

EPHEMERIDES

8 22.9

8 23.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
16266	Johconnell		8 22.9 100°19	8°3/14.9	18		157350	2004 TB ₆₉		8 22.9 279°57	1°3/24.4	18	
7 20	22 35.62	-33 59.0	2.007	2.883	12.3	18.4	7 20	22 27.33	-4 6.1	2.274	3.123	12.0	19.8
7 30	22 29.75	-35 18.3	1.967	2.891	10.1	18.3	7 30	22 23.38	-4 45.9	2.188	3.114	9.2	19.6
8 9	22 21.75	-36 27.6	1.950	2.900	8.6	18.2	8 9	22 17.89	-5 39.2	2.125	3.104	5.9	19.4
8 19	22 12.39	-37 18.9	1.958	2.908	8.4	18.3	8 19	22 11.32	-6 43.1	2.088	3.095	2.4	19.1
8 29	22 2.75	-37 46.6	1.992	2.916	9.7	18.4	8 29	22 4.35	-7 53.0	2.080	3.085	2.2	19.1
9 8	21 53.96	-37 48.5	2.049	2.924	11.7	18.5	9 8	21 57.74	-9 3.2	2.100	3.076	5.6	19.3
9 18	21 46.93	-37 25.9	2.128	2.932	13.9	18.7	9 18	21 52.18	-10 8.7	2.146	3.066	9.0	19.5
9 28	21 42.31	-36 42.0	2.226	2.940	15.8	18.8	9 28	21 48.26	-11 4.9	2.217	3.057	12.1	19.7
233963	2010 AP ₃₁		8 22.9 191°92	1°0/21.9	18		420315	2011 YR ₆₅		8 23.0 203°06	2°6/24.9	17	
7 20	22 32.05	-11 29.3	2.150	3.016	12.0	21.7	7 20	22 35.04	-3 11.8	1.591	2.443	16.2	21.5
7 30	22 26.89	-12 18.6	2.075	3.015	8.8	21.5	7 30	22 29.64	-3 18.8	1.515	2.440	12.5	21.3
8 9	22 20.00	-13 16.5	2.025	3.013	5.2	21.3	8 9	22 21.91	-3 42.9	1.460	2.437	8.3	21.0
8 19	22 11.91	-14 18.3	2.001	3.011	1.6	21.0	8 19	22 12.53	-4 21.8	1.430	2.433	4.0	20.8
8 29	22 3.43	-15 18.4	2.006	3.008	3.0	21.1	8 29	22 2.56	-5 10.7	1.425	2.429	3.4	20.7
9 8	21 55.41	-16 11.4	2.039	3.004	6.7	21.3	9 8	21 53.21	-6 3.1	1.447	2.425	7.5	21.0
9 18	21 48.66	-16 53.5	2.099	3.000	10.2	21.5	9 18	21 45.55	-6 52.6	1.494	2.420	11.8	21.2
9 28	21 43.78	-17 22.2	2.182	2.996	13.1	21.7	9 28	21 40.42	-7 33.8	1.563	2.414	15.7	21.4
48116	2001 FK ₉₀		8 22.9 30°16	3°4/25.6	17		447536	2006 SZ ₂₃₂		8 23.0 240°33	1°8/21.5	18	
7 20	22 29.20	-0 41.9	1.248	2.116	18.7	18.4	7 20	22 34.00	-15 57.6	2.130	3.002	11.8	21.3
7 30	22 25.61	-1 5.7	1.190	2.122	14.6	18.1	7 30	22 28.36	-16 17.3	2.053	2.996	8.7	21.1
8 9	22 19.56	-1 54.2	1.151	2.129	9.8	17.9	8 9	22 20.90	-16 40.7	2.001	2.990	5.2	20.9
8 19	22 11.82	-3 3.8	1.134	2.137	5.0	17.6	8 19	22 12.20	-17 3.6	1.975	2.983	2.1	20.7
8 29	22 3.60	-4 27.1	1.141	2.145	3.9	17.6	8 29	22 3.11	-17 21.9	1.978	2.977	3.5	20.8
9 8	21 56.22	-5 53.7	1.172	2.154	8.1	17.9	9 8	21 54.54	-17 31.8	2.008	2.970	7.1	21.0
9 18	21 50.78	-7 14.3	1.226	2.164	12.7	18.2	9 18	21 47.31	-17 31.4	2.064	2.963	10.5	21.2
9 28	21 48.05	-8 21.3	1.301	2.174	16.8	18.5	9 28	21 42.08	-17 19.7	2.144	2.955	13.4	21.4
177406	2004 BU ₁₄₅		8 22.9 243°17	0°8/22.3	18		417367	2006 GD ₂₆		8 23.0 319°24	6°8/18.9	17	
7 20	22 31.59	-9 23.4	1.559	2.437	15.1	20.2	7 20	22 34.78	-22 48.3	1.158	2.066	16.9	20.4
7 30	22 27.16	-10 21.9	1.487	2.432	11.2	20.0	7 30	22 30.37	-23 48.7	1.096	2.054	12.9	20.1
8 9	22 20.44	-11 35.3	1.436	2.426	6.7	19.7	8 9	22 22.77	-24 50.1	1.054	2.042	8.8	19.9
8 19	22 12.09	-12 57.2	1.410	2.420	1.9	19.4	8 19	22 12.85	-25 41.8	1.033	2.031	6.8	19.7
8 29	22 3.15	-14 19.5	1.410	2.414	3.5	19.5	8 29	22 2.14	-26 12.9	1.036	2.020	9.0	19.8
9 8	21 54.81	-15 33.5	1.437	2.408	8.3	19.8	9 8	21 52.41	-26 17.0	1.060	2.010	13.2	20.0
9 18	21 48.14	-16 32.9	1.488	2.401	12.7	20.0	9 18	21 45.15	-25 53.1	1.105	2.000	17.6	20.2
9 28	21 43.95	-17 14.1	1.560	2.395	16.5	20.2	9 28	21 41.34	-25 4.0	1.166	1.992	21.5	20.5
515620	2014 KK ₉₈		8 22.9 14°81	4°5/18.6	18		156256	2001 VC ₈		8 23.0 260°06	4°5/19.6	17	
7 20	22 29.75	-21 9.2	1.896	2.788	12.2	20.5	7 20	22 34.72	-20 27.8	1.625	2.515	13.9	20.1
7 30	22 25.42	-22 19.0	1.839	2.790	9.0	20.4	7 30	22 29.42	-21 21.0	1.562	2.512	10.3	19.8
8 9	22 19.18	-23 30.1	1.805	2.792	6.0	20.2	8 9	22 21.75	-22 16.3	1.521	2.508	6.7	19.6
8 19	22 11.69	-24 35.6	1.798	2.794	4.5	20.1	8 19	22 12.48	-23 6.1	1.504	2.505	4.5	19.5
8 29	22 3.82	-25 28.7	1.816	2.797	6.2	20.2	8 29	22 2.72	-23 43.0	1.514	2.501	6.3	19.6
9 8	21 56.57	-26 4.5	1.861	2.800	9.2	20.4	9 8	21 53.70	-24 2.1	1.550	2.498	10.0	19.8
9 18	21 50.79	-26 21.0	1.929	2.803	12.3	20.6	9 18	21 46.51	-24 1.5	1.608	2.494	13.6	20.0
9 28	21 47.11	-26 18.3	2.018	2.806	14.9	20.8	9 28	21 41.89	-23 41.8	1.687	2.490	16.8	20.2
448658	2010 VV ₁₄₇		8 22.9 300°53	5°8/16.9	18		112164	2002 JH ₈₀		8 23.0 8°01	4°8/20.4	18	
7 20	22 30.94	-26 34.3	2.128	3.015	11.3	20.6	7 20	22 28.65	-18 19.6	0.876	1.803	19.1	18.2
7 30	22 26.25	-27 44.0	2.064	3.007	8.7	20.5	7 30	22 26.02	-18 58.4	0.834	1.804	14.1	17.9
8 9	22 19.68	-28 51.1	2.024	2.998	6.5	20.3	8 9	22 20.13	-19 42.4	0.809	1.806	8.7	17.6
8 19	22 11.84	-29 48.8	2.010	2.990	5.9	20.3	8 19	22 12.05	-20 21.6	0.804	1.811	4.9	17.4
8 29	22 3.58	-30 31.0	2.022	2.983	7.3	20.3	8 29	22 3.45	-20 45.8	0.819	1.817	7.2	17.6
9 8	21 55.86	-30 53.7	2.060	2.975	9.8	20.5	9 8	21 56.16	-20 48.3	0.855	1.826	12.4	17.9
9 18	21 49.52	-30 55.8	2.122	2.967	12.4	20.6	9 18	21 51.55	-20 27.6	0.909	1.836	17.3	18.2
9 28	21 45.23	-30 38.3	2.204	2.960	14.8	20.8	9 28	21 50.39	-19 45.4	0.980	1.848	21.4	18.5
42130	2001 BW ₁₉		8 22.9 160°39	1°0/24.2	18 R		92038	1999 VK ₁₈₆		8 23.0 270°22	3°3/26.6	18	
7 20	22 27.59	-4 30.1	2.419	3.266	11.5	19.0	7 20	22 28.11	+1 33.0	2.392	3.212	12.4	19.9
7 30	22 23.42	-5 17.8	2.343	3.268	8.7	18.8	7 30	22 23.93	+1 20.8	2.296	3.197	9.9	19.7
8 9	22 17.83	-6 18.0	2.290	3.270	5.5	18.6	8 9	22 18.23	+0 53.2	2.222	3.182	7.1	19.5
8 19	22 11.28	-7 27.1	2.264	3.271	2.1	18.4	8 19	22 11.45	+0 11.3	2.174	3.166	4.3	19.3
8 29	22 4.42	-8 40.6	2.267	3.273	2.0	18.4	8 29	22 4.23	-0 41.9	2.153	3.151	3.5	19.2
9 8	21 57.95	-9 53.0	2.299	3.274	5.3	18.6	9 8	21 57.31	-1 42.1	2.161	3.135	5.6	19.3
9 18	21 52.50	-10 59.5	2.359	3.275	8.5	18.8	9 18	21 51.37	-2 44.3	2.195	3.120	8.6	19.5
9 28	21 48.59	-11 56.4	2.443	3.277	11.3	19.0	9 28	21 47.02	-3 43.3	2.255	3.104	11.5	19.6
281219	2007 HK ₃₃		8 22.9 47°24	9°8/15.9	17		345023	2005 EF ₈₃		8 23.0 175°78	2°3/21.1	18	
7 20	22 37.06	-32 45.4	1.426	2.319	15.4	19.3	7 20	22 35.25	-17 6.7	2.144	3.016	11.8	21.2
7 30	22 31.34	-34 8.3	1.395	2.332	12.5	19.2	7 30	22 29.21	-17 31.7	2.075	3.018	8.6	21.0
8 9	22 22.89	-35 18.7	1.385	2.345	10.3	19.1	8 9	22 21.37	-17 59.4	2.030	3.019	5.2	20.8
8 19	22 12.74	-36 6.2	1.397	2.359	9.9	19.1	8 19	22 12.34	-18 25.4	2.013	3.020	2.4	20.6
8 29	22 2.38	-36 23.8	1.433	2.373	11.4	19.3	8 29	22 2.97	-18 45.2	2.024	3.020	3.8	20.7
9 8	21 53.29	-36 9.6	1.491	2.388	13.9	19.5	9 8	21 54.21	-18 55.5	2.063	3.020	7.2	20.9
9 18	21 46.58	-35 26.8	1.569	2.403	16.6	19.7	9 18	21 46.84	-18 54.4	2.128	3.020	10.5	21.1
9 28	21 42.91	-34 20.6	1.664	2.418	18.9	19.9	9 28	21 41.48	-18 41.5	2.216	3.020	13.3	21.3
373161	2012 CE ₅₃		8 22.9 105°80	0°5/23.4	17		16799	1997 JU ₇		8 23.0 300°02	8°5/30.2	18	
7 20	22 36.82	-8 5.8	1.588	2.453	15.5								

EPHEMERIDES

8 23.0

8 23.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
317484	2002 <i>RS</i> ₂₇₁		8 23.0 65°46'	1.3°/24.6	18		508102	2015 <i>DO</i> ₁₅₆		8 23.0 241°91'	2°9°/20.8	17	
7 20	22 27.17	- 3 7.8	2.270	3.116	12.2	20.4	7 20	22 35.79	-16 13.7	1.723	2.603	13.8	23.0
7 30	22 23.12	- 3 59.5	2.208	3.131	9.2	20.2	7 30	22 30.24	-17 3.2	1.642	2.589	10.2	22.8
8 9	22 17.64	- 5 4.7	2.170	3.147	5.9	20.0	8 9	22 22.34	-17 59.3	1.585	2.575	6.2	22.5
8 19	22 11.24	- 6 19.7	2.157	3.163	2.5	19.8	8 19	22 12.73	-18 55.8	1.554	2.560	3.0	22.3
8 29	22 4.61	- 7 39.3	2.174	3.179	2.1	19.8	8 29	22 2.46	-19 45.2	1.549	2.545	4.9	22.4
9 8	21 58.45	- 8 57.5	2.219	3.195	5.4	20.1	9 8	21 52.73	-20 21.3	1.571	2.529	9.0	22.6
9 18	21 53.40	-10 9.4	2.291	3.211	8.5	20.3	9 18	21 44.64	-20 40.8	1.618	2.512	13.0	22.8
9 28	21 49.95	-11 10.9	2.388	3.227	11.3	20.5	9 28	21 39.05	-20 42.4	1.685	2.495	16.5	23.0
29884	1999 <i>GF</i> ₃₁		8 23.0 332°40'	3°1°/25.5	18		226306	2003 <i>BP</i> ₉₀		8 23.0 270°39'	2°4°/20.8	18	
7 20	22 28.26	- 1 22.3	1.427	2.291	17.1	17.3	7 20	22 30.77	-12 15.1	1.693	2.575	13.9	20.2
7 30	22 24.86	- 1 41.5	1.352	2.282	13.3	17.0	7 30	22 26.62	-13 41.8	1.608	2.556	10.2	19.9
8 9	22 19.15	- 2 22.7	1.297	2.274	9.0	16.8	8 9	22 20.23	-15 22.9	1.545	2.537	6.1	19.6
8 19	22 11.77	- 3 23.4	1.264	2.267	4.6	16.5	8 19	22 12.15	-17 10.8	1.509	2.517	2.5	19.4
8 29	22 3.78	- 4 37.7	1.256	2.260	3.6	16.4	8 29	22 3.33	-18 56.1	1.499	2.497	4.7	19.5
9 8	21 56.36	- 5 57.0	1.273	2.254	7.7	16.6	9 8	21 54.91	-20 29.1	1.517	2.476	9.1	19.7
9 18	21 50.62	- 7 12.6	1.313	2.248	12.3	16.9	9 18	21 47.96	-21 43.2	1.559	2.456	13.3	19.9
9 28	21 47.40	- 8 17.3	1.374	2.243	16.3	17.1	9 28	21 43.38	-22 34.7	1.622	2.435	16.9	20.1
72955	2002 <i>CV</i> ₉₅		8 23.0 75°24'	0°5°/22.7	17		262166	2006 <i>SP</i> ₁₀₃		8 23.0 212°87'	1°2°/24.0	18	
7 20	22 36.53	-11 16.7	1.669	2.539	14.6	19.9	7 20	22 33.34	- 5 24.5	1.829	2.683	14.3	21.7
7 30	22 30.27	-11 34.2	1.624	2.565	10.7	19.7	7 30	22 28.19	- 5 56.4	1.748	2.677	10.8	21.4
8 9	22 21.99	-11 59.9	1.601	2.590	6.4	19.5	8 9	22 20.99	- 6 43.2	1.689	2.671	6.9	21.2
8 19	22 12.50	-12 29.3	1.605	2.615	1.8	19.2	8 19	22 12.34	- 7 41.4	1.656	2.664	2.6	20.9
8 29	22 2.86	-12 57.1	1.635	2.639	2.9	19.4	8 29	22 3.13	- 8 45.3	1.651	2.656	2.6	20.9
9 8	21 54.15	-13 18.9	1.693	2.664	7.2	19.7	9 8	21 54.43	- 9 48.4	1.673	2.648	6.9	21.1
9 18	21 47.23	-13 31.8	1.775	2.688	11.0	20.0	9 18	21 47.16	-10 44.8	1.720	2.639	11.0	21.4
9 28	21 42.68	-13 34.0	1.880	2.712	14.2	20.2	9 28	21 42.09	-11 30.0	1.791	2.630	14.5	21.6
332709	2009 <i>SR</i> ₅₃		8 23.0 335°64'	4°9°/26.1	18		179485	2002 <i>CC</i> ₂₂		8 23.0 48°66'	1°3°/23.9	18	
7 20	22 25.80	- 0 50.5	1.098	1.980	19.7	19.5	7 20	22 36.84	- 8 44.5	1.826	2.685	14.1	18.7
7 30	22 23.66	- 0 30.8	1.022	1.960	15.8	19.2	7 30	22 30.39	- 8 18.6	1.773	2.705	10.5	18.5
8 9	22 18.76	- 0 35.4	0.963	1.941	11.1	18.9	8 9	22 22.06	- 8 1.3	1.744	2.727	6.6	18.3
8 19	22 11.74	- 1 4.8	0.924	1.924	6.6	18.5	8 19	22 12.57	- 7 50.6	1.741	2.748	2.5	18.1
8 29	22 3.79	- 1 55.0	0.906	1.908	5.3	18.4	8 29	22 2.93	- 7 43.8	1.765	2.770	2.6	18.1
9 8	21 56.44	- 2 57.8	0.909	1.894	9.3	18.6	9 8	21 54.11	- 7 38.1	1.817	2.792	6.4	18.4
9 18	21 51.10	- 4 3.3	0.934	1.881	14.5	18.8	9 18	21 46.95	- 7 30.9	1.895	2.815	10.1	18.7
9 28	21 48.86	- 5 1.5	0.976	1.870	19.3	19.1	9 28	21 42.00	- 7 20.1	1.997	2.837	13.2	18.9
92045	1999 <i>VO</i> ₁₉₉		8 23.0 279°38'	4°0°/27.6	18		60381	2000 <i>AX</i> ₁₈₀		8 23.0 13°40'	0°8°/24.1	18	
7 20	22 26.97	+ 4 45.6	2.363	3.169	13.0	19.6	7 20	22 24.77	- 5 21.6	2.554	3.407	10.8	18.0
7 30	22 23.14	+ 4 17.3	2.262	3.151	10.5	19.4	7 30	22 21.31	- 6 5.3	2.481	3.410	8.1	17.8
8 9	22 17.79	+ 3 30.1	2.183	3.133	7.8	19.2	8 9	22 16.58	- 6 59.9	2.432	3.413	5.0	17.6
8 19	22 11.35	+ 2 25.0	2.129	3.115	5.1	19.0	8 19	22 11.01	- 8 2.2	2.409	3.417	1.9	17.4
8 29	22 4.44	+ 1 5.3	2.103	3.097	4.0	18.9	8 29	22 5.17	- 9 8.0	2.415	3.421	1.8	17.4
9 8	21 57.81	- 0 23.5	2.105	3.079	5.8	19.0	9 8	21 59.69	-10 12.6	2.450	3.425	5.0	17.6
9 18	21 52.15	- 1 55.3	2.134	3.061	8.7	19.2	9 18	21 55.14	-11 11.6	2.512	3.430	8.0	17.8
9 28	21 48.07	- 3 23.7	2.189	3.042	11.7	19.3	9 28	21 51.98	-12 1.8	2.598	3.435	10.6	18.0
20563	1999 <i>RG</i> ₁₂₁		8 23.0 270°90'	5°8°/28.5	18		362436	2010 <i>RJ</i> ₅₂		8 23.0 336°38'	0°6°/23.5	18	
7 20	22 29.06	+ 7 9.0	1.888	2.692	15.8	18.2	7 20	22 32.97	- 9 15.6	2.023	2.885	12.8	20.4
7 30	22 25.05	+ 7 0.6	1.794	2.677	13.1	18.0	7 30	22 27.66	- 9 12.7	1.948	2.883	9.6	20.2
8 9	22 19.12	+ 6 28.7	1.720	2.663	10.0	17.8	8 9	22 20.53	- 9 18.1	1.896	2.881	5.9	20.0
8 19	22 11.78	+ 5 33.0	1.670	2.648	7.1	17.6	8 19	22 12.18	- 9 29.2	1.871	2.880	2.0	19.7
8 29	22 3.83	+ 4 16.5	1.645	2.633	5.8	17.4	8 29	22 3.45	- 9 42.6	1.873	2.878	2.3	19.7
9 8	21 56.24	+ 2 45.2	1.646	2.617	7.4	17.5	9 8	21 55.25	- 9 54.7	1.902	2.877	6.3	20.0
9 18	21 49.93	+ 1 7.1	1.673	2.602	10.6	17.7	9 18	21 48.40	-10 2.5	1.958	2.875	9.9	20.2
9 28	21 45.64	- 0 29.4	1.724	2.586	13.9	17.8	9 28	21 43.54	-10 3.7	2.037	2.874	13.1	20.4
243571	1996 <i>AS</i> ₆		8 23.0 34°95'	2°8°/20.7	18		126641	2002 <i>CK</i> ₁₇₄		8 23.0 124°88'	2°8°/20.0	18	
7 20	22 31.35	-15 50.5	1.642	2.531	13.9	20.5	7 20	22 31.62	-19 3.1	2.465	3.341	10.3	20.1
7 30	22 26.80	-16 44.5	1.584	2.535	10.1	20.3	7 30	22 26.34	-19 47.5	2.407	3.351	7.5	20.0
8 9	22 20.12	-17 44.7	1.548	2.540	6.1	20.0	8 9	22 19.58	-20 33.4	2.374	3.361	4.7	19.8
8 19	22 12.03	-18 44.4	1.538	2.545	2.9	19.9	8 19	22 11.87	-21 16.1	2.368	3.370	2.8	19.7
8 29	22 3.56	-19 36.4	1.553	2.550	4.8	20.0	8 29	22 3.93	-21 51.3	2.391	3.380	4.2	19.8
9 8	21 55.80	-20 14.9	1.595	2.555	8.7	20.2	9 8	21 56.51	-22 15.5	2.442	3.389	6.9	20.0
9 18	21 49.71	-20 36.7	1.660	2.560	12.4	20.5	9 18	21 50.26	-22 27.2	2.519	3.398	9.6	20.2
9 28	21 45.95	-20 41.0	1.746	2.566	15.7	20.7	9 28	21 45.70	-22 26.0	2.619	3.406	11.9	20.4
315139	2007 <i>EM</i> ₁₂₆		8 23.0 316°97'	0°5°/23.4	18		233395	2006 <i>FH</i> ₂₂		8 23.0 221°80'	1°4°/21.8	18	
7 20	22 31.68	- 9 31.7	1.957	2.824	13.0	20.7	7 20	22 33.57	-13 19.1	2.051	2.921	12.3	21.4
7 30	22 26.82	- 9 32.5	1.876	2.813	9.7	20.4	7 30	22 28.18	-13 54.7	1.972	2.914	9.1	21.2
8 9	22 20.08	- 9 41.8	1.817	2.803	6.0	20.2	8 9	22 20.90	-14 37.3	1.917	2.906	5.4	21.0
8 19	22 12.03	- 9 57.0	1.784	2.793	1.9	19.9	8 19	22 12.31	-15 22.4	1.888	2.897	1.8	20.7
8 29	22 3.52	-10 14.5	1.778	2.784	2.4	19.9	8 29	22 3.25	-16 4.6	1.888	2.889	3.3	20.8
9 8	21 55.48	-10 30.2	1.800	2.774	6.5	20.2	9 8	21 54.67	-16 39.1	1.915	2.879	7.1	21.0
9 18	21 48.79	-10 40.9	1.847	2.765	10.3	20.4	9 18	21 47.44	-17 2.6	1.968	2.870	10.7	21.2
9 28	21 44.12	-10 44.1	1.917	2.757	13.6	20.6	9 28	21 42.23	-17 13.3	2.044	2.859	13.8	21.4
152081	2004 <i>RD</i> ₂₇		8 23.0 348°26'	1°3°/21.8	18		209302						

EPHEMERIDES

8 23.0

8 23.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
170904	2004 <i>XW</i> ₁₉		8 23.0 333°19	5°0/25.6	18		66217	1999 <i>CZ</i> ₄₂		8 23.0 334°52	0°8/22.5	18	
7 20	22 29.75	- 2 18.3	1.040	1.924	20.4	19.5	7 20	22 34.71	-11 10.6	1.283	2.171	17.0	19.1
7 30	22 26.76	- 1 41.8	0.969	1.909	16.2	19.2	7 30	22 29.86	-11 35.9	1.219	2.169	12.7	18.9
8 9	22 20.73	- 1 26.8	0.915	1.895	11.3	18.9	8 9	22 22.29	-12 13.6	1.176	2.167	7.6	18.6
8 19	22 12.39	- 1 34.0	0.880	1.882	6.5	18.6	8 19	22 12.81	-12 58.0	1.156	2.166	2.2	18.2
8 29	22 3.07	- 2 0.3	0.867	1.870	5.4	18.5	8 29	22 2.72	-13 41.4	1.160	2.165	3.8	18.4
9 8	21 54.46	- 2 38.7	0.875	1.859	9.8	18.7	9 8	21 53.49	-14 16.6	1.189	2.164	9.1	18.7
9 18	21 48.09	- 3 20.7	0.903	1.849	15.1	19.0	9 18	21 46.36	-14 38.7	1.240	2.163	14.0	18.9
9 28	21 45.07	- 3 57.7	0.950	1.841	19.9	19.2	9 28	21 42.21	-14 45.1	1.312	2.162	18.1	19.2
376973	2002 <i>LK</i> ₃₄		8 23.0 20°41	12°4/30.6	17		22075	2000 <i>AL</i> ₁₃₈		8 23.1 7°03	6°5/17.5	18	
7 20	22 29.83	+ 8 33.7	0.865	1.724	25.7	19.0	7 20	22 31.95	-24 7.7	1.539	2.438	14.0	18.0
7 30	22 26.74	+10 27.1	0.829	1.737	21.8	18.8	7 30	22 27.55	-25 31.5	1.486	2.438	10.7	17.8
8 9	22 20.53	+11 43.2	0.807	1.752	17.8	18.7	8 9	22 20.75	-26 54.3	1.456	2.439	7.6	17.6
8 19	22 12.24	+12 16.0	0.801	1.769	14.2	18.6	8 19	22 12.34	-28 6.8	1.450	2.440	6.5	17.5
8 29	22 3.48	+12 5.5	0.814	1.789	12.5	18.6	8 29	22 3.46	-29 0.0	1.470	2.441	8.4	17.7
9 8	21 55.98	+11 19.7	0.845	1.810	13.3	18.7	9 8	21 55.39	-29 28.7	1.513	2.443	11.6	17.8
9 18	21 51.07	+10 11.2	0.894	1.834	16.0	18.9	9 18	21 49.20	-29 31.8	1.578	2.445	14.9	18.1
9 28	21 49.57	+ 8 54.4	0.961	1.858	19.2	19.2	9 28	21 45.63	-29 11.0	1.661	2.447	17.7	18.3
116493	2004 <i>BL</i> ₁₃		8 23.0 301°41	1°1/21.8	18		242564	2005 <i>EZ</i> ₁₈₄		8 23.1 40°50	1°5/24.3	18	
7 20	22 28.15	-13 6.8	2.522	3.392	10.3	20.2	7 20	22 31.06	- 5 28.9	1.776	2.637	14.4	20.7
7 30	22 23.85	-13 43.5	2.447	3.389	7.5	20.0	7 30	22 26.46	- 5 43.1	1.709	2.640	10.9	20.5
8 9	22 18.13	-14 26.0	2.396	3.386	4.4	19.8	8 9	22 19.93	- 6 10.9	1.663	2.644	6.9	20.2
8 19	22 11.48	-15 10.6	2.373	3.383	1.5	19.6	8 19	22 12.10	- 6 49.2	1.642	2.649	2.9	20.0
8 29	22 4.52	-15 53.2	2.379	3.380	2.7	19.7	8 29	22 3.88	- 7 33.4	1.647	2.653	2.6	20.0
9 8	21 57.94	-16 29.7	2.412	3.377	5.9	19.9	9 8	21 56.26	- 8 17.8	1.680	2.657	6.6	20.2
9 18	21 52.38	-16 57.3	2.472	3.374	8.8	20.1	9 18	21 50.10	- 8 57.4	1.737	2.662	10.5	20.5
9 28	21 48.35	-17 14.3	2.556	3.371	11.4	20.3	9 28	21 46.06	- 9 28.2	1.818	2.667	13.9	20.7
301782	2010 <i>JP</i> ₁₆₅		8 23.0 0°26	3°3/20.3	18		361949	2008 <i>HM</i> ₆₂		8 23.1 110°90	2°7/19.9	18	
7 20	22 31.25	-17 23.5	1.680	2.571	13.5	20.5	7 20	22 28.95	-16 28.8	2.252	3.132	11.0	21.0
7 30	22 26.76	-18 16.7	1.618	2.570	9.9	20.2	7 30	22 24.62	-17 41.0	2.189	3.136	8.0	20.8
8 9	22 20.15	-19 14.7	1.578	2.569	6.1	20.0	8 9	22 18.71	-18 58.0	2.150	3.140	4.9	20.7
8 19	22 12.11	-20 10.9	1.564	2.569	3.4	19.9	8 19	22 11.73	-20 14.2	2.139	3.143	2.8	20.5
8 29	22 3.64	-20 58.2	1.576	2.570	5.2	20.0	8 29	22 4.42	-21 23.3	2.156	3.147	4.3	20.6
9 8	21 55.85	-21 31.0	1.614	2.570	8.9	20.2	9 8	21 57.57	-22 20.3	2.201	3.150	7.3	20.8
9 18	21 49.68	-21 46.6	1.675	2.571	12.6	20.4	9 18	21 51.90	-23 2.2	2.271	3.154	10.3	21.0
9 28	21 45.84	-21 44.4	1.757	2.572	15.8	20.6	9 28	21 47.97	-23 27.5	2.364	3.157	12.9	21.2
21969	1999 <i>WJ</i> ₁₇		8 23.0 180°77	3°8/26.1	18		64681	2001 <i>XF</i> ₇₁		8 23.1 187°19	0°2/22.8	18	
7 20	22 32.96	+ 0 30.6	1.647	2.485	16.3	18.7	7 20	22 30.22	- 9 40.0	2.189	3.053	11.9	20.2
7 30	22 28.05	+ 0 22.8	1.573	2.486	12.9	18.5	7 30	22 25.57	-10 15.2	2.115	3.053	8.8	20.0
8 9	22 20.97	- 0 5.2	1.519	2.486	9.0	18.3	8 9	22 19.29	-10 59.5	2.066	3.053	5.3	19.8
8 19	22 12.37	- 0 51.5	1.489	2.487	5.2	18.1	8 19	22 11.91	-11 49.1	2.042	3.052	1.5	19.6
8 29	22 3.25	- 1 51.7	1.486	2.486	4.1	18.0	8 29	22 4.17	-12 39.2	2.047	3.052	2.4	19.6
9 8	21 54.73	- 2 58.9	1.508	2.486	7.2	18.2	9 8	21 56.89	-13 25.0	2.080	3.051	6.1	19.9
9 18	21 47.80	- 4 6.0	1.556	2.485	11.2	18.4	9 18	21 50.80	-14 2.7	2.139	3.050	9.5	20.1
9 28	21 43.22	- 5 6.3	1.627	2.484	14.8	18.7	9 28	21 46.49	-14 29.5	2.222	3.049	12.5	20.3
510209	2011 <i>CP</i> ₁₁₂		8 23.0 233°03	0°7/23.6	17		287677	2003 <i>QB</i> ₄		8 23.1 353°81	4°0/24.9	17	
7 20	22 33.86	- 7 31.6	1.747	2.610	14.4	22.6	7 20	22 30.01	- 5 29.2	0.932	1.832	20.8	19.5
7 30	22 28.69	- 7 52.5	1.667	2.602	10.9	22.4	7 30	22 27.07	- 4 39.5	0.873	1.824	16.2	19.2
8 9	22 21.36	- 8 26.2	1.609	2.594	6.8	22.1	8 9	22 20.95	- 4 7.7	0.831	1.818	10.9	18.9
8 19	22 12.51	- 9 9.2	1.576	2.585	2.3	21.8	8 19	22 12.52	- 3 54.0	0.808	1.813	5.6	18.6
8 29	22 3.08	- 9 56.1	1.571	2.576	2.7	21.8	8 29	22 3.27	- 3 55.3	0.805	1.810	4.8	18.5
9 8	21 54.17	-10 41.1	1.592	2.567	7.2	22.1	9 8	21 55.00	- 4 5.6	0.824	1.809	9.9	18.8
9 18	21 46.80	-11 19.1	1.639	2.557	11.4	22.3	9 18	21 49.21	- 4 18.1	0.861	1.810	15.3	19.1
9 28	21 41.73	-11 46.3	1.708	2.547	15.1	22.5	9 28	21 46.90	- 4 26.2	0.917	1.812	20.1	19.4
86984	2000 <i>JF</i> ₂₆		8 23.0 170°33	5°6/27.6	18		348018	2003 <i>SF</i> ₃₃₄		8 23.1 293°79	1°0/23.8	18	
7 20	22 32.63	+ 4 22.4	1.724	2.542	16.5	19.8	7 20	22 31.46	- 7 10.0	1.751	2.616	14.3	21.2
7 30	22 27.73	+ 4 36.5	1.649	2.543	13.4	19.6	7 30	22 26.94	- 7 25.0	1.669	2.605	10.8	21.0
8 9	22 20.75	+ 4 29.3	1.594	2.545	10.0	19.4	8 9	22 20.35	- 7 52.8	1.610	2.595	6.8	20.7
8 19	22 12.32	+ 4 1.0	1.562	2.545	6.8	19.2	8 19	22 12.28	- 8 30.3	1.575	2.584	2.4	20.4
8 29	22 3.37	+ 3 14.4	1.555	2.546	5.6	19.1	8 29	22 3.64	- 9 12.6	1.567	2.573	2.6	20.4
9 8	21 54.99	+ 2 15.0	1.575	2.546	7.6	19.3	9 8	21 55.50	- 9 54.1	1.586	2.563	7.0	20.7
9 18	21 48.13	+ 1 10.0	1.620	2.547	10.9	19.5	9 18	21 48.82	-10 29.7	1.629	2.552	11.2	20.9
9 28	21 43.52	+ 0 6.3	1.687	2.547	14.3	19.7	9 28	21 44.35	-10 55.5	1.695	2.542	14.8	21.1
446180	2013 <i>FS</i> ₉		8 23.0 80°58	3°1/20.3	18		362860	2012 <i>BJ</i> ₅₈		8 23.1 226°62	1°2/21.8	18	
7 20	22 33.66	-20 3.7	2.237	3.115	11.2	21.0	7 20	22 30.57	-13 21.2	2.327	3.197	11.0	21.5
7 30	22 27.92	-20 33.5	2.185	3.129	8.2	20.8	7 30	22 25.77	-13 54.5	2.252	3.194	8.1	21.4
8 9	22 20.56	-21 3.5	2.157	3.144	5.1	20.7	8 9	22 19.39	-14 33.7	2.201	3.190	4.8	21.1
8 19	22 12.19	-21 29.2	2.156	3.158	3.1	20.6	8 19	22 11.95	-15 14.8	2.177	3.186	1.6	20.9
8 29	22 3.64	-21 46.4	2.183	3.172	4.4	20.7	8 29	22 4.16	-15 53.6	2.181	3.182	2.9	21.0
9 8	21 55.75	-21 52.3	2.238	3.187	7.3	20.9	9 8	21 56.81	-16 25.8	2.214	3.178	6.3	21.2
9 18	21 49.21	-21 45.9	2.318	3.201	10.1	21.1	9 18	21 50.59	-16 48.6	2.273	3.174	9.5	21.4
9 28	21 44.56	-21 27.3	2.421	3.215	12.6	21.3	9 28	21 46.09	-17 0.2	2.355	3.170	12.2	21.6
108454	2001 <i>KC</i> ₅₀		8 23.0 43°14	4°1/19.6	18		520246	2014 <i>DU</i>					

EPHEMERIDES

8 23.1

8 23.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
8193	Ciaurro		8 23.1 240°69	0°8/23.6	18		84349	2002 <i>TF</i> ₇₆		8 23.1 295°08	4°5/26.5	18	
7 20	22 36.02	- 8 9.1	1.563	2.431	15.6	19.7	7 20	22 31.17	+ 1 7.4	1.489	2.335	17.4	19.4
7 30	22 30.56	- 8 18.8	1.485	2.422	11.8	19.4	7 30	22 27.06	+ 1 9.3	1.410	2.326	13.9	19.2
8 9	22 22.65	- 8 41.3	1.427	2.413	7.4	19.1	8 9	22 20.60	+ 0 49.0	1.351	2.318	9.9	18.9
8 19	22 12.98	- 9 13.1	1.394	2.403	2.5	18.8	8 19	22 12.43	+ 0 7.4	1.314	2.309	6.0	18.7
8 29	22 2.64	- 9 49.0	1.387	2.393	2.9	18.8	8 29	22 3.58	- 0 51.3	1.301	2.301	4.7	18.6
9 8	21 52.90	-10 22.9	1.407	2.383	7.9	19.1	9 8	21 55.28	- 2 0.2	1.314	2.293	7.9	18.8
9 18	21 44.90	-10 49.8	1.451	2.372	12.4	19.3	9 18	21 48.64	- 3 10.9	1.351	2.285	12.1	19.0
9 28	21 39.51	-11 6.2	1.517	2.361	16.4	19.6	9 28	21 44.52	- 4 15.8	1.409	2.277	16.1	19.2
215780	2004 <i>HR</i> ₆₉		8 23.1 219°01	6°2/29.8	18		508171	2015 <i>FJ</i> ₂₁₇		8 23.1 208°41	1°2/22.1	17	
7 20	22 29.49	+10 11.9	2.357	3.126	14.1	20.9	7 20	22 35.21	-12 24.2	1.866	2.736	13.3	22.7
7 30	22 25.02	+10 21.0	2.267	3.121	11.9	20.8	7 30	22 29.60	-13 1.0	1.790	2.731	9.9	22.5
8 9	22 18.98	+10 10.4	2.198	3.116	9.5	20.6	8 9	22 21.92	-13 46.3	1.737	2.726	5.9	22.2
8 19	22 11.85	+ 9 39.6	2.153	3.110	7.3	20.5	8 19	22 12.78	-14 35.2	1.710	2.720	1.8	22.0
8 29	22 4.30	+ 8 50.1	2.133	3.104	6.2	20.4	8 29	22 3.13	-15 21.7	1.711	2.713	3.3	22.1
9 8	21 57.09	+ 7 45.9	2.141	3.098	7.0	20.4	9 8	21 54.04	-16 0.3	1.740	2.706	7.5	22.3
9 18	21 50.94	+ 6 32.4	2.175	3.092	9.1	20.5	9 18	21 46.44	-16 27.3	1.794	2.698	11.4	22.5
9 28	21 46.44	+ 5 15.9	2.234	3.085	11.6	20.7	9 28	21 41.08	-16 40.7	1.870	2.690	14.7	22.7
364520	2007 <i>EP</i> ₁₅₂		8 23.1 167°21	0°8/22.2	18		492390	2014 <i>JC</i> ₅		8 23.1 231°38	1°5/21.7	18	
7 20	22 29.18	-11 22.3	2.528	3.392	10.5	21.0	7 20	22 31.62	-13 40.3	2.014	2.889	12.3	21.3
7 30	22 24.61	-12 6.2	2.455	3.394	7.7	20.9	7 30	22 26.77	-14 17.7	1.943	2.887	9.0	21.1
8 9	22 18.64	-12 57.2	2.408	3.396	4.5	20.7	8 9	22 20.12	-15 1.8	1.895	2.885	5.4	20.8
8 19	22 11.73	-13 51.3	2.388	3.398	1.3	20.4	8 19	22 12.23	-15 47.8	1.874	2.884	1.9	20.6
8 29	22 4.52	-14 44.3	2.397	3.399	2.5	20.5	8 29	22 3.96	-16 30.4	1.881	2.882	3.4	20.7
9 8	21 57.71	-15 31.7	2.435	3.401	5.7	20.7	9 8	21 56.21	-17 4.9	1.915	2.880	7.1	20.9
9 18	21 51.93	-16 10.4	2.499	3.402	8.7	20.9	9 18	21 49.79	-17 28.0	1.974	2.878	10.6	21.1
9 28	21 47.69	-16 38.2	2.588	3.403	11.3	21.1	9 28	21 45.36	-17 38.0	2.056	2.876	13.6	21.3
5148	Giordano		8 23.1 99°81	0°2/22.9	18 R		429724	2011 <i>KA</i> ₁₄		8 23.1 102°46	9°2/ 2.5	17	
7 20	22 30.79	- 9 58.1	2.355	3.216	11.3	19.0	7 20	22 33.52	+17 58.5	2.060	2.779	17.3	20.9
7 30	22 25.79	-10 25.5	2.294	3.229	8.3	18.8	7 30	22 28.07	+18 29.9	1.998	2.801	15.1	20.8
8 9	22 19.32	-11 0.5	2.256	3.243	5.0	18.6	8 9	22 20.83	+18 35.1	1.953	2.823	12.8	20.7
8 19	22 11.92	-11 39.6	2.246	3.256	1.4	18.4	8 19	22 12.43	+18 12.2	1.930	2.844	10.7	20.6
8 29	22 4.29	-12 18.6	2.264	3.269	2.2	18.5	8 29	22 3.71	+17 22.4	1.931	2.865	9.4	20.5
9 8	21 57.17	-12 53.7	2.311	3.282	5.6	18.8	9 8	21 55.61	+16 10.2	1.957	2.885	9.5	20.6
9 18	21 51.20	-13 21.8	2.385	3.294	8.7	19.0	9 18	21 48.90	+14 42.7	2.008	2.905	10.8	20.7
9 28	21 46.89	-13 40.8	2.482	3.307	11.4	19.2	9 28	21 44.20	+13 8.1	2.082	2.924	12.7	20.9
259952	2004 <i>EU</i> ₇₃		8 23.1 227°54	3°6/19.9	18		521496	2015 <i>OF</i> ₉₅		8 23.1 332°30	1°5/24.5	18	
7 20	22 34.82	-17 47.0	1.791	2.673	13.2	21.5	7 20	22 28.05	- 4 1.8	1.860	2.718	13.9	21.0
7 30	22 29.48	-18 51.0	1.717	2.664	9.8	21.2	7 30	22 24.29	- 4 40.0	1.783	2.713	10.6	20.8
8 9	22 21.91	-20 0.4	1.666	2.655	6.1	21.0	8 9	22 18.70	- 5 34.2	1.728	2.709	6.8	20.6
8 19	22 12.76	-21 8.2	1.641	2.645	3.6	20.8	8 19	22 11.85	- 6 41.1	1.698	2.704	2.8	20.3
8 29	22 3.02	-22 6.7	1.644	2.634	5.5	20.9	8 29	22 4.54	- 7 54.8	1.695	2.700	2.5	20.3
9 8	21 53.85	-22 49.9	1.673	2.623	9.2	21.1	9 8	21 57.70	- 9 8.5	1.719	2.697	6.4	20.5
9 18	21 46.26	-23 14.4	1.726	2.611	12.9	21.3	9 18	21 52.15	-10 16.0	1.768	2.693	10.3	20.7
9 28	21 41.05	-23 19.5	1.801	2.599	16.1	21.5	9 28	21 48.59	-11 12.2	1.841	2.690	13.7	21.0
246729	2009 <i>BN</i> ₅₆		8 23.1 262°49	1°3/21.9	18		259403	2003 <i>QL</i> ₂₄		8 23.1 318°24	0°6/23.5	18	
7 20	22 32.01	-12 35.8	2.013	2.885	12.4	21.3	7 20	22 36.02	-10 32.5	2.164	3.021	12.3	19.6
7 30	22 27.18	-13 14.4	1.927	2.870	9.2	21.0	7 30	22 29.89	-10 9.4	2.082	3.014	9.2	19.4
8 9	22 20.43	-14 1.4	1.865	2.854	5.5	20.8	8 9	22 21.96	- 9 51.7	2.024	3.008	5.7	19.2
8 19	22 12.32	-14 52.2	1.829	2.838	1.8	20.5	8 19	22 12.79	- 9 37.7	1.993	3.001	1.9	18.9
8 29	22 3.65	-15 41.3	1.820	2.822	3.2	20.6	8 29	22 3.22	- 9 25.2	1.990	2.995	2.3	18.9
9 8	21 55.40	-16 23.2	1.839	2.805	7.2	20.8	9 8	21 54.16	- 9 12.0	2.016	2.990	6.1	19.2
9 18	21 48.43	-16 54.1	1.884	2.788	11.0	21.0	9 18	21 46.42	- 8 56.0	2.069	2.984	9.6	19.4
9 28	21 43.49	-17 11.5	1.951	2.771	14.2	21.2	9 28	21 40.64	- 8 36.0	2.147	2.978	12.7	19.6
220887	2004 <i>XR</i> ₁₀₇		8 23.1 291°11	0°1/23.1	17		284257	2006 <i>GP</i> ₂₆		8 23.1 34°40	2°1/21.4	18	
7 20	22 31.39	-10 1.0	2.288	3.149	11.5	21.2	7 20	22 32.18	-14 22.4	1.633	2.519	14.1	20.6
7 30	22 26.57	-10 13.6	2.187	3.122	8.7	21.0	7 30	22 27.50	-15 5.2	1.573	2.523	10.3	20.4
8 9	22 20.02	-10 34.2	2.110	3.096	5.3	20.7	8 9	22 20.68	-15 55.2	1.535	2.527	6.2	20.1
8 19	22 12.21	-11 0.1	2.059	3.069	1.6	20.4	8 19	22 12.43	-16 46.6	1.522	2.531	2.4	19.9
8 29	22 3.85	-11 27.6	2.037	3.042	2.3	20.4	8 29	22 3.77	-17 32.6	1.535	2.535	4.1	20.0
9 8	21 55.76	-11 52.7	2.043	3.015	6.1	20.6	9 8	21 55.83	-18 7.4	1.574	2.540	8.3	20.3
9 18	21 48.75	-12 12.2	2.075	2.988	9.7	20.8	9 18	21 49.56	-18 27.6	1.638	2.544	12.2	20.5
9 28	21 43.50	-12 23.3	2.131	2.960	12.9	21.0	9 28	21 45.64	-18 32.0	1.722	2.549	15.5	20.8
364121	2006 <i>AF</i> ₁₀₄		8 23.1 194°39	1°8/20.9	18		469782	2005 <i>QV</i> ₁₃₆		8 23.1 307°34	1°7/21.9	18	
7 20	22 28.71	-14 28.3	2.447	3.320	10.4	21.7	7 20	22 32.04	-12 56.2	1.392	2.283	15.7	21.5
7 30	22 24.36	-15 25.3	2.376	3.320	7.6	21.5	7 30	22 28.00	-13 30.0	1.311	2.263	11.7	21.2
8 9	22 18.54	-16 28.0	2.329	3.319	4.5	21.3	8 9	22 21.35	-14 15.0	1.251	2.243	7.1	20.9
8 19	22 11.73	-17 31.8	2.310	3.318	2.0	21.2	8 19	22 12.72	-15 5.6	1.214	2.224	2.3	20.5
8 29	22 4.60	-18 31.5	2.320	3.317	3.4	21.3	8 29	22 3.26	-15 53.9	1.202	2.205	4.3	20.6
9 8	21 57.86	-19 22.6	2.358	3.316	6.4	21.5	9 8	21 54.35	-16 32.3	1.215	2.186	9.4	20.8
9 18	21 52.18	-20 1.8	2.423	3.315	9.4	21.6	9 18	21 47.27	-16 55.7	1.250	2.168	14.3	21.1
9 28	21 48.10	-20 27.6	2.511	3.313	11.9	21.8	9 28	21 43.01	-17 1.4	1.304	2.150	18.5	21.3
177258	2003 <i>WX</i> ₃₉		8 23.1 181°41	2°1/24.8	17		34663	2000 <i>WT</i> ₁₇₃		8 23.1 254°94	5°2/17		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
94961	2001 YJ ₁₀₁		8 23.1 121°89	2°6/25.3	18		311	Claudia		8 23.1 161°71	1°6/21.6	18	A
7 20	22 33.61	- 2 39.8	1.812	2.657	14.8	19.8	7 20	22 31.12	-13 40.0	2.034	2.910	12.2	14.6
7 30	22 28.32	- 2 45.6	1.745	2.665	11.4	19.6	7 30	22 26.42	-14 21.2	1.965	2.910	8.9	14.4
8 9	22 21.09	- 3 6.8	1.700	2.673	7.6	19.4	8 9	22 19.94	-15 9.1	1.920	2.910	5.3	14.2
8 19	22 12.56	- 3 41.0	1.679	2.681	3.8	19.2	8 19	22 12.28	-15 58.9	1.901	2.910	1.9	13.9
8 29	22 3.65	- 4 23.9	1.686	2.689	3.1	19.2	8 29	22 4.24	-16 45.2	1.910	2.910	3.4	14.1
9 8	21 55.36	- 5 10.3	1.719	2.696	6.5	19.4	9 8	21 56.72	-17 23.1	1.946	2.911	7.0	14.3
9 18	21 48.57	- 5 54.6	1.779	2.704	10.3	19.7	9 18	21 50.52	-17 49.3	2.008	2.911	10.5	14.5
9 28	21 43.92	- 6 32.4	1.861	2.710	13.6	19.9	9 28	21 46.25	-18 2.2	2.092	2.911	13.4	14.7
310654	2002 DU ₁₃		8 23.1 49°16	2°6/25.1	18		53043	1998 WY ₂₁		8 23.1 231°75	3°7/19.7	18	R
7 20	22 33.88	- 4 0.9	2.089	2.929	13.2	20.2	7 20	22 35.66	-19 14.2	2.007	2.884	12.2	20.2
7 30	22 28.32	- 3 38.1	2.015	2.933	10.2	20.0	7 30	22 29.99	-20 13.6	1.927	2.871	9.1	20.0
8 9	22 21.01	- 3 26.3	1.964	2.937	6.9	19.8	8 9	22 22.24	-21 16.6	1.871	2.858	5.8	19.8
8 19	22 12.53	- 3 24.5	1.939	2.940	3.6	19.6	8 19	22 13.00	-22 16.9	1.842	2.843	3.7	19.6
8 29	22 3.69	- 3 30.3	1.942	2.944	3.0	19.6	8 29	22 3.17	-23 7.6	1.841	2.828	5.4	19.7
9 8	21 55.39	- 3 40.7	1.973	2.948	6.0	19.8	9 8	21 53.82	-23 43.5	1.867	2.812	8.8	19.9
9 18	21 48.39	- 3 52.2	2.030	2.952	9.4	20.0	9 18	21 45.90	-24 1.8	1.918	2.795	12.2	20.1
9 28	21 43.32	- 4 1.7	2.111	2.956	12.4	20.2	9 28	21 40.18	-24 2.2	1.991	2.778	15.2	20.3
167758	2004 XT ₁₀₇		8 23.1 102°81	5°3/19.4	18		369931	2013 EZ ₉₉		8 23.1 69°34	1°1/24.4	18	
7 20	22 36.42	-20 29.2	1.372	2.268	15.6	19.4	7 20	22 27.75	- 3 41.6	2.152	3.001	12.6	20.8
7 30	22 31.05	-21 38.6	1.321	2.274	11.6	19.2	7 30	22 23.82	- 4 39.2	2.081	3.007	9.5	20.6
8 9	22 23.01	-22 50.3	1.291	2.279	7.6	19.0	8 9	22 18.33	- 5 51.5	2.033	3.013	6.0	20.4
8 19	22 13.16	-23 54.8	1.285	2.284	5.3	18.9	8 19	22 11.80	- 7 14.4	2.012	3.019	2.4	20.2
8 29	22 2.86	-24 42.8	1.304	2.290	7.3	19.0	8 29	22 4.94	- 8 42.1	2.019	3.025	2.1	20.2
9 8	21 53.54	-25 8.6	1.347	2.295	11.2	19.2	9 8	21 58.53	-10 8.1	2.054	3.031	5.7	20.4
9 18	21 46.38	-25 10.7	1.413	2.300	15.0	19.5	9 18	21 53.25	-11 26.6	2.117	3.037	9.2	20.7
9 28	21 42.16	-24 50.6	1.497	2.305	18.4	19.7	9 28	21 49.67	-12 33.2	2.204	3.043	12.1	20.9
112614	2002 PM ₆₇		8 23.1 339°83	1°1/24.1	18		451367	2010 XP ₇₆		8 23.1 325°52	4°3/18.7	18	
7 20	22 29.49	- 5 33.8	1.700	2.565	14.6	19.6	7 20	22 29.40	-20 48.2	2.034	2.923	11.6	20.5
7 30	22 25.51	- 6 7.7	1.627	2.562	11.1	19.4	7 30	22 25.27	-21 57.9	1.967	2.916	8.6	20.3
8 9	22 19.53	- 6 57.3	1.576	2.560	7.0	19.1	8 9	22 19.32	-23 9.8	1.924	2.910	5.7	20.1
8 19	22 12.15	- 7 58.6	1.549	2.557	2.6	18.9	8 19	22 12.12	-24 17.4	1.907	2.904	4.3	20.0
8 29	22 4.29	- 9 5.5	1.549	2.555	2.6	18.9	8 29	22 4.49	-25 14.0	1.917	2.898	5.9	20.1
9 8	21 56.97	-10 11.0	1.575	2.553	6.9	19.1	9 8	21 57.35	-25 54.7	1.954	2.892	8.8	20.3
9 18	21 51.11	-11 9.0	1.626	2.551	11.1	19.4	9 18	21 51.54	-26 17.0	2.014	2.887	11.8	20.4
9 28	21 47.43	-11 54.6	1.699	2.549	14.6	19.6	9 28	21 47.69	-26 20.4	2.095	2.882	14.5	20.6
2022	West		8 23.1 300°11	2°0/21.6	18	R	444690	2007 EQ ₁₇		8 23.1 160°79	0°1/23.1	18	
7 20	22 33.40	-15 11.4	1.732	2.614	13.6	15.7	7 20	22 30.08	- 9 36.5	2.358	3.219	11.3	21.8
7 30	22 28.48	-15 37.0	1.655	2.602	10.1	15.4	7 30	22 25.42	-10 3.4	2.285	3.220	8.3	21.6
8 9	22 21.37	-16 8.6	1.600	2.591	6.1	15.2	8 9	22 19.25	-10 38.4	2.236	3.222	5.0	21.4
8 19	22 12.71	-16 41.3	1.570	2.579	2.4	14.9	8 19	22 12.08	-11 18.3	2.213	3.223	1.5	21.2
8 29	22 3.49	-17 9.1	1.567	2.567	4.0	15.0	8 29	22 4.59	-11 58.9	2.219	3.224	2.2	21.2
9 8	21 54.83	-17 27.3	1.590	2.556	8.2	15.2	9 8	21 57.53	-12 36.2	2.253	3.224	5.7	21.5
9 18	21 47.75	-17 32.7	1.638	2.545	12.2	15.4	9 18	21 51.57	-13 6.8	2.314	3.225	8.9	21.7
9 28	21 43.02	-17 24.3	1.707	2.534	15.6	15.6	9 28	21 47.25	-13 28.3	2.398	3.226	11.7	21.9
324335	2006 PG ₅		8 23.1 0°73	0°1/23.1	17		288926	2004 SK ₂₅		8 23.1 267°88	3°2/26.7	18	
7 20	22 32.18	-11 16.3	1.015	1.920	19.1	20.1	7 20	22 28.02	+ 1 25.5	2.329	3.151	12.7	21.0
7 30	22 28.51	-11 9.1	0.959	1.917	14.3	19.8	7 30	22 23.97	+ 1 7.6	2.245	3.148	10.0	20.8
8 9	22 21.76	-11 14.3	0.922	1.915	8.7	19.5	8 9	22 18.42	+ 0 34.0	2.184	3.144	7.1	20.6
8 19	22 12.86	-11 27.3	0.905	1.915	2.6	19.2	8 19	22 11.85	- 0 13.8	2.147	3.141	4.3	20.4
8 29	22 3.32	-11 41.6	0.910	1.916	3.7	19.3	8 29	22 4.90	- 1 12.3	2.139	3.138	3.3	20.4
9 8	21 54.83	-11 50.7	0.937	1.918	9.7	19.6	9 8	21 58.33	- 2 16.7	2.158	3.134	5.5	20.5
9 18	21 48.78	-11 50.2	0.985	1.922	15.1	19.9	9 18	21 52.79	- 3 21.8	2.205	3.131	8.5	20.7
9 28	21 46.06	-11 37.2	1.050	1.927	19.6	20.2	9 28	21 48.84	- 4 22.7	2.276	3.127	11.4	20.9
339460	2005 EP ₂₁₀		8 23.1 206°24	0°5/23.6	18		480013	2014 OB ₅₁		8 23.1 131°91	1°7/21.0	18	
7 20	22 31.73	- 7 24.0	2.212	3.065	12.1	22.1	7 20	22 29.47	-14 43.9	2.634	3.503	9.9	21.8
7 30	22 26.76	- 7 53.9	2.131	3.061	9.1	21.9	7 30	22 24.82	-15 37.6	2.570	3.513	7.2	21.6
8 9	22 20.12	- 8 34.5	2.074	3.057	5.6	21.7	8 9	22 18.82	-16 35.8	2.532	3.521	4.3	21.4
8 19	22 12.32	- 9 22.4	2.043	3.052	1.9	21.4	8 19	22 11.94	-17 34.4	2.522	3.530	1.9	21.3
8 29	22 4.11	-10 13.3	2.041	3.047	2.2	21.4	8 29	22 4.81	-18 28.6	2.542	3.538	3.1	21.4
9 8	21 56.32	-11 2.2	2.068	3.041	5.9	21.7	9 8	21 58.10	-19 14.7	2.589	3.546	6.0	21.6
9 18	21 49.70	-11 44.8	2.121	3.035	9.4	21.9	9 18	21 52.39	-19 49.8	2.664	3.554	8.7	21.8
9 28	21 44.87	-12 18.0	2.198	3.028	12.5	22.1	9 28	21 48.19	-20 12.6	2.762	3.561	11.1	22.0
509941	2009 QD ₅₃		8 23.1 18°43	0°2/23.0	18		23094	1999 XF ₁₄₃		8 23.1 349°13	2°5/20.9	18	
7 20	22 35.62	-12 25.6	1.970	2.837	12.9	20.4	7 20	22 25.31	-11 24.9	1.292	2.195	16.0	16.6
7 30	22 29.69	-12 11.1	1.901	2.840	9.6	20.2	7 30	22 23.01	-12 53.3	1.228	2.186	11.7	16.4
8 9	22 21.87	-12 1.8	1.856	2.843	5.8	20.0	8 9	22 18.31	-14 38.5	1.184	2.179	6.9	16.1
8 19	22 12.82	-11 55.1	1.836	2.846	1.7	19.7	8 19	22 11.89	-16 31.4	1.164	2.173	2.7	15.8
8 29	22 3.44	-11 48.0	1.845	2.850	2.5	19.8	8 29	22 4.84	-18 20.1	1.168	2.168	5.1	15.9
9 8	21 54.71	-11 37.9	1.881	2.854	6.5	20.0	9 8	21 58.45	-19 53.4	1.196	2.164	10.0	16.2
9 18	21 47.45	-11 22.9	1.944	2.858	10.2	20.3	9 18	21 53.85	-21 3.7	1.247	2.161	14.5	16.5
9 28	21 42.30	-11 1.9	2.030	2.863	13.3	20.5	9 28	21 51.87	-21 47.4	1.316	2.160	18.4	16.7
36212	1999 TU ₁₅₄		8 23.1 82°03	1°8/21.2	18		408739	2014 OO ₈₀		8 23.1 353°86	0°6/22.7	18	
7 20	22 30.11	-14 14.5	2.189	3.065									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
220739	2004 <i>TU</i> ₁₉		8 23.1 307°64	1°2/21.9	18		445423	2010 <i>TU</i> ₁₈₄		8 23.1 340°68	4°8/19.5	18	
7 20	22 28.81	-12 3.5	2.002	2.878	12.3	20.3	7 20	22 33.05	-22 37.0	1.749	2.640	13.1	20.6
7 30	22 24.92	-12 46.9	1.913	2.858	9.1	20.1	7 30	22 28.21	-23 14.1	1.683	2.632	9.8	20.4
8 9	22 19.18	-13 39.8	1.847	2.837	5.4	19.8	8 9	22 21.20	-23 50.5	1.639	2.625	6.6	20.2
8 19	22 12.12	-14 37.6	1.807	2.817	1.7	19.6	8 19	22 12.72	-24 19.8	1.620	2.618	4.8	20.0
8 29	22 4.50	-15 34.5	1.794	2.796	3.2	19.6	8 29	22 3.79	-24 36.0	1.628	2.612	6.3	20.1
9 8	21 57.24	-16 24.9	1.809	2.776	7.2	19.8	9 8	21 55.54	-24 35.3	1.661	2.606	9.6	20.3
9 18	21 51.19	-17 4.1	1.848	2.757	10.9	20.0	9 18	21 48.95	-24 16.7	1.717	2.602	12.9	20.5
9 28	21 47.07	-17 29.4	1.910	2.737	14.2	20.2	9 28	21 44.72	-23 41.2	1.793	2.597	15.9	20.7
37211	2000 <i>WK</i> ₁₁₉		8 23.1 321°98	6°3/17.2	18		273687	2007 <i>EG</i> ₂₇		8 23.1 72°49	2°5/21.3	17	
7 20	22 31.75	-26 33.9	1.908	2.798	12.2	18.2	7 20	22 35.92	-15 37.0	1.562	2.446	14.7	20.5
7 30	22 27.19	-27 42.9	1.844	2.788	9.4	18.0	7 30	22 30.21	-16 14.6	1.516	2.464	10.7	20.3
8 9	22 20.57	-28 49.2	1.804	2.779	7.1	17.8	8 9	22 22.29	-16 57.5	1.491	2.482	6.4	20.1
8 19	22 12.51	-29 45.3	1.789	2.771	6.3	17.8	8 19	22 13.00	-17 39.2	1.492	2.500	2.7	19.9
8 29	22 3.99	-30 24.4	1.800	2.762	7.8	17.8	8 29	22 3.46	-18 13.4	1.519	2.518	4.4	20.1
9 8	21 56.07	-30 42.1	1.835	2.754	10.5	18.0	9 8	21 54.85	-18 35.3	1.572	2.536	8.5	20.4
9 18	21 49.69	-30 37.6	1.894	2.747	13.4	18.2	9 18	21 48.12	-18 42.6	1.649	2.553	12.3	20.7
9 28	21 45.55	-30 12.2	1.972	2.739	15.9	18.3	9 28	21 43.89	-18 35.0	1.748	2.571	15.5	20.9
380298	2002 <i>CS</i> ₂₀₈		8 23.1 136°47	1°1/22.1	17		311474	2005 <i>UD</i> ₄₉₉		8 23.1 245°66	5°5/16.6	18	
7 20	22 33.98	-12 2.9	2.151	3.015	12.0	22.3	7 20	22 30.93	-26 3.0	2.333	3.216	10.5	20.3
7 30	22 28.35	-12 47.4	2.090	3.028	8.8	22.1	7 30	22 26.30	-27 27.2	2.267	3.208	8.1	20.2
8 9	22 21.02	-13 39.0	2.053	3.041	5.2	21.9	8 9	22 19.92	-28 50.0	2.227	3.200	6.1	20.0
8 19	22 12.60	-14 33.0	2.043	3.053	1.6	21.7	8 19	22 12.33	-30 4.5	2.214	3.192	5.6	20.0
8 29	22 3.90	-15 24.3	2.062	3.064	2.9	21.8	8 29	22 4.32	-31 4.5	2.228	3.184	7.0	20.1
9 8	21 55.79	-16 8.0	2.110	3.075	6.5	22.1	9 8	21 56.73	-31 45.8	2.268	3.176	9.3	20.2
9 18	21 48.99	-16 41.0	2.184	3.085	9.8	22.3	9 18	21 50.38	-32 6.6	2.333	3.168	11.8	20.4
9 28	21 44.09	-17 1.5	2.282	3.095	12.7	22.5	9 28	21 45.89	-32 7.5	2.417	3.159	14.0	20.5
335570	2006 <i>CB</i> ₃₉		8 23.1 229°14	1°9/24.7	18		434911	2006 <i>TD</i> ₆₃		8 23.1 271°71	3°4/20.7	18	
7 20	22 33.00	-4 30.2	1.877	2.727	14.1	20.7	7 20	22 38.82	-18 9.2	1.768	2.645	13.6	21.8
7 30	22 27.99	-4 39.1	1.797	2.722	10.8	20.5	7 30	22 32.82	-18 48.1	1.670	2.615	10.2	21.6
8 9	22 21.01	-5 1.7	1.739	2.717	7.1	20.3	8 9	22 24.26	-19 31.9	1.596	2.584	6.4	21.3
8 19	22 12.65	-5 35.6	1.706	2.711	3.2	20.0	8 19	22 13.73	-20 14.3	1.547	2.552	3.5	21.0
8 29	22 3.79	-6 16.9	1.700	2.705	2.7	20.0	8 29	22 2.25	-20 48.2	1.526	2.520	5.3	21.1
9 8	21 55.42	-7 0.1	1.722	2.699	6.5	20.2	9 8	21 51.12	-21 7.7	1.532	2.486	9.5	21.2
9 18	21 48.44	-7 40.4	1.769	2.693	10.4	20.5	9 18	21 41.59	-21 9.8	1.562	2.452	13.7	21.4
9 28	21 43.56	-8 13.4	1.840	2.686	13.9	20.7	9 28	21 34.65	-20 53.9	1.613	2.418	17.4	21.6
434097	2002 <i>GT</i> ₃₃		8 23.1 130°64	12°8/13.7	17		354196	2002 <i>EY</i> ₉₂		8 23.1 59°74	2°0/21.7	18	
7 20	23 0.53	-51 55.7	2.132	2.921	14.8	21.0	7 20	22 36.53	-16 55.8	1.968	2.842	12.6	20.1
7 30	22 48.37	-52 51.0	2.105	2.933	13.6	20.9	7 30	22 30.23	-17 3.3	1.919	2.862	9.2	19.9
8 9	22 33.06	-53 21.1	2.099	2.945	12.9	20.9	8 9	22 22.12	-17 12.9	1.892	2.881	5.5	19.7
8 19	22 16.06	-53 17.6	2.115	2.957	12.9	20.9	8 19	22 12.93	-17 20.8	1.893	2.901	2.3	19.6
8 29	21 59.33	-52 36.7	2.154	2.968	13.6	21.0	8 29	22 3.59	-17 23.1	1.922	2.921	3.6	19.7
9 8	21 44.67	-51 20.8	2.216	2.978	14.7	21.1	9 8	21 55.05	-17 17.1	1.978	2.941	7.1	19.9
9 18	21 33.28	-49 36.5	2.297	2.988	16.0	21.3	9 18	21 48.08	-17 1.8	2.060	2.960	10.3	20.2
9 28	21 25.68	-47 32.0	2.397	2.998	17.2	21.4	9 28	21 43.23	-16 37.2	2.165	2.980	13.2	20.4
294525	2007 <i>XZ</i> ₂₉		8 23.1 205°29	3°1/20.6	17		109447	2001 <i>QO</i> ₂₀₅		8 23.1 250°29	4°6/19.4	18	
7 20	22 34.81	-15 33.4	1.606	2.491	14.4	20.8	7 20	22 35.14	-20 33.6	1.704	2.591	13.5	19.7
7 30	22 29.67	-16 41.2	1.539	2.488	10.6	20.6	7 30	22 29.90	-21 34.2	1.633	2.582	10.1	19.5
8 9	22 22.18	-17 57.2	1.494	2.484	6.4	20.3	8 9	22 22.32	-22 37.5	1.586	2.572	6.6	19.3
8 19	22 13.02	-19 13.6	1.474	2.481	3.2	20.1	8 19	22 13.09	-23 35.9	1.563	2.562	4.6	19.1
8 29	22 3.30	-20 22.0	1.482	2.477	5.2	20.3	8 29	22 3.26	-24 21.8	1.567	2.552	6.4	19.2
9 8	21 54.23	-21 15.0	1.515	2.472	9.3	20.5	9 8	21 54.07	-24 49.5	1.597	2.542	10.0	19.4
9 18	21 46.90	-21 48.8	1.572	2.467	13.3	20.7	9 18	21 46.58	-24 56.8	1.650	2.531	13.6	19.6
9 28	21 42.13	-22 2.3	1.650	2.461	16.8	20.9	9 28	21 41.60	-24 43.9	1.723	2.520	16.8	19.8
272415	2005 <i>TY</i> ₆₄		8 23.1 219°41	0°2/23.2	17		340450	2006 <i>GX</i> ₃₉		8 23.1 67°48	8°8/16.9	17	
7 20	22 34.04	-8 46.5	1.891	2.753	13.6	22.2	7 20	22 40.39	-32 44.4	1.634	2.514	14.4	20.2
7 30	22 28.78	-9 14.4	1.811	2.746	10.1	21.9	7 30	22 33.55	-33 50.6	1.605	2.536	11.6	20.1
8 9	22 21.50	-9 53.5	1.754	2.739	6.2	21.7	8 9	22 24.26	-34 44.6	1.599	2.558	9.4	20.0
8 19	22 12.81	-10 40.0	1.722	2.732	1.9	21.4	8 19	22 13.56	-35 18.1	1.617	2.580	8.8	20.0
8 29	22 3.59	-11 28.5	1.719	2.724	2.6	21.4	8 29	22 2.77	-35 25.5	1.660	2.601	10.1	20.1
9 8	21 54.87	-12 13.4	1.742	2.715	6.9	21.7	9 8	21 53.23	-35 5.7	1.726	2.623	12.4	20.3
9 18	21 47.56	-12 50.3	1.792	2.706	10.9	21.9	9 18	21 45.92	-34 21.5	1.814	2.645	14.8	20.5
9 28	21 42.40	-13 15.8	1.865	2.697	14.3	22.1	9 28	21 41.41	-33 17.7	1.921	2.667	17.0	20.7
206584	2003 <i>WJ</i> ₁₃		8 23.1 225°32	1°9/24.9	18		349735	2008 <i>YU</i> ₁₀₅		8 23.1 264°77	0°7/23.7	18	
7 20	22 32.09	-3 57.2	2.131	2.974	12.9	21.2	7 20	22 32.14	-7 32.6	1.925	2.786	13.4	21.5
7 30	22 27.13	-4 9.1	2.046	2.967	10.0	21.0	7 30	22 27.38	-7 51.9	1.840	2.774	10.1	21.3
8 9	22 20.41	-4 33.8	1.985	2.960	6.5	20.7	8 9	22 20.68	-8 22.9	1.778	2.762	6.3	21.0
8 19	22 12.48	-5 9.2	1.948	2.953	3.0	20.5	8 19	22 12.59	-9 2.4	1.741	2.750	2.2	20.8
8 29	22 4.08	-5 51.6	1.940	2.945	2.5	20.5	8 29	22 3.96	-9 45.9	1.732	2.737	2.4	20.7
9 8	21 56.09	-6 36.2	1.960	2.936	5.9	20.7	9 8	21 55.77	-10 28.0	1.749	2.725	6.6	21.0
9 18	21 49.30	-7 18.5	2.007	2.928	9.5	20.9	9 18	21 48.89	-11 4.2	1.793	2.712	10.6	21.2
9 28	21 44.37	-7 54.4	2.077	2.919	12.7	21.1	9 28	21 44.08	-11 30.7	1.860	2.700	14.0	21.4
278937	2008 <i>UR</i> ₂₅		8 23.1 47°33	2°1/21.6	16		277619	2006 <i>BS</i> ₉					

EPHEMERIDES

8 23.1

8 23.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
331321	2011 <i>UN</i> ₃₁₁		8 23.1	5°09	0°8/22.5	18	12875	1998 <i>QA</i> ₂		8 23.1	298°02	1°9/24.6	18 R
7 20	22 31.39	-11 43.8	1.790	2.667	13.5	21.0	7 20	22 30.63	-4 35.2	1.731	2.590	14.7	18.7
7 30	22 26.84	-12 11.2	1.722	2.667	10.0	20.8	7 30	22 26.56	-4 49.5	1.639	2.569	11.4	18.4
8 9	22 20.32	-12 47.3	1.677	2.667	6.0	20.5	8 9	22 20.37	-5 19.5	1.568	2.548	7.4	18.1
8 19	22 12.47	-13 27.6	1.657	2.668	1.7	20.2	8 19	22 12.58	-6 2.9	1.521	2.527	3.3	17.8
8 29	22 4.22	-14 6.6	1.665	2.668	3.0	20.3	8 29	22 4.09	-6 55.0	1.500	2.505	2.8	17.8
9 8	21 56.56	-14 39.2	1.698	2.669	7.2	20.6	9 8	21 55.96	-7 49.8	1.506	2.484	7.1	18.0
9 18	21 50.38	-15 1.6	1.757	2.671	11.1	20.8	9 18	21 49.21	-8 41.0	1.536	2.464	11.4	18.2
9 28	21 46.34	-15 11.7	1.837	2.673	14.3	21.1	9 28	21 44.70	-9 23.3	1.589	2.443	15.3	18.4
255129	2005 <i>UC</i> ₁₃₀		8 23.1	331°36	7°3/16.3	17	250989	2006 <i>KX</i> ₄₀		8 23.1	220°42	3°6/25.8	17
7 20	22 27.39	-24 34.0	1.469	2.376	14.0	20.3	7 20	22 34.29	-0 40.3	1.548	2.394	16.8	20.8
7 30	22 24.65	-26 10.6	1.394	2.350	10.9	20.1	7 30	22 29.36	-0 46.1	1.470	2.389	13.3	20.6
8 9	22 19.42	-27 49.7	1.342	2.325	8.1	19.8	8 9	22 22.07	-1 12.1	1.413	2.384	9.1	20.3
8 19	22 12.30	-29 20.9	1.313	2.300	7.4	19.7	8 19	22 13.08	-1 56.6	1.378	2.378	5.0	20.1
8 29	22 4.39	-30 33.1	1.308	2.276	9.6	19.8	8 29	22 3.43	-2 54.8	1.370	2.372	4.0	20.0
9 8	21 57.00	-31 18.4	1.326	2.254	13.1	19.9	9 8	21 54.35	-3 59.8	1.387	2.366	7.6	20.2
9 18	21 51.38	-31 33.4	1.364	2.233	16.7	20.1	9 18	21 46.95	-5 3.9	1.429	2.359	11.9	20.5
9 28	21 48.49	-31 18.8	1.420	2.213	19.9	20.3	9 28	21 42.07	-6 0.5	1.494	2.352	15.8	20.7
195349	2002 <i>EC</i> ₁₅₄		8 23.1	309°41	5°7/19.8	18	199598	2006 <i>FV</i> ₂₃		8 23.1	74°06	0°2/23.3	17
7 20	22 40.50	-25 8.8	1.586	2.471	14.5	19.6	7 20	22 31.65	-8 6.9	1.739	2.608	14.2	20.4
7 30	22 33.97	-25 30.6	1.518	2.462	11.1	19.4	7 30	22 27.05	-8 41.4	1.674	2.613	10.6	20.2
8 9	22 24.80	-25 47.9	1.473	2.454	7.7	19.1	8 9	22 20.47	-9 28.4	1.631	2.618	6.5	19.9
8 19	22 13.83	-25 53.7	1.451	2.446	5.7	19.0	8 19	22 12.55	-10 23.4	1.613	2.623	2.0	19.7
8 29	22 2.35	-25 42.0	1.456	2.438	7.2	19.1	8 29	22 4.24	-11 20.4	1.622	2.628	2.6	19.7
9 8	21 51.78	-25 10.2	1.487	2.431	10.6	19.3	9 8	21 56.54	-12 13.1	1.658	2.633	7.0	20.0
9 18	21 43.30	-24 19.3	1.541	2.423	14.3	19.5	9 18	21 50.35	-12 56.5	1.719	2.638	10.9	20.3
9 28	21 37.70	-23 12.2	1.615	2.416	17.5	19.7	9 28	21 46.33	-13 27.4	1.803	2.644	14.3	20.5
494525	2017 <i>AU</i>		8 23.1	203°35	4°4/27.3	17	291212	2006 <i>AB</i> ₉₃		8 23.2	21°74	2°9/20.4	18
7 20	22 34.48	+ 3 33.0	2.751	3.540	11.8	21.1	7 20	22 28.84	-16 25.0	1.845	2.734	12.6	19.7
7 30	22 28.53	+ 4 12.0	2.661	3.537	9.6	20.9	7 30	22 24.90	-17 24.5	1.788	2.740	9.2	19.5
8 9	22 21.11	+ 4 39.2	2.595	3.534	7.2	20.7	8 9	22 19.13	-18 29.2	1.755	2.746	5.6	19.3
8 19	22 12.71	+ 4 54.1	2.556	3.531	5.2	20.6	8 19	22 12.15	-19 32.7	1.748	2.754	3.0	19.1
8 29	22 3.92	+ 4 57.3	2.545	3.527	4.5	20.6	8 29	22 4.83	-20 28.6	1.767	2.761	4.6	19.2
9 8	21 55.46	+ 4 50.8	2.563	3.524	5.8	20.6	9 8	21 58.13	-21 11.4	1.813	2.770	8.1	19.5
9 18	21 47.96	+ 4 37.3	2.609	3.520	8.0	20.8	9 18	21 52.83	-21 38.1	1.883	2.779	11.4	19.7
9 28	21 41.98	+ 4 20.4	2.681	3.515	10.4	20.9	9 28	21 49.56	-21 47.9	1.974	2.788	14.3	19.9
514632	2004 <i>TM</i> ₁₉₈		8 23.1	350°53	0°8/22.5	18	401648	2013 <i>GO</i> ₉₈		8 23.2	153°72	0°4/23.6	18
7 20	22 29.06	-11 40.3	1.726	2.608	13.6	20.6	7 20	22 29.77	-7 56.7	2.303	3.160	11.6	21.1
7 30	22 25.22	-12 6.6	1.655	2.603	10.1	20.3	7 30	22 25.27	-8 24.7	2.229	3.161	8.7	20.9
8 9	22 19.40	-12 42.1	1.607	2.598	6.0	20.1	8 9	22 19.24	-9 2.4	2.178	3.163	5.3	20.7
8 19	22 12.23	-13 22.4	1.583	2.593	1.8	19.8	8 19	22 12.18	-9 46.4	2.154	3.163	1.7	20.5
8 29	22 4.60	-14 1.9	1.585	2.590	3.1	19.9	8 29	22 4.79	-10 32.6	2.159	3.164	2.1	20.5
9 8	21 57.53	-14 35.1	1.614	2.587	7.3	20.1	9 8	21 57.83	-11 16.6	2.191	3.165	5.6	20.8
9 18	21 51.92	-14 58.1	1.667	2.585	11.3	20.4	9 18	21 51.98	-11 54.5	2.251	3.166	8.9	21.0
9 28	21 48.46	-15 8.3	1.741	2.583	14.7	20.6	9 28	21 47.78	-12 23.4	2.334	3.167	11.8	21.2
188790	2005 <i>VP</i> ₅₈		8 23.1	50°24	1°9/21.6	18	209090	2003 <i>ST</i> ₃₃		8 23.2	295°41	1°7/24.7	18
7 20	22 33.07	-15 31.6	1.895	2.774	12.8	20.5	7 20	22 29.09	-3 11.1	1.731	2.588	14.8	20.4
7 30	22 27.87	-15 56.7	1.839	2.785	9.3	20.3	7 30	22 25.47	-3 53.3	1.634	2.563	11.5	20.1
8 9	22 20.82	-16 26.1	1.807	2.797	5.6	20.1	8 9	22 19.75	-4 55.5	1.558	2.538	7.5	19.8
8 19	22 12.61	-16 55.2	1.801	2.809	2.2	19.9	8 19	22 12.43	-6 14.4	1.507	2.513	3.2	19.5
8 29	22 4.13	-17 19.1	1.822	2.821	3.6	20.0	8 29	22 4.35	-7 44.2	1.482	2.488	2.7	19.4
9 8	21 56.34	-17 34.0	1.869	2.834	7.3	20.3	9 8	21 56.58	-9 16.6	1.484	2.463	7.2	19.6
9 18	21 50.06	-17 37.7	1.942	2.846	10.7	20.5	9 18	21 50.14	-10 43.3	1.511	2.438	11.6	19.8
9 28	21 45.85	-17 29.4	2.038	2.859	13.7	20.7	9 28	21 45.89	-11 57.5	1.561	2.413	15.6	20.0
389027	2008 <i>UF</i> ₃₁₈		8 23.1	274°70	3°8/20.3	18	469129	2015 <i>ET</i> ₁₇		8 23.2	331°69	3°6/19.3	16
7 20	22 36.38	-19 50.8	1.820	2.702	13.1	21.2	7 20	22 20.51	-5 44.9	0.999	1.907	19.0	19.7
7 30	22 30.77	-20 26.0	1.737	2.683	9.8	21.0	7 30	22 20.15	-9 3.0	0.921	1.884	13.9	19.3
8 9	22 22.86	-21 3.5	1.676	2.664	6.3	20.7	8 9	22 17.05	-13 9.0	0.865	1.862	8.1	18.9
8 19	22 13.30	-21 37.2	1.641	2.644	3.8	20.5	8 19	22 11.72	-17 46.4	0.833	1.842	3.6	18.6
8 29	22 3.07	-22 0.8	1.634	2.624	5.4	20.6	8 29	22 5.30	-22 26.9	0.827	1.823	7.9	18.8
9 8	21 53.37	-22 9.7	1.652	2.604	9.1	20.8	9 8	21 59.38	-26 40.1	0.846	1.805	14.4	19.0
9 18	21 45.25	-22 1.8	1.695	2.584	12.9	21.0	9 18	21 55.51	-30 4.1	0.887	1.789	20.2	19.3
9 28	21 39.56	-21 37.4	1.759	2.564	16.2	21.1	9 28	21 54.98	-32 29.9	0.944	1.776	25.0	19.6
104211	2000 <i>EW</i> ₁₁₆		8 23.1	261°82	0°7/23.7	18	255207	2005 <i>UG</i> ₃₄₁		8 23.2	19°31	7°8/31.8	18
7 20	22 32.64	-7 9.7	1.596	2.464	15.3	20.4	7 20	22 27.86	+13 34.8	2.009	2.771	16.4	20.3
7 30	22 28.07	-7 38.6	1.520	2.458	11.5	20.2	7 30	22 24.12	+13 47.7	1.931	2.773	14.1	20.1
8 9	22 21.24	-8 22.4	1.466	2.451	7.2	19.9	8 9	22 18.67	+13 35.8	1.872	2.776	11.6	20.0
8 19	22 12.81	-9 16.8	1.436	2.445	2.4	19.6	8 19	22 12.04	+12 57.9	1.834	2.779	9.2	19.9
8 29	22 3.78	-10 15.8	1.432	2.438	2.7	19.6	8 29	22 4.99	+11 55.7	1.821	2.782	7.9	19.8
9 8	21 55.32	-11 12.1	1.454	2.431	7.5	19.9	9 8	21 58.39	+10 34.2	1.833	2.786	8.3	19.8
9 18	21 48.48	-11 59.8	1.501	2.424	12.0	20.1	9 18	21 53.02	+9 0.6	1.870	2.789	10.2	19.9
9 28	21 44.05	-12 34.7	1.570	2.417	15.8	20.4	9 28	21 49.50	+7 22.9	1.931	2.793	12.6	20.1
325000	2008 <i>BL</i> ₂₈		8 23.1	86°22	1°1/22.3	13 C	316089	2009 <i>KH</i> ₁₅		8 23.2	62°96		

EPHEMERIDES

8 23.2

8 23.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
508628	2017 <i>SD</i> ₄₂		8 23.2	11 ^o 77	3 ^o 4/20.7	17	224162	2005 <i>QM</i> ₈₅		8 23.2	272 ^o 27	1 ^o 9/24.9	18
7 20	22 28.10	-12 35.1	1.008	1.921	18.4	20.6	7 20	22 30.38	-2 37.0	1.608	2.465	15.8	20.9
7 30	22 25.55	-14 5.6	0.959	1.922	13.5	20.3	7 30	22 26.43	-3 19.7	1.528	2.456	12.2	20.6
8 9	22 20.06	-15 52.5	0.929	1.925	8.0	20.0	8 9	22 20.31	-4 23.0	1.468	2.447	7.9	20.3
8 19	22 12.53	-17 44.2	0.920	1.929	3.5	19.8	8 19	22 12.61	-5 43.2	1.432	2.438	3.5	20.1
8 29	22 4.37	-19 26.4	0.934	1.933	6.2	20.0	8 29	22 4.27	-7 13.6	1.422	2.428	2.8	20.0
9 8	21 57.22	-20 46.8	0.970	1.939	11.5	20.3	9 8	21 56.42	-8 45.3	1.439	2.419	7.3	20.2
9 18	21 52.37	-21 38.9	1.026	1.946	16.5	20.6	9 18	21 50.08	-10 10.1	1.481	2.409	11.7	20.5
9 28	21 50.70	-22 1.2	1.100	1.953	20.6	20.9	9 28	21 46.07	-11 21.3	1.545	2.400	15.6	20.7
42060	2000 <i>YX</i> ₁₁₅		8 23.2	336 ^o 41	4 ^o 4/19.2	18	98598	2000 <i>WW</i> ₅₉		8 23.2	189 ^o 71	5 ^o 5/28.4	18
7 20	22 30.55	-18 19.0	1.584	2.479	13.9	18.3	7 20	22 33.07	+ 6 32.4	2.237	3.025	14.2	20.4
7 30	22 26.59	-19 42.3	1.521	2.475	10.3	18.0	7 30	22 27.82	+ 6 49.7	2.152	3.024	11.7	20.2
8 9	22 20.38	-21 11.5	1.481	2.471	6.5	17.8	8 9	22 20.87	+ 6 49.2	2.089	3.023	9.0	20.0
8 19	22 12.59	-22 38.1	1.467	2.468	4.4	17.7	8 19	22 12.73	+ 6 30.6	2.050	3.021	6.5	19.9
8 29	22 4.26	-23 52.7	1.478	2.465	6.4	17.8	8 29	22 4.15	+ 5 55.4	2.037	3.019	5.5	19.8
9 8	21 56.58	-24 48.3	1.514	2.462	10.1	18.0	9 8	21 55.96	+ 5 7.6	2.053	3.016	6.8	19.9
9 18	21 50.57	-25 21.2	1.573	2.459	13.8	18.2	9 18	21 48.94	+ 4 12.3	2.094	3.013	9.3	20.0
9 28	21 47.00	-25 30.9	1.651	2.457	17.0	18.4	9 28	21 43.72	+ 3 15.3	2.161	3.009	12.0	20.2
421004	2013 <i>PX</i> ₄₅		8 23.2	224 ^o 32	3 ^o 0/25.5	17	126023	2001 <i>YX</i> ₆₁		8 23.2	135 ^o 26	3 ^o 8/19.7	18
7 20	22 33.92	- 1 36.2	1.634	2.480	16.1	21.4	7 20	22 34.64	-19 3.7	1.888	2.770	12.7	20.2
7 30	22 29.01	- 1 47.3	1.554	2.474	12.6	21.2	7 30	22 29.18	-20 9.4	1.832	2.779	9.3	20.1
8 9	22 21.84	- 2 17.1	1.495	2.468	8.5	20.9	8 9	22 21.73	-21 17.9	1.800	2.787	5.9	19.9
8 19	22 13.04	- 3 3.6	1.459	2.461	4.4	20.7	8 19	22 12.97	-22 22.2	1.794	2.795	3.8	19.8
8 29	22 3.61	- 4 1.9	1.450	2.454	3.5	20.6	8 29	22 3.87	-23 15.5	1.816	2.803	5.4	19.9
9 8	21 54.71	- 5 5.4	1.468	2.446	7.3	20.8	9 8	21 55.44	-23 52.9	1.865	2.811	8.7	20.1
9 18	21 47.39	- 6 7.0	1.510	2.438	11.5	21.0	9 18	21 48.57	-24 12.1	1.938	2.818	11.9	20.3
9 28	21 42.48	- 7 0.5	1.575	2.430	15.4	21.3	9 28	21 43.90	-24 13.4	2.033	2.824	14.7	20.5
519651	2012 <i>VQ</i> ₈₆		8 23.2	281 ^o 31	9 ^o 5/14.0	18	178691	2000 <i>SB</i> ₂₇		8 23.2	326 ^o 22	6 ^o 2/28.9	18
7 20	22 36.91	-34 37.1	1.824	2.701	13.2	21.6	7 20	22 29.60	+ 7 7.5	1.993	2.792	15.3	19.6
7 30	22 31.46	-36 6.2	1.759	2.683	11.1	21.5	7 30	22 25.46	+ 7 28.1	1.910	2.787	12.7	19.4
8 9	22 23.42	-37 26.4	1.718	2.665	9.7	21.3	8 9	22 19.54	+ 7 28.6	1.847	2.782	9.9	19.2
8 19	22 13.53	-38 28.2	1.700	2.647	9.7	21.3	8 19	22 12.35	+ 7 8.4	1.807	2.778	7.3	19.0
8 29	22 2.95	-39 3.2	1.707	2.628	11.2	21.4	8 29	22 4.69	+ 6 29.2	1.792	2.773	6.2	19.0
9 8	21 53.06	-39 7.7	1.736	2.610	13.5	21.5	9 8	21 57.43	+ 5 35.2	1.804	2.769	7.4	19.0
9 18	21 45.05	-38 42.1	1.786	2.591	16.1	21.6	9 18	21 51.40	+ 4 32.5	1.840	2.765	10.0	19.2
9 28	21 39.82	-37 50.2	1.854	2.573	18.4	21.7	9 28	21 47.27	+ 3 27.6	1.901	2.762	12.8	19.4
512434	2016 <i>PX</i> ₉₀		8 23.2	25 ^o 23	2 ^o 3/21.6	17	283227	2010 <i>RW</i> ₆₀		8 23.2	79 ^o 68	0 ^o 7/22.7	17
7 20	22 33.03	-15 8.6	1.389	2.283	15.6	21.0	7 20	22 36.01	-11 12.6	1.371	2.254	16.5	20.5
7 30	22 28.44	-15 37.7	1.337	2.290	11.4	20.7	7 30	22 30.75	-11 36.6	1.312	2.259	12.2	20.3
8 9	22 21.45	-16 13.5	1.306	2.298	6.8	20.5	8 9	22 22.92	-12 11.8	1.274	2.264	7.3	20.0
8 19	22 12.89	-16 49.6	1.298	2.307	2.7	20.3	8 19	22 13.37	-12 52.7	1.260	2.270	2.1	19.7
8 29	22 3.95	-17 19.2	1.316	2.317	4.4	20.4	8 29	22 3.34	-13 32.2	1.271	2.275	3.5	19.8
9 8	21 55.92	-17 37.0	1.358	2.327	8.9	20.7	9 8	21 54.18	-14 4.0	1.307	2.281	8.6	20.2
9 18	21 49.83	-17 40.2	1.424	2.338	13.1	21.0	9 18	21 47.05	-14 23.7	1.366	2.286	13.1	20.4
9 28	21 46.39	-17 28.1	1.509	2.349	16.7	21.2	9 28	21 42.72	-14 29.2	1.446	2.291	17.0	20.7
66734	1999 <i>TX</i> ₁₁₄		8 23.2	257 ^o 82	4 ^o 2/20.3	18	214146	2005 <i>AE</i> ₇₀		8 23.2	127 ^o 60	1 ^o 7/21.9	17
7 20	22 38.93	-22 0.5	1.832	2.711	13.1	19.0	7 20	22 35.59	-12 36.6	1.471	2.353	15.6	20.6
7 30	22 32.51	-22 22.7	1.761	2.704	9.9	18.8	7 30	22 30.32	-13 22.2	1.411	2.359	11.5	20.4
8 9	22 23.82	-22 43.8	1.712	2.697	6.4	18.6	8 9	22 22.62	-14 18.0	1.373	2.364	6.8	20.2
8 19	22 13.60	-22 58.0	1.690	2.690	4.2	18.5	8 19	22 13.28	-15 17.2	1.360	2.369	2.3	19.9
8 29	22 2.91	-22 59.9	1.695	2.683	5.6	18.5	8 29	22 3.47	-16 12.2	1.373	2.374	4.0	20.0
9 8	21 52.94	-22 46.7	1.726	2.675	9.0	18.7	9 8	21 54.47	-16 55.9	1.411	2.379	8.7	20.3
9 18	21 44.71	-22 17.7	1.782	2.668	12.5	18.9	9 18	21 47.37	-17 24.2	1.473	2.384	13.0	20.6
9 28	21 38.94	-21 34.3	1.860	2.660	15.6	19.1	9 28	21 42.93	-17 35.5	1.556	2.388	16.6	20.8
392031	2009 <i>BL</i> ₃₅		8 23.2	318 ^o 57	0 ^o 7/22.6	18	184175	2004 <i>NT</i> ₂₈		8 23.2	321 ^o 94	3 ^o 0/25.7	18
7 20	22 33.76	-12 7.5	1.759	2.634	13.8	20.9	7 20	22 28.89	- 2 0.7	1.835	2.684	14.4	19.7
7 30	22 28.69	-12 21.3	1.687	2.630	10.2	20.7	7 30	22 25.12	- 2 2.1	1.747	2.669	11.3	19.4
8 9	22 21.53	-12 42.9	1.636	2.625	6.2	20.4	8 9	22 19.43	- 2 19.4	1.680	2.653	7.7	19.2
8 19	22 12.93	-13 8.3	1.611	2.621	1.8	20.2	8 19	22 12.36	- 2 51.1	1.638	2.638	4.2	19.0
8 29	22 3.85	-13 32.6	1.613	2.618	3.0	20.2	8 29	22 4.71	- 3 33.9	1.621	2.624	3.3	18.9
9 8	21 55.38	-13 51.2	1.642	2.614	7.3	20.5	9 8	21 57.45	- 4 22.3	1.631	2.610	6.6	19.0
9 18	21 48.45	-14 0.8	1.695	2.610	11.3	20.7	9 18	21 51.48	- 5 10.8	1.665	2.596	10.4	19.2
9 28	21 43.79	-13 59.5	1.771	2.607	14.8	20.9	9 28	21 47.54	- 5 54.0	1.723	2.583	14.0	19.4
138939	2001 <i>BE</i> ₂₀		8 23.2	294 ^o 99	0 ^o 3/23.3	18	438787	2008 <i>WM</i> ₆₇		8 23.2	319 ^o 31	3 ^o 5/26.1	18
7 20	22 34.71	- 9 33.7	1.365	2.246	16.6	20.1	7 20	22 30.65	- 0 26.6	1.686	2.531	15.7	21.4
7 30	22 30.06	- 9 42.2	1.286	2.231	12.6	19.8	7 30	22 26.49	- 0 32.6	1.609	2.527	12.4	21.2
8 9	22 22.72	-10 3.7	1.228	2.217	7.8	19.5	8 9	22 20.28	- 0 57.3	1.552	2.522	8.6	21.0
8 19	22 13.36	-10 34.1	1.193	2.203	2.4	19.2	8 19	22 12.61	- 1 39.2	1.519	2.518	4.8	20.7
8 29	22 3.19	-11 7.6	1.183	2.189	3.2	19.2	8 29	22 4.40	- 2 33.9	1.512	2.514	3.8	20.7
9 8	21 53.63	-11 37.5	1.198	2.175	8.7	19.5	9 8	21 56.70	- 3 35.2	1.531	2.510	7.0	20.8
9 18	21 45.98	-11 58.4	1.236	2.162	13.7	19.7	9 18	21 50.47	- 4 36.2	1.574	2.506	10.9	21.1
9 28	21 41.22	-12 6.9	1.293	2.149	18.0	20.0	9 28	21 46.4					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
346532	2008 <i>UH</i> ₂₂₈	8 23.2 15°60'	1.8°/21.7	17			201082	2002 <i>GA</i> ₂₇	8 23.2 69°26'	1.8°/24.7	16		
7 20	22 33.34	-14 3.5	1.673	2.555	14.0	21.3	7 20	22 32.50	-4 20.3	1.669	2.526	15.3	20.8
7 30	22 28.45	-14 38.2	1.608	2.556	10.3	21.0	7 30	22 27.69	-4 40.7	1.612	2.541	11.6	20.6
8 9	22 21.42	-15 20.3	1.566	2.556	6.2	20.8	8 9	22 20.88	-5 16.6	1.576	2.556	7.5	20.4
8 19	22 12.93	-16 4.1	1.548	2.557	2.2	20.5	8 19	22 12.78	-6 4.2	1.565	2.571	3.2	20.1
8 29	22 4.00	-16 43.5	1.557	2.558	3.8	20.7	8 29	22 4.36	-6 58.3	1.580	2.585	2.7	20.1
9 8	21 55.74	-17 13.1	1.592	2.559	8.0	20.9	9 8	21 56.65	-7 52.3	1.622	2.600	6.7	20.4
9 18	21 49.11	-17 29.4	1.652	2.561	12.0	21.2	9 18	21 50.51	-8 40.7	1.689	2.615	10.6	20.7
9 28	21 44.83	-17 31.2	1.733	2.562	15.4	21.4	9 28	21 46.60	-9 19.2	1.779	2.630	14.0	20.9
193599	2001 <i>BJ</i> ₆₆	8 23.2 215°26'	0.7°/22.4	18			111233	2001 <i>WP</i> ₇₀	8 23.2 58°44'	0.2°/23.4	18		
7 20	22 31.29	-9 31.4	2.334	3.193	11.4	20.0	7 20	22 31.50	-8 19.9	1.801	2.668	13.9	19.7
7 30	22 26.51	-10 35.3	2.249	3.185	8.5	19.8	7 30	22 26.80	-8 53.1	1.748	2.686	10.3	19.5
8 9	22 20.10	-11 50.0	2.189	3.176	5.1	19.5	8 9	22 20.28	-9 37.4	1.718	2.705	6.2	19.3
8 19	22 12.53	-13 10.6	2.157	3.167	1.5	19.3	8 19	22 12.60	-10 28.4	1.714	2.723	1.9	19.1
8 29	22 4.52	-14 31.4	2.154	3.157	2.6	19.3	8 29	22 4.66	-11 20.5	1.736	2.742	2.4	19.2
9 8	21 56.84	-15 46.4	2.180	3.147	6.2	19.6	9 8	21 57.40	-12 7.8	1.785	2.760	6.6	19.5
9 18	21 50.25	-16 50.9	2.234	3.136	9.6	19.8	9 18	21 51.62	-12 46.3	1.860	2.779	10.3	19.7
9 28	21 45.35	-17 41.7	2.311	3.124	12.5	19.9	9 28	21 47.90	-13 13.1	1.958	2.798	13.4	20.0
266943	2010 <i>TH</i> ₂	8 23.2 342°04'	2.7°/20.9	18			380739	2005 <i>SA</i> ₇₂	8 23.2 309°89'	1.6°/22.2	18		
7 20	22 29.81	-15 57.1	1.760	2.649	13.1	20.0	7 20	22 33.25	-13 12.8	1.353	2.244	16.1	20.4
7 30	22 25.83	-16 43.6	1.691	2.642	9.6	19.8	7 30	22 29.21	-13 34.0	1.265	2.217	12.1	20.1
8 9	22 19.85	-17 36.2	1.644	2.636	5.8	19.5	8 9	22 22.39	-14 5.7	1.198	2.190	7.4	19.7
8 19	22 12.47	-18 29.1	1.623	2.630	2.8	19.3	8 19	22 13.40	-14 42.7	1.153	2.163	2.4	19.4
8 29	22 4.63	-19 15.7	1.628	2.625	4.5	19.4	8 29	22 3.39	-15 17.7	1.133	2.137	4.2	19.4
9 8	21 57.35	-19 50.5	1.659	2.620	8.3	19.7	9 8	21 53.84	-15 43.5	1.138	2.111	9.6	19.6
9 18	21 51.54	-20 10.2	1.713	2.616	12.0	19.9	9 18	21 46.15	-15 55.2	1.164	2.086	14.8	19.9
9 28	21 47.91	-20 13.4	1.789	2.612	15.2	20.1	9 28	21 41.41	-15 50.2	1.210	2.061	19.3	20.1
220406	2003 <i>SG</i> ₅₆	8 23.2 245°34'	2.0°/25.2	18			239637	2008 <i>WP</i> ₂₄	8 23.2 294°13'	0.3°/23.4	18		
7 20	22 30.06	-3 30.1	2.548	3.384	11.3	20.1	7 20	22 32.15	-8 41.2	1.670	2.542	14.6	21.0
7 30	22 25.42	-3 35.4	2.461	3.377	8.7	19.9	7 30	22 27.77	-9 2.2	1.585	2.526	11.0	20.7
8 9	22 19.35	-3 51.5	2.397	3.370	5.8	19.7	8 9	22 21.18	-9 35.9	1.522	2.509	6.8	20.4
8 19	22 12.30	-4 16.6	2.360	3.362	2.9	19.5	8 19	22 12.97	-10 18.5	1.483	2.493	2.2	20.1
8 29	22 4.88	-4 48.1	2.351	3.354	2.3	19.4	8 29	22 4.07	-11 4.4	1.471	2.477	2.7	20.1
9 8	21 57.80	-5 22.4	2.371	3.347	5.1	19.6	9 8	21 55.64	-11 47.6	1.484	2.460	7.5	20.4
9 18	21 51.68	-5 55.9	2.418	3.339	8.1	19.8	9 18	21 48.70	-12 22.7	1.523	2.444	11.9	20.6
9 28	21 47.07	-6 25.3	2.489	3.331	10.8	20.0	9 28	21 44.11	-12 46.0	1.582	2.429	15.7	20.8
255061	2005 <i>TX</i> ₁₆₇	8 23.2 332°31'	1.0°/22.4	18			14698	Scottyoung	8 23.2 81°93'	0.3°/23.4	18		
7 20	22 30.48	-12 9.0	1.828	2.707	13.2	20.6	7 20	22 34.74	-7 58.9	1.502	2.373	15.9	18.7
7 30	22 26.25	-12 36.1	1.753	2.699	9.8	20.4	7 30	22 29.52	-8 32.0	1.450	2.389	11.9	18.5
8 9	22 20.08	-13 11.6	1.701	2.691	5.8	20.2	8 9	22 22.06	-9 18.6	1.419	2.406	7.2	18.3
8 19	22 12.55	-13 51.3	1.674	2.684	1.8	19.9	8 19	22 13.16	-10 13.6	1.412	2.422	2.3	18.0
8 29	22 4.55	-14 29.7	1.673	2.677	3.1	20.0	8 29	22 3.93	-11 10.1	1.432	2.438	2.8	18.1
9 8	21 57.06	-15 1.7	1.699	2.670	7.2	20.2	9 8	21 55.55	-12 1.2	1.478	2.454	7.5	18.4
9 18	21 50.98	-15 23.4	1.750	2.664	11.1	20.4	9 18	21 49.00	-12 41.8	1.548	2.469	11.8	18.7
9 28	21 46.99	-15 32.7	1.823	2.659	14.4	20.6	9 28	21 44.93	-13 8.7	1.640	2.485	15.3	19.0
441885	2010 <i>CH</i> ₇₉	8 23.2 123°24'	0.1°/23.2	16			255531	2006 <i>GS</i> ₁	8 23.2 1°62'	6.9°/19.3	18		
7 20	22 33.48	-9 19.1	1.870	2.735	13.5	21.6	7 20	22 32.58	-22 0.2	0.969	1.889	18.4	19.1
7 30	22 28.31	-9 44.0	1.804	2.741	10.1	21.4	7 30	22 29.16	-23 0.8	0.922	1.887	13.8	18.8
8 9	22 21.23	-10 19.1	1.760	2.747	6.1	21.2	8 9	22 22.41	-24 2.5	0.894	1.885	9.3	18.6
8 19	22 12.88	-11 0.2	1.743	2.753	1.8	20.9	8 19	22 13.35	-24 53.4	0.885	1.885	6.9	18.4
8 29	22 4.16	-11 42.4	1.753	2.758	2.5	21.0	8 29	22 3.68	-25 22.4	0.898	1.887	9.1	18.6
9 8	21 56.04	-12 20.5	1.790	2.763	6.7	21.3	9 8	21 55.23	-25 23.2	0.932	1.889	13.6	18.8
9 18	21 49.38	-12 50.4	1.853	2.769	10.5	21.5	9 18	21 49.46	-24 55.6	0.984	1.893	18.0	19.1
9 28	21 44.81	-13 9.4	1.938	2.774	13.7	21.7	9 28	21 47.23	-24 2.9	1.053	1.898	21.9	19.4
320369	2007 <i>TO</i> ₃₉₈	8 23.2 246°73'	2.7°/21.4	17			498254	2007 <i>UB</i> ₁₁₃	8 23.2 309°23'	7.4°/18.1	18		
7 20	22 37.77	-15 50.2	1.514	2.397	15.2	21.3	7 20	22 33.82	-23 7.0	1.174	2.083	16.7	20.8
7 30	22 32.13	-16 23.1	1.439	2.387	11.3	21.1	7 30	22 30.07	-24 26.2	1.104	2.062	12.8	20.5
8 9	22 23.88	-17 2.7	1.387	2.377	6.9	20.8	8 9	22 23.09	-25 48.9	1.053	2.040	9.1	20.3
8 19	22 13.75	-17 42.5	1.359	2.367	2.9	20.5	8 19	22 13.64	-27 3.1	1.025	2.019	7.5	20.1
8 29	22 2.92	-18 15.4	1.357	2.356	4.7	20.6	8 29	22 3.13	-27 56.3	1.019	1.999	9.8	20.2
9 8	21 52.78	-18 35.5	1.381	2.345	9.3	20.9	9 8	21 53.37	-28 19.8	1.034	1.979	14.1	20.4
9 18	21 44.54	-18 39.7	1.428	2.334	13.7	21.1	9 18	21 45.94	-28 11.1	1.069	1.959	18.5	20.6
9 28	21 39.09	-18 27.3	1.496	2.322	17.5	21.3	9 28	21 42.00	-27 32.2	1.120	1.941	22.5	20.8
417918	2007 <i>RZ</i> ₂₀₄	8 23.2 157°85'	1.4°/22.4	17			390147	2012 <i>VD</i> ₈₆	8 23.2 320°70'	2.4°/25.1	18		
7 20	22 38.77	-13 30.8	1.371	2.253	16.5	20.9	7 20	22 32.07	-3 31.1	1.734	2.587	15.0	21.1
7 30	22 32.89	-13 42.8	1.307	2.254	12.2	20.7	7 30	22 27.49	-3 35.9	1.659	2.584	11.6	20.9
8 9	22 24.30	-14 2.7	1.264	2.255	7.4	20.4	8 9	22 20.88	-3 56.1	1.605	2.582	7.7	20.6
8 19	22 13.85	-14 25.3	1.246	2.255	2.3	20.1	8 19	22 12.85	-4 29.4	1.576	2.579	3.7	20.4
8 29	22 2.84	-14 44.3	1.252	2.256	3.9	20.2	8 29	22 4.31	-5 11.6	1.573	2.577	3.0	20.3
9 8	21 52.73	-14 54.3	1.284	2.256	8.9	20.5	9 8	21 56.32	-5 57.1	1.596	2.575	6.8	20.6
9 18	21 44.74	-14 52.6	1.340	2.257	13.6	20.8	9 18	21 49.80	-6 40.4	1.645	2.573	10.7	20.8
9 28	21 39.71	-14 37.9	1.416	2.257	17.5	21.0	9 28	21 45.47	-7 16.6	1.716	2.571	14.3	21.0
511657	2015 <i>BS</i> ₂₉₁	8 23.2 138°69'	0.7°/22.6	17			513966	2014 <i>FW</i> ₁₅	8 23.2 317°21'	1.3°			

EPHEMERIDES

8 23.2

8 23.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
152801	1999 <i>TQ</i> ₁₄₃		8 23.2 319°54	3°1/20.7	18		330286	2006 <i>SP</i> ₃₉₁		8 23.2 228°01	3°3/25.9	17	
7 20	22 34.56	-19 45.3	2.030	2.909	12.0	19.5	7 20	22 32.58	-0 30.3	1.627	2.472	16.2	21.2
7 30	22 29.11	-20 6.3	1.958	2.903	8.9	19.3	7 30	22 28.05	-0 47.2	1.549	2.468	12.7	21.0
8 9	22 21.74	-20 28.1	1.910	2.897	5.6	19.1	8 9	22 21.33	-1 24.3	1.492	2.463	8.7	20.7
8 19	22 13.08	-20 46.1	1.888	2.891	3.2	18.9	8 19	22 13.03	-2 19.4	1.458	2.458	4.7	20.5
8 29	22 4.03	-20 55.6	1.893	2.885	4.6	19.0	8 29	22 4.13	-3 27.5	1.450	2.453	3.6	20.4
9 8	21 55.56	-20 53.4	1.925	2.880	7.8	19.2	9 8	21 55.77	-4 41.2	1.469	2.448	7.2	20.6
9 18	21 48.52	-20 38.3	1.983	2.875	11.1	19.4	9 18	21 48.96	-5 53.0	1.513	2.443	11.4	20.8
9 28	21 43.58	-20 10.4	2.063	2.870	14.0	19.6	9 28	21 44.50	-6 56.2	1.579	2.437	15.1	21.1
212482	2006 <i>QQ</i> ₈₁		8 23.2 350°89	0°9/22.6	18		285350	1999 <i>RP</i> ₁₂₆		8 23.2 336°91	4°3/26.8	18	
7 20	22 33.90	-13 4.0	1.653	2.533	14.3	19.6	7 20	22 24.97	+1 6.9	1.507	2.362	16.7	19.1
7 30	22 28.93	-13 10.0	1.584	2.529	10.6	19.4	7 30	22 22.64	+1 2.0	1.418	2.340	13.4	18.9
8 9	22 21.77	-13 22.8	1.537	2.527	6.4	19.1	8 9	22 18.18	+0 34.2	1.349	2.319	9.6	18.6
8 19	22 13.11	-13 38.6	1.514	2.524	1.9	18.8	8 19	22 12.11	-0 15.7	1.302	2.299	5.8	18.3
8 29	22 3.99	-13 52.4	1.518	2.522	3.2	18.9	8 29	22 5.35	-1 23.8	1.279	2.280	4.5	18.2
9 8	21 55.54	-14 0.2	1.548	2.521	7.6	19.2	9 8	21 58.99	-2 42.7	1.281	2.263	7.5	18.4
9 18	21 48.73	-13 58.9	1.603	2.520	11.7	19.4	9 18	21 54.08	-4 3.7	1.306	2.247	11.8	18.6
9 28	21 44.31	-13 47.1	1.679	2.520	15.2	19.7	9 28	21 51.49	-5 18.4	1.352	2.232	15.8	18.8
330683	2008 <i>HE</i> ₃₉		8 23.2 54°78	1°3/24.1	17		255705	2006 <i>QO</i> ₉₃		8 23.2 342°20	1°9/21.5	18	
7 20	22 34.00	-6 3.8	1.308	2.183	17.6	20.9	7 20	22 29.74	-12 57.0	1.685	2.570	13.8	19.9
7 30	22 29.19	-6 24.2	1.261	2.201	13.2	20.7	7 30	22 25.87	-13 53.7	1.617	2.566	10.1	19.6
8 9	22 21.95	-7 1.5	1.233	2.218	8.3	20.5	8 9	22 19.95	-15 0.2	1.571	2.562	6.0	19.4
8 19	22 13.14	-7 50.8	1.228	2.236	3.1	20.2	8 19	22 12.60	-16 10.5	1.550	2.559	2.2	19.1
8 29	22 4.02	-8 45.0	1.248	2.255	2.9	20.2	8 29	22 4.75	-17 16.9	1.555	2.555	4.0	19.3
9 8	21 55.86	-9 36.5	1.293	2.273	7.9	20.6	9 8	21 57.47	-18 12.7	1.586	2.553	8.1	19.5
9 18	21 49.71	-10 19.2	1.362	2.292	12.4	20.9	9 18	21 51.69	-18 53.2	1.642	2.550	12.1	19.7
9 28	21 46.26	-10 49.1	1.452	2.311	16.2	21.2	9 28	21 48.13	-19 16.1	1.719	2.548	15.4	20.0
260882	2005 <i>QR</i> ₁₃₄		8 23.2 293°35	3°1/20.7	18		491831	2013 <i>AN</i> ₃₂		8 23.2 255°55	1°3/22.2	18	
7 20	22 34.86	-19 31.9	2.061	2.939	11.9	20.9	7 20	22 36.85	-14 33.7	2.204	3.068	11.8	21.8
7 30	22 29.28	-19 56.5	1.991	2.935	8.8	20.7	7 30	22 30.79	-14 44.9	2.112	3.050	8.8	21.5
8 9	22 21.82	-20 22.1	1.944	2.932	5.5	20.5	8 9	22 22.81	-15 0.4	2.043	3.031	5.3	21.3
8 19	22 13.11	-20 44.0	1.924	2.928	3.2	20.4	8 19	22 13.46	-15 16.8	2.002	3.011	1.8	21.0
8 29	22 4.01	-20 57.6	1.932	2.924	4.5	20.5	8 29	22 3.55	-15 30.0	1.990	2.991	3.0	21.1
9 8	21 55.50	-20 59.6	1.967	2.921	7.8	20.6	9 8	21 54.04	-15 36.5	2.006	2.971	6.8	21.3
9 18	21 48.42	-20 48.6	2.027	2.917	11.0	20.8	9 18	21 45.80	-15 34.2	2.049	2.951	10.4	21.5
9 28	21 43.39	-20 24.6	2.110	2.914	13.8	21.0	9 28	21 39.54	-15 21.8	2.115	2.929	13.5	21.6
339274	2004 <i>XB</i> ₃		8 23.2 302°64	9°8/30.6	17		471749	2012 <i>US</i> ₈₃		8 23.2 313°84	10°0/13.9	18	
7 20	22 31.04	+12 23.8	1.675	2.455	18.5	20.6	7 20	22 33.25	-31 50.8	1.506	2.402	14.5	20.7
7 30	22 27.07	+13 19.1	1.584	2.437	16.1	20.4	7 30	22 29.16	-33 38.7	1.445	2.384	12.0	20.5
8 9	22 20.86	+13 49.7	1.510	2.420	13.4	20.2	8 9	22 22.29	-35 20.2	1.407	2.367	10.2	20.4
8 19	22 12.91	+13 51.7	1.457	2.403	11.1	20.0	8 19	22 13.37	-36 43.5	1.391	2.351	10.2	20.3
8 29	22 4.16	+13 23.8	1.426	2.386	9.8	19.9	8 29	22 3.67	-37 38.1	1.399	2.335	12.1	20.4
9 8	21 55.74	+12 29.2	1.419	2.369	10.5	19.9	9 8	21 54.70	-37 58.6	1.428	2.319	14.9	20.5
9 18	21 48.74	+11 14.6	1.435	2.353	12.8	20.0	9 18	21 47.78	-37 44.7	1.477	2.304	17.8	20.7
9 28	21 44.11	+9 49.4	1.472	2.336	15.7	20.1	9 28	21 43.87	-37 0.3	1.541	2.289	20.5	20.9
254276	2004 <i>RD</i> ₂₀₂		8 23.2 350°67	5°7/28.8	18		279429	2010 <i>NY</i> ₁₁		8 23.2 12°59	3°9/19.6	18	
7 20	22 27.82	+6 39.7	1.932	2.739	15.4	20.0	7 20	22 30.36	-18 59.3	1.785	2.676	12.8	20.1
7 30	22 24.20	+6 43.9	1.852	2.736	12.7	19.8	7 30	22 26.20	-20 2.0	1.726	2.678	9.4	19.8
8 9	22 18.83	+6 26.7	1.791	2.733	9.8	19.6	8 9	22 20.07	-21 7.9	1.691	2.680	6.0	19.7
8 19	22 12.23	+5 48.2	1.754	2.730	7.0	19.4	8 19	22 12.61	-22 10.3	1.681	2.683	3.9	19.5
8 29	22 5.18	+4 51.1	1.742	2.729	5.7	19.3	8 29	22 4.77	-23 2.1	1.698	2.686	5.6	19.6
9 8	21 58.56	+3 40.6	1.756	2.727	7.1	19.4	9 8	21 57.55	-23 38.2	1.740	2.690	8.9	19.9
9 18	21 53.17	+2 23.6	1.796	2.726	9.9	19.6	9 18	21 51.83	-23 56.0	1.806	2.694	12.3	20.1
9 28	21 49.68	+1 7.2	1.859	2.725	12.8	19.8	9 28	21 48.28	-23 55.2	1.893	2.698	15.2	20.3
305580	2008 <i>YO</i> ₂₂		8 23.2 99°73	2°2/25.2	16		76984	2001 <i>BZ</i> ₆₆		8 23.2 225°36	1°1/22.4	18	
7 20	22 33.72	-3 36.8	2.063	2.904	13.4	20.9	7 20	22 35.25	-11 44.7	1.556	2.434	15.1	19.5
7 30	22 28.26	-3 40.6	2.001	2.919	10.3	20.7	7 30	22 30.12	-12 19.7	1.485	2.430	11.2	19.3
8 9	22 21.11	-3 56.9	1.961	2.935	6.8	20.5	8 9	22 22.61	-13 5.3	1.436	2.426	6.7	19.0
8 19	22 12.88	-4 23.7	1.947	2.950	3.3	20.3	8 19	22 13.42	-13 56.0	1.412	2.422	2.1	18.7
8 29	22 4.38	-4 57.2	1.961	2.965	2.7	20.3	8 29	22 3.65	-14 44.9	1.414	2.417	3.5	18.8
9 8	21 56.46	-5 33.0	2.003	2.980	5.8	20.5	9 8	21 54.54	-15 25.4	1.442	2.412	8.3	19.1
9 18	21 49.88	-6 7.0	2.072	2.994	9.2	20.8	9 18	21 47.18	-15 53.1	1.494	2.408	12.7	19.3
9 28	21 45.20	-6 35.4	2.165	3.008	12.2	21.0	9 28	21 42.39	-16 5.4	1.567	2.402	16.4	19.6
299088	2005 <i>ET</i> ₆₄		8 23.2 86°85	0°5/22.9	18		439352	2012 <i>XU</i> ₈₂		8 23.2 2°85	6°6/16.9	18	
7 20	22 38.10	-12 50.5	1.856	2.722	13.6	20.1	7 20	22 32.29	-25 6.5	1.712	2.606	13.1	20.6
7 30	22 31.70	-12 44.1	1.791	2.729	10.1	19.9	7 30	22 27.85	-26 40.6	1.659	2.606	10.1	20.4
8 9	22 23.27	-12 43.2	1.750	2.737	6.1	19.7	8 9	22 21.17	-28 13.4	1.628	2.606	7.4	20.3
8 19	22 13.54	-12 44.6	1.735	2.745	1.8	19.4	8 19	22 12.97	-29 35.6	1.623	2.606	6.7	20.2
8 29	22 3.49	-12 44.7	1.748	2.752	2.7	19.5	8 29	22 4.29	-30 38.6	1.643	2.606	8.4	20.3
9 8	21 54.17	-12 40.3	1.788	2.760	6.9	19.8	9 8	21 56.30	-31 17.3	1.688	2.607	11.3	20.5
9 18	21 46.47	-12 29.7	1.855	2.767	10.7	20.0	9 18	21 49.99	-31 30.2	1.755	2.607	14.3	20.7
9 28	21 41.04	-12 11.6	1.945	2.775	13.9	20.3	9 28	21 46.12	-31 19.0	1.841	2.608	16.9	20.9
340397	2006 <i>EK</i> ₃₂		8 23.2 264°71	2°6/25.5	18		129027	2004 <i>TJ</i> ₃₄₅		8 23.2 339°2			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
90491	2004 <i>DW</i> ₂₂		8 23.2 229°24	0°7/22.5	18		106953	2000 <i>YL</i> ₇₈		8 23.2 242°92	2°8/20.8	18	
7 20	22 30.90	-10 14.7	2.331	3.192	11.3	20.2	7 20	22 33.27	-16 8.3	1.871	2.752	12.8	19.8
7 30	22 26.26	-11 5.7	2.246	3.183	8.4	20.0	7 30	22 28.38	-17 2.1	1.797	2.744	9.5	19.6
8 9	22 20.00	-12 6.2	2.185	3.172	5.0	19.7	8 9	22 21.45	-18 2.1	1.747	2.737	5.8	19.4
8 19	22 12.61	-13 11.9	2.152	3.162	1.5	19.5	8 19	22 13.09	-19 2.2	1.722	2.729	2.9	19.2
8 29	22 4.77	-14 17.7	2.147	3.150	2.6	19.5	8 29	22 4.21	-19 55.6	1.725	2.720	4.5	19.3
9 8	21 57.27	-15 18.1	2.171	3.139	6.2	19.7	9 8	21 55.85	-20 36.8	1.755	2.712	8.3	19.5
9 18	21 50.85	-16 9.1	2.222	3.127	9.5	19.9	9 18	21 48.93	-21 2.2	1.809	2.703	11.9	19.7
9 28	21 46.13	-16 47.6	2.297	3.114	12.4	20.1	9 28	21 44.20	-21 10.7	1.885	2.694	15.1	19.9
472550	2015 <i>DY</i> ₃₆		8 23.2 145°04	1°8/21.8	17		371565	2006 <i>VO</i> ₆₈		8 23.2 288°07	1°2/22.4	18	
7 20	22 35.65	-13 42.5	1.799	2.673	13.6	22.3	7 20	22 33.08	-11 14.3	1.468	2.351	15.5	21.1
7 30	22 30.02	-14 24.6	1.737	2.680	10.0	22.1	7 30	22 28.83	-11 54.6	1.385	2.333	11.6	20.9
8 9	22 22.35	-15 13.9	1.697	2.687	6.0	21.9	8 9	22 22.05	-12 48.1	1.323	2.314	7.0	20.5
8 19	22 13.30	-16 4.8	1.684	2.693	2.2	21.6	8 19	22 13.35	-13 49.4	1.285	2.295	2.1	20.2
8 29	22 3.87	-16 51.0	1.699	2.699	3.7	21.8	8 29	22 3.81	-14 50.6	1.272	2.276	3.8	20.3
9 8	21 55.12	-17 27.3	1.740	2.705	7.7	22.0	9 8	21 54.77	-15 43.7	1.285	2.257	8.9	20.5
9 18	21 47.96	-17 50.4	1.807	2.710	11.4	22.3	9 18	21 47.45	-16 22.7	1.321	2.239	13.7	20.7
9 28	21 43.07	-17 58.9	1.895	2.714	14.6	22.5	9 28	21 42.82	-16 44.1	1.377	2.220	17.8	21.0
204125	2003 <i>XN</i> ₁₂		8 23.2 202°89	1°6/21.6	18		432593	2010 <i>RF</i> ₁₂₈		8 23.2 305°22	5°1/26.5	17	
7 20	22 34.68	-15 32.3	2.681	3.542	10.0	20.7	7 20	22 31.10	+ 0 47.0	1.285	2.142	18.9	21.2
7 30	22 28.79	-16 0.4	2.600	3.537	7.4	20.6	7 30	22 27.64	+ 1 0.5	1.200	2.123	15.2	20.9
8 9	22 21.41	-16 31.9	2.544	3.531	4.4	20.4	8 9	22 21.48	+ 0 50.2	1.134	2.104	10.9	20.6
8 19	22 13.01	-17 3.4	2.516	3.524	1.8	20.2	8 19	22 13.21	+ 0 15.7	1.088	2.085	6.7	20.3
8 29	22 4.26	-17 31.1	2.518	3.516	3.0	20.2	8 29	22 3.97	- 0 39.8	1.066	2.066	5.3	20.2
9 8	21 55.89	-17 51.6	2.550	3.508	5.9	20.4	9 8	21 55.18	- 1 48.6	1.067	2.048	8.9	20.3
9 18	21 48.58	-18 3.0	2.608	3.499	8.8	20.6	9 18	21 48.21	- 3 1.4	1.091	2.031	13.7	20.5
9 28	21 42.87	-18 4.2	2.692	3.490	11.3	20.8	9 28	21 44.14	- 4 8.8	1.134	2.014	18.3	20.7
36402	2000 <i>OT</i> ₄₇		8 23.2 339°96	1°2/22.3	18 R		224270	2005 <i>TP</i> ₃₀		8 23.2 323°45	1°6/24.3	18	
7 20	22 29.41	-11 7.4	1.305	2.200	16.3	17.9	7 20	22 27.94	- 5 5.9	1.233	2.118	17.8	20.1
7 30	22 26.16	-11 47.5	1.237	2.190	12.1	17.6	7 30	22 25.32	- 5 31.2	1.152	2.097	13.7	19.8
8 9	22 20.39	-12 41.4	1.188	2.181	7.3	17.3	8 9	22 20.06	- 6 18.4	1.090	2.077	8.8	19.5
8 19	22 12.80	-13 43.1	1.162	2.173	2.2	17.0	8 19	22 12.78	- 7 24.2	1.049	2.058	3.5	19.1
8 29	22 4.53	-14 44.1	1.161	2.165	3.9	17.1	8 29	22 4.59	- 8 41.1	1.032	2.039	3.2	19.0
9 8	21 56.94	-15 36.0	1.183	2.159	9.1	17.3	9 8	21 56.90	- 9 59.1	1.039	2.021	8.8	19.3
9 18	21 51.21	-16 12.7	1.228	2.153	13.9	17.6	9 18	21 51.05	-11 8.8	1.067	2.005	14.1	19.6
9 28	21 48.21	-16 30.9	1.292	2.148	18.0	17.9	9 28	21 48.09	-12 2.5	1.114	1.989	18.9	19.8
1558	Järnefelt		8 23.2 281°11	2°9/19.9	18		428581	2008 <i>DD</i> ₈₈		8 23.2 202°53	2°7/20.9	17	
7 20	22 29.31	-17 38.2	2.337	3.217	10.6	15.4	7 20	22 36.96	-16 10.8	1.935	2.807	12.8	22.8
7 30	22 25.06	-18 41.2	2.268	3.214	7.8	15.2	7 30	22 31.05	-17 1.2	1.860	2.803	9.5	22.6
8 9	22 19.25	-19 48.0	2.223	3.212	4.8	15.0	8 9	22 23.04	-17 57.2	1.810	2.798	5.8	22.4
8 19	22 12.38	-20 53.6	2.206	3.209	2.9	14.8	8 19	22 13.58	-18 52.8	1.786	2.792	2.8	22.2
8 29	22 5.14	-21 52.1	2.217	3.206	4.3	14.9	8 29	22 3.60	-19 41.6	1.790	2.785	4.4	22.3
9 8	21 58.32	-22 39.1	2.255	3.204	7.2	15.1	9 8	21 54.17	-20 18.2	1.822	2.778	8.1	22.5
9 18	21 52.61	-23 11.6	2.319	3.201	10.1	15.3	9 18	21 46.23	-20 39.6	1.879	2.769	11.7	22.7
9 28	21 48.59	-23 28.7	2.405	3.198	12.7	15.5	9 28	21 40.53	-20 45.0	1.958	2.760	14.8	22.9
312450	2008 <i>KG</i> ₉		8 23.2 58°76	4°5/27.9	18		38151	1999 <i>JT</i> ₆₅		8 23.2 36°22	0°4/22.9	18	
7 20	22 29.29	+ 4 23.2	2.252	3.059	13.5	20.8	7 20	22 32.71	- 9 22.8	1.053	1.952	19.1	18.0
7 30	22 25.04	+ 4 23.9	2.172	3.060	11.0	20.6	7 30	22 28.75	- 9 56.7	1.010	1.964	14.1	17.8
8 9	22 19.23	+ 4 7.4	2.114	3.061	8.2	20.4	8 9	22 21.93	-10 46.9	0.985	1.977	8.5	17.5
8 19	22 12.37	+ 3 34.5	2.080	3.062	5.5	20.3	8 19	22 13.25	-11 46.3	0.981	1.991	2.5	17.2
8 29	22 5.14	+ 2 47.7	2.073	3.063	4.5	20.2	8 29	22 4.15	-12 45.3	1.001	2.006	3.7	17.4
9 8	21 58.31	+ 1 51.4	2.093	3.064	6.0	20.3	9 8	21 56.20	-13 34.9	1.043	2.022	9.4	17.7
9 18	21 52.56	+ 0 50.9	2.140	3.065	8.7	20.5	9 18	21 50.59	-14 9.3	1.107	2.038	14.4	18.1
9 28	21 48.49	- 0 8.3	2.211	3.067	11.5	20.7	9 28	21 48.06	-14 25.4	1.189	2.055	18.5	18.4
291203	2006 <i>AC</i> ₈₀		8 23.2 341°11	0°3/23.4	18		318268	2004 <i>SA</i> ₃₄		8 23.2 315°39	3°1/25.8	17	
7 20	22 30.81	- 9 39.1	1.862	2.733	13.3	20.5	7 20	22 30.78	- 2 3.3	2.010	2.851	13.7	21.3
7 30	22 26.48	- 9 46.0	1.786	2.726	10.0	20.3	7 30	22 26.40	- 1 52.8	1.923	2.840	10.7	21.1
8 9	22 20.25	-10 2.2	1.732	2.719	6.1	20.0	8 9	22 20.21	- 1 56.0	1.859	2.828	7.4	20.8
8 19	22 12.71	-10 24.6	1.703	2.712	1.9	19.8	8 19	22 12.73	- 2 11.9	1.818	2.817	4.1	20.6
8 29	22 4.70	-10 49.1	1.700	2.706	2.4	19.8	8 29	22 4.75	- 2 37.7	1.805	2.806	3.3	20.5
9 8	21 57.20	-11 11.1	1.724	2.700	6.6	20.0	9 8	21 57.16	- 3 9.4	1.819	2.796	6.2	20.7
9 18	21 51.06	-11 27.1	1.774	2.696	10.5	20.3	9 18	21 50.79	- 3 42.5	1.858	2.786	9.7	20.9
9 28	21 46.96	-11 34.3	1.846	2.691	13.9	20.5	9 28	21 46.32	- 4 12.5	1.921	2.776	13.0	21.1
246643	Miaoli		8 23.2 216°12	1°4/24.6	18		236917	2007 <i>TT</i> ₁₃₇		8 23.2 1°10	6°7/19.3	18	
7 20	22 32.84	- 5 6.5	2.321	3.162	12.1	21.3	7 20	22 38.18	-26 45.5	1.433	2.327	15.2	19.2
7 30	22 27.67	- 5 22.1	2.233	3.155	9.2	21.1	7 30	22 32.47	-27 13.0	1.378	2.325	11.7	18.9
8 9	22 20.85	- 5 48.8	2.170	3.147	6.0	20.8	8 9	22 24.06	-27 34.2	1.344	2.324	8.4	18.8
8 19	22 12.88	- 6 24.4	2.133	3.138	2.5	20.6	8 19	22 13.88	-27 41.4	1.334	2.324	6.7	18.7
8 29	22 4.47	- 7 5.4	2.124	3.129	2.2	20.6	8 29	22 3.30	-27 28.4	1.348	2.325	8.2	18.8
9 8	21 56.43	- 7 47.3	2.144	3.120	5.6	20.8	9 8	21 53.79	-26 53.0	1.386	2.327	11.5	18.9
9 18	21 49.50	- 8 26.2	2.192	3.110	9.0	21.0	9 18	21 46.49	-25 56.7	1.446	2.329	15.0	19.2
9 28	21 44.29	- 8 58.5	2.264	3.099	12.0	21.2	9 28	21 42.14	-24 43.2	1.526	2.333	18.1	19.4
168359	1996 <i>DH</i> ₃		8 23.2 79°57	4°7/27.6	18		166163	2002 <i>ER</i> ₃₉		8 23.2 150°63	0°4/22.9		

EPHEMERIDES

8 23.2

8 23.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
297984	2002 <i>LW</i> ₃₉		8 23.2 14°39'	7.3/29.4	16		244457	2002 <i>RT</i> ₁₅₁		8 23.2 359°95'	4.4/25.9	18	
7 20	22 23.11	+ 6 25.2	1.046	1.907	22.0	19.4	7 20	22 32.33	- 2 1.1	1.408	2.268	17.4	19.8
7 30	22 21.64	+ 6 32.5	0.999	1.916	18.1	19.1	7 30	22 28.11	- 1 21.2	1.340	2.265	13.8	19.6
8 9	22 17.66	+ 6 4.9	0.968	1.928	13.7	18.9	8 9	22 21.49	- 0 58.2	1.291	2.264	9.6	19.4
8 19	22 11.99	+ 5 3.1	0.955	1.942	9.5	18.8	8 19	22 13.20	- 0 52.1	1.265	2.263	5.7	19.1
8 29	22 5.85	+ 3 33.6	0.963	1.958	7.3	18.7	8 29	22 4.32	- 1 0.6	1.263	2.264	4.7	19.1
9 8	22 0.60	+ 1 48.3	0.993	1.976	9.1	18.9	9 8	21 56.13	- 1 19.1	1.286	2.265	8.0	19.3
9 18	21 57.32	+ 0 0.4	1.045	1.995	12.9	19.2	9 18	21 49.72	- 1 41.9	1.332	2.267	12.1	19.5
9 28	21 56.73	- 1 38.3	1.116	2.017	16.8	19.5	9 28	21 45.90	- 2 3.2	1.398	2.271	15.9	19.8
347091	2010 <i>GF</i> ₁₂₃		8 23.2 123°54'	0.6/23.8	18		70220	1999 <i>RF</i> ₄₄		8 23.2 297°64'	2.0/21.2	18	
7 20	22 31.75	- 7 2.5	1.907	2.767	13.5	21.5	7 20	22 29.08	- 10 57.4	1.664	2.546	14.1	19.4
7 30	22 27.09	- 7 34.5	1.837	2.771	10.2	21.3	7 30	22 25.59	- 12 29.0	1.584	2.532	10.4	19.2
8 9	22 20.59	- 8 18.9	1.791	2.774	6.3	21.1	8 9	22 19.96	- 14 16.1	1.527	2.518	6.2	18.9
8 19	22 12.84	- 9 11.8	1.769	2.778	2.1	20.8	8 19	22 12.76	- 16 11.3	1.495	2.504	2.3	18.6
8 29	22 4.69	- 10 7.9	1.776	2.782	2.3	20.8	8 29	22 4.89	- 18 4.5	1.491	2.490	4.3	18.7
9 8	21 57.09	- 11 1.4	1.809	2.785	6.4	21.1	9 8	21 57.45	- 19 46.0	1.514	2.477	8.7	19.0
9 18	21 50.85	- 11 47.3	1.869	2.788	10.2	21.3	9 18	21 51.46	- 21 8.5	1.560	2.463	12.9	19.2
9 28	21 46.61	- 12 22.3	1.952	2.792	13.4	21.6	9 28	21 47.74	- 22 8.0	1.629	2.450	16.5	19.4
261436	2005 <i>UK</i> ₅₂₇		8 23.2 243°31'	1.2/21.9	18		128086	2003 <i>OQ</i> ₃₁		8 23.2 285°09'	1.3/21.7	18	
7 20	22 30.61	- 12 56.2	2.266	3.136	11.3	21.5	7 20	22 28.29	- 11 13.2	2.252	3.122	11.4	19.5
7 30	22 26.05	- 13 34.7	2.192	3.133	8.3	21.3	7 30	22 24.47	- 12 24.1	2.167	3.109	8.4	19.3
8 9	22 19.88	- 14 19.9	2.141	3.130	4.9	21.0	8 9	22 19.03	- 13 45.4	2.106	3.096	5.0	19.1
8 19	22 12.63	- 15 7.6	2.117	3.127	1.7	20.8	8 19	22 12.44	- 15 11.8	2.073	3.082	1.7	18.8
8 29	22 5.00	- 15 53.0	2.122	3.123	2.9	20.9	8 29	22 5.39	- 16 37.2	2.068	3.069	3.1	18.9
9 8	21 57.81	- 16 31.6	2.154	3.120	6.4	21.1	9 8	21 58.65	- 17 55.2	2.092	3.056	6.7	19.1
9 18	21 51.75	- 17 0.3	2.213	3.117	9.6	21.3	9 18	21 52.97	- 19 0.9	2.142	3.042	10.0	19.3
9 28	21 47.43	- 17 17.1	2.295	3.113	12.4	21.5	9 28	21 48.98	- 19 51.1	2.215	3.029	13.0	19.5
227316	2005 <i>TZ</i> ₆₂		8 23.2 343°52'	0.2/23.4	18		136851	1998 <i>DY</i> ₈		8 23.2 50°43'	0.9/22.4	18	
7 20	22 27.93	- 8 28.5	1.141	2.039	17.9	19.9	7 20	22 31.90	- 12 1.8	1.928	2.801	12.8	20.2
7 30	22 25.36	- 8 53.7	1.074	2.028	13.5	19.6	7 30	22 27.18	- 12 32.0	1.864	2.807	9.5	20.0
8 9	22 20.08	- 9 37.0	1.025	2.017	8.3	19.3	8 9	22 20.65	- 13 9.9	1.823	2.812	5.6	19.8
8 19	22 12.80	- 10 33.1	0.997	2.007	2.6	18.9	8 19	22 12.91	- 13 51.2	1.809	2.818	1.7	19.6
8 29	22 4.75	- 11 33.7	0.993	1.999	3.4	18.9	8 29	22 4.83	- 14 30.7	1.821	2.825	2.9	19.7
9 8	21 57.42	- 12 29.6	1.011	1.992	9.2	19.2	9 8	21 57.33	- 15 3.6	1.861	2.831	6.8	19.9
9 18	21 52.11	- 13 12.9	1.050	1.987	14.5	19.5	9 18	21 51.22	- 15 26.5	1.926	2.838	10.4	20.2
9 28	21 49.77	- 13 38.7	1.108	1.983	19.0	19.8	9 28	21 47.10	- 15 37.5	2.014	2.844	13.5	20.4
280160	2002 <i>QA</i> ₁₄		8 23.2 43°15'	6.0/27.5	18		494626	2017 <i>CZ</i> ₁₀		8 23.2 282°97'	1.4/22.1	17	
7 20	22 34.70	+ 3 9.3	1.635	2.459	17.0	20.3	7 20	22 37.31	- 15 52.9	2.410	3.271	11.0	21.8
7 30	22 29.48	+ 3 55.3	1.571	2.469	13.8	20.1	7 30	22 31.10	- 15 55.1	2.307	3.244	8.2	21.5
8 9	22 22.13	+ 4 22.1	1.528	2.480	10.3	20.0	8 9	22 23.06	- 15 59.7	2.229	3.215	5.0	21.3
8 19	22 13.34	+ 4 28.7	1.508	2.490	7.2	19.8	8 19	22 13.68	- 16 3.7	2.178	3.187	1.8	21.0
8 29	22 4.12	+ 4 16.8	1.513	2.502	6.1	19.8	8 29	22 3.72	- 16 3.6	2.157	3.158	3.0	21.1
9 8	21 55.58	+ 3 50.7	1.543	2.513	7.9	19.9	9 8	21 54.08	- 15 56.7	2.165	3.129	6.5	21.2
9 18	21 48.69	+ 3 16.1	1.598	2.525	11.1	20.1	9 18	21 45.57	- 15 41.4	2.201	3.099	9.9	21.4
9 28	21 44.14	+ 2 39.5	1.675	2.537	14.3	20.3	9 28	21 38.91	- 15 17.0	2.260	3.069	12.9	21.6
250682	2005 <i>QT</i> ₁₆		8 23.2 18°68'	0.7/22.6	18		231298	2006 <i>BQ</i> ₁₄₄		8 23.3 105°02'	5.1/27.2	18	
7 20	22 31.38	- 11 21.0	2.056	2.925	12.3	20.4	7 20	22 35.93	+ 2 38.3	1.868	2.683	15.6	20.1
7 30	22 26.73	- 11 51.5	1.985	2.925	9.1	20.2	7 30	22 30.17	+ 3 8.4	1.801	2.695	12.5	19.9
8 9	22 20.35	- 12 30.1	1.938	2.926	5.4	20.0	8 9	22 22.47	+ 3 21.0	1.755	2.707	9.2	19.7
8 19	22 12.79	- 13 12.7	1.916	2.926	1.6	19.8	8 19	22 13.47	+ 3 16.2	1.733	2.718	6.2	19.5
8 29	22 4.85	- 13 54.4	1.923	2.927	2.7	19.8	8 29	22 4.08	+ 2 56.0	1.738	2.729	5.1	19.5
9 8	21 57.42	- 14 30.5	1.957	2.927	6.5	20.1	9 8	21 55.31	+ 2 24.8	1.770	2.740	7.1	19.7
9 18	21 51.26	- 14 57.5	2.017	2.928	10.0	20.3	9 18	21 48.02	+ 1 47.6	1.828	2.751	10.2	19.9
9 28	21 46.98	- 15 13.2	2.099	2.928	13.0	20.5	9 28	21 42.87	+ 1 10.0	1.909	2.761	13.2	20.1
319373	2006 <i>DT</i> ₈₂		8 23.2 55°60'	0.4/23.6	16		217369	2004 <i>TC</i> ₁₅₁		8 23.3 348°32'	0.7/23.8	18	
7 20	22 32.93	- 7 59.2	1.555	2.427	15.4	21.1	7 20	22 29.76	- 7 46.3	1.882	2.749	13.4	20.3
7 30	22 28.18	- 8 26.1	1.502	2.442	11.5	20.9	7 30	22 25.71	- 8 3.3	1.808	2.745	10.1	20.1
8 9	22 21.31	- 9 5.9	1.470	2.457	7.0	20.7	8 9	22 19.83	- 8 31.6	1.756	2.741	6.3	19.9
8 19	22 13.08	- 9 54.1	1.463	2.472	2.3	20.4	8 19	22 12.69	- 9 8.0	1.729	2.737	2.2	19.6
8 29	22 4.51	- 10 44.3	1.481	2.487	2.7	20.5	8 29	22 5.11	- 9 48.0	1.728	2.734	2.3	19.6
9 8	21 56.74	- 11 30.2	1.526	2.503	7.2	20.8	9 8	21 58.02	- 10 26.4	1.755	2.732	6.4	19.9
9 18	21 50.67	- 12 6.9	1.595	2.519	11.3	21.1	9 18	21 52.25	- 10 58.8	1.806	2.730	10.2	20.1
9 28	21 46.95	- 12 31.3	1.687	2.535	14.8	21.4	9 28	21 48.45	- 11 21.8	1.881	2.728	13.5	20.3
180501	2004 <i>CK</i> ₉₂		8 23.2 110°92'	3.0/26.1	17		332427	2007 <i>TV</i> ₂₃		8 23.3 182°01'	13.5/ 5.0	17	
7 20	22 32.79	+ 0 53.7	1.711	2.546	16.0	20.6	7 20	22 32.38	+ 22 14.9	1.273	2.015	25.0	20.7
7 30	22 27.96	+ 0 8.7	1.649	2.561	12.4	20.4	7 30	22 28.64	+ 22 35.1	1.201	2.016	22.4	20.5
8 9	22 21.15	- 0 57.5	1.608	2.576	8.4	20.2	8 9	22 22.10	+ 22 10.6	1.140	2.016	19.4	20.3
8 19	22 13.03	- 2 21.1	1.591	2.591	4.5	20.0	8 19	22 13.48	+ 20 55.3	1.096	2.016	16.3	20.1
8 29	22 4.55	- 3 55.4	1.602	2.605	3.3	19.9	8 29	22 4.02	+ 18 48.3	1.072	2.016	14.0	20.0
9 8	21 56.73	- 5 32.0	1.640	2.619	6.6	20.2	9 8	21 55.26	+ 15 58.4	1.069	2.015	13.6	19.9
9 18	21 50.44	- 7 2.9	1.704	2.632	10.5	20.4	9 18	21 48.55	+ 12 41.4	1.089	2.014	15.3	20.0
9 28	21 46.33	- 8 21.8	1.792	2.645	13.9	20.7	9 28	21 44.89	+ 9 17.3	1.131	2.012	18.2	20.2
164889	1999 <i>VN</i> ₉₃		8 23.2										

EPHEMERIDES

8 23.3

8 23.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
202650	2006 <i>JL</i> ₄₇		8 23.3 150°29	8°5/15.9	18		476203	2007 <i>UP</i> ₆₀		8 23.3 279°26	1°6/24.7	16	
7 20	22 38.74	-33 9.6	1.863	2.739	13.1	20.0	7 20	22 31.40	-4 47.5	1.942	2.794	13.6	22.0
7 30	22 32.57	-34 20.4	1.815	2.741	10.7	19.9	7 30	22 27.02	-5 5.2	1.851	2.778	10.5	21.7
8 9	22 24.04	-35 21.7	1.789	2.743	8.9	19.8	8 9	22 20.73	-5 36.9	1.782	2.761	6.8	21.5
8 19	22 13.97	-36 5.0	1.788	2.745	8.5	19.7	8 19	22 13.04	-6 20.2	1.739	2.745	2.9	21.2
8 29	22 3.53	-36 24.0	1.812	2.746	9.8	19.8	8 29	22 4.76	-7 10.7	1.723	2.728	2.5	21.1
9 8	21 53.96	-36 16.2	1.860	2.748	12.1	20.0	9 8	21 56.84	-8 2.8	1.734	2.711	6.4	21.4
9 18	21 46.30	-35 43.2	1.930	2.749	14.5	20.1	9 18	21 50.16	-8 51.3	1.770	2.695	10.4	21.6
9 28	21 41.25	-34 48.5	2.019	2.751	16.7	20.3	9 28	21 45.49	-9 31.5	1.830	2.678	13.9	21.7
480428	2015 <i>KZ</i> ₁₂₂		8 23.3 6°58	7°6/16.1	18		418108	2007 <i>XS</i> ₅₀		8 23.3 187°49	7°9/14.4	15	
7 20	22 28.45	-23 15.6	1.339	2.249	15.0	19.4	7 20	22 37.29	-29 9.6	1.923	2.803	12.6	21.7
7 30	22 25.53	-25 24.3	1.292	2.249	11.4	19.2	7 30	22 31.63	-31 21.2	1.870	2.803	10.0	21.5
8 9	22 20.06	-27 34.4	1.267	2.251	8.4	19.1	8 9	22 23.63	-33 28.8	1.842	2.802	8.2	21.4
8 19	22 12.82	-29 32.8	1.266	2.253	7.7	19.0	8 19	22 13.93	-35 21.9	1.841	2.800	8.1	21.4
8 29	22 5.02	-31 7.5	1.290	2.256	9.9	19.2	8 29	22 3.60	-36 51.0	1.867	2.798	9.8	21.5
9 8	21 58.01	-32 10.8	1.336	2.260	13.3	19.4	9 8	21 53.84	-37 50.9	1.917	2.795	12.3	21.7
9 18	21 52.95	-32 40.7	1.402	2.265	16.6	19.6	9 18	21 45.76	-38 20.6	1.990	2.791	14.8	21.8
9 28	21 50.63	-32 39.1	1.485	2.270	19.5	19.8	9 28	21 40.19	-38 22.7	2.081	2.786	17.0	22.0
16062	Buncher		8 23.3 42°60	6°3/18.4	18	R	242178	2003 <i>HV</i> ₃₁		8 23.3 23°79	2°7/26.5	18	
7 20	22 33.87	-21 2.9	1.287	2.190	15.9	17.6	7 20	22 26.38	+ 0 3.1	2.353	3.184	12.3	19.2
7 30	22 29.55	-22 40.2	1.238	2.194	11.9	17.4	7 30	22 22.84	- 0 14.3	2.285	3.194	9.6	19.0
8 9	22 22.49	-24 20.5	1.211	2.199	8.1	17.2	8 9	22 17.93	- 0 46.0	2.240	3.205	6.6	18.9
8 19	22 13.55	-25 52.2	1.208	2.204	6.3	17.1	8 19	22 12.13	- 1 29.8	2.220	3.216	3.8	18.7
8 29	22 4.07	-27 4.1	1.228	2.208	8.5	17.2	8 29	22 6.07	- 2 22.3	2.227	3.228	2.9	18.7
9 8	21 55.54	-27 48.8	1.272	2.214	12.3	17.5	9 8	22 0.42	- 3 18.9	2.262	3.240	5.1	18.9
9 18	21 49.17	-28 4.6	1.337	2.219	16.1	17.7	9 18	21 55.77	- 4 14.9	2.323	3.252	8.0	19.1
9 28	21 45.76	-27 53.2	1.420	2.225	19.3	18.0	9 28	21 52.63	- 5 6.0	2.410	3.265	10.7	19.3
134248	2006 <i>AL</i> ₁₉		8 23.3 139°69	7°6/16.2	17		237210	2008 <i>UJ</i> ₃₀₉		8 23.3 277°32	2°5/21.5	18	
7 20	22 37.50	-30 38.1	1.909	2.788	12.7	20.0	7 20	22 36.30	-16 42.3	1.762	2.641	13.6	20.2
7 30	22 31.56	-31 57.9	1.862	2.794	10.1	19.8	7 30	22 30.84	-17 5.8	1.682	2.628	10.1	20.0
8 9	22 23.39	-33 10.4	1.839	2.801	8.1	19.7	8 9	22 23.12	-17 33.6	1.625	2.614	6.2	19.7
8 19	22 13.77	-34 7.3	1.842	2.806	7.7	19.7	8 19	22 13.78	-18 0.7	1.593	2.600	2.8	19.5
8 29	22 3.79	-34 42.1	1.870	2.812	9.1	19.8	8 29	22 3.82	-18 21.2	1.588	2.586	4.3	19.6
9 8	21 54.62	-34 51.7	1.922	2.817	11.4	20.0	9 8	21 54.42	-18 30.8	1.609	2.572	8.4	19.8
9 18	21 47.21	-34 36.8	1.997	2.822	13.9	20.1	9 18	21 46.61	-18 26.8	1.655	2.558	12.3	20.0
9 28	21 42.27	-34 0.2	2.091	2.827	16.1	20.3	9 28	21 41.21	-18 8.8	1.723	2.544	15.8	20.2
8615	1979 <i>MB</i> ₂		8 23.3 280°23	0°6/22.7	18	R	362509	2010 <i>TV</i> ₈₁		8 23.3 334°50	3°8/20.3	18	
7 20	22 32.56	- 9 30.5	1.829	2.697	13.7	17.9	7 20	22 34.27	-20 50.5	1.879	2.764	12.6	20.5
7 30	22 28.14	-10 18.2	1.730	2.669	10.3	17.6	7 30	22 29.13	-21 18.9	1.810	2.757	9.4	20.3
8 9	22 21.56	-11 19.7	1.653	2.641	6.3	17.3	8 9	22 21.95	-21 47.8	1.765	2.751	6.1	20.1
8 19	22 13.32	-12 30.4	1.602	2.612	1.9	16.9	8 19	22 13.39	-22 11.6	1.744	2.745	3.9	20.0
8 29	22 4.26	-13 43.7	1.579	2.583	3.0	17.0	8 29	22 4.40	-22 25.0	1.750	2.740	5.3	20.0
9 8	21 55.47	-14 52.3	1.582	2.553	7.7	17.2	9 8	21 56.03	-22 24.6	1.783	2.735	8.6	20.2
9 18	21 47.99	-15 49.9	1.611	2.523	12.0	17.4	9 18	21 49.19	-22 9.0	1.840	2.730	11.9	20.4
9 28	21 42.71	-16 32.3	1.662	2.493	15.8	17.5	9 28	21 44.57	-21 38.8	1.918	2.726	14.9	20.6
479773	2014 <i>EK</i> ₃₁		8 23.3 38°58	3°3/20.6	18		442520	2011 <i>WU</i> ₈₇		8 23.3 178°68	2°6/20.5	18	
7 20	22 33.22	-17 59.1	1.737	2.624	13.4	20.6	7 20	22 31.87	-17 26.2	2.359	3.233	10.7	22.1
7 30	22 28.37	-18 44.1	1.680	2.629	9.8	20.4	7 30	22 26.97	-18 16.8	2.290	3.234	7.9	21.9
8 9	22 21.46	-19 32.6	1.645	2.635	6.1	20.2	8 9	22 20.48	-19 10.8	2.247	3.235	4.9	21.7
8 19	22 13.20	-20 18.3	1.636	2.641	3.4	20.0	8 19	22 12.92	-20 3.3	2.231	3.235	2.7	21.6
8 29	22 4.58	-20 54.8	1.654	2.647	5.0	20.1	8 29	22 5.02	-20 49.2	2.243	3.235	4.0	21.7
9 8	21 56.66	-21 17.7	1.697	2.654	8.5	20.4	9 8	21 57.58	-21 24.5	2.283	3.235	7.0	21.9
9 18	21 50.35	-21 24.5	1.765	2.661	12.1	20.6	9 18	21 51.29	-21 46.7	2.349	3.234	9.9	22.0
9 28	21 46.30	-21 15.2	1.853	2.668	15.1	20.8	9 28	21 46.72	-21 55.0	2.438	3.234	12.5	22.2
401685	2013 <i>HL</i> ₁₀		8 23.3 64°40	0°3/23.6	18		99126	2001 <i>FV</i> ₈₁		8 23.3 237°24	0°2/23.4	18	
7 20	22 28.32	- 5 57.8	2.162	3.018	12.3	20.5	7 20	22 37.59	-10 58.6	1.926	2.787	13.4	19.2
7 30	22 24.37	- 7 5.2	2.099	3.031	9.2	20.3	7 30	22 31.51	-10 51.5	1.847	2.782	10.0	19.0
8 9	22 18.89	- 8 25.3	2.060	3.044	5.6	20.1	8 9	22 23.38	-10 51.2	1.792	2.777	6.2	18.8
8 19	22 12.41	- 9 53.4	2.047	3.056	1.8	19.9	8 19	22 13.83	-10 55.0	1.762	2.771	1.9	18.5
8 29	22 5.63	-11 23.3	2.064	3.069	2.1	20.0	8 29	22 3.81	-10 59.5	1.761	2.766	2.5	18.5
9 8	21 59.32	-12 48.3	2.109	3.082	5.8	20.2	9 8	21 54.34	-11 1.3	1.787	2.761	6.7	18.8
9 18	21 54.16	-14 3.4	2.180	3.095	9.2	20.5	9 18	21 46.36	-10 57.9	1.840	2.755	10.6	19.0
9 28	21 50.67	-15 4.8	2.276	3.108	12.1	20.7	9 28	21 40.57	-10 47.4	1.916	2.749	13.9	19.2
431197	2006 <i>SG</i> ₁₁₇		8 23.3 246°49	1°6/22.1	17		355666	2008 <i>ET</i> ₁₂₂		8 23.3 112°25	1°0/22.3	18	
7 20	22 35.84	-12 55.2	1.735	2.609	14.0	22.5	7 20	22 34.64	-13 46.1	2.381	3.243	11.1	20.8
7 30	22 30.56	-13 33.4	1.652	2.595	10.4	22.2	7 30	22 28.84	-14 1.7	2.319	3.256	8.1	20.7
8 9	22 22.98	-14 20.9	1.591	2.581	6.3	22.0	8 9	22 21.51	-14 21.7	2.282	3.269	4.9	20.5
8 19	22 13.73	-15 12.4	1.556	2.566	2.1	21.7	8 19	22 13.22	-14 42.7	2.272	3.282	1.6	20.3
8 29	22 3.80	-16 1.2	1.549	2.550	3.7	21.7	8 29	22 4.69	-15 1.1	2.292	3.294	2.6	20.4
9 8	21 54.35	-16 41.3	1.568	2.535	8.1	22.0	9 8	21 56.71	-15 13.8	2.340	3.306	5.9	20.6
9 18	21 46.46	-17 8.3	1.612	2.518	12.3	22.2	9 18	21 49.96	-15 18.9	2.415	3.318	8.9	20.8
9 28	21 40.97	-17 20.0	1.677	2.502	16.0	22.4	9 28	21 44.94	-15 15.2	2.514	3.329	11.6	21.0
204767	2006 <i>KD</i> ₄		8 23.3 9°97	9°5/14.9	18		374267	2005 <i>LW</i>		8 23.3 235°05	0°5/2		

EPHEMERIDES

8 23.3

8 23.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
237587	2001 <i>FP</i> ₃₄		8 23.3 147°63	3°0/21.1	18		477556	2010 <i>GP</i> ₇₅		8 23.3 319°47	5°3/19.7	18	
7 20	22 38.99	-19 19.6	2.013	2.884	12.4	20.3	7 20	22 37.85	-23 38.8	1.643	2.529	14.0	20.6
7 30	22 32.38	-19 37.7	1.948	2.890	9.2	20.1	7 30	22 32.09	-24 12.3	1.577	2.524	10.6	20.4
8 9	22 23.79	-19 56.4	1.908	2.894	5.7	19.9	8 9	22 23.89	-24 43.7	1.535	2.518	7.2	20.2
8 19	22 13.93	-20 11.1	1.895	2.899	3.1	19.7	8 19	22 14.03	-25 6.1	1.516	2.512	5.3	20.0
8 29	22 3.75	-20 17.2	1.909	2.903	4.4	19.8	8 29	22 3.68	-25 13.1	1.524	2.507	6.8	20.1
9 8	21 54.28	-20 12.0	1.952	2.907	7.7	20.0	9 8	21 54.13	-25 1.3	1.557	2.502	10.2	20.3
9 18	21 46.38	-19 54.5	2.020	2.911	11.0	20.2	9 18	21 46.46	-24 30.5	1.614	2.497	13.7	20.5
9 28	21 40.69	-19 25.2	2.112	2.914	13.9	20.4	9 28	21 41.44	-23 42.5	1.690	2.493	16.8	20.7
307109	2002 <i>CV</i> ₄₉		8 23.3 100°62	0°7/23.9	18		446156	2013 <i>EZ</i> ₁₁₃		8 23.3 7°28	5°5/17.9	18	
7 20	22 35.37	- 8 20.4	2.533	3.376	11.1	20.7	7 20	22 33.35	-25 40.1	2.092	2.975	11.6	20.8
7 30	22 29.22	- 8 22.2	2.475	3.399	8.3	20.5	7 30	22 28.32	-26 40.2	2.034	2.976	8.8	20.6
8 9	22 21.66	- 8 31.1	2.441	3.422	5.1	20.3	8 9	22 21.41	-27 37.7	1.999	2.976	6.4	20.5
8 19	22 13.25	- 8 44.9	2.436	3.444	1.8	20.1	8 19	22 13.26	-28 26.0	1.991	2.976	5.5	20.4
8 29	22 4.68	- 9 0.7	2.460	3.465	1.9	20.2	8 29	22 4.74	-28 59.5	2.009	2.976	6.8	20.5
9 8	21 56.65	- 9 15.5	2.513	3.486	5.0	20.4	9 8	21 56.83	-29 14.6	2.053	2.977	9.4	20.7
9 18	21 49.78	- 9 27.0	2.595	3.507	8.0	20.7	9 18	21 50.34	-29 10.5	2.121	2.977	12.0	20.8
9 28	21 44.55	- 9 33.2	2.701	3.527	10.5	20.9	9 28	21 45.90	-28 48.2	2.210	2.977	14.4	21.0
103446	2000 <i>AS</i> ₁₉₀		8 23.3 289°72	1°0/24.2	18		265279	2004 <i>FE</i> ₇₀		8 23.3 232°70	0°7/23.9	18	
7 20	22 29.43	- 4 30.4	1.784	2.644	14.3	19.0	7 20	22 34.51	- 6 53.2	1.820	2.677	14.2	21.9
7 30	22 25.75	- 5 22.6	1.694	2.626	11.0	18.7	7 30	22 29.45	- 7 21.4	1.736	2.667	10.8	21.7
8 9	22 20.07	- 6 33.2	1.625	2.608	7.0	18.5	8 9	22 22.28	- 8 3.2	1.674	2.656	6.8	21.4
8 19	22 12.89	- 7 58.3	1.582	2.589	2.6	18.1	8 19	22 13.58	- 8 55.0	1.637	2.645	2.4	21.1
8 29	22 5.05	- 9 31.2	1.565	2.571	2.5	18.1	8 29	22 4.27	- 9 51.3	1.628	2.633	2.5	21.1
9 8	21 57.56	-11 3.6	1.575	2.553	7.0	18.3	9 8	21 55.40	-10 46.0	1.646	2.621	6.9	21.4
9 18	21 51.37	-12 28.0	1.612	2.535	11.3	18.6	9 18	21 47.96	-11 33.5	1.689	2.608	11.1	21.6
9 28	21 47.30	-13 38.2	1.670	2.517	15.0	18.8	9 28	21 42.72	-12 9.8	1.756	2.595	14.7	21.8
230358	2002 <i>EZ</i> ₃₆		8 23.3 215°60	1°4/22.0	18		106220	2000 <i>UD</i> ₃₇		8 23.3 249°16	1°7/22.0	17	
7 20	22 34.37	-13 1.9	2.063	2.930	12.3	21.7	7 20	22 35.08	-12 26.4	1.481	2.363	15.5	20.2
7 30	22 29.08	-13 41.8	1.984	2.924	9.1	21.5	7 30	22 30.26	-13 12.1	1.409	2.356	11.5	19.9
8 9	22 21.90	-14 29.2	1.929	2.917	5.5	21.3	8 9	22 22.94	-14 9.1	1.358	2.349	6.9	19.6
8 19	22 13.40	-15 19.4	1.900	2.910	1.9	21.0	8 19	22 13.81	-15 11.1	1.332	2.341	2.3	19.3
8 29	22 4.42	-16 6.9	1.900	2.902	3.2	21.1	8 29	22 3.99	-16 10.1	1.331	2.333	4.0	19.4
9 8	21 55.90	-16 46.6	1.928	2.893	7.0	21.4	9 8	21 54.82	-16 58.5	1.356	2.325	8.9	19.7
9 18	21 48.70	-17 15.1	1.982	2.884	10.6	21.6	9 18	21 47.45	-17 31.4	1.405	2.317	13.4	19.9
9 28	21 43.48	-17 30.2	2.059	2.875	13.7	21.7	9 28	21 42.77	-17 46.3	1.474	2.309	17.3	20.2
20006	Albertus Magnus		8 23.3 177°02	0°1/23.2	18		18161	Koshiishi		8 23.3 327°59	3°0/20.9	18	
7 20	22 30.51	- 9 31.4	2.859	3.711	9.8	19.7	7 20	22 34.37	-18 42.5	1.898	2.780	12.6	16.6
7 30	22 25.69	-10 4.2	2.782	3.713	7.2	19.5	7 30	22 29.20	-19 5.3	1.826	2.773	9.4	16.3
8 9	22 19.61	-10 44.0	2.730	3.714	4.4	19.3	8 9	22 22.02	-19 30.1	1.778	2.766	5.8	16.1
8 19	22 12.68	-11 27.9	2.705	3.715	1.3	19.1	8 19	22 13.47	-19 52.0	1.755	2.760	3.1	15.9
8 29	22 5.46	-12 12.3	2.711	3.715	1.8	19.1	8 29	22 4.48	-20 6.0	1.759	2.754	4.5	16.0
9 8	21 58.58	-12 53.7	2.745	3.715	4.9	19.4	9 8	21 56.07	-20 8.3	1.790	2.748	8.0	16.2
9 18	21 52.60	-13 29.1	2.808	3.715	7.7	19.5	9 18	21 49.16	-19 57.4	1.846	2.743	11.5	16.4
9 28	21 47.98	-13 56.2	2.895	3.714	10.1	19.7	9 28	21 44.43	-19 33.1	1.923	2.738	14.6	16.6
100572	1997 <i>HJ</i> ₂		8 23.3 67°69	2°3/21.3	17		22086	2000 <i>AG</i> ₁₇₀		8 23.3 137°45	2°5/20.4	18	
7 20	22 32.88	-14 32.4	1.712	2.594	13.7	19.8	7 20	22 29.37	-15 40.4	2.296	3.173	10.9	18.0
7 30	22 28.12	-15 25.3	1.657	2.605	10.0	19.6	7 30	22 25.21	-16 51.6	2.228	3.174	8.0	17.8
8 9	22 21.34	-16 25.0	1.625	2.615	6.0	19.4	8 9	22 19.48	-18 8.4	2.186	3.175	4.8	17.6
8 19	22 13.22	-17 25.3	1.618	2.626	2.5	19.2	8 19	22 12.68	-19 25.4	2.170	3.176	2.6	17.5
8 29	22 4.76	-18 19.2	1.638	2.637	4.2	19.4	8 29	22 5.53	-20 36.3	2.183	3.176	4.0	17.6
9 8	21 57.01	-19 1.2	1.685	2.648	8.0	19.6	9 8	21 58.79	-21 36.1	2.224	3.177	7.1	17.8
9 18	21 50.84	-19 27.8	1.756	2.659	11.7	19.9	9 18	21 53.16	-22 21.4	2.291	3.178	10.1	18.0
9 28	21 46.92	-19 38.0	1.848	2.670	14.8	20.1	9 28	21 49.22	-22 50.6	2.381	3.178	12.7	18.1
367176	2006 <i>XK</i> ₂₆		8 23.3 139°13	3°4/26.6	18		119942	2002 <i>GJ</i> ₁₂₉		8 23.3 31°17	1°5/25.2	18	R
7 20	22 32.05	+ 0 21.3	2.337	3.156	12.7	20.7	7 20	22 27.32	- 4 3.3	2.738	3.578	10.5	19.6
7 30	22 27.06	+ 0 30.7	2.259	3.160	10.1	20.5	7 30	22 23.39	- 4 17.8	2.665	3.584	8.0	19.5
8 9	22 20.54	+ 0 26.7	2.205	3.164	7.1	20.3	8 9	22 18.23	- 4 42.2	2.616	3.590	5.2	19.3
8 19	22 12.97	+ 0 10.3	2.175	3.167	4.4	20.2	8 19	22 12.28	- 5 14.4	2.593	3.597	2.5	19.1
8 29	22 5.06	- 0 16.4	2.174	3.171	3.5	20.1	8 29	22 6.08	- 5 51.6	2.599	3.603	2.0	19.1
9 8	21 57.57	- 0 49.6	2.200	3.174	5.6	20.3	9 8	22 0.23	- 6 30.2	2.633	3.610	4.6	19.3
9 18	21 51.17	- 1 25.3	2.254	3.177	8.5	20.5	9 18	21 55.26	- 7 6.9	2.695	3.617	7.3	19.5
9 28	21 46.44	- 1 59.3	2.332	3.180	11.2	20.6	9 28	21 51.62	- 7 38.7	2.781	3.625	9.8	19.7
20495	Rimavská Sobota		8 23.3 35°90	2°1/25.3	18		364685	2007 <i>TB</i> ₄₁₂		8 23.3 20°08	5°1/26.1	17	
7 20	22 28.44	- 0 24.3	1.509	2.365	16.7	18.8	7 20	22 31.75	- 1 55.0	0.926	1.815	21.9	19.7
7 30	22 25.09	- 1 33.0	1.445	2.372	12.9	18.5	7 30	22 28.43	- 1 18.2	0.880	1.822	17.3	19.4
8 9	22 19.63	- 3 5.9	1.402	2.379	8.4	18.3	8 9	22 22.04	- 1 6.5	0.850	1.830	11.9	19.2
8 19	22 12.74	- 4 57.7	1.382	2.387	3.9	18.0	8 19	22 13.54	- 1 19.1	0.839	1.840	6.8	19.0
8 29	22 5.38	- 6 59.2	1.389	2.395	2.8	18.0	8 29	22 4.47	- 1 51.1	0.849	1.852	5.4	18.9
9 8	21 58.66	- 8 59.5	1.422	2.403	7.1	18.3	9 8	21 56.55	- 2 33.6	0.880	1.865	9.5	19.2
9 18	21 53.50	-10 48.9	1.481	2.412	11.5	18.6	9 18	21 51.11	- 3 17.6	0.931	1.879	14.5	19.5
9 28	21 50.63	-12 20.3	1.562	2.421	15.2	18.8	9 28	21 48.99	- 3 54.6	1.001	1.894	18.9	19.9
33685	Younglove		8 23.3 168°27	2°9/20.8	18		390219	2012 <i>XN</i> ₃₆		8 23.3 344°52	4°7/19.4	18	

EPHEMERIDES

8 23.3

8 23.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
428673	2008 <i>HE</i> ₁₀		8 23.3 169°22	0°8/22.6	17		216157	2006 <i>SM</i> ₃₂₇		8 23.3 287°80	1°7/21.8	18	
7 20	22 36.05	-11 10.1	1.778	2.646	14.0	22.1	7 20	22 31.95	-13 48.3	1.971	2.847	12.5	21.3
7 30	22 30.49	-11 45.5	1.710	2.650	10.4	21.8	7 30	22 27.38	-14 28.0	1.897	2.841	9.2	21.1
8 9	22 22.83	-12 30.5	1.664	2.652	6.2	21.6	8 9	22 20.95	-15 14.8	1.846	2.836	5.5	20.8
8 19	22 13.74	-13 20.1	1.645	2.655	1.9	21.3	8 19	22 13.23	-16 3.7	1.821	2.830	2.1	20.6
8 29	22 4.18	-14 8.4	1.652	2.656	3.0	21.4	8 29	22 5.05	-16 49.2	1.824	2.825	3.4	20.7
9 8	21 55.25	-14 49.4	1.687	2.657	7.4	21.7	9 8	21 57.36	-17 26.2	1.854	2.819	7.2	20.9
9 18	21 47.90	-15 19.4	1.748	2.658	11.3	21.9	9 18	21 51.00	-17 51.2	1.909	2.814	10.8	21.1
9 28	21 42.82	-15 35.9	1.831	2.658	14.7	22.2	9 28	21 46.63	-18 2.4	1.986	2.808	13.9	21.3
44384	1998 <i>SJ</i> ₆₁		8 23.3 341°73	6°4/28.9	18		91863	1999 <i>UV</i> ₂₃		8 23.3 187°23	2°2/21.5	18	
7 20	22 28.71	+ 6 35.2	1.619	2.437	17.4	18.8	7 20	22 36.98	-16 47.2	2.133	3.002	12.0	18.9
7 30	22 25.32	+ 6 43.1	1.540	2.431	14.4	18.6	7 30	22 30.92	-17 12.1	2.061	3.001	8.8	18.7
8 9	22 19.84	+ 6 26.1	1.480	2.426	11.1	18.4	8 9	22 23.00	-17 40.2	2.013	3.001	5.4	18.4
8 19	22 12.88	+ 5 43.9	1.442	2.421	7.9	18.2	8 19	22 13.83	-18 7.0	1.993	3.000	2.4	18.3
8 29	22 5.33	+ 4 39.3	1.428	2.417	6.4	18.1	8 29	22 4.28	-18 27.8	2.001	2.998	3.7	18.3
9 8	21 58.26	+ 3 18.9	1.439	2.413	7.9	18.2	9 8	21 55.29	-18 39.2	2.037	2.996	7.1	18.6
9 18	21 52.66	+ 1 51.1	1.474	2.410	11.2	18.3	9 18	21 47.69	-18 39.1	2.099	2.994	10.5	18.8
9 28	21 49.28	+ 0 24.8	1.532	2.407	14.6	18.6	9 28	21 42.10	-18 27.2	2.184	2.991	13.4	19.0
504351	2007 <i>TN</i> ₃₃₁		8 23.3 236°57	2°8/21.4	17		402441	2006 <i>BJ</i> ₃₁		8 23.3 188°44	1°1/24.4	18	
7 20	22 38.16	-16 5.2	1.545	2.427	15.0	22.1	7 20	22 34.36	- 7 19.9	2.652	3.491	10.8	21.1
7 30	22 32.51	-16 42.0	1.472	2.418	11.1	21.8	7 30	22 28.64	- 7 10.5	2.570	3.491	8.2	20.9
8 9	22 24.30	-17 25.3	1.420	2.410	6.8	21.6	8 9	22 21.48	- 7 8.4	2.513	3.490	5.2	20.7
8 19	22 14.26	-18 8.5	1.394	2.401	3.1	21.3	8 19	22 13.36	- 7 11.7	2.483	3.489	2.1	20.5
8 29	22 3.54	-18 44.3	1.394	2.392	4.8	21.4	8 29	22 4.92	- 7 18.3	2.483	3.488	1.9	20.5
9 8	21 53.49	-19 6.9	1.419	2.382	9.2	21.7	9 8	21 56.86	- 7 25.7	2.512	3.487	5.0	20.7
9 18	21 45.31	-19 13.2	1.469	2.372	13.5	21.9	9 18	21 49.83	- 7 31.5	2.570	3.485	7.9	20.9
9 28	21 39.86	-19 2.6	1.539	2.362	17.2	22.1	9 28	21 44.35	- 7 33.6	2.652	3.483	10.6	21.1
298219	2002 <i>TF</i> ₃₈₅		8 23.3 301°31	1°6/21.9	18		476733	2008 <i>UF</i> ₃₅		8 23.3 308°99	2°9/21.3	16	
7 20	22 30.91	-12 23.9	1.816	2.694	13.3	20.4	7 20	22 33.56	-16 1.2	1.479	2.370	15.0	21.8
7 30	22 26.76	-13 14.9	1.741	2.686	9.8	20.2	7 30	22 29.37	-16 36.4	1.394	2.346	11.2	21.5
8 9	22 20.64	-14 15.7	1.688	2.679	5.9	19.9	8 9	22 22.58	-17 19.2	1.330	2.322	6.9	21.2
8 19	22 13.11	-15 20.8	1.662	2.671	2.0	19.7	8 19	22 13.83	-18 3.3	1.291	2.298	3.1	20.9
8 29	22 5.06	-16 23.4	1.662	2.664	3.5	19.8	8 29	22 4.20	-18 41.3	1.276	2.275	5.0	20.9
9 8	21 57.50	-17 17.1	1.689	2.656	7.6	20.0	9 8	21 55.06	-19 6.3	1.286	2.252	9.6	21.1
9 18	21 51.34	-17 57.5	1.741	2.649	11.5	20.2	9 18	21 47.66	-19 14.3	1.319	2.229	14.2	21.3
9 28	21 47.29	-18 21.9	1.814	2.642	14.8	20.4	9 28	21 42.99	-19 3.8	1.371	2.207	18.3	21.5
269161	2008 <i>EV</i> ₁₅₀		8 23.3 24°47	2°8/21.4	16		186730	2004 <i>CH</i> ₄		8 23.3 281°60	2°6/21.4	17	
7 20	22 31.07	-13 55.0	1.113	2.019	17.6	20.1	7 20	22 34.55	-14 4.3	1.523	2.408	15.0	21.1
7 30	22 27.59	-14 48.6	1.069	2.029	12.9	19.8	7 30	22 30.09	-14 57.9	1.435	2.384	11.2	20.8
8 9	22 21.37	-15 52.9	1.044	2.039	7.7	19.6	8 9	22 23.04	-16 2.9	1.369	2.360	6.8	20.5
8 19	22 13.34	-16 58.9	1.042	2.051	3.1	19.4	8 19	22 13.98	-17 12.6	1.327	2.335	2.9	20.2
8 29	22 4.88	-17 56.6	1.062	2.063	5.2	19.5	8 29	22 3.99	-18 18.4	1.311	2.310	4.8	20.2
9 8	21 57.47	-18 38.0	1.106	2.077	10.1	19.9	9 8	21 54.41	-19 12.1	1.320	2.285	9.6	20.4
9 18	21 52.26	-18 59.0	1.171	2.092	14.7	20.2	9 18	21 46.50	-19 47.9	1.353	2.260	14.2	20.6
9 28	21 50.00	-18 58.9	1.254	2.107	18.6	20.5	9 28	21 41.28	-20 3.3	1.405	2.234	18.3	20.8
288506	2004 <i>FO</i> ₉₈		8 23.3 279°34	5°6/18.8	18		510001	2009 <i>VR</i> ₅₉		8 23.3 284°11	6°7/17.6	18	
7 20	22 38.03	-26 7.5	1.983	2.861	12.3	20.1	7 20	22 35.11	-24 19.4	1.590	2.483	14.0	21.3
7 30	22 32.06	-26 47.4	1.904	2.843	9.5	19.9	7 30	22 30.47	-25 42.8	1.515	2.463	10.8	21.0
8 9	22 23.86	-27 24.1	1.849	2.825	6.9	19.7	8 9	22 23.22	-27 7.6	1.463	2.443	7.8	20.8
8 19	22 14.11	-27 51.0	1.820	2.807	5.6	19.6	8 19	22 14.02	-28 24.0	1.435	2.423	6.7	20.7
8 29	22 3.79	-28 2.1	1.818	2.789	7.0	19.6	8 29	22 4.00	-29 22.4	1.432	2.403	8.6	20.8
9 8	21 54.04	-27 54.1	1.842	2.771	9.9	19.8	9 8	21 54.53	-29 55.8	1.454	2.382	12.1	20.9
9 18	21 45.87	-27 26.4	1.890	2.753	12.9	19.9	9 18	21 46.86	-30 2.0	1.497	2.362	15.6	21.1
9 28	21 40.06	-26 40.9	1.959	2.735	15.7	20.1	9 28	21 41.95	-29 42.2	1.559	2.342	18.8	21.3
154775	2004 <i>PL</i> ₃₁		8 23.3 12°75	0°5/22.9	18		133808	2003 <i>WB</i> ₁₅₃		8 23.3 306°97	6°5/16.9	18	
7 20	22 29.49	-10 18.4	1.614	2.496	14.4	19.9	7 20	22 31.38	-23 39.6	1.677	2.573	13.3	19.0
7 30	22 25.77	-10 49.0	1.554	2.500	10.7	19.7	7 30	22 27.46	-25 24.5	1.614	2.563	10.1	18.8
8 9	22 20.02	-11 30.5	1.515	2.505	6.4	19.5	8 9	22 21.24	-27 11.2	1.573	2.554	7.4	18.7
8 19	22 12.92	-12 18.1	1.500	2.510	1.9	19.2	8 19	22 13.38	-28 49.8	1.558	2.544	6.6	18.6
8 29	22 5.42	-13 5.7	1.511	2.516	2.9	19.3	8 29	22 4.88	-30 10.5	1.569	2.535	8.5	18.7
9 8	21 58.56	-13 47.1	1.548	2.523	7.3	19.6	9 8	21 56.94	-31 6.5	1.604	2.526	11.6	18.8
9 18	21 53.24	-14 18.0	1.609	2.531	11.3	19.8	9 18	21 50.64	-31 35.2	1.661	2.517	14.8	19.0
9 28	21 50.13	-14 35.5	1.692	2.540	14.8	20.1	9 28	21 46.78	-31 37.3	1.737	2.509	17.6	19.2
243814	2000 <i>SL</i> ₂₉₂		8 23.3 309°92	9°9/29.9	18		512665	2016 <i>TH</i> ₇₄		8 23.3 239°77	1°7/21.9	18	
7 20	22 30.70	+10 40.3	1.535	2.333	19.2	20.1	7 20	22 34.38	-14 27.1	1.938	2.812	12.8	21.6
7 30	22 27.25	+11 38.2	1.435	2.304	16.6	19.9	7 30	22 29.21	-14 57.8	1.863	2.807	9.4	21.4
8 9	22 21.35	+12 11.7	1.353	2.275	13.8	19.6	8 9	22 22.08	-15 34.7	1.812	2.801	5.7	21.2
8 19	22 13.47	+12 16.0	1.290	2.246	11.2	19.4	8 19	22 13.60	-16 12.9	1.787	2.796	2.1	20.9
8 29	22 4.54	+11 49.1	1.250	2.218	9.9	19.3	8 29	22 4.65	-16 47.2	1.790	2.791	3.5	21.0
9 8	21 55.81	+10 53.7	1.232	2.190	10.9	19.2	9 8	21 56.22	-17 12.8	1.820	2.785	7.4	21.3
9 18	21 48.53	+ 9 36.7	1.237	2.163	13.7	19.3	9 18	21 49.21	-17 26.8	1.875	2.779	11.0	21.5
9 28	21 43.79	+ 8 8.2	1.262	2.136	17.2	19.5	9 28	21 44.29	-17 27.8	1.953	2.773	14.2	21.7
479768	2014 <i>EG</i> ₂₈		8 23.3 124°64	3°1/20.5	17		23298	Loewenstein					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
275318	2010 <i>UM</i> ₁₁		8 23.3 108°30	5°2/18.1	18		27028	1998 <i>QS</i> ₉₈		8 23.3 345°92	4°2/20.9	18	
7 20	22 34.63	-26 36.8	2.297	3.174	10.9	20.1	7 20	22 30.92	-16 27.1	0.947	1.866	18.8	16.6
7 30	22 29.10	-27 28.1	2.243	3.181	8.4	19.9	7 30	22 28.20	-17 14.5	0.891	1.856	14.0	16.3
8 9	22 21.84	-28 15.5	2.214	3.188	6.1	19.8	8 9	22 22.19	-18 11.8	0.852	1.848	8.7	16.0
8 19	22 13.48	-28 53.6	2.212	3.194	5.2	19.8	8 19	22 13.77	-19 9.3	0.834	1.841	4.4	15.7
8 29	22 4.85	-29 17.4	2.237	3.201	6.4	19.9	8 29	22 4.50	-19 55.4	0.836	1.836	6.7	15.8
9 8	21 56.82	-29 24.3	2.288	3.207	8.7	20.0	9 8	21 56.24	-20 20.9	0.860	1.832	12.2	16.1
9 18	21 50.16	-29 13.8	2.364	3.214	11.2	20.2	9 18	21 50.51	-20 21.9	0.902	1.829	17.4	16.4
9 28	21 45.43	-28 47.2	2.461	3.220	13.3	20.4	9 28	21 48.32	-19 58.2	0.961	1.827	21.9	16.7
67990	2000 <i>XA</i> ₂₁		8 23.3 359°52	7°5/26.1	18		482357	2011 <i>WF</i> ₁₁₈		8 23.3 263°05	1°3/21.9	17	
7 20	22 33.38	- 2 34.4	0.883	1.774	22.5	18.3	7 20	22 32.38	-12 47.9	2.385	3.250	11.0	22.9
7 30	22 30.04	- 0 47.3	0.827	1.768	18.1	18.0	7 30	22 27.57	-13 31.1	2.288	3.227	8.2	22.7
8 9	22 23.30	+ 0 41.8	0.788	1.765	13.2	17.7	8 9	22 21.07	-14 21.8	2.215	3.203	4.9	22.5
8 19	22 14.09	+ 1 48.1	0.767	1.763	8.8	17.5	8 19	22 13.33	-15 16.1	2.170	3.179	1.7	22.2
8 29	22 4.01	+ 2 29.6	0.766	1.764	7.7	17.4	8 29	22 5.04	-16 9.0	2.153	3.154	2.9	22.3
9 8	21 54.96	+ 2 48.9	0.786	1.767	11.2	17.6	9 8	21 57.02	-16 55.7	2.165	3.129	6.4	22.4
9 18	21 48.54	+ 2 52.1	0.824	1.772	15.9	17.9	9 18	21 50.02	-17 32.3	2.203	3.103	9.8	22.6
9 28	21 45.80	+ 2 47.8	0.879	1.779	20.4	18.2	9 28	21 44.72	-17 56.5	2.265	3.077	12.8	22.8
152151	2005 <i>MC</i> ₃₆		8 23.3 348°59	1°4/22.5	18		195158	2002 <i>CG</i> ₂₁₈		8 23.3 142°87	0°9/22.5	17	
7 20	22 29.68	-12 23.6	1.064	1.972	18.1	18.8	7 20	22 33.75	-11 5.1	1.863	2.733	13.4	21.0
7 30	22 26.93	-12 43.3	1.002	1.962	13.5	18.5	7 30	22 28.74	-11 46.5	1.797	2.738	9.9	20.8
8 9	22 21.25	-13 15.8	0.958	1.953	8.2	18.2	8 9	22 21.78	-12 37.5	1.754	2.742	5.9	20.6
8 19	22 13.44	-13 54.8	0.935	1.946	2.6	17.9	8 19	22 13.52	-13 32.9	1.737	2.747	1.8	20.3
8 29	22 4.86	-14 32.1	0.935	1.940	4.2	18.0	8 29	22 4.86	-14 26.9	1.747	2.751	3.0	20.4
9 8	21 57.13	-14 59.5	0.956	1.935	10.0	18.3	9 8	21 56.77	-15 13.6	1.785	2.755	7.1	20.7
9 18	21 51.61	-15 11.7	0.998	1.933	15.3	18.6	9 18	21 50.13	-15 49.0	1.848	2.759	10.8	20.9
9 28	21 49.25	-15 6.1	1.058	1.931	19.8	18.8	9 28	21 45.60	-16 10.9	1.934	2.762	14.0	21.1
308	<i>Polyxo</i>		8 23.3 33°12	1°3/24.5	18		306742	2000 <i>XV</i> ₃₂		8 23.3 194°23	4°3/27.8	17	
7 20	22 31.01	- 5 0.8	1.794	2.652	14.3	12.3	7 20	22 33.61	+ 4 30.1	2.826	3.610	11.6	21.0
7 30	22 26.78	- 5 29.0	1.724	2.654	10.9	12.1	7 30	22 28.08	+ 4 56.4	2.737	3.608	9.5	20.8
8 9	22 20.63	- 6 12.1	1.675	2.656	7.0	11.9	8 9	22 21.18	+ 5 10.0	2.670	3.606	7.2	20.6
8 19	22 13.16	- 7 6.4	1.652	2.659	2.8	11.7	8 19	22 13.32	+ 5 10.8	2.629	3.603	5.1	20.5
8 29	22 5.27	- 8 6.6	1.655	2.661	2.4	11.6	8 29	22 5.10	+ 4 59.8	2.617	3.599	4.4	20.5
9 8	21 57.91	- 9 6.2	1.685	2.664	6.5	11.9	9 8	21 57.18	+ 4 39.3	2.633	3.596	5.6	20.5
9 18	21 51.94	- 9 59.7	1.741	2.667	10.4	12.1	9 18	21 50.16	+ 4 12.5	2.678	3.592	7.7	20.7
9 28	21 48.04	-10 42.6	1.819	2.669	13.8	12.3	9 28	21 44.58	+ 3 43.2	2.748	3.587	10.0	20.8
66008	1998 <i>QH</i> ₂		8 23.3 110°67	17°5/10.0	18		511462	2014 <i>KZ</i> ₄₀		8 23.3 23°06	1°1/24.3	18	
7 20	23 17.54	+47 32.0	1.126	1.624	38.2	18.8	7 20	22 30.70	- 6 15.1	1.874	2.735	13.7	21.1
7 30	23 2.32	+45 23.5	1.041	1.665	35.4	18.6	7 30	22 26.46	- 6 36.4	1.805	2.738	10.4	20.9
8 9	22 42.27	+41 40.9	0.962	1.703	31.3	18.4	8 9	22 20.40	- 7 10.3	1.759	2.741	6.5	20.7
8 19	22 19.59	+35 57.6	0.899	1.739	26.1	18.2	8 19	22 13.10	- 7 53.6	1.737	2.744	2.5	20.5
8 29	21 57.48	+28 9.7	0.865	1.772	20.7	17.9	8 29	22 5.41	- 8 41.6	1.742	2.748	2.3	20.5
9 8	21 38.88	+18 57.9	0.870	1.801	17.6	17.9	9 8	21 58.25	- 9 28.5	1.774	2.752	6.3	20.7
9 18	21 25.45	+ 9 36.9	0.918	1.828	18.9	18.1	9 18	21 52.42	-10 9.8	1.832	2.756	10.0	21.0
9 28	21 17.60	+ 1 16.2	1.005	1.853	22.6	18.4	9 28	21 48.58	-10 41.6	1.912	2.761	13.3	21.2
228543	2001 <i>WP</i> ₃₀		8 23.3 2°00	3°1/21.3	18		101104	1998 <i>RC</i> ₄₂		8 23.3 324°51	2°5/25.2	18	
7 20	22 27.51	-14 20.7	1.020	1.936	18.0	19.1	7 20	22 30.95	- 3 42.8	1.606	2.466	15.6	19.7
7 30	22 25.30	-15 9.3	0.969	1.933	13.3	18.8	7 30	22 27.05	- 3 47.3	1.526	2.456	12.1	19.5
8 9	22 20.21	-16 9.6	0.936	1.932	8.0	18.5	8 9	22 20.98	- 4 8.4	1.467	2.445	8.1	19.2
8 19	22 13.11	-17 12.8	0.923	1.932	3.4	18.3	8 19	22 13.33	- 4 43.8	1.432	2.436	3.9	19.0
8 29	22 5.39	-18 8.2	0.933	1.935	5.5	18.4	8 29	22 5.07	- 5 29.1	1.421	2.426	3.1	18.9
9 8	21 58.62	-18 46.8	0.965	1.939	10.8	18.7	9 8	21 57.29	- 6 18.2	1.437	2.418	7.1	19.1
9 18	21 54.08	-19 3.8	1.016	1.944	15.7	19.0	9 18	21 51.03	- 7 4.8	1.477	2.409	11.4	19.4
9 28	21 52.63	-18 57.9	1.085	1.952	19.9	19.3	9 28	21 47.07	- 7 43.5	1.538	2.401	15.2	19.6
170657	2003 <i>YO</i> ₁₃₂		8 23.3 334°25	5°3/19.7	18		58733	1998 <i>DH</i> ₃₅		8 23.3 167°67	3°8/20.6	18	
7 20	22 35.15	-22 45.7	1.515	2.410	14.5	19.4	7 20	22 39.83	-21 7.9	1.924	2.799	12.8	18.4
7 30	22 30.36	-23 23.3	1.449	2.399	11.0	19.2	7 30	22 33.20	-21 34.5	1.860	2.801	9.6	18.2
8 9	22 23.04	-24 0.4	1.404	2.390	7.4	19.0	8 9	22 24.47	-22 0.6	1.819	2.803	6.2	18.0
8 19	22 13.95	-24 29.3	1.382	2.380	5.3	18.8	8 19	22 14.34	-22 20.8	1.805	2.805	3.9	17.9
8 29	22 4.27	-24 43.2	1.386	2.372	7.0	18.9	8 29	22 3.85	-22 30.0	1.818	2.807	5.2	18.0
9 8	21 55.36	-24 37.5	1.414	2.364	10.6	19.1	9 8	21 54.08	-22 25.1	1.859	2.808	8.5	18.2
9 18	21 48.34	-24 11.5	1.465	2.356	14.3	19.3	9 18	21 45.99	-22 5.3	1.925	2.809	11.8	18.4
9 28	21 44.05	-23 26.8	1.535	2.350	17.7	19.5	9 28	21 40.22	-21 31.8	2.013	2.810	14.7	18.6
265536	2005 <i>NO</i> ₇₈		8 23.3 8°63	1°6/24.3	15		449395	2013 <i>GT</i> ₁₁₆		8 23.3 158°37	1°1/24.3	18	
7 20	22 31.05	- 6 55.5	1.090	1.982	19.0	20.3	7 20	22 32.80	- 6 53.4	2.342	3.190	11.8	21.4
7 30	22 27.73	- 6 53.7	1.034	1.983	14.5	20.1	7 30	22 27.68	- 6 59.8	2.267	3.192	8.9	21.2
8 9	22 21.60	- 7 9.7	0.997	1.986	9.2	19.8	8 9	22 21.00	- 7 15.3	2.215	3.194	5.6	21.0
8 19	22 13.53	- 7 39.8	0.981	1.989	3.6	19.5	8 19	22 13.28	- 7 37.8	2.189	3.196	2.2	20.8
8 29	22 4.85	- 8 17.5	0.987	1.994	3.3	19.5	8 29	22 5.23	- 8 3.9	2.193	3.198	2.0	20.8
9 8	21 57.11	- 8 54.9	1.016	2.000	8.7	19.8	9 8	21 57.61	- 8 30.0	2.224	3.200	5.4	21.0
9 18	21 51.54	- 9 25.1	1.067	2.007	13.9	20.1	9 18	21 51.11	- 8 52.8	2.283	3.201	8.6	21.2
9 28	21 49.00	- 9 43.2	1.136	2.016	18.2	20.4	9 28	21 46.30	- 9 9.7	2.366	3.203	11.5	21.4
70747	1999 <i>VT</i> ₂₂		8 23.3 258°70	0°2/23.5	18		265939	2006 <i>BD</i> ₁₈₈					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
317775	2003 SE ₁₂₈		8 23.3 26°22	4.8/26.0	18		193508	2000 YG ₄₆		8 23.4 256°91	2°0/21.5	18	
7 20	22 36.08	- 2 24.4	1.267	2.129	18.8	19.3	7 20	22 33.64	-13 53.6	2.036	2.907	12.3	20.8
7 30	22 31.02	- 1 28.6	1.215	2.141	14.8	19.1	7 30	22 28.79	-14 47.8	1.946	2.888	9.1	20.6
8 9	22 23.39	- 0 50.6	1.182	2.154	10.3	18.9	8 9	22 21.97	-15 50.5	1.880	2.869	5.5	20.3
8 19	22 14.06	- 0 30.8	1.171	2.169	6.1	18.7	8 19	22 13.70	-16 56.4	1.840	2.848	2.3	20.1
8 29	22 4.31	- 0 27.0	1.184	2.184	5.1	18.7	8 29	22 4.80	-17 59.1	1.829	2.827	3.8	20.1
9 8	21 55.53	- 0 34.6	1.221	2.200	8.3	18.9	9 8	21 56.23	-18 52.5	1.845	2.806	7.6	20.3
9 18	21 48.83	- 0 48.0	1.281	2.217	12.5	19.2	9 18	21 48.91	-19 32.3	1.887	2.784	11.3	20.5
9 28	21 44.96	- 1 1.4	1.362	2.235	16.2	19.5	9 28	21 43.61	-19 56.1	1.951	2.762	14.6	20.7
353779	2012 HR ₇₈		8 23.3 304°58	1.7/21.3	18		192478	1998 FM ₁₃₈		8 23.4 102°51	2°3/21.6	18	
7 20	22 28.55	-14 14.1	2.566	3.437	10.1	20.4	7 20	22 37.55	-16 8.3	1.806	2.681	13.5	20.4
7 30	22 24.51	-15 5.4	2.492	3.435	7.4	20.2	7 30	22 31.52	-16 37.2	1.751	2.694	9.9	20.2
8 9	22 19.08	-16 2.3	2.443	3.432	4.4	20.0	8 9	22 23.46	-17 10.1	1.719	2.707	6.0	20.0
8 19	22 12.71	-17 0.5	2.422	3.430	1.8	19.8	8 19	22 14.09	-17 41.8	1.713	2.720	2.6	19.8
8 29	22 6.01	-17 55.3	2.429	3.427	3.1	19.9	8 29	22 4.43	-18 6.9	1.735	2.733	4.0	19.9
9 8	21 59.66	-18 42.6	2.465	3.425	6.0	20.1	9 8	21 55.54	-18 21.4	1.783	2.746	7.7	20.2
9 18	21 54.29	-19 19.2	2.527	3.422	8.9	20.3	9 18	21 48.31	-18 23.4	1.857	2.758	11.3	20.4
9 28	21 50.40	-19 43.4	2.612	3.420	11.4	20.5	9 28	21 43.36	-18 12.4	1.953	2.770	14.3	20.7
223406	2003 SY ₁₅₇		8 23.3 320°29	2°1/25.3	18		59808	1999 RU ₁₃		8 23.4 332°50	2°0/21.7	18	
7 20	22 29.25	- 3 25.8	2.128	2.974	12.8	20.3	7 20	22 31.34	-14 44.9	1.793	2.676	13.2	18.9
7 30	22 25.31	- 3 37.1	2.043	2.964	9.9	20.1	7 30	22 27.17	-15 15.8	1.718	2.666	9.7	18.6
8 9	22 19.70	- 4 1.7	1.980	2.955	6.6	19.8	8 9	22 20.98	-15 53.1	1.665	2.656	5.9	18.4
8 19	22 12.93	- 4 37.6	1.942	2.945	3.2	19.6	8 19	22 13.38	-16 32.1	1.638	2.647	2.3	18.1
8 29	22 5.71	- 5 21.1	1.932	2.936	2.5	19.5	8 29	22 5.27	-17 6.9	1.637	2.638	3.8	18.2
9 8	21 58.85	- 6 7.5	1.948	2.927	5.7	19.7	9 8	21 57.67	-17 32.6	1.663	2.630	7.7	18.5
9 18	21 53.11	- 6 52.2	1.992	2.919	9.2	19.9	9 18	21 51.50	-17 45.7	1.712	2.622	11.6	18.7
9 28	21 49.11	- 7 30.9	2.058	2.910	12.4	20.1	9 28	21 47.49	-17 44.7	1.784	2.615	14.9	18.9
303214	2004 JY ₂₁		8 23.3 198°26	5°4/18.1	18		311922	2007 BU ₄₅		8 23.4 47°16	2°5/20.5	18	
7 20	22 34.68	-25 44.0	2.135	3.015	11.5	20.8	7 20	22 29.73	-15 17.3	2.138	3.017	11.5	20.4
7 30	22 29.36	-26 43.3	2.074	3.014	8.8	20.7	7 30	22 25.65	-16 29.3	2.073	3.019	8.4	20.2
8 9	22 22.14	-27 39.9	2.038	3.013	6.4	20.5	8 9	22 19.90	-17 47.6	2.032	3.022	5.1	20.0
8 19	22 13.67	-28 27.4	2.028	3.012	5.4	20.5	8 19	22 13.03	-19 6.1	2.018	3.024	2.6	19.8
8 29	22 4.81	-29 0.2	2.044	3.011	6.8	20.6	8 29	22 5.78	-20 18.5	2.033	3.027	4.1	19.9
9 8	21 56.53	-29 14.8	2.087	3.010	9.3	20.7	9 8	21 58.99	-21 19.2	2.075	3.030	7.4	20.1
9 18	21 49.68	-29 10.2	2.154	3.008	11.9	20.9	9 18	21 53.39	-22 4.7	2.142	3.032	10.5	20.3
9 28	21 44.89	-28 47.8	2.242	3.007	14.3	21.1	9 28	21 49.59	-22 33.2	2.232	3.035	13.2	20.5
443604	2014 KP ₁₀₁		8 23.3 91°23	5°6/28.7	18		113652	2002 TR ₈₁		8 23.4 340°23	3°7/20.0	18	
7 20	22 31.86	+ 6 19.5	2.121	2.916	14.6	20.4	7 20	22 32.22	-18 12.7	1.781	2.669	13.0	19.4
7 30	22 27.19	+ 6 41.5	2.043	2.919	12.1	20.2	7 30	22 27.82	-19 15.5	1.717	2.667	9.6	19.2
8 9	22 20.82	+ 6 45.3	1.986	2.922	9.3	20.0	8 9	22 21.38	-20 22.8	1.676	2.665	6.1	19.0
8 19	22 13.27	+ 6 30.4	1.953	2.925	6.8	19.9	8 19	22 13.51	-21 27.7	1.660	2.663	3.7	18.9
8 29	22 5.32	+ 5 58.6	1.946	2.928	5.6	19.8	8 29	22 5.18	-22 22.9	1.671	2.662	5.4	19.0
9 8	21 57.79	+ 5 13.9	1.966	2.931	6.9	19.9	9 8	21 57.44	-23 2.7	1.708	2.660	8.9	19.2
9 18	21 51.46	+ 4 21.4	2.012	2.934	9.4	20.1	9 18	21 51.20	-23 24.3	1.769	2.659	12.4	19.4
9 28	21 46.94	+ 3 27.1	2.081	2.937	12.1	20.3	9 28	21 47.18	-23 27.1	1.851	2.658	15.4	19.6
44468	1998 VH ₃₄		8 23.3 345°23	2°0/24.9	18		214909	2007 TD ₁₈₀		8 23.4 297°83	6°6/19.1	18	
7 20	22 31.39	- 5 22.4	1.903	2.758	13.8	18.3	7 20	22 37.25	-22 53.5	1.278	2.178	16.3	20.1
7 30	22 27.02	- 5 13.5	1.825	2.752	10.6	18.1	7 30	22 32.53	-23 55.7	1.210	2.163	12.4	19.8
8 9	22 20.80	- 5 16.3	1.768	2.747	6.9	17.8	8 9	22 24.73	-24 59.4	1.163	2.149	8.6	19.6
8 19	22 13.29	- 5 29.1	1.737	2.742	3.2	17.6	8 19	22 14.64	-25 54.3	1.138	2.134	6.6	19.4
8 29	22 5.30	- 5 48.8	1.732	2.737	2.6	17.6	8 29	22 3.68	-26 29.9	1.137	2.120	8.6	19.5
9 8	21 57.79	- 6 11.2	1.754	2.733	6.2	17.8	9 8	21 53.53	-26 39.7	1.159	2.106	12.7	19.7
9 18	21 51.59	- 6 32.2	1.802	2.730	10.0	18.0	9 18	21 45.63	-26 22.0	1.201	2.092	16.9	19.9
9 28	21 47.37	- 6 48.3	1.872	2.727	13.3	18.2	9 28	21 41.01	-25 39.4	1.262	2.078	20.7	20.1
259747	2003 YT ₁₆₈		8 23.3 284°95	9°1/15.5	18		469622	2004 RT ₁₅₈		8 23.4 337°38	1°4/22.7	16	
7 20	22 35.60	-28 28.8	1.428	2.325	15.1	19.7	7 20	22 31.95	-14 29.7	1.097	2.003	17.8	20.9
7 30	22 31.13	-30 19.4	1.369	2.313	12.0	19.5	7 30	22 28.83	-14 18.0	1.021	1.980	13.4	20.6
8 9	22 23.76	-32 6.8	1.331	2.302	9.6	19.4	8 9	22 22.62	-14 13.0	0.964	1.958	8.3	20.3
8 19	22 14.28	-33 38.7	1.318	2.290	9.3	19.3	8 19	22 14.04	-14 10.2	0.928	1.938	2.7	19.9
8 29	22 4.01	-34 43.7	1.328	2.279	11.2	19.4	8 29	22 4.44	-14 3.8	0.914	1.919	4.2	19.9
9 8	21 54.49	-35 15.3	1.360	2.267	14.4	19.6	9 8	21 55.53	-13 48.6	0.922	1.902	10.1	20.2
9 18	21 47.10	-35 12.9	1.412	2.256	17.6	19.7	9 18	21 48.83	-13 21.5	0.951	1.887	15.6	20.4
9 28	21 42.79	-34 40.0	1.481	2.244	20.5	19.9	9 28	21 45.46	-12 41.4	0.997	1.874	20.4	20.7
30395	2000 KQ ₃₆		8 23.4 235°66	0°2/23.5	18		26553	2000 DO ₇₅		8 23.4 12°90	0°9/22.6	18	
7 20	22 30.22	- 6 35.5	2.196	3.050	12.2	19.1	7 20	22 29.60	-11 44.4	1.838	2.717	13.1	18.3
7 30	22 26.01	- 7 36.2	2.111	3.042	9.2	18.9	7 30	22 25.71	-12 15.1	1.776	2.721	9.7	18.1
8 9	22 20.14	- 8 50.3	2.050	3.033	5.6	18.6	8 9	22 20.00	-12 54.3	1.736	2.726	5.8	17.8
8 19	22 13.09	-10 13.6	2.015	3.024	1.8	18.3	8 19	22 13.08	-13 37.4	1.721	2.731	1.8	17.6
8 29	22 5.58	-11 40.1	2.010	3.015	2.2	18.4	8 29	22 5.80	-14 19.1	1.733	2.737	2.9	17.7
9 8	21 58.40	-13 3.2	2.033	3.006	6.1	18.6	9 8	21 59.09	-14 54.3	1.771	2.744	6.9	17.9
9 18	21 52.33	-14 17.4	2.083	2.996	9.6	18.8	9 18	21 53.75	-15 19.3	1.834	2.751	10.5	18.2
9 28	21 47.99	-15 18.4	2.158	2.987	12.7	19.0	9 28	21 50.38	-15 31.9	1.920	2.759	13.7	18.4
249344	2008 WC ₆₀		8 23.4 353°97	1°9/21.9	18		285423	1999 VM ₁₀₀		8 23.4 231°33	3°9/27.7	18	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
64985	2002 AT ₄₈		8 23.4	79°80	2°4/20.8	18	337179	1999 VZ ₈₂		8 23.4	47°86	6°9/18.5	18
7 20	22 30.54	-15 0.7	2.097	2.975	11.8	19.8	7 20	22 39.14	-27 41.2	1.628	2.514	14.2	20.1
7 30	22 26.25	-16 9.5	2.036	2.982	8.6	19.6	7 30	22 33.10	-28 29.9	1.579	2.520	11.0	19.9
8 9	22 20.27	-17 24.4	1.999	2.989	5.2	19.4	8 9	22 24.61	-29 12.6	1.551	2.526	8.1	19.7
8 19	22 13.18	-18 39.5	1.989	2.995	2.5	19.3	8 19	22 14.55	-29 41.2	1.548	2.532	6.9	19.7
8 29	22 5.73	-19 48.5	2.007	3.002	4.0	19.4	8 29	22 4.14	-29 49.4	1.571	2.538	8.3	19.8
9 8	21 58.78	-20 45.8	2.053	3.009	7.3	19.6	9 8	21 54.71	-29 34.6	1.618	2.545	11.2	20.0
9 18	21 53.08	-21 28.1	2.124	3.016	10.5	19.8	9 18	21 47.30	-28 57.7	1.687	2.551	14.2	20.2
9 28	21 49.21	-21 53.9	2.218	3.023	13.2	20.0	9 28	21 42.58	-28 2.1	1.777	2.558	16.9	20.4
4073	Ruianzhongxue		8 23.4	356°66	0°2/23.3	18	60174	1999 UV ₅₆		8 23.4	35°59	1°5/22.1	18
7 20	22 28.89	- 9 22.9	1.747	2.623	13.8	16.3	7 20	22 31.08	-12 55.7	1.824	2.703	13.2	18.6
7 30	22 25.34	- 9 52.3	1.677	2.620	10.3	16.1	7 30	22 26.80	-13 36.2	1.767	2.713	9.7	18.4
8 9	22 19.87	-10 33.1	1.629	2.618	6.3	15.8	8 9	22 20.67	-14 24.2	1.734	2.724	5.8	18.2
8 19	22 13.09	-11 21.0	1.606	2.616	1.9	15.5	8 19	22 13.33	-15 14.6	1.726	2.735	2.0	18.0
8 29	22 5.85	-12 10.4	1.609	2.615	2.6	15.6	8 29	22 5.67	-16 1.5	1.744	2.746	3.3	18.1
9 8	21 59.14	-12 55.4	1.638	2.614	6.9	15.9	9 8	21 58.63	-16 39.7	1.790	2.758	7.2	18.4
9 18	21 53.82	-13 31.3	1.692	2.615	10.8	16.1	9 18	21 53.03	-17 5.8	1.860	2.770	10.7	18.6
9 28	21 50.56	-13 54.8	1.768	2.616	14.2	16.3	9 28	21 49.45	-17 18.1	1.952	2.783	13.8	18.9
239859	1999 XF ₂₁₃		8 23.4	265°34	6°0/28.9	18	152103	2004 RN ₁₀₉		8 23.4	356°26	0°2/23.6	18
7 20	22 31.65	+ 7 10.1	2.013	2.808	15.3	20.5	7 20	22 29.63	- 8 13.5	1.923	2.791	13.1	19.7
7 30	22 27.32	+ 7 22.3	1.918	2.793	12.8	20.3	7 30	22 25.74	- 8 45.5	1.851	2.789	9.8	19.5
8 9	22 21.10	+ 7 14.0	1.842	2.778	9.9	20.1	8 9	22 20.06	- 9 29.0	1.801	2.787	6.0	19.3
8 19	22 13.50	+ 6 44.4	1.790	2.762	7.2	19.9	8 19	22 13.16	-10 20.1	1.777	2.786	1.9	19.0
8 29	22 5.27	+ 5 55.0	1.763	2.747	6.0	19.8	8 29	22 5.85	-11 13.6	1.780	2.786	2.3	19.0
9 8	21 57.35	+ 4 50.4	1.763	2.731	7.3	19.8	9 8	21 59.00	-12 3.8	1.810	2.786	6.4	19.3
9 18	21 50.60	+ 3 37.0	1.789	2.715	10.2	20.0	9 18	21 53.44	-12 46.1	1.865	2.786	10.1	19.5
9 28	21 45.79	+ 2 21.7	1.839	2.699	13.3	20.1	9 28	21 49.78	-13 17.0	1.943	2.786	13.3	19.7
202225	2004 XH ₁₉₁		8 23.4	300°14	9°5/14.6	18	360939	2005 TN ₁₉₆		8 23.4	294°95	5°4/18.3	18
7 20	22 35.72	-31 49.7	1.604	2.493	14.1	19.7	7 20	22 33.96	-25 7.3	2.047	2.930	11.8	21.1
7 30	22 31.15	-33 27.1	1.536	2.471	11.6	19.5	7 30	22 29.02	-26 2.9	1.977	2.919	9.0	20.9
8 9	22 23.80	-34 58.7	1.490	2.449	9.8	19.4	8 9	22 22.10	-26 56.8	1.930	2.908	6.5	20.7
8 19	22 14.39	-36 13.4	1.467	2.428	9.7	19.3	8 19	22 13.80	-27 42.5	1.909	2.897	5.4	20.7
8 29	22 4.13	-37 1.4	1.469	2.406	11.5	19.3	8 29	22 5.02	-28 13.8	1.915	2.886	6.8	20.7
9 8	21 54.50	-37 17.1	1.492	2.385	14.2	19.5	9 8	21 56.77	-28 26.9	1.947	2.875	9.5	20.9
9 18	21 46.82	-37 0.0	1.536	2.363	17.2	19.6	9 18	21 49.94	-28 20.5	2.003	2.864	12.4	21.0
9 28	21 42.09	-36 13.7	1.596	2.342	19.9	19.8	9 28	21 45.23	-27 55.6	2.079	2.854	15.0	21.2
392346	2010 FG ₄		8 23.4	268°75	2°9/20.9	18	455146	1993 FS		8 23.4	84°57	3°0/26.1	16
7 20	22 35.04	-16 35.0	1.864	2.743	13.0	21.3	7 20	22 40.87	+ 1 11.3	1.559	2.385	17.7	23.4
7 30	22 30.05	-17 23.6	1.777	2.722	9.7	21.1	7 30	22 33.90	+ 0 18.9	1.522	2.430	13.6	23.2
8 9	22 22.87	-18 18.6	1.713	2.702	6.0	20.8	8 9	22 24.83	- 0 54.8	1.506	2.473	9.1	23.1
8 19	22 14.07	-19 14.0	1.675	2.680	3.0	20.6	8 19	22 14.56	- 2 24.5	1.515	2.515	4.6	22.9
8 29	22 4.56	-20 3.0	1.664	2.659	4.7	20.6	8 29	22 4.22	- 4 2.0	1.552	2.555	3.3	22.9
9 8	21 55.45	-20 39.8	1.679	2.637	8.5	20.8	9 8	21 54.94	- 5 38.3	1.617	2.595	6.8	23.2
9 18	21 47.77	-21 0.7	1.720	2.615	12.4	21.0	9 18	21 47.59	- 7 5.6	1.709	2.633	10.7	23.5
9 28	21 42.34	-21 4.4	1.782	2.592	15.8	21.2	9 28	21 42.74	- 8 18.8	1.825	2.670	14.0	23.8
100131	1993 RU ₅		8 23.4	276°04	0°3/23.5	18	480653	2015 OX ₁₂		8 23.4	97°47	5°0/18.0	18
7 20	22 35.47	- 8 46.2	1.451	2.325	16.2	20.1	7 20	22 32.41	-21 56.4	2.004	2.889	11.9	20.6
7 30	22 30.82	- 9 5.8	1.368	2.309	12.3	19.8	7 30	22 27.78	-23 30.5	1.953	2.899	8.9	20.5
8 9	22 23.56	- 9 39.6	1.305	2.293	7.7	19.5	8 9	22 21.28	-25 5.3	1.928	2.909	6.1	20.3
8 19	22 14.32	-10 23.6	1.266	2.276	2.5	19.2	8 19	22 13.54	-26 33.0	1.929	2.919	5.0	20.3
8 29	22 4.22	-11 11.4	1.253	2.259	3.0	19.2	8 29	22 5.43	-27 46.3	1.957	2.929	6.6	20.4
9 8	21 54.62	-11 55.8	1.265	2.242	8.3	19.4	9 8	21 57.90	-28 40.0	2.012	2.939	9.3	20.6
9 18	21 46.78	-12 30.7	1.300	2.225	13.3	19.7	9 18	21 51.78	-29 12.2	2.091	2.949	12.1	20.8
9 28	21 41.68	-12 52.1	1.356	2.208	17.6	19.9	9 28	21 47.69	-29 23.2	2.190	2.958	14.5	21.0
464577	2016 CN ₇₂		8 23.4	58°06	0°9/22.8	17	37837	1998 CA ₂		8 23.4	168°35	7°4/15.9	18
7 20	22 35.98	-10 26.5	1.155	2.045	18.3	21.5	7 20	22 38.11	-31 11.9	2.108	2.981	11.9	19.0
7 30	22 31.35	-11 3.0	1.102	2.052	13.6	21.3	7 30	22 32.06	-32 34.0	2.057	2.985	9.6	18.9
8 9	22 23.83	-11 54.1	1.068	2.059	8.2	21.0	8 9	22 23.91	-33 49.1	2.031	2.988	7.8	18.8
8 19	22 14.35	-12 52.9	1.056	2.066	2.5	20.7	8 19	22 14.36	-34 49.6	2.031	2.991	7.5	18.8
8 29	22 4.32	-13 50.3	1.068	2.074	3.8	20.8	8 29	22 4.41	-35 29.1	2.057	2.993	8.7	18.8
9 8	21 55.28	-14 37.6	1.105	2.081	9.4	21.1	9 8	21 55.14	-35 44.5	2.108	2.995	10.9	19.0
9 18	21 48.52	-15 9.3	1.163	2.089	14.4	21.4	9 18	21 47.48	-35 36.1	2.182	2.996	13.2	19.1
9 28	21 44.86	-15 22.8	1.240	2.096	18.6	21.7	9 28	21 42.12	-35 6.5	2.275	2.997	15.3	19.3
442369	2011 SB ₂₅₇		8 23.4	288°73	0°7/23.9	16	129985	Jimfreemantle		8 23.4	275°74	5°3/18.4	18
7 20	22 33.15	- 8 14.0	1.922	2.783	13.4	22.0	7 20	22 33.53	-22 17.0	1.796	2.685	12.9	19.5
7 30	22 28.48	- 8 23.8	1.833	2.766	10.2	21.8	7 30	22 28.96	-23 34.6	1.728	2.675	9.7	19.3
8 9	22 21.83	- 8 44.2	1.766	2.750	6.4	21.5	8 9	22 22.20	-24 54.0	1.683	2.666	6.7	19.1
8 19	22 13.73	- 9 12.5	1.725	2.733	2.2	21.2	8 19	22 13.88	-26 7.2	1.663	2.656	5.3	19.0
8 29	22 5.03	- 9 44.5	1.710	2.716	2.3	21.2	8 29	22 4.98	-27 6.3	1.670	2.646	7.0	19.0
9 8	21 56.72	-10 15.3	1.723	2.700	6.6	21.4	9 8	21 56.62	-27 45.3	1.702	2.636	10.2	19.2
9 18	21 49.71	-10 40.7	1.762	2.683	10.6	21.6	9 18	21 49.81	-28 1.9	1.757	2.626	13.5	19.4
9 28	21 44.75	-10 57.5	1.824	2.667	14.1	21.8	9 28	21 45.33	-27 56.4	1.832	2.617	16.4	19.6
291981	2006 QH ₈₈		8 23.4	23°26	1°1/22.6	18	151735	2003 BO ₉₀		8 23.4	259°97	1°9/21.9	18
7 20	22 33.47	-12 32.5	1.695										

EPHEMERIDES

8 23.4

8 23.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
145078	2005 <i>GO</i> ₃₉		8 23.4 42°43'	5°3/19.8	17		298097	2002 <i>RY</i> ₇₆		8 23.4 359°35'	1°9/22.4	18	
7 20	22 33.95	-17 57.1	1.074	1.983	17.9	19.0	7 20	22 39.36	-16 44.7	1.510	2.392	15.3	19.7
7 30	22 29.82	-19 24.3	1.043	2.003	13.1	18.8	7 30	22 33.40	-16 30.5	1.444	2.390	11.4	19.5
8 9	22 22.83	-20 56.0	1.032	2.024	8.2	18.6	8 9	22 24.92	-16 18.5	1.399	2.389	6.9	19.2
8 19	22 14.04	-22 20.3	1.043	2.046	5.3	18.5	8 19	22 14.74	-16 4.7	1.379	2.388	2.6	19.0
8 29	22 4.96	-23 25.9	1.077	2.069	7.4	18.7	8 29	22 4.09	-15 45.1	1.386	2.388	3.8	19.1
9 8	21 57.15	-24 5.8	1.134	2.092	11.7	19.0	9 8	21 54.29	-15 17.2	1.418	2.389	8.4	19.3
9 18	21 51.72	-24 18.7	1.212	2.115	15.8	19.3	9 18	21 46.46	-14 40.1	1.475	2.391	12.6	19.6
9 28	21 49.36	-24 6.4	1.307	2.139	19.2	19.6	9 28	21 41.35	-13 54.2	1.553	2.393	16.3	19.8
38162	1999 <i>JB</i> ₇₇		8 23.4 346°77'	2°8/21.1	18		260076	2004 <i>JJ</i> ₇		8 23.4 143°52'	1°8/21.8	17	
7 20	22 29.93	-11 47.7	1.164	2.065	17.4	18.0	7 20	22 36.46	-13 37.4	1.846	2.717	13.4	21.6
7 30	22 27.01	-13 15.8	1.103	2.061	12.8	17.7	7 30	22 30.82	-14 25.2	1.785	2.726	9.9	21.4
8 9	22 21.34	-15 1.3	1.063	2.057	7.7	17.4	8 9	22 23.17	-15 20.2	1.747	2.735	5.9	21.2
8 19	22 13.68	-16 54.1	1.045	2.054	3.1	17.2	8 19	22 14.18	-16 16.7	1.735	2.743	2.2	20.9
8 29	22 5.28	-18 41.1	1.051	2.051	5.5	17.3	8 29	22 4.81	-17 8.5	1.751	2.751	3.6	21.1
9 8	21 57.64	-20 10.3	1.081	2.049	10.7	17.6	9 8	21 56.08	-17 49.9	1.794	2.758	7.5	21.3
9 18	21 52.06	-21 14.0	1.131	2.048	15.6	17.9	9 18	21 48.90	-18 17.7	1.863	2.764	11.2	21.6
9 28	21 49.45	-21 49.5	1.201	2.047	19.7	18.1	9 28	21 43.92	-18 30.6	1.954	2.770	14.3	21.8
59733	1999 <i>LR</i> ₂		8 23.4 23°18'	1°9/25.1	17		6534	Carriepeterson		8 23.4 194°37'	8°0/12.3	18	
7 20	22 28.99	- 2 24.2	1.385	2.252	17.2	18.7	7 20	22 35.17	-38 46.4	2.686	3.540	10.2	18.0
7 30	22 25.79	- 3 13.6	1.323	2.258	13.2	18.4	7 30	22 29.72	-40 13.7	2.640	3.539	8.8	18.0
8 9	22 20.33	- 4 25.5	1.282	2.263	8.6	18.2	8 9	22 22.46	-41 31.0	2.618	3.537	8.1	17.9
8 19	22 13.31	- 5 55.0	1.264	2.270	3.7	17.9	8 19	22 13.96	-42 31.9	2.622	3.535	8.2	17.9
8 29	22 5.79	- 7 33.5	1.271	2.277	2.8	17.9	8 29	22 5.06	-43 11.5	2.652	3.532	9.3	18.0
9 8	21 58.95	- 9 10.7	1.303	2.285	7.5	18.2	9 8	21 56.67	-43 27.6	2.705	3.530	10.7	18.1
9 18	21 53.81	-10 37.8	1.359	2.293	12.0	18.5	9 18	21 49.59	-43 20.7	2.780	3.527	12.3	18.2
9 28	21 51.11	-11 48.1	1.436	2.302	15.9	18.8	9 28	21 44.47	-42 53.1	2.872	3.524	13.7	18.3
46701	1997 <i>CP</i> ₂₉		8 23.4 169°79'	0°2/23.3	18		509381	2007 <i>BY</i> ₉₉		8 23.4 171°08'	4°3/18.2	18	
7 20	22 34.02	- 7 57.9	1.629	2.497	15.1	19.1	7 20	22 31.20	-21 30.8	2.355	3.235	10.5	21.7
7 30	22 29.30	- 8 47.9	1.561	2.499	11.3	18.9	7 30	22 26.72	-22 56.9	2.292	3.237	7.9	21.5
8 9	22 22.39	- 9 52.5	1.514	2.501	6.9	18.6	8 9	22 20.61	-24 24.4	2.256	3.238	5.4	21.4
8 19	22 13.95	-11 6.3	1.492	2.502	2.1	18.3	8 19	22 13.39	-25 46.9	2.247	3.239	4.3	21.3
8 29	22 4.98	-12 21.8	1.497	2.503	2.8	18.4	8 29	22 5.78	-26 58.2	2.266	3.239	5.7	21.4
9 8	21 56.61	-13 31.4	1.529	2.503	7.5	18.7	9 8	21 58.59	-27 53.5	2.313	3.240	8.2	21.5
9 18	21 49.85	-14 28.9	1.586	2.504	11.8	18.9	9 18	21 52.55	-28 30.5	2.384	3.241	10.9	21.7
9 28	21 45.44	-15 10.6	1.664	2.504	15.4	19.1	9 28	21 48.25	-28 48.6	2.477	3.241	13.1	21.9
363701	2004 <i>TE</i> ₂₉₁		8 23.4 344°83'	3°8/27.3	17		399537	2003 <i>NB</i> ₉		8 23.4 32°57'	13°8/4.2	18	
7 20	22 28.70	+ 2 9.3	2.016	2.842	14.2	21.2	7 20	22 40.43	+22 0.0	1.803	2.492	20.3	19.2
7 30	22 25.01	+ 1 59.4	1.935	2.838	11.4	21.0	7 30	22 34.07	+24 19.3	1.750	2.512	18.4	19.1
8 9	22 19.64	+ 1 31.5	1.875	2.834	8.2	20.8	8 9	22 25.33	+26 10.4	1.714	2.532	16.5	19.0
8 19	22 13.08	+ 0 46.8	1.840	2.831	5.1	20.6	8 19	22 14.91	+27 27.1	1.699	2.554	14.9	18.9
8 29	22 6.08	- 0 11.2	1.831	2.828	3.9	20.5	8 29	22 3.87	+28 6.0	1.704	2.576	14.0	18.9
9 8	21 59.48	- 1 17.0	1.848	2.826	6.1	20.7	9 8	21 53.44	+28 8.5	1.730	2.598	13.9	19.0
9 18	21 54.04	- 2 24.6	1.892	2.824	9.3	20.9	9 18	21 44.72	+27 40.1	1.778	2.621	14.5	19.1
9 28	21 50.41	- 3 28.1	1.960	2.822	12.5	21.1	9 28	21 38.54	+26 49.7	1.846	2.645	15.7	19.2
420468	2012 <i>DR</i> ₈₇		8 23.4 152°63'	4°3/26.8	17		36254	1999 <i>XM</i> ₁₇		8 23.4 208°59'	5°0/18.4	18	
7 20	22 36.58	+ 1 21.3	1.721	2.547	16.3	21.5	7 20	22 34.97	-25 53.9	2.304	3.180	10.9	18.1
7 30	22 31.06	+ 1 25.9	1.650	2.553	12.9	21.3	7 30	22 29.51	-26 42.1	2.241	3.179	8.3	17.9
8 9	22 23.39	+ 1 11.4	1.599	2.560	9.2	21.1	8 9	22 22.29	-27 27.3	2.202	3.177	6.0	17.8
8 19	22 14.25	+ 0 38.9	1.573	2.565	5.6	20.9	8 19	22 13.91	-28 4.1	2.190	3.176	5.0	17.7
8 29	22 4.61	- 0 8.1	1.573	2.571	4.4	20.8	8 29	22 5.17	-28 27.4	2.206	3.174	6.2	17.8
9 8	21 55.58	- 1 3.5	1.599	2.575	7.1	21.0	9 8	21 56.98	-28 34.2	2.248	3.172	8.6	18.0
9 18	21 48.12	- 2 1.0	1.652	2.579	10.7	21.2	9 18	21 50.12	-28 23.9	2.315	3.170	11.2	18.1
9 28	21 42.96	- 2 54.1	1.727	2.583	14.2	21.5	9 28	21 45.18	-27 57.5	2.403	3.168	13.5	18.3
63727	2001 <i>QO</i> ₂₃₇		8 23.4 290°08'	1°3/22.2	18		339350	2005 <i>AD</i> ₈		8 23.4 265°11'	0°9/24.0	18	
7 20	22 32.50	-12 51.9	1.947	2.821	12.7	19.3	7 20	22 37.69	- 8 47.0	1.942	2.796	13.6	20.8
7 30	22 27.92	-13 25.7	1.871	2.814	9.4	19.0	7 30	22 31.88	- 8 37.1	1.850	2.780	10.3	20.5
8 9	22 21.44	-14 7.1	1.818	2.807	5.7	18.8	8 9	22 23.96	- 8 35.7	1.781	2.763	6.5	20.3
8 19	22 13.65	-14 51.7	1.791	2.800	1.9	18.5	8 19	22 14.49	- 8 40.6	1.738	2.746	2.4	20.0
8 29	22 5.37	-15 34.1	1.791	2.794	3.1	18.6	8 29	22 4.37	- 8 48.8	1.723	2.729	2.4	19.9
9 8	21 57.57	-16 9.2	1.818	2.787	7.1	18.8	9 8	21 54.66	- 8 56.5	1.736	2.712	6.6	20.2
9 18	21 51.10	-16 33.3	1.871	2.780	10.8	19.1	9 18	21 46.32	- 9 0.6	1.775	2.694	10.7	20.4
9 28	21 46.64	-16 44.5	1.946	2.774	14.0	19.3	9 28	21 40.16	- 8 58.5	1.838	2.676	14.2	20.6
223975	2004 <i>XL</i> ₁₇₉		8 23.4 286°03'	0°1/23.3	18		308639	2005 <i>YO</i> ₈₆		8 23.4 171°06'	6°4/13.6	18	
7 20	22 30.38	- 9 23.8	2.310	3.170	11.5	21.0	7 20	22 33.18	-33 38.9	2.938	3.802	9.2	20.8
7 30	22 26.15	- 9 53.3	2.218	3.153	8.6	20.8	7 30	22 28.05	-35 15.8	2.890	3.806	7.6	20.7
8 9	22 20.30	-10 32.0	2.151	3.136	5.3	20.6	8 9	22 21.38	-36 46.4	2.868	3.808	6.6	20.6
8 19	22 13.30	-11 16.8	2.110	3.119	1.6	20.3	8 19	22 13.63	-38 4.6	2.873	3.811	6.6	20.6
8 29	22 5.82	-12 3.3	2.097	3.102	2.2	20.3	8 29	22 5.50	-39 5.5	2.906	3.812	7.7	20.7
9 8	21 58.64	-12 46.8	2.112	3.086	5.9	20.5	9 8	21 57.75	-39 46.4	2.964	3.814	9.2	20.8
9 18	21 52.51	-13 23.6	2.154	3.069	9.3	20.7	9 18	21 51.06	-40 6.6	3.046	3.815	10.9	20.9
9 28	21 48.03	-13 50.6	2.220	3.052	12.3	20.9	9 28	21 46.01	-40 7.5	3.147	3.816	12.4	21.0
169025	2001 <i>DY</i> ₉₅		8 23.4 185°42'	2°0/21.9	18		310604	2001 <i>XJ</i> ₁₂₈		8			

EPHEMERIDES

8 23.4

8 23.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
480458	2015 <i>LJ</i> ₁		8 23.4	4°66'	1.9°/25.3	18	391769	2008 <i>FJ</i> ₅₄		8 23.4	35°02'	2.7°/26.2	18
7 20	22 25.93	— 0 30.9	1.377	2.243	17.4	20.2	7 20	22 29.43	— 0 25.9	2.081	2.916	13.5	20.5
7 30	22 23.60	— 1 46.4	1.310	2.242	13.4	19.9	7 30	22 25.49	— 0 50.8	2.006	2.918	10.6	20.3
8 9	22 19.07	— 3 29.3	1.263	2.243	8.8	19.7	8 9	22 19.91	— 1 31.9	1.953	2.921	7.2	20.1
8 19	22 12.99	— 5 33.7	1.239	2.244	3.9	19.4	8 19	22 13.22	— 2 27.0	1.925	2.924	3.9	19.9
8 29	22 6.35	— 7 49.2	1.240	2.247	2.8	19.3	8 29	22 6.15	— 3 31.6	1.925	2.927	2.9	19.9
9 8	22 0.31	— 10 3.2	1.268	2.250	7.5	19.6	9 8	21 59.50	— 4 40.1	1.952	2.931	5.7	20.0
9 18	21 55.87	— 12 4.1	1.319	2.255	12.2	19.9	9 18	21 54.02	— 5 46.7	2.005	2.934	9.1	20.3
9 28	21 53.82	— 13 43.9	1.393	2.260	16.3	20.2	9 28	21 50.28	— 6 46.4	2.083	2.938	12.1	20.5
93222	2000 <i>SL</i> ₁₄₀		8 23.4	274°74'	0°8'/24.0	18	339209	2004 <i>TT</i> ₂₆₉		8 23.4	8°32'	0°4'/23.2	18
7 20	22 34.64	— 7 33.7	1.820	2.679	14.1	19.3	7 20	22 29.61	— 9 50.4	1.148	2.047	17.8	19.8
7 30	22 29.81	— 7 47.7	1.726	2.658	10.8	19.1	7 30	22 26.65	— 10 15.6	1.094	2.049	13.3	19.5
8 9	22 22.80	— 8 14.0	1.654	2.637	6.8	18.8	8 9	22 21.06	— 10 55.9	1.059	2.051	8.1	19.3
8 19	22 14.17	— 8 49.7	1.607	2.615	2.5	18.5	8 19	22 13.64	— 11 45.3	1.045	2.055	2.4	18.9
8 29	22 4.80	— 9 30.3	1.587	2.593	2.5	18.4	8 29	22 5.66	— 12 35.7	1.055	2.061	3.4	19.0
9 8	21 55.76	— 10 10.1	1.594	2.571	7.0	18.7	9 8	21 58.56	— 13 18.8	1.087	2.068	8.9	19.4
9 18	21 48.09	— 10 44.1	1.627	2.548	11.3	18.9	9 18	21 53.49	— 13 48.8	1.142	2.076	13.8	19.7
9 28	21 42.63	— 11 8.6	1.682	2.526	15.1	19.1	9 28	21 51.26	— 14 2.1	1.215	2.085	17.9	20.0
127811	2003 <i>FS</i> ₈₅		8 23.4	48°11'	0°4'/23.2	17	183883	2004 <i>CK</i> ₆₂		8 23.4	130°45'	4°8'/19.9	18
7 20	22 36.59	— 10 38.2	1.309	2.192	17.1	19.2	7 20	22 38.28	— 20 57.3	1.607	2.492	14.3	20.5
7 30	22 31.28	— 10 55.6	1.269	2.215	12.6	19.0	7 30	22 32.52	— 21 53.7	1.552	2.499	10.7	20.3
8 9	22 23.53	— 11 24.1	1.250	2.239	7.6	18.8	8 9	22 24.37	— 22 51.2	1.519	2.504	7.0	20.1
8 19	22 14.30	— 11 58.2	1.254	2.264	2.3	18.5	8 19	22 14.62	— 23 41.9	1.511	2.510	4.8	20.0
8 29	22 4.84	— 12 31.4	1.283	2.288	3.1	18.7	8 29	22 4.45	— 24 18.6	1.530	2.516	6.4	20.1
9 8	21 56.47	— 12 57.7	1.337	2.314	8.1	19.0	9 8	21 55.10	— 24 36.3	1.574	2.521	9.9	20.3
9 18	21 50.17	— 13 13.4	1.415	2.339	12.4	19.3	9 18	21 47.64	— 24 33.9	1.641	2.526	13.5	20.6
9 28	21 46.59	— 13 16.4	1.513	2.365	16.0	19.6	9 28	21 42.79	— 24 12.5	1.729	2.530	16.6	20.8
5794	<i>Irimina</i>		8 23.4	313°96'	1°1'/24.5	18	50389	2000 <i>CO</i> ₉₂		8 23.4	65°39'	0°6'/23.9	18
7 20	22 29.06	— 5 35.1	2.032	2.889	12.9	17.5	7 20	22 31.91	— 6 46.7	1.807	2.669	14.1	18.3
7 30	22 25.36	— 6 3.6	1.945	2.875	9.9	17.3	7 30	22 27.48	— 7 21.3	1.745	2.679	10.6	18.1
8 9	22 19.92	— 6 45.5	1.880	2.861	6.3	17.0	8 9	22 21.17	— 8 8.9	1.705	2.689	6.6	17.9
8 19	22 13.23	— 7 37.9	1.840	2.847	2.5	16.8	8 19	22 13.62	— 9 5.4	1.690	2.699	2.3	17.7
8 29	22 6.04	— 8 36.1	1.828	2.834	2.2	16.7	8 29	22 5.70	— 10 4.9	1.703	2.709	2.3	17.7
9 8	21 59.19	— 9 34.3	1.842	2.821	6.0	17.0	9 8	21 58.38	— 11 1.3	1.742	2.719	6.5	18.0
9 18	21 53.49	— 10 27.5	1.883	2.808	9.8	17.2	9 18	21 52.47	— 11 49.6	1.807	2.730	10.3	18.2
9 28	21 49.61	— 11 11.1	1.947	2.796	13.1	17.3	9 28	21 48.61	— 12 26.1	1.895	2.740	13.6	18.5
59684	1999 <i>JB</i> ₁₀₇		8 23.4	4°35'	5°0'/27.5	18	75958	2000 <i>CE</i> ₉₄		8 23.4	201°52'	1°4'/25.0	18
7 20	22 30.71	+ 2 59.8	1.518	2.355	17.5	18.7	7 20	22 31.17	— 3 2.6	2.380	3.215	12.0	20.0
7 30	22 26.99	+ 2 57.5	1.446	2.355	14.1	18.5	7 30	22 26.65	— 3 49.0	2.295	3.212	9.2	19.9
8 9	22 21.08	+ 2 31.6	1.394	2.355	10.2	18.2	8 9	22 20.58	— 4 49.5	2.233	3.208	6.0	19.6
8 19	22 13.62	+ 1 43.0	1.364	2.355	6.5	18.0	8 19	22 13.44	— 6 0.9	2.198	3.203	2.6	19.4
8 29	22 5.58	+ 0 36.2	1.359	2.356	5.0	17.9	8 29	22 5.89	— 7 18.5	2.192	3.198	2.0	19.4
9 8	21 58.12	— 0 41.3	1.378	2.358	7.5	18.1	9 8	21 58.67	— 8 36.5	2.216	3.192	5.3	19.6
9 18	21 52.25	— 2 1.2	1.422	2.359	11.4	18.3	9 18	21 52.48	— 9 49.7	2.267	3.186	8.7	19.8
9 28	21 48.73	— 3 15.1	1.488	2.361	15.1	18.6	9 28	21 47.89	— 10 53.7	2.343	3.180	11.6	20.0
349159	2007 <i>PA</i> ₂₈		8 23.4	335°78'	5°6'/19.7	18	5608	<i>Olimos</i>		8 23.4	31°35'	1°9'/21.9	18
7 20	22 32.96	— 21 44.7	1.337	2.240	15.5	20.3	7 20	22 34.14	— 13 59.7	1.650	2.531	14.2	17.0
7 30	22 29.17	— 22 30.7	1.269	2.224	11.7	20.1	7 30	22 29.38	— 14 36.3	1.587	2.533	10.5	16.8
8 9	22 22.65	— 23 18.2	1.221	2.210	7.8	19.8	8 9	22 22.45	— 15 20.4	1.546	2.536	6.3	16.6
8 19	22 14.15	— 23 58.9	1.196	2.196	5.6	19.6	8 19	22 14.05	— 16 6.4	1.530	2.539	2.4	16.3
8 29	22 4.91	— 24 24.0	1.195	2.183	7.4	19.7	8 29	22 5.20	— 16 47.8	1.540	2.541	3.8	16.4
9 8	21 56.41	— 24 27.9	1.217	2.172	11.4	19.9	9 8	21 57.02	— 17 19.1	1.577	2.544	8.0	16.7
9 18	21 49.91	— 24 8.7	1.261	2.161	15.5	20.1	9 18	21 50.47	— 17 36.9	1.637	2.548	12.0	16.9
9 28	21 46.34	— 23 27.7	1.323	2.152	19.2	20.3	9 28	21 46.27	— 17 39.7	1.720	2.551	15.3	17.2
393385	2000 <i>GO</i> ₁₇		8 23.4	200°87'	1°2'/24.9	18	507249	2011 <i>BZ</i> ₁₀₀		8 23.4	234°27'	0°7'/23.9	18
7 20	22 32.41	— 4 23.3	2.884	3.713	10.3	23.0	7 20	22 36.15	— 7 41.5	1.791	2.649	14.4	22.3
7 30	22 27.29	— 4 52.6	2.794	3.708	7.9	22.8	7 30	22 30.87	— 7 57.5	1.708	2.639	10.9	22.1
8 9	22 20.85	— 5 32.0	2.728	3.701	5.1	22.6	8 9	22 23.41	— 8 25.7	1.646	2.629	6.9	21.8
8 19	22 13.49	— 6 19.2	2.690	3.694	2.2	22.4	8 19	22 14.39	— 9 2.7	1.611	2.619	2.4	21.5
8 29	22 5.77	— 7 10.9	2.681	3.687	1.8	22.4	8 29	22 4.74	— 9 43.8	1.602	2.608	2.5	21.5
9 8	21 58.33	— 8 3.2	2.703	3.678	4.6	22.6	9 8	21 55.56	— 10 23.3	1.621	2.597	7.0	21.7
9 18	21 51.74	— 8 52.5	2.754	3.669	7.5	22.8	9 18	21 47.84	— 10 56.4	1.665	2.585	11.2	22.0
9 28	21 46.53	— 9 35.7	2.830	3.659	10.1	22.9	9 28	21 42.39	— 11 19.5	1.732	2.573	14.8	22.2
74107	1998 <i>QM</i> ₃₇		8 23.4	191°13'	2°0'/24.9	18	55575	2002 <i>DC</i> ₁₆		8 23.4	86°10'	0°7'/24.2	18
7 20	22 36.62	— 4 58.0	1.691	2.543	15.4	18.2	7 20	22 30.75	— 5 53.7	2.331	3.179	11.8	19.0
7 30	22 31.20	— 4 58.5	1.617	2.542	11.8	18.0	7 30	22 26.21	— 6 34.2	2.271	3.197	8.9	18.8
8 9	22 23.56	— 5 13.2	1.564	2.541	7.7	17.7	8 9	22 20.23	— 7 25.5	2.236	3.216	5.5	18.6
8 19	22 14.39	— 5 39.6	1.535	2.540	3.5	17.5	8 19	22 13.32	— 8 23.9	2.227	3.235	2.0	18.4
8 29	22 4.65	— 6 13.5	1.534	2.539	2.8	17.4	8 29	22 6.18	— 9 25.0	2.247	3.253	1.9	18.4
9 8	21 55.51	— 6 49.5	1.559	2.537	6.9	17.7	9 8	21 59.52	— 10 23.6	2.295	3.271	5.2	18.7
9 18	21 47.95	— 7 22.5	1.610	2.535	11.1	17.9	9 18	21 53.95	— 11 15.8	2.371	3.289	8.4	18.9
9 28	21 42.74	— 7 48.3	1.683	2.533	14.8	18.2	9 28	21 49.99	— 11 58.4	2.471	3.307		

EPHEMERIDES

8 23.4

8 23.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
491670	2012 <i>TG</i> ₃₁₃		8 23.4 327°27'	2°5/21.9	16		485208	2010 <i>UR</i> ₇₆		8 23.4 327°16'	6°4/28.1	17	
7 20	22 33.59	-15 41.1	1.324	2.220	16.1	21.3	7 20	22 29.99	+ 4 15.9	1.687	2.512	16.6	20.5
7 30	22 29.70	-15 58.9	1.247	2.201	12.0	21.0	7 30	22 26.53	+ 4 54.6	1.592	2.489	13.7	20.3
8 9	22 23.06	-16 23.6	1.189	2.182	7.4	20.7	8 9	22 20.94	+ 5 14.0	1.517	2.466	10.6	20.0
8 19	22 14.36	-16 49.4	1.155	2.164	3.0	20.4	8 19	22 13.71	+ 5 12.5	1.464	2.444	7.6	19.8
8 29	22 4.81	-17 9.3	1.145	2.147	4.7	20.5	8 29	22 5.72	+ 4 50.6	1.435	2.423	6.4	19.7
9 8	21 55.88	-17 17.2	1.158	2.130	9.7	20.7	9 8	21 58.02	+ 4 12.2	1.431	2.403	8.2	19.8
9 18	21 48.87	-17 9.7	1.194	2.115	14.5	20.9	9 18	21 51.65	+ 3 23.2	1.450	2.384	11.5	19.9
9 28	21 44.78	-16 45.8	1.249	2.101	18.7	21.2	9 28	21 47.50	+ 2 30.7	1.492	2.365	15.0	20.1
484871	2009 <i>OB</i> ₂₀		8 23.4 10°17'	3°9/25.1	18		245304	2005 <i>EZ</i> ₂₆		8 23.5 168°00'	1°5/22.2	18	
7 20	22 39.64	- 6 12.8	1.435	2.296	17.1	19.1	7 20	22 35.04	-13 44.1	2.000	2.870	12.6	20.8
7 30	22 33.62	- 4 49.0	1.372	2.300	13.3	18.9	7 30	22 29.74	-14 13.4	1.931	2.871	9.3	20.6
8 9	22 25.10	- 3 35.0	1.331	2.307	9.0	18.6	8 9	22 22.57	-14 48.9	1.885	2.873	5.6	20.4
8 19	22 14.91	- 2 32.2	1.314	2.314	5.0	18.4	8 19	22 14.14	-15 26.2	1.865	2.874	2.0	20.2
8 29	22 4.25	- 1 40.9	1.323	2.324	4.4	18.4	8 29	22 5.30	-16 0.1	1.873	2.875	3.2	20.3
9 8	21 54.46	- 1 0.0	1.357	2.334	7.9	18.7	9 8	21 57.01	-16 26.2	1.909	2.876	6.9	20.5
9 18	21 46.64	- 0 27.1	1.416	2.346	12.0	18.9	9 18	21 50.10	-16 41.7	1.971	2.876	10.5	20.7
9 28	21 41.55	+ 0 1.1	1.497	2.359	15.6	19.2	9 28	21 45.21	-16 45.1	2.055	2.877	13.5	20.9
214392	2005 <i>MV</i> ₃₈		8 23.4 11°40'	0°5/23.9	18		347970	2003 <i>SL</i> ₄₂		8 23.5 356°26'	6°9/28.7	17	
7 20	22 31.97	- 8 4.5	1.881	2.745	13.5	20.7	7 20	22 29.07	+ 5 11.6	1.597	2.423	17.3	19.5
7 30	22 27.55	- 8 25.1	1.810	2.746	10.2	20.5	7 30	22 25.77	+ 5 57.1	1.522	2.417	14.4	19.2
8 9	22 21.26	- 8 56.9	1.762	2.747	6.3	20.3	8 9	22 20.38	+ 6 21.4	1.467	2.413	11.1	19.0
8 19	22 13.70	- 9 36.3	1.739	2.748	2.1	20.0	8 19	22 13.51	+ 6 23.1	1.433	2.410	8.2	18.9
8 29	22 5.72	-10 18.6	1.743	2.749	2.3	20.1	8 29	22 6.06	+ 6 3.2	1.422	2.408	6.9	18.8
9 8	21 58.26	-10 58.5	1.774	2.751	6.4	20.3	9 8	21 59.10	+ 5 26.1	1.436	2.407	8.3	18.9
9 18	21 52.14	-11 31.6	1.830	2.752	10.2	20.6	9 18	21 53.61	+ 4 38.1	1.473	2.407	11.3	19.0
9 28	21 48.03	-11 54.8	1.909	2.754	13.5	20.8	9 28	21 50.33	+ 3 46.6	1.532	2.409	14.5	19.3
221155	Marchetti		8 23.4 331°85'	1°4/22.7	18		346484	2008 <i>UH</i> ₃₂		8 23.5 359°18'	4°0/20.4	18	
7 20	22 36.56	-13 57.3	1.171	2.067	17.7	17.4	7 20	22 33.89	-18 17.5	1.527	2.420	14.5	20.9
7 30	22 32.09	-13 56.8	1.103	2.056	13.3	17.2	7 30	22 29.45	-19 12.1	1.467	2.419	10.8	20.6
8 9	22 24.58	-14 4.4	1.053	2.046	8.1	16.8	8 9	22 22.64	-20 11.3	1.428	2.418	6.8	20.4
8 19	22 14.84	-14 14.9	1.026	2.036	2.6	16.5	8 19	22 14.20	-21 7.5	1.414	2.418	4.0	20.2
8 29	22 4.27	-14 22.1	1.022	2.027	4.0	16.6	8 29	22 5.25	-21 53.0	1.425	2.418	5.8	20.3
9 8	21 54.52	-14 20.2	1.042	2.019	9.7	16.9	9 8	21 57.02	-22 21.7	1.461	2.418	9.6	20.6
9 18	21 47.03	-14 6.3	1.083	2.012	14.9	17.1	9 18	21 50.57	-22 31.0	1.521	2.419	13.5	20.8
9 28	21 42.78	-13 39.1	1.144	2.006	19.4	17.4	9 28	21 46.66	-22 21.0	1.600	2.420	16.8	21.0
71550	2000 <i>DG</i> ₆		8 23.4 276°66'	2°7/20.7	18		111355	2001 <i>XF</i> ₁₁₂		8 23.5 318°83'	3°9/19.8	18	
7 20	22 32.51	-18 17.2	2.347	3.222	10.8	19.3	7 20	22 30.82	-18 13.8	1.812	2.701	12.8	19.5
7 30	22 27.70	-18 53.3	2.271	3.214	8.0	19.1	7 30	22 26.95	-19 23.5	1.740	2.690	9.5	19.3
8 9	22 21.25	-19 32.0	2.220	3.207	5.0	18.9	8 9	22 21.06	-20 38.6	1.691	2.680	6.0	19.1
8 19	22 13.69	-20 8.8	2.195	3.199	2.8	18.7	8 19	22 13.71	-21 52.1	1.668	2.670	3.9	18.9
8 29	22 5.74	-20 39.1	2.198	3.191	4.0	18.8	8 29	22 5.82	-22 56.4	1.672	2.661	5.6	19.0
9 8	21 58.20	-20 59.3	2.229	3.183	7.0	19.0	9 8	21 58.41	-23 45.2	1.701	2.651	9.0	19.2
9 18	21 51.81	-21 7.3	2.286	3.176	10.0	19.2	9 18	21 52.41	-24 14.9	1.754	2.642	12.5	19.4
9 28	21 47.16	-21 2.2	2.366	3.168	12.6	19.3	9 28	21 48.57	-24 24.6	1.828	2.634	15.6	19.6
168246	2006 <i>KF</i> ₁₀₁		8 23.4 44°09'	3°6/26.3	16		351179	2004 <i>BM</i> ₇₆		8 23.5 181°41'	1°3/22.0	18	
7 20	22 32.38	- 0 36.0	1.577	2.425	16.5	20.4	7 20	22 32.09	-12 1.8	2.304	3.169	11.3	21.7
7 30	22 28.06	- 0 37.9	1.517	2.435	12.9	20.2	7 30	22 27.39	-12 59.0	2.231	3.169	8.3	21.5
8 9	22 21.65	- 0 58.8	1.476	2.446	8.9	20.0	8 9	22 21.08	-14 4.1	2.182	3.170	5.0	21.3
8 19	22 13.83	- 1 36.8	1.459	2.458	5.0	19.8	8 19	22 13.68	-15 12.3	2.161	3.170	1.7	21.1
8 29	22 5.60	- 2 27.1	1.467	2.469	3.8	19.7	8 29	22 5.89	-16 18.3	2.168	3.169	2.9	21.2
9 8	21 58.05	- 3 23.1	1.501	2.481	6.9	20.0	9 8	21 58.51	-17 16.7	2.204	3.168	6.3	21.4
9 18	21 52.09	- 4 18.3	1.560	2.494	10.8	20.2	9 18	21 52.24	-18 3.7	2.267	3.167	9.6	21.6
9 28	21 48.41	- 5 6.8	1.641	2.506	14.3	20.5	9 28	21 47.68	-18 37.1	2.353	3.165	12.3	21.8
209952	2006 <i>FA</i> ₃₀		8 23.4 30°49'	2°0/24.7	17		32399	2000 <i>QA</i> ₂₁₉		8 23.5 276°06'	0°5/23.9	18	
7 20	22 31.09	- 4 32.6	0.959	1.854	20.9	20.0	7 20	22 31.84	- 7 42.1	2.072	2.929	12.7	19.2
7 30	22 27.97	- 4 55.1	0.918	1.867	15.9	19.7	7 30	22 27.39	- 8 5.0	1.990	2.922	9.6	19.0
8 9	22 21.93	- 5 41.6	0.894	1.882	10.1	19.5	8 9	22 21.18	- 8 38.8	1.932	2.915	6.0	18.7
8 19	22 13.95	- 6 46.1	0.890	1.898	4.2	19.2	8 19	22 13.74	- 9 20.2	1.900	2.908	2.1	18.5
8 29	22 5.53	- 7 58.9	0.908	1.915	3.3	19.2	8 29	22 5.83	-10 5.0	1.895	2.901	2.1	18.4
9 8	21 58.24	- 9 8.8	0.948	1.933	8.9	19.6	9 8	21 58.33	-10 47.9	1.918	2.894	6.1	18.7
9 18	21 53.31	-10 7.0	1.009	1.953	14.1	20.0	9 18	21 52.03	-11 24.9	1.967	2.887	9.7	18.9
9 28	21 51.49	-10 47.6	1.089	1.973	18.5	20.3	9 28	21 47.59	-11 52.6	2.040	2.880	12.9	19.1
250933	2005 <i>WD</i> ₁₈₄		8 23.4 259°76'	4°1/27.8	18		283058	2008 <i>ON</i> ₂₃		8 23.5 244°93'	7°8/ 1.1	18	
7 20	22 30.21	+ 3 40.5	2.372	3.177	13.0	20.7	7 20	22 30.23	+14 37.7	1.930	2.685	17.2	20.5
7 30	22 26.00	+ 3 37.8	2.279	3.167	10.5	20.6	7 30	22 26.40	+14 27.5	1.842	2.679	14.8	20.3
8 9	22 20.25	+ 3 18.9	2.209	3.157	7.8	20.4	8 9	22 20.68	+13 48.7	1.771	2.674	12.1	20.1
8 19	22 13.41	+ 2 44.4	2.163	3.147	5.2	20.2	8 19	22 13.60	+12 40.3	1.721	2.669	9.5	19.9
8 29	22 6.12	+ 1 56.8	2.144	3.136	4.1	20.1	8 29	22 5.98	+11 4.3	1.697	2.663	7.9	19.8
9 8	21 59.12	+ 1 0.1	2.153	3.126	5.8	20.2	9 8	21 58.76	+ 9 7.2	1.698	2.657	8.3	19.9
9 18	21 53.11	- 0 0.7	2.189	3.115	8.5	20.4	9 18	21 52.79	+ 6 57.9	1.726	2.651	10.5	20.0
9 28	21 48.69	- 1 0.2	2.249	3.104	11.4	20.5	9 28	21 48.80	+ 4 46.7	1.779	2.646	13.3	20.1
358801	2008 <i>EV</i> ₅₈		8 23.4 40°58'	0°2/23.3	18		256797	Benbow		8 23.5 242°59'			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
304415	2006 <i>TV</i> ₅₃		8 23.5 349°69	5°0/19.5	18		357857	2005 <i>UG</i> ₂₅₅		8 23.5 18°44	4°7/19.5	18	
7 20	22 32.06	-21 8.0	1.538	2.435	14.2	20.3	7 20	22 34.14	-22 28.0	1.837	2.724	12.7	20.4
7 30	22 28.14	-22 3.5	1.476	2.429	10.6	20.0	7 30	22 29.27	-23 15.8	1.780	2.727	9.5	20.3
8 9	22 21.88	-23 0.8	1.436	2.424	7.0	19.8	8 9	22 22.37	-24 3.1	1.746	2.730	6.4	20.1
8 19	22 13.99	-23 52.2	1.420	2.419	5.0	19.7	8 19	22 14.12	-24 43.3	1.737	2.733	4.7	20.0
8 29	22 5.57	-24 30.0	1.429	2.415	6.7	19.8	8 29	22 5.49	-25 10.6	1.755	2.737	6.2	20.1
9 8	21 57.84	-24 48.7	1.462	2.412	10.3	20.0	9 8	21 57.55	-25 21.0	1.798	2.741	9.2	20.3
9 18	21 51.86	-24 46.4	1.518	2.410	13.9	20.2	9 18	21 51.17	-25 13.4	1.865	2.746	12.3	20.5
9 28	21 48.38	-24 23.8	1.593	2.409	17.1	20.4	9 28	21 47.01	-24 48.7	1.953	2.750	15.1	20.7
370639	2003 <i>YR</i> ₁₇₄		8 23.5 247°86	2°4/21.4	18		139185	2001 <i>FH</i> ₁₄₄		8 23.5 48°84	5°3/20.1	17	
7 20	22 35.09	-13 50.8	1.638	2.518	14.4	21.3	7 20	22 37.48	-20 0.8	1.174	2.076	17.2	18.7
7 30	22 30.36	-14 50.8	1.560	2.506	10.7	21.0	7 30	22 32.34	-21 3.4	1.141	2.097	12.7	18.5
8 9	22 23.27	-16 1.1	1.505	2.495	6.5	20.8	8 9	22 24.40	-22 7.1	1.128	2.118	8.2	18.4
8 19	22 14.46	-17 14.8	1.475	2.483	2.7	20.5	8 19	22 14.74	-23 2.2	1.138	2.140	5.4	18.3
8 29	22 4.94	-18 23.9	1.472	2.470	4.5	20.6	8 29	22 4.84	-23 39.6	1.172	2.162	7.2	18.4
9 8	21 55.93	-19 20.7	1.494	2.458	8.8	20.8	9 8	21 56.22	-23 54.5	1.229	2.185	11.2	18.7
9 18	21 48.52	-20 0.4	1.541	2.445	13.0	21.0	9 18	21 49.98	-23 46.4	1.308	2.208	15.1	19.0
9 28	21 43.58	-20 20.7	1.609	2.431	16.6	21.3	9 28	21 46.77	-23 17.6	1.405	2.231	18.4	19.3
193272	2000 <i>SM</i> ₁₈₈		8 23.5 281°75	2°2/25.0	18		67889	2000 <i>WT</i> ₆₀		8 23.5 355°80	9°6/29.1	18	
7 20	22 35.16	-4 47.4	1.768	2.619	14.8	20.8	7 20	22 25.35	+ 4 32.3	0.882	1.761	23.6	17.5
7 30	22 30.32	-4 43.1	1.672	2.597	11.5	20.5	7 30	22 24.18	+ 5 46.6	0.825	1.752	19.8	17.2
8 9	22 23.25	-4 52.5	1.598	2.575	7.7	20.2	8 9	22 20.00	+ 6 29.9	0.782	1.745	15.5	16.9
8 19	22 14.47	-5 13.8	1.548	2.552	3.6	19.9	8 19	22 13.54	+ 6 37.4	0.755	1.741	11.5	16.7
8 29	22 4.90	-5 43.8	1.524	2.529	2.9	19.8	8 29	22 6.18	+ 6 9.3	0.747	1.739	9.6	16.6
9 8	21 55.64	-6 17.4	1.528	2.506	7.0	20.0	9 8	21 59.62	+ 5 13.1	0.757	1.739	11.4	16.7
9 18	21 47.77	-6 49.6	1.556	2.483	11.3	20.2	9 18	21 55.36	+ 4 0.3	0.787	1.741	15.4	16.9
9 28	21 42.17	-7 15.6	1.607	2.460	15.2	20.4	9 28	21 54.44	+ 2 44.8	0.833	1.746	19.7	17.2
218503	2004 <i>TG</i> ₈₅		8 23.5 33°23	1°9/25.3	18		339345	2005 <i>AB</i> ₅		8 23.5 241°54	0°1/23.5	18	
7 20	22 30.21	-3 38.1	1.862	2.715	14.1	20.2	7 20	22 35.02	-9 31.3	2.115	2.971	12.5	21.7
7 30	22 26.21	-3 57.0	1.798	2.724	10.8	20.0	7 30	22 29.80	-9 52.9	2.026	2.958	9.4	21.5
8 9	22 20.44	-4 30.7	1.757	2.734	7.1	19.8	8 9	22 22.72	-10 23.9	1.960	2.944	5.8	21.3
8 19	22 13.50	-5 16.1	1.740	2.744	3.3	19.6	8 19	22 14.28	-11 0.9	1.921	2.930	1.8	21.0
8 29	22 6.20	-6 8.4	1.749	2.754	2.5	19.6	8 29	22 5.30	-11 39.6	1.910	2.916	2.3	21.0
9 8	21 59.45	-7 2.1	1.785	2.765	6.0	19.8	9 8	21 56.68	-12 15.2	1.927	2.900	6.3	21.2
9 18	21 54.02	-7 51.7	1.847	2.777	9.7	20.1	9 18	21 49.27	-12 43.7	1.971	2.885	10.1	21.4
9 28	21 50.52	-8 32.9	1.933	2.789	12.9	20.3	9 28	21 43.79	-13 2.5	2.038	2.869	13.3	21.6
480913	2002 <i>TF</i> ₃₀₆		8 23.5 325°58	0°1/23.5	18		508224	2015 <i>GR</i> ₄₂		8 23.5 131°30	7°8/16.6	17	
7 20	22 29.37	-7 26.0	1.630	2.504	14.8	20.9	7 20	22 40.36	-31 26.2	1.920	2.793	12.9	22.3
7 30	22 26.02	-8 14.2	1.552	2.493	11.1	20.6	7 30	22 33.90	-32 42.5	1.877	2.805	10.3	22.2
8 9	22 20.57	-9 18.5	1.495	2.482	6.9	20.4	8 9	22 25.18	-33 50.3	1.858	2.815	8.3	22.1
8 19	22 13.60	-10 33.8	1.463	2.472	2.2	20.0	8 19	22 15.01	-34 41.6	1.863	2.826	7.9	22.1
8 29	22 6.03	-11 53.0	1.456	2.462	2.7	20.1	8 29	22 4.53	-35 10.2	1.895	2.835	9.1	22.2
9 8	21 58.91	-13 8.0	1.476	2.453	7.4	20.3	9 8	21 54.90	-35 13.3	1.952	2.845	11.4	22.3
9 18	21 53.24	-14 12.1	1.520	2.445	11.7	20.6	9 18	21 47.11	-34 52.2	2.031	2.854	13.8	22.5
9 28	21 49.80	-15 0.3	1.586	2.437	15.5	20.8	9 28	21 41.83	-34 10.1	2.130	2.862	15.9	22.7
430768	2004 <i>RV</i> ₂₄₆		8 23.5 18°64	12°0/30.9	16		523077	2016 <i>QL</i> ₉₃		8 23.5 234°81	4°4/26.8	18	
7 20	22 32.78	+ 9 23.4	1.048	1.883	23.8	19.5	7 20	22 36.07	+ 0 52.8	1.995	2.814	14.6	21.7
7 30	22 29.19	+11 15.8	1.004	1.894	20.4	19.3	7 30	22 30.64	+ 1 20.2	1.909	2.807	11.7	21.5
8 9	22 22.73	+12 35.9	0.975	1.907	16.8	19.1	8 9	22 23.26	+ 1 32.7	1.844	2.800	8.5	21.2
8 19	22 14.28	+13 17.9	0.963	1.923	13.6	19.0	8 19	22 14.47	+ 1 30.3	1.803	2.793	5.4	21.1
8 29	22 5.26	+13 20.5	0.972	1.940	12.0	19.0	8 29	22 5.10	+ 1 14.6	1.790	2.785	4.5	21.0
9 8	21 57.24	+12 49.3	1.000	1.958	12.7	19.1	9 8	21 56.14	+ 0 49.1	1.804	2.777	6.7	21.1
9 18	21 51.49	+11 54.3	1.048	1.979	15.1	19.3	9 18	21 48.47	+ 0 18.5	1.845	2.769	10.0	21.3
9 28	21 48.86	+10 47.8	1.114	2.000	18.0	19.6	9 28	21 42.82	- 0 12.3	1.909	2.760	13.2	21.5
367062	2006 <i>KA</i> ₈₈		8 23.5 99°60	1°4/24.5	16		383447	2006 <i>WU</i> ₁₀₃		8 23.5 295°58	2°5/21.7	18	
7 20	22 37.24	-5 42.5	1.416	2.279	17.1	22.2	7 20	22 34.39	-14 0.8	1.420	2.309	15.6	21.2
7 30	22 31.88	-6 3.0	1.359	2.293	13.0	22.0	7 30	22 30.31	-14 46.6	1.334	2.285	11.7	20.9
8 9	22 24.08	-6 40.1	1.323	2.306	8.2	21.8	8 9	22 23.53	-15 43.9	1.269	2.261	7.2	20.6
8 19	22 14.66	-7 29.3	1.311	2.318	3.2	21.5	8 19	22 14.66	-16 46.0	1.228	2.237	2.9	20.3
8 29	22 4.80	-8 24.1	1.325	2.331	2.8	21.5	8 29	22 4.80	-17 44.5	1.212	2.213	4.7	20.3
9 8	21 55.80	-9 17.0	1.364	2.343	7.6	21.9	9 8	21 55.38	-18 30.8	1.220	2.189	9.8	20.6
9 18	21 48.71	-10 2.0	1.428	2.355	12.1	22.2	9 18	21 47.72	-18 59.5	1.251	2.165	14.6	20.8
9 28	21 44.28	-10 34.8	1.513	2.367	15.9	22.4	9 28	21 42.88	-19 7.8	1.302	2.142	18.9	21.0
487766	2015 <i>RU</i> ₂₀₂		8 23.5 283°05	7°4/15.9	17		91794	1999 <i>TG</i> ₂₂₈		8 23.5 327°86	4°9/28.7	18	
7 20	22 38.31	-33 52.2	2.340	3.205	11.2	21.9	7 20	22 27.19	+ 5 56.2	1.896	2.709	15.4	19.5
7 30	22 32.31	-34 46.5	2.265	3.184	9.2	21.7	7 30	22 24.17	+ 5 35.8	1.805	2.696	12.7	19.3
8 9	22 24.24	-35 33.2	2.213	3.162	7.7	21.6	8 9	22 19.36	+ 4 52.0	1.735	2.684	9.5	19.1
8 19	22 14.73	-36 5.5	2.187	3.140	7.5	21.5	8 19	22 13.25	+ 3 45.7	1.688	2.672	6.4	18.9
8 29	22 4.69	-36 17.9	2.188	3.118	8.6	21.6	8 29	22 6.60	+ 2 20.3	1.667	2.660	4.9	18.8
9 8	21 55.16	-36 7.6	2.213	3.096	10.6	21.7	9 8	22 0.29	+ 0 42.7	1.672	2.649	6.7	18.8
9 18	21 47.10	-35 35.0	2.262	3.074	12.9	21.8	9 18	21 55.16	- 0 59.1	1.703	2.639	9.9	19.0
9 28	21 41.21	-34 42.3	2.330	3.051	15.0	21.9	9 28	21 51.92	- 2 36.9	1.758	2.629	13.2	19.2
133463	2003 <i>SG</i> ₂₃₅		8 23.5 303°89	1°4/22.1	18		510961	2013 <i>GP</i> ₄₅					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
412410	2014 CV ₂₂		8 23.5 184°45'	2°5'/26.1	17		254317	2004 RG ₃₂₃		8 23.5 276°56'	4°2'/27.7	18	
7 20	22 31.51	- 0 7.1	2.045	2.875	13.9	21.3	7 20	22 30.80	+ 3 14.0	2.329	3.137	13.1	20.3
7 30	22 27.16	- 0 44.8	1.965	2.875	10.8	21.1	7 30	22 26.51	+ 3 21.4	2.238	3.127	10.6	20.1
8 9	22 21.07	- 1 40.3	1.907	2.875	7.4	20.9	8 9	22 20.64	+ 3 13.3	2.168	3.117	7.9	19.9
8 19	22 13.76	- 2 50.8	1.875	2.875	3.9	20.7	8 19	22 13.65	+ 2 50.0	2.123	3.108	5.3	19.7
8 29	22 6.01	- 4 11.3	1.870	2.874	2.8	20.6	8 29	22 6.21	+ 2 13.5	2.106	3.098	4.2	19.7
9 8	21 58.68	- 5 35.2	1.894	2.873	5.9	20.8	9 8	21 59.06	+ 1 27.7	2.116	3.088	5.9	19.7
9 18	21 52.54	- 6 55.9	1.945	2.872	9.4	21.1	9 18	21 52.94	+ 0 37.3	2.152	3.078	8.7	19.9
9 28	21 48.24	- 8 7.9	2.020	2.870	12.6	21.3	9 28	21 48.43	- 0 12.8	2.213	3.069	11.5	20.1
136013	2002 VP ₆₆		8 23.5 359°61'	1°0'/24.3	18		172751	2004 CJ ₁₀₀		8 23.5 80°72'	2°2'/21.4	17	
7 20	22 29.02	- 6 34.7	1.373	2.254	16.5	19.1	7 20	22 34.96	-15 23.9	2.028	2.901	12.3	20.3
7 30	22 25.99	- 6 56.3	1.308	2.251	12.5	18.9	7 30	22 29.51	-16 13.8	1.984	2.926	9.0	20.1
8 9	22 20.65	- 7 34.6	1.263	2.249	7.9	18.6	8 9	22 22.35	-17 8.0	1.964	2.952	5.4	20.0
8 19	22 13.68	- 8 25.5	1.240	2.249	2.9	18.3	8 19	22 14.13	-18 1.0	1.970	2.977	2.4	19.8
8 29	22 6.15	- 9 22.3	1.242	2.249	2.7	18.3	8 29	22 5.72	-18 47.4	2.004	3.002	3.7	19.9
9 8	21 59.27	-10 17.3	1.268	2.250	7.7	18.6	9 8	21 57.99	-19 22.8	2.066	3.026	7.0	20.2
9 18	21 54.09	-11 3.7	1.318	2.253	12.3	18.9	9 18	21 51.68	-19 44.8	2.154	3.050	10.2	20.4
9 28	21 51.39	-11 36.9	1.388	2.257	16.2	19.2	9 28	21 47.32	-19 52.9	2.265	3.074	12.9	20.7
371571	2006 VR ₁₀₄		8 23.5 306°26'	6°0'/18.8	18		296098	2009 BS ₃₄		8 23.5 350°43'	5°2'/18.5	18	
7 20	22 32.83	-19 42.1	1.292	2.195	15.9	20.5	7 20	22 28.06	-17 40.3	1.406	2.311	14.8	19.6
7 30	22 29.52	-21 8.2	1.209	2.166	12.0	20.2	7 30	22 25.40	-19 34.1	1.346	2.305	10.9	19.3
8 9	22 23.25	-22 44.1	1.148	2.138	8.1	19.9	8 9	22 20.37	-21 37.1	1.308	2.299	7.1	19.1
8 19	22 14.63	-24 19.0	1.109	2.109	6.0	19.7	8 19	22 13.62	-23 38.2	1.295	2.295	5.2	19.0
8 29	22 4.85	-25 40.4	1.095	2.081	8.3	19.8	8 29	22 6.25	-25 25.3	1.307	2.292	7.4	19.1
9 8	21 55.50	-26 37.7	1.103	2.052	12.8	19.9	9 8	21 59.48	-26 48.7	1.343	2.289	11.3	19.3
9 18	21 48.09	-27 5.3	1.132	2.025	17.5	20.1	9 18	21 54.44	-27 43.4	1.400	2.287	15.2	19.6
9 28	21 43.83	-27 2.3	1.177	1.998	21.6	20.3	9 28	21 51.95	-28 8.7	1.477	2.286	18.5	19.8
67496	2000 RK ₃₁		8 23.5 299°87'	5°3'/26.9	18 R		179733	2002 RS ₁₀₃		8 23.5 3°39'	3°6'/26.1	18	
7 20	22 32.58	+ 1 27.6	1.318	2.169	18.9	18.4	7 20	22 28.38	- 0 51.3	1.125	2.002	19.7	19.5
7 30	22 29.01	+ 1 41.9	1.233	2.151	15.3	18.2	7 30	22 25.91	- 1 7.6	1.064	2.000	15.5	19.2
8 9	22 22.77	+ 1 32.2	1.167	2.133	11.1	17.9	8 9	22 20.79	- 1 50.7	1.021	2.000	10.6	18.9
8 19	22 14.44	+ 0 58.0	1.121	2.115	7.0	17.6	8 19	22 13.77	- 2 57.5	0.998	2.001	5.5	18.6
8 29	22 5.13	+ 0 2.4	1.098	2.098	5.4	17.5	8 29	22 6.08	- 4 20.5	0.998	2.003	4.0	18.6
9 8	21 56.23	- 1 7.3	1.100	2.081	8.7	17.6	9 8	21 59.15	- 5 48.9	1.020	2.006	8.3	18.8
9 18	21 49.10	- 2 21.8	1.124	2.064	13.4	17.8	9 18	21 54.19	- 7 11.7	1.065	2.010	13.4	19.1
9 28	21 44.80	- 3 31.6	1.168	2.047	17.9	18.0	9 28	21 52.09	- 8 20.2	1.129	2.016	17.8	19.4
455581	2004 RJ ₂₅₂		8 23.5 348°61'	15°0'/27.1	16		42459	5036 T ₋₃		8 23.5 262°11'	5°0'/18.1	18	
7 20	22 46.04	+ 6 36.3	0.932	1.771	25.8	19.8	7 20	22 32.91	-24 44.0	2.301	3.181	10.8	19.2
7 30	22 40.07	+ 9 48.3	0.872	1.766	22.3	19.5	7 30	22 28.17	-25 48.1	2.233	3.174	8.2	19.0
8 9	22 30.07	+12 40.5	0.827	1.762	18.7	19.3	8 9	22 21.67	-26 51.0	2.189	3.166	5.9	18.9
8 19	22 16.84	+14 59.2	0.801	1.759	15.9	19.1	8 19	22 13.97	-27 46.8	2.172	3.158	5.0	18.8
8 29	22 2.16	+16 33.2	0.796	1.757	15.1	19.1	8 29	22 5.84	-28 29.7	2.182	3.150	6.3	18.9
9 8	21 48.32	+17 19.5	0.810	1.755	16.7	19.2	9 8	21 58.16	-28 55.9	2.219	3.142	8.7	19.0
9 18	21 37.39	+17 24.4	0.842	1.755	19.9	19.3	9 18	21 51.70	-29 3.9	2.280	3.135	11.4	19.2
9 28	21 30.82	+17 1.1	0.890	1.755	23.3	19.6	9 28	21 47.10	-28 54.0	2.362	3.127	13.7	19.3
253633	2003 UV ₁₀₃		8 23.5 334°97'	5°7'/27.4	18		195296	2002 EB ₈₈		8 23.5 181°04'	2°4'/21.4	18	
7 20	22 26.21	+ 1 50.2	1.057	1.931	20.9	19.5	7 20	22 35.67	-15 49.3	1.999	2.872	12.5	21.1
7 30	22 24.61	+ 1 58.5	0.982	1.914	17.0	19.2	7 30	22 30.29	-16 33.9	1.930	2.873	9.2	20.9
8 9	22 20.22	+ 1 36.5	0.924	1.897	12.3	18.9	8 9	22 23.00	-17 23.6	1.885	2.873	5.6	20.7
8 19	22 13.66	+ 0 43.8	0.884	1.881	7.7	18.6	8 19	22 14.39	-18 13.2	1.866	2.873	2.6	20.5
8 29	22 6.11	- 0 35.2	0.866	1.867	5.8	18.4	8 29	22 5.35	-18 56.8	1.876	2.873	4.0	20.6
9 8	21 59.12	- 2 10.1	0.868	1.855	9.3	18.6	9 8	21 56.86	-19 29.5	1.912	2.872	7.5	20.8
9 18	21 54.11	- 3 48.3	0.892	1.844	14.4	18.8	9 18	21 49.76	-19 48.7	1.975	2.871	11.0	21.1
9 28	21 52.20	- 5 17.2	0.934	1.834	19.3	19.0	9 28	21 44.72	-19 53.2	2.059	2.869	13.9	21.3
400714	2009 SG ₁₀		8 23.5 238°15'	2°9'/26.8	18		511484	2014 NE		8 23.5 47°92'	3°4'/19.9	18	
7 20	22 29.62	+ 0 53.2	2.444	3.263	12.2	21.1	7 20	22 30.95	-17 21.3	1.960	2.844	12.2	20.8
7 30	22 25.52	+ 0 36.8	2.358	3.259	9.7	21.0	7 30	22 26.83	-18 38.5	1.901	2.849	8.9	20.6
8 9	22 19.97	+ 0 5.8	2.295	3.256	6.8	20.8	8 9	22 20.89	-20 0.6	1.866	2.855	5.6	20.4
8 19	22 13.42	- 0 38.2	2.258	3.252	4.0	20.6	8 19	22 13.73	-21 20.7	1.858	2.860	3.5	20.3
8 29	22 6.49	- 1 32.1	2.248	3.248	3.0	20.5	8 29	22 6.17	-22 31.7	1.877	2.866	5.0	20.4
9 8	21 59.89	- 2 31.5	2.267	3.244	5.2	20.7	9 8	21 59.15	-23 27.8	1.923	2.872	8.2	20.6
9 18	21 54.25	- 3 31.6	2.313	3.240	8.1	20.8	9 18	21 53.45	-24 6.0	1.993	2.878	11.4	20.8
9 28	21 50.13	- 4 27.7	2.384	3.236	10.9	21.0	9 28	21 49.72	-24 25.3	2.085	2.884	14.2	21.0
11840	1986 QR ₂		8 23.5 343°97'	1°2'/22.4	18		91765	1999 TE ₁₉₄		8 23.5 150°11'	3°9'/27.3	18	
7 20	22 20.07	- 6 21.7	1.065	1.973	18.2	16.5	7 20	22 32.01	+ 1 54.5	2.296	3.109	13.1	19.7
7 30	22 19.92	- 7 59.9	0.992	1.952	13.6	16.1	7 30	22 27.35	+ 2 7.3	2.215	3.109	10.5	19.6
8 9	22 17.28	-10 9.1	0.938	1.933	8.3	15.8	8 9	22 21.11	+ 2 5.4	2.156	3.109	7.6	19.4
8 19	22 12.71	-12 40.4	0.905	1.915	2.4	15.4	8 19	22 13.79	+ 1 49.6	2.122	3.110	5.0	19.2
8 29	22 7.30	-15 18.7	0.895	1.900	4.4	15.4	8 29	22 6.08	+ 1 21.9	2.116	3.110	4.0	19.2
9 8	22 2.44	-17 46.5	0.908	1.887	10.4	15.7	9 8	21 58.74	+ 0 46.0	2.137	3.110	5.8	19.3
9 18	21 59.44	-19 48.9	0.942	1.876	16.0	16.0	9 18	21 52.49	+ 0 6.3	2.184	3.110	8.6	19.4
9 28	21 59.31	-21 17.2	0.994	1.868	20.7	16.3	9 28	21 47.90	- 0 32.9	2.257	3.110	11.4	19.6
299194	2005 GG ₁₄₆		8 23.5 85°41'	0°9'/24.3	16		445012	2008 HJ ₂₆		8 23.5 60°29'	1°0'/24.6	18	
7 20	22 33.94												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
393572	2003 <i>KF</i> ₈		8 23.5	2°30	9°1/	2.1 16	386475	2008 <i>YT</i> ₁₀₅		8 23.5	76°62	1°2/22.4	18
7 20	22 23.28	+13 52.8	1.443	2.239	20.2	19.9	7 20	22 32.90	-11 43.8	1.839	2.712	13.4	21.3
7 30	22 21.68	+14 0.8	1.373	2.237	17.5	19.7	7 30	22 28.35	-12 27.6	1.773	2.716	9.9	21.1
8 9	22 18.01	+13 34.7	1.318	2.237	14.4	19.5	8 9	22 21.87	-13 20.6	1.730	2.719	5.9	20.8
8 19	22 12.88	+12 32.8	1.283	2.238	11.3	19.3	8 19	22 14.08	-14 17.7	1.713	2.722	1.9	20.6
8 29	22 7.21	+10 57.6	1.269	2.241	9.4	19.2	8 29	22 5.86	-15 12.6	1.723	2.726	3.1	20.7
9 8	22 2.08	+ 8 57.5	1.279	2.246	9.6	19.2	9 8	21 58.20	-15 59.6	1.760	2.729	7.1	20.9
9 18	21 58.44	+ 6 43.8	1.312	2.252	11.8	19.4	9 18	21 51.96	-16 34.6	1.821	2.733	10.9	21.2
9 28	21 57.05	+ 4 29.4	1.367	2.260	14.9	19.6	9 28	21 47.79	-16 55.3	1.906	2.736	14.1	21.4
175734	1998 <i>FA</i> ₁₂₂		8 23.5	99°30	1°7/25.6	17	451267	2010 <i>OP</i> ₃₇		8 23.5	179°02	4°4/28.4	18
7 20	22 31.77	- 1 55.6	2.430	3.258	12.0	21.2	7 20	22 31.85	+ 5 17.2	2.644	3.431	12.3	21.3
7 30	22 26.95	- 2 36.7	2.370	3.281	9.2	21.1	7 30	22 27.07	+ 5 27.9	2.559	3.431	10.0	21.2
8 9	22 20.73	- 3 30.7	2.334	3.304	6.1	20.9	8 9	22 20.89	+ 5 23.9	2.496	3.432	7.6	21.0
8 19	22 13.64	- 4 34.5	2.325	3.327	2.9	20.7	8 19	22 13.76	+ 5 5.3	2.458	3.432	5.4	20.9
8 29	22 6.33	- 5 43.7	2.344	3.349	2.1	20.7	8 29	22 6.27	+ 4 34.0	2.448	3.432	4.4	20.8
9 8	21 59.49	- 6 53.1	2.393	3.371	4.9	21.0	9 8	21 59.09	+ 3 53.1	2.466	3.432	5.6	20.9
9 18	21 53.72	- 7 58.1	2.470	3.392	7.9	21.2	9 18	21 52.85	+ 3 6.6	2.511	3.432	7.9	21.0
9 28	21 49.50	- 8 54.8	2.573	3.413	10.6	21.4	9 28	21 48.08	+ 2 19.0	2.582	3.431	10.3	21.2
159450	2000 <i>BK</i> ₃₃		8 23.5	176°74	0°8/22.6	18	200304	2000 <i>CL</i> ₁₀₈		8 23.5	194°81	7°4/	1.1 17
7 20	22 30.35	-11 21.5	2.520	3.382	10.6	20.3	7 20	22 33.15	+15 54.0	2.847	3.555	13.2	20.0
7 30	22 26.01	-12 3.8	2.446	3.383	7.8	20.1	7 30	22 28.04	+16 41.2	2.757	3.554	11.5	19.9
8 9	22 20.24	-12 53.2	2.396	3.383	4.7	19.9	8 9	22 21.51	+17 11.0	2.687	3.552	9.8	19.7
8 19	22 13.51	-13 46.0	2.374	3.384	1.5	19.7	8 19	22 13.97	+17 21.7	2.641	3.550	8.3	19.6
8 29	22 6.46	-14 37.7	2.381	3.384	2.3	19.8	8 29	22 6.00	+17 13.0	2.619	3.547	7.5	19.6
9 8	21 59.76	-15 24.2	2.416	3.384	5.6	20.0	9 8	21 58.30	+16 46.6	2.624	3.545	7.7	19.6
9 18	21 54.06	-16 2.0	2.478	3.384	8.6	20.2	9 18	21 51.48	+16 6.0	2.655	3.542	8.8	19.7
9 28	21 49.87	-16 29.1	2.564	3.384	11.2	20.4	9 28	21 46.10	+15 16.1	2.711	3.539	10.5	19.8
168078	2006 <i>DX</i> ₂₇		8 23.5	23°62	5°9/21.0	17	445430	2010 <i>UH</i> ₃₂		8 23.5	319°63	2°7/21.2	18
7 20	22 42.97	-25 7.2	1.233	2.127	17.1	19.0	7 20	22 34.66	-18 5.7	2.031	2.908	12.1	20.7
7 30	22 36.40	-25 5.5	1.189	2.138	13.0	18.8	7 30	22 29.57	-18 30.2	1.958	2.902	9.0	20.5
8 9	22 26.89	-24 57.1	1.166	2.150	8.8	18.6	8 9	22 22.59	-18 57.2	1.909	2.896	5.6	20.3
8 19	22 15.59	-24 35.4	1.165	2.164	6.0	18.5	8 19	22 14.32	-19 22.1	1.885	2.891	2.9	20.1
8 29	22 4.08	-23 55.7	1.189	2.178	7.3	18.6	8 29	22 5.61	-19 40.0	1.890	2.885	4.1	20.2
9 8	21 53.99	-22 57.5	1.237	2.194	11.0	18.9	9 8	21 57.44	-19 47.3	1.921	2.880	7.5	20.4
9 18	21 46.49	-21 43.8	1.307	2.210	14.9	19.1	9 18	21 50.62	-19 42.2	1.978	2.875	10.9	20.6
9 28	21 42.23	-20 18.6	1.398	2.227	18.3	19.4	9 28	21 45.84	-19 24.2	2.056	2.870	13.8	20.7
37944	1998 <i>HK</i> ₁₉		8 23.5	297°03	5°4/27.9	18	34462	2000 <i>SD</i> ₉₅		8 23.5	74°09	2°6/25.2	18
7 20	22 31.22	+ 4 4.4	1.662	2.488	16.8	18.2	7 20	22 37.31	- 4 12.5	1.314	2.178	18.2	18.7
7 30	22 27.48	+ 4 10.5	1.572	2.471	13.7	17.9	7 30	22 32.16	- 4 10.4	1.257	2.188	14.0	18.5
8 9	22 21.57	+ 3 54.2	1.501	2.455	10.3	17.7	8 9	22 24.42	- 4 26.3	1.219	2.198	9.2	18.3
8 19	22 14.03	+ 3 15.1	1.452	2.439	6.9	17.5	8 19	22 14.92	- 4 57.6	1.204	2.209	4.3	18.0
8 29	22 5.75	+ 2 16.0	1.429	2.423	5.4	17.3	8 29	22 4.92	- 5 38.5	1.213	2.219	3.3	18.0
9 8	21 57.83	+ 1 2.9	1.430	2.407	7.6	17.4	9 8	21 55.79	- 6 22.0	1.248	2.229	7.9	18.3
9 18	21 51.29	- 0 16.4	1.457	2.392	11.3	17.6	9 18	21 48.69	- 7 1.7	1.306	2.240	12.5	18.6
9 28	21 47.02	- 1 33.4	1.505	2.376	15.1	17.8	9 28	21 44.40	- 7 32.2	1.385	2.250	16.5	18.9
396009	2013 <i>BJ</i> ₆₅		8 23.5	94°51	0°5/23.9	18	291935	2006 <i>QS</i> ₃₀		8 23.5	358°09	3°5/21.4	18
7 20	22 32.48	- 7 43.5	2.044	2.901	12.9	21.4	7 20	22 35.96	-19 6.3	1.454	2.346	15.1	18.9
7 30	22 27.85	- 8 6.2	1.972	2.904	9.7	21.2	7 30	22 31.11	-19 20.5	1.392	2.343	11.3	18.7
8 9	22 21.48	- 8 39.5	1.924	2.906	6.0	21.0	8 9	22 23.76	-19 36.5	1.351	2.341	7.1	18.4
8 19	22 13.93	- 9 20.2	1.901	2.909	2.1	20.8	8 19	22 14.72	-19 48.3	1.334	2.340	3.7	18.2
8 29	22 5.99	-10 3.6	1.905	2.912	2.1	20.8	8 29	22 5.17	-19 50.1	1.343	2.340	5.2	18.3
9 8	21 58.53	-10 45.0	1.938	2.914	6.0	21.0	9 8	21 56.44	-19 38.2	1.376	2.340	9.3	18.6
9 18	21 52.32	-11 20.1	1.996	2.917	9.6	21.3	9 18	21 49.64	-19 11.4	1.432	2.342	13.4	18.8
9 28	21 47.98	-11 46.0	2.078	2.919	12.7	21.5	9 28	21 45.53	-18 30.5	1.508	2.344	16.9	19.0
331612	2001 <i>YD</i> ₂₄		8 23.5	324°28	2°7/21.8	18	402329	2005 <i>UO</i> ₈₉		8 23.5	356°33	1°5/24.2	17
7 20	22 33.28	-15 17.4	1.285	2.183	16.3	19.9	7 20	22 33.61	- 8 44.8	0.895	1.800	21.0	20.6
7 30	22 29.60	-15 46.3	1.209	2.164	12.2	19.6	7 30	22 30.44	- 8 22.2	0.839	1.795	16.0	20.3
8 9	22 23.14	-16 23.9	1.154	2.146	7.5	19.3	8 9	22 23.88	- 8 15.9	0.800	1.791	10.2	19.9
8 19	22 14.58	-17 3.7	1.121	2.129	3.1	19.0	8 19	22 14.85	- 8 22.9	0.780	1.789	3.8	19.6
8 29	22 5.14	-17 37.7	1.112	2.113	4.9	19.1	8 29	22 4.97	- 8 37.3	0.781	1.788	3.6	19.6
9 8	21 56.31	-17 58.7	1.126	2.097	10.0	19.3	9 8	21 56.13	- 8 51.7	0.803	1.789	9.9	19.9
9 18	21 49.44	-18 2.5	1.162	2.083	14.9	19.5	9 18	21 49.89	- 9 0.0	0.844	1.791	15.7	20.3
9 28	21 45.54	-17 47.8	1.217	2.069	19.1	19.8	9 28	21 47.27	- 8 57.4	0.902	1.794	20.7	20.6
438299	2006 <i>DO</i> ₃₆		8 23.5	148°02	0°8/24.3	17	400666	2009 <i>HH</i> ₁₀₄		8 23.5	47°06	2°0/21.6	18
7 20	22 33.93	- 5 56.2	2.145	2.991	12.7	22.1	7 20	22 30.88	-12 15.2	1.699	2.580	13.9	20.4
7 30	22 28.81	- 6 30.0	2.075	3.000	9.6	21.9	7 30	22 26.87	-13 30.8	1.652	2.600	10.1	20.2
8 9	22 22.02	- 7 15.7	2.028	3.008	6.1	21.7	8 9	22 20.94	-14 55.7	1.629	2.619	6.0	20.0
8 19	22 14.09	- 8 9.8	2.008	3.015	2.3	21.5	8 19	22 13.78	-16 22.4	1.631	2.639	2.3	19.8
8 29	22 5.80	- 9 7.5	2.016	3.022	2.0	21.5	8 29	22 6.32	-17 43.1	1.660	2.660	3.9	20.0
9 8	21 58.00	-10 3.4	2.053	3.029	5.8	21.7	9 8	21 59.54	-18 51.0	1.716	2.681	7.7	20.3
9 18	21 51.42	-10 53.1	2.116	3.035	9.2	22.0	9 18	21 54.27	-19 41.8	1.796	2.702	11.3	20.5
9 28	21 46.67	-11 33.0	2.204	3.040	12.3	22.2	9 28	21 51.09	-20 13.8	1.898	2.723	14.4	20.8
509641	2008 <i>GV</i> ₁₀		8 23.5	47°33	4°0/26.7	17	355017	2006 <i>QS</i> ₁₀₈					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
131239	2001 <i>EB</i> ₂		8 23.5 152°72	4.2/19.0	18		182950	2002 <i>GL</i> ₁₆₃		8 23.5 325°94	3.8/27.9	18	
7 20	22 34.40	-20 34.2	2.115	2.994	11.6	19.7	7 20	22 28.81	+ 3 59.8	2.199	3.010	13.7	19.9
7 30	22 29.32	-21 53.5	2.057	3.000	8.6	19.5	7 30	22 25.11	+ 3 30.5	2.115	3.008	11.0	19.7
8 9	22 22.41	-23 14.7	2.023	3.006	5.7	19.4	8 9	22 19.84	+ 2 42.1	2.053	3.006	8.0	19.5
8 19	22 14.26	-24 30.8	2.016	3.012	4.2	19.3	8 19	22 13.49	+ 1 36.2	2.016	3.004	5.1	19.3
8 29	22 5.72	-25 35.3	2.037	3.017	5.7	19.4	8 29	22 6.72	+ 0 16.9	2.006	3.002	3.8	19.3
9 8	21 57.71	-26 23.2	2.086	3.021	8.5	19.6	9 8	22 0.32	- 1 10.0	2.023	3.001	5.7	19.4
9 18	21 51.04	-26 52.1	2.159	3.025	11.4	19.8	9 18	21 54.97	- 2 38.0	2.068	2.999	8.7	19.6
9 28	21 46.34	-27 2.2	2.253	3.029	13.9	20.0	9 28	21 51.27	- 4 0.8	2.138	2.998	11.7	19.7
266576	2008 <i>HO</i> ₇		8 23.5 342°57	0.7/22.8	18		98791	2000 <i>YW</i> ₁₀₄		8 23.5 270°67	2.3/22.2	18	
7 20	22 29.11	- 9 6.3	1.991	2.860	12.7	20.2	7 20	22 45.43	-18 20.3	1.999	2.858	13.0	19.5
7 30	22 25.48	-10 9.0	1.917	2.857	9.4	20.0	7 30	22 37.86	-18 13.8	1.900	2.834	9.8	19.3
8 9	22 20.13	-11 23.8	1.866	2.854	5.7	19.8	8 9	22 27.87	-18 7.4	1.824	2.808	6.2	19.0
8 19	22 13.56	-12 45.7	1.842	2.851	1.7	19.5	8 19	22 16.09	-17 56.9	1.776	2.783	2.7	18.8
8 29	22 6.56	-14 7.9	1.845	2.849	2.7	19.6	8 29	22 3.54	-17 38.3	1.758	2.757	3.8	18.8
9 8	21 59.97	-15 23.7	1.875	2.847	6.6	19.8	9 8	21 51.44	-17 9.2	1.769	2.730	7.8	19.0
9 18	21 54.57	-16 27.8	1.932	2.845	10.3	20.1	9 18	21 40.90	-16 28.9	1.807	2.703	11.8	19.2
9 28	21 51.02	-17 16.6	2.011	2.843	13.4	20.3	9 28	21 32.79	-15 38.4	1.868	2.676	15.2	19.3
476758	2008 <i>UJ</i> ₇₃		8 23.5 325°09	5.6/20.2	18		127226	2002 <i>JQ</i> ₈		8 23.5 116°07	2.3/25.8	18	
7 20	22 34.36	-21 26.3	1.245	2.149	16.3	20.2	7 20	22 32.83	- 1 18.8	1.957	2.792	14.2	20.0
7 30	22 30.76	-22 2.5	1.162	2.119	12.4	19.9	7 30	22 28.15	- 1 53.1	1.890	2.804	11.0	19.8
8 9	22 24.08	-22 41.1	1.099	2.089	8.3	19.6	8 9	22 21.70	- 2 44.0	1.845	2.816	7.3	19.6
8 19	22 14.98	-23 13.6	1.059	2.060	5.7	19.3	8 19	22 14.06	- 3 48.4	1.825	2.827	3.7	19.4
8 29	22 4.76	-23 30.5	1.041	2.032	7.6	19.4	8 29	22 6.06	- 5 1.1	1.834	2.838	2.6	19.4
9 8	21 55.08	-23 25.1	1.045	2.005	12.1	19.5	9 8	21 58.59	- 6 15.4	1.870	2.849	5.9	19.6
9 18	21 47.49	-22 54.8	1.070	1.980	16.9	19.7	9 18	21 52.43	- 7 25.5	1.933	2.859	9.5	19.8
9 28	21 43.17	-22 1.1	1.113	1.955	21.2	19.9	9 28	21 48.18	- 8 26.2	2.019	2.869	12.7	20.1
372360	2009 <i>HX</i> ₄₂		8 23.5 41°25	1.8/22.3	17		217833	2001 <i>KC</i> ₃₃		8 23.5 43°95	1.6/24.6	17	
7 20	22 34.21	-11 49.0	1.133	2.030	18.1	20.8	7 20	22 34.06	- 5 22.5	1.216	2.093	18.5	20.1
7 30	22 30.13	-12 39.1	1.088	2.042	13.3	20.6	7 30	22 29.82	- 5 42.0	1.168	2.108	14.0	19.9
8 9	22 23.28	-13 42.3	1.063	2.055	8.0	20.4	8 9	22 23.01	- 6 20.5	1.139	2.124	8.9	19.6
8 19	22 14.58	-14 50.3	1.059	2.069	2.7	20.1	8 19	22 14.51	- 7 12.9	1.132	2.140	3.6	19.4
8 29	22 5.45	-15 53.1	1.080	2.083	4.3	20.2	8 29	22 5.59	- 8 11.8	1.149	2.156	2.9	19.4
9 8	21 57.36	-16 42.1	1.124	2.098	9.6	20.6	9 8	21 57.63	- 9 8.7	1.191	2.173	8.0	19.7
9 18	21 51.49	-17 12.7	1.189	2.113	14.3	20.9	9 18	21 51.73	- 9 56.6	1.255	2.191	12.7	20.0
9 28	21 48.60	-17 22.9	1.274	2.129	18.3	21.2	9 28	21 48.60	-10 30.7	1.340	2.209	16.7	20.3
367591	2009 <i>SC</i> ₂₇₃		8 23.5 291°25	5.6/29.8	18		186534	2002 <i>VX</i> ₈₈		8 23.5 12°00	3.3/25.4	18	
7 20	22 28.88	+ 8 54.1	2.335	3.114	13.9	20.9	7 20	22 32.77	- 4 51.7	1.052	1.939	20.0	18.6
7 30	22 25.22	+ 8 48.4	2.230	3.093	11.7	20.7	7 30	22 29.29	- 4 23.1	0.999	1.942	15.5	18.4
8 9	22 19.97	+ 8 22.4	2.145	3.072	9.2	20.5	8 9	22 22.92	- 4 13.8	0.963	1.947	10.3	18.1
8 19	22 13.54	+ 7 35.8	2.084	3.051	6.8	20.3	8 19	22 14.54	- 4 22.1	0.948	1.952	5.1	17.9
8 29	22 6.59	+ 6 30.3	2.049	3.029	5.6	20.2	8 29	22 5.54	- 4 43.2	0.954	1.960	4.0	17.8
9 8	21 59.85	+ 5 10.4	2.041	3.008	6.6	20.2	9 8	21 57.51	- 5 10.1	0.983	1.968	8.7	18.1
9 18	21 54.06	+ 3 42.0	2.060	2.987	9.0	20.4	9 18	21 51.72	- 5 36.0	1.033	1.978	13.8	18.4
9 28	21 49.86	+ 2 11.9	2.104	2.965	11.8	20.5	9 28	21 49.03	- 5 54.6	1.102	1.989	18.1	18.7
402214	2004 <i>XV</i> ₁₆₅		8 23.5 283°12	3.5/26.8	17		479691	2014 <i>DN</i> ₁₀₃		8 23.5 248°11	4.1/21.0	18	
7 20	22 32.02	+ 0 32.9	2.372	3.190	12.6	21.5	7 20	22 44.25	-22 57.6	1.874	2.744	13.3	21.0
7 30	22 27.48	+ 0 44.6	2.272	3.171	10.1	21.3	7 30	22 36.84	-23 2.4	1.802	2.739	10.1	20.8
8 9	22 21.32	+ 0 43.1	2.194	3.152	7.2	21.1	8 9	22 27.09	-23 4.1	1.753	2.735	6.6	20.6
8 19	22 13.97	+ 0 28.7	2.142	3.133	4.5	20.9	8 19	22 15.80	-22 57.3	1.731	2.730	4.2	20.5
8 29	22 6.10	+ 0 3.4	2.117	3.114	3.6	20.8	8 29	22 4.06	-22 38.0	1.737	2.726	5.4	20.5
9 8	21 58.47	- 0 29.6	2.121	3.095	5.7	20.9	9 8	21 53.11	-22 3.9	1.771	2.721	8.7	20.7
9 18	21 51.83	- 1 6.1	2.151	3.076	8.7	21.1	9 18	21 43.97	-21 15.8	1.830	2.717	12.2	20.9
9 28	21 46.80	- 1 41.9	2.205	3.057	11.7	21.3	9 28	21 37.38	-20 15.6	1.912	2.712	15.2	21.1
25149	1998 <i>SM</i> ₄₉		8 23.5 325°53	0.3/23.3	18		196296	2003 <i>EY</i> ₆₁		8 23.5 40°57	2.1/21.9	17	
7 20	22 30.16	-10 1.9	1.824	2.698	13.4	19.1	7 20	22 33.94	-13 18.7	1.415	2.303	15.7	20.1
7 30	22 26.52	-10 25.2	1.737	2.679	10.1	18.9	7 30	22 29.56	-14 5.5	1.362	2.312	11.6	19.9
8 9	22 20.92	-10 59.2	1.672	2.660	6.2	18.6	8 9	22 22.81	-15 1.8	1.330	2.321	6.9	19.7
8 19	22 13.87	-11 40.3	1.632	2.642	1.9	18.3	8 19	22 14.46	-16 0.5	1.322	2.331	2.6	19.4
8 29	22 6.22	-12 23.1	1.618	2.624	2.6	18.3	8 29	22 5.68	-16 53.9	1.339	2.341	4.1	19.6
9 8	21 58.94	-13 2.3	1.631	2.607	6.9	18.6	9 8	21 57.72	-17 35.1	1.381	2.351	8.7	19.9
9 18	21 52.95	-13 33.0	1.668	2.590	11.0	18.8	9 18	21 51.60	-18 0.1	1.447	2.362	12.9	20.1
9 28	21 49.03	-13 52.0	1.727	2.574	14.6	19.0	9 28	21 48.06	-18 7.6	1.533	2.373	16.5	20.4
27602	Chaselewis		8 23.5 71°11	1.7/24.7	18		239692	2008 <i>YV</i> ₁₂₄		8 23.5 48°82	0.5/22.9	18	
7 20	22 36.62	- 4 55.8	1.371	2.236	17.5	19.3	7 20	22 29.97	-11 20.7	2.615	3.476	10.3	20.3
7 30	22 31.43	- 5 16.8	1.323	2.256	13.3	19.0	7 30	22 25.61	-11 44.5	2.556	3.492	7.6	20.1
8 9	22 23.86	- 5 55.2	1.295	2.277	8.5	18.8	8 9	22 19.97	-12 14.1	2.521	3.507	4.5	19.9
8 19	22 14.74	- 6 46.5	1.290	2.297	3.5	18.6	8 19	22 13.51	-12 46.5	2.513	3.523	1.4	19.7
8 29	22 5.29	- 7 43.8	1.311	2.318	2.8	18.6	8 29	22 6.84	-13 18.1	2.534	3.538	2.0	19.8
9 8	21 56.78	- 8 39.5	1.358	2.338	7.5	18.9	9 8	22 0.59	-13 45.7	2.583	3.554	5.1	20.0
9 18	21 50.21	- 9 27.3	1.428	2.358	11.9	19.3	9 18	21 55.32	-14 6.8	2.659	3.570	7.9	20.2
9 28	21 46.27	-10 2.8	1.520	2.379	15.6	19.5	9 28	21 51.49	-14 19.6	2.760	3.586	10.3	20.4
281552	2008 <i>UF</i> ₄₉		8 23.5 349°49	6.0/27.7	18		257674	1999 <i>VM</i> ₁₂₂		8 23.5			

EPHEMERIDES

8 23.5

8 23.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
382102	2011 <i>GJ</i> ₆₇		8 23.5 108°28'	2.6°/21.5	17		112276	2002 <i>LK</i> ₂₄		8 23.5 351°36'	6.2°/17.9	18	
7 20	22 38.42	-16 33.1	1.833	2.707	13.4	21.3	7 20	22 19.87	-14 6.1	0.874	1.806	18.5	17.8
7 30	22 32.35	-17 10.6	1.780	2.723	9.8	21.1	7 30	22 20.25	-16 41.7	0.820	1.794	13.6	17.5
8 9	22 24.26	-17 51.9	1.751	2.738	6.0	20.9	8 9	22 17.74	-19 40.5	0.786	1.784	8.5	17.2
8 19	22 14.89	-18 31.3	1.748	2.754	2.8	20.7	8 19	22 13.03	-22 44.6	0.772	1.776	6.2	17.1
8 29	22 5.22	-19 3.3	1.772	2.769	4.2	20.8	8 29	22 7.45	-25 31.5	0.780	1.770	9.6	17.2
9 8	21 56.32	-19 23.5	1.823	2.784	7.8	21.1	9 8	22 2.66	-27 42.5	0.808	1.767	14.9	17.5
9 18	21 49.05	-19 30.0	1.900	2.798	11.2	21.3	9 18	22 0.12	-29 8.0	0.854	1.766	19.8	17.8
9 28	21 44.04	-19 22.6	1.999	2.811	14.2	21.6	9 28	22 0.82	-29 46.5	0.915	1.767	24.0	18.1
6851	Chianti		8 23.5 266°69'	1.3°/22.6	18 R		148274	2000 <i>GS</i> ₃₉		8 23.5 208°29'	1.2°/22.5	17	
7 20	22 35.15	-10 33.7	1.405	2.286	16.3	17.8	7 20	22 36.86	-12 21.9	1.946	2.811	13.1	21.6
7 30	22 30.83	-11 24.0	1.326	2.272	12.2	17.5	7 30	22 31.35	-12 59.2	1.868	2.806	9.7	21.3
8 9	22 23.87	-12 29.4	1.269	2.259	7.4	17.2	8 9	22 23.80	-13 44.9	1.813	2.800	5.9	21.1
8 19	22 14.91	-13 43.8	1.235	2.245	2.4	16.9	8 19	22 14.83	-14 34.2	1.784	2.794	2.0	20.8
8 29	22 5.09	-14 58.2	1.227	2.231	3.8	16.9	8 29	22 5.31	-15 21.3	1.784	2.786	3.1	20.9
9 8	21 55.80	-16 3.6	1.244	2.217	9.0	17.2	9 8	21 56.28	-16 0.9	1.811	2.779	7.2	21.1
9 18	21 48.31	-16 53.2	1.284	2.202	13.9	17.5	9 18	21 48.64	-16 29.2	1.864	2.770	11.0	21.4
9 28	21 43.60	-17 23.2	1.344	2.188	18.1	17.7	9 28	21 43.12	-16 44.0	1.940	2.762	14.2	21.6
298236	2002 <i>VQ</i> ₇		8 23.5 267°89'	2.7°/25.8	18		256604	2007 <i>VB</i> ₃₅		8 23.5 80°74'	0.6°/23.9	17	
7 20	22 34.62	-2 27.2	2.205	3.035	13.0	20.7	7 20	22 35.09	-6 43.4	1.364	2.237	17.1	21.2
7 30	22 29.59	-2 22.0	2.102	3.013	10.2	20.5	7 30	22 30.52	-7 20.5	1.306	2.245	12.9	21.0
8 9	22 22.72	-2 29.4	2.022	2.990	7.0	20.2	8 9	22 23.48	-8 14.6	1.267	2.253	8.0	20.7
8 19	22 14.49	-2 48.4	1.968	2.967	3.8	20.0	8 19	22 14.74	-9 20.4	1.252	2.261	2.8	20.5
8 29	22 5.61	-3 16.5	1.941	2.944	3.0	19.9	8 29	22 5.47	-10 29.9	1.263	2.269	2.8	20.5
9 8	21 56.98	-3 49.9	1.943	2.920	5.9	20.0	9 8	21 56.99	-11 34.7	1.298	2.277	7.9	20.8
9 18	21 49.42	-4 24.2	1.971	2.895	9.5	20.2	9 18	21 50.41	-12 28.1	1.358	2.285	12.6	21.1
9 28	21 43.67	-4 55.3	2.024	2.870	12.8	20.4	9 28	21 46.50	-13 5.7	1.438	2.293	16.5	21.4
12557	Caracol		8 23.5 172°65'	2.2°/25.8	18		152798	1999 <i>TP</i> ₁₂₅		8 23.5 195°71'	6.0°/17.1	18	
7 20	22 30.76	-2 24.0	2.349	3.182	12.2	17.9	7 20	22 39.84	-33 0.4	2.801	3.657	9.8	20.4
7 30	22 26.44	-2 37.2	2.269	3.183	9.5	17.7	7 30	22 33.02	-33 40.1	2.739	3.654	7.9	20.3
8 9	22 20.62	-3 3.1	2.213	3.183	6.4	17.5	8 9	22 24.54	-34 12.5	2.701	3.651	6.5	20.2
8 19	22 13.77	-3 39.7	2.182	3.183	3.3	17.3	8 19	22 15.00	-34 32.6	2.691	3.648	6.0	20.1
8 29	22 6.55	-4 23.6	2.179	3.183	2.5	17.3	8 29	22 5.18	-34 36.5	2.709	3.644	7.0	20.2
9 8	21 59.70	-5 10.6	2.205	3.183	5.2	17.5	9 8	21 55.92	-34 22.6	2.754	3.640	8.7	20.3
9 18	21 53.89	-5 56.4	2.257	3.183	8.4	17.7	9 18	21 47.94	-33 51.4	2.824	3.636	10.6	20.4
9 28	21 49.67	-6 36.9	2.334	3.183	11.2	17.8	9 28	21 41.81	-33 4.8	2.915	3.631	12.4	20.6
134622	1999 <i>TT</i> ₂₇₁		8 23.5 213°36'	0.9°/22.9	18		264229	2010 <i>SP</i> ₆		8 23.5 300°11'	0.4°/23.8	18	
7 20	22 38.91	-12 14.6	1.574	2.447	15.3	20.0	7 20	22 35.93	-9 6.2	1.341	2.220	17.0	20.8
7 30	22 33.22	-12 28.6	1.503	2.444	11.4	19.7	7 30	22 31.45	-9 15.2	1.265	2.209	12.9	20.5
8 9	22 25.08	-12 51.2	1.454	2.442	7.0	19.5	8 9	22 24.27	-9 37.9	1.210	2.197	8.1	20.2
8 19	22 15.23	-13 17.8	1.429	2.439	2.2	19.2	8 19	22 15.06	-10 10.2	1.177	2.186	2.7	19.8
8 29	22 4.79	-13 42.9	1.431	2.435	3.2	19.2	8 29	22 5.03	-10 46.2	1.169	2.176	3.0	19.8
9 8	21 55.02	-14 1.1	1.459	2.432	7.9	19.5	9 8	21 55.61	-11 19.0	1.186	2.165	8.5	20.1
9 18	21 47.04	-14 9.1	1.512	2.429	12.3	19.8	9 18	21 48.10	-11 42.9	1.226	2.155	13.5	20.4
9 28	21 41.66	-14 5.0	1.586	2.425	16.1	20.0	9 28	21 43.46	-11 54.3	1.285	2.145	17.8	20.6
444318	2005 <i>WC</i> ₁₆		8 23.5 22°23'	4.5°/27.9	15		405437	2004 <i>TC</i> ₅₁		8 23.5 269°51'	4.0°/19.6	18	
7 20	22 31.25	+ 3 23.0	2.123	2.935	14.1	20.9	7 20	22 34.14	-22 26.9	2.363	3.239	10.7	21.1
7 30	22 26.96	+ 3 32.6	2.045	2.936	11.4	20.7	7 30	22 29.07	-23 8.9	2.287	3.228	8.0	20.9
8 9	22 21.00	+ 3 25.3	1.988	2.938	8.4	20.5	8 9	22 22.29	-23 50.7	2.236	3.218	5.4	20.7
8 19	22 13.90	+ 3 1.7	1.956	2.940	5.6	20.4	8 19	22 14.34	-24 27.3	2.212	3.207	4.0	20.6
8 29	22 6.39	+ 2 24.0	1.950	2.942	4.5	20.3	8 29	22 5.96	-24 53.9	2.215	3.196	5.2	20.7
9 8	21 59.29	+ 1 36.7	1.970	2.944	6.2	20.4	9 8	21 58.00	-25 7.1	2.246	3.185	7.8	20.8
9 18	21 53.33	+ 0 44.8	2.018	2.946	9.0	20.6	9 18	21 51.24	-25 5.2	2.302	3.174	10.6	21.0
9 28	21 49.14	-0 6.2	2.089	2.948	11.9	20.8	9 28	21 46.28	-24 48.5	2.380	3.163	13.1	21.1
442039	2010 <i>PW</i> ₈₀		8 23.5 10°73'	1.3°/24.6	18		159553	2001 <i>SB</i> ₂₃₆		8 23.5 8°36'	3.8°/21.2	18	
7 20	22 35.02	-7 11.6	2.073	2.924	13.0	20.5	7 20	22 26.46	-14 8.8	0.784	1.714	20.3	18.2
7 30	22 29.76	-7 2.3	1.998	2.924	9.9	20.3	7 30	22 25.29	-15 11.9	0.743	1.715	15.0	17.9
8 9	22 22.71	-7 2.3	1.946	2.925	6.3	20.1	8 9	22 20.80	-16 29.6	0.719	1.717	9.1	17.6
8 19	22 14.45	-7 9.7	1.919	2.925	2.6	19.8	8 19	22 13.97	-17 50.2	0.713	1.722	4.1	17.3
8 29	22 5.78	-7 21.4	1.920	2.926	2.2	19.8	8 29	22 6.46	-18 59.3	0.727	1.728	6.5	17.5
9 8	21 57.60	-7 34.1	1.949	2.927	5.9	20.0	9 8	22 0.13	-19 45.9	0.760	1.737	12.2	17.8
9 18	21 50.69	-7 44.6	2.005	2.928	9.4	20.3	9 18	21 56.39	-20 4.5	0.811	1.748	17.6	18.2
9 28	21 45.70	-7 50.1	2.084	2.929	12.5	20.5	9 28	21 56.11	-19 54.8	0.878	1.760	22.0	18.5
253528	2003 <i>SP</i> ₁₉₀		8 23.5 259°28'	0.7°/23.9	18		373778	2002 <i>TS</i> ₃₃₁		8 23.5 254°11'	1.6°/22.3	18	
7 20	22 36.56	-7 59.0	1.504	2.372	16.1	20.7	7 20	22 36.03	-12 33.5	1.696	2.570	14.3	22.1
7 30	22 31.67	-8 13.5	1.425	2.362	12.2	20.5	7 30	22 31.10	-13 15.1	1.614	2.556	10.7	21.9
8 9	22 24.26	-8 41.9	1.368	2.353	7.7	20.2	8 9	22 23.86	-14 6.9	1.553	2.542	6.5	21.6
8 19	22 15.03	-9 20.5	1.334	2.343	2.7	19.9	8 19	22 14.91	-15 3.4	1.518	2.527	2.2	21.3
8 29	22 5.04	-10 3.5	1.326	2.333	2.7	19.8	8 29	22 5.23	-15 57.8	1.510	2.512	3.6	21.3
9 8	21 55.60	-10 44.3	1.344	2.322	7.8	20.1	9 8	21 56.01	-16 43.3	1.528	2.496	8.1	21.6
9 18	21 47.89	-11 17.4	1.386	2.312	12.5	20.4	9 18	21 48.33	-17 15.2	1.571	2.481	12.4	21.8
9 28	21 42.80	-11 38.6	1.449	2.301	16.6	20.6	9 28	21 43.05	-17 31.2	1.635	2.464	16.1	22.0
309689	2008 <i>FB</i> ₄		8 23.5 166°04'	1.5°/22.0	18		231273	2006 <i>AU</i> ₆₃		8 23.5 329°72'	2.4°/21.7	18	

EPHEMERIDES

8 23.5

8 23.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
388205	2006 <i>EQ</i> ₃₆		8 23.5 242°96	8:7/20.6	15		45802	2000 <i>PV</i> ₂₉		8 23.6 63°77	0°0/23.7	02 C	
7 20	22 55.95	-29 8.1	1.133	2.014	19.3	20.9	7 20	22 12.96	-10 33.0	42.652	43.499	0.7	24.5
7 30	22 47.18	-29 26.5	1.069	2.006	15.3	20.6	7 30	22 12.34	-10 36.5	42.572	43.500	0.5	24.4
8 9	22 34.19	-29 33.4	1.024	1.998	11.2	20.3	8 9	22 11.65	-10 40.3	42.518	43.500	0.3	24.4
8 19	22 18.22	-29 16.8	1.001	1.990	8.8	20.2	8 19	22 10.92	-10 44.4	42.492	43.500	0.1	24.4
8 29	22 1.41	-28 28.0	1.003	1.981	10.2	20.2	8 29	22 10.19	-10 48.5	42.495	43.501	0.1	24.4
9 8	21 46.18	-27 6.4	1.028	1.972	14.2	20.4	9 8	22 9.46	-10 52.6	42.527	43.501	0.3	24.4
9 18	21 34.39	-25 18.5	1.075	1.963	18.7	20.7	9 18	22 8.78	-10 56.5	42.588	43.501	0.6	24.4
9 28	21 27.06	-23 13.6	1.141	1.953	22.7	20.9	9 28	22 8.16	-11 0.0	42.676	43.502	0.8	24.5
162885	2001 <i>FW</i> ₈₄		8 23.5 128°82	1°7/22.1	18		137601	1999 <i>VO</i> ₁₇₀		8 23.6 252°23	1°6/22.3	18	
7 20	22 34.79	-13 47.5	1.853	2.727	13.2	20.8	7 20	22 36.83	-12 46.5	1.719	2.591	14.2	21.3
7 30	22 29.80	-14 23.9	1.786	2.729	9.8	20.6	7 30	22 31.71	-13 25.5	1.634	2.575	10.6	21.1
8 9	22 22.84	-15 7.2	1.743	2.731	5.9	20.4	8 9	22 24.26	-14 14.2	1.571	2.559	6.5	20.8
8 19	22 14.52	-15 52.5	1.725	2.733	2.2	20.1	8 19	22 15.08	-15 7.3	1.534	2.543	2.3	20.5
8 29	22 5.77	-16 33.9	1.734	2.735	3.5	20.2	8 29	22 5.15	-15 58.1	1.524	2.526	3.6	20.6
9 8	21 57.60	-17 6.3	1.770	2.737	7.4	20.5	9 8	21 55.65	-16 40.2	1.540	2.509	8.1	20.8
9 18	21 50.89	-17 26.4	1.832	2.739	11.1	20.7	9 18	21 47.69	-17 9.0	1.582	2.491	12.4	21.0
9 28	21 46.32	-17 32.8	1.916	2.741	14.2	20.9	9 28	21 42.13	-17 22.2	1.645	2.473	16.1	21.2
474619	2004 <i>TD</i> ₉₈		8 23.5 325°96	3°1/25.7	16		271762	2004 <i>SC</i> ₁₄		8 23.6 340°97	3°5/26.2	18	
7 20	22 27.95	- 2 23.4	1.272	2.146	18.0	21.4	7 20	22 27.94	- 1 1.2	1.272	2.141	18.3	19.7
7 30	22 25.70	- 2 32.3	1.183	2.120	14.2	21.1	7 30	22 25.54	- 1 12.4	1.197	2.129	14.5	19.4
8 9	22 20.89	- 3 4.4	1.114	2.094	9.7	20.8	8 9	22 20.67	- 1 47.9	1.141	2.118	10.0	19.2
8 19	22 14.05	- 3 58.3	1.065	2.069	4.9	20.4	8 19	22 13.96	- 2 45.6	1.105	2.107	5.4	18.9
8 29	22 6.21	- 5 8.7	1.039	2.045	3.6	20.3	8 29	22 6.49	- 3 59.8	1.093	2.098	3.9	18.8
9 8	21 58.74	- 6 26.9	1.037	2.022	8.3	20.5	9 8	21 59.56	- 5 21.2	1.105	2.090	8.0	19.0
9 18	21 52.96	- 7 42.8	1.057	2.001	13.6	20.7	9 18	21 54.36	- 6 40.0	1.139	2.083	12.8	19.2
9 28	21 49.95	- 8 47.6	1.096	1.980	18.4	20.9	9 28	21 51.82	- 7 47.5	1.194	2.078	17.2	19.5
328404	2008 <i>SH</i> ₄₈		8 23.5 207°95	1°7/21.8	18		312545	2009 <i>FO</i> ₉		8 23.6 183°41	0°9/22.9	17	
7 20	22 33.03	-16 10.9	2.643	3.509	10.0	20.9	7 20	22 39.05	-11 10.2	1.716	2.581	14.6	21.8
7 30	22 27.98	-16 32.2	2.568	3.507	7.4	20.7	7 30	22 33.17	-11 43.8	1.645	2.582	10.9	21.5
8 9	22 21.50	-16 56.4	2.519	3.506	4.5	20.5	8 9	22 25.02	-12 27.4	1.596	2.582	6.6	21.3
8 19	22 14.07	-17 20.0	2.497	3.505	1.9	20.3	8 19	22 15.28	-13 15.9	1.572	2.582	2.1	21.0
8 29	22 6.34	-17 39.8	2.504	3.503	2.9	20.4	8 29	22 4.98	-14 3.2	1.576	2.581	3.0	21.1
9 8	21 58.99	-17 52.6	2.540	3.502	5.8	20.6	9 8	21 55.30	-14 43.2	1.608	2.579	7.6	21.3
9 18	21 52.67	-17 56.7	2.603	3.500	8.6	20.8	9 18	21 47.26	-15 11.7	1.665	2.576	11.7	21.6
9 28	21 47.88	-17 51.1	2.689	3.498	11.1	21.0	9 28	21 41.64	-15 26.5	1.744	2.573	15.3	21.8
278022	2006 <i>VN</i> ₅₁		8 23.5 300°67	2°9/21.5	18		451570	2011 <i>YZ</i> ₇₆		8 23.6 44°72	5°4/28.5	18	
7 20	22 34.50	-14 57.9	1.384	2.275	15.8	20.9	7 20	22 33.21	+ 5 7.1	2.156	2.954	14.3	20.5
7 30	22 30.45	-15 44.7	1.306	2.258	11.8	20.6	7 30	22 28.40	+ 5 38.8	2.080	2.959	11.8	20.4
8 9	22 23.70	-16 41.5	1.249	2.240	7.3	20.3	8 9	22 21.91	+ 5 53.9	2.025	2.963	9.0	20.2
8 19	22 14.91	-17 41.3	1.215	2.223	3.2	20.0	8 19	22 14.26	+ 5 51.9	1.994	2.968	6.5	20.1
8 29	22 5.25	-18 35.3	1.206	2.206	5.0	20.0	8 29	22 6.20	+ 5 34.0	1.989	2.972	5.4	20.0
9 8	21 56.13	-19 15.6	1.222	2.189	9.9	20.3	9 8	21 58.56	+ 5 3.8	2.011	2.977	6.7	20.1
9 18	21 48.85	-19 37.3	1.259	2.172	14.6	20.5	9 18	21 52.09	+ 4 25.8	2.059	2.982	9.2	20.3
9 28	21 44.42	-19 38.4	1.317	2.156	18.7	20.7	9 28	21 47.40	+ 3 45.1	2.131	2.987	11.9	20.4
339130	2004 <i>RA</i> ₃₃₆		8 23.5 339°66	3°6/25.9	16		452159	2015 <i>RH</i> ₅₆		8 23.6 3°86	3°5/27.1	18	
7 20	22 28.32	- 2 25.7	1.204	2.081	18.6	21.6	7 20	22 28.93	+ 1 38.0	1.902	2.734	14.7	20.6
7 30	22 25.97	- 2 18.2	1.128	2.065	14.7	21.3	7 30	22 25.44	+ 1 16.0	1.826	2.734	11.7	20.4
8 9	22 21.00	- 2 32.5	1.071	2.050	10.1	21.0	8 9	22 20.20	+ 0 34.6	1.771	2.734	8.3	20.2
8 19	22 14.06	- 3 7.5	1.034	2.037	5.4	20.7	8 19	22 13.73	- 0 24.0	1.740	2.734	4.9	20.0
8 29	22 6.27	- 3 58.5	1.019	2.024	4.0	20.5	8 29	22 6.82	- 1 35.6	1.735	2.735	3.6	19.9
9 8	21 59.03	- 4 57.4	1.028	2.013	8.3	20.8	9 8	22 0.35	- 2 53.5	1.757	2.737	6.1	20.1
9 18	21 53.61	- 5 55.5	1.058	2.004	13.4	21.0	9 18	21 55.10	- 4 11.1	1.805	2.739	9.6	20.3
9 28	21 51.01	- 6 44.5	1.107	1.996	17.9	21.3	9 28	21 51.72	- 5 22.0	1.877	2.741	12.8	20.5
327625	2006 <i>HU</i> ₅₅		8 23.5 196°63	6°9/ 3.5	18		28963	<i>Tamyiu</i>		8 23.6 72°81	1°1/24.4	18	
7 20	22 30.99	+20 50.6	3.589	4.243	11.4	21.5	7 20	22 36.02	- 5 47.7	1.408	2.275	17.1	18.8
7 30	22 26.25	+21 13.8	3.490	4.240	10.2	21.4	7 30	22 31.02	- 6 17.6	1.358	2.293	12.9	18.6
8 9	22 20.38	+21 20.5	3.412	4.235	8.9	21.3	8 9	22 23.69	- 7 4.1	1.329	2.312	8.1	18.4
8 19	22 13.72	+21 9.3	3.355	4.230	7.7	21.2	8 19	22 14.83	- 8 2.1	1.323	2.331	3.0	18.2
8 29	22 6.74	+20 40.5	3.324	4.225	7.0	21.2	8 29	22 5.61	- 9 4.5	1.343	2.349	2.6	18.2
9 8	21 59.95	+19 55.5	3.319	4.218	6.9	21.1	9 8	21 57.27	-10 3.5	1.388	2.368	7.4	18.5
9 18	21 53.86	+18 57.6	3.340	4.212	7.6	21.2	9 18	21 50.80	-10 52.9	1.458	2.386	11.8	18.8
9 28	21 48.91	+17 50.8	3.387	4.205	8.8	21.3	9 28	21 46.90	-11 28.9	1.549	2.405	15.5	19.1
211399	2002 <i>VB</i> ₁₈		8 23.5 311°45	1°8/25.1	18		408716	2014 <i>OS</i> ₄		8 23.6 36°66	2°6/26.0	18	
7 20	22 31.84	- 4 32.9	1.782	2.638	14.5	20.3	7 20	22 31.96	- 2 11.4	2.253	3.086	12.7	21.4
7 30	22 27.78	- 4 46.0	1.700	2.628	11.2	20.0	7 30	22 27.40	- 2 9.1	2.176	3.088	9.9	21.2
8 9	22 21.72	- 5 14.0	1.640	2.618	7.3	19.8	8 9	22 21.26	- 2 19.3	2.122	3.090	6.7	21.0
8 19	22 14.22	- 5 54.4	1.604	2.609	3.3	19.5	8 19	22 14.05	- 2 40.5	2.094	3.093	3.7	20.8
8 29	22 6.14	- 6 42.6	1.594	2.600	2.6	19.5	8 29	22 6.47	- 3 10.0	2.093	3.095	2.8	20.7
9 8	21 58.49	- 7 32.7	1.611	2.591	6.5	19.7	9 8	21 59.30	- 3 43.7	2.120	3.097	5.4	20.9
9 18	21 52.19	- 8 19.2	1.653	2.583	10.6	19.9	9 18	21 53.23	- 4 17.7	2.173	3.100	8.6	21.1
9 28	21 48.00	- 8 57.3	1.718	2.574	14.2	20.1	9 28	21 48.84	- 4 48.1	2.251	3.103	11.5	21.3
151467	2002 <i>GK</i> ₁₅₃		8 23.5 124°39	3°4/19.5	18		341110	2007 <i>LE</i> ₂					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
381717	2009 <i>QP</i> ₄₁		8 23.6	20°16'	1.8°/22.5	17	143725	2003 <i>UX</i> ₂₀₀		8 23.6	97°25'	0.8°/24.2	17
7 20	22 32.00	-12 28.3	1.003	1.911	19.0	20.4	7 20	22 37.36	-6 23.0	1.507	2.369	16.4	20.0
7 30	22 28.81	-12 58.9	0.959	1.919	14.0	20.1	7 30	22 31.94	-6 57.3	1.454	2.387	12.3	19.8
8 9	22 22.67	-13 42.0	0.934	1.929	8.4	19.9	8 9	22 24.23	-7 46.8	1.422	2.405	7.7	19.6
8 19	22 14.56	-14 30.1	0.930	1.940	2.8	19.6	8 19	22 15.05	-8 46.5	1.415	2.423	2.7	19.4
8 29	22 5.97	-15 13.8	0.948	1.953	4.3	19.7	8 29	22 5.49	-9 49.4	1.434	2.440	2.6	19.4
9 8	21 58.49	-15 45.1	0.988	1.967	9.8	20.1	9 8	21 56.76	-10 48.2	1.480	2.457	7.3	19.7
9 18	21 53.35	-15 59.4	1.049	1.982	14.8	20.4	9 18	21 49.85	-11 37.1	1.550	2.474	11.6	20.0
9 28	21 51.33	-15 55.1	1.128	1.999	19.0	20.7	9 28	21 45.44	-12 12.4	1.642	2.490	15.2	20.3
273298	2006 <i>SD</i> ₁₀₀		8 23.6	158°18'	5°1'/27.8	17	165281	2000 <i>SS</i> ₃₂₆		8 23.6	215°10'	2°1'/21.9	18
7 20	22 35.25	+3 58.1	1.669	2.487	17.0	21.2	7 20	22 39.01	-14 27.3	1.754	2.624	14.0	20.7
7 30	22 30.37	+3 57.4	1.596	2.492	13.8	21.0	7 30	22 33.23	-15 7.2	1.676	2.618	10.4	20.5
8 9	22 23.33	+3 34.2	1.542	2.495	10.1	20.8	8 9	22 25.14	-15 54.6	1.622	2.610	6.4	20.2
8 19	22 14.77	+2 49.4	1.512	2.499	6.6	20.6	8 19	22 15.39	-16 43.8	1.594	2.602	2.5	20.0
8 29	22 5.65	+1 46.7	1.507	2.502	5.1	20.5	8 29	22 5.00	-17 28.1	1.593	2.593	4.0	20.0
9 8	21 57.09	+0 32.9	1.528	2.504	7.3	20.6	9 8	21 55.16	-18 1.6	1.619	2.583	8.2	20.3
9 18	21 50.06	-0 44.2	1.575	2.507	10.9	20.9	9 18	21 46.92	-18 21.0	1.670	2.573	12.2	20.5
9 28	21 45.34	-1 57.1	1.645	2.508	14.4	21.1	9 28	21 41.10	-18 24.8	1.743	2.562	15.7	20.7
364670	2007 <i>TW</i> ₃₃₇		8 23.6	16°64'	2°6'/25.4	17	394171	2006 <i>QK</i> ₁₅₂		8 23.6	13°39'	0°2'/23.4	18
7 20	22 27.02	-2 35.3	0.880	1.779	21.8	19.9	7 20	22 33.32	-9 58.5	1.729	2.600	14.2	21.2
7 30	22 25.36	-3 4.7	0.834	1.785	16.8	19.7	7 30	22 28.86	-10 20.5	1.662	2.601	10.6	20.9
8 9	22 20.72	-4 3.7	0.805	1.792	11.0	19.4	8 9	22 22.36	-10 52.8	1.616	2.603	6.5	20.7
8 19	22 13.98	-5 26.6	0.795	1.802	5.0	19.1	8 19	22 14.48	-11 31.4	1.595	2.605	2.0	20.4
8 29	22 6.64	-7 2.2	0.805	1.812	3.5	19.1	8 29	22 6.13	-12 10.8	1.601	2.607	2.6	20.5
9 8	22 0.31	-8 36.6	0.837	1.825	9.1	19.4	9 8	21 58.36	-12 45.6	1.633	2.609	6.9	20.8
9 18	21 56.31	-9 57.8	0.888	1.839	14.7	19.8	9 18	21 52.08	-13 11.7	1.691	2.612	10.9	21.0
9 28	21 55.47	-10 58.0	0.958	1.854	19.4	20.1	9 28	21 47.98	-13 26.2	1.770	2.615	14.4	21.2
339303	2004 <i>XZ</i> ₇₇		8 23.6	326°89'	1°0'/24.3	18	104114	2000 <i>EO</i> ₅₀		8 23.6	115°75'	0°3'/23.8	18
7 20	22 33.63	-7 25.3	1.554	2.424	15.6	20.0	7 20	22 35.89	-7 31.1	1.719	2.580	14.8	20.4
7 30	22 29.37	-7 34.5	1.479	2.417	11.9	19.8	7 30	22 30.68	-8 9.1	1.659	2.592	11.1	20.2
8 9	22 22.82	-7 57.3	1.425	2.410	7.5	19.5	8 9	22 23.43	-9 0.3	1.621	2.605	6.8	19.9
8 19	22 14.63	-8 30.3	1.395	2.403	2.8	19.2	8 19	22 14.80	-9 59.7	1.608	2.617	2.3	19.7
8 29	22 5.82	-9 8.5	1.390	2.397	2.6	19.2	8 29	22 5.79	-11 1.0	1.623	2.629	2.4	19.7
9 8	21 57.55	-9 45.7	1.411	2.391	7.3	19.5	9 8	21 57.43	-11 57.7	1.664	2.640	6.8	20.0
9 18	21 50.89	-10 16.7	1.456	2.386	11.8	19.7	9 18	21 50.65	-12 44.8	1.732	2.651	10.8	20.3
9 28	21 46.66	-10 37.5	1.523	2.381	15.6	20.0	9 28	21 46.10	-13 18.8	1.821	2.662	14.2	20.5
480909	2002 <i>TB</i> ₆₄		8 23.6	320°65'	1°9'/22.3	18	269402	2009 <i>RH</i> ₁₂		8 23.6	154°64'	0°6'/24.1	18
7 20	22 34.14	-14 38.2	1.525	2.412	14.9	21.0	7 20	22 35.69	-6 46.1	1.909	2.761	13.8	21.3
7 30	22 29.98	-14 54.0	1.440	2.389	11.2	20.7	7 30	22 30.43	-7 19.7	1.839	2.768	10.4	21.1
8 9	22 23.34	-15 17.0	1.377	2.368	6.9	20.4	8 9	22 23.25	-8 6.1	1.792	2.774	6.5	20.9
8 19	22 14.84	-15 42.3	1.337	2.346	2.5	20.1	8 19	22 14.76	-9 1.1	1.771	2.779	2.3	20.6
8 29	22 5.53	-16 3.8	1.323	2.326	3.9	20.1	8 29	22 5.83	-9 59.3	1.778	2.784	2.2	20.6
9 8	21 56.69	-16 16.0	1.334	2.306	8.7	20.3	9 8	21 57.45	-10 54.8	1.813	2.789	6.4	20.9
9 18	21 49.51	-16 15.3	1.368	2.287	13.2	20.5	9 18	21 50.47	-11 42.6	1.874	2.793	10.2	21.1
9 28	21 44.92	-16 0.1	1.422	2.268	17.2	20.8	9 28	21 45.54	-12 19.2	1.959	2.797	13.5	21.4
510053	2010 <i>FQ</i> ₃₁		8 23.6	171°47'	1°7'/25.3	18	476604	2008 <i>SQ</i> ₁₀₅		8 23.6	286°21'	5°4'/28.6	18
7 20	22 34.92	-3 52.8	2.405	3.236	12.0	22.7	7 20	22 31.17	+5 43.3	1.758	2.571	16.5	21.4
7 30	22 29.50	-4 8.4	2.326	3.240	9.3	22.5	7 30	22 27.35	+5 34.8	1.675	2.565	13.5	21.1
8 9	22 22.51	-4 35.4	2.271	3.243	6.1	22.3	8 9	22 21.52	+5 2.7	1.612	2.560	10.2	20.9
8 19	22 14.47	-5 11.7	2.243	3.246	2.8	22.1	8 19	22 14.25	+4 7.3	1.571	2.554	6.9	20.7
8 29	22 6.05	-5 53.6	2.243	3.248	2.2	22.1	8 29	22 6.39	+2 52.3	1.556	2.549	5.4	20.6
9 8	21 58.04	-6 37.2	2.273	3.250	5.2	22.3	9 8	21 58.95	+1 24.3	1.567	2.543	7.2	20.7
9 18	21 51.11	-7 18.2	2.331	3.250	8.4	22.5	9 18	21 52.86	-0 8.3	1.603	2.538	10.5	20.9
9 28	21 45.84	-7 53.4	2.413	3.251	11.3	22.7	9 28	21 48.87	-1 37.4	1.663	2.532	14.0	21.1
445797	2012 <i>BB</i> ₁₆		8 23.6	343°63'	2°2'/25.4	18	325888	2010 <i>UC</i> ₁₃		8 23.6	20°55'	6°9'/19.8	18
7 20	22 33.91	-4 27.4	2.107	2.949	13.1	20.5	7 20	22 38.48	-23 32.8	1.120	2.025	17.6	19.9
7 30	22 28.97	-4 15.5	2.028	2.947	10.1	20.3	7 30	22 33.66	-24 23.0	1.074	2.029	13.4	19.7
8 9	22 22.29	-4 14.7	1.972	2.946	6.8	20.1	8 9	22 25.67	-25 11.2	1.047	2.034	9.2	19.5
8 19	22 14.42	-4 23.5	1.942	2.944	3.4	19.9	8 19	22 15.57	-25 46.9	1.043	2.039	6.9	19.4
8 29	22 6.11	-4 39.4	1.939	2.943	2.6	19.9	8 29	22 4.96	-26 1.1	1.061	2.046	8.6	19.5
9 8	21 58.24	-4 58.8	1.964	2.942	5.8	20.1	9 8	21 55.57	-25 49.4	1.101	2.053	12.6	19.7
9 18	21 51.58	-5 17.9	2.015	2.941	9.2	20.3	9 18	21 48.74	-25 12.6	1.161	2.061	16.7	20.0
9 28	21 46.77	-5 33.4	2.090	2.940	12.3	20.5	9 28	21 45.26	-24 14.5	1.240	2.069	20.2	20.3
218153	2002 <i>RS</i> ₁₂₃		8 23.6	303°67'	6°7'/19.1	18	250732	2005 <i>SO</i> ₆₅		8 23.6	337°38'	0°2'/23.4	18
7 20	22 37.72	-23 49.9	1.360	2.256	15.7	19.6	7 20	22 34.94	-11 21.7	1.896	2.763	13.3	20.0
7 30	22 33.06	-24 47.7	1.287	2.237	12.1	19.3	7 30	22 29.95	-11 24.5	1.821	2.759	9.9	19.7
8 9	22 25.42	-25 45.9	1.234	2.218	8.5	19.1	8 9	22 23.00	-11 34.7	1.768	2.755	6.1	19.5
8 19	22 15.54	-26 34.7	1.205	2.199	6.7	18.9	8 19	22 14.69	-11 49.0	1.741	2.751	1.9	19.2
8 29	22 4.74	-27 4.5	1.199	2.180	8.6	19.0	8 29	22 5.92	-12 3.6	1.742	2.747	2.4	19.3
9 8	21 54.62	-27 8.8	1.217	2.161	12.4	19.1	9 8	21 57.67	-12 14.5	1.769	2.744	6.6	19.5
9 18	21 46.61	-26 46.3	1.256	2.143	16.5	19.3	9 18	21 50.81	-12 18.8	1.822	2.741	10.4	19.8
9 28	21 41.74	-25 59.3	1.313	2.126	20.2	19.5	9 28	21 46.04	-12 14.4	1.898	2.738	13.7	20.0
259123	2002 <i>XH</i> ₃₀		8 23.6	207°14'	15°2'/31.6	16	446233	2013 <i>GH</i> ₁₀₈		8 23.6	144°31'	3°7'/27	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
251924	1999 VT ₁₉₅		8 23.6 310°92	2°8/21.8	18		23389	1181 T ₋₃		8 23.6 125°70	0°6/24.1	18	
7 20	22 33.90	-14 29.3	1.255	2.152	16.7	20.6	7 20	22 34.37	-8 46.1	2.288	3.140	11.9	19.3
7 30	22 30.33	-15 8.8	1.175	2.129	12.6	20.3	7 30	22 29.18	-8 49.1	2.214	3.142	8.9	19.1
8 9	22 23.86	-15 59.7	1.114	2.107	7.7	20.0	8 9	22 22.38	-9 0.0	2.162	3.144	5.6	18.9
8 19	22 15.12	-16 55.1	1.076	2.085	3.2	19.7	8 19	22 14.49	-9 16.4	2.138	3.146	2.0	18.7
8 29	22 5.34	-17 45.6	1.062	2.064	5.1	19.7	8 29	22 6.25	-9 35.0	2.142	3.148	1.9	18.7
9 8	21 56.08	-18 22.9	1.071	2.043	10.4	20.0	9 8	21 58.46	-9 52.5	2.174	3.150	5.5	18.9
9 18	21 48.78	-18 41.2	1.102	2.023	15.5	20.2	9 18	21 51.81	-10 5.9	2.233	3.152	8.8	19.1
9 28	21 44.55	-18 38.3	1.151	2.003	20.0	20.4	9 28	21 46.90	-10 12.9	2.316	3.153	11.7	19.3
253474	2003 SG ₅₄		8 23.6 16°27	5°4/26.9	18		475356	2006 CQ ₅		8 23.6 205°40	5°8/27.8	17	
7 20	22 32.90	+ 0 20.5	1.095	1.963	20.8	19.6	7 20	22 37.64	+ 3 40.7	1.876	2.683	15.8	21.3
7 30	22 29.43	+ 0 47.6	1.038	1.966	16.6	19.3	7 30	22 32.05	+ 4 23.7	1.795	2.681	13.0	21.1
8 9	22 23.12	+ 0 49.5	0.999	1.970	11.8	19.1	8 9	22 24.37	+ 4 49.6	1.735	2.679	9.8	20.9
8 19	22 14.81	+ 0 26.5	0.979	1.976	7.2	18.9	8 19	22 15.21	+ 4 57.4	1.698	2.677	6.9	20.7
8 29	22 5.82	- 0 17.1	0.981	1.982	5.6	18.8	8 29	22 5.45	+ 4 47.8	1.688	2.675	5.8	20.6
9 8	21 57.71	- 1 12.9	1.006	1.989	8.9	19.0	9 8	21 56.15	+ 4 24.5	1.705	2.672	7.5	20.7
9 18	21 51.74	- 2 11.4	1.052	1.997	13.5	19.3	9 18	21 48.24	+ 3 52.1	1.747	2.670	10.6	20.9
9 28	21 48.81	- 3 4.0	1.118	2.006	17.8	19.6	9 28	21 42.51	+ 3 16.7	1.812	2.667	13.7	21.1
129465	1993 FC ₄₁		8 23.6 128°76	2°6/26.3	18		123709	2000 YZ ₁₁₈		8 23.6 226°26	2°3/20.9	18	
7 20	22 32.96	+ 0 2.6	2.078	2.904	13.8	20.1	7 20	22 31.61	-16 1.2	2.541	3.411	10.2	20.3
7 30	22 28.24	- 0 31.9	2.008	2.916	10.8	19.9	7 30	22 27.14	-16 58.7	2.462	3.404	7.5	20.2
8 9	22 21.84	- 1 23.3	1.961	2.927	7.4	19.7	8 9	22 21.16	-18 1.1	2.409	3.396	4.6	20.0
8 19	22 14.31	- 2 28.7	1.938	2.937	3.9	19.5	8 19	22 14.14	-19 3.7	2.383	3.388	2.4	19.8
8 29	22 6.42	- 3 43.3	1.944	2.947	2.8	19.5	8 29	22 6.72	-20 1.4	2.386	3.380	3.6	19.9
9 8	21 59.01	- 5 0.8	1.979	2.957	5.7	19.7	9 8	21 59.62	-20 49.9	2.418	3.372	6.5	20.1
9 18	21 52.82	- 6 15.2	2.040	2.967	9.1	19.9	9 18	21 53.51	-21 26.0	2.476	3.363	9.4	20.2
9 28	21 48.45	- 7 21.4	2.126	2.975	12.1	20.1	9 28	21 48.96	-21 48.3	2.557	3.355	11.9	20.4
449417	2013 HG ₃₅		8 23.6 98°98	3°8/27.6	18		440659	2005 XF ₂₅		8 23.6 295°75	1°0/24.5	15	
7 20	22 30.97	+ 2 43.4	2.303	3.114	13.1	21.4	7 20	22 31.93	- 6 37.2	2.081	2.935	12.8	22.0
7 30	22 26.68	+ 2 41.1	2.224	3.117	10.5	21.3	7 30	22 27.65	- 6 53.0	1.995	2.923	9.7	21.8
8 9	22 20.86	+ 2 22.9	2.167	3.120	7.7	21.1	8 9	22 21.61	- 7 20.1	1.931	2.912	6.2	21.5
8 19	22 14.01	+ 1 50.0	2.135	3.122	5.0	20.9	8 19	22 14.31	- 7 56.0	1.893	2.900	2.4	21.3
8 29	22 6.77	+ 1 5.0	2.130	3.125	3.9	20.9	8 29	22 6.51	- 8 36.6	1.883	2.889	2.1	21.2
9 8	21 59.92	+ 0 12.2	2.153	3.128	5.6	21.0	9 8	21 59.06	- 9 17.1	1.900	2.878	5.9	21.5
9 18	21 54.11	- 0 43.3	2.203	3.130	8.4	21.2	9 18	21 52.77	- 9 53.2	1.943	2.867	9.6	21.7
9 28	21 49.93	- 1 36.8	2.277	3.133	11.2	21.4	9 28	21 48.30	-10 21.3	2.010	2.856	12.9	21.9
2040	Chalonge		8 23.6 201°64	5°2/17.3	18		519738	2013 CH ₂₂₆		8 23.6 98°12	4°9/19.6	18	
7 20	22 35.57	-29 13.7	2.821	3.687	9.4	17.1	7 20	22 39.02	-25 26.4	2.128	3.001	11.8	21.2
7 30	22 29.95	-30 7.0	2.756	3.683	7.4	17.0	7 30	22 32.76	-25 57.5	2.070	3.007	9.0	21.1
8 9	22 22.79	-30 56.0	2.716	3.679	5.8	16.9	8 9	22 24.59	-26 25.0	2.036	3.013	6.3	20.9
8 19	22 14.61	-31 35.8	2.704	3.674	5.3	16.8	8 19	22 15.21	-26 43.4	2.029	3.018	4.9	20.9
8 29	22 6.09	-32 1.9	2.720	3.669	6.3	16.9	8 29	22 5.54	-26 48.1	2.049	3.024	6.1	20.9
9 8	21 57.99	-32 12.0	2.763	3.664	8.1	17.0	9 8	21 56.56	-26 36.9	2.096	3.030	8.6	21.1
9 18	21 51.00	-32 5.5	2.831	3.658	10.2	17.1	9 18	21 49.10	-26 9.6	2.168	3.035	11.4	21.3
9 28	21 45.65	-31 43.3	2.920	3.652	12.0	17.3	9 28	21 43.77	-25 27.9	2.262	3.041	13.8	21.5
500802	2013 GA ₁₈		8 23.6 34°39	6°8/19.8	17		312428	2008 GP ₉₈		8 23.6 150°25	2°1/21.4	18	
7 20	22 37.02	-21 38.1	0.953	1.868	19.1	20.5	7 20	22 31.84	-15 0.5	2.307	3.179	11.1	21.0
7 30	22 32.75	-22 43.4	0.919	1.880	14.3	20.3	7 30	22 27.36	-15 53.2	2.239	3.181	8.1	20.8
8 9	22 25.16	-23 48.6	0.903	1.893	9.5	20.1	8 9	22 21.31	-16 51.3	2.195	3.183	4.9	20.6
8 19	22 15.41	-24 41.8	0.908	1.908	6.8	20.0	8 19	22 14.19	-17 50.0	2.178	3.185	2.2	20.5
8 29	22 5.27	-25 12.2	0.935	1.923	8.8	20.2	8 29	22 6.70	-18 44.0	2.190	3.187	3.5	20.6
9 8	21 56.57	-25 14.8	0.982	1.940	13.0	20.5	9 8	21 59.64	-19 28.7	2.229	3.189	6.6	20.8
9 18	21 50.62	-24 50.1	1.049	1.957	17.3	20.8	9 18	21 53.69	-20 1.2	2.294	3.190	9.7	21.0
9 28	21 48.16	-24 2.0	1.133	1.975	21.0	21.1	9 28	21 49.43	-20 19.8	2.383	3.192	12.3	21.1
218066	2002 EF ₁₃₅		8 23.6 66°24	3°5/27.5	18		505473	2013 TH ₁₃₂		8 23.6 219°24	2°7/26.2	18	
7 20	22 30.01	+ 2 31.2	2.220	3.036	13.4	20.4	7 20	22 34.01	- 0 3.0	1.989	2.816	14.3	22.3
7 30	22 26.02	+ 2 13.1	2.142	3.039	10.7	20.2	7 30	22 29.30	- 0 37.7	1.899	2.807	11.3	22.0
8 9	22 20.49	+ 1 37.9	2.085	3.042	7.7	20.1	8 9	22 22.69	- 1 31.2	1.831	2.798	7.7	21.8
8 19	22 13.89	+ 0 47.2	2.054	3.045	4.8	19.9	8 19	22 14.69	- 2 40.9	1.789	2.789	4.1	21.6
8 29	22 6.92	- 0 15.4	2.050	3.048	3.6	19.8	8 29	22 6.09	- 4 2.1	1.775	2.778	2.9	21.5
9 8	22 0.33	- 1 24.6	2.073	3.051	5.6	20.0	9 8	21 57.85	- 5 27.8	1.788	2.767	6.2	21.7
9 18	21 54.81	- 2 34.9	2.124	3.054	8.6	20.1	9 18	21 50.83	- 6 51.1	1.829	2.755	10.0	21.9
9 28	21 50.95	- 3 40.7	2.199	3.057	11.5	20.3	9 28	21 45.76	- 8 5.8	1.894	2.743	13.4	22.1
220653	2004 RH ₁₀₅		8 23.6 264°51	1°2/24.6	18		243100	2007 RQ ₃₁		8 23.6 15°93	8°4/29.7	17	
7 20	22 34.96	- 7 10.1	2.381	3.224	11.7	20.6	7 20	22 23.17	+ 5 23.3	0.734	1.625	25.8	19.5
7 30	22 29.67	- 7 2.7	2.290	3.213	9.0	20.4	7 30	22 22.80	+ 5 54.9	0.698	1.634	21.2	19.2
8 9	22 22.72	- 7 3.4	2.224	3.201	5.8	20.2	8 9	22 19.31	+ 5 44.7	0.674	1.645	16.1	19.0
8 19	22 14.62	- 7 10.7	2.183	3.189	2.4	20.0	8 19	22 13.66	+ 4 52.6	0.667	1.658	11.1	18.8
8 29	22 6.05	- 7 21.9	2.172	3.177	2.0	19.9	8 29	22 7.40	+ 3 25.9	0.676	1.674	8.4	18.8
9 8	21 57.82	- 7 34.0	2.189	3.165	5.4	20.1	9 8	22 2.26	+ 1 39.7	0.705	1.693	10.4	18.9
9 18	21 50.66	- 7 44.2	2.233	3.153	8.7	20.3	9 18	21 59.55	- 0 9.4	0.752	1.713	14.8	19.3
9 28	21 45.18	- 7 49.9	2.302	3.141	11.7	20.5	9 28	22 0.08	- 1 46.6	0.816	1.736	19.2	19.6
37619	1993 OJ ₆		8 23.6 11°69	3°0/20.5	18		523807	2003 LG		8 23.6 204°29	2°2/21.4	18	
7 20	22 31.02	-16 23.9	1.997	2.879									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
19811	Kimperkins		8 23.6 264°87	1.4/22.4	18		156388	2001 YE ₁₀₁		8 23.6 312°74	2°6/25.6	17	
7 20	22 35.57	-12 52.6	1.833	2.705	13.5	19.0	7 20	22 33.52	-3 0.2	1.586	2.440	16.1	20.0
7 30	22 30.68	-13 26.6	1.748	2.689	10.1	18.7	7 30	22 29.30	-3 8.2	1.510	2.435	12.5	19.8
8 9	22 23.63	-14 9.3	1.685	2.673	6.1	18.4	8 9	22 22.85	-3 33.8	1.454	2.430	8.4	19.5
8 19	22 15.01	-14 55.9	1.648	2.657	2.1	18.2	8 19	22 14.79	-4 14.6	1.423	2.426	4.2	19.3
8 29	22 5.72	-15 40.4	1.638	2.640	3.3	18.2	8 29	22 6.11	-5 5.9	1.416	2.421	3.1	19.2
9 8	21 56.83	-16 17.2	1.655	2.624	7.6	18.4	9 8	21 57.96	-6 1.0	1.436	2.417	7.0	19.4
9 18	21 49.36	-16 42.1	1.697	2.607	11.6	18.6	9 18	21 51.35	-6 53.4	1.480	2.413	11.3	19.7
9 28	21 44.10	-16 52.8	1.761	2.590	15.2	18.8	9 28	21 47.09	-7 37.3	1.546	2.409	15.2	19.9
144054	2004 BM ₃₄		8 23.6 30°55	0°7/24.0	18	R	406309	2007 HX ₆₉		8 23.6 222°94	1°2/25.1	18	
7 20	22 37.90	-9 17.3	1.297	2.175	17.5	19.3	7 20	22 30.30	-3 56.4	2.819	3.651	10.4	21.7
7 30	22 32.82	-9 9.7	1.237	2.180	13.2	19.0	7 30	22 26.03	-4 30.5	2.728	3.643	8.0	21.5
8 9	22 25.05	-9 14.2	1.198	2.185	8.3	18.8	8 9	22 20.45	-5 15.5	2.660	3.634	5.2	21.4
8 19	22 15.46	-9 27.4	1.182	2.191	2.9	18.5	8 19	22 13.96	-6 9.0	2.620	3.625	2.3	21.1
8 29	22 5.32	-9 44.1	1.190	2.197	2.9	18.5	8 29	22 7.12	-7 7.6	2.610	3.615	1.7	21.1
9 8	21 56.06	-9 58.8	1.223	2.204	8.1	18.8	9 8	22 0.51	-8 7.1	2.628	3.605	4.6	21.3
9 18	21 48.86	-10 7.1	1.280	2.211	12.9	19.1	9 18	21 54.74	-9 3.4	2.675	3.595	7.5	21.5
9 28	21 44.55	-10 5.9	1.357	2.218	16.9	19.4	9 28	21 50.29	-9 53.2	2.748	3.584	10.1	21.6
463432	2013 LJ ₂₃		8 23.6 57°76	4°3/20.6	17		41016	1999 UR ₂₄		8 23.6 5°15	4°9/27.9	18	
7 20	22 36.55	-15 12.0	1.093	1.995	18.3	20.2	7 20	22 31.28	+3 11.1	1.887	2.707	15.2	18.6
7 30	22 31.94	-16 46.7	1.062	2.019	13.3	20.0	7 30	22 27.27	+3 29.2	1.811	2.707	12.4	18.4
8 9	22 24.48	-18 29.6	1.051	2.043	8.1	19.8	8 9	22 21.43	+3 29.0	1.756	2.708	9.2	18.2
8 19	22 15.23	-20 8.5	1.062	2.068	4.4	19.7	8 19	22 14.31	+3 10.8	1.724	2.709	6.2	18.0
8 29	22 5.68	-21 31.2	1.098	2.093	6.5	19.9	8 29	22 6.72	+2 36.9	1.718	2.711	4.9	18.0
9 8	21 57.37	-22 29.4	1.157	2.118	11.0	20.2	9 8	21 59.58	+1 52.0	1.738	2.713	6.7	18.1
9 18	21 51.45	-23 0.5	1.237	2.144	15.3	20.6	9 18	21 53.71	+1 1.6	1.783	2.715	9.8	18.3
9 28	21 48.59	-23 5.6	1.336	2.169	18.8	20.9	9 28	21 49.78	+0 11.8	1.852	2.718	12.9	18.5
352283	2007 TN ₃₇₇		8 23.6 76°63	4°4/27.6	18		191692	2004 RN ₁₄₉		8 23.6 77°83	2°1/22.2	17	
7 20	22 32.48	+2 47.1	1.918	2.738	15.1	20.6	7 20	22 38.52	-14 52.7	1.598	2.475	14.8	19.9
7 30	22 28.10	+2 48.0	1.844	2.741	12.1	20.4	7 30	22 32.76	-15 20.7	1.547	2.491	10.9	19.7
8 9	22 21.89	+2 30.3	1.791	2.745	8.8	20.3	8 9	22 24.77	-15 54.4	1.518	2.507	6.6	19.5
8 19	22 14.42	+1 55.0	1.761	2.749	5.7	20.1	8 19	22 15.35	-16 28.3	1.514	2.523	2.6	19.3
8 29	22 6.50	+1 5.2	1.758	2.753	4.4	20.0	8 29	22 5.61	-16 56.4	1.537	2.538	3.8	19.4
9 8	21 59.05	+0 6.3	1.781	2.757	6.4	20.1	9 8	21 56.72	-17 13.9	1.586	2.554	8.0	19.7
9 18	21 52.88	+0 55.5	1.831	2.761	9.7	20.4	9 18	21 49.64	-17 18.5	1.660	2.569	11.9	20.0
9 28	21 48.66	-1 54.2	1.904	2.766	12.8	20.6	9 28	21 45.04	-17 9.7	1.755	2.585	15.2	20.2
76235	2000 EY ₈₀		8 23.6 24°99	1°6/22.2	18		424581	2008 GO ₃₇		8 23.6 124°97	0°2/23.5	17	
7 20	22 29.30	-10 26.2	1.365	2.256	16.0	17.9	7 20	22 36.36	-8 40.6	1.738	2.600	14.5	22.2
7 30	22 26.25	-11 39.5	1.316	2.268	11.8	17.7	7 30	22 31.09	-9 22.1	1.676	2.611	10.8	22.0
8 9	22 20.94	-13 6.7	1.288	2.280	7.0	17.5	8 9	22 23.76	-10 15.8	1.638	2.623	6.6	21.8
8 19	22 14.13	-14 39.5	1.283	2.293	2.3	17.2	8 19	22 15.05	-11 16.4	1.624	2.634	2.1	21.5
8 29	22 6.88	-16 8.2	1.304	2.307	3.9	17.4	8 29	22 5.93	-12 17.6	1.638	2.644	2.6	21.6
9 8	22 0.40	-17 23.8	1.350	2.322	8.5	17.7	9 8	21 57.46	-13 12.9	1.680	2.654	7.0	21.9
9 18	21 55.63	-18 20.5	1.419	2.338	12.8	18.0	9 18	21 50.55	-13 57.4	1.747	2.664	10.9	22.1
9 28	21 53.29	-18 55.7	1.508	2.355	16.3	18.2	9 28	21 45.88	-14 28.3	1.836	2.673	14.3	22.4
366119	2012 DP ₃₃		8 23.6 331°99	5°8/17.8	18		210360	2007 UR ₅₄		8 23.6 296°79	0°8/24.3	18	
7 20	22 35.39	-28 23.2	2.307	3.182	10.9	20.3	7 20	22 33.02	-7 9.5	1.821	2.682	14.0	21.3
7 30	22 30.10	-29 13.7	2.247	3.181	8.5	20.2	7 30	22 28.71	-7 29.0	1.740	2.673	10.7	21.1
8 9	22 23.02	-29 59.6	2.211	3.179	6.5	20.0	8 9	22 22.40	-8 1.2	1.681	2.664	6.7	20.9
8 19	22 14.76	-30 35.0	2.202	3.178	5.8	20.0	8 19	22 14.66	-8 42.8	1.648	2.655	2.5	20.6
8 29	22 6.15	-30 55.2	2.220	3.177	6.9	20.1	8 29	22 6.35	-9 29.0	1.640	2.647	2.3	20.5
9 8	21 58.10	-30 57.3	2.263	3.176	9.1	20.2	9 8	21 58.47	-10 13.9	1.660	2.639	6.6	20.8
9 18	21 51.38	-30 41.0	2.331	3.175	11.5	20.4	9 18	21 51.95	-10 52.7	1.705	2.630	10.6	21.0
9 28	21 46.61	-30 7.8	2.419	3.174	13.7	20.5	9 28	21 47.52	-11 21.4	1.773	2.622	14.2	21.2
33499	Stanton		8 23.6 163°55	2°2/21.9	18		214780	2006 UD ₈₀		8 23.6 6°80	0°9/22.9	18	
7 20	22 39.12	-14 15.1	1.585	2.460	15.0	19.3	7 20	22 31.97	-10 52.7	1.776	2.650	13.7	20.0
7 30	22 33.42	-14 58.7	1.521	2.464	11.1	19.1	7 30	22 27.89	-11 32.2	1.708	2.651	10.2	19.7
8 9	22 25.31	-15 50.1	1.479	2.468	6.7	18.8	8 9	22 21.85	-12 22.0	1.663	2.651	6.2	19.5
8 19	22 15.55	-16 43.1	1.463	2.471	2.7	18.6	8 19	22 14.46	-13 17.1	1.643	2.652	1.9	19.2
8 29	22 5.25	-17 30.2	1.473	2.473	4.1	18.7	8 29	22 6.61	-14 11.4	1.649	2.654	2.9	19.3
9 8	21 55.67	-18 5.4	1.510	2.476	8.5	18.9	9 8	21 59.29	-14 58.8	1.682	2.655	7.1	19.6
9 18	21 47.90	-18 25.2	1.571	2.477	12.6	19.2	9 18	21 53.39	-15 35.0	1.740	2.657	11.0	19.8
9 28	21 42.71	-18 28.4	1.653	2.478	16.1	19.4	9 28	21 49.57	-15 57.2	1.820	2.659	14.3	20.0
505110	2012 DU ₃₃		8 23.6 132°27	1°1/22.7	17		476179	2007 TM ₄₄₀		8 23.6 275°74	5°1/18.9	18	
7 20	22 37.47	-11 0.2	1.656	2.525	14.8	21.9	7 20	22 35.34	-22 39.7	1.924	2.807	12.4	21.4
7 30	22 32.01	-11 48.3	1.596	2.536	11.0	21.7	7 30	22 30.52	-23 43.2	1.847	2.791	9.4	21.2
8 9	22 24.36	-12 47.0	1.559	2.546	6.6	21.5	8 9	22 23.56	-24 48.0	1.794	2.775	6.5	21.0
8 19	22 15.22	-13 50.4	1.547	2.556	2.1	21.2	8 19	22 15.05	-25 47.0	1.766	2.759	5.1	20.9
8 29	22 5.64	-14 51.4	1.562	2.566	3.2	21.3	8 29	22 5.91	-26 33.1	1.765	2.743	6.6	20.9
9 8	21 56.77	-15 43.2	1.604	2.574	7.6	21.6	9 8	21 57.23	-27 0.9	1.790	2.726	9.6	21.1
9 18	21 49.58	-16 21.6	1.671	2.583	11.7	21.9	9 18	21 49.98	-27 8.3	1.838	2.710	12.9	21.2
9 28	21 44.77	-16 44.2	1.760	2.591	15.1	22.1	9 28	21 44.97	-26 55.6	1.908	2.693	15.8	21.4
514194	2015 MJ ₁₀₈		8 23.6 271°19	3°8/26.6	18		324891	2007 UP ₁₃₉		8 23.6 248°50	1°3/22.9	18	
7 20	22 35.23	-0 27.1	1.986	2.813	14.4	21.1	7 20	22 40.27					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
368518	2003 <i>UW</i> ₃₅₅		8 23.6 318°94	1.8/22.6	17		245895	2006 <i>QJ</i> ₇₇		8 23.6 350°59	2.2/25.5	18	
7 20	22 34.36	-13 11.4	1.176	2.074	17.6	20.8	7 20	22 32.04	-3 34.4	1.726	2.579	15.0	20.2
7 30	22 30.80	-13 33.9	1.101	2.055	13.2	20.4	7 30	22 28.02	-3 45.7	1.651	2.577	11.6	20.0
8 9	22 24.24	-14 8.0	1.045	2.038	8.1	20.1	8 9	22 22.00	-4 13.0	1.598	2.575	7.7	19.7
8 19	22 15.38	-14 47.8	1.011	2.020	2.8	19.7	8 19	22 14.56	-4 53.6	1.569	2.573	3.7	19.5
8 29	22 5.51	-15 25.0	1.000	2.004	4.3	19.8	8 29	22 6.60	-5 42.8	1.566	2.572	2.7	19.4
9 8	21 56.25	-15 51.6	1.011	1.988	10.0	20.1	9 8	21 59.14	-6 34.8	1.590	2.571	6.5	19.7
9 18	21 49.08	-16 2.4	1.045	1.973	15.4	20.3	9 18	21 53.08	-7 23.6	1.638	2.570	10.5	19.9
9 28	21 45.10	-15 55.0	1.096	1.959	20.0	20.6	9 28	21 49.15	-8 4.3	1.709	2.570	14.1	20.1
508022	2015 <i>BG</i> ₄₀₁		8 23.6 289°41	2.5/25.1	17		39899	1998 <i>FP</i> ₂₆		8 23.6 330°32	5.1/21.1	18	
7 20	22 37.49	-5 32.4	1.401	2.265	17.3	21.7	7 20	22 37.21	-20 28.3	1.082	1.990	18.0	16.9
7 30	22 32.69	-5 15.9	1.319	2.251	13.4	21.4	7 30	22 33.20	-20 49.0	1.015	1.973	13.6	16.6
8 9	22 25.19	-5 14.3	1.257	2.237	8.9	21.1	8 9	22 25.83	-21 11.5	0.965	1.957	8.9	16.3
8 19	22 15.65	-5 25.9	1.218	2.224	4.1	20.8	8 19	22 15.92	-21 27.3	0.937	1.941	5.3	16.0
8 29	22 5.21	-5 47.1	1.204	2.210	3.3	20.7	8 29	22 5.01	-21 27.5	0.931	1.927	7.1	16.1
9 8	21 55.29	-6 12.2	1.215	2.196	8.0	21.0	9 8	21 54.96	-21 6.6	0.947	1.915	12.0	16.3
9 18	21 47.17	-6 35.6	1.250	2.183	13.0	21.2	9 18	21 47.39	-20 23.6	0.983	1.903	17.0	16.6
9 28	21 41.87	-6 52.4	1.305	2.170	17.3	21.5	9 28	21 43.38	-19 20.9	1.037	1.893	21.4	16.8
42167	2001 <i>CR</i> ₁₃		8 23.6 94°01	1.4/21.7	18		116265	2003 <i>YB</i> ₃₃		8 23.6 320°97	0.3/23.9	18	
7 20	22 29.14	-14 53.1	3.180	4.044	8.6	19.3	7 20	22 31.66	-7 6.4	1.763	2.628	14.2	19.8
7 30	22 24.97	-15 31.2	3.116	4.055	6.3	19.2	7 30	22 27.73	-7 51.3	1.689	2.624	10.7	19.6
8 9	22 19.70	-16 12.7	3.079	4.066	3.8	19.0	8 9	22 21.82	-8 50.8	1.636	2.621	6.7	19.4
8 19	22 13.72	-16 54.3	3.069	4.077	1.6	18.9	8 19	22 14.51	-10 0.1	1.609	2.618	2.2	19.1
8 29	22 7.53	-17 33.0	3.089	4.087	2.4	19.0	8 29	22 6.67	-11 12.9	1.609	2.615	2.4	19.1
9 8	22 1.67	-18 5.7	3.138	4.098	4.9	19.2	9 8	21 59.30	-12 22.0	1.635	2.612	6.8	19.4
9 18	21 56.59	-18 30.4	3.214	4.109	7.2	19.3	9 18	21 53.31	-13 21.3	1.687	2.610	10.9	19.6
9 28	21 52.71	-18 45.8	3.315	4.120	9.3	19.5	9 28	21 49.41	-14 6.7	1.761	2.607	14.4	19.8
78851	2003 <i>QE</i> ₆₂		8 23.6 325°91	4.7/20.5	18		179514	2002 <i>CW</i> ₁₅₅		8 23.6 114°83	3.1/20.4	18	
7 20	22 32.44	-17 7.5	1.136	2.044	17.2	18.9	7 20	22 32.58	-17 50.2	2.196	3.074	11.3	20.2
7 30	22 29.43	-18 11.5	1.069	2.029	12.9	18.6	7 30	22 28.04	-18 50.3	2.133	3.077	8.3	20.1
8 9	22 23.41	-19 25.6	1.021	2.014	8.2	18.3	8 9	22 21.82	-19 54.0	2.094	3.081	5.2	19.9
8 19	22 15.11	-20 40.0	0.995	2.000	4.7	18.1	8 19	22 14.47	-20 55.7	2.082	3.085	3.1	19.8
8 29	22 5.87	-21 43.1	0.991	1.987	6.9	18.2	8 29	22 6.75	-21 49.7	2.098	3.089	4.4	19.8
9 8	21 57.33	-22 25.2	1.010	1.975	11.8	18.4	9 8	21 59.50	-22 31.3	2.142	3.093	7.4	20.0
9 18	21 50.96	-22 41.6	1.049	1.964	16.7	18.7	9 18	21 53.46	-22 57.9	2.210	3.096	10.4	20.2
9 28	21 47.80	-22 31.4	1.106	1.954	20.9	18.9	9 28	21 49.22	-23 8.7	2.301	3.100	13.0	20.4
192397	1996 <i>XZ</i> ₅		8 23.6 271°90	1.5/24.8	18		324344	2006 <i>QH</i> ₁₀		8 23.6 343°82	7.0/18.4	18	
7 20	22 35.46	-5 41.1	1.900	2.749	14.0	20.2	7 20	22 25.49	-19 11.2	0.925	1.854	18.1	18.9
7 30	22 30.62	-5 49.7	1.802	2.727	10.8	19.9	7 30	22 24.65	-20 51.0	0.868	1.838	13.6	18.6
8 9	22 23.67	-6 11.4	1.726	2.705	7.1	19.7	8 9	22 20.66	-22 41.6	0.828	1.823	9.2	18.3
8 19	22 15.13	-6 43.9	1.676	2.682	3.0	19.4	8 19	22 14.27	-24 29.2	0.809	1.810	7.0	18.1
8 29	22 5.84	-7 23.3	1.653	2.659	2.4	19.3	8 29	22 6.92	-25 57.7	0.810	1.799	9.7	18.3
9 8	21 56.83	-8 4.4	1.657	2.635	6.6	19.5	9 8	22 0.38	-26 54.6	0.831	1.790	14.5	18.5
9 18	21 49.09	-8 42.1	1.687	2.611	10.8	19.7	9 18	21 56.21	-27 14.5	0.869	1.783	19.3	18.7
9 28	21 43.45	-9 12.1	1.740	2.587	14.5	19.9	9 28	21 55.45	-26 58.2	0.923	1.779	23.5	19.0
223195	2003 <i>BW</i> ₈		8 23.6 196°76	0.9/24.4	18		301173	2008 <i>YK</i> ₉₇		8 23.6 46°49	2.3/21.6	18	
7 20	22 33.97	-5 19.4	1.797	2.651	14.5	20.9	7 20	22 33.72	-14 40.3	1.754	2.634	13.6	20.2
7 30	22 29.41	-6 1.9	1.721	2.649	11.0	20.7	7 30	22 29.22	-15 29.9	1.692	2.638	10.0	20.0
8 9	22 22.83	-7 0.1	1.667	2.648	7.0	20.4	8 9	22 22.68	-16 26.6	1.653	2.642	6.1	19.8
8 19	22 14.82	-8 9.9	1.638	2.646	2.6	20.2	8 19	22 14.77	-17 24.2	1.639	2.647	2.6	19.6
8 29	22 6.27	-9 25.0	1.637	2.643	2.3	20.1	8 29	22 6.42	-18 16.2	1.652	2.652	4.0	19.7
9 8	21 58.20	-10 38.2	1.663	2.641	6.6	20.4	9 8	21 58.67	-18 56.7	1.692	2.656	7.9	19.9
9 18	21 51.52	-11 43.2	1.715	2.638	10.7	20.7	9 18	21 52.43	-19 22.4	1.756	2.661	11.6	20.2
9 28	21 46.96	-12 35.4	1.789	2.634	14.3	20.9	9 28	21 48.37	-19 31.8	1.842	2.666	14.8	20.4
131192	2001 <i>DN</i> ₇		8 23.6 269°93	1.4/22.2	18		173633	2001 <i>FM</i> ₉₂		8 23.6 139°56	1.7/22.1	17	
7 20	22 32.36	-10 32.6	1.908	2.778	13.1	20.0	7 20	22 36.98	-12 11.4	1.759	2.629	14.1	20.5
7 30	22 28.29	-11 43.3	1.819	2.759	9.8	19.7	7 30	22 31.60	-13 12.1	1.699	2.640	10.4	20.3
8 9	22 22.23	-13 7.3	1.752	2.740	5.9	19.5	8 9	22 24.12	-14 22.3	1.662	2.650	6.2	20.1
8 19	22 14.66	-14 39.0	1.712	2.721	2.0	19.2	8 19	22 15.23	-15 35.6	1.650	2.659	2.2	19.9
8 29	22 6.42	-16 10.7	1.700	2.702	3.3	19.2	8 29	22 5.91	-16 44.6	1.667	2.668	3.6	20.0
9 8	21 58.47	-17 34.7	1.715	2.682	7.5	19.5	9 8	21 57.23	-17 42.7	1.710	2.676	7.7	20.3
9 18	21 51.77	-18 44.7	1.756	2.662	11.5	19.7	9 18	21 50.12	-18 25.7	1.780	2.684	11.5	20.5
9 28	21 47.10	-19 36.7	1.820	2.642	15.0	19.8	9 28	21 45.28	-18 51.7	1.871	2.691	14.7	20.7
430115	2013 <i>TG</i> ₁₀		8 23.6 305°02	0.5/24.1	18		397401	2006 <i>WF</i> ₈₂		8 23.6 323°08	0.4/24.0	16	
7 20	22 31.50	-5 52.3	1.379	2.254	16.8	20.9	7 20	22 31.65	-7 44.8	1.868	2.732	13.6	21.4
7 30	22 28.21	-6 40.7	1.300	2.241	12.8	20.6	7 30	22 27.65	-8 12.0	1.790	2.725	10.3	21.2
8 9	22 22.43	-7 49.9	1.241	2.228	8.1	20.3	8 9	22 21.75	-8 51.4	1.734	2.718	6.4	21.0
8 19	22 14.77	-9 14.8	1.206	2.215	2.9	19.9	8 19	22 14.50	-9 39.5	1.703	2.712	2.2	20.7
8 29	22 6.29	-10 47.1	1.195	2.202	2.8	19.9	8 29	22 6.74	-10 31.0	1.699	2.705	2.2	20.7
9 8	21 58.30	-12 16.4	1.210	2.190	8.2	20.2	9 8	21 59.41	-11 20.1	1.722	2.700	6.5	20.9
9 18	21 52.00	-13 33.7	1.248	2.178	13.2	20.4	9 18	21 53.37	-12 2.0	1.770	2.694	10.4	21.2
9 28	21 48.34	-14 32.8	1.306	2.166	17.6	20.7	9 28	21 49.33	-12 32.9	1.841	2.689	13.8	21.4
257803	2000 <i>EC</i> ₇₅		8 23.6 286°58	5.4/20.8	18		361070	2005 <i>YN</i> ₂₇₉		8 23.6 268°96			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
65561	2195 T_{-2}		8 23.6 321°38	0°9/24.2	18		428193	2006 UW_{121}		8 23.7 195°02	1°9/22.1	17	
7 20	22 32.11	- 6 44.7	1.177	2.063	18.4	19.2	7 20	22 37.47	-13 35.4	1.846	2.715	13.5	21.9
7 30	22 29.02	- 7 7.7	1.103	2.050	14.1	18.9	7 30	22 32.02	-14 21.7	1.773	2.713	10.0	21.7
8 9	22 23.12	- 7 50.6	1.049	2.036	9.0	18.6	8 9	22 24.46	-15 16.1	1.723	2.711	6.1	21.4
8 19	22 15.06	- 8 49.2	1.015	2.024	3.3	18.2	8 19	22 15.41	-16 12.9	1.700	2.708	2.3	21.2
8 29	22 6.07	- 9 55.7	1.005	2.012	3.0	18.1	8 29	22 5.82	-17 5.6	1.704	2.704	3.6	21.3
9 8	21 57.67	-11 0.4	1.018	2.000	8.9	18.4	9 8	21 56.76	-17 48.3	1.735	2.700	7.7	21.5
9 18	21 51.24	-11 54.6	1.052	1.990	14.3	18.7	9 18	21 49.19	-18 17.4	1.792	2.696	11.5	21.7
9 28	21 47.83	-12 32.2	1.106	1.980	19.0	19.0	9 28	21 43.84	-18 31.0	1.871	2.690	14.8	21.9
155579	1999 XG_{219}		8 23.6 326°08	0°6/23.1	18		323570	2004 TN_{114}		8 23.7 274°82	1°4/22.3	18	
7 20	22 31.17	-10 52.2	1.894	2.767	13.1	20.0	7 20	22 33.80	-14 11.0	2.328	3.194	11.2	21.1
7 30	22 27.32	-11 17.9	1.812	2.753	9.8	19.7	7 30	22 28.97	-14 35.3	2.241	3.179	8.3	20.8
8 9	22 21.58	-11 53.2	1.752	2.740	6.0	19.5	8 9	22 22.45	-15 4.9	2.177	3.164	5.1	20.6
8 19	22 14.46	-12 34.1	1.717	2.727	1.9	19.2	8 19	22 14.75	-15 36.1	2.141	3.149	1.9	20.4
8 29	22 6.80	-13 15.5	1.709	2.714	2.6	19.2	8 29	22 6.57	-16 4.7	2.133	3.134	2.9	20.4
9 8	21 59.53	-13 52.2	1.727	2.702	6.8	19.5	9 8	21 58.73	-16 26.9	2.153	3.119	6.3	20.6
9 18	21 53.53	-14 19.9	1.771	2.691	10.7	19.7	9 18	21 51.98	-16 39.8	2.199	3.104	9.6	20.8
9 28	21 49.52	-14 35.8	1.837	2.680	14.0	19.9	9 28	21 46.95	-16 42.0	2.269	3.089	12.5	21.0
203677	2002 LB_8		8 23.6 106°78	6°3/29.5	18		497555	2006 DQ_{103}		8 23.7 233°81	0°2/23.6	17	
7 20	22 33.55	+ 7 48.0	1.885	2.677	16.3	20.3	7 20	22 36.09	- 8 11.6	1.410	2.283	16.7	22.3
7 30	22 28.99	+ 8 3.1	1.811	2.684	13.5	20.1	7 30	22 31.56	- 8 52.7	1.338	2.279	12.6	22.1
8 9	22 22.53	+ 7 56.1	1.758	2.690	10.5	19.9	8 9	22 24.45	- 9 50.2	1.287	2.274	7.8	21.8
8 19	22 14.75	+ 7 26.8	1.727	2.696	7.7	19.8	8 19	22 15.47	-10 58.7	1.259	2.268	2.5	21.5
8 29	22 6.50	+ 6 37.4	1.721	2.703	6.3	19.7	8 29	22 5.74	-12 10.0	1.257	2.263	3.0	21.5
9 8	21 58.74	+ 5 33.2	1.742	2.709	7.4	19.8	9 8	21 56.63	-13 15.5	1.280	2.257	8.3	21.8
9 18	21 52.32	+ 4 20.9	1.788	2.715	10.1	20.0	9 18	21 49.32	-14 8.4	1.327	2.251	13.1	22.0
9 28	21 47.91	+ 3 7.8	1.858	2.721	13.0	20.2	9 28	21 44.73	-14 44.3	1.395	2.245	17.2	22.3
239783	2010 CJ_{117}		8 23.6 64°51	3°6/27.3	18		386346	2008 SL_{284}		8 23.7 161°59	4°5/27.6	17	
7 20	22 30.99	+ 2 52.6	1.741	2.569	16.0	20.2	7 20	22 34.28	+ 2 32.2	1.877	2.696	15.4	21.0
7 30	22 27.18	+ 2 14.0	1.671	2.576	12.7	20.0	7 30	22 29.56	+ 2 39.6	1.800	2.697	12.4	20.8
8 9	22 21.46	+ 1 12.7	1.622	2.584	9.0	19.8	8 9	22 22.92	+ 2 28.4	1.744	2.699	9.0	20.6
8 19	22 14.41	+ 0 8.6	1.597	2.591	5.3	19.6	8 19	22 14.91	+ 1 59.5	1.712	2.700	5.8	20.4
8 29	22 6.91	+ 1 43.9	1.598	2.599	3.7	19.5	8 29	22 6.40	+ 1 15.6	1.706	2.701	4.5	20.3
9 8	21 59.94	+ 3 25.0	1.626	2.607	6.4	19.7	9 8	21 58.36	+ 0 22.0	1.726	2.702	6.7	20.4
9 18	21 54.34	+ 5 3.4	1.680	2.614	10.1	20.0	9 18	21 51.65	+ 0 35.2	1.773	2.703	10.0	20.6
9 28	21 50.80	+ 6 31.9	1.758	2.622	13.6	20.2	9 28	21 46.98	+ 1 30.1	1.843	2.704	13.2	20.9
472391	2015 BU_{132}		8 23.6 96°54	1°6/22.4	17		253683	2003 UW_{228}		8 23.7 317°34	0°9/23.1	18	
7 20	22 37.56	-12 42.3	1.620	2.494	14.8	21.5	7 20	22 34.84	-11 43.5	1.200	2.093	17.6	20.4
7 30	22 32.09	-13 25.8	1.568	2.510	10.9	21.3	7 30	22 31.15	-11 56.7	1.123	2.074	13.3	20.1
8 9	22 24.43	-14 17.8	1.537	2.526	6.6	21.0	8 9	22 24.49	-12 22.2	1.066	2.057	8.2	19.8
8 19	22 15.34	-15 12.2	1.532	2.541	2.3	20.8	8 19	22 15.55	-12 55.1	1.030	2.040	2.6	19.4
8 29	22 5.90	-16 2.2	1.554	2.556	3.5	20.9	8 29	22 5.61	-13 28.2	1.017	2.023	3.7	19.4
9 8	21 57.24	-16 41.8	1.602	2.571	7.8	21.2	9 8	21 56.25	-13 53.9	1.028	2.007	9.5	19.7
9 18	21 50.32	-17 7.7	1.675	2.586	11.7	21.5	9 18	21 48.93	-14 6.8	1.061	1.992	14.9	20.0
9 28	21 45.79	-17 18.2	1.770	2.600	15.0	21.7	9 28	21 44.75	-14 3.8	1.112	1.978	19.5	20.2
126742	2002 CU_{304}		8 23.7 230°31	3°4/27.3	18		510723	2012 VN_{61}		8 23.7 293°09	9°2/15.2	18	
7 20	22 30.84	+ 2 0.6	2.316	3.130	13.0	20.2	7 20	22 38.05	-33 4.6	1.733	2.613	13.7	21.4
7 30	22 26.71	+ 1 46.4	2.230	3.127	10.4	20.0	7 30	22 32.91	-34 31.3	1.676	2.604	11.3	21.2
8 9	22 21.03	+ 1 16.1	2.167	3.123	7.4	19.8	8 9	22 25.21	-35 49.7	1.641	2.595	9.6	21.1
8 19	22 14.27	+ 0 31.2	2.129	3.119	4.6	19.6	8 19	22 15.69	-36 50.0	1.630	2.585	9.4	21.0
8 29	22 7.09	+ 0 25.2	2.118	3.116	3.4	19.5	8 29	22 5.54	-37 24.2	1.644	2.576	10.8	21.1
9 8	22 0.24	+ 1 28.4	2.135	3.112	5.5	19.7	9 8	21 56.13	-37 28.4	1.680	2.567	13.2	21.2
9 18	21 54.41	+ 2 33.1	2.179	3.108	8.4	19.8	9 18	21 48.60	-37 3.3	1.737	2.558	15.8	21.4
9 28	21 50.19	+ 3 34.1	2.248	3.104	11.3	20.0	9 28	21 43.81	-36 12.5	1.812	2.549	18.2	21.6
236950	2007 TF_{411}		8 23.7 9°44	0°4/23.9	18		28877	2000 KC_{41}		8 23.7 32°71	2°5/21.1	18	
7 20	22 34.31	- 8 43.8	1.631	2.500	15.0	19.9	7 20	22 30.48	-12 41.2	1.672	2.556	13.9	18.4
7 30	22 29.80	- 8 56.0	1.563	2.501	11.3	19.7	7 30	22 26.92	-14 10.4	1.614	2.562	10.2	18.2
8 9	22 23.13	- 9 19.8	1.516	2.502	7.0	19.4	8 9	22 21.36	-15 50.3	1.579	2.570	6.1	18.0
8 19	22 14.97	- 9 51.6	1.494	2.503	2.4	19.1	8 19	22 14.41	-17 33.1	1.569	2.577	2.7	17.8
8 29	22 6.31	-10 26.2	1.498	2.505	2.4	19.1	8 29	22 7.01	-19 9.6	1.587	2.585	4.4	18.0
9 8	21 58.25	-10 58.1	1.528	2.507	7.0	19.4	9 8	22 0.19	-20 31.7	1.631	2.593	8.3	18.2
9 18	21 51.76	-11 22.8	1.583	2.509	11.2	19.7	9 18	21 54.83	-21 34.3	1.699	2.602	12.1	18.5
9 28	21 47.57	-11 37.1	1.660	2.512	14.8	19.9	9 28	21 51.63	-22 15.2	1.789	2.611	15.3	18.7
495050	2011 BZ_{123}		8 23.7 268°59	1°6/21.7	17		478752	2012 UX_{96}		8 23.7 325°94	1°1/22.8	18	
7 20	22 31.26	-13 48.8	2.598	3.464	10.2	22.4	7 20	22 29.89	-10 8.5	1.357	2.247	16.1	20.6
7 30	22 26.98	-14 40.7	2.504	3.443	7.5	22.2	7 30	22 27.11	-10 56.1	1.278	2.228	12.1	20.3
8 9	22 21.21	-15 39.3	2.435	3.422	4.6	22.0	8 9	22 21.83	-11 59.9	1.219	2.210	7.4	20.0
8 19	22 14.34	-16 40.5	2.393	3.401	1.9	21.8	8 19	22 14.67	-13 14.0	1.182	2.192	2.4	19.6
8 29	22 7.00	-17 39.4	2.381	3.380	3.0	21.8	8 29	22 6.67	-14 29.8	1.171	2.176	3.6	19.7
9 8	21 59.89	-18 31.5	2.397	3.358	6.1	22.0	9 8	21 59.13	-15 37.9	1.183	2.160	8.9	19.9
9 18	21 53.68	-19 13.2	2.440	3.336	9.1	22.2	9 18	21 53.28	-16 30.8	1.218	2.145	13.8	20.2
9 28	21 48.97	-19 42.3	2.506	3.314	11.8	22.3	9 28	21 50.09	-17 3.9	1.273	2.131	18.1	20.4
223617	2004 JE_6		8 23.7 226°11	1°3/22.5	18		125072	2001 UG		8 23.7 188°34	3°3/20.5	17	

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8 23.7

8 23.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
313905	2004 <i>NB</i> ₂₉		8 23.7 358°47	2°0/21.6	18		35618	Tartu		8 23.7 301°50	8°1/15.4	18	
7 20	22 27.21	-10 10.3	1.601	2.486	14.3	19.6	7 20	22 36.13	-31 59.7	1.971	2.850	12.4	17.3
7 30	22 24.64	-11 48.8	1.534	2.483	10.6	19.4	7 30	22 31.34	-33 18.0	1.897	2.826	10.2	17.1
8 9	22 20.05	-13 42.8	1.490	2.481	6.3	19.1	8 9	22 24.24	-34 30.7	1.846	2.803	8.5	17.0
8 19	22 14.02	-15 44.2	1.471	2.480	2.3	18.9	8 19	22 15.43	-35 29.3	1.820	2.779	8.3	16.9
8 29	22 7.46	-17 42.6	1.479	2.480	4.1	19.0	8 29	22 5.92	-36 6.1	1.819	2.756	9.7	16.9
9 8	22 1.39	-19 28.0	1.514	2.481	8.4	19.3	9 8	21 56.89	-36 16.9	1.842	2.732	12.1	17.0
9 18	21 56.73	-20 53.4	1.572	2.482	12.4	19.5	9 18	21 49.42	-36 1.1	1.886	2.709	14.7	17.2
9 28	21 54.23	-21 54.9	1.652	2.484	15.8	19.7	9 28	21 44.34	-35 20.8	1.949	2.686	17.1	17.3
260188	2004 <i>RS</i> ₁₅₂		8 23.7 349°94	5°0/27.5	18		473303	2015 <i>RC</i> ₅₆		8 23.7 292°81	1°9/25.5	18	
7 20	22 32.65	+ 1 49.6	1.800	2.627	15.6	19.8	7 20	22 31.10	- 3 23.4	2.146	2.988	12.9	21.3
7 30	22 28.47	+ 2 23.5	1.721	2.622	12.6	19.6	7 30	22 27.09	- 3 40.8	2.056	2.975	10.0	21.1
8 9	22 22.31	+ 2 40.6	1.662	2.618	9.3	19.4	8 9	22 21.39	- 4 11.9	1.989	2.962	6.7	20.9
8 19	22 14.75	+ 2 40.4	1.627	2.614	6.2	19.2	8 19	22 14.47	- 4 54.5	1.946	2.950	3.2	20.6
8 29	22 6.63	+ 2 24.6	1.617	2.611	5.1	19.2	8 29	22 7.04	- 5 44.9	1.932	2.937	2.4	20.5
9 8	21 58.95	+ 1 57.1	1.633	2.608	7.1	19.3	9 8	21 59.92	- 6 38.0	1.945	2.924	5.7	20.7
9 18	21 52.62	+ 1 23.0	1.674	2.606	10.3	19.5	9 18	21 53.88	- 7 29.0	1.984	2.912	9.2	20.9
9 28	21 48.35	+ 0 47.9	1.738	2.605	13.6	19.7	9 28	21 49.58	- 8 13.2	2.047	2.899	12.4	21.1
354294	2002 <i>TL</i> ₆₀		8 23.7 335°50	2°7/21.2	17		46130	2001 <i>FQ</i> ₄₆		8 23.7 354°47	2°2/25.6	18	
7 20	22 21.70	-10 16.8	1.113	2.025	17.2	19.4	7 20	22 32.11	- 2 36.5	1.772	2.620	14.9	19.1
7 30	22 21.47	-11 47.0	1.023	1.986	12.9	19.0	7 30	22 28.07	- 3 0.2	1.698	2.620	11.6	18.8
8 9	22 18.67	-13 44.5	0.952	1.949	7.9	18.6	8 9	22 22.07	- 3 41.0	1.644	2.619	7.7	18.6
8 19	22 13.74	-16 1.7	0.903	1.912	3.1	18.2	8 19	22 14.69	- 4 35.9	1.616	2.619	3.7	18.4
8 29	22 7.67	-18 25.0	0.876	1.878	5.7	18.2	8 29	22 6.81	- 5 40.0	1.613	2.619	2.7	18.3
9 8	22 1.90	-20 37.5	0.871	1.846	11.6	18.4	9 8	21 59.40	- 6 46.4	1.638	2.618	6.4	18.5
9 18	21 57.92	-22 25.1	0.887	1.816	17.4	18.6	9 18	21 53.36	- 7 48.9	1.687	2.618	10.3	18.8
9 28	21 57.00	-23 38.5	0.919	1.788	22.4	18.9	9 28	21 49.38	- 8 42.1	1.760	2.619	13.8	19.0
88988	2001 <i>TO</i> ₇₁		8 23.7 81°99	0°1/23.7	18		441982	2010 <i>NJ</i> ₄₂		8 23.7 289°11	0°2/23.5	17	
7 20	22 32.57	- 8 32.6	2.023	2.884	12.9	19.6	7 20	22 36.80	-11 23.0	2.164	3.021	12.3	21.3
7 30	22 28.16	- 9 5.3	1.952	2.885	9.6	19.4	7 30	22 31.43	-11 22.8	2.063	2.996	9.3	21.1
8 9	22 21.99	- 9 48.6	1.903	2.887	5.9	19.2	8 9	22 24.13	-11 28.9	1.986	2.970	5.8	20.8
8 19	22 14.62	-10 38.7	1.880	2.889	1.9	18.9	8 19	22 15.38	-11 38.8	1.934	2.944	1.9	20.5
8 29	22 6.83	-11 30.6	1.885	2.891	2.2	18.9	8 29	22 5.98	-11 49.0	1.912	2.917	2.2	20.5
9 8	21 59.50	-12 18.9	1.917	2.893	6.1	19.2	9 8	21 56.84	-11 56.1	1.917	2.891	6.3	20.7
9 18	21 53.41	-12 59.2	1.976	2.894	9.8	19.4	9 18	21 48.87	-11 57.3	1.949	2.864	10.1	20.9
9 28	21 49.19	-13 28.6	2.057	2.896	12.9	19.6	9 28	21 42.81	-11 50.5	2.005	2.837	13.4	21.1
288003	2003 <i>UJ</i> ₁₉₅		8 23.7 327°04	5°4/26.9	17		279847	2000 <i>XV</i> ₁₆		8 23.7 326°05	0°7/24.0	18	
7 20	22 30.98	+ 0 14.6	1.155	2.022	20.0	20.2	7 20	22 32.72	- 9 45.6	1.217	2.108	17.6	19.1
7 30	22 28.27	+ 0 39.0	1.077	2.005	16.1	19.9	7 30	22 29.70	- 9 33.1	1.126	2.075	13.5	18.7
8 9	22 22.75	+ 0 39.2	1.016	1.988	11.6	19.6	8 9	22 23.76	- 9 32.7	1.053	2.043	8.7	18.4
8 19	22 15.02	+ 0 14.5	0.976	1.973	7.2	19.3	8 19	22 15.42	- 9 41.7	1.002	2.011	3.1	17.9
8 29	22 6.28	- 0 32.1	0.957	1.958	5.5	19.2	8 29	22 5.84	- 9 55.5	0.974	1.981	3.1	17.8
9 8	21 58.03	- 1 32.9	0.961	1.945	9.0	19.4	9 8	21 56.57	-10 7.9	0.968	1.952	9.1	18.1
9 18	21 51.71	- 2 38.4	0.985	1.932	14.0	19.6	9 18	21 49.14	-10 13.5	0.984	1.924	14.8	18.3
9 28	21 48.41	- 3 38.7	1.029	1.921	18.7	19.8	9 28	21 44.82	-10 7.8	1.018	1.898	19.9	18.5
476321	2007 <i>YX</i> ₃		8 23.7 335°73	7°4/17.5	18		486994	2014 <i>NU</i> ₅₂		8 23.7 253°29	0°2/23.9	17	
7 20	22 32.71	-25 36.6	1.466	2.366	14.5	20.4	7 20	22 36.21	-10 30.4	2.547	3.396	10.9	21.2
7 30	22 29.15	-26 58.1	1.403	2.353	11.3	20.2	7 30	22 30.57	-10 24.6	2.459	3.386	8.2	21.0
8 9	22 23.02	-28 18.5	1.362	2.341	8.4	20.0	8 9	22 23.37	-10 24.5	2.395	3.377	5.1	20.8
8 19	22 15.03	-29 27.9	1.344	2.330	7.5	19.9	8 19	22 15.08	-10 27.7	2.359	3.367	1.7	20.5
8 29	22 6.34	-30 16.7	1.351	2.320	9.2	20.0	8 29	22 6.39	-10 31.9	2.352	3.358	1.8	20.5
9 8	21 58.33	-30 38.8	1.380	2.310	12.5	20.2	9 8	21 58.04	-10 34.4	2.374	3.348	5.2	20.7
9 18	21 52.17	-30 32.7	1.430	2.301	15.9	20.4	9 18	21 50.74	-10 33.1	2.424	3.338	8.4	20.9
9 28	21 48.74	-30 0.5	1.498	2.293	18.9	20.5	9 28	21 45.05	-10 26.3	2.499	3.328	11.2	21.1
290282	2005 <i>SA</i> ₁₅₆		8 23.7 356°31	3°7/20.8	18		485635	2011 <i>UP</i> ₄₀₄		8 23.7 11°31	12°3/ 7.3	17	
7 20	22 35.63	-20 5.8	1.846	2.729	12.9	20.2	7 20	22 17.71	+20 51.6	1.015	1.812	26.9	19.2
7 30	22 30.63	-20 37.1	1.781	2.727	9.6	20.0	7 30	22 18.30	+20 50.8	0.966	1.821	23.8	19.0
8 9	22 23.58	-21 9.6	1.740	2.726	6.2	19.8	8 9	22 16.46	+19 57.1	0.929	1.833	20.3	18.9
8 19	22 15.14	-21 37.7	1.723	2.725	3.8	19.6	8 19	22 12.93	+18 7.9	0.906	1.848	16.5	18.7
8 29	22 6.27	-21 56.0	1.733	2.724	5.1	19.7	8 29	22 8.87	+15 27.8	0.902	1.865	13.4	18.6
9 8	21 58.02	-22 0.6	1.769	2.724	8.4	19.9	9 8	22 5.57	+12 11.4	0.918	1.885	12.3	18.6
9 18	21 51.29	-21 50.1	1.830	2.724	11.8	20.1	9 18	22 4.08	+ 8 39.4	0.956	1.907	13.7	18.8
9 28	21 46.78	-21 24.7	1.913	2.725	14.8	20.3	9 28	22 5.12	+ 5 13.4	1.015	1.932	16.6	19.1
323321	2003 <i>UZ</i> ₁₃₁		8 23.7 346°19	0°5/23.9	18		295330	2008 <i>HM</i> ₂		8 23.7 39°24	3°3/20.7	18	
7 20	22 32.37	-10 32.3	0.968	1.874	19.7	19.7	7 20	22 33.55	-18 26.7	1.877	2.760	12.7	20.1
7 30	22 29.64	-10 14.2	0.905	1.862	15.0	19.4	7 30	22 28.97	-19 13.1	1.823	2.770	9.3	19.9
8 9	22 23.69	-10 9.2	0.858	1.851	9.4	19.0	8 9	22 22.50	-20 2.3	1.793	2.781	5.9	19.8
8 19	22 15.33	-10 13.8	0.832	1.842	3.2	18.6	8 19	22 14.80	-20 48.3	1.789	2.792	3.4	19.6
8 29	22 6.02	-10 22.3	0.827	1.834	3.4	18.6	8 29	22 6.77	-21 25.3	1.811	2.803	4.8	19.7
9 8	21 57.54	-10 27.9	0.842	1.828	9.7	19.0	9 8	21 59.38	-21 49.0	1.860	2.815	8.0	20.0
9 18	21 51.43	-10 25.7	0.878	1.824	15.4	19.3	9 18	21 53.44	-21 57.4	1.933	2.827	11.2	20.2
9 28	21 48.76	-10 11.9	0.931	1.821	20.4	19.6	9 28	21 49.56	-21 50.2	2.028	2.840	14.1	20.4
513810	2013 <i>CA</i> ₂₂₅		8 23.7 78°62	2°8/27.1	18		284350	2006 <i>RC</i> ₉₈ </					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
405415	2004 <i>RN</i> ₁₆₂		8 23.7 262°55	1°5/22.4	18		280554	2004 <i>RX</i> ₂₆₀		8 23.7 296°57	1°5/24.9	18	
7 20	22 37.27	-15 39.6	2.507	3.366	10.7	21.0	7 20	22 32.76	-4 35.1	1.632	2.491	15.5	21.3
7 30	22 31.47	-15 48.7	2.414	3.348	8.0	20.8	7 30	22 28.80	-5 3.5	1.554	2.484	11.9	21.1
8 9	22 23.99	-16 0.9	2.345	3.330	4.9	20.6	8 9	22 22.67	-5 49.1	1.496	2.476	7.7	20.8
8 19	22 15.31	-16 12.8	2.304	3.311	1.9	20.3	8 19	22 14.96	-6 48.5	1.463	2.469	3.2	20.5
8 29	22 6.15	-16 21.2	2.292	3.293	2.8	20.4	8 29	22 6.62	-7 55.6	1.456	2.462	2.5	20.4
9 8	21 57.31	-16 23.1	2.309	3.273	6.1	20.6	9 8	21 58.75	-9 3.3	1.474	2.455	7.0	20.7
9 18	21 49.55	-16 16.6	2.353	3.254	9.2	20.7	9 18	21 52.35	-10 4.5	1.518	2.448	11.3	20.9
9 28	21 43.49	-16 1.0	2.422	3.234	12.0	20.9	9 28	21 48.22	-10 53.9	1.584	2.442	15.1	21.2
483278	2015 <i>TZ</i> ₂₄₆		8 23.7 301°58	3°8/20.4	18		212605	2006 <i>SO</i> ₂₈₁		8 23.7 88°83	5°5/29.5	18	
7 20	22 35.55	-21 15.6	2.137	3.014	11.6	21.3	7 20	22 31.57	+7 29.2	2.046	2.838	15.2	19.9
7 30	22 30.40	-21 48.6	2.064	3.007	8.7	21.1	7 30	22 27.43	+7 25.4	1.971	2.845	12.5	19.7
8 9	22 23.39	-22 21.9	2.016	2.999	5.7	20.9	8 9	22 21.58	+7 0.3	1.917	2.852	9.6	19.5
8 19	22 15.11	-22 50.5	1.993	2.992	3.8	20.7	8 19	22 14.56	+6 14.6	1.885	2.858	6.9	19.4
8 29	22 6.40	-23 9.3	1.998	2.985	5.0	20.8	8 29	22 7.13	+5 11.2	1.880	2.865	5.5	19.3
9 8	21 58.17	-23 14.9	2.030	2.978	7.9	21.0	9 8	22 0.14	+3 55.5	1.901	2.872	6.6	19.4
9 18	21 51.27	-23 6.0	2.087	2.971	11.0	21.1	9 18	21 54.34	+2 34.2	1.949	2.879	9.2	19.6
9 28	21 46.34	-22 42.6	2.166	2.964	13.7	21.3	9 28	21 50.35	+1 14.2	2.022	2.885	12.1	19.8
262503	2006 <i>UR</i> ₂₅₆		8 23.7 289°64	0°3/23.9	18		326783	2003 <i>SA</i> ₂₄₂		8 23.7 273°20	1°7/24.9	17	
7 20	22 32.45	-8 4.6	1.965	2.826	13.2	21.4	7 20	22 35.74	-5 12.4	1.483	2.345	16.6	21.5
7 30	22 28.21	-8 34.2	1.886	2.819	9.9	21.2	7 30	22 31.34	-5 25.5	1.400	2.331	12.8	21.2
8 9	22 22.12	-9 15.5	1.829	2.813	6.2	20.9	8 9	22 24.42	-5 55.8	1.336	2.317	8.4	20.9
8 19	22 14.73	-10 4.7	1.797	2.806	2.1	20.7	8 19	22 15.59	-6 40.5	1.296	2.302	3.6	20.6
8 29	22 6.84	-10 56.7	1.793	2.799	2.2	20.7	8 29	22 5.91	-7 34.1	1.281	2.288	2.8	20.5
9 8	21 59.35	-11 46.0	1.816	2.793	6.3	20.9	9 8	21 56.67	-8 29.2	1.292	2.273	7.7	20.8
9 18	21 53.11	-12 28.0	1.865	2.786	10.1	21.1	9 18	21 49.09	-9 19.0	1.327	2.258	12.5	21.0
9 28	21 48.79	-12 59.0	1.937	2.780	13.4	21.3	9 28	21 44.12	-9 57.8	1.383	2.243	16.8	21.3
289674	2005 <i>GZ</i> ₁₄₄		8 23.7 28°82	1°3/22.7	18		298158	2002 <i>TU</i> ₅₀		8 23.7 301°29	9°4/14.5	18	
7 20	22 35.27	-13 3.2	1.781	2.655	13.7	20.3	7 20	22 37.37	-33 31.5	1.773	2.653	13.5	19.3
7 30	22 30.39	-13 27.0	1.715	2.657	10.2	20.0	7 30	22 32.60	-35 0.6	1.702	2.629	11.2	19.1
8 9	22 23.47	-13 58.2	1.671	2.659	6.2	19.8	8 9	22 25.19	-36 22.6	1.654	2.605	9.7	19.0
8 19	22 15.15	-14 32.0	1.653	2.662	2.1	19.6	8 19	22 15.83	-37 27.5	1.629	2.581	9.6	18.9
8 29	22 6.40	-15 3.3	1.661	2.664	3.1	19.6	8 29	22 5.65	-38 6.6	1.629	2.558	11.1	19.0
9 8	21 58.23	-15 27.1	1.696	2.667	7.2	19.9	9 8	21 56.02	-38 15.2	1.651	2.534	13.6	19.1
9 18	21 51.57	-15 40.3	1.756	2.670	11.1	20.1	9 18	21 48.18	-37 52.8	1.693	2.511	16.3	19.2
9 28	21 47.09	-15 41.2	1.838	2.673	14.3	20.4	9 28	21 43.08	-37 2.9	1.754	2.488	18.8	19.4
510305	2011 <i>QA</i> ₃₄		8 23.7 13°22	9°3/30.3	18		398049	2009 <i>FL</i> ₆₅		8 23.7 323°85	1°9/25.5	18	
7 20	22 32.96	+8 50.8	1.408	2.219	19.9	19.9	7 20	22 31.57	-3 7.3	1.878	2.726	14.2	21.1
7 30	22 29.14	+10 2.2	1.345	2.223	16.9	19.7	7 30	22 27.61	-3 33.7	1.800	2.722	11.0	20.8
8 9	22 22.94	+10 48.0	1.299	2.228	13.7	19.5	8 9	22 21.79	-4 16.3	1.744	2.720	7.3	20.6
8 19	22 15.03	+11 4.7	1.274	2.235	10.8	19.4	8 19	22 14.66	-5 11.9	1.713	2.717	3.4	20.4
8 29	22 6.51	+10 52.3	1.270	2.242	9.3	19.3	8 29	22 7.02	-6 15.7	1.708	2.714	2.4	20.3
9 8	21 58.63	+10 15.2	1.290	2.251	10.2	19.4	9 8	21 59.82	-7 21.3	1.731	2.712	6.1	20.5
9 18	21 52.47	+9 20.9	1.332	2.260	12.7	19.5	9 18	21 53.88	-8 22.8	1.779	2.709	10.0	20.8
9 28	21 48.86	+8 18.8	1.394	2.271	15.7	19.8	9 28	21 49.91	-9 15.1	1.851	2.707	13.4	21.0
176624	2002 <i>JR</i> ₃₉		8 23.7 66°29	3°5/21.1	17		338011	2002 <i>EE</i> ₁₄₃		8 23.7 102°26	1°6/22.4	17	
7 20	22 37.39	-14 54.3	1.253	2.145	17.1	19.8	7 20	22 36.79	-13 25.2	1.796	2.667	13.7	20.9
7 30	22 32.42	-16 12.3	1.216	2.168	12.5	19.5	7 30	22 31.44	-14 0.6	1.738	2.679	10.1	20.7
8 9	22 24.84	-17 38.3	1.199	2.190	7.6	19.3	8 9	22 24.06	-14 43.2	1.702	2.690	6.1	20.5
8 19	22 15.59	-19 2.4	1.206	2.213	3.7	19.2	8 19	22 15.36	-15 27.5	1.692	2.701	2.2	20.3
8 29	22 6.01	-20 14.3	1.238	2.235	5.6	19.4	8 29	22 6.28	-16 7.8	1.710	2.712	3.3	20.4
9 8	21 57.52	-21 6.4	1.295	2.258	9.9	19.7	9 8	21 57.88	-16 39.1	1.754	2.722	7.3	20.6
9 18	21 51.18	-21 35.8	1.374	2.281	14.1	20.0	9 18	21 51.02	-16 58.3	1.824	2.733	11.0	20.9
9 28	21 47.69	-21 42.7	1.473	2.303	17.5	20.3	9 28	21 46.36	-17 3.9	1.916	2.743	14.2	21.1
512117	2015 <i>OQ</i> ₈₄		8 23.7 45°64	2°9/26.2	18		300759	2007 <i>VC</i> ₂₃₄		8 23.7 46°75	1°6/25.0	18	
7 20	22 33.72	-2 5.5	2.004	2.840	13.9	20.8	7 20	22 33.87	-5 13.1	1.855	2.706	14.2	21.4
7 30	22 29.02	-1 58.4	1.932	2.844	10.9	20.6	7 30	22 29.29	-5 24.2	1.783	2.709	10.9	21.0
8 9	22 22.54	-2 5.1	1.881	2.849	7.5	20.4	8 9	22 22.79	-5 48.5	1.733	2.711	7.1	21.0
8 19	22 14.86	-2 24.2	1.855	2.854	4.1	20.2	8 19	22 14.97	-6 23.4	1.708	2.714	3.1	20.7
8 29	22 6.76	-2 52.6	1.856	2.858	3.1	20.1	8 29	22 6.70	-7 4.4	1.710	2.717	2.3	20.7
9 8	21 59.13	-3 26.0	1.884	2.863	5.9	20.3	9 8	21 58.93	-7 46.4	1.740	2.719	6.2	21.0
9 18	21 52.77	-3 59.9	1.939	2.868	9.3	20.5	9 18	21 52.53	-8 24.4	1.794	2.722	10.0	21.2
9 28	21 48.29	-4 30.0	2.017	2.873	12.4	20.8	9 28	21 48.16	-8 54.4	1.872	2.725	13.4	21.4
94873	2001 <i>XZ</i> ₂₃₂		8 23.7 108°38	0°9/22.9	18		346591	2008 <i>VW</i> ₇₉		8 23.7 329°97	9°3/17.5	18	
7 20	22 36.70	-11 27.5	1.701	2.571	14.4	20.1	7 20	22 38.26	-30 19.2	1.341	2.237	15.9	19.3
7 30	22 31.50	-11 57.4	1.639	2.579	10.7	19.9	7 30	22 33.69	-31 18.3	1.277	2.220	12.9	19.0
8 9	22 24.16	-12 36.7	1.599	2.586	6.5	19.7	8 9	22 26.02	-32 9.7	1.233	2.203	10.2	18.8
8 19	22 15.39	-13 20.2	1.584	2.593	2.1	19.4	8 19	22 16.12	-32 42.9	1.211	2.187	9.4	18.7
8 29	22 6.19	-14 2.2	1.595	2.600	2.9	19.5	8 29	22 5.40	-32 48.4	1.212	2.173	11.0	18.8
9 8	21 57.64	-14 37.1	1.634	2.607	7.3	19.8	9 8	21 55.57	-32 22.1	1.234	2.159	14.1	18.9
9 18	21 50.69	-15 1.0	1.698	2.614	11.3	20.0	9 18	21 48.03	-31 25.2	1.277	2.146	17.5	19.1
9 28	21 46.03	-15 11.8	1.784	2.620	14.7	20.3	9 28	21 43.75	-30 2.6	1.337	2.134	20.5	19.3
292878	2006 <i>VY</i> ₁₉		8 23.7 238°29	5°0/19.9	18		87263	2000 <i>OB</i> ₅₇		8 23.7 277°83	1°0/22.9	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
348323	2005 <i>CN</i> ₂₈		8 23.7 313 ^o .75	1 ^o .4/22.8	18		85633	1998 <i>KR</i> ₆₅		8 23.7 273 ^o .84	0 ^o .0/23.4	07	C
7 20	22 34.71	-12 58.9	1.508	2.391	15.2	20.5	7 20	22 13.53	-11 57.8	42.940	43.791	0.7	23.2
7 30	22 30.60	-13 16.7	1.423	2.369	11.5	20.2	7 30	22 12.91	-12 1.4	42.860	43.790	0.5	23.2
8 9	22 23.98	-13 43.7	1.358	2.348	7.1	19.9	8 9	22 12.22	-12 5.3	42.805	43.789	0.3	23.1
8 19	22 15.46	-14 15.2	1.318	2.327	2.4	19.6	8 19	22 11.50	-12 9.4	42.779	43.789	0.1	23.1
8 29	22 6.09	-14 45.2	1.302	2.307	3.5	19.6	8 29	22 10.76	-12 13.5	42.783	43.788	0.1	23.1
9 8	21 57.16	-15 7.4	1.312	2.287	8.5	19.9	9 8	22 10.04	-12 17.5	42.815	43.787	0.4	23.1
9 18	21 49.88	-15 17.6	1.345	2.267	13.1	20.1	9 18	22 9.35	-12 21.2	42.876	43.786	0.6	23.2
9 28	21 45.19	-15 13.4	1.399	2.248	17.2	20.3	9 28	22 8.73	-12 24.5	42.964	43.786	0.8	23.2
401551	2013 <i>ES</i> ₁₂₅		8 23.7 41 ^o .76	3 ^o .0/21.0	18		145337	2005 <i>MG</i> ₁		8 23.7 183 ^o .41	0 ^o .4/24.1	18	
7 20	22 33.38	-17 43.2	1.967	2.848	12.3	20.6	7 20	22 33.15	-7 56.9	2.104	2.960	12.6	20.7
7 30	22 28.78	-18 26.1	1.913	2.859	9.1	20.4	7 30	22 28.58	-8 19.5	2.029	2.960	9.5	20.5
8 9	22 22.38	-19 12.2	1.882	2.870	5.6	20.2	8 9	22 22.31	-8 52.5	1.977	2.960	5.9	20.3
8 19	22 14.82	-19 55.9	1.877	2.881	3.1	20.1	8 19	22 14.85	-9 32.6	1.951	2.960	2.1	20.1
8 29	22 6.94	-20 31.8	1.899	2.893	4.3	20.2	8 29	22 6.97	-10 15.3	1.953	2.960	2.0	20.0
9 8	21 59.66	-20 55.8	1.947	2.905	7.5	20.4	9 8	21 59.53	-10 55.9	1.983	2.960	5.8	20.3
9 18	21 53.75	-21 5.7	2.021	2.917	10.7	20.6	9 18	21 53.27	-11 30.4	2.039	2.959	9.4	20.5
9 28	21 49.81	-21 1.1	2.117	2.930	13.5	20.8	9 28	21 48.83	-11 55.7	2.118	2.959	12.5	20.7
395060	2009 <i>FR</i> ₁₁		8 23.7 282 ^o .06	1 ^o .6/25.2	18		170789	2004 <i>DD</i> ₂		8 23.7 201 ^o .71	3 ^o .3/27.3	18	
7 20	22 32.54	-4 13.7	1.908	2.758	14.0	21.5	7 20	22 31.94	+2 5.6	2.254	3.068	13.3	20.8
7 30	22 28.34	-4 35.3	1.827	2.751	10.8	21.3	7 30	22 27.63	+1 41.8	2.169	3.065	10.6	20.6
8 9	22 22.26	-5 11.6	1.768	2.745	7.0	21.1	8 9	22 21.71	+1 1.0	2.105	3.062	7.6	20.4
8 19	22 14.83	-5 59.8	1.734	2.739	3.1	20.8	8 19	22 14.67	+0 4.7	2.067	3.059	4.5	20.2
8 29	22 6.88	-6 55.2	1.727	2.733	2.3	20.7	8 29	22 7.18	-1 3.3	2.056	3.056	3.3	20.1
9 8	21 59.33	-7 52.1	1.747	2.727	6.2	21.0	9 8	22 0.03	-2 17.6	2.074	3.052	5.5	20.3
9 18	21 53.05	-8 44.7	1.793	2.721	10.0	21.2	9 18	21 53.93	-3 32.4	2.119	3.048	8.7	20.4
9 28	21 48.73	-9 28.6	1.862	2.715	13.4	21.4	9 28	21 49.50	-4 42.2	2.190	3.044	11.6	20.6
391607	2007 <i>UP</i> ₁₂₆		8 23.7 176 ^o .41	2 ^o .9/26.6	18		5371	1987 <i>VG</i> ₁		8 23.7 357 ^o .33	4 ^o .9/28.2	18	
7 20	22 33.59	-0 28.6	2.211	3.035	13.2	21.0	7 20	22 31.82	+3 48.6	2.054	2.864	14.5	17.1
7 30	22 28.83	-0 35.2	2.131	3.036	10.4	20.8	7 30	22 27.67	+4 9.2	1.974	2.863	11.8	16.9
8 9	22 22.41	-0 56.3	2.074	3.037	7.2	20.6	8 9	22 21.80	+4 12.7	1.915	2.862	8.9	16.7
8 19	22 14.86	-1 30.3	2.041	3.038	4.1	20.4	8 19	22 14.71	+3 59.1	1.880	2.861	6.1	16.5
8 29	22 6.87	-2 14.0	2.037	3.038	3.1	20.4	8 29	22 7.16	+3 30.3	1.871	2.861	4.9	16.5
9 8	21 59.28	-3 2.9	2.060	3.038	5.6	20.5	9 8	22 0.00	+2 50.3	1.888	2.861	6.5	16.6
9 18	21 52.81	-3 52.1	2.111	3.038	8.8	20.7	9 18	21 54.00	+2 4.1	1.932	2.861	9.3	16.7
9 28	21 48.08	-4 37.2	2.186	3.037	11.8	20.9	9 28	21 49.81	+1 17.2	1.999	2.862	12.2	16.9
13356	1998 <i>TX</i> ₁₇		8 23.7 181 ^o .07	1 ^o .3/25.3	18		509878	2009 <i>BQ</i> ₄₂		8 23.7 182 ^o .15	0 ^o .7/22.9	18	
7 20	22 30.50	-3 57.6	2.479	3.317	11.5	18.5	7 20	22 34.38	-10 55.5	2.352	3.208	11.4	23.0
7 30	22 26.38	-4 27.8	2.399	3.317	8.8	18.3	7 30	22 29.36	-11 33.9	2.276	3.209	8.5	22.8
8 9	22 20.84	-5 9.8	2.343	3.317	5.8	18.1	8 9	22 22.72	-12 20.1	2.224	3.209	5.2	22.6
8 19	22 14.33	-6 1.0	2.313	3.317	2.6	17.9	8 19	22 14.99	-13 10.2	2.199	3.209	1.6	22.4
8 29	22 7.47	-6 57.6	2.311	3.317	1.9	17.9	8 29	22 6.86	-13 59.7	2.204	3.208	2.3	22.4
9 8	22 0.93	-7 54.9	2.338	3.317	4.9	18.1	9 8	21 59.13	-14 43.9	2.237	3.207	5.8	22.6
9 18	21 55.35	-8 48.7	2.393	3.317	8.1	18.3	9 18	21 52.50	-15 19.4	2.297	3.205	9.1	22.8
9 28	21 51.27	-9 35.1	2.472	3.316	10.8	18.4	9 28	21 47.56	-15 43.9	2.381	3.203	11.9	23.0
194131	2001 <i>SE</i> ₂₉₉		8 23.7 294 ^o .02	1 ^o .6/25.5	18		153136	2000 <i>SW</i> ₁₈₅		8 23.7 59 ^o .90	0 ^o .2/23.6	18	
7 20	22 29.71	-3 42.2	2.534	3.371	11.3	21.0	7 20	22 35.77	-9 17.5	1.492	2.365	15.9	19.5
7 30	22 25.82	-4 3.3	2.445	3.362	8.7	20.8	7 30	22 30.98	-9 47.4	1.439	2.380	11.8	19.3
8 9	22 20.52	-4 35.9	2.380	3.353	5.8	20.6	8 9	22 23.93	-10 29.6	1.408	2.395	7.2	19.1
8 19	22 14.24	-5 17.9	2.340	3.344	2.7	20.4	8 19	22 15.40	-11 18.9	1.401	2.410	2.3	18.8
8 29	22 7.57	-6 6.1	2.329	3.335	2.0	20.3	8 29	22 6.48	-12 8.6	1.419	2.425	2.7	18.9
9 8	22 1.17	-6 56.1	2.347	3.326	4.9	20.5	9 8	21 58.36	-12 52.1	1.464	2.441	7.4	19.2
9 18	21 55.67	-7 43.9	2.391	3.317	8.0	20.7	9 18	21 52.00	-13 24.7	1.532	2.456	11.7	19.5
9 28	21 51.62	-8 25.8	2.461	3.308	10.8	20.8	9 28	21 48.09	-13 43.8	1.623	2.472	15.3	19.8
274976	2009 <i>SR</i> ₃₅₅		8 23.7 305 ^o .93	0 ^o .8/22.3	17		148468	2001 <i>CJ</i> ₁₀		8 23.7 139 ^o .95	1 ^o .1/24.8	18	
7 20	22 26.34	-13 59.9	4.219	5.078	6.7	20.7	7 20	22 35.57	-6 45.0	2.702	3.536	10.8	20.0
7 30	22 22.79	-14 23.8	4.139	5.074	4.9	20.5	7 30	22 29.95	-6 42.3	2.628	3.545	8.2	19.8
8 9	22 18.43	-14 50.5	4.085	5.071	3.0	20.4	8 9	22 22.95	-6 47.3	2.578	3.553	5.2	19.6
8 19	22 13.52	-15 18.0	4.059	5.067	1.1	20.2	8 19	22 15.04	-6 58.1	2.556	3.561	2.2	19.4
8 29	22 8.42	-15 44.3	4.062	5.064	1.7	20.3	8 29	22 6.86	-7 12.3	2.563	3.569	1.8	19.4
9 8	22 3.51	-16 7.2	4.096	5.060	3.7	20.4	9 8	21 59.07	-7 27.1	2.600	3.576	4.7	19.6
9 18	21 59.15	-16 25.2	4.157	5.057	5.6	20.6	9 18	21 52.27	-7 40.1	2.666	3.584	7.6	19.8
9 28	21 55.63	-16 37.1	4.244	5.054	7.3	20.7	9 28	21 46.97	-7 48.9	2.756	3.590	10.1	20.0
58317	1994 <i>PB</i> ₃₃		8 23.7 10 ^o .15	2 ^o .5/25.3	17		306738	2000 <i>XE</i> ₃		8 23.7 299 ^o .05	5 ^o .9/27.3	18	
7 20	22 32.13	-4 1.3	1.034	1.921	20.3	18.9	7 20	22 36.50	+2 2.0	1.636	2.463	16.9	20.0
7 30	22 29.16	-4 11.7	0.978	1.921	15.7	18.6	7 30	22 31.83	+2 50.6	1.542	2.442	13.9	19.8
8 9	22 23.25	-4 45.8	0.939	1.923	10.3	18.3	8 9	22 24.75	+3 22.5	1.467	2.421	10.4	19.5
8 19	22 15.24	-5 39.8	0.920	1.926	4.7	18.0	8 19	22 15.79	+3 35.9	1.415	2.401	7.2	19.3
8 29	22 6.51	-6 45.6	0.923	1.930	3.4	18.0	8 29	22 5.91	+3 30.9	1.388	2.380	6.0	19.2
9 8	21 58.64	-7 53.0	0.949	1.935	8.8	18.3	9 8	21 56.30	+3 10.8	1.387	2.360	8.3	19.2
9 18	21 52.98	-8 52.4	0.996	1.941	14.1	18.6	9 18	21 48.15	+2 40.7	1.409	2.340	12.0	19.4
9 28	21 50.45	-9 36.7	1.061	1.947	18.7	18.9	9 28	21 42.42	+2 7.2	1.454	2.320	15.8	19.6
126570													

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
412222	2013 <i>GE</i> ₁₂₅		8 23.7 114°58	0°7/22.9	18		5904	Württemberg		8 23.7 246°49	0°5/24.2	18	
7 20	22 31.25	-10 21.5	2.512	3.370	10.7	21.7	7 20	22 34.28	-8 7.0	2.173	3.025	12.4	18.1
7 30	22 26.90	-11 14.1	2.446	3.380	7.9	21.5	7 30	22 29.48	-8 24.4	2.088	3.016	9.4	17.9
8 9	22 21.16	-12 14.4	2.405	3.390	4.8	21.4	8 9	22 22.92	-8 51.7	2.025	3.007	5.9	17.7
8 19	22 14.48	-13 18.6	2.391	3.400	1.5	21.1	8 19	22 15.13	-9 26.0	1.989	2.998	2.1	17.4
8 29	22 7.51	-14 21.7	2.406	3.410	2.2	21.2	8 29	22 6.83	-10 3.2	1.982	2.988	2.0	17.4
9 8	22 0.93	-15 19.1	2.451	3.420	5.4	21.5	9 8	21 58.90	-10 38.9	2.002	2.978	5.8	17.6
9 18	21 55.34	-16 7.2	2.522	3.429	8.4	21.7	9 18	21 52.11	-11 9.1	2.048	2.968	9.4	17.8
9 28	21 51.25	-16 43.8	2.618	3.438	11.0	21.9	9 28	21 47.13	-11 30.9	2.119	2.958	12.6	18.0
144169	2004 <i>BX</i> ₁₀₇		8 23.7 104°05	3°2/21.2	18		184807	2005 <i>TK</i> ₁₂₂		8 23.7 186°22	0°5/23.3	18	
7 20	22 38.39	-16 25.6	1.579	2.460	14.8	20.1	7 20	22 33.28	-10 38.3	2.399	3.256	11.2	21.8
7 30	22 32.91	-17 20.7	1.527	2.473	10.9	19.9	7 30	22 28.52	-11 7.6	2.323	3.256	8.3	21.6
8 9	22 25.12	-18 21.3	1.497	2.486	6.7	19.7	8 9	22 22.22	-11 44.5	2.271	3.256	5.1	21.4
8 19	22 15.81	-19 20.1	1.492	2.498	3.4	19.5	8 19	22 14.87	-12 25.4	2.246	3.255	1.6	21.1
8 29	22 6.08	-20 9.4	1.514	2.510	4.9	19.6	8 29	22 7.15	-13 6.2	2.249	3.254	2.1	21.2
9 8	21 57.17	-20 43.8	1.562	2.522	8.8	19.9	9 8	21 59.80	-13 42.8	2.281	3.253	5.6	21.4
9 18	21 50.06	-21 0.3	1.633	2.533	12.6	20.1	9 18	21 53.52	-14 12.0	2.340	3.252	8.8	21.6
9 28	21 45.47	-20 59.0	1.726	2.544	15.9	20.4	9 28	21 48.86	-14 31.5	2.423	3.250	11.6	21.8
472873	2015 <i>FJ</i> ₃₀₂		8 23.7 101°39	2°3/21.5	17		311937	2007 <i>CF</i> ₃₆		8 23.7 51°69	1°9/22.4	18	
7 20	22 34.58	-13 9.6	1.847	2.720	13.3	21.5	7 20	22 41.06	-17 27.1	2.061	2.925	12.5	19.6
7 30	22 29.80	-14 26.7	1.793	2.735	9.8	21.3	7 30	22 34.37	-17 18.7	1.997	2.934	9.3	19.5
8 9	22 23.11	-15 52.2	1.762	2.751	5.9	21.1	8 9	22 25.80	-17 11.4	1.957	2.943	5.7	19.3
8 19	22 15.15	-17 19.0	1.758	2.766	2.5	20.9	8 19	22 16.01	-17 1.9	1.944	2.952	2.3	19.1
8 29	22 6.82	-18 39.4	1.782	2.781	3.9	21.0	8 29	22 5.94	-16 47.0	1.960	2.961	3.2	19.1
9 8	21 59.09	-19 47.0	1.834	2.795	7.6	21.3	9 8	21 56.57	-16 24.8	2.004	2.970	6.7	19.4
9 18	21 52.82	-20 37.8	1.911	2.809	11.1	21.5	9 18	21 48.70	-15 54.6	2.075	2.979	10.1	19.6
9 28	21 48.62	-21 10.0	2.010	2.823	14.1	21.8	9 28	21 42.96	-15 16.5	2.170	2.989	13.0	19.8
423033	2003 <i>UK</i> ₅₉		8 23.7 10°14	0°9/24.2	17		20511	1999 <i>RJ</i> ₃₁		8 23.7 50°53	1°4/22.9	18	
7 20	22 28.04	-9 31.9	0.752	1.675	21.8	19.3	7 20	22 40.85	-13 47.3	1.267	2.152	17.4	17.3
7 30	22 26.66	-9 13.2	0.712	1.678	16.5	19.0	7 30	22 35.18	-13 51.5	1.214	2.161	13.0	17.1
8 9	22 21.92	-9 12.5	0.688	1.683	10.4	18.7	8 9	22 26.71	-14 3.3	1.181	2.170	7.9	16.8
8 19	22 14.86	-9 25.2	0.682	1.692	3.7	18.4	8 19	22 16.37	-14 17.4	1.170	2.180	2.6	16.5
8 29	22 7.18	-9 43.9	0.695	1.703	3.4	18.4	8 29	22 5.56	-14 27.8	1.185	2.190	3.7	16.6
9 8	22 0.72	-10 0.2	0.727	1.716	9.8	18.8	9 8	21 55.77	-14 29.7	1.225	2.200	8.8	17.0
9 18	21 56.88	-10 7.6	0.777	1.732	15.6	19.2	9 18	21 48.21	-14 20.5	1.287	2.211	13.5	17.3
9 28	21 56.47	-10 1.9	0.844	1.750	20.3	19.6	9 28	21 43.66	-13 59.2	1.370	2.221	17.4	17.5
251827	1999 <i>TS</i> ₁₉₂		8 23.7 306°71	0°6/24.2	18		34423	2000 <i>SF</i> ₂₀		8 23.7 169°55	4°0/27.3	18	
7 20	22 33.87	-8 44.5	1.994	2.853	13.1	20.0	7 20	22 36.96	+1 37.0	2.162	2.971	13.9	19.4
7 30	22 29.41	-8 47.7	1.899	2.832	9.9	19.8	7 30	22 31.40	+1 50.0	2.082	2.975	11.2	19.3
8 9	22 23.01	-9 0.3	1.827	2.810	6.3	19.5	8 9	22 24.06	+1 47.9	2.025	2.978	8.1	19.1
8 19	22 15.18	-9 19.9	1.781	2.789	2.3	19.2	8 19	22 15.49	+1 31.1	1.992	2.980	5.1	18.9
8 29	22 6.71	-9 42.9	1.761	2.768	2.1	19.2	8 29	22 6.46	+1 2.0	1.987	2.982	4.0	18.8
9 8	21 58.55	-10 4.9	1.769	2.747	6.3	19.4	9 8	21 57.86	+0 24.6	2.010	2.984	6.1	19.0
9 18	21 51.58	-10 22.2	1.803	2.726	10.2	19.6	9 18	21 50.47	+0 16.5	2.061	2.985	9.1	19.2
9 28	21 46.58	-10 31.7	1.859	2.706	13.7	19.8	9 28	21 44.94	+0 56.5	2.135	2.985	12.1	19.3
450939	2008 <i>FQ</i> ₇₉		8 23.7 93°24	5°5/19.1	18		146094	2000 <i>KD</i> ₈₃		8 23.7 119°23	1°2/22.7	18	
7 20	22 39.42	-27 16.7	2.168	3.039	11.7	20.8	7 20	22 36.70	-11 17.3	1.764	2.632	14.1	20.3
7 30	22 33.21	-27 52.3	2.112	3.045	9.0	20.6	7 30	22 31.45	-12 8.5	1.706	2.645	10.4	20.1
8 9	22 25.10	-28 23.1	2.080	3.051	6.6	20.5	8 9	22 24.16	-13 9.5	1.670	2.658	6.3	19.9
8 19	22 15.78	-28 43.4	2.074	3.057	5.5	20.5	8 19	22 15.52	-14 14.4	1.661	2.670	2.1	19.7
8 29	22 6.16	-28 48.7	2.096	3.063	6.6	20.5	8 29	22 6.47	-15 16.4	1.678	2.682	3.1	19.8
9 8	21 57.22	-28 36.6	2.144	3.069	8.9	20.7	9 8	21 58.08	-16 9.4	1.723	2.693	7.3	20.1
9 18	21 49.80	-28 7.5	2.217	3.075	11.5	20.9	9 18	21 51.24	-16 49.1	1.794	2.704	11.1	20.3
9 28	21 44.49	-27 23.1	2.311	3.080	13.8	21.1	9 28	21 46.61	-17 13.3	1.887	2.715	14.3	20.6
127235	2002 <i>JW</i> ₁₇		8 23.7 175°95	1°2/24.9	18		293297	2007 <i>DL</i> ₂₃		8 23.7 149°83	0°1/23.7	18	
7 20	22 35.29	-5 24.2	2.163	3.005	12.8	20.8	7 20	22 32.86	-9 14.6	2.776	3.623	10.2	22.1
7 30	22 30.15	-5 46.7	2.086	3.007	9.8	20.6	7 30	22 27.97	-9 41.5	2.704	3.631	7.6	21.9
8 9	22 23.28	-6 21.0	2.031	3.008	6.3	20.4	8 9	22 21.77	-10 15.5	2.656	3.638	4.7	21.7
8 19	22 15.22	-7 4.4	2.004	3.009	2.6	20.2	8 19	22 14.71	-10 53.7	2.636	3.645	1.5	21.5
8 29	22 6.72	-7 52.7	2.004	3.010	2.0	20.1	8 29	22 7.36	-11 32.6	2.646	3.652	1.7	21.5
9 8	21 58.65	-8 40.8	2.033	3.010	5.7	20.4	9 8	22 0.37	-12 8.9	2.685	3.658	4.8	21.8
9 18	21 51.78	-9 24.5	2.089	3.010	9.2	20.6	9 18	21 54.30	-12 39.5	2.751	3.664	7.6	22.0
9 28	21 46.72	-10 0.0	2.169	3.009	12.3	20.8	9 28	21 49.63	-13 2.3	2.843	3.669	10.1	22.1
160675	2000 <i>CK</i> ₄₇		8 23.7 301°86	2°4/25.6	18		34738	Hulbert		8 23.7 319°89	1°4/24.5	18	
7 20	22 32.39	-3 1.4	1.694	2.546	15.3	20.1	7 20	22 33.09	-6 52.8	1.088	1.978	19.3	18.4
7 30	22 28.70	-3 14.7	1.594	2.518	12.0	19.8	7 30	22 30.11	-6 58.4	1.013	1.961	14.9	18.1
8 9	22 22.80	-3 45.8	1.515	2.491	8.1	19.6	8 9	22 24.09	-7 23.3	0.957	1.944	9.6	17.8
8 19	22 15.18	-4 32.8	1.460	2.463	4.0	19.2	8 19	22 15.68	-8 4.4	0.920	1.928	3.8	17.4
8 29	22 6.69	-5 31.7	1.430	2.436	2.9	19.1	8 29	22 6.18	-8 54.9	0.906	1.913	3.2	17.3
9 8	21 58.43	-6 35.7	1.427	2.408	7.0	19.3	9 8	21 57.25	-9 45.5	0.914	1.899	9.3	17.6
9 18	21 51.47	-7 37.9	1.448	2.381	11.5	19.5	9 18	21 50.42	-10 27.8	0.943	1.886	15.0	17.9
9 28	21 46.76	-8 31.8	1.492	2.355	15.6	19.7	9 28	21 46.86	-10 55.5	0.991	1.873	20.1	18.1
367488	Aloisortner		8 23.7 11°48	2°8/22.2	17		401329	2013 <i>AD</i> ₅₅		8 23.7 104°16	4°4/19.3	18	
7 20	22 33.28	-15 2.2	0.930										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
51010	2000 <i>GN</i> ₁₀₃		8 23.7 208°35	0°5/23.3	18		34436	2000 <i>SE</i> ₄₀		8 23.7 301°15	0°6/24.4	18	
7 20	22 36.19	- 9 33.9	1.898	2.758	13.6	20.1	7 20	22 30.69	- 5 32.3	2.074	2.927	12.9	18.9
7 30	22 31.13	-10 15.8	1.819	2.753	10.2	19.9	7 30	22 26.87	- 6 20.3	1.995	2.923	9.8	18.7
8 9	22 24.05	-11 9.0	1.763	2.748	6.2	19.6	8 9	22 21.36	- 7 22.3	1.938	2.919	6.2	18.4
8 19	22 15.53	-12 9.1	1.733	2.742	2.0	19.3	8 19	22 14.66	- 8 34.3	1.908	2.916	2.3	18.2
8 29	22 6.44	-13 9.8	1.731	2.736	2.6	19.4	8 29	22 7.51	- 9 50.8	1.905	2.912	2.0	18.2
9 8	21 57.79	-14 5.1	1.756	2.729	6.9	19.6	9 8	22 0.72	-11 5.5	1.931	2.909	5.9	18.4
9 18	21 50.50	-14 50.0	1.808	2.721	10.8	19.8	9 18	21 55.06	-12 12.7	1.983	2.905	9.5	18.6
9 28	21 45.31	-15 21.4	1.882	2.714	14.2	20.0	9 28	21 51.17	-13 8.0	2.058	2.902	12.7	18.8
104175	2000 <i>EJ</i> ₈₄		8 23.7 182°69	2°2/26.3	18		246526	2008 <i>FA</i> ₆₁		8 23.7 182°56	1°9/25.9	18	
7 20	22 32.37	- 0 25.8	2.309	3.132	12.7	20.2	7 20	22 31.73	- 2 22.4	2.498	3.327	11.7	21.4
7 30	22 27.92	- 1 4.6	2.227	3.133	9.9	20.1	7 30	22 27.34	- 2 46.3	2.416	3.327	9.1	21.2
8 9	22 21.90	- 1 59.1	2.167	3.133	6.8	19.9	8 9	22 21.51	- 3 22.8	2.358	3.327	6.1	21.0
8 19	22 14.79	- 3 6.6	2.133	3.133	3.5	19.7	8 19	22 14.69	- 4 9.5	2.326	3.327	3.0	20.9
8 29	22 7.27	- 4 22.8	2.128	3.132	2.5	19.6	8 29	22 7.50	- 5 2.9	2.322	3.327	2.2	20.8
9 8	22 0.09	- 5 41.9	2.152	3.131	5.3	19.8	9 8	22 0.64	- 5 58.7	2.347	3.326	4.9	21.0
9 18	21 53.95	- 6 58.2	2.204	3.129	8.5	20.0	9 18	21 54.74	- 6 52.4	2.400	3.325	8.0	21.2
9 28	21 49.45	- 8 6.8	2.280	3.127	11.5	20.2	9 28	21 50.34	- 7 40.1	2.478	3.323	10.7	21.4
339275	2004 <i>XD</i> ₇		8 23.7 277°46	2°0/25.4	18		507987	2015 <i>BA</i> ₁₅₇		8 23.7 213°87	3°0/21.3	18	
7 20	22 34.92	- 3 55.5	1.886	2.730	14.3	21.4	7 20	22 37.00	-15 31.6	1.673	2.551	14.2	21.5
7 30	22 30.39	- 4 6.2	1.785	2.706	11.2	21.1	7 30	22 32.02	-16 30.7	1.602	2.547	10.5	21.2
8 9	22 23.74	- 4 31.8	1.706	2.681	7.5	20.8	8 9	22 24.74	-17 37.6	1.555	2.543	6.5	21.0
8 19	22 15.48	- 5 10.5	1.652	2.655	3.5	20.5	8 19	22 15.81	-18 45.2	1.532	2.539	3.2	20.8
8 29	22 6.43	- 5 58.4	1.624	2.630	2.6	20.4	8 29	22 6.27	-19 45.6	1.537	2.534	4.7	20.9
9 8	21 57.61	- 6 49.9	1.624	2.604	6.6	20.6	9 8	21 57.28	-20 32.3	1.568	2.528	8.7	21.1
9 18	21 50.01	- 7 39.3	1.650	2.577	10.8	20.8	9 18	21 49.92	-21 1.3	1.623	2.523	12.7	21.3
9 28	21 44.51	- 8 21.5	1.699	2.551	14.6	21.0	9 28	21 44.97	-21 11.4	1.699	2.517	16.1	21.5
513298	2007 <i>BR</i> ₇₈		8 23.7 40°66	0°8/23.1	18		259759	2004 <i>AJ</i> ₉		8 23.7 179°38	0°2/23.6	17	
7 20	22 37.34	-13 33.7	2.112	2.975	12.3	20.9	7 20	22 36.53	- 8 14.6	1.877	2.733	13.9	21.4
7 30	22 31.66	-13 33.5	2.042	2.977	9.2	20.7	7 30	22 31.37	- 9 1.0	1.803	2.735	10.4	21.2
8 9	22 24.20	-13 38.0	1.995	2.980	5.6	20.5	8 9	22 24.19	- 9 59.9	1.752	2.736	6.4	21.0
8 19	22 15.53	-13 44.1	1.974	2.984	1.8	20.3	8 19	22 15.61	-11 6.6	1.728	2.737	2.1	20.7
8 29	22 6.51	-13 48.2	1.982	2.987	2.5	20.3	8 29	22 6.50	-12 14.9	1.731	2.736	2.4	20.7
9 8	21 58.02	-13 47.5	2.018	2.990	6.2	20.6	9 8	21 57.89	-13 18.1	1.762	2.736	6.7	21.0
9 18	21 50.85	-13 39.9	2.081	2.993	9.7	20.8	9 18	21 50.67	-14 11.1	1.819	2.734	10.7	21.3
9 28	21 45.64	-13 24.4	2.167	2.997	12.6	21.0	9 28	21 45.57	-14 50.3	1.899	2.732	14.0	21.5
515994	2015 <i>RS</i> ₂₁₈		8 23.7 320°66	5°3/19.0	18		507902	2014 <i>UX</i> ₅₀		8 23.7 317°03	4°9/20.8	17	
7 20	22 38.09	-27 0.2	2.265	3.137	11.2	21.2	7 20	22 35.33	-18 8.9	1.069	1.977	18.0	21.0
7 30	22 32.24	-27 35.6	2.202	3.136	8.7	21.0	7 30	22 32.03	-18 57.5	0.998	1.957	13.6	20.6
8 9	22 24.55	-28 6.8	2.164	3.136	6.3	20.8	8 9	22 25.40	-19 54.4	0.946	1.939	8.8	20.3
8 19	22 15.65	-28 28.3	2.151	3.135	5.3	20.8	8 19	22 16.18	-20 50.1	0.915	1.920	5.1	20.0
8 29	22 6.41	-28 35.6	2.166	3.134	6.3	20.8	8 29	22 5.81	-21 33.1	0.906	1.903	7.1	20.1
9 8	21 57.76	-28 26.4	2.208	3.133	8.7	21.0	9 8	21 56.13	-21 54.4	0.919	1.886	12.3	20.3
9 18	21 50.51	-28 0.4	2.274	3.133	11.2	21.2	9 18	21 48.79	-21 49.8	0.951	1.870	17.5	20.6
9 28	21 45.25	-27 19.1	2.363	3.132	13.6	21.3	9 28	21 44.99	-21 19.7	1.000	1.855	22.1	20.8
507372	2012 <i>BO</i> ₃₄		8 23.7 148°46	4°2/27.8	18		51033	2000 <i>GD</i> ₁₂₂		8 23.7 189°31	2°8/20.7	18	
7 20	22 36.35	+ 3 6.5	2.675	3.465	12.1	20.8	7 20	22 34.36	-17 15.8	2.406	3.275	10.8	19.0
7 30	22 30.63	+ 3 39.1	2.594	3.470	9.8	20.6	7 30	22 29.40	-18 15.9	2.334	3.274	7.9	18.8
8 9	22 23.46	+ 3 59.5	2.535	3.475	7.3	20.5	8 9	22 22.83	-19 20.1	2.287	3.273	5.0	18.6
8 19	22 15.30	+ 4 7.4	2.503	3.480	5.1	20.3	8 19	22 15.14	-20 23.1	2.268	3.271	2.8	18.4
8 29	22 6.78	+ 4 3.7	2.499	3.485	4.2	20.3	8 29	22 7.05	-21 19.5	2.277	3.269	4.1	18.5
9 8	21 58.61	+ 3 50.9	2.524	3.489	5.5	20.4	9 8	21 59.33	-22 4.8	2.315	3.266	6.9	18.7
9 18	21 51.42	+ 3 32.1	2.576	3.494	7.8	20.5	9 18	21 52.72	-22 36.2	2.379	3.263	9.9	18.9
9 28	21 45.74	+ 3 10.7	2.655	3.498	10.2	20.7	9 28	21 47.81	-22 52.6	2.466	3.259	12.4	19.1
261520	2005 <i>WO</i> ₇₀		8 23.7 209°37	5°8/30.0	18		342179	2008 <i>SF</i> ₁₈₅		8 23.7 9°24	4°8/26.2	17	
7 20	22 32.07	+ 8 54.6	2.396	3.168	13.8	20.5	7 20	22 27.19	- 4 12.3	0.819	1.727	22.1	18.5
7 30	22 27.70	+ 9 12.7	2.310	3.166	11.6	20.3	7 30	22 25.81	- 3 13.1	0.778	1.731	17.3	18.3
8 9	22 21.78	+ 9 12.9	2.245	3.165	9.2	20.2	8 9	22 21.33	- 2 36.7	0.753	1.738	12.0	18.0
8 19	22 14.78	+ 8 54.5	2.203	3.163	7.0	20.0	8 19	22 14.74	- 2 23.1	0.746	1.749	6.7	17.8
8 29	22 7.34	+ 8 18.8	2.188	3.161	5.8	20.0	8 29	22 7.56	- 2 28.6	0.758	1.762	5.1	17.8
9 8	22 0.23	+ 7 29.4	2.199	3.160	6.6	20.0	9 8	22 1.47	- 2 45.8	0.789	1.779	9.3	18.1
9 18	21 54.11	+ 6 31.1	2.237	3.158	8.7	20.1	9 18	21 57.77	- 3 6.5	0.840	1.797	14.3	18.4
9 28	21 49.58	+ 5 29.4	2.300	3.156	11.1	20.3	9 28	21 57.26	- 3 23.0	0.909	1.819	18.8	18.8
127075	2002 <i>GU</i> ₆₄		8 23.7 105°12	0°8/24.5	18		350192	2011 <i>WG</i> ₃₂		8 23.8 252°57	0°2/24.1	17	
7 20	22 34.49	- 6 1.2	1.853	2.706	14.1	20.7	7 20	22 25.69	- 8 37.1	4.449	5.291	6.7	21.1
7 30	22 29.74	- 6 36.8	1.789	2.718	10.7	20.5	7 30	22 22.33	- 8 58.8	4.364	5.288	5.0	20.9
8 9	22 23.11	- 7 26.0	1.748	2.729	6.7	20.3	8 9	22 18.21	- 9 25.3	4.304	5.284	3.1	20.8
8 19	22 15.20	- 8 24.6	1.732	2.739	2.5	20.1	8 19	22 13.59	- 9 54.8	4.273	5.281	1.1	20.6
8 29	22 6.91	- 9 26.9	1.744	2.750	2.1	20.1	8 29	22 8.79	-10 25.5	4.272	5.278	1.0	20.6
9 8	21 59.18	-10 26.6	1.783	2.761	6.3	20.3	9 8	22 4.15	-10 55.3	4.300	5.275	3.1	20.8
9 18	21 52.84	-11 18.6	1.848	2.771	10.1	20.6	9 18	22 0.01	-11 22.4	4.357	5.272	5.0	20.9
9 28	21 48.53	-11 59.2	1.936	2.781	13.3	20.8	9 28	21 56.64	-11 45.2	4.441	5.268	6.7	21.1
238175	2003 <i>SG</i> ₂₀₃		8 23.7 325°75	0°2/23.9	18		355531	2008 <i>AM</i> ₉₃		8 23.8			

EPHEMERIDES

8 23.8

8 23.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
361778	2008 AM ₆₈		8 23.8 227°17'	1.7°/21.8	18		105817	2000 SC ₁₄₂		8 23.8 313°70'	4.5°/27.3	18	
7 20	22 33.76	-14 9.6	2.663	3.523	10.1	22.2	7 20	22 33.02	+ 1 3.6	1.883	2.711	15.0	19.4
7 30	22 28.89	-15 0.2	2.575	3.511	7.5	22.0	7 30	22 28.91	+ 1 27.2	1.791	2.694	12.1	19.1
8 9	22 22.51	-15 56.6	2.511	3.497	4.6	21.8	8 9	22 22.81	+ 1 34.8	1.719	2.677	8.9	18.9
8 19	22 15.06	-16 54.9	2.476	3.484	1.9	21.6	8 19	22 15.24	+ 1 26.1	1.671	2.661	5.7	18.7
8 29	22 7.17	-17 50.3	2.471	3.469	3.0	21.7	8 29	22 7.01	+ 1 3.0	1.649	2.645	4.5	18.6
9 8	21 59.54	-18 38.4	2.494	3.454	6.0	21.8	9 8	21 59.07	+ 0 29.3	1.652	2.629	6.8	18.7
9 18	21 52.83	-19 16.2	2.545	3.438	8.9	22.0	9 18	21 52.37	- 0 9.8	1.682	2.614	10.3	18.9
9 28	21 47.63	-19 41.5	2.619	3.422	11.5	22.2	9 28	21 47.67	- 0 48.8	1.734	2.599	13.7	19.1
347305	2011 QT ₃		8 23.8 191°81'	6.7°/30.2	18		64070	NEAT		8 23.8 310°19'	2.2°/21.8	18	
7 20	22 35.02	+ 9 47.9	2.200	2.966	15.0	20.9	7 20	22 30.03	-10 12.0	1.388	2.277	15.9	17.9
7 30	22 30.06	+10 17.9	2.115	2.965	12.7	20.7	7 30	22 27.38	-11 41.2	1.303	2.254	11.9	17.6
8 9	22 23.33	+10 28.4	2.049	2.964	10.2	20.6	8 9	22 22.24	-13 30.8	1.240	2.231	7.3	17.2
8 19	22 15.35	+10 18.3	2.007	2.962	7.9	20.4	8 19	22 15.14	-15 33.1	1.200	2.209	2.7	16.9
8 29	22 6.86	+ 9 48.3	1.991	2.960	6.7	20.4	8 29	22 7.08	-17 36.4	1.186	2.187	4.6	17.0
9 8	21 58.71	+ 9 1.9	2.002	2.958	7.5	20.4	9 8	21 59.38	-19 28.1	1.197	2.166	9.8	17.2
9 18	21 51.69	+ 8 4.3	2.038	2.955	9.6	20.5	9 18	21 53.29	-20 58.6	1.231	2.146	14.7	17.4
9 28	21 46.48	+ 7 1.7	2.099	2.952	12.1	20.7	9 28	21 49.84	-22 2.1	1.284	2.126	18.9	17.6
448425	2009 SV ₂₇₉		8 23.8 271°43'	6.7°/16.4	18		392735	2012 RL ₂₂		8 23.8 292°14'	10.1°/16.0	18	
7 20	22 37.97	-32 55.1	2.530	3.394	10.5	21.2	7 20	22 44.83	-36 3.9	1.711	2.578	14.5	20.1
7 30	22 32.24	-33 48.5	2.457	3.376	8.6	21.1	7 30	22 38.33	-37 5.7	1.641	2.557	12.2	19.9
8 9	22 24.65	-34 35.2	2.409	3.359	7.1	21.0	8 9	22 28.86	-37 55.9	1.593	2.537	10.5	19.8
8 19	22 15.77	-35 9.2	2.386	3.342	6.8	20.9	8 19	22 17.25	-38 24.5	1.568	2.516	10.2	19.7
8 29	22 6.42	-35 25.7	2.390	3.324	7.8	21.0	8 29	22 4.86	-38 23.5	1.567	2.495	11.5	19.8
9 8	21 57.52	-35 21.9	2.420	3.306	9.7	21.1	9 8	21 53.31	-37 49.8	1.589	2.475	13.9	19.9
9 18	21 49.90	-34 57.9	2.474	3.288	11.8	21.2	9 18	21 43.93	-36 45.5	1.633	2.454	16.6	20.0
9 28	21 44.24	-34 15.3	2.548	3.270	13.8	21.3	9 28	21 37.66	-35 15.9	1.694	2.434	19.2	20.1
185617	2008 CS ₈₅		8 23.8 12°86'	3.6°/21.7	17		490470	2009 ST ₂₉₉		8 23.8 297°01'	5.4°/29.5	17	
7 20	22 31.48	-15 54.9	0.929	1.847	19.2	18.9	7 20	22 30.18	+ 7 43.3	2.299	3.084	13.9	21.8
7 30	22 28.91	-16 31.5	0.887	1.852	14.2	18.7	7 30	22 26.54	+ 7 43.6	2.191	3.059	11.7	21.6
8 9	22 23.20	-17 16.7	0.863	1.858	8.7	18.4	8 9	22 21.24	+ 7 24.5	2.102	3.033	9.1	21.4
8 19	22 15.36	-18 1.5	0.858	1.866	4.0	18.2	8 19	22 14.71	+ 6 45.5	2.037	3.008	6.7	21.2
8 29	22 6.95	-18 35.9	0.875	1.876	5.8	18.3	8 29	22 7.59	+ 5 48.1	1.999	2.982	5.4	21.1
9 8	21 59.68	-18 52.3	0.912	1.888	11.0	18.7	9 8	22 0.63	+ 4 36.5	1.987	2.956	6.5	21.1
9 18	21 54.86	-18 47.7	0.970	1.901	16.0	19.0	9 18	21 54.60	+ 3 16.3	2.002	2.931	9.1	21.3
9 28	21 53.29	-18 22.5	1.044	1.916	20.1	19.3	9 28	21 50.19	+ 1 54.1	2.042	2.905	12.0	21.4
353873	2012 WF ₁₅		8 23.8 256°37'	6.3°/17.5	18		254454	2005 CQ ₁₀		8 23.8 82°34'	2.6°/22.2	17	
7 20	22 35.82	-25 39.7	1.937	2.820	12.4	20.9	7 20	22 41.53	-15 51.6	1.381	2.263	16.4	20.0
7 30	22 31.04	-27 2.0	1.870	2.810	9.6	20.7	7 30	22 35.55	-16 14.3	1.328	2.274	12.2	19.7
8 9	22 24.10	-28 23.3	1.826	2.800	7.1	20.6	8 9	22 26.92	-16 42.5	1.296	2.284	7.5	19.5
8 19	22 15.63	-29 35.5	1.809	2.790	6.3	20.5	8 19	22 16.54	-17 9.8	1.288	2.295	3.1	19.3
8 29	22 6.56	-30 30.9	1.818	2.780	7.8	20.6	8 29	22 5.73	-17 29.7	1.305	2.306	4.4	19.4
9 8	21 57.98	-31 4.5	1.852	2.770	10.5	20.7	9 8	21 55.89	-17 37.3	1.348	2.317	9.0	19.7
9 18	21 50.89	-31 14.6	1.909	2.760	13.4	20.9	9 18	21 48.17	-17 30.4	1.415	2.328	13.3	20.0
9 28	21 46.04	-31 2.2	1.986	2.749	16.0	21.1	9 28	21 43.32	-17 9.2	1.502	2.339	16.9	20.2
103300	2000 AX ₄₇		8 23.8 239°20'	3.0°/20.5	18		256641	2007 VH ₃₁₆		8 23.8 73°92'	4.2°/20.9	17	
7 20	22 33.22	-15 47.3	2.063	2.938	12.0	19.7	7 20	22 39.19	-18 7.4	1.355	2.244	16.2	20.3
7 30	22 28.89	-17 7.8	1.986	2.930	8.9	19.5	7 30	22 33.86	-19 2.8	1.308	2.258	12.0	20.1
8 9	22 22.70	-18 35.9	1.933	2.921	5.5	19.3	8 9	22 25.90	-20 2.5	1.282	2.271	7.5	19.9
8 19	22 15.16	-20 5.0	1.907	2.912	3.1	19.1	8 19	22 16.21	-20 57.7	1.280	2.284	4.3	19.7
8 29	22 7.07	-21 27.6	1.910	2.902	4.6	19.2	8 29	22 6.10	-21 40.1	1.304	2.297	5.9	19.9
9 8	21 59.34	-22 37.2	1.940	2.892	8.0	19.4	9 8	21 56.97	-22 4.1	1.352	2.311	10.0	20.1
9 18	21 52.83	-23 29.5	1.996	2.882	11.3	19.6	9 18	21 49.95	-22 7.6	1.422	2.324	14.0	20.4
9 28	21 48.24	-24 2.7	2.073	2.872	14.2	19.8	9 28	21 45.76	-21 51.5	1.513	2.337	17.4	20.7
358834	2008 FC ₃		8 23.8 311°56'	0.9°/23.0	18		225742	2001 SO ₂₉		8 23.8 344°83'	1.0°/24.4	18	
7 20	22 35.26	-12 41.3	1.978	2.846	12.8	20.7	7 20	22 29.23	- 6 32.8	1.140	2.032	18.4	20.0
7 30	22 30.36	-12 56.3	1.902	2.841	9.5	20.5	7 30	22 26.98	- 6 54.4	1.072	2.020	14.1	19.7
8 9	22 23.56	-13 18.0	1.849	2.836	5.8	20.3	8 9	22 22.03	- 7 36.3	1.022	2.010	9.0	19.4
8 19	22 15.43	-13 42.7	1.821	2.831	1.9	20.0	8 19	22 15.06	- 8 34.1	0.993	2.001	3.4	19.0
8 29	22 6.82	-14 5.9	1.821	2.826	2.7	20.0	8 29	22 7.25	- 9 40.0	0.986	1.994	2.9	19.0
9 8	21 58.69	-14 23.5	1.849	2.821	6.6	20.3	9 8	22 0.08	-10 44.2	1.002	1.987	8.6	19.3
9 18	21 51.88	-14 32.4	1.902	2.817	10.3	20.5	9 18	21 54.84	-11 38.0	1.040	1.982	14.0	19.6
9 28	21 47.07	-14 31.0	1.978	2.812	13.5	20.7	9 28	21 52.50	-12 15.2	1.097	1.979	18.6	19.8
360650	2004 PW ₇		8 23.8 5°43'	1.6°/25.5	18		21817	Yingling		8 23.8 187°33'	1.6°/25.4	18	
7 20	22 28.86	- 1 29.7	1.888	2.734	14.2	19.9	7 20	22 34.53	- 3 38.3	2.301	3.134	12.4	19.3
7 30	22 25.66	- 2 32.7	1.813	2.734	11.0	19.7	7 30	22 29.57	- 4 1.7	2.219	3.133	9.6	19.1
8 9	22 20.69	- 3 55.1	1.759	2.735	7.2	19.4	8 9	22 22.98	- 4 37.8	2.160	3.133	6.3	18.9
8 19	22 14.50	- 5 32.5	1.731	2.736	3.3	19.2	8 19	22 15.25	- 5 24.0	2.128	3.131	2.9	18.7
8 29	22 7.84	- 7 18.3	1.731	2.737	2.2	19.1	8 29	22 7.10	- 6 16.4	2.124	3.129	2.1	18.7
9 8	22 1.60	- 9 4.0	1.758	2.739	6.0	19.4	9 8	21 59.30	- 7 10.3	2.148	3.127	5.3	18.9
9 18	21 56.56	-10 41.9	1.812	2.741	9.8	19.6	9 18	21 52.59	- 8 1.0	2.201	3.123	8.7	19.1
9 28	21 53.37	-12 6.1	1.889	2.744	13.2	19.8	9 28	21 47.58	- 8 44.7	2.278	3.120	11.7	19.3
266721	2009 RX ₆		8 23.8 355°51'	3.3°/25.7	18		355529	2008 AZ ₈₄		8 23.8 297°84'	1.7°/22.3	18	
7 20	22 29.81	- 4 12.0											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
424412	2008 <i>AN</i> ₅₇		8 23.8 126°03	1.3°/22.8	17		127839	2003 <i>FV</i> ₁₀₇		8 23.8 121°38	1.9°/25.0	17	
7 20	22 36.44	-10 53.2	1.508	2.383	15.6	21.4	7 20	22 40.13	-5 20.7	1.435	2.292	17.3	20.4
7 30	22 31.70	-11 43.6	1.445	2.388	11.6	21.2	7 30	22 34.48	-5 25.0	1.374	2.302	13.3	20.2
8 9	22 24.59	-12 46.4	1.404	2.393	7.1	21.0	8 9	22 26.31	-5 45.2	1.332	2.312	8.6	19.9
8 19	22 15.82	-13 55.0	1.387	2.397	2.3	20.7	8 19	22 16.41	-6 18.2	1.315	2.321	3.7	19.7
8 29	22 6.51	-15 1.6	1.397	2.401	3.4	20.8	8 29	22 5.97	-6 58.5	1.323	2.329	2.8	19.6
9 8	21 57.87	-15 58.4	1.432	2.405	8.1	21.1	9 8	21 56.32	-7 39.6	1.357	2.338	7.5	19.9
9 18	21 50.97	-16 40.4	1.492	2.409	12.5	21.3	9 18	21 48.57	-8 15.5	1.416	2.345	12.0	20.2
9 28	21 46.59	-17 4.8	1.573	2.412	16.2	21.6	9 28	21 43.53	-8 42.0	1.496	2.353	15.9	20.5
383143	2005 <i>UB</i> ₁₇₈		8 23.8 13°16	5°3/20.4	16		482370	2011 <i>YL</i> ₂₄		8 23.8 118°12	5°1/17.5	18	
7 20	22 36.83	-20 53.6	1.252	2.152	16.5	20.5	7 20	22 32.98	-24 38.2	2.364	3.243	10.6	21.0
7 30	22 32.42	-21 39.4	1.201	2.155	12.4	20.3	7 30	22 28.49	-26 5.8	2.310	3.249	8.1	20.8
8 9	22 25.18	-22 26.6	1.169	2.158	8.1	20.1	8 9	22 22.34	-27 32.2	2.281	3.255	5.9	20.7
8 19	22 16.03	-23 6.5	1.161	2.162	5.4	19.9	8 19	22 15.07	-28 50.8	2.279	3.261	5.1	20.7
8 29	22 6.33	-23 30.7	1.176	2.166	7.1	20.1	8 29	22 7.41	-29 55.7	2.305	3.267	6.4	20.8
9 8	21 57.60	-23 33.9	1.214	2.172	11.0	20.3	9 8	22 0.20	-30 42.5	2.358	3.273	8.7	20.9
9 18	21 51.06	-23 15.1	1.274	2.178	15.1	20.6	9 18	21 54.16	-31 9.6	2.435	3.278	11.1	21.1
9 28	21 47.50	-22 36.3	1.352	2.185	18.7	20.8	9 28	21 49.87	-31 17.4	2.533	3.284	13.2	21.3
288870	2004 <i>RV</i> ₂₃₁		8 23.8 263°01	4°0/19.9	18		71010	1999 <i>XD</i> ₄₅		8 23.8 252°00	5°1/19.8	18	
7 20	22 36.01	-22 47.2	2.322	3.195	10.9	20.5	7 20	22 38.05	-20 34.4	1.552	2.439	14.6	18.4
7 30	22 30.73	-23 24.3	2.250	3.189	8.3	20.4	7 30	22 33.09	-21 40.6	1.484	2.432	11.0	18.2
8 9	22 23.70	-24 0.7	2.202	3.183	5.6	20.2	8 9	22 25.57	-22 50.2	1.439	2.424	7.3	17.9
8 19	22 15.49	-24 31.4	2.182	3.177	4.1	20.1	8 19	22 16.21	-23 54.7	1.418	2.416	5.1	17.8
8 29	22 6.88	-24 51.7	2.189	3.170	5.2	20.1	8 29	22 6.15	-24 45.3	1.423	2.409	6.8	17.9
9 8	21 58.72	-24 58.3	2.223	3.164	7.8	20.3	9 8	21 56.73	-25 15.6	1.453	2.401	10.5	18.1
9 18	21 51.80	-24 50.2	2.283	3.158	10.6	20.5	9 18	21 49.12	-25 23.1	1.506	2.393	14.3	18.3
9 28	21 46.73	-24 27.5	2.365	3.151	13.1	20.6	9 28	21 44.20	-25 8.5	1.578	2.384	17.7	18.5
102640	1999 <i>VO</i> ₃₉		8 23.8 187°36	6°9/16.8	18		271008	2002 <i>YM</i> ₂		8 23.8 225°38	0°8/23.0	18	
7 20	22 38.77	-30 5.4	2.141	3.013	11.8	20.3	7 20	22 36.36	-10 18.3	2.119	2.975	12.5	21.8
7 30	22 33.02	-31 19.0	2.084	3.013	9.4	20.1	7 30	22 31.21	-11 6.8	2.030	2.963	9.4	21.6
8 9	22 25.21	-32 27.1	2.052	3.012	7.5	20.0	8 9	22 24.16	-12 5.8	1.966	2.950	5.7	21.4
8 19	22 16.00	-33 22.1	2.045	3.011	7.0	20.0	8 19	22 15.71	-13 10.7	1.928	2.937	1.8	21.1
8 29	22 6.34	-33 57.9	2.065	3.009	8.2	20.0	8 29	22 6.66	-14 15.9	1.918	2.922	2.6	21.1
9 8	21 57.28	-34 11.3	2.110	3.007	10.4	20.2	9 8	21 57.94	-15 15.3	1.937	2.907	6.6	21.4
9 18	21 49.72	-34 2.0	2.178	3.005	12.8	20.3	9 18	21 50.40	-16 4.3	1.983	2.891	10.3	21.6
9 28	21 44.37	-33 32.1	2.267	3.003	15.0	20.5	9 28	21 44.78	-16 39.8	2.053	2.874	13.6	21.7
330165	2006 <i>BA</i> ₁₄₂		8 23.8 259°30	0°6/24.3	18		253442	2003 <i>RZ</i>		8 23.8 354°96	7°6/18.9	18	
7 20	22 34.25	-8 33.3	2.362	3.212	11.6	20.9	7 20	22 33.36	-22 36.5	1.017	1.934	18.0	19.1
7 30	22 29.33	-8 38.5	2.280	3.207	8.8	20.7	7 30	22 30.47	-23 53.8	0.967	1.928	13.7	18.8
8 9	22 22.82	-8 51.8	2.221	3.202	5.5	20.5	8 9	22 24.32	-25 12.8	0.936	1.924	9.6	18.6
8 19	22 15.21	-9 10.7	2.189	3.197	2.0	20.3	8 19	22 15.84	-26 20.9	0.925	1.922	7.6	18.5
8 29	22 7.19	-9 32.1	2.185	3.191	1.8	20.2	8 29	22 6.58	-27 5.9	0.936	1.920	9.7	18.6
9 8	21 59.53	-9 52.5	2.210	3.186	5.3	20.5	9 8	21 58.35	-27 20.3	0.967	1.920	13.8	18.8
9 18	21 52.94	-10 8.9	2.261	3.181	8.7	20.7	9 18	21 52.59	-27 3.1	1.017	1.921	18.1	19.1
9 28	21 48.00	-10 18.9	2.337	3.176	11.6	20.9	9 28	21 50.25	-26 17.5	1.084	1.923	21.9	19.4
360969	2005 <i>UB</i> ₂₀₉		8 23.8 170°23	5°6/31.3	18		332118	2005 <i>UF</i> ₅₁₂		8 23.8 294°15	3°2/25.9	18	
7 20	22 31.59	+12 0.6	2.862	3.602	12.5	22.1	7 20	22 36.13	-3 2.3	1.564	2.415	16.5	20.5
7 30	22 27.13	+12 2.5	2.775	3.605	10.6	22.0	7 30	22 31.59	-2 47.4	1.481	2.403	12.9	20.2
8 9	22 21.37	+11 46.9	2.708	3.608	8.6	21.8	8 9	22 24.65	-2 48.5	1.418	2.391	8.9	20.0
8 19	22 14.72	+11 13.6	2.665	3.610	6.7	21.7	8 19	22 15.93	-3 4.6	1.378	2.379	4.7	19.7
8 29	22 7.74	+10 24.1	2.649	3.612	5.6	21.7	8 29	22 6.43	-3 32.5	1.363	2.367	3.6	19.6
9 8	22 1.03	+9 21.7	2.661	3.614	6.1	21.7	9 8	21 57.38	-4 6.8	1.374	2.355	7.3	19.8
9 18	21 55.17	+8 10.8	2.701	3.615	7.6	21.8	9 18	21 49.89	-4 41.7	1.410	2.344	11.7	20.0
9 28	21 50.65	+6 56.7	2.766	3.616	9.6	21.9	9 28	21 44.87	-5 11.7	1.467	2.332	15.7	20.2
236550	2006 <i>HP</i> ₅₁		8 23.8 54°47	2°5/25.4	17		392086	2009 <i>DB</i> ₆₅		8 23.8 202°60	1°5/25.4	18	
7 20	22 39.11	-5 15.3	1.588	2.440	16.2	19.6	7 20	22 32.59	-3 28.3	2.168	3.007	12.9	21.1
7 30	22 33.38	-4 50.8	1.531	2.456	12.4	19.4	7 30	22 28.25	-4 1.7	2.087	3.005	9.9	20.9
8 9	22 25.45	-4 39.5	1.496	2.472	8.2	19.2	8 9	22 22.24	-4 49.2	2.029	3.003	6.5	20.7
8 19	22 16.07	-4 39.7	1.485	2.488	4.0	19.0	8 19	22 15.06	-5 48.0	1.996	3.000	2.9	20.5
8 29	22 6.33	-4 48.2	1.501	2.505	3.0	19.0	8 29	22 7.43	-6 53.3	1.991	2.997	2.1	20.4
9 8	21 57.37	-5 0.6	1.542	2.522	6.8	19.3	9 8	22 0.16	-7 59.6	2.015	2.994	5.5	20.7
9 18	21 50.16	-5 12.9	1.609	2.539	10.8	19.5	9 18	21 54.00	-9 1.6	2.066	2.991	9.1	20.9
9 28	21 45.36	-5 21.2	1.699	2.557	14.3	19.8	9 28	21 49.57	-9 54.8	2.141	2.987	12.2	21.1
14585	1998 <i>RX</i> ₆₄		8 23.8 270°11	1°0/24.5	18		322671	1999 <i>TX</i> ₁₃₁		8 23.8 345°31	2°2/22.6	18	
7 20	22 35.23	-6 11.8	1.634	2.494	15.4	19.3	7 20	22 35.74	-14 36.0	1.118	2.019	18.0	19.5
7 30	22 30.86	-6 36.8	1.547	2.479	11.8	19.0	7 30	22 31.98	-14 50.3	1.055	2.011	13.5	19.2
8 9	22 24.19	-7 17.6	1.481	2.463	7.6	18.8	8 9	22 25.17	-15 13.3	1.011	2.004	8.3	18.9
8 19	22 15.76	-8 10.8	1.439	2.447	2.9	18.4	8 19	22 16.14	-15 38.9	0.988	1.997	3.1	18.6
8 29	22 6.55	-9 10.7	1.424	2.431	2.5	18.4	8 29	22 6.29	-15 59.3	0.988	1.992	4.5	18.7
9 8	21 57.72	-10 10.2	1.435	2.414	7.3	18.6	9 8	21 57.28	-16 7.9	1.011	1.988	10.0	19.0
9 18	21 50.37	-11 2.7	1.471	2.398	11.8	18.9	9 18	21 50.52	-16 1.1	1.055	1.985	15.1	19.2
9 28	21 45.39	-11 43.1	1.528	2.381	15.8	19.1	9 28	21 46.97	-15 37.9	1.118	1.983	19.5	19.5
236295	2006 <i>AE</i> ₆₆		8 23.8 220°32	0°9/24.7	18		99526	2002 <i>EC</i> ₇₃		8 23.8 91°61	0°2/23.6	17	</

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
64940	2001 YS ₁₁₆		8 23.8	10°00	4°0/25.8	18	178027	2006 RF ₄₁		8 23.8	251°05	4°0/26.1	18
7 20	22 32.40	- 4 33.7	0.873	1.772	22.0	17.6	7 20	22 40.85	- 2 34.5	1.554	2.395	17.0	20.0
7 30	22 29.77	- 3 54.1	0.824	1.773	17.2	17.3	7 30	22 35.12	- 1 55.4	1.474	2.389	13.5	19.7
8 9	22 23.90	- 3 36.6	0.792	1.777	11.6	17.1	8 9	22 26.84	- 1 30.7	1.415	2.383	9.4	19.5
8 19	22 15.72	- 3 40.0	0.777	1.782	6.0	16.8	8 19	22 16.70	- 1 20.8	1.379	2.377	5.4	19.2
8 29	22 6.80	- 3 59.6	0.783	1.789	4.5	16.7	8 29	22 5.79	- 1 23.6	1.369	2.370	4.3	19.1
9 8	21 58.94	- 4 27.4	0.810	1.798	9.4	17.0	9 8	21 55.41	- 1 35.3	1.386	2.364	7.7	19.3
9 18	21 53.58	- 4 55.2	0.856	1.808	14.8	17.4	9 18	21 46.75	- 1 51.2	1.427	2.357	11.9	19.6
9 28	21 51.64	- 5 15.7	0.919	1.820	19.5	17.7	9 28	21 40.72	- 2 6.1	1.491	2.351	15.8	19.8
442409	2011 UJ ₈₁		8 23.8	5°17	1°8/22.3	18	35751	1999 GE ₃₆		8 23.8	241°49	3°6/21.3	18
7 20	22 33.47	-13 40.4	1.717	2.596	13.8	20.8	7 20	22 39.96	-17 24.1	1.471	2.355	15.5	19.0
7 30	22 29.28	-14 18.0	1.651	2.596	10.2	20.6	7 30	22 34.62	-18 8.6	1.401	2.348	11.6	18.8
8 9	22 23.03	-15 3.5	1.608	2.597	6.2	20.4	8 9	22 26.59	-18 58.9	1.353	2.341	7.3	18.5
8 19	22 15.35	-15 51.4	1.589	2.598	2.4	20.1	8 19	22 16.62	-19 47.6	1.328	2.333	3.8	18.3
8 29	22 7.19	-16 35.4	1.597	2.599	3.6	20.2	8 29	22 5.90	-20 26.7	1.329	2.325	5.4	18.4
9 8	21 59.60	-17 10.1	1.631	2.601	7.6	20.5	9 8	21 55.86	-20 49.8	1.356	2.317	9.7	18.6
9 18	21 53.50	-17 31.7	1.690	2.603	11.5	20.7	9 18	21 47.72	-20 54.0	1.406	2.309	14.0	18.9
9 28	21 49.59	-17 38.4	1.770	2.605	14.8	20.9	9 28	21 42.41	-20 39.3	1.476	2.301	17.7	19.1
280975	2006 DP ₄₀		8 23.8	20°09	5°7/20.4	18	483227	2015 RZ ₅₆		8 23.8	248°39	3°5/28.1	18
7 20	22 36.32	-21 53.1	1.199	2.103	16.8	19.3	7 20	22 30.69	+ 4 6.3	2.651	3.447	12.0	21.7
7 30	22 32.02	-22 32.4	1.156	2.111	12.6	19.1	7 30	22 26.65	+ 3 42.8	2.551	3.433	9.7	21.5
8 9	22 24.90	-23 11.1	1.133	2.122	8.4	18.9	8 9	22 21.22	+ 3 3.0	2.472	3.419	7.2	21.4
8 19	22 15.96	-23 40.5	1.133	2.133	5.7	18.8	8 19	22 14.77	+ 2 8.2	2.419	3.405	4.6	21.2
8 29	22 6.62	-23 53.0	1.155	2.145	7.3	18.9	8 29	22 7.89	+ 1 1.0	2.395	3.390	3.5	21.1
9 8	21 58.38	-23 44.5	1.201	2.159	11.1	19.2	9 8	22 1.22	- 0 14.0	2.399	3.374	5.1	21.2
9 18	21 52.39	-23 14.9	1.268	2.174	15.1	19.4	9 18	21 55.39	- 1 31.7	2.431	3.359	7.7	21.3
9 28	21 49.36	-22 26.8	1.354	2.190	18.5	19.7	9 28	21 50.95	- 2 46.9	2.490	3.343	10.4	21.5
190528	2000 QQ ₁₈₁		8 23.8	309°24	3°1/25.7	18	441826	2009 SR ₆₄		8 23.8	249°27	1°7/25.7	18
7 20	22 34.46	- 3 35.5	1.498	2.356	16.7	18.8	7 20	22 30.65	- 2 42.7	2.413	3.247	11.9	21.5
7 30	22 30.71	- 3 22.7	1.395	2.322	13.2	18.5	7 30	22 26.68	- 3 13.9	2.328	3.242	9.2	21.3
8 9	22 24.38	- 3 26.2	1.312	2.288	9.1	18.2	8 9	22 21.25	- 3 58.3	2.266	3.238	6.1	21.1
8 19	22 15.96	- 3 45.6	1.252	2.254	4.7	17.9	8 19	22 14.78	- 4 53.5	2.230	3.233	2.9	20.9
8 29	22 6.39	- 4 17.8	1.216	2.221	3.6	17.7	8 29	22 7.91	- 5 55.4	2.223	3.228	2.1	20.8
9 8	21 56.98	- 4 57.4	1.205	2.188	7.9	17.9	9 8	22 1.34	- 6 59.2	2.244	3.224	5.0	21.0
9 18	21 49.02	- 5 37.9	1.218	2.155	12.9	18.1	9 18	21 55.74	- 8 0.1	2.293	3.219	8.2	21.2
9 28	21 43.65	- 6 12.7	1.251	2.122	17.5	18.2	9 28	21 51.65	- 8 53.9	2.366	3.214	11.1	21.4
110935	2001 UU ₁₅₂		8 23.8	307°43	0°7/24.4	18	309186	2007 CK ₆₂		8 23.8	137°80	0°1/23.8	18
7 20	22 33.09	- 7 9.1	2.013	2.869	13.1	20.0	7 20	22 34.15	- 9 44.0	2.382	3.235	11.4	20.8
7 30	22 28.74	- 7 31.0	1.936	2.866	9.9	19.8	7 30	22 29.22	-10 1.8	2.309	3.239	8.5	20.7
8 9	22 22.60	- 8 4.3	1.882	2.863	6.3	19.5	8 9	22 22.76	-10 27.2	2.260	3.243	5.3	20.5
8 19	22 15.22	- 8 45.9	1.852	2.860	2.3	19.3	8 19	22 15.26	-10 57.2	2.239	3.247	1.7	20.2
8 29	22 7.36	- 9 31.2	1.851	2.857	2.0	19.3	8 29	22 7.42	-11 28.1	2.245	3.251	1.9	20.2
9 8	21 59.93	-10 15.2	1.877	2.855	6.0	19.5	9 8	22 0.00	-11 56.2	2.281	3.255	5.4	20.5
9 18	21 53.71	-10 53.4	1.928	2.852	9.7	19.7	9 18	21 53.65	-12 18.3	2.343	3.259	8.6	20.7
9 28	21 49.36	-11 22.3	2.004	2.850	12.9	19.9	9 28	21 48.95	-12 32.4	2.429	3.262	11.4	20.9
125828	2001 XT ₁₇₄		8 23.8	284°67	0°3/24.1	18	210335	2007 TT ₃₆₇		8 23.8	211°40	2°3/21.7	18
7 20	22 34.53	- 7 51.7	1.637	2.503	15.1	20.1	7 20	22 35.23	-15 39.4	2.030	2.902	12.3	20.9
7 30	22 30.30	- 8 19.0	1.556	2.492	11.5	19.8	7 30	22 30.36	-16 22.1	1.958	2.900	9.1	20.7
8 9	22 23.81	- 9 0.3	1.496	2.481	7.2	19.6	8 9	22 23.62	-17 10.2	1.911	2.898	5.6	20.5
8 19	22 15.68	- 9 51.8	1.461	2.470	2.5	19.3	8 19	22 15.58	-17 58.6	1.889	2.896	2.6	20.3
8 29	22 6.84	-10 47.3	1.452	2.459	2.5	19.2	8 29	22 7.08	-18 41.6	1.895	2.893	3.8	20.3
9 8	21 58.46	-11 40.0	1.470	2.448	7.3	19.5	9 8	21 59.05	-19 14.4	1.929	2.891	7.3	20.6
9 18	21 51.57	-12 24.1	1.511	2.437	11.7	19.7	9 18	21 52.33	-19 34.0	1.988	2.888	10.7	20.8
9 28	21 47.00	-12 55.5	1.575	2.426	15.5	20.0	9 28	21 47.59	-19 39.2	2.069	2.885	13.7	21.0
94797	2001 XH ₁₅₅		8 23.8	199°70	0°6/23.3	18	180238	2003 UP ₂₂₅		8 23.8	244°64	3°8/20.8	18
7 20	22 35.32	- 9 51.9	1.840	2.704	13.8	20.3	7 20	22 40.54	-18 53.7	1.830	2.703	13.4	20.6
7 30	22 30.58	-10 34.4	1.766	2.702	10.3	20.1	7 30	22 34.76	-19 42.8	1.745	2.686	10.1	20.4
8 9	22 23.83	-11 28.1	1.715	2.701	6.3	19.8	8 9	22 26.59	-20 36.3	1.683	2.668	6.5	20.2
8 19	22 15.64	-12 28.2	1.689	2.698	2.0	19.5	8 19	22 16.64	-21 27.3	1.647	2.649	3.9	20.0
8 29	22 6.93	-13 28.6	1.691	2.696	2.7	19.6	8 29	22 5.92	-22 8.8	1.639	2.630	5.4	20.0
9 8	21 58.69	-14 23.0	1.720	2.693	6.9	19.8	9 8	21 55.62	-22 35.1	1.657	2.610	9.1	20.2
9 18	21 51.85	-15 6.4	1.774	2.690	10.9	20.1	9 18	21 46.86	-22 43.3	1.701	2.589	12.9	20.4
9 28	21 47.11	-15 36.0	1.852	2.687	14.3	20.3	9 28	21 40.51	-22 33.2	1.765	2.568	16.2	20.6
516501	2005 YN ₁₇₁		8 23.8	239°22	5°8/16.6	18	351722	2006 BV ₂₆₈		8 23.8	279°47	7°6/17.4	18
7 20	22 36.19	-30 20.5	2.759	3.625	9.7	22.0	7 20	22 38.59	-27 45.9	1.692	2.576	13.8	20.5
7 30	22 30.82	-31 23.2	2.687	3.611	7.7	21.9	7 30	22 33.56	-29 3.0	1.621	2.560	10.9	20.3
8 9	22 23.79	-32 21.6	2.639	3.597	6.2	21.8	8 9	22 25.94	-30 17.2	1.573	2.543	8.4	20.1
8 19	22 15.60	-33 10.1	2.619	3.582	5.8	21.7	8 19	22 16.43	-31 19.3	1.549	2.527	7.6	20.0
8 29	22 6.97	-33 44.0	2.626	3.567	6.9	21.8	8 29	22 6.16	-32 0.5	1.551	2.510	9.2	20.1
9 8	21 58.69	-34 0.3	2.659	3.551	8.7	21.9	9 8	21 56.45	-32 15.5	1.576	2.493	12.1	20.2
9 18	21 51.51	-33 58.1	2.717	3.535	10.8	22.0	9 18	21 48.53	-32 3.3	1.624	2.476	15.2	20.4
9 28	21 46.02	-33 38.3	2.796	3.519	12.7	22.1	9 28	21 43.28	-31 26.3	1.690	2.459	18.1	20.5
236501	2006 GT ₂₆		8 23.8	356°48	1°0/24.6	18	134190	2005 CP ₅₇		8 23.8	279°91	0°1/23.9	18
7 20	22 33												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
505692	2014 <i>WK</i> ₄₈₄		8 23.8 280°30	0°6/23.5	17		68130	2001 <i>AO</i> ₁₇		8 23.8	0°56	2°6/25.0	18
7 20	22 37.48	-10 16.9	1.340	2.219	17.0	22.3	7 20	22 39.30	-8 0.3	1.307	2.179	17.8	16.0
7 30	22 33.02	-10 40.7	1.263	2.207	12.9	22.0	7 30	22 34.20	-7 3.5	1.240	2.177	13.7	15.7
8 9	22 25.78	-11 18.2	1.206	2.194	8.0	21.7	8 9	22 26.36	-6 16.7	1.194	2.175	9.0	15.5
8 19	22 16.42	-12 4.5	1.172	2.181	2.6	21.3	8 19	22 16.58	-5 39.6	1.170	2.175	4.2	15.2
8 29	22 6.16	-12 52.2	1.163	2.169	3.2	21.3	8 29	22 6.13	-5 10.6	1.170	2.176	3.4	15.2
9 8	21 56.45	-13 33.6	1.178	2.156	8.7	21.6	9 8	21 56.46	-4 47.0	1.196	2.178	8.0	15.4
9 18	21 48.64	-14 2.9	1.217	2.143	13.8	21.9	9 18	21 48.82	-4 26.0	1.244	2.181	12.7	15.7
9 28	21 43.73	-14 16.4	1.275	2.131	18.2	22.1	9 28	21 44.08	-4 4.2	1.314	2.185	16.8	16.0
356435	2010 <i>WP</i> ₃		8 23.8 279°78	0°5/22.9	13 C		295082	2008 <i>EO</i> ₁₃₆		8 23.8 204°41	1°5/22.6	18	
7 20	22 26.54	-12 27.8	4.491	5.343	6.5	22.0	7 20	22 38.48	-12 44.1	1.820	2.687	13.8	21.8
7 30	22 23.04	-12 49.6	4.396	5.328	4.8	21.9	7 30	22 33.03	-13 23.9	1.745	2.683	10.3	21.6
8 9	22 18.76	-13 14.8	4.328	5.312	2.9	21.7	8 9	22 25.41	-14 12.4	1.692	2.678	6.3	21.4
8 19	22 13.94	-13 41.6	4.288	5.297	1.0	21.5	8 19	22 16.24	-15 4.4	1.664	2.673	2.2	21.1
8 29	22 8.91	-14 7.9	4.278	5.281	1.4	21.6	8 29	22 6.48	-15 53.6	1.665	2.668	3.3	21.2
9 8	22 4.02	-14 32.0	4.297	5.266	3.3	21.7	9 8	21 57.23	-16 34.1	1.693	2.661	7.5	21.4
9 18	21 59.61	-14 52.0	4.346	5.250	5.2	21.8	9 18	21 49.46	-17 2.0	1.746	2.655	11.5	21.6
9 28	21 55.99	-15 6.7	4.420	5.235	6.9	21.9	9 28	21 43.95	-17 15.3	1.822	2.647	14.9	21.8
432849	2011 <i>HL</i> ₅₅		8 23.8 45°51	7°8/17.3	18		125499	2001 <i>WK</i> ₃₁		8 23.8 254°67	4°2/20.3	18	
7 20	22 36.36	-26 32.5	1.469	2.364	14.8	20.5	7 20	22 36.04	-18 25.5	1.648	2.533	14.0	19.6
7 30	22 31.85	-28 8.7	1.427	2.373	11.5	20.4	7 30	22 31.43	-19 32.7	1.582	2.529	10.5	19.4
8 9	22 24.78	-29 40.9	1.408	2.382	8.8	20.2	8 9	22 24.52	-20 45.1	1.538	2.525	6.7	19.2
8 19	22 16.00	-30 58.2	1.412	2.392	7.9	20.2	8 19	22 15.96	-21 54.8	1.520	2.522	4.2	19.0
8 29	22 6.75	-31 51.8	1.440	2.402	9.5	20.3	8 29	22 6.80	-22 53.8	1.528	2.518	5.8	19.1
9 8	21 58.38	-32 16.8	1.492	2.412	12.4	20.5	9 8	21 58.22	-23 35.4	1.561	2.514	9.5	19.3
9 18	21 51.99	-32 13.1	1.565	2.422	15.4	20.7	9 18	21 51.28	-23 56.7	1.618	2.510	13.2	19.5
9 28	21 48.34	-31 44.0	1.656	2.433	18.1	21.0	9 28	21 46.77	-23 57.2	1.696	2.506	16.4	19.7
517874	2015 <i>RR</i> ₂₅₈		8 23.8 258°03	6°1/17.4	18		244462	2002 <i>RQ</i> ₁₇₄		8 23.8 323°92	3°2/26.4	18	
7 20	22 37.63	-30 35.1	2.505	3.372	10.5	21.6	7 20	22 33.76	-1 30.4	1.771	2.612	15.2	20.0
7 30	22 31.98	-31 23.1	2.437	3.362	8.4	21.4	7 30	22 29.52	-1 26.9	1.692	2.607	12.0	19.7
8 9	22 24.94	-32 5.6	2.393	3.352	6.6	21.3	8 9	22 23.25	-1 39.7	1.634	2.603	8.3	19.5
8 19	22 15.89	-32 36.9	2.375	3.342	6.1	21.3	8 19	22 15.54	-2 7.5	1.599	2.598	4.6	19.3
8 29	22 6.84	-32 52.3	2.385	3.332	7.1	21.3	8 29	22 7.24	-2 46.7	1.591	2.594	3.4	19.2
9 8	21 58.27	-32 49.2	2.421	3.322	9.1	21.4	9 8	21 59.39	-3 32.2	1.609	2.589	6.5	19.4
9 18	21 50.96	-32 27.6	2.481	3.312	11.3	21.6	9 18	21 52.90	-4 18.1	1.652	2.585	10.3	19.6
9 28	21 45.54	-31 48.9	2.562	3.301	13.4	21.7	9 28	21 48.52	-4 59.1	1.718	2.582	13.9	19.8
145972	2000 <i>AH</i> ₃₉		8 23.8 282°31	5°0/19.8	18		394525	2007 <i>TC</i> ₃₇₆		8 23.8 328°12	0°5/24.2	18	
7 20	22 36.12	-19 23.5	1.488	2.379	14.9	19.3	7 20	22 32.67	-7 38.7	1.649	2.517	14.9	21.3
7 30	22 31.81	-20 38.6	1.418	2.368	11.2	19.0	7 30	22 28.87	-8 4.6	1.572	2.509	11.3	21.1
8 9	22 24.92	-21 59.6	1.371	2.358	7.4	18.8	8 9	22 22.93	-8 44.3	1.517	2.501	7.1	20.8
8 19	22 16.12	-23 17.3	1.348	2.348	5.0	18.6	8 19	22 15.45	-9 34.0	1.485	2.494	2.5	20.5
8 29	22 6.55	-24 22.0	1.350	2.337	6.9	18.7	8 29	22 7.35	-10 27.9	1.480	2.487	2.4	20.5
9 8	21 57.57	-25 6.1	1.377	2.327	10.7	18.9	9 8	21 59.73	-11 19.3	1.501	2.480	7.0	20.8
9 18	21 50.38	-25 26.2	1.426	2.316	14.7	19.1	9 18	21 53.55	-12 2.5	1.546	2.474	11.3	21.0
9 28	21 45.90	-25 22.2	1.494	2.306	18.2	19.3	9 28	21 49.61	-12 33.5	1.614	2.469	15.0	21.2
249025	2007 <i>RZ</i> ₂₃₃		8 23.8 13°09	4°1/26.1	18		195017	2002 <i>CW</i> ₂₂		8 23.8 207°45	0°1/23.9	17	
7 20	22 33.32	-3 8.2	0.963	1.850	21.4	19.1	7 20	22 37.12	-9 12.1	2.042	2.895	13.0	21.1
7 30	22 30.29	-2 41.7	0.911	1.853	16.8	18.8	7 30	22 31.78	-9 32.6	1.961	2.891	9.8	20.9
8 9	22 24.18	-2 38.4	0.876	1.857	11.5	18.6	8 9	22 24.54	-10 2.6	1.904	2.886	6.1	20.7
8 19	22 15.88	-2 57.0	0.859	1.862	6.1	18.3	8 19	22 15.94	-10 38.9	1.872	2.881	2.0	20.4
8 29	22 6.86	-3 32.1	0.864	1.869	4.5	18.2	8 29	22 6.83	-11 16.9	1.869	2.875	2.1	20.4
9 8	21 58.81	-4 15.2	0.891	1.877	9.0	18.5	9 8	21 58.14	-11 51.8	1.894	2.869	6.2	20.7
9 18	21 53.10	-4 57.3	0.937	1.887	14.2	18.8	9 18	21 50.74	-12 19.7	1.946	2.863	10.0	20.9
9 28	21 50.65	-5 30.8	1.003	1.897	18.8	19.2	9 28	21 45.31	-12 37.8	2.021	2.856	13.2	21.1
130038	1999 <i>VM</i> ₁₂₇		8 23.8 258°67	0°6/24.3	18		304750	2006 <i>YJ</i> ₂₀		8 23.8 3°41	0°1/23.9	18	
7 20	22 34.01	-6 57.3	1.828	2.687	14.1	20.2	7 20	22 33.51	-9 12.9	1.829	2.695	13.8	20.9
7 30	22 29.65	-7 27.5	1.750	2.682	10.7	19.9	7 30	22 29.22	-9 33.9	1.758	2.694	10.3	20.6
8 9	22 23.30	-8 11.0	1.694	2.677	6.8	19.7	8 9	22 23.00	-10 5.5	1.709	2.695	6.4	20.4
8 19	22 15.53	-9 4.2	1.663	2.671	2.5	19.4	8 19	22 15.43	-10 43.8	1.686	2.695	2.1	20.1
8 29	22 7.20	-10 1.6	1.659	2.666	2.2	19.4	8 29	22 7.40	-11 23.9	1.689	2.696	2.3	20.1
9 8	21 59.31	-10 57.0	1.683	2.661	6.5	19.7	9 8	21 59.86	-12 0.6	1.719	2.697	6.5	20.4
9 18	21 52.76	-11 44.9	1.731	2.656	10.6	19.9	9 18	21 53.69	-12 29.5	1.775	2.698	10.4	20.7
9 28	21 48.29	-12 21.3	1.803	2.650	14.1	20.1	9 28	21 49.56	-12 47.7	1.852	2.699	13.7	20.9
140728	2001 <i>UC</i> ₉₆		8 23.8 354°28	1°6/22.5	18		517706	2015 <i>FQ</i> ₄₀₃		8 23.8 35°38	8°5/31.9	16	
7 20	22 33.86	-13 18.0	1.795	2.671	13.5	20.3	7 20	22 30.78	+12 2.5	1.417	2.213	20.5	20.9
7 30	22 29.54	-13 52.2	1.726	2.670	10.0	20.1	7 30	22 27.58	+12 12.6	1.358	2.227	17.4	20.7
8 9	22 23.21	-14 34.1	1.680	2.669	6.1	19.8	8 9	22 22.14	+11 50.2	1.317	2.241	13.9	20.5
8 19	22 15.49	-15 18.9	1.659	2.668	2.2	19.6	8 19	22 15.17	+10 54.5	1.294	2.256	10.6	20.4
8 29	22 7.28	-16 0.6	1.664	2.667	3.3	19.7	8 29	22 7.70	+9 29.3	1.295	2.271	8.6	20.3
9 8	21 59.60	-16 33.9	1.696	2.666	7.3	19.9	9 8	22 0.91	+7 43.1	1.319	2.288	9.2	20.4
9 18	21 53.35	-16 55.2	1.753	2.666	11.1	20.1	9 18	21 55.78	+5 46.9	1.367	2.304	11.7	20.6
9 28	21 49.21	-17 2.6	1.832	2.666	14.4	20.4	9 28	21 53.04	+3 52.3	1.437	2.322	14.8	20.8
279097	2008 <i>XB</i> ₉		8 23.8 10°20	4°8/19.9	18		17226	2000 <i>CC</i> ₇₆		8 23.8 110°62	0°3/23		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
515987	2015 <i>RH</i> ₂₀₀		8 23.8 221°06	4.4/19.1	18		123638	2000 <i>YY</i> ₅₃		8 23.8 169°83	3.4/19.9	18	
7 20	22 35.51	-24 30.4	2.510	3.382	10.3	21.8	7 20	22 32.91	-19 15.1	2.418	3.292	10.5	19.8
7 30	22 30.32	-25 15.9	2.442	3.378	7.8	21.6	7 30	22 28.42	-20 20.3	2.352	3.293	7.8	19.6
8 9	22 23.50	-25 59.7	2.398	3.374	5.5	21.5	8 9	22 22.36	-21 28.1	2.310	3.295	5.1	19.4
8 19	22 15.58	-26 37.0	2.381	3.370	4.4	21.4	8 19	22 15.23	-22 33.2	2.297	3.296	3.4	19.3
8 29	22 7.29	-27 3.0	2.393	3.366	5.5	21.5	8 29	22 7.72	-23 29.9	2.311	3.297	4.6	19.4
9 8	21 59.43	-27 14.7	2.431	3.361	7.8	21.6	9 8	22 0.60	-24 14.0	2.353	3.297	7.3	19.6
9 18	21 52.71	-27 11.1	2.495	3.357	10.3	21.8	9 18	21 54.56	-24 43.1	2.421	3.298	10.0	19.8
9 28	21 47.72	-26 52.5	2.581	3.352	12.5	21.9	9 28	21 50.18	-24 56.3	2.512	3.298	12.4	19.9
448631	2010 <i>VR</i> ₂₂		8 23.8 327°37	2.0/25.5	18		452738	2006 <i>BT</i> ₆₃		8 23.8 313°80	1.4/22.4	17	
7 20	22 31.85	-4 24.3	1.855	2.707	14.2	20.5	7 20	22 30.50	-11 24.6	1.943	2.817	12.7	20.9
7 30	22 28.07	-4 29.0	1.770	2.695	11.0	20.3	7 30	22 27.07	-12 20.6	1.857	2.799	9.5	20.7
8 9	22 22.37	-4 47.5	1.706	2.683	7.3	20.0	8 9	22 21.77	-13 27.7	1.793	2.781	5.8	20.4
8 19	22 15.27	-5 18.0	1.667	2.671	3.5	19.8	8 19	22 15.10	-14 41.0	1.755	2.764	2.0	20.2
8 29	22 7.58	-5 56.5	1.654	2.660	2.5	19.7	8 29	22 7.83	-15 53.8	1.744	2.747	3.1	20.2
9 8	22 0.26	-6 38.0	1.668	2.649	6.2	19.9	9 8	22 0.87	-16 59.4	1.760	2.730	7.1	20.4
9 18	21 54.20	-7 17.2	1.707	2.639	10.1	20.1	9 18	21 55.09	-17 52.6	1.802	2.714	10.9	20.6
9 28	21 50.12	-7 49.7	1.769	2.629	13.7	20.3	9 28	21 51.23	-18 29.9	1.865	2.698	14.3	20.8
204463	2005 <i>AL</i> ₁₄		8 23.8 227°35	2.1/21.8	18		506503	2003 <i>YP</i> ₁₂₄		8 23.8 142°08	4.8/27.5	17	
7 20	22 35.45	-14 29.1	2.043	2.912	12.4	20.6	7 20	22 43.62	+ 2 20.1	2.068	2.863	14.9	21.4
7 30	22 30.60	-15 17.8	1.965	2.905	9.2	20.4	7 30	22 36.47	+ 2 59.8	1.995	2.877	12.1	21.2
8 9	22 23.84	-16 13.5	1.911	2.898	5.6	20.2	8 9	22 27.35	+ 3 24.4	1.945	2.890	8.9	21.0
8 19	22 15.74	-17 11.0	1.883	2.890	2.4	19.9	8 19	22 16.89	+ 3 33.5	1.920	2.902	6.0	20.9
8 29	22 7.10	-18 4.2	1.883	2.882	3.6	20.0	8 29	22 5.99	+ 3 28.2	1.923	2.913	4.9	20.9
9 8	21 58.86	-18 47.8	1.910	2.873	7.2	20.2	9 8	21 55.65	+ 3 11.9	1.956	2.923	6.7	21.0
9 18	21 51.90	-19 18.2	1.963	2.864	10.8	20.4	9 18	21 46.74	+ 2 48.7	2.015	2.933	9.7	21.2
9 28	21 46.91	-19 33.5	2.039	2.855	13.8	20.6	9 28	21 39.94	+ 2 23.5	2.100	2.942	12.5	21.4
105914	2000 <i>ST</i> ₂₀₅		8 23.8 4°22	4.4/20.1	18		221453	2006 <i>BP</i> ₂		8 23.8 215°59	5.4/29.3	18	
7 20	22 36.32	-21 56.4	1.935	2.816	12.5	19.5	7 20	22 33.94	+ 6 54.5	2.478	3.255	13.2	19.9
7 30	22 31.28	-22 37.5	1.873	2.816	9.4	19.3	7 30	22 29.15	+ 7 25.3	2.391	3.254	11.0	19.7
8 9	22 24.24	-23 18.5	1.833	2.816	6.3	19.1	8 9	22 22.81	+ 7 40.5	2.326	3.252	8.6	19.6
8 19	22 15.85	-23 53.4	1.819	2.816	4.4	19.0	8 19	22 15.40	+ 7 39.5	2.286	3.251	6.4	19.4
8 29	22 7.04	-24 16.7	1.832	2.817	5.6	19.1	8 29	22 7.56	+ 7 23.2	2.272	3.249	5.4	19.4
9 8	21 58.82	-24 24.7	1.871	2.818	8.6	19.3	9 8	22 0.02	+ 6 54.4	2.286	3.247	6.3	19.4
9 18	21 52.08	-24 16.0	1.935	2.819	11.8	19.5	9 18	21 53.46	+ 6 16.8	2.326	3.245	8.5	19.6
9 28	21 47.47	-23 51.2	2.020	2.820	14.5	19.7	9 28	21 48.46	+ 5 35.4	2.391	3.244	10.9	19.7
102225	1999 <i>TU</i> ₁₂		8 23.8 317°05	3.0/26.0	18		186829	2004 <i>FJ</i> ₅₉		8 23.8 277°81	3.5/20.9	18	
7 20	22 29.86	-1 31.3	1.221	2.092	18.8	19.0	7 20	22 36.17	-15 40.9	1.569	2.452	14.7	20.2
7 30	22 27.57	-1 53.0	1.136	2.070	14.9	18.7	7 30	22 31.90	-16 48.9	1.483	2.430	11.0	20.0
8 9	22 22.60	-2 41.3	1.068	2.047	10.2	18.4	8 9	22 25.08	-18 7.5	1.419	2.408	6.9	19.7
8 19	22 15.48	-3 54.3	1.022	2.026	5.2	18.0	8 19	22 16.30	-19 29.0	1.379	2.385	3.6	19.4
8 29	22 7.30	-5 25.7	0.998	2.005	3.5	17.8	8 29	22 6.57	-20 44.2	1.366	2.362	5.4	19.5
9 8	21 59.49	-7 4.7	0.998	1.984	8.4	18.1	9 8	21 57.19	-21 44.4	1.378	2.338	9.8	19.7
9 18	21 53.42	-8 39.8	1.020	1.965	13.9	18.3	9 18	21 49.40	-22 24.1	1.414	2.314	14.2	19.9
9 28	21 50.23	-10 0.5	1.062	1.947	18.8	18.5	9 28	21 44.21	-22 41.2	1.470	2.291	18.0	20.1
248020	2004 <i>FX</i> ₄₀		8 23.8 35°03	2.9/26.8	18		284629	2007 <i>VU</i> ₁₈₀		8 23.8 338°71	6.8/18.6	18	
7 20	22 30.58	+ 0 51.7	1.837	2.671	15.1	19.9	7 20	22 35.92	-25 22.9	1.528	2.421	14.4	20.2
7 30	22 27.02	+ 0 11.7	1.765	2.676	11.8	19.7	7 30	22 31.61	-26 26.2	1.466	2.413	11.2	19.9
8 9	22 21.64	+ 0 48.4	1.715	2.681	8.2	19.5	8 9	22 24.76	-27 27.5	1.427	2.406	8.2	19.7
8 19	22 15.01	-2 5.7	1.688	2.687	4.5	19.3	8 19	22 16.12	-28 18.0	1.411	2.399	6.8	19.7
8 29	22 7.93	-3 34.4	1.689	2.693	3.0	19.2	8 29	22 6.85	-28 49.3	1.420	2.393	8.4	19.7
9 8	22 1.30	-5 6.9	1.717	2.699	6.0	19.4	9 8	21 58.30	-28 56.6	1.452	2.387	11.5	19.9
9 18	21 55.95	-6 35.7	1.771	2.705	9.7	19.6	9 18	21 51.59	-28 39.0	1.506	2.382	14.9	20.1
9 28	21 52.52	-7 54.4	1.849	2.711	13.1	19.9	9 28	21 47.57	-27 58.8	1.579	2.378	18.0	20.3
221858	2008 <i>GS</i> ₁₁		8 23.8 341°28	4.1/20.4	18		391972	2008 <i>WO</i> ₁₄₀		8 23.8 342°14	8.3/16.8	18	
7 20	22 31.88	-19 8.6	1.650	2.542	13.6	19.4	7 20	22 31.31	-24 58.9	1.264	2.174	15.7	19.9
7 30	22 28.37	-19 57.7	1.578	2.530	10.2	19.2	7 30	22 28.65	-26 45.2	1.207	2.162	12.2	19.6
8 9	22 22.66	-20 50.7	1.530	2.518	6.6	18.9	8 9	22 23.19	-28 32.3	1.171	2.152	9.3	19.4
8 19	22 15.39	-21 41.0	1.505	2.507	4.1	18.8	8 19	22 15.65	-30 7.6	1.157	2.143	8.4	19.4
8 29	22 7.51	-22 21.4	1.506	2.497	5.7	18.8	8 29	22 7.32	-31 18.9	1.166	2.134	10.5	19.4
9 8	22 0.16	-22 46.2	1.531	2.488	9.3	19.0	9 8	21 59.71	-31 58.5	1.197	2.127	13.9	19.6
9 18	21 54.32	-22 52.5	1.580	2.480	13.0	19.2	9 18	21 54.12	-32 4.2	1.247	2.121	17.5	19.8
9 28	21 50.79	-22 39.8	1.649	2.473	16.2	19.4	9 28	21 51.51	-31 38.4	1.314	2.116	20.8	20.0
198046	2004 <i>RB</i> ₂₈₅		8 23.8 302°57	0.1/23.9	18		240399	2003 <i>UB</i> ₁₂₃		8 23.8 317°31	3.9/20.7	18	
7 20	22 33.14	-7 50.3	1.580	2.451	15.3	20.9	7 20	22 36.72	-19 26.4	1.752	2.634	13.5	20.5
7 30	22 29.36	-8 30.3	1.501	2.440	11.6	20.6	7 30	22 31.81	-20 12.0	1.686	2.631	10.1	20.3
8 9	22 23.33	-9 25.8	1.444	2.430	7.2	20.4	8 9	22 24.70	-21 0.3	1.642	2.629	6.5	20.1
8 19	22 15.63	-10 32.0	1.411	2.420	2.4	20.0	8 19	22 16.07	-21 44.9	1.624	2.626	4.0	19.9
8 29	22 7.24	-11 42.1	1.403	2.410	2.6	20.0	8 29	22 6.91	-22 19.1	1.633	2.624	5.4	20.0
9 8	21 59.30	-12 48.1	1.422	2.400	7.5	20.3	9 8	21 58.36	-22 38.1	1.667	2.621	8.9	20.2
9 18	21 52.87	-13 43.5	1.465	2.391	12.0	20.5	9 18	21 51.39	-22 39.8	1.725	2.619	12.4	20.4
9 28	21 48.79	-14 23.6	1.529	2.381	15.9	20.8	9 28	21 46.73	-22 24.2	1.804	2.617	15.5	20.6
90051	2002 <i>VN</i> ₂₅		8 23.8 260°97	1.4/25.1	18		50292	2000 <i>CW</i> ₂₉					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
312433	2008 <i>GW</i> ₁₄₃		8 23.8	15°02	3°8/27.8	18	65112	2002 <i>CR</i> ₄₄		8 23.8	301°57	0°1/23.9	18
7 20	22 31.20	+ 2 37.1	2.098	2.914	14.1	20.3	7 20	22 33.03	- 8 48.8	2.040	2.900	12.8	20.6
7 30	22 27.31	+ 2 28.0	2.019	2.916	11.3	20.1	7 30	22 28.77	- 9 15.0	1.961	2.894	9.6	20.4
8 9	22 21.78	+ 2 1.2	1.962	2.917	8.2	20.0	8 9	22 22.73	- 9 51.6	1.905	2.888	6.0	20.2
8 19	22 15.09	+ 1 18.1	1.929	2.918	5.2	19.8	8 19	22 15.43	-10 35.1	1.874	2.883	2.0	19.9
8 29	22 7.96	+ 0 21.9	1.923	2.920	3.9	19.7	8 29	22 7.65	-11 20.7	1.871	2.877	2.1	19.9
9 8	22 1.22	- 0 42.0	1.943	2.921	5.8	19.8	9 8	22 0.25	-12 3.3	1.895	2.871	6.1	20.2
9 18	21 55.60	- 1 48.1	1.991	2.923	8.9	20.0	9 18	21 54.05	-12 38.7	1.945	2.866	9.8	20.4
9 28	21 51.71	- 2 50.4	2.062	2.925	11.9	20.2	9 28	21 49.71	-13 3.8	2.018	2.861	13.0	20.6
386123	2007 <i>RD</i> ₂₈₆		8 23.8	33°57	12°6/27.5	15	289001	2004 <i>TV</i> ₇₄		8 23.8	255°83	2°0/21.7	18
7 20	22 49.70	+ 3 51.8	0.906	1.752	25.8	19.9	7 20	22 33.84	-16 6.6	2.529	3.395	10.4	21.2
7 30	22 43.10	+ 6 42.4	0.853	1.757	21.8	19.6	7 30	22 29.12	-16 43.0	2.443	3.382	7.7	21.0
8 9	22 32.47	+ 9 11.3	0.816	1.763	17.4	19.4	8 9	22 22.84	-17 23.6	2.382	3.368	4.8	20.8
8 19	22 18.81	+11 7.4	0.798	1.769	13.8	19.2	8 19	22 15.45	-18 4.3	2.348	3.354	2.2	20.6
8 29	22 4.01	+12 22.4	0.801	1.776	12.7	19.2	8 29	22 7.62	-18 40.9	2.343	3.340	3.3	20.7
9 8	21 50.37	+12 56.1	0.824	1.783	14.6	19.4	9 8	22 0.10	-19 9.4	2.366	3.326	6.2	20.9
9 18	21 39.82	+12 56.1	0.867	1.791	18.2	19.6	9 18	21 53.56	-19 27.4	2.416	3.312	9.2	21.0
9 28	21 33.58	+12 35.0	0.926	1.799	22.0	19.9	9 28	21 48.62	-19 33.3	2.489	3.297	11.9	21.2
9167	Kharkiv		8 23.8	2°81	2°2/22.2	18	327213	2005 <i>NT</i> ₁₂₅		8 23.9	23°16	6°5/19.7	17
7 20	22 34.64	-16 4.0	1.743	2.625	13.6	16.8	7 20	22 37.87	-22 50.6	1.230	2.131	16.7	19.7
7 30	22 30.17	-16 21.9	1.678	2.624	10.1	16.6	7 30	22 33.35	-23 50.6	1.183	2.136	12.7	19.5
8 9	22 23.65	-16 44.3	1.635	2.624	6.2	16.3	8 9	22 25.91	-24 49.9	1.156	2.141	8.7	19.3
8 19	22 15.71	-17 6.4	1.617	2.625	2.6	16.1	8 19	22 16.52	-25 38.7	1.151	2.147	6.5	19.2
8 29	22 7.33	-17 23.1	1.626	2.626	3.8	16.2	8 29	22 6.59	-26 7.7	1.170	2.154	8.2	19.3
9 8	21 59.55	-17 30.4	1.660	2.629	7.6	16.4	9 8	21 57.69	-26 11.9	1.212	2.162	11.9	19.5
9 18	21 53.29	-17 25.9	1.719	2.631	11.3	16.7	9 18	21 51.07	-25 51.1	1.275	2.170	15.8	19.8
9 28	21 49.21	-17 8.8	1.799	2.635	14.6	16.9	9 28	21 47.52	-25 7.9	1.356	2.178	19.2	20.0
254373	2004 <i>TT</i> ₁₂₄		8 23.8	187°82	7°3/16.4	18	148005	1997 <i>GF</i> ₃₀		8 23.9	91°68	0°1/23.9	18
7 20	22 41.53	-35 46.5	2.531	3.384	10.8	20.7	7 20	22 33.89	- 8 51.3	2.251	3.104	12.0	20.6
7 30	22 34.86	-36 33.4	2.476	3.384	9.0	20.6	7 30	22 29.11	- 9 19.8	2.188	3.118	8.9	20.5
8 9	22 26.31	-37 10.8	2.445	3.384	7.6	20.5	8 9	22 22.76	- 9 57.2	2.150	3.133	5.5	20.3
8 19	22 16.55	-37 32.9	2.440	3.383	7.3	20.5	8 19	22 15.40	-10 39.8	2.138	3.147	1.8	20.1
8 29	22 6.49	-37 35.4	2.461	3.382	8.3	20.6	8 29	22 7.74	-11 23.3	2.154	3.160	1.9	20.1
9 8	21 57.07	-37 16.7	2.508	3.381	9.9	20.7	9 8	22 0.56	-12 3.5	2.199	3.174	5.5	20.4
9 18	21 49.13	-36 37.8	2.579	3.379	11.8	20.8	9 18	21 54.53	-12 36.6	2.270	3.188	8.7	20.6
9 28	21 43.25	-35 41.6	2.670	3.378	13.6	21.0	9 28	21 50.19	-13 0.4	2.366	3.201	11.5	20.8
294029	2007 <i>TO</i> ₁₂₆		8 23.8	243°13	1°9/25.7	18	55704	2165 <i>T</i> ₋₃		8 23.9	313°88	1°3/22.8	18
7 20	22 33.54	- 3 15.8	2.035	2.875	13.6	20.8	7 20	22 35.18	-13 15.2	1.808	2.681	13.5	19.0
7 30	22 29.17	- 3 35.3	1.951	2.869	10.5	20.6	7 30	22 30.64	-13 35.8	1.729	2.671	10.1	18.8
8 9	22 22.99	- 4 9.3	1.889	2.863	7.0	20.4	8 9	22 24.01	-14 3.7	1.673	2.661	6.2	18.5
8 19	22 15.51	- 4 55.4	1.853	2.856	3.4	20.1	8 19	22 15.89	-14 34.6	1.642	2.651	2.2	18.2
8 29	22 7.52	- 5 49.4	1.844	2.849	2.4	20.1	8 29	22 7.19	-15 3.3	1.638	2.641	3.1	18.3
9 8	21 59.89	- 6 45.8	1.863	2.843	5.8	20.3	9 8	21 58.95	-15 24.9	1.660	2.632	7.2	18.5
9 18	21 53.44	- 7 39.4	1.908	2.836	9.5	20.5	9 18	21 52.12	-15 36.2	1.707	2.623	11.2	18.7
9 28	21 48.84	- 8 25.4	1.976	2.828	12.8	20.7	9 28	21 47.46	-15 35.0	1.776	2.614	14.6	19.0
263081	2007 <i>RX</i> ₂₃₃		8 23.8	14°02	7°2/27.7	17	485226	2010 <i>VU</i> ₂₃		8 23.9	317°97	8°4/31.6	17
7 20	22 30.67	+ 0 12.0	0.804	1.697	24.0	18.5	7 20	22 30.92	+12 39.8	1.958	2.723	16.7	21.3
7 30	22 28.64	+ 1 17.9	0.762	1.702	19.3	18.2	7 30	22 27.46	+13 18.4	1.862	2.705	14.5	21.1
8 9	22 23.33	+ 1 54.7	0.734	1.710	14.1	18.0	8 9	22 22.10	+13 34.3	1.784	2.688	12.1	20.9
8 19	22 15.71	+ 2 0.4	0.723	1.719	9.2	17.8	8 19	22 15.29	+13 24.7	1.728	2.671	9.8	20.8
8 29	22 7.39	+ 1 38.4	0.731	1.731	7.2	17.7	8 29	22 7.80	+12 49.4	1.694	2.654	8.5	20.7
9 8	22 0.19	+ 0 57.5	0.759	1.745	10.2	18.0	9 8	22 0.56	+11 51.6	1.686	2.638	9.0	20.6
9 18	21 55.54	+ 0 8.7	0.805	1.761	14.9	18.3	9 18	21 54.45	+10 37.0	1.702	2.622	10.9	20.7
9 28	21 54.31	- 0 37.3	0.869	1.779	19.4	18.6	9 28	21 50.27	+ 9 13.8	1.740	2.607	13.5	20.9
236231	2005 <i>XX</i> ₇₉		8 23.8	231°37	1°2/22.9	18	289682	2005 <i>GG</i> ₁₅₇		8 23.9	63°47	4°0/20.7	18
7 20	22 36.97	-12 27.1	1.874	2.740	13.4	21.2	7 20	22 37.22	-19 57.7	1.782	2.663	13.3	20.3
7 30	22 31.87	-12 55.2	1.797	2.735	10.0	21.0	7 30	22 32.04	-20 42.7	1.728	2.672	9.9	20.1
8 9	22 24.72	-13 31.4	1.742	2.729	6.1	20.8	8 9	22 24.76	-21 29.2	1.696	2.682	6.4	19.9
8 19	22 16.10	-14 11.2	1.714	2.723	2.1	20.5	8 19	22 16.12	-22 10.8	1.690	2.691	4.0	19.8
8 29	22 6.92	-14 49.1	1.713	2.717	2.9	20.5	8 29	22 7.10	-22 41.3	1.711	2.701	5.4	19.9
9 8	21 58.23	-15 20.1	1.739	2.710	7.1	20.8	9 8	21 58.78	-22 56.7	1.758	2.711	8.6	20.1
9 18	21 50.93	-15 40.5	1.791	2.703	11.0	21.0	9 18	21 52.06	-22 55.4	1.829	2.720	11.9	20.3
9 28	21 45.78	-15 48.3	1.865	2.697	14.3	21.2	9 28	21 47.60	-22 37.8	1.922	2.730	14.8	20.5
338012	2002 <i>EL</i> ₁₄₇		8 23.8	124°77	0°2/23.9	16	136727	1995 <i>UB</i> ₅₁		8 23.9	50°53	1°4/24.9	17
7 20	22 34.26	- 7 30.7	1.778	2.639	14.3	21.1	7 20	22 36.28	- 5 27.3	1.221	2.095	18.6	20.2
7 30	22 29.86	- 8 13.5	1.709	2.643	10.8	20.9	7 30	22 31.88	- 5 48.8	1.174	2.113	14.2	20.0
8 9	22 23.46	- 9 9.7	1.662	2.646	6.7	20.6	8 9	22 24.89	- 6 29.0	1.147	2.130	9.0	19.7
8 19	22 15.67	-10 14.8	1.640	2.649	2.3	20.3	8 19	22 16.19	- 7 22.9	1.141	2.149	3.6	19.5
8 29	22 7.39	-11 22.4	1.646	2.652	2.3	20.4	8 29	22 7.06	- 8 22.8	1.160	2.167	2.7	19.5
9 8	21 59.63	-12 25.8	1.678	2.655	6.7	20.6	9 8	21 58.88	- 9 20.1	1.204	2.187	7.8	19.9
9 18	21 53.27	-13 19.3	1.736	2.658	10.7	20.9	9 18	21 52.75	-10 8.1	1.270	2.206	12.6	20.2
9 28	21 49.02	-13 59.3	1.817	2.661	14.1	21.1	9 28	21 49.40	-10 42.0	1.357	2.225	16.5	20.5
210349	2007 <i>UJ</i> ₄		8 23.8	204°61	3°9/27.7	18	180269	2003 <i>WB</i> ₄₁		8 23.			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
127269	2002 <i>JJ</i> ₅₅		8 23.9 159°77	2°5/21.1	18		407633	2011 <i>DF</i>		8 23.9 307°05	1°2/25.0	18	
7 20	22 34.25	-17 51.1	2.597	3.464	10.1	20.2	7 20	22 34.12	-6 37.0	2.450	3.292	11.5	20.6
7 30	22 29.30	-18 33.4	2.529	3.468	7.5	20.1	7 30	22 29.29	-6 33.1	2.367	3.288	8.8	20.5
8 9	22 22.89	-19 18.1	2.486	3.471	4.7	19.9	8 9	22 22.95	-6 37.8	2.308	3.284	5.7	20.3
8 19	22 15.49	-20 1.2	2.471	3.475	2.6	19.7	8 19	22 15.55	-6 49.2	2.275	3.281	2.5	20.0
8 29	22 7.78	-20 38.2	2.485	3.478	3.6	19.8	8 29	22 7.77	-7 4.9	2.271	3.277	1.9	20.0
9 8	22 0.45	-21 5.7	2.527	3.480	6.3	20.0	9 8	22 0.33	-7 21.6	2.295	3.274	5.0	20.2
9 18	21 54.16	-21 21.6	2.596	3.483	9.0	20.2	9 18	21 53.90	-7 36.4	2.347	3.270	8.2	20.4
9 28	21 49.42	-21 25.2	2.688	3.485	11.4	20.4	9 28	21 49.05	-7 46.8	2.423	3.267	11.0	20.6
478753	2012 <i>UY</i> ₉₇		8 23.9 353°53	8°5/28.8	18		101283	1998 <i>SJ</i> ₁₁₈		8 23.9 183°85	10°4/11.8	18	
7 20	22 33.68	+ 4 34.7	1.264	2.103	20.2	20.2	7 20	22 53.25	-49 53.1	2.729	3.520	11.8	19.7
7 30	22 30.24	+ 5 52.4	1.194	2.096	16.9	20.0	7 30	22 43.85	-50 56.3	2.690	3.521	10.9	19.7
8 9	22 24.15	+ 6 47.7	1.142	2.091	13.3	19.8	8 9	22 31.97	-51 41.7	2.673	3.520	10.4	19.6
8 19	22 16.06	+ 7 16.9	1.109	2.086	9.9	19.6	8 19	22 18.53	-52 2.6	2.680	3.520	10.6	19.6
8 29	22 7.13	+ 7 19.1	1.098	2.083	8.5	19.5	8 29	22 4.79	-51 54.9	2.710	3.518	11.3	19.7
9 8	21 58.77	+ 6 58.1	1.110	2.082	10.1	19.6	9 8	21 52.11	-51 18.3	2.763	3.516	12.3	19.8
9 18	21 52.24	+ 6 20.8	1.143	2.081	13.4	19.8	9 18	21 41.55	-50 16.0	2.836	3.513	13.5	19.9
9 28	21 48.53	+ 5 36.2	1.197	2.082	17.1	20.0	9 28	21 33.79	-48 52.9	2.927	3.510	14.6	20.0
438921	2010 <i>CK</i> ₅₉		8 23.9 136°48	0°7/24.7	18		315159	2007 <i>FX</i> ₂₂		8 23.9 167°65	0°3/24.3	18	
7 20	22 34.36	- 4 35.0	2.211	3.050	12.7	21.2	7 20	22 32.18	- 7 22.8	2.644	3.489	10.7	21.4
7 30	22 29.55	- 5 31.9	2.142	3.062	9.6	21.0	7 30	22 27.75	- 7 56.3	2.567	3.491	8.0	21.2
8 9	22 23.11	- 6 42.3	2.097	3.074	6.1	20.8	8 9	22 21.95	- 8 38.8	2.514	3.493	5.0	21.0
8 19	22 15.59	- 8 2.0	2.079	3.085	2.3	20.6	8 19	22 15.22	- 9 27.4	2.488	3.496	1.8	20.8
8 29	22 7.70	- 9 25.3	2.090	3.096	1.8	20.6	8 29	22 8.16	-10 18.2	2.491	3.497	1.6	20.8
9 8	22 0.24	-10 45.8	2.130	3.107	5.5	20.8	9 8	22 1.42	-11 7.1	2.523	3.499	4.8	21.0
9 18	21 53.94	-11 58.4	2.198	3.116	8.9	21.1	9 18	21 55.60	-11 50.5	2.583	3.500	7.8	21.2
9 28	21 49.36	-12 59.0	2.290	3.126	11.9	21.3	9 28	21 51.20	-12 25.7	2.668	3.501	10.4	21.4
367285	2007 <i>TB</i> ₃₈₇		8 23.9 314°31	3°6/25.9	18		259589	2003 <i>UV</i> ₂₃₅		8 23.9 170°10	2°0/25.4	18	
7 20	22 36.09	- 3 35.4	1.213	2.082	19.1	20.6	7 20	22 40.23	- 4 35.8	1.801	2.641	15.1	20.7
7 30	22 32.27	- 3 11.7	1.136	2.068	15.1	20.3	7 30	22 34.32	- 4 37.4	1.727	2.645	11.6	20.5
8 9	22 25.55	- 3 6.6	1.076	2.054	10.3	20.0	8 9	22 26.27	- 4 52.6	1.674	2.648	7.7	20.3
8 19	22 16.57	- 3 19.5	1.038	2.041	5.4	19.7	8 19	22 16.71	- 5 19.2	1.647	2.651	3.6	20.0
8 29	22 6.57	- 3 46.8	1.023	2.028	4.1	19.6	8 29	22 6.61	- 5 53.0	1.648	2.653	2.6	20.0
9 8	21 57.09	- 4 21.9	1.032	2.016	8.6	19.8	9 8	21 57.05	- 6 29.0	1.675	2.654	6.5	20.2
9 18	21 49.57	- 4 57.8	1.062	2.004	13.8	20.0	9 18	21 49.01	- 7 2.4	1.730	2.655	10.5	20.5
9 28	21 45.09	- 5 27.4	1.112	1.993	18.5	20.3	9 28	21 43.22	- 7 28.9	1.807	2.655	14.0	20.7
129700	1998 <i>SS</i> ₈₉		8 23.9 304°16	1°1/22.9	18		470743	2008 <i>UK</i> ₁₂₀		8 23.9 11°02	3°4/26.3	18	
7 20	22 33.83	-12 57.8	2.115	2.983	12.1	20.0	7 20	22 36.25	- 2 22.9	1.604	2.450	16.3	21.1
7 30	22 29.40	-13 20.0	2.029	2.968	9.0	19.8	7 30	22 31.58	- 2 5.1	1.533	2.451	12.8	20.8
8 9	22 23.17	-13 49.0	1.967	2.954	5.5	19.6	8 9	22 24.68	- 2 3.2	1.482	2.452	8.8	20.6
8 19	22 15.65	-14 21.0	1.931	2.940	1.9	19.3	8 19	22 16.20	- 2 16.4	1.454	2.453	4.9	20.4
8 29	22 7.60	-14 51.5	1.922	2.926	2.7	19.3	8 29	22 7.14	- 2 41.2	1.452	2.455	3.6	20.3
9 8	21 59.90	-15 16.1	1.941	2.912	6.5	19.6	9 8	21 58.64	- 3 12.7	1.476	2.457	6.9	20.5
9 18	21 53.37	-15 31.7	1.986	2.899	10.0	19.7	9 18	21 51.71	- 3 45.3	1.525	2.459	11.0	20.8
9 28	21 48.68	-15 36.2	2.054	2.886	13.2	19.9	9 28	21 47.13	- 4 13.8	1.595	2.461	14.6	21.0
185796	1999 <i>VA</i> ₁₅₁		8 23.9 351°39	6°0/18.5	18		289264	2004 <i>XE</i> ₁₂₁		8 23.9 321°90	2°9/25.4	18	
7 20	22 36.30	-26 42.3	1.985	2.866	12.2	19.6	7 20	22 33.26	- 5 13.2	1.080	1.965	19.7	19.8
7 30	22 31.35	-27 34.6	1.925	2.864	9.5	19.4	7 30	22 30.53	- 4 54.6	1.000	1.943	15.5	19.5
8 9	22 24.37	-28 23.3	1.889	2.862	7.0	19.3	8 9	22 24.71	- 4 54.9	0.937	1.921	10.4	19.1
8 19	22 16.03	-29 1.8	1.877	2.860	6.0	19.2	8 19	22 16.39	- 5 13.3	0.895	1.901	5.0	18.8
8 29	22 7.26	-29 24.3	1.892	2.859	7.2	19.3	8 29	22 6.85	- 5 45.3	0.874	1.881	3.7	18.6
9 8	21 59.09	-29 27.4	1.933	2.858	9.7	19.4	9 8	21 57.74	- 6 23.4	0.875	1.862	9.2	18.9
9 18	21 52.41	-29 10.6	1.997	2.857	12.5	19.6	9 18	21 50.68	- 6 59.5	0.897	1.844	15.0	19.1
9 28	21 47.89	-28 35.4	2.081	2.857	14.9	19.8	9 28	21 46.92	- 7 26.2	0.937	1.828	20.2	19.4
62566	2000 <i>SA</i> ₂₇₄		8 23.9 345°64	4°8/28.6	18		444282	2005 <i>UF</i> ₄₃₁		8 23.9 231°15	2°7/26.7	18	
7 20	22 30.81	+ 4 44.4	1.936	2.748	15.2	19.3	7 20	22 32.83	- 0 42.4	2.400	3.221	12.4	22.0
7 30	22 27.23	+ 4 40.5	1.855	2.745	12.4	19.1	7 30	22 28.41	- 0 48.7	2.313	3.216	9.7	21.8
8 9	22 21.87	+ 4 16.1	1.794	2.742	9.3	18.9	8 9	22 22.46	- 1 8.4	2.249	3.211	6.8	21.6
8 19	22 15.22	+ 3 32.0	1.756	2.739	6.3	18.7	8 19	22 15.43	- 1 39.9	2.210	3.206	3.9	21.4
8 29	22 8.08	+ 2 31.2	1.744	2.737	4.8	18.6	8 29	22 7.97	- 2 20.5	2.199	3.200	2.8	21.3
9 8	22 1.30	+ 1 19.4	1.758	2.735	6.5	18.7	9 8	22 0.81	- 3 6.1	2.216	3.195	5.2	21.5
9 18	21 55.72	+ 0 3.2	1.798	2.733	9.5	18.9	9 18	21 54.63	- 3 52.4	2.261	3.189	8.2	21.7
9 28	21 51.99	- 1 10.4	1.862	2.732	12.7	19.1	9 28	21 50.02	- 4 35.2	2.330	3.183	11.1	21.8
175687	1995 <i>SV</i> ₁₂		8 23.9 12°19	0°7/24.5	18		260074	2004 <i>HK</i> ₆₅		8 23.9 74°70	6°0/28.0	17	
7 20	22 32.52	- 6 39.2	1.893	2.751	13.7	20.5	7 20	22 41.18	+ 3 0.4	1.520	2.339	18.3	20.3
7 30	22 28.48	- 7 7.0	1.821	2.752	10.4	20.3	7 30	22 35.16	+ 3 46.6	1.465	2.359	14.8	20.1
8 9	22 22.61	- 7 47.7	1.771	2.753	6.6	20.0	8 9	22 26.79	+ 4 12.1	1.429	2.379	11.0	19.9
8 19	22 15.46	- 8 37.5	1.747	2.754	2.5	19.8	8 19	22 16.87	+ 4 16.2	1.417	2.400	7.5	19.8
8 29	22 7.86	- 9 31.4	1.749	2.756	2.0	19.8	8 29	22 6.53	+ 4 0.9	1.429	2.420	6.1	19.8
9 8	22 0.71	-10 23.5	1.779	2.758	6.1	20.0	9 8	21 57.00	+ 3 31.3	1.467	2.439	8.0	19.9
9 18	21 54.84	-11 9.0	1.834	2.760	9.9	20.3	9 18	21 49.31	+ 2 53.8	1.530	2.459	11.3	20.2
9 28	21 50.90	-11 44.0	1.912	2.763	13.2	20.5	9 28	21 44.17	+ 2 15.0	1.615	2.479	14.6	20.4
328106	2008 <i>AA</i> ₃₂		8 23.9 269°73	2°3/21.9	18		209254	2003 <i>WQ</i> ₁₄₉					

EPHEMERIDES

8 23.9

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
82775	2001 QZ ₁₅		8 23.9 338°00	1.3°/22.8	18		447330	2005 YE ₂₂		8 23.9 323°06	0.4°/24.3	18	
7 20	22 33.23	-11 47.3	1.770	2.645	13.7	19.2	7 20	22 32.99	-8 16.7	2.022	2.881	12.9	21.3
7 30	22 29.21	-12 28.3	1.698	2.641	10.2	19.0	7 30	22 28.83	-8 32.3	1.941	2.873	9.8	21.1
8 9	22 23.17	-13 19.1	1.649	2.637	6.2	18.8	8 9	22 22.87	-8 58.2	1.882	2.865	6.2	20.8
8 19	22 15.70	-14 14.6	1.624	2.633	2.1	18.5	8 19	22 15.63	-9 31.4	1.849	2.857	2.2	20.6
8 29	22 7.70	-15 8.6	1.626	2.630	3.1	18.6	8 29	22 7.89	-10 7.7	1.843	2.850	2.0	20.5
9 8	22 0.18	-15 54.8	1.655	2.627	7.3	18.8	9 8	22 0.54	-10 42.3	1.865	2.843	6.0	20.8
9 18	21 54.06	-16 29.0	1.708	2.625	11.2	19.1	9 18	21 54.37	-11 11.3	1.912	2.836	9.7	21.0
9 28	21 50.05	-16 48.5	1.784	2.622	14.6	19.3	9 28	21 50.07	-11 31.3	1.982	2.830	13.0	21.2
385614	2005 GA ₁₄₂		8 23.9 120°44	1°0°/22.9	18		482434	2012 CD ₅₃		8 23.9 206°86	2°6°/21.0	18	
7 20	22 36.92	-12 33.5	2.042	2.905	12.7	21.2	7 20	22 36.91	-19 54.2	2.971	3.831	9.2	22.2
7 30	22 31.58	-12 59.1	1.977	2.913	9.4	21.0	7 30	22 31.18	-20 21.4	2.891	3.825	6.9	22.0
8 9	22 24.44	-13 31.4	1.936	2.922	5.7	20.8	8 9	22 24.05	-20 49.2	2.836	3.818	4.4	21.9
8 19	22 16.08	-14 6.2	1.921	2.930	1.9	20.6	8 19	22 15.98	-21 14.0	2.810	3.811	2.6	21.7
8 29	22 7.35	-14 38.9	1.934	2.938	2.7	20.7	8 29	22 7.57	-21 32.6	2.814	3.803	3.5	21.8
9 8	21 59.16	-15 5.2	1.975	2.945	6.4	20.9	9 8	21 59.49	-21 42.2	2.846	3.795	5.9	21.9
9 18	21 52.31	-15 22.0	2.042	2.953	9.9	21.1	9 18	21 52.35	-21 41.4	2.907	3.787	8.4	22.1
9 28	21 47.40	-15 27.8	2.132	2.960	12.9	21.4	9 28	21 46.67	-21 30.0	2.991	3.778	10.6	22.2
264296	1998 TR ₂₀		8 23.9 156°56	4°0°/20.9	18		319935	2006 YS ₄₈		8 23.9 313°74	3°0°/21.6	18	
7 20	22 39.77	-19 9.2	1.680	2.559	14.1	20.5	7 20	22 33.17	-13 38.0	1.343	2.236	16.1	20.3
7 30	22 34.17	-19 57.6	1.619	2.562	10.5	20.3	7 30	22 29.90	-14 45.1	1.269	2.222	12.0	20.0
8 9	22 26.24	-20 48.8	1.580	2.565	6.8	20.0	8 9	22 24.00	-16 5.6	1.217	2.208	7.4	19.7
8 19	22 16.72	-21 36.0	1.566	2.568	4.1	19.9	8 19	22 16.12	-17 31.5	1.187	2.195	3.3	19.4
8 29	22 6.68	-22 12.1	1.579	2.570	5.5	20.0	8 29	22 7.38	-18 52.3	1.182	2.182	5.1	19.5
9 8	21 57.35	-22 32.1	1.618	2.573	9.1	20.2	9 8	21 59.16	-19 58.5	1.202	2.170	9.9	19.7
9 18	21 49.74	-22 34.2	1.681	2.574	12.7	20.4	9 18	21 52.73	-20 43.7	1.244	2.158	14.6	20.0
9 28	21 44.61	-22 18.7	1.766	2.576	15.9	20.7	9 28	21 49.05	-21 5.0	1.304	2.147	18.6	20.2
278204	2007 EH ₃₄		8 23.9 218°09	1°3°/22.7	17		218802	2006 BF ₁₄₀		8 23.9 228°24	0°2°/24.1	18	
7 20	22 36.96	-11 52.3	1.945	2.808	13.2	21.9	7 20	22 32.58	-8 23.0	2.582	3.430	10.8	21.3
7 30	22 31.89	-12 37.0	1.864	2.801	9.8	21.6	7 30	22 28.15	-8 49.5	2.497	3.424	8.1	21.1
8 9	22 24.80	-13 31.1	1.807	2.793	6.0	21.4	8 9	22 22.29	-9 24.4	2.437	3.418	5.1	20.9
8 19	22 16.26	-14 29.8	1.776	2.785	2.1	21.1	8 19	22 15.42	-10 5.1	2.403	3.412	1.8	20.7
8 29	22 7.13	-15 26.7	1.773	2.776	3.0	21.2	8 29	22 8.16	-10 47.8	2.399	3.405	1.7	20.7
9 8	21 58.41	-16 16.1	1.798	2.767	7.1	21.4	9 8	22 1.20	-11 28.6	2.423	3.398	5.0	20.9
9 18	21 51.01	-16 53.6	1.849	2.757	10.9	21.6	9 18	21 55.16	-12 3.9	2.474	3.391	8.1	21.1
9 28	21 45.69	-17 16.8	1.922	2.747	14.2	21.8	9 28	21 50.59	-12 31.2	2.550	3.384	10.9	21.3
228124	2008 YC ₇		8 23.9 309°96	2°6°/28.3	17		267851	2003 UF ₂₈₃		8 23.9 272°39	4°1°/27.9	18	
7 20	22 26.10	+ 3 14.2	3.952	4.741	8.5	19.9	7 20	22 32.54	+ 3 16.2	1.969	2.784	14.9	21.1
7 30	22 22.92	+ 3 4.7	3.848	4.726	6.8	19.8	7 30	22 28.65	+ 2 59.7	1.873	2.768	12.1	20.9
8 9	22 18.87	+ 2 45.3	3.768	4.711	5.1	19.7	8 9	22 22.88	+ 2 22.7	1.797	2.752	8.8	20.7
8 19	22 14.21	+ 2 16.8	3.714	4.696	3.4	19.5	8 19	22 15.69	+ 1 26.3	1.746	2.735	5.6	20.4
8 29	22 9.31	+ 1 40.6	3.689	4.681	2.6	19.5	8 29	22 7.85	+ 0 13.8	1.721	2.718	4.1	20.3
9 8	22 4.54	+ 0 59.2	3.693	4.666	3.6	19.5	9 8	22 0.27	- 1 8.8	1.723	2.702	6.3	20.4
9 18	22 0.29	+ 0 15.0	3.725	4.652	5.4	19.6	9 18	21 53.83	- 2 34.3	1.751	2.685	9.8	20.6
9 28	21 56.91	- 0 29.0	3.784	4.637	7.2	19.7	9 28	21 49.29	- 3 55.4	1.804	2.668	13.3	20.8
121353	1999 TF ₃₉		8 23.9 281°90	3°9°/19.6	18		214114	2004 SY ₂₂		8 23.9 132°22	1°7°/22.8	17	
7 20	22 34.01	-20 33.2	2.305	3.181	10.9	19.9	7 20	22 40.83	-13 11.2	1.385	2.263	16.6	20.6
7 30	22 29.58	-21 35.0	2.216	3.157	8.2	19.7	7 30	22 35.34	-13 38.1	1.323	2.267	12.4	20.3
8 9	22 23.35	-22 40.0	2.151	3.134	5.5	19.5	8 9	22 27.16	-14 14.1	1.283	2.271	7.6	20.1
8 19	22 15.79	-23 42.5	2.113	3.110	3.9	19.3	8 19	22 17.11	-14 53.4	1.266	2.275	2.7	19.8
8 29	22 7.63	-24 36.3	2.103	3.086	5.2	19.4	8 29	22 6.46	-15 28.6	1.274	2.278	3.7	19.9
9 8	21 59.74	-25 16.5	2.120	3.061	8.1	19.5	9 8	21 56.61	-15 53.7	1.308	2.281	8.7	20.2
9 18	21 52.92	-25 40.1	2.162	3.037	11.1	19.7	9 18	21 48.77	-16 4.8	1.366	2.284	13.3	20.4
9 28	21 47.90	-25 46.3	2.226	3.012	13.8	19.8	9 28	21 43.78	-16 0.6	1.444	2.287	17.1	20.7
401730	2013 JF ₁₆		8 23.9 192°65	4°2°/19.2	18		339328	2004 XY ₁₆₄		8 23.9 357°51	9°3°/28.5	18	
7 20	22 35.11	-23 29.5	2.494	3.366	10.3	21.5	7 20	22 34.52	+ 3 50.9	1.141	1.990	21.4	18.5
7 30	22 30.10	-24 22.4	2.428	3.365	7.8	21.3	7 30	22 31.13	+ 5 33.4	1.076	1.984	17.9	18.3
8 9	22 23.49	-25 14.4	2.387	3.364	5.4	21.2	8 9	22 24.86	+ 6 54.2	1.028	1.979	14.1	18.0
8 19	22 15.79	-26 0.5	2.372	3.363	4.2	21.1	8 19	22 16.43	+ 7 48.1	0.999	1.976	10.7	17.9
8 29	22 7.72	-26 35.7	2.386	3.361	5.3	21.2	8 29	22 7.10	+ 8 12.7	0.992	1.976	9.3	17.8
9 8	22 0.06	-26 56.9	2.428	3.359	7.7	21.3	9 8	21 58.43	+ 8 10.8	1.006	1.976	11.0	17.9
9 18	21 53.53	-27 2.5	2.494	3.358	10.2	21.5	9 18	21 51.78	+ 7 48.9	1.040	1.979	14.4	18.1
9 28	21 48.70	-26 52.6	2.583	3.355	12.5	21.6	9 28	21 48.19	+ 7 16.3	1.094	1.983	18.0	18.3
452287	2015 TC ₂₀₉		8 23.9 264°78	2°7°/27.2	18		67157	2000 AR ₁₉₈		8 23.9 332°94	7°4°/29.9	18	
7 20	22 30.87	+ 1 31.8	2.689	3.497	11.5	21.3	7 20	22 34.44	+ 8 45.0	2.038	2.818	15.6	17.2
7 30	22 26.92	+ 1 0.6	2.583	3.477	9.2	21.1	7 30	22 30.00	+ 9 43.9	1.950	2.808	13.3	17.0
8 9	22 21.56	+ 0 14.4	2.500	3.457	6.5	20.9	8 9	22 23.67	+ 10 24.9	1.882	2.799	10.8	16.8
8 19	22 15.18	+ 0 45.5	2.443	3.436	3.8	20.7	8 19	22 15.95	+ 10 45.5	1.836	2.790	8.5	16.6
8 29	22 8.32	+ 1 55.8	2.414	3.415	2.7	20.6	8 29	22 7.60	+ 10 45.3	1.815	2.782	7.4	16.6
9 8	22 1.64	+ 3 12.0	2.415	3.393	4.8	20.7	9 8	21 59.55	+ 10 26.5	1.820	2.774	8.2	16.6
9 18	21 55.75	+ 4 28.9	2.444	3.371	7.7	20.8	9 18	21 52.65	+ 9 53.4	1.849	2.767	10.4	16.7
9 28	21 51.23	+ 5 41.7	2.499	3.349	10.5	21.0	9 28	21 47.65	+ 9 12.0	1.902	2.760	13.0	16.9
365677	2010 VL ₈₅		8 23.9 111°94	4°0°/28.2	18		92722	2000 QY ₉₄		8 23.9 225°53	0°1°/23.9	18	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
509478	2007 <i>SM</i> ₂₂		8 23.9 351°03	2°6/25.5	18		146891	2002 <i>CY</i> ₄₀		8 23.9 45°33	7°7/30.3	18	
7 20	22 34.54	- 5 33.6	1.375	2.244	17.2	20.5	7 20	22 37.22	+ 9 39.0	2.005	2.775	16.2	19.3
7 30	22 30.70	- 5 9.4	1.303	2.237	13.4	20.2	7 30	22 31.95	+10 43.5	1.934	2.784	13.7	19.1
8 9	22 24.36	- 4 59.9	1.252	2.232	8.9	19.9	8 9	22 24.79	+11 28.6	1.884	2.794	11.1	19.0
8 19	22 16.21	- 5 3.5	1.223	2.227	4.3	19.7	8 19	22 16.31	+11 51.9	1.856	2.805	8.9	18.9
8 29	22 7.36	- 5 16.8	1.218	2.223	3.2	19.6	8 29	22 7.34	+11 53.3	1.853	2.815	7.7	18.8
9 8	21 59.10	- 5 34.6	1.237	2.221	7.5	19.8	9 8	21 58.83	+11 35.5	1.877	2.826	8.4	18.9
9 18	21 52.59	- 5 51.8	1.280	2.219	12.2	20.1	9 18	21 51.63	+11 3.2	1.925	2.837	10.3	19.0
9 28	21 48.71	- 6 3.5	1.343	2.218	16.2	20.3	9 28	21 46.42	+10 22.7	1.996	2.848	12.7	19.2
40237	1998 <i>VM</i> ₆		8 23.9 278°22	0°6/24.9	15		104305	2000 <i>EH</i> ₁₈₃		8 23.9 39°28	9°0/18.9	17	
7 20	22 27.12	- 6 57.2	4.519	5.351	6.8	19.4	7 20	22 43.51	-29 38.9	1.236	2.129	17.2	18.7
7 30	22 23.57	- 7 8.5	4.418	5.335	5.2	19.3	7 30	22 37.56	-30 31.8	1.200	2.142	13.6	18.5
8 9	22 19.24	- 7 24.8	4.344	5.319	3.3	19.1	8 9	22 28.51	-31 14.5	1.184	2.156	10.4	18.4
8 19	22 14.37	- 7 44.9	4.297	5.303	1.4	19.0	8 19	22 17.52	-31 36.9	1.189	2.170	9.0	18.4
8 29	22 9.29	- 8 7.1	4.280	5.286	1.0	18.9	8 29	22 6.24	-31 31.7	1.218	2.184	10.3	18.5
9 8	22 4.34	- 8 29.6	4.293	5.270	3.0	19.1	9 8	21 56.33	-30 57.1	1.270	2.200	13.3	18.7
9 18	21 59.85	- 8 50.6	4.335	5.254	4.9	19.2	9 18	21 49.02	-29 56.6	1.342	2.215	16.5	19.0
9 28	21 56.13	- 9 8.5	4.404	5.237	6.6	19.3	9 28	21 44.99	-28 35.9	1.432	2.232	19.4	19.2
265222	2004 <i>CF</i> ₇₇		8 23.9 281°09	0°4/23.6	17		107475	2001 <i>DK</i> ₃₃		8 23.9 276°97	2°1/22.4	18	
7 20	22 35.18	- 8 32.8	1.519	2.390	15.8	21.1	7 20	22 37.06	-13 7.3	1.487	2.367	15.6	19.3
7 30	22 31.21	- 9 15.6	1.431	2.371	12.0	20.8	7 30	22 32.67	-13 52.0	1.405	2.351	11.7	19.0
8 9	22 24.76	-10 14.8	1.365	2.351	7.5	20.5	8 9	22 25.68	-14 48.2	1.345	2.334	7.2	18.7
8 19	22 16.40	-11 25.5	1.322	2.331	2.5	20.1	8 19	22 16.72	-15 49.6	1.309	2.317	2.8	18.4
8 29	22 7.11	-12 40.1	1.305	2.311	2.9	20.1	8 29	22 6.86	-16 48.1	1.298	2.300	4.1	18.4
9 8	21 58.18	-13 50.1	1.314	2.291	8.1	20.4	9 8	21 57.45	-17 35.7	1.313	2.283	9.0	18.7
9 18	21 50.80	-14 48.0	1.347	2.271	13.0	20.6	9 18	21 49.73	-18 7.2	1.351	2.266	13.6	18.9
9 28	21 45.96	-15 29.0	1.401	2.251	17.2	20.8	9 28	21 44.68	-18 19.9	1.409	2.249	17.7	19.1
435141	2007 <i>GH</i> ₇₇		8 23.9 107°34	3°2/21.4	17		349883	2009 <i>DJ</i> ₈₇		8 23.9 215°16	2°0/22.1	18	
7 20	22 38.80	-17 20.2	1.753	2.629	13.8	21.7	7 20	22 34.92	-14 2.5	1.976	2.847	12.7	20.9
7 30	22 33.27	-18 6.4	1.698	2.641	10.2	21.5	7 30	22 30.31	-14 48.9	1.905	2.846	9.4	20.7
8 9	22 25.62	-18 56.6	1.665	2.652	6.4	21.3	8 9	22 23.82	-15 42.4	1.857	2.844	5.7	20.5
8 19	22 16.55	-19 44.3	1.658	2.663	3.4	21.2	8 19	22 16.00	-16 37.8	1.835	2.842	2.4	20.2
8 29	22 7.08	-20 23.2	1.678	2.673	4.6	21.3	8 29	22 7.71	-17 29.2	1.840	2.840	3.5	20.3
9 8	21 58.33	-20 48.5	1.725	2.684	8.2	21.5	9 8	21 59.87	-18 11.1	1.873	2.838	7.2	20.6
9 18	21 51.20	-20 57.9	1.796	2.694	11.8	21.7	9 18	21 53.33	-18 40.2	1.931	2.836	10.7	20.8
9 28	21 46.38	-20 51.3	1.889	2.704	14.8	22.0	9 28	21 48.77	-18 54.5	2.012	2.834	13.8	21.0
435177	2007 <i>RV</i> ₇		8 23.9 14°05	1°3/23.2	18		511431	2014 <i>HZ</i> ₁₉₄		8 23.9 43°40	7°5/16.6	18	
7 20	22 36.73	-13 28.7	1.335	2.222	16.5	20.1	7 20	22 35.15	-28 36.6	1.797	2.684	13.0	20.0
7 30	22 32.27	-13 32.5	1.278	2.226	12.3	19.9	7 30	22 30.70	-30 8.4	1.758	2.696	10.2	19.8
8 9	22 25.24	-13 44.2	1.241	2.231	7.6	19.7	8 9	22 24.10	-31 34.4	1.742	2.709	8.1	19.7
8 19	22 16.46	-13 58.9	1.227	2.236	2.6	19.4	8 19	22 16.08	-32 46.0	1.751	2.722	7.5	19.7
8 29	22 7.17	-14 10.9	1.238	2.243	3.4	19.4	8 29	22 7.68	-33 36.0	1.785	2.735	8.9	19.8
9 8	21 58.70	-14 15.4	1.273	2.250	8.3	19.8	9 8	22 0.00	-34 0.6	1.843	2.748	11.3	20.0
9 18	21 52.18	-14 9.3	1.332	2.259	12.8	20.0	9 18	21 53.96	-33 59.9	1.923	2.762	13.8	20.2
9 28	21 48.39	-13 51.4	1.410	2.268	16.7	20.3	9 28	21 50.22	-33 36.2	2.022	2.776	16.0	20.4
204700	2006 <i>EB</i> ₅₅		8 23.9 29°33	2°0/25.5	16		184311	2005 <i>ER</i> ₂₇₀		8 23.9 198°99	3°2/21.3	18	
7 20	22 33.18	- 4 2.2	1.379	2.246	17.3	20.1	7 20	22 38.10	-15 24.7	1.629	2.507	14.5	20.8
7 30	22 29.49	- 4 18.2	1.323	2.256	13.3	19.8	7 30	22 33.11	-16 31.1	1.561	2.505	10.8	20.5
8 9	22 23.48	- 4 52.9	1.286	2.266	8.7	19.6	8 9	22 25.75	-17 46.0	1.515	2.503	6.7	20.3
8 19	22 15.88	- 5 42.4	1.272	2.277	4.0	19.4	8 19	22 16.70	-19 1.6	1.495	2.500	3.4	20.1
8 29	22 7.79	- 6 40.4	1.283	2.289	2.7	19.3	8 29	22 6.99	-20 9.6	1.501	2.497	4.9	20.2
9 8	22 0.41	- 7 39.2	1.318	2.302	7.2	19.6	9 8	21 57.86	-21 2.8	1.533	2.493	9.0	20.4
9 18	21 54.78	- 8 31.7	1.377	2.315	11.6	19.9	9 18	21 50.39	-21 36.9	1.590	2.489	12.9	20.6
9 28	21 51.61	- 9 12.6	1.458	2.329	15.5	20.2	9 28	21 45.39	-21 50.8	1.667	2.485	16.4	20.9
41765	2000 <i>VV</i> ₃₅		8 23.9 78°49	4°5/27.3	18		436179	2009 <i>WD</i> ₂₀		8 23.9 129°79	4°5/28.3	17	
7 20	22 36.51	+ 1 37.3	1.387	2.227	18.7	18.7	7 20	22 37.88	+ 4 11.9	2.228	3.020	14.1	21.5
7 30	22 31.98	+ 1 33.2	1.328	2.239	14.9	18.5	7 30	22 32.17	+ 4 21.5	2.158	3.036	11.4	21.4
8 9	22 25.03	+ 1 5.3	1.287	2.251	10.6	18.3	8 9	22 24.79	+ 4 14.5	2.110	3.052	8.5	21.2
8 19	22 16.40	+ 0 15.4	1.269	2.263	6.3	18.1	8 19	22 16.30	+ 3 51.4	2.087	3.067	5.7	21.1
8 29	22 7.24	- 0 51.1	1.275	2.276	4.6	18.0	8 29	22 7.44	+ 3 14.6	2.091	3.081	4.5	21.0
9 8	21 58.81	- 2 5.7	1.306	2.288	7.5	18.2	9 8	21 59.06	+ 2 28.5	2.124	3.095	6.0	21.2
9 18	21 52.19	- 3 19.9	1.362	2.300	11.7	18.5	9 18	21 51.89	+ 1 37.8	2.184	3.108	8.7	21.4
9 28	21 48.17	- 4 25.9	1.439	2.312	15.5	18.8	9 28	21 46.51	+ 0 47.9	2.269	3.121	11.4	21.6
513428	2008 <i>UA</i> ₁₂₉		8 23.9 283°53	2°3/25.7	18		510517	2012 <i>BN</i> ₁₀₂		8 23.9 189°84	3°0/20.5	18	
7 20	22 35.03	- 3 37.5	1.761	2.608	15.0	22.0	7 20	22 32.78	-17 38.9	2.379	3.252	10.7	20.9
7 30	22 30.75	- 3 43.7	1.668	2.590	11.8	21.8	7 30	22 28.46	-18 42.8	2.310	3.252	7.9	20.7
8 9	22 24.30	- 4 5.6	1.597	2.571	7.9	21.5	8 9	22 22.56	-19 50.6	2.266	3.252	5.0	20.6
8 19	22 16.21	- 4 41.3	1.550	2.553	3.9	21.2	8 19	22 15.56	-20 57.1	2.249	3.251	3.0	20.4
8 29	22 7.36	- 5 26.8	1.529	2.535	2.8	21.1	8 29	22 8.17	-21 56.6	2.260	3.250	4.2	20.5
9 8	21 58.81	- 6 16.3	1.535	2.516	6.7	21.3	9 8	22 1.15	-22 44.6	2.299	3.249	7.0	20.7
9 18	21 51.59	- 7 4.0	1.566	2.498	10.9	21.5	9 18	21 55.20	-23 18.1	2.364	3.248	9.9	20.9
9 28	21 46.56	- 7 44.5	1.620	2.479	14.8	21.7	9 28	21 50.89	-23 36.0	2.452	3.247	12.4	21.0
343861	2011 <i>HU</i> ₅₅		8 23.9 156°59	4°0/28.0	18		384510	2010 <i>CS</i> _{139</}					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
481270	2005 YF ₅		8 23.9 280°54	4.2/27.8	17		480512	2015 ML ₅		8 23.9 63°03	4.4/27.9	17	
7 20	22 33.59	+ 2 22.9	2.254	3.063	13.4	21.5	7 20	22 33.86	+ 2 45.3	1.834	2.654	15.6	20.8
7 30	22 29.17	+ 2 37.9	2.162	3.053	10.9	21.3	7 30	22 29.54	+ 2 46.0	1.766	2.664	12.6	20.6
8 9	22 23.08	+ 2 38.0	2.092	3.042	8.0	21.1	8 9	22 23.34	+ 2 27.5	1.719	2.674	9.1	20.4
8 19	22 15.77	+ 2 23.2	2.046	3.031	5.3	20.9	8 19	22 15.86	+ 1 50.8	1.696	2.685	5.8	20.3
8 29	22 7.94	+ 1 55.5	2.027	3.020	4.2	20.8	8 29	22 7.94	+ 0 59.6	1.699	2.695	4.4	20.2
9 8	22 0.38	+ 1 18.3	2.035	3.009	5.9	20.9	9 8	22 0.54	- 0 0.5	1.728	2.706	6.4	20.3
9 18	21 53.86	+ 0 36.2	2.070	2.999	8.8	21.1	9 18	21 54.49	- 1 3.1	1.783	2.717	9.7	20.6
9 28	21 49.02	- 0 6.0	2.129	2.988	11.8	21.2	9 28	21 50.42	- 2 2.0	1.862	2.728	12.8	20.8
444459	2006 EJ ₃₇		8 23.9 260°85	13.7/18.6	15		418085	2007 VC ₃₁₁		8 23.9 218°25	1.1/22.4	18	
7 20	23 1.13	-38 6.2	1.137	2.004	20.2	21.1	7 20	22 29.79	-13 51.7	3.500	4.357	8.0	22.1
7 30	22 52.12	-38 58.9	1.077	1.992	17.2	20.9	7 30	22 25.77	-14 25.6	3.418	4.352	5.9	21.9
8 9	22 38.28	-39 31.6	1.035	1.980	14.7	20.7	8 9	22 20.70	-15 3.3	3.362	4.347	3.6	21.8
8 19	22 20.99	-39 27.8	1.013	1.967	13.7	20.6	8 19	22 14.93	-15 42.2	3.334	4.342	1.4	21.6
8 29	22 2.71	-38 35.9	1.013	1.954	14.9	20.6	8 29	22 8.89	-16 19.3	3.336	4.337	2.0	21.6
9 8	21 46.29	-36 55.5	1.035	1.941	17.9	20.7	9 8	22 3.07	-16 51.9	3.367	4.331	4.4	21.8
9 18	21 33.82	-34 36.2	1.077	1.928	21.4	20.9	9 18	21 57.92	-17 18.0	3.426	4.325	6.7	22.0
9 28	21 26.32	-31 51.7	1.136	1.914	24.7	21.1	9 28	21 53.83	-17 35.8	3.510	4.319	8.7	22.1
299727	2006 RX ₄₁		8 23.9 359°40	0.4/23.6	18		134089	2004 XE ₁₀₅		8 23.9 313°88	1.9/22.5	18	
7 20	22 34.38	-10 14.6	1.760	2.629	14.1	21.0	7 20	22 35.88	-14 2.2	1.563	2.445	14.9	19.6
7 30	22 30.07	-10 37.3	1.690	2.628	10.5	20.8	7 30	22 31.59	-14 29.8	1.486	2.432	11.1	19.4
8 9	22 23.74	-11 10.1	1.642	2.628	6.5	20.6	8 9	22 24.90	-15 5.8	1.431	2.420	6.9	19.1
8 19	22 16.00	-11 49.0	1.618	2.628	2.1	20.3	8 19	22 16.46	-15 44.6	1.399	2.408	2.6	18.8
8 29	22 7.75	-12 28.5	1.622	2.628	2.5	20.3	8 29	22 7.30	-16 19.9	1.394	2.396	3.8	18.9
9 8	22 0.02	-13 3.3	1.651	2.628	6.8	20.6	9 8	21 58.65	-16 45.5	1.413	2.385	8.3	19.1
9 18	21 53.71	-13 29.1	1.706	2.629	10.8	20.8	9 18	21 51.61	-16 57.6	1.457	2.374	12.7	19.3
9 28	21 49.53	-13 43.3	1.783	2.630	14.2	21.1	9 28	21 47.07	-16 54.4	1.521	2.364	16.4	19.6
520328	2014 GM ₆₀		8 23.9 194°03	9.6/14.8	18		91776	1999 TJ ₂₀₆		8 23.9 56°46	13.6/7.9	18	
7 20	22 47.99	-41 44.7	2.296	3.131	12.4	21.7	7 20	22 48.06	-54 17.3	2.138	2.933	14.5	17.8
7 30	22 40.08	-42 42.7	2.247	3.130	10.8	21.6	7 30	22 40.84	-55 48.1	2.129	2.946	13.8	17.8
8 9	22 29.80	-43 26.1	2.220	3.128	9.8	21.5	8 9	22 30.52	-56 54.6	2.138	2.958	13.6	17.8
8 19	22 17.97	-43 47.6	2.217	3.126	9.7	21.5	8 19	22 18.25	-57 29.4	2.168	2.971	13.9	17.8
8 29	22 5.80	-43 42.4	2.240	3.123	10.6	21.6	8 29	22 5.67	-57 28.2	2.216	2.985	14.6	17.9
9 8	21 54.53	-43 9.3	2.286	3.120	12.2	21.7	9 8	21 54.49	-56 52.1	2.283	2.998	15.6	18.0
9 18	21 45.20	-42 10.9	2.355	3.117	13.9	21.8	9 18	21 45.94	-55 45.4	2.365	3.011	16.6	18.2
9 28	21 38.50	-40 51.8	2.442	3.113	15.5	22.0	9 28	21 40.73	-54 14.4	2.462	3.025	17.5	18.3
58461	1996 ML		8 23.9 167°97	0.6/23.4	18		106460	2000 WV ₃		8 23.9 331°30	0.9/23.3	18	
7 20	22 35.52	-10 42.7	2.135	2.993	12.4	20.0	7 20	22 37.17	-13 15.0	1.950	2.816	13.0	19.1
7 30	22 30.59	-11 14.1	2.062	2.995	9.2	19.8	7 30	22 32.01	-13 18.4	1.874	2.811	9.7	18.8
8 9	22 23.91	-11 53.9	2.013	2.997	5.6	19.6	8 9	22 24.89	-13 27.6	1.820	2.806	6.0	18.6
8 19	22 16.03	-12 38.2	1.990	2.999	1.8	19.3	8 19	22 16.41	-13 38.9	1.793	2.802	2.0	18.3
8 29	22 7.73	-13 22.1	1.995	3.000	2.3	19.3	8 29	22 7.43	-13 48.6	1.793	2.798	2.6	18.4
9 8	21 59.86	-14 0.9	2.029	3.001	6.1	19.6	9 8	21 58.95	-13 53.0	1.820	2.794	6.6	18.6
9 18	21 53.21	-14 31.1	2.088	3.002	9.6	19.8	9 18	21 51.83	-13 49.6	1.874	2.790	10.3	18.9
9 28	21 48.39	-14 50.2	2.172	3.003	12.6	20.0	9 28	21 46.77	-13 37.0	1.950	2.787	13.6	19.1
123105	2000 SS ₃₄₉		8 23.9 332°24	9.8/17.4	18		240270	2002 XE ₄₅		8 23.9 353°24	2.9/21.3	18	
7 20	22 39.72	-31 6.2	1.326	2.220	16.2	18.9	7 20	22 27.58	-12 18.1	1.319	2.218	15.9	18.9
7 30	22 35.09	-32 11.9	1.267	2.207	13.2	18.7	7 30	22 25.64	-13 45.8	1.255	2.211	11.8	18.6
8 9	22 27.31	-33 9.1	1.228	2.195	10.7	18.5	8 9	22 21.32	-15 28.9	1.211	2.205	7.1	18.4
8 19	22 17.28	-33 46.7	1.210	2.183	9.9	18.5	8 19	22 15.28	-17 18.3	1.192	2.200	3.2	18.1
8 29	22 6.46	-33 55.1	1.216	2.172	11.4	18.5	8 29	22 8.57	-19 2.5	1.196	2.196	5.0	18.2
9 8	21 56.56	-33 30.4	1.242	2.163	14.4	18.7	9 8	22 2.41	-20 30.8	1.225	2.194	9.7	18.5
9 18	21 49.01	-32 34.2	1.289	2.154	17.7	18.8	9 18	21 57.93	-21 35.9	1.276	2.193	14.1	18.7
9 28	21 44.74	-31 11.8	1.354	2.146	20.8	19.0	9 28	21 55.95	-22 14.5	1.347	2.193	17.9	19.0
298141	2002 ST ₄		8 23.9 331°09	5.2/28.3	18		167468	2003 YR ₂₈		8 23.9 13°76	9.2/15.2	18	
7 20	22 28.09	+ 3 38.3	1.441	2.283	18.0	20.2	7 20	22 36.15	-31 14.7	1.616	2.504	14.1	18.9
7 30	22 25.93	+ 3 31.8	1.352	2.262	14.8	20.0	7 30	22 31.87	-33 0.2	1.571	2.506	11.5	18.8
8 9	22 21.52	+ 2 58.8	1.281	2.242	10.9	19.7	8 9	22 25.06	-34 38.1	1.549	2.508	9.6	18.7
8 19	22 15.35	+ 1 59.2	1.232	2.223	7.1	19.4	8 19	22 16.51	-35 57.9	1.550	2.510	9.3	18.7
8 29	22 8.36	+ 0 36.7	1.206	2.205	5.2	19.3	8 29	22 7.38	-36 50.9	1.576	2.513	10.9	18.8
9 8	22 1.69	- 1 0.5	1.204	2.188	7.7	19.4	9 8	21 59.02	-37 12.8	1.624	2.516	13.3	18.9
9 18	21 56.48	- 2 42.3	1.226	2.172	11.9	19.5	9 18	21 52.54	-37 4.2	1.692	2.519	15.9	19.1
9 28	21 53.66	- 4 18.1	1.270	2.158	16.1	19.8	9 28	21 48.71	-36 28.5	1.778	2.523	18.2	19.3
216696	2004 QB ₇		8 23.9 328°60	3.8/19.9	18		53863	2000 FJ ₂₆		8 23.9 149°79	1.6/22.5	18	R
7 20	22 32.02	-18 22.6	1.932	2.816	12.3	19.6	7 20	22 38.20	-12 40.6	1.862	2.727	13.6	19.3
7 30	22 28.29	-19 35.6	1.862	2.809	9.2	19.4	7 30	22 32.81	-13 28.1	1.797	2.735	10.1	19.1
8 9	22 22.65	-20 53.7	1.815	2.802	5.9	19.2	8 9	22 25.38	-14 23.8	1.756	2.742	6.1	18.9
8 19	22 15.65	-22 10.0	1.795	2.795	3.9	19.1	8 19	22 16.58	-15 22.4	1.740	2.749	2.2	18.7
8 29	22 8.12	-23 17.2	1.801	2.789	5.3	19.1	8 29	22 7.32	-16 17.3	1.753	2.755	3.3	18.7
9 8	22 1.01	-24 9.3	1.834	2.783	8.6	19.3	9 8	21 58.63	-17 2.9	1.793	2.760	7.2	19.0
9 18	21 55.19	-24 43.0	1.891	2.778	11.8	19.5	9 18	21 51.41	-17 35.4	1.858	2.765	10.9	19.2
9 28	21 51.36	-24 57.0	1.969	2.772	14.7	19.7	9 28	21 46.34	-17 53.0	1.946	2.770	14.1	19.5
67176	2000 BP ₂₀		8 23.9 312°26	0.8/23.1	18		509583	2008 CA ₁₉₉		8 23.9 112°32	0.7/24.7	18	
7 20	22 31.36												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
59609	1999 <i>JB</i> ₆₇		8 23.9 80°09	1.7°/22.5	17		246480	2007 <i>XT</i> ₁		8 23.9 345°28	2°5°/25.9	18	
7 20	22 35.75	-11 55.1	1.609	2.484	14.8	19.1	7 20	22 33.58	-3 1.4	1.702	2.552	15.4	20.4
7 30	22 31.20	-12 52.9	1.553	2.496	11.0	18.9	7 30	22 29.60	-3 5.6	1.626	2.548	12.0	20.2
8 9	22 24.48	-14 1.1	1.518	2.507	6.6	18.7	8 9	22 23.56	-3 25.9	1.571	2.545	8.1	20.0
8 19	22 16.29	-15 13.1	1.509	2.518	2.4	18.5	8 19	22 16.04	-4 0.3	1.540	2.542	4.1	19.7
8 29	22 7.65	-16 21.0	1.527	2.529	3.6	18.6	8 29	22 7.95	-4 44.5	1.535	2.540	2.9	19.7
9 8	21 59.68	-17 17.8	1.570	2.540	7.8	18.9	9 8	22 0.32	-5 32.7	1.555	2.537	6.5	19.9
9 18	21 53.32	-17 59.2	1.639	2.552	11.8	19.1	9 18	21 54.09	-6 19.0	1.601	2.536	10.5	20.1
9 28	21 49.28	-18 22.9	1.729	2.563	15.2	19.4	9 28	21 50.01	-6 58.3	1.669	2.534	14.1	20.3
490212	2008 <i>VP</i>		8 23.9 348°42	6°8°/20.8	16		71054	1999 <i>XU</i> ₉₃		8 23.9 240°34	4°4°/19.2	18	
7 20	22 31.36	-23 16.7	0.925	1.849	18.6	20.0	7 20	22 35.66	-20 51.5	2.148	3.024	11.6	19.6
7 30	22 29.52	-23 33.0	0.864	1.830	14.4	19.7	7 30	22 30.95	-22 9.6	2.071	3.012	8.7	19.4
8 9	22 24.25	-23 46.6	0.820	1.812	9.9	19.4	8 9	22 24.32	-23 31.0	2.018	3.000	5.9	19.2
8 19	22 16.38	-23 48.1	0.795	1.797	6.9	19.2	8 19	22 16.30	-24 48.7	1.993	2.987	4.4	19.1
8 29	22 7.51	-23 28.3	0.791	1.785	8.5	19.2	8 29	22 7.68	-25 55.8	1.995	2.974	5.8	19.1
9 8	21 59.57	-22 42.6	0.805	1.775	13.1	19.4	9 8	21 59.41	-26 46.5	2.024	2.960	8.7	19.3
9 18	21 54.17	-21 31.7	0.839	1.769	18.0	19.7	9 18	21 52.36	-27 18.1	2.078	2.946	11.7	19.4
9 28	21 52.37	-19 59.7	0.888	1.765	22.3	19.9	9 28	21 47.25	-27 29.8	2.153	2.931	14.4	19.6
350287	2012 <i>TQ</i> ₂₈₆		8 23.9 18°89	2°4°/25.8	18		37209	2000 <i>WA</i> ₁₀₈		8 23.9 153°48	0°5°/23.5	18	
7 20	22 32.00	-3 326.8	1.287	2.158	18.1	20.2	7 20	22 34.99	-11 6.3	2.321	3.178	11.6	19.4
7 30	22 28.81	-3 383.3	1.230	2.165	14.0	19.9	7 30	22 30.09	-11 27.8	2.248	3.180	8.6	19.3
8 9	22 23.19	-4 10.1	1.193	2.173	9.3	19.7	8 9	22 23.59	-11 56.2	2.198	3.182	5.3	19.1
8 19	22 15.89	-4 58.6	1.177	2.181	4.4	19.4	8 19	22 16.00	-12 28.3	2.176	3.184	1.7	18.8
8 29	22 8.05	-5 57.5	1.185	2.191	3.0	19.4	8 29	22 8.04	-13 0.1	2.181	3.187	2.1	18.9
9 8	22 0.94	-6 58.4	1.217	2.202	7.4	19.7	9 8	22 0.48	-13 27.7	2.215	3.188	5.6	19.1
9 18	21 55.61	-7 53.6	1.272	2.214	12.0	20.0	9 18	21 54.04	-13 48.2	2.276	3.190	8.9	19.3
9 28	21 52.85	-8 37.2	1.348	2.226	16.0	20.3	9 28	21 49.28	-13 59.5	2.361	3.192	11.7	19.5
403403	2009 <i>RT</i> ₄₈		8 23.9 336°81	2°0°/25.9	18		434117	2002 <i>PL</i> ₁₄₀		8 23.9 3°50	13°1°/20.9	16	
7 20	22 30.93	-3 9.0	2.023	2.868	13.5	20.9	7 20	22 34.89	-36 13.5	0.761	1.685	21.5	18.2
7 30	22 27.34	-3 27.1	1.941	2.861	10.5	20.7	7 30	22 32.54	-36 7.0	0.727	1.682	18.0	18.0
8 9	22 22.02	-3 59.8	1.881	2.854	7.0	20.5	8 9	22 26.02	-35 33.7	0.708	1.682	14.8	17.8
8 19	22 15.48	-4 44.6	1.845	2.848	3.4	20.2	8 19	22 16.87	-34 23.6	0.706	1.687	13.1	17.7
8 29	22 8.44	-5 37.6	1.837	2.842	2.4	20.2	8 29	22 7.37	-32 32.7	0.721	1.695	13.9	17.8
9 8	22 1.76	-6 33.2	1.855	2.837	5.7	20.4	9 8	21 59.72	-30 6.1	0.755	1.707	16.6	18.0
9 18	21 56.21	-7 26.3	1.900	2.832	9.3	20.6	9 18	21 55.31	-27 15.5	0.806	1.723	20.1	18.3
9 28	21 52.43	-8 12.1	1.968	2.827	12.6	20.8	9 28	21 54.77	-24 12.9	0.874	1.743	23.4	18.6
123597	2000 <i>YN</i> ₂		8 23.9 252°97	22°7°/2.4	18		298194	2002 <i>TO</i> ₂₄₄		8 23.9 264°69	0°7°/24.6	18	
7 20	22 48.02	+27 55.7	1.305	1.979	27.4	19.4	7 20	22 34.48	-6 59.1	1.952	2.806	13.5	21.4
7 30	22 42.31	+31 24.5	1.233	1.968	26.0	19.2	7 30	22 30.05	-7 21.2	1.874	2.802	10.3	21.2
8 9	22 32.66	+34 24.4	1.175	1.956	24.6	19.0	8 9	22 23.74	-7 55.4	1.818	2.798	6.5	20.9
8 19	22 19.47	+36 41.1	1.131	1.944	23.4	18.9	8 19	22 16.11	-8 38.3	1.787	2.794	2.5	20.7
8 29	22 4.03	+38 1.4	1.102	1.931	22.8	18.8	8 29	22 7.95	-9 25.4	1.784	2.790	2.0	20.6
9 8	21 48.42	+38 19.9	1.089	1.918	22.8	18.8	9 8	22 0.21	-10 11.2	1.808	2.786	6.1	20.9
9 18	21 34.91	+37 40.0	1.091	1.905	23.6	18.8	9 18	21 53.72	-10 51.0	1.858	2.782	9.9	21.1
9 28	21 25.40	+36 14.1	1.107	1.891	24.9	18.9	9 28	21 49.18	-11 21.2	1.931	2.778	13.2	21.3
246404	2007 <i>UX</i> ₈₈		8 23.9 20°23	3°1°/26.6	18		505112	2012 <i>DX</i> ₄₄		8 23.9 225°29	2°4°/22.0	17	
7 20	22 33.73	-0 51.6	1.833	2.669	15.0	20.5	7 20	22 38.84	-13 57.0	1.682	2.554	14.4	22.6
7 30	22 29.54	-0 58.7	1.758	2.670	11.8	20.3	7 30	22 33.73	-14 52.1	1.604	2.546	10.8	22.3
8 9	22 23.42	-1 22.9	1.704	2.671	8.2	20.1	8 9	22 26.24	-15 56.9	1.549	2.536	6.6	22.1
8 19	22 15.96	-2 2.1	1.674	2.672	4.5	19.8	8 19	22 17.01	-17 4.7	1.519	2.527	2.8	21.8
8 29	22 7.98	-2 52.6	1.671	2.674	3.2	19.8	8 29	22 7.04	-18 7.8	1.516	2.516	4.2	21.9
9 8	22 0.45	-3 48.4	1.694	2.675	6.2	20.0	9 8	21 57.55	-18 59.0	1.540	2.505	8.5	22.1
9 18	21 54.24	-4 43.8	1.743	2.677	9.9	20.2	9 18	21 49.62	-19 33.8	1.589	2.494	12.6	22.3
9 28	21 50.04	-5 33.1	1.816	2.678	13.3	20.4	9 28	21 44.14	-19 50.3	1.659	2.482	16.2	22.5
215818	2004 <i>XP</i> ₃₁		8 23.9 295°53	0°9°/24.6	18		84227	2002 <i>SJ</i> ₅		8 23.9 318°07	0°3°/24.2	18	
7 20	22 35.39	-7 10.1	1.702	2.563	14.9	20.4	7 20	22 32.38	-7 44.8	1.240	2.126	17.7	19.7
7 30	22 31.03	-7 22.4	1.621	2.552	11.4	20.2	7 30	22 29.61	-8 11.2	1.158	2.104	13.6	19.4
8 9	22 24.49	-7 47.7	1.560	2.542	7.3	19.9	8 9	22 24.08	-8 56.4	1.095	2.083	8.6	19.1
8 19	22 16.36	-8 23.1	1.525	2.532	2.8	19.6	8 19	22 16.38	-9 56.2	1.053	2.062	3.1	18.7
8 29	22 7.56	-9 3.6	1.515	2.522	2.3	19.6	8 29	22 7.63	-11 3.0	1.035	2.042	2.9	18.6
9 8	21 59.18	-9 43.5	1.532	2.512	6.8	19.8	9 8	21 59.28	-12 7.1	1.041	2.023	8.8	18.9
9 18	21 52.24	-10 17.5	1.574	2.502	11.1	20.1	9 18	21 52.74	-13 0.3	1.068	2.005	14.2	19.2
9 28	21 47.54	-10 41.8	1.638	2.493	14.9	20.3	9 28	21 49.10	-13 36.3	1.114	1.988	19.0	19.4
347059	2010 <i>FU</i> ₁		8 23.9 349°70	2°2°/22.1	18		163350	2002 <i>NP</i> ₂₆		8 23.9 342°73	1°1°/22.9	18	
7 20	22 33.37	-13 11.9	1.509	2.395	15.1	19.8	7 20	22 26.48	-7 58.5	1.277	2.170	16.8	18.1
7 30	22 29.70	-14 5.2	1.443	2.391	11.2	19.6	7 30	22 24.95	-9 15.4	1.203	2.155	12.6	17.8
8 9	22 23.72	-15 9.0	1.398	2.388	6.8	19.3	8 9	22 21.03	-10 54.3	1.149	2.141	7.7	17.5
8 19	22 16.10	-16 16.7	1.377	2.386	2.7	19.1	8 19	22 15.30	-12 47.9	1.118	2.128	2.5	17.2
8 29	22 7.86	-17 20.2	1.382	2.384	4.1	19.2	8 29	22 8.78	-14 44.9	1.111	2.116	3.6	17.2
9 8	22 0.20	-18 11.9	1.412	2.382	8.5	19.4	9 8	22 2.73	-16 32.8	1.128	2.106	9.0	17.5
9 18	21 54.16	-18 47.0	1.466	2.381	12.7	19.7	9 18	21 58.32	-18 1.6	1.167	2.097	14.0	17.7
9 28	21 50.55	-19 3.3	1.540	2.381	16.4	19.9	9 28	21 56.48	-19 5.0	1.227	2.090	18.2	18.0
206606	2003 <i>WO</i> ₆₆		8 23.9 250°60	0°1°/24.1	18		391608	2007 <i>UE</i> ₁₂₉		8 23.9 222°19	2°0°/25.8		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
285206	1996 XY ₂₀		8 23.9 213°72	3°8/20.3	18		23522	1992 WC ₉		8 23.9 246°30	5°1/20.1	18	
7 20	22 37.79	-19 40.8	2.069	2.942	12.1	21.4	7 20	22 39.40	-20 39.9	1.576	2.460	14.6	18.1
7 30	22 32.53	-20 39.4	1.996	2.936	9.1	21.1	7 30	22 34.33	-21 43.6	1.507	2.452	11.0	17.8
8 9	22 25.30	-21 40.9	1.946	2.930	5.9	20.9	8 9	22 26.71	-22 50.7	1.460	2.444	7.4	17.6
8 19	22 16.66	-22 39.1	1.924	2.923	3.9	20.8	8 19	22 17.22	-23 52.6	1.438	2.436	5.1	17.4
8 29	22 7.48	-23 27.6	1.929	2.916	5.2	20.9	8 29	22 7.01	-24 40.8	1.442	2.427	6.7	17.5
9 8	21 58.74	-24 1.5	1.961	2.908	8.3	21.1	9 8	21 57.41	-25 9.0	1.470	2.419	10.4	17.7
9 18	21 51.34	-24 18.3	2.018	2.899	11.5	21.2	9 18	21 49.59	-25 14.8	1.522	2.410	14.1	17.9
9 28	21 45.98	-24 17.7	2.098	2.891	14.3	21.4	9 28	21 44.43	-24 58.8	1.594	2.401	17.5	18.1
273896	2007 HZ ₃₇		8 23.9 107°93	0°7/23.4	18		365672	2010 VT ₇₅		8 23.9 259°89	4°3/19.4	18	
7 20	22 35.74	-9 37.6	1.689	2.557	14.6	21.1	7 20	22 35.29	-22 59.4	2.366	3.240	10.7	21.1
7 30	22 31.18	-10 24.1	1.625	2.563	10.9	20.9	7 30	22 30.50	-23 53.4	2.291	3.230	8.1	20.9
8 9	22 24.52	-11 22.7	1.583	2.569	6.7	20.6	8 9	22 23.98	-24 47.4	2.240	3.219	5.6	20.7
8 19	22 16.39	-12 27.9	1.565	2.574	2.2	20.4	8 19	22 16.23	-25 36.1	2.216	3.208	4.3	20.6
8 29	22 7.77	-13 32.9	1.575	2.580	2.7	20.4	8 29	22 8.02	-26 14.1	2.220	3.197	5.5	20.7
9 8	21 59.72	-14 30.9	1.611	2.586	7.2	20.7	9 8	22 0.18	-26 37.4	2.251	3.186	8.0	20.8
9 18	21 53.19	-15 16.6	1.672	2.591	11.2	21.0	9 18	21 53.48	-26 44.4	2.307	3.175	10.7	21.0
9 28	21 48.88	-15 47.2	1.756	2.596	14.7	21.2	9 28	21 48.56	-26 34.9	2.385	3.163	13.2	21.2
361462	2007 CQ ₄₇		8 23.9 137°02	1°4/25.8	18		447071	2004 RG ₃₄₅		8 23.9 358°07	7°6/19.2	15	
7 20	22 31.65	-2 13.0	2.659	3.484	11.2	20.9	7 20	22 39.94	-29 32.6	1.557	2.443	14.7	20.1
7 30	22 27.43	-3 2.5	2.583	3.493	8.6	20.8	7 30	22 34.66	-30 1.9	1.501	2.439	11.6	19.9
8 9	22 21.89	-4 4.8	2.532	3.502	5.7	20.6	8 9	22 26.79	-30 23.1	1.466	2.437	8.9	19.8
8 19	22 15.46	-5 16.7	2.507	3.510	2.6	20.4	8 19	22 17.19	-30 28.4	1.454	2.435	7.6	19.7
8 29	22 8.71	-6 34.0	2.512	3.518	1.7	20.3	8 29	22 7.14	-30 11.9	1.467	2.434	8.8	19.8
9 8	22 2.28	-7 51.7	2.547	3.526	4.6	20.6	9 8	21 57.99	-29 31.8	1.503	2.435	11.5	19.9
9 18	21 56.75	-9 4.9	2.610	3.533	7.5	20.8	9 18	21 50.86	-28 29.6	1.562	2.436	14.6	20.1
9 28	21 52.59	-10 9.8	2.699	3.540	10.1	21.0	9 28	21 46.47	-27 9.3	1.641	2.439	17.4	20.3
324269	2006 BT ₂₇₄		8 23.9 227°82	0°9/22.9	18		386977	2012 MK ₄		8 23.9 272°73	2°1/25.9	18	
7 20	22 33.12	-12 2.8	2.627	3.484	10.4	22.2	7 20	22 33.44	-1 47.1	1.722	2.567	15.5	20.8
7 30	22 28.63	-12 37.4	2.544	3.477	7.7	22.0	7 30	22 29.66	-2 25.2	1.633	2.552	12.1	20.5
8 9	22 22.69	-13 18.5	2.485	3.470	4.7	21.8	8 9	22 23.75	-3 23.6	1.564	2.537	8.1	20.3
8 19	22 15.75	-14 2.6	2.454	3.463	1.6	21.6	8 19	22 16.24	-4 39.4	1.519	2.523	3.9	20.0
8 29	22 8.42	-14 45.6	2.452	3.455	2.2	21.6	8 29	22 7.99	-6 6.9	1.501	2.508	2.6	19.9
9 8	22 1.38	-15 23.8	2.478	3.448	5.4	21.8	9 8	22 0.05	-7 37.9	1.510	2.492	6.7	20.1
9 18	21 55.26	-15 54.0	2.532	3.440	8.4	22.0	9 18	21 53.44	-9 4.3	1.545	2.477	11.0	20.3
9 28	21 50.61	-16 14.2	2.610	3.431	11.0	22.1	9 28	21 48.98	-10 19.0	1.602	2.462	14.9	20.5
516335	2017 BD ₄₄		8 23.9 241°11	0°9/25.0	18		240644	2005 BX ₁₆		8 23.9 278°21	1°8/22.5	18	
7 20	22 32.24	-5 43.6	2.646	3.484	10.9	21.5	7 20	22 36.55	-13 38.1	1.807	2.679	13.6	21.2
7 30	22 27.96	-6 8.3	2.556	3.475	8.3	21.3	7 30	22 31.95	-14 14.4	1.720	2.661	10.2	21.0
8 9	22 22.29	-6 43.1	2.489	3.465	5.4	21.1	8 9	22 25.15	-14 59.3	1.655	2.643	6.3	20.7
8 19	22 15.62	-7 25.5	2.450	3.455	2.2	20.9	8 19	22 16.71	-15 47.6	1.616	2.624	2.4	20.4
8 29	22 8.55	-8 12.1	2.439	3.445	1.6	20.8	8 29	22 7.53	-16 33.2	1.603	2.606	3.5	20.4
9 8	22 1.72	-8 59.0	2.457	3.435	4.8	21.0	9 8	21 58.71	-17 10.0	1.618	2.587	7.7	20.7
9 18	21 55.77	-9 42.2	2.503	3.425	7.8	21.2	9 18	21 51.27	-17 34.0	1.657	2.568	11.8	20.9
9 28	21 51.23	-10 18.8	2.574	3.414	10.6	21.4	9 28	21 46.05	-17 42.8	1.718	2.549	15.4	21.1
357114	2001 VA ₈₅		8 23.9 264°37	5°4/18.7	18		205200	2000 EU ₁₂₂		8 23.9 29°89	0°5/23.6	18	
7 20	22 36.63	-24 54.7	2.083	2.961	11.8	20.8	7 20	22 35.22	-10 34.1	1.517	2.394	15.5	20.0
7 30	22 31.70	-25 55.6	2.015	2.954	9.1	20.6	7 30	22 30.92	-10 53.6	1.461	2.403	11.6	19.7
8 9	22 24.79	-26 55.2	1.971	2.947	6.6	20.4	8 9	22 24.40	-11 23.8	1.426	2.413	7.1	19.5
8 19	22 16.50	-27 46.8	1.954	2.940	5.4	20.3	8 19	22 16.39	-11 59.9	1.415	2.424	2.3	19.2
8 29	22 7.71	-28 24.2	1.963	2.933	6.7	20.4	8 29	22 7.94	-12 35.9	1.429	2.435	2.7	19.3
9 8	21 59.40	-28 43.3	1.998	2.926	9.3	20.6	9 8	22 0.19	-13 6.2	1.469	2.447	7.3	19.6
9 18	21 52.46	-28 42.7	2.057	2.919	12.1	20.7	9 18	21 54.12	-13 26.6	1.533	2.460	11.5	19.9
9 28	21 47.57	-28 23.3	2.137	2.911	14.6	20.9	9 28	21 50.42	-13 34.6	1.619	2.473	15.1	20.1
363420	2003 QZ ₁₁₂		8 23.9 319°41	3°0/20.3	18		20130	1996 BO ₁		8 23.9 16°53	1°8/25.5	18	
7 20	22 29.55	-12 12.2	1.911	2.789	12.7	19.6	7 20	22 35.51	-5 26.6	1.978	2.824	13.7	17.7
7 30	22 26.68	-14 14.2	1.819	2.765	9.4	19.3	7 30	22 30.75	-5 17.4	1.905	2.826	10.5	17.5
8 9	22 21.88	-16 32.4	1.751	2.741	5.8	19.1	8 9	22 24.16	-5 19.4	1.853	2.828	6.9	17.3
8 19	22 15.59	-18 58.6	1.712	2.717	3.0	18.8	8 19	22 16.30	-5 30.8	1.827	2.831	3.3	17.1
8 29	22 8.56	-21 22.4	1.701	2.694	4.9	18.9	8 29	22 8.00	-5 48.6	1.828	2.834	2.4	17.0
9 8	22 1.72	-23 33.2	1.718	2.671	8.7	19.1	9 8	22 0.16	-6 8.8	1.857	2.837	5.8	17.3
9 18	21 56.00	-25 23.1	1.761	2.649	12.5	19.3	9 18	21 53.60	-6 27.6	1.911	2.840	9.4	17.5
9 28	21 52.23	-26 47.4	1.826	2.628	15.8	19.5	9 28	21 48.96	-6 41.7	1.989	2.844	12.6	17.7
488105	2015 VW ₇₁		8 23.9 288°40	3°2/27.7	17		309115	2006 WX ₁₂₇		8 23.9 63°54	1°3/25.1	18	
7 20	22 30.65	+ 2 3.8	2.387	3.200	12.7	22.2	7 20	22 34.98	-5 53.2	1.978	2.826	13.6	20.4
7 30	22 26.96	+ 1 45.2	2.294	3.189	10.2	22.0	7 30	22 30.30	-6 3.4	1.912	2.836	10.4	20.2
8 9	22 21.76	+ 1 10.6	2.223	3.178	7.3	21.8	8 9	22 23.84	-6 25.3	1.868	2.846	6.7	20.0
8 19	22 15.48	+ 0 21.2	2.177	3.167	4.5	21.6	8 19	22 16.18	-6 56.1	1.850	2.856	2.8	19.8
8 29	22 8.74	-0 39.8	2.158	3.157	3.3	21.5	8 29	22 8.14	-7 31.9	1.859	2.866	2.1	19.8
9 8	22 2.25	-1 47.7	2.167	3.146	5.2	21.6	9 8	22 0.61	-8 7.9	1.896	2.876	5.7	20.0
9 18	21 56.69	-2 57.2	2.204	3.135	8.2	21.8	9 18	21 54.36	-8 39.9	1.959	2.886	9.3	20.3
9 28	21 52.65	-4 3.1	2.266	3.125	11.1	21.9	9 28	21 50.01	-9 4.5	2.045	2.896	12.5	20.5
180394	2004 AG ₁₀		8 23.9 329°19	2°7/25.4	17		478016	2011 SH ₁₉₂		8 23.9 337°84	1°2/24.9	18	
7 20	22 35.76	-5 54.0	1.182	2.060	18.9	19.4							

EPHEMERIDES

8 23.9

8 24.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
273410	2006 <i>VH</i> ₁₆₈		8 23.9 235°18	2°9/26.4	18		452657	2005 <i>UA</i> ₄₄₉		8 23.9 299°99	4°2/20.2	18	
7 20	22 37.17	-1 22.5	1.871	2.701	15.0	21.4	7 20	22 36.25	-21 47.4	2.058	2.936	12.0	20.9
7 30	22 32.27	-1 27.8	1.781	2.691	11.8	21.2	7 30	22 31.43	-22 31.2	1.985	2.926	9.0	20.7
8 9	22 25.28	-1 49.7	1.712	2.679	8.2	21.0	8 9	22 24.66	-23 15.5	1.935	2.918	6.1	20.5
8 19	22 16.75	-2 26.5	1.669	2.667	4.5	20.7	8 19	22 16.53	-23 54.7	1.912	2.909	4.3	20.4
8 29	22 7.51	-3 14.7	1.652	2.655	3.2	20.6	8 29	22 7.89	-24 23.1	1.916	2.900	5.5	20.5
9 8	21 58.61	-4 8.8	1.662	2.642	6.4	20.8	9 8	21 59.72	-24 36.6	1.946	2.891	8.4	20.6
9 18	21 51.01	-5 2.8	1.699	2.629	10.3	21.0	9 18	21 52.87	-24 33.6	2.001	2.883	11.5	20.8
9 28	21 45.51	-5 51.2	1.759	2.615	14.0	21.2	9 28	21 48.05	-24 14.2	2.077	2.875	14.3	21.0
329945	2005 <i>QB</i> ₃₁		8 23.9 342°21	6°3/19.8	18		469667	2004 <i>TT</i> ₃₆₁		8 23.9 329°93	7°0/19.6	18	
7 20	22 30.80	-20 3.5	1.036	1.954	17.7	19.7	7 20	22 38.86	-25 8.9	1.350	2.246	15.9	20.6
7 30	22 28.84	-21 9.4	0.975	1.938	13.4	19.4	7 30	22 34.38	-25 53.7	1.283	2.232	12.3	20.3
8 9	22 23.77	-22 21.7	0.931	1.923	9.0	19.1	8 9	22 26.96	-26 36.0	1.237	2.218	8.8	20.1
8 19	22 16.34	-23 29.4	0.909	1.910	6.3	18.9	8 19	22 17.40	-27 6.7	1.213	2.205	7.0	20.0
8 29	22 7.94	-24 20.2	0.907	1.899	8.4	19.0	8 29	22 7.03	-27 17.2	1.212	2.193	8.5	20.0
9 8	22 0.29	-24 45.0	0.927	1.889	12.9	19.2	9 8	21 57.41	-27 2.6	1.235	2.182	12.1	20.2
9 18	21 54.89	-24 40.2	0.965	1.881	17.6	19.4	9 18	21 49.91	-26 22.8	1.279	2.171	16.0	20.4
9 28	21 52.79	-24 6.9	1.020	1.875	21.8	19.7	9 28	21 45.47	-25 20.7	1.342	2.162	19.5	20.6
448432	2009 <i>VJ</i> ₁₁₅		8 23.9 254°39	5°5/16.5	18		198077	2004 <i>SS</i> ₄		8 24.0 274°51	4°1/27.7	18	
7 20	22 36.14	-31 4.0	3.023	3.884	9.0	21.6	7 20	22 33.60	+ 2 51.1	1.882	2.701	15.4	20.5
7 30	22 30.92	-32 3.5	2.944	3.865	7.3	21.4	7 30	22 29.69	+ 2 35.2	1.783	2.680	12.5	20.2
8 9	22 24.16	-32 58.8	2.891	3.845	5.9	21.3	8 9	22 23.77	+ 1 58.3	1.703	2.660	9.1	20.0
8 19	22 16.30	-33 44.8	2.865	3.824	5.6	21.2	8 19	22 16.30	+ 1 1.0	1.648	2.639	5.7	19.7
8 29	22 8.00	-34 17.2	2.866	3.803	6.6	21.3	8 29	22 8.07	- 0 13.2	1.618	2.617	4.1	19.6
9 8	21 59.97	-34 33.1	2.894	3.782	8.3	21.4	9 8	22 0.07	- 1 38.0	1.616	2.596	6.6	19.7
9 18	21 52.90	-34 31.6	2.947	3.760	10.2	21.5	9 18	21 53.23	- 3 5.8	1.640	2.574	10.3	19.9
9 28	21 47.38	-34 13.4	3.022	3.738	12.0	21.6	9 28	21 48.40	- 4 28.9	1.688	2.552	14.0	20.1
475386	2006 <i>GT</i> ₂₁		8 23.9 93°73	3°9/21.2	16		70014	1998 <i>YL</i> ₃		8 24.0 265°52	0°3/23.7	18	
7 20	22 41.31	-20 32.1	1.772	2.647	13.7	21.0	7 20	22 33.04	-10 7.4	2.508	3.362	10.9	19.5
7 30	22 35.25	-21 0.7	1.714	2.655	10.3	20.8	7 30	22 28.68	-10 33.1	2.421	3.351	8.2	19.3
8 9	22 26.98	-21 29.6	1.679	2.663	6.6	20.7	8 9	22 22.82	-11 6.5	2.357	3.340	5.1	19.1
8 19	22 17.25	-21 53.0	1.669	2.670	4.0	20.5	8 19	22 15.89	-11 44.5	2.320	3.329	1.7	18.9
8 29	22 7.13	-22 5.4	1.687	2.678	5.2	20.6	8 29	22 8.53	-12 23.5	2.312	3.318	1.9	18.9
9 8	21 57.76	-22 3.2	1.731	2.686	8.5	20.8	9 8	22 1.45	-12 59.4	2.332	3.307	5.3	19.1
9 18	21 50.10	-21 45.8	1.800	2.693	12.0	21.1	9 18	21 55.31	-13 28.8	2.380	3.295	8.5	19.3
9 28	21 44.84	-21 13.9	1.890	2.701	15.0	21.3	9 28	21 50.70	-13 49.4	2.452	3.284	11.3	19.4
319135	2005 <i>YB</i> ₁₁		8 23.9 314°43	6°3/17.2	18		482200	2010 <i>VA</i> ₁₀₃		8 24.0 301°39	1°0/24.9	18	
7 20	22 34.04	-26 30.5	2.028	2.912	11.9	20.5	7 20	22 35.69	- 7 30.1	2.125	2.973	12.8	21.2
7 30	22 29.90	-27 52.9	1.964	2.903	9.2	20.3	7 30	22 30.87	- 7 27.4	2.040	2.966	9.8	20.9
8 9	22 23.76	-29 13.6	1.923	2.895	7.0	20.1	8 9	22 24.27	- 7 34.1	1.979	2.958	6.3	20.7
8 19	22 16.21	-30 24.9	1.909	2.887	6.3	20.1	8 19	22 16.41	- 7 48.0	1.944	2.950	2.6	20.5
8 29	22 8.11	-31 19.7	1.920	2.879	7.7	20.2	8 29	22 8.04	- 8 6.0	1.936	2.943	2.0	20.4
9 8	22 0.47	-31 53.3	1.956	2.871	10.2	20.3	9 8	22 0.04	- 8 24.3	1.956	2.936	5.7	20.7
9 18	21 54.18	-32 4.1	2.016	2.863	12.9	20.5	9 18	21 53.20	- 8 39.5	2.003	2.928	9.3	20.9
9 28	21 49.95	-31 52.8	2.095	2.856	15.3	20.6	9 28	21 48.20	- 8 48.8	2.074	2.921	12.5	21.1
327821	2006 <i>VF</i> ₁₇₁		8 23.9 11°41	4°8/27.2	17		266750	2009 <i>SU</i> ₆₅		8 24.0 289°74	0°9/23.1	18	
7 20	22 34.56	+ 0 5.5	1.236	2.094	19.5	19.9	7 20	22 32.72	-11 40.3	2.311	3.174	11.4	21.4
7 30	22 30.97	+ 0 26.3	1.173	2.095	15.6	19.7	7 30	22 28.61	-12 15.2	2.223	3.158	8.5	21.2
8 9	22 24.73	+ 0 24.1	1.128	2.098	11.1	19.5	8 9	22 22.86	-12 58.0	2.157	3.143	5.2	21.0
8 19	22 16.59	- 0 0.4	1.104	2.100	6.7	19.2	8 19	22 15.93	-13 45.0	2.119	3.128	1.8	20.7
8 29	22 7.75	- 0 43.2	1.103	2.104	4.9	19.1	8 29	22 8.50	-14 31.6	2.108	3.112	2.4	20.8
9 8	21 59.59	- 1 36.8	1.125	2.109	8.1	19.3	9 8	22 1.35	-15 13.1	2.126	3.097	6.0	21.0
9 18	21 53.34	- 2 32.9	1.170	2.114	12.6	19.6	9 18	21 55.22	-15 45.9	2.170	3.082	9.3	21.1
9 28	21 49.88	- 3 23.4	1.236	2.120	16.7	19.9	9 28	21 50.72	-16 7.4	2.237	3.067	12.3	21.3
137600	1999 <i>VJ</i> ₁₆₉		8 23.9 257°49	0°3/24.2	18		204007	2003 <i>UQ</i> ₁₄		8 24.0 268°37	0°8/24.7	18	
7 20	22 38.16	- 8 16.9	1.689	2.549	15.0	21.2	7 20	22 34.88	- 6 42.9	1.872	2.727	14.0	20.6
7 30	22 33.29	- 8 38.2	1.600	2.533	11.5	20.9	7 30	22 30.52	- 7 5.9	1.791	2.719	10.7	20.4
8 9	22 26.06	- 9 12.5	1.533	2.516	7.3	20.7	8 9	22 24.17	- 7 41.8	1.731	2.712	6.8	20.2
8 19	22 17.06	- 9 56.4	1.491	2.499	2.6	20.3	8 19	22 16.40	- 8 27.4	1.697	2.704	2.6	19.9
8 29	22 7.24	-10 44.1	1.475	2.482	2.4	20.3	8 29	22 8.04	- 9 17.8	1.690	2.697	2.1	19.8
9 8	21 57.77	-11 29.3	1.486	2.464	7.3	20.5	9 8	22 0.08	-10 7.2	1.710	2.689	6.3	20.1
9 18	21 49.77	-12 6.7	1.523	2.446	11.8	20.8	9 18	21 53.41	-10 50.4	1.756	2.682	10.3	20.3
9 28	21 44.13	-12 32.1	1.581	2.428	15.7	21.0	9 28	21 48.77	-11 23.5	1.824	2.674	13.8	20.5
154535	2003 <i>GH</i> ₁		8 23.9 61°61	2°9/26.8	18		470278	2007 <i>DO</i> ₅		8 24.0 150°01	2°7/21.7	17	
7 20	22 32.96	+ 1 4.2	1.539	2.380	17.1	19.7	7 20	22 36.17	-13 57.4	1.626	2.505	14.5	21.2
7 30	22 29.24	+ 0 13.8	1.478	2.393	13.4	19.5	7 30	22 31.71	-15 5.0	1.562	2.507	10.8	20.9
8 9	22 23.39	- 1 0.4	1.437	2.406	9.2	19.3	8 9	22 24.99	-16 22.1	1.520	2.509	6.6	20.7
8 19	22 16.10	- 2 34.1	1.420	2.420	4.8	19.1	8 19	22 16.68	-17 41.4	1.504	2.511	3.0	20.5
8 29	22 8.33	- 4 19.7	1.428	2.433	3.1	19.0	8 29	22 7.79	-18 54.5	1.514	2.512	4.4	20.6
9 8	22 1.17	- 6 7.3	1.464	2.447	6.6	19.3	9 8	21 59.49	-19 54.1	1.550	2.514	8.5	20.8
9 18	21 55.56	- 7 47.8	1.524	2.461	10.8	19.5	9 18	21 52.77	-20 35.6	1.610	2.515	12.5	21.1
9 28	21 52.20	- 9 13.9	1.608	2.475	14.5	19.8	9 28	21 48.42	-20 57.2	1.692	2.516	15.9	21.3
430684	2003 <i>WR</i> ₉₃		8 23.9 245°18	2°6/22.0	17		389106	2008 <i>YE</i> ₂₀		8 24.0			