

EPHEMERIDES

12 22.9

12 23.0

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
163970	2003 <i>UW</i> ₁₀₁	12 22.9	90°33'	2°9'/23.1	18		281835	2010 <i>AR</i> ₆₈	12 22.9	344°51'	0°7'/22.9	18	
11 17	6 34.47	+15 52.1	1.770	2.575	15.5	20.4	11 17	6 30.92	+23 16.3	1.980	2.792	13.8	20.4
11 27	6 29.15	+15 39.7	1.703	2.587	12.0	20.2	11 27	6 26.61	+23 48.3	1.895	2.787	10.6	20.2
12 7	6 21.34	+15 33.9	1.658	2.600	8.0	20.0	12 7	6 19.87	+24 22.8	1.834	2.782	6.8	19.9
12 17	6 11.79	+15 35.0	1.639	2.612	4.1	19.8	12 17	6 11.32	+24 57.5	1.799	2.777	2.7	19.7
12 27	6 1.65	+15 42.7	1.649	2.624	3.4	19.8	12 27	6 1.98	+25 29.6	1.793	2.773	1.9	19.6
1 6	5 52.14	+15 56.5	1.687	2.636	7.0	20.1	1 6	5 53.01	+25 57.2	1.816	2.770	6.1	19.9
1 16	5 44.33	+16 15.4	1.752	2.648	10.8	20.3	1 16	5 45.49	+26 20.0	1.866	2.767	10.0	20.1
1 26	5 39.01	+16 38.7	1.841	2.660	14.2	20.6	1 26	5 40.30	+26 38.6	1.940	2.764	13.4	20.3
49610	1999 <i>FY</i> ₂₉	12 22.9	358°21'	5°1'/23.3	18		114798	2003 <i>NW</i> ₃	12 22.9	12°33'	0°5'/23.2	18	
11 17	6 31.18	+12 46.9	1.305	2.130	18.8	17.9	11 17	6 32.67	+17 9.8	1.459	2.281	17.3	19.3
11 27	6 27.58	+12 22.7	1.234	2.128	14.9	17.6	11 27	6 28.47	+17 8.5	1.388	2.283	13.4	19.1
12 7	6 20.83	+12 10.5	1.184	2.126	10.4	17.4	12 7	6 21.28	+17 14.7	1.337	2.284	8.9	18.8
12 17	6 11.72	+12 12.2	1.156	2.125	6.2	17.1	12 17	6 11.89	+17 28.1	1.311	2.287	4.1	18.6
12 27	6 1.65	+12 28.8	1.153	2.125	5.5	17.1	12 27	6 1.63	+17 47.8	1.311	2.290	3.2	18.5
1 6	5 52.21	+12 59.0	1.176	2.125	9.2	17.3	1 6	5 51.99	+18 12.2	1.339	2.293	7.7	18.8
1 16	5 44.83	+13 40.1	1.222	2.127	13.8	17.6	1 16	5 44.31	+18 40.1	1.391	2.297	12.3	19.1
1 26	5 40.53	+14 28.9	1.290	2.129	17.8	17.8	1 26	5 39.55	+19 10.4	1.466	2.302	16.3	19.3
134038	2004 <i>XP</i> ₅	12 22.9	101°15'	6°0'/21.4	18		34571	2000 <i>SA</i> ₃₀₈	12 22.9	265°44'	0°5'/22.9	18	
11 17	6 49.27	+25 48.9	1.118	1.938	21.7	19.3	11 17	6 35.88	+23 32.4	1.787	2.596	15.2	18.8
11 27	6 42.89	+28 35.0	1.059	1.952	16.8	19.1	11 27	6 30.66	+23 11.8	1.691	2.581	11.7	18.5
12 7	6 31.56	+31 31.4	1.021	1.965	11.4	18.8	12 7	6 22.60	+22 49.7	1.618	2.565	7.6	18.2
12 17	6 16.11	+34 21.1	1.008	1.978	6.7	18.6	12 17	6 12.41	+22 25.2	1.571	2.550	3.0	17.9
12 27	5 58.62	+36 45.4	1.023	1.991	7.1	18.7	12 27	6 1.26	+21 58.3	1.553	2.534	2.1	17.8
1 6	5 41.90	+38 33.3	1.066	2.003	11.7	19.0	1 6	5 50.53	+21 30.1	1.564	2.518	6.9	18.1
1 16	5 28.54	+39 44.4	1.133	2.015	16.5	19.3	1 16	5 41.53	+21 2.9	1.602	2.502	11.4	18.3
1 26	5 20.18	+40 27.0	1.219	2.027	20.6	19.6	1 26	5 35.23	+20 39.1	1.663	2.485	15.3	18.5
146664	2001 <i>UK</i> ₁₄₁	12 22.9	328°02'	5°2'/22.9	17		333109	2011 <i>UB</i> ₃₆₃	12 22.9	7°14'	1°3'/22.9	18	
11 17	6 30.51	+12 6.2	1.747	2.553	15.6	20.1	11 17	6 34.34	+25 53.5	1.694	2.510	15.6	21.1
11 27	6 26.35	+11 20.8	1.664	2.545	12.4	19.9	11 27	6 29.54	+26 9.2	1.617	2.510	12.0	20.9
12 7	6 19.70	+10 43.2	1.602	2.537	8.9	19.6	12 7	6 21.87	+26 24.2	1.562	2.510	7.7	20.6
12 17	6 11.24	+10 16.2	1.566	2.529	5.8	19.5	12 17	6 12.11	+26 35.5	1.533	2.511	3.2	20.3
12 27	6 2.00	+10 1.9	1.557	2.522	5.5	19.4	12 27	6 1.49	+26 41.0	1.532	2.512	2.4	20.3
1 6	5 53.20	+10 1.2	1.576	2.516	8.3	19.6	1 6	5 51.47	+26 40.0	1.558	2.513	6.9	20.6
1 16	5 45.94	+10 13.6	1.620	2.509	12.0	19.8	1 16	5 43.32	+26 33.9	1.612	2.514	11.2	20.8
1 26	5 41.07	+10 37.1	1.686	2.504	15.4	20.0	1 26	5 37.97	+26 25.1	1.688	2.516	14.9	21.1
348516	2005 <i>UT</i> ₃₇	12 22.9	47°38'	2°9'/22.7	18		315781	2008 <i>FR</i> ₁₀₉	12 22.9	158°55'	0°8'/22.9	18	
11 17	6 34.86	+28 23.3	1.813	2.623	14.9	20.4	11 17	6 33.95	+24 50.8	2.148	2.950	13.2	21.3
11 27	6 29.78	+29 15.7	1.746	2.634	11.5	20.2	11 27	6 28.65	+25 10.6	2.067	2.953	10.1	21.1
12 7	6 21.93	+30 6.7	1.701	2.646	7.6	20.0	12 7	6 21.02	+25 30.6	2.009	2.955	6.5	20.9
12 17	6 12.08	+30 51.6	1.684	2.657	3.9	19.8	12 17	6 11.73	+25 48.4	1.979	2.957	2.6	20.6
12 27	6 1.46	+31 26.2	1.695	2.669	3.5	19.8	12 27	6 1.76	+26 2.1	1.978	2.958	1.9	20.6
1 6	5 51.44	+31 48.8	1.734	2.682	7.0	20.1	1 6	5 52.24	+26 10.8	2.008	2.960	5.7	20.8
1 16	5 43.26	+32 0.2	1.800	2.694	10.7	20.3	1 16	5 44.17	+26 15.2	2.065	2.961	9.4	21.1
1 26	5 37.79	+32 3.2	1.890	2.707	13.9	20.5	1 26	5 38.35	+26 16.7	2.147	2.963	12.6	21.3
460816	2014 <i>WS</i> ₅₃	12 22.9	156°54'	1°2'/22.9	17		443181	2014 <i>DF</i> ₂₇	12 22.9	260°87'	2°6'/22.8	18	
11 17	6 30.57	+19 51.8	2.421	3.220	12.0	21.8	11 17	6 37.30	+28 26.7	1.796	2.603	15.2	22.0
11 27	6 25.72	+19 41.5	2.336	3.220	9.2	21.6	11 27	6 32.02	+28 58.1	1.700	2.587	11.9	21.7
12 7	6 18.96	+19 33.2	2.277	3.221	5.9	21.4	12 7	6 23.66	+29 28.1	1.626	2.570	7.9	21.5
12 17	6 10.88	+19 26.8	2.245	3.221	2.5	21.2	12 17	6 12.88	+29 52.3	1.578	2.553	3.8	21.2
12 27	6 2.27	+19 22.0	2.243	3.222	1.9	21.1	12 27	6 0.92	+30 6.9	1.559	2.536	3.3	21.1
1 6	5 54.05	+19 19.0	2.271	3.222	5.3	21.4	1 6	5 49.30	+30 10.4	1.568	2.518	7.3	21.3
1 16	5 47.02	+19 18.1	2.327	3.223	8.5	21.6	1 16	5 39.46	+30 4.0	1.605	2.500	11.7	21.5
1 26	5 41.85	+19 19.6	2.410	3.223	11.4	21.8	1 26	5 32.54	+29 51.1	1.664	2.482	15.5	21.7
48868	1998 <i>HB</i> ₉₂	12 22.9	164°70'	3°7'/23.0	18		110479	2001 <i>TL</i> ₅₈	12 22.9	159°91'	2°7'/23.0	18	
11 17	6 36.84	+14 43.1	1.780	2.577	15.7	20.2	11 17	6 32.67	+16 23.7	2.069	2.868	13.7	19.8
11 27	6 31.03	+14 17.0	1.703	2.582	12.3	20.0	11 27	6 27.58	+16 4.8	1.989	2.870	10.6	19.6
12 7	6 22.60	+13 57.6	1.648	2.586	8.4	19.7	12 7	6 20.29	+15 50.8	1.931	2.872	7.1	19.3
12 17	6 12.32	+13 45.9	1.620	2.590	4.7	19.5	12 17	6 11.43	+15 41.9	1.901	2.874	3.7	19.1
12 27	6 1.31	+13 42.7	1.620	2.593	4.1	19.5	12 27	6 1.97	+15 38.8	1.900	2.875	3.1	19.1
1 6	5 50.88	+13 47.8	1.650	2.595	7.5	19.7	1 6	5 52.97	+15 41.2	1.928	2.876	6.4	19.3
1 16	5 42.16	+14 0.9	1.706	2.597	11.4	19.9	1 16	5 45.37	+15 49.1	1.985	2.878	9.9	19.5
1 26	5 36.00	+14 20.8	1.786	2.598	14.9	20.2	1 26	5 39.92	+16 2.0	2.065	2.879	13.1	19.7
275262	2009 <i>YA</i> ₂₄	12 22.9	279°06'	0°5'/22.9	18		55044	2001 <i>QZ</i> ₅₉	12 22.9	131°60'	0°3'/23.0	18	
11 17	6 31.52	+23 33.2	2.351	3.152	12.2	20.4	11 17	6 34.38	+22 36.4	2.037	2.841	13.8	20.3
11 27	6 26.72	+23 59.1	2.256	3.142	9.4	20.2	11 27	6 28.97	+22 36.1	1.960	2.847	10.5	20.1
12 7	6 19.77	+24 26.7	2.186	3.133	6.0	20.0	12 7	6 21.20	+22 36.5	1.906	2.852	6.7	19.9
12 17	6 11.25	+24 54.0	2.144	3.123	2.4	19.7	12 17	6 11.78	+22 36.6	1.879	2.858	2.6	19.6
12 27	6 2.00	+25 18.8	2.132	3.113	1.7	19.6	12 27	6 1.75	+22 35.3	1.882	2.863	1.7	19.6
1 6	5 53.02	+25 39.9	2.150	3.103	5.4	19.9	1 6	5 52.25	+22 32.6	1.915	2.868	5.9	19.9
1 16	5 45.26	+25 57.0	2.197	3.093	8.9	20.1	1 16	5 44.29	+22 29.3	1.976	2.873	9.7	20.1
1 26	5 39.51	+26 10.9	2.269	3.083	12.0	20.2	1 26	5 38.63	+22 26.5	2.061	2.878	12.9	20.3
40214	1998 <i>SR</i> ₆₃	12 22.9	94°52'	0°2'/23.0	18		112549	2002 <i>PZ</i> ₄₂	12 23.0				

EPHEMERIDES

12 23.0

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
300419	2007 <i>RO</i> ₃₂₁	12 23.0 205°63		6°3/22.8 18			320133	2007 <i>EP</i> ₂₀₁	12 23.0 72°91		6°0/23.2 17		
11 17	6 41.12	+40 7.4	2.140	2.915	14.1	20.5	11 17	6 38.36	+39 49.9	2.027	2.811	14.5	20.4
11 27	6 34.69	+40 58.7	2.055	2.911	11.5	20.3	11 27	6 32.50	+40 28.7	1.955	2.817	11.7	20.2
12 7	6 25.20	+41 40.3	1.993	2.906	8.8	20.1	12 7	6 23.69	+40 56.6	1.906	2.823	8.8	20.1
12 17	6 13.41	+42 5.9	1.957	2.901	6.7	20.0	12 17	6 12.80	+41 8.0	1.882	2.830	6.5	19.9
12 27	6 0.64	+42 10.7	1.950	2.896	6.5	20.0	12 27	6 1.15	+40 59.4	1.885	2.836	6.2	19.9
1 6	5 48.42	+41 54.2	1.971	2.890	8.4	20.1	1 6	5 50.24	+40 31.2	1.917	2.842	8.2	20.1
1 16	5 38.15	+41 19.3	2.019	2.883	11.2	20.2	1 16	5 41.35	+39 47.2	1.975	2.849	11.0	20.2
1 26	5 30.85	+40 32.1	2.091	2.876	13.9	20.4	1 26	5 35.37	+38 53.1	2.057	2.855	13.7	20.4
459878	2014 <i>HX</i> ₁₂₃	12 23.0 153°96		4°9/24.5 17			5310	Papike	12 23.0 241°49		3°9/23.1 18		
11 17	6 45.50	+5 59.3	1.166	1.960	22.5	21.1	11 17	6 34.41	+14 5.2	1.719	2.523	15.9	18.3
11 27	6 39.22	+7 22.2	1.091	1.964	18.1	20.8	11 27	6 29.45	+13 42.8	1.634	2.516	12.5	18.0
12 7	6 28.78	+9 18.0	1.035	1.968	12.7	20.5	12 7	6 21.79	+13 28.1	1.570	2.508	8.6	17.8
12 17	6 14.99	+11 44.4	1.003	1.972	7.1	20.2	12 17	6 12.12	+13 22.3	1.531	2.501	5.0	17.5
12 27	5 59.52	+14 31.9	0.999	1.975	5.2	20.1	12 27	6 1.55	+13 26.2	1.521	2.493	4.4	17.5
1 6	5 44.60	+17 26.0	1.025	1.977	9.9	20.4	1 6	5 51.42	+13 39.6	1.539	2.485	7.8	17.7
1 16	5 32.29	+20 13.3	1.077	1.979	15.5	20.7	1 16	5 42.94	+14 1.4	1.583	2.477	11.9	17.9
1 26	5 24.05	+22 45.5	1.153	1.981	20.3	21.0	1 26	5 37.04	+14 30.3	1.650	2.468	15.6	18.1
101679	1999 <i>CR</i> ₁₀₈	12 23.0 51°16		0°8/22.9 18			421732	2014 <i>PA</i> ₄₀	12 23.0 205°71		4°9/23.1 17		
11 17	6 42.42	+25 10.2	1.486	2.296	17.7	17.6	11 17	6 38.09	+37 53.3	2.260	3.042	13.3	21.4
11 27	6 35.03	+24 11.2	1.447	2.337	13.3	17.4	11 27	6 32.02	+38 22.4	2.175	3.039	10.6	21.2
12 7	6 24.82	+23 9.2	1.431	2.378	8.4	17.2	12 7	6 23.30	+38 42.5	2.113	3.036	7.8	21.0
12 17	6 13.00	+22 5.2	1.441	2.419	3.2	17.0	12 17	6 12.65	+38 49.1	2.078	3.032	5.5	20.8
12 27	6 1.12	+21 1.9	1.480	2.460	2.3	17.1	12 27	6 1.25	+38 39.1	2.071	3.029	5.1	20.8
1 6	5 50.61	+20 3.0	1.548	2.501	7.0	17.5	1 6	5 50.40	+38 12.6	2.094	3.025	7.2	20.9
1 16	5 42.54	+19 11.8	1.643	2.542	11.2	17.8	1 16	5 41.28	+37 32.6	2.145	3.020	10.1	21.1
1 26	5 37.48	+18 30.4	1.761	2.582	14.6	18.1	1 26	5 34.76	+36 44.1	2.220	3.016	12.8	21.3
448361	2009 <i>HA</i> ₄₄	12 23.0 316°00		1°8/23.1 18			15489	1999 <i>CJ</i> ₇₈	12 23.0 36°03		4°4/23.2 18		
11 17	6 32.81	+18 30.4	1.800	2.610	15.0	21.6	11 17	6 30.18	+12 27.4	1.850	2.653	14.9	17.1
11 27	6 28.12	+18 27.0	1.718	2.607	11.6	21.4	11 27	6 25.75	+11 56.4	1.788	2.669	11.7	16.9
12 7	6 20.86	+18 28.3	1.658	2.604	7.6	21.1	12 7	6 19.11	+11 34.0	1.749	2.685	8.2	16.7
12 17	6 11.72	+18 33.9	1.624	2.601	3.4	20.9	12 17	6 10.99	+11 21.9	1.736	2.701	5.1	16.6
12 27	6 1.80	+18 43.1	1.619	2.598	2.6	20.8	12 27	6 2.39	+11 20.8	1.751	2.718	4.7	16.6
1 6	5 52.34	+18 55.3	1.642	2.596	6.7	21.1	1 6	5 54.39	+11 30.5	1.793	2.736	7.3	16.8
1 16	5 44.48	+19 10.1	1.692	2.593	10.8	21.3	1 16	5 47.90	+11 49.8	1.862	2.753	10.6	17.0
1 26	5 39.11	+19 27.3	1.766	2.591	14.5	21.5	1 26	5 43.62	+12 16.6	1.955	2.772	13.6	17.3
318209	2004 <i>RY</i> ₁₇₅	12 23.0 82°08		2°7/23.2 17			438515	2007 <i>RE</i> ₁₉₄	12 23.0 41°88		3°0/23.2 17		
11 17	6 36.35	+32 1.5	2.095	2.892	13.7	20.0	11 17	6 33.97	+16 44.8	1.360	2.184	18.2	21.3
11 27	6 30.44	+32 1.4	2.025	2.905	10.6	19.8	11 27	6 29.32	+16 32.1	1.308	2.204	14.0	21.1
12 7	6 22.08	+31 54.6	1.978	2.918	7.1	19.6	12 7	6 21.67	+16 27.3	1.277	2.224	9.3	20.9
12 17	6 12.10	+31 38.6	1.959	2.930	3.7	19.4	12 17	6 12.00	+16 30.4	1.271	2.246	4.5	20.7
12 27	6 1.61	+31 12.2	1.968	2.943	3.1	19.4	12 27	6 1.74	+16 40.8	1.290	2.268	3.6	20.7
1 6	5 51.85	+30 36.7	2.008	2.956	6.1	19.6	1 6	5 52.41	+16 57.4	1.336	2.290	7.8	21.0
1 16	5 43.82	+29 55.3	2.076	2.969	9.5	19.9	1 16	5 45.24	+17 19.1	1.408	2.313	12.2	21.3
1 26	5 38.25	+29 11.7	2.168	2.981	12.5	20.1	1 26	5 41.05	+17 44.6	1.501	2.336	16.0	21.6
341913	2008 <i>JZ</i> ₃₂	12 23.0 104°59		6°3/23.8 18			6981	Chirman	12 23.0 172°87		5°7/22.7 18		
11 17	6 31.01	+3 3 3.3	2.361	3.120	13.4	20.9	11 17	6 40.04	+39 9.6	2.308	3.082	13.2	18.0
11 27	6 25.90	+2 36.6	2.294	3.135	11.0	20.8	11 27	6 33.59	+40 5.2	2.228	3.085	10.7	17.9
12 7	6 19.00	+2 23.0	2.249	3.149	8.6	20.6	12 7	6 24.36	+40 52.4	2.172	3.087	8.1	17.7
12 17	6 10.90	+2 24.6	2.231	3.164	6.8	20.6	12 17	6 13.08	+41 25.3	2.143	3.089	6.1	17.6
12 27	6 2.39	+2 42.3	2.241	3.178	6.4	20.6	12 27	6 0.95	+41 39.7	2.143	3.090	5.9	17.6
1 6	5 54.31	+3 15.1	2.280	3.192	7.8	20.7	1 6	5 49.33	+41 34.9	2.172	3.091	7.8	17.7
1 16	5 47.42	+4 0.8	2.346	3.205	10.0	20.8	1 16	5 39.48	+41 13.2	2.229	3.091	10.3	17.9
1 26	5 42.30	+4 55.9	2.436	3.218	12.3	21.0	1 26	5 32.30	+40 39.7	2.309	3.091	12.9	18.0
131352	2001 <i>JA</i> ₁	12 23.0 126°35		1°3/23.0 18			508343	2016 <i>AC</i> ₁₉₅	12 23.0 217°13		16°4/20.8 17		
11 17	6 31.23	+19 15.4	2.641	3.434	11.3	20.2	11 17	6 37.24	-5 19.2	1.300	2.060	22.3	21.4
11 27	6 26.00	+19 5.1	2.564	3.444	8.6	20.0	11 27	6 32.19	-7 58.3	1.238	2.057	19.9	21.2
12 7	6 19.04	+18 57.1	2.512	3.454	5.6	19.8	12 7	6 23.83	-10 15.3	1.193	2.052	17.7	21.1
12 17	6 10.92	+18 51.1	2.488	3.464	2.5	19.6	12 17	6 12.97	-11 57.0	1.170	2.048	16.5	21.0
12 27	6 2.38	+18 46.9	2.495	3.474	1.9	19.6	12 27	6 1.03	-12 53.1	1.167	2.043	16.7	21.0
1 6	5 54.25	+18 44.8	2.533	3.483	4.9	19.8	1 6	5 49.70	-13 0.3	1.186	2.037	18.2	21.1
1 16	5 47.24	+18 44.8	2.600	3.492	7.9	20.0	1 16	5 40.48	-12 22.4	1.223	2.031	20.5	21.2
1 26	5 41.95	+18 47.1	2.693	3.500	10.5	20.2	1 26	5 34.49	-11 8.5	1.276	2.025	22.9	21.4
494441	2016 <i>UQ</i> ₁₀₄	12 23.0 140°01		0°5/23.0 16			223872	2004 <i>TX</i> ₃₄₄	12 23.0 68°02		3°4/22.7 17		
11 17	6 38.73	+22 19.2	1.803	2.606	15.3	22.8	11 17	6 34.88	+31 11.9	2.092	2.892	13.6	19.9
11 27	6 32.49	+22 15.9	1.731	2.617	11.7	22.6	11 27	6 29.55	+31 57.1	2.020	2.901	10.5	19.7
12 7	6 23.54	+22 13.5	1.682	2.627	7.5	22.4	12 7	6 21.69	+32 38.6	1.972	2.911	7.2	19.5
12 17	6 12.70	+22 10.6	1.659	2.637	2.9	22.1	12 17	6 12.04	+33 12.0	1.951	2.920	4.1	19.3
12 27	6 1.20	+22 6.3	1.666	2.647	2.0	22.1	12 27	6 1.68	+33 34.1	1.959	2.930	3.8	19.3
1 6	5 50.39	+22 0.7	1.702	2.655	6.5	22.4	1 6	5 51.86	+33 43.8	1.996	2.939	6.6	19.5
1 16	5 41.43	+21 54.7	1.766	2.663	10.7	22.6	1 16	5 43.67	+33 42.4	2.061	2.949	9.8	19.8
1 26	5 35.16	+21 50.1	1.854	2.671	14.2	22.9	1 26	5 37.95	+33 33.1	2.150	2.959	12.8	20.0
475244	2005 <i>WU</i> ₂₈	12 23.0 63°50		2°9/22.8 18			86882	2000 <i>HE</i> ₂₇	12 23.0 234°98		0°8/23.1 18		
11 17	6 38.16	+27 53.4	1.435	2.255									

EPHEMERIDES

12 23.0

12 23.0

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
175980	2000 QV ₆		12 23.0 169°61	6°9/23.9	18		458668	2011 GG ₈₆		12 23.0 227°36	2°2/23.1	18	
11 17	6 31.67	- 0 49.0	2.660	3.394	12.7	21.0	11 17	6 30.36	+16 2.9	2.497	3.290	11.8	21.6
11 27	6 26.30	- 1 13.6	2.580	3.398	10.7	20.9	11 27	6 25.56	+15 55.6	2.408	3.286	9.2	21.4
12 7	6 19.25	- 1 24.3	2.523	3.402	8.7	20.8	12 7	6 18.92	+15 53.0	2.342	3.281	6.1	21.2
12 17	6 11.04	- 1 18.7	2.492	3.405	7.2	20.7	12 17	6 10.96	+15 55.2	2.304	3.277	3.2	21.0
12 27	6 2.37	- 0 55.8	2.489	3.407	7.0	20.7	12 27	6 2.45	+16 2.2	2.297	3.272	2.6	21.0
1 6	5 54.02	- 0 16.3	2.516	3.409	8.0	20.7	1 6	5 54.25	+16 13.5	2.319	3.267	5.5	21.1
1 16	5 46.70	+ 0 37.4	2.570	3.411	9.9	20.9	1 16	5 47.14	+16 28.7	2.371	3.262	8.6	21.3
1 26	5 41.00	+ 1 41.9	2.648	3.411	11.9	21.0	1 26	5 41.79	+16 47.4	2.447	3.257	11.4	21.5
448830	2011 UA ₆₆		12 23.0 213°36	5°7/23.1	18		443159	2014 CV ₁₅		12 23.0 224°94	0°8/23.0	18	
11 17	6 32.71	+ 8 26.8	2.018	2.801	14.6	22.0	11 17	6 36.86	+25 23.1	1.931	2.734	14.4	21.8
11 27	6 27.68	+ 7 47.4	1.933	2.797	11.8	21.8	11 27	6 31.25	+25 30.2	1.840	2.726	11.1	21.6
12 7	6 20.42	+ 7 18.0	1.872	2.793	8.8	21.6	12 7	6 22.93	+25 36.4	1.772	2.718	7.2	21.3
12 17	6 11.55	+ 7 1.3	1.836	2.788	6.3	21.4	12 17	6 12.59	+25 39.4	1.731	2.709	2.9	21.1
12 27	6 2.01	+ 6 59.0	1.829	2.784	6.0	21.4	12 27	6 1.36	+25 37.3	1.719	2.700	2.0	21.0
1 6	5 52.86	+ 7 11.2	1.850	2.779	8.2	21.5	1 6	5 50.58	+25 30.0	1.737	2.690	6.4	21.2
1 16	5 45.06	+ 7 36.8	1.897	2.773	11.2	21.7	1 16	5 41.45	+25 18.8	1.783	2.680	10.6	21.5
1 26	5 39.40	+ 8 13.1	1.969	2.767	14.2	21.9	1 26	5 34.91	+25 6.1	1.853	2.670	14.2	21.7
43483	2001 BO ₃₈		12 23.0 111°16	3°6/23.4	18 R		493346	2014 WS ₂		12 23.0 92°65	2°3/22.8	17	
11 17	6 31.44	+11 26.1	2.344	3.128	12.8	19.5	11 17	6 33.65	+28 46.4	2.336	3.134	12.4	21.0
11 27	6 26.34	+11 22.0	2.269	3.139	10.0	19.3	11 27	6 28.34	+29 26.7	2.260	3.142	9.5	20.8
12 7	6 19.36	+11 26.2	2.219	3.150	7.0	19.1	12 7	6 20.82	+30 5.1	2.208	3.150	6.3	20.6
12 17	6 11.09	+11 39.3	2.196	3.160	4.3	19.0	12 17	6 11.71	+30 38.4	2.184	3.157	3.2	20.4
12 27	6 2.35	+12 1.0	2.203	3.170	3.8	19.0	12 27	6 1.97	+31 3.6	2.190	3.165	2.8	20.4
1 6	5 54.01	+12 30.2	2.239	3.180	6.1	19.1	1 6	5 52.66	+31 19.7	2.226	3.173	5.7	20.6
1 16	5 46.88	+13 5.5	2.304	3.190	9.0	19.3	1 16	5 44.74	+31 27.4	2.291	3.180	8.9	20.8
1 26	5 41.59	+13 45.1	2.394	3.199	11.7	19.5	1 26	5 38.97	+31 28.5	2.380	3.188	11.7	21.0
369006	2007 JD ₂₀		12 23.0 218°28	4°0/23.1	17		281345	2007 UH ₃₃		12 23.0 63°59	4°8/23.7	17	
11 17	6 30.32	+11 35.5	2.333	3.121	12.7	21.5	11 17	6 41.10	+36 47.7	1.651	2.450	16.7	19.9
11 27	6 25.58	+11 11.0	2.248	3.119	10.1	21.3	11 27	6 34.74	+36 47.2	1.587	2.464	13.2	19.7
12 7	6 18.95	+10 53.8	2.187	3.117	7.2	21.1	12 7	6 25.12	+36 34.0	1.545	2.478	9.3	19.5
12 17	6 10.96	+10 45.2	2.152	3.114	4.6	20.9	12 17	6 13.34	+36 3.9	1.528	2.492	5.8	19.4
12 27	6 2.42	+10 46.0	2.147	3.112	4.2	20.9	12 27	6 0.99	+35 15.4	1.538	2.506	5.0	19.4
1 6	5 54.24	+10 56.1	2.172	3.110	6.5	21.0	1 6	5 49.76	+34 11.4	1.577	2.521	7.9	19.6
1 16	5 47.21	+11 14.8	2.224	3.107	9.4	21.2	1 16	5 40.98	+32 58.2	1.642	2.535	11.6	19.8
1 26	5 42.01	+11 40.7	2.301	3.105	12.2	21.4	1 26	5 35.47	+31 42.7	1.731	2.550	14.9	20.1
124955	2001 TC ₉₂		12 23.0 59°56	1°8/23.0	18		488001	2015 TD ₃₄₆		12 23.0 79°39	2°3/22.8	18	
11 17	6 39.38	+26 32.9	1.158	1.991	20.2	19.7	11 17	6 35.48	+27 41.0	1.861	2.669	14.7	21.4
11 27	6 34.33	+26 47.0	1.102	2.003	15.5	19.5	11 27	6 30.28	+28 19.1	1.785	2.672	11.3	21.2
12 7	6 25.33	+26 59.1	1.065	2.016	10.0	19.2	12 7	6 22.32	+28 56.1	1.731	2.676	7.4	21.0
12 17	6 13.52	+27 5.0	1.051	2.029	4.2	18.9	12 17	6 12.35	+29 27.9	1.704	2.680	3.5	20.7
12 27	6 0.79	+27 1.5	1.063	2.043	3.0	18.9	12 27	6 1.55	+29 51.3	1.706	2.683	3.0	20.7
1 6	5 49.24	+26 49.2	1.100	2.057	8.6	19.3	1 6	5 51.29	+30 4.7	1.737	2.687	6.7	21.0
1 16	5 40.55	+26 31.1	1.161	2.070	13.9	19.6	1 16	5 42.78	+30 9.1	1.795	2.691	10.6	21.2
1 26	5 35.74	+26 11.7	1.242	2.084	18.2	19.9	1 26	5 36.95	+30 7.1	1.876	2.694	14.0	21.4
23671	1997 GX ₁₈		12 23.0 342°13	0°2/23.0	18		450703	2006 WT ₁₆₇		12 23.0 35°96	1°1/22.9	18	
11 17	6 31.74	+23 28.6	1.381	2.213	17.6	18.7	11 17	6 33.96	+24 41.5	1.798	2.610	14.9	21.3
11 27	6 28.17	+23 22.5	1.302	2.204	13.5	18.5	11 27	6 29.11	+25 9.9	1.723	2.614	11.4	21.1
12 7	6 21.35	+23 16.8	1.243	2.196	8.8	18.2	12 7	6 21.56	+25 39.4	1.670	2.618	7.4	20.8
12 17	6 12.05	+23 10.1	1.209	2.188	3.4	17.8	12 17	6 12.06	+26 6.9	1.644	2.622	3.0	20.6
12 27	6 1.68	+23 1.4	1.200	2.181	2.3	17.7	12 27	6 1.76	+26 29.5	1.647	2.627	2.2	20.5
1 6	5 51.92	+22 51.0	1.217	2.175	7.8	18.1	1 6	5 52.00	+26 45.9	1.678	2.632	6.5	20.8
1 16	5 44.26	+22 40.3	1.259	2.171	12.9	18.3	1 16	5 43.98	+26 56.5	1.736	2.636	10.6	21.1
1 26	5 39.79	+22 31.3	1.322	2.167	17.2	18.6	1 26	5 38.58	+27 2.9	1.817	2.642	14.1	21.3
99208	2001 HX ₂₇		12 23.0 150°64	3°4/22.7	18		79651	1998 SD ₁₇		12 23.0 152°04	0°8/22.9	18 R	
11 17	6 34.46	+32 33.7	2.507	3.296	11.9	19.5	11 17	6 37.70	+24 31.4	1.637	2.448	16.2	20.3
11 27	6 28.93	+33 18.5	2.425	3.300	9.3	19.3	11 27	6 32.20	+24 48.6	1.561	2.452	12.5	20.1
12 7	6 21.19	+33 59.3	2.369	3.303	6.4	19.2	12 7	6 23.65	+25 6.4	1.507	2.455	8.0	19.8
12 17	6 11.85	+34 32.3	2.340	3.306	3.9	19.0	12 17	6 12.88	+25 21.7	1.479	2.458	3.2	19.5
12 27	6 1.84	+34 54.5	2.342	3.309	3.7	19.0	12 27	6 1.22	+25 32.1	1.480	2.461	2.2	19.5
1 6	5 52.21	+35 5.0	2.374	3.312	6.0	19.1	1 6	5 50.20	+25 36.6	1.509	2.463	7.1	19.8
1 16	5 43.94	+35 4.6	2.433	3.314	8.8	19.3	1 16	5 41.17	+25 36.4	1.564	2.465	11.5	20.0
1 26	5 37.79	+34 56.2	2.519	3.317	11.4	19.5	1 26	5 35.11	+25 33.8	1.643	2.467	15.4	20.3
230027	2000 KR ₆₄		12 23.0 259°32	0°1/23.0	18		126231	2002 AY ₅₅		12 23.0 51°09	0°1/23.0	18	
11 17	6 36.50	+21 59.3	1.744	2.552	15.5	20.8	11 17	6 33.33	+23 38.7	1.892	2.702	14.4	20.1
11 27	6 31.37	+22 22.7	1.647	2.536	12.0	20.5	11 27	6 28.38	+23 40.3	1.818	2.709	11.0	19.8
12 7	6 23.27	+22 50.2	1.572	2.519	7.8	20.2	12 7	6 20.94	+23 42.1	1.768	2.715	7.0	19.6
12 17	6 12.80	+23 19.3	1.524	2.502	3.0	19.9	12 17	6 11.77	+23 42.6	1.744	2.722	2.7	19.4
12 27	6 1.14	+23 46.9	1.504	2.485	2.0	19.8	12 27	6 1.97	+23 40.8	1.749	2.730	1.8	19.3
1 6	5 49.76	+24 11.2	1.513	2.467	7.1	20.1	1 6	5 52.75	+23 36.6	1.782	2.737	6.1	19.6
1 16	5 40.06	+24 31.6	1.549	2.449	11.7	20.3	1 16	5 45.16	+23 31.0	1.844	2.745	10.1	19.9
1 26	5 33.16	+24 49.0	1.608	2.430	15.8	20.5	1 26	5 40.01	+23 25.5	1.929	2.752	13.4	20.1
296376	2009 FW ₄₄		12 23.0 167°58	2°6/22.9	18		179777	2002 SR ₄₇		12 23.0 165°14	2°6/23.1	18	
11 17	6 41.17	+28 6.1	1.673	2.									

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
1281	Jeanne		12 23.0 161°95'	3°1'/23.0	18	R	125793	2001 XC ₁₅₃		12 23.0 74°16'	1°1'/23.1	18	R
11 17	6 34.71	+14 54.2	2.267	3.053	13.1	16.5	11 17	6 37.76	+20 20.1	1.513	2.327	17.2	19.8
11 27	6 28.91	+14 29.4	2.186	3.060	10.2	16.3	11 27	6 32.02	+20 21.4	1.458	2.349	13.1	19.6
12 7	6 21.06	+14 9.5	2.130	3.066	6.9	16.1	12 7	6 23.35	+20 26.5	1.424	2.371	8.4	19.4
12 17	6 11.78	+13 55.5	2.102	3.071	3.9	15.9	12 17	6 12.69	+20 33.8	1.415	2.393	3.4	19.2
12 27	6 1.98	+13 47.9	2.104	3.075	3.4	15.9	12 27	6 1.46	+20 42.1	1.434	2.415	2.3	19.2
1 6	5 52.63	+13 46.9	2.136	3.079	6.2	16.1	1 6	5 51.13	+20 50.7	1.482	2.436	7.1	19.5
1 16	5 44.60	+13 52.4	2.197	3.082	9.4	16.3	1 16	5 42.94	+20 59.8	1.555	2.458	11.5	19.8
1 26	5 38.58	+14 3.9	2.283	3.085	12.3	16.5	1 26	5 37.69	+21 10.0	1.652	2.479	15.2	20.1
458657	2011 GO ₆₈		12 23.0 237°67'	0°2'/23.1	17		268702	2006 HJ ₁₆		12 23.0 355°93'	3°1'/23.1	17	
11 17	6 33.64	+19 30.1	2.874	3.657	10.7	21.6	11 17	6 29.78	+15 22.4	1.928	2.736	14.3	20.9
11 27	6 28.01	+20 17.2	2.769	3.645	8.2	21.4	11 27	6 25.62	+15 4.9	1.848	2.733	11.1	20.7
12 7	6 20.52	+21 9.1	2.690	3.632	5.3	21.2	12 7	6 19.19	+14 53.6	1.790	2.732	7.5	20.5
12 17	6 11.63	+22 3.9	2.641	3.619	2.1	20.9	12 17	6 11.14	+14 49.3	1.759	2.730	4.1	20.3
12 27	6 2.03	+22 59.1	2.625	3.606	1.3	20.9	12 27	6 2.43	+14 52.4	1.755	2.729	3.5	20.2
1 6	5 52.55	+23 52.5	2.641	3.592	4.7	21.1	1 6	5 54.15	+15 2.5	1.780	2.729	6.7	20.4
1 16	5 44.00	+24 42.5	2.688	3.578	7.8	21.3	1 16	5 47.29	+15 19.1	1.832	2.729	10.3	20.7
1 26	5 37.07	+25 28.6	2.763	3.563	10.5	21.4	1 26	5 42.62	+15 41.0	1.908	2.730	13.6	20.9
307260	2002 MW ₂		12 23.0 104°71'	2°6'/23.4	18		403370	2009 HG ₇₅		12 23.0 236°70'	0°3'/22.9	17	
11 17	6 37.10	+13 29.7	2.264	3.043	13.3	20.8	11 17	6 35.02	+21 54.5	2.143	2.941	13.3	21.5
11 27	6 30.56	+13 47.6	2.202	3.071	10.3	20.6	11 27	6 29.66	+22 30.4	2.047	2.932	10.3	21.2
12 7	6 22.00	+14 13.2	2.165	3.099	6.9	20.4	12 7	6 21.86	+23 10.4	1.976	2.922	6.6	21.0
12 17	6 12.11	+14 45.5	2.156	3.126	3.6	20.3	12 17	6 12.22	+23 51.6	1.933	2.912	2.6	20.7
12 27	6 1.80	+15 23.1	2.178	3.153	2.9	20.3	12 27	6 1.68	+24 31.2	1.920	2.901	1.7	20.6
1 6	5 52.06	+16 4.1	2.232	3.178	5.8	20.5	1 6	5 51.41	+25 7.1	1.938	2.890	5.9	20.9
1 16	5 43.74	+16 46.9	2.315	3.203	8.9	20.8	1 16	5 42.49	+25 38.3	1.983	2.879	9.8	21.1
1 26	5 37.48	+17 30.1	2.424	3.227	11.7	21.0	1 26	5 35.83	+26 5.4	2.054	2.867	13.1	21.3
158302	2001 UO ₁₄₅		12 23.0 348°13'	2°6'/23.1	18		315745	2008 FS ₁₀		12 23.0 111°64'	1°5'/23.0	18	
11 17	6 32.66	+17 42.9	1.358	2.185	18.1	20.1	11 17	6 35.33	+27 43.1	2.039	2.841	13.8	21.4
11 27	6 28.79	+17 34.9	1.283	2.181	14.0	19.8	11 27	6 29.82	+27 52.0	1.963	2.848	10.6	21.2
12 7	6 21.70	+17 33.9	1.228	2.177	9.3	19.6	12 7	6 21.85	+27 58.0	1.911	2.855	6.9	21.0
12 17	6 12.20	+17 40.0	1.198	2.174	4.3	19.3	12 17	6 12.16	+27 58.8	1.885	2.862	3.0	20.8
12 27	6 1.67	+17 52.5	1.193	2.172	3.4	19.2	12 27	6 1.84	+27 52.8	1.889	2.868	2.3	20.7
1 6	5 51.75	+18 10.4	1.214	2.170	8.2	19.5	1 6	5 52.11	+27 40.2	1.923	2.875	6.0	21.0
1 16	5 43.89	+18 32.7	1.260	2.168	13.1	19.7	1 16	5 44.01	+27 22.7	1.984	2.881	9.7	21.2
1 26	5 39.17	+18 58.6	1.327	2.168	17.4	20.0	1 26	5 38.33	+27 2.9	2.070	2.887	12.9	21.4
211683	2003 WC ₈₁		12 23.0 45°38'	2°7'/22.9	18		192271	3310 T ₋₁		12 23.0 195°79'	13°0'/22.3	18	
11 17	6 35.91	+28 18.8	1.564	2.381	16.6	19.9	11 17	6 59.87	+58 57.4	2.112	2.801	16.8	21.2
11 27	6 30.97	+28 52.4	1.498	2.391	12.8	19.7	11 27	6 51.39	+60 40.4	2.043	2.798	15.3	21.0
12 7	6 22.90	+29 23.6	1.455	2.401	8.4	19.5	12 7	6 37.27	+62 3.3	1.994	2.795	13.9	20.9
12 17	6 12.59	+29 48.0	1.436	2.411	4.0	19.3	12 17	6 18.50	+62 53.7	1.966	2.791	13.1	20.9
12 27	6 1.46	+30 2.0	1.445	2.422	3.4	19.2	12 27	5 57.58	+63 2.3	1.961	2.787	13.1	20.9
1 6	5 51.10	+30 4.8	1.481	2.433	7.4	19.5	1 6	5 37.88	+62 27.9	1.979	2.782	13.9	20.9
1 16	5 42.87	+29 58.2	1.544	2.445	11.7	19.8	1 16	5 22.24	+61 17.1	2.018	2.776	15.2	21.0
1 26	5 37.71	+29 45.9	1.629	2.456	15.3	20.1	1 26	5 12.21	+59 42.0	2.077	2.770	16.8	21.1
27017	1998 JX		12 23.0 193°84'	2°1'/22.9	18		185449	2006 YG ₂₆		12 23.0 250°72'	0°6'/22.9	17	
11 17	6 37.68	+18 38.1	1.865	2.663	15.0	19.5	11 17	6 33.60	+23 47.0	2.084	2.888	13.5	21.3
11 27	6 31.74	+18 17.6	1.779	2.662	11.6	19.3	11 27	6 28.58	+24 10.9	1.996	2.883	10.3	21.1
12 7	6 23.17	+18 0.1	1.716	2.659	7.7	19.0	12 7	6 21.15	+24 36.2	1.932	2.878	6.7	20.8
12 17	6 12.67	+17 45.7	1.681	2.656	3.6	18.8	12 17	6 11.94	+25 0.8	1.895	2.873	2.6	20.6
12 27	6 1.39	+17 34.6	1.674	2.652	2.9	18.7	12 27	6 1.95	+25 22.2	1.887	2.868	1.8	20.5
1 6	5 50.61	+17 27.3	1.698	2.648	6.9	19.0	1 6	5 52.32	+25 39.3	1.909	2.863	5.9	20.8
1 16	5 41.49	+17 24.4	1.749	2.642	11.0	19.2	1 16	5 44.13	+25 52.0	1.960	2.857	9.7	21.0
1 26	5 34.93	+17 26.4	1.824	2.636	14.6	19.4	1 26	5 38.23	+26 1.5	2.034	2.852	13.1	21.2
221884	2008 HH ₄₅		12 23.0 323°18'	4°5'/23.1	18		220674	2004 RC ₂₁₄		12 23.0 69°25'	3°2'/23.4	17	
11 17	6 33.18	+14 44.8	1.327	2.151	18.6	20.2	11 17	6 36.93	+33 50.3	2.073	2.868	13.9	20.2
11 27	6 29.25	+14 15.7	1.250	2.144	14.7	20.0	11 27	6 31.00	+33 45.3	1.999	2.877	10.8	20.0
12 7	6 22.05	+13 55.2	1.192	2.136	10.1	19.7	12 7	6 22.55	+33 31.9	1.949	2.886	7.4	19.8
12 17	6 12.36	+13 45.5	1.157	2.129	5.7	19.4	12 17	6 12.40	+33 7.3	1.926	2.895	4.1	19.6
12 27	6 1.57	+13 47.8	1.148	2.122	5.0	19.4	12 27	6 1.73	+32 30.7	1.932	2.904	3.5	19.6
1 6	5 51.33	+14 1.9	1.165	2.116	9.1	19.6	1 6	5 51.80	+31 43.6	1.967	2.914	6.4	19.8
1 16	5 43.16	+14 26.5	1.206	2.110	13.9	19.8	1 16	5 43.68	+30 49.9	2.031	2.923	9.7	20.0
1 26	5 38.18	+14 59.6	1.267	2.105	18.2	20.1	1 26	5 38.09	+29 54.0	2.119	2.933	12.8	20.2
300450	2007 TJ ₆₃		12 23.0 112°55'	3°2'/23.1	18		5413	Smyslov		12 23.0 289°75'	0°2'/23.0	18	
11 17	6 34.48	+15 33.1	1.907	2.706	14.7	20.9	11 17	6 31.26	+23 38.1	2.310	3.113	12.4	17.2
11 27	6 29.05	+15 7.0	1.836	2.716	11.4	20.7	11 27	6 26.61	+23 43.1	2.212	3.099	9.5	17.0
12 7	6 21.28	+14 46.5	1.788	2.727	7.7	20.5	12 7	6 19.80	+23 48.4	2.138	3.085	6.1	16.8
12 17	6 11.89	+14 32.6	1.766	2.737	4.2	20.3	12 17	6 11.41	+23 52.8	2.092	3.071	2.4	16.5
12 27	6 1.94	+14 25.9	1.774	2.747	3.7	20.3	12 27	6 2.31	+23 55.2	2.076	3.056	1.6	16.4
1 6	5 52.58	+14 26.4	1.810	2.757	6.8	20.5	1 6	5 53.49	+23 55.2	2.089	3.042	5.4	16.7
1 16	5 44.79	+14 34.0	1.874	2.766	10.5	20.7	1 16	5 45.92	+23 53.3	2.130	3.029	9.1	16.9
1 26	5 39.33	+14 47.8	1.962	2.775	13.7	21.0	1 26	5 40.36	+23 50.7	2.197	3.015	12.2	17.0
226550	2003 UW ₃₀₇		12 23.0 352°79'	0°4'/23.0	17		120551	1995 BX ₁₀		12 23.0 162°92'	2°6'/23.3	17	
11 17	6 30.91	+24 2.8	1.860	2.676	14.4								

EPHEMERIDES

12 23.0

12 23.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
71895	2000 <i>WM</i> ₁₁		12 23.0 340°63	0°5/23.0	18		471039	2009 <i>TY</i> ₂₂		12 23.0 43°75	1°1/23.1	18	
11 17	6 34.71	+24 4.6	1.199	2.037	19.4	18.7	11 17	6 36.11	+20 43.1	1.180	2.014	19.8	20.6
11 27	6 30.87	+23 39.2	1.126	2.030	15.0	18.4	11 27	6 31.51	+20 43.6	1.129	2.032	15.1	20.3
12 7	6 23.30	+23 11.9	1.071	2.024	9.7	18.1	12 7	6 23.38	+20 48.8	1.098	2.050	9.7	20.1
12 17	6 12.90	+22 41.7	1.040	2.019	3.8	17.8	12 17	6 12.83	+20 56.8	1.091	2.069	3.9	19.8
12 27	6 1.35	+22 8.9	1.033	2.014	2.6	17.7	12 27	6 1.54	+21 6.1	1.108	2.089	2.6	19.8
1 6	5 50.59	+21 35.7	1.052	2.011	8.6	18.0	1 6	5 51.36	+21 15.6	1.152	2.110	8.2	20.2
1 16	5 42.34	+21 5.3	1.094	2.008	14.2	18.3	1 16	5 43.74	+21 25.8	1.219	2.131	13.2	20.5
1 26	5 37.73	+20 40.7	1.157	2.005	18.9	18.6	1 26	5 39.57	+21 37.1	1.308	2.152	17.4	20.9
26629	Zahller		12 23.0 319°98	0°1/23.0	18		3026	Sarastro		12 23.0 121°40	3°7/22.9	18	
11 17	6 34.88	+26 6.3	1.671	2.486	15.8	17.9	11 17	6 30.92	+13 20.6	2.269	3.060	12.9	16.6
11 27	6 30.04	+25 31.4	1.584	2.476	12.2	17.6	11 27	6 26.09	+12 44.8	2.188	3.062	10.1	16.4
12 7	6 22.29	+24 51.6	1.518	2.467	7.9	17.3	12 7	6 19.32	+12 14.7	2.131	3.064	7.1	16.2
12 17	6 12.42	+24 6.1	1.479	2.458	3.1	17.0	12 17	6 11.19	+11 51.9	2.101	3.066	4.4	16.0
12 27	6 1.69	+23 15.9	1.468	2.449	2.0	16.9	12 27	6 2.56	+11 37.5	2.101	3.067	4.0	16.0
1 6	5 51.57	+22 23.4	1.485	2.441	7.0	17.2	1 6	5 54.32	+11 32.1	2.129	3.069	6.5	16.2
1 16	5 43.34	+21 32.5	1.529	2.433	11.6	17.5	1 16	5 47.32	+11 35.4	2.186	3.071	9.5	16.4
1 26	5 37.94	+20 46.8	1.596	2.425	15.5	17.7	1 26	5 42.20	+11 46.6	2.267	3.072	12.3	16.6
182688	2001 <i>VQ</i> ₄₅		12 23.0 353°50	8°6/19.9	18		287770	2003 <i>SP</i> ₇₄		12 23.0 74°21	5°1/23.2	15	
11 17	6 45.15	+25 36.4	0.959	1.797	23.1	18.9	11 17	6 34.79	+11 33.2	1.665	2.465	16.5	21.3
11 27	6 41.08	+29 18.4	0.892	1.794	18.2	18.6	11 27	6 29.45	+10 54.2	1.607	2.484	13.0	21.1
12 7	6 31.48	+33 23.7	0.846	1.792	12.8	18.3	12 7	6 21.60	+10 25.2	1.570	2.502	9.2	20.9
12 17	6 16.67	+37 29.6	0.824	1.790	8.9	18.0	12 17	6 12.07	+10 8.5	1.559	2.521	5.9	20.7
12 27	5 58.55	+41 6.5	0.829	1.789	10.1	18.1	12 27	6 2.03	+10 5.1	1.575	2.540	5.5	20.8
1 6	5 40.39	+43 53.3	0.860	1.789	14.9	18.4	1 6	5 52.72	+10 14.8	1.619	2.559	8.2	21.0
1 16	5 25.68	+45 45.7	0.912	1.789	20.1	18.7	1 16	5 45.19	+10 36.0	1.689	2.577	11.6	21.2
1 26	5 16.93	+46 54.0	0.982	1.791	24.4	19.0	1 26	5 40.19	+11 6.3	1.783	2.596	14.8	21.5
49221	1998 <i>SR</i> ₁₂₉		12 23.0 12°99	1°5/22.9	18		311782	2006 <i>UT</i> ₅₂		12 23.0 29°03	1°4/23.0	17	
11 17	6 34.49	+25 51.8	1.658	2.475	15.8	18.9	11 17	6 32.75	+20 57.4	1.438	2.264	17.3	20.7
11 27	6 29.79	+26 14.7	1.582	2.475	12.2	18.7	11 27	6 28.48	+20 42.0	1.378	2.276	13.2	20.5
12 7	6 22.16	+26 37.5	1.529	2.477	7.9	18.4	12 7	6 21.26	+20 29.3	1.339	2.289	8.5	20.2
12 17	6 12.38	+26 56.8	1.500	2.478	3.3	18.2	12 17	6 12.00	+20 18.8	1.324	2.302	3.5	20.0
12 27	6 1.72	+27 9.8	1.500	2.480	2.5	18.1	12 27	6 2.08	+20 10.5	1.336	2.317	2.5	19.9
1 6	5 51.65	+27 15.6	1.528	2.482	7.0	18.4	1 6	5 52.98	+20 4.5	1.375	2.332	7.3	20.3
1 16	5 43.48	+27 15.2	1.582	2.485	11.3	18.7	1 16	5 45.94	+20 1.7	1.440	2.348	11.8	20.6
1 26	5 38.16	+27 11.0	1.659	2.487	15.0	18.9	1 26	5 41.80	+20 2.5	1.526	2.364	15.6	20.8
400156	2006 <i>VH</i> ₄₇		12 23.0 27°52	0°8/23.0	17		303486	2005 <i>EJ</i> ₇₁		12 23.0 238°85	2°2/23.2	18	R
11 17	6 33.95	+25 14.6	1.752	2.566	15.2	21.7	11 17	6 34.12	+16 19.9	1.969	2.768	14.3	20.8
11 27	6 29.13	+25 19.8	1.678	2.570	11.7	21.5	11 27	6 29.04	+16 25.8	1.877	2.759	11.2	20.6
12 7	6 21.60	+25 24.1	1.625	2.573	7.5	21.2	12 7	6 21.51	+16 38.4	1.809	2.751	7.4	20.3
12 17	6 12.13	+25 25.4	1.598	2.577	3.0	21.0	12 17	6 12.14	+16 57.3	1.767	2.742	3.6	20.1
12 27	6 1.91	+25 22.2	1.600	2.581	2.0	20.9	12 27	6 1.92	+17 21.6	1.755	2.733	2.8	20.0
1 6	5 52.30	+25 14.6	1.630	2.585	6.5	21.2	1 6	5 52.03	+17 49.8	1.772	2.723	6.5	20.2
1 16	5 44.49	+25 4.0	1.687	2.590	10.7	21.5	1 16	5 43.57	+18 20.9	1.817	2.713	10.5	20.4
1 26	5 39.34	+24 52.5	1.767	2.595	14.3	21.7	1 26	5 37.42	+18 53.8	1.886	2.703	14.0	20.6
307220	2002 <i>GH</i> ₈₅		12 23.0 134°01	6°8/22.4	18		507900	2014 <i>TO</i> ₈₆		12 23.1 66°34	16°5/21.2	17	
11 17	6 41.68	+38 44.5	1.873	2.658	15.5	20.1	11 17	6 37.28	- 2 25.9	1.132	1.917	23.6	20.8
11 27	6 35.51	+40 0.8	1.802	2.665	12.5	20.0	11 27	6 32.33	- 5 26.5	1.086	1.925	20.7	20.6
12 7	6 25.97	+41 8.3	1.753	2.671	9.5	19.8	12 7	6 23.92	- 8 2.6	1.058	1.934	18.1	20.5
12 17	6 13.89	+41 59.2	1.731	2.677	7.2	19.7	12 17	6 13.07	-10 0.2	1.050	1.943	16.6	20.4
12 27	6 0.72	+42 27.3	1.736	2.683	7.1	19.7	12 27	6 1.40	-11 8.5	1.063	1.953	16.7	20.5
1 6	5 48.20	+42 31.3	1.769	2.688	9.2	19.8	1 6	5 50.69	-11 25.4	1.097	1.962	18.3	20.6
1 16	5 37.88	+42 14.3	1.828	2.693	12.1	20.0	1 16	5 42.41	-10 56.1	1.149	1.972	20.6	20.8
1 26	5 30.84	+41 42.5	1.909	2.698	14.9	20.2	1 26	5 37.54	- 9 51.2	1.216	1.981	23.0	21.0
293132	2006 <i>XW</i> ₅₆		12 23.0 309°34	7°1/22.2	17		27784	1992 <i>OE</i>		12 23.1 86°17	11°6/25.7	18	
11 17	6 31.78	+ 8 18.4	1.851	2.641	15.4	20.0	11 17	6 57.71	+57 48.5	2.059	2.757	16.9	18.5
11 27	6 27.20	+ 6 56.5	1.768	2.633	12.6	19.8	11 27	6 48.19	+58 41.3	2.008	2.778	15.0	18.4
12 7	6 20.26	+ 5 42.6	1.707	2.626	9.7	19.6	12 7	6 34.05	+59 10.4	1.976	2.798	13.2	18.3
12 17	6 11.61	+ 4 41.7	1.673	2.618	7.5	19.4	12 17	6 16.84	+59 6.2	1.965	2.819	11.9	18.2
12 27	6 2.25	+ 3 57.9	1.665	2.611	7.4	19.4	12 27	5 59.08	+58 24.0	1.979	2.839	11.6	18.3
1 6	5 53.32	+ 3 33.5	1.685	2.604	9.6	19.5	1 6	5 43.34	+57 6.5	2.018	2.859	12.2	18.3
1 16	5 45.84	+ 3 28.7	1.730	2.597	12.6	19.7	1 16	5 31.40	+55 22.1	2.081	2.879	13.5	18.5
1 26	5 40.63	+ 3 41.1	1.797	2.590	15.5	19.9	1 26	5 24.08	+53 22.2	2.166	2.898	15.1	18.6
493286	2014 <i>UA</i> ₁₆₃		12 23.0 266°82	2°5/22.9	18		421023	2013 <i>PO</i> ₆₂		12 23.1 158°41	1°7/23.1	17	
11 17	6 31.14	+17 15.9	2.337	3.133	12.4	21.4	11 17	6 31.30	+18 2.1	2.569	3.361	11.6	22.4
11 27	6 26.28	+16 41.1	2.248	3.128	9.6	21.2	11 27	6 26.21	+17 49.7	2.486	3.365	8.9	22.2
12 7	6 19.46	+16 8.8	2.183	3.124	6.5	21.0	12 7	6 19.32	+17 40.3	2.427	3.369	5.8	22.0
12 17	6 11.25	+15 40.1	2.147	3.119	3.4	20.8	12 17	6 11.20	+17 33.8	2.397	3.372	2.8	21.8
12 27	6 2.50	+15 16.1	2.140	3.114	3.0	20.7	12 27	6 2.60	+17 30.4	2.397	3.375	2.2	21.8
1 6	5 54.12	+14 57.6	2.163	3.109	5.9	20.9	1 6	5 54.37	+17 30.1	2.428	3.377	5.1	22.0
1 16	5 46.96	+14 45.4	2.214	3.104	9.2	21.1	1 16	5 47.26	+17 32.8	2.488	3.380	8.2	22.2
1 26	5 41.68	+14 39.5	2.290	3.099	12.1	21.3	1 26	5 41.89	+17 38.6	2.574	3.382	10.9	22.4
67253	2000 <i>EA</i> ₁₀₆		12 23.0 172°35	6°0/22.4	18		387220	2012 <i>UN</i> ₁₄		12 23.1 167°30	0°6/23.0	18	

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12 23.1

12 23.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
319358	2006 <i>CE</i> ₆₄		12 23.1	54°15'	0°2'/23.1	18	54462	2000 <i>NC</i> ₂₉		12 23.1	131°81'	6°3'/23.9	18
11 17	6 33.17	+22 2.6	1.894	2.704	14.4	20.8	11 17	6 32.36	+2 42.3	2.412	3.165	13.3	19.2
11 27	6 28.25	+22 14.1	1.824	2.714	11.0	20.6	11 27	6 26.98	+2 21.4	2.340	3.177	11.0	19.0
12 7	6 20.90	+22 27.6	1.778	2.725	7.0	20.3	12 7	6 19.80	+2 13.6	2.291	3.189	8.6	18.9
12 17	6 11.85	+22 41.6	1.758	2.736	2.7	20.1	12 17	6 11.39	+2 21.1	2.269	3.201	6.7	18.8
12 27	6 2.18	+22 54.5	1.766	2.747	1.8	20.0	12 27	6 2.54	+2 44.5	2.275	3.212	6.4	18.8
1 6	5 53.08	+23 5.6	1.804	2.759	6.0	20.4	1 6	5 54.09	+3 22.8	2.311	3.223	7.7	18.9
1 16	5 45.60	+23 14.9	1.869	2.770	9.9	20.6	1 16	5 46.81	+4 13.4	2.374	3.233	9.9	19.1
1 26	5 40.51	+23 23.3	1.958	2.782	13.3	20.9	1 26	5 41.30	+5 13.2	2.462	3.242	12.2	19.2
460802	2014 <i>WO</i> ₄₇		12 23.1	27°95'	2°3'/22.7	17	416088	2002 <i>OL</i> ₂₄		12 23.1	81°94'	5°4'/24.1	18
11 17	6 33.03	+27 31.8	2.069	2.875	13.5	20.9	11 17	6 31.49	+4 43.9	2.390	3.153	13.1	20.9
11 27	6 28.21	+28 21.7	1.993	2.880	10.4	20.7	11 27	6 26.29	+4 39.8	2.326	3.173	10.7	20.7
12 7	6 20.95	+29 11.2	1.941	2.885	6.8	20.5	12 7	6 19.33	+4 48.4	2.285	3.194	8.1	20.6
12 17	6 11.91	+29 56.4	1.917	2.891	3.3	20.2	12 17	6 11.20	+5 10.7	2.270	3.214	5.9	20.5
12 27	6 2.13	+30 33.7	1.922	2.898	2.9	20.2	12 27	6 2.68	+5 46.6	2.285	3.234	5.5	20.5
1 6	5 52.78	+31 1.4	1.956	2.904	6.2	20.5	1 6	5 54.60	+6 34.3	2.329	3.254	7.0	20.6
1 16	5 44.95	+31 19.5	2.017	2.911	9.7	20.7	1 16	5 47.71	+7 31.2	2.402	3.273	9.3	20.8
1 26	5 39.47	+31 29.9	2.103	2.918	12.8	20.9	1 26	5 42.58	+8 34.2	2.500	3.293	11.7	21.0
324086	2005 <i>WU</i> ₁₀₂		12 23.1	10°68'	1°2'/23.2	17	178466	1999 <i>RE</i> ₁₀₅		12 23.1	68°84'	4°2'/22.9	18
11 17	6 31.91	+19 3.4	1.807	2.619	14.9	20.3	11 17	6 41.24	+30 52.9	1.326	2.145	18.9	19.6
11 27	6 27.49	+19 17.9	1.729	2.620	11.5	20.1	11 27	6 35.53	+31 37.3	1.272	2.164	14.6	19.4
12 7	6 20.55	+19 37.7	1.674	2.621	7.4	19.9	12 7	6 26.05	+32 16.2	1.239	2.182	9.9	19.2
12 17	6 11.77	+20 1.6	1.646	2.623	3.1	19.6	12 17	6 13.92	+32 43.0	1.229	2.201	5.4	19.0
12 27	6 2.24	+20 27.9	1.645	2.626	2.1	19.5	12 27	6 0.94	+32 52.9	1.246	2.220	4.7	19.0
1 6	5 53.18	+20 54.9	1.673	2.628	6.4	19.8	1 6	5 49.11	+32 45.7	1.290	2.239	8.7	19.3
1 16	5 45.70	+21 21.8	1.729	2.632	10.5	20.1	1 16	5 40.02	+32 25.4	1.358	2.257	13.1	19.6
1 26	5 40.67	+21 48.2	1.807	2.635	14.0	20.3	1 26	5 34.65	+31 57.9	1.448	2.276	16.9	19.9
513922	2014 <i>BO</i> ₄₂		12 23.1	261°75'	1°0'/23.1	18	523247	2017 <i>AZ</i> ₁₂		12 23.1	12°23'	4°8'/24.2	18
11 17	6 37.45	+26 48.5	1.606	2.419	16.4	20.8	11 17	6 32.74	+9 2.4	1.411	2.220	18.5	20.0
11 27	6 32.20	+26 37.7	1.521	2.413	12.7	20.6	11 27	6 28.67	+9 33.1	1.340	2.223	14.7	19.8
12 7	6 23.80	+26 23.2	1.459	2.407	8.2	20.3	12 7	6 21.59	+10 23.0	1.289	2.226	10.4	19.6
12 17	6 13.08	+26 2.8	1.422	2.400	3.3	20.0	12 17	6 12.26	+11 32.1	1.263	2.230	6.2	19.3
12 27	6 1.39	+25 35.4	1.413	2.394	2.3	19.9	12 27	6 1.95	+12 57.1	1.262	2.235	5.1	19.3
1 6	5 50.33	+25 2.5	1.432	2.387	7.3	20.2	1 6	5 52.20	+14 32.3	1.289	2.240	8.5	19.5
1 16	5 41.32	+24 27.0	1.478	2.381	11.9	20.5	1 16	5 44.35	+16 11.5	1.342	2.247	12.8	19.8
1 26	5 35.37	+23 52.7	1.546	2.374	16.0	20.7	1 26	5 39.43	+17 49.4	1.417	2.254	16.7	20.0
249348	2008 <i>WR</i> ₉₇		12 23.1	343°17'	2°8'/22.4	18	118562	2000 <i>FC</i> ₄₇		12 23.1	173°83'	1°5'/22.9	18
11 17	6 34.90	+27 24.3	2.208	3.007	13.0	20.0	11 17	6 39.14	+25 46.5	2.128	2.921	13.6	19.8
11 27	6 29.68	+28 42.1	2.122	3.004	10.0	19.8	11 27	6 32.77	+26 23.5	2.044	2.925	10.5	19.5
12 7	6 21.98	+30 1.8	2.060	3.002	6.7	19.6	12 7	6 23.85	+27 0.7	1.985	2.928	6.8	19.3
12 17	6 12.36	+31 18.2	2.027	2.999	3.5	19.4	12 17	6 13.05	+27 34.6	1.953	2.930	2.9	19.1
12 27	6 1.81	+32 26.2	2.025	2.997	3.4	19.3	12 27	6 1.45	+28 2.1	1.953	2.931	2.3	19.0
1 6	5 51.49	+33 22.6	2.053	2.996	6.4	19.5	1 6	5 50.27	+28 21.6	1.982	2.932	6.1	19.3
1 16	5 42.55	+34 6.2	2.109	2.994	9.8	19.7	1 16	5 40.67	+28 33.6	2.041	2.932	9.8	19.5
1 26	5 35.91	+34 38.5	2.190	2.993	12.8	19.9	1 26	5 33.51	+28 40.0	2.125	2.931	13.0	19.7
187568	2006 <i>VU</i> ₉₉		12 23.1	283°00'	3°2'/22.8	18	384695	2011 <i>HG</i> ₆		12 23.1	187°70'	2°0'/23.2	18
11 17	6 37.92	+27 59.7	1.464	2.283	17.4	20.0	11 17	6 36.37	+17 1.5	1.816	2.617	15.3	21.2
11 27	6 33.08	+28 50.8	1.385	2.278	13.6	19.8	11 27	6 30.89	+17 12.1	1.733	2.617	11.9	21.0
12 7	6 24.69	+29 42.2	1.327	2.273	9.1	19.5	12 7	6 22.76	+17 29.6	1.673	2.616	7.8	20.8
12 17	6 13.52	+30 27.8	1.294	2.269	4.5	19.2	12 17	6 12.66	+17 53.1	1.639	2.615	3.6	20.5
12 27	6 1.06	+31 1.9	1.288	2.264	4.0	19.2	12 27	6 1.70	+18 21.0	1.635	2.614	2.7	20.4
1 6	5 49.15	+31 21.7	1.308	2.259	8.4	19.4	1 6	5 51.19	+18 51.5	1.660	2.612	6.8	20.7
1 16	5 39.48	+31 28.1	1.355	2.254	13.1	19.7	1 16	5 42.32	+19 23.5	1.712	2.609	10.9	20.9
1 26	5 33.27	+31 25.3	1.422	2.250	17.1	19.9	1 26	5 36.00	+19 56.2	1.788	2.607	14.6	21.2
77306	2001 <i>FH</i> ₇₉		12 23.1	201°90'	0°5'/23.0	18	111007	2001 <i>VG</i> ₁		12 23.1	3°33'	0°5'/23.1	18
11 17	6 38.33	+22 50.0	1.801	2.604	15.3	19.7	11 17	6 32.52	+19 29.2	1.588	2.408	16.3	18.3
11 27	6 32.60	+23 21.8	1.715	2.601	11.8	19.5	11 27	6 28.38	+20 7.2	1.512	2.407	12.5	18.0
12 7	6 23.97	+23 57.0	1.652	2.598	7.6	19.2	12 7	6 21.35	+20 52.7	1.458	2.407	8.1	17.8
12 17	6 13.15	+24 32.1	1.615	2.594	3.0	18.9	12 17	6 12.16	+21 43.0	1.429	2.408	3.2	17.5
12 27	6 1.32	+25 4.1	1.608	2.589	2.0	18.8	12 27	6 2.02	+22 34.4	1.428	2.409	2.0	17.4
1 6	5 49.92	+25 30.6	1.630	2.584	6.7	19.1	1 6	5 52.36	+23 23.6	1.455	2.411	7.0	17.7
1 16	5 40.27	+25 51.4	1.680	2.578	11.1	19.4	1 16	5 44.51	+24 8.7	1.507	2.414	11.5	18.0
1 26	5 33.37	+26 7.9	1.754	2.571	14.8	19.6	1 26	5 39.44	+24 49.3	1.583	2.417	15.4	18.3
304956	2007 <i>TW</i> ₅₁		12 23.1	335°42'	1°2'/23.1	18	149782	2004 <i>RZ</i> ₃₄₃		12 23.1	172°50'	3°2'/23.3	18
11 17	6 33.72	+20 59.0	1.664	2.480	15.8	20.8	11 17	6 31.58	+12 32.2	2.638	3.418	11.6	20.8
11 27	6 29.10	+20 46.2	1.584	2.477	12.2	20.6	11 27	6 26.36	+12 19.4	2.553	3.421	9.1	20.6
12 7	6 21.69	+20 35.5	1.526	2.474	7.9	20.3	12 7	6 19.42	+12 12.9	2.493	3.423	6.3	20.4
12 17	6 12.24	+20 26.2	1.493	2.471	3.3	20.1	12 17	6 11.27	+12 13.3	2.460	3.425	3.8	20.3
12 27	6 1.95	+20 18.3	1.488	2.469	2.3	20.0	12 27	6 2.64	+12 20.9	2.459	3.427	3.4	20.3
1 6	5 52.22	+20 11.8	1.512	2.466	7.0	20.3	1 6	5 54.33	+12 35.4	2.487	3.428	5.7	20.4
1 16	5 44.26	+20 7.6	1.561	2.464	11.4	20.5	1 16	5 47.08	+12 55.8	2.545	3.428	8.4	20.6
1 26	5 39.02	+20 6.6	1.633	2.463	15.2	20.8	1 26	5 41.48	+13 21.2	2.629	3.428	11.0	20.8
257827	2000 <i>GY</i> ₁₆₈		12 23.1	155°87'	9°1'/23.6	18	373924	2003 <i>UD</i> ₂₂₇		12 23.1	79°39'	1°2'/23	

EPHEMERIDES

12 23.1

12 23.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
265896	2006 <i>AO</i> ₉₂		12 23.1 122°40'	2.7°/23.2	17		266688	2009 <i>OH</i> ₂₃		12 23.1 74°13'	5.4°/23.1	18	
11 17	6 35.65	+32 22.9	2.394	3.184	12.4	20.8	11 17	6 44.06	+34 13.2	1.381	2.191	18.8	20.3
11 27	6 29.79	+32 31.7	2.318	3.193	9.6	20.7	11 27	6 37.56	+34 59.1	1.332	2.215	14.7	20.1
12 7	6 21.73	+32 34.6	2.265	3.202	6.5	20.5	12 7	6 27.27	+35 35.6	1.303	2.240	10.3	19.9
12 17	6 12.16	+32 29.0	2.240	3.210	3.6	20.3	12 17	6 14.38	+35 55.3	1.298	2.264	6.3	19.7
12 27	6 2.08	+32 13.5	2.246	3.218	3.1	20.3	12 27	6 0.78	+35 54.0	1.321	2.288	5.8	19.8
1 6	5 52.56	+31 48.7	2.281	3.226	5.7	20.5	1 6	5 48.48	+35 32.5	1.370	2.312	9.0	20.0
1 16	5 44.53	+31 16.7	2.345	3.234	8.8	20.7	1 16	5 39.05	+34 56.3	1.444	2.336	12.9	20.3
1 26	5 38.70	+30 41.0	2.435	3.242	11.5	20.9	1 26	5 33.40	+34 12.6	1.540	2.359	16.4	20.6
302545	2002 <i>NE</i> ₆₈		12 23.1 173°60'	4.3°/23.3	18		132920	2002 <i>SY</i> ₃₇		12 23.1 96°57'	6.5°/23.6	18	
11 17	6 33.79	+10 33.4	2.292	3.070	13.2	21.7	11 17	6 29.59	+ 1 57.7	2.548	3.301	12.7	19.5
11 27	6 28.27	+10 12.6	2.209	3.073	10.5	21.5	11 27	6 24.80	+ 1 17.8	2.481	3.315	10.6	19.3
12 7	6 20.74	+10 0.0	2.150	3.076	7.5	21.3	12 7	6 18.39	+ 0 50.4	2.436	3.328	8.4	19.2
12 17	6 11.80	+ 9 57.0	2.118	3.078	4.9	21.2	12 17	6 10.88	+ 0 37.7	2.418	3.341	6.9	19.1
12 27	6 2.30	+10 4.3	2.116	3.079	4.5	21.2	12 27	6 2.99	+ 0 41.3	2.427	3.354	6.6	19.2
1 6	5 53.17	+10 21.3	2.144	3.080	6.7	21.3	1 6	5 55.49	+ 1 0.7	2.465	3.366	7.8	19.3
1 16	5 45.29	+10 47.0	2.200	3.080	9.7	21.5	1 16	5 49.04	+ 1 34.1	2.530	3.379	9.7	19.4
1 26	5 39.34	+11 19.6	2.281	3.079	12.5	21.7	1 26	5 44.22	+ 2 18.7	2.618	3.391	11.7	19.6
121931	2000 <i>DY</i> ₁₁₄		12 23.1 98°34'	0.2°/23.1	18		209731	2005 <i>EX</i> ₁₆₇		12 23.1 115°71'	0.4°/23.1	18	
11 17	6 39.87	+23 37.2	1.287	2.111	19.1	20.5	11 17	6 35.25	+22 19.0	1.873	2.680	14.7	20.8
11 27	6 34.46	+23 43.0	1.223	2.120	14.7	20.3	11 27	6 29.92	+22 18.6	1.798	2.686	11.2	20.6
12 7	6 25.41	+23 50.0	1.179	2.129	9.4	20.0	12 7	6 22.04	+22 19.6	1.745	2.692	7.2	20.4
12 17	6 13.72	+23 55.2	1.159	2.138	3.6	19.7	12 17	6 12.37	+22 20.5	1.719	2.698	2.8	20.1
12 27	6 1.07	+23 56.4	1.165	2.146	2.4	19.7	12 27	6 2.02	+22 20.3	1.723	2.704	1.8	20.1
1 6	5 49.38	+23 53.3	1.198	2.155	8.1	20.0	1 6	5 52.24	+22 18.8	1.755	2.709	6.2	20.4
1 16	5 40.22	+23 47.7	1.256	2.163	13.3	20.3	1 16	5 44.14	+22 16.9	1.815	2.715	10.3	20.6
1 26	5 34.65	+23 42.2	1.335	2.171	17.6	20.6	1 26	5 38.52	+22 15.6	1.899	2.720	13.7	20.9
252419	2001 <i>TJ</i> ₁₂₁		12 23.1 124°00'	3.2°/22.9	18		516795	2010 <i>GZ</i> ₆₂		12 23.1 169°21'	4.1°/22.9	18	
11 17	6 35.27	+14 42.7	2.538	3.316	12.1	20.9	11 17	6 33.62	+ 9 28.5	2.902	3.664	11.1	23.0
11 27	6 29.00	+13 58.8	2.468	3.336	9.4	20.7	11 27	6 27.68	+ 8 51.2	2.817	3.670	8.9	22.9
12 7	6 20.99	+13 18.9	2.424	3.356	6.4	20.5	12 7	6 20.16	+ 8 20.3	2.759	3.676	6.5	22.7
12 17	6 11.83	+12 44.3	2.408	3.374	3.8	20.4	12 17	6 11.56	+ 7 57.3	2.729	3.680	4.5	22.6
12 27	6 2.33	+12 16.4	2.424	3.392	3.5	20.4	12 27	6 2.56	+ 7 43.5	2.730	3.684	4.3	22.6
1 6	5 53.36	+11 56.0	2.471	3.409	5.8	20.6	1 6	5 53.88	+ 7 39.1	2.762	3.687	6.0	22.7
1 16	5 45.63	+11 43.5	2.548	3.426	8.6	20.8	1 16	5 46.21	+ 7 43.9	2.824	3.688	8.3	22.9
1 26	5 39.71	+11 38.5	2.650	3.442	11.1	21.0	1 26	5 40.08	+ 7 56.9	2.911	3.690	10.6	23.0
357432	2003 <i>YG</i> ₁₄₁		12 23.1 23°75'	6.4°/22.1	18		67627	2000 <i>SW</i> ₁₈₇		12 23.1 85°68'	2.9°/23.4	18	
11 17	6 37.21	+33 21.0	1.436	2.254	17.8	19.8	11 17	6 39.07	+15 20.1	1.367	2.180	18.8	19.6
11 27	6 32.74	+34 58.1	1.373	2.261	14.1	19.6	11 27	6 33.37	+15 29.8	1.310	2.199	14.5	19.4
12 7	6 24.55	+36 31.3	1.332	2.268	10.1	19.4	12 7	6 24.47	+15 50.0	1.274	2.218	9.6	19.2
12 17	6 13.49	+37 51.0	1.315	2.276	7.0	19.2	12 17	6 13.33	+16 19.6	1.262	2.236	4.7	19.0
12 27	6 1.17	+38 49.1	1.324	2.285	6.9	19.2	12 27	6 1.44	+16 56.1	1.277	2.255	3.6	18.9
1 6	5 49.57	+39 22.0	1.360	2.295	9.9	19.4	1 6	5 50.46	+17 36.9	1.320	2.273	8.0	19.2
1 16	5 40.43	+39 31.8	1.420	2.305	13.6	19.7	1 16	5 41.75	+18 19.7	1.388	2.291	12.6	19.6
1 26	5 34.96	+39 24.6	1.500	2.316	17.0	19.9	1 26	5 36.23	+19 2.9	1.479	2.308	16.5	19.9
344949	2004 <i>VF</i> ₅₂		12 23.1 32°35'	0.3°/23.1	16		257040	2008 <i>FY</i> ₅₅		12 23.1 327°19'	0.2°/23.1	17	
11 17	6 29.91	+21 46.3	2.191	2.999	12.8	20.3	11 17	6 33.52	+23 38.9	1.959	2.767	14.1	21.3
11 27	6 25.38	+21 58.4	2.132	3.021	9.7	20.2	11 27	6 28.62	+23 46.7	1.876	2.765	10.8	21.1
12 7	6 18.88	+22 12.2	2.097	3.044	6.2	20.0	12 7	6 21.26	+23 55.2	1.817	2.764	6.9	20.8
12 17	6 11.06	+22 26.6	2.089	3.068	2.4	19.8	12 17	6 12.09	+24 2.5	1.784	2.763	2.7	20.6
12 27	6 2.83	+22 40.4	2.111	3.092	1.5	19.8	12 27	6 2.20	+24 7.3	1.781	2.762	1.8	20.5
1 6	5 55.14	+22 52.8	2.162	3.117	5.2	20.1	1 6	5 52.77	+24 9.2	1.807	2.761	6.1	20.8
1 16	5 48.81	+23 3.9	2.241	3.142	8.6	20.3	1 16	5 44.89	+24 8.6	1.860	2.760	10.0	21.0
1 26	5 44.45	+23 14.1	2.345	3.167	11.4	20.6	1 26	5 39.39	+24 7.1	1.937	2.759	13.4	21.2
171305	2006 <i>HJ</i> ₃₀		12 23.1 165°68'	2.0°/23.1	18		72678	2001 <i>FY</i> ₆₀		12 23.1 41°00'	5.6°/22.8	18	
11 17	6 35.08	+17 15.1	2.377	3.164	12.5	20.6	11 17	6 36.43	+37 11.5	1.982	2.775	14.5	18.4
11 27	6 29.20	+17 3.5	2.294	3.170	9.7	20.4	11 27	6 31.17	+38 5.8	1.912	2.783	11.6	18.2
12 7	6 21.32	+16 55.5	2.236	3.175	6.4	20.2	12 7	6 23.03	+38 51.9	1.865	2.790	8.5	18.1
12 17	6 12.03	+16 51.3	2.206	3.180	3.1	20.0	12 17	6 12.80	+39 24.0	1.844	2.798	6.1	17.9
12 27	6 2.21	+16 50.7	2.207	3.184	2.5	20.0	12 27	6 1.75	+39 38.1	1.851	2.806	5.9	17.9
1 6	5 52.81	+16 53.6	2.239	3.187	5.6	20.2	1 6	5 51.33	+39 33.4	1.885	2.814	8.0	18.1
1 16	5 44.68	+17 0.0	2.300	3.189	8.9	20.4	1 16	5 42.81	+39 12.6	1.946	2.823	10.9	18.3
1 26	5 38.51	+17 9.8	2.386	3.191	11.8	20.6	1 26	5 37.10	+38 40.7	2.030	2.832	13.7	18.5
332286	2006 <i>TT</i>		12 23.1 115°47'	1.3°/23.1	18		226405	2003 <i>QK</i> ₆₇		12 23.1 56°41'	4.2°/23.5	18	
11 17	6 39.23	+21 11.8	1.554	2.364	17.0	21.7	11 17	6 30.68	+10 25.1	2.142	2.931	13.7	19.7
11 27	6 33.27	+20 55.9	1.487	2.377	13.0	21.5	11 27	6 26.04	+10 14.8	2.067	2.937	10.8	19.5
12 7	6 24.29	+20 41.8	1.443	2.389	8.4	21.3	12 7	6 19.39	+10 14.3	2.015	2.944	7.7	19.3
12 17	6 13.23	+20 28.8	1.423	2.401	3.4	21.0	12 17	6 11.33	+10 24.5	1.990	2.951	5.0	19.2
12 27	6 1.46	+20 16.6	1.433	2.413	2.4	21.0	12 27	6 2.73	+10 45.4	1.993	2.958	4.5	19.1
1 6	5 50.53	+20 5.6	1.470	2.424	7.2	21.3	1 6	5 54.55	+11 16.0	2.025	2.965	6.8	19.3
1 16	5 41.70	+19 57.3	1.534	2.435	11.7	21.6	1 16	5 47.64	+11 54.4	2.085	2.972	9.8	19.5
1 26	5 35.86	+19 52.7	1.621	2.445	15.6	21.8	1 26	5 42.69	+12 38.5	2.170	2.980	12.6	19.7
69566	1998 <i>BX</i>		12 23.1 30°21'	1.1°/23.1	18		493160	2014 <i>TZ</i> ₇₂		12 23.1			

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12 23.1

12 23.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
22428	1996 <i>DT</i>		12 23.1 224°70	4°2/23.4	18		314276	2005 <i>SP</i> ₂₂		12 23.1 143°11	0°6/23.1	18	
11 17	6 30.71	+10 10.1	2.341	3.124	12.8	18.4	11 17	6 33.85	+20 59.2	2.183	2.982	13.1	20.9
11 27	6 25.99	+9 55.0	2.255	3.121	10.2	18.2	11 27	6 28.57	+21 8.3	2.103	2.987	10.0	20.7
12 7	6 19.35	+9 48.6	2.191	3.118	7.3	18.0	12 7	6 21.09	+21 19.9	2.047	2.992	6.5	20.5
12 17	6 11.34	+9 52.2	2.155	3.114	4.8	17.8	12 17	6 12.06	+21 32.7	2.019	2.997	2.6	20.3
12 27	6 2.75	+10 6.2	2.148	3.111	4.4	17.8	12 27	6 2.41	+21 45.5	2.020	3.001	1.7	20.2
1 6	5 54.47	+10 30.1	2.170	3.107	6.6	17.9	1 6	5 53.19	+21 57.4	2.052	3.005	5.6	20.5
1 16	5 47.33	+11 2.4	2.220	3.103	9.5	18.1	1 16	5 45.36	+22 8.6	2.112	3.009	9.2	20.7
1 26	5 42.01	+11 41.2	2.295	3.099	12.2	18.3	1 26	5 39.65	+22 19.5	2.197	3.013	12.3	20.9
241785	2001 <i>OJ</i> ₁₀₃		12 23.1 203°33	0°5/23.1	18		287651	2003 <i>KV</i> ₁₇		12 23.1 117°22	0°9/23.2	18	
11 17	6 36.47	+26 27.9	2.220	3.015	13.0	20.5	11 17	6 37.00	+19 33.9	1.846	2.648	15.0	20.5
11 27	6 30.56	+26 9.4	2.130	3.012	10.0	20.3	11 27	6 31.25	+19 50.9	1.776	2.661	11.5	20.3
12 7	6 22.35	+25 47.4	2.064	3.008	6.5	20.1	12 7	6 22.92	+20 12.5	1.729	2.674	7.4	20.1
12 17	6 12.51	+25 20.7	2.027	3.004	2.6	19.8	12 17	6 12.78	+20 36.9	1.708	2.686	3.0	19.8
12 27	6 2.03	+24 49.3	2.019	3.000	1.7	19.7	12 27	6 1.96	+21 2.0	1.717	2.698	2.0	19.8
1 6	5 52.06	+24 14.4	2.043	2.995	5.6	20.0	1 6	5 51.73	+21 26.4	1.756	2.709	6.3	20.1
1 16	5 43.57	+23 38.1	2.095	2.990	9.3	20.2	1 16	5 43.22	+21 49.5	1.822	2.720	10.3	20.3
1 26	5 37.33	+23 3.3	2.172	2.985	12.5	20.4	1 26	5 37.22	+22 11.5	1.913	2.731	13.7	20.6
196713	2003 <i>SJ</i> ₁₀₁		12 23.1 3°81	8°2/24.2	17		362501	2010 <i>TP</i> ₅₀		12 23.1 48°00	5°2/22.7	18	
11 17	6 39.53	+45 27.0	1.803	2.580	16.3	19.5	11 17	6 37.25	+34 16.4	1.774	2.577	15.5	20.4
11 27	6 34.05	+45 52.6	1.730	2.580	13.6	19.3	11 27	6 32.04	+35 18.5	1.707	2.586	12.2	20.2
12 7	6 25.06	+46 1.1	1.678	2.580	10.9	19.2	12 7	6 23.73	+36 14.6	1.663	2.596	8.7	20.0
12 17	6 13.61	+45 45.7	1.649	2.581	8.7	19.0	12 17	6 13.16	+36 58.2	1.644	2.606	5.8	19.8
12 27	6 1.36	+45 2.7	1.646	2.583	8.3	19.0	12 27	6 1.70	+37 24.4	1.654	2.616	5.5	19.8
1 6	5 50.15	+43 54.1	1.669	2.586	9.8	19.1	1 6	5 50.90	+37 31.9	1.690	2.627	8.2	20.0
1 16	5 41.44	+42 26.2	1.718	2.589	12.4	19.3	1 16	5 42.14	+37 23.1	1.753	2.637	11.5	20.2
1 26	5 36.17	+40 47.8	1.790	2.593	15.2	19.5	1 26	5 36.41	+37 2.9	1.839	2.648	14.6	20.5
245818	2006 <i>JA</i> ₂₅		12 23.1 159°61	0°8/23.1	18		267859	2003 <i>WH</i> ₉		12 23.1 70°11	2°1/23.2	17	
11 17	6 35.57	+21 8.0	1.922	2.726	14.5	21.1	11 17	6 34.79	+30 28.2	2.185	2.983	13.1	20.2
11 27	6 30.15	+21 9.0	1.843	2.729	11.1	20.9	11 27	6 29.31	+30 28.8	2.111	2.993	10.1	20.1
12 7	6 22.22	+21 12.4	1.786	2.732	7.2	20.7	12 7	6 21.54	+30 24.2	2.061	3.003	6.7	19.9
12 17	6 12.49	+21 16.8	1.756	2.734	2.9	20.4	12 17	6 12.20	+30 12.2	2.039	3.013	3.3	19.7
12 27	6 2.04	+21 21.3	1.756	2.737	1.9	20.3	12 27	6 2.35	+29 51.8	2.046	3.023	2.6	19.6
1 6	5 52.11	+21 25.4	1.785	2.739	6.2	20.6	1 6	5 53.10	+29 23.8	2.082	3.032	5.8	19.9
1 16	5 43.78	+21 29.6	1.842	2.741	10.2	20.9	1 16	5 45.43	+28 50.7	2.147	3.042	9.1	20.1
1 26	5 37.88	+21 34.6	1.923	2.742	13.7	21.1	1 26	5 40.04	+28 15.5	2.237	3.052	12.1	20.3
49195	1998 <i>SG</i> ₁₀₂		12 23.1 300°17	2°0/23.0	18		449888	2015 <i>MW</i> ₉₀		12 23.1 134°13	7°2/23.3	18	
11 17	6 35.57	+27 39.1	1.792	2.602	15.1	19.2	11 17	6 33.73	+3 59.5	2.064	2.830	14.9	22.0
11 27	6 30.57	+28 2.7	1.711	2.600	11.7	19.0	11 27	6 28.35	+3 6.8	1.995	2.840	12.3	21.8
12 7	6 22.71	+28 24.7	1.652	2.597	7.7	18.7	12 7	6 20.87	+2 27.0	1.947	2.849	9.6	21.7
12 17	6 12.74	+28 41.4	1.619	2.595	3.5	18.5	12 17	6 11.95	+2 3.6	1.926	2.859	7.6	21.6
12 27	6 1.88	+28 50.0	1.614	2.593	2.8	18.4	12 27	6 2.51	+1 58.9	1.932	2.868	7.4	21.6
1 6	5 51.54	+28 49.7	1.638	2.591	6.8	18.6	1 6	5 53.55	+2 12.6	1.966	2.876	9.0	21.7
1 16	5 43.01	+28 42.0	1.689	2.588	10.9	18.9	1 16	5 45.97	+2 42.9	2.026	2.884	11.4	21.8
1 26	5 37.22	+28 29.8	1.763	2.586	14.5	19.1	1 26	5 40.46	+3 26.3	2.110	2.892	13.9	22.0
22929	Seanwahl		12 23.1 128°83	3°0/23.2	18		41370	2000 <i>AA</i> ₁₀₁		12 23.1 135°61	1°4/23.3	18	
11 17	6 34.36	+16 8.1	1.795	2.599	15.3	19.2	11 17	6 32.61	+17 37.4	2.327	3.122	12.5	19.1
11 27	6 29.30	+15 49.4	1.718	2.602	11.9	19.0	11 27	6 27.49	+17 54.4	2.246	3.126	9.6	18.9
12 7	6 21.71	+15 36.6	1.664	2.605	8.0	18.7	12 7	6 20.35	+18 16.6	2.189	3.131	6.3	18.7
12 17	6 12.31	+15 30.3	1.636	2.608	4.2	18.5	12 17	6 11.77	+18 42.8	2.160	3.136	2.8	18.4
12 27	6 2.20	+15 30.7	1.636	2.611	3.5	18.5	12 27	6 2.60	+19 11.8	2.161	3.140	2.0	18.4
1 6	5 52.63	+15 37.6	1.664	2.614	7.0	18.7	1 6	5 53.80	+19 42.2	2.193	3.145	5.4	18.6
1 16	5 44.68	+15 50.6	1.720	2.617	11.0	19.0	1 16	5 46.23	+20 12.8	2.253	3.149	8.8	18.9
1 26	5 39.19	+16 8.9	1.799	2.619	14.4	19.2	1 26	5 40.60	+20 43.3	2.339	3.153	11.7	19.1
207678	2007 <i>PH</i> ₄₂		12 23.1 46°50	3°6/23.4	18		500752	2013 <i>AO</i> ₇₁		12 23.1 358°06	21°7/25.7	17	
11 17	6 34.18	+14 16.8	1.437	2.253	17.8	20.2	11 17	6 50.34	+58 32.5	0.909	1.694	28.0	20.4
11 27	6 29.53	+14 13.8	1.380	2.269	13.9	20.0	11 27	6 48.46	+60 43.3	0.863	1.690	25.8	20.2
12 7	6 21.98	+14 21.4	1.342	2.285	9.4	19.8	12 7	6 37.72	+62 19.2	0.830	1.687	23.6	20.0
12 17	6 12.41	+14 39.6	1.330	2.302	5.0	19.5	12 17	6 19.28	+62 57.6	0.810	1.686	22.1	19.9
12 27	6 2.17	+15 7.2	1.344	2.319	4.1	19.5	12 27	5 57.89	+62 20.9	0.806	1.686	21.7	19.9
1 6	5 52.70	+15 42.3	1.385	2.337	7.9	19.8	1 6	5 39.76	+60 29.7	0.817	1.687	22.5	20.0
1 16	5 45.25	+16 22.4	1.451	2.354	12.1	20.1	1 16	5 28.99	+57 42.0	0.844	1.690	24.2	20.1
1 26	5 40.66	+17 5.4	1.540	2.372	15.8	20.4	1 26	5 26.53	+54 22.8	0.885	1.694	26.5	20.3
415233	2012 <i>HL</i> ₇₉		12 23.1 157°70	1°6/22.9	18		269912	2000 <i>HR</i> ₇₇		12 23.1 325°04	5°2/22.3	18	
11 17	6 33.27	+26 50.1	2.482	3.278	11.8	21.0	11 17	6 30.31	+14 18.3	1.770	2.580	15.3	19.4
11 27	6 28.03	+27 24.0	2.398	3.280	9.1	20.8	11 27	6 26.47	+13 2.0	1.671	2.555	12.2	19.2
12 7	6 20.71	+27 57.4	2.339	3.282	5.9	20.6	12 7	6 20.09	+11 47.8	1.595	2.531	8.7	18.9
12 17	6 11.90	+28 27.5	2.309	3.284	2.7	20.4	12 17	6 11.78	+10 39.4	1.544	2.508	5.8	18.7
12 27	6 2.46	+28 51.9	2.308	3.286	2.2	20.4	12 27	6 2.56	+9 41.2	1.521	2.485	5.7	18.6
1 6	5 53.37	+29 9.5	2.338	3.288	5.3	20.6	1 6	5 53.65	+8 56.5	1.525	2.463	8.7	18.8
1 16	5 45.51	+29 20.6	2.397	3.289	8.5	20.8	1 16	5 46.19	+8 27.5	1.554	2.441	12.5	18.9
1 26	5 39.64	+29 26.5	2.482	3.291	11.3	21.0	1 26	5 41.13	+8 14.0	1.606	2.421	16.1	19.1
196809	2003 <i>SU</i> ₂₂₃		12 23.1 74°95	8°9/22.3	18		436668	2011 <i>SL</i> ₆₃		12 23.1 39°40	3°6/22.9	18	

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
158540	2002 <i>GH</i> ₉₂		12 23.1	2°76	1°0/23.1	17	373101	2011 <i>GW</i> ₂₁		12 23.1	40°47	1°3/23.2	17
11 17	6 33.10	+25 43.8	1.926	2.736	14.2	20.1	11 17	6 32.95	+27 56.9	2.316	3.116	12.4	21.3
11 27	6 28.41	+25 55.3	1.846	2.735	10.9	19.9	11 27	6 27.86	+27 55.6	2.234	3.118	9.5	21.1
12 7	6 21.19	+26 5.9	1.788	2.735	7.0	19.7	12 7	6 20.64	+27 51.0	2.176	3.120	6.2	20.9
12 17	6 12.15	+26 13.4	1.758	2.736	2.9	19.4	12 17	6 11.92	+27 41.6	2.145	3.122	2.7	20.7
12 27	6 2.38	+26 16.2	1.756	2.736	2.0	19.3	12 27	6 2.65	+27 26.5	2.144	3.124	2.0	20.7
1 6	5 53.11	+26 13.8	1.783	2.737	6.2	19.6	1 6	5 53.84	+27 6.2	2.173	3.126	5.4	20.9
1 16	5 45.43	+26 7.3	1.837	2.738	10.1	19.9	1 16	5 46.42	+26 42.2	2.231	3.128	8.8	21.1
1 26	5 40.20	+25 58.6	1.915	2.739	13.5	20.1	1 26	5 41.08	+26 17.0	2.314	3.130	11.7	21.3
56838	2000 <i>QK</i> ₄₀		12 23.1	109°06	1°7/23.1	18	300470	2007 <i>TN</i> ₁₁₂		12 23.1	82°32	3°1/23.4	17
11 17	6 35.46	+28 4.9	2.068	2.869	13.7	19.0	11 17	6 41.03	+32 20.3	1.756	2.555	15.8	21.3
11 27	6 29.99	+28 17.0	1.992	2.876	10.5	18.8	11 27	6 34.45	+32 23.7	1.696	2.577	12.2	21.1
12 7	6 22.09	+28 26.3	1.939	2.883	6.9	18.5	12 7	6 24.97	+32 19.2	1.659	2.599	8.2	20.9
12 17	6 12.47	+28 30.1	1.914	2.890	3.1	18.3	12 17	6 13.57	+32 3.4	1.649	2.620	4.3	20.8
12 27	6 2.22	+28 26.7	1.918	2.896	2.4	18.3	12 27	6 1.68	+31 35.0	1.667	2.642	3.5	20.8
1 6	5 52.53	+28 16.2	1.951	2.903	6.0	18.5	1 6	5 50.78	+30 55.8	1.714	2.663	6.9	21.0
1 16	5 44.45	+28 0.3	2.013	2.909	9.6	18.8	1 16	5 42.07	+30 9.9	1.789	2.684	10.7	21.3
1 26	5 38.76	+27 41.4	2.099	2.915	12.8	19.0	1 26	5 36.30	+29 22.2	1.887	2.704	14.0	21.5
116488	2004 <i>BG</i> ₁₂		12 23.1	156°10	1°3/23.1	18	197209	2003 <i>WQ</i> ₈		12 23.1	329°48	1°4/22.9	18
11 17	6 35.74	+26 42.7	1.934	2.739	14.3	20.1	11 17	6 32.61	+23 6.8	1.868	2.680	14.5	18.6
11 27	6 30.41	+26 53.1	1.854	2.740	11.0	19.9	11 27	6 28.09	+22 11.9	1.773	2.664	11.2	18.4
12 7	6 22.47	+27 1.6	1.796	2.742	7.2	19.7	12 7	6 21.04	+21 13.2	1.702	2.649	7.3	18.1
12 17	6 12.66	+27 5.7	1.766	2.743	3.0	19.4	12 17	6 12.15	+20 11.7	1.657	2.635	3.1	17.8
12 27	6 2.10	+27 3.7	1.765	2.744	2.2	19.4	12 27	6 2.50	+19 9.7	1.642	2.621	2.4	17.7
1 6	5 52.08	+26 55.3	1.793	2.746	6.2	19.6	1 6	5 53.31	+18 10.2	1.655	2.608	6.7	18.0
1 16	5 43.74	+26 42.3	1.848	2.747	10.2	19.9	1 16	5 45.70	+17 16.6	1.696	2.596	10.9	18.2
1 26	5 37.93	+26 26.9	1.927	2.747	13.6	20.1	1 26	5 40.52	+16 31.4	1.760	2.584	14.5	18.4
518986	2010 <i>JP</i> ₁₀		12 23.1	177°85	3°9/23.1	18	500694	2012 <i>VP</i> ₉₇		12 23.1	87°39	15°5/20.0	17
11 17	6 33.75	+12 16.5	2.361	3.142	12.8	22.1	11 17	6 56.73	+44 21.6	1.079	1.877	23.7	20.7
11 27	6 28.23	+11 44.1	2.276	3.144	10.1	21.9	11 27	6 51.02	+47 59.9	1.037	1.891	20.3	20.6
12 7	6 20.77	+11 17.9	2.216	3.145	7.1	21.7	12 7	6 38.48	+51 23.6	1.014	1.906	17.3	20.4
12 17	6 11.94	+10 59.3	2.184	3.146	4.5	21.6	12 17	6 19.68	+54 7.8	1.013	1.921	15.6	20.4
12 27	6 2.57	+10 49.6	2.181	3.146	4.2	21.6	12 27	5 57.52	+55 51.6	1.034	1.935	16.0	20.5
1 6	5 53.58	+10 48.9	2.209	3.146	6.5	21.7	1 6	5 36.49	+56 30.3	1.077	1.949	18.0	20.6
1 16	5 45.80	+10 56.9	2.265	3.145	9.4	21.9	1 16	5 20.63	+56 15.4	1.139	1.963	20.7	20.9
1 26	5 39.91	+11 12.6	2.346	3.143	12.2	22.1	1 26	5 12.05	+55 26.4	1.217	1.977	23.3	21.1
177699	2005 <i>GJ</i> ₂₉		12 23.1	244°83	4°3/22.9	18	126209	2002 <i>AQ</i> ₄₂		12 23.1	303°29	5°3/23.6	18
11 17	6 40.44	+32 7.8	1.559	2.367	17.0	21.0	11 17	6 32.81	+10 39.4	1.556	2.362	17.2	19.4
11 27	6 35.03	+32 43.9	1.474	2.359	13.4	20.8	11 27	6 28.70	+10 24.7	1.469	2.350	13.8	19.2
12 7	6 26.01	+33 14.9	1.410	2.350	9.3	20.5	12 7	6 21.72	+10 22.6	1.403	2.337	9.9	18.9
12 17	6 14.19	+33 34.5	1.371	2.341	5.3	20.3	12 17	6 12.51	+10 35.5	1.361	2.325	6.3	18.7
12 27	6 1.08	+33 37.8	1.359	2.331	4.8	20.2	12 27	6 2.25	+11 3.8	1.345	2.313	5.6	18.6
1 6	5 48.54	+33 23.7	1.375	2.322	8.5	20.4	1 6	5 52.33	+11 46.2	1.356	2.302	8.8	18.8
1 16	5 38.29	+32 55.5	1.416	2.312	12.9	20.6	1 16	5 44.09	+12 39.7	1.393	2.290	12.9	19.0
1 26	5 31.54	+32 19.0	1.480	2.301	16.9	20.9	1 26	5 38.60	+13 40.7	1.451	2.279	16.9	19.2
448021	2008 <i>EF</i> ₁₁		12 23.1	5°51	0°6/23.2	18	271379	2003 <i>YS</i> ₁₅₂		12 23.1	3°40	1°6/23.3	18
11 17	6 32.87	+20 27.6	1.679	2.495	15.7	20.8	11 17	6 30.92	+17 22.9	2.294	3.092	12.6	20.3
11 27	6 28.53	+20 47.3	1.602	2.495	12.0	20.5	11 27	6 26.29	+17 34.8	2.209	3.092	9.7	20.1
12 7	6 21.43	+21 11.9	1.547	2.496	7.8	20.3	12 7	6 19.66	+17 52.0	2.149	3.092	6.4	19.9
12 17	6 12.32	+21 39.4	1.518	2.497	3.1	20.0	12 17	6 11.58	+18 13.8	2.116	3.092	2.9	19.7
12 27	6 2.34	+22 7.5	1.517	2.498	2.0	19.9	12 27	6 2.90	+18 38.9	2.113	3.092	2.1	19.6
1 6	5 52.87	+22 34.4	1.544	2.500	6.7	20.2	1 6	5 54.55	+19 6.3	2.140	3.093	5.5	19.8
1 16	5 45.12	+22 59.5	1.597	2.502	11.1	20.5	1 16	5 47.40	+19 34.9	2.196	3.093	8.9	20.1
1 26	5 40.03	+23 22.7	1.673	2.505	14.8	20.7	1 26	5 42.17	+20 4.1	2.276	3.094	11.9	20.3
159202	2005 <i>UB</i> ₃₁₈		12 23.1	206°14	0°7/23.1	18	445783	2011 <i>YF</i> ₅₃		12 23.1	359°02	0°3/23.1	17
11 17	6 38.17	+24 50.9	1.909	2.710	14.6	21.3	11 17	6 33.09	+26 11.4	1.468	2.295	17.0	20.6
11 27	6 32.36	+24 59.9	1.821	2.706	11.3	21.1	11 27	6 29.05	+25 42.2	1.393	2.292	13.1	20.4
12 7	6 23.81	+25 8.5	1.756	2.701	7.3	20.8	12 7	6 21.91	+25 8.7	1.340	2.290	8.5	20.1
12 17	6 13.23	+25 14.4	1.717	2.695	2.9	20.5	12 17	6 12.54	+24 30.0	1.310	2.289	3.3	19.8
12 27	6 1.76	+25 15.6	1.709	2.689	1.9	20.4	12 27	6 2.34	+23 46.8	1.308	2.289	2.1	19.7
1 6	5 50.76	+25 11.8	1.729	2.683	6.4	20.7	1 6	5 52.87	+23 1.6	1.333	2.290	7.3	20.1
1 16	5 41.44	+25 4.2	1.778	2.675	10.6	21.0	1 16	5 45.49	+22 17.9	1.383	2.292	12.1	20.3
1 26	5 34.75	+24 55.1	1.851	2.668	14.2	21.2	1 26	5 41.12	+21 39.0	1.455	2.295	16.1	20.6
44388	1998 <i>SK</i> ₆₃		12 23.1	338°12	0°5/23.1	18	14107	1997 <i>VM</i> ₅		12 23.1	100°49	0°1/23.1	18
11 17	6 31.77	+23 37.1	1.927	2.739	14.1	17.6	11 17	6 32.60	+22 55.8	2.526	3.321	11.6	19.1
11 27	6 27.46	+23 54.9	1.842	2.733	10.8	17.4	11 27	6 27.29	+23 0.3	2.453	3.336	8.9	19.0
12 7	6 20.65	+24 14.2	1.779	2.727	7.0	17.1	12 7	6 20.13	+23 5.3	2.406	3.350	5.7	18.8
12 17	6 12.00	+24 32.9	1.743	2.722	2.7	16.9	12 17	6 11.72	+23 9.7	2.387	3.365	2.2	18.6
12 27	6 2.55	+24 49.1	1.736	2.717	1.8	16.8	12 27	6 2.87	+23 12.5	2.398	3.379	1.4	18.5
1 6	5 53.49	+25 1.6	1.757	2.712	6.1	17.1	1 6	5 54.47	+23 13.8	2.440	3.393	4.8	18.8
1 16	5 45.94	+25 10.6	1.805	2.708	10.1	17.3	1 16	5 47.30	+23 13.8	2.511	3.407	8.0	19.0
1 26	5 40.77	+25 17.3	1.878	2.704	13.6	17.5	1 26	5 41.96	+23 13.4	2.608	3.420	10.7	19.2
484116	2006 <i>SL</i> ₁₅₇		12 23.1	28°31	6°6/23.2	17	265810	2005 <i>XJ</i> ₃₈		12 23.1	23		

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12 23.1

12 23.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
107542	2001 <i>DO</i> ₇₀		12 23.1	45°72	8°2/24.1	18	277060	2005 <i>EB</i> ₇₉		12 23.1	284°85	1°2/23.2	18
11 17	6 32.54	+ 3 13.4	1.654	2.435	17.4	19.4	11 17	6 31.04	+18 55.2	2.351	3.149	12.3	20.6
11 27	6 28.03	+ 2 37.9	1.586	2.441	14.4	19.3	11 27	6 26.45	+19 4.5	2.257	3.140	9.5	20.4
12 7	6 20.99	+ 2 20.0	1.538	2.446	11.3	19.1	12 7	6 19.82	+19 17.8	2.187	3.130	6.2	20.2
12 17	6 12.15	+ 2 23.6	1.514	2.452	8.8	18.9	12 17	6 11.71	+19 34.3	2.144	3.121	2.7	19.9
12 27	6 2.60	+ 2 50.3	1.515	2.458	8.3	18.9	12 27	6 2.92	+19 53.0	2.132	3.112	1.9	19.8
1 6	5 53.60	+ 3 38.3	1.543	2.465	10.1	19.1	1 6	5 54.40	+20 13.1	2.149	3.102	5.4	20.1
1 16	5 46.22	+ 4 43.8	1.596	2.471	13.0	19.2	1 16	5 47.03	+20 33.8	2.195	3.093	8.9	20.3
1 26	5 41.31	+ 6 1.2	1.672	2.478	15.9	19.5	1 26	5 41.56	+20 55.0	2.266	3.083	11.9	20.4
443772	2015 <i>MU</i> ₅₇		12 23.1	66°31	3°1/23.6	18	303550	2005 <i>GW</i> ₅		12 23.1	64°82	1°0/23.1	18
11 17	6 36.24	+13 31.9	1.608	2.411	16.8	20.8	11 17	6 35.79	+24 35.0	1.721	2.533	15.5	20.4
11 27	6 30.83	+13 50.1	1.550	2.432	13.1	20.6	11 27	6 30.69	+25 1.9	1.652	2.542	11.9	20.2
12 7	6 22.74	+14 19.4	1.514	2.454	8.8	20.4	12 7	6 22.79	+25 29.6	1.605	2.552	7.7	20.0
12 17	6 12.80	+14 58.7	1.504	2.476	4.6	20.3	12 17	6 12.89	+25 55.2	1.584	2.562	3.1	19.8
12 27	6 2.24	+15 45.7	1.521	2.497	3.6	20.2	12 27	6 2.22	+26 15.7	1.591	2.572	2.2	19.7
1 6	5 52.41	+16 37.4	1.568	2.519	7.2	20.5	1 6	5 52.19	+26 29.9	1.628	2.582	6.6	20.0
1 16	5 44.45	+17 31.0	1.641	2.540	11.2	20.8	1 16	5 44.00	+26 38.4	1.690	2.592	10.8	20.3
1 26	5 39.17	+18 24.3	1.737	2.562	14.7	21.1	1 26	5 38.54	+26 43.0	1.777	2.602	14.3	20.5
156	Xanthippe		12 23.1	253°04	2°4/22.9	18	196699	2003 <i>SX</i> ₇₈		12 23.1	98°15	0°9/23.1	18
11 17	6 34.11	+17 53.4	2.284	3.077	12.8	13.6	11 17	6 33.59	+21 33.2	2.383	3.178	12.3	20.3
11 27	6 28.83	+17 22.3	2.180	3.059	10.0	13.4	11 27	6 28.08	+21 13.5	2.311	3.193	9.3	20.2
12 7	6 21.37	+16 53.0	2.101	3.041	6.7	13.2	12 7	6 20.66	+20 54.4	2.265	3.209	6.0	20.0
12 17	6 12.30	+16 26.4	2.049	3.022	3.4	12.9	12 17	6 11.95	+20 35.7	2.247	3.224	2.5	19.8
12 27	6 2.49	+16 3.4	2.028	3.003	2.9	12.9	12 27	6 2.85	+20 17.5	2.259	3.239	1.7	19.7
1 6	5 52.95	+15 45.0	2.037	2.984	6.1	13.0	1 6	5 54.26	+20 0.4	2.301	3.254	5.1	20.0
1 16	5 44.64	+15 32.0	2.074	2.964	9.7	13.2	1 16	5 46.98	+19 45.5	2.373	3.268	8.4	20.2
1 26	5 38.33	+15 24.9	2.136	2.944	12.9	13.4	1 26	5 41.64	+19 33.6	2.470	3.282	11.2	20.4
350316	2012 <i>US</i> ₅₉		12 23.1	144°89	3°0/23.0	18	275106	Sarahdubeyjames		12 23.1	32°18	1°5/23.4	18
11 17	6 37.65	+16 36.4	2.036	2.826	14.2	21.7	11 17	6 32.54	+17 23.6	1.613	2.429	16.2	19.8
11 27	6 31.42	+15 59.9	1.961	2.838	11.0	21.5	11 27	6 28.12	+17 51.3	1.556	2.448	12.4	19.6
12 7	6 22.91	+15 27.2	1.911	2.848	7.4	21.3	12 7	6 21.07	+18 26.8	1.520	2.467	8.1	19.4
12 17	6 12.83	+14 59.2	1.888	2.858	3.9	21.1	12 17	6 12.20	+19 8.1	1.511	2.488	3.5	19.2
12 27	6 2.22	+14 37.0	1.894	2.868	3.4	21.1	12 27	6 2.70	+19 52.4	1.529	2.509	2.3	19.2
1 6	5 52.19	+14 21.6	1.931	2.876	6.6	21.3	1 6	5 53.89	+20 37.0	1.575	2.531	6.6	19.5
1 16	5 43.71	+14 13.5	1.997	2.884	10.1	21.6	1 16	5 46.87	+21 20.0	1.648	2.554	10.7	19.8
1 26	5 37.52	+14 12.5	2.086	2.892	13.2	21.8	1 26	5 42.45	+22 0.7	1.744	2.577	14.2	20.1
101397	1998 <i>UG</i> ₃₉		12 23.1	53°04	2°0/23.1	18	422278	2014 <i>SC</i> ₁₅₃		12 23.1	58°72	3°3/23.1	17
11 17	6 39.37	+26 21.6	1.243	2.070	19.4	19.2	11 17	6 35.88	+31 57.0	2.006	2.806	14.1	20.8
11 27	6 34.10	+26 51.8	1.194	2.093	14.8	19.0	11 27	6 30.42	+32 23.9	1.942	2.823	10.9	20.6
12 7	6 25.20	+27 20.8	1.166	2.115	9.6	18.8	12 7	6 22.43	+32 45.2	1.902	2.841	7.4	20.4
12 17	6 13.79	+27 43.8	1.161	2.139	4.1	18.5	12 17	6 12.70	+32 57.3	1.889	2.859	4.1	20.2
12 27	6 1.66	+27 57.0	1.183	2.162	3.1	18.5	12 27	6 2.40	+32 57.8	1.904	2.877	3.6	20.2
1 6	5 50.70	+27 59.9	1.230	2.186	8.1	18.9	1 6	5 52.80	+32 46.9	1.949	2.895	6.5	20.5
1 16	5 42.43	+27 54.8	1.303	2.210	12.9	19.3	1 16	5 44.95	+32 26.8	2.021	2.913	9.8	20.7
1 26	5 37.73	+27 45.6	1.397	2.234	16.8	19.6	1 26	5 39.62	+32 1.1	2.117	2.931	12.8	20.9
369517	2010 <i>VM</i> ₁₇₉		12 23.1	37°54	0°7/23.1	18	351041	2003 <i>SO</i> ₁₉₃		12 23.1	64°75	0°4/23.1	16
11 17	6 36.77	+24 4.0	1.078	1.919	20.8	20.9	11 17	6 38.05	+24 2.9	1.571	2.384	16.7	21.1
11 27	6 32.62	+24 16.1	1.025	1.931	16.0	20.6	11 27	6 32.31	+23 36.2	1.512	2.404	12.7	20.9
12 7	6 24.53	+24 29.6	0.991	1.944	10.3	20.4	12 7	6 23.70	+23 8.1	1.476	2.424	8.1	20.6
12 17	6 13.61	+24 41.0	0.979	1.958	4.0	20.1	12 17	6 13.18	+22 38.0	1.465	2.444	3.2	20.4
12 27	6 1.75	+24 47.5	0.992	1.973	2.6	20.0	12 27	6 2.16	+22 6.4	1.483	2.464	2.0	20.4
1 6	5 51.05	+24 48.4	1.029	1.988	8.6	20.4	1 6	5 52.07	+21 35.1	1.529	2.484	6.8	20.7
1 16	5 43.17	+24 45.5	1.090	2.005	14.0	20.8	1 16	5 44.09	+21 6.5	1.601	2.504	11.2	21.0
1 26	5 39.13	+24 41.7	1.170	2.021	18.5	21.1	1 26	5 38.99	+20 42.7	1.697	2.524	14.8	21.3
88682	2001 <i>RA</i> ₉₇		12 23.1	223°62	1°7/23.2	18	386031	2007 <i>EY</i> ₂₆		12 23.1	308°90	7°4/22.5	18
11 17	6 36.53	+19 16.1	1.742	2.548	15.6	21.0	11 17	6 38.01	+36 15.2	1.393	2.209	18.3	20.7
11 27	6 31.27	+19 8.3	1.656	2.542	12.1	20.8	11 27	6 34.06	+37 26.1	1.307	2.191	14.9	20.4
12 7	6 23.22	+19 4.4	1.591	2.536	8.0	20.5	12 7	6 25.99	+38 31.1	1.240	2.173	11.1	20.1
12 17	6 13.08	+19 3.7	1.553	2.530	3.5	20.2	12 17	6 14.48	+39 20.6	1.197	2.155	8.0	19.9
12 27	6 2.02	+19 5.8	1.544	2.523	2.6	20.1	12 27	6 1.17	+39 46.0	1.178	2.138	7.8	19.9
1 6	5 51.40	+19 10.1	1.563	2.516	7.0	20.4	1 6	5 48.28	+39 43.8	1.185	2.121	10.9	20.0
1 16	5 42.50	+19 17.0	1.609	2.508	11.4	20.6	1 16	5 37.95	+39 16.9	1.215	2.105	15.1	20.2
1 26	5 36.28	+19 26.9	1.678	2.500	15.2	20.9	1 26	5 31.71	+38 33.4	1.265	2.089	19.1	20.4
323174	2003 <i>GY</i> ₁₉		12 23.1	272°12	3°5/23.2	17	439324	2012 <i>VO</i> ₁₀₉		12 23.1	100°69	1°5/23.2	18
11 17	6 32.10	+14 10.7	2.033	2.830	14.0	21.7	11 17	6 38.31	+18 43.4	1.848	2.646	15.2	21.7
11 27	6 27.43	+13 48.2	1.945	2.824	11.0	21.5	11 27	6 32.11	+18 45.5	1.787	2.669	11.6	21.5
12 7	6 20.53	+13 32.1	1.881	2.817	7.6	21.3	12 7	6 23.44	+18 51.9	1.749	2.692	7.5	21.3
12 17	6 11.99	+13 23.5	1.843	2.811	4.4	21.1	12 17	6 13.08	+19 1.7	1.738	2.714	3.3	21.1
12 27	6 2.75	+13 23.1	1.833	2.805	3.9	21.0	12 27	6 2.21	+19 13.6	1.756	2.736	2.3	21.1
1 6	5 53.87	+13 30.9	1.853	2.799	6.8	21.2	1 6	5 52.06	+19 26.9	1.804	2.757	6.3	21.4
1 16	5 46.33	+13 46.3	1.900	2.792	10.3	21.4	1 16	5 43.66	+19 41.4	1.880	2.777	10.2	21.6
1 26	5 40.93	+14 8.1	1.971	2.786	13.5	21.6	1 26	5 37.77	+19 57.1	1.981	2.797	13.4	21.9
66175	1998 <i>WD</i> ₄		12 23.1	64°21	2°0/23.2	18	369559	2011 <i>AQ</i> ₇₄		12 23.1	263°53	4°9/23.3	

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12 23.1

12 23.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
275130	2009 <i>VF</i> ₆₇		12 23.1 343°29	1°9/23.1 18			107987	2001 <i>FG</i> ₁₃₄		12 23.2 317°51	3°0/23.1 17		
11 17	6 32.46	+27 45.8	1.912	2.724	14.2	20.9	11 17	6 31.84	+17 48.2	1.483	2.306	17.0	19.8
11 27	6 28.12	+28 4.7	1.828	2.718	11.0	20.7	11 27	6 28.29	+17 20.1	1.390	2.285	13.4	19.5
12 7	6 21.18	+28 21.7	1.767	2.713	7.2	20.4	12 7	6 21.68	+16 56.1	1.318	2.265	9.0	19.2
12 17	6 12.33	+28 33.8	1.732	2.708	3.3	20.2	12 17	6 12.67	+16 37.6	1.270	2.245	4.5	18.9
12 27	6 2.66	+28 38.8	1.725	2.704	2.6	20.1	12 27	6 2.47	+16 25.6	1.248	2.226	3.7	18.8
1 6	5 53.44	+28 36.2	1.747	2.700	6.4	20.4	1 6	5 52.60	+16 20.9	1.253	2.207	8.2	19.0
1 16	5 45.83	+28 27.1	1.795	2.697	10.3	20.6	1 16	5 44.52	+16 24.0	1.282	2.189	13.1	19.2
1 26	5 40.70	+28 14.0	1.868	2.694	13.7	20.8	1 26	5 39.37	+16 34.6	1.333	2.172	17.4	19.4
180797	2005 <i>EM</i> ₇		12 23.1 239°76	2°6/23.2 18			311658	2006 <i>RW</i> ₁₂₀		12 23.2 34°51	1°7/23.2 18		
11 17	6 37.04	+17 26.7	1.568	2.378	16.9	21.5	11 17	6 33.69	+19 25.8	1.798	2.607	15.1	21.0
11 27	6 32.01	+17 15.3	1.482	2.370	13.2	21.2	11 27	6 28.93	+19 14.6	1.721	2.609	11.6	20.8
12 7	6 23.90	+17 9.7	1.417	2.361	8.8	20.9	12 7	6 21.62	+19 6.9	1.666	2.612	7.6	20.5
12 17	6 13.46	+17 10.2	1.377	2.352	4.2	20.6	12 17	6 12.49	+19 2.3	1.638	2.615	3.3	20.3
12 27	6 1.93	+17 16.3	1.365	2.343	3.3	20.5	12 27	6 2.65	+19 0.5	1.638	2.618	2.4	20.2
1 6	5 50.85	+17 27.5	1.381	2.333	7.8	20.8	1 6	5 53.34	+19 1.5	1.667	2.621	6.6	20.5
1 16	5 41.63	+17 43.4	1.422	2.323	12.5	21.0	1 16	5 45.66	+19 5.5	1.722	2.624	10.6	20.7
1 26	5 35.33	+18 3.6	1.487	2.313	16.6	21.3	1 26	5 40.46	+19 12.6	1.802	2.627	14.2	21.0
67243	2000 <i>ED</i> ₅₇		12 23.1 21°34	8°2/23.5 17			446482	2014 <i>KY</i> ₁₉		12 23.2 112°09	0°5/23.2 18		
11 17	6 38.33	+44 0.6	1.784	2.567	16.2	18.0	11 17	6 35.99	+20 47.0	1.952	2.753	14.4	21.4
11 27	6 33.25	+44 52.5	1.720	2.574	13.5	17.8	11 27	6 30.47	+21 5.7	1.880	2.765	11.0	21.2
12 7	6 24.71	+45 29.5	1.678	2.583	10.7	17.7	12 7	6 22.52	+21 27.8	1.830	2.776	7.1	21.0
12 17	6 13.71	+45 44.5	1.659	2.592	8.7	17.6	12 17	6 12.82	+21 51.4	1.808	2.786	2.8	20.7
12 27	6 1.85	+45 33.0	1.666	2.601	8.4	17.6	12 27	6 2.47	+22 14.6	1.816	2.797	1.7	20.6
1 6	5 50.91	+44 55.8	1.699	2.612	10.0	17.7	1 6	5 52.65	+22 36.0	1.853	2.807	6.0	21.0
1 16	5 42.40	+43 57.9	1.757	2.623	12.5	17.9	1 16	5 44.43	+22 55.4	1.918	2.817	9.9	21.2
1 26	5 37.25	+42 47.0	1.837	2.635	15.1	18.1	1 26	5 38.59	+23 13.1	2.008	2.827	13.2	21.4
264829	2002 <i>QV</i>		12 23.1 186°69	3°8/23.4 18			364427	2006 <i>WU</i> ₉₃		12 23.2 275°45	2°1/23.2 17		
11 17	6 30.51	+10 42.5	2.583	3.362	11.9	20.7	11 17	6 33.16	+18 20.0	1.976	2.779	14.1	21.5
11 27	6 25.72	+10 26.2	2.497	3.362	9.4	20.5	11 27	6 28.43	+18 1.8	1.884	2.769	11.0	21.3
12 7	6 19.21	+10 17.3	2.436	3.362	6.7	20.4	12 7	6 21.30	+17 46.9	1.816	2.759	7.3	21.0
12 17	6 11.47	+10 17.0	2.401	3.361	4.4	20.2	12 17	6 12.40	+17 35.7	1.774	2.750	3.5	20.8
12 27	6 3.23	+10 25.7	2.397	3.360	4.0	20.2	12 27	6 2.73	+17 28.4	1.762	2.740	2.7	20.7
1 6	5 55.29	+10 43.0	2.422	3.359	6.0	20.3	1 6	5 53.41	+17 25.2	1.778	2.729	6.4	20.9
1 16	5 48.39	+11 7.9	2.476	3.358	8.7	20.5	1 16	5 45.52	+17 26.3	1.822	2.719	10.4	21.1
1 26	5 43.12	+11 38.9	2.555	3.356	11.2	20.7	1 26	5 39.89	+17 32.1	1.889	2.709	13.8	21.3
514798	2007 <i>RG</i> ₁₁₃		12 23.1 141°87	3°5/23.1 18			80552	2000 <i>AF</i> ₉₀		12 23.2 73°71	2°0/23.3 18		
11 17	6 40.15	+32 52.0	2.177	2.964	13.5	22.9	11 17	6 37.50	+17 54.5	1.414	2.231	18.1	19.4
11 27	6 33.62	+33 24.6	2.103	2.975	10.6	22.8	11 27	6 32.31	+17 59.6	1.353	2.245	13.9	19.2
12 7	6 24.51	+33 51.4	2.053	2.986	7.3	22.6	12 7	6 23.99	+18 12.0	1.313	2.259	9.1	19.0
12 17	6 13.57	+34 8.4	2.030	2.997	4.3	22.4	12 17	6 13.45	+18 30.3	1.297	2.273	4.0	18.7
12 27	6 1.95	+34 12.6	2.037	3.006	3.9	22.4	12 27	6 2.13	+18 52.8	1.308	2.288	2.9	18.7
1 6	5 50.94	+34 3.7	2.074	3.016	6.5	22.6	1 6	5 51.62	+19 17.8	1.347	2.302	7.6	19.0
1 16	5 41.66	+33 44.1	2.140	3.024	9.7	22.8	1 16	5 43.27	+19 44.2	1.411	2.316	12.2	19.3
1 26	5 34.92	+33 17.6	2.230	3.032	12.6	23.0	1 26	5 38.01	+20 11.5	1.498	2.331	16.2	19.6
440794	2006 <i>OO</i> ₁₄		12 23.1 79°19	2°4/23.3 17			323527	2004 <i>RO</i> ₁₄₇		12 23.2 94°70	0°3/23.2 18		
11 17	6 41.34	+30 25.9	1.914	2.708	14.9	21.4	11 17	6 34.34	+24 3.4	2.175	2.975	13.1	21.0
11 27	6 34.36	+30 32.3	1.862	2.741	11.4	21.2	11 27	6 28.98	+24 7.6	2.102	2.987	10.0	20.8
12 7	6 24.79	+30 32.9	1.833	2.773	7.5	21.1	12 7	6 21.43	+24 11.7	2.054	2.999	6.4	20.6
12 17	6 13.58	+30 24.7	1.831	2.805	3.6	20.9	12 17	6 12.38	+24 14.2	2.033	3.011	2.5	20.4
12 27	6 2.02	+30 6.6	1.859	2.836	2.9	20.9	12 27	6 2.79	+24 13.9	2.042	3.023	1.6	20.4
1 6	5 51.41	+29 39.9	1.917	2.867	6.3	21.2	1 6	5 53.73	+24 10.8	2.080	3.034	5.4	20.6
1 16	5 42.80	+29 7.5	2.003	2.897	9.8	21.5	1 16	5 46.12	+24 5.8	2.147	3.046	9.0	20.9
1 26	5 36.88	+28 33.3	2.114	2.927	12.8	21.7	1 26	5 40.67	+24 0.2	2.240	3.057	12.0	21.1
92855	2000 <i>QW</i> ₂₀₄		12 23.2 92°18	1°1/23.1 18			113308	2002 <i>RM</i> ₁₈₇		12 23.2 68°25	6°7/23.2 18		
11 17	6 39.53	+26 4.9	1.703	2.509	15.9	20.9	11 17	6 40.02	+10 34.3	1.361	2.163	19.4	18.7
11 27	6 33.40	+26 14.5	1.642	2.529	12.2	20.7	11 27	6 33.74	+9 26.3	1.320	2.195	15.3	18.6
12 7	6 24.44	+26 22.4	1.603	2.548	7.8	20.5	12 7	6 24.56	+8 31.3	1.298	2.228	11.0	18.4
12 17	6 13.53	+26 25.7	1.590	2.568	3.2	20.3	12 17	6 13.54	+7 53.1	1.302	2.260	7.5	18.3
12 27	6 2.03	+26 22.7	1.606	2.587	2.2	20.2	12 27	6 2.16	+7 34.1	1.331	2.291	7.0	18.3
1 6	5 51.37	+26 13.6	1.651	2.605	6.6	20.6	1 6	5 51.90	+7 34.2	1.388	2.323	9.7	18.6
1 16	5 42.74	+26 0.3	1.724	2.624	10.7	20.9	1 16	5 43.91	+7 51.1	1.469	2.353	13.3	18.9
1 26	5 36.96	+25 45.6	1.820	2.641	14.2	21.1	1 26	5 38.91	+8 21.0	1.572	2.384	16.5	19.2
460553	2014 <i>TY</i> ₅₉		12 23.2 62°12	2°5/23.1 18			447648	2006 <i>VZ</i> ₇₀		12 23.2 70°79	1°0/23.1 18		
11 17	6 32.30	+17 19.6	2.124	2.923	13.4	21.0	11 17	6 35.66	+24 12.8	1.848	2.655	14.8	21.1
11 27	6 27.33	+16 49.5	2.055	2.937	10.3	20.9	11 27	6 30.42	+24 44.9	1.780	2.668	11.3	20.9
12 7	6 20.30	+16 23.0	2.009	2.950	6.9	20.7	12 7	6 22.58	+25 18.3	1.734	2.681	7.3	20.7
12 17	6 11.90	+16 0.9	1.991	2.964	3.5	20.5	12 17	6 12.88	+25 49.8	1.716	2.694	2.9	20.4
12 27	6 3.04	+15 44.0	2.002	2.978	3.0	20.5	12 27	6 2.48	+26 16.6	1.726	2.707	2.0	20.4
1 6	5 54.71	+15 32.9	2.043	2.991	6.0	20.7	1 6	5 52.67	+26 37.3	1.766	2.720	6.2	20.7
1 16	5 47.77	+15 27.8	2.111	3.005	9.3	20.9	1 16	5 44.57	+26 52.0	1.833	2.732	10.2	21.0
1 26	5 42.87	+15 28.5	2.204	3.019	12.3	21.2	1 26	5 39.03	+27 2.2	1.923	2.745	13.5	21.2
493059	2014 <i>SV</i> ₂₈₁		12 23.2 70°73	3°6/22.8 17			520656	2014 <i>QG</i> ₂₁₄		12 23.2 95°03	5°5/2		

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12 23.2

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
119782	2002 AC ₅₁		12 23.2	21°06'	0°1'/23.2	18	326743	2003 QF ₆₉		12 23.2	150°60'	4°2'/23.1	18
11 17	6 33.47	+23 6.9	1.885	2.695	14.5	20.0	11 17	6 43.51	+32 20.8	1.668	2.467	16.5	21.4
11 27	6 28.73	+23 6.7	1.807	2.696	11.1	19.8	11 27	6 37.02	+33 1.5	1.596	2.475	13.0	21.1
12 7	6 21.49	+23 7.3	1.751	2.699	7.1	19.6	12 7	6 27.14	+33 36.6	1.545	2.482	8.9	20.9
12 17	6 12.46	+23 7.1	1.723	2.701	2.8	19.3	12 17	6 14.76	+33 59.9	1.521	2.489	5.2	20.7
12 27	6 2.73	+23 5.4	1.722	2.704	1.7	19.3	12 27	6 1.41	+34 6.9	1.525	2.495	4.6	20.7
1 6	5 53.52	+23 1.9	1.751	2.707	6.1	19.6	1 6	5 48.83	+33 57.1	1.557	2.501	8.0	20.9
1 16	5 45.91	+22 57.4	1.807	2.710	10.1	19.8	1 16	5 38.55	+33 33.6	1.616	2.506	12.0	21.2
1 26	5 40.72	+22 53.3	1.887	2.713	13.6	20.0	1 26	5 31.58	+33 2.2	1.698	2.510	15.5	21.4
136487	2005 GZ ₁₀₀		12 23.2	120°79'	1°6'/23.2	18	273941	2007 JB ₂₃		12 23.2	132°71'	0°9'/23.2	17
11 17	6 35.84	+18 33.2	2.280	3.070	12.9	21.0	11 17	6 34.22	+26 55.9	2.500	3.293	11.8	20.9
11 27	6 29.89	+18 27.6	2.210	3.088	9.9	20.8	11 27	6 28.68	+26 50.1	2.420	3.301	9.0	20.7
12 7	6 21.90	+18 25.2	2.165	3.106	6.4	20.6	12 7	6 21.16	+26 41.7	2.365	3.308	5.8	20.5
12 17	6 12.54	+18 25.6	2.147	3.123	2.9	20.4	12 17	6 12.30	+26 29.4	2.338	3.315	2.4	20.3
12 27	6 2.72	+18 28.4	2.161	3.139	2.1	20.4	12 27	6 2.96	+26 12.5	2.341	3.321	1.6	20.3
1 6	5 53.43	+18 33.4	2.205	3.155	5.5	20.7	1 6	5 54.08	+25 51.7	2.375	3.328	5.0	20.5
1 16	5 45.51	+18 40.4	2.277	3.170	8.8	20.9	1 16	5 46.51	+25 28.4	2.439	3.334	8.2	20.7
1 26	5 39.63	+18 49.6	2.376	3.185	11.7	21.1	1 26	5 40.88	+25 4.6	2.528	3.340	11.0	20.9
482512	2012 TO ₁₃₄		12 23.2	107°49'	0°2'/23.2	16	488413	2016 XZ ₂		12 23.2	18°52'	4°1'/22.9	18
11 17	6 39.34	+22 48.6	1.774	2.576	15.5	22.7	11 17	6 36.51	+29 44.8	1.368	2.193	18.1	21.0
11 27	6 33.13	+22 51.7	1.710	2.595	11.9	22.5	11 27	6 32.26	+30 40.0	1.301	2.197	14.1	20.8
12 7	6 24.23	+22 55.7	1.668	2.614	7.6	22.2	12 7	6 24.39	+31 33.1	1.255	2.201	9.5	20.5
12 17	6 13.49	+22 58.7	1.654	2.632	2.9	22.0	12 17	6 13.77	+32 17.3	1.233	2.205	5.2	20.3
12 27	6 2.15	+22 59.6	1.668	2.649	1.8	22.0	12 27	6 2.01	+32 46.9	1.236	2.210	4.7	20.3
1 6	5 51.58	+22 58.0	1.712	2.666	6.4	22.3	1 6	5 51.00	+32 59.6	1.266	2.216	8.7	20.5
1 16	5 42.90	+22 55.1	1.784	2.683	10.5	22.6	1 16	5 42.40	+32 57.6	1.320	2.222	13.1	20.8
1 26	5 36.91	+22 52.4	1.880	2.699	13.9	22.8	1 26	5 37.34	+32 45.5	1.396	2.229	17.1	21.1
383058	2005 QC ₁₄₀		12 23.2	132°19'	3°3'/23.1	18	418809	2008 VO ₃₀		12 23.2	80°12'	1°8'/23.1	17
11 17	6 41.28	+30 54.5	1.732	2.532	15.9	21.8	11 17	6 33.96	+28 23.1	2.367	3.164	12.3	21.3
11 27	6 35.05	+31 23.3	1.661	2.542	12.4	21.6	11 27	6 28.62	+28 42.1	2.297	3.178	9.4	21.1
12 7	6 25.71	+31 47.1	1.612	2.552	8.3	21.3	12 7	6 21.19	+28 58.4	2.251	3.193	6.2	21.0
12 17	6 14.14	+32 1.1	1.590	2.561	4.4	21.1	12 17	6 12.32	+29 9.7	2.233	3.208	2.9	20.8
12 27	6 1.74	+32 2.0	1.596	2.570	3.8	21.1	12 27	6 2.95	+29 14.4	2.245	3.223	2.3	20.8
1 6	5 50.10	+31 49.6	1.631	2.579	7.3	21.4	1 6	5 54.09	+29 12.1	2.287	3.238	5.3	21.0
1 16	5 40.59	+31 26.8	1.693	2.587	11.3	21.6	1 16	5 46.62	+29 4.1	2.358	3.252	8.5	21.2
1 26	5 34.14	+30 58.3	1.778	2.594	14.7	21.8	1 26	5 41.21	+28 52.4	2.454	3.267	11.3	21.4
142101	2002 QJ ₆₈		12 23.2	255°32'	3°3'/23.2	18	326073	2011 AE ₆₇		12 23.2	184°94'	2°3'/23.4	18
11 17	6 39.72	+30 28.5	1.564	2.374	16.9	20.5	11 17	6 36.62	+32 11.5	2.462	3.249	12.2	20.8
11 27	6 34.47	+30 50.6	1.477	2.364	13.3	20.3	11 27	6 30.65	+32 4.1	2.375	3.249	9.5	20.7
12 7	6 25.73	+31 8.2	1.411	2.354	9.0	20.0	12 7	6 22.51	+31 50.2	2.312	3.249	6.4	20.5
12 17	6 14.28	+31 16.1	1.370	2.343	4.6	19.7	12 17	6 12.86	+31 27.7	2.277	3.248	3.3	20.3
12 27	6 1.60	+31 10.6	1.356	2.332	3.9	19.7	12 27	6 2.67	+30 55.8	2.272	3.248	2.7	20.2
1 6	5 49.46	+30 51.1	1.371	2.321	8.1	19.9	1 6	5 53.00	+30 15.7	2.299	3.247	5.5	20.4
1 16	5 39.52	+30 20.8	1.410	2.310	12.7	20.1	1 16	5 44.76	+29 29.9	2.354	3.245	8.6	20.6
1 26	5 32.94	+29 45.0	1.473	2.299	16.7	20.3	1 26	5 38.68	+28 41.9	2.435	3.244	11.5	20.8
359715	2011 TD ₁₆		12 23.2	232°60'	6°8'/22.3	17	186033	2001 RZ ₄₄		12 23.2	21°87'	3°8'/23.3	18
11 17	6 40.42	+39 8.4	1.993	2.776	14.7	21.0	11 17	6 33.62	+31 4.0	1.134	1.975	20.0	18.7
11 27	6 34.72	+40 25.7	1.912	2.772	12.0	20.8	11 27	6 30.16	+31 20.8	1.090	1.994	15.4	18.5
12 7	6 25.77	+41 35.3	1.853	2.768	9.3	20.7	12 7	6 22.91	+31 30.0	1.065	2.014	10.3	18.3
12 17	6 14.28	+42 29.7	1.820	2.763	7.2	20.5	12 17	6 13.11	+31 26.8	1.062	2.036	5.3	18.1
12 27	6 1.58	+43 2.7	1.815	2.759	7.1	20.5	12 27	6 2.61	+31 9.0	1.083	2.060	4.3	18.1
1 6	5 49.30	+43 12.1	1.838	2.754	9.1	20.6	1 6	5 53.37	+30 38.4	1.130	2.086	8.6	18.4
1 16	5 38.98	+43 0.2	1.886	2.749	11.9	20.8	1 16	5 46.87	+30 0.0	1.199	2.112	13.2	18.8
1 26	5 31.77	+42 32.7	1.958	2.744	14.7	21.0	1 26	5 43.97	+29 19.1	1.289	2.140	17.1	19.1
348318	2005 BH ₁₉		12 23.2	27°82'	3°3'/23.1	18	369419	2009 WY ₁₅₉		12 23.2	352°51'	3°0'/22.9	17
11 17	6 35.42	+29 4.4	1.221	2.056	19.3	19.7	11 17	6 32.99	+29 37.5	1.821	2.634	14.8	20.8
11 27	6 31.44	+29 37.2	1.167	2.069	14.9	19.4	11 27	6 28.78	+30 15.2	1.741	2.630	11.5	20.6
12 7	6 23.76	+30 6.1	1.133	2.083	9.8	19.2	12 7	6 21.78	+30 50.5	1.683	2.626	7.7	20.4
12 17	6 13.44	+30 25.7	1.122	2.098	4.9	19.0	12 17	6 12.71	+31 19.2	1.651	2.623	4.1	20.2
12 27	6 2.24	+30 32.2	1.137	2.114	4.0	19.0	12 27	6 2.74	+31 37.8	1.646	2.621	3.5	20.1
1 6	5 52.09	+30 25.4	1.176	2.131	8.5	19.3	1 6	5 53.23	+31 44.9	1.670	2.620	7.0	20.3
1 16	5 44.56	+30 8.4	1.240	2.149	13.2	19.6	1 16	5 45.44	+31 41.8	1.720	2.619	10.8	20.5
1 26	5 40.63	+29 45.9	1.324	2.168	17.2	19.9	1 26	5 40.33	+31 31.4	1.793	2.618	14.2	20.8
369177	2008 SE ₁₇₁		12 23.2	85°48'	4°4'/23.2	17	487672	2015 PT ₁₁₅		12 23.2	23°66'	1°7'/23.4	18
11 17	6 30.91	+10 49.3	2.295	3.080	13.0	21.0	11 17	6 33.24	+17 29.1	1.334	2.162	18.3	20.3
11 27	6 26.20	+10 13.6	2.218	3.085	10.3	20.8	11 27	6 29.36	+17 52.7	1.272	2.170	14.1	20.1
12 7	6 19.60	+9 45.4	2.165	3.091	7.4	20.7	12 7	6 22.30	+18 25.9	1.229	2.179	9.3	19.9
12 17	6 11.69	+9 26.5	2.138	3.096	5.0	20.5	12 17	6 12.92	+19 6.6	1.211	2.188	4.0	19.6
12 27	6 3.30	+9 18.2	2.141	3.102	4.7	20.5	12 27	6 2.64	+19 51.8	1.219	2.199	2.7	19.5
1 6	5 55.31	+9 20.7	2.173	3.107	6.7	20.7	1 6	5 53.07	+20 38.1	1.253	2.211	7.7	19.9
1 16	5 48.50	+9 33.2	2.232	3.113	9.5	20.8	1 16	5 45.62	+21 23.3	1.312	2.223	12.5	20.2
1 26	5 43.53	+9 54.2	2.316	3.118	12.2	21.0	1 26	5 41.26	+22 6.1	1.393	2.236	16.5	20.5
174391	2002 VG ₂₂		12 23.2	57°13'	1°5'/23.1	18	335710	2007 BZ ₄₁		12 23.2	233°67'	3°7'/23.3	18
11 17	6 35.98	+26 23.0	1.705	2.51									

EPHEMERIDES

12 23.2

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
32889	1993 <i>TN</i> ₂₉		12 23.2 107°10	1°0/23.2	18		431225	2006 <i>SF</i> ₂₉₉		12 23.2 142°65	2°7/23.1	18	
11 17	6 38.97	+20 2.0	1.820	2.619	15.3	20.3	11 17	6 42.18	+28 59.5	1.715	2.515	16.1	22.0
11 27	6 32.77	+20 7.6	1.756	2.640	11.7	20.1	11 27	6 35.78	+29 30.6	1.643	2.526	12.4	21.8
12 7	6 24.00	+20 16.8	1.716	2.660	7.6	19.9	12 7	6 26.24	+29 58.7	1.594	2.535	8.3	21.6
12 17	6 13.46	+20 27.9	1.702	2.680	3.1	19.7	12 17	6 14.44	+30 19.0	1.570	2.544	4.0	21.4
12 27	6 2.36	+20 39.6	1.718	2.699	2.0	19.7	12 27	6 1.77	+30 27.9	1.576	2.553	3.3	21.3
1 6	5 51.96	+20 51.2	1.764	2.717	6.3	20.0	1 6	5 49.83	+30 24.9	1.611	2.561	7.2	21.6
1 16	5 43.36	+21 2.7	1.837	2.735	10.3	20.3	1 16	5 40.00	+30 12.1	1.673	2.568	11.3	21.9
1 26	5 37.34	+21 14.6	1.935	2.752	13.7	20.5	1 26	5 33.24	+29 53.7	1.759	2.574	14.9	22.1
329268	1999 <i>RC</i> ₂₃₅		12 23.2 61°94	2°1/23.1	18		30748	1981 <i>ES</i> ₂₅		12 23.2 184°16	1°1/23.2	18	
11 17	6 42.13	+25 53.8	1.232	2.056	19.8	20.7	11 17	6 38.67	+25 46.3	1.943	2.742	14.5	19.5
11 27	6 36.25	+26 33.3	1.187	2.083	15.1	20.5	11 27	6 32.78	+26 1.4	1.859	2.743	11.2	19.3
12 7	6 26.66	+27 12.4	1.163	2.111	9.7	20.3	12 7	6 24.20	+26 15.7	1.799	2.743	7.3	19.1
12 17	6 14.55	+27 45.3	1.162	2.139	4.2	20.1	12 17	6 13.63	+26 26.4	1.765	2.742	3.0	18.8
12 27	6 1.75	+28 7.7	1.187	2.167	3.1	20.1	12 27	6 2.24	+26 31.4	1.761	2.741	2.1	18.8
1 6	5 50.21	+28 18.5	1.240	2.195	8.1	20.4	1 6	5 51.35	+26 30.0	1.787	2.739	6.3	19.0
1 16	5 41.45	+28 20.0	1.317	2.223	12.9	20.8	1 16	5 42.14	+26 23.6	1.840	2.737	10.3	19.3
1 26	5 36.36	+28 16.1	1.415	2.250	16.8	21.1	1 26	5 35.53	+26 14.4	1.918	2.734	13.8	19.5
179290	2001 <i>VD</i> ₃₁		12 23.2 55°73	1°6/23.1	18		193751	2001 <i>KH</i> ₉		12 23.2 216°12	0°9/23.1	18	
11 17	6 33.93	+20 7.5	1.883	2.690	14.6	19.8	11 17	6 33.04	+25 26.0	2.499	3.295	11.7	20.4
11 27	6 28.98	+19 44.1	1.808	2.696	11.2	19.6	11 27	6 27.96	+25 42.8	2.409	3.291	9.0	20.2
12 7	6 21.62	+19 22.6	1.757	2.702	7.3	19.4	12 7	6 20.86	+25 59.1	2.344	3.287	5.8	20.0
12 17	6 12.57	+19 3.3	1.731	2.708	3.2	19.2	12 17	6 12.29	+26 13.2	2.306	3.284	2.4	19.8
12 27	6 2.90	+18 46.4	1.735	2.714	2.4	19.1	12 27	6 3.09	+26 23.5	2.299	3.280	1.7	19.7
1 6	5 53.80	+18 32.6	1.768	2.721	6.3	19.4	1 6	5 54.21	+26 29.3	2.323	3.275	5.1	19.9
1 16	5 46.29	+18 22.9	1.827	2.727	10.2	19.6	1 16	5 46.53	+26 31.1	2.375	3.271	8.4	20.1
1 26	5 41.14	+18 17.7	1.911	2.734	13.6	19.9	1 26	5 40.76	+26 30.1	2.453	3.266	11.3	20.3
458044	2009 <i>WY</i> ₂₂₆		12 23.2 60°97	2°3/22.9	17		301405	2009 <i>DE</i> ₃₇		12 23.2 0°98	0°6/23.2	18	
11 17	6 34.66	+28 0.9	2.111	2.912	13.4	21.4	11 17	6 34.52	+22 9.3	1.591	2.409	16.3	21.0
11 27	6 29.57	+28 44.1	2.035	2.919	10.3	21.2	11 27	6 30.01	+22 3.2	1.514	2.408	12.6	20.8
12 7	6 22.05	+29 26.2	1.984	2.926	6.8	21.0	12 7	6 22.60	+21 58.8	1.459	2.407	8.1	20.5
12 17	6 12.76	+30 3.5	1.959	2.933	3.4	20.8	12 17	6 13.05	+21 54.7	1.429	2.407	3.2	20.2
12 27	6 2.76	+30 32.7	1.965	2.941	2.9	20.8	12 27	6 2.63	+21 50.3	1.427	2.408	2.1	20.1
1 6	5 53.20	+30 52.4	1.999	2.948	6.1	21.0	1 6	5 52.81	+21 45.5	1.452	2.408	7.0	20.4
1 16	5 45.16	+31 3.0	2.062	2.955	9.5	21.3	1 16	5 44.86	+21 41.3	1.503	2.409	11.5	20.7
1 26	5 39.45	+31 6.7	2.149	2.963	12.6	21.5	1 26	5 39.73	+21 38.8	1.577	2.411	15.4	20.9
43140	1999 <i>XT</i> ₉₀		12 23.2 80°83	0°4/23.1	18		6905	Miyazaki		12 23.2 73°22	5°6/22.6	18	
11 17	6 38.66	+25 3.8	1.758	2.563	15.5	18.4	11 17	6 41.64	+34 25.1	1.705	2.503	16.2	15.6
11 27	6 32.62	+24 23.8	1.690	2.578	11.9	18.2	11 27	6 35.57	+35 43.4	1.649	2.524	12.8	15.5
12 7	6 23.91	+23 40.6	1.646	2.592	7.6	18.0	12 7	6 26.20	+36 55.2	1.615	2.545	9.2	15.3
12 17	6 13.42	+22 53.8	1.628	2.606	3.0	17.7	12 17	6 14.44	+37 52.8	1.607	2.566	6.2	15.2
12 27	6 2.42	+22 5.0	1.640	2.621	1.9	17.7	12 27	6 1.80	+38 30.3	1.627	2.587	6.0	15.2
1 6	5 52.26	+21 16.5	1.681	2.635	6.5	18.0	1 6	5 49.97	+38 46.4	1.675	2.607	8.5	15.4
1 16	5 44.02	+20 31.4	1.749	2.649	10.6	18.3	1 16	5 40.40	+38 43.7	1.749	2.628	11.8	15.6
1 26	5 38.47	+19 52.5	1.842	2.663	14.1	18.6	1 26	5 34.08	+38 27.9	1.845	2.648	14.8	15.9
441223	2007 <i>VW</i> ₇₉		12 23.2 84°43	0°6/23.2	18		403652	2010 <i>TN</i> ₇₈		12 23.2 152°43	0°0/23.2	18	
11 17	6 38.70	+21 57.1	1.865	2.665	15.0	21.9	11 17	6 34.63	+22 58.7	2.097	2.898	13.5	21.7
11 27	6 32.40	+21 54.5	1.809	2.693	11.4	21.7	11 27	6 29.43	+23 7.7	2.016	2.901	10.3	21.5
12 7	6 23.64	+21 53.3	1.776	2.721	7.3	21.6	12 7	6 21.91	+23 17.7	1.958	2.903	6.7	21.3
12 17	6 13.29	+21 52.0	1.771	2.749	2.9	21.3	12 17	6 12.72	+23 27.2	1.927	2.906	2.6	21.0
12 27	6 2.51	+21 49.8	1.795	2.776	1.8	21.3	12 27	6 2.85	+23 34.8	1.927	2.908	1.6	20.9
1 6	5 52.52	+21 46.9	1.849	2.802	6.0	21.6	1 6	5 53.42	+23 40.0	1.956	2.910	5.7	21.2
1 16	5 44.33	+21 44.0	1.930	2.829	9.8	21.9	1 16	5 45.45	+23 43.0	2.013	2.912	9.5	21.5
1 26	5 38.66	+21 42.2	2.037	2.854	13.1	22.2	1 26	5 39.72	+23 45.1	2.094	2.913	12.7	21.7
357272	2002 <i>RG</i> ₁₄₇		12 23.2 24°04	0°5/23.2	17		490918	2011 <i>CO</i> ₂₁		12 23.2 148°82	3°4/23.6	17	
11 17	6 33.68	+21 28.1	1.494	2.317	16.9	20.5	11 17	6 31.46	+11 54.8	2.345	3.131	12.7	21.4
11 27	6 29.46	+21 38.9	1.426	2.323	13.0	20.3	11 27	6 26.69	+11 52.6	2.262	3.132	10.0	21.2
12 7	6 22.26	+21 53.3	1.380	2.330	8.4	20.0	12 7	6 20.00	+11 58.6	2.203	3.134	7.0	21.0
12 17	6 12.90	+22 9.4	1.358	2.337	3.3	19.7	12 17	6 11.95	+12 13.3	2.171	3.136	4.2	20.8
12 27	6 2.70	+22 25.3	1.364	2.345	2.0	19.7	12 27	6 3.33	+12 36.4	2.168	3.137	3.7	20.8
1 6	5 53.17	+22 39.7	1.396	2.354	7.1	20.0	1 6	5 55.03	+13 7.0	2.195	3.138	6.0	21.0
1 16	5 45.62	+22 52.7	1.454	2.363	11.7	20.3	1 16	5 47.89	+13 43.4	2.250	3.140	9.1	21.2
1 26	5 40.98	+23 4.9	1.535	2.372	15.6	20.6	1 26	5 42.57	+14 24.0	2.331	3.141	11.9	21.3
454658	2014 <i>QH</i> ₃₁₇		12 23.2 174°27	1°8/23.3	18		399803	2005 <i>SZ</i> ₃		12 23.2 48°06	1°2/23.1	18	
11 17	6 33.71	+17 41.9	2.180	2.976	13.2	22.1	11 17	6 34.71	+25 44.4	1.838	2.648	14.8	21.3
11 27	6 28.58	+17 41.5	2.097	2.978	10.2	21.9	11 27	6 29.80	+26 1.1	1.766	2.655	11.3	21.1
12 7	6 21.29	+17 45.6	2.037	2.979	6.7	21.7	12 7	6 22.27	+26 17.1	1.717	2.663	7.3	20.8
12 17	6 12.45	+17 53.9	2.004	2.979	3.1	21.5	12 17	6 12.88	+26 29.9	1.694	2.671	3.0	20.6
12 27	6 2.97	+18 5.6	2.002	2.980	2.3	21.4	12 27	6 2.78	+26 37.3	1.699	2.680	2.1	20.5
1 6	5 53.87	+18 20.2	2.029	2.980	5.8	21.7	1 6	5 53.26	+26 38.8	1.734	2.688	6.3	20.8
1 16	5 46.10	+18 37.1	2.084	2.980	9.3	21.9	1 16	5 45.46	+26 35.6	1.795	2.697	10.2	21.1
1 26	5 40.39	+18 56.0	2.165	2.980	12.5	22.1	1 26	5 40.22	+26 29.6	1.881	2.706	13.7	21.3
97389	2000 <i>AZ</i> ₉₆		12 23.2 340°54	8°1/23.6	18		72211	2001 <i>AS</i>		12 23.2 354°46	3°0/23.2	18	

EPHEMERIDES

12 23.2

12 23.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
218104	2002 <i>NO</i> ₅₅		12 23.2 106°80	1.6°/23.2	18		416350	2003 <i>SH</i> ₃₃₁		12 23.2 77°25	2.6°/22.9	17	
11 17	6 41.30	+19 33.5	1.730	2.527	16.1	20.8	11 17	6 35.18	+28 51.1	2.222	3.020	13.0	21.7
11 27	6 34.55	+19 21.6	1.671	2.553	12.3	20.6	11 27	6 29.87	+29 38.8	2.149	3.030	10.0	21.5
12 7	6 25.12	+19 12.9	1.634	2.577	8.0	20.4	12 7	6 22.22	+30 24.8	2.100	3.041	6.7	21.3
12 17	6 13.91	+19 6.8	1.624	2.601	3.4	20.2	12 17	6 12.88	+31 5.3	2.079	3.052	3.5	21.1
12 27	6 2.20	+19 2.7	1.644	2.624	2.5	20.1	12 27	6 2.86	+31 37.0	2.088	3.062	3.0	21.1
1 6	5 51.33	+19 0.7	1.694	2.646	6.7	20.5	1 6	5 53.29	+31 58.4	2.126	3.073	6.0	21.3
1 16	5 42.43	+19 1.3	1.771	2.667	10.7	20.7	1 16	5 45.18	+32 10.2	2.193	3.083	9.2	21.6
1 26	5 36.25	+19 5.1	1.872	2.687	14.1	21.0	1 26	5 39.33	+32 14.4	2.284	3.094	12.1	21.8
459777	2013 <i>RZ</i> ₁₁		12 23.2 132°22	2.8°/23.3	17		329546	2002 <i>TN</i> ₂₇₉		12 23.2 56°43	5.4°/22.7	18	
11 17	6 35.15	+32 47.3	2.510	3.298	11.9	21.8	11 17	6 32.74	+10 23.0	2.132	2.916	13.9	20.2
11 27	6 29.56	+32 58.4	2.429	3.303	9.3	21.6	11 27	6 27.59	+9 10.9	2.070	2.935	11.1	20.0
12 7	6 21.85	+33 3.8	2.373	3.308	6.3	21.5	12 7	6 20.49	+8 6.2	2.032	2.953	8.1	19.9
12 17	6 12.67	+33 0.9	2.344	3.312	3.6	21.3	12 17	6 12.12	+7 12.3	2.021	2.972	5.9	19.8
12 27	6 2.95	+32 48.1	2.345	3.317	3.1	21.3	12 27	6 3.38	+6 31.8	2.039	2.991	5.7	19.8
1 6	5 53.71	+32 25.9	2.377	3.322	5.6	21.4	1 6	5 55.19	+6 6.1	2.085	3.010	7.6	19.9
1 16	5 45.86	+31 56.3	2.437	3.326	8.5	21.6	1 16	5 48.36	+5 54.9	2.159	3.029	10.3	20.1
1 26	5 40.09	+31 22.3	2.523	3.330	11.2	21.8	1 26	5 43.49	+5 56.7	2.256	3.049	12.8	20.3
435553	2008 <i>QB</i> ₂₁		12 23.2 155°59	2.7°/23.2	18		481412	2006 <i>TL</i> ₁₁		12 23.2 120°93	3.5°/23.1	16	
11 17	6 37.71	+16 33.4	2.048	2.837	14.2	22.1	11 17	6 44.01	+30 52.5	1.758	2.553	16.0	21.9
11 27	6 31.63	+16 9.8	1.970	2.846	11.0	21.9	11 27	6 37.07	+31 32.5	1.694	2.572	12.4	21.7
12 7	6 23.24	+15 50.5	1.916	2.854	7.4	21.7	12 7	6 27.02	+32 7.6	1.653	2.591	8.4	21.5
12 17	6 13.23	+15 36.2	1.889	2.861	3.8	21.5	12 17	6 14.77	+32 32.6	1.638	2.609	4.5	21.3
12 27	6 2.62	+15 27.2	1.893	2.868	3.2	21.5	12 27	6 1.76	+32 43.5	1.653	2.626	3.9	21.3
1 6	5 52.53	+15 23.7	1.926	2.873	6.4	21.7	1 6	5 49.60	+32 40.1	1.696	2.642	7.3	21.6
1 16	5 43.96	+15 26.0	1.988	2.878	10.0	21.9	1 16	5 39.62	+32 25.0	1.767	2.657	11.1	21.8
1 26	5 37.65	+15 33.7	2.075	2.883	13.2	22.2	1 26	5 32.74	+32 2.9	1.862	2.672	14.4	22.1
56839	2000 <i>QM</i> ₄₀		12 23.2 143°23	2.2°/23.3	18		143651	2003 <i>QO</i> ₁₀₄		12 23.2 253°17	3.4°/22.8	18	A
11 17	6 33.45	+16 39.1	2.125	2.921	13.5	19.9	11 17	6 46.19	+30 31.0	2.176	2.952	13.9	20.8
11 27	6 28.42	+16 33.5	2.044	2.925	10.5	19.7	11 27	6 39.04	+31 21.4	2.053	2.921	11.0	20.6
12 7	6 21.21	+16 33.1	1.987	2.928	7.0	19.5	12 7	6 28.69	+32 11.0	1.955	2.888	7.6	20.3
12 17	6 12.45	+16 37.8	1.958	2.931	3.4	19.3	12 17	6 15.66	+32 54.0	1.885	2.853	4.3	20.0
12 27	6 3.08	+16 47.3	1.958	2.934	2.7	19.3	12 27	6 1.04	+33 25.0	1.846	2.817	3.9	19.9
1 6	5 54.13	+17 1.0	1.987	2.937	6.0	19.5	1 6	5 46.32	+33 40.9	1.839	2.779	7.3	20.1
1 16	5 46.52	+17 18.3	2.044	2.940	9.5	19.7	1 16	5 33.05	+33 41.9	1.862	2.740	11.3	20.2
1 26	5 41.00	+17 38.6	2.127	2.943	12.6	19.9	1 26	5 22.52	+33 31.9	1.909	2.698	14.9	20.4
274059	2007 <i>TB</i> ₉₅		12 23.2 124°27	1.2°/23.3	18		63354	2001 <i>FU</i> ₁₄₀		12 23.2 106°32	5.7°/23.4	18	
11 17	6 31.17	+18 22.5	3.021	3.806	10.2	20.9	11 17	6 31.16	+5 18.4	2.532	3.294	12.5	19.3
11 27	6 26.01	+18 24.1	2.945	3.820	7.8	20.7	11 27	6 26.17	+4 34.3	2.463	3.308	10.2	19.2
12 7	6 19.34	+18 28.6	2.894	3.834	5.1	20.6	12 7	6 19.53	+4 0.4	2.418	3.322	7.9	19.1
12 17	6 11.65	+18 35.4	2.873	3.848	2.3	20.4	12 17	6 11.76	+3 39.1	2.400	3.336	6.1	19.0
12 27	6 3.60	+18 44.0	2.883	3.862	1.7	20.3	12 27	6 3.61	+3 31.7	2.410	3.350	5.9	19.0
1 6	5 55.88	+18 54.2	2.924	3.875	4.3	20.6	1 6	5 55.85	+3 38.4	2.450	3.363	7.3	19.1
1 16	5 49.12	+19 5.6	2.995	3.887	7.0	20.7	1 16	5 49.18	+3 57.8	2.517	3.376	9.4	19.3
1 26	5 43.83	+19 18.2	3.093	3.900	9.3	20.9	1 26	5 44.15	+4 27.8	2.608	3.389	11.6	19.4
352869	2008 <i>WL</i> ₁₄₀		12 23.2 343°08	8.1°/22.5	18		129970	1999 <i>UH</i> ₁₉		12 23.2 40°66	0.1°/23.2	18	
11 17	6 33.31	+8 24.9	1.512	2.314	17.8	20.1	11 17	6 35.65	+23 19.7	1.680	2.493	15.8	20.1
11 27	6 29.02	+6 55.6	1.438	2.310	14.6	19.9	11 27	6 30.78	+23 26.9	1.604	2.495	12.1	19.8
12 7	6 21.94	+5 36.2	1.385	2.307	11.2	19.7	12 7	6 23.07	+23 35.3	1.550	2.497	7.8	19.6
12 17	6 12.82	+4 32.7	1.356	2.304	8.6	19.6	12 17	6 13.28	+23 42.8	1.521	2.500	3.1	19.3
12 27	6 2.87	+3 50.3	1.353	2.301	8.5	19.5	12 27	6 2.65	+23 47.9	1.521	2.502	1.9	19.2
1 6	5 53.47	+3 31.6	1.375	2.299	10.9	19.7	1 6	5 52.61	+23 49.8	1.549	2.505	6.7	19.5
1 16	5 45.85	+3 35.9	1.422	2.297	14.2	19.9	1 16	5 44.39	+23 49.5	1.604	2.508	11.1	19.8
1 26	5 40.92	+3 59.6	1.489	2.296	17.5	20.1	1 26	5 38.93	+23 48.5	1.681	2.511	14.8	20.1
477832	2011 <i>EW</i> ₇₅		12 23.2 284°50	2.4°/23.2	18		88667	2001 <i>RR</i> ₇₉		12 23.2 68°12	4.6°/23.5	18	
11 17	6 37.88	+28 8.9	1.478	2.296	17.3	21.5	11 17	6 35.60	+12 45.2	1.502	2.310	17.6	19.2
11 27	6 33.25	+28 28.9	1.391	2.284	13.5	21.2	11 27	6 30.70	+12 23.4	1.439	2.322	13.9	19.0
12 7	6 25.10	+28 46.5	1.325	2.272	9.0	20.9	12 7	6 22.95	+12 12.3	1.396	2.333	9.6	18.8
12 17	6 14.20	+28 57.5	1.283	2.259	4.2	20.6	12 17	6 13.20	+12 13.2	1.378	2.345	5.7	18.6
12 27	6 1.98	+28 58.2	1.268	2.247	3.2	20.5	12 27	6 2.73	+12 26.5	1.387	2.358	5.0	18.6
1 6	5 50.26	+28 47.7	1.280	2.235	8.0	20.7	1 6	5 52.96	+12 50.9	1.423	2.370	8.2	18.8
1 16	5 40.70	+28 28.3	1.318	2.223	13.0	21.0	1 16	5 45.11	+13 24.3	1.484	2.382	12.3	19.1
1 26	5 34.54	+28 4.5	1.377	2.210	17.3	21.2	1 26	5 40.05	+14 4.3	1.568	2.394	15.9	19.3
464595	2016 <i>CH</i> ₁₁₂		12 23.2 25°50	2.2°/23.1	17		24902	1997 <i>AR</i> ₂₂		12 23.2 40°11	4.1°/23.0	18	
11 17	6 31.73	+18 26.0	2.137	2.939	13.3	21.5	11 17	6 38.73	+29 48.4	1.233	2.061	19.5	17.9
11 27	6 27.07	+17 56.2	2.058	2.942	10.2	21.3	11 27	6 34.22	+30 38.2	1.174	2.071	15.1	17.7
12 7	6 20.31	+17 29.1	2.002	2.945	6.8	21.1	12 7	6 25.79	+31 24.6	1.134	2.081	10.2	17.4
12 17	6 12.10	+17 5.1	1.974	2.948	3.3	20.8	12 17	6 14.45	+32 0.7	1.118	2.091	5.5	17.2
12 27	6 3.34	+16 45.3	1.975	2.952	2.7	20.8	12 27	6 2.00	+32 20.8	1.127	2.102	4.7	17.2
1 6	5 55.03	+16 30.2	2.005	2.956	5.9	21.0	1 6	5 50.54	+32 23.5	1.162	2.114	9.0	17.5
1 16	5 48.07	+16 20.6	2.063	2.960	9.4	21.3	1 16	5 41.81	+32 11.9	1.221	2.126	13.7	17.8
1 26	5 43.14	+16 16.5	2.146	2.964	12.5	21.5	1 26	5 36.92	+31 51.6	1.300	2.139	17.8	18.0
113139	2002 <i>RC</i> ₈₈		12 23.2 128°31	0.4°/23.2	18		466572	2014 <i>UX</i> ₁₉		12 23.2 356°43			

EPHEMERIDES

12 23.2

12 23.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
265432	2004 <i>VL</i> ₆₂		12 23.2 32°63'	4.9°/23.9	18		123927	2001 <i>ER</i> ₄		12 23.2 221°04'	0.2°/23.2	18	
11 17	6 31.55	+ 9 21.2	1.797	2.592	15.6	19.9	11 17	6 32.86	+22 16.5	2.706	3.497	11.1	20.8
11 27	6 27.22	+ 9 19.0	1.729	2.603	12.4	19.7	11 27	6 27.70	+22 24.1	2.609	3.489	8.5	20.6
12 7	6 20.56	+ 9 29.7	1.684	2.614	8.9	19.5	12 7	6 20.68	+22 32.9	2.537	3.480	5.5	20.4
12 17	6 12.26	+ 9 54.2	1.664	2.625	5.8	19.4	12 17	6 12.31	+22 41.7	2.494	3.472	2.2	20.1
12 27	6 3.34	+10 32.1	1.671	2.637	5.1	19.3	12 27	6 3.35	+22 49.5	2.482	3.463	1.3	20.1
1 6	5 54.93	+11 21.1	1.706	2.649	7.5	19.5	1 6	5 54.64	+22 56.0	2.500	3.453	4.7	20.3
1 16	5 48.03	+12 18.0	1.768	2.662	10.9	19.7	1 16	5 46.98	+23 1.1	2.548	3.443	7.9	20.5
1 26	5 43.39	+13 19.7	1.854	2.676	14.0	20.0	1 26	5 41.03	+23 5.6	2.623	3.433	10.7	20.6
311767	2006 <i>TZ</i> ₁₂₂		12 23.2 340°73'	1.8°/23.1	17		369448	2010 <i>CV</i> ₁₁₇		12 23.2 45°79'	3.0°/23.3	17	
11 17	6 32.87	+26 0.3	1.557	2.380	16.3	21.0	11 17	6 34.92	+32 30.3	2.188	2.984	13.2	20.5
11 27	6 29.13	+26 29.3	1.474	2.371	12.7	20.8	11 27	6 29.71	+32 42.0	2.112	2.990	10.3	20.4
12 7	6 22.30	+26 59.0	1.413	2.362	8.3	20.5	12 7	6 22.12	+32 47.7	2.059	2.997	7.0	20.2
12 17	6 13.09	+27 25.8	1.377	2.355	3.6	20.2	12 17	6 12.88	+32 44.4	2.034	3.003	3.9	20.0
12 27	6 2.79	+27 46.1	1.368	2.347	2.7	20.1	12 27	6 3.04	+32 30.5	2.037	3.010	3.3	20.0
1 6	5 52.95	+27 58.3	1.385	2.341	7.3	20.4	1 6	5 53.77	+32 6.5	2.070	3.017	6.1	20.2
1 16	5 45.00	+28 2.9	1.428	2.336	11.9	20.6	1 16	5 46.07	+31 34.7	2.131	3.024	9.3	20.4
1 26	5 40.04	+28 2.3	1.494	2.331	16.0	20.9	1 26	5 40.70	+30 58.7	2.216	3.031	12.2	20.6
12977	1978 <i>NC</i>		12 23.2 127°38'	5.6°/24.7	18		155132	2005 <i>TV</i> ₁₃₂		12 23.2 303°74'	1.2°/23.2	18	
11 17	6 38.06	+ 3 40.9	2.124	2.877	14.9	19.0	11 17	6 35.81	+25 5.1	1.443	2.266	17.4	20.5
11 27	6 31.78	+ 4 2.8	2.050	2.892	12.1	18.8	11 27	6 31.70	+25 22.9	1.355	2.252	13.5	20.2
12 7	6 23.32	+ 4 41.1	1.998	2.906	9.1	18.6	12 7	6 24.16	+25 41.8	1.289	2.238	8.9	19.9
12 17	6 13.31	+ 5 36.3	1.973	2.919	6.5	18.5	12 17	6 13.91	+25 58.3	1.246	2.224	3.7	19.6
12 27	6 2.71	+ 6 47.0	1.979	2.932	5.7	18.5	12 27	6 2.33	+26 9.2	1.230	2.211	2.5	19.4
1 6	5 52.55	+ 8 9.7	2.014	2.944	7.5	18.6	1 6	5 51.18	+26 13.2	1.241	2.198	7.9	19.7
1 16	5 43.78	+ 9 39.9	2.080	2.956	10.3	18.8	1 16	5 42.09	+26 11.3	1.276	2.185	13.0	20.0
1 26	5 37.14	+11 13.3	2.171	2.967	13.1	19.0	1 26	5 36.30	+26 6.1	1.334	2.172	17.4	20.2
180987	2005 <i>NU</i> ₁₅		12 23.2 125°91'	1.5°/23.2	18		249164	2008 <i>BR</i> ₂₉		12 23.2 32°40'	5.5°/24.2	18	
11 17	6 36.26	+27 52.3	1.987	2.789	14.1	20.5	11 17	6 33.27	+ 7 34.9	1.720	2.510	16.4	20.2
11 27	6 30.88	+27 56.9	1.907	2.792	10.9	20.3	11 27	6 28.72	+ 7 38.0	1.646	2.514	13.2	20.0
12 7	6 22.95	+27 58.4	1.851	2.795	7.1	20.1	12 7	6 21.66	+ 7 56.7	1.594	2.519	9.7	19.8
12 17	6 13.21	+27 54.3	1.822	2.798	3.1	19.9	12 17	6 12.76	+ 8 32.1	1.566	2.524	6.5	19.6
12 27	6 2.78	+27 43.3	1.821	2.801	2.2	19.8	12 27	6 3.10	+ 9 23.6	1.566	2.530	5.7	19.5
1 6	5 52.90	+27 25.7	1.850	2.804	6.1	20.1	1 6	5 53.91	+10 28.1	1.594	2.535	8.1	19.7
1 16	5 44.67	+27 3.3	1.907	2.806	9.9	20.3	1 16	5 46.29	+11 41.7	1.648	2.541	11.6	19.9
1 26	5 38.92	+26 39.1	1.989	2.809	13.2	20.5	1 26	5 41.09	+12 59.9	1.727	2.547	14.9	20.1
91312	1999 <i>GE</i> ₇		12 23.2 34°31'	6.8°/22.3	18		422203	2014 <i>RG</i> ₄₅		12 23.2 94°64'	1.1°/23.2	18	
11 17	6 39.60	+33 30.4	1.336	2.155	18.8	18.1	11 17	6 33.27	+20 26.8	2.233	3.032	12.9	21.1
11 27	6 35.04	+35 11.5	1.277	2.164	14.9	17.8	11 27	6 28.17	+20 19.3	2.158	3.041	9.9	20.9
12 7	6 26.47	+36 48.2	1.238	2.174	10.7	17.6	12 7	6 21.02	+20 13.8	2.107	3.050	6.4	20.7
12 17	6 14.80	+38 10.3	1.224	2.185	7.4	17.5	12 17	6 12.43	+20 9.9	2.083	3.060	2.7	20.5
12 27	6 1.79	+39 8.4	1.235	2.196	7.3	17.5	12 27	6 3.33	+20 7.1	2.089	3.069	1.8	20.5
1 6	5 49.58	+39 39.0	1.272	2.208	10.4	17.7	1 6	5 54.69	+20 5.4	2.124	3.078	5.4	20.7
1 16	5 40.08	+39 45.1	1.333	2.220	14.2	18.0	1 16	5 47.38	+20 5.2	2.189	3.087	8.9	20.9
1 26	5 34.52	+39 33.3	1.415	2.233	17.7	18.2	1 26	5 42.10	+20 7.0	2.278	3.095	11.9	21.2
270992	2002 <i>XA</i> ₂₈		12 23.2 63°11'	1.9°/23.2	18		403368	2009 <i>HQ</i> ₆₆		12 23.2 247°51'	2.3°/23.3	17	
11 17	6 37.38	+20 33.8	1.414	2.233	17.9	19.9	11 17	6 34.55	+16 39.7	2.152	2.945	13.5	22.8
11 27	6 32.34	+20 6.5	1.348	2.242	13.8	19.7	11 27	6 29.46	+16 32.7	2.052	2.930	10.5	22.6
12 7	6 24.15	+19 41.5	1.303	2.251	9.0	19.4	12 7	6 22.06	+16 30.7	1.975	2.915	7.1	22.3
12 17	6 13.72	+19 18.8	1.283	2.260	3.9	19.2	12 17	6 12.93	+16 33.7	1.926	2.900	3.5	22.1
12 27	6 2.51	+18 59.0	1.290	2.270	2.8	19.1	12 27	6 2.97	+16 41.7	1.907	2.884	2.8	22.0
1 6	5 52.12	+18 43.1	1.324	2.279	7.7	19.4	1 6	5 53.26	+16 54.0	1.917	2.867	6.2	22.2
1 16	5 43.90	+18 32.3	1.383	2.289	12.4	19.7	1 16	5 44.80	+17 10.4	1.956	2.850	9.9	22.4
1 26	5 38.78	+18 27.5	1.464	2.298	16.4	20.0	1 26	5 38.47	+17 30.2	2.019	2.833	13.3	22.6
326639	2002 <i>SL</i> ₂₆		12 23.2 86°22'	0.9°/23.2	16		150379	2000 <i>DL</i> ₂₈		12 23.2 11°19'	4.4°/23.3	18	
11 17	6 41.31	+21 13.6	1.509	2.318	17.5	21.8	11 17	6 35.97	+31 25.8	1.146	1.983	20.1	19.5
11 27	6 34.95	+21 10.3	1.455	2.344	13.4	21.6	11 27	6 32.45	+31 55.7	1.084	1.985	15.7	19.2
12 7	6 25.58	+21 9.7	1.423	2.369	8.6	21.4	12 7	6 24.84	+32 19.0	1.040	1.988	10.7	19.0
12 17	6 14.20	+21 10.0	1.417	2.395	3.4	21.2	12 17	6 14.16	+32 29.3	1.019	1.992	5.9	18.7
12 27	6 2.27	+21 10.3	1.439	2.419	2.2	21.2	12 27	6 2.28	+32 22.2	1.021	1.997	5.0	18.7
1 6	5 51.32	+21 10.3	1.489	2.444	7.0	21.5	1 6	5 51.41	+31 57.9	1.048	2.003	9.4	18.9
1 16	5 42.60	+21 10.8	1.566	2.467	11.5	21.8	1 16	5 43.38	+31 21.1	1.098	2.010	14.3	19.2
1 26	5 36.91	+21 13.1	1.665	2.491	15.1	22.1	1 26	5 39.32	+30 38.7	1.168	2.018	18.7	19.5
485955	2012 <i>HV</i> ₅₄		12 23.2 201°45'	0.3°/23.3	18		449445	2013 <i>JM</i>		12 23.2 276°89'	2.9°/23.6	17	
11 17	6 32.92	+21 2.0	2.464	3.258	11.9	21.6	11 17	6 33.77	+14 5.0	1.960	2.756	14.5	21.6
11 27	6 27.89	+21 23.4	2.375	3.257	9.1	21.5	11 27	6 29.10	+14 15.7	1.862	2.740	11.4	21.3
12 7	6 20.87	+21 47.8	2.311	3.255	5.9	21.2	12 7	6 21.97	+14 35.8	1.787	2.725	7.8	21.1
12 17	6 12.39	+22 13.5	2.275	3.253	2.3	21.0	12 17	6 12.94	+15 5.0	1.738	2.710	4.1	20.8
12 27	6 3.29	+22 38.9	2.269	3.250	1.4	20.9	12 27	6 2.96	+15 42.5	1.719	2.694	3.3	20.8
1 6	5 54.47	+23 2.8	2.294	3.248	5.0	21.2	1 6	5 53.19	+16 26.2	1.728	2.679	6.7	20.9
1 16	5 46.81	+23 24.8	2.348	3.245	8.4	21.4	1 16	5 44.76	+17 14.0	1.765	2.663	10.7	21.1
1 26	5 41.01	+23 44.9	2.428	3.242	11.3	21.6	1 26	5 38.59	+18 4.1	1.827	2.647	14.2	21.3
270153	2001 <i>ST</i> ₉₄		12 23.2 113°28'	0.8°/23.2	18		103702	2000 <i>CZ</i> ₇₈		12 23.2 207°33'			

EPHEMERIDES

12 23.2

12 23.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
349210	2007 <i>RP</i> ₂₈₈		12 23.2 109°24	5°4/23.5	18		69990	1998 <i>WU</i> ₃₁		12 23.2 54°46	0°1/23.3	17	
11 17	6 44.03	+38 44.6	2.086	2.861	14.5	21.0	11 17	6 10.20	+19 37.0	35.099	35.886	1.0	23.8
11 27	6 36.79	+39 16.3	2.024	2.882	11.6	20.8	11 27	6 9.38	+19 36.3	35.013	35.891	0.7	23.7
12 7	6 26.70	+39 37.2	1.985	2.903	8.5	20.7	12 7	6 8.45	+19 35.9	34.955	35.896	0.5	23.7
12 17	6 14.66	+39 42.1	1.972	2.924	6.0	20.6	12 17	6 7.46	+19 35.5	34.925	35.901	0.2	23.6
12 27	6 2.06	+39 28.1	1.988	2.943	5.5	20.6	12 27	6 6.45	+19 35.4	34.927	35.906	0.1	23.6
1 6	5 50.35	+38 56.3	2.034	2.963	7.5	20.7	1 6	6 5.46	+19 35.5	34.960	35.911	0.4	23.7
1 16	5 40.73	+38 10.7	2.107	2.981	10.3	20.9	1 16	6 4.51	+19 35.7	35.022	35.916	0.7	23.7
1 26	5 34.00	+37 17.1	2.205	2.999	13.0	21.2	1 26	6 3.67	+19 36.1	35.113	35.921	0.9	23.7
387994	2005 <i>QZ</i> ₈₁		12 23.2 46°29	0°9/23.3	18		480123	2015 <i>FW</i> ₁₀₇		12 23.2 299°06	4°0/23.3	18	
11 17	6 37.37	+20 24.0	1.203	2.033	19.8	20.6	11 17	6 39.45	+31 21.1	1.338	2.159	18.7	21.2
11 27	6 32.69	+20 35.8	1.153	2.053	15.1	20.4	11 27	6 34.87	+31 44.0	1.258	2.151	14.7	20.9
12 7	6 24.51	+20 53.1	1.122	2.073	9.7	20.2	12 7	6 26.38	+32 1.0	1.199	2.143	10.0	20.6
12 17	6 13.90	+21 13.5	1.115	2.094	3.9	19.9	12 17	6 14.84	+32 6.2	1.163	2.135	5.4	20.3
12 27	6 2.54	+21 34.5	1.134	2.116	2.4	19.9	12 27	6 1.94	+31 55.0	1.152	2.128	4.5	20.2
1 6	5 52.23	+21 54.3	1.179	2.137	7.9	20.3	1 6	5 49.74	+31 27.4	1.168	2.120	8.9	20.5
1 16	5 44.43	+22 12.8	1.248	2.160	12.9	20.6	1 16	5 40.09	+30 47.7	1.208	2.113	13.8	20.7
1 26	5 40.06	+22 30.4	1.339	2.182	17.1	20.9	1 26	5 34.26	+30 2.4	1.269	2.106	18.2	21.0
31729	Scharmen		12 23.2 65°28	4°5/23.6	18		228987	2003 <i>WP</i> ₅		12 23.2 38°96	1°9/23.1	17	
11 17	6 33.06	+11 20.2	1.876	2.670	15.1	18.5	11 17	6 33.86	+27 28.4	1.981	2.788	14.0	19.7
11 27	6 28.28	+10 58.5	1.807	2.681	11.9	18.3	11 27	6 29.08	+27 58.0	1.911	2.798	10.7	19.5
12 7	6 21.21	+10 46.5	1.760	2.692	8.5	18.2	12 7	6 21.84	+28 26.1	1.864	2.808	7.0	19.3
12 17	6 12.56	+10 45.7	1.740	2.702	5.4	18.0	12 17	6 12.85	+28 49.5	1.843	2.819	3.2	19.1
12 27	6 3.31	+10 56.4	1.747	2.713	4.8	18.0	12 27	6 3.19	+29 5.7	1.851	2.830	2.5	19.1
1 6	5 54.59	+11 18.0	1.782	2.724	7.3	18.2	1 6	5 54.07	+29 13.9	1.889	2.841	6.1	19.3
1 16	5 47.36	+11 48.7	1.845	2.735	10.7	18.4	1 16	5 46.54	+29 15.0	1.953	2.852	9.7	19.6
1 26	5 42.37	+12 26.3	1.931	2.747	13.8	18.6	1 26	5 41.41	+29 11.0	2.042	2.864	12.9	19.8
447568	2006 <i>TO</i> ₃₃		12 23.2 168°58	3°4/23.0	18		517363	2014 <i>KX</i> ₄		12 23.2 204°55	1°2/23.2	18	
11 17	6 38.66	+32 54.6	2.451	3.234	12.3	22.2	11 17	6 37.20	+26 3.6	2.187	2.982	13.2	22.3
11 27	6 32.45	+33 31.7	2.368	3.238	9.7	22.1	11 27	6 31.51	+26 22.1	2.096	2.977	10.2	22.1
12 7	6 23.89	+34 4.0	2.310	3.242	6.7	21.9	12 7	6 23.40	+26 39.8	2.030	2.973	6.6	21.9
12 17	6 13.62	+34 27.7	2.280	3.245	4.0	21.7	12 17	6 13.49	+26 54.2	1.991	2.968	2.8	21.7
12 27	6 2.66	+34 39.9	2.280	3.248	3.7	21.7	12 27	6 2.78	+27 3.2	1.982	2.962	2.0	21.6
1 6	5 52.12	+34 39.8	2.311	3.250	6.1	21.9	1 6	5 52.45	+27 6.0	2.003	2.956	5.8	21.8
1 16	5 43.03	+34 29.0	2.370	3.252	9.0	22.0	1 16	5 43.56	+27 3.5	2.054	2.949	9.5	22.0
1 26	5 36.19	+34 10.5	2.455	3.253	11.7	22.2	1 26	5 36.97	+26 57.6	2.129	2.942	12.7	22.2
449667	2014 <i>KH</i> ₈₃		12 23.2 115°11	2°0/23.0	18		111336	2001 <i>XW</i> ₉₄		12 23.2 196°11	0°6/23.2	18	
11 17	6 37.79	+26 47.4	2.059	2.857	13.8	21.6	11 17	6 36.96	+22 30.4	1.631	2.443	16.2	20.4
11 27	6 32.00	+27 31.5	1.987	2.869	10.6	21.5	11 27	6 31.89	+22 21.1	1.552	2.443	12.5	20.1
12 7	6 23.69	+28 15.3	1.938	2.881	7.0	21.3	12 7	6 23.88	+22 12.7	1.495	2.443	8.1	19.9
12 17	6 13.56	+28 54.9	1.917	2.893	3.2	21.0	12 17	6 13.71	+22 3.9	1.464	2.442	3.2	19.6
12 27	6 2.71	+29 26.8	1.926	2.904	2.6	21.0	12 27	6 2.67	+21 54.2	1.461	2.442	2.0	19.5
1 6	5 52.37	+29 49.5	1.965	2.915	6.1	21.3	1 6	5 52.21	+21 43.7	1.486	2.441	6.9	19.8
1 16	5 43.63	+30 3.3	2.032	2.926	9.7	21.5	1 16	5 43.65	+21 33.8	1.537	2.441	11.5	20.1
1 26	5 37.33	+30 10.5	2.124	2.936	12.8	21.7	1 26	5 37.93	+21 26.1	1.611	2.440	15.4	20.3
410573	2008 <i>GT</i> ₈₂		12 23.2 250°35	5°1/22.6	17		127481	2002 <i>ST</i> ₂₉		12 23.2 234°20	2°5/23.4	18	
11 17	6 38.08	+35 16.2	2.115	2.904	13.8	21.2	11 17	6 31.27	+15 4.5	2.582	3.369	11.6	20.2
11 27	6 32.67	+36 19.0	2.028	2.898	11.0	21.0	11 27	6 26.51	+14 56.3	2.488	3.362	9.1	20.0
12 7	6 24.41	+37 16.9	1.964	2.891	8.0	20.8	12 7	6 19.95	+14 53.3	2.418	3.355	6.2	19.8
12 17	6 13.95	+38 4.0	1.927	2.884	5.6	20.7	12 17	6 12.08	+14 55.6	2.377	3.347	3.3	19.6
12 27	6 2.44	+38 35.2	1.919	2.878	5.4	20.7	12 27	6 3.64	+15 3.3	2.365	3.339	2.8	19.6
1 6	5 51.26	+38 48.7	1.940	2.871	7.7	20.8	1 6	5 55.46	+15 16.1	2.384	3.331	5.4	19.7
1 16	5 41.74	+38 45.7	1.987	2.863	10.8	21.0	1 16	5 48.30	+15 33.4	2.432	3.323	8.4	19.9
1 26	5 34.90	+38 30.2	2.059	2.856	13.7	21.1	1 26	5 42.82	+15 54.4	2.505	3.314	11.2	20.1
518385	2017 <i>GM</i> ₉		12 23.2 211°24	1°0/23.2	18		149266	2002 <i>TE</i> ₅₄		12 23.2 72°41	0°9/23.3	18	
11 17	6 32.80	+25 44.0	2.733	3.525	11.0	22.1	11 17	6 41.19	+20 22.7	1.389	2.203	18.5	20.5
11 27	6 27.69	+26 4.8	2.641	3.520	8.4	21.9	11 27	6 35.09	+20 34.8	1.341	2.231	14.1	20.3
12 7	6 20.71	+26 25.2	2.573	3.516	5.5	21.7	12 7	6 25.79	+20 51.4	1.313	2.260	9.0	20.1
12 17	6 12.37	+26 43.3	2.535	3.511	2.3	21.5	12 17	6 14.37	+21 10.1	1.310	2.288	3.6	19.8
12 27	6 3.44	+26 57.5	2.527	3.506	1.6	21.4	12 27	6 2.36	+21 28.6	1.335	2.316	2.2	19.8
1 6	5 54.78	+27 7.2	2.550	3.501	4.7	21.7	1 6	5 51.41	+21 45.5	1.387	2.343	7.3	20.2
1 16	5 47.19	+27 12.5	2.602	3.496	7.8	21.8	1 16	5 42.82	+22 1.0	1.466	2.370	11.9	20.5
1 26	5 41.35	+27 14.6	2.680	3.490	10.5	22.0	1 26	5 37.42	+22 15.8	1.567	2.397	15.7	20.8
95365	2002 <i>CS</i> ₁₅₅		12 23.2 231°79	2°2/23.1	18		347641	2001 <i>TJ</i> ₄		12 23.2 73°34	2°5/23.2	18	
11 17	6 35.59	+29 21.1	2.429	3.220	12.2	20.3	11 17	6 37.61	+29 24.2	1.863	2.666	14.9	20.6
11 27	6 30.16	+29 45.3	2.333	3.211	9.4	20.1	11 27	6 32.01	+29 49.6	1.799	2.683	11.4	20.4
12 7	6 22.48	+30 7.0	2.262	3.201	6.3	19.9	12 7	6 23.73	+30 11.2	1.758	2.700	7.6	20.2
12 17	6 13.11	+30 23.2	2.218	3.191	3.2	19.7	12 17	6 13.58	+30 25.5	1.744	2.717	3.8	20.0
12 27	6 2.98	+30 31.7	2.205	3.180	2.6	19.6	12 27	6 2.79	+30 30.0	1.758	2.734	3.1	20.0
1 6	5 53.15	+30 31.7	2.221	3.170	5.6	19.8	1 6	5 52.72	+30 24.4	1.801	2.751	6.5	20.3
1 16	5 44.62	+30 24.1	2.267	3.158	8.9	20.0	1 16	5 44.50	+30 10.8	1.872	2.768	10.2	20.5
1 26	5 38.20	+30 11.2	2.338	3.147	11.9	20.2	1 26	5 38.93	+29 52.5	1.966	2.785	13.4	20.8
494072	2016 <i>BW</i> ₇₀		12 23.2 72°32	6°1/23.8	17		92603	2000 <i>PF</i> ₂₁		12 23.2 189°86	0°5/23		

EPHEMERIDES

12 23.2

12 23.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
130206	2000 <i>AK</i> ₂₀₁	12 23.2 259°45' 16.5"/27.2 18					519215	2010 <i>TL</i> ₁₃₅	12 23.2 173°87' 0.7"/23.2 18				
11 17	6 40.12	-12 34.1	1.297	2.019	24.1	19.4	11 17	6 35.07	+23 55.1	1.989	2.793	14.0	21.7
11 27	6 35.13	-13 14.8	1.217	2.006	21.9	19.2	11 27	6 30.06	+24 20.9	1.907	2.793	10.8	21.5
12 7	6 26.51	-13 18.3	1.150	1.992	19.4	19.0	12 7	6 22.55	+24 48.3	1.848	2.793	7.0	21.3
12 17	6 14.95	-12 33.1	1.101	1.978	17.4	18.8	12 17	6 13.19	+25 14.7	1.816	2.794	2.8	21.0
12 27	6 1.85	-10 52.3	1.073	1.964	16.5	18.7	12 27	6 3.04	+25 37.5	1.813	2.794	1.8	20.9
1 6	5 49.03	- 8 18.1	1.068	1.949	17.4	18.7	1 6	5 53.30	+25 55.5	1.839	2.794	6.0	21.2
1 16	5 38.26	- 5 1.8	1.085	1.934	19.8	18.8	1 16	5 45.08	+26 8.6	1.894	2.794	9.9	21.5
1 26	5 30.92	- 1 20.2	1.124	1.918	22.8	19.0	1 26	5 39.25	+26 18.1	1.973	2.794	13.3	21.7
4995	Griffin	12 23.2 18°22' 19.2"/ 1.8 18 R					24659	1988 <i>AD</i> ₅	12 23.2 319°56' 4.0"/23.4 18				
11 17	6 53.71	+62 26.0	0.859	1.635	30.0	15.5	11 17	6 31.33	+15 5.4	1.452	2.274	17.4	18.4
11 27	6 49.73	+62 54.3	0.828	1.649	27.1	15.4	11 27	6 28.12	+14 45.1	1.357	2.250	13.8	18.1
12 7	6 36.85	+62 33.6	0.807	1.666	24.0	15.3	12 7	6 21.84	+14 33.0	1.283	2.227	9.6	17.8
12 17	6 18.54	+61 7.1	0.800	1.686	21.2	15.2	12 17	6 13.09	+14 30.8	1.232	2.204	5.3	17.5
12 27	6 0.38	+58 28.8	0.809	1.709	19.5	15.2	12 27	6 3.04	+14 39.5	1.207	2.182	4.5	17.4
1 6	5 46.94	+54 52.8	0.837	1.734	19.3	15.3	1 6	5 53.23	+14 58.6	1.207	2.160	8.6	17.6
1 16	5 40.01	+50 44.7	0.886	1.761	20.7	15.5	1 16	5 45.14	+15 27.1	1.233	2.140	13.4	17.8
1 26	5 39.40	+46 31.4	0.953	1.790	22.9	15.8	1 26	5 39.98	+16 3.1	1.279	2.120	17.9	18.0
52812	1998 <i>QR</i> ₉₂	12 23.2 53°28' 7.4"/22.8 18					286919	2002 <i>PQ</i> ₁₀₂	12 23.2 196°65' 1.2"/23.2 18				
11 17	6 45.27	+34 56.6	1.214	2.030	20.5	18.3	11 17	6 36.90	+21 40.5	2.156	2.950	13.4	21.2
11 27	6 39.35	+36 35.2	1.175	2.060	16.2	18.1	11 27	6 31.12	+21 12.3	2.067	2.948	10.3	21.0
12 7	6 29.11	+38 4.0	1.157	2.090	11.7	17.9	12 7	6 23.04	+20 43.9	2.002	2.945	6.7	20.8
12 17	6 15.79	+39 11.7	1.161	2.120	8.1	17.8	12 17	6 13.34	+20 15.0	1.965	2.942	2.8	20.5
12 27	6 1.54	+39 50.3	1.192	2.151	7.7	17.9	12 27	6 2.98	+19 46.3	1.959	2.939	2.0	20.4
1 6	5 48.71	+39 59.2	1.247	2.182	10.6	18.1	1 6	5 53.08	+19 19.0	1.982	2.934	5.8	20.7
1 16	5 39.13	+39 44.2	1.326	2.212	14.3	18.4	1 16	5 44.62	+18 54.5	2.035	2.930	9.6	20.9
1 26	5 33.79	+39 14.3	1.426	2.243	17.6	18.7	1 26	5 38.37	+18 34.4	2.112	2.925	12.8	21.1
280533	2004 <i>RG</i> ₂₅	12 23.2 108°18' 0.6"/23.3 18					302650	2002 <i>RX</i> ₂₃₉	12 23.3 173°48' 1.4"/23.3 18				
11 17	6 39.15	+21 35.9	1.815	2.615	15.3	21.4	11 17	6 35.48	+19 10.0	2.027	2.825	14.0	21.6
11 27	6 33.04	+21 37.3	1.750	2.634	11.7	21.2	11 27	6 30.19	+19 11.2	1.944	2.827	10.8	21.4
12 7	6 24.31	+21 40.6	1.708	2.652	7.5	21.0	12 7	6 22.54	+19 16.3	1.885	2.828	7.1	21.2
12 17	6 13.80	+21 44.3	1.693	2.670	3.0	20.8	12 17	6 13.17	+19 24.4	1.853	2.829	3.1	20.9
12 27	6 2.70	+21 47.2	1.707	2.688	1.8	20.7	12 27	6 3.09	+19 34.6	1.850	2.830	2.1	20.8
1 6	5 52.30	+21 49.1	1.750	2.705	6.3	21.1	1 6	5 53.43	+19 46.2	1.877	2.830	6.0	21.1
1 16	5 43.73	+21 50.6	1.822	2.721	10.3	21.3	1 16	5 45.23	+19 59.1	1.932	2.830	9.8	21.3
1 26	5 37.75	+21 52.8	1.918	2.737	13.7	21.6	1 26	5 39.30	+20 13.3	2.012	2.830	13.2	21.5
247944	2003 <i>YO</i> ₁₀	12 23.2 313°64' 3.5"/22.6 18					246282	2007 <i>TH</i> ₆₅	12 23.3 48°81' 7.1"/23.1 18				
11 17	6 34.30	+30 21.9	2.114	2.915	13.4	19.8	11 17	6 33.68	+ 8 20.0	1.627	2.422	17.0	19.8
11 27	6 29.72	+31 23.5	2.019	2.901	10.5	19.6	11 27	6 29.04	+ 7 12.0	1.562	2.431	13.8	19.6
12 7	6 22.51	+32 24.4	1.948	2.887	7.2	19.4	12 7	6 21.85	+ 6 15.6	1.519	2.440	10.4	19.4
12 17	6 13.24	+33 19.7	1.904	2.873	4.2	19.2	12 17	6 12.89	+ 5 35.0	1.500	2.450	7.7	19.3
12 27	6 2.92	+34 5.0	1.890	2.860	4.0	19.1	12 27	6 3.30	+ 5 13.6	1.508	2.460	7.4	19.3
1 6	5 52.80	+34 37.3	1.904	2.846	6.9	19.3	1 6	5 54.33	+ 5 12.0	1.542	2.470	9.6	19.4
1 16	5 44.10	+34 56.6	1.945	2.833	10.3	19.5	1 16	5 47.06	+ 5 28.7	1.602	2.480	12.8	19.6
1 26	5 37.83	+35 5.1	2.011	2.821	13.5	19.6	1 26	5 42.28	+ 6 0.1	1.683	2.491	15.8	19.9
400614	2009 <i>CJ</i> ₃	12 23.2 189°88' 0.3"/23.3 18					320795	2008 <i>EL</i> ₁₅₃	12 23.3 141°49' 1.8"/23.2 18				
11 17	6 36.16	+21 54.6	2.130	2.927	13.5	22.0	11 17	6 35.90	+28 29.0	2.390	3.183	12.3	21.5
11 27	6 30.66	+22 1.4	2.044	2.926	10.4	21.7	11 27	6 30.26	+28 47.8	2.311	3.190	9.5	21.4
12 7	6 22.81	+22 10.1	1.981	2.925	6.7	21.5	12 7	6 22.44	+29 3.9	2.257	3.198	6.2	21.2
12 17	6 13.26	+22 19.1	1.946	2.923	2.7	21.3	12 17	6 13.10	+29 14.8	2.230	3.205	2.9	21.0
12 27	6 2.97	+22 27.1	1.940	2.921	1.6	21.2	12 27	6 3.17	+29 18.8	2.234	3.211	2.3	20.9
1 6	5 53.09	+22 33.6	1.965	2.919	5.7	21.4	1 6	5 53.69	+29 15.5	2.268	3.218	5.4	21.2
1 16	5 44.62	+22 38.8	2.018	2.916	9.5	21.7	1 16	5 45.59	+29 6.1	2.330	3.224	8.6	21.4
1 26	5 38.39	+22 43.6	2.096	2.912	12.8	21.9	1 26	5 39.59	+28 52.8	2.419	3.229	11.5	21.6
289261	2004 <i>XD</i> ₁₀₇	12 23.2 3°69' 1.7"/23.2 18					344186	2001 <i>FD</i> ₉₆	12 23.3 353°23' 3.7"/22.7 18				
11 17	6 29.91	+28 19.9	2.290	3.096	12.3	20.0	11 17	6 28.01	+26 16.3	1.051	1.907	20.1	18.7
11 27	6 25.82	+28 30.5	2.210	3.097	9.5	19.8	11 27	6 26.75	+27 25.0	0.982	1.895	15.7	18.4
12 7	6 19.65	+28 38.4	2.153	3.097	6.2	19.6	12 7	6 21.53	+28 38.5	0.931	1.886	10.5	18.1
12 17	6 11.99	+28 41.6	2.124	3.099	2.9	19.4	12 17	6 13.10	+29 49.7	0.901	1.878	5.2	17.8
12 27	6 3.75	+28 39.0	2.123	3.101	2.2	19.3	12 27	6 3.09	+30 50.6	0.895	1.873	4.6	17.7
1 6	5 55.92	+28 30.3	2.152	3.104	5.4	19.6	1 6	5 53.66	+31 35.3	0.912	1.870	9.7	18.0
1 16	5 49.40	+28 16.7	2.208	3.108	8.7	19.8	1 16	5 46.81	+32 3.0	0.951	1.870	15.1	18.3
1 26	5 44.90	+28 0.2	2.289	3.112	11.6	20.0	1 26	5 43.96	+32 16.6	1.008	1.871	19.9	18.6
406686	2008 <i>EN</i> ₁₅₀	12 23.2 273°98' 0.8"/23.2 17					136489	2005 <i>GG</i> ₁₃₃	12 23.3 110°87' 2.0"/23.4 18				
11 17	6 34.93	+25 32.0	1.991	2.795	14.0	21.9	11 17	6 36.06	+17 29.4	2.136	2.928	13.6	20.9
11 27	6 29.94	+25 38.7	1.907	2.793	10.8	21.7	11 27	6 30.31	+17 23.2	2.068	2.946	10.5	20.7
12 7	6 22.45	+25 44.5	1.846	2.791	7.0	21.5	12 7	6 22.41	+17 21.5	2.023	2.963	6.9	20.5
12 17	6 13.14	+25 47.3	1.812	2.789	2.9	21.2	12 17	6 13.06	+17 23.9	2.006	2.981	3.3	20.3
12 27	6 3.07	+25 45.6	1.807	2.787	1.8	21.1	12 27	6 3.22	+17 30.0	2.020	2.997	2.5	20.3
1 6	5 53.46	+25 39.2	1.831	2.785	6.0	21.4	1 6	5 53.92	+17 39.1	2.063	3.014	5.8	20.5
1 16	5 45.40	+25 29.3	1.883	2.783	9.9	21.6	1 16	5 46.06	+17 51.2	2.135	3.030	9.2	20.8
1 26	5 39.74	+25 17.8	1.959	2.781	13.3	21.9	1 26	5 40.33	+18 5.8	2.232	3.045	12.2	21.0
316212	2010 <i>MG</i> ₁₀₃	12 23.2 97°20' 2.2"/23.4 18					417358	2006 <i>FQ</i> ₂₁	12 23.3 133°06' 4.5"/23.1 17				
11 17	6 34.14	+17 5.7	1.995	2.794	14.2	21.0	11 17	6 37.11	+37 17.6	2.533	3.310	12.1	21.6
11 27	6 29.09	+17 0.4	1.921	2.803	10.9	20.8							

EPHEMERIDES

12 23.3

12 23.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
283343	1999 TA ₂₆₃	12 23.3	81°80	1.1/23.3	18		265470	2005 AB ₆₀	12 23.3	333°69	0.2/23.3	18	
11 17	6 38.39	+20 43.9	1.736	2.540	15.8	21.2	11 17	6 32.04	+21 58.1	2.019	2.827	13.7	20.4
11 27	6 32.47	+20 36.5	1.678	2.564	12.0	21.0	11 27	6 27.73	+22 9.2	1.932	2.820	10.5	20.1
12 7	6 23.94	+20 31.5	1.642	2.587	7.8	20.8	12 7	6 21.07	+22 22.7	1.868	2.814	6.8	19.9
12 17	6 13.68	+20 28.2	1.633	2.611	3.2	20.6	12 17	6 12.67	+22 37.2	1.830	2.809	2.7	19.6
12 27	6 2.90	+20 25.7	1.653	2.634	2.1	20.5	12 27	6 3.50	+22 51.1	1.822	2.803	1.6	19.5
1 6	5 52.92	+20 24.1	1.702	2.656	6.4	20.9	1 6	5 54.69	+23 3.6	1.842	2.798	5.8	19.8
1 16	5 44.81	+20 24.0	1.778	2.679	10.4	21.2	1 16	5 47.27	+23 14.5	1.890	2.793	9.7	20.0
1 26	5 39.31	+20 26.0	1.879	2.701	13.8	21.4	1 26	5 42.07	+23 24.6	1.963	2.789	13.1	20.3
257461	1990 UT ₂	12 23.3	61°93	0.4/23.3	18		515523	2014 FL ₉	12 23.3	234°28	0.8/23.3	18	
11 17	6 43.70	+25 53.5	1.169	1.994	20.6	20.4	11 17	6 38.17	+25 22.5	1.815	2.619	15.2	21.6
11 27	6 37.44	+25 33.3	1.125	2.022	15.7	20.1	11 27	6 32.78	+25 28.1	1.725	2.611	11.7	21.4
12 7	6 27.46	+25 10.1	1.101	2.051	10.0	19.9	12 7	6 24.52	+25 32.8	1.657	2.602	7.7	21.1
12 17	6 15.05	+24 42.1	1.101	2.079	3.9	19.7	12 17	6 14.08	+25 34.2	1.615	2.593	3.1	20.8
12 27	6 2.16	+24 9.2	1.127	2.108	2.3	19.6	12 27	6 2.66	+25 30.4	1.602	2.583	2.0	20.7
1 6	5 50.74	+23 33.9	1.179	2.137	8.0	20.1	1 6	5 51.67	+25 21.3	1.619	2.573	6.6	21.0
1 16	5 42.23	+23 0.2	1.256	2.165	13.1	20.4	1 16	5 42.41	+25 8.2	1.662	2.563	11.0	21.2
1 26	5 37.42	+22 31.3	1.354	2.193	17.2	20.8	1 26	5 35.89	+24 53.8	1.730	2.552	14.8	21.5
520463	2014 KK ₁₀₈	12 23.3	68°29	4.7/22.8	18		194402	2001 VK ₂₆	12 23.3	61°32	3.2/23.1	18	
11 17	6 35.42	+14 37.6	1.774	2.574	15.6	21.2	11 17	6 40.90	+28 40.3	1.386	2.204	18.3	19.6
11 27	6 30.22	+13 29.6	1.702	2.581	12.3	20.9	11 27	6 35.31	+29 25.6	1.335	2.226	14.1	19.4
12 7	6 22.55	+12 26.2	1.653	2.588	8.6	20.7	12 7	6 26.23	+30 7.9	1.304	2.249	9.3	19.2
12 17	6 13.17	+11 30.4	1.630	2.595	5.4	20.6	12 17	6 14.70	+30 41.3	1.298	2.272	4.7	18.9
12 27	6 3.19	+10 45.5	1.635	2.602	5.1	20.6	12 27	6 2.39	+31 1.4	1.318	2.295	3.8	19.0
1 6	5 53.82	+10 13.4	1.669	2.609	7.9	20.8	1 6	5 51.13	+31 7.2	1.366	2.318	8.0	19.3
1 16	5 46.11	+9 55.0	1.729	2.616	11.5	21.0	1 16	5 42.38	+31 1.4	1.439	2.341	12.3	19.6
1 26	5 40.82	+9 49.4	1.812	2.623	14.7	21.2	1 26	5 37.08	+30 48.6	1.535	2.364	16.0	19.9
228692	2002 PL ₁₂	12 23.3	19°90	2°0/23.5	17		430575	2002 QT ₇₆	12 23.3	95°02	3°8/23.6	16	
11 17	6 36.50	+31 23.7	2.082	2.879	13.7	19.9	11 17	6 39.03	+13 49.5	1.530	2.331	17.6	21.5
11 27	6 30.97	+31 1.4	2.001	2.881	10.6	19.7	11 27	6 33.28	+13 39.2	1.470	2.351	13.7	21.3
12 7	6 22.99	+30 31.6	1.943	2.884	7.1	19.5	12 7	6 24.65	+13 38.8	1.431	2.369	9.4	21.1
12 17	6 13.33	+29 52.7	1.912	2.887	3.4	19.2	12 17	6 14.04	+13 48.7	1.418	2.388	5.2	20.9
12 27	6 3.11	+29 4.6	1.912	2.890	2.5	19.2	12 27	6 2.77	+14 8.3	1.432	2.406	4.2	20.9
1 6	5 53.53	+28 9.4	1.940	2.893	5.9	19.4	1 6	5 52.28	+14 36.0	1.475	2.424	7.8	21.1
1 16	5 45.62	+27 10.7	1.998	2.896	9.5	19.6	1 16	5 43.79	+15 9.8	1.543	2.441	11.9	21.4
1 26	5 40.13	+26 12.6	2.080	2.900	12.7	19.9	1 26	5 38.15	+15 47.7	1.635	2.458	15.5	21.7
101148	1998 RV ₇₀	12 23.3	129°27	0°2/23.3	18		367568	2009 SB ₁₀₈	12 23.3	35°67	5°1/23.4	18	
11 17	6 40.63	+22 46.0	1.867	2.663	15.1	20.5	11 17	6 32.72	+12 23.9	1.603	2.411	16.7	19.8
11 27	6 34.24	+23 4.9	1.797	2.679	11.6	20.3	11 27	6 28.22	+11 36.8	1.552	2.434	13.1	19.7
12 7	6 25.17	+23 25.5	1.751	2.695	7.4	20.1	12 7	6 21.25	+10 59.3	1.523	2.457	9.2	19.5
12 17	6 14.22	+23 45.2	1.732	2.710	2.9	19.9	12 17	6 12.66	+10 34.0	1.518	2.482	5.9	19.3
12 27	6 2.58	+24 1.8	1.742	2.724	1.7	19.8	12 27	6 3.61	+10 22.3	1.541	2.507	5.4	19.4
1 6	5 51.59	+24 14.2	1.783	2.737	6.2	20.1	1 6	5 55.32	+10 24.3	1.590	2.532	8.0	19.6
1 16	5 42.39	+24 23.0	1.852	2.749	10.2	20.4	1 16	5 48.79	+10 38.3	1.665	2.559	11.5	19.9
1 26	5 35.84	+24 29.5	1.945	2.761	13.7	20.6	1 26	5 44.70	+11 2.2	1.763	2.585	14.6	20.1
210940	2001 TR ₁₉₉	12 23.3	98°45	0°3/23.2	18		413180	2002 RH ₁	12 23.3	82°96	2°9/23.2	18	
11 17	6 36.38	+22 53.1	2.035	2.834	13.9	20.4	11 17	6 32.82	+15 55.6	2.329	3.120	12.6	20.8
11 27	6 30.82	+23 14.1	1.966	2.850	10.6	20.2	11 27	6 27.68	+15 19.9	2.258	3.134	9.8	20.6
12 7	6 22.89	+23 36.7	1.920	2.865	6.8	20.0	12 7	6 20.68	+14 48.3	2.212	3.149	6.6	20.4
12 17	6 13.31	+23 58.6	1.902	2.880	2.7	19.8	12 17	6 12.41	+14 21.7	2.194	3.163	3.7	20.3
12 27	6 3.13	+24 17.9	1.913	2.894	1.6	19.7	12 27	6 3.74	+14 1.2	2.205	3.177	3.2	20.2
1 6	5 53.49	+24 33.5	1.954	2.908	5.7	20.0	1 6	5 55.54	+13 47.5	2.246	3.191	5.8	20.4
1 16	5 45.41	+24 45.6	2.024	2.922	9.4	20.3	1 16	5 48.60	+13 40.8	2.316	3.205	8.8	20.7
1 26	5 39.64	+24 55.1	2.118	2.936	12.6	20.5	1 26	5 43.52	+13 40.6	2.411	3.219	11.6	20.9
226677	2004 HX ₃₀	12 23.3	252°42	2°0/23.3	18		61269	2000 OK ₃₀	12 23.3	58°87	2°5/23.3	18	
11 17	6 36.97	+18 18.2	1.727	2.532	15.8	21.5	11 17	6 37.74	+18 45.8	1.411	2.228	18.1	18.6
11 27	6 31.95	+18 13.7	1.633	2.518	12.3	21.2	11 27	6 32.46	+18 20.6	1.357	2.249	13.9	18.4
12 7	6 24.05	+18 14.3	1.560	2.504	8.2	20.9	12 7	6 24.17	+18 0.2	1.324	2.270	9.1	18.2
12 17	6 13.92	+18 19.5	1.513	2.489	3.8	20.6	12 17	6 13.85	+17 44.8	1.316	2.292	4.2	18.0
12 27	6 2.70	+18 28.8	1.495	2.474	2.7	20.5	12 27	6 2.94	+17 34.7	1.335	2.313	3.2	18.0
1 6	5 51.78	+18 41.2	1.505	2.459	7.2	20.8	1 6	5 52.97	+17 30.2	1.381	2.335	7.6	18.3
1 16	5 42.50	+18 56.6	1.542	2.443	11.7	21.0	1 16	5 45.18	+17 31.4	1.453	2.357	12.0	18.6
1 26	5 35.91	+19 14.8	1.603	2.427	15.7	21.2	1 26	5 40.37	+17 38.2	1.547	2.379	15.7	18.9
294881	2008 CY ₂₁₃	12 23.3	119°34	1.4/23.2	18		266520	2008 ET ₁₅₂	12 23.3	19°59	0°7/23.2	18	
11 17	6 35.92	+26 52.1	2.105	2.905	13.5	21.2	11 17	6 35.19	+23 2.1	1.103	1.945	20.4	20.6
11 27	6 30.53	+27 6.3	2.028	2.911	10.4	21.0	11 27	6 31.73	+23 28.0	1.043	1.949	15.7	20.3
12 7	6 22.75	+27 18.8	1.974	2.918	6.8	20.8	12 7	6 24.39	+23 58.2	1.002	1.955	10.2	20.0
12 17	6 13.28	+27 27.1	1.948	2.924	2.9	20.6	12 17	6 14.13	+24 28.5	0.983	1.962	4.0	19.7
12 27	6 3.15	+27 29.5	1.951	2.930	2.1	20.5	12 27	6 2.71	+24 55.0	0.988	1.970	2.5	19.6
1 6	5 53.52	+27 25.7	1.984	2.936	5.8	20.8	1 6	5 52.19	+25 15.3	1.018	1.978	8.6	20.0
1 16	5 45.43	+27 16.8	2.044	2.942	9.4	21.0	1 16	5 44.31	+25 29.6	1.071	1.988	14.1	20.3
1 26	5 39.66	+27 5.0	2.130	2.948	12.6	21.2	1 26	5 40.22	+25 39.9	1.145	1.998	18.6	20.7
223298	2003 JE ₁₈	12 23.3	170°74	6°3/22.9	18		400129	2006 UK ₁₂₈	12 23.3	99°77	3°1/23.3	18	
11 17	6 32.50	+4 6.9	2.633	3.386									

EPHEMERIDES

12 23.3

12 23.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
212148	2005 <i>EN</i> ₂₈₈		12 23.3	3°99	2°2/23.2	18	508967	2004 <i>VC</i> ₁₇		12 23.3	78°80	7°9/23.9	18 C
11 17	6 34.11	+27 20.0	1.369	2.198	17.8	20.2	11 17	7 2.46	+ 4 3.3	1.727	2.444	19.1	22.5
11 27	6 30.41	+27 41.6	1.298	2.197	13.8	20.0	11 27	6 49.58	+ 2 55.6	1.697	2.515	15.3	22.4
12 7	6 23.32	+28 1.4	1.248	2.198	9.1	19.7	12 7	6 34.18	+ 2 4.5	1.692	2.583	11.5	22.3
12 17	6 13.67	+28 15.7	1.222	2.199	4.1	19.4	12 17	6 17.48	+ 1 33.7	1.717	2.648	8.6	22.3
12 27	6 2.98	+28 21.1	1.221	2.201	3.0	19.4	12 27	6 1.01	+ 1 24.8	1.775	2.710	8.0	22.4
1 6	5 52.99	+28 16.9	1.247	2.204	7.8	19.7	1 6	5 46.17	+ 1 36.1	1.866	2.768	9.9	22.6
1 16	5 45.23	+28 5.2	1.297	2.207	12.6	19.9	1 16	5 33.98	+ 2 4.0	1.986	2.824	12.5	22.9
1 26	5 40.78	+27 49.3	1.369	2.212	16.8	20.2	1 26	5 24.96	+ 2 43.7	2.131	2.877	14.9	23.2
482749	2013 <i>FB</i> ₄		12 23.3	326°89	6°8/24.4	17	199923	2007 <i>GU</i> ₃₃		12 23.3	156°26	0°2/23.3	17
11 17	6 31.40	+ 6 26.4	1.465	2.267	18.2	20.7	11 17	6 33.48	+22 37.5	2.613	3.404	11.4	22.2
11 27	6 28.06	+ 6 25.2	1.375	2.249	15.0	20.5	11 27	6 28.20	+22 40.5	2.530	3.409	8.7	22.1
12 7	6 21.78	+ 6 43.4	1.305	2.231	11.3	20.2	12 7	6 21.06	+22 44.1	2.471	3.414	5.6	21.9
12 17	6 13.12	+ 7 24.2	1.257	2.214	7.9	20.0	12 17	6 12.62	+22 47.4	2.441	3.419	2.2	21.7
12 27	6 3.25	+ 8 28.0	1.235	2.198	6.9	19.9	12 27	6 3.68	+22 49.5	2.442	3.423	1.3	21.6
1 6	5 53.59	+ 9 51.5	1.239	2.183	9.6	20.0	1 6	5 55.09	+22 50.3	2.473	3.426	4.7	21.8
1 16	5 45.58	+11 29.1	1.268	2.168	13.7	20.2	1 16	5 47.65	+22 50.0	2.534	3.430	7.9	22.1
1 26	5 40.38	+13 14.2	1.319	2.155	17.7	20.4	1 26	5 41.99	+22 49.5	2.621	3.433	10.6	22.2
155254	2005 <i>WB</i> ₆₈		12 23.3	44°10	0°8/23.3	18	87641	2000 <i>RC</i> ₇₃		12 23.3	47°49	11°0/23.9	18
11 17	6 33.70	+21 22.2	1.929	2.736	14.3	20.4	11 17	6 33.34	- 1 25.2	1.611	2.376	18.4	19.5
11 27	6 28.95	+21 18.9	1.853	2.741	11.0	20.2	11 27	6 28.91	- 2 40.5	1.547	2.380	15.8	19.3
12 7	6 21.80	+21 17.7	1.801	2.747	7.1	20.0	12 7	6 21.90	- 3 35.7	1.501	2.384	13.3	19.1
12 17	6 12.95	+21 17.5	1.775	2.753	2.9	19.7	12 17	6 13.03	- 4 4.5	1.478	2.388	11.4	19.0
12 27	6 3.44	+21 17.7	1.778	2.759	1.8	19.7	12 27	6 3.44	- 4 3.0	1.479	2.393	11.1	19.0
1 6	5 54.45	+21 18.0	1.810	2.765	6.0	20.0	1 6	5 54.38	- 3 31.3	1.504	2.398	12.4	19.1
1 16	5 46.99	+21 18.9	1.869	2.771	9.9	20.2	1 16	5 46.97	- 2 33.5	1.553	2.402	14.7	19.3
1 26	5 41.85	+21 21.1	1.952	2.778	13.2	20.4	1 26	5 42.05	- 1 16.0	1.622	2.407	17.3	19.5
396924	2005 <i>ED</i> ₂₄₅		12 23.3	164°06	6°0/23.5	18	251680	1995 <i>TS</i> ₄		12 23.3	162°43	0°9/23.3	17
11 17	6 33.52	+ 2 46.5	2.783	3.525	12.0	22.6	11 17	6 35.00	+25 42.3	2.152	2.952	13.2	21.8
11 27	6 27.95	+ 2 5.9	2.704	3.533	9.9	22.4	11 27	6 29.84	+25 53.9	2.069	2.953	10.2	21.6
12 7	6 20.76	+ 1 36.0	2.649	3.539	7.9	22.3	12 7	6 22.36	+26 4.7	2.010	2.954	6.6	21.4
12 17	6 12.47	+ 1 19.0	2.621	3.545	6.3	22.2	12 17	6 13.20	+26 12.6	1.978	2.955	2.7	21.1
12 27	6 3.75	+ 1 16.5	2.622	3.550	6.1	22.2	12 27	6 3.36	+26 15.9	1.976	2.956	1.8	21.1
1 6	5 55.34	+ 1 28.4	2.653	3.554	7.3	22.3	1 6	5 53.94	+26 14.3	2.003	2.957	5.6	21.3
1 16	5 47.93	+ 1 53.5	2.711	3.558	9.3	22.4	1 16	5 45.97	+26 8.6	2.059	2.958	9.3	21.5
1 26	5 42.06	+ 2 29.4	2.795	3.561	11.3	22.6	1 26	5 40.23	+26 0.7	2.139	2.958	12.5	21.7
300589	2007 <i>TQ</i> ₃₉₈		12 23.3	21°58	1°1/23.2	17	207514	2006 <i>JD</i> ₂₉		12 23.3	130°86	2°1/23.4	18
11 17	6 34.09	+23 38.7	1.320	2.151	18.3	19.9	11 17	6 36.57	+17 21.8	2.082	2.874	13.9	21.3
11 27	6 30.32	+24 13.8	1.258	2.159	14.0	19.7	11 27	6 30.84	+17 13.3	2.009	2.887	10.7	21.1
12 7	6 23.20	+24 52.0	1.217	2.168	9.1	19.4	12 7	6 22.88	+17 9.3	1.959	2.899	7.1	20.9
12 17	6 13.61	+25 29.4	1.200	2.178	3.7	19.1	12 17	6 13.37	+17 9.7	1.936	2.910	3.4	20.7
12 27	6 3.07	+26 1.9	1.208	2.189	2.4	19.1	12 27	6 3.29	+17 14.0	1.944	2.921	2.6	20.7
1 6	5 53.29	+26 27.2	1.243	2.201	7.7	19.4	1 6	5 53.72	+17 22.0	1.981	2.932	6.0	20.9
1 16	5 45.75	+26 45.3	1.302	2.214	12.5	19.7	1 16	5 45.61	+17 33.2	2.047	2.942	9.6	21.1
1 26	5 41.47	+26 57.9	1.383	2.228	16.6	20.0	1 26	5 39.70	+17 47.5	2.138	2.952	12.7	21.4
458451	2011 <i>BG</i> ₉		12 23.3	94°08	2°4/23.4	17	317733	2003 <i>RF</i> ₂₃		12 23.3	144°88	4°2/23.6	18
11 17	6 36.28	+31 4.8	2.222	3.016	13.1	21.3	11 17	6 31.88	+ 9 19.7	2.613	3.385	11.9	21.3
11 27	6 30.71	+31 12.4	2.146	3.025	10.1	21.1	11 27	6 26.86	+ 9 0.1	2.534	3.393	9.5	21.1
12 7	6 22.82	+31 14.8	2.095	3.034	6.8	20.9	12 7	6 20.15	+ 8 48.8	2.479	3.400	6.9	20.9
12 17	6 13.32	+31 9.3	2.071	3.043	3.5	20.7	12 17	6 12.27	+ 8 46.8	2.452	3.407	4.7	20.8
12 27	6 3.26	+30 54.7	2.076	3.052	2.8	20.7	12 27	6 3.94	+ 8 54.7	2.454	3.413	4.3	20.8
1 6	5 53.76	+30 31.4	2.111	3.061	5.8	20.9	1 6	5 55.94	+ 9 12.1	2.487	3.420	6.1	20.9
1 16	5 45.82	+30 1.6	2.175	3.069	9.1	21.1	1 16	5 48.98	+ 9 37.8	2.548	3.425	8.6	21.1
1 26	5 40.16	+29 28.5	2.264	3.078	12.0	21.3	1 26	5 43.64	+10 10.2	2.634	3.431	11.0	21.3
520499	2014 <i>LV</i> ₂₀		12 23.3	182°01	0°1/23.3	18	155739	2000 <i>SY</i> ₃₀		12 23.3	117°37	0°8/23.3	18
11 17	6 37.14	+21 42.2	2.432	3.219	12.3	22.6	11 17	6 39.72	+24 53.9	1.891	2.690	14.9	21.6
11 27	6 31.23	+22 16.4	2.342	3.220	9.4	22.4	11 27	6 33.55	+25 7.1	1.823	2.706	11.4	21.4
12 7	6 23.16	+22 53.7	2.278	3.220	6.1	22.2	12 7	6 24.75	+25 19.9	1.778	2.722	7.3	21.2
12 17	6 13.50	+23 31.7	2.242	3.220	2.4	22.0	12 17	6 14.12	+25 29.7	1.760	2.738	3.0	20.9
12 27	6 3.12	+24 8.1	2.238	3.219	1.4	21.9	12 27	6 2.86	+25 34.6	1.772	2.753	1.9	20.9
1 6	5 53.03	+24 40.9	2.265	3.217	5.2	22.1	1 6	5 52.27	+25 34.3	1.813	2.767	6.1	21.2
1 16	5 44.17	+25 9.6	2.322	3.215	8.6	22.4	1 16	5 43.47	+25 30.0	1.883	2.781	10.1	21.4
1 26	5 37.31	+25 34.5	2.405	3.212	11.6	22.6	1 26	5 37.26	+25 23.7	1.977	2.794	13.4	21.7
407056	2009 <i>SY</i> ₁₄₃		12 23.3	110°04	2°4/23.2	18	419386	2009 <i>YM</i> ₂₁		12 23.3	265°56	2°5/23.4	18
11 17	6 36.50	+30 15.1	2.387	3.177	12.4	21.4	11 17	6 34.69	+31 28.4	2.411	3.203	12.2	21.4
11 27	6 30.73	+30 40.0	2.315	3.192	9.6	21.3	11 27	6 29.48	+31 35.6	2.322	3.199	9.5	21.2
12 7	6 22.77	+31 1.2	2.268	3.206	6.4	21.1	12 7	6 22.07	+31 37.8	2.256	3.194	6.4	21.0
12 17	6 13.30	+31 15.7	2.248	3.220	3.3	20.9	12 17	6 13.08	+31 32.4	2.219	3.190	3.4	20.8
12 27	6 3.28	+31 21.5	2.259	3.234	2.8	20.9	12 27	6 3.46	+31 18.1	2.211	3.185	2.8	20.7
1 6	5 53.77	+31 18.4	2.300	3.247	5.5	21.1	1 6	5 54.25	+30 55.1	2.233	3.181	5.6	20.9
1 16	5 45.70	+31 7.7	2.370	3.261	8.6	21.3	1 16	5 46.41	+30 25.3	2.283	3.176	8.8	21.1
1 26	5 39.77	+30 51.9	2.465	3.273	11.4	21.5	1 26	5 40.68	+29 51.6	2.359	3.172	11.7	21.3
13825	Booth		12 23.3	160°80	1°5/23.3	18	100126	1993 <i>QK</i> ₇		12 23.3	156°27	6°0/23.4</	

EPHEMERIDES

12 23.3

12 23.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
295178	2008 <i>FA</i> ₉₀		12 23.3 202°33	2°6/23.2	18		485604	2011 <i>UM</i> ₂₇₆		12 23.3 48°43	7°8/22.9	18	
11 17	6 41.77	+29 22.7	1.892	2.686	15.0	22.3	11 17	6 41.74	+39 22.5	1.554	2.351	17.6	20.7
11 27	6 35.57	+29 49.5	1.803	2.682	11.7	22.0	11 27	6 36.32	+40 43.6	1.501	2.369	14.3	20.6
12 7	6 26.36	+30 13.3	1.737	2.677	7.8	21.8	12 7	6 27.15	+41 53.1	1.469	2.388	10.9	20.4
12 17	6 14.89	+30 29.8	1.698	2.672	3.9	21.5	12 17	6 15.24	+42 42.1	1.461	2.407	8.3	20.3
12 27	6 2.39	+30 35.5	1.689	2.665	3.2	21.5	12 27	6 2.32	+43 4.3	1.479	2.426	8.1	20.3
1 6	5 50.37	+30 29.7	1.709	2.658	6.9	21.7	1 6	5 50.39	+42 59.2	1.524	2.446	10.1	20.5
1 16	5 40.17	+30 14.2	1.757	2.650	11.0	21.9	1 16	5 41.08	+42 31.5	1.592	2.466	13.1	20.7
1 26	5 32.82	+29 52.9	1.829	2.641	14.5	22.1	1 26	5 35.44	+41 48.9	1.682	2.486	16.0	21.0
43123	1999 <i>XT</i> ₅₀		12 23.3 198°07	0°9/23.2	18		207927	2008 <i>WE</i> ₆₃		12 23.3 112°56	0°8/23.3	17	
11 17	6 37.48	+24 17.7	2.225	3.018	13.1	18.9	11 17	6 33.78	+26 16.6	2.629	3.421	11.3	21.0
11 27	6 31.77	+24 47.5	2.135	3.015	10.1	18.7	11 27	6 28.42	+26 20.2	2.553	3.433	8.7	20.8
12 7	6 23.66	+25 18.5	2.068	3.011	6.5	18.5	12 7	6 21.20	+26 22.1	2.502	3.445	5.6	20.6
12 17	6 13.77	+25 48.2	2.030	3.007	2.7	18.2	12 17	6 12.72	+26 20.9	2.479	3.456	2.3	20.4
12 27	6 3.07	+26 13.8	2.023	3.003	1.8	18.1	12 27	6 3.80	+26 15.7	2.487	3.468	1.5	20.4
1 6	5 52.69	+26 34.0	2.045	2.998	5.7	18.4	1 6	5 55.29	+26 6.7	2.526	3.479	4.7	20.6
1 16	5 43.69	+26 48.6	2.097	2.992	9.3	18.6	1 16	5 48.00	+25 54.7	2.594	3.490	7.8	20.8
1 26	5 36.91	+26 59.1	2.174	2.986	12.6	18.8	1 26	5 42.52	+25 41.4	2.688	3.500	10.4	21.0
517261	2014 <i>DH</i> ₁₄₆		12 23.3 239°08	2°6/23.4	18		262280	2006 <i>SP</i> ₃₆₃		12 23.3 58°14	5°4/23.4	18	
11 17	6 35.97	+16 26.5	1.916	2.714	14.7	22.3	11 17	6 33.58	+10 45.8	1.784	2.580	15.7	20.5
11 27	6 30.87	+16 16.4	1.823	2.703	11.5	22.1	11 27	6 28.84	+10 0.5	1.717	2.590	12.5	20.3
12 7	6 23.22	+16 12.1	1.752	2.692	7.8	21.8	12 7	6 21.73	+9 24.8	1.673	2.601	9.1	20.1
12 17	6 13.64	+16 13.6	1.708	2.681	3.9	21.6	12 17	6 12.98	+9 1.3	1.653	2.612	6.1	20.0
12 27	6 3.15	+16 20.9	1.692	2.669	3.1	21.5	12 27	6 3.65	+8 51.7	1.662	2.623	5.7	20.0
1 6	5 52.98	+16 33.5	1.706	2.657	6.8	21.7	1 6	5 54.88	+8 56.2	1.698	2.635	8.1	20.1
1 16	5 44.26	+16 50.8	1.747	2.644	10.8	21.9	1 16	5 47.68	+9 13.5	1.760	2.646	11.3	20.3
1 26	5 37.92	+17 12.2	1.812	2.631	14.4	22.1	1 26	5 42.80	+9 41.2	1.845	2.658	14.4	20.6
256925	2008 <i>EH</i> ₁₅		12 23.3 347°61	1°8/23.4	18		103862	2000 <i>DW</i> ₄₀		12 23.3 342°94	5°2/23.4	18	
11 17	6 33.40	+18 52.4	1.809	2.618	15.0	20.8	11 17	6 39.11	+34 3.3	1.355	2.173	18.6	19.1
11 27	6 28.95	+18 44.1	1.728	2.616	11.6	20.6	11 27	6 34.67	+34 32.7	1.280	2.169	14.8	18.8
12 7	6 21.96	+18 39.9	1.669	2.614	7.6	20.3	12 7	6 26.33	+34 53.6	1.226	2.166	10.4	18.6
12 17	6 13.12	+18 39.6	1.636	2.613	3.5	20.1	12 17	6 15.01	+34 59.4	1.194	2.162	6.3	18.3
12 27	6 3.49	+18 42.7	1.632	2.611	2.5	20.0	12 27	6 2.43	+34 45.1	1.189	2.160	5.6	18.3
1 6	5 54.31	+18 49.0	1.656	2.610	6.5	20.3	1 6	5 50.68	+34 11.3	1.209	2.157	9.2	18.5
1 16	5 46.70	+18 58.2	1.706	2.609	10.6	20.5	1 16	5 41.52	+33 22.7	1.253	2.156	13.7	18.7
1 26	5 41.52	+19 10.4	1.781	2.609	14.2	20.7	1 26	5 36.16	+32 26.9	1.318	2.154	17.8	19.0
23743	Toshikasuga		12 23.3 140°70	0°0/23.3	18		272058	2005 <i>EB</i> ₁₇₆		12 23.3 237°52	9°6/23.1	18	
11 17	6 40.17	+21 43.0	1.738	2.539	15.9	19.6	11 17	6 29.86	-11 1.1	2.906	3.583	12.8	21.9
11 27	6 34.21	+22 6.9	1.664	2.549	12.2	19.4	11 27	6 25.31	-12 6.9	2.822	3.572	11.6	21.8
12 7	6 25.38	+22 34.2	1.613	2.558	7.9	19.1	12 7	6 19.20	-12 56.8	2.759	3.561	10.5	21.7
12 17	6 14.47	+23 2.3	1.589	2.567	3.1	18.9	12 17	6 11.97	-13 26.6	2.720	3.550	9.8	21.7
12 27	6 2.71	+23 28.2	1.594	2.575	1.8	18.8	12 27	6 4.23	-13 33.4	2.705	3.538	9.7	21.6
1 6	5 51.55	+23 50.3	1.628	2.583	6.6	19.1	1 6	5 56.68	-13 16.8	2.715	3.527	10.3	21.7
1 16	5 42.24	+24 8.6	1.690	2.590	10.9	19.4	1 16	5 50.00	-12 38.2	2.748	3.515	11.4	21.7
1 26	5 35.71	+24 24.0	1.775	2.596	14.6	19.6	1 26	5 44.74	-11 41.1	2.804	3.502	12.7	21.8
95907	2003 <i>HE</i> ₃₁		12 23.3 136°09	0°2/23.3	18		367651	2009 <i>WJ</i> ₉₃		12 23.3 44°10	1°8/23.5	18	
11 17	6 38.74	+23 21.5	1.941	2.739	14.5	21.0	11 17	6 33.00	+17 20.4	1.912	2.717	14.5	20.4
11 27	6 32.81	+23 34.1	1.867	2.750	11.1	20.8	11 27	6 28.38	+17 31.2	1.844	2.729	11.2	20.2
12 7	6 24.32	+23 47.6	1.816	2.760	7.2	20.6	12 7	6 21.45	+17 48.1	1.798	2.741	7.3	20.0
12 17	6 14.01	+23 59.9	1.792	2.770	2.8	20.4	12 17	6 12.89	+18 10.2	1.779	2.754	3.4	19.8
12 27	6 3.01	+24 9.1	1.798	2.780	1.7	20.3	12 27	6 3.72	+18 36.2	1.788	2.768	2.3	19.7
1 6	5 52.58	+24 14.7	1.834	2.789	6.0	20.6	1 6	5 55.05	+19 4.5	1.827	2.781	6.0	20.0
1 16	5 43.82	+24 17.2	1.898	2.797	10.0	20.9	1 16	5 47.88	+19 33.9	1.893	2.795	9.8	20.3
1 26	5 37.55	+24 18.2	1.987	2.805	13.3	21.1	1 26	5 42.97	+20 3.8	1.983	2.809	13.0	20.5
441209	2007 <i>UU</i> ₁₃₁		12 23.3 106°28	1°4/23.1	18		83002	2001 <i>QE</i> ₁₆₀		12 23.3 104°06	1°9/23.3	18	
11 17	6 40.50	+25 25.3	2.148	2.937	13.6	22.4	11 17	6 37.65	+28 38.7	2.008	2.807	14.1	20.1
11 27	6 33.87	+26 7.4	2.085	2.963	10.4	22.2	11 27	6 31.97	+28 51.7	1.936	2.818	10.9	19.9
12 7	6 24.85	+26 49.4	2.046	2.988	6.7	22.0	12 7	6 23.77	+29 1.4	1.887	2.829	7.1	19.7
12 17	6 14.18	+27 27.7	2.036	3.012	2.9	21.8	12 17	6 13.80	+29 4.8	1.865	2.840	3.3	19.4
12 27	6 2.94	+27 59.3	2.056	3.035	2.1	21.8	12 27	6 3.19	+29 0.3	1.873	2.851	2.5	19.4
1 6	5 52.29	+28 22.9	2.108	3.058	5.7	22.1	1 6	5 53.20	+28 47.8	1.910	2.862	6.1	19.7
1 16	5 43.27	+28 38.7	2.188	3.080	9.2	22.4	1 16	5 44.89	+28 29.3	1.975	2.872	9.7	19.9
1 26	5 36.61	+28 48.8	2.294	3.102	12.1	22.6	1 26	5 39.07	+28 7.7	2.064	2.882	12.9	20.1
215839	2005 <i>CP</i> ₂₆		12 23.3 129°80	1°1/23.4	18		106988	2000 <i>YE</i> ₁₀₁		12 23.3 54°62	2°0/22.9	18	
11 17	6 41.07	+19 17.7	1.704	2.502	16.2	21.1	11 17	6 46.50	+22 14.1	1.377	2.183	19.0	18.1
11 27	6 34.82	+19 33.2	1.635	2.517	12.5	20.9	11 27	6 39.28	+23 52.4	1.340	2.227	14.4	17.9
12 7	6 25.72	+19 53.9	1.588	2.532	8.1	20.7	12 7	6 28.65	+25 34.5	1.326	2.271	9.2	17.7
12 17	6 14.58	+20 17.7	1.568	2.545	3.4	20.4	12 17	6 15.70	+27 11.7	1.338	2.315	3.9	17.5
12 27	6 2.69	+20 42.4	1.578	2.558	2.1	20.4	12 27	6 2.15	+28 36.3	1.380	2.359	3.0	17.6
1 6	5 51.47	+21 6.4	1.616	2.570	6.7	20.7	1 6	5 49.79	+29 43.8	1.450	2.402	7.6	18.0
1 16	5 42.14	+21 29.1	1.683	2.582	11.0	21.0	1 16	5 40.04	+30 34.5	1.547	2.444	11.9	18.3
1 26	5 35.61	+21 51.0	1.773	2.593	14.6	21.2	1 26	5 33.76	+31 11.5	1.668	2.486	15.4	18.6
372119	2008 <i>SB</i> ₁₆₂		12 23.3 166°76	4°4/23.1	18		90752	1993 <i>RJ</i> ₁		12 23.3 230°07			

EPHEMERIDES

12 23.3

12 23.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
470092	2006 <i>SM</i> ₄₀₆		12 23.3 109°21	0°4/23.3	18		194142	2001 <i>SW</i> ₃₂₄		12 23.3 281°93	0°3/23.3	18	
11 17	6 43.07	+21 59.6	1.729	2.525	16.1	22.5	11 17	6 32.27	+22 53.9	2.441	3.238	11.9	20.4
11 27	6 36.14	+22 6.6	1.669	2.551	12.3	22.3	11 27	6 27.50	+22 45.2	2.352	3.235	9.2	20.2
12 7	6 26.42	+22 15.4	1.632	2.576	7.9	22.1	12 7	6 20.77	+22 36.5	2.287	3.231	5.9	20.0
12 17	6 14.82	+22 23.8	1.622	2.600	3.1	21.8	12 17	6 12.63	+22 27.2	2.250	3.227	2.4	19.8
12 27	6 2.65	+22 30.1	1.642	2.623	1.8	21.8	12 27	6 3.92	+22 17.0	2.243	3.224	1.4	19.7
1 6	5 51.33	+22 34.0	1.692	2.646	6.5	22.1	1 6	5 55.56	+22 6.1	2.266	3.220	5.0	19.9
1 16	5 42.02	+22 36.3	1.769	2.667	10.6	22.4	1 16	5 48.38	+21 55.2	2.318	3.217	8.4	20.1
1 26	5 35.54	+22 38.4	1.871	2.688	14.1	22.7	1 26	5 43.07	+21 45.4	2.395	3.213	11.3	20.3
66868	1999 <i>VS</i> ₄₇		12 23.3 66°37	3°4/23.5	18		486444	2013 <i>FC</i> ₂₄		12 23.3 298°25	1°2/23.3	17	
11 17	6 40.96	+32 20.2	1.601	2.406	16.8	19.0	11 17	6 35.31	+25 57.9	1.759	2.570	15.3	21.6
11 27	6 35.00	+32 28.0	1.542	2.425	13.1	18.8	11 27	6 30.84	+26 10.3	1.666	2.556	11.8	21.4
12 7	6 25.89	+32 27.9	1.504	2.444	8.8	18.6	12 7	6 23.46	+26 22.0	1.595	2.542	7.8	21.1
12 17	6 14.64	+32 16.0	1.492	2.464	4.7	18.4	12 17	6 13.85	+26 30.3	1.550	2.528	3.3	20.8
12 27	6 2.77	+31 50.4	1.508	2.483	3.8	18.4	12 27	6 3.18	+26 33.0	1.533	2.514	2.2	20.7
1 6	5 51.91	+31 12.9	1.552	2.502	7.3	18.7	1 6	5 52.87	+26 29.3	1.544	2.500	6.8	20.9
1 16	5 43.35	+30 27.7	1.622	2.522	11.3	19.0	1 16	5 44.25	+26 20.5	1.582	2.486	11.2	21.2
1 26	5 37.92	+29 40.1	1.716	2.541	14.8	19.2	1 26	5 38.36	+26 9.0	1.643	2.473	15.1	21.4
116057	2003 <i>WW</i> ₁₀₇		12 23.3 97°94	5°0/22.3	18		1272	Gefion		12 23.3 109°73	3°2/23.4	18	
11 17	6 47.25	+33 24.2	2.160	2.933	14.1	18.8	11 17	6 39.04	+32 48.5	2.148	2.938	13.6	17.7
11 27	6 39.46	+35 8.5	2.101	2.963	11.1	18.7	11 27	6 32.94	+33 2.9	2.077	2.952	10.6	17.5
12 7	6 28.73	+36 48.1	2.068	2.992	7.9	18.5	12 7	6 24.35	+33 10.9	2.030	2.965	7.2	17.3
12 17	6 15.83	+38 15.3	2.065	3.020	5.4	18.4	12 17	6 14.04	+33 9.1	2.009	2.978	4.1	17.2
12 27	6 2.00	+39 23.7	2.092	3.047	5.3	18.5	12 27	6 3.16	+32 55.6	2.019	2.991	3.5	17.1
1 6	5 48.73	+40 10.7	2.151	3.074	7.6	18.6	1 6	5 52.93	+32 31.1	2.057	3.003	6.2	17.3
1 16	5 37.33	+40 37.6	2.239	3.100	10.3	18.9	1 16	5 44.41	+31 58.2	2.125	3.015	9.5	17.6
1 26	5 31.77	+40 49.0	2.351	3.126	12.9	19.1	1 26	5 38.36	+31 20.8	2.217	3.027	12.4	17.8
112121	2002 <i>JT</i> ₄₆		12 23.3 118°13	0°6/23.3	18		474279	2001 <i>UK</i> ₃₁		12 23.3 21°09	1°0/23.3	18	
11 17	6 39.12	+25 16.4	2.083	2.876	13.8	19.9	11 17	6 34.79	+24 17.6	1.169	2.008	19.7	20.4
11 27	6 32.85	+25 18.6	2.014	2.894	10.6	19.7	11 27	6 31.27	+24 39.2	1.110	2.015	15.1	20.2
12 7	6 24.21	+25 19.4	1.969	2.912	6.8	19.5	12 7	6 24.05	+25 2.6	1.070	2.023	9.8	19.9
12 17	6 13.95	+25 17.0	1.951	2.929	2.7	19.3	12 17	6 14.10	+25 24.1	1.053	2.032	4.0	19.6
12 27	6 3.16	+25 10.3	1.964	2.945	1.7	19.2	12 27	6 3.12	+25 40.4	1.061	2.042	2.5	19.6
1 6	5 53.00	+24 59.5	2.007	2.961	5.7	19.5	1 6	5 53.03	+25 49.9	1.094	2.053	8.2	19.9
1 16	5 44.48	+24 46.0	2.079	2.976	9.3	19.8	1 16	5 45.47	+25 53.7	1.150	2.066	13.4	20.3
1 26	5 38.33	+24 32.0	2.176	2.990	12.4	20.0	1 26	5 41.49	+25 54.3	1.227	2.079	17.8	20.6
304179	2006 <i>QC</i> ₁₈		12 23.3 148°18	0°2/23.3	18		340933	2007 <i>EQ</i> ₂₀		12 23.3 333°96	4°8/23.6	18	
11 17	6 37.04	+23 1.7	2.225	3.018	13.1	21.1	11 17	6 34.48	+12 47.6	1.433	2.247	18.0	20.5
11 27	6 31.27	+23 19.7	2.146	3.026	10.0	20.9	11 27	6 30.37	+12 28.1	1.356	2.242	14.3	20.2
12 7	6 23.24	+23 39.0	2.091	3.034	6.5	20.7	12 7	6 23.22	+12 19.7	1.300	2.238	10.0	20.0
12 17	6 13.61	+23 57.6	2.064	3.042	2.6	20.5	12 17	6 13.76	+12 24.2	1.267	2.235	6.0	19.7
12 27	6 3.34	+24 13.7	2.068	3.049	1.5	20.4	12 27	6 3.27	+12 42.2	1.260	2.232	5.1	19.7
1 6	5 53.50	+24 26.3	2.102	3.055	5.4	20.7	1 6	5 53.28	+13 12.4	1.279	2.229	8.7	19.9
1 16	5 45.08	+24 35.8	2.165	3.061	9.0	20.9	1 16	5 45.17	+13 52.4	1.323	2.226	13.1	20.1
1 26	5 38.82	+24 43.0	2.253	3.067	12.1	21.1	1 26	5 39.99	+14 39.5	1.389	2.224	17.1	20.4
279820	2000 <i>LJ</i> ₃₃		12 23.3 221°39	0°3/23.3	18		82636	2001 <i>OP</i> ₁₁₁		12 23.3 29°84	2°8/23.5	18	
11 17	6 38.50	+21 47.4	2.067	2.861	13.9	22.2	11 17	6 33.72	+16 28.9	1.694	2.503	15.8	19.0
11 27	6 32.75	+21 58.4	1.970	2.851	10.8	21.9	11 27	6 29.27	+16 17.8	1.621	2.508	12.3	18.8
12 7	6 24.43	+22 11.7	1.897	2.840	7.0	21.7	12 7	6 22.22	+16 13.2	1.569	2.512	8.3	18.6
12 17	6 14.17	+22 25.7	1.851	2.828	2.8	21.4	12 17	6 13.28	+16 15.4	1.544	2.517	4.2	18.3
12 27	6 2.97	+22 38.5	1.835	2.816	1.7	21.3	12 27	6 3.61	+16 24.3	1.546	2.523	3.2	18.3
1 6	5 52.06	+22 49.3	1.849	2.803	6.0	21.5	1 6	5 54.46	+16 38.9	1.576	2.528	7.0	18.5
1 16	5 42.60	+22 58.0	1.892	2.789	10.1	21.8	1 16	5 46.98	+16 58.6	1.632	2.534	11.0	18.8
1 26	5 35.50	+23 5.8	1.960	2.774	13.6	22.0	1 26	5 42.02	+17 22.4	1.711	2.541	14.6	19.0
121934	2000 <i>EP</i> ₃		12 23.3 355°77	0°5/23.3	17		184994	2006 <i>MD</i> ₁₁		12 23.3 118°46	0°1/23.3	18	
11 17	6 32.53	+24 17.5	1.904	2.715	14.3	19.4	11 17	6 38.03	+22 2.3	2.125	2.918	13.6	21.0
11 27	6 28.29	+24 28.2	1.822	2.713	11.0	19.2	11 27	6 32.00	+22 17.3	2.055	2.935	10.4	20.9
12 7	6 21.56	+24 39.3	1.764	2.711	7.1	18.9	12 7	6 23.69	+22 34.1	2.009	2.953	6.7	20.7
12 17	6 13.01	+24 49.0	1.731	2.709	2.8	18.7	12 17	6 13.79	+22 50.9	1.992	2.969	2.6	20.4
12 27	6 3.68	+24 55.7	1.727	2.708	1.7	18.6	12 27	6 3.33	+23 5.9	2.004	2.985	1.5	20.4
1 6	5 54.80	+24 58.7	1.752	2.708	6.0	18.9	1 6	5 53.41	+23 18.4	2.047	3.001	5.5	20.7
1 16	5 47.45	+24 58.7	1.804	2.708	10.0	19.1	1 16	5 45.01	+23 28.5	2.119	3.016	9.2	20.9
1 26	5 42.48	+24 57.0	1.879	2.709	13.5	19.3	1 26	5 38.87	+23 37.1	2.216	3.030	12.3	21.2
250495	2004 <i>FD</i> ₃₆		12 23.3 294°56	9°0/23.7	18		76058	2000 <i>DD</i> ₆₃		12 23.3 228°02	2°9/23.3	18	
11 17	6 31.99	+ 0 33.9	1.902	2.664	16.1	20.5	11 17	6 38.10	+31 16.2	2.142	2.935	13.5	20.1
11 27	6 27.68	- 0 22.4	1.821	2.658	13.7	20.3	11 27	6 32.49	+31 35.9	2.051	2.928	10.6	19.9
12 7	6 21.08	- 1 2.7	1.762	2.652	11.2	20.1	12 7	6 24.27	+31 51.1	1.982	2.920	7.2	19.6
12 17	6 12.81	- 1 22.3	1.726	2.645	9.4	20.0	12 17	6 14.12	+31 58.1	1.941	2.911	3.9	19.4
12 27	6 3.79	- 1 18.0	1.715	2.639	9.1	20.0	12 27	6 3.10	+31 54.5	1.929	2.903	3.3	19.4
1 6	5 55.12	- 0 49.6	1.731	2.633	10.5	20.1	1 6	5 52.49	+31 39.8	1.947	2.894	6.4	19.5
1 16	5 47.79	+ 0 0.0	1.772	2.627	12.9	20.2	1 16	5 43.46	+31 16.1	1.992	2.885	9.9	19.7
1 26	5 42.61	+ 1 6.4	1.834	2.621	15.5	20.4	1 26	5 36.89	+30 46.8	2.063	2.875	13.1	19.9
329142	2011 <i>EN</i> ₅₅		12 23.3 117°95	1°0/23.2	17		215336	2001 <i>UM</i> ₁₇₈		12 23.3 73°19			

EPHEMERIDES

12 23.3

12 23.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
387630	2002 <i>OL</i> ₁₇		12 23.3 134°78	5°2/23.9	18		12996	1981 <i>EV</i> ₂₈		12 23.3 116°57	4°0/23.3	18	
11 17	6 35.43	+ 6 17.8	2.416	3.175	13.1	21.8	11 17	6 32.77	+12 0.3	2.328	3.112	12.9	19.5
11 27	6 29.63	+ 5 57.5	2.345	3.191	10.6	21.6	11 27	6 27.77	+11 24.8	2.252	3.120	10.2	19.3
12 7	6 21.99	+ 5 48.1	2.297	3.207	8.0	21.5	12 7	6 20.89	+10 55.9	2.200	3.128	7.2	19.1
12 17	6 13.10	+ 5 51.0	2.276	3.222	5.8	21.4	12 17	6 12.70	+10 35.2	2.176	3.136	4.7	19.0
12 27	6 3.75	+ 6 7.0	2.285	3.236	5.3	21.4	12 27	6 4.04	+10 23.9	2.180	3.144	4.3	19.0
1 6	5 54.82	+ 6 35.0	2.324	3.249	7.0	21.5	1 6	5 55.78	+10 22.3	2.214	3.152	6.4	19.1
1 16	5 47.09	+ 7 13.1	2.392	3.261	9.4	21.7	1 16	5 48.73	+10 29.8	2.277	3.159	9.3	19.3
1 26	5 41.17	+ 7 58.9	2.485	3.273	11.9	21.9	1 26	5 43.50	+10 45.3	2.363	3.167	11.9	19.5
209651	2005 <i>CS</i> ₈		12 23.3 321°55	7°3/23.6	18		38387	1999 <i>RB</i> ₁₈₄		12 23.3 348°95	0°6/23.3	17	
11 17	6 40.42	+40 6.2	1.599	2.395	17.2	20.1	11 17	6 33.90	+24 1.5	1.952	2.759	14.1	18.8
11 27	6 35.51	+40 45.3	1.517	2.386	14.1	19.9	11 27	6 29.31	+24 17.4	1.869	2.758	10.9	18.5
12 7	6 26.82	+41 12.1	1.457	2.378	10.8	19.7	12 7	6 22.24	+24 34.2	1.810	2.756	7.0	18.3
12 17	6 15.25	+41 18.6	1.419	2.370	8.0	19.5	12 17	6 13.33	+24 49.9	1.777	2.755	2.8	18.0
12 27	6 2.45	+40 59.7	1.408	2.362	7.5	19.4	12 27	6 3.65	+25 2.6	1.772	2.753	1.7	18.0
1 6	5 50.40	+40 15.2	1.423	2.355	9.8	19.6	1 6	5 54.37	+25 11.2	1.797	2.753	6.0	18.2
1 16	5 40.83	+39 10.7	1.463	2.348	13.3	19.8	1 16	5 46.61	+25 16.3	1.849	2.752	9.9	18.5
1 26	5 34.92	+37 54.5	1.525	2.342	16.7	20.0	1 26	5 41.22	+25 19.1	1.925	2.751	13.4	18.7
180977	2005 <i>NB</i> ₁		12 23.3 99°09	3°9/23.6	18		467173	2016 <i>ET</i> ₁₁₀		12 23.3 340°37	5°1/24.4	18	
11 17	6 35.14	+12 6.4	2.154	2.937	13.8	20.9	11 17	6 40.98	+40 13.2	1.960	2.741	15.0	20.0
11 27	6 29.60	+11 45.2	2.090	2.958	10.8	20.7	11 27	6 34.94	+39 56.2	1.871	2.734	12.2	19.8
12 7	6 22.04	+11 32.0	2.049	2.978	7.6	20.6	12 7	6 25.88	+39 24.2	1.805	2.727	9.0	19.6
12 17	6 13.12	+11 27.6	2.035	2.998	4.7	20.4	12 17	6 14.73	+38 33.1	1.764	2.721	6.1	19.4
12 27	6 3.75	+11 32.5	2.051	3.018	4.1	20.4	12 27	6 2.89	+37 21.6	1.752	2.715	5.3	19.3
1 6	5 54.92	+11 46.0	2.096	3.037	6.5	20.6	1 6	5 51.89	+35 52.7	1.769	2.710	7.5	19.4
1 16	5 47.46	+12 7.1	2.169	3.056	9.5	20.8	1 16	5 43.00	+34 12.6	1.815	2.705	10.8	19.6
1 26	5 42.01	+12 34.3	2.267	3.074	12.3	21.1	1 26	5 37.07	+32 29.2	1.885	2.701	14.0	19.8
79617	1998 <i>RW</i> ₆₀		12 23.3 137°92	2°1/23.4	18		63469	2001 <i>OP</i> ₂₂		12 23.3 210°22	2°2/23.2	18	
11 17	6 41.79	+28 54.9	1.777	2.576	15.7	19.5	11 17	6 37.87	+28 49.1	2.358	3.147	12.6	20.3
11 27	6 35.48	+29 4.0	1.704	2.586	12.1	19.2	11 27	6 32.09	+29 19.4	2.264	3.140	9.8	20.1
12 7	6 26.21	+29 9.0	1.654	2.596	8.0	19.0	12 7	6 23.93	+29 47.8	2.194	3.134	6.5	19.9
12 17	6 14.85	+29 6.3	1.630	2.605	3.7	18.8	12 17	6 14.01	+30 11.0	2.153	3.126	3.2	19.7
12 27	6 2.74	+28 53.9	1.635	2.614	2.7	18.7	12 27	6 3.26	+30 26.2	2.142	3.118	2.6	19.6
1 6	5 51.36	+28 32.5	1.670	2.622	6.7	19.0	1 6	5 52.82	+30 32.5	2.162	3.110	5.8	19.8
1 16	5 41.99	+28 4.7	1.732	2.629	10.8	19.3	1 16	5 43.74	+30 30.6	2.210	3.101	9.2	20.0
1 26	5 35.52	+27 34.4	1.818	2.636	14.3	19.5	1 26	5 36.86	+30 22.9	2.284	3.091	12.2	20.2
486563	2013 <i>HW</i> ₁₀₃		12 23.3 20°92	0°1/23.3	18		421880	2014 <i>QT</i> ₁₇₂		12 23.3 80°60	1°3/23.4	18	
11 17	6 35.03	+23 10.1	1.916	2.722	14.4	21.7	11 17	6 34.02	+19 42.1	2.067	2.868	13.7	21.5
11 27	6 30.14	+23 10.9	1.835	2.722	11.1	21.5	11 27	6 29.07	+19 37.5	1.992	2.876	10.5	21.3
12 7	6 22.72	+23 12.4	1.776	2.722	7.2	21.2	12 7	6 21.89	+19 35.8	1.940	2.884	6.9	21.1
12 17	6 13.49	+23 13.2	1.745	2.723	2.8	21.0	12 17	6 13.15	+19 36.7	1.915	2.892	3.0	20.8
12 27	6 3.50	+23 12.1	1.742	2.723	1.7	20.9	12 27	6 3.81	+19 39.5	1.920	2.900	2.0	20.8
1 6	5 53.99	+23 9.0	1.768	2.724	6.0	21.2	1 6	5 54.94	+19 43.8	1.954	2.908	5.7	21.0
1 16	5 46.06	+23 4.8	1.822	2.724	10.1	21.4	1 16	5 47.49	+19 49.8	2.015	2.915	9.4	21.3
1 26	5 40.53	+23 0.6	1.900	2.725	13.6	21.7	1 26	5 42.20	+19 57.7	2.102	2.923	12.6	21.5
51755	2001 <i>LC</i> ₃		12 23.3 172°04	1°7/22.9	18		59370	1999 <i>EK</i> ₅		12 23.3 2°98	3°7/23.2	18	
11 17	6 41.19	+22 43.7	2.184	2.970	13.5	18.5	11 17	6 38.15	+30 17.1	1.471	2.288	17.5	19.1
11 27	6 34.28	+21 34.9	2.096	2.972	10.4	18.3	11 27	6 33.56	+30 55.8	1.397	2.288	13.6	18.8
12 7	6 25.09	+20 22.2	2.034	2.974	6.8	18.1	12 7	6 25.48	+31 31.0	1.344	2.287	9.3	18.6
12 17	6 14.33	+19 7.1	2.000	2.976	3.0	17.9	12 17	6 14.74	+31 57.1	1.315	2.288	5.0	18.3
12 27	6 3.06	+17 52.1	1.999	2.977	2.4	17.8	12 27	6 2.85	+32 9.4	1.313	2.288	4.3	18.3
1 6	5 52.40	+16 40.7	2.030	2.978	6.1	18.1	1 6	5 51.63	+32 6.7	1.338	2.289	8.2	18.5
1 16	5 43.30	+15 36.3	2.090	2.978	9.7	18.3	1 16	5 42.68	+31 51.4	1.388	2.290	12.6	18.8
1 26	5 36.50	+14 41.3	2.177	2.978	12.9	18.5	1 26	5 37.11	+31 28.4	1.460	2.292	16.6	19.0
280850	2005 <i>UU</i> ₂₆₇		12 23.3 258°88	2°9/23.3	18		220240	2002 <i>XF</i> ₂₃		12 23.3 68°06	3°1/23.6	18	
11 17	6 36.48	+17 13.9	1.706	2.511	16.0	21.0	11 17	6 46.66	+31 13.0	1.360	2.168	19.1	20.0
11 27	6 31.62	+16 50.6	1.614	2.498	12.5	20.8	11 27	6 39.49	+31 17.1	1.317	2.203	14.7	19.8
12 7	6 23.93	+16 31.9	1.544	2.485	8.5	20.5	12 7	6 28.77	+31 13.1	1.294	2.236	9.7	19.6
12 17	6 14.07	+16 18.5	1.499	2.472	4.3	20.2	12 17	6 15.79	+30 56.8	1.296	2.270	4.8	19.5
12 27	6 3.18	+16 10.9	1.482	2.458	3.4	20.1	12 27	6 2.42	+30 26.8	1.326	2.303	3.6	19.5
1 6	5 52.64	+16 9.5	1.493	2.445	7.4	20.3	1 6	5 50.50	+29 45.7	1.383	2.336	7.8	19.8
1 16	5 43.74	+16 14.5	1.531	2.431	11.8	20.6	1 16	5 41.40	+28 58.9	1.467	2.368	12.1	20.1
1 26	5 37.50	+16 25.8	1.592	2.416	15.8	20.8	1 26	5 35.88	+28 12.1	1.573	2.400	15.8	20.4
349570	2008 <i>SP</i> ₂₀₃		12 23.3 105°26	0°9/23.4	18		383515	2007 <i>CO</i> ₄₀		12 23.3 203°97	4°7/23.7	18	
11 17	6 39.28	+20 23.8	1.824	2.623	15.3	21.7	11 17	6 36.85	+ 9 58.6	2.045	2.823	14.6	22.0
11 27	6 33.23	+20 30.6	1.760	2.643	11.7	21.6	11 27	6 31.32	+ 9 42.8	1.955	2.818	11.7	21.8
12 7	6 24.60	+20 40.6	1.719	2.663	7.6	21.3	12 7	6 23.44	+ 9 37.1	1.888	2.813	8.5	21.6
12 17	6 14.19	+20 52.4	1.704	2.682	3.1	21.1	12 17	6 13.82	+ 9 42.9	1.848	2.807	5.5	21.4
12 27	6 3.18	+21 4.4	1.719	2.700	1.9	21.1	12 27	6 3.41	+10 0.8	1.836	2.800	4.9	21.4
1 6	5 52.86	+21 15.9	1.764	2.718	6.2	21.4	1 6	5 53.31	+10 30.0	1.854	2.793	7.4	21.5
1 16	5 44.30	+21 26.8	1.836	2.736	10.2	21.7	1 16	5 44.56	+11 8.5	1.900	2.784	10.8	21.7
1 26	5 38.31	+21 37.9	1.933	2.752	13.6	21.9	1 26	5 37.99	+11 54.2	1.971	2.776	13.9	21.9
487789	2015 <i>RV</i> ₂₃₇		12 23.3 249°30	6°5/23.6	18		344887	2004 <i>PD</i> ₈₈		12 23.3 208°68			

EPHEMERIDES

12 23.3

12 23.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
421138	2013 <i>RW</i> ₁₁		12 23.3	38°11'	1°9'/23.4	16	334108	2001 <i>QH</i> ₂₃₉		12 23.3	113°11'	3°9'/23.7	18
11 17	6 32.01	+18 24.6	2.088	2.891	13.5	20.9	11 17	6 37.76	+13 9.3	1.689	2.485	16.5	20.8
11 27	6 27.47	+18 7.1	2.016	2.900	10.4	20.7	11 27	6 32.27	+13 0.2	1.621	2.498	12.9	20.6
12 7	6 20.82	+17 53.1	1.967	2.910	6.9	20.5	12 7	6 24.12	+13 0.8	1.575	2.510	8.9	20.4
12 17	6 12.72	+17 42.7	1.945	2.920	3.2	20.3	12 17	6 14.09	+13 11.6	1.554	2.522	5.1	20.2
12 27	6 4.08	+17 36.1	1.952	2.930	2.4	20.3	12 27	6 3.34	+13 32.4	1.561	2.534	4.2	20.2
1 6	5 55.92	+17 33.5	1.988	2.940	5.8	20.5	1 6	5 53.21	+14 1.5	1.597	2.545	7.4	20.4
1 16	5 49.13	+17 34.9	2.051	2.951	9.3	20.7	1 16	5 44.83	+14 37.0	1.660	2.556	11.3	20.6
1 26	5 44.39	+17 40.3	2.140	2.962	12.3	20.9	1 26	5 39.04	+15 17.1	1.746	2.566	14.8	20.9
135822	2002 <i>RF</i> ₂₀₈		12 23.3	88°07'	1°1'/23.3	18	520578	2014 <i>NB</i> ₇₂		12 23.3	56°74'	0°2'/23.3	17
11 17	6 37.66	+25 59.9	1.832	2.636	15.0	20.8	11 17	6 34.39	+22 59.7	2.045	2.848	13.7	21.1
11 27	6 32.18	+26 9.6	1.763	2.649	11.5	20.6	11 27	6 29.54	+23 17.4	1.965	2.851	10.5	20.9
12 7	6 24.04	+26 17.9	1.716	2.661	7.5	20.3	12 7	6 22.32	+23 36.7	1.909	2.854	6.8	20.7
12 17	6 14.02	+26 22.3	1.696	2.673	3.1	20.1	12 17	6 13.39	+23 55.9	1.879	2.857	2.7	20.4
12 27	6 3.34	+26 21.2	1.705	2.686	2.0	20.0	12 27	6 3.74	+24 12.9	1.879	2.860	1.6	20.4
1 6	5 53.31	+26 14.4	1.743	2.698	6.2	20.3	1 6	5 54.51	+24 26.7	1.908	2.863	5.7	20.6
1 16	5 45.07	+26 3.4	1.809	2.710	10.2	20.6	1 16	5 46.74	+24 37.4	1.965	2.867	9.5	20.9
1 26	5 39.44	+25 50.7	1.898	2.722	13.6	20.9	1 26	5 41.22	+24 46.0	2.047	2.870	12.8	21.1
368062	2012 <i>HG</i> ₆₆		12 23.3	4°57'	0°6'/23.2	17	307905	2004 <i>CF</i> ₆₉		12 23.3	271°73'	0°6'/23.4	17
11 17	6 33.74	+22 26.8	1.894	2.702	14.4	20.1	11 17	6 35.34	+20 44.6	1.985	2.786	14.1	21.5
11 27	6 29.30	+23 6.6	1.813	2.702	11.1	19.8	11 27	6 30.55	+20 57.7	1.884	2.768	11.0	21.3
12 7	6 22.30	+23 50.3	1.756	2.703	7.2	19.6	12 7	6 23.18	+21 14.7	1.806	2.751	7.2	21.0
12 17	6 13.40	+24 35.0	1.725	2.703	2.9	19.3	12 17	6 13.82	+21 34.1	1.755	2.732	2.9	20.7
12 27	6 3.65	+25 17.4	1.724	2.705	1.8	19.3	12 27	6 3.45	+21 54.0	1.733	2.714	1.8	20.6
1 6	5 54.28	+25 54.9	1.751	2.706	6.1	19.6	1 6	5 53.28	+22 13.3	1.740	2.695	6.2	20.8
1 16	5 46.43	+26 26.8	1.805	2.708	10.1	19.8	1 16	5 44.50	+22 31.3	1.776	2.677	10.4	21.0
1 26	5 41.00	+26 53.4	1.884	2.711	13.6	20.0	1 26	5 38.07	+22 48.5	1.835	2.658	14.1	21.2
229421	2005 <i>TT</i> ₂₆		12 23.3	323°91'	2°0'/23.4	18	515144	2011 <i>HN</i> ₇₇		12 23.3	231°82'	0°5'/23.4	18
11 17	6 33.88	+19 27.4	1.338	2.166	18.2	20.7	11 17	6 38.33	+21 18.2	1.908	2.706	14.7	22.6
11 27	6 30.38	+19 14.3	1.255	2.153	14.3	20.4	11 27	6 32.88	+21 26.8	1.812	2.695	11.4	22.3
12 7	6 23.52	+19 5.8	1.192	2.141	9.5	20.1	12 7	6 24.70	+21 38.3	1.739	2.683	7.5	22.1
12 17	6 14.03	+19 1.9	1.152	2.129	4.2	19.7	12 17	6 14.42	+21 51.1	1.693	2.671	3.0	21.8
12 27	6 3.28	+19 2.3	1.138	2.118	3.0	19.6	12 27	6 3.13	+22 3.5	1.677	2.658	1.8	21.7
1 6	5 52.99	+19 6.7	1.150	2.108	8.2	19.9	1 6	5 52.13	+22 14.5	1.690	2.644	6.4	21.9
1 16	5 44.74	+19 15.2	1.186	2.098	13.4	20.2	1 16	5 42.68	+22 24.1	1.731	2.630	10.7	22.2
1 26	5 39.72	+19 27.9	1.243	2.089	18.0	20.4	1 26	5 35.77	+22 33.3	1.796	2.615	14.5	22.4
23604	1996 <i>AL</i>		12 23.3	322°37'	3°7'/24.0	18	485484	2011 <i>SB</i> ₁₀₇		12 23.3	55°54'	4°3'/23.2	18
11 17	6 32.41	+11 19.3	1.809	2.607	15.4	18.0	11 17	6 40.51	+31 44.9	1.534	2.344	17.2	20.9
11 27	6 28.41	+11 41.5	1.714	2.592	12.3	17.8	11 27	6 34.93	+32 34.8	1.482	2.367	13.4	20.7
12 7	6 21.85	+12 17.3	1.641	2.576	8.6	17.5	12 7	6 26.05	+33 19.1	1.452	2.391	9.1	20.5
12 17	6 13.29	+13 7.0	1.593	2.561	5.0	17.3	12 17	6 14.87	+33 51.5	1.447	2.416	5.3	20.4
12 27	6 3.71	+14 9.0	1.573	2.547	4.0	17.2	12 27	6 2.96	+34 7.7	1.469	2.440	4.7	20.4
1 6	5 54.31	+15 20.0	1.582	2.533	7.2	17.3	1 6	5 52.02	+34 7.4	1.519	2.465	7.9	20.6
1 16	5 46.30	+16 36.2	1.618	2.519	11.2	17.5	1 16	5 43.43	+33 53.7	1.594	2.490	11.7	20.9
1 26	5 40.64	+17 53.9	1.678	2.507	14.9	17.7	1 26	5 38.09	+33 31.4	1.692	2.514	15.1	21.2
363339	2002 <i>PL</i> ₁₉₂		12 23.3	180°59'	6°2'/23.7	18	436404	2010 <i>XE</i> ₁₈		12 23.3	213°99'	1°2'/23.3	18
11 17	6 34.41	+ 5 9.0	2.269	3.031	13.8	21.6	11 17	6 39.59	+22 6.7	1.618	2.425	16.6	21.4
11 27	6 29.13	+ 4 32.5	2.187	3.032	11.3	21.4	11 27	6 34.10	+21 39.7	1.534	2.421	12.8	21.1
12 7	6 21.85	+ 4 7.4	2.128	3.033	8.8	21.2	12 7	6 25.55	+21 12.4	1.471	2.417	8.4	20.8
12 17	6 13.15	+ 3 56.4	2.094	3.033	6.7	21.1	12 17	6 14.74	+20 44.5	1.435	2.413	3.5	20.5
12 27	6 3.85	+ 4 1.0	2.090	3.033	6.3	21.1	12 27	6 2.98	+20 16.3	1.427	2.408	2.3	20.4
1 6	5 54.89	+ 4 20.9	2.114	3.032	8.0	21.2	1 6	5 51.79	+19 49.2	1.447	2.402	7.2	20.7
1 16	5 47.12	+ 4 54.6	2.165	3.030	10.5	21.4	1 16	5 42.53	+19 25.4	1.494	2.397	11.9	21.0
1 26	5 41.25	+ 5 39.3	2.241	3.028	13.0	21.5	1 26	5 36.21	+19 6.9	1.565	2.391	15.9	21.2
5218	<i>Kutsak</i>		12 23.3	87°42'	0°6'/23.3	18	125848	2001 <i>XE</i> ₁₈₄		12 23.3	26°29'	2°2'/23.3	18
11 17	6 40.08	+22 37.6	1.528	2.339	17.2	17.8	11 17	6 34.70	+20 4.1	1.212	2.046	19.4	19.0
11 27	6 34.31	+22 27.8	1.467	2.356	13.2	17.6	11 27	6 30.87	+19 37.6	1.154	2.055	15.0	18.7
12 7	6 25.51	+22 18.9	1.427	2.373	8.5	17.3	12 7	6 23.63	+19 14.9	1.115	2.066	9.8	18.5
12 17	6 14.62	+22 9.6	1.412	2.390	3.4	17.1	12 17	6 13.97	+18 56.4	1.100	2.077	4.4	18.2
12 27	6 3.06	+21 59.1	1.426	2.407	2.0	17.0	12 27	6 3.47	+18 42.6	1.110	2.090	3.1	18.1
1 6	5 52.36	+21 47.9	1.467	2.423	7.0	17.4	1 6	5 53.89	+18 34.0	1.145	2.103	8.2	18.5
1 16	5 43.80	+21 37.4	1.535	2.440	11.5	17.7	1 16	5 46.65	+18 31.4	1.204	2.117	13.2	18.8
1 26	5 38.23	+21 29.3	1.626	2.456	15.3	17.9	1 26	5 42.71	+18 34.7	1.284	2.132	17.4	19.1
225436	2000 <i>CK</i> ₇₉		12 23.3	356°07'	0°5'/23.4	17	9381	<i>Lyon</i>		12 23.3	355°29'	0°6'/23.3	18
11 17	6 32.03	+21 53.3	1.813	2.627	14.8	20.4	11 17	6 33.76	+24 48.2	2.015	2.821	13.8	17.4
11 27	6 28.01	+21 53.2	1.732	2.624	11.4	20.2	11 27	6 29.13	+24 55.7	1.933	2.820	10.6	17.2
12 7	6 21.47	+21 55.2	1.674	2.622	7.4	19.9	12 7	6 22.10	+25 3.0	1.873	2.819	6.9	16.9
12 17	6 13.07	+21 58.0	1.642	2.620	3.0	19.7	12 17	6 13.32	+25 8.3	1.841	2.818	2.8	16.7
12 27	6 3.90	+22 0.9	1.638	2.619	1.8	19.6	12 27	6 3.81	+25 10.0	1.837	2.818	1.7	16.6
1 6	5 55.17	+22 3.4	1.662	2.619	6.2	19.9	1 6	5 54.73	+25 7.9	1.862	2.818	5.8	16.9
1 16	5 48.01	+22 5.8	1.713	2.619	10.4	20.1	1 16	5 47.14	+25 2.8	1.915	2.818	9.7	17.1
1 26	5 43.27	+22 9.0	1.787	2.620	13.9	20.3	1 26	5 41.84	+24 56.3	1.993	2.818	13.0	17.3
16714	<i>Arndt</i>		12 23.3	109°00'	0°3'/23.4	18	53959	2000 <i>GY</i> ₆₁		12 23.3	86°26'	0°7'/23.3	18
11 17													

EPHEMERIDES

12 23.3

12 23.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
269779	1999 <i>TK</i> ₁₄₀		12 23.3	73°81	0°5/23.3	18	309594	2008 <i>AE</i> ₁₃₇		12 23.4	20°08	1°2/23.3	18
11 17	6 43.43	+24 15.6	1.365	2.178	18.8	21.0	11 17	6 34.54	+22 51.2	1.400	2.227	17.7	19.8
11 27	6 37.02	+24 22.7	1.317	2.208	14.3	20.8	11 27	6 30.41	+22 14.5	1.336	2.234	13.6	19.6
12 7	6 27.28	+24 29.9	1.290	2.237	9.2	20.6	12 7	6 23.19	+21 37.1	1.292	2.241	8.8	19.3
12 17	6 15.31	+24 34.0	1.288	2.266	3.6	20.4	12 17	6 13.80	+20 59.3	1.272	2.250	3.6	19.0
12 27	6 2.78	+24 33.2	1.313	2.295	2.1	20.3	12 27	6 3.65	+20 22.4	1.279	2.260	2.4	19.0
1 6	5 51.43	+24 27.6	1.366	2.323	7.3	20.7	1 6	5 54.32	+19 48.6	1.312	2.270	7.4	19.3
1 16	5 42.59	+24 19.2	1.445	2.351	12.0	21.1	1 16	5 47.10	+19 20.0	1.371	2.281	12.1	19.6
1 26	5 37.10	+24 10.7	1.547	2.378	15.8	21.4	1 26	5 42.87	+18 58.4	1.452	2.293	16.1	19.9
120675	1997 <i>AO</i> ₁₀		12 23.3	58°52	0°9/23.4	17	514721	2006 <i>UU</i> ₃₃₅		12 23.4	8°68	4°5/22.9	18
11 17	6 34.06	+20 24.9	2.031	2.833	13.8	20.6	11 17	6 37.63	+29 14.3	1.202	2.035	19.6	21.1
11 27	6 29.26	+20 29.4	1.950	2.835	10.6	20.4	11 27	6 33.89	+30 20.0	1.136	2.035	15.4	20.9
12 7	6 22.14	+20 36.9	1.892	2.836	6.9	20.2	12 7	6 26.12	+31 25.3	1.089	2.036	10.5	20.6
12 17	6 13.33	+20 46.5	1.861	2.838	2.9	19.9	12 17	6 15.17	+32 22.2	1.065	2.038	5.8	20.3
12 27	6 3.83	+20 57.1	1.859	2.840	1.8	19.8	12 27	6 2.79	+33 3.0	1.066	2.041	5.2	20.3
1 6	5 54.74	+21 7.9	1.887	2.842	5.8	20.1	1 6	5 51.16	+33 24.4	1.093	2.044	9.5	20.6
1 16	5 47.09	+21 18.9	1.942	2.844	9.6	20.3	1 16	5 42.20	+33 28.1	1.142	2.048	14.4	20.9
1 26	5 41.64	+21 30.3	2.022	2.846	12.9	20.6	1 26	5 37.20	+33 19.5	1.211	2.053	18.6	21.1
105091	2000 <i>LO</i>		12 23.3	183°47	1°6/23.2	18	418841	2008 <i>WZ</i> ₃₄		12 23.4	101°18	3°2/22.9	17
11 17	6 33.68	+28 35.1	2.869	3.656	10.6	20.4	11 17	6 35.70	+31 32.3	2.434	3.224	12.2	21.8
11 27	6 28.43	+28 55.5	2.780	3.656	8.2	20.2	11 27	6 30.37	+32 19.5	2.356	3.231	9.5	21.6
12 7	6 21.35	+29 13.8	2.717	3.656	5.4	20.0	12 7	6 22.80	+33 3.4	2.303	3.238	6.5	21.5
12 17	6 12.97	+29 27.9	2.682	3.656	2.6	19.8	12 17	6 13.61	+33 40.3	2.278	3.245	3.8	21.3
12 27	6 4.04	+29 36.1	2.678	3.655	2.0	19.8	12 27	6 3.73	+34 7.0	2.282	3.251	3.5	21.3
1 6	5 55.41	+29 38.1	2.705	3.654	4.7	20.0	1 6	5 54.22	+34 22.2	2.317	3.258	5.9	21.5
1 16	5 47.85	+29 34.3	2.761	3.652	7.5	20.2	1 16	5 46.06	+34 26.8	2.379	3.265	8.8	21.7
1 26	5 42.00	+29 26.5	2.844	3.651	10.0	20.3	1 26	5 40.03	+34 23.2	2.467	3.271	11.5	21.8
484772	2009 <i>BT</i> ₁₄₉		12 23.3	229°95	0°5/23.3	18	195940	2002 <i>RO</i> ₁₃₀		12 23.4	76°88	3°7/24.1	18
11 17	6 36.69	+24 35.3	1.988	2.790	14.1	22.1	11 17	6 32.78	+9 56.6	2.312	3.091	13.1	19.5
11 27	6 31.47	+24 40.8	1.899	2.784	10.9	21.9	11 27	6 27.88	+10 9.4	2.236	3.100	10.4	19.4
12 7	6 23.68	+24 46.0	1.833	2.777	7.1	21.7	12 7	6 21.06	+10 32.7	2.184	3.111	7.3	19.2
12 17	6 13.98	+24 49.1	1.793	2.771	2.9	21.4	12 17	6 12.88	+11 6.3	2.158	3.121	4.6	19.0
12 27	6 3.44	+24 48.4	1.783	2.764	1.7	21.3	12 27	6 4.16	+11 49.5	2.163	3.131	3.9	19.0
1 6	5 53.30	+24 43.8	1.802	2.757	6.0	21.6	1 6	5 55.80	+12 40.2	2.197	3.141	6.1	19.2
1 16	5 44.70	+24 36.2	1.850	2.750	10.1	21.8	1 16	5 48.61	+13 36.1	2.261	3.151	9.0	19.4
1 26	5 38.52	+24 27.4	1.921	2.742	13.6	22.0	1 26	5 43.26	+14 34.6	2.350	3.161	11.8	19.6
223422	2003 <i>SZ</i> ₂₃₁		12 23.4	24°15	1°0/23.3	17	195947	2002 <i>RL</i> ₁₃₉		12 23.4	45°46	6°8/22.8	17
11 17	6 33.55	+24 32.6	1.888	2.698	14.4	19.7	11 17	6 39.91	+39 28.2	1.922	2.708	15.1	19.5
11 27	6 29.11	+24 58.8	1.814	2.704	11.1	19.5	11 27	6 34.33	+40 47.8	1.869	2.730	12.3	19.4
12 7	6 22.14	+25 25.9	1.763	2.710	7.2	19.3	12 7	6 25.67	+41 57.2	1.839	2.753	9.4	19.2
12 17	6 13.36	+25 51.4	1.739	2.716	3.0	19.1	12 17	6 14.79	+42 49.3	1.834	2.776	7.2	19.2
12 27	6 3.83	+26 12.8	1.743	2.723	1.9	19.0	12 27	6 3.08	+43 19.2	1.857	2.800	7.0	19.2
1 6	5 54.80	+26 28.8	1.776	2.731	6.1	19.3	1 6	5 52.11	+43 26.0	1.907	2.824	8.8	19.4
1 16	5 47.34	+26 39.6	1.835	2.739	10.0	19.6	1 16	5 43.22	+43 12.8	1.983	2.848	11.3	19.6
1 26	5 42.31	+26 46.6	1.919	2.747	13.3	19.8	1 26	5 37.35	+42 45.4	2.082	2.872	13.8	19.8
478504	2012 <i>SN</i> ₁₉		12 23.4	142°97	1°4/23.4	18	125227	2001 <i>UX</i> ₁₅₈		12 23.4	203°54	2°0/23.4	18
11 17	6 39.05	+19 28.4	1.865	2.662	15.1	22.4	11 17	6 37.43	+18 12.5	1.916	2.713	14.8	20.3
11 27	6 33.15	+19 25.7	1.790	2.672	11.6	22.2	11 27	6 32.01	+18 4.6	1.829	2.709	11.5	20.1
12 7	6 24.66	+19 26.6	1.738	2.681	7.6	22.0	12 7	6 24.03	+18 1.1	1.764	2.706	7.6	19.8
12 17	6 14.33	+19 30.1	1.713	2.690	3.3	21.7	12 17	6 14.15	+18 1.5	1.726	2.701	3.5	19.6
12 27	6 3.30	+19 35.5	1.718	2.698	2.2	21.7	12 27	6 3.44	+18 5.5	1.718	2.696	2.6	19.5
1 6	5 52.83	+19 42.2	1.752	2.706	6.3	22.0	1 6	5 53.12	+18 12.7	1.739	2.691	6.5	19.7
1 16	5 44.05	+19 50.3	1.814	2.713	10.4	22.2	1 16	5 44.33	+18 22.8	1.787	2.685	10.5	20.0
1 26	5 37.78	+20 0.1	1.901	2.719	13.8	22.5	1 26	5 37.96	+18 36.0	1.860	2.679	14.1	20.2
232764	2004 <i>PN</i> ₂₈		12 23.4	74°42	6°7/24.1	18	251242	2006 <i>UE</i> ₃₅₉		12 23.4	144°04	2°3/23.3	18
11 17	6 46.21	+39 56.1	1.562	2.351	17.9	20.9	11 17	6 37.37	+29 15.0	2.137	2.933	13.5	21.3
11 27	6 39.45	+40 21.7	1.505	2.371	14.4	20.7	11 27	6 31.83	+29 38.4	2.058	2.938	10.4	21.1
12 7	6 28.99	+40 32.6	1.470	2.391	10.7	20.5	12 7	6 23.82	+29 58.9	2.002	2.943	6.9	20.9
12 17	6 16.03	+40 22.0	1.458	2.411	7.5	20.4	12 17	6 14.03	+30 13.0	1.974	2.947	3.4	20.7
12 27	6 2.41	+39 46.9	1.474	2.431	6.8	20.4	12 27	6 3.53	+30 18.6	1.975	2.951	2.8	20.6
1 6	5 50.08	+38 49.7	1.517	2.451	9.1	20.6	1 6	5 53.51	+30 15.1	2.006	2.955	6.0	20.8
1 16	5 40.54	+37 37.5	1.585	2.471	12.4	20.8	1 16	5 45.04	+30 3.9	2.065	2.959	9.5	21.1
1 26	5 34.65	+36 18.7	1.677	2.490	15.6	21.1	1 26	5 38.95	+29 47.8	2.148	2.963	12.6	21.3
274128	2008 <i>EB</i> ₆₀		12 23.4	221°40	2°5/23.4	18	345327	2005 <i>YZ</i> ₄₈		12 23.4	336°11	1°7/23.5	18
11 17	6 41.76	+29 45.2	1.739	2.539	15.9	21.3	11 17	6 34.80	+18 35.1	1.438	2.259	17.6	20.9
11 27	6 35.88	+29 55.6	1.650	2.532	12.4	21.0	11 27	6 30.83	+18 43.7	1.359	2.253	13.7	20.6
12 7	6 26.80	+30 1.3	1.583	2.524	8.3	20.8	12 7	6 23.69	+18 59.6	1.300	2.248	9.0	20.3
12 17	6 15.30	+29 58.5	1.541	2.515	4.1	20.5	12 17	6 14.12	+19 21.6	1.266	2.243	4.0	20.0
12 27	6 2.72	+29 44.2	1.529	2.506	3.1	20.4	12 27	6 3.44	+19 47.8	1.258	2.239	2.6	19.9
1 6	5 50.67	+29 18.7	1.545	2.497	7.2	20.7	1 6	5 53.23	+20 16.1	1.277	2.235	7.6	20.2
1 16	5 40.60	+28 45.0	1.589	2.487	11.6	20.9	1 16	5 44.95	+20 45.4	1.322	2.231	12.5	20.5
1 26	5 33.58	+28 7.8	1.656	2.476	15.4	21.1	1 26	5 39.71	+21 15.1	1.388	2.228	16.8	20.7
311888	2006 <i>XO</i> ₃₅		12 23.4	136°89	1°0/23.5	18	306791	2001 <i>KJ</i> ₃		12 23.			

EPHEMERIDES

12 23.4

12 23.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
189720	2001 <i>UA</i> ₁₅₅		12 23.4	95°67	0°3/23.4	18	195859	2002 <i>QM</i> ₈₈		12 23.4	166°68	4°0/23.2	18
11 17	6 40.40	+21 42.2	1.701	2.503	16.1	19.9	11 17	6 36.78	+35 57.3	2.635	3.413	11.7	21.6
11 27	6 34.30	+21 55.0	1.640	2.525	12.3	19.7	11 27	6 31.12	+36 32.4	2.552	3.415	9.3	21.4
12 7	6 25.43	+22 10.4	1.602	2.547	7.9	19.5	12 7	6 23.26	+37 1.3	2.493	3.417	6.7	21.3
12 17	6 14.65	+22 26.1	1.590	2.568	3.1	19.3	12 17	6 13.82	+37 20.2	2.462	3.419	4.5	21.1
12 27	6 3.24	+22 40.2	1.607	2.589	1.8	19.2	12 27	6 3.71	+37 26.5	2.461	3.421	4.2	21.1
1 6	5 52.59	+22 51.7	1.654	2.609	6.4	19.6	1 6	5 54.00	+37 19.7	2.490	3.423	6.1	21.2
1 16	5 43.89	+23 1.1	1.728	2.629	10.6	19.9	1 16	5 45.64	+37 1.5	2.547	3.424	8.6	21.4
1 26	5 37.94	+23 9.4	1.825	2.648	14.1	20.1	1 26	5 39.38	+36 35.0	2.629	3.425	11.1	21.6
378080	2006 <i>UW</i> ₇₁		12 23.4	28°63	7°4/23.8	18	339995	2005 <i>UX</i> ₂₇₈		12 23.4	343°09	1°3/23.4	18
11 17	6 43.26	+38 45.7	1.318	2.127	19.6	20.5	11 17	6 35.03	+20 38.5	1.356	2.183	18.2	20.9
11 27	6 38.18	+39 24.9	1.252	2.129	15.9	20.3	11 27	6 31.17	+20 33.2	1.280	2.178	14.1	20.6
12 7	6 28.79	+39 50.7	1.204	2.132	11.8	20.1	12 7	6 23.99	+20 31.8	1.224	2.173	9.2	20.3
12 17	6 16.18	+39 54.2	1.179	2.136	8.3	19.9	12 17	6 14.27	+20 33.5	1.191	2.169	3.9	20.0
12 27	6 2.35	+39 29.8	1.179	2.140	7.6	19.9	12 27	6 3.43	+20 37.2	1.185	2.166	2.4	19.9
1 6	5 49.64	+38 38.6	1.204	2.144	10.4	20.0	1 6	5 53.17	+20 42.3	1.205	2.163	7.8	20.2
1 16	5 39.95	+37 28.0	1.254	2.148	14.3	20.3	1 16	5 45.00	+20 49.0	1.249	2.161	12.9	20.5
1 26	5 34.43	+36 8.2	1.324	2.152	18.1	20.5	1 26	5 40.04	+20 58.0	1.315	2.159	17.3	20.8
24986	Yalefan		12 23.4	86°70	3°8/23.4	18	373397	1995 <i>KJ</i> ₄		12 23.4	175°69	0°6/23.3	18
11 17	6 40.11	+15 46.4	1.499	2.304	17.8	18.4	11 17	6 33.27	+25 8.7	3.093	3.878	10.0	22.3
11 27	6 34.19	+15 9.3	1.443	2.326	13.8	18.2	11 27	6 27.94	+25 21.6	3.004	3.880	7.6	22.2
12 7	6 25.38	+14 39.0	1.408	2.348	9.4	18.0	12 7	6 20.98	+25 34.1	2.941	3.882	4.9	22.0
12 17	6 14.62	+14 16.9	1.398	2.369	5.1	17.8	12 17	6 12.86	+25 44.6	2.906	3.883	2.0	21.8
12 27	6 3.29	+14 4.1	1.416	2.390	4.3	17.8	12 27	6 4.27	+25 52.2	2.904	3.884	1.3	21.7
1 6	5 52.84	+14 0.9	1.462	2.411	7.9	18.1	1 6	5 55.95	+25 56.3	2.932	3.885	4.2	22.0
1 16	5 44.48	+14 6.7	1.534	2.431	12.0	18.4	1 16	5 48.59	+25 57.4	2.991	3.885	6.9	22.1
1 26	5 39.00	+14 20.5	1.629	2.451	15.6	18.7	1 26	5 42.76	+25 56.3	3.077	3.884	9.4	22.3
337462	2001 <i>RR</i> ₁₂₁		12 23.4	125°36	0°5/23.4	18	83356	2001 <i>RF</i> ₁₅₃		12 23.4	210°09	4°5/23.8	18
11 17	6 39.88	+21 25.4	1.823	2.622	15.3	21.4	11 17	6 33.82	+9 52.3	2.124	2.905	14.0	19.8
11 27	6 33.85	+21 33.7	1.753	2.636	11.8	21.2	11 27	6 28.95	+9 40.1	2.037	2.902	11.2	19.7
12 7	6 25.14	+21 44.6	1.706	2.650	7.6	21.0	12 7	6 21.92	+9 38.1	1.974	2.899	8.1	19.5
12 17	6 14.56	+21 56.2	1.686	2.664	3.1	20.8	12 17	6 13.32	+9 47.3	1.937	2.896	5.3	19.3
12 27	6 3.28	+22 6.9	1.695	2.676	1.8	20.7	12 27	6 4.02	+10 8.3	1.929	2.893	4.7	19.2
1 6	5 52.64	+22 15.8	1.734	2.689	6.3	21.0	1 6	5 55.04	+10 40.0	1.950	2.889	7.0	19.4
1 16	5 43.77	+22 23.4	1.801	2.700	10.3	21.3	1 16	5 47.31	+11 20.6	1.998	2.885	10.2	19.6
1 26	5 37.52	+22 30.6	1.891	2.711	13.8	21.5	1 26	5 41.60	+12 7.7	2.072	2.881	13.2	19.7
18384	1992 <i>ES</i> ₂₈		12 23.4	137°20	1°2/23.3	18	225373	1999 <i>LJ</i> ₁₅		12 23.4	300°89	5°8/24.8	18
11 17	6 35.18	+26 24.9	2.146	2.946	13.3	18.8	11 17	6 37.27	+6 1.5	1.542	2.328	18.2	20.1
11 27	6 30.12	+26 39.8	2.064	2.947	10.2	18.6	11 27	6 32.90	+6 34.4	1.435	2.300	15.0	19.8
12 7	6 22.71	+26 53.6	2.005	2.948	6.7	18.4	12 7	6 25.30	+7 31.0	1.347	2.272	11.1	19.5
12 17	6 13.61	+27 3.8	1.973	2.950	2.9	18.1	12 17	6 14.97	+8 53.6	1.284	2.244	7.3	19.2
12 27	6 3.80	+27 8.8	1.971	2.951	2.0	18.1	12 27	6 2.98	+10 40.9	1.248	2.216	6.0	19.1
1 6	5 54.42	+27 8.0	1.998	2.952	5.7	18.3	1 6	5 50.84	+12 47.1	1.241	2.188	9.1	19.2
1 16	5 46.49	+27 2.3	2.054	2.953	9.3	18.5	1 16	5 40.19	+15 3.9	1.260	2.161	13.8	19.4
1 26	5 40.79	+26 53.8	2.134	2.954	12.5	18.7	1 26	5 32.41	+17 23.0	1.304	2.133	18.3	19.6
59256	1999 <i>CG</i> ₂₇		12 23.4	254°70	4°2/23.2	18	446111	2013 <i>DJ</i> ₁₁		12 23.4	325°94	8°2/23.3	17
11 17	6 39.97	+32 12.6	1.659	2.464	16.3	19.2	11 17	6 40.94	+41 40.5	1.640	2.430	17.1	21.1
11 27	6 34.80	+32 51.7	1.576	2.459	12.9	19.0	11 27	6 36.06	+42 37.3	1.561	2.423	14.2	20.9
12 7	6 26.28	+33 26.1	1.515	2.453	8.9	18.8	12 7	6 27.35	+43 21.7	1.502	2.416	11.1	20.7
12 17	6 15.17	+33 50.0	1.478	2.447	5.2	18.5	12 17	6 15.68	+43 45.2	1.468	2.409	8.7	20.5
12 27	6 2.88	+33 58.7	1.469	2.441	4.6	18.5	12 27	6 2.70	+43 41.6	1.458	2.403	8.4	20.5
1 6	5 51.12	+33 50.9	1.488	2.434	8.0	18.7	1 6	5 50.42	+43 9.9	1.475	2.397	10.4	20.6
1 16	5 41.44	+33 29.2	1.533	2.428	12.1	18.9	1 16	5 40.64	+42 15.1	1.516	2.392	13.5	20.8
1 26	5 34.98	+32 58.8	1.600	2.422	15.8	19.1	1 26	5 34.56	+41 5.5	1.579	2.387	16.7	21.0
81815	2000 <i>KP</i> ₃₁		12 23.4	140°84	0°7/23.3	18	487607	2015 <i>ML</i> ₃₃		12 23.4	159°83	1°7/23.7	18
11 17	6 36.77	+24 33.7	2.350	3.141	12.5	20.0	11 17	6 39.62	+16 8.3	1.892	2.682	15.2	21.6
11 27	6 31.05	+24 55.7	2.272	3.151	9.6	19.8	11 27	6 33.70	+16 39.4	1.811	2.688	11.8	21.4
12 7	6 23.17	+25 18.0	2.218	3.161	6.2	19.6	12 7	6 25.15	+17 19.2	1.754	2.693	7.8	21.1
12 17	6 13.76	+25 38.3	2.193	3.170	2.5	19.4	12 17	6 14.66	+18 5.7	1.723	2.698	3.6	20.9
12 27	6 3.75	+25 54.7	2.198	3.178	1.6	19.3	12 27	6 3.30	+18 56.3	1.723	2.703	2.3	20.8
1 6	5 54.16	+26 6.4	2.234	3.187	5.2	19.6	1 6	5 52.36	+19 47.9	1.753	2.706	6.4	21.1
1 16	5 45.91	+26 13.8	2.299	3.194	8.6	19.8	1 16	5 43.00	+20 38.5	1.812	2.709	10.4	21.3
1 26	5 39.73	+26 17.9	2.389	3.201	11.5	20.0	1 26	5 36.12	+21 26.9	1.895	2.712	13.9	21.6
490008	2008 <i>SU</i> ₂₃₁		12 23.4	107°08	3°8/23.4	18	132955	2002 <i>TD</i> ₈₅		12 23.4	96°37	3°5/23.0	18
11 17	6 32.32	+11 58.7	2.455	3.236	12.3	21.9	11 17	6 41.08	+30 50.1	1.997	2.789	14.4	19.8
11 27	6 27.37	+11 27.1	2.381	3.247	9.7	21.8	11 27	6 34.81	+31 46.9	1.935	2.810	11.2	19.7
12 7	6 20.66	+11 2.1	2.331	3.258	6.9	21.6	12 7	6 25.81	+32 40.2	1.896	2.831	7.6	19.5
12 17	6 12.72	+10 44.9	2.308	3.269	4.4	21.5	12 17	6 14.88	+33 24.6	1.884	2.852	4.4	19.3
12 27	6 4.35	+10 36.6	2.315	3.279	4.0	21.5	12 27	6 3.22	+33 56.0	1.902	2.872	3.9	19.3
1 6	5 56.37	+10 37.2	2.351	3.289	6.1	21.6	1 6	5 52.19	+34 13.3	1.949	2.892	6.8	19.6
1 16	5 49.52	+10 46.2	2.416	3.299	8.8	21.8	1 16	5 42.98	+34 17.7	2.025	2.911	10.1	19.8
1 26	5 44.40	+11 2.4	2.506	3.309	11.4	22.0	1 26	5 36.43	+34 12.8	2.124	2.930	13.0	20.0
187477	2006 <i>BW</i> ₂₃₂		12 23.4	58°49	0°7/23.3	18	480828	1999 <i>TS</i> ₁₉₁		12 23.4	32°59	1°7/23.5	

EPHEMERIDES

12 23.4

12 23.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
363947	2005 <i>TE</i> ₁₅₉		12 23.4 197°62	1°0/23.4 17			45450	2000 <i>AC</i> ₁₉₁		12 23.4 54°55	5°6/22.9 18		
11 17	6 36.20	+26 38.5	2.338	3.131	12.5	22.1	11 17	6 36.61	+13 38.4	1.589	2.393	17.0	17.5
11 27	6 30.74	+26 43.7	2.249	3.129	9.7	21.9	11 27	6 31.45	+12 18.2	1.527	2.406	13.4	17.3
12 7	6 23.07	+26 47.1	2.184	3.126	6.3	21.7	12 7	6 23.65	+11 4.2	1.487	2.420	9.6	17.1
12 17	6 13.80	+26 46.7	2.147	3.124	2.7	21.4	12 17	6 14.04	+10 0.5	1.472	2.434	6.3	17.0
12 27	6 3.86	+26 41.2	2.140	3.121	1.8	21.3	12 27	6 3.86	+9 11.1	1.485	2.448	5.9	17.0
1 6	5 54.30	+26 30.6	2.164	3.117	5.3	21.6	1 6	5 54.42	+8 38.0	1.525	2.463	8.8	17.2
1 16	5 46.09	+26 16.1	2.216	3.113	8.8	21.8	1 16	5 46.83	+8 21.8	1.591	2.478	12.3	17.4
1 26	5 39.98	+25 59.7	2.294	3.109	11.9	22.0	1 26	5 41.85	+8 20.6	1.679	2.493	15.6	17.7
276833	2004 <i>QW</i> ₁₄		12 23.4 122°17	2°7/23.4 18			422629	2014 <i>UK</i> ₁₁₆		12 23.4 299°64	2°9/22.6 18		
11 17	6 38.51	+16 56.7	1.872	2.666	15.1	21.5	11 17	6 41.57	+22 35.5	1.828	2.624	15.4	19.1
11 27	6 32.64	+16 34.1	1.802	2.681	11.7	21.3	11 27	6 35.46	+20 56.3	1.718	2.599	12.1	18.8
12 7	6 24.30	+16 16.3	1.756	2.695	7.8	21.1	12 7	6 26.45	+19 7.8	1.633	2.574	8.1	18.5
12 17	6 14.27	+16 3.7	1.736	2.709	4.0	20.9	12 17	6 15.27	+17 12.6	1.576	2.550	4.0	18.2
12 27	6 3.64	+15 56.5	1.746	2.722	3.1	20.9	12 27	6 3.11	+15 15.7	1.550	2.525	3.6	18.1
1 6	5 53.62	+15 55.0	1.785	2.734	6.6	21.1	1 6	5 51.36	+13 23.8	1.555	2.500	7.8	18.3
1 16	5 45.26	+15 59.1	1.851	2.746	10.4	21.4	1 16	5 41.34	+11 43.5	1.589	2.476	12.3	18.5
1 26	5 39.32	+16 8.4	1.942	2.758	13.7	21.6	1 26	5 34.02	+10 19.3	1.647	2.452	16.2	18.7
66545	1999 <i>RJ</i> ₁₂₀		12 23.4 67°58	1°2/23.4 18	R	R	69245	Persiceto		12 23.4 224°80	7°8/23.1 18	R	R
11 17	6 38.10	+20 17.4	1.575	2.386	16.8	19.4	11 17	6 45.58	+44 48.2	2.170	2.926	14.5	19.1
11 27	6 32.72	+20 13.7	1.517	2.406	12.9	19.2	11 27	6 38.98	+45 45.9	2.082	2.917	12.2	19.0
12 7	6 24.51	+20 13.7	1.481	2.426	8.3	19.0	12 7	6 28.96	+46 31.5	2.016	2.908	9.9	18.8
12 17	6 14.37	+20 16.1	1.470	2.447	3.5	18.7	12 17	6 16.33	+46 57.4	1.975	2.898	8.2	18.7
12 27	6 3.61	+20 20.0	1.487	2.468	2.2	18.7	12 27	6 2.50	+46 58.1	1.961	2.887	8.0	18.6
1 6	5 53.64	+20 24.9	1.532	2.488	6.8	19.0	1 6	5 49.20	+46 32.5	1.975	2.876	9.5	18.7
1 16	5 45.66	+20 31.1	1.604	2.509	11.1	19.3	1 16	5 38.02	+45 44.2	2.015	2.865	11.9	18.8
1 26	5 40.47	+20 39.0	1.699	2.529	14.7	19.6	1 26	5 30.08	+44 40.5	2.079	2.853	14.4	19.0
240162	2002 <i>PT</i> ₃₁		12 23.4 114°99	6°0/24.1 18			347580	2001 <i>CM</i> ₉		12 23.4 333°99	3°7/23.9 18		
11 17	6 35.48	+5 38.6	2.068	2.835	14.8	21.2	11 17	6 31.42	+13 48.1	1.330	2.156	18.5	19.5
11 27	6 30.07	+5 16.5	2.000	2.851	12.0	21.0	11 27	6 28.58	+13 56.3	1.245	2.139	14.7	19.2
12 7	6 22.54	+5 7.5	1.955	2.865	9.1	20.9	12 7	6 22.51	+14 18.1	1.179	2.124	10.1	18.9
12 17	6 13.56	+5 13.7	1.935	2.880	6.7	20.7	12 17	6 13.86	+14 54.5	1.136	2.109	5.5	18.6
12 27	6 4.05	+5 35.6	1.944	2.894	6.1	20.7	12 27	6 3.86	+15 44.0	1.118	2.096	4.2	18.5
1 6	5 55.01	+6 11.9	1.981	2.907	7.9	20.9	1 6	5 54.16	+16 43.3	1.126	2.083	8.5	18.7
1 16	5 47.35	+7 0.0	2.046	2.920	10.6	21.1	1 16	5 46.33	+17 48.5	1.158	2.072	13.5	19.0
1 26	5 41.75	+7 56.5	2.135	2.933	13.2	21.3	1 26	5 41.60	+18 55.8	1.212	2.062	18.1	19.2
88902	2001 <i>SF</i> ₃₄₉		12 23.4 169°47	0°7/23.4 18			511642	2015 <i>BJ</i> ₁₉₅		12 23.4 202°28	0°6/23.4 18		
11 17	6 36.22	+25 49.8	1.987	2.789	14.1	20.2	11 17	6 40.77	+20 25.7	1.702	2.503	16.2	21.8
11 27	6 31.08	+25 47.2	1.904	2.789	10.9	20.0	11 27	6 35.07	+20 45.1	1.616	2.499	12.5	21.6
12 7	6 23.43	+25 42.9	1.845	2.790	7.1	19.8	12 7	6 26.33	+21 9.5	1.551	2.495	8.2	21.3
12 17	6 13.97	+25 35.0	1.812	2.790	2.9	19.5	12 17	6 15.27	+21 36.7	1.513	2.490	3.4	21.0
12 27	6 3.80	+25 22.6	1.809	2.790	1.7	19.4	12 27	6 3.11	+22 3.9	1.503	2.485	1.9	20.9
1 6	5 54.11	+25 5.9	1.835	2.790	5.9	19.7	1 6	5 51.35	+22 29.1	1.523	2.478	6.9	21.2
1 16	5 46.00	+24 46.7	1.889	2.790	9.8	19.9	1 16	5 41.38	+22 51.9	1.570	2.471	11.5	21.5
1 26	5 40.30	+24 27.2	1.967	2.790	13.2	20.2	1 26	5 34.26	+23 12.8	1.641	2.464	15.5	21.7
78442	2002 <i>RN</i> ₁₄		12 23.4 352°27	2°2/23.3 18			14389	1990 <i>QR</i> ₅		12 23.4 144°82	0°5/23.4 18		
11 17	6 34.38	+29 20.2	2.249	3.047	12.8	19.5	11 17	6 32.86	+21 8.6	2.841	3.628	10.7	18.8
11 27	6 29.52	+29 41.7	2.165	3.046	9.9	19.3	11 27	6 27.71	+21 12.1	2.759	3.636	8.2	18.7
12 7	6 22.37	+30 0.2	2.104	3.045	6.6	19.1	12 7	6 20.89	+21 17.1	2.702	3.644	5.3	18.5
12 17	6 13.56	+30 13.1	2.071	3.045	3.3	18.9	12 17	6 12.92	+21 22.8	2.674	3.651	2.2	18.3
12 27	6 4.04	+30 18.2	2.068	3.044	2.6	18.9	12 27	6 4.49	+21 28.5	2.677	3.658	1.3	18.2
1 6	5 54.92	+30 14.9	2.093	3.044	5.7	19.1	1 6	5 56.37	+21 33.9	2.711	3.664	4.4	18.5
1 16	5 47.19	+30 4.6	2.147	3.044	9.1	19.3	1 16	5 49.28	+21 39.1	2.775	3.671	7.3	18.7
1 26	5 41.65	+29 49.4	2.226	3.044	12.1	19.5	1 26	5 43.79	+21 44.4	2.865	3.676	9.9	18.9
416461	2003 <i>WT</i> ₄₁		12 23.4 32°88	4°7/22.3 17			140045	2001 <i>SZ</i> ₈₀		12 23.4 153°70	3°8/23.6 18		
11 17	6 37.18	+16 6.2	1.932	2.726	14.8	19.8	11 17	6 34.35	+12 59.1	2.025	2.816	14.3	20.3
11 27	6 31.44	+14 21.5	1.860	2.735	11.6	19.6	11 27	6 29.44	+12 38.6	1.945	2.818	11.3	20.1
12 7	6 23.42	+12 38.0	1.812	2.745	8.1	19.5	12 7	6 22.30	+12 25.8	1.887	2.820	7.9	19.9
12 17	6 13.90	+10 59.8	1.793	2.756	5.3	19.3	12 17	6 13.55	+12 21.7	1.857	2.822	4.7	19.7
12 27	6 3.91	+9 32.1	1.804	2.766	5.1	19.3	12 27	6 4.14	+12 26.9	1.854	2.824	4.1	19.7
1 6	5 54.57	+8 18.7	1.844	2.778	7.8	19.5	1 6	5 55.14	+12 41.0	1.881	2.826	6.8	19.8
1 16	5 46.82	+7 22.1	1.912	2.790	11.1	19.7	1 16	5 47.50	+13 2.9	1.936	2.827	10.2	20.0
1 26	5 41.35	+6 42.3	2.004	2.802	14.0	19.9	1 26	5 41.99	+13 31.1	2.014	2.829	13.3	20.3
338988	2004 <i>FU</i> ₁₄₂		12 23.4 236°57	1°3/23.3 18			60206	1999 <i>VZ</i> ₆₈		12 23.4 127°53	1°9/23.4 18		
11 17	6 39.84	+24 54.7	1.852	2.651	15.1	21.5	11 17	6 40.39	+19 24.7	1.686	2.486	16.3	20.4
11 27	6 34.34	+25 26.5	1.755	2.639	11.7	21.2	11 27	6 34.40	+19 4.6	1.616	2.499	12.6	20.2
12 7	6 25.88	+26 0.1	1.682	2.626	7.7	21.0	12 7	6 25.62	+18 47.6	1.568	2.511	8.3	20.0
12 17	6 15.09	+26 32.0	1.635	2.612	3.3	20.7	12 17	6 14.87	+18 33.4	1.547	2.523	3.7	19.7
12 27	6 3.13	+26 58.7	1.618	2.598	2.2	20.6	12 27	6 3.43	+18 22.3	1.555	2.534	2.6	19.7
1 6	5 51.42	+27 17.9	1.630	2.583	6.7	20.8	1 6	5 52.68	+18 14.6	1.591	2.544	6.9	19.9
1 16	5 41.35	+27 29.9	1.669	2.568	11.1	21.1	1 16	5 43.83	+18 10.8	1.655	2.554	11.1	20.2
1 26	5 34.02	+27 36.5	1.733	2.552	14.9	21.3	1 26	5 37.71	+18 11.6	1.742	2.564	14.8	20.5
517266	2014 <i>FP</i> ₁		12 23.4 248°07	0°2/23.4 18			381379	2008 <i>FH</i> ₁₀₁		12 23.4 254°91	2°5/23.6 18		

EPHEMERIDES

12 23.4

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
264078	2009 SZ ₂₁₅		12 23.4 201 ^o 16	3 ^o 3/23.5	18		81332	2000 GJ ₃₂		12 23.4 188 ^o 17	0 ^o 6/23.4	18	
11 17	6 38.60	+15 21.7	1.825	2.618	15.5	21.4	11 17	6 36.03	+21 25.0	2.328	3.119	12.6	20.7
11 27	6 33.05	+15 2.4	1.738	2.615	12.2	21.2	11 27	6 30.57	+21 25.5	2.240	3.119	9.7	20.5
12 7	6 24.82	+14 49.2	1.674	2.611	8.3	21.0	12 7	6 22.97	+21 27.6	2.175	3.118	6.3	20.2
12 17	6 14.62	+14 43.1	1.636	2.606	4.5	20.7	12 17	6 13.83	+21 30.4	2.139	3.116	2.6	20.0
12 27	6 3.53	+14 44.4	1.627	2.601	3.7	20.7	12 27	6 4.03	+21 32.8	2.133	3.114	1.5	19.9
1 6	5 52.84	+14 52.7	1.647	2.595	7.2	20.9	1 6	5 54.59	+21 34.7	2.158	3.112	5.3	20.2
1 16	5 43.75	+15 7.6	1.694	2.589	11.2	21.1	1 16	5 46.42	+21 36.4	2.212	3.109	8.8	20.4
1 26	5 37.17	+15 28.4	1.765	2.581	14.8	21.3	1 26	5 40.26	+21 38.5	2.291	3.106	11.9	20.6
519809	2013 HK ₆₈		12 23.4 55 ^o 38	0 ^o 7/23.4	18		39685	1996 PO ₈		12 23.4 174 ^o 04	4 ^o 9/23.8	18	
11 17	6 35.51	+22 17.4	1.843	2.650	14.9	21.3	11 17	6 36.24	+10 15.1	1.863	2.648	15.5	19.2
11 27	6 30.57	+22 2.9	1.769	2.656	11.4	21.1	11 27	6 31.09	+9 58.1	1.782	2.650	12.4	19.0
12 7	6 23.12	+21 49.1	1.718	2.663	7.4	20.8	12 7	6 23.48	+9 51.9	1.724	2.652	8.9	18.8
12 17	6 13.88	+21 35.3	1.693	2.670	3.0	20.6	12 17	6 14.07	+9 58.2	1.692	2.653	5.8	18.6
12 27	6 3.98	+21 21.3	1.697	2.678	1.8	20.5	12 27	6 3.90	+10 17.3	1.688	2.653	5.1	18.6
1 6	5 54.65	+21 7.6	1.729	2.685	6.1	20.8	1 6	5 54.13	+10 48.1	1.713	2.654	7.7	18.7
1 16	5 46.96	+20 55.4	1.789	2.693	10.2	21.1	1 16	5 45.86	+11 28.6	1.764	2.653	11.2	18.9
1 26	5 41.73	+20 45.8	1.873	2.700	13.6	21.3	1 26	5 39.92	+12 16.1	1.840	2.653	14.4	19.2
192579	1998 XN ₆₂		12 23.4 14 ^o 17	14 ^o 2/26.7	17		268552	2006 BG ₈		12 23.4 16 ^o 89	2 ^o 3/23.6	17	
11 17	6 50.52	+59 4.6	1.631	2.354	19.8	18.4	11 17	6 32.29	+16 57.5	1.746	2.556	15.4	20.0
11 27	6 44.70	+60 6.2	1.578	2.361	17.9	18.3	11 27	6 28.25	+16 54.5	1.673	2.561	11.9	19.8
12 7	6 33.35	+60 40.5	1.541	2.369	16.1	18.2	12 7	6 21.71	+16 57.9	1.622	2.566	8.0	19.6
12 17	6 18.06	+60 36.3	1.524	2.379	14.7	18.1	12 17	6 13.37	+17 7.6	1.597	2.572	3.9	19.3
12 27	6 1.75	+59 47.0	1.528	2.390	14.2	18.1	12 27	6 4.31	+17 23.0	1.600	2.578	2.8	19.3
1 6	5 47.53	+58 15.0	1.553	2.402	14.8	18.2	1 6	5 55.74	+17 43.0	1.630	2.585	6.6	19.5
1 16	5 37.55	+56 10.1	1.600	2.415	16.1	18.3	1 16	5 48.74	+18 6.5	1.687	2.592	10.6	19.8
1 26	5 32.70	+53 45.8	1.668	2.429	17.8	18.5	1 26	5 44.14	+18 32.7	1.768	2.600	14.1	20.0
484498	2008 DE ₄₄		12 23.4 237 ^o 82	3 ^o 9/23.6	17		4923	Clarke		12 23.4 141 ^o 40	4 ^o 2/23.5	18	
11 17	6 33.73	+10 59.7	2.457	3.233	12.5	22.7	11 17	6 41.12	+13 34.7	1.683	2.474	16.7	18.3
11 27	6 28.72	+10 43.8	2.357	3.219	10.0	22.5	11 27	6 34.92	+13 6.6	1.613	2.487	13.2	18.1
12 7	6 21.76	+10 35.5	2.280	3.205	7.2	22.3	12 7	6 25.95	+12 46.6	1.565	2.499	9.1	17.9
12 17	6 13.35	+10 36.0	2.230	3.191	4.6	22.2	12 17	6 15.03	+12 36.2	1.543	2.510	5.3	17.7
12 27	6 4.25	+10 45.9	2.211	3.176	4.1	22.1	12 27	6 3.40	+12 35.9	1.550	2.521	4.6	17.7
1 6	5 55.34	+11 4.8	2.221	3.160	6.3	22.2	1 6	5 52.41	+12 45.5	1.585	2.530	7.8	17.9
1 16	5 47.47	+11 31.8	2.260	3.144	9.3	22.4	1 16	5 43.27	+13 3.9	1.648	2.539	11.7	18.1
1 26	5 41.37	+12 5.3	2.325	3.128	12.1	22.5	1 26	5 36.82	+13 29.6	1.733	2.547	15.2	18.4
489502	2007 LF ₂₂		12 23.4 226 ^o 66	5 ^o 5/23.0	18		213994	2004 BZ ₄₇		12 23.4 288 ^o 88	3 ^o 9/24.0	18	
11 17	6 32.22	+5 10.3	2.938	3.689	11.2	22.6	11 17	6 34.63	+11 25.7	1.824	2.618	15.5	20.4
11 27	6 27.19	+4 19.6	2.840	3.677	9.3	22.4	11 27	6 30.10	+11 36.7	1.734	2.609	12.3	20.2
12 7	6 20.57	+3 36.7	2.766	3.664	7.3	22.3	12 7	6 23.00	+12 0.0	1.666	2.600	8.7	20.0
12 17	6 12.83	+3 4.1	2.719	3.651	5.8	22.1	12 17	6 13.95	+12 36.0	1.624	2.591	5.1	19.7
12 27	6 4.56	+2 43.7	2.702	3.637	5.6	22.1	12 27	6 3.95	+13 23.6	1.609	2.582	4.2	19.7
1 6	5 56.49	+2 36.4	2.715	3.623	6.9	22.2	1 6	5 54.21	+14 20.4	1.624	2.573	7.2	19.8
1 16	5 49.27	+2 41.9	2.756	3.608	9.0	22.3	1 16	5 45.89	+15 23.1	1.666	2.564	11.1	20.0
1 26	5 43.47	+2 58.6	2.822	3.592	11.1	22.4	1 26	5 39.96	+16 28.7	1.731	2.555	14.7	20.3
287686	2003 QK ₁₈		12 23.4 119 ^o 51	4 ^o 1/23.5	18		109153	2001 QH ₆₀		12 23.4 187 ^o 19	5 ^o 1/23.4	18	
11 17	6 41.59	+34 5.7	1.862	2.655	15.3	20.8	11 17	6 38.47	+41 27.9	2.847	3.607	11.3	20.0
11 27	6 35.49	+34 28.5	1.790	2.664	12.0	20.6	11 27	6 32.45	+42 1.4	2.762	3.606	9.3	19.8
12 7	6 26.41	+34 43.6	1.741	2.674	8.4	20.4	12 7	6 24.19	+42 25.9	2.701	3.606	7.2	19.7
12 17	6 15.22	+34 46.4	1.717	2.683	5.0	20.2	12 17	6 14.32	+42 37.2	2.667	3.605	5.5	19.6
12 27	6 3.25	+34 33.9	1.722	2.692	4.4	20.2	12 27	6 3.80	+42 32.9	2.662	3.603	5.3	19.5
1 6	5 52.03	+34 6.8	1.756	2.700	7.2	20.4	1 6	5 53.70	+42 12.6	2.687	3.602	6.6	19.6
1 16	5 42.82	+33 28.4	1.817	2.708	10.8	20.6	1 16	5 45.00	+41 38.6	2.739	3.600	8.7	19.8
1 26	5 36.53	+32 44.0	1.902	2.716	14.0	20.9	1 26	5 38.44	+40 54.7	2.817	3.598	10.8	19.9
25351	1999 RK ₁₇₃		12 23.4 79 ^o 09	3 ^o 7/23.8	18		331089	2009 WR ₁₆₇		12 23.4 181 ^o 36	1 ^o 9/23.2	17	
11 17	6 40.41	+13 35.9	1.400	2.206	18.8	18.1	11 17	6 35.44	+27 31.4	2.466	3.257	12.0	21.6
11 27	6 34.70	+13 38.3	1.347	2.229	14.6	17.9	11 27	6 30.18	+28 8.6	2.379	3.257	9.3	21.5
12 7	6 25.92	+13 52.5	1.313	2.252	9.9	17.7	12 7	6 22.77	+28 45.2	2.317	3.258	6.1	21.3
12 17	6 15.00	+14 17.9	1.305	2.276	5.3	17.5	12 17	6 13.78	+29 18.0	2.283	3.258	2.9	21.1
12 27	6 3.41	+14 52.9	1.323	2.298	4.1	17.5	12 27	6 4.09	+29 44.5	2.280	3.257	2.3	21.0
1 6	5 52.70	+15 34.7	1.369	2.321	7.9	17.8	1 6	5 54.69	+30 3.3	2.307	3.257	5.3	21.2
1 16	5 44.17	+16 20.6	1.441	2.343	12.2	18.1	1 16	5 46.54	+30 14.6	2.363	3.256	8.5	21.4
1 26	5 38.68	+17 8.3	1.536	2.365	16.0	18.4	1 26	5 40.38	+30 19.9	2.445	3.255	11.4	21.6
115515	2003 UU ₃₆		12 23.4 339 ^o 02	1 ^o 1/23.3	18		164088	2003 WQ ₁₂₅		12 23.4 62 ^o 03	2 ^o 0/23.3	18	
11 17	6 38.05	+23 52.9	1.693	2.501	15.9	19.5	11 17	6 39.41	+26 30.4	1.595	2.406	16.6	19.0
11 27	6 32.78	+23 4.4	1.611	2.499	12.3	19.3	11 27	6 33.94	+27 8.5	1.539	2.428	12.7	18.8
12 7	6 24.67	+22 12.4	1.552	2.498	8.0	19.0	12 7	6 25.45	+27 45.8	1.505	2.450	8.3	18.6
12 17	6 14.54	+21 17.3	1.519	2.496	3.3	18.7	12 17	6 14.85	+28 17.9	1.497	2.473	3.7	18.4
12 27	6 3.64	+20 21.1	1.514	2.495	2.2	18.6	12 27	6 3.55	+28 41.3	1.516	2.495	2.7	18.4
1 6	5 53.38	+19 26.5	1.539	2.494	6.8	18.9	1 6	5 53.06	+28 54.7	1.564	2.518	6.9	18.7
1 16	5 44.98	+18 37.2	1.590	2.493	11.3	19.2	1 16	5 44.67	+28 59.4	1.638	2.540	11.0	19.0
1 26	5 39.32	+17 55.7	1.665	2.492	15.1	19.4	1 26	5 39.23	+28 58.3	1.735	2.563	14.6	19.3
119121	2001 OD ₈₈		12 23.4 143<										

EPHEMERIDES

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
140004	2001 <i>SN</i> ₄₂		12 23.4 353°79		3°1/23.2 17		228475	2001 <i>SM</i> ₄₉		12 23.4 88°95		1°1/23.4 18	
11 17	6 35.83	+29 32.9	1.674	2.487	15.9	19.6	11 17	6 41.96	+24 41.0	1.624	2.428	16.7	20.8
11 27	6 31.48	+30 7.2	1.596	2.485	12.4	19.3	11 27	6 35.75	+25 7.4	1.567	2.452	12.7	20.6
12 7	6 24.10	+30 38.8	1.539	2.483	8.3	19.1	12 7	6 26.56	+25 34.2	1.531	2.476	8.2	20.4
12 17	6 14.42	+31 3.2	1.508	2.481	4.3	18.8	12 17	6 15.30	+25 57.8	1.522	2.499	3.4	20.1
12 27	6 3.73	+31 16.8	1.504	2.480	3.6	18.8	12 27	6 3.37	+26 15.1	1.542	2.522	2.1	20.1
1 6	5 53.57	+31 18.3	1.528	2.479	7.3	19.0	1 6	5 52.28	+26 25.3	1.590	2.545	6.7	20.4
1 16	5 45.30	+31 9.3	1.577	2.479	11.4	19.3	1 16	5 43.31	+26 29.4	1.665	2.567	10.9	20.7
1 26	5 39.94	+30 53.4	1.650	2.479	15.1	19.5	1 26	5 37.29	+26 29.9	1.764	2.588	14.5	21.0
179697	2002 <i>RR</i> ₂₄		12 23.4 152°78		1°6/23.5 18		449782	2014 <i>OU</i> ₁₅₅		12 23.4 136°52		3°0/23.3 17	
11 17	6 40.17	+19 16.1	1.835	2.630	15.4	21.9	11 17	6 37.69	+30 42.5	1.980	2.779	14.3	21.8
11 27	6 34.15	+19 10.8	1.758	2.639	11.9	21.7	11 27	6 32.42	+31 8.7	1.900	2.780	11.1	21.6
12 7	6 25.46	+19 9.2	1.705	2.647	7.8	21.4	12 7	6 24.45	+31 30.9	1.843	2.782	7.5	21.4
12 17	6 14.87	+19 10.5	1.678	2.654	3.4	21.2	12 17	6 14.51	+31 45.1	1.812	2.783	4.0	21.2
12 27	6 3.52	+19 13.9	1.681	2.660	2.3	21.1	12 27	6 3.75	+31 48.7	1.810	2.784	3.4	21.1
1 6	5 52.74	+19 19.0	1.713	2.666	6.5	21.4	1 6	5 53.49	+31 41.0	1.837	2.786	6.5	21.3
1 16	5 43.67	+19 25.9	1.773	2.671	10.6	21.6	1 16	5 44.92	+31 24.1	1.891	2.787	10.2	21.6
1 26	5 37.17	+19 35.0	1.858	2.676	14.1	21.9	1 26	5 38.93	+31 1.2	1.970	2.788	13.4	21.8
503342	2016 <i>BL</i> ₃₉		12 23.4 79°55		16°3/27.2 17		398962	2013 <i>EP</i> ₁₂		12 23.4 227°30		0°3/23.4 17	
11 17	7 5.66	+55 31.1	1.069	1.831	26.0	21.1	11 17	6 36.14	+22 2.5	2.200	2.995	13.2	22.0
11 27	6 58.14	+56 39.0	1.022	1.843	23.0	21.0	11 27	6 30.91	+22 10.6	2.105	2.986	10.2	21.7
12 7	6 42.87	+57 13.7	0.988	1.856	19.9	20.8	12 7	6 23.36	+22 20.7	2.034	2.978	6.6	21.5
12 17	6 21.96	+56 55.8	0.972	1.868	17.3	20.7	12 17	6 14.07	+22 31.1	1.991	2.969	2.7	21.2
12 27	5 59.84	+55 33.8	0.975	1.880	16.3	20.7	12 27	6 3.99	+22 40.5	1.978	2.959	1.5	21.1
1 6	5 41.23	+53 14.1	1.000	1.892	17.3	20.8	1 6	5 54.19	+22 48.3	1.995	2.949	5.6	21.4
1 16	5 28.90	+50 16.9	1.046	1.904	19.6	21.0	1 16	5 45.71	+22 54.6	2.040	2.939	9.4	21.6
1 26	5 23.51	+47 5.8	1.111	1.916	22.4	21.2	1 26	5 39.38	+23 0.2	2.111	2.929	12.7	21.8
416179	2002 <i>SC</i> ₁₅		12 23.4 113°08		0°2/23.4 17		34123	Uedayukika		12 23.4 160°77		1°9/23.6 18	
11 17	6 35.73	+25 28.1	2.721	3.507	11.2	21.3	11 17	6 34.81	+16 25.1	2.561	3.343	11.9	18.9
11 27	6 29.87	+25 7.2	2.646	3.523	8.5	21.1	11 27	6 29.37	+16 27.3	2.477	3.350	9.2	18.7
12 7	6 22.25	+24 44.1	2.597	3.539	5.5	21.0	12 7	6 22.08	+16 34.3	2.418	3.355	6.1	18.5
12 17	6 13.47	+24 18.3	2.577	3.554	2.2	20.8	12 17	6 13.48	+16 45.6	2.388	3.360	3.0	18.3
12 27	6 4.34	+23 49.9	2.588	3.570	1.2	20.7	12 27	6 4.35	+17 0.7	2.388	3.365	2.3	18.3
1 6	5 55.68	+23 19.9	2.631	3.584	4.5	21.0	1 6	5 55.54	+17 18.8	2.419	3.369	5.1	18.5
1 16	5 48.23	+22 49.9	2.704	3.599	7.5	21.2	1 16	5 47.84	+17 39.3	2.480	3.372	8.2	18.7
1 26	5 42.55	+22 21.4	2.803	3.613	10.1	21.4	1 26	5 41.89	+18 1.7	2.566	3.375	10.9	18.9
260382	2004 <i>VF</i> ₃₈		12 23.4 63°59		1°9/23.3 18		96954	1999 <i>TU</i> ₁₇₆		12 23.4 266°48		13°4/19.6 18	
11 17	6 35.82	+27 18.2	2.044	2.846	13.8	20.0	11 17	6 54.30	+54 58.2	1.957	2.675	17.1	18.8
11 27	6 30.74	+27 49.6	1.973	2.857	10.6	19.8	11 27	6 48.25	+57 20.5	1.880	2.661	15.5	18.6
12 7	6 23.22	+28 19.7	1.926	2.869	7.0	19.6	12 7	6 36.74	+59 28.3	1.823	2.646	14.1	18.5
12 17	6 13.97	+28 45.4	1.905	2.880	3.2	19.4	12 17	6 20.15	+61 7.8	1.788	2.631	13.4	18.4
12 27	6 4.04	+29 4.0	1.914	2.892	2.4	19.4	12 27	6 0.38	+62 6.9	1.777	2.616	13.7	18.4
1 6	5 54.62	+29 14.5	1.952	2.904	5.9	19.6	1 6	5 40.57	+62 20.8	1.789	2.601	14.8	18.5
1 16	5 46.75	+29 17.7	2.018	2.916	9.5	19.9	1 16	5 24.02	+61 53.7	1.822	2.585	16.4	18.5
1 26	5 41.24	+29 15.7	2.108	2.928	12.6	20.1	1 26	5 12.99	+60 56.5	1.873	2.569	18.2	18.7
320796	2008 <i>EU</i> ₁₅₃		12 23.4 269°71		2°5/23.5 18		448895	2011 <i>UZ</i> ₂₉₃		12 23.4 133°61		2°3/23.1 18	
11 17	6 34.51	+16 9.6	2.181	2.973	13.4	21.6	11 17	6 39.36	+27 41.8	2.142	2.934	13.6	21.8
11 27	6 29.72	+16 2.4	2.075	2.952	10.5	21.4	11 27	6 33.44	+28 30.3	2.066	2.944	10.5	21.6
12 7	6 22.64	+16 0.7	1.992	2.930	7.1	21.2	12 7	6 25.01	+29 18.2	2.015	2.954	6.9	21.4
12 17	6 13.81	+16 4.6	1.936	2.909	3.7	20.9	12 17	6 14.74	+30 1.1	1.991	2.964	3.4	21.2
12 27	6 4.08	+16 13.9	1.910	2.886	2.9	20.8	12 27	6 3.69	+30 35.6	1.997	2.973	2.8	21.2
1 6	5 54.51	+16 28.3	1.913	2.864	6.2	21.0	1 6	5 53.08	+30 59.8	2.034	2.982	6.0	21.4
1 16	5 46.11	+16 47.1	1.945	2.841	9.9	21.2	1 16	5 44.02	+31 14.3	2.099	2.991	9.5	21.6
1 26	5 39.76	+17 9.8	2.001	2.817	13.3	21.3	1 26	5 37.35	+31 21.0	2.189	2.999	12.6	21.8
98900	2001 <i>BF</i> ₅₀		12 23.4 344°46		2°5/23.7 18		137208	1999 <i>MC</i> ₂		12 23.4 105°84		2°0/23.6 18	
11 17	6 38.89	+31 43.9	1.497	2.311	17.4	18.2	11 17	6 42.79	+16 51.8	1.716	2.508	16.4	20.3
11 27	6 34.04	+31 17.4	1.417	2.306	13.6	18.0	11 27	6 36.07	+17 4.7	1.657	2.535	12.7	20.1
12 7	6 25.80	+30 40.7	1.357	2.301	9.1	17.7	12 7	6 26.63	+17 24.6	1.621	2.561	8.3	19.9
12 17	6 15.09	+29 51.1	1.322	2.297	4.4	17.4	12 17	6 15.33	+17 49.7	1.611	2.586	3.8	19.7
12 27	6 3.43	+28 48.4	1.314	2.293	3.0	17.3	12 27	6 3.43	+18 18.3	1.631	2.610	2.6	19.6
1 6	5 52.58	+27 36.0	1.334	2.290	7.5	17.6	1 6	5 52.30	+18 48.3	1.681	2.634	6.6	19.9
1 16	5 44.00	+26 19.9	1.380	2.288	12.2	17.8	1 16	5 43.10	+19 18.7	1.759	2.657	10.7	20.2
1 26	5 38.70	+25 6.5	1.448	2.286	16.3	18.1	1 26	5 36.62	+19 49.1	1.861	2.678	14.1	20.5
420913	2013 <i>MM</i> ₅		12 23.4 117°44		0°3/23.4 18		495817	2017 <i>FB</i> ₁₀₉		12 23.4 206°73		2°0/23.7 18	
11 17	6 35.20	+25 20.1	2.799	3.584	10.9	21.7	11 17	6 32.56	+15 4.4	2.863	3.642	10.8	21.8
11 27	6 29.45	+25 9.5	2.725	3.601	8.3	21.5	11 27	6 27.57	+15 11.1	2.768	3.638	8.4	21.6
12 7	6 21.99	+24 57.2	2.676	3.618	5.3	21.4	12 7	6 20.92	+15 23.1	2.698	3.632	5.7	21.4
12 17	6 13.38	+24 42.5	2.657	3.634	2.1	21.2	12 17	6 13.05	+15 40.2	2.656	3.627	3.0	21.2
12 27	6 4.41	+24 25.0	2.668	3.650	1.2	21.1	12 27	6 4.65	+16 1.8	2.645	3.621	2.3	21.2
1 6	5 55.87	+24 5.4	2.712	3.665	4.4	21.4	1 6	5 56.44	+16 27.0	2.666	3.614	4.8	21.3
1 16	5 48.50	+23 44.7	2.785	3.680	7.3	21.6	1 16	5 49.16	+16 55.0	2.716	3.607	7.6	21.5
1 26	5 42.84	+23 24.4	2.885	3.694	9.8	21.8	1 26	5 43.39	+17 25.0	2.793	3.600	10.2	21.7
106012	2000 <i>SF</i> ₂₉₂		12 23.4 358°53		3°6/23.5 18		208805	2002 <i>QY</i> ₉₅		12 23.4 79°82			

EPHEMERIDES

12 23.4

12 23.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
458625	2011 <i>FB</i> ₁₃₂	12 23.4 243°36		0°6/23.5 18			369871	2012 <i>KV</i> ₃₀	12 23.4 196°20		1°7/23.5 18		
11 17	6 34.40	+26 9.5	2.765	3.553	10.9	21.1	11 17	6 32.75	+17 41.1	2.650	3.438	11.4	21.4
11 27	6 29.15	+26 2.5	2.663	3.540	8.4	21.0	11 27	6 27.83	+17 34.8	2.560	3.436	8.8	21.2
12 7	6 22.01	+25 53.3	2.585	3.526	5.5	20.7	12 7	6 21.14	+17 32.0	2.495	3.434	5.9	21.0
12 17	6 13.51	+25 40.9	2.536	3.512	2.3	20.5	12 17	6 13.17	+17 32.5	2.458	3.431	2.8	20.8
12 27	6 4.41	+25 24.7	2.517	3.498	1.4	20.4	12 27	6 4.67	+17 36.1	2.451	3.429	2.1	20.8
1 6	5 55.57	+25 5.0	2.530	3.484	4.6	20.6	1 6	5 56.44	+17 42.5	2.475	3.426	4.9	21.0
1 16	5 47.80	+24 43.0	2.573	3.469	7.8	20.8	1 16	5 49.24	+17 51.5	2.528	3.423	8.0	21.1
1 26	5 41.76	+24 20.4	2.642	3.454	10.6	21.0	1 26	5 43.70	+18 3.1	2.607	3.419	10.7	21.3
450603	2006 <i>SH</i> ₉₄	12 23.4 68°94		3°1/23.2 18			112026	2002 <i>HZ</i> ₄	12 23.4 129°49		1°9/23.2 18		
11 17	6 37.71	+30 9.2	1.884	2.686	14.8	21.4	11 17	6 44.15	+26 6.2	1.818	2.611	15.6	19.9
11 27	6 32.60	+30 45.3	1.806	2.688	11.5	21.2	11 27	6 37.39	+26 51.7	1.750	2.629	12.0	19.7
12 7	6 24.67	+31 18.4	1.750	2.690	7.8	21.0	12 7	6 27.68	+27 37.3	1.705	2.646	7.9	19.5
12 17	6 14.67	+31 44.1	1.721	2.693	4.2	20.8	12 17	6 15.85	+28 18.3	1.687	2.662	3.5	19.3
12 27	6 3.78	+31 58.8	1.721	2.696	3.5	20.8	12 27	6 3.20	+28 50.6	1.699	2.677	2.6	19.3
1 6	5 53.39	+32 1.6	1.749	2.698	6.8	21.0	1 6	5 51.19	+29 12.3	1.741	2.692	6.6	19.6
1 16	5 44.75	+31 53.8	1.805	2.701	10.5	21.2	1 16	5 41.13	+29 24.3	1.811	2.705	10.6	19.8
1 26	5 38.81	+31 38.9	1.884	2.703	13.9	21.4	1 26	5 33.94	+29 29.4	1.906	2.718	14.0	20.1
305942	2009 <i>HE</i> ₁₃	12 23.4 251°48		2°3/23.3 18			330795	2008 <i>UQ</i> ₂₀₂	12 23.4 140°65		2°8/23.4 18		
11 17	6 37.52	+28 16.9	1.925	2.727	14.5	21.1	11 17	6 32.70	+15 20.0	2.507	3.293	12.0	20.5
11 27	6 32.45	+28 46.7	1.837	2.721	11.3	20.9	11 27	6 27.80	+14 50.1	2.425	3.297	9.3	20.3
12 7	6 24.61	+29 15.1	1.772	2.714	7.5	20.7	12 7	6 21.10	+14 24.3	2.367	3.301	6.4	20.2
12 17	6 14.67	+29 38.1	1.734	2.708	3.7	20.4	12 17	6 13.15	+14 3.5	2.337	3.305	3.6	20.0
12 27	6 3.76	+29 52.6	1.724	2.702	2.9	20.3	12 27	6 4.71	+13 48.6	2.337	3.308	3.1	20.0
1 6	5 53.23	+29 57.4	1.743	2.695	6.6	20.6	1 6	5 56.63	+13 40.1	2.367	3.312	5.6	20.1
1 16	5 44.34	+29 53.5	1.790	2.688	10.5	20.8	1 16	5 49.65	+13 37.9	2.426	3.315	8.5	20.3
1 26	5 38.06	+29 43.7	1.861	2.681	14.0	21.0	1 26	5 44.40	+13 41.7	2.510	3.318	11.2	20.5
250661	2005 <i>NU</i> ₂₁	12 23.4 88°36		2°2/23.6 18			313401	2002 <i>PQ</i> ₇₀	12 23.4 125°49		1°5/23.4 17		
11 17	6 36.24	+16 41.2	2.037	2.830	14.1	20.9	11 17	6 33.92	+19 38.5	2.619	3.406	11.5	20.6
11 27	6 30.76	+16 35.6	1.973	2.851	10.9	20.7	11 27	6 28.62	+19 13.3	2.540	3.416	8.8	20.4
12 7	6 23.09	+16 35.4	1.932	2.871	7.2	20.5	12 7	6 21.56	+18 49.6	2.486	3.426	5.8	20.2
12 17	6 13.92	+16 40.4	1.918	2.891	3.6	20.4	12 17	6 13.31	+18 27.5	2.461	3.436	2.7	20.0
12 27	6 4.25	+16 50.0	1.934	2.911	2.7	20.3	12 27	6 4.64	+18 7.5	2.466	3.445	1.9	20.0
1 6	5 55.15	+17 3.6	1.979	2.931	5.9	20.6	1 6	5 56.36	+17 50.1	2.503	3.454	4.9	20.2
1 16	5 47.52	+17 20.4	2.053	2.950	9.4	20.8	1 16	5 49.21	+17 36.2	2.569	3.463	7.9	20.4
1 26	5 42.06	+17 40.0	2.151	2.969	12.5	21.1	1 26	5 43.79	+17 26.1	2.661	3.471	10.6	20.6
40589	1999 <i>RP</i> ₁₄₁	12 23.4 114°59		1°7/23.4 18			372220	2008 <i>UJ</i> ₃₂	12 23.4 26°10		5°6/23.3 17		
11 17	6 39.26	+27 41.0	1.796	2.599	15.4	19.7	11 17	6 31.45	+7 19.7	2.400	3.171	12.9	20.9
11 27	6 33.69	+27 50.1	1.722	2.606	11.8	19.5	11 27	6 26.92	+6 26.6	2.318	3.171	10.5	20.7
12 7	6 25.30	+27 56.5	1.670	2.614	7.8	19.3	12 7	6 20.57	+5 42.2	2.260	3.172	8.0	20.5
12 17	6 14.89	+27 57.0	1.645	2.621	3.5	19.0	12 17	6 12.95	+5 9.2	2.229	3.172	6.1	20.4
12 27	6 3.71	+27 49.9	1.649	2.628	2.4	18.9	12 27	6 4.82	+4 49.7	2.226	3.172	5.8	20.4
1 6	5 53.16	+27 35.2	1.681	2.635	6.5	19.2	1 6	5 57.01	+4 44.3	2.252	3.172	7.4	20.5
1 16	5 44.48	+27 15.1	1.741	2.642	10.6	19.5	1 16	5 50.28	+4 52.5	2.305	3.173	9.8	20.7
1 26	5 38.54	+26 52.7	1.825	2.649	14.1	19.7	1 26	5 45.27	+5 12.4	2.382	3.173	12.2	20.8
40909	1999 <i>TR</i> ₁₅₂	12 23.4 217°02		6°2/23.5 18			323053	2002 <i>RS</i> ₁₉₃	12 23.4 134°96		1°3/23.5 17		
11 17	6 35.09	+6 47.0	2.133	2.903	14.3	19.5	11 17	6 33.13	+18 17.6	2.856	3.639	10.7	22.1
11 27	6 29.99	+6 1.5	2.044	2.896	11.7	19.3	11 27	6 27.91	+18 15.6	2.777	3.651	8.3	21.9
12 7	6 22.72	+5 26.2	1.977	2.889	9.0	19.1	12 7	6 21.07	+18 16.5	2.724	3.662	5.4	21.7
12 17	6 13.85	+5 4.1	1.937	2.881	6.7	18.9	12 17	6 13.12	+18 19.9	2.699	3.673	2.5	21.6
12 27	6 4.26	+4 57.4	1.925	2.873	6.4	18.9	12 27	6 4.75	+18 25.6	2.705	3.684	1.8	21.5
1 6	5 54.97	+5 6.5	1.941	2.864	8.3	19.0	1 6	5 56.70	+18 33.0	2.743	3.694	4.5	21.7
1 16	5 46.92	+5 30.3	1.984	2.855	11.1	19.2	1 16	5 49.66	+18 42.2	2.810	3.704	7.3	21.9
1 26	5 40.88	+6 6.3	2.052	2.845	13.9	19.3	1 26	5 44.18	+18 52.9	2.904	3.713	9.8	22.1
292448	2006 <i>SN</i> ₃₅₇	12 23.4 51°64		2°3/23.2 18			483043	2015 <i>HV</i> ₆₁	12 23.4 165°93		1°7/23.5 18		
11 17	6 37.38	+26 53.4	1.701	2.511	15.8	20.0	11 17	6 39.31	+18 28.9	1.925	2.718	14.8	22.0
11 27	6 32.45	+27 37.3	1.634	2.522	12.2	19.8	11 27	6 33.46	+18 26.9	1.844	2.723	11.5	21.8
12 7	6 24.61	+28 21.0	1.589	2.534	8.0	19.6	12 7	6 25.06	+18 29.3	1.787	2.727	7.6	21.6
12 17	6 14.65	+29 0.0	1.570	2.545	3.8	19.4	12 17	6 14.81	+18 35.4	1.756	2.731	3.4	21.3
12 27	6 3.85	+29 30.4	1.579	2.558	2.9	19.3	12 27	6 3.80	+18 44.3	1.755	2.734	2.3	21.3
1 6	5 53.64	+29 50.5	1.617	2.570	6.8	19.6	1 6	5 53.25	+18 55.3	1.784	2.737	6.3	21.5
1 16	5 45.33	+30 0.8	1.681	2.582	10.9	19.9	1 16	5 44.29	+19 8.2	1.841	2.739	10.3	21.8
1 26	5 39.82	+30 4.0	1.769	2.595	14.4	20.1	1 26	5 37.76	+19 23.0	1.923	2.740	13.7	22.0
41512	2000 <i>QV</i> ₁₇₉	12 23.4 23°36		1°1/23.4 17			477226	2009 <i>PB</i> ₂₁	12 23.4 123°86		0°3/23.4 16		
11 17	6 35.40	+25 23.2	1.870	2.678	14.6	19.7	11 17	6 42.68	+24 2.9	1.783	2.579	15.7	22.6
11 27	6 30.70	+25 40.4	1.792	2.680	11.3	19.5	11 27	6 36.12	+24 7.1	1.716	2.597	12.1	22.4
12 7	6 23.38	+25 57.6	1.737	2.682	7.3	19.3	12 7	6 26.76	+24 11.2	1.671	2.615	7.8	22.2
12 17	6 14.15	+26 12.0	1.707	2.685	3.1	19.0	12 17	6 15.45	+24 13.0	1.654	2.631	3.1	21.9
12 27	6 4.12	+26 21.7	1.707	2.687	2.0	18.9	12 27	6 3.48	+24 10.8	1.666	2.647	1.7	21.8
1 6	5 54.57	+26 25.8	1.735	2.690	6.2	19.2	1 6	5 52.26	+24 4.6	1.708	2.662	6.3	22.2
1 16	5 46.65	+26 25.0	1.790	2.694	10.2	19.5	1 16	5 42.96	+23 55.9	1.777	2.677	10.5	22.5
1 26	5 41.24	+26 21.4	1.869	2.697	13.6	19.7	1 26	5 36.43	+23 46.9	1.871	2.690	14.0	22.7
369168	2008 <i>SC</i> ₁₁₅	12 23.4 60°93		4°4/23.8 18			65346	2002 <i>NC</i> ₂₀	12 23.4 110°33		2°8/23.7 18		
11 17	6 31.92	+10 18.6	2.223										

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12 23.4

12 23.5

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
52922	1998 SS ₁₁₃		12 23.4	51°10	4°0/23.8	18	327647	2006 QT ₂₁		12 23.4	80°57	0°3/23.5	18
11 17	6 38.91	+14 38.8	1.199	2.020	20.4	19.1	11 17	6 43.82	+22 32.9	1.397	2.207	18.6	21.0
11 27	6 33.91	+14 26.8	1.155	2.046	15.8	18.9	11 27	6 37.39	+22 35.0	1.346	2.235	14.2	20.8
12 7	6 25.57	+14 26.3	1.130	2.073	10.7	18.7	12 7	6 27.70	+22 38.8	1.317	2.263	9.1	20.6
12 17	6 14.99	+14 37.6	1.128	2.100	5.7	18.5	12 17	6 15.83	+22 42.0	1.313	2.291	3.6	20.3
12 27	6 3.78	+14 59.4	1.152	2.128	4.4	18.5	12 27	6 3.36	+22 42.8	1.337	2.318	2.0	20.3
1 6	5 53.66	+15 29.5	1.201	2.156	8.5	18.8	1 6	5 51.98	+22 41.2	1.388	2.345	7.2	20.7
1 16	5 45.96	+16 5.5	1.276	2.184	13.0	19.2	1 16	5 43.04	+22 38.6	1.466	2.371	11.9	21.0
1 26	5 41.54	+16 44.9	1.371	2.212	16.9	19.5	1 26	5 37.35	+22 36.6	1.567	2.397	15.7	21.3
115904	2003 WC		12 23.4	359°80	1°4/23.4	17	402066	2003 TY ₁₂		12 23.4	61°91	5°9/23.6	18
11 17	6 34.41	+25 5.1	1.384	2.213	17.7	19.7	11 17	6 42.64	+39 42.1	2.075	2.851	14.5	20.5
11 27	6 30.85	+25 31.3	1.311	2.210	13.7	19.4	11 27	6 36.03	+40 28.1	2.027	2.884	11.6	20.3
12 7	6 23.95	+25 58.9	1.259	2.209	9.0	19.1	12 7	6 26.63	+41 2.8	2.002	2.916	8.7	20.2
12 17	6 14.51	+26 24.3	1.230	2.208	3.8	18.8	12 17	6 15.38	+41 21.0	2.003	2.949	6.4	20.1
12 27	6 3.95	+26 44.0	1.228	2.209	2.5	18.7	12 27	6 3.61	+41 19.7	2.032	2.981	6.0	20.2
1 6	5 53.98	+26 56.1	1.252	2.210	7.6	19.1	1 6	5 52.74	+40 59.5	2.090	3.013	7.7	20.3
1 16	5 46.13	+27 1.4	1.300	2.212	12.5	19.3	1 16	5 43.92	+40 24.3	2.174	3.045	10.2	20.6
1 26	5 41.50	+27 2.2	1.370	2.215	16.7	19.6	1 26	5 37.91	+39 39.7	2.283	3.077	12.6	20.8
142398	2002 SP ₁₉		12 23.4	148°78	5°4/23.7	18	451837	2013 JV ₃₂		12 23.5	305°64	4°8/23.9	17
11 17	6 34.83	+ 8 29.1	2.093	2.869	14.4	20.5	11 17	6 33.04	+10 23.8	1.803	2.598	15.6	21.3
11 27	6 29.73	+ 7 54.9	2.016	2.875	11.6	20.3	11 27	6 29.01	+10 16.7	1.708	2.581	12.6	21.1
12 7	6 22.49	+ 7 30.8	1.961	2.880	8.6	20.1	12 7	6 22.43	+10 21.6	1.634	2.565	9.1	20.8
12 17	6 13.75	+ 7 19.0	1.933	2.885	6.1	20.0	12 17	6 13.88	+10 40.1	1.586	2.549	5.8	20.6
12 27	6 4.40	+ 7 20.9	1.934	2.890	5.6	20.0	12 27	6 4.33	+11 12.4	1.565	2.533	5.0	20.5
1 6	5 55.46	+ 7 36.2	1.963	2.894	7.6	20.1	1 6	5 54.99	+11 57.1	1.572	2.517	7.8	20.6
1 16	5 47.83	+ 8 3.4	2.019	2.898	10.5	20.3	1 16	5 47.02	+12 51.5	1.605	2.502	11.6	20.8
1 26	5 42.24	+ 8 40.1	2.099	2.901	13.3	20.5	1 26	5 41.40	+13 52.5	1.662	2.486	15.2	21.0
145116	2005 GT ₁₂₆		12 23.4	69°13	5°5/23.3	18	491435	2012 FB ₂₅		12 23.5	279°56	3°5/23.6	17
11 17	6 38.29	+13 38.6	1.351	2.163	19.0	19.5	11 17	6 33.51	+12 59.8	2.223	3.010	13.3	22.2
11 27	6 33.30	+12 40.5	1.290	2.175	15.0	19.3	11 27	6 28.95	+12 48.2	2.116	2.987	10.6	22.0
12 7	6 25.19	+11 50.9	1.250	2.187	10.6	19.1	12 7	6 22.19	+12 43.9	2.031	2.963	7.4	21.7
12 17	6 14.88	+11 13.4	1.234	2.199	6.6	18.9	12 17	6 13.74	+12 47.9	1.973	2.939	4.4	21.5
12 27	6 3.81	+10 50.6	1.243	2.212	5.9	18.9	12 27	6 4.41	+13 0.6	1.944	2.915	3.8	21.4
1 6	5 53.57	+10 43.4	1.279	2.224	9.2	19.1	1 6	5 55.21	+13 21.5	1.945	2.891	6.5	21.5
1 16	5 45.48	+10 51.0	1.340	2.237	13.4	19.4	1 16	5 47.11	+13 49.7	1.974	2.866	10.0	21.7
1 26	5 40.43	+11 11.0	1.422	2.250	17.1	19.6	1 26	5 40.96	+14 23.7	2.028	2.841	13.3	21.9
305952	2009 HU ₃₀		12 23.4	110°29	3°3/23.6	18	366503	2002 PN ₅₂		12 23.5	118°49	3°3/23.5	17
11 17	6 35.16	+14 47.0	1.916	2.712	14.8	21.1	11 17	6 37.90	+35 1.7	2.729	3.505	11.4	21.2
11 27	6 30.23	+14 29.7	1.840	2.718	11.6	20.9	11 27	6 31.80	+35 19.0	2.657	3.520	8.9	21.1
12 7	6 22.93	+14 19.3	1.786	2.723	7.9	20.7	12 7	6 23.69	+35 29.6	2.609	3.536	6.3	20.9
12 17	6 13.95	+14 16.3	1.759	2.728	4.4	20.5	12 17	6 14.20	+35 30.9	2.589	3.550	3.9	20.8
12 27	6 4.29	+14 21.1	1.760	2.733	3.6	20.5	12 27	6 4.24	+35 21.1	2.599	3.565	3.5	20.8
1 6	5 55.10	+14 33.1	1.790	2.738	6.7	20.7	1 6	5 54.80	+35 0.7	2.640	3.579	5.4	20.9
1 16	5 47.38	+14 51.6	1.847	2.743	10.3	20.9	1 16	5 46.70	+34 31.5	2.710	3.592	8.0	21.1
1 26	5 41.92	+15 15.4	1.928	2.748	13.6	21.1	1 26	5 40.61	+33 56.8	2.806	3.606	10.4	21.3
60720	2000 GC ₇₂		12 23.4	235°26	0°9/23.4	18	366326	2013 EW ₃₉		12 23.5	235°95	1°8/23.2	17
11 17	6 39.46	+24 41.0	1.878	2.677	14.9	20.6	11 17	6 37.70	+26 44.6	2.209	3.003	13.2	21.1
11 27	6 34.02	+25 0.4	1.782	2.666	11.6	20.4	11 27	6 32.33	+27 23.7	2.113	2.992	10.2	20.9
12 7	6 25.71	+25 20.7	1.710	2.653	7.6	20.1	12 7	6 24.46	+28 3.2	2.040	2.981	6.8	20.6
12 17	6 15.18	+25 39.0	1.664	2.641	3.2	19.8	12 17	6 14.67	+28 39.6	1.995	2.970	3.2	20.4
12 27	6 3.56	+25 52.8	1.647	2.628	1.9	19.7	12 27	6 3.92	+29 9.8	1.980	2.958	2.4	20.3
1 6	5 52.24	+26 0.6	1.659	2.614	6.5	20.0	1 6	5 53.40	+29 31.7	1.995	2.946	5.9	20.5
1 16	5 42.54	+26 3.1	1.700	2.600	10.8	20.2	1 16	5 44.23	+29 45.5	2.039	2.934	9.6	20.7
1 26	5 35.49	+26 2.2	1.764	2.585	14.6	20.4	1 26	5 37.34	+29 52.7	2.108	2.921	12.9	20.9
451989	2014 NR ₆₂		12 23.4	118°96	1°2/23.4	18	488466	1998 QO ₅₆		12 23.5	139°86	4°4/23.4	17
11 17	6 37.77	+26 14.2	2.330	3.120	12.7	22.0	11 17	6 38.70	+37 8.7	2.465	3.241	12.4	21.9
11 27	6 31.89	+26 37.2	2.258	3.136	9.7	21.8	11 27	6 32.82	+37 39.9	2.387	3.248	9.9	21.7
12 7	6 23.84	+26 59.2	2.210	3.152	6.3	21.6	12 7	6 24.57	+38 3.4	2.332	3.254	7.2	21.5
12 17	6 14.27	+27 17.7	2.191	3.167	2.7	21.4	12 17	6 14.62	+38 15.3	2.305	3.259	5.0	21.4
12 27	6 4.14	+27 30.8	2.202	3.182	1.9	21.4	12 27	6 4.01	+38 12.8	2.307	3.265	4.6	21.4
1 6	5 54.48	+27 37.7	2.244	3.196	5.3	21.6	1 6	5 53.90	+37 55.8	2.338	3.270	6.5	21.5
1 16	5 46.24	+27 39.1	2.315	3.210	8.6	21.8	1 16	5 45.30	+37 26.7	2.398	3.275	9.1	21.7
1 26	5 40.11	+27 36.9	2.411	3.223	11.5	22.1	1 26	5 39.01	+36 49.3	2.483	3.280	11.6	21.9
26517	2000 CG ₆₂		12 23.4	161°04	7°3/23.9	18	249209	2008 DY ₅₉		12 23.5	256°33	5°6/23.3	17
11 17	6 36.62	+ 5 40.4	1.759	2.535	16.7	18.6	11 17	6 33.53	+ 9 15.4	2.075	2.857	14.3	20.3
11 27	6 31.49	+ 4 56.6	1.684	2.539	13.7	18.4	11 27	6 28.89	+ 8 28.0	1.987	2.849	11.6	20.1
12 7	6 23.83	+ 4 26.6	1.630	2.542	10.5	18.3	12 7	6 22.07	+ 7 49.0	1.921	2.842	8.6	19.9
12 17	6 14.34	+ 4 14.2	1.601	2.545	7.9	18.1	12 17	6 13.65	+ 7 21.4	1.882	2.834	6.2	19.7
12 27	6 4.09	+ 4 21.3	1.599	2.548	7.4	18.1	12 27	6 4.52	+ 7 7.3	1.871	2.826	5.8	19.7
1 6	5 54.30	+ 4 47.6	1.625	2.550	9.4	18.2	1 6	5 55.71	+ 7 7.4	1.888	2.818	7.9	19.8
1 16	5 46.08	+ 5 30.5	1.676	2.551	12.5	18.4	1 16	5 48.15	+ 7 21.1	1.931	2.810	10.9	20.0
1 26	5 40.27	+ 6 25.9	1.750	2.553	15.5	18.6	1 26	5 42.63	+ 7 46.3	1.999	2.802	13.8	20.1
190453	2000 AQ ₂₃₅		12 23.4	305°27	0°5/23.5	18	445678	2011 UG ₁₀₅		12 23.5	91°06	2°3/23.4	15
11 17	6 33.23	+21 44.9	2.098										

EPHEMERIDES

12 23.5

12 23.5

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
365993	2012 <i>BU</i> ₈₉		12 23.5 266°99		1.6/23.6 17		301734	2010 <i>GL</i> ₁₄₁		12 23.5 122°40		4.4/23.9 18	
11 17	6 34.36	+18 15.8	2.041	2.840	13.9	21.4	11 17	6 36.75	+10 10.0	2.107	2.883	14.3	21.1
11 27	6 29.67	+18 18.6	1.954	2.836	10.8	21.2	11 27	6 31.12	+9 56.0	2.037	2.899	11.3	21.0
12 7	6 22.65	+18 26.3	1.889	2.831	7.1	21.0	12 7	6 23.35	+9 51.9	1.990	2.914	8.1	20.8
12 17	6 13.91	+18 38.2	1.851	2.827	3.3	20.7	12 17	6 14.12	+9 58.7	1.970	2.929	5.2	20.6
12 27	6 4.39	+18 53.3	1.843	2.822	2.2	20.6	12 27	6 4.34	+10 16.3	1.979	2.943	4.6	20.6
1 6	5 55.21	+19 10.9	1.864	2.818	5.9	20.9	1 6	5 55.04	+10 43.9	2.018	2.957	6.8	20.8
1 16	5 47.38	+19 30.1	1.912	2.813	9.8	21.1	1 16	5 47.12	+11 19.5	2.085	2.970	9.9	21.0
1 26	5 41.73	+19 50.9	1.985	2.809	13.1	21.3	1 26	5 41.28	+12 0.9	2.177	2.983	12.7	21.2
109903	2001 <i>SL</i> ₂₁		12 23.5 200°03		2.9/23.6 18		454002	2012 <i>DU</i> ₅		12 23.5 123°08		2.5/23.3 17	
11 17	6 34.44	+15 13.4	2.009	2.804	14.2	19.8	11 17	6 36.98	+29 37.7	2.194	2.988	13.2	21.4
11 27	6 29.68	+15 3.4	1.926	2.804	11.1	19.6	11 27	6 31.64	+30 8.6	2.115	2.994	10.2	21.2
12 7	6 22.61	+15 0.0	1.866	2.803	7.6	19.3	12 7	6 23.88	+30 36.7	2.060	2.999	6.9	21.0
12 17	6 13.88	+15 3.5	1.832	2.803	4.1	19.1	12 17	6 14.39	+30 58.6	2.032	3.004	3.6	20.8
12 27	6 4.43	+15 13.8	1.827	2.802	3.2	19.1	12 27	6 4.17	+31 11.6	2.034	3.010	2.9	20.7
1 6	5 55.35	+15 30.2	1.851	2.801	6.4	19.3	1 6	5 54.40	+31 14.9	2.066	3.014	5.9	20.9
1 16	5 47.64	+15 51.9	1.903	2.800	10.0	19.5	1 16	5 46.11	+31 9.7	2.125	3.019	9.3	21.2
1 26	5 42.10	+16 17.8	1.979	2.799	13.3	19.7	1 26	5 40.12	+30 58.5	2.210	3.024	12.3	21.4
455484	2003 <i>UA</i> ₂₈₅		12 23.5 76°92		4.5/23.6 18		233785	2008 <i>UA</i> ₄		12 23.5 242°40		5.5/23.4 18	
11 17	6 32.99	+10 48.9	2.234	3.016	13.4	21.3	11 17	6 41.89	+36 33.1	1.815	2.606	15.7	20.9
11 27	6 28.13	+10 12.5	2.165	3.031	10.6	21.2	11 27	6 36.31	+37 12.2	1.729	2.599	12.6	20.7
12 7	6 21.37	+9 44.1	2.120	3.045	7.7	21.0	12 7	6 27.39	+37 43.1	1.664	2.591	9.2	20.5
12 17	6 13.30	+9 25.5	2.102	3.060	5.1	20.9	12 17	6 15.93	+37 59.5	1.625	2.583	6.3	20.3
12 27	6 4.78	+9 17.7	2.113	3.074	4.7	20.9	12 27	6 3.31	+37 56.7	1.614	2.575	5.8	20.3
1 6	5 56.70	+9 20.8	2.152	3.088	6.7	21.0	1 6	5 51.23	+37 33.8	1.630	2.567	8.3	20.4
1 16	5 49.87	+9 33.9	2.220	3.102	9.5	21.2	1 16	5 41.22	+36 54.4	1.673	2.559	11.9	20.6
1 26	5 44.90	+9 55.4	2.311	3.117	12.1	21.4	1 26	5 34.38	+36 4.6	1.739	2.550	15.2	20.8
70819	1999 <i>VM</i> ₇₇		12 23.5 201°16		3.7/23.1 18		486302	2013 <i>CQ</i> ₈₀		12 23.5 51°43		6.9/22.2 18	
11 17	6 37.18	+16 11.1	1.962	2.755	14.6	19.3	11 17	6 43.09	+34 0.0	1.501	2.306	17.8	20.2
11 27	6 31.75	+15 14.8	1.877	2.753	11.5	19.1	11 27	6 37.73	+35 56.4	1.444	2.322	14.1	20.0
12 7	6 23.93	+14 21.2	1.815	2.751	7.9	18.9	12 7	6 28.56	+37 48.3	1.409	2.339	10.3	19.9
12 17	6 14.39	+13 32.3	1.781	2.749	4.6	18.6	12 17	6 16.45	+39 25.3	1.400	2.356	7.4	19.7
12 27	6 4.16	+12 50.7	1.775	2.746	4.1	18.6	12 27	6 3.03	+40 37.9	1.418	2.374	7.3	19.8
1 6	5 54.39	+12 18.3	1.799	2.743	7.1	18.8	1 6	5 50.31	+41 22.3	1.463	2.391	10.0	20.0
1 16	5 46.11	+11 56.2	1.851	2.740	10.7	19.0	1 16	5 40.07	+41 40.9	1.533	2.409	13.4	20.2
1 26	5 40.11	+11 44.5	1.926	2.736	14.0	19.2	1 26	5 33.53	+41 40.0	1.624	2.427	16.5	20.5
438537	2007 <i>TZ</i> ₁₆₅		12 23.5 38°26		7.6/22.7 17		398987	2013 <i>ES</i> ₉₂		12 23.5 218°83		0.4/23.5 18	
11 17	6 42.57	+34 52.2	1.262	2.079	19.8	19.6	11 17	6 38.18	+25 58.5	2.218	3.010	13.2	21.1
11 27	6 37.59	+36 44.0	1.222	2.106	15.7	19.4	11 27	6 32.44	+25 39.9	2.124	3.003	10.2	20.9
12 7	6 28.47	+38 27.1	1.203	2.134	11.5	19.3	12 7	6 24.36	+25 18.2	2.054	2.997	6.6	20.6
12 17	6 16.33	+39 50.2	1.207	2.163	8.2	19.2	12 17	6 14.58	+24 52.3	2.012	2.989	2.7	20.4
12 27	6 3.13	+40 44.6	1.236	2.193	7.9	19.2	12 27	6 4.09	+24 22.0	2.000	2.982	1.5	20.3
1 6	5 51.11	+41 8.7	1.291	2.223	10.6	19.5	1 6	5 54.02	+23 48.4	2.019	2.973	5.5	20.5
1 16	5 42.04	+41 6.9	1.370	2.254	14.1	19.7	1 16	5 45.38	+23 13.7	2.067	2.965	9.3	20.8
1 26	5 37.01	+40 47.3	1.469	2.285	17.3	20.0	1 26	5 38.97	+22 40.2	2.140	2.956	12.6	21.0
68818	2002 <i>GH</i> ₇₁		12 23.5 59°62		11.4/25.0 18		487009	2014 <i>OO</i>		12 23.5 218°00		1.2/23.5 17	
11 17	6 35.62	- 2 53.0	1.539	2.297	19.4	18.1	11 17	6 38.05	+27 7.4	2.243	3.035	13.0	22.0
11 27	6 30.74	- 4 4.5	1.492	2.319	16.7	18.0	11 27	6 32.41	+27 10.8	2.149	3.027	10.1	21.8
12 7	6 23.29	- 4 52.3	1.465	2.341	13.9	17.9	12 7	6 24.39	+27 11.9	2.078	3.020	6.6	21.6
12 17	6 14.10	- 5 10.6	1.459	2.364	11.9	17.8	12 17	6 14.61	+27 8.4	2.036	3.012	2.9	21.3
12 27	6 4.37	- 4 56.8	1.477	2.387	11.4	17.8	12 27	6 4.06	+26 59.0	2.023	3.003	1.9	21.2
1 6	5 55.38	- 4 12.7	1.519	2.410	12.5	18.0	1 6	5 53.87	+26 43.6	2.041	2.994	5.6	21.5
1 16	5 48.19	- 3 3.8	1.585	2.433	14.6	18.1	1 16	5 45.09	+26 23.9	2.087	2.984	9.3	21.7
1 26	5 43.54	- 1 37.4	1.671	2.455	16.9	18.4	1 26	5 38.54	+26 2.2	2.159	2.974	12.5	21.9
273245	2006 <i>KS</i> ₄₇		12 23.5 269°55		3.7/23.4 18		144994	2005 <i>EO</i> ₁₈₆		12 23.5 200°36		1.8/23.3 18	
11 17	6 32.16	+13 7.9	2.370	3.156	12.6	20.7	11 17	6 41.83	+26 4.3	1.813	2.610	15.4	20.5
11 27	6 27.55	+12 30.5	2.284	3.154	9.9	20.5	11 27	6 35.94	+26 39.3	1.725	2.607	12.0	20.3
12 7	6 21.05	+11 58.4	2.221	3.152	7.0	20.3	12 7	6 27.02	+27 15.0	1.661	2.603	7.9	20.0
12 17	6 13.21	+11 33.4	2.186	3.149	4.4	20.2	12 17	6 15.77	+27 47.2	1.623	2.599	3.5	19.8
12 27	6 4.81	+11 16.7	2.181	3.147	4.0	20.1	12 27	6 3.41	+28 12.1	1.614	2.593	2.5	19.7
1 6	5 56.74	+11 9.0	2.205	3.145	6.3	20.3	1 6	5 51.44	+28 27.8	1.635	2.587	6.8	19.9
1 16	5 49.79	+11 10.0	2.256	3.143	9.2	20.5	1 16	5 41.26	+28 34.8	1.683	2.580	11.1	20.2
1 26	5 44.63	+11 19.1	2.333	3.141	11.9	20.6	1 26	5 33.93	+28 35.8	1.755	2.573	14.8	20.4
141590	2002 <i>HS</i> ₆		12 23.5 135°99		2.0/23.5 18		232800	2004 <i>RH</i> ₁₉₆		12 23.5 152°01		2.6/23.6 18	
11 17	6 43.88	+28 25.4	1.752	2.548	16.0	20.9	11 17	6 41.71	+30 48.9	1.913	2.706	14.9	21.1
11 27	6 37.29	+28 38.6	1.681	2.561	12.3	20.7	11 27	6 35.52	+30 57.0	1.835	2.713	11.6	20.9
12 7	6 27.67	+28 48.2	1.633	2.574	8.1	20.5	12 7	6 26.49	+30 59.5	1.780	2.719	7.8	20.7
12 17	6 15.90	+28 50.5	1.611	2.586	3.8	20.3	12 17	6 15.45	+30 53.0	1.752	2.724	4.0	20.5
12 27	6 3.36	+28 43.3	1.618	2.597	2.7	20.2	12 27	6 3.65	+30 35.4	1.753	2.729	3.1	20.4
1 6	5 51.58	+28 26.7	1.655	2.608	6.7	20.5	1 6	5 52.50	+30 7.4	1.783	2.734	6.5	20.6
1 16	5 41.87	+28 3.4	1.720	2.618	10.9	20.7	1 16	5 43.22	+29 32.0	1.842	2.738	10.4	20.9
1 26	5 35.12	+27 37.3	1.808	2.627	14.4	21.0	1 26	5 36.70	+28 53.4	1.924	2.741	13.7	21.1
80997	2000 <i>EH</i> ₂₉		12 23.5 173°58		1.4/23.5 18		446127	2013 <i>EJ</i> ₃₂		12 23.5 333°85			

EPHEMERIDES

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
462998	2011 <i>FL</i> ₉₀	12 23.5 278°18		3°3/23.3 18			110618	2001 <i>TC</i> ₁₄₉	12 23.5 135°26		1°7/23.6 18		
11 17	6 35.96	+32 57.1	2.336	3.127	12.6	21.8	11 17	6 35.19	+17 58.2	2.025	2.822	14.0	20.0
11 27	6 30.94	+33 22.9	2.242	3.115	9.9	21.6	11 27	6 30.28	+18 2.5	1.944	2.825	10.9	19.8
12 7	6 23.51	+33 43.8	2.171	3.104	6.9	21.4	12 7	6 23.03	+18 11.9	1.886	2.828	7.2	19.6
12 17	6 14.29	+33 56.3	2.127	3.093	4.1	21.2	12 17	6 14.10	+18 25.6	1.855	2.830	3.3	19.3
12 27	6 4.25	+33 57.7	2.112	3.082	3.6	21.1	12 27	6 4.46	+18 42.7	1.853	2.832	2.2	19.3
1 6	5 54.54	+33 47.5	2.127	3.071	6.2	21.3	1 6	5 55.21	+19 2.2	1.881	2.835	5.9	19.5
1 16	5 46.20	+33 27.1	2.169	3.059	9.3	21.4	1 16	5 47.36	+19 23.4	1.936	2.837	9.7	19.7
1 26	5 40.11	+32 59.8	2.237	3.048	12.3	21.6	1 26	5 41.72	+19 45.7	2.017	2.839	13.0	20.0
211013	2001 <i>YK</i> ₃₃	12 23.5 253°22		2°1/23.4 17			366324	2013 <i>EX</i> ₁₄	12 23.5 202°79		0°0/23.5 18		
11 17	6 36.58	+28 25.5	2.062	2.861	13.8	20.8	11 17	6 36.60	+23 1.7	2.053	2.852	13.8	21.7
11 27	6 31.55	+28 48.4	1.975	2.857	10.7	20.6	11 27	6 31.43	+23 7.1	1.966	2.850	10.7	21.5
12 7	6 23.96	+29 9.2	1.911	2.853	7.1	20.4	12 7	6 23.83	+23 13.6	1.903	2.848	6.9	21.3
12 17	6 14.48	+29 24.6	1.874	2.849	3.4	20.2	12 17	6 14.44	+23 19.5	1.867	2.845	2.8	21.0
12 27	6 4.16	+29 32.3	1.867	2.845	2.6	20.1	12 27	6 4.28	+23 23.4	1.861	2.842	1.5	20.9
1 6	5 54.23	+29 31.4	1.889	2.840	6.1	20.3	1 6	5 54.50	+23 25.0	1.884	2.840	5.8	21.2
1 16	5 45.82	+29 23.0	1.938	2.836	9.8	20.5	1 16	5 46.18	+23 24.8	1.936	2.837	9.7	21.4
1 26	5 39.82	+29 9.8	2.012	2.832	13.1	20.7	1 26	5 40.16	+23 24.0	2.012	2.833	13.0	21.6
160356	2003 <i>UU</i> ₂₇₈	12 23.5 95°31		0°2/23.5 18			137463	1999 <i>TT</i> ₃₂₀	12 23.5 85°19		1°6/23.5 18		
11 17	6 41.15	+24 15.2	1.993	2.785	14.4	20.3	11 17	6 41.73	+27 0.4	1.435	2.248	18.0	20.3
11 27	6 34.56	+24 15.3	1.934	2.813	11.0	20.2	11 27	6 36.17	+27 10.1	1.372	2.262	13.9	20.1
12 7	6 25.57	+24 14.8	1.899	2.841	7.1	20.0	12 7	6 27.21	+27 17.4	1.329	2.275	9.1	19.8
12 17	6 14.99	+24 11.9	1.891	2.869	2.8	19.8	12 17	6 15.82	+27 18.6	1.312	2.289	3.9	19.5
12 27	6 3.96	+24 5.6	1.914	2.895	1.5	19.7	12 27	6 3.58	+27 11.5	1.321	2.302	2.5	19.5
1 6	5 53.68	+23 56.2	1.967	2.922	5.7	20.1	1 6	5 52.23	+26 56.3	1.359	2.315	7.4	19.8
1 16	5 45.13	+23 45.1	2.049	2.947	9.4	20.3	1 16	5 43.25	+26 35.8	1.422	2.328	12.1	20.1
1 26	5 39.03	+23 34.1	2.155	2.972	12.5	20.6	1 26	5 37.58	+26 13.7	1.507	2.341	16.0	20.4
486242	2013 <i>BE</i> ₂₆	12 23.5 75°65		6°5/23.9 18			292736	2006 <i>UL</i> ₁₆₄	12 23.5 112°74		1°2/23.5 18		
11 17	6 42.85	+40 23.0	1.833	2.615	15.9	21.1	11 17	6 36.07	+19 32.1	1.991	2.790	14.2	21.4
11 27	6 36.95	+40 51.9	1.756	2.616	12.9	20.9	11 27	6 30.93	+19 33.3	1.915	2.797	10.9	21.2
12 7	6 27.69	+41 8.3	1.700	2.617	9.8	20.7	12 7	6 23.44	+19 38.1	1.861	2.804	7.2	21.0
12 17	6 15.99	+41 6.0	1.669	2.618	7.2	20.5	12 17	6 14.26	+19 45.7	1.835	2.811	3.1	20.8
12 27	6 3.37	+40 41.0	1.666	2.619	6.6	20.5	12 27	6 4.40	+19 55.1	1.838	2.818	2.0	20.7
1 6	5 51.55	+39 54.2	1.690	2.620	8.7	20.6	1 6	5 55.01	+20 5.6	1.871	2.825	5.9	21.0
1 16	5 41.99	+38 50.5	1.740	2.621	11.8	20.8	1 16	5 47.11	+20 17.1	1.931	2.832	9.7	21.2
1 26	5 35.68	+37 37.3	1.814	2.622	14.8	21.0	1 26	5 41.47	+20 29.8	2.016	2.839	13.0	21.4
184752	2005 <i>SM</i> ₂₅₂	12 23.5 158°33		2°7/23.7 18			173395	Dweiberg	12 23.5 73°97		3°5/23.4 18		
11 17	6 34.91	+14 20.0	2.495	3.275	12.2	21.7	11 17	6 38.85	+31 55.6	1.834	2.634	15.2	20.3
11 27	6 29.53	+14 11.9	2.413	3.282	9.5	21.5	11 27	6 33.59	+32 23.7	1.759	2.639	11.9	20.1
12 7	6 22.28	+14 9.6	2.355	3.288	6.5	21.3	12 7	6 25.41	+32 46.6	1.706	2.643	8.2	19.8
12 17	6 13.72	+14 13.3	2.325	3.293	3.6	21.2	12 17	6 15.10	+32 59.7	1.678	2.648	4.6	19.6
12 27	6 4.62	+14 22.9	2.325	3.298	3.0	21.1	12 27	6 3.94	+33 0.0	1.680	2.652	3.9	19.6
1 6	5 55.86	+14 37.9	2.357	3.303	5.5	21.3	1 6	5 53.37	+32 47.2	1.709	2.657	7.0	19.8
1 16	5 48.23	+14 57.6	2.417	3.307	8.5	21.5	1 16	5 44.69	+32 23.6	1.766	2.662	10.7	20.0
1 26	5 42.38	+15 21.0	2.503	3.310	11.2	21.7	1 26	5 38.81	+31 53.6	1.846	2.666	14.1	20.3
15066	1999 <i>AX</i> ₇	12 23.5 223°76		3°9/23.3 18			96014	2004 <i>PD</i> ₇	12 23.5 86°96		1°8/23.6 18		
11 17	6 36.49	+35 7.0	2.498	3.281	12.1	17.7	11 17	6 39.53	+18 43.4	1.643	2.446	16.5	20.1
11 27	6 31.17	+35 37.7	2.411	3.278	9.6	17.5	11 27	6 33.83	+18 40.9	1.582	2.467	12.7	19.9
12 7	6 23.56	+36 2.5	2.348	3.275	6.9	17.3	12 7	6 25.38	+18 43.3	1.544	2.487	8.3	19.7
12 17	6 14.29	+36 17.6	2.312	3.272	4.5	17.2	12 17	6 15.02	+18 49.8	1.531	2.507	3.7	19.5
12 27	6 4.30	+36 20.4	2.306	3.270	4.1	17.2	12 27	6 4.03	+18 59.3	1.547	2.527	2.4	19.4
1 6	5 54.69	+36 10.4	2.329	3.267	6.2	17.3	1 6	5 53.78	+19 11.0	1.592	2.547	6.7	19.7
1 16	5 46.44	+35 49.3	2.381	3.264	8.9	17.5	1 16	5 45.44	+19 24.5	1.663	2.566	10.9	20.0
1 26	5 40.36	+35 20.4	2.457	3.260	11.5	17.6	1 26	5 39.82	+19 39.9	1.758	2.585	14.4	20.3
456461	2006 <i>VW</i> ₁₃₁	12 23.5 346°79		2°0/23.2 17			450695	2006 <i>WO</i> ₈₇	12 23.5 278°56		0°5/23.4 17		
11 17	6 36.09	+25 45.4	1.752	2.562	15.4	21.6	11 17	6 36.07	+22 38.2	1.948	2.751	14.3	21.3
11 27	6 31.63	+26 34.4	1.670	2.559	11.9	21.4	11 27	6 31.26	+23 13.0	1.861	2.747	11.1	21.0
12 7	6 24.27	+27 25.5	1.611	2.557	7.8	21.1	12 7	6 23.87	+23 51.3	1.797	2.742	7.2	20.8
12 17	6 14.70	+28 14.3	1.578	2.554	3.6	20.9	12 17	6 14.51	+24 30.5	1.760	2.738	2.9	20.5
12 27	6 4.08	+28 56.5	1.574	2.552	2.7	20.8	12 27	6 4.23	+25 7.3	1.752	2.734	1.7	20.4
1 6	5 53.84	+29 29.2	1.597	2.551	6.8	21.1	1 6	5 54.26	+25 39.6	1.774	2.729	6.1	20.7
1 16	5 45.31	+29 52.1	1.648	2.549	11.0	21.3	1 16	5 45.76	+26 6.6	1.823	2.725	10.1	20.9
1 26	5 39.51	+30 7.0	1.721	2.549	14.6	21.5	1 26	5 39.68	+26 29.0	1.897	2.721	13.6	21.1
265039	2003 <i>PM</i> ₁	12 23.5 118°09		0°2/23.5 18			281209	2007 <i>GE</i> ₆₃	12 23.5 152°92		4°3/23.4 18		
11 17	6 35.67	+23 45.4	2.571	3.359	11.7	21.4	11 17	6 37.67	+13 47.3	1.851	2.642	15.4	21.7
11 27	6 30.07	+23 50.1	2.498	3.375	8.9	21.2	11 27	6 32.21	+13 3.0	1.774	2.648	12.2	21.5
12 7	6 22.59	+23 54.7	2.449	3.391	5.7	21.1	12 7	6 24.29	+12 24.9	1.720	2.652	8.5	21.3
12 17	6 13.84	+23 58.0	2.429	3.406	2.3	20.8	12 17	6 14.60	+11 55.1	1.692	2.657	5.2	21.1
12 27	6 4.62	+23 59.1	2.440	3.421	1.3	20.8	12 27	6 4.23	+11 35.2	1.693	2.661	4.6	21.1
1 6	5 55.83	+23 57.8	2.482	3.435	4.7	21.1	1 6	5 54.36	+11 26.2	1.722	2.665	7.5	21.2
1 16	5 48.26	+23 54.7	2.553	3.449	7.8	21.3	1 16	5 46.07	+11 27.9	1.779	2.668	11.1	21.5
1 26	5 42.53	+23 50.8	2.650	3.463	10.5	21.5	1 26	5 40.17	+11 39.1	1.859	2.671	14.4	21.7
173690	2001 <i>PL</i> ₁₆	12 23.5 63°92		2°8/23.3 18			515779	2015 <i>KN</i> ₇₄	12 23.5 77°11		2°2/23.7 18		
11 17	6 38.60	+28 57.0	1.752										

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
189881	2003 <i>RG</i> ₁₁		12 23.5 133°36'	0°6/23.5	18		458121	2010 <i>EK</i> ₇		12 23.5 347°30'	1°4/23.3	17	
11 17	6 35.93	+26 5.6	2.544	3.332	11.7	20.1	11 17	6 34.18	+24 47.6	1.968	2.775	14.1	21.4
11 27	6 30.34	+25 58.2	2.464	3.342	9.0	19.9	11 27	6 29.84	+25 30.7	1.884	2.771	10.8	21.2
12 7	6 22.81	+25 48.7	2.409	3.351	5.8	19.7	12 7	6 22.97	+26 16.0	1.822	2.767	7.1	20.9
12 17	6 13.94	+25 36.0	2.383	3.360	2.4	19.5	12 17	6 14.17	+27 0.3	1.788	2.764	3.1	20.7
12 27	6 4.60	+25 19.5	2.387	3.368	1.4	19.4	12 27	6 4.48	+27 39.9	1.782	2.762	2.2	20.6
1 6	5 55.69	+24 59.8	2.422	3.376	4.8	19.7	1 6	5 55.10	+28 12.7	1.805	2.759	6.1	20.9
1 16	5 48.05	+24 38.3	2.487	3.384	8.0	19.9	1 16	5 47.17	+28 37.9	1.856	2.757	10.0	21.1
1 26	5 42.29	+24 16.5	2.577	3.391	10.8	20.1	1 26	5 41.62	+28 56.6	1.930	2.756	13.4	21.3
218131	2002 <i>QT</i> ₄₅		12 23.5 79°31'	0°7/23.5	18		321839	2010 <i>RN</i> ₁₀₄		12 23.5 86°49'	0°0/23.4	18	
11 17	6 42.79	+24 53.9	1.429	2.241	18.2	20.5	11 17	6 35.92	+23 24.8	1.971	2.773	14.2	21.6
11 27	6 36.74	+24 58.2	1.375	2.264	13.9	20.3	11 27	6 30.96	+23 25.4	1.891	2.776	10.9	21.4
12 7	6 27.41	+25 2.0	1.341	2.287	9.0	20.0	12 7	6 23.53	+23 26.5	1.834	2.779	7.1	21.2
12 17	6 15.85	+25 2.2	1.333	2.311	3.6	19.8	12 17	6 14.34	+23 26.7	1.804	2.782	2.8	20.9
12 27	6 3.62	+24 57.1	1.352	2.333	2.0	19.7	12 27	6 4.43	+23 24.8	1.803	2.785	1.5	20.8
1 6	5 52.41	+24 47.1	1.399	2.356	7.2	20.1	1 6	5 54.98	+23 20.7	1.832	2.788	5.8	21.1
1 16	5 43.57	+24 34.2	1.472	2.378	11.8	20.4	1 16	5 47.07	+23 15.2	1.888	2.791	9.8	21.3
1 26	5 37.97	+24 21.2	1.568	2.400	15.6	20.7	1 26	5 41.51	+23 9.7	1.968	2.793	13.2	21.6
183142	2002 <i>RF</i> ₂₃₈		12 23.5 308°59'	4°5/23.8	18		376218	2011 <i>EZ</i> ₆		12 23.5 309°93'	1°9/23.2	18	
11 17	6 36.06	+13 21.0	1.411	2.224	18.3	20.5	11 17	6 35.05	+26 59.0	2.254	3.051	12.8	20.2
11 27	6 31.92	+13 3.5	1.332	2.218	14.5	20.3	11 27	6 30.21	+27 39.3	2.167	3.048	9.9	20.0
12 7	6 24.62	+12 56.8	1.273	2.212	10.2	20.0	12 7	6 23.06	+28 19.8	2.104	3.046	6.5	19.8
12 17	6 14.89	+13 2.6	1.237	2.206	5.9	19.7	12 17	6 14.17	+28 57.0	2.069	3.044	3.1	19.6
12 27	6 4.03	+13 21.2	1.228	2.201	4.9	19.7	12 27	6 4.49	+29 28.0	2.063	3.041	2.4	19.6
1 6	5 53.63	+13 51.3	1.244	2.196	8.6	19.9	1 6	5 55.11	+29 51.0	2.088	3.039	5.7	19.8
1 16	5 45.12	+14 30.8	1.286	2.191	13.2	20.1	1 16	5 47.04	+30 6.2	2.141	3.037	9.1	20.0
1 26	5 39.63	+15 16.9	1.350	2.186	17.4	20.4	1 26	5 41.12	+30 14.9	2.218	3.035	12.2	20.2
245284	2005 <i>CT</i> ₈		12 23.5 284°90'	3°9/23.9	16		407216	2009 <i>VP</i> ₆₃		12 23.5 99°53'	1°2/23.4	18	
11 17	6 35.32	+12 30.6	1.803	2.598	15.6	21.1	11 17	6 37.10	+25 56.2	2.552	3.338	11.8	21.5
11 27	6 30.92	+12 30.2	1.700	2.576	12.5	20.8	11 27	6 31.23	+26 27.2	2.486	3.362	9.0	21.3
12 7	6 23.82	+12 40.4	1.619	2.554	8.8	20.6	12 7	6 23.39	+26 57.6	2.444	3.385	5.8	21.2
12 17	6 14.57	+13 2.3	1.564	2.531	5.1	20.3	12 17	6 14.21	+27 24.8	2.432	3.407	2.6	21.0
12 27	6 4.17	+13 35.7	1.536	2.509	4.2	20.2	12 27	6 4.54	+27 46.8	2.450	3.430	1.8	20.9
1 6	5 53.87	+14 19.0	1.537	2.486	7.5	20.4	1 6	5 55.33	+28 2.7	2.500	3.452	4.8	21.2
1 16	5 44.95	+15 9.7	1.564	2.463	11.7	20.5	1 16	5 47.39	+28 12.9	2.579	3.473	7.9	21.4
1 26	5 38.46	+16 5.3	1.616	2.440	15.6	20.7	1 26	5 41.38	+28 18.6	2.685	3.494	10.5	21.6
106397	2000 <i>VO</i> ₂₅		12 23.5 345°19'	0°2/23.5	18		230587	2003 <i>DW</i> ₁₉		12 23.5 26°80'	4°2/23.6	18	
11 17	6 36.16	+23 1.8	1.173	2.009	19.8	19.7	11 17	6 39.64	+32 12.4	1.331	2.152	18.8	20.1
11 27	6 32.73	+22 59.4	1.101	2.004	15.4	19.4	11 27	6 35.12	+32 33.2	1.266	2.157	14.7	19.9
12 7	6 25.50	+22 58.9	1.047	1.999	10.1	19.1	12 7	6 26.84	+32 46.6	1.220	2.162	10.1	19.7
12 17	6 15.32	+22 58.3	1.016	1.995	4.1	18.7	12 17	6 15.79	+32 47.1	1.197	2.168	5.6	19.4
12 27	6 3.81	+22 55.9	1.009	1.991	2.2	18.6	12 27	6 3.68	+32 31.0	1.200	2.175	4.6	19.4
1 6	5 52.98	+22 51.3	1.028	1.989	8.4	18.9	1 6	5 52.49	+31 59.1	1.229	2.182	8.5	19.6
1 16	5 44.59	+22 46.0	1.070	1.987	14.0	19.2	1 16	5 43.87	+31 16.3	1.283	2.190	13.1	19.9
1 26	5 39.87	+22 42.1	1.132	1.986	18.8	19.5	1 26	5 38.88	+30 28.7	1.358	2.198	17.1	20.2
403090	2008 <i>CX</i> ₆₇		12 23.5 208°76'	0°5/23.5	18		380689	2005 <i>JB</i> ₁₇		12 23.5 182°53'	3°0/23.5	18	
11 17	6 35.61	+20 57.9	2.085	2.884	13.7	21.4	11 17	6 43.42	+30 58.6	1.746	2.542	16.0	21.1
11 27	6 30.63	+21 10.4	1.999	2.882	10.5	21.2	11 27	6 37.25	+31 13.2	1.664	2.543	12.5	20.9
12 7	6 23.31	+21 26.0	1.936	2.880	6.9	20.9	12 7	6 27.89	+31 22.3	1.604	2.543	8.5	20.6
12 17	6 14.25	+21 43.3	1.900	2.878	2.8	20.7	12 17	6 16.17	+31 21.4	1.571	2.543	4.4	20.4
12 27	6 4.41	+22 0.6	1.894	2.875	1.6	20.6	12 27	6 3.47	+31 7.7	1.566	2.542	3.5	20.3
1 6	5 54.93	+22 17.0	1.918	2.873	5.7	20.9	1 6	5 51.40	+30 41.4	1.590	2.541	7.2	20.6
1 16	5 46.82	+22 32.0	1.969	2.870	9.5	21.1	1 16	5 41.40	+30 5.9	1.642	2.539	11.3	20.8
1 26	5 40.92	+22 46.2	2.046	2.868	12.8	21.3	1 26	5 34.47	+29 26.1	1.717	2.536	15.0	21.0
405995	2006 <i>SM</i> ₃₃₅		12 23.5 121°94'	6°8/23.9	18		356061	2009 <i>DV</i> ₃₈		12 23.5 62°93'	1°6/23.6	18	
11 17	6 34.56	+ 4 27.6	2.098	2.862	14.7	21.3	11 17	6 36.00	+19 15.4	1.774	2.580	15.4	21.2
11 27	6 29.50	+ 3 45.4	2.027	2.872	12.1	21.2	11 27	6 31.22	+19 11.3	1.696	2.582	11.9	21.0
12 7	6 22.38	+ 3 16.1	1.978	2.882	9.4	21.0	12 7	6 23.82	+19 11.4	1.641	2.585	7.8	20.8
12 17	6 13.81	+ 3 2.7	1.955	2.891	7.3	20.9	12 17	6 14.49	+19 15.1	1.611	2.587	3.5	20.5
12 27	6 4.69	+ 3 6.7	1.960	2.900	6.9	20.9	12 27	6 4.37	+19 21.5	1.610	2.590	2.3	20.5
1 6	5 55.99	+ 3 27.9	1.992	2.909	8.5	21.0	1 6	5 54.74	+19 30.1	1.637	2.592	6.5	20.7
1 16	5 48.60	+ 4 4.0	2.051	2.918	10.9	21.2	1 16	5 46.73	+19 40.6	1.691	2.595	10.6	21.0
1 26	5 43.20	+ 4 51.8	2.134	2.926	13.5	21.4	1 26	5 41.24	+19 53.3	1.769	2.598	14.2	21.2
95331	2002 <i>CH</i> ₁₁₄		12 23.5 328°37'	0°6/23.6	18		447818	2007 <i>TL</i> ₂₅₆		12 23.5 30°17'	3°3/23.6	17	
11 17	6 35.09	+19 26.7	1.422	2.244	17.7	18.9	11 17	6 34.52	+16 41.2	1.342	2.166	18.5	20.9
11 27	6 31.42	+19 59.8	1.338	2.233	13.8	18.7	11 27	6 30.58	+16 20.2	1.284	2.178	14.3	20.6
12 7	6 24.46	+20 41.8	1.275	2.223	9.1	18.4	12 7	6 23.57	+16 6.7	1.246	2.192	9.6	20.4
12 17	6 14.90	+21 30.2	1.236	2.214	3.8	18.0	12 17	6 14.40	+16 1.7	1.232	2.206	4.9	20.2
12 27	6 4.02	+22 21.0	1.224	2.205	2.0	17.9	12 27	6 4.47	+16 5.1	1.244	2.222	3.8	20.2
1 6	5 53.48	+23 10.5	1.238	2.197	7.6	18.2	1 6	5 55.33	+16 16.3	1.282	2.238	7.9	20.4
1 16	5 44.85	+23 56.3	1.278	2.190	12.7	18.5	1 16	5 48.25	+16 34.2	1.345	2.255	12.3	20.7
1 26	5 39.35	+24 37.8	1.340	2.183	17.1	18.7	1 26	5 44.13	+16 57.4	1.430	2.272	16.2	21.0
416199	2002 <i>TH</i> ₃₀₈		12 23.5 92°09'	3°5/23.8	17		31991	Royghosh		12 23.5 210°59'	1°3/23		

EPHEMERIDES

12 23.5

12 23.5

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
152925	2000 <i>EB</i> ₆₇		12 23.5 214°60	2°9/23.5 18			442336	2011 <i>SN</i> ₁₇₇		12 23.5 78°42	2°7/23.7 18		
11 17	6 38.23	+15 59.2	1.985	2.775	14.6	21.5	11 17	6 37.60	+16 11.3	1.765	2.564	15.7	21.6
11 27	6 32.73	+15 40.7	1.893	2.768	11.4	21.3	11 27	6 32.21	+16 4.0	1.704	2.585	12.2	21.5
12 7	6 24.74	+15 27.4	1.823	2.760	7.8	21.1	12 7	6 24.31	+16 3.5	1.665	2.605	8.1	21.3
12 17	6 14.88	+15 19.9	1.780	2.751	4.1	20.8	12 17	6 14.69	+16 9.5	1.653	2.625	4.1	21.1
12 27	6 4.17	+15 18.5	1.767	2.742	3.3	20.8	12 27	6 4.49	+16 21.5	1.669	2.646	3.1	21.0
1 6	5 53.77	+15 23.0	1.783	2.732	6.7	20.9	1 6	5 54.95	+16 38.4	1.714	2.666	6.6	21.3
1 16	5 44.81	+15 33.4	1.827	2.722	10.5	21.2	1 16	5 47.11	+16 59.4	1.786	2.686	10.4	21.6
1 26	5 38.15	+15 49.1	1.896	2.710	14.0	21.4	1 26	5 41.73	+17 23.5	1.882	2.705	13.7	21.8
409047	2003 <i>SK</i> ₄₉		12 23.5 102°84	4°6/23.6 18			208159	2000 <i>HU</i> ₁₅		12 23.5 325°34	10°2/20.7 17		
11 17	6 33.36	+9 31.7	2.443	3.216	12.6	21.2	11 17	6 44.44	+47 58.4	2.119	2.869	15.0	19.7
11 27	6 28.29	+8 52.3	2.373	3.231	10.1	21.1	11 27	6 39.12	+50 3.8	2.040	2.860	13.1	19.5
12 7	6 21.47	+8 20.7	2.327	3.246	7.4	20.9	12 7	6 29.91	+51 58.6	1.985	2.851	11.3	19.4
12 17	6 13.45	+7 59.0	2.308	3.261	5.2	20.8	12 17	6 17.36	+53 32.7	1.954	2.843	10.3	19.3
12 27	6 5.01	+7 48.4	2.319	3.275	4.8	20.8	12 27	6 2.88	+54 37.2	1.950	2.835	10.5	19.3
1 6	5 56.98	+7 49.0	2.359	3.289	6.6	20.9	1 6	5 48.45	+55 8.4	1.971	2.828	11.7	19.3
1 16	5 50.08	+8 0.0	2.427	3.303	9.1	21.1	1 16	5 36.11	+55 8.4	2.015	2.820	13.6	19.5
1 26	5 44.91	+8 19.8	2.520	3.317	11.5	21.3	1 26	5 27.44	+54 44.2	2.080	2.813	15.6	19.6
300423	2007 <i>SH</i> ₁₉		12 23.5 33°08	0°6/23.5 17			300525	2007 <i>TZ</i> ₂₁₄		12 23.5 26°85	1°9/23.4 18		
11 17	6 36.45	+24 45.6	1.342	2.169	18.3	20.5	11 17	6 36.08	+20 27.0	1.584	2.398	16.6	20.4
11 27	6 32.19	+24 48.9	1.286	2.184	14.0	20.2	11 27	6 31.53	+19 56.7	1.512	2.402	12.8	20.2
12 7	6 24.67	+24 52.1	1.251	2.201	9.1	20.0	12 7	6 24.14	+19 28.2	1.461	2.407	8.4	19.9
12 17	6 14.86	+24 52.6	1.240	2.218	3.7	19.7	12 17	6 14.70	+19 1.8	1.435	2.411	3.8	19.7
12 27	6 4.29	+24 48.9	1.255	2.237	2.0	19.7	12 27	6 4.49	+18 38.5	1.437	2.417	2.6	19.6
1 6	5 54.63	+24 41.0	1.297	2.256	7.3	20.1	1 6	5 54.90	+18 19.2	1.466	2.422	7.0	19.9
1 16	5 47.23	+24 30.7	1.363	2.275	12.0	20.4	1 16	5 47.15	+18 5.2	1.522	2.428	11.4	20.1
1 26	5 42.99	+24 20.2	1.451	2.296	15.9	20.7	1 26	5 42.15	+17 57.3	1.600	2.434	15.2	20.4
410944	2009 <i>SB</i> ₂₉₄		12 23.5 114°94	1°0/23.6 18			410912	Lisakaroline		12 23.5 81°05	0°3/23.5 14 C		
11 17	6 34.91	+20 3.4	2.277	3.071	12.8	21.9	11 17	6 37.33	+22 16.8	2.206	2.999	13.2	22.7
11 27	6 29.78	+20 3.3	2.200	3.080	9.8	21.7	11 27	6 31.54	+22 18.4	2.147	3.026	10.1	22.5
12 7	6 22.60	+20 5.9	2.147	3.089	6.4	21.5	12 7	6 23.66	+22 21.0	2.111	3.053	6.5	22.3
12 17	6 13.96	+20 10.3	2.121	3.098	2.7	21.3	12 17	6 14.39	+22 23.3	2.103	3.080	2.6	22.1
12 27	6 4.76	+20 16.0	2.125	3.106	1.7	21.2	12 27	6 4.70	+22 24.6	2.125	3.107	1.4	22.1
1 6	5 55.97	+20 22.4	2.160	3.114	5.2	21.5	1 6	5 55.60	+22 24.7	2.178	3.133	5.2	22.4
1 16	5 48.47	+20 29.6	2.223	3.122	8.7	21.7	1 16	5 47.96	+22 24.0	2.260	3.159	8.6	22.7
1 26	5 42.95	+20 37.8	2.312	3.130	11.7	21.9	1 26	5 42.42	+22 23.5	2.367	3.184	11.5	22.9
202609	2006 <i>HL</i> ₄₄		12 23.5 229°48	0°9/23.5 18			438567	2007 <i>TW</i> ₄₄₁		12 23.5 82°62	1°5/23.4 15		
11 17	6 33.22	+20 31.4	2.466	3.259	12.0	21.3	11 17	6 40.26	+21 40.2	1.769	2.569	15.7	21.4
11 27	6 28.45	+20 26.8	2.376	3.256	9.2	21.2	11 27	6 34.17	+21 0.6	1.707	2.590	12.0	21.3
12 7	6 21.75	+20 24.1	2.310	3.253	6.0	21.0	12 7	6 25.52	+20 21.1	1.669	2.612	7.8	21.1
12 17	6 13.65	+20 22.8	2.273	3.249	2.6	20.7	12 17	6 15.15	+19 42.3	1.657	2.633	3.4	20.8
12 27	6 4.95	+20 22.5	2.265	3.246	1.6	20.6	12 27	6 4.31	+19 5.3	1.674	2.654	2.3	20.8
1 6	5 56.55	+20 23.0	2.288	3.242	5.0	20.9	1 6	5 54.27	+18 31.8	1.721	2.675	6.4	21.1
1 16	5 49.29	+20 24.4	2.340	3.239	8.3	21.1	1 16	5 46.08	+18 3.7	1.796	2.695	10.4	21.4
1 26	5 43.83	+20 27.2	2.417	3.235	11.2	21.3	1 26	5 40.47	+17 42.2	1.894	2.716	13.7	21.6
249385	2009 <i>BV</i> ₆₈		12 23.5 126°40	4°8/24.1 18			482068	2010 <i>CU</i> ₁₁₁		12 23.5 218°54	2°5/23.7 18		
11 17	6 45.68	+38 41.2	2.166	2.935	14.2	20.2	11 17	6 36.97	+16 34.7	1.706	2.509	16.0	21.7
11 27	6 38.31	+38 48.9	2.094	2.950	11.3	20.1	11 27	6 32.15	+16 33.8	1.624	2.507	12.5	21.5
12 7	6 28.18	+38 45.3	2.045	2.965	8.3	19.9	12 7	6 24.58	+16 40.1	1.564	2.506	8.4	21.2
12 17	6 16.19	+38 26.0	2.024	2.978	5.6	19.7	12 17	6 14.93	+16 53.2	1.530	2.504	4.1	21.0
12 27	6 3.66	+37 49.2	2.031	2.992	4.9	19.7	12 27	6 4.36	+17 12.4	1.523	2.502	3.0	20.9
1 6	5 51.98	+36 56.5	2.069	3.005	7.0	19.9	1 6	5 54.21	+17 36.2	1.545	2.499	7.0	21.2
1 16	5 42.30	+35 52.4	2.136	3.017	9.9	20.1	1 16	5 45.71	+18 3.5	1.594	2.497	11.2	21.4
1 26	5 35.41	+34 43.0	2.228	3.029	12.7	20.3	1 26	5 39.81	+18 33.4	1.667	2.495	15.0	21.6
392665	2011 <i>UH</i> ₂₈₇		12 23.5 145°26	0°6/23.5 18			484494	2008 <i>DV</i> ₂₃		12 23.5 258°00	5°5/23.8 18		
11 17	6 39.30	+25 19.7	2.338	3.125	12.7	22.2	11 17	6 34.31	+6 50.2	2.351	3.116	13.3	22.5
11 27	6 33.11	+25 23.0	2.260	3.137	9.8	22.0	11 27	6 29.46	+6 23.5	2.245	3.095	10.9	22.3
12 7	6 24.72	+25 25.1	2.207	3.148	6.3	21.8	12 7	6 22.56	+6 6.9	2.162	3.074	8.3	22.1
12 17	6 14.82	+25 24.3	2.182	3.159	2.6	21.6	12 17	6 14.08	+6 2.6	2.106	3.052	6.1	21.9
12 27	6 4.36	+25 19.3	2.187	3.168	1.5	21.5	12 27	6 4.82	+6 12.3	2.079	3.030	5.7	21.9
1 6	5 54.38	+25 10.3	2.224	3.178	5.2	21.8	1 6	5 55.68	+6 35.8	2.080	3.007	7.5	21.9
1 16	5 45.81	+24 58.3	2.290	3.186	8.6	22.0	1 16	5 47.56	+7 11.8	2.110	2.984	10.3	22.1
1 26	5 39.37	+24 45.3	2.382	3.194	11.6	22.2	1 26	5 41.25	+7 57.9	2.164	2.960	13.1	22.2
400396	2008 <i>AK</i> ₈₀		12 23.5 314°34	0°1/23.5 18			260383	2004 <i>VV</i> ₄₀		12 23.5 118°21	0°9/23.6 18		
11 17	6 36.45	+23 48.9	1.904	2.708	14.6	21.3	11 17	6 34.80	+20 33.6	2.348	3.140	12.5	21.4
11 27	6 31.49	+23 41.4	1.822	2.708	11.2	21.1	11 27	6 29.66	+20 28.7	2.270	3.149	9.6	21.2
12 7	6 23.98	+23 33.5	1.762	2.707	7.3	20.8	12 7	6 22.53	+20 25.9	2.216	3.158	6.3	21.0
12 17	6 14.60	+23 24.0	1.729	2.707	2.9	20.6	12 17	6 13.99	+20 24.3	2.190	3.166	2.7	20.8
12 27	6 4.46	+23 12.3	1.725	2.707	1.6	20.5	12 27	6 4.92	+20 23.7	2.194	3.174	1.6	20.7
1 6	5 54.79	+22 58.6	1.750	2.706	6.0	20.7	1 6	5 56.25	+20 23.8	2.228	3.182	5.1	21.0
1 16	5 46.72	+22 44.1	1.802	2.706	10.1	21.0	1 16	5 48.83	+20 24.8	2.291	3.190	8.5	21.2
1 26	5 41.08	+22 30.8	1.879	2.706	13.6	21.2	1 26	5 43.34	+20 27.3	2.380	3.198	11.4	21.4
1430	Somalia		12 23.5 113°37	1°4/23.5 18 R			428626	2008 <i>FH</i> ₅₉		12 23.5 191°60	2°5/23.7 18		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
242577	2005 <i>GP</i> ₃₄		12 23.5 227°04	4.2/23.9	18		108353	2001 <i>KH</i> ₁₀		12 23.5 149°90	3.1/23.5	18	
11 17	6 35.57	+ 9 47.8	2.410	3.180	12.9	21.3	11 17	6 32.69	+12 52.8	2.906	3.679	10.8	20.0
11 27	6 30.33	+ 9 35.5	2.310	3.167	10.3	21.1	11 27	6 27.63	+12 24.9	2.824	3.687	8.5	19.9
12 7	6 23.05	+ 9 32.0	2.233	3.155	7.5	20.9	12 7	6 21.02	+12 2.0	2.768	3.695	6.0	19.7
12 17	6 14.27	+ 9 38.6	2.184	3.141	5.0	20.7	12 17	6 13.36	+11 45.0	2.740	3.702	3.7	19.6
12 27	6 4.75	+ 9 55.7	2.164	3.127	4.4	20.6	12 27	6 5.30	+11 34.7	2.742	3.708	3.3	19.6
1 6	5 55.41	+10 22.7	2.175	3.112	6.5	20.7	1 6	5 57.53	+11 31.3	2.775	3.715	5.2	19.7
1 16	5 47.14	+10 58.3	2.214	3.097	9.5	20.9	1 16	5 50.71	+11 34.6	2.838	3.720	7.7	19.9
1 26	5 40.67	+11 40.5	2.279	3.081	12.4	21.1	1 26	5 45.36	+11 43.9	2.927	3.726	10.0	20.0
321055	2008 <i>RH</i> ₁₁₁		12 23.5 161°24	0°3/23.5	17		99264	2001 <i>OP</i> ₄₂		12 23.5 182°50	0°8/23.5	18	
11 17	6 34.12	+21 59.0	2.551	3.342	11.7	21.7	11 17	6 41.01	+25 48.7	1.969	2.763	14.5	20.4
11 27	6 29.08	+22 4.7	2.466	3.345	9.0	21.5	11 27	6 34.97	+25 50.6	1.884	2.764	11.2	20.2
12 7	6 22.14	+22 11.8	2.405	3.347	5.8	21.3	12 7	6 26.26	+25 50.9	1.822	2.764	7.3	19.9
12 17	6 13.85	+22 19.2	2.373	3.350	2.4	21.1	12 17	6 15.59	+25 47.4	1.787	2.764	3.1	19.7
12 27	6 5.00	+22 25.9	2.371	3.352	1.3	21.0	12 27	6 4.09	+25 38.4	1.782	2.763	1.8	19.6
1 6	5 56.47	+22 31.5	2.400	3.354	4.8	21.2	1 6	5 53.09	+25 24.2	1.807	2.761	6.1	19.9
1 16	5 49.06	+22 36.2	2.457	3.356	8.0	21.4	1 16	5 43.75	+25 6.4	1.860	2.759	10.1	20.1
1 26	5 43.45	+22 40.6	2.541	3.358	10.8	21.6	1 26	5 36.97	+24 47.6	1.938	2.756	13.6	20.3
88577	2001 <i>QV</i> ₂₄₉		12 23.5 13°83	9°2/22.9	18		226266	2003 <i>AM</i> ₅₃		12 23.5 324°41	1°0/23.5	18	
11 17	6 39.77	+41 25.4	1.492	2.292	18.1	17.9	11 17	6 34.69	+23 52.4	1.268	2.101	18.8	20.7
11 27	6 35.66	+42 53.7	1.429	2.295	15.0	17.7	11 27	6 31.71	+24 16.8	1.182	2.084	14.7	20.4
12 7	6 27.53	+44 9.9	1.387	2.300	11.9	17.5	12 7	6 25.05	+24 44.9	1.117	2.068	9.7	20.1
12 17	6 16.28	+45 4.3	1.367	2.305	9.6	17.4	12 17	6 15.37	+25 13.5	1.074	2.052	4.0	19.7
12 27	6 3.67	+45 28.9	1.372	2.312	9.4	17.4	12 27	6 4.13	+25 38.3	1.056	2.037	2.4	19.5
1 6	5 51.85	+45 22.3	1.402	2.319	11.3	17.6	1 6	5 53.21	+25 56.9	1.063	2.023	8.3	19.8
1 16	5 42.68	+44 49.1	1.455	2.327	14.2	17.8	1 16	5 44.48	+26 9.1	1.094	2.010	13.9	20.1
1 26	5 37.41	+43 57.6	1.529	2.336	17.2	18.0	1 26	5 39.30	+26 16.8	1.145	1.998	18.7	20.4
153611	2001 <i>SO</i> ₃₄₁		12 23.5 184°83	3°1/23.7	18		103150	1999 <i>XP</i> ₂₁₅		12 23.5 21°75	3°7/23.1	18	
11 17	6 42.94	+32 14.6	1.900	2.691	15.1	20.0	11 17	6 36.02	+19 54.6	1.300	2.127	18.8	18.2
11 27	6 36.68	+32 21.9	1.816	2.691	11.8	19.8	11 27	6 31.83	+18 34.7	1.239	2.136	14.6	17.9
12 7	6 27.46	+32 22.4	1.755	2.691	8.1	19.5	12 7	6 24.45	+17 14.9	1.199	2.146	9.8	17.7
12 17	6 16.07	+32 12.2	1.720	2.690	4.4	19.3	12 17	6 14.85	+15 59.0	1.182	2.156	5.1	17.5
12 27	6 3.82	+31 49.0	1.714	2.689	3.5	19.3	12 27	6 4.55	+14 51.5	1.192	2.168	4.3	17.4
1 6	5 52.19	+31 13.4	1.738	2.687	6.8	19.5	1 6	5 55.14	+13 56.4	1.228	2.181	8.5	17.7
1 16	5 42.47	+30 29.2	1.790	2.685	10.7	19.7	1 16	5 47.93	+13 16.2	1.289	2.195	13.1	18.0
1 26	5 35.62	+29 41.0	1.866	2.682	14.1	19.9	1 26	5 43.79	+12 51.2	1.371	2.209	17.0	18.3
385683	2005 <i>SA</i> ₂₄₉		12 23.5 40°32	1°3/23.5	18		517879	2015 <i>RF</i> ₂₆₀		12 23.5 120°75	3°0/23.5	18	
11 17	6 38.70	+25 37.4	1.217	2.047	19.6	20.6	11 17	6 39.13	+31 27.3	2.050	2.843	14.0	21.6
11 27	6 34.31	+25 50.6	1.163	2.062	15.1	20.3	11 27	6 33.52	+31 50.9	1.973	2.850	11.0	21.4
12 7	6 26.27	+26 3.3	1.128	2.078	9.8	20.1	12 7	6 25.29	+32 9.6	1.920	2.857	7.5	21.2
12 17	6 15.62	+26 11.7	1.117	2.095	4.1	19.8	12 17	6 15.18	+32 19.8	1.894	2.864	4.1	21.0
12 27	6 4.10	+26 13.3	1.131	2.112	2.5	19.8	12 27	6 4.33	+32 18.9	1.897	2.871	3.4	21.0
1 6	5 53.60	+26 7.8	1.171	2.131	7.9	20.1	1 6	5 54.03	+32 6.7	1.929	2.877	6.4	21.2
1 16	5 45.65	+25 57.3	1.236	2.149	12.9	20.5	1 16	5 45.41	+31 45.2	1.989	2.884	9.8	21.4
1 26	5 41.23	+25 45.2	1.321	2.168	17.1	20.8	1 26	5 39.32	+31 18.2	2.074	2.890	12.9	21.6
156818	2003 <i>BZ</i> ₅₄		12 23.5 250°14	1°0/23.6	18		443934	2002 <i>TY</i> ₂₁₄		12 23.5 13°83	11°4/24.9	17	
11 17	6 38.37	+20 13.6	1.818	2.619	15.3	20.4	11 17	6 29.35	+ 1 18.0	1.193	2.000	21.3	20.0
11 27	6 33.31	+20 17.4	1.721	2.604	11.9	20.2	11 27	6 26.86	+ 0 6.8	1.142	2.007	18.1	19.8
12 7	6 25.43	+20 25.1	1.646	2.590	7.9	19.9	12 7	6 21.34	- 0 40.1	1.108	2.016	14.7	19.7
12 17	6 15.35	+20 35.5	1.598	2.574	3.4	19.6	12 17	6 13.65	- 0 55.9	1.095	2.027	12.2	19.6
12 27	6 4.16	+20 47.1	1.578	2.559	2.0	19.5	12 27	6 5.16	- 0 36.9	1.103	2.039	11.5	19.6
1 6	5 53.23	+20 58.9	1.587	2.543	6.6	19.7	1 6	5 57.37	+ 0 14.7	1.133	2.053	13.0	19.7
1 16	5 43.84	+21 10.8	1.624	2.526	11.1	20.0	1 16	5 51.57	+ 1 32.6	1.185	2.069	15.8	19.9
1 26	5 37.05	+21 23.5	1.684	2.509	15.0	20.2	1 26	5 48.66	+ 3 7.9	1.257	2.086	18.8	20.2
382642	2002 <i>RP</i> ₅₃		12 23.5 87°26	7°4/23.7	18		420649	2012 <i>JO</i> ₁₅		12 23.5 178°64	1°4/23.5	17	
11 17	6 47.61	+39 21.2	1.497	2.288	18.4	20.6	11 17	6 33.74	+19 24.2	2.551	3.340	11.7	21.8
11 27	6 41.17	+40 19.1	1.441	2.307	14.9	20.4	11 27	6 28.76	+19 11.3	2.464	3.341	9.0	21.6
12 7	6 30.74	+41 4.3	1.405	2.325	11.2	20.3	12 7	6 21.93	+19 0.5	2.401	3.341	6.0	21.4
12 17	6 17.44	+41 28.0	1.394	2.343	8.2	20.1	12 17	6 13.78	+18 51.7	2.367	3.342	2.7	21.2
12 27	6 3.16	+41 24.6	1.408	2.361	7.6	20.2	12 27	6 5.09	+18 44.9	2.363	3.342	1.8	21.1
1 6	5 50.04	+40 54.7	1.449	2.379	9.9	20.3	1 6	5 56.72	+18 40.1	2.389	3.342	4.9	21.3
1 16	5 39.79	+40 4.5	1.515	2.396	13.2	20.6	1 16	5 49.46	+18 37.7	2.444	3.341	8.1	21.5
1 26	5 33.45	+39 2.8	1.603	2.413	16.4	20.8	1 26	5 43.95	+18 38.0	2.526	3.341	10.9	21.7
189901	2003 <i>SQ</i> ₈₆		12 23.5 162°13	2°5/23.4	18		89236	2001 <i>UB</i> ₁₅₀		12 23.5 35°00	4°1/23.6	18	
11 17	6 33.99	+16 55.9	2.453	3.240	12.2	20.0	11 17	6 36.28	+14 57.0	1.479	2.290	17.7	19.7
11 27	6 28.95	+16 22.6	2.368	3.243	9.5	19.9	11 27	6 31.85	+14 26.3	1.408	2.294	13.9	19.4
12 7	6 22.03	+15 52.1	2.308	3.245	6.4	19.7	12 7	6 24.46	+14 3.5	1.357	2.297	9.6	19.2
12 17	6 13.80	+15 25.4	2.276	3.246	3.4	19.5	12 17	6 14.91	+13 50.1	1.331	2.301	5.4	19.0
12 27	6 5.06	+15 3.4	2.274	3.248	2.8	19.4	12 27	6 4.49	+13 47.2	1.332	2.306	4.5	18.9
1 6	5 56.67	+14 46.8	2.302	3.250	5.5	19.6	1 6	5 54.65	+13 54.6	1.359	2.310	8.1	19.2
1 16	5 49.43	+14 36.2	2.359	3.251	8.6	19.8	1 16	5 46.71	+14 11.4	1.412	2.315	12.4	19.4
1 26	5 43.98	+14 31.5	2.442	3.252	11.4	20.0	1 26	5 41.60	+14 36.1	1.487	2.320	16.2	19.7
405218	2003 <i>QV</i> ₁₁₁		12 23.5 88°88	7°0/23.9	18		322334	2011 <i>HS</i> ₂₄					

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12 23.5

12 23.5

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
395838	2012 <i>XC</i> ₁₀₆		12 23.5	64°03	0°6/23.6	18	38074	1999 <i>GX</i> ₁₉		12 23.5	141°93	2°7/23.7	18
11 17	6 37.38	+19 9.4	1.745	2.549	15.7	20.7	11 17	6 41.86	+16 23.5	1.900	2.686	15.3	19.5
11 27	6 32.52	+19 44.8	1.665	2.550	12.1	20.5	11 27	6 35.40	+16 10.2	1.828	2.701	11.9	19.3
12 7	6 24.87	+20 27.2	1.606	2.551	7.9	20.2	12 7	6 26.41	+16 2.4	1.779	2.715	8.0	19.1
12 17	6 15.11	+21 14.3	1.574	2.551	3.3	19.9	12 17	6 15.64	+16 0.1	1.757	2.728	4.1	18.9
12 27	6 4.37	+22 2.7	1.571	2.552	1.8	19.8	12 27	6 4.21	+16 3.1	1.764	2.740	3.1	18.8
1 6	5 54.02	+22 49.4	1.596	2.553	6.5	20.1	1 6	5 53.37	+16 11.0	1.802	2.752	6.5	19.1
1 16	5 45.31	+23 32.6	1.649	2.554	10.8	20.4	1 16	5 44.20	+16 23.4	1.868	2.762	10.4	19.3
1 26	5 39.22	+24 11.8	1.726	2.554	14.6	20.6	1 26	5 37.49	+16 39.8	1.958	2.771	13.7	19.6
259313	2003 <i>FX</i> ₃₀		12 23.5	347°85	14°5/24.2	17	364807	2008 <i>BC</i> ₁₃		12 23.5	292°44	0°1/23.6	17
11 17	6 28.06	- 5 53.2	1.391	2.160	20.7	19.5	11 17	6 36.41	+20 11.1	1.842	2.646	15.0	21.5
11 27	6 25.77	- 7 27.4	1.322	2.147	18.5	19.3	11 27	6 31.91	+20 53.9	1.744	2.629	11.7	21.2
12 7	6 20.68	- 8 36.7	1.269	2.136	16.3	19.1	12 7	6 24.63	+21 44.2	1.668	2.612	7.7	20.9
12 17	6 13.47	- 9 11.6	1.236	2.126	14.8	19.0	12 17	6 15.12	+22 39.1	1.618	2.596	3.1	20.6
12 27	6 5.26	- 9 5.7	1.223	2.118	14.5	19.0	12 27	6 4.41	+23 35.1	1.598	2.579	1.7	20.5
1 6	5 57.43	- 8 18.1	1.231	2.111	15.6	19.0	1 6	5 53.83	+24 28.6	1.606	2.563	6.4	20.8
1 16	5 51.24	- 6 53.5	1.259	2.106	17.7	19.1	1 16	5 44.68	+25 17.3	1.643	2.546	10.9	21.0
1 26	5 47.72	- 5 0.9	1.305	2.102	20.1	19.3	1 26	5 38.07	+26 0.8	1.703	2.530	14.8	21.2
447661	2006 <i>WA</i> ₅₃		12 23.5	59°20	0°5/23.7	18	373041	2011 <i>EB</i> ₅₃		12 23.5	44°78	7°4/24.2	17
11 17	6 40.00	+16 54.2	1.740	2.536	16.0	20.0	11 17	6 31.18	+ 0 16.4	2.408	3.154	13.5	20.9
11 27	6 34.40	+18 10.8	1.671	2.552	12.4	19.8	11 27	6 26.85	- 0 23.4	2.329	3.155	11.4	20.7
12 7	6 26.01	+19 38.2	1.626	2.568	8.0	19.6	12 7	6 20.73	- 0 49.3	2.273	3.156	9.3	20.6
12 17	6 15.54	+21 11.7	1.608	2.585	3.3	19.3	12 17	6 13.34	- 0 58.3	2.242	3.157	7.8	20.5
12 27	6 4.18	+22 45.5	1.621	2.602	1.7	19.2	12 27	6 5.43	- 0 48.7	2.238	3.159	7.4	20.5
1 6	5 53.30	+24 13.9	1.663	2.619	6.4	19.6	1 6	5 57.81	- 0 20.7	2.261	3.160	8.5	20.6
1 16	5 44.14	+25 33.6	1.735	2.636	10.6	19.9	1 16	5 51.23	+ 0 23.5	2.311	3.162	10.5	20.7
1 26	5 37.64	+26 43.4	1.831	2.653	14.1	20.1	1 26	5 46.33	+ 1 20.6	2.384	3.163	12.6	20.8
161218	2002 <i>VD</i> ₈₅		12 23.5	72°42	0°8/23.6	18	484144	2006 <i>TJ</i> ₄₁		12 23.5	98°79	0°9/23.5	18
11 17	6 37.38	+27 18.5	2.350	3.140	12.6	19.2	11 17	6 37.64	+25 24.4	1.962	2.762	14.3	21.6
11 27	6 31.50	+27 2.8	2.287	3.166	9.6	19.0	11 27	6 32.34	+25 35.1	1.888	2.772	11.0	21.4
12 7	6 23.61	+26 43.8	2.249	3.191	6.2	18.9	12 7	6 24.52	+25 45.2	1.837	2.781	7.2	21.2
12 17	6 14.41	+26 20.6	2.239	3.215	2.6	18.7	12 17	6 14.91	+25 52.3	1.813	2.790	3.0	20.9
12 27	6 4.85	+25 53.1	2.259	3.240	1.5	18.6	12 27	6 4.61	+25 54.7	1.818	2.799	1.8	20.9
1 6	5 55.92	+25 22.3	2.310	3.265	4.9	18.9	1 6	5 54.84	+25 52.2	1.853	2.808	5.8	21.1
1 16	5 48.43	+24 50.3	2.391	3.289	8.2	19.1	1 16	5 46.69	+25 45.7	1.915	2.817	9.7	21.4
1 26	5 42.99	+24 19.2	2.497	3.313	11.0	19.4	1 26	5 40.96	+25 37.3	2.002	2.826	13.0	21.6
346928	2010 <i>AX</i> ₃₀		12 23.5	298°69	0°7/23.5	18	149385	2002 <i>YS</i> ₂₃		12 23.5	57°09	1°6/23.7	18
11 17	6 37.03	+24 16.4	1.518	2.335	17.0	21.2	11 17	6 38.45	+17 43.4	1.381	2.197	18.4	19.3
11 27	6 33.08	+24 28.7	1.417	2.310	13.3	20.9	11 27	6 33.77	+18 6.2	1.317	2.209	14.3	19.0
12 7	6 25.77	+24 42.6	1.337	2.285	8.8	20.6	12 7	6 25.85	+18 38.1	1.274	2.220	9.4	18.8
12 17	6 15.67	+24 55.6	1.281	2.259	3.7	20.3	12 17	6 15.54	+19 16.8	1.255	2.232	4.1	18.5
12 27	6 4.04	+25 4.6	1.253	2.234	2.1	20.1	12 27	6 4.29	+19 59.1	1.263	2.244	2.4	18.4
1 6	5 52.56	+25 8.2	1.251	2.209	7.6	20.4	1 6	5 53.73	+20 41.9	1.299	2.256	7.4	18.8
1 16	5 42.90	+25 7.0	1.275	2.185	12.9	20.6	1 16	5 45.29	+21 23.3	1.359	2.269	12.2	19.1
1 26	5 36.40	+25 3.5	1.321	2.160	17.5	20.8	1 26	5 39.98	+22 2.4	1.442	2.282	16.3	19.4
342718	2008 <i>WE</i> ₁₆		12 23.5	174°09	0°3/23.5	18	445313	2010 <i>EF</i> ₁₃₂		12 23.5	219°80	2°5/23.3	18
11 17	6 38.85	+23 5.8	1.793	2.595	15.4	21.1	11 17	6 39.37	+27 41.7	1.853	2.654	15.0	21.7
11 27	6 33.50	+22 56.8	1.712	2.597	11.9	20.9	11 27	6 34.15	+28 24.0	1.767	2.650	11.7	21.5
12 7	6 25.40	+22 48.1	1.653	2.598	7.7	20.6	12 7	6 26.01	+29 6.0	1.705	2.646	7.8	21.2
12 17	6 15.29	+22 38.3	1.621	2.598	3.2	20.3	12 17	6 15.64	+29 43.4	1.668	2.642	3.8	21.0
12 27	6 4.36	+22 26.7	1.617	2.599	1.7	20.2	12 27	6 4.20	+30 12.1	1.661	2.638	3.0	20.9
1 6	5 53.94	+22 13.7	1.643	2.599	6.4	20.5	1 6	5 53.14	+30 30.0	1.682	2.634	6.8	21.1
1 16	5 45.25	+22 0.5	1.696	2.599	10.7	20.8	1 16	5 43.78	+30 37.7	1.731	2.629	10.8	21.4
1 26	5 39.19	+21 49.0	1.773	2.599	14.3	21.0	1 26	5 37.15	+30 37.8	1.804	2.624	14.4	21.6
478509	2012 <i>SH</i> ₂₉		12 23.5	81°69	0°7/23.6	16	435564	2008 <i>RQ</i> ₃₀		12 23.5	118°59	0°7/23.6	18
11 17	6 41.73	+21 57.2	1.587	2.392	17.0	22.1	11 17	6 40.41	+21 16.2	1.856	2.652	15.2	22.1
11 27	6 35.64	+21 52.7	1.532	2.418	13.0	21.9	11 27	6 34.42	+21 17.4	1.787	2.668	11.7	21.9
12 7	6 26.65	+21 49.9	1.498	2.443	8.4	21.7	12 7	6 25.84	+21 20.8	1.741	2.684	7.6	21.7
12 17	6 15.71	+21 47.5	1.491	2.468	3.4	21.5	12 17	6 15.44	+21 25.1	1.722	2.699	3.1	21.5
12 27	6 4.20	+21 44.3	1.511	2.493	1.9	21.4	12 27	6 4.38	+21 29.0	1.733	2.714	1.7	21.4
1 6	5 53.58	+21 40.3	1.561	2.517	6.6	21.8	1 6	5 53.95	+21 32.1	1.773	2.728	6.1	21.7
1 16	5 45.04	+21 36.7	1.637	2.541	10.9	22.1	1 16	5 45.25	+21 34.9	1.841	2.741	10.1	22.0
1 26	5 39.37	+21 34.5	1.737	2.565	14.5	22.4	1 26	5 39.08	+21 38.4	1.933	2.754	13.5	22.2
16813	1997 <i>UT</i> ₆		12 23.5	275°64	2°3/23.5	18	50334	2000 <i>CC</i> ₅₈		12 23.5	251°25	4°9/23.9	18
11 17	6 38.47	+19 17.2	1.423	2.239	18.0	17.8	11 17	6 34.82	+ 9 8.2	2.076	2.854	14.4	18.3
11 27	6 34.09	+18 57.9	1.333	2.224	14.1	17.5	11 27	6 30.09	+ 8 53.5	1.981	2.843	11.6	18.1
12 7	6 26.32	+18 42.5	1.263	2.209	9.5	17.2	12 7	6 23.10	+ 8 49.5	1.909	2.832	8.5	17.8
12 17	6 15.85	+18 30.9	1.217	2.193	4.4	16.8	12 17	6 14.40	+ 8 58.0	1.863	2.820	5.7	17.7
12 27	6 4.01	+18 23.2	1.198	2.178	3.0	16.7	12 27	6 4.87	+ 9 19.5	1.845	2.808	5.1	17.6
1 6	5 52.52	+18 19.6	1.206	2.162	8.1	16.9	1 6	5 55.56	+ 9 53.3	1.857	2.795	7.4	17.7
1 16	5 42.98	+18 20.8	1.239	2.147	13.3	17.2	1 16	5 47.48	+10 37.3	1.895	2.783	10.6	17.9
1 26	5 36.66	+18 27.4	1.293	2.131	17.9	17.4	1 26	5 41.46	+11 28.9	1.959	2.770	13.8	18.1
513261	2006 <i>RP</i> ₁₀₈		12 23.5	300°28	2°3/23.5	18	418791	2008 <i>UR</i> ₃₄₇		12			

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12 23.5

12 23.6

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
275739	2001 GX ₆	12 23.5 215°52'		3°9'/23.8 18			520508	2014 LE ₃₁	12 23.6 181°66'		3°5'/23.6 18		
11 17	6 32.18	+ 8 21.4	3.137	3.895	10.4	21.6	11 17	6 34.93	+13 28.4	2.283	3.066	13.1	21.5
11 27	6 27.27	+ 8 4.6	3.037	3.886	8.4	21.4	11 27	6 29.86	+13 3.0	2.198	3.067	10.3	21.3
12 7	6 20.87	+ 7 55.1	2.963	3.876	6.2	21.3	12 7	6 22.76	+12 43.6	2.136	3.067	7.2	21.1
12 17	6 13.40	+ 7 54.0	2.916	3.866	4.4	21.1	12 17	6 14.21	+12 31.4	2.102	3.067	4.3	20.9
12 27	6 5.44	+ 8 1.9	2.900	3.855	4.0	21.1	12 27	6 5.06	+12 27.1	2.097	3.066	3.7	20.9
1 6	5 57.64	+ 8 18.5	2.914	3.843	5.5	21.2	1 6	5 56.24	+12 30.8	2.122	3.066	6.2	21.0
1 16	5 50.63	+ 8 43.1	2.958	3.832	7.7	21.3	1 16	5 48.62	+12 41.9	2.175	3.064	9.3	21.2
1 26	5 44.95	+ 9 14.3	3.029	3.819	9.9	21.5	1 26	5 42.91	+12 59.6	2.254	3.063	12.2	21.4
409798	2006 GU ₅₀	12 23.5 305°46'		3°9'/24.1 17			351836	2006 QK ₁₀₂	12 23.6 73°81'		0°5'/23.6 17		
11 17	6 32.87	+11 0.8	2.077	2.865	14.1	20.0	11 17	6 36.86	+22 19.7	1.816	2.622	15.1	21.2
11 27	6 28.67	+11 6.0	1.980	2.850	11.2	19.8	11 27	6 31.91	+22 14.0	1.740	2.626	11.6	21.0
12 7	6 22.23	+11 22.1	1.905	2.835	8.0	19.5	12 7	6 24.35	+22 9.5	1.686	2.631	7.6	20.8
12 17	6 14.07	+11 49.8	1.856	2.821	4.9	19.3	12 17	6 14.90	+22 5.0	1.659	2.636	3.1	20.5
12 27	6 5.05	+12 28.6	1.836	2.806	4.1	19.2	12 27	6 4.71	+21 59.9	1.660	2.641	1.7	20.4
1 6	5 56.22	+13 16.7	1.845	2.792	6.7	19.4	1 6	5 55.04	+21 54.1	1.690	2.646	6.2	20.7
1 16	5 48.56	+14 11.8	1.882	2.779	10.2	19.5	1 16	5 47.02	+21 48.4	1.747	2.651	10.3	21.0
1 26	5 42.93	+15 11.2	1.944	2.765	13.5	19.7	1 26	5 41.52	+21 44.1	1.828	2.657	13.9	21.2
436793	2012 PS ₄₁	12 23.5 56°62'		5°0'/23.8 18			396642	2001 XF ₃₁	12 23.6 337°28'		12°1'/20.3 18		
11 17	6 36.98	+12 56.2	1.422	2.231	18.4	21.2	11 17	6 40.23	+12 16.7	0.969	1.801	23.3	19.8
11 27	6 32.41	+12 24.0	1.357	2.240	14.5	20.9	11 27	6 36.14	+ 8 58.9	0.904	1.794	19.2	19.5
12 7	6 24.84	+12 2.1	1.313	2.250	10.2	20.7	12 7	6 27.91	+ 5 39.0	0.858	1.788	15.0	19.3
12 17	6 15.11	+11 52.8	1.293	2.260	6.2	20.5	12 17	6 16.53	+ 2 32.8	0.834	1.783	12.3	19.1
12 27	6 4.57	+11 56.9	1.299	2.270	5.3	20.5	12 27	6 3.84	- 0 1.9	0.834	1.778	12.9	19.1
1 6	5 54.70	+12 13.9	1.332	2.280	8.6	20.7	1 6	5 52.03	- 1 52.3	0.856	1.774	16.4	19.3
1 16	5 46.80	+12 41.7	1.389	2.290	12.7	21.0	1 16	5 42.96	- 2 54.8	0.897	1.771	20.7	19.5
1 26	5 41.80	+13 17.9	1.469	2.301	16.5	21.2	1 26	5 37.85	- 3 14.3	0.955	1.769	24.6	19.8
223355	2003 RV ₂₁	12 23.6 104°88'		2°1'/23.6 17			357731	2005 QO ₁₈₉	12 23.6 197°62'		5°2'/23.6 17		
11 17	6 37.23	+30 21.0	2.308	3.099	12.7	20.1	11 17	6 42.13	+39 28.0	2.467	3.233	12.7	21.6
11 27	6 31.72	+30 22.8	2.230	3.107	9.9	19.9	11 27	6 35.76	+40 0.9	2.378	3.230	10.3	21.4
12 7	6 23.98	+30 19.8	2.176	3.115	6.6	19.8	12 7	6 26.78	+40 24.9	2.313	3.226	7.8	21.2
12 17	6 14.68	+30 9.9	2.150	3.122	3.3	19.6	12 17	6 15.89	+40 35.1	2.276	3.222	5.7	21.1
12 27	6 4.81	+29 52.0	2.153	3.130	2.4	19.5	12 27	6 4.20	+40 28.3	2.267	3.218	5.3	21.1
1 6	5 55.45	+29 25.5	2.186	3.138	5.4	19.7	1 6	5 52.96	+40 4.4	2.288	3.213	7.0	21.2
1 16	5 47.55	+28 55.6	2.248	3.145	8.7	19.9	1 16	5 43.33	+39 25.9	2.337	3.208	9.6	21.3
1 26	5 41.82	+28 22.2	2.336	3.152	11.6	20.1	1 26	5 36.17	+38 37.5	2.411	3.202	12.1	21.5
124507	2001 RU ₆₄	12 23.6 141°46'		0°7'/23.5 18			360195	1995 UC ₂₁	12 23.6 115°78'		5°8'/23.6 18		
11 17	6 40.99	+22 4.5	1.946	2.739	14.7	20.9	11 17	6 34.55	+ 6 50.8	2.318	3.083	13.4	21.5
11 27	6 34.79	+21 53.3	1.871	2.751	11.3	20.7	11 27	6 29.37	+ 6 1.2	2.247	3.096	10.9	21.4
12 7	6 26.06	+21 42.8	1.820	2.762	7.4	20.4	12 7	6 22.33	+ 5 21.4	2.201	3.110	8.3	21.3
12 17	6 15.54	+21 32.0	1.795	2.772	3.0	20.2	12 17	6 14.01	+ 4 54.0	2.180	3.122	6.3	21.1
12 27	6 4.36	+21 20.5	1.801	2.782	1.7	20.1	12 27	6 5.22	+ 4 40.8	2.189	3.135	5.9	21.1
1 6	5 53.78	+21 8.6	1.837	2.791	6.0	20.4	1 6	5 56.85	+ 4 42.1	2.227	3.147	7.5	21.3
1 16	5 44.86	+20 57.5	1.901	2.800	9.9	20.7	1 16	5 49.67	+ 4 56.7	2.291	3.159	9.9	21.4
1 26	5 38.42	+20 48.5	1.990	2.808	13.3	20.9	1 26	5 44.31	+ 5 22.5	2.381	3.170	12.3	21.6
412475	2014 HL ₁₃₀	12 23.6 165°61'		0°3'/23.5 18			115682	2003 UN ₁₅₀	12 23.6 8°67'		1°9'/23.5 18		
11 17	6 38.63	+23 7.5	1.953	2.751	14.5	21.6	11 17	6 36.64	+27 10.8	1.499	2.318	17.1	19.2
11 27	6 33.19	+23 23.8	1.871	2.754	11.2	21.4	11 27	6 32.48	+27 29.2	1.426	2.319	13.2	19.0
12 7	6 25.16	+23 41.8	1.813	2.756	7.3	21.1	12 7	6 25.10	+27 46.0	1.374	2.320	8.7	18.7
12 17	6 15.24	+23 59.2	1.781	2.759	2.9	20.9	12 17	6 15.31	+27 57.7	1.346	2.322	4.0	18.4
12 27	6 4.49	+24 13.9	1.779	2.761	1.6	20.8	12 27	6 4.51	+28 1.3	1.345	2.325	2.7	18.4
1 6	5 54.18	+24 25.0	1.807	2.762	6.0	21.1	1 6	5 54.33	+27 56.2	1.371	2.328	7.3	18.6
1 16	5 45.44	+24 32.6	1.862	2.764	10.0	21.3	1 16	5 46.20	+27 44.2	1.422	2.331	11.9	18.9
1 26	5 39.15	+24 38.0	1.943	2.765	13.4	21.5	1 26	5 41.16	+27 28.5	1.496	2.335	15.8	19.2
103739	2000 CT ₁₁₀	12 23.6 130°32'		3°7'/23.6 18			412821	2014 PV ₃₉	12 23.6 100°74'		1°0'/23.6 18		
11 17	6 40.50	+33 9.8	1.945	2.737	14.7	19.7	11 17	6 35.41	+20 10.4	2.117	2.914	13.5	21.6
11 27	6 34.79	+33 30.4	1.868	2.742	11.6	19.5	11 27	6 30.42	+20 10.6	2.039	2.921	10.4	21.4
12 7	6 26.26	+33 44.5	1.813	2.747	8.0	19.3	12 7	6 23.21	+20 13.7	1.986	2.928	6.8	21.2
12 17	6 15.67	+33 47.8	1.785	2.752	4.7	19.1	12 17	6 14.42	+20 18.8	1.959	2.935	2.9	21.0
12 27	6 4.29	+33 37.7	1.785	2.757	3.9	19.0	12 27	6 5.00	+20 25.1	1.962	2.942	1.7	20.9
1 6	5 53.52	+33 14.4	1.815	2.761	6.8	19.2	1 6	5 56.00	+20 32.2	1.994	2.949	5.5	21.2
1 16	5 44.58	+32 40.7	1.872	2.765	10.4	19.4	1 16	5 48.39	+20 39.9	2.055	2.956	9.2	21.4
1 26	5 38.38	+32 1.1	1.953	2.769	13.6	19.6	1 26	5 42.89	+20 48.7	2.140	2.963	12.3	21.6
267140	2000 ER ₁₅₉	12 23.6 211°24'		5°6'/24.1 18			164512	2006 HG ₂	12 23.6 177°37'		5°6'/22.9 18		
11 17	6 31.76	+ 3 26.4	2.831	3.578	11.7	21.3	11 17	6 40.67	+43 22.1	3.086	3.833	10.8	21.0
11 27	6 27.08	+ 3 1.1	2.740	3.573	9.7	21.2	11 27	6 34.36	+44 19.8	3.003	3.834	9.0	20.9
12 7	6 20.81	+ 2 46.4	2.672	3.567	7.6	21.0	12 7	6 25.77	+45 8.9	2.945	3.836	7.2	20.8
12 17	6 13.40	+ 2 44.2	2.631	3.561	6.0	20.9	12 17	6 15.49	+45 44.9	2.914	3.836	5.9	20.7
12 27	6 5.48	+ 2 55.6	2.619	3.555	5.7	20.9	12 27	6 4.43	+46 4.2	2.913	3.837	5.8	20.7
1 6	5 57.77	+ 3 20.3	2.636	3.549	6.9	21.0	1 6	5 53.67	+46 6.1	2.940	3.837	6.9	20.8
1 16	5 50.93	+ 3 57.0	2.682	3.542	8.9	21.1	1 16	5 44.19	+45 51.9	2.996	3.836	8.6	20.9
1 26	5 45.54	+ 4 43.2	2.752	3.534	11.0	21.2	1 26	5 36.82	+45 25.4	3.076	3.836	10.5	21.0
164823	1999 RD ₁₇₁	12 23.6 69°12'		1°1'/23.6 18			363031	1998 XX ₁₃	12 23.6 49°02'		5°7'/22.9 18		
11 17	6 39.49	+20 17.5	1.595	2.402	16.8	20.4	11 17	6 37.51	+12 15.3	1			

EPHEMERIDES

12 23.6

12 23.6

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
203675	2002 <i>LH</i>		12 23.6 192°06	1.9°/23.8	18		443066	2013 <i>GV₂</i>		12 23.6 23°76	6°4/24.2	17	
11 17	6 37.27	+16 43.9	1.953	2.747	14.6	20.6	11 17	6 42.72	+39 52.1	1.647	2.438	17.0	20.6
11 27	6 32.14	+16 57.9	1.868	2.746	11.4	20.4	11 27	6 37.21	+40 10.9	1.574	2.441	13.8	20.4
12 7	6 24.51	+17 19.1	1.805	2.745	7.6	20.1	12 7	6 28.15	+40 16.0	1.522	2.444	10.3	20.2
12 17	6 15.03	+17 46.3	1.769	2.743	3.6	19.9	12 17	6 16.54	+40 1.2	1.495	2.448	7.3	20.0
12 27	6 4.69	+18 18.0	1.763	2.742	2.4	19.8	12 27	6 4.01	+39 22.9	1.494	2.452	6.6	20.0
1 6	5 54.69	+18 52.3	1.786	2.740	6.2	20.0	1 6	5 52.41	+38 23.0	1.520	2.457	8.8	20.2
1 16	5 46.13	+19 27.9	1.837	2.737	10.1	20.3	1 16	5 43.26	+37 7.6	1.572	2.462	12.2	20.4
1 26	5 39.89	+20 3.7	1.912	2.734	13.6	20.5	1 26	5 37.54	+35 44.7	1.647	2.467	15.5	20.6
241250	2007 <i>TT₂₃₃</i>		12 23.6 163°48	5°5/23.4	18		460956	2014 <i>WT₂₇₃</i>		12 23.6 126°75	1°4/23.8	17	
11 17	6 36.53	+ 8 20.3	2.296	3.062	13.5	21.0	11 17	6 33.83	+17 29.2	2.540	3.327	11.8	21.4
11 27	6 30.97	+ 7 27.1	2.216	3.068	11.0	20.8	11 27	6 28.89	+17 44.6	2.458	3.333	9.1	21.2
12 7	6 23.43	+ 6 42.2	2.160	3.073	8.2	20.7	12 7	6 22.10	+18 4.8	2.400	3.340	6.0	21.0
12 17	6 14.49	+ 6 8.3	2.131	3.078	6.0	20.6	12 17	6 13.98	+18 28.9	2.371	3.346	2.8	20.8
12 27	6 5.00	+ 5 47.6	2.132	3.082	5.7	20.5	12 27	6 5.31	+18 55.6	2.372	3.352	1.8	20.7
1 6	5 55.90	+ 5 40.7	2.161	3.085	7.5	20.7	1 6	5 56.94	+19 23.9	2.404	3.358	4.9	20.9
1 16	5 48.01	+ 5 47.1	2.219	3.088	10.1	20.8	1 16	5 49.65	+19 52.7	2.466	3.363	8.0	21.2
1 26	5 42.02	+ 6 5.0	2.301	3.090	12.7	21.0	1 26	5 44.10	+20 21.5	2.553	3.369	10.8	21.4
449210	2013 <i>CX₇₀</i>		12 23.6 229°04	2°2/23.6	18		268842	2006 <i>WK₁₂₈</i>		12 23.6 17°34	0°6/23.6	18	
11 17	6 36.51	+18 3.0	2.016	2.811	14.2	21.6	11 17	6 38.46	+24 45.4	1.305	2.130	18.8	21.0
11 27	6 31.47	+17 43.7	1.925	2.805	11.1	21.4	11 27	6 34.21	+24 46.9	1.235	2.132	14.6	20.7
12 7	6 24.03	+17 27.9	1.858	2.798	7.4	21.1	12 7	6 26.40	+24 48.2	1.185	2.134	9.5	20.4
12 17	6 14.82	+17 15.8	1.817	2.791	3.6	20.9	12 17	6 15.91	+24 46.7	1.158	2.137	3.9	20.1
12 27	6 4.81	+17 7.8	1.806	2.784	2.7	20.8	12 27	6 4.31	+24 40.6	1.158	2.140	2.1	20.0
1 6	5 55.15	+17 3.9	1.824	2.776	6.2	21.0	1 6	5 53.45	+24 29.6	1.184	2.143	7.8	20.4
1 16	5 46.88	+17 4.6	1.870	2.768	10.1	21.2	1 16	5 44.93	+24 16.0	1.234	2.147	12.9	20.7
1 26	5 40.85	+17 9.8	1.940	2.760	13.5	21.4	1 26	5 39.83	+24 2.5	1.306	2.151	17.3	21.0
73793	1995 <i>FK₁</i>		12 23.6 159°37	4°4/23.4	18		369831	2012 <i>JC₄</i>		12 23.6 141°42	2°8/23.7	17	
11 17	6 38.42	+37 12.1	2.618	3.391	11.9	20.4	11 17	6 32.81	+13 42.1	2.748	3.526	11.3	21.6
11 27	6 32.69	+37 47.9	2.536	3.395	9.5	20.2	11 27	6 27.90	+13 28.0	2.667	3.534	8.8	21.5
12 7	6 24.68	+38 16.8	2.479	3.398	7.0	20.0	12 7	6 21.34	+13 19.3	2.611	3.541	6.1	21.3
12 17	6 15.04	+38 34.6	2.448	3.401	4.9	19.9	12 17	6 13.65	+13 16.5	2.582	3.548	3.6	21.2
12 27	6 4.72	+38 38.8	2.448	3.404	4.5	19.9	12 27	6 5.51	+13 19.9	2.584	3.555	3.0	21.1
1 6	5 54.80	+38 28.9	2.477	3.407	6.3	20.0	1 6	5 57.66	+13 29.0	2.617	3.562	5.1	21.3
1 16	5 46.26	+38 6.7	2.534	3.409	8.8	20.2	1 16	5 50.81	+13 43.5	2.679	3.568	7.8	21.5
1 26	5 39.88	+37 35.7	2.617	3.411	11.2	20.3	1 26	5 45.51	+14 2.4	2.767	3.574	10.3	21.6
268228	2005 <i>ES₄₃</i>		12 23.6 310°53	0°9/23.6	18		229080	2004 <i>LS₁₉</i>		12 23.6 57°46	3°5/23.2	18	
11 17	6 33.03	+20 30.3	2.138	2.939	13.3	20.6	11 17	6 40.85	+28 23.9	1.406	2.223	18.1	20.0
11 27	6 28.79	+20 31.5	2.043	2.927	10.3	20.3	11 27	6 35.97	+29 21.7	1.343	2.233	14.1	19.8
12 7	6 22.31	+20 35.6	1.971	2.915	6.8	20.1	12 7	6 27.51	+30 18.7	1.300	2.244	9.5	19.6
12 17	6 14.14	+20 41.7	1.926	2.903	2.9	19.8	12 17	6 16.35	+31 8.4	1.282	2.255	4.9	19.3
12 27	6 5.17	+20 49.1	1.910	2.891	1.7	19.7	12 27	6 4.09	+31 44.8	1.291	2.267	4.1	19.3
1 6	5 56.46	+20 57.2	1.924	2.880	5.6	20.0	1 6	5 52.57	+32 5.5	1.326	2.278	8.2	19.6
1 16	5 49.00	+21 5.8	1.965	2.869	9.4	20.2	1 16	5 43.41	+32 11.9	1.387	2.290	12.6	19.9
1 26	5 43.62	+21 15.3	2.032	2.858	12.7	20.4	1 26	5 37.71	+32 8.2	1.470	2.302	16.5	20.1
460851	2014 <i>WN₁₀₅</i>		12 23.6 357°26	5°7/23.7	17		409193	2003 <i>UD₃₂₉</i>		12 23.6 50°92	7°7/23.7	17	
11 17	6 32.13	+ 7 56.0	2.124	2.904	14.1	21.7	11 17	6 32.19	+ 1 45.9	2.230	2.985	14.2	21.3
11 27	6 27.86	+ 7 15.6	2.044	2.903	11.4	21.5	11 27	6 27.78	+ 0 47.7	2.154	2.987	12.0	21.2
12 7	6 21.56	+ 6 45.1	1.986	2.903	8.6	21.3	12 7	6 21.44	+ 0 2.6	2.100	2.989	9.7	21.0
12 17	6 13.78	+ 6 27.3	1.953	2.902	6.3	21.2	12 17	6 13.73	- 0 25.7	2.071	2.990	8.1	20.9
12 27	6 5.40	+ 6 23.7	1.949	2.902	5.8	21.1	12 27	6 5.47	- 0 34.7	2.068	2.992	7.8	20.9
1 6	5 57.34	+ 6 34.6	1.973	2.902	7.7	21.2	1 6	5 57.53	- 0 24.0	2.093	2.994	9.0	21.0
1 16	5 50.50	+ 6 58.6	2.023	2.902	10.4	21.4	1 16	5 50.73	+ 0 4.8	2.144	2.996	11.1	21.1
1 26	5 45.57	+ 7 33.3	2.097	2.903	13.2	21.6	1 26	5 45.75	+ 0 48.2	2.218	2.998	13.4	21.3
61839	2000 <i>QA₁₉₈</i>		12 23.6 192°10	0°3/23.6	18		82240	2001 <i>JQ₆</i>		12 23.6 214°33	3°6/23.5	18	
11 17	6 39.68	+23 31.2	2.022	2.816	14.2	20.4	11 17	6 43.14	+31 40.7	1.874	2.666	15.2	20.2
11 27	6 33.99	+23 44.6	1.934	2.814	11.0	20.2	11 27	6 37.17	+32 12.1	1.784	2.659	12.0	20.0
12 7	6 25.72	+23 59.1	1.870	2.813	7.2	19.9	12 7	6 28.07	+32 39.0	1.716	2.652	8.3	19.8
12 17	6 15.53	+24 12.6	1.833	2.810	2.9	19.7	12 17	6 16.57	+32 56.5	1.675	2.644	4.7	19.5
12 27	6 4.48	+24 23.0	1.826	2.807	1.6	19.6	12 27	6 3.95	+33 0.6	1.662	2.635	3.9	19.5
1 6	5 53.80	+24 29.5	1.848	2.803	5.9	19.8	1 6	5 51.74	+32 50.2	1.679	2.626	7.2	19.7
1 16	5 44.66	+24 32.6	1.899	2.799	9.9	20.1	1 16	5 41.40	+32 27.6	1.723	2.616	11.2	19.9
1 26	5 37.92	+24 33.7	1.975	2.794	13.4	20.3	1 26	5 33.99	+31 57.5	1.791	2.605	14.7	20.1
371333	2006 <i>JJ₃₃</i>		12 23.6 151°75	2°0/23.8	18		290055	2005 <i>QF₅₇</i>		12 23.6 138°45	0°8/23.6	18	
11 17	6 33.18	+15 49.2	2.564	3.349	11.8	20.9	11 17	6 42.38	+25 12.4	1.899	2.693	15.0	21.8
11 27	6 28.38	+15 56.8	2.479	3.352	9.2	20.7	11 27	6 36.04	+25 21.6	1.826	2.706	11.5	21.6
12 7	6 21.76	+16 9.9	2.418	3.355	6.2	20.5	12 7	6 26.98	+25 30.0	1.776	2.718	7.5	21.4
12 17	6 13.85	+16 28.1	2.385	3.357	3.1	20.3	12 17	6 16.01	+25 35.1	1.753	2.730	3.1	21.1
12 27	6 5.38	+16 50.7	2.383	3.360	2.3	20.3	12 27	6 4.31	+25 35.0	1.760	2.741	1.8	21.0
1 6	5 57.18	+17 16.6	2.411	3.362	5.0	20.5	1 6	5 53.24	+25 29.5	1.797	2.752	6.1	21.3
1 16	5 50.03	+17 44.8	2.468	3.365	8.1	20.7	1 16	5 43.94	+25 20.0	1.862	2.761	10.1	21.6
1 26	5 44.57	+18 14.6	2.552	3.367	10.8	20.8	1 26	5 37.28	+25 8.9	1.952	2.770	13.5	21.8
234	Barbara		12 23.6 85°17	7°7/25.1	18		332596	2008 <i>SQ₂₂₃</i>		12 23.6 236°84	1°3/23.6	18	

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
12234 Shkuratov		12 23.6	73°82	6°0/24.5	18		197733 2004 PJ ₂₂		12 23.6	101°18	0°0/23.6	18	
11 17	6 37.38	+ 7 8.9	1.701	2.483	16.9	17.2	11 17	6 41.23	+23 7.8	1.746	2.546	15.8	21.5
11 27	6 32.12	+ 6 55.3	1.644	2.505	13.6	17.1	11 27	6 35.24	+23 11.5	1.682	2.565	12.2	21.3
12 7	6 24.38	+ 6 56.7	1.607	2.527	10.1	16.9	12 7	6 26.50	+23 16.0	1.640	2.584	7.9	21.1
12 17	6 14.93	+ 7 14.7	1.595	2.549	6.9	16.8	12 17	6 15.84	+23 19.5	1.625	2.603	3.2	20.8
12 27	6 4.90	+ 7 49.0	1.611	2.570	6.1	16.8	12 27	6 4.54	+23 20.4	1.639	2.621	1.6	20.8
1 6	5 55.51	+ 8 37.2	1.655	2.592	8.2	16.9	1 6	5 53.95	+23 18.5	1.682	2.638	6.2	21.1
1 16	5 47.79	+ 9 35.8	1.725	2.613	11.4	17.2	1 16	5 45.25	+23 14.8	1.753	2.656	10.4	21.4
1 26	5 42.51	+10 40.6	1.819	2.634	14.5	17.4	1 26	5 39.25	+23 11.1	1.848	2.672	13.9	21.7
22856 Stevenzeiher		12 23.6	17°43	2°8/23.5	18		419455 2010 CY ₁₄₁		12 23.6	320°37	4°2/23.7	18	
11 17	6 38.43	+29 6.6	1.584	2.397	16.6	19.5	11 17	6 37.45	+36 2.1	2.236	3.022	13.2	20.6
11 27	6 33.78	+29 31.2	1.510	2.398	13.0	19.3	11 27	6 32.32	+36 17.9	2.148	3.017	10.6	20.4
12 7	6 25.94	+29 52.7	1.456	2.400	8.7	19.0	12 7	6 24.65	+36 25.7	2.083	3.011	7.6	20.2
12 17	6 15.70	+30 6.9	1.428	2.402	4.3	18.8	12 17	6 15.15	+36 21.8	2.045	3.006	4.9	20.1
12 27	6 4.46	+30 10.3	1.427	2.404	3.3	18.7	12 27	6 4.88	+36 3.8	2.036	3.001	4.3	20.0
1 6	5 53.82	+30 2.5	1.453	2.407	7.3	19.0	1 6	5 55.07	+35 32.1	2.055	2.996	6.6	20.1
1 16	5 45.23	+29 45.5	1.505	2.410	11.6	19.2	1 16	5 46.84	+34 49.2	2.102	2.992	9.6	20.3
1 26	5 39.70	+29 23.3	1.580	2.413	15.5	19.5	1 26	5 41.01	+33 59.7	2.174	2.987	12.5	20.5
341275 2007 RG ₂₈₃		12 23.6	351°81	1°3/23.4	14	C	442685 2012 UU ₄₂		12 23.6	138°67	0°7/23.6	16	
11 17	6 17.78	+44 11.4	14.624	15.362	2.5	20.6	11 17	6 41.32	+24 49.5	1.942	2.735	14.7	23.0
11 27	6 15.57	+44 15.7	14.536	15.359	2.1	20.6	11 27	6 35.22	+25 2.4	1.867	2.747	11.3	22.8
12 7	6 13.01	+44 17.7	14.473	15.357	1.7	20.5	12 7	6 26.49	+25 15.0	1.816	2.758	7.4	22.6
12 17	6 10.22	+44 17.1	14.438	15.355	1.4	20.5	12 17	6 15.87	+25 24.9	1.792	2.769	3.1	22.4
12 27	6 7.34	+44 13.6	14.432	15.353	1.3	20.5	12 27	6 4.53	+25 30.0	1.798	2.779	1.7	22.3
1 6	6 4.53	+44 7.4	14.456	15.351	1.6	20.5	1 6	5 53.75	+25 30.0	1.834	2.788	6.0	22.6
1 16	6 1.90	+43 58.4	14.508	15.349	2.0	20.6	1 16	5 44.68	+25 25.9	1.898	2.797	9.9	22.9
1 26	5 59.60	+43 47.0	14.587	15.347	2.4	20.6	1 26	5 38.15	+25 19.7	1.986	2.805	13.3	23.1
487631 2015 NZ ₂₃		12 23.6	100°72	1°1/23.6	18		336865 2011 FW ₁₄₄		12 23.6	175°66	1°4/23.6	18	
11 17	6 40.35	+25 49.9	1.797	2.598	15.4	21.3	11 17	6 42.19	+27 34.2	1.763	2.562	15.8	21.2
11 27	6 34.61	+26 0.7	1.729	2.613	11.9	21.1	11 27	6 36.28	+27 31.4	1.682	2.564	12.2	21.0
12 7	6 26.10	+26 10.4	1.684	2.628	7.7	20.9	12 7	6 27.37	+27 25.1	1.623	2.565	8.1	20.8
12 17	6 15.66	+26 16.2	1.666	2.642	3.3	20.6	12 17	6 16.29	+27 12.5	1.590	2.566	3.5	20.5
12 27	6 4.52	+26 16.3	1.676	2.657	1.9	20.6	12 27	6 4.31	+26 52.3	1.586	2.567	2.1	20.4
1 6	5 54.05	+26 10.5	1.715	2.671	6.2	20.9	1 6	5 52.94	+26 25.0	1.612	2.567	6.6	20.7
1 16	5 45.43	+26 0.4	1.782	2.685	10.3	21.2	1 16	5 43.48	+25 53.5	1.664	2.566	10.9	20.9
1 26	5 39.49	+25 48.3	1.874	2.698	13.7	21.4	1 26	5 36.89	+25 21.3	1.741	2.565	14.6	21.2
205998 2002 PH ₂₀		12 23.6	132°93	0°3/23.6	18		265216 2004 CK ₂₇		12 23.6	289°14	1°1/23.7	18	
11 17	6 38.42	+23 2.9	1.999	2.795	14.2	21.2	11 17	6 37.60	+20 14.7	1.458	2.275	17.6	20.8
11 27	6 32.88	+22 57.6	1.922	2.804	10.9	21.0	11 27	6 33.50	+20 21.2	1.367	2.259	13.8	20.5
12 7	6 24.89	+22 52.6	1.868	2.812	7.1	20.8	12 7	6 26.06	+20 33.1	1.297	2.243	9.2	20.2
12 17	6 15.17	+22 46.7	1.842	2.819	2.9	20.6	12 17	6 15.94	+20 49.0	1.250	2.228	3.9	19.9
12 27	6 4.78	+22 39.1	1.845	2.826	1.5	20.5	12 27	6 4.42	+21 7.0	1.231	2.212	2.2	19.7
1 6	5 54.91	+22 30.0	1.878	2.833	5.8	20.8	1 6	5 53.17	+21 25.3	1.238	2.196	7.6	20.0
1 16	5 46.60	+22 20.4	1.938	2.840	9.6	21.0	1 16	5 43.81	+21 43.4	1.271	2.181	12.9	20.3
1 26	5 40.65	+22 11.7	2.024	2.846	13.0	21.3	1 26	5 37.59	+22 1.9	1.325	2.166	17.4	20.5
489796 2008 CF ₁₄₈		12 23.6	20°42	4°3/23.9	17		345357 2006 AY ₁₀		12 23.6	323°16	10°1/23.9	16	
11 17	6 36.10	+33 1.7	1.138	1.974	20.3	20.5	11 17	6 41.39	+43 40.3	1.332	2.134	19.8	20.3
11 27	6 32.75	+33 8.8	1.090	1.989	15.8	20.2	11 27	6 37.87	+44 29.1	1.246	2.112	16.7	20.0
12 7	6 25.49	+33 5.5	1.060	2.006	10.8	20.0	12 7	6 29.65	+45 1.6	1.177	2.091	13.5	19.7
12 17	6 15.50	+32 47.2	1.052	2.024	6.0	19.8	12 17	6 17.57	+45 6.9	1.130	2.071	10.8	19.5
12 27	6 4.71	+32 12.1	1.068	2.044	4.7	19.8	12 27	6 3.58	+44 36.1	1.106	2.052	10.2	19.4
1 6	5 55.15	+31 23.1	1.109	2.066	8.6	20.1	1 6	5 50.32	+43 28.1	1.105	2.033	12.4	19.5
1 16	5 48.35	+30 26.2	1.174	2.089	13.2	20.4	1 16	5 40.12	+41 50.2	1.127	2.016	16.0	19.7
1 26	5 45.22	+29 28.0	1.259	2.113	17.3	20.7	1 26	5 34.49	+39 55.2	1.169	2.000	19.9	19.8
448952 2011 WZ ₇₁		12 23.6	3°69	2°2/23.5	17		427350 2014 WE ₃₉₂		12 23.6	60°34	3°7/24.3	17	
11 17	6 35.28	+27 25.0	1.462	2.285	17.2	21.6	11 17	6 33.49	+10 25.4	2.250	3.030	13.4	21.0
11 27	6 31.58	+27 48.8	1.389	2.284	13.4	21.4	11 27	6 28.83	+10 35.0	2.171	3.037	10.6	20.9
12 7	6 24.63	+28 11.3	1.337	2.284	8.9	21.1	12 7	6 22.19	+10 54.8	2.116	3.044	7.5	20.7
12 17	6 15.24	+28 28.5	1.309	2.285	4.1	20.9	12 17	6 14.12	+11 25.2	2.088	3.051	4.6	20.5
12 27	6 4.79	+28 37.2	1.308	2.287	2.9	20.8	12 27	6 5.46	+12 5.2	2.089	3.058	3.8	20.5
1 6	5 54.95	+28 36.3	1.333	2.290	7.4	21.1	1 6	5 57.12	+12 52.9	2.120	3.065	6.1	20.6
1 16	5 47.16	+28 27.5	1.383	2.294	12.0	21.3	1 16	5 49.96	+13 46.1	2.179	3.073	9.1	20.8
1 26	5 42.48	+28 14.0	1.456	2.298	16.0	21.6	1 26	5 44.67	+14 42.4	2.264	3.080	12.0	21.0
226273 2003 AO ₇₀		12 23.6	341°66	5°5/23.6	18		324949 2007 YQ ₂₈		12 23.6	83°04	0°7/23.6	18	
11 17	6 39.17	+34 6.7	1.307	2.128	19.0	19.4	11 17	6 43.48	+25 23.8	1.327	2.143	19.1	20.9
11 27	6 35.32	+34 40.1	1.232	2.122	15.2	19.1	11 27	6 37.78	+25 21.4	1.269	2.160	14.7	20.7
12 7	6 27.47	+35 5.4	1.176	2.116	10.8	18.9	12 7	6 28.52	+25 17.5	1.230	2.177	9.5	20.5
12 17	6 16.50	+35 15.5	1.143	2.111	6.7	18.6	12 17	6 16.75	+25 9.5	1.216	2.194	3.9	20.2
12 27	6 4.12	+35 5.1	1.135	2.106	5.8	18.6	12 27	6 4.16	+24 55.7	1.229	2.211	2.1	20.1
1 6	5 52.48	+34 33.9	1.153	2.102	9.4	18.7	1 6	5 52.59	+24 36.8	1.270	2.228	7.5	20.5
1 16	5 43.44	+33 46.8	1.194	2.099	13.9	19.0	1 16	5 43.54	+24 15.8	1.335	2.244	12.5	20.8
1 26	5 38.26	+32 51.2	1.255	2.097	18.1	19.2	1 26	5 37.95	+23 55.8	1.423	2.260	16.6	21.1
4426 Roerich		12 23.6	155°38	0°6/23.6	18		421013 2013 PO ₅₅		12 23.6	208°09	2°4/23.7	18	
11 17	6 36.60	+21 49.2	2										

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
295693	2008 <i>TJ</i> ₁₅₈		12 23.6	84°62	3°2/23.3	18	270091	2001 <i>QG</i> ₁₉₅		12 23.6	131°96	0°8/23.6	18
11 17	6 39.55	+31 44.6	2.471	3.252	12.3	20.8	11 17	6 42.08	+24 56.5	1.861	2.656	15.2	21.8
11 27	6 33.43	+32 33.9	2.411	3.280	9.5	20.6	11 27	6 35.91	+25 10.5	1.789	2.670	11.7	21.6
12 7	6 25.11	+33 19.1	2.376	3.307	6.5	20.5	12 7	6 27.01	+25 24.3	1.741	2.683	7.6	21.4
12 17	6 15.29	+33 56.3	2.369	3.334	3.9	20.3	12 17	6 16.14	+25 35.1	1.719	2.695	3.2	21.1
12 27	6 4.91	+34 22.5	2.392	3.361	3.4	20.4	12 27	6 4.54	+25 40.8	1.726	2.707	1.8	21.1
1 6	5 55.04	+34 37.0	2.446	3.387	5.7	20.5	1 6	5 53.55	+25 40.8	1.763	2.718	6.1	21.4
1 16	5 46.61	+34 40.6	2.529	3.413	8.4	20.8	1 16	5 44.35	+25 36.5	1.829	2.729	10.2	21.6
1 26	5 40.31	+34 36.2	2.637	3.438	10.9	21.0	1 26	5 37.81	+25 29.9	1.918	2.739	13.6	21.9
330511	2007 <i>NJ</i> ₃		12 23.6	170°73	5°0/24.2	18	488316	2016 <i>UP</i> ₈₂		12 23.6	319°55	6°3/23.2	18
11 17	6 32.09	+3 39.7	3.103	3.846	10.8	22.2	11 17	6 34.60	+12 58.5	1.357	2.174	18.7	20.8
11 27	6 27.20	+3 21.2	3.018	3.849	9.0	22.0	11 27	6 31.12	+11 51.9	1.273	2.159	15.0	20.5
12 7	6 20.87	+3 12.5	2.957	3.852	7.0	21.9	12 7	6 24.45	+10 52.1	1.209	2.146	10.9	20.3
12 17	6 13.54	+3 15.2	2.924	3.855	5.4	21.8	12 17	6 15.28	+10 3.5	1.169	2.132	7.2	20.0
12 27	6 5.79	+3 29.9	2.920	3.857	5.1	21.8	12 27	6 4.93	+9 30.5	1.153	2.120	6.7	19.9
1 6	5 58.27	+3 56.1	2.946	3.859	6.2	21.9	1 6	5 54.96	+9 15.6	1.163	2.108	10.0	20.1
1 16	5 51.56	+4 32.4	3.000	3.860	8.1	22.0	1 16	5 46.88	+9 19.1	1.197	2.096	14.4	20.3
1 26	5 46.19	+5 16.7	3.081	3.861	10.0	22.1	1 26	5 41.81	+9 38.8	1.251	2.086	18.6	20.5
400774	2010 <i>EG</i> ₁₄		12 23.6	259°08	4°3/24.2	18	185720	1998 <i>SG</i> ₈₉		12 23.6	107°11	0°4/23.6	18
11 17	6 37.21	+10 3.9	1.987	2.767	14.9	21.1	11 17	6 42.55	+24 21.3	1.668	2.469	16.4	21.3
11 27	6 32.24	+10 10.9	1.884	2.749	12.0	20.9	11 27	6 36.44	+24 24.0	1.603	2.487	12.6	21.1
12 7	6 24.77	+10 30.3	1.803	2.730	8.6	20.7	12 7	6 27.39	+24 26.4	1.560	2.504	8.2	20.8
12 17	6 15.32	+11 2.9	1.749	2.711	5.4	20.4	12 17	6 16.30	+24 26.2	1.544	2.521	3.3	20.6
12 27	6 4.81	+11 48.2	1.723	2.692	4.5	20.3	12 27	6 4.50	+24 22.0	1.556	2.538	1.7	20.5
1 6	5 54.41	+12 44.3	1.727	2.672	7.2	20.4	1 6	5 53.47	+24 13.6	1.598	2.554	6.5	20.8
1 16	5 45.26	+13 48.1	1.759	2.652	10.9	20.6	1 16	5 44.46	+24 2.9	1.666	2.569	10.8	21.1
1 26	5 38.33	+14 56.5	1.815	2.631	14.5	20.8	1 26	5 38.31	+23 51.9	1.759	2.584	14.4	21.4
342404	2008 <i>UQ</i> ₅₆		12 23.6	60°91	3°4/23.6	18	128736	2004 <i>RJ</i> ₁₅₆		12 23.6	96°67	1°5/23.6	18
11 17	6 43.16	+30 30.3	1.403	2.215	18.4	20.9	11 17	6 42.58	+27 22.2	1.739	2.538	15.9	20.7
11 27	6 37.44	+30 55.4	1.352	2.239	14.3	20.7	11 27	6 36.37	+27 27.5	1.676	2.558	12.3	20.5
12 7	6 28.23	+31 14.8	1.322	2.264	9.6	20.5	12 7	6 27.29	+27 29.9	1.636	2.578	8.0	20.3
12 17	6 16.62	+31 23.4	1.315	2.288	4.9	20.3	12 17	6 16.23	+27 26.4	1.622	2.598	3.5	20.1
12 27	6 4.29	+31 18.0	1.336	2.313	3.8	20.3	12 27	6 4.55	+27 15.5	1.637	2.617	2.2	20.0
1 6	5 53.06	+30 59.5	1.384	2.337	7.7	20.6	1 6	5 53.66	+26 57.6	1.681	2.636	6.4	20.3
1 16	5 44.36	+30 31.6	1.458	2.362	12.0	20.9	1 16	5 44.78	+26 35.3	1.753	2.654	10.5	20.6
1 26	5 39.06	+29 59.4	1.554	2.386	15.7	21.2	1 26	5 38.73	+26 11.7	1.848	2.672	13.9	20.9
456071	2006 <i>AF</i> ₁₀₅		12 23.6	27°92	5°2/24.7	16	412009	2012 <i>RB</i> ₂		12 23.6	207°13	17°9/26.9	17
11 17	6 33.95	+7 29.4	1.763	2.550	16.2	20.8	11 17	6 40.84	-13 10.7	1.268	1.988	24.6	21.1
11 27	6 29.67	+7 41.5	1.693	2.559	13.1	20.6	11 27	6 36.02	-14 33.6	1.204	1.986	22.5	20.9
12 7	6 22.97	+8 9.2	1.644	2.568	9.5	20.5	12 7	6 27.68	-15 21.4	1.154	1.983	20.3	20.7
12 17	6 14.50	+8 53.5	1.620	2.578	6.3	20.3	12 17	6 16.61	-15 22.5	1.120	1.979	18.6	20.6
12 27	6 5.31	+9 52.9	1.623	2.588	5.3	20.3	12 27	6 4.27	-14 29.4	1.106	1.975	17.9	20.5
1 6	5 56.56	+11 4.0	1.655	2.599	7.6	20.4	1 6	5 52.42	-12 43.2	1.112	1.971	18.6	20.6
1 16	5 49.30	+12 22.7	1.713	2.610	11.0	20.6	1 16	5 42.70	-10 12.5	1.138	1.966	20.5	20.7
1 26	5 44.35	+13 44.5	1.796	2.622	14.2	20.9	1 26	5 36.33	-7 11.9	1.183	1.960	22.9	20.8
476728	2008 <i>UZ</i> ₂₄		12 23.6	26°86	2°4/23.6	16	333529	2005 <i>RA</i> ₂₃		12 23.6	134°67	11°9/25.2	18
11 17	6 37.22	+27 28.3	1.187	2.021	19.7	20.8	11 17	6 38.06	-8 23.3	1.909	2.617	17.8	21.3
11 27	6 33.51	+27 50.3	1.131	2.032	15.3	20.5	11 27	6 32.53	-9 35.3	1.849	2.630	15.7	21.2
12 7	6 26.04	+28 10.3	1.095	2.044	10.1	20.3	12 7	6 24.67	-10 24.4	1.807	2.642	13.8	21.1
12 17	6 15.85	+28 23.4	1.081	2.058	4.6	20.0	12 17	6 15.18	-10 44.9	1.788	2.653	12.4	21.0
12 27	6 4.66	+28 26.5	1.092	2.072	3.1	20.0	12 27	6 5.07	-10 33.3	1.792	2.664	12.0	21.0
1 6	5 54.44	+28 19.1	1.129	2.087	8.1	20.3	1 6	5 55.45	-9 50.5	1.822	2.674	12.8	21.1
1 16	5 46.79	+28 3.9	1.189	2.104	13.1	20.7	1 16	5 47.33	-8 40.5	1.874	2.684	14.3	21.2
1 26	5 42.74	+27 45.1	1.270	2.121	17.4	21.0	1 26	5 41.44	-7 10.4	1.949	2.692	16.2	21.4
60780	2000 <i>GA</i> ₁₆₄		12 23.6	200°99	2°9/23.8	18	438250	2005 <i>WG</i> ₅₆		12 23.6	55°11	0°2/23.6	17
11 17	6 38.26	+15 22.7	1.800	2.595	15.6	19.5	11 17	6 39.31	+21 18.9	1.397	2.215	18.2	21.0
11 27	6 33.13	+15 21.0	1.715	2.593	12.3	19.3	11 27	6 34.59	+21 57.3	1.334	2.227	14.0	20.8
12 7	6 25.33	+15 27.0	1.653	2.591	8.4	19.0	12 7	6 26.56	+22 41.7	1.292	2.239	9.1	20.5
12 17	6 15.52	+15 40.8	1.616	2.588	4.3	18.8	12 17	6 16.07	+23 28.0	1.274	2.252	3.7	20.2
12 27	6 4.79	+16 1.6	1.608	2.584	3.2	18.7	12 27	6 4.60	+24 12.0	1.283	2.265	1.9	20.1
1 6	5 54.43	+16 28.1	1.628	2.581	6.9	18.9	1 6	5 53.82	+24 50.4	1.319	2.278	7.3	20.5
1 16	5 45.63	+16 58.9	1.677	2.577	11.0	19.2	1 16	5 45.20	+25 22.4	1.381	2.291	12.1	20.8
1 26	5 39.32	+17 32.8	1.749	2.572	14.6	19.4	1 26	5 39.78	+25 48.9	1.466	2.304	16.1	21.1
82657	2001 <i>PA</i> ₁₄		12 23.6	90°49	2°1/23.7	18	492911	2014 <i>QG</i> ₄₃₈		12 23.6	142°76	0°4/23.6	17
11 17	6 41.53	+18 5.3	1.634	2.433	16.8	19.7	11 17	6 35.15	+23 5.7	2.491	3.282	11.9	21.3
11 27	6 35.49	+17 59.1	1.577	2.458	12.9	19.5	11 27	6 30.09	+23 32.5	2.407	3.286	9.2	21.1
12 7	6 26.67	+17 58.3	1.541	2.482	8.5	19.3	12 7	6 23.04	+24 1.1	2.348	3.290	5.9	20.9
12 17	6 15.96	+18 2.2	1.531	2.506	4.0	19.1	12 17	6 14.53	+24 29.4	2.317	3.294	2.4	20.7
12 27	6 4.65	+18 9.9	1.550	2.529	2.6	19.0	12 27	6 5.38	+24 55.5	2.316	3.298	1.3	20.6
1 6	5 54.14	+18 20.6	1.598	2.552	6.7	19.4	1 6	5 56.54	+25 18.0	2.346	3.301	4.8	20.9
1 16	5 45.57	+18 34.0	1.673	2.575	10.9	19.7	1 16	5 48.85	+25 36.8	2.406	3.305	8.1	21.1
1 26	5 39.74	+18 49.9	1.772	2.596	14.4	19.9	1 26	5 43.02	+25 52.3	2.491	3.308	11.0	21.3
401629	2013 <i>GU</i> ₇₂		12 23.6	182°68	0°7/23.6	18	162039	1996 <i>JG</i>		12 23.6	35°71</		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
159120	2004 VM ₃₁		12 23.6 282°76	2°9/23.2	18		73554	2124 P-L		12 23.6 110°17	4°7/23.6	18	
11 17	6 36.99	+29 25.8	2.187	2.981	13.2	20.0	11 17	6 39.67	+37 44.8	2.432	3.207	12.6	19.5
11 27	6 32.05	+30 16.7	2.099	2.977	10.3	19.8	11 27	6 33.82	+38 18.8	2.359	3.217	10.1	19.4
12 7	6 24.61	+31 6.7	2.035	2.973	7.0	19.6	12 7	6 25.55	+38 44.7	2.309	3.228	7.5	19.2
12 17	6 15.26	+31 51.5	1.998	2.968	3.8	19.4	12 17	6 15.58	+38 58.4	2.286	3.238	5.2	19.1
12 27	6 4.99	+32 27.2	1.990	2.964	3.3	19.4	12 27	6 4.95	+38 57.0	2.292	3.248	4.8	19.1
1 6	5 54.98	+32 51.7	2.013	2.959	6.2	19.6	1 6	5 54.84	+38 40.6	2.328	3.258	6.6	19.2
1 16	5 46.37	+33 5.2	2.063	2.955	9.6	19.8	1 16	5 46.29	+38 11.5	2.391	3.268	9.1	19.4
1 26	5 40.06	+33 9.8	2.138	2.951	12.7	19.9	1 26	5 40.06	+37 33.7	2.480	3.278	11.6	19.6
234166	2000 KD ₆₇		12 23.6 258°18	7°0/24.2	18		493404	2014 WE ₁₉₀		12 23.6 86°07	0°8/23.7	17	
11 17	6 32.32	- 2 37.0	2.970	3.687	11.8	20.4	11 17	6 34.56	+19 21.1	2.336	3.128	12.6	21.5
11 27	6 27.62	- 3 6.6	2.863	3.664	10.2	20.3	11 27	6 29.70	+19 42.2	2.258	3.136	9.7	21.3
12 7	6 21.33	- 3 23.4	2.779	3.642	8.6	20.1	12 7	6 22.80	+20 7.4	2.203	3.145	6.3	21.1
12 17	6 13.84	- 3 24.6	2.721	3.619	7.4	20.0	12 17	6 14.46	+20 35.4	2.176	3.153	2.7	20.9
12 27	6 5.75	- 3 8.3	2.690	3.595	7.1	19.9	12 27	6 5.51	+21 4.5	2.180	3.161	1.5	20.8
1 6	5 57.76	- 2 34.7	2.688	3.571	8.0	20.0	1 6	5 56.89	+21 33.2	2.213	3.169	5.0	21.1
1 16	5 50.54	- 1 45.2	2.713	3.546	9.7	20.0	1 16	5 49.48	+22 0.9	2.276	3.177	8.4	21.3
1 26	5 44.69	- 0 42.6	2.763	3.521	11.6	20.1	1 26	5 43.97	+22 27.1	2.364	3.184	11.4	21.5
434603	2005 UR ₃₀₅		12 23.6 124°55	2°8/23.6	18		64530	2001 VF ₁₁₀		12 23.6 69°45	0°9/23.6	18	
11 17	6 40.05	+17 17.7	1.754	2.550	15.9	21.7	11 17	6 42.32	+24 57.1	1.459	2.270	17.9	19.5
11 27	6 34.33	+16 48.4	1.683	2.562	12.4	21.5	11 27	6 36.55	+25 9.5	1.406	2.295	13.7	19.3
12 7	6 25.97	+16 23.6	1.634	2.573	8.3	21.3	12 7	6 27.57	+25 21.7	1.374	2.319	8.9	19.1
12 17	6 15.75	+16 4.0	1.612	2.584	4.3	21.1	12 17	6 16.41	+25 30.4	1.367	2.344	3.7	18.9
12 27	6 4.84	+15 50.2	1.619	2.595	3.3	21.0	12 27	6 4.58	+25 33.5	1.388	2.369	2.0	18.8
1 6	5 54.55	+15 42.7	1.654	2.605	6.9	21.3	1 6	5 53.71	+25 30.6	1.436	2.393	7.0	19.2
1 16	5 46.00	+15 41.7	1.717	2.615	10.9	21.5	1 16	5 45.12	+25 23.6	1.511	2.418	11.4	19.5
1 26	5 40.02	+15 47.0	1.803	2.624	14.4	21.8	1 26	5 39.67	+25 15.0	1.609	2.442	15.2	19.8
428223	2006 WW		12 23.6 93°24	0°7/23.5	16		99833	2002 NY ₁₈		12 23.6 102°67	5°4/24.6	18	
11 17	6 46.41	+24 47.0	3.310	4.062	10.0	22.4	11 17	6 33.44	+ 4 52.4	2.438	3.196	13.1	19.7
11 27	6 37.76	+25 18.4	3.252	4.110	7.7	22.3	11 27	6 28.61	+ 4 44.9	2.362	3.206	10.7	19.6
12 7	6 27.51	+25 48.6	3.223	4.156	4.9	22.2	12 7	6 21.98	+ 4 49.7	2.310	3.216	8.1	19.4
12 17	6 16.21	+26 15.2	3.226	4.201	2.1	22.0	12 17	6 14.10	+ 5 8.1	2.284	3.226	6.0	19.3
12 27	6 4.64	+26 36.7	3.264	4.244	1.2	22.0	12 27	6 5.71	+ 5 40.3	2.287	3.236	5.4	19.3
1 6	5 53.57	+26 52.4	3.338	4.286	3.9	22.2	1 6	5 57.65	+ 6 24.9	2.319	3.246	6.9	19.4
1 16	5 43.70	+27 2.9	3.444	4.327	6.5	22.5	1 16	5 50.67	+ 7 19.4	2.380	3.255	9.2	19.6
1 26	5 35.54	+27 9.3	3.580	4.366	8.6	22.7	1 26	5 45.38	+ 8 20.9	2.466	3.265	11.6	19.7
148197	2000 CQ ₃₈		12 23.6 222°19	1°6/23.7	18		247861	2003 UB ₅₃		12 23.6 192°69	4°6/23.8	18	
11 17	6 39.52	+18 21.7	1.897	2.690	15.0	20.7	11 17	6 43.87	+37 23.9	2.241	3.013	13.6	20.4
11 27	6 34.13	+18 27.0	1.803	2.682	11.7	20.4	11 27	6 37.30	+37 44.0	2.153	3.012	11.0	20.2
12 7	6 26.04	+18 37.6	1.732	2.672	7.8	20.2	12 7	6 27.96	+37 55.1	2.088	3.010	8.0	20.1
12 17	6 15.89	+18 52.7	1.687	2.662	3.6	19.9	12 17	6 16.60	+37 52.5	2.050	3.007	5.4	19.9
12 27	6 4.72	+19 10.9	1.672	2.652	2.2	19.8	12 27	6 4.43	+37 33.3	2.042	3.003	4.8	19.8
1 6	5 53.83	+19 30.9	1.686	2.641	6.4	20.0	1 6	5 52.80	+36 57.8	2.063	2.999	6.9	20.0
1 16	5 44.42	+19 52.2	1.728	2.629	10.7	20.3	1 16	5 42.93	+36 9.4	2.113	2.995	10.0	20.2
1 26	5 37.49	+20 14.4	1.795	2.616	14.4	20.5	1 26	5 35.71	+35 13.2	2.188	2.990	12.8	20.3
157452	2004 VJ ₆₃		12 23.6 57°78	0°6/23.6	18		26516	2000 CW ₅₆		12 23.6 82°19	2°5/23.9	18	
11 17	6 35.38	+21 34.5	2.006	2.807	14.0	20.7	11 17	6 34.87	+14 8.0	2.367	3.150	12.7	18.2
11 27	6 30.57	+21 32.8	1.934	2.819	10.8	20.5	11 27	6 29.72	+14 15.8	2.300	3.171	9.9	18.1
12 7	6 23.45	+21 33.0	1.886	2.830	7.0	20.3	12 7	6 22.69	+14 30.5	2.258	3.191	6.7	17.9
12 17	6 14.72	+21 34.1	1.864	2.842	2.9	20.0	12 17	6 14.38	+14 51.7	2.242	3.212	3.6	17.7
12 27	6 5.38	+21 35.2	1.872	2.853	1.6	19.9	12 27	6 5.60	+15 18.6	2.257	3.232	2.7	17.7
1 6	5 56.53	+21 36.2	1.909	2.865	5.6	20.2	1 6	5 57.23	+15 49.8	2.303	3.252	5.3	17.9
1 16	5 49.16	+21 37.3	1.973	2.877	9.3	20.5	1 16	5 50.07	+16 23.8	2.377	3.272	8.4	18.1
1 26	5 44.00	+21 39.2	2.063	2.889	12.6	20.7	1 26	5 44.73	+16 59.6	2.477	3.292	11.1	18.3
154816	2004 QR ₇		12 23.6 141°71	1°0/23.7	18		97717	2000 GX ₁₀₂		12 23.6 128°40	1°6/23.5	18	
11 17	6 35.51	+20 13.9	2.283	3.075	12.8	21.5	11 17	6 35.65	+28 4.5	2.676	3.463	11.3	19.5
11 27	6 30.45	+20 12.6	2.201	3.080	9.9	21.3	11 27	6 30.37	+28 27.4	2.596	3.472	8.7	19.4
12 7	6 23.30	+20 13.7	2.143	3.085	6.5	21.1	12 7	6 23.16	+28 48.4	2.542	3.480	5.8	19.2
12 17	6 14.66	+20 16.7	2.113	3.089	2.8	20.9	12 17	6 14.60	+29 5.4	2.515	3.489	2.8	19.0
12 27	6 5.40	+20 20.7	2.113	3.093	1.6	20.8	12 27	6 5.48	+29 16.4	2.519	3.497	2.0	19.0
1 6	5 56.52	+20 25.5	2.142	3.097	5.2	21.0	1 6	5 56.70	+29 20.9	2.554	3.505	4.8	19.2
1 16	5 48.89	+20 31.0	2.201	3.101	8.7	21.3	1 16	5 49.09	+29 19.6	2.618	3.513	7.7	19.4
1 26	5 43.25	+20 37.6	2.285	3.105	11.8	21.5	1 26	5 43.30	+29 14.0	2.709	3.520	10.4	19.6
210586	1999 VL ₂₂₄		12 23.6 49°82	1°7/23.7	18		454465	2014 OQ ₅₄		12 23.6 136°03	0°3/23.7	18	
11 17	6 36.91	+19 35.9	1.634	2.444	16.3	20.8	11 17	6 36.55	+21 43.3	2.098	2.895	13.6	21.9
11 27	6 32.25	+19 25.3	1.562	2.450	12.6	20.6	11 27	6 31.48	+21 52.9	2.017	2.899	10.5	21.7
12 7	6 24.80	+19 18.5	1.512	2.457	8.3	20.3	12 7	6 24.10	+22 4.7	1.960	2.903	6.8	21.5
12 17	6 15.33	+19 15.1	1.487	2.463	3.7	20.1	12 17	6 15.03	+22 17.2	1.930	2.907	2.8	21.2
12 27	6 5.06	+19 14.6	1.490	2.470	2.4	20.0	12 27	6 5.25	+22 29.1	1.929	2.911	1.4	21.1
1 6	5 55.37	+19 16.8	1.521	2.478	6.7	20.3	1 6	5 55.87	+22 39.6	1.958	2.914	5.5	21.4
1 16	5 47.45	+19 21.8	1.578	2.485	11.1	20.6	1 16	5 47.89	+22 48.6	2.016	2.918	9.3	21.7
1 26	5 42.21	+19 29.8	1.659	2.492	14.8	20.8	1 26	5 42.10	+22 56.8	2.098	2.921	12.5	21.9
181134	2005 QO ₁₄₉		12 23.6 174°63	2°0/23.4	18		368351	2002 QK ₁₁₃		12 23.6 276°39	1°7/23.6	18	
11 17	6 38.53	+27 38.9	2.279	3.069	12.9								

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
9171	Carolyndiane		12 23.6 136°63	6°5/23.0	18		168837	2000 TZ ₃₆		12 23.6 60°59	3°5/23.6	18	
11 17	6 44.52	+39 3.9	2.045	2.819	14.7	17.4	11 17	6 36.41	+33 52.2	2.412	3.198	12.4	20.0
11 27	6 38.29	+40 16.5	1.973	2.828	12.0	17.3	11 27	6 31.26	+34 20.0	2.339	3.209	9.7	19.8
12 7	6 28.88	+41 20.6	1.924	2.836	9.1	17.1	12 7	6 23.88	+34 42.2	2.290	3.221	6.8	19.6
12 17	6 17.08	+42 9.2	1.901	2.844	6.9	17.0	12 17	6 14.94	+34 55.3	2.268	3.232	4.2	19.5
12 27	6 4.22	+42 36.6	1.907	2.852	6.7	17.0	12 27	6 5.40	+34 57.1	2.276	3.244	3.7	19.5
1 6	5 51.88	+42 41.4	1.940	2.859	8.5	17.1	1 6	5 56.33	+34 47.5	2.313	3.256	5.9	19.6
1 16	5 41.50	+42 26.2	2.001	2.866	11.2	17.3	1 16	5 48.67	+34 28.1	2.379	3.267	8.7	19.8
1 26	5 34.13	+41 56.5	2.085	2.872	13.9	17.5	1 26	5 43.14	+34 2.1	2.469	3.279	11.3	20.0
25921	2001 DS ₂₁		12 23.6 205°90	5°4/22.9	18		314686	2006 QS ₁₈₃		12 23.6 89°25	0°8/23.6	18	
11 17	6 40.46	+40 1.4	2.732	3.493	11.7	19.4	11 17	6 40.11	+23 7.0	1.927	2.722	14.7	20.4
11 27	6 34.54	+41 2.1	2.643	3.489	9.6	19.3	11 27	6 34.11	+22 35.5	1.861	2.742	11.3	20.2
12 7	6 26.17	+41 55.9	2.579	3.484	7.4	19.1	12 7	6 25.68	+22 3.2	1.819	2.761	7.3	20.0
12 17	6 15.94	+42 37.5	2.542	3.479	5.7	19.0	12 17	6 15.63	+21 29.8	1.803	2.780	3.0	19.8
12 27	6 4.80	+43 3.0	2.534	3.474	5.6	19.0	12 27	6 5.09	+20 56.1	1.818	2.799	1.7	19.7
1 6	5 53.90	+43 11.0	2.556	3.468	7.1	19.1	1 6	5 55.24	+20 23.6	1.863	2.818	5.8	20.1
1 16	5 44.34	+43 2.8	2.606	3.462	9.2	19.2	1 16	5 47.10	+19 54.1	1.935	2.836	9.7	20.3
1 26	5 37.01	+42 41.9	2.680	3.456	11.4	19.3	1 26	5 41.37	+19 29.2	2.033	2.854	12.9	20.6
31557	Holleybakich		12 23.6 140°92	4°0/23.5	18		337674	2001 TU ₁₈₅		12 23.6 113°49	6°8/23.5	18	
11 17	6 40.63	+34 35.8	2.307	3.087	13.1	19.5	11 17	6 47.29	+39 16.8	1.786	2.565	16.4	20.6
11 27	6 34.65	+35 12.7	2.230	3.096	10.3	19.4	11 27	6 40.65	+40 19.2	1.723	2.581	13.3	20.4
12 7	6 26.17	+35 43.6	2.176	3.104	7.3	19.2	12 7	6 30.48	+41 11.0	1.682	2.597	10.0	20.2
12 17	6 15.89	+36 4.0	2.150	3.111	4.7	19.0	12 17	6 17.73	+41 44.5	1.666	2.612	7.4	20.1
12 27	6 4.87	+36 11.1	2.154	3.119	4.2	19.0	12 27	6 4.00	+41 54.1	1.677	2.627	7.0	20.1
1 6	5 54.33	+36 4.2	2.187	3.126	6.4	19.2	1 6	5 51.10	+41 39.5	1.717	2.641	9.0	20.3
1 16	5 45.35	+35 45.4	2.249	3.132	9.3	19.4	1 16	5 40.60	+41 5.0	1.782	2.654	12.0	20.5
1 26	5 38.77	+35 18.3	2.336	3.139	12.1	19.6	1 26	5 33.51	+40 17.7	1.870	2.668	14.9	20.7
271485	2004 FA ₄₉		12 23.6 214°46	0°7/23.6	18		308816	2006 QR ₁₄₇		12 23.6 54°83	1°8/23.6	18	
11 17	6 40.19	+21 47.8	1.796	2.595	15.5	21.4	11 17	6 38.11	+27 18.7	1.771	2.577	15.4	20.9
11 27	6 34.77	+21 42.1	1.707	2.589	12.0	21.2	11 27	6 33.20	+27 39.2	1.697	2.582	11.9	20.7
12 7	6 26.51	+21 38.1	1.640	2.583	7.9	20.9	12 7	6 25.47	+27 58.1	1.645	2.588	7.9	20.5
12 17	6 16.11	+21 34.4	1.600	2.577	3.3	20.6	12 17	6 15.67	+28 12.1	1.619	2.595	3.6	20.3
12 27	6 4.73	+21 30.1	1.589	2.570	1.8	20.5	12 27	6 5.03	+28 18.6	1.621	2.601	2.4	20.2
1 6	5 53.74	+21 25.1	1.607	2.562	6.5	20.8	1 6	5 54.94	+28 16.9	1.652	2.607	6.5	20.5
1 16	5 44.43	+21 20.3	1.652	2.554	10.9	21.0	1 16	5 46.64	+28 8.5	1.710	2.614	10.5	20.7
1 26	5 37.78	+21 16.9	1.721	2.546	14.7	21.2	1 26	5 41.04	+27 56.1	1.791	2.620	14.1	21.0
367989	2012 FO ₂₁		12 23.6 103°15	0°9/23.7	18		86786	2000 GS ₉₇		12 23.6 131°57	1°8/23.5	18	
11 17	6 35.71	+19 56.6	2.369	3.159	12.5	21.3	11 17	6 42.95	+26 56.0	1.989	2.779	14.5	20.6
11 27	6 30.45	+19 59.9	2.297	3.174	9.6	21.1	11 27	6 36.53	+27 27.4	1.918	2.795	11.2	20.4
12 7	6 23.22	+20 5.9	2.249	3.189	6.3	21.0	12 7	6 27.43	+27 57.7	1.870	2.810	7.4	20.2
12 17	6 14.63	+20 13.8	2.228	3.204	2.7	20.8	12 17	6 16.43	+28 23.1	1.850	2.825	3.4	20.0
12 27	6 5.53	+20 22.7	2.238	3.219	1.6	20.7	12 27	6 4.67	+28 40.6	1.860	2.838	2.4	20.0
1 6	5 56.84	+20 32.1	2.279	3.233	5.0	21.0	1 6	5 53.49	+28 49.3	1.899	2.851	6.1	20.2
1 16	5 49.41	+20 41.8	2.348	3.247	8.3	21.2	1 16	5 44.04	+28 50.2	1.968	2.864	9.8	20.5
1 26	5 43.88	+20 52.1	2.443	3.261	11.1	21.4	1 26	5 37.17	+28 45.8	2.061	2.875	13.1	20.7
438039	2004 JS ₇		12 23.6 257°38	2°7/23.6	18		24972	1998 FC ₁₁₆		12 23.6 62°23	16°1/23.5	18	
11 17	6 38.63	+17 40.8	1.708	2.509	16.1	22.4	11 17	6 40.53	- 6 31.3	1.323	2.070	22.6	17.6
11 27	6 33.77	+17 19.0	1.612	2.494	12.7	22.2	11 27	6 35.02	- 9 21.2	1.290	2.095	20.0	17.5
12 7	6 26.00	+17 1.4	1.537	2.478	8.6	21.9	12 7	6 26.51	-11 41.9	1.275	2.120	17.7	17.4
12 17	6 15.96	+16 48.6	1.489	2.462	4.3	21.6	12 17	6 16.01	-13 22.2	1.281	2.145	16.3	17.4
12 27	6 4.78	+16 41.0	1.468	2.446	3.2	21.5	12 27	6 4.94	-14 15.0	1.308	2.170	16.1	17.4
1 6	5 53.88	+16 38.8	1.476	2.429	7.3	21.7	1 6	5 54.81	-14 20.5	1.356	2.196	17.1	17.6
1 16	5 44.58	+16 42.4	1.510	2.412	11.8	21.9	1 16	5 46.84	-13 44.9	1.424	2.221	18.7	17.8
1 26	5 37.95	+16 51.8	1.568	2.394	15.9	22.1	1 26	5 41.82	-12 38.1	1.508	2.246	20.4	18.0
81098	2000 EH ₁₀₈		12 23.6 196°09	6°1/23.8	18		194938	2002 AG ₁₄₉		12 23.6 4°09	1°8/23.6	18	
11 17	6 35.05	+ 5 25.1	2.356	3.115	13.4	19.6	11 17	6 38.16	+26 43.3	1.449	2.268	17.6	20.5
11 27	6 29.99	+ 4 42.3	2.270	3.113	11.1	19.4	11 27	6 33.90	+27 2.9	1.374	2.267	13.7	20.3
12 7	6 22.98	+ 4 9.9	2.206	3.110	8.6	19.3	12 7	6 26.28	+27 21.5	1.321	2.267	9.0	20.0
12 17	6 14.57	+ 3 50.6	2.169	3.106	6.6	19.1	12 17	6 16.10	+27 35.5	1.291	2.268	4.0	19.7
12 27	6 5.54	+ 3 46.4	2.160	3.103	6.2	19.1	12 27	6 4.82	+27 41.5	1.288	2.269	2.6	19.6
1 6	5 56.79	+ 3 57.4	2.181	3.098	7.8	19.2	1 6	5 54.14	+27 38.8	1.313	2.270	7.4	19.9
1 16	5 49.15	+ 4 22.4	2.228	3.094	10.2	19.3	1 16	5 45.58	+27 29.0	1.362	2.272	12.2	20.2
1 26	5 43.30	+ 4 59.0	2.300	3.088	12.7	19.5	1 26	5 40.24	+27 15.4	1.434	2.274	16.3	20.4
272958	2006 CL ₂₂		12 23.6 15°98	5°1/24.1	17		179387	2001 YO ₃₈		12 23.6 33°97	2°2/23.5	18	
11 17	6 32.81	+ 9 28.0	1.952	2.740	14.8	20.4	11 17	6 37.11	+27 38.9	1.755	2.563	15.4	20.3
11 27	6 28.66	+ 9 4.8	1.875	2.742	11.9	20.2	11 27	6 32.50	+28 10.0	1.683	2.570	11.9	20.1
12 7	6 22.29	+ 8 52.2	1.820	2.744	8.7	20.0	12 7	6 25.05	+28 39.7	1.633	2.576	7.9	19.9
12 17	6 14.32	+ 8 52.3	1.790	2.747	5.9	19.8	12 17	6 15.52	+29 4.4	1.608	2.583	3.8	19.6
12 27	6 5.68	+ 9 5.9	1.788	2.750	5.3	19.8	12 27	6 5.13	+29 20.8	1.612	2.591	2.8	19.6
1 6	5 57.42	+ 9 32.0	1.814	2.754	7.4	19.9	1 6	5 55.27	+29 27.8	1.644	2.598	6.6	19.9
1 16	5 50.48	+10 8.9	1.867	2.758	10.6	20.1	1 16	5 47.19	+29 26.5	1.703	2.606	10.6	20.1
1 26	5 45.62	+10 53.9	1.944	2.762	13.6	20.3	1 26	5 41.82	+29 19.5	1.785	2.614	14.1	20.3
179628	2002 PM ₅₈		12 23.6 99°03	1°4/23.7	18		369624	2011 DH ₁₁		12 23.6 318°01	10°6/25.1	18	
11 17	6 41.96	+19 32.0	1.570	2.373	17.2								

EPHEMERIDES

12 23.6

12 23.7

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
195985	2002 <i>RE</i> ₂₁₁		12 23.6 157°22	8°5/23.4	18		245733	2006 <i>DR</i> ₆₉		12 23.6 109°06	3°8/23.9	18	
11 17	6 49.54	+55 10.6	3.021	3.712	12.1	21.0	11 17	6 33.74	+11 5.4	2.475	3.250	12.4	20.8
11 27	6 41.92	+56 16.4	2.952	3.718	10.8	20.9	11 27	6 28.83	+10 46.7	2.401	3.263	9.8	20.6
12 7	6 31.14	+57 7.5	2.904	3.725	9.5	20.8	12 7	6 22.14	+10 35.6	2.350	3.275	7.0	20.5
12 17	6 18.00	+57 37.8	2.881	3.730	8.7	20.7	12 17	6 14.23	+10 33.0	2.327	3.287	4.5	20.3
12 27	6 3.87	+57 42.9	2.884	3.736	8.6	20.8	12 27	6 5.84	+10 39.5	2.334	3.298	3.9	20.3
1 6	5 50.34	+57 22.6	2.913	3.740	9.2	20.8	1 6	5 57.81	+10 54.5	2.370	3.310	5.9	20.4
1 16	5 38.84	+56 39.8	2.967	3.745	10.4	20.9	1 16	5 50.88	+11 17.1	2.435	3.321	8.6	20.6
1 26	5 30.36	+55 40.5	3.043	3.749	11.7	21.0	1 26	5 45.65	+11 45.6	2.526	3.332	11.2	20.8
295813	2008 <i>UX</i> ₃₂₆		12 23.6	9°76	2°2/23.8	18	273032	2006 <i>DK</i> ₁₁₈		12 23.7 254°92	4°5/23.9	18	
11 17	6 34.40	+18 0.7	1.339	2.165	18.4	19.6	11 17	6 32.82	+ 9 38.9	2.423	3.198	12.7	20.9
11 27	6 30.96	+17 59.8	1.270	2.166	14.3	19.3	11 27	6 28.34	+ 9 13.6	2.329	3.189	10.2	20.7
12 7	6 24.32	+18 6.5	1.221	2.169	9.5	19.0	12 7	6 21.97	+ 8 56.6	2.259	3.180	7.5	20.5
12 17	6 15.29	+18 20.2	1.196	2.172	4.4	18.8	12 17	6 14.21	+ 8 49.4	2.216	3.171	5.1	20.4
12 27	6 5.24	+18 39.6	1.196	2.176	2.9	18.7	12 27	6 5.83	+ 8 53.0	2.202	3.162	4.6	20.3
1 6	5 55.79	+19 3.2	1.223	2.182	7.6	19.0	1 6	5 57.67	+ 9 7.4	2.217	3.153	6.6	20.4
1 16	5 48.35	+19 29.5	1.274	2.188	12.5	19.3	1 16	5 50.53	+ 9 31.6	2.261	3.144	9.3	20.6
1 26	5 43.96	+19 57.7	1.346	2.195	16.7	19.5	1 26	5 45.12	+10 3.8	2.329	3.134	12.0	20.7
513592	2011 <i>DW</i> ₇		12 23.6 201°75	3°6/23.5	18		375447	2008 <i>TA</i> ₉₀		12 23.7 79°71	3°6/23.7	16	
11 17	6 43.47	+32 9.5	1.996	2.783	14.6	22.4	11 17	6 33.29	+13 8.5	2.343	3.127	12.8	21.6
11 27	6 37.32	+32 41.0	1.907	2.779	11.5	22.2	11 27	6 28.62	+12 36.8	2.266	3.135	10.1	21.4
12 7	6 28.20	+33 7.8	1.841	2.774	8.0	22.0	12 7	6 22.07	+12 11.1	2.212	3.142	7.1	21.2
12 17	6 16.84	+33 25.1	1.801	2.769	4.6	21.8	12 17	6 14.22	+11 52.8	2.186	3.150	4.4	21.1
12 27	6 4.45	+33 29.2	1.791	2.763	3.9	21.7	12 27	6 5.86	+11 42.8	2.190	3.157	3.8	21.1
1 6	5 52.48	+33 19.1	1.811	2.756	6.9	21.9	1 6	5 57.87	+11 41.2	2.222	3.165	6.1	21.2
1 16	5 42.28	+32 57.1	1.858	2.749	10.6	22.1	1 16	5 51.03	+11 47.8	2.283	3.173	9.0	21.4
1 26	5 34.84	+32 27.5	1.930	2.741	14.0	22.3	1 26	5 45.99	+12 1.6	2.369	3.180	11.7	21.6
287845	2003 <i>SC</i> ₂₃₁		12 23.6 118°13	3°7/23.4	17		514177	2015 <i>MC</i> ₅₂		12 23.7 216°40	0°6/23.7	18	
11 17	6 38.18	+33 30.0	2.357	3.142	12.7	20.8	11 17	6 40.29	+22 0.3	1.983	2.775	14.5	22.2
11 27	6 32.76	+34 9.8	2.279	3.148	10.0	20.6	11 27	6 34.65	+21 56.9	1.888	2.768	11.2	22.0
12 7	6 24.96	+34 44.6	2.225	3.155	7.0	20.5	12 7	6 26.36	+21 54.7	1.817	2.759	7.4	21.7
12 17	6 15.44	+35 10.6	2.198	3.161	4.4	20.3	12 17	6 16.09	+21 52.6	1.773	2.750	3.1	21.5
12 27	6 5.19	+35 24.6	2.201	3.167	3.9	20.3	12 27	6 4.88	+21 49.5	1.759	2.740	1.6	21.3
1 6	5 55.34	+35 25.8	2.233	3.173	6.2	20.4	1 6	5 54.00	+21 45.2	1.774	2.729	6.1	21.6
1 16	5 46.94	+35 15.7	2.293	3.179	9.1	20.6	1 16	5 44.62	+21 40.4	1.818	2.718	10.2	21.8
1 26	5 40.79	+34 57.4	2.379	3.185	11.8	20.8	1 26	5 37.68	+21 36.5	1.887	2.706	13.9	22.0
492176	2013 <i>QK</i> ₈		12 23.6 88°92	3°7/23.7	17		330557	2008 <i>BE</i> ₃₀		12 23.7 16°78	6°4/24.4	18	
11 17	6 33.12	+12 30.0	2.380	3.163	12.6	21.8	11 17	6 33.43	+10 58.3	0.985	1.824	22.5	19.9
11 27	6 28.46	+12 0.8	2.303	3.170	10.0	21.7	11 27	6 30.91	+10 36.3	0.931	1.829	18.0	19.6
12 7	6 21.95	+11 38.1	2.249	3.177	7.1	21.5	12 7	6 24.62	+10 32.6	0.893	1.836	12.9	19.3
12 17	6 14.15	+11 23.1	2.222	3.184	4.5	21.3	12 17	6 15.49	+10 50.2	0.876	1.844	8.1	19.1
12 27	6 5.85	+11 16.8	2.225	3.191	3.9	21.3	12 27	6 5.22	+11 29.1	0.881	1.853	6.7	19.1
1 6	5 57.90	+11 19.1	2.257	3.199	6.1	21.5	1 6	5 55.76	+12 25.5	0.909	1.863	10.3	19.3
1 16	5 51.08	+11 29.6	2.317	3.206	8.9	21.7	1 16	5 48.80	+13 33.7	0.958	1.875	15.2	19.6
1 26	5 46.01	+11 47.1	2.403	3.212	11.6	21.8	1 26	5 45.47	+14 47.6	1.027	1.889	19.7	19.9
460544	2014 <i>TM</i> ₄₈		12 23.6 50°56	3°1/23.5	17		403694	2010 <i>VG</i> ₁₀₂		12 23.7 52°84	0°7/23.7	18	
11 17	6 37.26	+31 14.6	2.024	2.822	14.0	21.1	11 17	6 35.89	+21 36.7	1.918	2.722	14.5	21.6
11 27	6 32.25	+31 45.1	1.956	2.835	10.9	20.9	11 27	6 31.15	+21 33.9	1.843	2.728	11.2	21.4
12 7	6 24.69	+32 11.3	1.911	2.848	7.5	20.7	12 7	6 23.98	+21 33.0	1.791	2.735	7.3	21.2
12 17	6 15.32	+32 29.3	1.892	2.862	4.1	20.5	12 17	6 15.06	+21 32.9	1.765	2.742	3.0	20.9
12 27	6 5.27	+32 36.5	1.902	2.875	3.4	20.5	12 27	6 5.44	+21 33.0	1.768	2.749	1.6	20.8
1 6	5 55.77	+32 32.5	1.941	2.889	6.3	20.7	1 6	5 56.31	+21 32.9	1.800	2.756	5.8	21.1
1 16	5 47.92	+32 18.9	2.007	2.903	9.6	21.0	1 16	5 48.71	+21 33.1	1.859	2.764	9.8	21.4
1 26	5 42.51	+31 59.1	2.098	2.918	12.7	21.2	1 26	5 43.43	+21 34.3	1.943	2.771	13.2	21.6
520299	2014 <i>FU</i> ₇₄		12 23.6 204°71	3°3/23.9	18		89880	2002 <i>CZ</i> ₂₁₆		12 23.7 31°20	0°3/23.6	18	
11 17	6 36.92	+12 49.1	2.226	3.005	13.5	22.8	11 17	6 35.81	+23 26.9	1.952	2.755	14.3	19.5
11 27	6 31.65	+12 45.0	2.134	3.001	10.7	22.6	11 27	6 31.17	+23 42.2	1.873	2.758	11.0	19.3
12 7	6 24.21	+12 48.8	2.066	2.996	7.5	22.4	12 7	6 24.05	+23 58.9	1.816	2.761	7.2	19.0
12 17	6 15.14	+13 1.1	2.024	2.990	4.4	22.2	12 17	6 15.12	+24 15.0	1.787	2.764	2.9	18.8
12 27	6 5.33	+13 21.5	2.013	2.984	3.6	22.1	12 27	6 5.41	+24 28.6	1.786	2.767	1.5	18.7
1 6	5 55.77	+13 49.1	2.031	2.978	6.2	22.3	1 6	5 56.12	+24 38.8	1.814	2.771	5.8	19.0
1 16	5 47.41	+14 22.5	2.078	2.971	9.6	22.5	1 16	5 48.33	+24 45.8	1.870	2.774	9.7	19.2
1 26	5 41.05	+15 0.2	2.151	2.963	12.7	22.7	1 26	5 42.88	+24 50.6	1.950	2.778	13.1	19.4
85502	1997 <i>TZ</i> ₂₃		12 23.6	9°10	0°5/23.7	17	408462	2013 <i>HE</i> ₅₆		12 23.7 151°48	0°2/23.7	18	
11 17	6 33.97	+21 56.5	2.101	2.903	13.5	20.3	11 17	6 37.11	+23 11.0	2.175	2.970	13.3	21.9
11 27	6 29.54	+21 53.8	2.019	2.904	10.4	20.1	11 27	6 31.85	+23 7.2	2.093	2.974	10.2	21.7
12 7	6 22.87	+21 52.5	1.961	2.905	6.8	19.9	12 7	6 24.33	+23 3.5	2.035	2.977	6.7	21.5
12 17	6 14.58	+21 51.9	1.929	2.906	2.8	19.6	12 17	6 15.19	+22 59.0	2.004	2.981	2.7	21.3
12 27	6 5.63	+21 51.1	1.926	2.908	1.5	19.5	12 27	6 5.40	+22 52.9	2.002	2.984	1.4	21.2
1 6	5 57.05	+21 49.9	1.953	2.909	5.5	19.8	1 6	5 56.02	+22 45.1	2.031	2.987	5.4	21.5
1 16	5 49.82	+21 48.9	2.007	2.911	9.2	20.0	1 16	5 48.03	+22 36.5	2.088	2.990	9.0	21.7
1 26	5 44.70	+21 48.6	2.086	2.914	12.4	20.3	1 26	5 42.19	+22 28.5	2.171	2.992	12.2	21.9
66837	1999 <i>US</i> ₄₈		12 23.6	99°86	0°3/23.6	18	71363	2000 <i>AK</i> ₁₃₄		12 23.7 264°67			

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12 23.7

12 23.7

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
393510	2002 <i>SK</i> ₄		12 23.7 152°55	6°7/23.2	15		162936	2001 <i>OD</i> ₁₀₂		12 23.7 117°67	1°8/23.8	18	
11 17	6 37.64	+ 4 8.3	2.515	3.259	13.1	22.0	11 17	6 36.65	+30 20.5	2.526	3.313	11.9	19.7
11 27	6 31.71	+ 2 54.8	2.440	3.270	10.8	21.9	11 27	6 31.26	+30 16.8	2.444	3.318	9.2	19.6
12 7	6 23.97	+ 1 50.9	2.389	3.279	8.6	21.8	12 7	6 23.82	+30 8.5	2.385	3.323	6.2	19.4
12 17	6 14.98	+ 1 0.1	2.365	3.288	7.0	21.7	12 17	6 14.97	+29 53.8	2.355	3.327	3.0	19.2
12 27	6 5.53	+ 0 25.2	2.370	3.297	6.8	21.7	12 27	6 5.58	+29 31.8	2.355	3.332	2.2	19.1
1 6	5 56.44	+ 0 7.4	2.405	3.304	8.1	21.8	1 6	5 56.63	+29 3.1	2.385	3.337	5.0	19.3
1 16	5 48.48	+ 0 6.0	2.468	3.311	10.2	21.9	1 16	5 48.98	+28 29.8	2.444	3.341	8.1	19.5
1 26	5 42.27	+ 0 19.1	2.555	3.317	12.3	22.1	1 26	5 43.29	+27 54.3	2.530	3.346	10.9	19.7
328394	2008 <i>RT</i> ₁₂₄		12 23.7 171°72	0°6/23.6	18		101055	1998 <i>RL</i>		12 23.7 111°46	3°1/23.8	18	
11 17	6 35.62	+25 9.5	2.592	3.381	11.6	21.8	11 17	6 41.09	+15 36.0	1.729	2.521	16.3	20.2
11 27	6 30.43	+25 18.4	2.506	3.383	8.9	21.6	11 27	6 35.15	+15 19.9	1.664	2.540	12.7	20.0
12 7	6 23.29	+25 26.7	2.443	3.385	5.8	21.4	12 7	6 26.56	+15 10.7	1.621	2.558	8.6	19.8
12 17	6 14.75	+25 32.8	2.409	3.386	2.4	21.2	12 17	6 16.13	+15 8.7	1.605	2.576	4.5	19.6
12 27	6 5.63	+25 35.7	2.406	3.387	1.4	21.1	12 27	6 5.05	+15 13.8	1.618	2.593	3.5	19.5
1 6	5 56.82	+25 34.8	2.434	3.388	4.7	21.4	1 6	5 54.63	+15 25.3	1.659	2.610	6.9	19.8
1 16	5 49.16	+25 30.9	2.490	3.389	7.9	21.6	1 16	5 45.99	+15 42.3	1.728	2.626	10.8	20.1
1 26	5 43.32	+25 25.1	2.573	3.389	10.7	21.8	1 26	5 39.94	+16 4.0	1.820	2.641	14.3	20.3
447956	2008 <i>BB</i> ₁₉		12 23.7 137°78	1°0/23.8	18		481291	2005 <i>YL</i> ₁₀₄		12 23.7 29°31	1°2/23.9	18	
11 17	6 37.37	+19 13.2	2.157	2.948	13.5	21.5	11 17	6 36.77	+17 49.9	1.195	2.025	19.9	20.6
11 27	6 32.03	+19 26.4	2.078	2.956	10.4	21.3	11 27	6 33.08	+18 27.1	1.138	2.036	15.4	20.4
12 7	6 24.45	+19 43.9	2.023	2.964	6.8	21.1	12 7	6 25.86	+19 15.2	1.099	2.048	10.1	20.1
12 17	6 15.25	+20 4.3	1.995	2.971	3.0	20.9	12 17	6 16.01	+20 11.3	1.084	2.061	4.3	19.8
12 27	6 5.38	+20 26.1	1.998	2.978	1.7	20.8	12 27	6 5.09	+21 10.3	1.094	2.075	2.3	19.7
1 6	5 55.89	+20 48.1	2.030	2.985	5.4	21.1	1 6	5 54.94	+22 7.8	1.130	2.090	7.8	20.1
1 16	5 47.76	+21 9.7	2.091	2.991	9.1	21.3	1 16	5 47.11	+23 0.8	1.190	2.106	13.0	20.5
1 26	5 41.75	+21 30.8	2.178	2.997	12.3	21.5	1 26	5 42.67	+23 48.2	1.271	2.123	17.3	20.8
241781	2001 <i>OJ</i> ₂₁		12 23.7 114°17	5°8/24.5	18		351044	2003 <i>SM</i> ₂₀₈		12 23.7 85°69	6°7/24.2	18	
11 17	6 36.72	+ 3 46.6	2.504	3.250	13.1	21.5	11 17	6 46.14	+40 46.7	1.741	2.521	16.7	20.7
11 27	6 30.94	+ 3 21.3	2.441	3.274	10.7	21.4	11 27	6 39.76	+41 17.5	1.676	2.534	13.6	20.5
12 7	6 23.42	+ 3 7.9	2.400	3.297	8.3	21.3	12 7	6 29.88	+41 34.9	1.632	2.547	10.3	20.4
12 17	6 14.74	+ 3 8.3	2.387	3.320	6.4	21.2	12 17	6 17.53	+41 32.1	1.613	2.560	7.5	20.2
12 27	6 5.67	+ 3 23.2	2.403	3.342	5.9	21.2	12 27	6 4.37	+41 5.4	1.620	2.573	6.9	20.2
1 6	5 57.02	+ 3 51.6	2.448	3.364	7.2	21.3	1 6	5 52.20	+40 16.2	1.655	2.585	8.8	20.4
1 16	5 49.52	+ 4 31.6	2.522	3.384	9.3	21.5	1 16	5 42.51	+39 10.2	1.717	2.598	11.9	20.6
1 26	5 43.74	+ 5 20.1	2.621	3.404	11.5	21.7	1 26	5 36.22	+37 55.3	1.802	2.610	14.9	20.8
270784	2002 <i>RR</i> ₂₀₅		12 23.7 65°20	4°0/23.9	18		506085	2015 <i>XH</i> ₃₇₈		12 23.7 198°17	4°9/24.7	17	
11 17	6 33.92	+11 54.5	2.204	2.988	13.5	20.6	11 17	6 56.60	+38 4.7	1.150	1.951	22.3	20.8
11 27	6 29.12	+11 26.3	2.139	3.007	10.6	20.4	11 27	6 49.22	+37 20.1	1.073	1.950	18.0	20.5
12 7	6 22.39	+11 5.7	2.098	3.026	7.6	20.3	12 7	6 36.71	+36 12.5	1.014	1.949	12.7	20.2
12 17	6 14.35	+10 54.2	2.083	3.044	4.8	20.1	12 17	6 20.45	+34 34.6	0.978	1.947	7.2	19.9
12 27	6 5.86	+10 52.4	2.097	3.063	4.2	20.1	12 27	6 2.95	+32 25.5	0.969	1.945	5.1	19.8
1 6	5 57.83	+11 0.0	2.141	3.082	6.3	20.3	1 6	5 47.08	+29 55.0	0.987	1.942	9.7	20.0
1 16	5 51.06	+11 16.1	2.212	3.101	9.2	20.5	1 16	5 35.01	+27 19.2	1.031	1.939	15.4	20.4
1 26	5 46.17	+11 39.2	2.308	3.120	11.9	20.7	1 26	5 27.84	+24 53.6	1.097	1.935	20.4	20.6
508358	2016 <i>EW</i> ₁₁₀		12 23.7 235°54	16°0/21.2	18		194905	2002 <i>AU</i> ₁₀₅		12 23.7 315°86	0°6/23.7	18	
11 17	6 56.54	+50 52.5	1.283	2.050	22.2	21.2	11 17	6 36.69	+24 27.9	1.452	2.273	17.4	20.8
11 27	6 51.74	+53 29.7	1.220	2.046	19.7	21.0	11 27	6 32.92	+24 33.3	1.365	2.259	13.6	20.5
12 7	6 40.28	+55 50.6	1.175	2.041	17.5	20.8	12 7	6 25.81	+24 39.4	1.298	2.246	9.0	20.2
12 17	6 22.64	+57 35.6	1.151	2.036	16.2	20.7	12 17	6 16.06	+24 43.7	1.255	2.233	3.8	19.9
12 27	6 1.45	+58 27.2	1.147	2.030	16.3	20.7	12 27	6 5.01	+24 44.0	1.239	2.220	2.0	19.7
1 6	5 40.99	+58 19.9	1.164	2.025	17.8	20.8	1 6	5 54.33	+24 39.6	1.249	2.208	7.4	20.0
1 16	5 25.26	+57 22.3	1.200	2.019	20.2	20.9	1 16	5 45.62	+24 31.6	1.284	2.197	12.6	20.3
1 26	5 16.50	+55 51.7	1.253	2.013	22.7	21.1	1 26	5 40.07	+24 22.7	1.341	2.186	17.0	20.5
229074	2004 <i>JL</i> ₆		12 23.7 228°78	0°9/23.6	18		202685	2006 <i>VV</i> ₈₅		12 23.7 161°79	1°0/23.7	18	
11 17	6 40.36	+21 41.9	1.910	2.705	14.9	21.3	11 17	6 41.00	+21 16.6	1.653	2.456	16.5	21.8
11 27	6 34.82	+21 28.6	1.814	2.694	11.6	21.1	11 27	6 35.52	+21 9.2	1.575	2.459	12.8	21.6
12 7	6 26.55	+21 16.1	1.741	2.683	7.6	20.8	12 7	6 27.07	+21 4.1	1.519	2.463	8.4	21.3
12 17	6 16.21	+21 3.7	1.694	2.671	3.3	20.5	12 17	6 16.43	+21 0.1	1.489	2.466	3.6	21.1
12 27	6 4.88	+20 50.8	1.677	2.658	1.8	20.4	12 27	6 4.88	+20 56.2	1.487	2.468	2.0	21.0
1 6	5 53.87	+20 37.7	1.689	2.645	6.3	20.6	1 6	5 53.88	+20 52.5	1.514	2.470	6.8	21.3
1 16	5 44.41	+20 25.7	1.730	2.631	10.6	20.9	1 16	5 44.75	+20 49.7	1.567	2.472	11.3	21.5
1 26	5 37.47	+20 16.3	1.795	2.616	14.4	21.1	1 26	5 38.45	+20 48.9	1.645	2.473	15.2	21.8
139559	2001 <i>QH</i> ₇₀		12 23.7 83°43	4°7/23.9	18		328018	2007 <i>JM</i> ₈		12 23.7 204°65	3°0/23.3	18	
11 17	6 37.82	+10 37.9	2.016	2.794	14.8	20.3	11 17	6 37.39	+30 24.1	2.299	3.090	12.8	21.1
11 27	6 32.13	+10 4.3	1.960	2.822	11.7	20.1	11 27	6 32.28	+31 8.6	2.214	3.089	10.0	20.9
12 7	6 24.33	+ 9 40.0	1.926	2.850	8.4	20.0	12 7	6 24.77	+31 50.8	2.152	3.088	6.8	20.7
12 17	6 15.13	+ 9 26.7	1.919	2.877	5.5	19.9	12 17	6 15.47	+32 26.9	2.118	3.087	3.8	20.5
12 27	6 5.51	+ 9 25.2	1.941	2.903	4.9	19.9	12 27	6 5.35	+32 53.5	2.113	3.085	3.3	20.5
1 6	5 56.50	+ 9 35.0	1.992	2.930	7.0	20.1	1 6	5 55.52	+33 9.1	2.138	3.084	6.0	20.7
1 16	5 48.95	+ 9 54.7	2.071	2.956	10.0	20.3	1 16	5 47.05	+33 14.3	2.192	3.083	9.2	20.9
1 26	5 43.52	+10 22.3	2.174	2.981	12.7	20.5	1 26	5 40.79	+33 11.3	2.270	3.081	12.1	21.1
105419	2000 <i>QR</i> ₁₆₅		12 23.7 200°40	3°1/23.7	18		107984	2001 <i>FT</i> ₁₃₂		12 23.7 1			

EPHEMERIDES

12 23.7

12 23.7

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
304243	2006 <i>RJ</i> ₂₉		12 23.7 314°55	7.7/23.6	18		329993	2005 <i>TM</i> ₅₄		12 23.7 94°79	0.2/23.7	18	
11 17	6 33.61	+ 6 49.5	1.660	2.450	16.9	20.5	11 17	6 43.98	+22 28.2	1.707	2.503	16.3	20.5
11 27	6 29.82	+ 5 50.1	1.574	2.437	14.0	20.3	11 27	6 37.46	+22 52.3	1.650	2.531	12.5	20.3
12 7	6 23.40	+ 5 2.5	1.509	2.425	10.9	20.1	12 7	6 28.10	+23 18.6	1.615	2.558	8.1	20.1
12 17	6 14.98	+ 4 31.6	1.467	2.413	8.3	19.9	12 17	6 16.79	+23 44.1	1.607	2.585	3.3	19.9
12 27	6 5.59	+ 4 20.9	1.452	2.401	7.8	19.9	12 27	6 4.85	+24 6.0	1.629	2.611	1.6	19.9
1 6	5 56.50	+ 4 31.4	1.462	2.390	10.0	20.0	1 6	5 53.70	+24 23.1	1.680	2.636	6.3	20.2
1 16	5 48.89	+ 5 1.7	1.497	2.379	13.2	20.1	1 16	5 44.53	+24 35.8	1.759	2.660	10.4	20.5
1 26	5 43.72	+ 5 47.9	1.554	2.369	16.6	20.3	1 26	5 38.16	+24 45.5	1.862	2.684	13.9	20.8
137383	1999 <i>TL</i> ₁₅₁		12 23.7 45°53	4.4/24.0	18		43830	1993 <i>FZ</i> ₂₁		12 23.7 314°19	0.2/23.6	18	
11 17	6 38.98	+14 24.5	1.108	1.935	21.3	19.6	11 17	6 37.75	+27 41.9	1.616	2.428	16.4	18.5
11 27	6 34.58	+14 6.3	1.063	1.957	16.7	19.4	11 27	6 33.47	+28 1.5	1.530	2.419	12.8	18.3
12 7	6 26.63	+14 0.6	1.036	1.980	11.4	19.2	12 7	6 26.04	+28 19.5	1.465	2.410	8.5	18.0
12 17	6 16.23	+14 8.1	1.032	2.003	6.2	19.0	12 17	6 16.15	+28 32.1	1.425	2.401	4.0	17.7
12 27	6 5.07	+14 28.2	1.052	2.028	4.8	19.0	12 27	6 5.10	+28 36.3	1.413	2.392	2.8	17.6
1 6	5 54.97	+14 58.4	1.097	2.052	8.9	19.3	1 6	5 54.46	+28 31.1	1.428	2.384	7.1	17.9
1 16	5 47.40	+15 35.8	1.166	2.078	13.6	19.6	1 16	5 45.71	+28 18.1	1.469	2.376	11.7	18.1
1 26	5 43.23	+16 17.7	1.255	2.103	17.7	19.9	1 26	5 39.94	+28 0.5	1.533	2.369	15.7	18.4
364028	2005 <i>VB</i> ₁₂₈		12 23.7 221°46	0.3/23.6	17		130313	2000 <i>EM</i> ₁₂₀		12 23.7 293°10	0.3/23.7	18	
11 17	6 36.80	+23 28.1	2.233	3.027	13.0	22.4	11 17	6 34.43	+21 16.2	2.215	3.012	13.0	19.9
11 27	6 31.74	+23 44.2	2.141	3.021	10.1	22.2	11 27	6 29.98	+21 33.0	2.119	3.001	10.1	19.7
12 7	6 24.38	+24 1.6	2.074	3.016	6.6	22.0	12 7	6 23.29	+21 53.0	2.047	2.991	6.6	19.4
12 17	6 15.31	+24 18.4	2.033	3.010	2.7	21.7	12 17	6 14.92	+22 14.8	2.003	2.980	2.7	19.2
12 27	6 5.45	+24 32.8	2.023	3.005	1.4	21.6	12 27	6 5.72	+22 36.6	1.987	2.969	1.4	19.0
1 6	5 55.87	+24 43.8	2.043	2.998	5.4	21.9	1 6	5 56.74	+22 57.2	2.002	2.958	5.4	19.3
1 16	5 47.58	+24 51.5	2.091	2.992	9.1	22.1	1 16	5 48.96	+23 16.1	2.045	2.948	9.1	19.5
1 26	5 41.40	+24 57.0	2.165	2.985	12.3	22.3	1 26	5 43.22	+23 33.4	2.113	2.937	12.4	19.7
516521	2006 <i>KE</i> ₁₀₅		12 23.7 228°46	6.7/23.7	18		493423	2014 <i>WT</i> ₂₆₉		12 23.7 297°50	1.0/23.5	18	
11 17	6 36.16	+ 5 42.2	2.115	2.880	14.6	22.2	11 17	6 35.87	+23 33.8	2.359	3.152	12.4	21.4
11 27	6 31.18	+ 4 51.8	2.024	2.870	12.1	22.0	11 27	6 30.98	+24 21.5	2.271	3.150	9.6	21.2
12 7	6 23.99	+ 4 12.2	1.954	2.860	9.4	21.9	12 7	6 23.89	+25 12.0	2.206	3.148	6.3	21.0
12 17	6 15.16	+ 3 46.6	1.911	2.849	7.2	21.7	12 17	6 15.15	+26 2.5	2.170	3.146	2.7	20.8
12 27	6 5.55	+ 3 37.8	1.895	2.838	6.9	21.7	12 27	6 5.61	+26 49.8	2.164	3.145	1.7	20.7
1 6	5 56.18	+ 3 46.2	1.908	2.827	8.6	21.7	1 6	5 56.29	+27 31.6	2.189	3.143	5.2	20.9
1 16	5 48.02	+ 4 10.9	1.947	2.815	11.4	21.9	1 16	5 48.16	+28 6.9	2.243	3.141	8.7	21.1
1 26	5 41.88	+ 4 49.1	2.010	2.802	14.1	22.1	1 26	5 42.00	+28 36.1	2.323	3.140	11.7	21.3
21988	1999 <i>XQ</i> ₂₀		12 23.7 36°84	3.5/23.2	18		237810	2002 <i>CT</i> ₇₇		12 23.7 347°86	0.7/23.7	18	
11 17	6 37.78	+30 45.2	2.015	2.812	14.1	18.8	11 17	6 34.97	+21 9.8	1.313	2.142	18.5	20.2
11 27	6 32.89	+31 38.6	1.938	2.816	11.0	18.6	11 27	6 31.73	+21 18.0	1.237	2.136	14.4	19.9
12 7	6 25.32	+32 29.5	1.883	2.820	7.6	18.4	12 7	6 25.09	+21 31.1	1.180	2.130	9.5	19.6
12 17	6 15.74	+33 13.3	1.856	2.824	4.4	18.2	12 17	6 15.80	+21 47.3	1.147	2.125	4.0	19.3
12 27	6 5.26	+33 45.7	1.857	2.828	3.9	18.2	12 27	6 5.28	+22 4.5	1.140	2.121	2.0	19.2
1 6	5 55.17	+34 4.9	1.887	2.833	6.7	18.3	1 6	5 55.25	+22 21.0	1.158	2.118	7.7	19.5
1 16	5 46.67	+34 11.6	1.945	2.837	10.1	18.6	1 16	5 47.30	+22 36.5	1.200	2.116	12.9	19.8
1 26	5 40.69	+34 8.7	2.026	2.842	13.2	18.8	1 26	5 42.60	+22 51.4	1.264	2.115	17.4	20.1
337432	2001 <i>RY</i> ₂₇		12 23.7 37°05	1.0/23.7	18		350867	2002 <i>OU</i> ₆		12 23.7 130°98	3.1/24.0	15	
11 17	6 38.07	+21 44.0	1.217	2.047	19.6	20.2	11 17	6 44.52	+34 11.3	2.227	3.003	13.6	21.0
11 27	6 33.94	+21 34.8	1.161	2.060	15.1	19.9	11 27	6 37.48	+34 5.7	2.152	3.017	10.7	20.8
12 7	6 26.30	+21 28.5	1.125	2.074	9.9	19.7	12 7	6 27.93	+33 51.6	2.100	3.031	7.4	20.7
12 17	6 16.15	+21 23.9	1.111	2.089	4.1	19.4	12 17	6 16.69	+33 26.2	2.077	3.044	4.2	20.5
12 27	6 5.12	+21 20.1	1.123	2.105	2.2	19.3	12 27	6 4.92	+32 48.5	2.084	3.056	3.3	20.4
1 6	5 55.01	+21 16.9	1.161	2.121	7.7	19.7	1 6	5 53.87	+31 59.9	2.121	3.068	6.0	20.6
1 16	5 47.31	+21 15.2	1.223	2.138	12.8	20.0	1 16	5 44.58	+31 4.1	2.188	3.080	9.2	20.9
1 26	5 42.97	+21 16.1	1.307	2.156	17.1	20.4	1 26	5 37.81	+30 5.9	2.281	3.090	12.1	21.1
308117	2004 <i>XD</i> ₆₁		12 23.7 59°16	11.6/25.7	18		256815	2008 <i>CQ</i> ₁₂₀		12 23.7 342°98	2.6/23.5	18	
11 17	6 59.83	+50 36.1	1.475	2.225	20.5	19.4	11 17	6 38.75	+26 17.9	1.228	2.057	19.5	20.2
11 27	6 51.18	+51 50.1	1.446	2.266	17.4	19.3	11 27	6 35.12	+27 0.9	1.154	2.052	15.2	19.9
12 7	6 37.53	+52 39.3	1.435	2.307	14.5	19.2	12 7	6 27.57	+27 46.1	1.100	2.048	10.2	19.6
12 17	6 20.58	+52 52.5	1.446	2.347	12.3	19.2	12 17	6 16.90	+28 27.7	1.068	2.045	4.7	19.3
12 27	6 3.07	+52 24.4	1.481	2.387	11.6	19.3	12 27	6 4.72	+28 59.8	1.062	2.042	3.4	19.2
1 6	5 47.78	+51 19.2	1.540	2.427	12.6	19.4	1 6	5 53.10	+29 19.2	1.082	2.039	8.6	19.5
1 16	5 36.54	+49 47.9	1.624	2.466	14.6	19.6	1 16	5 43.92	+29 26.8	1.125	2.037	13.9	19.8
1 26	5 30.13	+48 3.4	1.728	2.505	16.7	19.9	1 26	5 38.53	+29 26.1	1.188	2.036	18.5	20.1
411108	2009 <i>WK</i> ₇₁		12 23.7 359°47	1.2/23.7	16		456143	2006 <i>DH</i> ₁₈₈		12 23.7 279°74	0.4/23.7	18	
11 17	6 31.23	+20 44.1	1.492	2.319	16.8	20.8	11 17	6 35.06	+23 55.0	2.255	3.052	12.8	21.8
11 27	6 28.34	+20 37.7	1.417	2.315	13.0	20.5	11 27	6 30.43	+24 5.0	2.160	3.041	9.9	21.6
12 7	6 22.57	+20 34.9	1.363	2.312	8.5	20.3	12 7	6 23.57	+24 15.6	2.088	3.031	6.5	21.4
12 17	6 14.66	+20 35.1	1.334	2.311	3.7	20.0	12 17	6 15.02	+24 25.2	2.044	3.021	2.7	21.1
12 27	6 5.82	+20 37.6	1.330	2.311	2.1	19.9	12 27	6 5.69	+24 32.5	2.029	3.011	1.4	21.0
1 6	5 57.47	+20 41.8	1.353	2.313	6.9	20.2	1 6	5 56.61	+24 36.6	2.044	3.001	5.3	21.3
1 16	5 50.90	+20 47.9	1.401	2.316	11.5	20.5	1 16	5 48.77	+24 38.0	2.088	2.990	9.0	21.5
1 26	5 47.05	+20 56.1	1.472	2.321	15.5	20.7	1 26	5 42.99	+24 37.8	2.157	2.980	12.2	21.7
523304	2017 <i>BH</i> ₁₀₅		12 23.7 205°25	1.2/23.8	18		307470	2002 <i>WL</i> ₃₀					

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12 23.7

12 23.7

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
224072	2005 <i>NK</i> ₄₉		12 23.7 133°45	2°8/23.8	18		229665	2006 <i>MC</i> ₂		12 23.7 235°94	2°1/23.9	18	
11 17	6 41.14	+16 50.3	1.756	2.549	16.0	21.4	11 17	6 33.64	+15 33.1	2.454	3.240	12.2	20.7
11 27	6 35.28	+16 31.6	1.685	2.562	12.5	21.2	11 27	6 29.03	+15 40.8	2.364	3.237	9.5	20.5
12 7	6 26.74	+16 18.4	1.636	2.574	8.4	21.0	12 7	6 22.50	+15 54.5	2.298	3.235	6.5	20.3
12 17	6 16.29	+16 10.9	1.613	2.585	4.3	20.8	12 17	6 14.56	+16 13.9	2.260	3.232	3.3	20.1
12 27	6 5.11	+16 9.1	1.619	2.595	3.2	20.7	12 27	6 6.00	+16 38.3	2.252	3.229	2.4	20.1
1 6	5 54.53	+16 12.9	1.654	2.606	6.8	21.0	1 6	5 57.66	+17 6.5	2.273	3.225	5.2	20.3
1 16	5 45.69	+16 21.9	1.716	2.615	10.8	21.2	1 16	5 50.39	+17 37.4	2.324	3.222	8.4	20.5
1 26	5 39.43	+16 35.8	1.803	2.624	14.4	21.5	1 26	5 44.87	+18 10.1	2.401	3.219	11.3	20.6
431159	2006 <i>RR</i> ₈		12 23.7 103°15	6°4/23.9	18		4178	Mimeev		12 23.7 272°27	0°4/23.7	18	
11 17	6 48.71	+37 45.4	1.541	2.331	18.1	21.2	11 17	6 34.60	+24 16.7	2.515	3.307	11.8	17.9
11 27	6 42.04	+38 27.8	1.481	2.348	14.5	21.0	11 27	6 29.90	+24 24.2	2.412	3.291	9.1	17.7
12 7	6 31.55	+38 58.7	1.441	2.365	10.6	20.8	12 7	6 23.15	+24 31.8	2.333	3.275	6.0	17.5
12 17	6 18.31	+39 10.4	1.426	2.382	7.3	20.7	12 17	6 14.86	+24 38.2	2.282	3.259	2.5	17.2
12 27	6 4.15	+38 58.2	1.438	2.398	6.6	20.7	12 27	6 5.83	+24 42.1	2.261	3.243	1.3	17.1
1 6	5 51.07	+38 23.0	1.477	2.414	9.1	20.9	1 6	5 56.99	+24 43.0	2.271	3.226	4.9	17.3
1 16	5 40.72	+37 30.5	1.542	2.429	12.6	21.1	1 16	5 49.23	+24 41.2	2.309	3.210	8.3	17.5
1 26	5 34.09	+36 29.0	1.630	2.444	15.9	21.4	1 26	5 43.32	+24 38.0	2.374	3.193	11.4	17.7
212227	2005 <i>JJ</i> ₁₉		12 23.7 217°78	1°0/23.8	18		28746	2000 <i>GB</i> ₁₄₈		12 23.7 81°87	1°4/23.8	18	
11 17	6 37.47	+19 30.5	2.318	3.105	12.8	21.3	11 17	6 42.12	+19 45.5	1.535	2.339	17.5	19.3
11 27	6 32.16	+19 38.9	2.221	3.097	10.0	21.1	11 27	6 36.25	+19 43.6	1.479	2.363	13.4	19.1
12 7	6 24.64	+19 50.9	2.149	3.088	6.6	20.9	12 7	6 27.43	+19 46.0	1.444	2.388	8.8	18.9
12 17	6 15.46	+20 5.6	2.104	3.079	2.9	20.7	12 17	6 16.58	+19 51.5	1.435	2.412	3.8	18.7
12 27	6 5.50	+20 21.7	2.089	3.070	1.6	20.5	12 27	6 5.09	+19 58.7	1.454	2.435	2.2	18.6
1 6	5 55.76	+20 38.2	2.105	3.060	5.3	20.8	1 6	5 54.43	+20 7.0	1.502	2.458	6.8	18.9
1 16	5 47.21	+20 54.7	2.150	3.049	9.0	21.0	1 16	5 45.86	+20 16.3	1.576	2.481	11.2	19.3
1 26	5 40.66	+21 11.4	2.221	3.038	12.2	21.2	1 26	5 40.18	+20 27.2	1.673	2.504	14.9	19.5
89984	2002 <i>TR</i> ₃₈		12 23.7 247°79	3°5/23.6	18		272654	2005 <i>WA</i> ₁₇₁		12 23.7 162°08	0°1/23.7	18	
11 17	6 38.72	+16 49.1	1.593	2.397	16.9	19.8	11 17	6 40.63	+22 12.3	1.975	2.768	14.5	21.4
11 27	6 33.92	+16 10.1	1.508	2.391	13.3	19.6	11 27	6 34.85	+22 24.9	1.894	2.773	11.2	21.2
12 7	6 26.16	+15 35.4	1.445	2.385	9.1	19.3	12 7	6 26.50	+22 39.8	1.836	2.778	7.3	21.0
12 17	6 16.17	+15 6.5	1.407	2.379	4.9	19.0	12 17	6 16.25	+22 54.7	1.806	2.783	3.0	20.7
12 27	6 5.16	+14 45.0	1.397	2.372	4.0	19.0	12 27	6 5.20	+23 7.9	1.805	2.787	1.5	20.6
1 6	5 54.60	+14 32.1	1.414	2.365	7.8	19.2	1 6	5 54.58	+23 18.4	1.834	2.790	5.9	20.9
1 16	5 45.80	+14 28.3	1.457	2.359	12.2	19.4	1 16	5 45.54	+23 26.4	1.892	2.793	9.9	21.2
1 26	5 39.79	+14 33.4	1.523	2.352	16.2	19.6	1 26	5 38.92	+23 33.0	1.974	2.795	13.3	21.4
43003	1999 <i>UC</i> ₁₄		12 23.7 97°16	1°6/23.8	18		479720	2014 <i>DX</i> ₁₃₁		12 23.7 11°82	1°3/23.8	18	
11 17	6 43.84	+18 51.4	1.612	2.408	17.1	19.7	11 17	6 34.97	+20 14.8	1.175	2.011	19.8	20.8
11 27	6 37.40	+18 52.7	1.555	2.435	13.2	19.6	11 27	6 31.89	+20 17.6	1.111	2.013	15.4	20.5
12 7	6 28.09	+18 58.9	1.520	2.461	8.6	19.4	12 7	6 25.24	+20 26.4	1.066	2.017	10.1	20.2
12 17	6 16.81	+19 8.8	1.511	2.486	3.8	19.1	12 17	6 15.88	+20 39.8	1.043	2.021	4.3	19.9
12 27	6 4.92	+19 20.8	1.531	2.511	2.3	19.1	12 27	6 5.40	+20 55.9	1.046	2.027	2.3	19.8
1 6	5 53.85	+19 34.1	1.580	2.535	6.7	19.4	1 6	5 55.62	+21 13.0	1.073	2.034	8.0	20.2
1 16	5 44.81	+19 48.4	1.656	2.558	10.9	19.7	1 16	5 48.16	+21 30.5	1.123	2.042	13.3	20.5
1 26	5 38.62	+20 3.9	1.757	2.581	14.5	20.0	1 26	5 44.12	+21 48.6	1.195	2.051	17.8	20.8
492918	2014 <i>RS</i> ₁₆		12 23.7 67°68	4°7/23.7	17		72899	2001 <i>KA</i> ₆₁		12 23.7 60°97	4°1/23.7	18	
11 17	6 39.59	+36 20.5	2.112	2.897	13.9	20.8	11 17	6 33.79	+12 33.3	2.189	2.975	13.5	19.2
11 27	6 34.16	+36 53.0	2.040	2.907	11.1	20.7	11 27	6 29.19	+11 54.8	2.114	2.982	10.7	19.1
12 7	6 26.05	+37 17.5	1.991	2.916	8.0	20.5	12 7	6 22.59	+11 22.9	2.061	2.990	7.6	18.9
12 17	6 16.03	+37 29.6	1.967	2.925	5.4	20.3	12 17	6 14.59	+10 59.4	2.036	2.998	4.9	18.7
12 27	6 5.27	+37 26.2	1.973	2.935	4.9	20.3	12 27	6 6.05	+10 45.5	2.040	3.005	4.3	18.7
1 6	5 55.09	+37 7.3	2.007	2.944	7.0	20.5	1 6	5 57.91	+10 41.6	2.072	3.013	6.5	18.9
1 16	5 46.64	+36 35.6	2.068	2.954	9.9	20.7	1 16	5 51.00	+10 47.3	2.132	3.021	9.5	19.1
1 26	5 40.76	+35 55.6	2.154	2.963	12.7	20.9	1 26	5 46.00	+11 1.5	2.217	3.029	12.3	19.3
452863	2006 <i>SQ</i> ₂₇₉		12 23.7 221°11	3°9/23.5	18		82389	2001 <i>MH</i> ₂₅		12 23.7 96°68	1°0/23.7	18	
11 17	6 36.32	+14 48.1	1.972	2.763	14.6	20.9	11 17	6 42.57	+20 38.2	1.686	2.484	16.4	19.9
11 27	6 31.41	+13 59.5	1.888	2.762	11.5	20.7	11 27	6 36.39	+20 35.9	1.626	2.508	12.6	19.7
12 7	6 24.18	+13 15.4	1.827	2.760	8.1	20.5	12 7	6 27.44	+20 36.6	1.589	2.531	8.2	19.5
12 17	6 15.26	+12 37.9	1.793	2.759	4.9	20.3	12 17	6 16.58	+20 39.0	1.577	2.554	3.5	19.3
12 27	6 5.64	+12 8.9	1.787	2.757	4.2	20.2	12 27	6 5.11	+20 41.8	1.595	2.576	1.9	19.2
1 6	5 56.42	+11 49.7	1.811	2.755	7.0	20.4	1 6	5 54.40	+20 44.8	1.642	2.598	6.4	19.5
1 16	5 48.60	+11 40.9	1.861	2.753	10.5	20.6	1 16	5 45.63	+20 48.3	1.716	2.619	10.6	19.8
1 26	5 42.98	+11 41.7	1.936	2.751	13.7	20.8	1 26	5 39.59	+20 53.2	1.815	2.640	14.1	20.1
335301	2005 <i>QU</i> ₁₁		12 23.7 164°53	11°2/24.7	18		279672	2011 <i>FE</i> ₂₈		12 23.7 263°27	5°8/23.1	18	
11 17	7 0.16	+54 7.3	2.001	2.712	17.0	21.4	11 17	6 39.64	+40 33.9	2.528	3.295	12.4	20.2
11 27	6 51.45	+55 11.9	1.931	2.718	14.9	21.2	11 27	6 34.23	+41 27.3	2.435	3.283	10.2	20.1
12 7	6 38.01	+55 56.4	1.881	2.723	13.0	21.1	12 7	6 26.22	+42 13.0	2.364	3.271	7.9	19.9
12 17	6 21.05	+56 10.1	1.854	2.728	11.5	21.0	12 17	6 16.20	+42 45.6	2.321	3.259	6.2	19.8
12 27	6 2.83	+55 45.9	1.851	2.731	11.2	21.0	12 27	6 5.21	+43 1.0	2.306	3.247	6.0	19.7
1 6	5 45.98	+54 44.2	1.875	2.734	12.1	21.1	1 6	5 54.47	+42 57.9	2.320	3.235	7.5	19.8
1 16	5 32.58	+53 12.5	1.922	2.736	13.8	21.2	1 16	5 45.17	+42 37.8	2.361	3.223	9.8	19.9
1 26	5 23.80	+51 22.3	1.993	2.738	15.8	21.3	1 26	5 38.25	+42 4.9	2.426	3.211	12.2	20.1
58154	1988 <i>RJ</i> ₁₁		12 23.7 125°82	2°4/23.8	18		40747	1999 <i>TK</i> ₅		12 23.7 124°38	5°2/2		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
351401	2005 EA ₂₄₆		12 23.7 297°60	2°3/23.8 18			35116	1992 DV ₈		12 23.7 143°87	3°8/23.8 18		
11 17	6 36.09	+17 46.9	1.718	2.523	15.8	21.2	11 17	6 41.25	+14 41.3	1.660	2.453	16.8	18.3
11 27	6 31.80	+17 35.3	1.629	2.514	12.4	21.0	11 27	6 35.56	+14 14.7	1.587	2.463	13.2	18.1
12 7	6 24.76	+17 28.8	1.563	2.505	8.3	20.7	12 7	6 27.05	+13 55.5	1.536	2.471	9.1	17.9
12 17	6 15.63	+17 27.7	1.521	2.496	4.1	20.5	12 17	6 16.52	+13 44.8	1.511	2.479	5.1	17.7
12 27	6 5.51	+17 31.8	1.508	2.486	2.8	20.4	12 27	6 5.17	+13 43.1	1.513	2.487	4.1	17.7
1 6	5 55.71	+17 40.5	1.522	2.478	6.9	20.6	1 6	5 54.40	+13 50.3	1.545	2.494	7.5	17.9
1 16	5 47.49	+17 53.6	1.563	2.469	11.2	20.8	1 16	5 45.43	+14 5.6	1.603	2.500	11.6	18.1
1 26	5 41.82	+18 10.7	1.628	2.460	15.1	21.0	1 26	5 39.15	+14 27.8	1.684	2.505	15.2	18.4
88129	2000 WN ₁₅₂		12 23.7 145°30	2°8/23.4 18			375596	2008 VN ₅₈		12 23.7 26°77	3°4/23.7 17		
11 17	6 33.57	+15 36.1	2.801	3.580	11.0	19.4	11 17	6 33.47	+14 50.1	2.164	2.956	13.4	20.9
11 27	6 28.60	+14 49.9	2.715	3.583	8.6	19.2	11 27	6 29.04	+14 15.8	2.085	2.959	10.6	20.7
12 7	6 22.02	+14 6.3	2.655	3.586	6.0	19.1	12 7	6 22.56	+13 46.7	2.028	2.962	7.3	20.5
12 17	6 14.33	+13 26.8	2.623	3.589	3.5	18.9	12 17	6 14.63	+13 24.0	1.999	2.966	4.3	20.3
12 27	6 6.20	+12 52.7	2.621	3.591	3.1	18.9	12 27	6 6.11	+13 8.9	1.998	2.970	3.6	20.3
1 6	5 58.39	+12 25.1	2.651	3.594	5.2	19.0	1 6	5 57.97	+13 1.8	2.027	2.974	6.2	20.5
1 16	5 51.55	+12 4.6	2.710	3.596	7.8	19.2	1 16	5 51.07	+13 2.6	2.083	2.978	9.4	20.7
1 26	5 46.25	+11 51.4	2.795	3.598	10.3	19.4	1 26	5 46.11	+13 10.7	2.164	2.982	12.4	20.9
445619	2011 SX ₁₇₈		12 23.7 83°51	6°4/23.8 15			273330	2006 TO ₅₇		12 23.7 27°36	4°5/23.8 18		
11 17	6 37.41	+ 8 24.3	1.807	2.588	16.1	22.2	11 17	6 36.54	+15 31.4	1.154	1.983	20.5	20.3
11 27	6 32.18	+ 7 27.7	1.746	2.606	13.0	22.1	11 27	6 32.93	+14 54.6	1.095	1.991	16.1	20.1
12 7	6 24.61	+ 6 42.2	1.707	2.624	9.7	21.9	12 7	6 25.80	+14 27.0	1.055	1.999	11.1	19.8
12 17	6 15.42	+ 6 11.3	1.692	2.642	7.1	21.8	12 17	6 16.10	+14 10.8	1.036	2.008	6.2	19.6
12 27	6 5.68	+ 5 57.0	1.706	2.659	6.5	21.8	12 27	6 5.41	+14 7.2	1.043	2.018	4.9	19.5
1 6	5 56.54	+ 5 59.6	1.747	2.676	8.5	21.9	1 6	5 55.53	+14 16.0	1.073	2.029	9.1	19.8
1 16	5 48.96	+ 6 17.4	1.815	2.694	11.5	22.2	1 16	5 47.98	+14 35.7	1.128	2.040	13.9	20.1
1 26	5 43.68	+ 6 47.6	1.906	2.711	14.3	22.4	1 26	5 43.78	+15 4.0	1.202	2.052	18.2	20.4
322955	2002 JT ₅₀		12 23.7 115°26	2°9/23.5 18			216663	2003 YB ₃₆		12 23.7 316°72	4°5/23.4 17		
11 17	6 45.39	+28 34.9	1.646	2.443	16.8	20.8	11 17	6 34.25	+15 41.7	1.545	2.359	16.9	19.9
11 27	6 39.05	+29 18.5	1.581	2.461	13.0	20.6	11 27	6 30.76	+14 48.3	1.449	2.336	13.5	19.6
12 7	6 29.46	+30 0.0	1.538	2.478	8.7	20.4	12 7	6 24.33	+13 58.4	1.374	2.314	9.5	19.3
12 17	6 17.51	+30 34.0	1.522	2.495	4.4	20.2	12 17	6 15.56	+13 15.0	1.323	2.292	5.7	19.1
12 27	6 4.65	+30 55.9	1.534	2.511	3.4	20.2	12 27	6 5.60	+12 41.1	1.299	2.271	4.9	19.0
1 6	5 52.54	+31 4.6	1.575	2.526	7.2	20.4	1 6	5 55.88	+12 18.9	1.301	2.251	8.6	19.1
1 16	5 42.60	+31 1.8	1.643	2.541	11.3	20.7	1 16	5 47.78	+12 9.6	1.328	2.231	13.0	19.3
1 26	5 35.80	+30 51.6	1.734	2.555	14.9	21.0	1 26	5 42.42	+12 12.9	1.377	2.212	17.2	19.5
59744	1999 LG ₁₀		12 23.7 318°53	8°8/23.2 18			488004	2015 TO ₃₄₆		12 23.7 78°99	2°6/23.9 18		
11 17	6 35.03	+ 6 13.7	1.532	2.323	18.1	17.4	11 17	6 36.93	+16 16.8	1.868	2.665	15.1	20.9
11 27	6 31.09	+ 4 50.7	1.453	2.315	15.0	17.2	11 27	6 31.95	+16 9.1	1.799	2.678	11.7	20.7
12 7	6 24.34	+ 3 39.6	1.394	2.307	11.8	17.0	12 7	6 24.55	+16 7.7	1.753	2.692	7.9	20.5
12 17	6 15.47	+ 2 46.6	1.359	2.300	9.4	16.8	12 17	6 15.46	+16 12.6	1.733	2.705	4.0	20.3
12 27	6 5.62	+ 2 16.9	1.349	2.292	9.0	16.8	12 27	6 5.72	+16 23.3	1.741	2.718	2.9	20.3
1 6	5 56.16	+ 2 12.3	1.364	2.285	11.2	16.9	1 6	5 56.50	+16 39.0	1.779	2.732	6.3	20.5
1 16	5 48.35	+ 2 31.8	1.403	2.279	14.4	17.0	1 16	5 48.82	+16 58.8	1.844	2.745	10.0	20.8
1 26	5 43.17	+ 3 11.2	1.463	2.273	17.6	17.2	1 26	5 43.46	+17 21.8	1.933	2.758	13.3	21.0
447368	2006 AU ₃₈		12 23.7 207°56	1°7/23.7 18			278736	2008 SX ₈₄		12 23.7 107°66	2°6/23.7 18		
11 17	6 41.02	+28 7.2	1.818	2.617	15.3	21.6	11 17	6 41.29	+17 25.6	1.935	2.722	15.0	21.0
11 27	6 35.54	+28 9.5	1.733	2.615	12.0	21.4	11 27	6 35.02	+16 56.2	1.871	2.745	11.6	20.9
12 7	6 27.15	+28 8.4	1.670	2.612	7.9	21.2	12 7	6 26.39	+16 30.9	1.831	2.767	7.8	20.7
12 17	6 16.58	+28 0.8	1.633	2.608	3.6	20.9	12 17	6 16.16	+16 10.1	1.817	2.789	4.0	20.5
12 27	6 5.09	+27 45.1	1.625	2.605	2.3	20.8	12 27	6 5.42	+15 54.5	1.834	2.810	3.0	20.5
1 6	5 54.09	+27 21.6	1.646	2.601	6.5	21.1	1 6	5 55.34	+15 44.5	1.880	2.831	6.3	20.7
1 16	5 44.89	+26 52.7	1.695	2.597	10.7	21.3	1 16	5 46.90	+15 40.4	1.955	2.850	9.9	21.0
1 26	5 38.45	+26 21.9	1.767	2.593	14.4	21.5	1 26	5 40.82	+15 42.1	2.054	2.869	13.1	21.2
20225	1997 MG ₁		12 23.7 41°79	5°6/23.9 18			415384	2013 MZ ₉		12 23.7 88°71	0°0/23.7 18		
11 17	6 33.55	+ 8 54.1	1.974	2.758	14.8	17.5	11 17	6 35.94	+21 47.5	2.359	3.150	12.5	20.8
11 27	6 29.21	+ 8 13.2	1.903	2.766	12.0	17.3	11 27	6 30.82	+22 10.9	2.286	3.165	9.6	20.6
12 7	6 22.71	+ 7 42.7	1.853	2.774	8.9	17.2	12 7	6 23.66	+22 36.6	2.237	3.179	6.2	20.4
12 17	6 14.68	+ 7 24.9	1.829	2.782	6.3	17.0	12 17	6 15.07	+23 2.8	2.217	3.194	2.5	20.2
12 27	6 6.06	+ 7 21.4	1.833	2.790	5.7	17.0	12 27	6 5.91	+23 27.8	2.226	3.208	1.2	20.1
1 6	5 57.86	+ 7 32.3	1.865	2.799	7.7	17.1	1 6	5 57.14	+23 50.3	2.266	3.222	4.9	20.4
1 16	5 50.99	+ 7 55.9	1.923	2.807	10.6	17.3	1 16	5 49.61	+24 9.9	2.335	3.236	8.2	20.7
1 26	5 46.17	+ 8 29.8	2.005	2.816	13.5	17.5	1 26	5 44.02	+24 27.0	2.430	3.250	11.1	20.9
481388	2006 RD ₁		12 23.7 66°66	4°7/22.9 17			383027	2005 NQ ₇₄		12 23.7 62°25	0°8/23.8 18		
11 17	6 49.72	+20 3.4	1.284	2.088	20.2	20.0	11 17	6 41.47	+21 1.6	1.323	2.140	19.0	21.0
11 27	6 42.00	+18 0.7	1.237	2.120	15.7	19.8	11 27	6 36.25	+21 6.3	1.270	2.162	14.6	20.8
12 7	6 30.98	+15 57.6	1.211	2.151	10.5	19.6	12 7	6 27.68	+21 15.1	1.238	2.184	9.5	20.6
12 17	6 17.93	+14 0.1	1.212	2.182	5.9	19.5	12 17	6 16.79	+21 25.9	1.229	2.207	4.0	20.3
12 27	6 4.60	+12 15.6	1.241	2.213	5.3	19.5	12 27	6 5.14	+21 36.7	1.248	2.229	2.0	20.3
1 6	5 52.70	+10 50.1	1.299	2.243	9.2	19.8	1 6	5 54.44	+21 46.6	1.293	2.252	7.3	20.7
1 16	5 43.48	+ 9 46.8	1.383	2.274	13.5	20.2	1 16	5 46.08	+21 55.8	1.364	2.274	12.1	21.0
1 26	5 37.66	+ 9 5.2	1.488	2.304	17.1	20.5	1 26	5 40.97	+22 5.2	1.457	2.297	16.1	21.3
471041	2009 TV ₃₃		12 23.7 18°36	3°2/24.0 16			454539	2014 OE ₃₃₄		12 23.7 157°64	2°0/23.7 18		
11 17	6 34.99	+31 14.3	0.866	1.724									

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
441728	2009 BT ₆₀		12 23.7 358°74	6°1/24.4	17		478432	2012 HS ₃₉		12 23.7 202°69	3°2/23.5	18	
11 17	6 41.97	+38 28.3	1.450	2.254	18.3	20.3	11 17	6 44.78	+29 50.2	1.857	2.647	15.4	21.7
11 27	6 37.25	+38 34.8	1.376	2.252	14.8	20.1	11 27	6 38.66	+30 30.4	1.768	2.643	12.1	21.5
12 7	6 28.69	+38 26.8	1.321	2.250	10.9	19.8	12 7	6 29.38	+31 8.4	1.701	2.638	8.3	21.2
12 17	6 17.31	+37 58.3	1.289	2.250	7.2	19.6	12 17	6 17.64	+31 39.0	1.661	2.632	4.4	21.0
12 27	6 4.86	+37 5.9	1.284	2.250	6.2	19.6	12 27	6 4.71	+31 57.8	1.650	2.625	3.6	20.9
1 6	5 53.36	+35 52.4	1.304	2.250	9.0	19.7	1 6	5 52.15	+32 2.9	1.669	2.617	7.1	21.1
1 16	5 44.46	+34 24.8	1.350	2.252	13.0	20.0	1 16	5 41.41	+31 55.8	1.715	2.609	11.2	21.3
1 26	5 39.22	+32 52.3	1.418	2.254	16.8	20.2	1 26	5 33.61	+31 40.4	1.786	2.600	14.8	21.6
249828	2001 KX ₆₁		12 23.7 195°82	1°8/23.5	18		67121	2000 AE ₁₂₃		12 23.7 136°25	3°7/24.1	18	
11 17	6 39.83	+26 59.1	2.335	3.121	12.8	21.5	11 17	6 33.81	+11 21.7	2.352	3.131	12.9	19.4
11 27	6 34.12	+27 36.2	2.244	3.118	9.9	21.3	11 27	6 29.19	+11 13.8	2.269	3.133	10.2	19.2
12 7	6 26.02	+28 13.2	2.177	3.115	6.6	21.1	12 7	6 22.64	+11 14.2	2.209	3.136	7.3	19.0
12 17	6 16.14	+28 46.7	2.138	3.112	3.1	20.8	12 17	6 14.71	+11 23.8	2.176	3.138	4.5	18.9
12 27	6 5.40	+29 13.7	2.129	3.107	2.3	20.8	12 27	6 6.19	+11 42.5	2.172	3.140	3.8	18.8
1 6	5 54.92	+29 32.7	2.152	3.103	5.5	21.0	1 6	5 57.96	+12 9.3	2.198	3.142	6.0	19.0
1 16	5 45.75	+29 43.7	2.203	3.097	9.0	21.2	1 16	5 50.83	+12 43.0	2.253	3.144	9.0	19.2
1 26	5 38.75	+29 48.6	2.280	3.091	12.1	21.4	1 26	5 45.48	+13 21.7	2.333	3.146	11.7	19.3
51588	2001 HH ₁₃		12 23.7 153°85	1°4/23.6	18		16167	Oertli		12 23.7 78°82	2°6/23.9	18	
11 17	6 39.79	+26 44.6	2.255	3.043	13.1	20.8	11 17	6 41.60	+17 15.0	1.454	2.260	18.2	18.6
11 27	6 34.00	+27 7.7	2.174	3.051	10.1	20.7	11 27	6 36.02	+17 5.5	1.398	2.282	14.1	18.4
12 7	6 25.86	+27 29.7	2.118	3.057	6.7	20.5	12 7	6 27.41	+17 3.0	1.362	2.304	9.4	18.2
12 17	6 16.03	+27 47.8	2.089	3.064	3.0	20.2	12 17	6 16.69	+17 7.0	1.352	2.326	4.5	18.0
12 27	6 5.48	+27 59.9	2.090	3.069	2.0	20.2	12 27	6 5.28	+17 16.7	1.369	2.348	3.1	17.9
1 6	5 55.34	+28 5.1	2.122	3.075	5.4	20.4	1 6	5 54.70	+17 31.1	1.414	2.369	7.3	18.3
1 16	5 46.62	+28 4.2	2.182	3.079	8.9	20.6	1 16	5 46.24	+17 49.4	1.485	2.391	11.7	18.6
1 26	5 40.11	+27 59.2	2.269	3.084	12.0	20.8	1 26	5 40.74	+18 10.8	1.579	2.411	15.5	18.9
56196	1999 GF ₇		12 23.7 159°98	3°1/23.8	18		272056	2005 EZ ₁₇₂		12 23.7 326°26	4°1/24.2	18	
11 17	6 38.74	+15 20.1	1.923	2.712	15.0	18.6	11 17	6 33.11	+10 38.7	2.236	3.018	13.4	21.0
11 27	6 33.36	+15 2.0	1.843	2.717	11.7	18.4	11 27	6 28.80	+10 27.4	2.150	3.015	10.7	20.8
12 7	6 25.52	+14 50.1	1.786	2.722	8.0	18.2	12 7	6 22.47	+10 25.3	2.087	3.013	7.7	20.6
12 17	6 15.91	+14 45.0	1.756	2.726	4.4	18.0	12 17	6 14.67	+10 33.4	2.050	3.010	5.0	20.5
12 27	6 5.55	+14 46.9	1.754	2.729	3.4	17.9	12 27	6 6.22	+10 52.0	2.042	3.008	4.3	20.4
1 6	5 55.62	+14 55.4	1.782	2.732	6.6	18.1	1 6	5 58.04	+11 20.3	2.063	3.006	6.4	20.6
1 16	5 47.18	+15 10.1	1.838	2.734	10.3	18.4	1 16	5 50.99	+11 56.5	2.112	3.004	9.5	20.7
1 26	5 41.07	+15 30.0	1.918	2.736	13.7	18.6	1 26	5 45.79	+12 38.8	2.186	3.002	12.3	20.9
45040	1999 XJ ₈		12 23.7 159°69	0°1/23.7	18		95237	2002 CO ₄₀		12 23.7 160°51	1°4/23.6	18	
11 17	6 38.98	+21 40.1	2.150	2.941	13.6	18.8	11 17	6 37.06	+20 48.6	2.329	3.117	12.7	19.8
11 27	6 33.44	+22 2.9	2.068	2.946	10.5	18.6	11 27	6 31.68	+20 18.1	2.244	3.121	9.8	19.6
12 7	6 25.55	+22 28.7	2.009	2.951	6.8	18.4	12 7	6 24.25	+19 48.1	2.184	3.124	6.5	19.4
12 17	6 15.92	+22 55.4	1.978	2.955	2.8	18.1	12 17	6 15.36	+19 18.7	2.151	3.126	2.9	19.1
12 27	6 5.54	+23 20.7	1.977	2.959	1.4	18.0	12 27	6 5.91	+18 50.7	2.149	3.129	1.9	19.1
1 6	5 55.51	+23 43.2	2.007	2.962	5.4	18.3	1 6	5 56.86	+18 24.9	2.178	3.131	5.3	19.3
1 16	5 46.87	+24 2.6	2.065	2.965	9.2	18.5	1 16	5 49.09	+18 2.7	2.235	3.133	8.7	19.5
1 26	5 40.43	+24 19.4	2.149	2.968	12.4	18.8	1 26	5 43.27	+17 45.0	2.318	3.134	11.7	19.7
56123	1999 CR ₂₃		12 23.7 164°68	2°9/23.7	18		520644	2014 PD ₇₇		12 23.7 35°53	0°3/23.7	17	
11 17	6 42.96	+30 56.0	1.900	2.691	15.1	19.4	11 17	6 36.07	+23 18.4	1.977	2.780	14.2	20.9
11 27	6 36.95	+31 13.4	1.820	2.695	11.8	19.2	11 27	6 31.44	+23 33.5	1.898	2.783	10.9	20.7
12 7	6 28.03	+31 25.7	1.762	2.699	8.0	18.9	12 7	6 24.36	+23 50.2	1.842	2.786	7.1	20.5
12 17	6 16.98	+31 29.2	1.731	2.702	4.2	18.7	12 17	6 15.48	+24 6.4	1.812	2.790	2.9	20.2
12 27	6 5.05	+31 21.0	1.729	2.705	3.3	18.7	12 27	6 5.84	+24 20.3	1.812	2.793	1.5	20.1
1 6	5 53.68	+31 1.2	1.756	2.707	6.6	18.9	1 6	5 56.60	+24 31.0	1.840	2.797	5.7	20.4
1 16	5 44.16	+30 32.3	1.812	2.708	10.5	19.1	1 16	5 48.83	+24 38.5	1.896	2.801	9.6	20.7
1 26	5 37.42	+29 58.7	1.891	2.710	13.9	19.3	1 26	5 43.37	+24 44.0	1.977	2.805	13.0	20.9
294539	2007 XH ₅₄		12 23.7 84°38	1°9/24.1	18		64502	2001 VQ ₆₆		12 23.7 41°85	1°8/23.7	18	
11 17	6 39.63	+15 18.9	1.868	2.657	15.4	20.2	11 17	6 37.90	+27 51.2	1.763	2.569	15.4	19.4
11 27	6 34.03	+15 55.1	1.802	2.677	11.9	20.0	11 27	6 33.13	+28 3.1	1.691	2.577	12.0	19.2
12 7	6 25.94	+16 40.5	1.759	2.697	7.9	19.8	12 7	6 25.56	+28 12.3	1.642	2.585	7.9	19.0
12 17	6 16.07	+17 33.0	1.743	2.717	3.8	19.6	12 17	6 15.98	+28 16.0	1.618	2.594	3.6	18.8
12 27	6 5.50	+18 29.5	1.756	2.736	2.3	19.6	12 27	6 5.62	+28 12.1	1.623	2.603	2.4	18.7
1 6	5 55.44	+19 27.0	1.800	2.755	6.0	19.8	1 6	5 55.84	+28 0.5	1.656	2.612	6.4	19.0
1 16	5 46.97	+20 22.8	1.872	2.774	9.9	20.1	1 16	5 47.87	+27 43.2	1.716	2.621	10.4	19.2
1 26	5 40.90	+21 15.7	1.969	2.792	13.2	20.4	1 26	5 42.57	+27 23.0	1.799	2.631	13.9	19.5
340861	2007 BN ₁₇		12 23.7 297°50	0°6/23.7	18		3437	Kapitsa		12 23.7 338°71	2°9/23.6	18	
11 17	6 38.06	+22 50.3	1.441	2.259	17.7	20.8	11 17	6 39.32	+27 43.1	1.301	2.126	18.9	16.1
11 27	6 34.14	+22 38.2	1.346	2.239	13.9	20.5	11 27	6 35.45	+28 18.8	1.226	2.121	14.8	15.8
12 7	6 26.80	+22 26.8	1.271	2.219	9.2	20.2	12 7	6 27.78	+28 54.3	1.170	2.117	9.9	15.5
12 17	6 16.69	+22 14.7	1.221	2.199	3.9	19.8	12 17	6 17.11	+29 23.9	1.138	2.113	4.8	15.2
12 27	6 5.12	+22 1.0	1.197	2.179	2.0	19.6	12 27	6 5.02	+29 42.5	1.131	2.110	3.5	15.1
1 6	5 53.83	+21 46.0	1.200	2.159	7.7	19.9	1 6	5 53.49	+29 48.2	1.150	2.107	8.4	15.4
1 16	5 44.45	+21 31.3	1.227	2.139	13.1	20.2	1 16	5 44.32	+29 42.3	1.193	2.104	13.4	15.7
1 26	5 38.29	+21 19.2	1.277	2.120	17.8	20.4	1 26	5 38.80	+29 29.3	1.257	2.102	17.9	15.9
463044	2011 HB ₃₆		12 23.7 95°78	9°8/20.9	17		60287	1999 XV ₁₁₁		12 23.7 116°50	0°0/23.7	18	
11 17	6 53.48	+31 48.8	1.108	1.922	22.2	20.1							

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
202219	2004 <i>XC</i> ₁₃₄		12 23.7 260°96	1°8/23.7 18			141722	2002 <i>LS</i> ₂₀		12 23.7 163°32	0°9/23.7 18		
11 17	6 36.82	+29 2.8	2.287	3.080	12.8	20.0	11 17	6 43.06	+24 20.9	1.811	2.606	15.6	20.6
11 27	6 31.83	+29 10.9	2.197	3.075	9.9	19.8	11 27	6 37.08	+24 46.9	1.732	2.612	12.0	20.4
12 7	6 24.53	+29 15.7	2.130	3.069	6.6	19.6	12 7	6 28.20	+25 14.2	1.675	2.617	7.9	20.2
12 17	6 15.54	+29 15.0	2.090	3.064	3.2	19.4	12 17	6 17.13	+25 39.5	1.645	2.621	3.3	19.9
12 27	6 5.82	+29 7.0	2.080	3.058	2.3	19.3	12 27	6 5.11	+25 59.7	1.644	2.625	1.9	19.8
1 6	5 56.44	+28 51.7	2.100	3.053	5.5	19.5	1 6	5 53.57	+26 13.4	1.673	2.628	6.4	20.1
1 16	5 48.42	+28 30.6	2.148	3.047	8.9	19.7	1 16	5 43.81	+26 21.0	1.729	2.630	10.6	20.4
1 26	5 42.54	+28 6.3	2.221	3.042	12.0	19.9	1 26	5 36.80	+26 24.6	1.810	2.632	14.3	20.6
199743	2006 <i>JS</i> ₂		12 23.7 58°85	7°0/22.9 17			208830	2002 <i>RB</i> ₅₈		12 23.7 113°86	1°1/23.8 18		
11 17	6 41.51	+41 29.8	2.209	2.979	13.9	19.9	11 17	6 39.38	+20 34.7	2.099	2.889	13.9	20.9
11 27	6 36.02	+42 47.7	2.140	2.988	11.5	19.7	11 27	6 33.59	+20 25.6	2.029	2.906	10.7	20.7
12 7	6 27.57	+43 56.4	2.094	2.996	9.1	19.6	12 7	6 25.54	+20 18.5	1.982	2.923	7.0	20.5
12 17	6 16.88	+44 49.0	2.074	3.005	7.3	19.5	12 17	6 15.93	+20 12.8	1.963	2.939	3.0	20.3
12 27	6 5.17	+45 20.4	2.082	3.014	7.1	19.5	12 27	6 5.76	+20 7.9	1.974	2.955	1.7	20.2
1 6	5 53.91	+45 29.1	2.117	3.024	8.6	19.6	1 6	5 56.12	+20 4.0	2.016	2.970	5.5	20.5
1 16	5 44.43	+45 17.4	2.178	3.033	10.9	19.8	1 16	5 47.97	+20 1.5	2.085	2.985	9.1	20.8
1 26	5 37.74	+44 50.3	2.263	3.042	13.2	20.0	1 26	5 42.02	+20 1.1	2.180	3.000	12.3	21.0
120273	2004 <i>HP</i> ₅		12 23.7 108°10	3°6/23.7 18			216376	2008 <i>BP</i> ₂₀		12 23.7 186°49	2°1/23.9 18		
11 17	6 42.06	+34 4.5	2.315	3.093	13.1	20.1	11 17	6 36.49	+16 43.4	1.993	2.787	14.4	20.5
11 27	6 35.68	+34 30.8	2.248	3.114	10.3	20.0	11 27	6 31.71	+16 48.9	1.909	2.787	11.2	20.3
12 7	6 26.90	+34 50.7	2.205	3.134	7.2	19.8	12 7	6 24.54	+17 0.9	1.848	2.787	7.5	20.1
12 17	6 16.46	+35 0.3	2.190	3.153	4.4	19.7	12 17	6 15.61	+17 18.7	1.813	2.787	3.7	19.9
12 27	6 5.44	+34 57.3	2.204	3.172	3.8	19.7	12 27	6 5.89	+17 41.3	1.808	2.786	2.5	19.8
1 6	5 55.03	+34 42.0	2.249	3.191	6.0	19.9	1 6	5 56.50	+18 7.3	1.832	2.786	6.0	20.0
1 16	5 46.24	+34 16.5	2.322	3.209	9.0	20.1	1 16	5 48.49	+18 35.7	1.883	2.785	9.8	20.2
1 26	5 39.80	+33 44.6	2.421	3.226	11.6	20.3	1 26	5 42.68	+19 5.6	1.960	2.785	13.2	20.5
389921	2012 <i>TN</i> ₁₀₂		12 23.7 336°46	2°0/23.7 16			437079	2012 <i>UK</i> ₆₉		12 23.7 86°12	4°8/23.6 18		
11 17	6 36.85	+27 8.9	1.331	2.158	18.4	21.2	11 17	6 46.32	+33 41.3	1.656	2.449	16.9	20.7
11 27	6 33.43	+27 23.5	1.252	2.149	14.4	21.0	11 27	6 39.83	+34 31.6	1.601	2.474	13.3	20.6
12 7	6 26.40	+27 36.7	1.192	2.140	9.6	20.7	12 7	6 30.01	+35 14.7	1.567	2.499	9.3	20.4
12 17	6 16.54	+27 44.5	1.155	2.132	4.4	20.3	12 17	6 17.84	+35 44.3	1.560	2.523	5.8	20.2
12 27	6 5.33	+27 43.8	1.144	2.124	2.8	20.2	12 27	6 4.88	+35 55.8	1.580	2.547	5.1	20.2
1 6	5 54.64	+27 33.6	1.159	2.118	7.9	20.5	1 6	5 52.84	+35 49.0	1.629	2.571	7.9	20.5
1 16	5 46.15	+27 16.3	1.198	2.112	13.1	20.8	1 16	5 43.13	+35 27.4	1.704	2.594	11.4	20.7
1 26	5 41.11	+26 55.5	1.258	2.107	17.6	21.0	1 26	5 36.68	+34 56.6	1.803	2.617	14.6	21.0
381798	2009 <i>UJ</i> ₄₁		12 23.7 317°76	4°4/23.6 18			439792	2015 <i>HY</i> ₄₂		12 23.7 215°39	1°4/23.7 18		
11 17	6 34.95	+16 13.7	1.284	2.109	19.0	20.7	11 17	6 41.08	+20 36.6	1.739	2.538	16.0	21.6
11 27	6 31.90	+15 31.5	1.196	2.090	15.2	20.4	11 27	6 35.67	+20 19.9	1.650	2.532	12.4	21.3
12 7	6 25.42	+14 54.7	1.128	2.072	10.6	20.1	12 7	6 27.35	+20 5.2	1.584	2.526	8.3	21.1
12 17	6 16.17	+14 26.0	1.083	2.054	5.9	19.8	12 17	6 16.83	+19 52.0	1.543	2.519	3.7	20.8
12 27	6 5.49	+14 7.9	1.062	2.037	4.9	19.7	12 27	6 5.30	+19 39.8	1.531	2.512	2.2	20.7
1 6	5 55.12	+14 1.7	1.066	2.021	9.2	19.9	1 6	5 54.17	+19 29.2	1.548	2.504	6.7	20.9
1 16	5 46.71	+14 7.9	1.094	2.006	14.4	20.1	1 16	5 44.75	+19 21.1	1.592	2.495	11.2	21.2
1 26	5 41.54	+14 25.2	1.142	1.991	19.0	20.4	1 26	5 38.04	+19 16.6	1.660	2.486	15.2	21.4
136154	2003 <i>TX</i> ₁₄		12 23.7 119°92	4°2/24.0 18			224240	2005 <i>SY</i> ₁₁₀		12 23.7 320°62	1°8/23.8 18		
11 17	6 41.27	+13 15.5	1.578	2.373	17.5	20.5	11 17	6 36.72	+20 6.3	1.374	2.197	18.2	20.4
11 27	6 35.68	+12 58.2	1.511	2.386	13.8	20.3	11 27	6 33.05	+19 51.3	1.291	2.186	14.2	20.2
12 7	6 27.21	+12 50.8	1.465	2.399	9.6	20.1	12 7	6 26.03	+19 40.1	1.229	2.176	9.5	19.9
12 17	6 16.67	+12 54.2	1.444	2.411	5.6	19.9	12 17	6 16.40	+19 32.3	1.189	2.166	4.3	19.5
12 27	6 5.33	+13 8.3	1.451	2.423	4.5	19.8	12 27	6 5.50	+19 27.7	1.176	2.157	2.6	19.4
1 6	5 54.62	+13 32.0	1.486	2.435	7.8	20.0	1 6	5 55.02	+19 26.1	1.189	2.148	7.8	19.7
1 16	5 45.79	+14 3.4	1.547	2.446	11.8	20.3	1 16	5 46.53	+19 28.2	1.226	2.140	13.0	20.0
1 26	5 39.72	+14 40.4	1.632	2.456	15.5	20.6	1 26	5 41.21	+19 34.4	1.285	2.132	17.5	20.2
36948	2000 <i>SO</i> ₂₅₉		12 23.7 122°93	0°2/23.7 18			430469	2001 <i>RG</i> ₅₈		12 23.7 134°75	0°6/23.8 18		
11 17	6 40.96	+22 49.3	1.916	2.710	14.8	20.0	11 17	6 41.71	+21 4.7	1.903	2.695	15.0	22.0
11 27	6 35.09	+22 49.6	1.844	2.724	11.4	19.8	11 27	6 35.72	+21 15.3	1.830	2.708	11.6	21.8
12 7	6 26.65	+22 50.8	1.796	2.738	7.4	19.6	12 7	6 27.12	+21 28.9	1.780	2.721	7.6	21.6
12 17	6 16.40	+22 51.3	1.774	2.751	3.1	19.4	12 17	6 16.65	+21 43.5	1.756	2.733	3.2	21.3
12 27	6 5.48	+22 49.9	1.782	2.764	1.5	19.3	12 27	6 5.44	+21 57.5	1.763	2.744	1.6	21.2
1 6	5 55.13	+22 46.5	1.820	2.776	5.8	19.6	1 6	5 54.77	+22 9.8	1.799	2.755	5.9	21.5
1 16	5 46.45	+22 41.9	1.886	2.788	9.8	19.8	1 16	5 45.74	+22 20.6	1.864	2.765	10.0	21.8
1 26	5 40.25	+22 37.5	1.976	2.799	13.2	20.1	1 26	5 39.22	+22 30.7	1.953	2.775	13.4	22.0
7061	Pieri		12 23.7 116°83	5°0/24.7 18			412850	2014 <i>PL</i> ₅₅		12 23.8 114°52	3°0/23.9 18		
11 17	6 34.18	+ 4 26.9	2.818	3.565	11.7	18.3	11 17	6 35.44	+14 35.9	2.157	2.944	13.6	21.5
11 27	6 29.02	+ 4 17.5	2.747	3.582	9.6	18.2	11 27	6 30.61	+14 24.0	2.078	2.950	10.7	21.3
12 7	6 22.31	+ 4 18.9	2.699	3.599	7.4	18.1	12 7	6 23.67	+14 18.6	2.022	2.956	7.3	21.1
12 17	6 14.55	+ 4 32.2	2.679	3.616	5.5	18.0	12 17	6 15.22	+14 20.2	1.994	2.962	4.1	20.9
12 27	6 6.38	+ 4 57.7	2.688	3.633	5.0	18.0	12 27	6 6.14	+14 28.6	1.994	2.968	3.2	20.9
1 6	5 58.53	+ 5 34.2	2.727	3.649	6.2	18.1	1 6	5 57.43	+14 43.4	2.024	2.973	6.0	21.1
1 16	5 51.63	+ 6 19.8	2.796	3.664	8.3	18.2	1 16	5 49.98	+15 3.7	2.082	2.979	9.3	21.3
1 26	5 46.22	+ 7 12.1	2.890	3.679	10.4	18.4	1 26	5 44.53	+15 28.3	2.165	2.984	12.3	21.5
91616	1999 <i>TR</i> ₃₃		12 23.7 49°04	5°0/23.8 18			48821	1997 <i>WK</i> ₃₅		12 23.8 330°58	1°1/23.8 18		

EPHEMERIDES

12 23.8

12 23.8

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
487698	2015 <i>RS</i> ₁₈		12 23.8	77°37'	7.7/24.4	18	105021	2000 <i>KR</i> ₂₁		12 23.8	162°41'	1.7/23.7	18
11 17	6 37.08	+ 3 55.4	1.809	2.577	16.6	21.4	11 17	6 34.51	+18 59.6	2.690	3.474	11.3	19.4
11 27	6 31.96	+ 3 2.5	1.752	2.598	13.7	21.3	11 27	6 29.52	+18 32.6	2.603	3.477	8.8	19.2
12 7	6 24.54	+ 2 24.9	1.716	2.619	10.7	21.1	12 7	6 22.79	+18 7.1	2.541	3.479	5.8	19.0
12 17	6 15.54	+ 2 6.3	1.705	2.639	8.4	21.0	12 17	6 14.85	+17 43.7	2.508	3.481	2.8	18.8
12 27	6 6.02	+ 2 8.5	1.721	2.660	7.8	21.1	12 27	6 6.42	+17 22.8	2.505	3.483	2.0	18.7
1 6	5 57.07	+ 2 30.8	1.763	2.680	9.4	21.2	1 6	5 58.30	+17 5.0	2.533	3.485	4.8	18.9
1 16	5 49.67	+ 3 10.2	1.832	2.701	11.9	21.4	1 16	5 51.23	+16 51.0	2.591	3.486	7.8	19.1
1 26	5 44.52	+ 4 2.6	1.923	2.721	14.5	21.6	1 26	5 45.79	+16 41.3	2.674	3.488	10.4	19.3
368476	2003 <i>SM</i> ₂₂₆		12 23.8	53°39'	4.8/23.9	17	192244	2008 <i>EP</i> ₃₉		12 23.8	235°70'	0.8/23.8	18
11 17	6 33.56	+10 3.8	2.164	2.945	13.8	20.3	11 17	6 36.93	+21 19.9	2.298	3.088	12.8	21.1
11 27	6 29.12	+ 9 28.9	2.088	2.951	11.1	20.1	11 27	6 31.86	+21 12.1	2.201	3.078	9.9	20.9
12 7	6 22.67	+ 9 2.7	2.034	2.957	8.1	20.0	12 7	6 24.58	+21 5.7	2.127	3.068	6.5	20.7
12 17	6 14.80	+ 8 47.1	2.007	2.963	5.5	19.8	12 17	6 15.67	+20 59.8	2.081	3.057	2.8	20.4
12 27	6 6.36	+ 8 43.5	2.009	2.969	5.0	19.8	12 27	6 6.00	+20 54.1	2.065	3.046	1.5	20.3
1 6	5 58.28	+ 8 51.7	2.039	2.975	7.0	19.9	1 6	5 56.58	+20 48.5	2.080	3.035	5.3	20.5
1 16	5 51.41	+ 9 10.7	2.096	2.981	9.8	20.1	1 16	5 48.38	+20 43.5	2.123	3.023	9.0	20.7
1 26	5 46.44	+ 9 38.7	2.177	2.988	12.6	20.3	1 26	5 42.18	+20 40.1	2.192	3.011	12.2	20.9
124506	2001 <i>RN</i> ₆₂		12 23.8	33°88'	3.1/23.4	18	407855	2012 <i>BV</i> ₆₄		12 23.8	73°74'	2.3/23.9	18
11 17	6 40.05	+26 57.8	1.359	2.180	18.5	19.4	11 17	6 36.38	+17 1.6	1.913	2.711	14.8	21.2
11 27	6 35.76	+27 57.2	1.293	2.186	14.4	19.2	11 27	6 31.61	+16 53.1	1.839	2.719	11.5	21.0
12 7	6 27.85	+28 58.1	1.247	2.192	9.6	18.9	12 7	6 24.46	+16 50.1	1.788	2.727	7.7	20.8
12 17	6 17.15	+29 54.2	1.225	2.199	4.8	18.7	12 17	6 15.60	+16 52.5	1.763	2.736	3.8	20.6
12 27	6 5.20	+30 39.0	1.229	2.207	3.7	18.6	12 27	6 6.06	+17 0.0	1.766	2.744	2.7	20.5
1 6	5 53.89	+31 9.2	1.260	2.215	8.1	18.9	1 6	5 56.97	+17 12.0	1.799	2.753	6.1	20.8
1 16	5 44.89	+31 25.3	1.316	2.223	12.8	19.2	1 16	5 49.36	+17 27.8	1.859	2.761	9.9	21.0
1 26	5 39.35	+31 30.8	1.394	2.232	16.8	19.5	1 26	5 44.01	+17 46.8	1.943	2.770	13.2	21.2
66915	1999 <i>VT</i> ₁₇₀		12 23.8	154°86'	2°6/23.5	18	321595	2009 <i>UM</i> ₁₁₆		12 23.8	158°51'	1.1/23.7	17
11 17	6 41.52	+29 30.1	2.258	3.042	13.2	18.9	11 17	6 36.06	+20 58.0	2.355	3.146	12.5	20.8
11 27	6 35.46	+30 7.7	2.178	3.050	10.3	18.7	11 27	6 30.98	+20 38.6	2.270	3.148	9.7	20.6
12 7	6 26.93	+30 42.9	2.122	3.057	6.9	18.5	12 7	6 23.87	+20 20.2	2.210	3.150	6.4	20.4
12 17	6 16.60	+31 11.9	2.093	3.064	3.6	18.3	12 17	6 15.33	+20 2.6	2.177	3.152	2.8	20.2
12 27	6 5.48	+31 31.5	2.096	3.070	2.9	18.2	12 27	6 6.20	+19 45.9	2.174	3.154	1.7	20.1
1 6	5 54.77	+31 40.7	2.128	3.076	5.8	18.4	1 6	5 57.43	+19 30.6	2.201	3.156	5.1	20.3
1 16	5 45.54	+31 40.4	2.189	3.081	9.2	18.7	1 16	5 49.89	+19 17.6	2.258	3.157	8.5	20.6
1 26	5 38.62	+31 33.1	2.276	3.085	12.1	18.9	1 26	5 44.27	+19 7.6	2.340	3.159	11.5	20.8
274069	2007 <i>VU</i> ₁₈₈		12 23.8	81°03'	2.7/23.9	18	484391	2007 <i>WC</i> ₁₃		12 23.8	331°65'	6.4/23.9	17
11 17	6 44.72	+17 8.7	1.325	2.133	19.6	20.5	11 17	6 34.93	+ 8 49.6	1.683	2.475	16.7	21.9
11 27	6 38.61	+17 2.4	1.276	2.161	15.1	20.3	11 27	6 30.85	+ 8 6.1	1.603	2.471	13.6	21.7
12 7	6 29.18	+17 4.1	1.246	2.188	10.0	20.1	12 7	6 24.18	+ 7 34.0	1.544	2.467	10.1	21.5
12 17	6 17.50	+17 12.7	1.241	2.215	4.8	19.9	12 17	6 15.57	+ 7 16.8	1.509	2.463	7.2	21.3
12 27	6 5.15	+17 27.0	1.263	2.242	3.2	19.9	12 27	6 6.08	+ 7 16.7	1.501	2.459	6.6	21.2
1 6	5 53.82	+17 45.5	1.313	2.268	7.7	20.2	1 6	5 56.96	+ 7 33.6	1.519	2.456	8.9	21.4
1 16	5 44.88	+18 7.2	1.388	2.294	12.3	20.6	1 16	5 49.35	+ 8 5.9	1.563	2.453	12.3	21.6
1 26	5 39.20	+18 31.5	1.486	2.319	16.2	20.9	1 26	5 44.18	+ 8 50.2	1.630	2.450	15.6	21.8
51116	2000 <i>HQ</i> ₃₁		12 23.8	163°33'	7.3/24.9	18	97225	1999 <i>XY</i> ₅₃		12 23.8	70°32'	1.6/23.8	18
11 17	6 32.57	- 3 10.0	2.778	3.496	12.5	19.5	11 17	6 40.73	+19 36.5	1.640	2.443	16.6	19.9
11 27	6 27.94	- 3 38.5	2.698	3.499	10.8	19.4	11 27	6 35.07	+19 28.3	1.586	2.469	12.8	19.7
12 7	6 21.73	- 3 52.6	2.640	3.501	9.0	19.2	12 7	6 26.70	+19 24.1	1.553	2.496	8.4	19.5
12 17	6 14.40	- 3 49.8	2.607	3.504	7.7	19.2	12 17	6 16.48	+19 23.0	1.546	2.522	3.7	19.3
12 27	6 6.59	- 3 28.6	2.602	3.506	7.3	19.1	12 27	6 5.71	+19 24.3	1.568	2.548	2.2	19.3
1 6	5 59.03	- 2 49.7	2.624	3.508	8.2	19.2	1 6	5 55.72	+19 27.7	1.618	2.574	6.4	19.6
1 16	5 52.37	- 1 55.4	2.674	3.510	9.7	19.3	1 16	5 47.65	+19 33.1	1.695	2.600	10.5	19.9
1 26	5 47.17	- 0 49.0	2.748	3.511	11.5	19.4	1 26	5 42.24	+19 40.9	1.796	2.625	14.0	20.2
237788	2002 <i>AX</i> ₂₀₁		12 23.8	323°31'	5.1/22.9	16	402327	2005 <i>US</i> ₈₄		12 23.8	72°98'	1.2/23.8	16
11 17	6 36.55	+30 4.2	1.312	2.140	18.6	20.4	11 17	6 36.93	+20 4.9	1.962	2.760	14.4	21.7
11 27	6 33.82	+31 15.9	1.222	2.117	14.8	20.1	11 27	6 31.96	+19 59.4	1.892	2.773	11.1	21.5
12 7	6 27.17	+32 29.9	1.151	2.095	10.4	19.8	12 7	6 24.63	+19 56.9	1.845	2.787	7.3	21.3
12 17	6 17.13	+33 38.4	1.104	2.074	6.2	19.5	12 17	6 15.66	+19 56.7	1.824	2.800	3.2	21.1
12 27	6 5.14	+34 32.6	1.082	2.054	5.7	19.4	12 27	6 6.07	+19 58.2	1.833	2.814	1.8	21.0
1 6	5 53.25	+35 6.8	1.084	2.034	9.8	19.6	1 6	5 56.99	+20 1.0	1.871	2.827	5.7	21.3
1 16	5 43.54	+35 20.6	1.110	2.016	14.7	19.8	1 16	5 49.41	+20 5.2	1.937	2.840	9.5	21.5
1 26	5 37.67	+35 18.2	1.156	1.999	19.3	20.0	1 26	5 44.08	+20 11.3	2.027	2.854	12.8	21.8
196449	2003 <i>HB</i> ₄₇		12 23.8	238°73'	1.2/23.8	18	122028	2000 <i>GR</i> ₅₉		12 23.8	188°78'	3.6/23.8	18
11 17	6 39.24	+20 1.4	1.917	2.712	14.8	21.2	11 17	6 38.99	+14 58.2	1.778	2.572	15.9	20.5
11 27	6 34.11	+20 0.5	1.821	2.701	11.6	21.0	11 27	6 33.86	+14 31.2	1.696	2.571	12.5	20.2
12 7	6 26.31	+20 2.9	1.747	2.689	7.7	20.7	12 7	6 26.08	+14 10.6	1.636	2.571	8.7	20.0
12 17	6 16.46	+20 7.8	1.700	2.676	3.4	20.4	12 17	6 16.33	+13 57.7	1.601	2.570	4.9	19.8
12 27	6 5.58	+20 14.3	1.682	2.663	1.9	20.3	12 27	6 5.72	+13 53.2	1.595	2.568	3.9	19.7
1 6	5 54.96	+20 21.5	1.693	2.649	6.2	20.5	1 6	5 55.53	+13 57.1	1.617	2.567	7.2	19.9
1 16	5 45.80	+20 29.5	1.733	2.635	10.5	20.8	1 16	5 46.91	+14 9.0	1.667	2.564	11.2	20.1
1 26	5 39.07	+20 38.8	1.796	2.621	14.2	21.0	1 26	5 40.79	+14 27.9	1.740	2.562	14.7	20.4
443933	2002 <i>TU</i> ₁₆₅		12 23.8	110°29'	3.1/24.0	18	1582	Martir		12 23.8	240°57'	0.1/23.8	

EPHEMERIDES

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
112823	2002 QR ₈	12 23.8 213°14			0°8/23.9 18		290024	2005 QE ₂₂	12 23.8 90°63			0°4/23.8 18	
11 17	6 38.70	+19 16.4	2.187	2.974	13.5	20.4	11 17	6 38.45	+24 38.9	2.013	2.810	14.1	21.7
11 27	6 33.36	+19 38.2	2.092	2.968	10.5	20.2	11 27	6 33.16	+24 41.6	1.941	2.822	10.9	21.5
12 7	6 25.66	+20 5.0	2.022	2.961	6.9	20.0	12 7	6 25.44	+24 43.9	1.892	2.835	7.1	21.3
12 17	6 16.17	+20 35.3	1.978	2.954	3.0	19.7	12 17	6 16.03	+24 44.0	1.871	2.847	2.9	21.0
12 27	6 5.80	+21 6.9	1.965	2.947	1.6	19.6	12 27	6 5.97	+24 40.8	1.878	2.860	1.5	20.9
1 6	5 55.65	+21 38.2	1.983	2.938	5.5	19.9	1 6	5 56.45	+24 34.0	1.915	2.872	5.6	21.3
1 16	5 46.76	+22 8.1	2.030	2.930	9.3	20.1	1 16	5 48.47	+24 24.9	1.981	2.884	9.3	21.5
1 26	5 39.99	+22 36.3	2.102	2.920	12.7	20.3	1 26	5 42.82	+24 15.1	2.071	2.896	12.6	21.7
47774	2000 DC ₁₁₀	12 23.8 132°18			4°1/24.1 17		489801	2008 CW ₁₆₉	12 23.8 269°65			1°9/23.8 17	
11 17	6 33.50	+10 4.0	2.487	3.260	12.4	19.5	11 17	6 38.88	+29 3.2	1.975	2.772	14.4	21.6
11 27	6 28.87	+9 46.9	2.405	3.264	9.9	19.3	11 27	6 33.85	+29 6.4	1.885	2.765	11.2	21.4
12 7	6 22.45	+9 38.2	2.347	3.269	7.2	19.2	12 7	6 26.12	+29 5.7	1.817	2.757	7.5	21.1
12 17	6 14.75	+9 38.9	2.316	3.273	4.8	19.0	12 17	6 16.40	+28 58.3	1.776	2.750	3.6	20.9
12 27	6 6.52	+9 49.4	2.315	3.277	4.2	19.0	12 27	6 5.77	+28 42.5	1.763	2.742	2.4	20.8
1 6	5 58.58	+10 9.3	2.343	3.281	6.1	19.1	1 6	5 55.55	+28 18.7	1.780	2.735	6.1	21.0
1 16	5 51.68	+10 37.3	2.399	3.285	8.7	19.3	1 16	5 46.92	+27 48.8	1.824	2.727	10.1	21.2
1 26	5 46.45	+11 11.6	2.481	3.289	11.3	19.5	1 26	5 40.81	+27 16.3	1.893	2.719	13.6	21.4
485837	2012 DO ₇₅	12 23.8 184°44			4°9/24.1 17		387743	2003 HV ₃₅	12 23.8 302°12			1°0/23.6 18	
11 17	6 34.33	+7 18.6	2.587	3.348	12.3	21.9	11 17	6 38.31	+22 17.2	1.494	2.310	17.3	20.4
11 27	6 29.45	+6 53.9	2.500	3.348	10.0	21.8	11 27	6 34.40	+23 4.8	1.402	2.293	13.6	20.1
12 7	6 22.81	+6 38.6	2.437	3.347	7.5	21.6	12 7	6 27.11	+23 59.9	1.330	2.277	9.0	19.8
12 17	6 14.90	+6 34.1	2.400	3.347	5.5	21.5	12 17	6 17.03	+24 58.6	1.284	2.261	3.8	19.5
12 27	6 6.45	+6 41.5	2.393	3.346	5.0	21.4	12 27	6 5.40	+25 55.5	1.264	2.245	2.1	19.3
1 6	5 58.25	+7 0.4	2.416	3.344	6.5	21.5	1 6	5 53.90	+26 46.2	1.272	2.230	7.5	19.6
1 16	5 51.03	+7 29.5	2.467	3.342	9.0	21.7	1 16	5 44.21	+27 28.5	1.305	2.215	12.7	19.9
1 26	5 45.44	+8 6.9	2.543	3.340	11.4	21.8	1 26	5 37.67	+28 2.8	1.361	2.200	17.1	20.1
101382	1998 UN ₂₁	12 23.8 111°56			2°5/23.5 18		450069	2015 RM ₄₇	12 23.8 105°41			7°6/24.4 18	
11 17	6 43.64	+27 10.9	1.658	2.458	16.5	19.7	11 17	6 37.32	+2 20.4	2.063	2.815	15.3	21.7
11 27	6 37.81	+27 56.4	1.591	2.473	12.8	19.5	11 27	6 31.94	+1 30.2	2.001	2.834	12.8	21.5
12 7	6 28.82	+28 41.6	1.545	2.486	8.5	19.3	12 7	6 24.48	+0 54.6	1.961	2.852	10.2	21.4
12 17	6 17.50	+29 21.3	1.526	2.500	4.1	19.1	12 17	6 15.60	+0 36.9	1.946	2.871	8.1	21.3
12 27	6 5.22	+29 51.0	1.535	2.513	3.0	19.0	12 27	6 6.21	+0 39.2	1.958	2.889	7.7	21.3
1 6	5 53.58	+30 8.9	1.572	2.525	7.0	19.3	1 6	5 57.30	+1 0.6	1.998	2.906	9.0	21.4
1 16	5 43.97	+30 15.9	1.637	2.537	11.2	19.6	1 16	5 49.75	+1 38.9	2.064	2.923	11.2	21.6
1 26	5 37.39	+30 15.3	1.726	2.549	14.8	19.8	1 26	5 44.23	+2 30.0	2.154	2.939	13.6	21.8
104655	2000 GD ₁₃₅	12 23.8 240°79			4°8/23.0 18		411028	2009 UP ₁₁₀	12 23.8 91°80			1°6/23.7 18	
11 17	6 42.27	+35 14.3	2.311	3.087	13.2	20.6	11 17	6 37.56	+27 13.7	2.276	3.068	12.9	21.0
11 27	6 36.54	+36 16.8	2.211	3.073	10.6	20.4	11 27	6 32.32	+27 38.7	2.203	3.081	9.9	20.8
12 7	6 28.01	+37 15.5	2.136	3.058	7.8	20.2	12 7	6 24.85	+28 2.3	2.154	3.094	6.5	20.6
12 17	6 17.25	+38 4.6	2.087	3.043	5.4	20.1	12 17	6 15.80	+28 21.9	2.132	3.106	3.0	20.4
12 27	6 5.29	+38 39.0	2.069	3.027	5.1	20.0	12 27	6 6.12	+28 35.4	2.140	3.119	2.1	20.4
1 6	5 53.46	+38 56.2	2.080	3.010	7.3	20.1	1 6	5 56.88	+28 41.9	2.178	3.131	5.3	20.6
1 16	5 43.05	+38 57.0	2.118	2.993	10.2	20.3	1 16	5 49.01	+28 42.2	2.245	3.144	8.6	20.8
1 26	5 35.13	+38 45.0	2.182	2.976	13.1	20.4	1 26	5 43.25	+28 38.0	2.337	3.156	11.6	21.0
412681	2014 OB ₂₂₇	12 23.8 175°86			3°2/23.6 18		377981	2006 QM ₃₂	12 23.8 124°91			0°4/23.8 18	
11 17	6 40.31	+32 32.2	2.473	3.252	12.3	22.2	11 17	6 45.34	+24 58.2	1.717	2.511	16.3	21.8
11 27	6 34.46	+33 5.2	2.387	3.254	9.7	22.0	11 27	6 38.74	+24 52.9	1.649	2.529	12.6	21.5
12 7	6 26.28	+33 33.8	2.325	3.256	6.7	21.8	12 7	6 29.21	+24 46.2	1.604	2.545	8.2	21.3
12 17	6 16.40	+33 54.5	2.291	3.257	4.0	21.6	12 17	6 17.61	+24 36.1	1.585	2.561	3.4	21.1
12 27	6 5.76	+34 4.4	2.288	3.258	3.4	21.6	12 27	6 5.29	+24 21.4	1.595	2.577	1.6	21.0
1 6	5 55.47	+34 2.7	2.315	3.258	5.8	21.7	1 6	5 53.74	+24 2.6	1.635	2.591	6.4	21.3
1 16	5 46.55	+33 50.9	2.370	3.258	8.8	21.9	1 16	5 44.21	+23 42.0	1.703	2.605	10.7	21.6
1 26	5 39.78	+33 31.7	2.452	3.257	11.5	22.1	1 26	5 37.55	+23 22.2	1.795	2.618	14.3	21.9
486418	2013 EG ₁₁₃	12 23.8 217°50			0°2/23.8 18		464615	2016 CJ ₁₆₇	12 23.8 297°45			3°5/23.8 16	
11 17	6 38.07	+20 13.5	2.031	2.825	14.1	21.0	11 17	6 37.91	+33 29.9	2.201	2.991	13.3	21.6
11 27	6 33.07	+20 51.7	1.943	2.822	10.9	20.8	11 27	6 32.97	+33 49.0	2.111	2.983	10.5	21.4
12 7	6 25.57	+21 35.6	1.878	2.820	7.2	20.5	12 7	6 25.49	+34 2.2	2.043	2.975	7.4	21.2
12 17	6 16.17	+22 22.6	1.840	2.817	3.0	20.3	12 17	6 16.14	+34 6.0	2.002	2.968	4.4	21.0
12 27	6 5.85	+23 9.7	1.833	2.815	1.4	20.2	12 27	6 5.94	+33 57.8	1.990	2.960	3.7	20.9
1 6	5 55.78	+23 54.2	1.855	2.812	5.7	20.4	1 6	5 56.12	+33 37.4	2.007	2.953	6.3	21.0
1 16	5 47.07	+24 34.5	1.906	2.809	9.7	20.7	1 16	5 47.78	+33 6.8	2.052	2.946	9.6	21.2
1 26	5 40.65	+25 10.6	1.982	2.806	13.1	20.9	1 26	5 41.81	+32 29.8	2.121	2.938	12.6	21.4
361222	2006 SB ₉₆	12 23.8 293°30			1°7/23.7 17		482694	2013 CN ₁₂₁	12 23.8 343°69			3°0/23.9 17	
11 17	6 37.83	+26 42.9	1.864	2.667	14.9	21.4	11 17	6 33.48	+17 9.7	1.360	2.186	18.2	21.2
11 27	6 33.21	+27 5.2	1.776	2.660	11.6	21.2	11 27	6 30.54	+16 54.5	1.280	2.175	14.3	20.9
12 7	6 25.82	+27 27.0	1.710	2.653	7.7	20.9	12 7	6 24.42	+16 46.6	1.221	2.166	9.7	20.6
12 17	6 16.30	+27 45.1	1.671	2.646	3.5	20.7	12 17	6 15.84	+16 46.7	1.184	2.158	4.9	20.4
12 27	6 5.79	+27 56.7	1.659	2.639	2.3	20.6	12 27	6 6.08	+16 54.8	1.173	2.151	3.5	20.2
1 6	5 55.61	+28 0.8	1.677	2.632	6.3	20.8	1 6	5 56.72	+17 10.1	1.187	2.145	7.9	20.5
1 16	5 47.03	+27 58.0	1.722	2.626	10.5	21.0	1 16	5 49.25	+17 31.8	1.226	2.140	12.8	20.8
1 26	5 41.04	+27 50.7	1.790	2.619	14.1	21.3	1 26	5 44.77	+17 58.4	1.286	2.136	17.2	21.0
220371	2003 OR ₁₂	12 23.8 20°93			8°8/22.9 18		124952	2001 TF ₈₉	12 23.8 16°34			5°2/23.7 18	
11 17	6 33.90	+8 44.0	1.384	2.192	18.8	18.4	11 17	6 40.96	+33 35.0	1.362	2.178	18.7	19.5
11 27	6 30.14	+6 45.8	1.336	2.209	15.4								

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
388520	2007 <i>GN</i> ₃₁		12 23.8 225°93	0.7/23.8	18		517229	2014 <i>BP</i> ₅₄		12 23.8 250°84	0.7/23.8	18	
11 17	6 40.18	+21 30.4	1.854	2.651	15.2	22.4	11 17	6 39.72	+21 30.6	1.750	2.551	15.7	22.3
11 27	6 34.93	+21 30.0	1.762	2.643	11.8	22.2	11 27	6 34.80	+21 29.0	1.656	2.540	12.3	22.1
12 7	6 26.92	+21 32.0	1.692	2.635	7.8	21.9	12 7	6 26.96	+21 29.7	1.584	2.527	8.1	21.8
12 17	6 16.79	+21 34.9	1.649	2.626	3.3	21.6	12 17	6 16.85	+21 31.6	1.538	2.514	3.5	21.5
12 27	6 5.64	+21 37.5	1.635	2.616	1.7	21.5	12 27	6 5.62	+21 33.3	1.520	2.501	1.8	21.3
1 6	5 54.81	+21 39.2	1.650	2.607	6.3	21.8	1 6	5 54.67	+21 34.3	1.531	2.488	6.6	21.6
1 16	5 45.55	+21 40.6	1.693	2.596	10.6	22.0	1 16	5 45.35	+21 35.2	1.569	2.474	11.2	21.8
1 26	5 38.84	+21 42.6	1.760	2.585	14.4	22.2	1 26	5 38.71	+21 37.0	1.630	2.460	15.2	22.1
139000	2001 <i>DA</i> ₂₈		12 23.8 13°02	4.2/24.2	18		360841	2005 <i>NK</i> ₆₃		12 23.8 145°81	7.1/24.3	18	
11 17	6 35.56	+14 5.7	1.112	1.944	21.0	19.1	11 17	6 35.12	+3 57.7	2.047	2.810	15.1	21.2
11 27	6 32.55	+14 0.8	1.049	1.946	16.6	18.8	11 27	6 30.49	+3 17.1	1.969	2.812	12.5	21.1
12 7	6 25.89	+14 9.8	1.004	1.949	11.4	18.6	12 7	6 23.71	+2 49.9	1.913	2.815	9.8	20.9
12 17	6 16.46	+14 33.6	0.981	1.953	6.2	18.3	12 17	6 15.38	+2 39.4	1.882	2.817	7.7	20.8
12 27	6 5.81	+15 10.9	0.981	1.958	4.6	18.2	12 27	6 6.37	+2 47.4	1.878	2.819	7.2	20.7
1 6	5 55.83	+15 58.4	1.006	1.965	9.0	18.5	1 6	5 57.71	+3 13.6	1.902	2.821	8.7	20.8
1 16	5 48.16	+16 52.2	1.054	1.972	14.1	18.8	1 16	5 50.31	+3 55.7	1.952	2.822	11.2	21.0
1 26	5 43.97	+17 48.9	1.123	1.980	18.7	19.1	1 26	5 44.91	+4 50.0	2.026	2.824	13.8	21.2
58085	1199 <i>T</i> ₋₃		12 23.8 106°21	2.0/23.8	18	R	518101	2016 <i>AY</i> ₂₂₉		12 23.8 179°01	4.6/23.5	17	
11 17	6 37.90	+18 35.2	2.172	2.961	13.5	19.3	11 17	6 39.13	+37 31.3	2.589	3.361	12.0	21.5
11 27	6 32.42	+18 9.8	2.100	2.976	10.4	19.1	11 27	6 33.64	+38 12.9	2.505	3.362	9.7	21.4
12 7	6 24.82	+17 47.2	2.053	2.991	7.0	19.0	12 7	6 25.82	+38 47.8	2.445	3.362	7.2	21.2
12 17	6 15.76	+17 27.7	2.033	3.006	3.4	18.8	12 17	6 16.27	+39 11.7	2.412	3.362	5.1	21.1
12 27	6 6.18	+17 11.8	2.042	3.020	2.4	18.7	12 27	6 5.96	+39 21.4	2.408	3.362	4.8	21.0
1 6	5 57.10	+16 59.8	2.082	3.034	5.6	19.0	1 6	5 55.99	+39 16.3	2.433	3.362	6.5	21.2
1 16	5 49.40	+16 52.3	2.150	3.048	9.0	19.2	1 16	5 47.39	+38 57.9	2.487	3.362	8.9	21.3
1 26	5 43.75	+16 49.6	2.244	3.062	12.0	19.4	1 26	5 40.95	+38 29.7	2.566	3.361	11.3	21.5
296960	2010 <i>EY</i> ₄₃		12 23.8 304°64	1°0/23.7	18		63434	2001 <i>MD</i> ₂₁		12 23.8 74°81	0°3/23.8	18	
11 17	6 34.72	+25 20.8	2.239	3.038	12.8	21.1	11 17	6 42.82	+25 20.6	1.464	2.274	17.9	18.6
11 27	6 30.48	+25 40.3	2.134	3.016	10.0	20.9	11 27	6 37.22	+25 6.1	1.403	2.292	13.8	18.4
12 7	6 23.91	+26 0.4	2.052	2.995	6.6	20.6	12 7	6 28.39	+24 49.6	1.364	2.309	9.0	18.2
12 17	6 15.53	+26 18.8	1.998	2.974	2.9	20.4	12 17	6 17.33	+24 29.4	1.349	2.327	3.7	17.9
12 27	6 6.22	+26 33.5	1.972	2.953	1.7	20.2	12 27	6 5.53	+24 4.9	1.362	2.344	1.8	17.8
1 6	5 57.05	+26 43.3	1.977	2.932	5.5	20.5	1 6	5 54.63	+23 37.4	1.403	2.361	6.9	18.2
1 16	5 49.07	+26 48.3	2.009	2.912	9.2	20.7	1 16	5 45.98	+23 9.7	1.470	2.379	11.6	18.5
1 26	5 43.16	+26 49.8	2.066	2.891	12.6	20.8	1 26	5 40.45	+22 44.6	1.560	2.396	15.5	18.8
129079	2004 <i>VZ</i> ₇₀		12 23.8 12°82	0°8/23.7	18	R	487035	2014 <i>OV</i> ₃₆		12 23.8 184°37	1°1/23.9	18	
11 17	6 32.14	+25 11.5	2.328	3.129	12.3	19.3	11 17	6 37.41	+19 8.4	2.257	3.045	13.1	22.7
11 27	6 28.15	+25 23.7	2.250	3.134	9.5	19.2	11 27	6 32.22	+19 18.0	2.170	3.046	10.1	22.5
12 7	6 22.15	+25 35.7	2.196	3.139	6.2	19.0	12 7	6 24.85	+19 31.7	2.106	3.045	6.7	22.2
12 17	6 14.70	+25 45.8	2.169	3.145	2.6	18.8	12 17	6 15.87	+19 48.3	2.069	3.045	3.0	22.0
12 27	6 6.67	+25 52.8	2.171	3.152	1.4	18.7	12 27	6 6.16	+20 6.7	2.063	3.044	1.7	21.9
1 6	5 58.98	+25 56.1	2.203	3.160	4.9	18.9	1 6	5 56.74	+20 25.7	2.087	3.043	5.3	22.2
1 16	5 52.50	+25 56.1	2.263	3.167	8.3	19.2	1 16	5 48.56	+20 44.9	2.140	3.041	8.9	22.4
1 26	5 47.92	+25 53.9	2.348	3.176	11.2	19.4	1 26	5 42.40	+21 4.2	2.219	3.039	12.1	22.6
276172	2002 <i>PD</i> ₃₅		12 23.8 111°39	4°3/24.1	17		317697	2003 <i>PO</i> ₅		12 23.8 107°85	3°9/23.9	18	
11 17	6 41.25	+38 21.8	2.559	3.327	12.3	20.7	11 17	6 42.57	+14 51.1	1.524	2.321	17.9	20.8
11 27	6 35.03	+38 35.7	2.485	3.339	9.8	20.5	11 27	6 36.77	+14 25.5	1.461	2.339	14.0	20.6
12 7	6 26.52	+38 40.5	2.435	3.352	7.2	20.4	12 7	6 28.07	+14 8.0	1.420	2.356	9.6	20.4
12 17	6 16.46	+38 32.9	2.411	3.364	4.9	20.3	12 17	6 17.17	+13 59.7	1.403	2.372	5.3	20.1
12 27	6 5.87	+38 11.1	2.418	3.376	4.4	20.2	12 27	6 5.58	+14 0.9	1.415	2.389	4.2	20.1
1 6	5 55.85	+37 35.6	2.454	3.388	6.1	20.4	1 6	5 54.73	+14 11.0	1.454	2.404	7.7	20.4
1 16	5 47.36	+36 49.5	2.519	3.399	8.6	20.6	1 16	5 45.87	+14 29.0	1.519	2.419	11.9	20.6
1 26	5 41.11	+35 56.9	2.610	3.411	11.0	20.7	1 26	5 39.88	+14 53.4	1.608	2.434	15.6	20.9
245322	2005 <i>EE</i> ₈₂		12 23.8 135°74	0°4/23.8	18		30718	Records		12 23.8 82°69	0°3/23.8	18	
11 17	6 39.03	+22 15.3	1.978	2.773	14.4	21.5	11 17	6 41.91	+24 44.6	2.043	2.833	14.2	18.6
11 27	6 33.69	+22 15.0	1.899	2.780	11.1	21.3	11 27	6 35.51	+24 39.4	1.987	2.864	10.9	18.5
12 7	6 25.87	+22 16.2	1.844	2.787	7.3	21.1	12 7	6 26.79	+24 33.1	1.954	2.895	7.0	18.3
12 17	6 16.27	+22 17.4	1.816	2.793	3.0	20.8	12 17	6 16.56	+24 24.2	1.949	2.926	2.9	18.1
12 27	6 5.94	+22 17.6	1.817	2.799	1.5	20.7	12 27	6 5.90	+24 12.1	1.974	2.956	1.4	18.0
1 6	5 56.06	+22 16.6	1.848	2.805	5.7	21.0	1 6	5 55.96	+23 57.2	2.030	2.985	5.4	18.4
1 16	5 47.73	+22 14.8	1.907	2.810	9.7	21.3	1 16	5 47.70	+23 41.0	2.114	3.014	9.0	18.6
1 26	5 41.73	+22 13.4	1.991	2.815	13.0	21.5	1 26	5 41.78	+23 25.3	2.223	3.043	12.0	18.9
146274	2001 <i>FF</i> ₆		12 23.8 226°36	2°2/23.9	18		319046	2005 <i>VA</i> ₁₀₉		12 23.8 46°26	0°5/23.8	18	
11 17	6 40.58	+17 36.5	1.831	2.624	15.5	21.1	11 17	6 36.55	+22 12.2	1.916	2.718	14.5	21.2
11 27	6 35.26	+17 31.4	1.737	2.614	12.2	20.8	11 27	6 31.89	+22 10.0	1.839	2.723	11.2	21.0
12 7	6 27.16	+17 31.7	1.665	2.603	8.2	20.6	12 7	6 24.75	+22 9.4	1.785	2.729	7.3	20.8
12 17	6 16.91	+17 37.2	1.618	2.592	4.0	20.3	12 17	6 15.84	+22 9.1	1.758	2.735	3.1	20.5
12 27	6 5.59	+17 47.0	1.601	2.580	2.6	20.2	12 27	6 6.19	+22 8.3	1.759	2.741	1.5	20.4
1 6	5 54.53	+18 0.5	1.613	2.568	6.7	20.4	1 6	5 57.01	+22 6.8	1.789	2.747	5.8	20.7
1 16	5 44.98	+18 17.1	1.653	2.554	11.0	20.6	1 16	5 49.35	+22 4.9	1.847	2.753	9.7	21.0
1 26	5 37.98	+18 36.7	1.717	2.540	14.9	20.8	1 26	5 44.02	+22 3.8	1.929	2.759	13.2	21.2
355048	2006 <i>SF</i> ₅₅		12 23.8 94°64	6°3/23.1	18		272081	2005 <i>ER</i> ₂₈₈		12 23.8 222°24	5°0/22.8	18	</

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
29419	Mládková		12 23.8	89°28	0°3/23.8	18	26290	1998 SX ₁₀₁		12 23.8	105°46	2°4/23.7	18
11 17	6 34.49	+21 58.6	2.541	3.332	11.7	19.5	11 17	6 46.06	+28 48.0	1.762	2.553	16.1	19.5
11 27	6 29.69	+22 4.4	2.463	3.341	9.0	19.3	11 27	6 39.33	+29 14.4	1.701	2.578	12.4	19.4
12 7	6 23.03	+22 11.7	2.409	3.350	5.9	19.1	12 7	6 29.62	+29 37.5	1.663	2.601	8.3	19.2
12 17	6 15.06	+22 19.4	2.383	3.359	2.4	18.9	12 17	6 17.84	+29 53.0	1.651	2.624	4.0	19.0
12 27	6 6.57	+22 26.5	2.387	3.369	1.2	18.8	12 27	6 5.36	+29 57.8	1.669	2.647	2.9	18.9
1 6	5 58.40	+22 32.6	2.422	3.378	4.6	19.1	1 6	5 53.68	+29 51.8	1.716	2.668	6.6	19.2
1 16	5 51.36	+22 37.8	2.485	3.387	7.8	19.3	1 16	5 44.07	+29 37.3	1.791	2.689	10.5	19.5
1 26	5 46.08	+22 42.6	2.575	3.396	10.6	19.5	1 26	5 37.39	+29 18.1	1.890	2.709	13.9	19.7
99254	2001 LG ₁₁		12 23.8	118°19	3°1/24.3	18	28769	2000 HC ₂₆		12 23.8	108°32	0°1/23.8	18
11 17	6 34.37	+11 47.6	2.595	3.368	12.0	19.5	11 17	6 41.21	+22 29.6	1.663	2.466	16.4	18.4
11 27	6 29.49	+11 53.1	2.515	3.377	9.4	19.4	11 27	6 35.82	+22 45.9	1.593	2.477	12.6	18.2
12 7	6 22.86	+12 6.4	2.460	3.387	6.6	19.2	12 7	6 27.50	+23 4.7	1.544	2.488	8.3	18.0
12 17	6 14.99	+12 27.7	2.432	3.396	4.0	19.0	12 17	6 17.03	+23 23.7	1.522	2.499	3.4	17.7
12 27	6 6.61	+12 56.3	2.435	3.405	3.2	19.0	12 27	6 5.70	+23 40.2	1.528	2.509	1.6	17.6
1 6	5 58.51	+13 31.0	2.468	3.414	5.3	19.2	1 6	5 54.96	+23 53.1	1.562	2.520	6.5	18.0
1 16	5 51.43	+14 10.4	2.530	3.422	8.1	19.4	1 16	5 46.09	+24 2.7	1.624	2.529	10.9	18.2
1 26	5 45.98	+14 52.6	2.619	3.431	10.7	19.5	1 26	5 40.02	+24 10.2	1.709	2.539	14.6	18.5
46936	1998 SN ₆₇		12 23.8	346°04	9°4/21.9	18	311871	2006 WV ₉₅		12 23.8	101°32	0°9/23.7	18
11 17	6 40.13	+39 6.5	1.441	2.247	18.3	17.8	11 17	6 38.53	+24 13.2	1.985	2.782	14.3	20.9
11 27	6 36.73	+41 3.5	1.367	2.238	15.2	17.6	11 27	6 33.42	+24 41.4	1.909	2.790	11.0	20.7
12 7	6 29.17	+42 54.5	1.313	2.231	12.0	17.4	12 7	6 25.79	+25 11.1	1.855	2.798	7.2	20.5
12 17	6 18.07	+44 27.9	1.283	2.224	9.8	17.2	12 17	6 16.31	+25 39.4	1.829	2.805	3.1	20.3
12 27	6 5.04	+45 32.6	1.278	2.219	9.8	17.2	12 27	6 6.04	+26 3.5	1.832	2.813	1.7	20.2
1 6	5 52.33	+46 3.5	1.297	2.214	12.1	17.3	1 6	5 56.19	+26 22.2	1.864	2.820	5.7	20.5
1 16	5 42.11	+46 2.7	1.339	2.210	15.3	17.5	1 16	5 47.86	+26 35.4	1.925	2.827	9.6	20.7
1 26	5 35.98	+45 37.9	1.401	2.208	18.5	17.7	1 26	5 41.91	+26 44.3	2.010	2.835	12.9	20.9
230693	2003 UF ₄₉		12 23.8	36°63	0°4/23.8	18	297302	1998 SB ₃₈		12 23.8	72°46	1°5/23.9	18
11 17	6 36.03	+23 25.6	1.783	2.591	15.2	19.5	11 17	6 39.95	+19 25.8	1.709	2.510	16.1	21.1
11 27	6 31.59	+23 42.8	1.720	2.608	11.7	19.3	11 27	6 34.49	+19 20.6	1.651	2.533	12.4	20.9
12 7	6 24.58	+24 1.4	1.680	2.625	7.6	19.1	12 7	6 26.39	+19 19.4	1.614	2.556	8.1	20.7
12 17	6 15.76	+24 19.3	1.666	2.643	3.1	18.8	12 17	6 16.49	+19 21.6	1.604	2.580	3.6	20.5
12 27	6 6.27	+24 34.4	1.680	2.661	1.5	18.8	12 27	6 6.00	+19 26.1	1.622	2.603	2.1	20.5
1 6	5 57.36	+24 45.7	1.722	2.680	5.9	19.1	1 6	5 56.20	+19 32.4	1.669	2.626	6.3	20.8
1 16	5 50.12	+24 53.6	1.791	2.699	9.9	19.4	1 16	5 48.21	+19 40.5	1.744	2.648	10.3	21.1
1 26	5 45.33	+24 59.2	1.885	2.719	13.3	19.6	1 26	5 42.78	+19 50.6	1.842	2.671	13.7	21.3
116624	2004 BR ₁₁₈		12 23.8	321°82	5°1/23.2	18	522270	2016 AO ₂₇₇		12 23.8	283°39	2°9/23.9	18
11 17	6 40.41	+33 23.8	1.760	2.559	15.8	19.7	11 17	6 37.90	+32 48.0	2.330	3.117	12.8	21.6
11 27	6 35.72	+34 29.8	1.679	2.555	12.6	19.5	11 27	6 32.79	+32 54.6	2.238	3.110	10.0	21.4
12 7	6 27.77	+35 32.2	1.619	2.551	9.0	19.3	12 7	6 25.31	+32 55.1	2.168	3.102	7.0	21.2
12 17	6 17.27	+36 24.5	1.585	2.547	5.9	19.1	12 17	6 16.10	+32 46.9	2.126	3.094	3.9	21.0
12 27	6 5.50	+37 0.4	1.579	2.544	5.4	19.1	12 27	6 6.14	+32 28.1	2.113	3.087	3.1	20.9
1 6	5 54.09	+37 17.3	1.600	2.540	8.2	19.2	1 6	5 56.56	+31 59.0	2.130	3.079	5.8	21.0
1 16	5 44.57	+37 16.5	1.647	2.537	11.8	19.4	1 16	5 48.38	+31 21.9	2.176	3.071	9.0	21.2
1 26	5 38.09	+37 2.4	1.718	2.534	15.2	19.6	1 26	5 42.41	+30 40.2	2.246	3.064	12.0	21.4
128126	2003 QY ₃₉		12 23.8	26°63	0°3/23.8	18	183646	2003 WR ₆₃		12 23.8	20°29	3°7/23.5	18
11 17	6 32.38	+22 27.5	2.320	3.120	12.4	19.0	11 17	6 37.88	+27 3.6	1.031	1.874	21.4	19.6
11 27	6 28.21	+22 24.1	2.251	3.134	9.5	18.9	11 27	6 35.01	+28 3.8	0.975	1.881	16.7	19.3
12 7	6 22.12	+22 21.8	2.205	3.149	6.2	18.7	12 7	6 27.86	+29 5.6	0.938	1.888	11.2	19.0
12 17	6 14.70	+22 19.6	2.187	3.164	2.6	18.5	12 17	6 17.40	+30 1.2	0.922	1.897	5.6	18.8
12 27	6 6.78	+22 17.0	2.198	3.180	1.2	18.4	12 27	6 5.54	+30 43.1	0.929	1.908	4.3	18.7
1 6	5 59.28	+22 14.1	2.239	3.196	4.8	18.7	1 6	5 54.57	+31 7.7	0.961	1.919	9.3	19.0
1 16	5 53.00	+22 11.1	2.307	3.213	8.1	18.9	1 16	5 46.46	+31 16.3	1.015	1.932	14.6	19.4
1 26	5 48.55	+22 8.8	2.402	3.230	11.0	19.1	1 26	5 42.46	+31 13.9	1.088	1.945	19.1	19.7
361822	2008 CF ₁₃₇		12 23.8	86°70	1°2/23.8	18	370578	2003 UD ₂₈₅		12 23.8	12°55	0°8/23.8	17
11 17	6 38.96	+27 13.7	1.916	2.716	14.7	20.7	11 17	6 35.69	+24 59.8	2.103	2.903	13.5	21.2
11 27	6 33.84	+27 13.1	1.837	2.719	11.3	20.5	11 27	6 31.15	+25 15.1	2.021	2.904	10.4	21.0
12 7	6 26.07	+27 9.7	1.781	2.723	7.5	20.3	12 7	6 24.28	+25 30.6	1.962	2.905	6.8	20.8
12 17	6 16.41	+27 1.5	1.751	2.727	3.3	20.0	12 17	6 15.68	+25 44.2	1.930	2.907	2.9	20.5
12 27	6 5.97	+26 47.1	1.749	2.730	1.9	19.9	12 27	6 6.35	+25 54.0	1.927	2.908	1.6	20.4
1 6	5 56.05	+26 26.8	1.777	2.734	5.9	20.2	1 6	5 57.37	+25 59.3	1.953	2.910	5.5	20.7
1 16	5 47.77	+26 2.7	1.833	2.737	9.9	20.4	1 16	5 49.77	+26 0.6	2.008	2.912	9.2	20.9
1 26	5 42.00	+25 37.5	1.913	2.741	13.4	20.7	1 26	5 44.36	+25 59.1	2.087	2.914	12.4	21.2
149828	2005 NZ ₆₂		12 23.8	104°23	0°9/23.8	18	457254	2008 QL ₃₅		12 23.8	66°08	3°0/23.2	16
11 17	6 44.44	+25 16.9	1.708	2.504	16.3	20.9	11 17	6 43.04	+28 6.8	2.210	2.992	13.5	20.5
11 27	6 38.07	+25 26.4	1.645	2.526	12.5	20.7	11 27	6 36.62	+29 29.8	2.153	3.025	10.4	20.3
12 7	6 28.79	+25 35.2	1.606	2.548	8.2	20.5	12 7	6 27.72	+30 51.8	2.122	3.057	7.0	20.2
12 17	6 17.49	+25 40.2	1.592	2.569	3.4	20.3	12 17	6 17.07	+32 7.3	2.120	3.090	3.8	20.0
12 27	6 5.50	+25 39.6	1.608	2.589	1.8	20.2	12 27	6 5.71	+33 11.4	2.150	3.122	3.3	20.1
1 6	5 54.29	+25 33.4	1.652	2.609	6.3	20.6	1 6	5 54.85	+34 1.5	2.210	3.153	6.0	20.3
1 16	5 45.08	+25 23.0	1.725	2.628	10.5	20.8	1 16	5 45.55	+34 37.6	2.299	3.185	9.1	20.5
1 26	5 38.73	+25 11.2	1.822	2.646	14.1	21.1	1 26	5 38.60	+35 2.0	2.414	3.216	11.8	20.8
515034	2009 WT ₄		12 23.8	100°24	3°7/23.9	18	460613	2014 UH ₆₈		12 23.8	26°50	3°5/24.0	16
11 17	6 40.85	+15 18.6	1.605	2.402	17.1								

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
458132	2010 <i>FU</i> ₅₁	12 23.8 261°11		3°5/24.2 18			50907	2000 <i>GB</i> ₅₂	12 23.8 314°92		3°9/23.5 18		
11 17	6 41.47	+36 52.8	2.729	3.494	11.6	21.1	11 17	6 38.35	+29 4.7	1.335	2.159	18.5	18.4
11 27	6 35.27	+36 47.7	2.620	3.476	9.3	20.9	11 27	6 35.04	+29 51.3	1.247	2.141	14.7	18.1
12 7	6 26.80	+36 33.9	2.535	3.457	6.7	20.7	12 7	6 27.89	+30 38.2	1.179	2.124	10.1	17.7
12 17	6 16.70	+36 8.3	2.478	3.437	4.3	20.5	12 17	6 17.54	+31 18.9	1.134	2.107	5.4	17.4
12 27	6 5.88	+35 29.5	2.452	3.418	3.6	20.5	12 27	6 5.44	+31 47.0	1.115	2.091	4.4	17.3
1 6	5 55.42	+34 38.1	2.457	3.398	5.7	20.6	1 6	5 53.60	+31 59.1	1.121	2.076	8.8	17.5
1 16	5 46.28	+33 37.0	2.491	3.377	8.5	20.7	1 16	5 43.97	+31 56.1	1.151	2.061	14.0	17.8
1 26	5 39.25	+32 30.5	2.553	3.357	11.1	20.9	1 26	5 38.03	+31 42.5	1.202	2.047	18.5	18.0
521814	2015 <i>TG</i> ₂₁₅	12 23.8 51°84		0°4/23.8 18			55600	2002 <i>RO</i> ₁₀₆	12 23.8 315°06		6°6/22.8 17		
11 17	6 38.17	+22 28.5	1.653	2.462	16.2	21.1	11 17	6 40.74	+36 10.4	1.735	2.531	16.1	18.8
11 27	6 33.40	+22 24.5	1.588	2.475	12.5	20.9	11 27	6 36.31	+37 32.4	1.650	2.521	13.0	18.6
12 7	6 25.85	+22 22.1	1.544	2.489	8.1	20.7	12 7	6 28.40	+38 50.1	1.586	2.511	9.8	18.3
12 17	6 16.33	+22 19.8	1.526	2.503	3.4	20.4	12 17	6 17.65	+39 55.2	1.548	2.501	7.2	18.2
12 27	6 6.08	+22 16.7	1.535	2.517	1.6	20.3	12 27	6 5.41	+40 40.3	1.537	2.492	6.9	18.1
1 6	5 56.48	+22 12.6	1.573	2.532	6.3	20.7	1 6	5 53.41	+41 1.7	1.553	2.483	9.3	18.3
1 16	5 48.69	+22 8.5	1.638	2.546	10.6	21.0	1 16	5 43.37	+41 0.9	1.594	2.474	12.7	18.4
1 26	5 43.57	+22 5.4	1.726	2.561	14.2	21.2	1 26	5 36.59	+40 43.0	1.657	2.466	16.0	18.6
329714	2003 <i>WW</i> ₂₂	12 23.8 163°47		0°5/23.8 18			326227	2012 <i>DZ</i> ₆	12 23.8 42°18		3°4/24.1 18		
11 17	6 41.42	+23 16.9	1.483	2.294	17.6	20.9	11 17	6 35.39	+14 19.1	1.852	2.649	15.2	20.8
11 27	6 36.52	+23 37.6	1.407	2.295	13.7	20.6	11 27	6 30.99	+14 5.1	1.778	2.655	11.9	20.6
12 7	6 28.28	+24 1.3	1.351	2.296	9.0	20.4	12 7	6 24.19	+13 58.9	1.726	2.662	8.2	20.4
12 17	6 17.48	+24 24.6	1.320	2.297	3.8	20.1	12 17	6 15.67	+14 1.2	1.700	2.669	4.7	20.2
12 27	6 5.51	+24 44.4	1.316	2.298	1.9	19.9	12 27	6 6.43	+14 11.9	1.702	2.676	3.7	20.1
1 6	5 54.06	+24 58.8	1.340	2.299	7.2	20.3	1 6	5 57.63	+14 30.4	1.732	2.683	6.6	20.3
1 16	5 44.66	+25 8.1	1.390	2.299	12.1	20.6	1 16	5 50.28	+14 55.3	1.790	2.691	10.3	20.6
1 26	5 38.43	+25 14.3	1.463	2.300	16.3	20.8	1 26	5 45.20	+15 25.1	1.871	2.699	13.6	20.8
192245	2008 <i>EG</i> ₅₀	12 23.8 111°02		1°9/23.7 18			202808	2008 <i>SJ</i> ₁₅	12 23.8 332°51		0°0/23.8 17		
11 17	6 39.31	+28 2.6	2.073	2.867	13.9	21.3	11 17	6 35.50	+23 26.7	2.079	2.879	13.6	20.8
11 27	6 33.94	+28 21.7	1.998	2.876	10.8	21.1	11 27	6 31.04	+23 27.4	1.992	2.876	10.5	20.6
12 7	6 26.07	+28 38.6	1.945	2.885	7.1	20.9	12 7	6 24.23	+23 28.7	1.929	2.872	6.9	20.3
12 17	6 16.41	+28 50.4	1.920	2.894	3.4	20.7	12 17	6 15.70	+23 29.2	1.892	2.869	2.9	20.1
12 27	6 6.04	+28 54.7	1.924	2.902	2.3	20.6	12 27	6 6.41	+23 28.0	1.884	2.866	1.3	19.9
1 6	5 56.14	+28 51.3	1.957	2.911	5.8	20.8	1 6	5 57.45	+23 24.7	1.905	2.863	5.5	20.2
1 16	5 47.79	+28 41.3	2.019	2.919	9.4	21.1	1 16	5 49.86	+23 20.0	1.955	2.860	9.3	20.5
1 26	5 41.81	+28 27.2	2.105	2.927	12.6	21.3	1 26	5 44.45	+23 15.0	2.029	2.858	12.7	20.7
399126	2014 <i>DY</i> ₁₃₉	12 23.8 203°74		0°3/23.8 18			365075	2009 <i>BA</i> ₁₃	12 23.8 318°59		3°4/24.1 17		
11 17	6 40.35	+23 46.3	2.099	2.890	13.9	22.1	11 17	6 40.39	+32 47.3	1.554	2.362	17.1	20.6
11 27	6 34.78	+23 54.4	2.008	2.886	10.7	21.9	11 27	6 35.91	+32 39.6	1.465	2.349	13.6	20.4
12 7	6 26.69	+24 3.1	1.940	2.881	7.1	21.7	12 7	6 27.97	+32 22.6	1.397	2.336	9.4	20.1
12 17	6 16.72	+24 10.6	1.899	2.875	2.9	21.4	12 17	6 17.38	+31 52.3	1.353	2.324	5.1	19.8
12 27	6 5.88	+24 15.0	1.888	2.870	1.4	21.3	12 27	6 5.61	+31 6.5	1.336	2.313	3.7	19.7
1 6	5 55.35	+24 15.9	1.907	2.863	5.7	21.5	1 6	5 54.41	+30 7.1	1.346	2.301	7.6	19.9
1 16	5 46.26	+24 13.7	1.955	2.856	9.6	21.8	1 16	5 45.34	+28 59.2	1.383	2.291	12.2	20.1
1 26	5 39.48	+24 10.2	2.028	2.848	13.0	22.0	1 26	5 39.53	+27 49.3	1.442	2.280	16.4	20.4
50312	2000 <i>CN</i> ₄₅	12 23.8 6°97		6°8/24.1 18			373627	2002 <i>JG</i> ₁₄₇	12 23.8 189°06		0°7/23.8 18		
11 17	6 34.04	+ 8 51.8	1.484	2.287	18.0	18.7	11 17	6 36.07	+25 48.1	3.474	4.248	9.2	23.6
11 27	6 30.48	+ 8 5.9	1.414	2.288	14.6	18.5	11 27	6 30.51	+25 58.3	3.377	4.246	7.1	23.4
12 7	6 24.12	+ 7 33.1	1.363	2.289	10.9	18.3	12 7	6 23.43	+26 7.6	3.307	4.244	4.6	23.2
12 17	6 15.69	+ 7 17.2	1.335	2.291	7.8	18.1	12 17	6 15.27	+26 14.7	3.266	4.241	2.0	23.0
12 27	6 6.38	+ 7 20.5	1.333	2.293	7.0	18.0	12 27	6 6.63	+26 18.6	3.257	4.237	1.1	23.0
1 6	5 57.54	+ 7 42.7	1.357	2.296	9.4	18.2	1 6	5 58.19	+26 19.0	3.280	4.233	3.7	23.2
1 16	5 50.41	+ 8 21.2	1.405	2.301	13.0	18.4	1 16	5 50.58	+26 16.3	3.335	4.228	6.3	23.3
1 26	5 45.91	+ 9 11.8	1.475	2.305	16.5	18.6	1 26	5 44.34	+26 11.3	3.417	4.223	8.5	23.5
267942	2004 <i>EA</i> ₂₅	12 23.8 205°19		3°8/23.6 18			467254	2016 <i>EO</i> ₁₇₃	12 23.8 333°17		2°0/23.5 18		
11 17	6 44.52	+32 21.7	1.957	2.743	14.9	21.2	11 17	6 35.13	+25 38.9	1.867	2.675	14.6	20.3
11 27	6 38.47	+32 59.9	1.868	2.738	11.8	21.0	11 27	6 31.31	+26 29.5	1.775	2.662	11.4	20.1
12 7	6 29.37	+33 33.7	1.801	2.733	8.2	20.7	12 7	6 24.76	+27 23.0	1.705	2.649	7.6	19.8
12 17	6 17.90	+33 57.9	1.760	2.727	4.9	20.5	12 17	6 16.04	+28 15.4	1.662	2.638	3.6	19.6
12 27	6 5.32	+34 8.3	1.749	2.720	4.1	20.5	12 27	6 6.21	+29 2.4	1.648	2.626	2.6	19.5
1 6	5 53.11	+34 3.5	1.767	2.712	7.1	20.6	1 6	5 56.56	+29 41.0	1.661	2.616	6.5	19.7
1 16	5 42.67	+33 45.4	1.813	2.704	10.8	20.8	1 16	5 48.37	+30 10.1	1.702	2.606	10.6	19.9
1 26	5 35.07	+33 18.6	1.883	2.695	14.2	21.0	1 26	5 42.68	+30 30.8	1.766	2.597	14.2	20.1
237760	2001 <i>YU</i> ₁₃₆	12 23.8 4°82		5°5/23.9 16			39337	2002 <i>AZ</i> ₁₃	12 23.8 237°42		0°8/23.8 18		
11 17	6 33.83	+33 12.7	1.000	1.849	21.5	19.6	11 17	6 40.31	+25 26.2	1.916	2.713	14.8	19.7
11 27	6 32.19	+33 41.6	0.942	1.847	17.1	19.3	11 27	6 35.08	+25 32.6	1.822	2.703	11.5	19.5
12 7	6 26.15	+34 1.0	0.901	1.848	12.0	19.0	12 7	6 27.08	+25 38.4	1.750	2.693	7.6	19.2
12 17	6 16.72	+34 4.0	0.880	1.851	7.1	18.8	12 17	6 16.95	+25 41.2	1.705	2.682	3.3	18.9
12 27	6 5.92	+33 45.7	0.881	1.856	5.9	18.7	12 27	6 5.81	+25 39.1	1.690	2.671	1.7	18.8
1 6	5 56.10	+33 7.1	0.905	1.862	9.9	19.0	1 6	5 54.98	+25 31.5	1.703	2.660	6.2	19.1
1 16	5 49.23	+32 14.3	0.951	1.871	14.9	19.3	1 16	5 45.72	+25 19.8	1.745	2.648	10.4	19.3
1 26	5 46.51	+31 15.3	1.015	1.882	19.4	19.6	1 26	5 39.01	+25 6.3	1.810	2.636	14.1	19.5
76936	2001 <i>AF</i> ₄₉	12 23.8 217°95		1°9/23.6 18			212264	2005 <i>JJ</i> ₁₂₂	12 23.8 127°00		4°8/23.9 18		
11 17	6 42.68	+25 48.											

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
243015	2006 <i>UK</i> ₁₆₆		12 23.8 186°73	0°7/23.9	18		486185	2013 <i>AV</i> ₂₃		12 23.8 316°11	0°1/23.8	18	
11 17	6 37.74	+20 33.7	2.143	2.935	13.6	20.8	11 17	6 37.89	+21 12.1	1.687	2.494	16.0	20.9
11 27	6 32.64	+20 40.8	2.056	2.935	10.5	20.6	11 27	6 33.49	+21 40.4	1.603	2.490	12.4	20.6
12 7	6 25.23	+20 51.0	1.993	2.934	6.9	20.3	12 7	6 26.19	+22 13.9	1.541	2.485	8.2	20.4
12 17	6 16.11	+21 3.0	1.957	2.933	3.0	20.1	12 17	6 16.65	+22 50.2	1.504	2.481	3.4	20.1
12 27	6 6.23	+21 15.5	1.951	2.932	1.5	20.0	12 27	6 6.01	+23 26.0	1.495	2.477	1.6	19.9
1 6	5 56.67	+21 27.8	1.975	2.931	5.5	20.3	1 6	5 55.71	+23 58.9	1.515	2.473	6.5	20.3
1 16	5 48.44	+21 39.6	2.027	2.929	9.2	20.5	1 16	5 47.06	+24 27.8	1.562	2.470	11.0	20.5
1 26	5 42.35	+21 51.3	2.105	2.927	12.5	20.7	1 26	5 41.11	+24 53.1	1.632	2.466	15.0	20.8
387484	2013 <i>YH</i> ₆₂		12 23.8 274°33	2°7/24.2	18 R		46633	1994 <i>VH</i> ₁		12 23.8 314°54	0°2/23.8	18	
11 17	6 38.82	+15 13.4	1.631	2.432	16.8	21.0	11 17	6 37.50	+22 45.2	1.739	2.546	15.6	18.0
11 27	6 34.40	+15 26.5	1.534	2.414	13.3	20.7	11 27	6 33.11	+23 4.1	1.654	2.541	12.1	17.7
12 7	6 26.94	+15 50.1	1.457	2.396	9.1	20.4	12 7	6 25.89	+23 25.8	1.591	2.536	8.0	17.5
12 17	6 17.02	+16 24.0	1.406	2.378	4.6	20.1	12 17	6 16.50	+23 48.2	1.554	2.531	3.3	17.2
12 27	6 5.75	+17 6.6	1.382	2.360	3.1	20.0	12 27	6 6.09	+24 8.6	1.544	2.526	1.6	17.1
1 6	5 54.58	+17 55.1	1.386	2.342	7.3	20.2	1 6	5 56.02	+24 25.5	1.563	2.522	6.4	17.4
1 16	5 44.97	+18 46.7	1.417	2.323	12.1	20.4	1 16	5 47.57	+24 38.8	1.609	2.517	10.8	17.6
1 26	5 38.12	+19 39.6	1.471	2.305	16.4	20.6	1 26	5 41.77	+24 49.4	1.679	2.513	14.6	17.8
370564	2003 <i>UE</i> ₁₈₀		12 23.8 45°42	5°8/24.1	18		31276	Calvinrieder		12 23.8 31°56	0°0/23.8	18	
11 17	6 39.16	+13 5.3	1.107	1.932	21.5	20.4	11 17	6 36.96	+23 24.4	1.884	2.687	14.7	18.7
11 27	6 34.95	+12 22.2	1.059	1.950	17.0	20.2	11 27	6 32.34	+23 25.4	1.805	2.690	11.4	18.5
12 7	6 27.19	+11 52.0	1.030	1.969	11.9	20.0	12 7	6 25.16	+23 27.2	1.749	2.693	7.4	18.3
12 17	6 16.96	+11 37.6	1.022	1.990	7.2	19.8	12 17	6 16.12	+23 28.2	1.719	2.696	3.1	18.0
12 27	6 5.91	+11 40.1	1.039	2.010	6.0	19.8	12 27	6 6.30	+23 27.3	1.718	2.699	1.4	17.9
1 6	5 55.87	+11 58.4	1.080	2.032	9.6	20.0	1 6	5 56.92	+23 24.1	1.745	2.703	5.9	18.2
1 16	5 48.28	+12 29.7	1.144	2.053	14.1	20.4	1 16	5 49.10	+23 19.4	1.800	2.707	9.9	18.5
1 26	5 44.08	+13 10.1	1.229	2.075	18.1	20.7	1 26	5 43.69	+23 14.6	1.879	2.711	13.4	18.7
449748	2014 <i>ON</i> ₈		12 23.8 52°75	2°9/24.1	18		204731	2006 <i>HK</i> ₄₃		12 23.8 186°62	1°2/23.8	18	
11 17	6 36.04	+15 20.0	1.849	2.646	15.2	21.2	11 17	6 40.30	+25 59.4	2.034	2.827	14.1	21.8
11 27	6 31.51	+15 13.6	1.775	2.653	11.9	21.0	11 27	6 34.85	+26 17.6	1.948	2.827	11.0	21.6
12 7	6 24.55	+15 14.6	1.723	2.661	8.1	20.8	12 7	6 26.80	+26 35.4	1.886	2.827	7.2	21.4
12 17	6 15.83	+15 23.1	1.697	2.668	4.3	20.6	12 17	6 16.81	+26 49.9	1.850	2.826	3.2	21.1
12 27	6 6.39	+15 38.6	1.699	2.676	3.2	20.5	12 27	6 5.96	+26 58.8	1.844	2.824	1.9	21.0
1 6	5 57.37	+16 0.1	1.730	2.683	6.4	20.7	1 6	5 55.48	+27 1.3	1.868	2.823	5.8	21.3
1 16	5 49.84	+16 26.4	1.788	2.691	10.2	21.0	1 16	5 46.52	+26 58.2	1.920	2.821	9.7	21.5
1 26	5 44.60	+16 56.2	1.870	2.699	13.6	21.2	1 26	5 39.98	+26 51.5	1.996	2.818	13.1	21.7
83400	2001 <i>SS</i> ₃₂		12 23.8 117°55	2°4/23.9	18		363604	2004 <i>FG</i> ₁₃₄		12 23.8 280°69	0°1/23.8	18	
11 17	6 37.43	+16 18.1	2.147	2.934	13.7	20.0	11 17	6 37.98	+23 24.9	1.970	2.768	14.3	21.4
11 27	6 32.19	+16 6.3	2.073	2.946	10.7	19.8	11 27	6 33.31	+23 20.6	1.864	2.747	11.2	21.1
12 7	6 24.79	+15 59.6	2.022	2.958	7.2	19.6	12 7	6 25.97	+23 16.6	1.781	2.725	7.4	20.9
12 17	6 15.88	+15 58.2	1.998	2.969	3.7	19.4	12 17	6 16.55	+23 11.5	1.725	2.702	3.1	20.6
12 27	6 6.38	+16 1.9	2.004	2.980	2.7	19.4	12 27	6 6.05	+23 4.2	1.698	2.680	1.5	20.4
1 6	5 57.31	+16 10.5	2.039	2.991	5.8	19.6	1 6	5 55.72	+22 54.5	1.700	2.657	6.1	20.6
1 16	5 49.57	+16 23.3	2.103	3.001	9.2	19.8	1 16	5 46.78	+22 43.4	1.729	2.634	10.4	20.9
1 26	5 43.88	+16 39.8	2.193	3.011	12.2	20.0	1 26	5 40.23	+22 32.6	1.783	2.611	14.2	21.0
15116	Jaytate		12 23.8 65°94	0°5/23.8	18		85565	1998 <i>BM</i> ₉		12 23.8 62°95	0°2/23.8	18	
11 17	6 43.10	+21 34.8	1.381	2.193	18.7	18.4	11 17	6 39.16	+23 44.3	1.783	2.586	15.4	19.4
11 27	6 37.46	+21 41.7	1.331	2.220	14.3	18.2	11 27	6 33.94	+23 47.6	1.722	2.607	11.9	19.2
12 7	6 28.58	+21 51.9	1.301	2.247	9.3	17.9	12 7	6 26.10	+23 51.3	1.683	2.627	7.7	19.0
12 17	6 17.47	+22 3.0	1.296	2.274	3.9	17.7	12 17	6 16.46	+23 53.6	1.671	2.648	3.2	18.7
12 27	6 5.69	+22 13.1	1.319	2.301	1.8	17.6	12 27	6 6.20	+23 53.3	1.687	2.669	1.5	18.7
1 6	5 54.89	+22 21.2	1.369	2.327	7.0	18.0	1 6	5 56.61	+23 50.1	1.732	2.689	5.9	19.0
1 16	5 46.38	+22 28.0	1.445	2.354	11.7	18.4	1 16	5 48.77	+23 45.1	1.804	2.710	9.9	19.3
1 26	5 41.04	+22 34.5	1.543	2.380	15.5	18.7	1 26	5 43.46	+23 39.7	1.900	2.731	13.3	19.5
416727	2005 <i>CV</i> ₇₉		12 23.8 280°57	5°3/24.2	18		91891	1999 <i>VJ</i> ₂		12 23.8 56°66	1°7/23.9	18 R	
11 17	6 33.19	+ 6 44.1	2.433	3.198	12.9	21.5	11 17	6 38.81	+29 5.3	1.980	2.778	14.3	18.7
11 27	6 28.92	+ 6 22.0	2.330	3.180	10.6	21.3	11 27	6 33.58	+28 58.7	1.908	2.789	11.1	18.5
12 7	6 22.73	+ 6 10.2	2.251	3.162	8.1	21.1	12 7	6 25.84	+28 47.5	1.859	2.800	7.4	18.3
12 17	6 15.09	+ 6 10.7	2.197	3.143	5.9	21.0	12 17	6 16.36	+28 29.8	1.837	2.811	3.4	18.1
12 27	6 6.73	+ 6 24.7	2.172	3.125	5.4	20.9	12 27	6 6.24	+28 4.7	1.843	2.823	2.1	18.0
1 6	5 58.50	+ 6 51.8	2.177	3.106	7.1	21.0	1 6	5 56.73	+27 33.2	1.879	2.835	5.8	18.3
1 16	5 51.22	+ 7 30.7	2.209	3.088	9.7	21.1	1 16	5 48.88	+26 57.9	1.943	2.846	9.5	18.5
1 26	5 45.61	+ 8 18.9	2.265	3.069	12.4	21.3	1 26	5 43.44	+26 21.8	2.031	2.858	12.7	18.8
372100	2008 <i>SL</i> ₁₀₄		12 23.8 22°54	3°8/23.9	17		255995	2006 <i>TY</i> ₁₀₅		12 23.8 63°19	2°6/23.9	18	
11 17	6 33.60	+13 19.6	2.155	2.944	13.6	21.1	11 17	6 40.77	+30 45.9	1.785	2.585	15.6	20.4
11 27	6 29.30	+12 45.8	2.075	2.947	10.7	20.9	11 27	6 35.41	+30 48.4	1.716	2.596	12.1	20.2
12 7	6 22.95	+12 18.3	2.019	2.950	7.6	20.7	12 7	6 27.18	+30 45.1	1.669	2.608	8.2	20.0
12 17	6 15.15	+11 58.7	1.989	2.953	4.7	20.5	12 17	6 16.94	+30 32.8	1.647	2.620	4.1	19.7
12 27	6 6.74	+11 48.0	1.988	2.957	4.0	20.5	12 27	6 5.98	+30 10.0	1.654	2.632	2.9	19.7
1 6	5 58.69	+11 46.6	2.016	2.960	6.4	20.7	1 6	5 55.71	+29 37.7	1.690	2.644	6.5	19.9
1 16	5 51.86	+11 54.1	2.071	2.964	9.5	20.9	1 16	5 47.36	+28 59.1	1.752	2.656	10.4	20.2
1 26	5 46.95	+12 9.3	2.151	2.969	12.4	21.1	1 26	5 41.76	+28 18.3	1.839	2.668	13.8	20.4
290697	2005 <i>UJ</i> ₃₇₃		12 23.8 17°13	0°6/23.8	17		33414	Jessicatian		12 23.8 232°03	3°7/23.6	18	

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
326668	2002 UC ₅		12 23.8	87°35'	4.0°/23.5	18	70767	1999 VP ₃₃		12 23.8	274°27'	3.4°/23.6	18
11 17	6 40.38	+34 59.4	2.519	3.294	12.2	20.3	11 17	6 35.39	+15 24.1	2.217	3.004	13.3	19.2
11 27	6 34.46	+35 48.2	2.455	3.317	9.7	20.2	11 27	6 30.70	+14 38.6	2.126	2.998	10.5	19.0
12 7	6 26.29	+36 31.1	2.416	3.339	6.9	20.0	12 7	6 23.91	+13 56.5	2.058	2.991	7.3	18.8
12 17	6 16.53	+37 4.1	2.405	3.362	4.6	19.9	12 17	6 15.60	+13 19.7	2.018	2.984	4.3	18.6
12 27	6 6.16	+37 24.0	2.423	3.384	4.2	19.9	12 27	6 6.61	+12 49.7	2.006	2.977	3.7	18.5
1 6	5 56.26	+37 30.1	2.472	3.406	6.1	20.1	1 6	5 57.92	+12 27.8	2.025	2.970	6.3	18.7
1 16	5 47.79	+37 24.1	2.549	3.427	8.6	20.3	1 16	5 50.44	+12 14.7	2.071	2.964	9.6	18.9
1 26	5 41.49	+37 9.0	2.651	3.449	10.9	20.5	1 26	5 44.89	+12 10.2	2.142	2.957	12.6	19.1
90871	1996 TG ₁₉		12 23.8	327°38'	21.7°/18.5	18	305214	2007 WR ₄₈		12 23.8	173°75'	3.5°/23.8	18
11 17	6 36.99	-7 51.9	1.026	1.800	26.1	18.9	11 17	6 37.60	+15 11.4	1.971	2.761	14.6	20.8
11 27	6 33.92	-11 39.5	0.974	1.792	24.1	18.7	11 27	6 32.59	+14 36.7	1.888	2.762	11.5	20.6
12 7	6 27.04	-15 1.1	0.939	1.785	22.5	18.6	12 7	6 25.23	+14 7.1	1.829	2.763	8.0	20.4
12 17	6 17.15	-17 37.6	0.920	1.778	21.7	18.5	12 17	6 16.16	+13 44.1	1.796	2.763	4.6	20.2
12 27	6 5.81	-19 13.2	0.919	1.772	22.1	18.5	12 27	6 6.36	+13 28.7	1.792	2.764	3.8	20.1
1 6	5 54.98	-19 42.3	0.934	1.766	23.5	18.6	1 6	5 56.95	+13 21.6	1.816	2.764	6.7	20.3
1 16	5 46.45	-19 8.9	0.963	1.761	25.5	18.7	1 16	5 48.96	+13 22.8	1.869	2.764	10.3	20.5
1 26	5 41.55	-17 45.0	1.003	1.757	27.6	18.9	1 26	5 43.17	+13 31.6	1.945	2.764	13.5	20.7
187046	2005 LT ₂₃		12 23.8	89°62'	3.6°/23.9	18 R	75770	2000 AX ₁₉₀		12 23.8	56°13'	9.1°/24.7	18
11 17	6 41.39	+16 8.4	1.557	2.357	17.4	20.3	11 17	6 36.46	+2 18.3	1.597	2.371	18.2	18.0
11 27	6 35.84	+15 34.6	1.496	2.375	13.6	20.1	11 27	6 31.93	+1 18.9	1.542	2.387	15.2	17.9
12 7	6 27.43	+15 7.1	1.456	2.394	9.3	19.9	12 7	6 24.84	+0 37.9	1.506	2.404	12.2	17.7
12 17	6 17.03	+14 47.2	1.441	2.412	5.0	19.7	12 17	6 15.97	+0 19.8	1.493	2.422	9.8	17.6
12 27	6 5.95	+14 35.6	1.454	2.429	3.9	19.7	12 27	6 6.47	+0 27.3	1.505	2.439	9.2	17.6
1 6	5 55.62	+14 32.6	1.496	2.447	7.5	20.0	1 6	5 57.58	+0 59.0	1.543	2.457	10.6	17.8
1 16	5 47.22	+14 37.8	1.563	2.464	11.5	20.2	1 16	5 50.35	+1 51.3	1.605	2.475	13.2	18.0
1 26	5 41.59	+14 50.4	1.654	2.481	15.2	20.5	1 26	5 45.58	+2 58.2	1.689	2.493	15.9	18.2
5271	Kaylamaya		12 23.8	277°89'	5.1°/24.5	18	328398	2008 RM ₁₄₃		12 23.8	154°56'	4.4°/24.0	17
11 17	6 36.05	+8 33.9	1.920	2.700	15.3	18.0	11 17	6 34.08	+9 15.5	2.636	3.402	12.0	21.9
11 27	6 31.64	+8 29.5	1.825	2.687	12.4	17.8	11 27	6 29.27	+8 45.0	2.554	3.407	9.6	21.7
12 7	6 24.79	+8 38.0	1.753	2.675	9.2	17.6	12 7	6 22.77	+8 22.2	2.495	3.411	7.1	21.6
12 17	6 16.04	+9 1.1	1.705	2.663	6.1	17.4	12 17	6 15.07	+8 8.6	2.464	3.416	5.0	21.4
12 27	6 6.34	+9 39.1	1.686	2.650	5.3	17.3	12 27	6 6.88	+8 5.2	2.463	3.420	4.5	21.4
1 6	5 56.82	+10 30.1	1.695	2.638	7.6	17.4	1 6	5 58.96	+8 12.1	2.491	3.424	6.1	21.5
1 16	5 48.57	+11 31.3	1.732	2.625	11.1	17.6	1 16	5 52.03	+8 28.4	2.548	3.427	8.6	21.7
1 26	5 42.53	+12 39.2	1.792	2.613	14.4	17.8	1 26	5 46.69	+8 52.7	2.631	3.430	11.0	21.9
514712	2006 SY ₂₈₈		12 23.8	105°96'	4.9°/23.4	18	108123	2001 GE ₆		12 23.8	303°04'	1.0°/23.9	18
11 17	6 43.26	+35 1.0	2.035	2.818	14.5	21.4	11 17	6 37.46	+20 28.1	1.742	2.547	15.7	19.8
11 27	6 37.31	+36 0.0	1.967	2.833	11.5	21.2	11 27	6 33.01	+20 31.8	1.657	2.543	12.2	19.6
12 7	6 28.48	+36 53.0	1.922	2.847	8.3	21.1	12 7	6 25.80	+20 39.3	1.594	2.538	8.1	19.3
12 17	6 17.53	+37 34.0	1.903	2.861	5.6	20.9	12 17	6 16.48	+20 49.6	1.557	2.534	3.5	19.0
12 27	6 5.69	+37 58.5	1.914	2.875	5.1	20.9	12 27	6 6.19	+21 1.1	1.548	2.529	1.8	18.9
1 6	5 54.39	+38 5.3	1.953	2.888	7.4	21.1	1 6	5 56.26	+21 12.9	1.567	2.525	6.4	19.2
1 16	5 44.90	+37 56.4	2.020	2.901	10.4	21.3	1 16	5 47.93	+21 24.7	1.613	2.521	10.8	19.4
1 26	5 38.16	+37 36.3	2.110	2.914	13.2	21.5	1 26	5 42.18	+21 37.1	1.683	2.517	14.6	19.7
231161	2005 UT ₇₃		12 23.8	345°42'	0.7°/23.8	18	448330	2009 DZ ₁₃₆		12 23.8	188°93'	4.9°/24.3	18
11 17	6 35.28	+23 12.4	1.211	2.047	19.3	19.7	11 17	6 36.60	+7 8.9	2.566	3.322	12.5	22.5
11 27	6 32.57	+23 36.9	1.135	2.038	15.1	19.4	11 27	6 31.29	+6 46.5	2.476	3.321	10.2	22.3
12 7	6 26.16	+24 6.0	1.079	2.030	10.0	19.0	12 7	6 24.14	+6 33.5	2.410	3.319	7.7	22.2
12 17	6 16.79	+24 36.3	1.045	2.023	4.2	18.7	12 17	6 15.67	+6 31.7	2.371	3.317	5.5	22.0
12 27	6 5.98	+25 3.8	1.035	2.017	2.1	18.5	12 27	6 6.59	+6 41.9	2.361	3.314	5.0	22.0
1 6	5 55.62	+25 25.7	1.051	2.012	8.1	18.9	1 6	5 57.75	+7 3.6	2.382	3.310	6.6	22.1
1 16	5 47.51	+25 41.8	1.090	2.009	13.6	19.2	1 16	5 49.92	+7 35.7	2.431	3.306	9.1	22.2
1 26	5 42.94	+25 53.4	1.149	2.007	18.3	19.5	1 26	5 43.76	+8 15.8	2.506	3.301	11.6	22.4
263296	2008 CM ₁₁		12 23.8	226°20'	2.1°/24.1	18	298446	2003 UQ ₅₅		12 23.8	19°01'	4.3°/23.8	18
11 17	6 36.70	+16 20.2	2.057	2.848	14.1	20.4	11 17	6 36.99	+31 7.0	1.189	2.022	19.8	19.9
11 27	6 31.95	+16 27.5	1.969	2.845	11.0	20.2	11 27	6 33.85	+31 41.9	1.133	2.031	15.5	19.7
12 7	6 24.86	+16 41.5	1.904	2.842	7.4	20.0	12 7	6 26.84	+32 11.0	1.097	2.042	10.6	19.4
12 17	6 16.03	+17 1.7	1.865	2.838	3.7	19.8	12 17	6 16.97	+32 28.4	1.082	2.055	5.9	19.2
12 27	6 6.38	+17 27.0	1.856	2.835	2.5	19.7	12 27	6 6.02	+32 29.7	1.093	2.068	4.7	19.2
1 6	5 57.00	+17 56.0	1.876	2.831	5.9	19.9	1 6	5 56.01	+32 14.6	1.128	2.083	8.7	19.4
1 16	5 48.92	+18 27.4	1.925	2.827	9.7	20.1	1 16	5 48.61	+31 47.0	1.186	2.100	13.3	19.8
1 26	5 42.99	+19 0.2	1.998	2.823	13.0	20.3	1 26	5 44.85	+31 12.7	1.265	2.117	17.3	20.1
409045	2003 SM ₃₂		12 23.8	74°22'	7.8°/23.5	18	459177	2012 DX ₂₈		12 23.8	186°66'	4.5°/24.2	17
11 17	6 45.90	+45 25.6	2.237	2.988	14.3	20.4	11 17	6 34.60	+9 23.2	2.377	3.149	13.0	21.6
11 27	6 39.49	+46 39.7	2.182	3.011	12.0	20.3	11 27	6 29.92	+9 4.0	2.291	3.148	10.4	21.5
12 7	6 29.95	+47 40.8	2.149	3.033	9.8	20.2	12 7	6 23.32	+8 53.8	2.229	3.148	7.7	21.3
12 17	6 18.13	+48 22.1	2.141	3.055	8.2	20.1	12 17	6 15.34	+8 53.9	2.193	3.147	5.2	21.1
12 27	6 5.43	+48 38.8	2.161	3.078	7.9	20.2	12 27	6 6.75	+9 5.1	2.186	3.147	4.6	21.1
1 6	5 53.42	+48 30.6	2.208	3.100	9.1	20.3	1 6	5 58.43	+9 26.8	2.208	3.146	6.5	21.2
1 16	5 43.47	+48 1.1	2.281	3.121	11.0	20.4	1 16	5 51.18	+9 57.7	2.259	3.144	9.2	21.4
1 26	5 36.53	+47 16.4	2.377	3.143	13.0	20.6	1 26	5 45.68	+10 35.7	2.335	3.143	11.9	21.6
468335	2016 ET ₄		12 23.8	130°75'	19.1°/25.3	17	384293	2009 RM ₂₅		12 23.8	47°44'	5.7°/23.7	18
11 17	6 39.53	-13 25.7	1.275	1.995	24.5	21.							

EPHEMERIDES

12 23.8

12 23.9

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
51790	2001 <i>MG</i> ₂₃		12 23.8	58°61'	3°7/23.6	18	265164	2003 <i>WD</i> ₁₃₄		12 23.8	54°30'	0°8/23.8	18 R
11 17	6 34.47	+13 56.3	2.377	3.160	12.7	17.4	11 17	6 43.31	+23 51.0	1.151	1.977	20.7	20.4
11 27	6 29.75	+13 6.3	2.296	3.164	10.0	17.3	11 27	6 38.32	+24 12.6	1.104	2.000	15.9	20.2
12 7	6 23.16	+12 20.7	2.239	3.168	7.1	17.1	12 7	6 29.51	+24 36.3	1.076	2.025	10.4	20.0
12 17	6 15.25	+11 41.3	2.210	3.172	4.4	16.9	12 17	6 18.01	+24 57.8	1.072	2.049	4.3	19.7
12 27	6 6.83	+11 10.0	2.210	3.176	3.9	16.9	12 27	6 5.65	+25 13.5	1.092	2.074	2.1	19.6
1 6	5 58.75	+10 47.8	2.240	3.181	6.1	17.0	1 6	5 54.44	+25 22.3	1.139	2.099	7.8	20.1
1 16	5 51.81	+10 35.2	2.298	3.185	9.0	17.2	1 16	5 45.95	+25 25.5	1.210	2.125	13.0	20.4
1 26	5 46.65	+10 31.6	2.381	3.189	11.7	17.4	1 26	5 41.13	+25 25.9	1.303	2.150	17.2	20.7
196325	2003 <i>FL</i> ₄₇		12 23.8	231°13'	0°4/23.9	18 R	119351	2001 <i>SR</i> ₂₂₂		12 23.8	186°24'	1°2/23.8	18
11 17	6 40.18	+22 8.7	1.884	2.681	15.0	21.4	11 17	6 42.58	+26 3.6	2.048	2.837	14.2	21.7
11 27	6 34.99	+22 9.9	1.791	2.672	11.7	21.2	11 27	6 36.62	+26 21.7	1.961	2.837	11.0	21.5
12 7	6 27.06	+22 12.8	1.720	2.662	7.7	21.0	12 7	6 28.00	+26 39.1	1.896	2.836	7.3	21.3
12 17	6 17.02	+22 16.1	1.676	2.652	3.3	20.7	12 17	6 17.39	+26 53.0	1.859	2.835	3.2	21.0
12 27	6 5.97	+22 18.4	1.660	2.642	1.6	20.5	12 27	6 5.87	+27 1.0	1.852	2.833	1.9	20.9
1 6	5 55.22	+22 19.0	1.674	2.631	6.2	20.8	1 6	5 54.73	+27 2.1	1.876	2.830	5.9	21.2
1 16	5 46.00	+22 18.5	1.716	2.620	10.5	21.0	1 16	5 45.15	+26 57.3	1.927	2.826	9.8	21.4
1 26	5 39.29	+22 18.3	1.782	2.608	14.3	21.2	1 26	5 38.03	+26 49.0	2.004	2.822	13.2	21.6
375239	2008 <i>GX</i> ₈		12 23.8	349°17'	1°0/23.8	18	280273	2003 <i>BN</i> ₃₄		12 23.8	321°96'	2°7/23.9	18
11 17	6 36.60	+23 42.1	1.137	1.974	20.2	20.8	11 17	6 41.00	+30 1.3	1.453	2.266	17.8	20.2
11 27	6 33.80	+24 8.8	1.065	1.968	15.8	20.5	11 27	6 36.51	+30 5.7	1.372	2.261	14.0	20.0
12 7	6 27.09	+24 39.7	1.012	1.963	10.4	20.2	12 7	6 28.47	+30 4.7	1.312	2.256	9.5	19.7
12 17	6 17.23	+25 11.0	0.981	1.959	4.4	19.8	12 17	6 17.71	+29 54.0	1.276	2.251	4.7	19.4
12 27	6 5.86	+25 38.1	0.974	1.955	2.3	19.7	12 27	6 5.73	+29 31.0	1.267	2.246	3.2	19.3
1 6	5 55.04	+25 58.3	0.991	1.953	8.4	20.0	1 6	5 54.37	+28 56.4	1.285	2.241	7.7	19.5
1 16	5 46.65	+26 11.3	1.032	1.952	14.1	20.3	1 16	5 45.23	+28 14.1	1.328	2.237	12.5	19.8
1 26	5 42.04	+26 19.5	1.093	1.952	19.0	20.6	1 26	5 39.45	+27 29.3	1.393	2.234	16.7	20.1
297304	1998 <i>SQ</i> ₁₂₅		12 23.8	77°03'	1°1/23.9	17	233325	2006 <i>BF</i> ₂₂₃		12 23.8	242°11'	1°4/23.9	18
11 17	6 42.31	+19 50.1	1.832	2.624	15.5	21.4	11 17	6 39.11	+19 22.2	1.912	2.707	14.8	21.2
11 27	6 36.07	+19 55.4	1.780	2.658	11.9	21.2	11 27	6 34.12	+19 19.9	1.817	2.696	11.6	21.0
12 7	6 27.34	+20 4.3	1.751	2.691	7.7	21.0	12 7	6 26.49	+19 21.5	1.743	2.684	7.8	20.7
12 17	6 16.95	+20 15.2	1.748	2.724	3.3	20.8	12 17	6 16.81	+19 26.3	1.697	2.672	3.5	20.4
12 27	6 6.09	+20 27.0	1.776	2.757	1.8	20.8	12 27	6 6.13	+19 33.5	1.679	2.660	2.0	20.3
1 6	5 55.99	+20 38.7	1.833	2.789	5.8	21.1	1 6	5 55.68	+19 42.2	1.691	2.647	6.2	20.5
1 16	5 47.65	+20 50.3	1.918	2.820	9.7	21.4	1 16	5 46.68	+19 52.5	1.730	2.633	10.5	20.8
1 26	5 41.81	+21 2.2	2.028	2.851	12.9	21.7	1 26	5 40.08	+20 4.6	1.794	2.620	14.2	21.0
402343	2005 <i>UC</i> ₄₆₁		12 23.8	23°94'	0°7/23.8	17	180807	2005 <i>EG</i> ₁₆₄		12 23.8	201°28'	3°0/23.9	18
11 17	6 36.55	+22 18.3	1.914	2.716	14.6	21.5	11 17	6 41.08	+16 9.3	1.805	2.596	15.8	21.1
11 27	6 31.96	+22 4.5	1.834	2.719	11.2	21.3	11 27	6 35.62	+15 48.9	1.718	2.592	12.4	20.9
12 7	6 24.90	+21 51.4	1.778	2.721	7.4	21.1	12 7	6 27.43	+15 34.2	1.652	2.588	8.5	20.6
12 17	6 16.05	+21 38.4	1.747	2.724	3.1	20.8	12 17	6 17.18	+15 25.8	1.613	2.584	4.5	20.4
12 27	6 6.47	+21 25.3	1.746	2.727	1.6	20.7	12 27	6 5.98	+15 23.9	1.602	2.578	3.4	20.3
1 6	5 57.34	+21 12.3	1.773	2.731	5.8	21.0	1 6	5 55.13	+15 28.4	1.621	2.572	7.0	20.5
1 16	5 49.73	+21 0.4	1.828	2.734	9.8	21.2	1 16	5 45.87	+15 39.0	1.667	2.566	11.1	20.7
1 26	5 44.44	+20 51.0	1.907	2.738	13.3	21.5	1 26	5 39.13	+15 55.4	1.737	2.559	14.8	21.0
90662	4087 <i>T</i> ₋₃		12 23.8	145°95'	5°3/24.3	18	520444	2014 <i>KQ</i> ₇₃		12 23.8	117°21'	0°5/23.8	18
11 17	6 34.07	+ 2 48.6	3.151	3.884	10.9	21.8	11 17	6 40.63	+21 40.9	2.112	2.900	13.9	21.6
11 27	6 28.93	+ 2 16.2	3.075	3.897	9.0	21.7	11 27	6 34.91	+22 28.6	2.037	2.914	10.7	21.4
12 7	6 22.39	+ 1 53.5	3.022	3.909	7.2	21.6	12 7	6 26.76	+23 20.3	1.986	2.927	7.0	21.2
12 17	6 14.89	+ 1 42.3	2.997	3.920	5.7	21.5	12 17	6 16.85	+24 12.8	1.963	2.940	2.9	21.0
12 27	6 7.02	+ 1 43.6	3.002	3.931	5.4	21.5	12 27	6 6.15	+25 2.6	1.971	2.952	1.4	20.9
1 6	5 59.41	+ 1 57.3	3.036	3.941	6.4	21.6	1 6	5 55.83	+25 47.1	2.009	2.964	5.5	21.2
1 16	5 52.62	+ 2 22.2	3.099	3.951	8.1	21.7	1 16	5 46.95	+26 25.2	2.076	2.976	9.2	21.5
1 26	5 47.16	+ 2 56.3	3.188	3.960	9.9	21.8	1 26	5 40.32	+26 57.3	2.169	2.987	12.4	21.7
450697	2006 <i>WW</i> ₉₄		12 23.8	106°35'	1°0/23.9	17	359667	2011 <i>SU</i> ₉₂		12 23.8	30°75'	1°7/23.9	17
11 17	6 38.19	+20 31.5	2.045	2.839	14.1	22.0	11 17	6 38.37	+27 5.2	1.284	2.111	18.9	20.6
11 27	6 32.97	+20 29.3	1.971	2.850	10.8	21.8	11 27	6 34.35	+27 13.7	1.231	2.128	14.6	20.4
12 7	6 25.43	+20 29.7	1.920	2.861	7.1	21.6	12 7	6 26.86	+27 19.7	1.198	2.146	9.6	20.2
12 17	6 16.24	+20 31.9	1.896	2.872	3.1	21.4	12 17	6 16.93	+27 20.0	1.188	2.165	4.3	19.9
12 27	6 6.41	+20 34.9	1.902	2.883	1.6	21.3	12 27	6 6.17	+27 12.3	1.204	2.185	2.5	19.9
1 6	5 57.04	+20 38.4	1.937	2.894	5.5	21.6	1 6	5 56.36	+26 57.2	1.246	2.206	7.4	20.2
1 16	5 49.12	+20 42.6	2.001	2.904	9.3	21.8	1 16	5 48.93	+26 37.3	1.313	2.228	12.1	20.6
1 26	5 43.41	+20 48.0	2.089	2.914	12.5	22.1	1 26	5 44.78	+26 16.0	1.401	2.250	16.1	20.9
481966	2009 <i>EV</i> ₆		12 23.8	314°29'	2°9/23.6	17	458026	2009 <i>WB</i> ₁₇₉		12 23.9	62°56'	3°5/23.6	17
11 17	6 37.76	+27 47.6	1.547	2.363	16.8	21.2	11 17	6 39.28	+31 40.5	2.063	2.856	14.0	21.2
11 27	6 34.04	+28 29.4	1.456	2.346	13.2	20.9	11 27	6 34.05	+32 23.5	1.998	2.872	10.9	21.1
12 7	6 26.97	+29 12.0	1.385	2.330	9.0	20.6	12 7	6 26.26	+33 2.3	1.955	2.889	7.5	20.9
12 17	6 17.16	+29 50.5	1.339	2.314	4.5	20.4	12 17	6 16.63	+33 32.6	1.939	2.906	4.4	20.7
12 27	6 5.90	+30 19.8	1.320	2.298	3.4	20.2	12 27	6 6.28	+33 51.1	1.952	2.923	3.7	20.7
1 6	5 54.86	+30 37.1	1.328	2.283	7.7	20.5	1 6	5 56.46	+33 56.9	1.994	2.940	6.4	20.9
1 16	5 45.68	+30 42.6	1.361	2.269	12.4	20.7	1 16	5 48.26	+33 51.5	2.063	2.957	9.6	21.2
1 26	5 39.65	+30 39.3	1.417	2.255	16.6	20.9	1 26	5 42.52	+33 38.1	2.158	2.974	12.5	21.4
442445	2011 <i>UR</i> ₁₉₄		12 23.8	100°24'	0°2/23.8	15	385993	2007 <i>BA</i> ₁₀₂		12 23.9			

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
57144	2001 <i>PJ</i> ₄₃		12 23.9	24°00	5°2/24.1	18	156700	2002 <i>LQ</i> ₃₉		12 23.9	115°89	4°1/23.9	18
11 17	6 37.04	+12 49.6	1.345	2.158	19.0	18.9	11 17	6 34.74	+11 15.9	2.367	3.144	12.9	19.9
11 27	6 33.13	+12 16.1	1.278	2.162	15.1	18.6	11 27	6 29.98	+10 44.0	2.289	3.151	10.3	19.7
12 7	6 26.06	+11 53.5	1.230	2.167	10.7	18.4	12 7	6 23.35	+10 19.3	2.234	3.158	7.4	19.6
12 17	6 16.66	+11 44.3	1.205	2.171	6.6	18.2	12 17	6 15.39	+10 3.3	2.207	3.165	4.9	19.4
12 27	6 6.26	+11 49.7	1.206	2.177	5.5	18.1	12 27	6 6.91	+9 57.1	2.208	3.172	4.3	19.4
1 6	5 56.46	+12 9.1	1.232	2.183	8.8	18.3	1 6	5 58.76	+10 0.8	2.239	3.178	6.3	19.5
1 16	5 48.63	+12 40.4	1.283	2.189	13.1	18.6	1 16	5 51.73	+10 13.5	2.299	3.185	9.0	19.7
1 26	5 43.79	+13 20.5	1.355	2.196	17.1	18.9	1 26	5 46.46	+10 34.0	2.383	3.191	11.7	19.9
190883	2001 <i>TT</i> ₁₈₃		12 23.9	164°76	2°7/23.7	18	440118	2003 <i>SX</i> ₈₂		12 23.9	84°24	6°5/24.3	18
11 17	6 43.43	+29 18.7	1.932	2.722	14.9	21.2	11 17	6 37.78	+7 27.6	1.749	2.529	16.6	21.6
11 27	6 37.48	+29 50.5	1.852	2.727	11.6	21.0	11 27	6 32.82	+6 45.4	1.685	2.544	13.5	21.4
12 7	6 28.66	+30 19.7	1.794	2.731	7.9	20.8	12 7	6 25.42	+6 16.2	1.643	2.559	10.1	21.3
12 17	6 17.69	+30 42.1	1.763	2.735	4.0	20.6	12 17	6 16.29	+6 2.9	1.625	2.573	7.3	21.1
12 27	6 5.79	+30 54.2	1.762	2.738	3.1	20.5	12 27	6 6.51	+6 7.0	1.634	2.588	6.6	21.1
1 6	5 54.35	+30 55.0	1.790	2.741	6.5	20.7	1 6	5 57.28	+6 27.9	1.670	2.602	8.6	21.3
1 16	5 44.65	+30 45.9	1.846	2.742	10.3	21.0	1 16	5 49.62	+7 3.2	1.733	2.617	11.6	21.5
1 26	5 37.66	+30 30.4	1.926	2.744	13.7	21.2	1 26	5 44.31	+7 49.4	1.819	2.631	14.6	21.7
63933	2001 <i>SA</i> ₅₂		12 23.9	158°81	1°9/24.0	18	491538	2012 <i>LW</i> ₈		12 23.9	176°66	4°2/24.2	18
11 17	6 36.72	+17 18.0	1.987	2.782	14.4	19.1	11 17	6 33.44	+7 58.4	2.925	3.683	11.1	22.7
11 27	6 32.03	+17 21.7	1.904	2.782	11.2	18.9	11 27	6 28.68	+7 38.5	2.837	3.684	9.0	22.5
12 7	6 24.96	+17 31.2	1.844	2.783	7.5	18.7	12 7	6 22.37	+7 26.6	2.774	3.686	6.7	22.4
12 17	6 16.13	+17 46.0	1.809	2.783	3.6	18.5	12 17	6 14.97	+7 24.0	2.739	3.687	4.8	22.2
12 27	6 6.51	+18 5.2	1.804	2.784	2.3	18.4	12 27	6 7.10	+7 31.2	2.733	3.687	4.3	22.2
1 6	5 57.22	+18 27.4	1.829	2.784	5.9	18.6	1 6	5 59.45	+7 48.1	2.757	3.687	5.7	22.3
1 16	5 49.30	+18 51.9	1.881	2.784	9.8	18.8	1 16	5 52.65	+8 13.5	2.811	3.687	8.0	22.4
1 26	5 43.59	+19 17.8	1.958	2.785	13.1	19.0	1 26	5 47.27	+8 46.0	2.890	3.686	10.2	22.6
519771	2013 <i>ER</i> ₁₅₆		12 23.9	353°68	1°8/23.8	18	158122	2001 <i>DV</i> ₃₇		12 23.9	217°60	2°7/24.3	18
11 17	6 36.60	+20 17.9	1.584	2.397	16.6	21.1	11 17	6 35.54	+13 30.6	2.364	3.144	12.8	20.1
11 27	6 32.52	+19 53.7	1.505	2.395	12.9	20.8	11 27	6 30.78	+13 43.1	2.273	3.141	10.1	19.9
12 7	6 25.55	+19 31.9	1.448	2.393	8.6	20.6	12 7	6 24.00	+14 3.6	2.206	3.138	7.0	19.7
12 17	6 16.43	+19 12.6	1.415	2.391	3.9	20.3	12 17	6 15.72	+14 32.0	2.166	3.135	3.8	19.5
12 27	6 6.38	+18 56.2	1.410	2.390	2.4	20.2	12 27	6 6.74	+15 7.2	2.156	3.131	2.9	19.4
1 6	5 56.81	+18 43.3	1.432	2.389	6.9	20.5	1 6	5 57.97	+15 47.6	2.177	3.128	5.5	19.6
1 16	5 49.00	+18 34.8	1.480	2.389	11.4	20.7	1 16	5 50.29	+16 31.4	2.226	3.124	8.8	19.8
1 26	5 43.90	+18 31.5	1.550	2.390	15.4	21.0	1 26	5 44.43	+17 17.2	2.302	3.120	11.7	20.0
482918	2014 <i>HO</i> ₁₄₅		12 23.9	304°32	4°5/24.1	18	411480	2011 <i>AW</i> ₃₇		12 23.9	36°88	3°3/23.9	17
11 17	6 36.50	+13 27.4	1.535	2.341	17.4	21.2	11 17	6 39.08	+32 39.7	1.932	2.728	14.7	21.4
11 27	6 32.61	+13 4.8	1.448	2.329	13.9	20.9	11 27	6 34.10	+32 52.0	1.857	2.734	11.5	21.2
12 7	6 25.76	+12 51.6	1.381	2.318	9.8	20.7	12 7	6 26.39	+32 58.0	1.805	2.741	7.9	21.0
12 17	6 16.59	+12 49.7	1.339	2.307	5.8	20.4	12 17	6 16.74	+32 54.0	1.779	2.748	4.5	20.8
12 27	6 6.27	+12 59.9	1.323	2.296	4.7	20.3	12 27	6 6.33	+32 38.0	1.782	2.755	3.6	20.8
1 6	5 56.24	+13 21.6	1.334	2.285	8.2	20.5	1 6	5 56.50	+32 10.5	1.813	2.763	6.5	21.0
1 16	5 47.88	+13 53.4	1.370	2.275	12.5	20.7	1 16	5 48.42	+31 34.2	1.871	2.771	10.0	21.2
1 26	5 42.26	+14 32.8	1.429	2.265	16.6	20.9	1 26	5 42.94	+30 53.3	1.954	2.779	13.2	21.4
18751	Yualexandrov		12 23.9	115°92	2°7/23.8	18	421107	2013 <i>QB</i> ₆₉		12 23.9	164°18	3°5/23.9	18
11 17	6 47.78	+29 41.4	1.714	2.504	16.5	18.8	11 17	6 38.78	+34 32.9	2.468	3.248	12.3	21.3
11 27	6 40.85	+30 4.2	1.651	2.526	12.8	18.7	11 27	6 33.40	+34 50.7	2.383	3.249	9.8	21.1
12 7	6 30.78	+30 22.6	1.610	2.548	8.6	18.5	12 7	6 25.74	+35 2.3	2.322	3.250	6.9	20.9
12 17	6 18.51	+30 32.1	1.596	2.568	4.3	18.2	12 17	6 16.44	+35 4.3	2.288	3.251	4.3	20.7
12 27	6 5.48	+30 29.8	1.610	2.588	3.1	18.2	12 27	6 6.47	+34 54.7	2.284	3.252	3.7	20.7
1 6	5 53.29	+30 15.7	1.654	2.606	6.8	18.5	1 6	5 56.90	+34 33.5	2.309	3.253	5.8	20.8
1 16	5 43.28	+29 52.8	1.726	2.624	10.8	18.8	1 16	5 48.71	+34 2.7	2.364	3.253	8.7	21.0
1 26	5 36.34	+29 25.4	1.822	2.641	14.3	19.0	1 26	5 42.67	+33 25.7	2.443	3.254	11.4	21.2
278645	Kontsevych		12 23.9	144°98	0°2/23.9	18	488911	2005 <i>TT</i> ₁₁₉		12 23.9	41°96	4°8/23.9	16
11 17	6 42.36	+23 46.2	1.967	2.757	14.7	21.5	11 17	6 38.09	+14 19.3	1.339	2.154	19.0	21.7
11 27	6 36.34	+23 51.3	1.890	2.767	11.3	21.3	11 27	6 33.87	+13 37.6	1.277	2.163	15.0	21.4
12 7	6 27.73	+23 56.7	1.836	2.777	7.4	21.1	12 7	6 26.50	+13 4.9	1.234	2.172	10.5	21.2
12 17	6 17.26	+24 0.5	1.810	2.787	3.1	20.8	12 17	6 16.84	+12 43.6	1.214	2.182	6.2	21.0
12 27	6 6.03	+24 1.0	1.813	2.795	1.4	20.7	12 27	6 6.31	+12 35.2	1.220	2.193	5.1	21.0
1 6	5 55.32	+23 58.1	1.847	2.803	5.8	21.0	1 6	5 56.47	+12 39.8	1.253	2.204	8.6	21.2
1 16	5 46.24	+23 52.6	1.909	2.810	9.7	21.3	1 16	5 48.67	+12 56.3	1.309	2.215	12.9	21.5
1 26	5 39.64	+23 46.3	1.996	2.817	13.2	21.5	1 26	5 43.88	+13 22.3	1.388	2.227	16.8	21.7
297968	2002 <i>JP</i> ₂₀		12 23.9	176°35	4°9/24.0	18	228175	2009 <i>SC</i> ₂₃₄		12 23.9	44°02	3°5/23.9	18
11 17	6 37.77	+7 59.5	2.587	3.342	12.5	22.3	11 17	6 40.29	+18 5.9	1.149	1.976	20.7	19.8
11 27	6 32.14	+7 25.2	2.501	3.346	10.1	22.2	11 27	6 35.76	+17 24.8	1.102	1.998	16.1	19.6
12 7	6 24.69	+6 59.2	2.438	3.348	7.6	22.0	12 7	6 27.73	+16 50.0	1.075	2.021	10.8	19.4
12 17	6 15.94	+6 43.3	2.403	3.350	5.4	21.9	12 17	6 17.29	+16 23.1	1.070	2.044	5.4	19.1
12 27	6 6.64	+6 38.8	2.398	3.351	5.0	21.8	12 27	6 6.16	+16 5.2	1.091	2.069	3.9	19.1
1 6	5 57.61	+6 45.8	2.424	3.351	6.6	21.9	1 6	5 56.10	+15 56.9	1.136	2.093	8.4	19.5
1 16	5 49.62	+7 3.5	2.478	3.350	9.1	22.1	1 16	5 48.53	+15 58.0	1.206	2.119	13.2	19.8
1 26	5 43.32	+7 30.1	2.558	3.348	11.5	22.3	1 26	5 44.30	+16 7.3	1.297	2.144	17.3	20.1
485648	2011 <i>WF</i> ₃₄		12 23.9	40°51	0°0/23.9	17	22520	1998 <i>EL</i> ₂		12 23.9	120°32	1°5/23.9	18
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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
324812	2007 <i>HY</i> ₅₉		12 23.9	84°98'	8°0'/22.7	18	470032	2006 <i>ST</i> ₁₃		12 23.9	62°83'	6°3'/23.7	18
11 17	6 45.82	+44 48.2	2.265	3.018	14.1	20.8	11 17	6 46.36	+34 39.0	1.282	2.093	19.9	20.4
11 27	6 39.71	+46 22.3	2.202	3.031	11.9	20.6	11 27	6 41.06	+35 41.7	1.230	2.112	15.8	20.2
12 7	6 30.36	+47 45.4	2.161	3.044	9.7	20.5	12 7	6 31.58	+36 36.1	1.197	2.130	11.3	20.0
12 17	6 18.53	+48 49.7	2.146	3.058	8.3	20.5	12 17	6 19.05	+37 13.1	1.187	2.149	7.4	19.9
12 27	6 5.51	+49 29.2	2.159	3.071	8.2	20.5	12 27	6 5.39	+37 26.2	1.203	2.169	6.6	19.9
1 6	5 52.93	+49 42.4	2.198	3.084	9.4	20.6	1 6	5 52.84	+37 15.0	1.244	2.188	9.6	20.1
1 16	5 42.27	+49 31.8	2.264	3.097	11.3	20.7	1 16	5 43.19	+36 44.6	1.310	2.207	13.6	20.4
1 26	5 34.64	+49 3.3	2.352	3.110	13.3	20.9	1 26	5 37.54	+36 2.9	1.397	2.227	17.3	20.7
112660	2002 <i>PX</i> ₈₆		12 23.9	114°27'	3°2'/24.3	18	42828	1999 <i>NH</i> ₃₉		12 23.9	183°78'	0°5'/23.9	18
11 17	6 34.89	+11 25.2	2.696	3.465	11.7	20.0	11 17	6 43.62	+24 12.0	1.832	2.625	15.5	19.9
11 27	6 29.85	+11 19.9	2.622	3.481	9.2	19.8	11 27	6 37.71	+24 24.1	1.747	2.626	12.0	19.6
12 7	6 23.16	+11 21.8	2.572	3.496	6.5	19.7	12 7	6 28.89	+24 36.9	1.685	2.626	7.9	19.4
12 17	6 15.32	+11 31.4	2.550	3.511	4.1	19.5	12 17	6 17.88	+24 47.7	1.649	2.625	3.3	19.1
12 27	6 7.03	+11 48.6	2.559	3.526	3.4	19.5	12 27	6 5.87	+24 54.3	1.642	2.624	1.6	19.0
1 6	5 59.06	+12 12.5	2.598	3.540	5.3	19.7	1 6	5 54.30	+24 55.8	1.665	2.622	6.3	19.3
1 16	5 52.09	+12 41.9	2.666	3.555	7.9	19.8	1 16	5 44.45	+24 53.1	1.717	2.619	10.6	19.5
1 26	5 46.70	+13 15.4	2.760	3.568	10.3	20.0	1 26	5 37.31	+24 48.3	1.792	2.615	14.3	19.8
226960	2004 <i>VX</i> ₇₁		12 23.9	33°16'	1°2'/23.7	17	480502	2015 <i>LU</i> ₃₆		12 23.9	150°29'	0°3'/23.8	18
11 17	6 36.90	+25 16.0	2.038	2.838	13.9	21.0	11 17	6 42.29	+22 50.7	1.881	2.674	15.1	21.6
11 27	6 32.27	+25 45.1	1.959	2.841	10.7	20.8	11 27	6 36.51	+23 13.8	1.803	2.682	11.7	21.4
12 7	6 25.18	+26 14.9	1.902	2.844	7.1	20.6	12 7	6 28.00	+23 39.4	1.748	2.690	7.7	21.2
12 17	6 16.28	+26 42.7	1.872	2.848	3.1	20.3	12 17	6 17.47	+24 4.6	1.720	2.697	3.2	21.0
12 27	6 6.57	+27 5.8	1.871	2.851	1.9	20.3	12 27	6 6.07	+24 26.8	1.721	2.703	1.5	20.8
1 6	5 57.22	+27 22.7	1.899	2.855	5.7	20.5	1 6	5 55.11	+24 44.5	1.752	2.709	6.0	21.2
1 16	5 49.31	+27 33.6	1.955	2.859	9.4	20.8	1 16	5 45.82	+24 57.7	1.812	2.714	10.1	21.4
1 26	5 43.68	+27 39.9	2.036	2.863	12.7	21.0	1 26	5 39.09	+25 7.7	1.895	2.719	13.7	21.6
207502	2006 <i>HZ</i> ₁₁₁		12 23.9	269°99'	2°8'/24.1	18	38778	2000 <i>RX</i> ₁₉		12 23.9	53°36'	3°8'/23.9	18
11 17	6 37.53	+15 45.3	1.763	2.561	15.8	20.5	11 17	6 38.89	+16 11.5	1.440	2.251	18.1	18.5
11 27	6 33.06	+15 42.8	1.675	2.554	12.4	20.3	11 27	6 34.24	+15 34.9	1.380	2.265	14.2	18.3
12 7	6 25.88	+15 48.0	1.608	2.546	8.5	20.0	12 7	6 26.61	+15 5.2	1.340	2.280	9.7	18.1
12 17	6 16.64	+16 1.0	1.567	2.539	4.4	19.8	12 17	6 16.88	+14 43.8	1.324	2.295	5.3	17.8
12 27	6 6.39	+16 21.2	1.554	2.531	3.1	19.7	12 27	6 6.39	+14 31.7	1.335	2.310	4.1	17.8
1 6	5 56.42	+16 47.1	1.569	2.524	6.8	19.9	1 6	5 56.62	+14 29.3	1.373	2.326	7.8	18.1
1 16	5 47.96	+17 17.5	1.611	2.516	11.0	20.1	1 16	5 48.84	+14 36.0	1.436	2.341	12.0	18.4
1 26	5 41.98	+17 51.1	1.677	2.508	14.8	20.3	1 26	5 43.91	+14 50.7	1.521	2.357	15.8	18.6
301900	1998 <i>SM</i> ₈₉		12 23.9	84°78'	2°0'/23.9	17	259640	2003 <i>WQ</i> ₄₈		12 23.9	204°99'	1°8'/23.8	18
11 17	6 42.27	+28 46.4	1.824	2.620	15.4	21.4	11 17	6 42.33	+20 31.2	1.666	2.465	16.5	21.4
11 27	6 36.44	+28 55.3	1.760	2.639	11.9	21.3	11 27	6 36.88	+20 4.6	1.580	2.462	12.9	21.1
12 7	6 27.84	+29 0.3	1.718	2.658	7.9	21.1	12 7	6 28.42	+19 39.5	1.516	2.458	8.6	20.8
12 17	6 17.33	+28 58.5	1.703	2.677	3.7	20.8	12 17	6 17.71	+19 15.7	1.478	2.454	3.9	20.6
12 27	6 6.16	+28 48.2	1.717	2.696	2.4	20.8	12 27	6 5.97	+18 53.6	1.469	2.449	2.4	20.4
1 6	5 55.70	+28 29.6	1.760	2.715	6.2	21.1	1 6	5 54.70	+18 34.1	1.488	2.443	7.0	20.7
1 16	5 47.13	+28 5.3	1.831	2.733	10.0	21.3	1 16	5 45.22	+18 18.7	1.534	2.438	11.5	21.0
1 26	5 41.25	+27 38.5	1.926	2.751	13.4	21.6	1 26	5 38.56	+18 8.7	1.604	2.431	15.5	21.2
326495	2002 <i>HN</i> ₇		12 23.9	172°41'	2°5'/23.9	17	223139	2002 <i>VD</i> ₁₂₀		12 23.9	63°02'	3°3'/23.4	18
11 17	6 35.43	+15 53.9	2.382	3.166	12.6	21.5	11 17	6 48.78	+21 45.5	1.309	2.115	19.8	18.9
11 27	6 30.62	+15 37.9	2.296	3.167	9.9	21.3	11 27	6 41.58	+20 6.9	1.262	2.146	15.3	18.7
12 7	6 23.85	+15 26.6	2.234	3.168	6.7	21.2	12 7	6 31.11	+18 27.0	1.236	2.178	10.1	18.5
12 17	6 15.67	+15 20.4	2.199	3.169	3.6	21.0	12 17	6 18.58	+16 49.9	1.236	2.209	5.0	18.3
12 27	6 6.89	+15 19.5	2.194	3.170	2.8	20.9	12 27	6 5.72	+15 20.9	1.264	2.240	3.9	18.3
1 6	5 58.40	+15 23.7	2.220	3.170	5.5	21.1	1 6	5 54.20	+14 5.4	1.320	2.271	8.2	18.7
1 16	5 51.04	+15 32.8	2.274	3.170	8.6	21.3	1 16	5 45.28	+13 6.7	1.403	2.302	12.7	19.0
1 26	5 45.50	+15 46.3	2.353	3.171	11.5	21.5	1 26	5 39.67	+12 25.3	1.508	2.333	16.5	19.3
520734	2014 <i>QN</i> ₄₇₂		12 23.9	109°52'	4°6'/24.0	18	27840	1994 <i>PJ</i> ₂₈		12 23.9	204°08'	0°7'/23.9	18
11 17	6 35.57	+10 10.6	2.279	3.054	13.4	21.9	11 17	6 41.48	+20 55.0	1.951	2.742	14.8	20.7
11 27	6 30.66	+9 33.8	2.205	3.064	10.7	21.7	11 27	6 35.90	+21 1.5	1.860	2.737	11.5	20.4
12 7	6 23.82	+9 5.1	2.154	3.074	7.8	21.6	12 7	6 27.66	+21 11.0	1.792	2.732	7.6	20.2
12 17	6 15.63	+8 46.3	2.130	3.085	5.4	21.4	12 17	6 17.38	+21 22.2	1.750	2.726	3.3	19.9
12 27	6 6.92	+8 38.8	2.135	3.095	4.8	21.4	12 27	6 6.14	+21 33.3	1.738	2.720	1.6	19.8
1 6	5 58.57	+8 42.5	2.169	3.105	6.7	21.5	1 6	5 55.21	+21 43.4	1.756	2.713	6.0	20.1
1 16	5 51.41	+8 56.7	2.231	3.114	9.4	21.7	1 16	5 45.77	+21 52.6	1.803	2.705	10.2	20.3
1 26	5 46.09	+9 19.6	2.318	3.124	12.1	21.9	1 26	5 38.78	+22 1.6	1.874	2.696	13.8	20.5
69282	1990 <i>SV</i> ₆		12 23.9	37°73'	9°7'/23.3	18	388113	2005 <i>UP</i> ₄₀₂		12 23.9	1°82'	0°8'/23.8	18
11 17	6 45.49	+43 40.0	1.579	2.361	18.0	17.7	11 17	6 34.39	+23 9.3	1.092	1.935	20.4	20.1
11 27	6 40.54	+45 10.1	1.517	2.369	15.1	17.5	11 27	6 32.15	+23 36.9	1.026	1.933	15.9	19.9
12 7	6 31.43	+46 26.9	1.476	2.377	12.2	17.4	12 7	6 26.04	+24 9.4	0.979	1.931	10.5	19.5
12 17	6 19.09	+47 19.9	1.458	2.385	10.1	17.3	12 17	6 16.90	+24 43.1	0.953	1.932	4.4	19.2
12 27	6 5.31	+47 41.2	1.465	2.395	9.9	17.3	12 27	6 6.36	+25 13.5	0.951	1.933	2.2	19.1
1 6	5 52.34	+47 29.5	1.497	2.404	11.5	17.4	1 6	5 56.45	+25 37.6	0.974	1.937	8.3	19.5
1 16	5 42.10	+46 49.9	1.553	2.414	14.1	17.6	1 16	5 49.00	+25 55.2	1.019	1.941	13.9	19.8
1 26	5 35.85	+45 51.4	1.629	2.424	16.8	17.8	1 26	5 45.25	+26 7.6	1.084	1.948	18.7	20.1
139591	2001 <i>QS</i> ₁₁₃		12 23.9	22°22'	0°9'/23.9	18	365640	2010 <i>UA</i> ₉₃		12 23.9	186		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
476541	2008 <i>HM</i> ₃₆		12 23.9 335°41	2°3/24.1	18		110105	2001 <i>SK</i> ₁₃₁		12 23.9 173°96	1°5/23.9	18	
11 17	6 38.70	+16 53.5	1.397	2.211	18.4	21.1	11 17	6 39.28	+27 17.6	2.069	2.863	13.9	20.2
11 27	6 34.62	+17 2.4	1.319	2.208	14.4	20.8	11 27	6 34.09	+27 29.2	1.985	2.864	10.8	20.0
12 7	6 27.25	+17 20.7	1.262	2.205	9.7	20.6	12 7	6 26.38	+27 38.9	1.924	2.865	7.2	19.7
12 17	6 17.33	+17 47.7	1.228	2.203	4.7	20.3	12 17	6 16.83	+27 44.2	1.890	2.865	3.3	19.5
12 27	6 6.18	+18 21.4	1.221	2.201	2.9	20.1	12 27	6 6.48	+27 43.0	1.886	2.866	2.0	19.4
1 6	5 55.46	+18 59.1	1.240	2.199	7.6	20.4	1 6	5 56.53	+27 35.2	1.911	2.866	5.7	19.6
1 16	5 46.68	+19 38.8	1.285	2.197	12.6	20.7	1 16	5 48.07	+27 21.9	1.964	2.866	9.5	19.9
1 26	5 40.99	+20 18.9	1.352	2.196	16.9	21.0	1 26	5 41.97	+27 5.7	2.042	2.866	12.8	20.1
392287	2010 <i>CM</i> ₁₈		12 23.9 206°93	1°1/23.8	18		271471	2004 <i>EM</i> ₉₃		12 23.9 277°06	2°7/23.7	18	
11 17	6 41.36	+25 58.6	2.038	2.829	14.2	22.2	11 17	6 41.40	+28 6.6	1.511	2.321	17.4	21.2
11 27	6 35.78	+26 10.7	1.947	2.825	11.0	22.0	11 27	6 36.87	+28 38.2	1.426	2.313	13.7	21.0
12 7	6 27.56	+26 22.0	1.879	2.819	7.3	21.8	12 7	6 28.85	+29 9.0	1.363	2.306	9.2	20.7
12 17	6 17.34	+26 29.9	1.838	2.814	3.2	21.5	12 17	6 18.05	+29 34.1	1.323	2.298	4.6	20.4
12 27	6 6.19	+26 32.3	1.826	2.807	1.8	21.4	12 27	6 5.89	+29 48.8	1.311	2.290	3.3	20.3
1 6	5 55.38	+26 28.6	1.845	2.800	5.9	21.6	1 6	5 54.12	+29 51.3	1.326	2.282	7.7	20.6
1 16	5 46.07	+26 19.8	1.892	2.793	9.8	21.9	1 16	5 44.41	+29 43.1	1.367	2.274	12.4	20.8
1 26	5 39.21	+26 8.2	1.964	2.785	13.3	22.1	1 26	5 37.98	+29 28.2	1.430	2.266	16.6	21.0
254807	2005 <i>QG</i> ₁₀₉		12 23.9 105°53	1°1/23.9	18		434494	2005 <i>ST</i> ₃₅		12 23.9 133°88	0°6/23.9	16	
11 17	6 38.61	+20 5.0	2.208	2.996	13.3	21.8	11 17	6 42.70	+21 2.3	1.887	2.677	15.2	22.7
11 27	6 33.10	+20 0.5	2.138	3.014	10.3	21.6	11 27	6 36.69	+21 11.3	1.814	2.691	11.7	22.5
12 7	6 25.46	+19 58.6	2.092	3.031	6.7	21.4	12 7	6 28.04	+21 23.2	1.764	2.705	7.7	22.2
12 17	6 16.35	+19 58.4	2.073	3.048	3.0	21.2	12 17	6 17.50	+21 36.3	1.741	2.717	3.3	22.0
12 27	6 6.69	+19 59.6	2.084	3.065	1.6	21.1	12 27	6 6.20	+21 48.9	1.747	2.729	1.5	21.9
1 6	5 57.51	+20 1.6	2.126	3.081	5.2	21.4	1 6	5 55.43	+21 59.9	1.784	2.740	5.9	22.2
1 16	5 49.69	+20 4.8	2.196	3.097	8.7	21.7	1 16	5 46.33	+22 9.6	1.849	2.751	10.0	22.5
1 26	5 43.93	+20 9.4	2.292	3.112	11.7	21.9	1 26	5 39.75	+22 18.7	1.938	2.761	13.4	22.7
522005	2015 <i>XT</i> ₁₃₃		12 23.9 107°26	0°0/23.9	18		363932	2005 <i>TT</i> ₅₃		12 23.9 114°11	6°4/24.3	18	
11 17	6 37.94	+22 47.7	2.071	2.867	13.8	21.9	11 17	6 35.56	+ 5 36.3	2.115	2.880	14.6	20.7
11 27	6 32.91	+22 56.3	1.993	2.874	10.7	21.7	11 27	6 30.85	+ 4 53.5	2.040	2.887	12.0	20.6
12 7	6 25.53	+23 6.2	1.939	2.881	7.0	21.5	12 7	6 24.07	+ 4 22.6	1.988	2.894	9.3	20.4
12 17	6 16.44	+23 16.0	1.911	2.888	2.9	21.2	12 17	6 15.82	+ 4 6.3	1.960	2.900	7.0	20.3
12 27	6 6.64	+23 24.1	1.913	2.894	1.3	21.1	12 27	6 6.96	+ 4 6.5	1.961	2.906	6.5	20.3
1 6	5 57.25	+23 29.8	1.944	2.901	5.4	21.4	1 6	5 58.46	+ 4 23.0	1.990	2.912	8.1	20.4
1 16	5 49.28	+23 33.5	2.004	2.908	9.2	21.6	1 16	5 51.19	+ 4 54.1	2.045	2.918	10.6	20.6
1 26	5 43.54	+23 36.2	2.088	2.914	12.5	21.9	1 26	5 45.87	+ 5 36.6	2.125	2.924	13.2	20.7
60402	2000 <i>BL</i> ₂₇		12 23.9 290°69	2°9/24.1	18		196056	2002 <i>TK</i> ₂		12 23.9 60°49	4°6/24.1	18	
11 17	6 38.13	+16 23.7	1.490	2.300	17.6	19.2	11 17	6 34.51	+10 32.8	2.197	2.977	13.7	20.2
11 27	6 34.10	+16 18.0	1.403	2.288	13.9	18.9	11 27	6 29.91	+ 9 55.2	2.130	2.992	10.9	20.0
12 7	6 26.90	+16 20.6	1.335	2.277	9.5	18.6	12 7	6 23.37	+ 9 25.8	2.086	3.008	7.9	19.8
12 17	6 17.21	+16 31.7	1.292	2.265	4.9	18.3	12 17	6 15.49	+ 9 6.6	2.068	3.024	5.4	19.7
12 27	6 6.23	+16 50.6	1.275	2.254	3.3	18.2	12 27	6 7.12	+ 8 58.8	2.079	3.040	4.8	19.7
1 6	5 55.53	+17 15.9	1.286	2.242	7.7	18.4	1 6	5 59.18	+ 9 2.3	2.118	3.055	6.7	19.9
1 16	5 46.59	+17 46.3	1.321	2.231	12.5	18.7	1 16	5 52.45	+ 9 16.3	2.185	3.071	9.5	20.1
1 26	5 40.58	+18 20.2	1.380	2.220	16.9	18.9	1 26	5 47.59	+ 9 38.9	2.277	3.087	12.1	20.3
141755	2002 <i>LN</i> ₅₅		12 23.9 210°22	0°7/23.9	18		472031	2013 <i>YN</i> ₁₇		12 23.9 352°70	0°7/23.9	18	
11 17	6 42.83	+21 50.7	1.890	2.680	15.2	21.1	11 17	6 34.96	+22 35.7	1.123	1.963	20.2	20.8
11 27	6 37.05	+21 44.0	1.797	2.674	11.8	20.8	11 27	6 32.49	+22 25.4	1.052	1.957	15.8	20.5
12 7	6 28.47	+21 38.7	1.726	2.667	7.8	20.6	12 7	6 26.23	+22 17.2	0.999	1.951	10.4	20.2
12 17	6 17.76	+21 33.5	1.682	2.658	3.4	20.3	12 17	6 17.00	+22 9.8	0.969	1.947	4.4	19.9
12 27	6 6.03	+21 27.4	1.668	2.650	1.7	20.1	12 27	6 6.41	+22 2.3	0.962	1.944	2.1	19.7
1 6	5 54.64	+21 20.4	1.684	2.640	6.2	20.4	1 6	5 56.43	+21 54.7	0.980	1.943	8.3	20.1
1 16	5 44.83	+21 13.2	1.727	2.629	10.6	20.7	1 16	5 48.82	+21 48.1	1.020	1.943	13.9	20.4
1 26	5 37.60	+21 7.5	1.796	2.618	14.4	20.9	1 26	5 44.83	+21 44.4	1.080	1.944	18.8	20.7
78347	2002 <i>PM</i> ₉₄		12 23.9 110°17	4°3/24.2	18		421119	2013 <i>QK</i> ₇₆		12 23.9 19°67	1°2/23.9	17	
11 17	6 34.29	+ 9 44.5	2.458	3.229	12.6	19.9	11 17	6 34.93	+20 30.8	2.129	2.927	13.4	21.0
11 27	6 29.60	+ 9 20.0	2.381	3.238	10.1	19.8	11 27	6 30.53	+20 16.2	2.048	2.929	10.4	20.8
12 7	6 23.13	+ 9 3.9	2.328	3.247	7.4	19.6	12 7	6 23.94	+20 3.6	1.990	2.932	6.9	20.5
12 17	6 15.39	+ 8 57.4	2.301	3.255	5.0	19.5	12 17	6 15.79	+19 52.8	1.959	2.935	3.1	20.3
12 27	6 7.14	+ 9 1.3	2.303	3.264	4.4	19.5	12 27	6 7.00	+19 43.5	1.958	2.938	1.8	20.2
1 6	5 59.21	+ 9 15.3	2.335	3.272	6.2	19.6	1 6	5 58.58	+19 36.1	1.986	2.942	5.4	20.5
1 16	5 52.34	+ 9 38.2	2.396	3.280	8.8	19.8	1 16	5 51.47	+19 30.9	2.041	2.946	9.0	20.7
1 26	5 47.16	+10 8.4	2.481	3.288	11.3	20.0	1 26	5 46.39	+19 28.6	2.122	2.950	12.2	20.9
246076	2006 <i>WB</i> ₁₅₀		12 23.9 323°30	0°4/23.9	18		149380	2002 <i>YJ</i> ₄		12 23.9 355°07	1°1/23.9	18	
11 17	6 37.49	+22 43.5	1.938	2.738	14.5	21.2	11 17	6 37.00	+20 5.8	1.252	2.080	19.3	19.7
11 27	6 32.78	+22 36.9	1.854	2.737	11.2	21.0	11 27	6 33.69	+20 15.0	1.179	2.077	15.0	19.4
12 7	6 25.57	+22 31.1	1.792	2.736	7.4	20.8	12 7	6 26.85	+20 30.9	1.126	2.075	10.0	19.1
12 17	6 16.50	+22 24.9	1.757	2.734	3.1	20.5	12 17	6 17.24	+20 51.7	1.095	2.073	4.3	18.8
12 27	6 6.62	+22 17.8	1.751	2.733	1.4	20.4	12 27	6 6.34	+21 14.9	1.090	2.072	2.1	18.6
1 6	5 57.14	+22 9.6	1.774	2.732	5.8	20.7	1 6	5 55.96	+21 38.5	1.110	2.072	7.8	19.0
1 16	5 49.15	+22 1.3	1.825	2.731	9.8	20.9	1 16	5 47.74	+22 1.5	1.154	2.072	13.2	19.3
1 26	5 43.51	+21 54.1	1.900	2.730	13.3	21.1	1 26	5 42.89	+22 23.9	1.220	2.073	17.7	19.5
453751	2011 <i>CJ</i> ₆₈		12 23.9 173°52	1°5/24.0	18		478664	2012 <i>TV</i> ₂₅₇		12 23.9 18°9			

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
490010	2008 SZ ₂₃₆		12 23.9	89°68	7°5/23.5	17	65142	2002 CK ₁₁₁		12 23.9	78°09	4°8/24.5	18
11 17	6 43.79	+45 27.7	2.398	3.149	13.5	21.3	11 17	6 41.62	+10 13.5	1.724	2.504	16.8	18.8
11 27	6 37.88	+46 32.6	2.328	3.157	11.3	21.1	11 27	6 35.67	+9 59.5	1.673	2.536	13.3	18.6
12 7	6 29.04	+47 25.9	2.281	3.165	9.3	21.0	12 7	6 27.24	+9 57.6	1.643	2.568	9.5	18.5
12 17	6 18.01	+48 1.3	2.259	3.173	7.8	20.9	12 17	6 17.15	+10 8.6	1.639	2.599	6.0	18.3
12 27	6 6.03	+48 14.2	2.264	3.182	7.5	20.9	12 27	6 6.55	+10 32.0	1.664	2.630	5.0	18.3
1 6	5 54.55	+48 3.9	2.297	3.190	8.7	21.0	1 6	5 56.67	+11 6.0	1.717	2.660	7.4	18.5
1 16	5 44.89	+47 33.3	2.355	3.198	10.6	21.2	1 16	5 48.54	+11 48.0	1.797	2.690	10.8	18.8
1 26	5 38.00	+46 47.7	2.437	3.206	12.6	21.3	1 26	5 42.87	+12 35.0	1.901	2.719	13.9	19.1
518504	2006 DH ₇₁		12 23.9	261°49	1°0/23.9	18	331701	2002 RC ₅₅		12 23.9	105°73	3°7/23.9	18
11 17	6 39.08	+20 41.0	1.802	2.603	15.4	22.2	11 17	6 42.02	+15 44.0	1.595	2.391	17.3	20.7
11 27	6 34.38	+20 40.0	1.707	2.590	12.0	22.0	11 27	6 36.42	+15 10.9	1.530	2.407	13.5	20.5
12 7	6 26.87	+20 42.3	1.634	2.576	8.0	21.7	12 7	6 27.98	+14 44.4	1.486	2.422	9.3	20.3
12 17	6 17.17	+20 46.6	1.587	2.563	3.5	21.4	12 17	6 17.53	+14 25.5	1.467	2.437	5.1	20.1
12 27	6 6.38	+20 52.0	1.568	2.549	1.8	21.2	12 27	6 6.36	+14 15.3	1.477	2.452	4.0	20.1
1 6	5 55.83	+20 57.6	1.578	2.535	6.4	21.5	1 6	5 55.85	+14 13.8	1.515	2.466	7.4	20.3
1 16	5 46.80	+21 3.6	1.615	2.521	10.9	21.7	1 16	5 47.23	+14 20.7	1.579	2.479	11.5	20.6
1 26	5 40.33	+21 10.8	1.676	2.507	14.8	21.9	1 26	5 41.34	+14 34.9	1.667	2.493	15.1	20.8
332967	2011 EV ₇₄		12 23.9	325°88	6°6/24.3	18	119104	2001 ON ₅₃		12 23.9	106°93	2°9/23.7	18
11 17	6 33.16	+3 43.7	2.311	3.069	13.7	20.8	11 17	6 44.24	+28 28.5	1.672	2.471	16.5	20.3
11 27	6 28.93	+3 2.2	2.229	3.068	11.4	20.7	11 27	6 38.48	+29 15.0	1.605	2.485	12.8	20.1
12 7	6 22.82	+2 32.7	2.168	3.066	9.0	20.5	12 7	6 29.54	+30 0.1	1.560	2.499	8.6	19.8
12 17	6 15.34	+2 18.1	2.133	3.064	7.1	20.4	12 17	6 18.26	+30 38.3	1.541	2.513	4.4	19.6
12 27	6 7.25	+2 20.3	2.126	3.063	6.7	20.4	12 27	6 6.01	+31 5.2	1.550	2.527	3.4	19.6
1 6	5 59.42	+2 39.1	2.146	3.061	8.1	20.5	1 6	5 54.39	+31 18.9	1.588	2.540	7.1	19.8
1 16	5 52.65	+3 13.1	2.194	3.060	10.3	20.6	1 16	5 44.80	+31 20.8	1.653	2.552	11.1	20.1
1 26	5 47.62	+3 59.1	2.265	3.059	12.7	20.8	1 26	5 38.24	+31 14.6	1.741	2.565	14.7	20.4
364006	2005 UR ₄₇₂		12 23.9	101°52	0°7/23.9	18	517933	2015 TV ₂₃₂		12 23.9	48°09	0°2/23.9	18
11 17	6 38.08	+24 31.6	2.120	2.915	13.6	21.3	11 17	6 38.54	+24 3.0	1.716	2.523	15.8	20.8
11 27	6 33.02	+24 47.3	2.043	2.922	10.5	21.1	11 27	6 33.83	+24 0.5	1.644	2.531	12.2	20.6
12 7	6 25.62	+25 3.5	1.989	2.930	6.9	20.9	12 7	6 26.36	+23 58.1	1.595	2.539	8.0	20.4
12 17	6 16.53	+25 17.8	1.962	2.938	2.9	20.7	12 17	6 16.89	+23 54.1	1.571	2.548	3.3	20.1
12 27	6 6.73	+25 28.6	1.964	2.946	1.5	20.6	12 27	6 6.64	+23 47.4	1.575	2.557	1.5	20.0
1 6	5 57.34	+25 35.1	1.997	2.953	5.4	20.9	1 6	5 56.95	+23 38.0	1.608	2.567	6.2	20.4
1 16	5 49.36	+25 37.6	2.057	2.961	9.1	21.1	1 16	5 49.02	+23 27.2	1.667	2.576	10.4	20.6
1 26	5 43.59	+25 37.7	2.143	2.968	12.2	21.4	1 26	5 43.71	+23 16.7	1.751	2.586	14.1	20.9
97121	1999 VK ₉₇		12 23.9	102°31	1°3/23.9	18	494161	2016 ED ₈₉		12 23.9	15°59	1°2/23.9	17
11 17	6 39.99	+20 25.1	1.839	2.636	15.3	20.5	11 17	6 34.70	+19 59.3	2.313	3.106	12.6	21.8
11 27	6 34.64	+20 14.3	1.768	2.648	11.8	20.3	11 27	6 30.22	+19 51.2	2.229	3.107	9.8	21.6
12 7	6 26.72	+20 6.3	1.719	2.661	7.8	20.1	12 7	6 23.71	+19 45.5	2.168	3.108	6.5	21.4
12 17	6 16.98	+20 0.1	1.698	2.673	3.4	19.8	12 17	6 15.74	+19 41.9	2.134	3.109	2.9	21.2
12 27	6 6.55	+19 55.5	1.705	2.685	1.9	19.7	12 27	6 7.15	+19 40.0	2.130	3.110	1.7	21.1
1 6	5 56.67	+19 52.2	1.741	2.697	6.0	20.0	1 6	5 58.86	+19 39.7	2.155	3.111	5.1	21.4
1 16	5 48.43	+19 50.9	1.805	2.709	10.0	20.3	1 16	5 51.76	+19 41.1	2.210	3.113	8.5	21.6
1 26	5 42.65	+19 52.1	1.893	2.720	13.5	20.5	1 26	5 46.53	+19 44.6	2.289	3.114	11.5	21.8
26192	1997 CH ₁₆		12 23.9	126°81	0°3/23.9	18	9744	Nielsen		12 23.9	227°24	1°7/24.1	18
11 17	6 44.11	+23 39.4	1.845	2.636	15.5	20.6	11 17	6 38.99	+16 30.0	2.507	3.281	12.3	18.9
11 27	6 37.84	+23 48.8	1.775	2.653	11.9	20.4	11 27	6 33.50	+16 44.6	2.401	3.268	9.6	18.7
12 7	6 28.83	+23 58.8	1.728	2.669	7.8	20.2	12 7	6 25.91	+17 5.0	2.319	3.253	6.5	18.5
12 17	6 17.86	+24 7.1	1.708	2.684	3.2	19.9	12 17	6 16.71	+17 30.6	2.266	3.238	3.2	18.2
12 27	6 6.16	+24 11.8	1.717	2.699	1.5	19.8	12 27	6 6.68	+18 0.1	2.244	3.222	2.0	18.1
1 6	5 55.07	+24 12.5	1.756	2.713	6.0	20.2	1 6	5 56.75	+18 32.0	2.253	3.206	5.2	18.3
1 16	5 45.77	+24 10.1	1.824	2.726	10.1	20.4	1 16	5 47.85	+19 5.3	2.292	3.188	8.6	18.5
1 26	5 39.12	+24 6.4	1.916	2.738	13.6	20.7	1 26	5 40.75	+19 39.0	2.358	3.170	11.7	18.7
308777	2006 PG ₂₄		12 23.9	66°73	5°4/24.9	18	182323	2001 OC ₁₁₃		12 23.9	73°60	6°8/25.7	18
11 17	6 37.98	+7 34.2	1.747	2.526	16.6	20.0	11 17	6 38.08	+2 6.0	1.897	2.652	16.3	19.8
11 27	6 33.12	+7 39.1	1.680	2.541	13.4	19.8	11 27	6 33.09	+2 16.4	1.821	2.660	13.6	19.6
12 7	6 25.75	+7 59.4	1.635	2.556	9.8	19.6	12 7	6 25.73	+2 45.9	1.766	2.667	10.5	19.4
12 17	6 16.60	+8 35.8	1.615	2.572	6.5	19.5	12 17	6 16.62	+3 36.2	1.735	2.674	7.8	19.3
12 27	6 6.72	+9 27.3	1.623	2.587	5.4	19.5	12 27	6 6.75	+4 46.6	1.733	2.682	6.9	19.2
1 6	5 57.34	+10 30.8	1.659	2.602	7.7	19.6	1 6	5 57.24	+6 13.5	1.759	2.689	8.4	19.4
1 16	5 49.51	+11 42.2	1.722	2.617	11.0	19.9	1 16	5 49.12	+7 51.8	1.813	2.697	11.2	19.5
1 26	5 44.05	+12 57.5	1.809	2.633	14.2	20.1	1 26	5 43.21	+9 35.6	1.893	2.705	14.1	19.7
49416	1998 XG ₇₃		12 23.9	331°24	3°9/24.3	18	200055	2008 PO ₉		12 23.9	106°75	2°5/23.9	18
11 17	6 41.01	+34 20.2	1.643	2.445	16.6	18.1	11 17	6 45.74	+29 49.1	1.830	2.620	15.6	20.3
11 27	6 36.30	+34 15.2	1.558	2.437	13.2	17.9	11 27	6 39.16	+30 4.0	1.767	2.642	12.1	20.1
12 7	6 28.27	+34 0.2	1.493	2.429	9.3	17.6	12 7	6 29.69	+30 14.3	1.726	2.663	8.1	19.9
12 17	6 17.76	+33 30.9	1.453	2.421	5.3	17.4	12 17	6 18.23	+30 16.3	1.711	2.684	4.1	19.7
12 27	6 6.19	+32 45.3	1.440	2.414	4.1	17.3	12 27	6 6.09	+30 7.8	1.726	2.704	2.8	19.6
1 6	5 55.24	+31 45.0	1.455	2.408	7.5	17.5	1 6	5 54.72	+29 49.1	1.771	2.724	6.4	19.9
1 16	5 46.38	+30 35.3	1.496	2.402	11.7	17.7	1 16	5 45.34	+29 23.0	1.843	2.742	10.2	20.2
1 26	5 40.66	+29 22.7	1.561	2.396	15.5	17.9	1 26	5 38.78	+28 53.4	1.941	2.761	13.5	20.4
108819	2001 OW ₇₇		12 23.9	139°18	0°3/23.9	18	201663	2003 UB ₁₂		12 23.9	45°15	0°7/23.9	16
11 17	6 42.14	+20 58.0	1.768	2.563	15.8	19.8	11						

EPHEMERIDES

12 23.9

12 23.9

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
230168	2001 <i>QO</i> ₂₆₅		12 23.9 121°25	0°8/23.9	18		172246	2002 <i>RS</i> ₂₂₃		12 23.9 337°12	4°5/23.5	17	
11 17	6 42.81	+21 21.7	1.832	2.625	15.5	21.4	11 17	6 39.78	+31 49.3	1.658	2.463	16.3	19.6
11 27	6 36.80	+21 15.8	1.763	2.641	12.0	21.2	11 27	6 35.48	+32 45.5	1.577	2.458	12.9	19.4
12 7	6 28.14	+21 12.0	1.716	2.657	7.8	21.0	12 7	6 27.90	+33 39.0	1.518	2.454	9.1	19.2
12 17	6 17.60	+21 8.8	1.696	2.672	3.4	20.7	12 17	6 17.72	+34 23.5	1.483	2.450	5.5	18.9
12 27	6 6.36	+21 5.6	1.705	2.686	1.7	20.6	12 27	6 6.28	+34 53.4	1.476	2.446	4.9	18.9
1 6	5 55.74	+21 2.2	1.744	2.700	6.0	20.9	1 6	5 55.22	+35 6.1	1.496	2.443	8.0	19.1
1 16	5 46.84	+20 59.2	1.810	2.713	10.1	21.2	1 16	5 46.09	+35 3.0	1.542	2.440	11.9	19.3
1 26	5 40.52	+20 57.8	1.902	2.726	13.6	21.5	1 26	5 40.04	+34 48.3	1.611	2.437	15.5	19.5
339015	2004 <i>GF</i> ₇₈		12 23.9 180°42	2°9/23.9	18		156828	2003 <i>BQ</i> ₇₁		12 23.9 334°99	6°3/24.3	18	
11 17	6 40.98	+16 13.0	2.014	2.797	14.6	22.0	11 17	6 33.42	+11 26.9	1.212	2.037	20.0	19.8
11 27	6 35.28	+15 49.8	1.928	2.799	11.5	21.8	11 27	6 31.01	+10 51.3	1.132	2.022	16.2	19.5
12 7	6 27.14	+15 31.3	1.866	2.800	7.9	21.5	12 7	6 25.20	+10 28.7	1.071	2.009	11.8	19.2
12 17	6 17.22	+15 18.2	1.830	2.800	4.2	21.3	12 17	6 16.67	+10 23.2	1.031	1.996	7.7	18.9
12 27	6 6.51	+15 10.9	1.824	2.800	3.2	21.3	12 27	6 6.74	+10 37.0	1.015	1.984	6.6	18.8
1 6	5 56.17	+15 9.5	1.848	2.799	6.4	21.5	1 6	5 57.12	+11 9.5	1.022	1.974	10.0	19.0
1 16	5 47.27	+15 14.1	1.901	2.797	10.1	21.7	1 16	5 49.46	+11 58.0	1.053	1.965	14.7	19.2
1 26	5 40.64	+15 24.3	1.978	2.794	13.4	21.9	1 26	5 45.01	+12 57.6	1.103	1.957	19.2	19.4
308781	2006 <i>PX</i> ₃₂		12 23.9 95°44	0°6/23.8	18		267829	2003 <i>UX</i> ₉₃		12 23.9 106°57	3°6/23.9	18	
11 17	6 41.38	+21 52.0	1.960	2.752	14.7	20.4	11 17	6 40.24	+34 31.0	2.487	3.263	12.3	20.7
11 27	6 35.71	+22 42.6	1.891	2.769	11.3	20.2	11 27	6 34.48	+34 57.3	2.414	3.278	9.7	20.5
12 7	6 27.47	+23 37.3	1.845	2.786	7.4	20.0	12 7	6 26.47	+35 17.4	2.366	3.293	6.9	20.4
12 17	6 17.35	+24 32.6	1.827	2.803	3.1	19.8	12 17	6 16.89	+35 28.0	2.345	3.307	4.3	20.2
12 27	6 6.45	+25 24.4	1.839	2.820	1.5	19.7	12 27	6 6.72	+35 26.8	2.354	3.321	3.7	20.2
1 6	5 55.99	+26 10.0	1.881	2.837	5.7	20.0	1 6	5 57.02	+35 13.7	2.393	3.334	5.8	20.4
1 16	5 47.10	+26 48.4	1.951	2.853	9.6	20.3	1 16	5 48.74	+34 50.6	2.461	3.348	8.5	20.6
1 26	5 40.64	+27 20.1	2.047	2.869	12.9	20.5	1 26	5 42.61	+34 20.9	2.554	3.361	11.0	20.8
3712	Kraft		12 23.9 335°38	7°8/26.6	18 A		420698	2012 <i>KP</i> ₄₆		12 23.9 135°53	3°4/23.1	17	
11 17	6 56.42	+47 14.3	1.441	2.206	20.2	15.2	11 17	6 40.92	+31 53.1	2.797	3.569	11.2	21.0
11 27	6 49.18	+46 21.2	1.340	2.185	17.1	14.9	11 27	6 34.96	+33 4.7	2.716	3.578	8.8	20.8
12 7	6 37.05	+44 56.5	1.258	2.166	13.4	14.7	12 7	6 26.85	+34 14.3	2.661	3.587	6.2	20.7
12 17	6 21.43	+42 50.3	1.200	2.147	9.6	14.4	12 17	6 17.11	+35 17.3	2.635	3.596	3.9	20.5
12 27	6 4.73	+39 59.3	1.170	2.129	7.8	14.2	12 27	6 6.59	+36 9.8	2.641	3.604	3.6	20.5
1 6	5 49.59	+36 32.4	1.169	2.113	10.0	14.3	1 6	5 56.24	+36 49.6	2.678	3.613	5.6	20.7
1 16	5 38.01	+32 48.0	1.197	2.098	14.3	14.5	1 16	5 47.03	+37 16.8	2.744	3.620	8.1	20.9
1 26	5 31.03	+29 6.7	1.251	2.085	18.7	14.7	1 26	5 39.72	+37 33.0	2.837	3.628	10.5	21.0
449585	2014 <i>JF</i> ₃₄		12 23.9 104°81	3°2/24.0	18		300446	2007 <i>TK</i> ₅₄		12 23.9 304°00	5°8/23.8	17	
11 17	6 38.13	+15 19.4	1.928	2.718	14.9	21.7	11 17	6 35.86	+11 36.4	1.672	2.469	16.5	20.9
11 27	6 33.08	+14 54.1	1.854	2.728	11.7	21.5	11 27	6 31.94	+10 43.9	1.581	2.454	13.4	20.6
12 7	6 25.67	+14 34.9	1.803	2.738	8.0	21.3	12 7	6 25.32	+9 59.0	1.511	2.439	9.8	20.4
12 17	6 16.57	+14 22.4	1.779	2.748	4.5	21.1	12 17	6 16.59	+9 25.2	1.465	2.425	6.6	20.2
12 27	6 6.82	+14 17.4	1.783	2.757	3.5	21.1	12 27	6 6.82	+9 5.5	1.446	2.410	6.0	20.1
1 6	5 57.53	+14 19.8	1.816	2.766	6.5	21.3	1 6	5 57.30	+9 1.1	1.455	2.396	8.7	20.2
1 16	5 49.70	+14 29.0	1.877	2.776	10.1	21.5	1 16	5 49.26	+9 11.9	1.488	2.383	12.5	20.4
1 26	5 44.12	+14 44.4	1.962	2.785	13.3	21.8	1 26	5 43.72	+9 35.9	1.544	2.369	16.1	20.6
8831	Brändström		12 23.9 108°17	1°4/24.0	18		90425	2004 <i>AK</i> ₂		12 23.9 194°29	1°1/24.0	18	
11 17	6 39.90	+19 20.3	1.846	2.641	15.3	18.1	11 17	6 38.48	+19 33.9	2.239	3.026	13.2	20.3
11 27	6 34.61	+19 20.8	1.774	2.653	11.8	17.9	11 27	6 33.25	+19 37.0	2.149	3.024	10.3	20.1
12 7	6 26.75	+19 25.5	1.724	2.665	7.8	17.7	12 7	6 25.79	+19 43.6	2.083	3.022	6.8	19.9
12 17	6 17.05	+19 33.3	1.701	2.677	3.5	17.4	12 17	6 16.68	+19 52.7	2.044	3.019	3.0	19.7
12 27	6 6.61	+19 43.3	1.707	2.688	1.9	17.3	12 27	6 6.80	+20 3.3	2.036	3.016	1.7	19.6
1 6	5 56.68	+19 54.5	1.742	2.699	6.0	17.6	1 6	5 57.21	+20 14.7	2.057	3.013	5.3	19.8
1 16	5 48.36	+20 6.8	1.805	2.710	10.0	17.9	1 16	5 48.87	+20 26.6	2.108	3.009	9.0	20.0
1 26	5 42.48	+20 20.2	1.893	2.720	13.5	18.1	1 26	5 42.57	+20 39.3	2.184	3.005	12.2	20.2
24235	1999 <i>XK</i> ₉₅		12 23.9 185°64	3°5/23.6	18		152643	1997 <i>SP</i> ₆		12 23.9 269°92	0°8/23.9	18	
11 17	6 44.20	+29 54.2	1.754	2.549	16.0	18.4	11 17	6 39.69	+21 23.1	1.655	2.460	16.4	20.8
11 27	6 38.61	+30 41.9	1.672	2.549	12.6	18.2	11 27	6 35.15	+21 22.2	1.561	2.446	12.8	20.6
12 7	6 29.79	+31 27.8	1.612	2.549	8.6	18.0	12 7	6 27.57	+21 24.2	1.488	2.432	8.5	20.3
12 17	6 18.47	+32 6.2	1.578	2.548	4.7	17.7	12 17	6 17.58	+21 27.9	1.441	2.418	3.7	20.0
12 27	6 5.95	+32 32.3	1.573	2.547	3.8	17.7	12 27	6 6.37	+21 31.7	1.422	2.404	1.8	19.8
1 6	5 53.84	+32 43.7	1.596	2.545	7.3	17.9	1 6	5 55.41	+21 35.0	1.431	2.389	6.8	20.1
1 16	5 43.63	+32 41.9	1.646	2.543	11.4	18.1	1 16	5 46.13	+21 38.2	1.466	2.375	11.6	20.3
1 26	5 36.43	+32 30.8	1.720	2.540	15.0	18.3	1 26	5 39.64	+21 42.2	1.525	2.360	15.8	20.5
23188	2000 <i>PJ</i> ₂₀		12 23.9 310°21	9°3/25.3	18		477429	2009 <i>WW</i> ₉₆		12 23.9 54°19	1°7/23.9	18	
11 17	6 34.71	- 0 41.4	1.783	2.540	17.2	17.5	11 17	6 41.05	+20 12.4	1.291	2.111	19.3	21.4
11 27	6 30.99	- 1 6.6	1.684	2.516	14.8	17.3	11 27	6 36.31	+19 59.3	1.236	2.128	14.9	21.1
12 7	6 24.70	- 1 11.7	1.604	2.493	12.2	17.0	12 7	6 28.20	+19 50.5	1.201	2.147	9.8	20.9
12 17	6 16.35	- 0 51.8	1.547	2.470	10.0	16.9	12 17	6 17.71	+19 45.3	1.189	2.166	4.4	20.6
12 27	6 6.87	- 0 3.9	1.515	2.447	9.3	16.8	12 27	6 6.41	+19 42.9	1.204	2.185	2.4	20.6
1 6	5 57.45	+ 1 10.8	1.509	2.425	10.7	16.8	1 6	5 55.99	+19 43.2	1.245	2.204	7.5	20.9
1 16	5 49.28	+ 2 48.2	1.528	2.403	13.5	16.9	1 16	5 47.87	+19 46.4	1.311	2.224	12.3	21.3
1 26	5 43.39	+ 4 41.5	1.571	2.382	16.6	17.1	1 26	5 42.98	+19 52.9	1.399	2.244	16.4	21.6
128446	2004 <i>NJ</i> ₂₁		12 23.9 185°01	0°4/23.9	18		304196	2006 <i>QL</i> ₉₂		12 23.9 113°57	0°4/23.9	18</	

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
160488	2007 <i>BD</i> ₃₃		12 23.9 212°66	3:2/24.4	18		485716	2012 <i>AC</i> ₂₃		12 23.9 68°70	1:5/23.7	17	
11 17	6 36.47	+12 29.5	2.231	3.010	13.5	20.5	11 17	6 40.79	+24 2.8	1.752	2.553	15.7	21.5
11 27	6 31.68	+12 36.5	2.141	3.007	10.7	20.3	11 27	6 35.64	+24 56.6	1.685	2.568	12.1	21.3
12 7	6 24.77	+12 52.3	2.074	3.004	7.5	20.1	12 7	6 27.64	+25 53.4	1.641	2.583	8.0	21.1
12 17	6 16.27	+13 17.3	2.035	3.001	4.3	19.9	12 17	6 17.54	+26 48.7	1.623	2.599	3.5	20.9
12 27	6 7.02	+13 50.6	2.025	2.997	3.3	19.8	12 27	6 6.54	+27 37.9	1.633	2.614	2.2	20.8
1 6	5 58.00	+14 30.6	2.045	2.994	5.9	20.0	1 6	5 56.04	+28 18.3	1.673	2.629	6.3	21.1
1 16	5 50.13	+15 15.4	2.093	2.990	9.2	20.2	1 16	5 47.30	+28 49.1	1.741	2.644	10.4	21.4
1 26	5 44.19	+16 3.2	2.167	2.986	12.3	20.4	1 26	5 41.26	+29 11.9	1.832	2.659	13.9	21.6
374824	2006 <i>UK</i> ₁₇₅		12 23.9 22°14	0:4/23.9	18		184380	2005 <i>LN</i> ₈		12 23.9 179°08	1:2/23.9	18	
11 17	6 36.07	+20 47.7	0.956	1.805	22.2	20.3	11 17	6 43.97	+25 41.1	1.997	2.784	14.6	21.2
11 27	6 33.61	+21 11.7	0.906	1.815	17.2	20.0	11 27	6 37.86	+26 1.4	1.911	2.786	11.3	21.0
12 7	6 27.05	+21 43.6	0.874	1.827	11.3	19.7	12 7	6 29.02	+26 21.6	1.848	2.788	7.5	20.8
12 17	6 17.41	+22 19.9	0.862	1.841	4.7	19.4	12 17	6 18.11	+26 38.5	1.813	2.789	3.3	20.5
12 27	6 6.57	+22 56.1	0.873	1.856	2.1	19.3	12 27	6 6.28	+26 49.5	1.808	2.788	1.8	20.4
1 6	5 56.69	+23 28.8	0.908	1.872	8.5	19.7	1 6	5 54.84	+26 53.6	1.832	2.787	5.9	20.7
1 16	5 49.56	+23 56.7	0.965	1.890	14.2	20.1	1 16	5 45.00	+26 51.6	1.886	2.786	10.0	20.9
1 26	5 46.32	+24 20.5	1.041	1.909	19.0	20.5	1 26	5 37.70	+26 45.8	1.964	2.783	13.4	21.2
252508	2001 <i>UV</i> ₁₆₉		12 23.9 46°22	1:0/23.9	18		516577	2007 <i>ER</i> ₇₃		12 23.9 328°00	1:3/23.9	18	
11 17	6 37.79	+21 36.9	1.778	2.582	15.4	20.7	11 17	6 37.58	+25 3.8	1.292	2.120	18.8	21.5
11 27	6 33.14	+21 22.2	1.705	2.590	11.9	20.4	11 27	6 34.40	+25 21.3	1.210	2.107	14.7	21.3
12 7	6 25.87	+21 9.0	1.654	2.597	7.8	20.2	12 7	6 27.55	+25 40.4	1.147	2.096	9.8	20.9
12 17	6 16.74	+20 56.8	1.629	2.606	3.4	20.0	12 17	6 17.73	+25 57.6	1.108	2.085	4.3	20.6
12 27	6 6.87	+20 45.3	1.633	2.614	1.7	19.9	12 27	6 6.42	+26 9.2	1.093	2.075	2.3	20.4
1 6	5 57.52	+20 34.7	1.665	2.623	6.1	20.2	1 6	5 55.49	+26 13.5	1.104	2.065	7.9	20.8
1 16	5 49.81	+20 26.0	1.724	2.631	10.2	20.4	1 16	5 46.72	+26 11.6	1.140	2.057	13.4	21.0
1 26	5 44.58	+20 20.1	1.807	2.640	13.8	20.7	1 26	5 41.45	+26 6.0	1.196	2.049	18.1	21.3
518364	2017 <i>DZ</i> ₁₂₀		12 23.9 175°86	0:2/23.9	18		286189	2001 <i>US</i> ₅₇		12 23.9 75°62	5:2/24.1	18	
11 17	6 37.13	+23 37.9	2.573	3.358	11.7	21.6	11 17	6 37.31	+10 38.2	1.898	2.682	15.4	21.0
11 27	6 31.90	+23 25.6	2.484	3.359	9.1	21.4	11 27	6 32.40	+9 54.6	1.833	2.697	12.3	20.8
12 7	6 24.74	+23 12.6	2.420	3.360	5.9	21.2	12 7	6 25.21	+9 20.3	1.790	2.713	8.9	20.6
12 17	6 16.21	+22 58.3	2.385	3.361	2.5	21.0	12 17	6 16.44	+8 57.7	1.772	2.729	6.0	20.5
12 27	6 7.11	+22 42.4	2.380	3.362	1.1	20.9	12 27	6 7.09	+8 48.2	1.783	2.745	5.3	20.5
1 6	5 58.33	+22 25.3	2.406	3.362	4.6	21.1	1 6	5 58.26	+8 51.9	1.822	2.760	7.5	20.6
1 16	5 50.70	+22 8.0	2.461	3.362	7.9	21.3	1 16	5 50.88	+9 7.7	1.888	2.776	10.6	20.9
1 26	5 44.86	+21 51.7	2.543	3.361	10.7	21.5	1 26	5 45.67	+9 33.2	1.977	2.791	13.5	21.1
396466	2014 <i>FB</i> ₃₅		12 23.9 306°14	0:8/23.9	18		193254	2000 <i>SV</i> ₇₉		12 23.9 92°46	1:9/24.1	18	
11 17	6 38.57	+24 20.9	1.483	2.299	17.4	21.7	11 17	6 41.44	+18 9.9	1.722	2.518	16.2	21.0
11 27	6 34.74	+24 36.9	1.393	2.285	13.6	21.4	11 27	6 35.86	+18 5.7	1.659	2.538	12.5	20.8
12 7	6 27.55	+24 54.8	1.324	2.271	9.1	21.1	12 7	6 27.60	+18 6.7	1.618	2.558	8.3	20.6
12 17	6 17.67	+25 11.7	1.279	2.257	3.9	20.8	12 17	6 17.46	+18 12.4	1.603	2.577	3.9	20.3
12 27	6 6.40	+25 24.5	1.261	2.243	1.9	20.6	12 27	6 6.65	+18 21.6	1.617	2.596	2.4	20.3
1 6	5 55.41	+25 31.7	1.270	2.230	7.3	20.9	1 6	5 56.48	+18 33.7	1.659	2.615	6.4	20.6
1 16	5 46.31	+25 33.5	1.305	2.217	12.4	21.1	1 16	5 48.07	+18 48.1	1.729	2.633	10.4	20.9
1 26	5 40.34	+25 32.4	1.361	2.205	16.8	21.4	1 26	5 42.25	+19 4.6	1.823	2.651	13.9	21.1
355029	Herve		12 23.9 85°21	7:4/23.9	18		410537	2008 <i>FV</i> ₅₅		12 23.9 258°71	4:1/23.6	18	
11 17	6 46.58	+42 16.7	1.935	2.704	15.6	20.7	11 17	6 40.77	+33 38.8	2.195	2.979	13.5	21.8
11 27	6 40.39	+43 17.1	1.874	2.720	12.9	20.6	11 27	6 35.59	+34 19.3	2.097	2.965	10.8	21.5
12 7	6 30.86	+44 5.4	1.834	2.736	10.1	20.5	12 7	6 27.68	+34 55.5	2.021	2.950	7.7	21.3
12 17	6 18.88	+44 34.2	1.819	2.753	7.9	20.4	12 17	6 17.64	+35 22.7	1.973	2.936	4.9	21.1
12 27	6 5.96	+44 38.6	1.831	2.769	7.5	20.4	12 27	6 6.51	+35 36.9	1.954	2.921	4.3	21.1
1 6	5 53.81	+44 18.5	1.870	2.785	9.1	20.5	1 6	5 55.60	+35 36.6	1.964	2.906	6.8	21.2
1 16	5 43.90	+43 38.1	1.936	2.801	11.6	20.7	1 16	5 46.14	+35 23.1	2.001	2.890	10.1	21.4
1 26	5 37.20	+42 44.2	2.024	2.816	14.1	20.9	1 26	5 39.14	+34 59.7	2.064	2.875	13.2	21.5
366073	2012 <i>CQ</i> ₃₉		12 23.9 117°97	2:1/24.1	18		188782	2005 <i>VD</i> ₉		12 23.9 166°91	1:0/23.9	17	
11 17	6 36.92	+16 40.0	2.137	2.926	13.7	21.2	11 17	6 36.97	+20 13.5	2.163	2.956	13.4	21.9
11 27	6 32.06	+16 41.9	2.057	2.932	10.7	21.0	11 27	6 32.17	+20 10.9	2.078	2.957	10.4	21.7
12 7	6 25.01	+16 49.6	2.001	2.938	7.2	20.8	12 7	6 25.13	+20 11.1	2.017	2.958	6.9	21.5
12 17	6 16.37	+17 2.5	1.971	2.944	3.6	20.6	12 17	6 16.46	+20 13.3	1.983	2.958	3.1	21.3
12 27	6 7.05	+17 20.1	1.971	2.949	2.4	20.5	12 27	6 7.08	+20 16.8	1.978	2.959	1.6	21.1
1 6	5 58.07	+17 41.1	2.001	2.955	5.6	20.7	1 6	5 58.03	+20 21.2	2.003	2.960	5.4	21.4
1 16	5 50.38	+18 4.7	2.058	2.960	9.1	20.9	1 16	5 50.27	+20 26.5	2.056	2.960	9.0	21.6
1 26	5 44.73	+18 30.2	2.142	2.965	12.3	21.1	1 26	5 44.57	+20 33.1	2.135	2.960	12.3	21.8
318156	2004 <i>PR</i> ₁₁₃		12 23.9 77°81	1:0/23.9	18		364382	2006 <i>VU</i> ₂₈		12 23.9 29°51	0:9/23.9	17	
11 17	6 42.67	+20 57.7	1.571	2.373	17.2	21.2	11 17	6 38.51	+25 53.4	1.809	2.613	15.2	21.3
11 27	6 36.98	+20 52.0	1.513	2.397	13.2	21.0	11 27	6 33.83	+25 54.6	1.731	2.616	11.8	21.1
12 7	6 28.38	+20 49.4	1.478	2.421	8.7	20.8	12 7	6 26.44	+25 54.5	1.676	2.619	7.8	20.9
12 17	6 17.76	+20 48.4	1.468	2.444	3.7	20.5	12 17	6 17.05	+25 50.9	1.646	2.622	3.4	20.6
12 27	6 6.48	+20 48.1	1.486	2.467	1.9	20.4	12 27	6 6.83	+25 42.5	1.644	2.626	1.7	20.5
1 6	5 56.01	+20 48.1	1.532	2.490	6.5	20.8	1 6	5 57.10	+25 29.2	1.671	2.629	6.0	20.8
1 16	5 47.54	+20 49.1	1.606	2.513	10.9	21.1	1 16	5 49.04	+25 12.7	1.726	2.633	10.2	21.0
1 26	5 41.90	+20 51.8	1.703	2.535	14.5	21.4	1 26	5 43.54	+24 55.2	1.804	2.637	13.8	21.3
198035	2004 <i>RK</i> ₂₅₃		12 23.9 173°08	11:7/22.8	18		164542	2006 <i>JO</i> ₁₅		12 23.9 100°97	0:0/2		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
300457	2007 <i>TE</i> ₇₉		12 23.9 114°23	3°0/23.8	18		285984	2001 <i>RG</i> ₁₄₉		12 23.9 51°72	3°4/24.4	18	
11 17	6 42.52	+30 21.8	1.929	2.721	14.9	21.4	11 17	6 38.58	+13 33.9	1.604	2.403	17.1	20.3
11 27	6 36.83	+30 53.2	1.857	2.733	11.6	21.2	11 27	6 33.76	+13 39.7	1.549	2.427	13.3	20.1
12 7	6 28.35	+31 20.9	1.808	2.744	7.9	21.0	12 7	6 26.28	+13 56.2	1.515	2.451	9.1	20.0
12 17	6 17.83	+31 40.8	1.785	2.755	4.2	20.8	12 17	6 16.95	+14 22.9	1.506	2.476	5.0	19.8
12 27	6 6.49	+31 49.6	1.791	2.766	3.3	20.8	12 27	6 6.97	+14 58.2	1.525	2.500	3.6	19.7
1 6	5 55.70	+31 46.6	1.826	2.777	6.4	21.0	1 6	5 57.64	+15 39.7	1.571	2.525	6.9	20.0
1 16	5 46.67	+31 33.7	1.889	2.787	10.1	21.3	1 16	5 50.08	+16 24.9	1.645	2.550	10.8	20.3
1 26	5 40.30	+31 14.4	1.977	2.797	13.3	21.5	1 26	5 45.08	+17 11.6	1.742	2.576	14.2	20.6
493252	2014 <i>UC</i> ₁₀₇		12 23.9 15°79	4°6/24.1	17		518427	2002 <i>QK</i> ₆₅		12 23.9 130°16	6°4/24.9	18	
11 17	6 34.46	+11 10.7	2.084	2.869	14.1	21.6	11 17	6 37.80	+ 4 23.9	2.077	2.835	15.0	22.0
11 27	6 30.19	+10 36.6	2.004	2.870	11.3	21.4	11 27	6 32.68	+ 4 4.2	2.003	2.845	12.4	21.8
12 7	6 23.81	+10 10.7	1.946	2.871	8.2	21.2	12 7	6 25.40	+ 3 58.8	1.951	2.854	9.5	21.7
12 17	6 15.90	+ 9 54.8	1.914	2.873	5.4	21.0	12 17	6 16.58	+ 4 9.6	1.924	2.863	7.1	21.5
12 27	6 7.34	+ 9 50.2	1.911	2.875	4.8	21.0	12 27	6 7.11	+ 4 37.4	1.925	2.872	6.4	21.5
1 6	5 59.10	+ 9 57.1	1.936	2.877	6.9	21.1	1 6	5 58.00	+ 5 20.9	1.954	2.880	8.0	21.6
1 16	5 52.10	+10 14.4	1.988	2.879	10.0	21.3	1 16	5 50.19	+ 6 17.0	2.011	2.888	10.6	21.8
1 26	5 47.06	+10 40.5	2.064	2.881	12.9	21.5	1 26	5 44.39	+ 7 22.0	2.093	2.896	13.3	22.0
291917	2006 <i>QS</i> ₁₈		12 23.9 74°48	3°3/23.9	18		334072	2001 <i>PL</i> ₅₁		12 23.9 56°08	5°9/24.4	18	
11 17	6 42.95	+31 23.0	1.795	2.590	15.7	20.6	11 17	6 48.05	+36 35.7	1.306	2.111	19.9	20.8
11 27	6 37.21	+31 48.8	1.734	2.611	12.2	20.4	11 27	6 42.11	+36 59.7	1.259	2.136	15.8	20.6
12 7	6 28.56	+32 9.4	1.695	2.631	8.3	20.2	12 7	6 32.14	+37 11.0	1.230	2.162	11.3	20.4
12 17	6 17.89	+32 20.3	1.683	2.652	4.6	20.0	12 17	6 19.42	+37 2.9	1.225	2.187	7.2	20.3
12 27	6 6.51	+32 18.9	1.699	2.673	3.6	20.0	12 27	6 5.95	+36 31.9	1.245	2.213	6.1	20.3
1 6	5 55.87	+32 5.2	1.743	2.693	6.7	20.3	1 6	5 53.84	+35 40.8	1.292	2.239	8.9	20.5
1 16	5 47.19	+31 41.8	1.815	2.714	10.3	20.5	1 16	5 44.70	+34 36.7	1.364	2.265	12.9	20.8
1 26	5 41.31	+31 13.0	1.911	2.734	13.6	20.8	1 26	5 39.41	+33 28.0	1.458	2.291	16.5	21.1
425525	2010 <i>NL</i> ₁₁		12 23.9 285°43	0°5/23.9	18		209128	2003 <i>SX</i> ₂₁₀		12 23.9 40°63	8°7/25.5	17	
11 17	6 34.72	+22 26.8	2.567	3.356	11.6	21.4	11 17	6 49.88	+43 53.9	1.300	2.091	20.7	20.3
11 27	6 30.14	+22 12.9	2.473	3.351	9.0	21.2	11 27	6 43.82	+44 13.4	1.255	2.115	17.0	20.1
12 7	6 23.67	+21 59.1	2.404	3.345	5.9	21.0	12 7	6 33.31	+44 12.2	1.228	2.140	13.1	20.0
12 17	6 15.83	+21 45.1	2.363	3.339	2.5	20.8	12 17	6 19.87	+43 42.2	1.222	2.166	9.8	19.9
12 27	6 7.39	+21 30.6	2.352	3.334	1.2	20.6	12 27	6 5.80	+42 40.5	1.242	2.193	8.7	19.9
1 6	5 59.21	+21 16.0	2.372	3.328	4.6	20.9	1 6	5 53.43	+41 12.0	1.287	2.220	10.5	20.0
1 16	5 52.10	+21 2.1	2.420	3.322	7.9	21.1	1 16	5 44.43	+39 27.0	1.357	2.248	13.7	20.3
1 26	5 46.72	+20 49.9	2.495	3.317	10.8	21.3	1 26	5 39.59	+37 37.0	1.448	2.276	16.9	20.6
103019	1999 <i>XG</i> ₁₀₆		12 23.9 352°94	0°6/23.9	18		71899	2000 <i>WA</i> ₁₆		12 23.9 123°04	2°1/23.8	18	
11 17	6 34.68	+22 7.7	1.723	2.535	15.5	19.5	11 17	6 46.06	+26 45.0	1.614	2.411	17.0	20.2
11 27	6 31.03	+22 0.8	1.641	2.531	12.0	19.2	11 27	6 39.98	+27 22.5	1.546	2.426	13.2	19.9
12 7	6 24.71	+21 55.5	1.581	2.527	7.9	19.0	12 7	6 30.64	+27 59.7	1.500	2.440	8.8	19.7
12 17	6 16.38	+21 51.0	1.546	2.523	3.4	18.7	12 17	6 18.88	+28 31.7	1.480	2.454	4.1	19.5
12 27	6 7.15	+21 46.6	1.539	2.521	1.6	18.5	12 27	6 6.13	+28 54.2	1.488	2.467	2.7	19.4
1 6	5 58.31	+21 42.2	1.559	2.519	6.2	18.9	1 6	5 54.05	+29 5.8	1.525	2.480	7.0	19.7
1 16	5 51.06	+21 38.4	1.606	2.518	10.5	19.1	1 16	5 44.08	+29 7.6	1.589	2.491	11.3	20.0
1 26	5 46.29	+21 36.1	1.677	2.518	14.3	19.3	1 26	5 37.22	+29 3.0	1.677	2.503	15.0	20.2
212375	2006 <i>HE</i> ₃₃		12 23.9 221°70	0°3/23.9	18		372450	2009 <i>SV</i> ₁₀₄		12 23.9 326°35	4°7/24.9	18	
11 17	6 35.87	+21 37.3	2.671	3.455	11.4	20.8	11 17	6 45.81	+39 57.5	2.087	2.856	14.6	19.7
11 27	6 31.01	+21 50.1	2.575	3.449	8.8	20.6	11 27	6 39.35	+39 33.0	1.992	2.847	11.9	19.5
12 7	6 24.25	+22 4.9	2.503	3.442	5.8	20.4	12 7	6 29.96	+38 54.0	1.920	2.839	8.7	19.3
12 17	6 16.09	+22 20.5	2.459	3.435	2.4	20.2	12 17	6 18.51	+37 56.5	1.875	2.831	5.8	19.1
12 27	6 7.28	+22 35.8	2.446	3.428	1.1	20.1	12 27	6 6.33	+36 39.5	1.859	2.823	4.8	19.0
1 6	5 58.65	+22 49.8	2.464	3.421	4.5	20.3	1 6	5 54.89	+35 5.7	1.873	2.816	6.9	19.1
1 16	5 51.02	+23 2.4	2.512	3.413	7.7	20.5	1 16	5 45.42	+33 21.4	1.916	2.809	10.2	19.3
1 26	5 45.07	+23 13.8	2.586	3.405	10.6	20.7	1 26	5 38.78	+31 34.1	1.986	2.803	13.4	19.5
97311	1999 <i>XB</i> ₁₉₈		12 23.9 4°81	3°6/23.4	18		312268	2008 <i>AU</i> ₃₉		12 23.9 42°68	0°9/24.0	18	
11 17	6 39.69	+28 18.1	1.570	2.380	16.8	17.9	11 17	6 37.86	+19 49.7	1.655	2.463	16.3	20.6
11 27	6 35.49	+29 23.6	1.494	2.380	13.2	17.6	11 27	6 33.44	+20 4.4	1.586	2.472	12.6	20.4
12 7	6 27.98	+30 30.2	1.439	2.381	9.0	17.4	12 7	6 26.26	+20 24.2	1.538	2.481	8.3	20.2
12 17	6 17.86	+31 31.6	1.410	2.381	4.9	17.1	12 17	6 17.03	+20 47.7	1.515	2.491	3.6	19.9
12 27	6 6.48	+32 21.5	1.407	2.382	4.0	17.1	12 27	6 6.95	+21 12.5	1.520	2.502	1.7	19.8
1 6	5 55.48	+32 56.4	1.433	2.384	7.7	17.3	1 6	5 57.38	+21 37.0	1.553	2.512	6.3	20.1
1 16	5 46.42	+33 16.2	1.484	2.386	12.0	17.6	1 16	5 49.53	+22 0.4	1.614	2.523	10.6	20.4
1 26	5 40.47	+33 24.1	1.558	2.389	15.7	17.8	1 26	5 44.29	+22 22.6	1.697	2.535	14.3	20.7
517386	2014 <i>KL</i> ₉₅		12 23.9 89°30	5°1/25.0	18		369613	2011 <i>CJ</i> ₇₃		12 23.9 247°50	4°0/24.2	18	
11 17	6 38.43	+ 7 2.7	1.993	2.761	15.3	21.1	11 17	6 40.56	+37 0.7	2.485	3.258	12.4	20.5
11 27	6 33.20	+ 7 6.7	1.925	2.778	12.3	21.0	11 27	6 34.97	+37 11.3	2.393	3.252	10.0	20.3
12 7	6 25.74	+ 7 24.6	1.880	2.796	9.1	20.8	12 7	6 26.99	+37 13.7	2.324	3.246	7.3	20.1
12 17	6 16.70	+ 7 57.1	1.860	2.813	6.2	20.7	12 17	6 17.28	+37 4.5	2.282	3.240	4.8	20.0
12 27	6 7.05	+ 8 43.4	1.869	2.830	5.2	20.6	12 27	6 6.84	+36 41.4	2.270	3.233	4.2	19.9
1 6	5 57.83	+ 9 40.9	1.907	2.847	7.1	20.8	1 6	5 56.82	+36 5.0	2.287	3.227	6.1	20.0
1 16	5 49.99	+10 46.3	1.973	2.863	10.1	21.0	1 16	5 48.23	+35 17.7	2.333	3.220	8.9	20.2
1 26	5 44.27	+11 56.0	2.065	2.879	13.0	21.2	1 26	5 41.87	+34 23.7	2.405	3.214	11.6	20.4
218129	2002 <i>QU</i> ₂₀		12 23.9 82°37	2°3/23.9	18		473341	2015 <i>TK</i> ₁₇₁		12 23.			

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
355345	2007 <i>TF</i> ₁₃₀		12 23.9	56°54	3°6/23.7	18	466930	2016 <i>AL</i> ₄₃		12 23.9	102°20	0°6/24.0	17
11 17	6 42.74	+29 51.6	1.539	2.346	17.3	20.4	11 17	6 38.44	+26 29.6	2.224	3.015	13.1	20.8
11 27	6 37.52	+30 39.3	1.484	2.368	13.5	20.2	11 27	6 33.26	+26 13.5	2.140	3.018	10.2	20.6
12 7	6 29.02	+31 23.6	1.450	2.390	9.1	20.0	12 7	6 25.83	+25 54.5	2.080	3.020	6.7	20.4
12 17	6 18.18	+31 58.8	1.441	2.412	4.9	19.8	12 17	6 16.79	+25 31.5	2.047	3.023	2.9	20.2
12 27	6 6.49	+32 20.5	1.459	2.434	3.9	19.8	12 27	6 7.12	+25 4.3	2.044	3.026	1.3	20.0
1 6	5 55.59	+32 27.4	1.505	2.457	7.4	20.1	1 6	5 57.88	+24 33.8	2.071	3.028	5.2	20.3
1 16	5 46.90	+32 21.9	1.578	2.480	11.4	20.4	1 16	5 50.03	+24 1.8	2.127	3.031	8.8	20.5
1 26	5 41.34	+32 8.0	1.673	2.502	14.9	20.6	1 26	5 44.30	+23 30.6	2.209	3.033	11.9	20.8
49043	1998 <i>RG</i> ₄		12 23.9	332°77	22°0/21.8	18	265193	2004 <i>BW</i> ₄₁		12 23.9	283°14	0°1/23.9	18
11 17	6 30.64	-16 39.7	1.242	1.965	25.0	18.0	11 17	6 40.17	+21 8.1	1.480	2.292	17.6	20.6
11 27	6 28.86	-19 14.6	1.179	1.945	23.7	17.8	11 27	6 35.99	+21 36.3	1.392	2.281	13.8	20.3
12 7	6 23.86	-21 17.1	1.129	1.926	22.7	17.7	12 7	6 28.43	+22 11.0	1.324	2.269	9.2	20.0
12 17	6 16.24	-22 33.1	1.094	1.908	22.1	17.6	12 17	6 18.16	+22 49.4	1.281	2.258	3.9	19.7
12 27	6 7.24	-22 51.1	1.073	1.891	22.1	17.5	12 27	6 6.45	+23 27.9	1.265	2.247	1.7	19.5
1 6	5 58.46	-22 7.0	1.068	1.876	22.8	17.5	1 6	5 54.97	+24 3.2	1.276	2.236	7.3	19.8
1 16	5 51.46	-22 24.2	1.077	1.863	24.1	17.5	1 16	5 45.35	+24 33.9	1.314	2.225	12.4	20.1
1 26	5 47.51	-17 53.3	1.099	1.851	25.8	17.6	1 26	5 38.85	+25 0.5	1.373	2.214	16.9	20.3
218228	2002 <i>VU</i> ₇₇		12 23.9	28°51	1°3/24.1	18	143834	2003 <i>WV</i> ₁₆₇		12 23.9	300°46	4°1/24.1	18
11 17	6 37.36	+18 34.0	0.992	1.835	22.1	19.2	11 17	6 38.57	+15 1.3	1.369	2.182	18.7	20.1
11 27	6 34.36	+18 59.7	0.946	1.851	17.1	18.9	11 27	6 34.71	+14 37.5	1.287	2.173	14.9	19.9
12 7	6 27.43	+19 35.8	0.918	1.869	11.3	18.7	12 7	6 27.53	+14 22.4	1.225	2.165	10.4	19.6
12 17	6 17.61	+20 19.4	0.911	1.888	4.9	18.4	12 17	6 17.74	+14 17.8	1.185	2.156	5.8	19.3
12 27	6 6.75	+21 5.9	0.927	1.909	2.3	18.3	12 27	6 6.66	+14 24.2	1.172	2.148	4.5	19.2
1 6	5 56.88	+21 51.0	0.967	1.931	8.3	18.7	1 6	5 55.93	+14 41.1	1.185	2.140	8.5	19.4
1 16	5 49.68	+22 32.5	1.031	1.954	13.8	19.1	1 16	5 47.12	+15 7.3	1.223	2.132	13.3	19.7
1 26	5 46.20	+23 9.7	1.114	1.978	18.3	19.5	1 26	5 41.40	+15 40.9	1.281	2.124	17.7	19.9
139099	2001 <i>FK</i> ₃₈		12 23.9	3°60	1°9/23.9	18	180829	2005 <i>GK</i> ₄₃		12 23.9	173°44	2°0/24.0	18
11 17	6 38.96	+20 39.5	1.258	2.083	19.4	19.1	11 17	6 45.18	+28 44.7	1.690	2.486	16.5	20.5
11 27	6 35.17	+20 14.3	1.187	2.082	15.1	18.8	11 27	6 39.29	+28 47.4	1.610	2.489	12.9	20.3
12 7	6 27.84	+19 51.9	1.135	2.082	10.1	18.5	12 7	6 30.20	+28 45.9	1.551	2.491	8.6	20.0
12 17	6 17.81	+19 32.3	1.106	2.083	4.6	18.2	12 17	6 18.74	+28 36.8	1.518	2.492	4.1	19.8
12 27	6 6.62	+19 15.8	1.103	2.084	2.7	18.1	12 27	6 6.27	+28 18.0	1.513	2.493	2.5	19.7
1 6	5 56.05	+19 3.2	1.125	2.085	8.0	18.4	1 6	5 54.39	+27 49.9	1.538	2.494	6.8	19.9
1 16	5 47.71	+18 55.6	1.172	2.087	13.2	18.7	1 16	5 44.53	+27 15.7	1.589	2.493	11.2	20.2
1 26	5 42.72	+18 53.8	1.239	2.090	17.7	19.0	1 26	5 37.69	+26 39.5	1.665	2.493	15.0	20.4
239407	2007 <i>TD</i> ₄₉		12 23.9	109°84	0°3/23.9	18	484148	2006 <i>TP</i> ₇₅		12 23.9	51°20	4°1/23.5	18
11 17	6 41.95	+23 58.0	2.013	2.803	14.4	21.2	11 17	6 41.71	+30 26.2	1.635	2.439	16.6	20.6
11 27	6 36.01	+24 2.6	1.944	2.822	11.1	21.0	11 27	6 36.74	+31 32.1	1.575	2.457	13.0	20.4
12 7	6 27.62	+24 7.3	1.899	2.840	7.2	20.8	12 7	6 28.58	+32 35.4	1.537	2.474	8.9	20.2
12 17	6 17.52	+24 10.2	1.881	2.858	3.0	20.6	12 17	6 18.06	+33 29.6	1.524	2.492	5.2	20.0
12 27	6 6.79	+24 9.9	1.894	2.875	1.3	20.5	12 27	6 6.57	+34 9.3	1.539	2.511	4.5	20.0
1 6	5 56.63	+24 6.4	1.936	2.892	5.5	20.8	1 6	5 55.72	+34 32.2	1.582	2.529	7.6	20.3
1 16	5 48.07	+24 0.4	2.006	2.909	9.3	21.0	1 16	5 46.91	+34 39.7	1.651	2.548	11.3	20.5
1 26	5 41.89	+23 53.7	2.102	2.925	12.5	21.3	1 26	5 41.13	+34 35.9	1.743	2.567	14.6	20.8
114051	2002 <i>VY</i> ₁₈		12 23.9	168°21	1°3/23.9	18	419418	2010 <i>AF</i> ₈₁		12 23.9	54°18	8°7/26.8	18
11 17	6 38.63	+20 20.8	2.030	2.823	14.2	20.0	11 17	6 36.06	- 5 15.9	2.187	2.904	15.5	20.1
11 27	6 33.57	+20 6.2	1.946	2.825	11.0	19.8	11 27	6 31.18	- 5 22.4	2.124	2.922	13.4	19.9
12 7	6 26.13	+19 53.8	1.886	2.826	7.3	19.6	12 7	6 24.34	- 5 8.3	2.080	2.940	11.2	19.8
12 17	6 16.94	+19 43.0	1.852	2.827	3.3	19.3	12 17	6 16.14	- 4 31.1	2.060	2.958	9.4	19.7
12 27	6 7.02	+19 33.8	1.848	2.828	1.9	19.2	12 27	6 7.43	- 3 30.4	2.067	2.976	8.7	19.7
1 6	5 57.47	+19 26.4	1.873	2.829	5.7	19.5	1 6	5 59.12	- 2 8.9	2.101	2.995	9.4	19.8
1 16	5 49.35	+19 21.1	1.926	2.830	9.6	19.7	1 16	5 52.04	- 0 31.5	2.163	3.013	11.1	20.0
1 26	5 43.45	+19 18.9	2.004	2.830	12.9	19.9	1 26	5 46.82	+ 1 16.1	2.249	3.032	13.1	20.1
248993	Jonava		12 23.9	182°47	1°5/23.8	18	329084	2011 <i>BX</i> ₄₈		12 23.9	313°46	4°3/24.7	18
11 17	6 42.85	+25 24.0	2.135	2.920	13.8	21.2	11 17	6 35.00	+ 9 16.2	2.173	2.949	13.9	20.1
11 27	6 36.96	+26 4.9	2.047	2.921	10.7	21.0	11 27	6 30.66	+ 9 19.2	2.085	2.945	11.2	19.9
12 7	6 28.46	+26 47.1	1.983	2.921	7.1	20.7	12 7	6 24.20	+ 9 33.6	2.018	2.941	8.1	19.7
12 17	6 17.98	+27 27.1	1.946	2.921	3.2	20.5	12 17	6 16.16	+10 0.1	1.978	2.936	5.3	19.6
12 27	6 6.55	+28 1.3	1.940	2.920	2.0	20.4	12 27	6 7.38	+10 38.6	1.967	2.932	4.4	19.5
1 6	5 55.39	+28 27.5	1.965	2.918	5.8	20.7	1 6	5 58.81	+11 27.2	1.984	2.929	6.5	19.6
1 16	5 45.67	+28 45.8	2.019	2.916	9.5	20.9	1 16	5 51.38	+12 23.4	2.030	2.925	9.6	19.8
1 26	5 38.31	+28 57.5	2.098	2.913	12.8	21.1	1 26	5 45.85	+13 24.4	2.102	2.921	12.6	20.0
359264	2009 <i>FP</i> ₆₃		12 23.9	259°31	2°4/23.8	17	194688	2001 <i>XK</i> ₂₂₁		12 23.9	271°39	4°3/23.5	18
11 17	6 40.07	+28 33.2	1.957	2.753	14.5	22.0	11 17	6 40.04	+16 28.6	1.691	2.489	16.4	20.1
11 27	6 35.18	+29 3.1	1.864	2.743	11.4	21.7	11 27	6 35.23	+15 23.9	1.596	2.474	13.0	19.8
12 7	6 27.50	+29 31.6	1.793	2.733	7.7	21.5	12 7	6 27.56	+14 20.7	1.524	2.459	9.2	19.6
12 17	6 17.64	+29 55.0	1.750	2.722	3.9	21.2	12 17	6 17.68	+13 21.8	1.476	2.444	5.4	19.3
12 27	6 6.70	+30 9.8	1.735	2.712	2.8	21.2	12 27	6 6.72	+12 30.5	1.457	2.429	4.6	19.2
1 6	5 56.03	+30 14.6	1.749	2.702	6.4	21.4	1 6	5 56.08	+11 49.8	1.467	2.414	8.1	19.4
1 16	5 46.89	+30 10.2	1.790	2.691	10.3	21.6	1 16	5 47.03	+11 21.7	1.502	2.398	12.3	19.6
1 26	5 40.31	+29 59.4	1.856	2.680	13.9	21.8	1 26	5 40.61	+11 6.7	1.560	2.383	16.2	19.8
107259	2001 <i>BT</i> ₆₃		12 23.9	321°34	2°0/24.1	17	484884	2009 <i>QT</i> ₃₄		12 23.9	62°65		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
27960	Dobiáš	12 23.9	173°28	5°0/23.9	18		235355	2003 <i>UE</i> ₃₂₃	12 23.9	162°13	2°4/23.9	17	
11 17	6 44.51	+38 27.6	2.364	3.131	13.2	19.3	11 17	6 35.70	+16 0.0	2.655	3.432	11.6	21.0
11 27	6 38.18	+38 58.6	2.281	3.133	10.7	19.1	11 27	6 30.72	+15 36.2	2.569	3.436	9.1	20.8
12 7	6 29.19	+39 20.9	2.221	3.136	7.9	19.0	12 7	6 24.00	+15 16.2	2.508	3.440	6.2	20.7
12 17	6 18.26	+39 29.9	2.187	3.137	5.6	18.8	12 17	6 16.03	+15 0.4	2.475	3.443	3.4	20.5
12 27	6 6.51	+39 22.2	2.183	3.139	5.1	18.8	12 27	6 7.55	+14 49.4	2.472	3.446	2.6	20.4
1 6	5 55.25	+38 57.8	2.208	3.139	6.9	18.9	1 6	5 59.35	+14 43.6	2.500	3.449	5.0	20.6
1 16	5 45.62	+38 19.4	2.262	3.140	9.6	19.1	1 16	5 52.17	+14 42.8	2.557	3.451	7.9	20.8
1 26	5 38.50	+37 31.6	2.341	3.139	12.2	19.3	1 26	5 46.62	+14 46.9	2.640	3.453	10.6	21.0
400356	2007 <i>VP</i> ₁₃₅	12 23.9	317°75	11°0/21.1	17		434151	2002 <i>RA</i> ₂₀₃	12 23.9	82°83	3°2/24.1	18	
11 17	6 45.49	+14 9.4	0.995	1.819	23.4	19.9	11 17	6 46.03	+31 2.0	1.458	2.262	18.2	20.8
11 27	6 40.80	+10 59.2	0.926	1.814	19.2	19.6	11 27	6 40.23	+31 12.9	1.396	2.279	14.2	20.6
12 7	6 31.84	+7 43.9	0.877	1.808	14.6	19.3	12 7	6 30.89	+31 17.5	1.356	2.295	9.7	20.4
12 17	6 19.59	+4 37.7	0.850	1.804	11.3	19.1	12 17	6 19.04	+31 10.9	1.339	2.311	5.0	20.2
12 27	6 5.93	+1 57.9	0.848	1.799	11.7	19.1	12 27	6 6.31	+30 50.7	1.350	2.328	3.6	20.1
1 6	5 53.12	-0 2.0	0.870	1.795	15.4	19.3	1 6	5 54.54	+30 17.9	1.389	2.344	7.5	20.4
1 16	5 43.08	-1 16.6	0.913	1.791	19.9	19.6	1 16	5 45.21	+29 36.9	1.454	2.359	11.9	20.7
1 26	5 37.08	-1 49.4	0.972	1.788	24.1	19.8	1 26	5 39.27	+28 53.2	1.541	2.375	15.7	21.0
102732	1999 <i>VV</i> ₁₀₂	12 23.9	126°72	0°9/23.9	18		204865	2007 <i>RU</i> ₂₃₃	12 23.9	128°01	0°0/23.9	18	
11 17	6 43.86	+24 37.7	1.638	2.438	16.7	21.0	11 17	6 36.02	+23 3.5	2.680	3.465	11.3	21.1
11 27	6 38.21	+24 55.1	1.566	2.449	13.0	20.8	11 27	6 31.04	+23 11.8	2.599	3.474	8.7	21.0
12 7	6 29.46	+25 13.3	1.517	2.459	8.5	20.5	12 7	6 24.24	+23 21.0	2.542	3.482	5.7	20.8
12 17	6 18.42	+25 28.9	1.492	2.469	3.6	20.3	12 17	6 16.15	+23 29.6	2.513	3.489	2.4	20.6
12 27	6 6.45	+25 39.3	1.497	2.478	1.8	20.2	12 27	6 7.53	+23 36.8	2.515	3.497	1.0	20.5
1 6	5 55.08	+25 43.5	1.530	2.487	6.6	20.5	1 6	5 59.20	+23 42.0	2.548	3.504	4.4	20.7
1 16	5 45.68	+25 42.5	1.590	2.496	11.0	20.8	1 16	5 51.93	+23 45.3	2.610	3.512	7.5	21.0
1 26	5 39.21	+25 38.7	1.674	2.504	14.9	21.0	1 26	5 46.36	+23 47.6	2.699	3.519	10.2	21.1
265048	2003 <i>QP</i> ₇₅	12 23.9	79°27	0°3/23.9	18		307766	2003 <i>VN</i> ₁₂	12 23.9	78°01	4°6/24.3	18	
11 17	6 38.43	+24 26.5	2.223	3.014	13.2	20.7	11 17	6 45.89	+35 49.5	1.734	2.522	16.4	20.3
11 27	6 33.11	+24 25.4	2.156	3.033	10.1	20.5	11 27	6 39.70	+36 1.8	1.670	2.540	13.0	20.1
12 7	6 25.64	+24 23.8	2.112	3.053	6.6	20.3	12 7	6 30.33	+36 4.2	1.629	2.558	9.2	19.9
12 17	6 16.69	+24 20.4	2.096	3.072	2.8	20.1	12 17	6 18.75	+35 51.6	1.613	2.575	5.7	19.8
12 27	6 7.23	+24 14.3	2.109	3.091	1.2	20.0	12 27	6 6.46	+35 21.9	1.625	2.593	4.7	19.7
1 6	5 58.26	+24 5.7	2.153	3.110	5.0	20.3	1 6	5 55.08	+34 36.6	1.665	2.611	7.4	19.9
1 16	5 50.70	+23 55.3	2.226	3.129	8.5	20.6	1 16	5 45.93	+33 40.4	1.732	2.628	10.9	20.2
1 26	5 45.20	+23 44.8	2.324	3.148	11.4	20.8	1 26	5 39.87	+32 39.5	1.824	2.646	14.2	20.4
96266	1995 <i>SB</i> ₃₃	12 23.9	56°53	3°4/24.2	18		517974	2015 <i>TC</i> ₃₆₈	12 23.9	190°65	3°7/23.4	18	
11 17	6 38.83	+15 26.2	1.529	2.334	17.5	19.6	11 17	6 42.33	+31 39.8	2.250	3.031	13.3	21.9
11 27	6 34.21	+15 10.3	1.467	2.349	13.7	19.4	11 27	6 36.67	+32 37.1	2.162	3.030	10.5	21.7
12 7	6 26.74	+15 2.6	1.425	2.364	9.3	19.2	12 7	6 28.37	+33 32.0	2.098	3.029	7.4	21.6
12 17	6 17.25	+15 3.7	1.408	2.379	5.0	18.9	12 17	6 18.03	+34 19.7	2.062	3.027	4.5	21.4
12 27	6 6.98	+15 13.4	1.419	2.395	3.7	18.9	12 27	6 6.69	+34 55.7	2.056	3.025	3.9	21.3
1 6	5 57.35	+15 30.6	1.456	2.411	7.2	19.2	1 6	5 55.59	+35 17.8	2.080	3.022	6.5	21.5
1 16	5 49.56	+15 54.0	1.520	2.427	11.4	19.4	1 16	5 45.92	+35 26.6	2.132	3.019	9.6	21.7
1 26	5 44.49	+16 22.0	1.607	2.443	15.1	19.7	1 26	5 38.63	+35 24.8	2.210	3.015	12.6	21.9
474953	2005 <i>TD</i> ₂₃	12 23.9	38°37	1°1/23.9	18		79753	1998 <i>TK</i> ₆	12 23.9	338°47	19°3/19.5	18	
11 17	6 40.58	+24 40.4	1.145	1.976	20.5	20.7	11 17	6 31.90	-14 16.2	1.451	2.167	22.2	18.8
11 27	6 36.53	+24 57.9	1.096	1.995	15.8	20.5	11 27	6 29.36	-17 9.0	1.389	2.151	20.9	18.6
12 7	6 28.68	+25 16.6	1.065	2.014	10.3	20.2	12 7	6 23.95	-19 35.3	1.343	2.136	19.9	18.5
12 17	6 18.13	+25 32.5	1.057	2.034	4.4	20.0	12 17	6 16.27	-21 22.6	1.315	2.123	19.4	18.4
12 27	6 6.63	+25 42.3	1.074	2.056	2.2	19.9	12 27	6 7.45	-22 20.8	1.304	2.110	19.5	18.4
1 6	5 56.16	+25 45.3	1.116	2.078	7.8	20.3	1 6	5 58.87	-22 26.1	1.310	2.099	20.4	18.4
1 16	5 48.29	+25 42.9	1.183	2.100	12.9	20.6	1 16	5 51.87	-21 41.1	1.331	2.089	21.7	18.5
1 26	5 44.01	+25 38.0	1.270	2.123	17.2	21.0	1 26	5 47.54	-20 13.6	1.366	2.081	23.2	18.6
184492	2005 <i>OM</i> ₂₁	12 23.9	44°23	2°1/24.2	18		19044	6516 <i>P-L</i>	12 23.9	48°95	6°2/23.9	18	
11 17	6 37.04	+16 38.6	1.918	2.713	14.8	20.3	11 17	6 47.28	+33 28.9	1.057	1.882	22.3	18.6
11 27	6 32.51	+16 44.2	1.837	2.715	11.6	20.1	11 27	6 42.28	+34 27.6	1.018	1.909	17.5	18.4
12 7	6 25.54	+16 56.7	1.779	2.717	7.8	19.9	12 7	6 32.69	+35 17.1	0.996	1.936	12.3	18.2
12 17	6 16.76	+17 15.4	1.746	2.719	3.9	19.6	12 17	6 19.85	+35 48.1	0.997	1.963	7.6	18.0
12 27	6 7.17	+17 39.2	1.742	2.721	2.5	19.6	12 27	6 6.04	+35 54.2	1.021	1.991	6.4	18.0
1 6	5 57.92	+18 6.7	1.768	2.724	6.0	19.8	1 6	5 53.71	+35 36.1	1.070	2.020	9.9	18.3
1 16	5 50.07	+18 36.5	1.821	2.726	9.9	20.0	1 16	5 44.73	+35 0.5	1.142	2.048	14.3	18.7
1 26	5 44.48	+19 7.8	1.898	2.728	13.4	20.2	1 26	5 40.07	+34 15.9	1.234	2.077	18.3	19.0
152904	2000 <i>DW</i> ₅₂	12 23.9	264°26	3°1/24.1	18		104149	2000 <i>ET</i> ₆₇	12 23.9	337°27	10°5/23.9	18	
11 17	6 39.70	+16 6.2	1.708	2.505	16.3	21.1	11 17	6 31.84	-1 27.5	1.827	2.584	16.8	19.5
11 27	6 35.11	+15 50.7	1.610	2.488	12.9	20.9	11 27	6 28.62	-2 44.9	1.745	2.571	14.6	19.3
12 7	6 27.61	+15 41.7	1.532	2.470	8.9	20.6	12 7	6 23.09	-3 45.8	1.683	2.559	12.4	19.1
12 17	6 17.77	+15 39.7	1.480	2.451	4.8	20.3	12 17	6 15.81	-4 23.9	1.643	2.548	10.8	19.0
12 27	6 6.70	+15 45.1	1.455	2.432	3.4	20.2	12 27	6 7.68	-4 34.7	1.627	2.537	10.5	18.9
1 6	5 55.79	+15 57.2	1.459	2.413	7.3	20.4	1 6	5 59.78	-4 17.1	1.636	2.527	11.7	19.0
1 16	5 46.38	+16 15.7	1.490	2.394	11.8	20.6	1 16	5 53.14	-3 33.1	1.668	2.518	13.9	19.1
1 26	5 39.59	+16 39.6	1.544	2.374	15.9	20.8	1 26	5 48.60	-2 27.7	1.721	2.510	16.3	19.3
450242	2003 <i>DG</i>	12 23.9	290°70	7°6/24.2	18		40278	1999 <i>JC</i> ₃₄	12 23.9	85°81	3°4/24.0	18</	

EPHEMERIDES

12 23.9

12 24.0

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
294315	2007 <i>VW</i> ₄₉		12 23.9	26°22'	1°0'/23.9	18	180924	2005 <i>LH</i> ₁₇		12 23.9	228°23'	0°9'/23.9	18
11 17	6 42.10	+22 59.8	1.291	2.110	19.3	21.0	11 17	6 42.38	+23 50.9	1.587	2.392	17.0	20.8
11 27	6 37.59	+22 33.1	1.218	2.111	15.1	20.7	11 27	6 37.49	+24 18.2	1.502	2.386	13.2	20.5
12 7	6 29.45	+22 6.1	1.166	2.112	10.0	20.4	12 7	6 29.32	+24 48.6	1.437	2.381	8.8	20.3
12 17	6 18.57	+21 38.0	1.137	2.114	4.3	20.1	12 17	6 18.57	+25 18.5	1.399	2.375	3.8	20.0
12 27	6 6.52	+21 9.1	1.134	2.115	2.1	19.9	12 27	6 6.54	+25 44.1	1.388	2.369	1.9	19.8
1 6	5 55.18	+20 40.9	1.157	2.117	7.8	20.3	1 6	5 54.85	+26 3.1	1.405	2.363	7.0	20.1
1 16	5 46.14	+20 15.9	1.205	2.119	13.1	20.6	1 16	5 45.03	+26 15.6	1.449	2.356	11.8	20.4
1 26	5 40.55	+19 56.6	1.275	2.121	17.6	20.9	1 26	5 38.24	+26 23.5	1.516	2.350	15.9	20.6
363872	2005 <i>SU</i> ₂₉		12 23.9	143°96'	5°8'/24.0	18	335319	2005 <i>QH</i> ₈₃		12 23.9	57°38'	2°6'/24.1	18
11 17	6 36.38	+7 32.9	2.233	2.999	13.9	21.5	11 17	6 44.73	+29 23.9	1.308	2.123	19.3	20.7
11 27	6 31.52	+6 43.7	2.155	3.004	11.3	21.4	11 27	6 39.41	+29 32.2	1.255	2.144	15.0	20.5
12 7	6 24.65	+6 4.0	2.099	3.009	8.6	21.2	12 7	6 30.42	+29 35.4	1.223	2.166	10.0	20.3
12 17	6 16.36	+5 36.4	2.070	3.014	6.4	21.1	12 17	6 18.87	+29 29.1	1.213	2.188	4.8	20.0
12 27	6 7.48	+5 22.9	2.069	3.018	5.9	21.0	12 27	6 6.52	+29 11.1	1.231	2.210	3.1	20.0
1 6	5 58.93	+5 24.0	2.097	3.022	7.6	21.2	1 6	5 55.24	+28 42.6	1.275	2.232	7.6	20.3
1 16	5 51.56	+5 38.7	2.152	3.026	10.1	21.3	1 16	5 46.56	+28 7.7	1.344	2.255	12.3	20.6
1 26	5 46.05	+6 4.9	2.231	3.030	12.7	21.5	1 26	5 41.37	+27 31.4	1.435	2.277	16.2	20.9
220532	2004 <i>FK</i> ₂₅		12 23.9	322°87'	3°3'/23.7	18	154159	2002 <i>GB</i> ₃₉		12 23.9	174°36'	4°2'/24.2	18
11 17	6 37.95	+19 32.7	1.287	2.111	19.1	20.0	11 17	6 35.43	+11 16.5	2.294	3.071	13.2	19.8
11 27	6 34.50	+18 39.3	1.204	2.098	15.1	19.7	11 27	6 30.83	+10 47.5	2.210	3.071	10.6	19.6
12 7	6 27.54	+17 46.7	1.141	2.086	10.3	19.4	12 7	6 24.25	+10 26.0	2.148	3.072	7.7	19.4
12 17	6 17.84	+16 56.6	1.101	2.075	5.2	19.1	12 17	6 16.23	+10 13.6	2.114	3.072	5.0	19.3
12 27	6 6.81	+16 12.1	1.086	2.064	3.9	19.0	12 27	6 7.60	+10 11.2	2.108	3.073	4.3	19.2
1 6	5 56.23	+15 35.9	1.097	2.054	8.6	19.3	1 6	5 59.24	+10 18.8	2.132	3.073	6.4	19.4
1 16	5 47.72	+15 10.6	1.132	2.044	13.8	19.5	1 16	5 52.01	+10 35.6	2.184	3.073	9.3	19.6
1 26	5 42.49	+14 57.2	1.187	2.036	18.5	19.8	1 26	5 46.60	+11 0.1	2.260	3.073	12.1	19.7
167207	2003 <i>UH</i> ₁		12 23.9	36°02'	8°1'/24.1	18	275641	2000 <i>GE</i> ₄₆		12 23.9	253°19'	1°0'/23.9	18
11 17	6 44.43	+40 28.3	1.459	2.256	18.6	19.8	11 17	6 41.59	+25 0.4	1.724	2.525	16.0	21.4
11 27	6 39.68	+41 26.6	1.400	2.266	15.2	19.6	11 27	6 36.71	+25 16.8	1.629	2.512	12.5	21.1
12 7	6 30.93	+42 11.9	1.360	2.278	11.7	19.5	12 7	6 28.74	+25 34.2	1.557	2.500	8.3	20.8
12 17	6 19.19	+42 35.4	1.343	2.290	8.8	19.3	12 17	6 18.32	+25 49.5	1.510	2.486	3.6	20.5
12 27	6 6.29	+42 31.2	1.352	2.302	8.2	19.3	12 27	6 6.65	+25 59.8	1.492	2.473	1.9	20.4
1 6	5 54.35	+41 59.3	1.385	2.315	10.2	19.5	1 6	5 55.23	+26 3.7	1.502	2.459	6.7	20.6
1 16	5 45.11	+41 5.7	1.443	2.329	13.4	19.7	1 16	5 45.49	+26 2.0	1.539	2.445	11.3	20.9
1 26	5 39.68	+39 58.9	1.522	2.342	16.6	19.9	1 26	5 38.59	+25 56.9	1.599	2.431	15.4	21.1
282078	2000 <i>GP</i> ₅₁		12 23.9	293°92'	3°8'/24.0	18	173873	2001 <i>TQ</i> ₂₅₆		12 23.9	101°83'	1°7'/23.9	18
11 17	6 38.07	+15 55.9	1.494	2.303	17.6	20.6	11 17	6 41.60	+26 59.9	2.127	2.915	13.8	21.3
11 27	6 34.23	+15 28.3	1.401	2.285	14.0	20.3	11 27	6 35.80	+27 30.0	2.059	2.935	10.6	21.1
12 7	6 27.23	+15 7.1	1.328	2.268	9.8	20.0	12 7	6 27.57	+27 58.8	2.015	2.954	7.0	20.9
12 17	6 17.71	+14 54.0	1.279	2.251	5.4	19.7	12 17	6 17.63	+28 23.4	1.999	2.973	3.3	20.7
12 27	6 6.85	+14 49.8	1.257	2.233	4.1	19.6	12 27	6 7.02	+28 40.9	2.012	2.991	2.1	20.6
1 6	5 56.20	+14 55.0	1.262	2.216	8.1	19.8	1 6	5 56.92	+28 50.5	2.056	3.009	5.5	20.9
1 16	5 47.25	+15 9.2	1.291	2.199	12.9	20.0	1 16	5 48.35	+28 53.0	2.128	3.027	9.0	21.2
1 26	5 41.20	+15 31.3	1.343	2.182	17.3	20.2	1 26	5 42.10	+28 50.5	2.225	3.044	12.1	21.4
397614	2007 <i>VM</i> ₂₄₁		12 23.9	57°64'	2°2'/23.6	18	216415	2008 <i>SF</i> ₆₁		12 24.0	100°88'	5°0'/24.4	18
11 17	6 43.41	+24 17.9	1.535	2.340	17.4	20.2	11 17	6 35.33	+7 16.4	2.556	3.316	12.5	20.8
11 27	6 38.02	+25 32.8	1.480	2.365	13.4	20.0	11 27	6 30.39	+6 43.8	2.488	3.334	10.1	20.6
12 7	6 29.43	+26 51.1	1.446	2.389	8.8	19.8	12 7	6 23.75	+6 20.4	2.443	3.351	7.6	20.5
12 17	6 18.48	+28 6.4	1.439	2.414	4.1	19.6	12 17	6 15.96	+6 8.2	2.425	3.369	5.6	20.4
12 27	6 6.60	+29 12.3	1.460	2.439	2.8	19.6	12 27	6 7.75	+6 8.0	2.436	3.386	5.0	20.4
1 6	5 55.41	+30 4.9	1.509	2.464	7.0	19.9	1 6	5 59.88	+6 19.5	2.476	3.403	6.5	20.5
1 16	5 46.30	+30 43.9	1.586	2.489	11.3	20.2	1 16	5 53.05	+6 41.5	2.545	3.420	8.7	20.7
1 26	5 40.26	+31 11.3	1.685	2.514	14.8	20.5	1 26	5 47.85	+7 12.1	2.639	3.436	11.0	20.9
267966	2004 <i>FZ</i> ₇₂		12 23.9	41°58'	3°9'/23.9	18	520976	2015 <i>AV</i> ₁		12 24.0	110°17'	3°4'/24.9	18
11 17	6 42.74	+30 27.9	1.185	2.010	20.3	20.3	11 17	6 37.77	+8 47.3	2.615	3.372	12.3	21.4
11 27	6 38.42	+30 57.0	1.131	2.025	15.9	20.1	11 27	6 32.32	+9 16.3	2.536	3.386	9.8	21.2
12 7	6 30.09	+31 20.8	1.096	2.041	10.8	19.8	12 7	6 25.08	+9 56.0	2.480	3.399	7.0	21.0
12 17	6 18.82	+31 33.3	1.084	2.057	5.7	19.6	12 17	6 16.56	+10 45.9	2.453	3.412	4.4	20.9
12 27	6 6.49	+31 30.1	1.097	2.074	4.3	19.6	12 27	6 7.48	+11 44.5	2.457	3.425	3.5	20.9
1 6	5 55.21	+31 11.5	1.135	2.091	8.5	19.9	1 6	5 58.66	+12 49.5	2.493	3.437	5.4	21.0
1 16	5 46.69	+30 41.6	1.196	2.109	13.3	20.2	1 16	5 50.87	+13 58.0	2.559	3.449	8.1	21.2
1 26	5 41.97	+30 6.6	1.279	2.127	17.4	20.5	1 26	5 44.72	+15 7.6	2.652	3.461	10.6	21.4
10866	Peru		12 23.9	284°57'	1°1'/23.9	18	263217	2008 <i>AF</i> ₃₆		12 24.0	194°47'	1°3'/23.9	17
11 17	6 40.27	+25 54.8	1.625	2.433	16.5	18.6	11 17	6 40.12	+27 13.4	2.252	3.039	13.1	21.4
11 27	6 35.85	+26 0.7	1.533	2.419	12.9	18.3	11 27	6 34.71	+27 20.9	2.162	3.038	10.2	21.2
12 7	6 28.24	+26 5.8	1.461	2.405	8.6	18.0	12 7	6 26.93	+27 26.4	2.097	3.036	6.8	21.0
12 17	6 18.11	+26 7.1	1.415	2.392	3.8	17.7	12 17	6 17.41	+27 27.6	2.059	3.033	3.1	20.8
12 27	6 6.71	+26 2.6	1.396	2.378	1.9	17.5	12 27	6 7.12	+27 22.9	2.050	3.031	1.8	20.7
1 6	5 55.62	+25 51.5	1.405	2.364	6.9	17.8	1 6	5 57.17	+27 12.2	2.072	3.028	5.3	20.9
1 16	5 46.32	+25 35.5	1.441	2.350	11.7	18.1	1 16	5 48.58	+26 56.5	2.123	3.024	8.9	21.1
1 26	5 39.96	+25 17.5	1.499	2.337	15.9	18.3	1 26	5 42.17	+26 38.3	2.200	3.020	12.1	21.3
171569	1999 <i>UD</i> ₃		12 23.9	16°24'	4°0'/23.8	17	455238	2001 <i>SZ</i> ₁₇₉		12 24.0	178°90'	7°4'/25.4	18