

EPHEMERIDES

9 19.0

9 19.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
215217	2000 UX ₁₆		9 19.0 336°27	3°1/17.0	18		240460	2003 YG ₁₃₅		9 19.0 198°55	2°4/16.2	18	
8 19	0 9.01	- 5 58.5	1.080	2.001	16.4	19.5	8 19	0 8.84	- 8 10.5	2.512	3.402	9.5	21.3
8 29	0 4.15	- 6 32.7	1.023	1.990	11.6	19.2	8 29	0 2.74	- 8 51.2	2.444	3.398	6.6	21.1
9 8	23 56.53	- 7 15.0	0.985	1.981	6.3	18.8	9 8	23 55.29	- 9 34.0	2.404	3.394	3.7	20.9
9 18	23 47.15	- 7 56.9	0.970	1.972	3.1	18.6	9 18	23 47.07	-10 14.6	2.392	3.389	2.5	20.8
9 28	23 37.57	- 8 28.8	0.978	1.964	7.4	18.9	9 28	23 38.78	-10 48.3	2.410	3.384	4.7	21.0
10 8	23 29.40	- 8 43.1	1.009	1.957	12.8	19.1	10 8	23 31.17	-11 11.7	2.456	3.378	7.7	21.1
10 18	23 23.86	- 8 35.8	1.060	1.951	17.8	19.4	10 18	23 24.83	-11 22.3	2.529	3.371	10.5	21.3
10 28	23 21.69	- 8 6.3	1.127	1.947	21.9	19.7	10 28	23 20.24	-11 19.4	2.624	3.364	12.8	21.5
3263	Bligh		9 19.0 270°43	5°4/14.3	18		20896	Tiphene		9 19.0 73°80	4°0/14.8	18	
8 19	0 9.90	-12 24.5	1.535	2.446	13.1	16.6	8 19	0 6.67	- 7 6.0	1.546	2.457	13.0	16.9
8 29	0 4.16	-13 32.8	1.478	2.439	9.4	16.4	8 29	0 1.64	- 8 55.1	1.510	2.474	9.0	16.7
9 8	23 56.28	-14 41.2	1.444	2.431	6.2	16.2	9 8	23 54.81	-10 48.5	1.499	2.491	5.2	16.5
9 18	23 47.13	-15 40.7	1.436	2.424	5.7	16.2	9 18	23 47.02	-12 35.8	1.513	2.508	4.3	16.5
9 28	23 37.88	-16 23.1	1.454	2.416	8.5	16.3	9 28	23 39.34	-14 7.1	1.555	2.525	7.4	16.7
10 8	23 29.73	-16 42.9	1.496	2.409	12.3	16.5	10 8	23 32.79	-15 15.4	1.623	2.542	11.1	17.0
10 18	23 23.63	-16 38.5	1.560	2.401	15.8	16.7	10 18	23 28.13	-15 57.9	1.713	2.559	14.5	17.2
10 28	23 20.20	-16 10.9	1.642	2.394	18.9	16.9	10 28	23 25.83	-16 14.7	1.822	2.575	17.2	17.5
26188	1996 YE ₂		9 19.0 293°27	3°3/21.5	18		347220	2011 HQ ₇₂		9 19.0 17°56	12°7/7.7	18	
8 19	0 9.68	+ 7 27.9	1.407	2.281	16.3	17.7	8 19	0 4.32	-25 21.3	1.074	2.000	16.1	18.6
8 29	0 4.28	+ 7 28.3	1.333	2.271	12.4	17.4	8 29	0 0.63	-27 29.0	1.060	2.009	13.6	18.5
9 8	23 56.50	+ 7 8.7	1.281	2.261	7.9	17.2	9 8	23 54.45	-29 14.5	1.065	2.019	12.7	18.5
9 18	23 47.16	+ 6 31.2	1.252	2.250	3.8	16.9	9 18	23 46.98	-30 24.6	1.091	2.032	13.7	18.6
9 28	23 37.52	+ 5 41.2	1.248	2.240	4.8	16.9	9 28	23 39.76	-30 51.5	1.137	2.045	16.0	18.8
10 8	23 28.93	+ 4 47.1	1.270	2.230	9.4	17.2	10 8	23 34.17	-30 35.1	1.201	2.061	18.6	19.0
10 18	23 22.48	+ 3 57.0	1.315	2.221	14.0	17.4	10 18	23 31.10	-29 40.6	1.282	2.077	21.2	19.3
10 28	23 18.95	+ 3 18.3	1.381	2.211	18.0	17.7	10 28	23 30.97	-28 15.3	1.376	2.095	23.3	19.5
263795	2008 QP ₄₁		9 19.0 291°03	0°1/18.9	15		294815	2008 CQ ₁₁₈		9 19.0 181°77	3°6/22.4	18	
8 19	23 59.38	- 0 15.6	4.238	5.113	6.3	21.0	8 19	0 10.23	+10 43.0	1.745	2.594	14.9	21.5
8 29	23 55.74	- 0 41.3	4.160	5.105	4.4	20.8	8 29	0 4.23	+10 27.2	1.674	2.595	11.4	21.3
9 8	23 51.41	- 1 11.5	4.108	5.097	2.4	20.7	9 8	23 56.30	+ 9 51.0	1.625	2.595	7.6	21.1
9 18	23 46.68	- 1 44.2	4.085	5.090	0.2	20.4	9 18	23 47.18	+ 8 56.8	1.601	2.595	4.2	20.9
9 28	23 41.90	- 2 17.0	4.093	5.082	2.0	20.6	9 28	23 37.93	+ 7 50.0	1.605	2.595	4.5	20.9
10 8	23 37.43	- 2 47.5	4.130	5.075	4.1	20.8	10 8	23 29.62	+ 6 38.3	1.637	2.593	8.0	21.1
10 18	23 33.60	- 3 13.7	4.196	5.067	6.0	20.9	10 18	23 23.13	+ 5 29.4	1.693	2.592	11.8	21.3
10 28	23 30.67	- 3 33.8	4.286	5.060	7.7	21.0	10 28	23 19.09	+ 4 30.4	1.773	2.590	15.2	21.5
442510	2011 WB ₄₈		9 19.0 331°87	0°4/19.4	18		251261	2006 VG ₁₂₄		9 19.0 58°90	0°2/19.2	18	
8 19	0 5.90	+ 2 0.4	1.828	2.713	12.7	21.5	8 19	0 6.99	+ 1 3.9	1.930	2.814	12.2	21.1
8 29	0 1.05	+ 1 24.4	1.760	2.709	9.1	21.3	8 29	0 1.70	+ 0 35.1	1.869	2.818	8.6	20.9
9 8	23 54.52	+ 0 35.9	1.716	2.706	5.0	21.1	9 8	23 54.83	- 0 4.1	1.832	2.822	4.7	20.7
9 18	23 46.97	- 0 20.5	1.699	2.703	0.7	20.7	9 18	23 47.04	- 0 49.5	1.822	2.826	0.5	20.4
9 28	23 39.32	- 1 18.6	1.709	2.701	3.8	21.0	9 28	23 39.21	- 1 35.6	1.839	2.831	3.7	20.6
10 8	23 32.51	- 2 11.9	1.746	2.698	8.0	21.2	10 8	23 32.23	- 2 16.8	1.885	2.835	7.6	20.9
10 18	23 27.29	- 2 54.9	1.808	2.696	11.8	21.5	10 18	23 26.82	- 2 48.7	1.955	2.839	11.2	21.1
10 28	23 24.23	- 3 23.8	1.891	2.693	14.9	21.7	10 28	23 23.47	- 3 8.0	2.048	2.844	14.1	21.3
100236	1994 PS ₂₇		9 19.0 305°57	1°8/17.6	18		186640	2003 KR ₁₆		9 19.0 44°04	4°3/14.9	18	
8 19	0 8.50	- 3 11.5	1.379	2.285	14.6	19.5	8 19	0 7.39	-11 26.9	1.740	2.649	11.9	19.1
8 29	0 3.42	- 3 53.5	1.311	2.272	10.3	19.2	8 29	0 1.96	-12 22.4	1.706	2.667	8.4	19.0
9 8	23 56.01	- 4 46.3	1.265	2.260	5.5	18.9	9 8	23 54.91	-13 16.8	1.697	2.685	5.2	18.8
9 18	23 47.12	- 5 43.0	1.244	2.247	1.8	18.7	9 18	23 47.03	-14 3.3	1.713	2.703	4.5	18.8
9 28	23 37.99	- 6 35.0	1.248	2.235	5.9	18.9	9 28	23 39.32	-14 35.7	1.756	2.722	7.0	19.0
10 8	23 29.93	- 7 14.4	1.276	2.223	10.9	19.1	10 8	23 32.67	-14 50.5	1.825	2.741	10.2	19.3
10 18	23 24.01	- 7 36.0	1.327	2.211	15.4	19.4	10 18	23 27.78	-14 46.6	1.916	2.761	13.2	19.5
10 28	23 20.94	- 7 37.1	1.397	2.200	19.2	19.6	10 28	23 25.07	-14 24.7	2.028	2.781	15.7	19.7
443567	2014 KY ₃₄		9 19.0 218°24	6°4/11.4	18		511198	2013 YC ₁₂₈		9 19.0 181°90	3°0/22.1	18	
8 19	0 8.77	-19 33.0	2.186	3.084	10.3	21.5	8 19	0 9.52	+ 9 17.0	2.070	2.917	13.0	22.2
8 29	0 2.91	-20 51.3	2.132	3.077	8.0	21.3	8 29	0 3.49	+ 9 7.4	1.996	2.917	9.9	22.0
9 8	23 55.45	-22 3.8	2.104	3.070	6.5	21.2	9 8	23 55.81	+ 8 41.8	1.946	2.918	6.4	21.8
9 18	23 47.07	-23 3.5	2.103	3.062	6.8	21.3	9 18	23 47.13	+ 8 2.3	1.923	2.918	3.4	21.6
9 28	23 38.62	-23 44.2	2.130	3.054	8.7	21.4	9 28	23 38.35	+ 7 13.2	1.928	2.917	3.9	21.6
10 8	23 30.98	-24 2.9	2.181	3.045	11.2	21.5	10 8	23 30.35	+ 6 20.0	1.961	2.916	7.1	21.8
10 18	23 24.87	-23 58.9	2.255	3.036	13.6	21.7	10 18	23 23.89	+ 5 28.9	2.021	2.914	10.4	22.0
10 28	23 20.81	-23 33.8	2.347	3.026	15.7	21.8	10 28	23 19.53	+ 4 45.1	2.104	2.912	13.4	22.2
108476	2001 KK ₅₈		9 19.0 7°78	5°9/13.7	18		351081	2003 UE ₇₇		9 19.0 328°26	5°2/22.7	17	
8 19	0 3.80	-11 42.4	1.290	2.215	13.9	18.0	8 19	0 4.91	+10 12.6	1.288	2.164	17.4	20.6
8 29	23 59.99	-13 11.3	1.249	2.217	9.9	17.8	8 29	0 1.24	+10 34.2	1.201	2.136	13.7	20.3
9 8	23 54.06	-14 40.5	1.230	2.219	6.6	17.6	9 8	23 55.07	+10 32.8	1.133	2.108	9.5	20.0
9 18	23 46.94	-15 59.0	1.235	2.223	6.3	17.6	9 18	23 47.09	+10 8.1	1.087	2.081	5.8	19.7
9 28	23 39.84	-16 56.9	1.264	2.228	9.4	17.8	9 28	23 38.53	+ 9 23.5	1.065	2.055	6.0	19.7
10 8	23 33.95	-17 28.0	1.316	2.234	13.2	18.0	10 8	23 30.82	+ 8 26.8	1.066	2.030	10.2	19.8
10 18	23 30.16	-17 30.9	1.387	2.241	16.8	18.3	10 18	23 25.26	+ 7 27.9	1.088	2.007	15.0	20.0
10 28	23 29.00	-17 7.0	1.477	2.249	19.8	18.5	10 28	23 22.82	+ 6 36.7	1.130	1.985	19.4	20.2
140846	2001 UX ₂₀₆		9 19.0 53°55	8°7/11.3	18		157933	1999 VS ₁₈₉		9 19.0 323°97	1°5/20.6	18	
8 19	0 11.91	-24											

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
453471	2009 <i>SS</i> ₁₈₈		9 19.0 274°10	4.8/13.5	18		454678	2014 <i>QL</i> ₄₁₀		9 19.0 350°55	2.2/16.6	17	
8 19	0 7.48	-16 7.8	2.333	3.233	9.7	21.2	8 19	0 2.75	-4 17.4	1.828	2.733	11.6	20.8
8 29	0 1.90	-16 55.6	2.273	3.224	7.2	21.1	8 29	23 58.85	-5 25.0	1.766	2.728	8.1	20.6
9 8	23 54.89	-17 39.9	2.238	3.216	5.2	20.9	9 8	23 53.36	-6 40.3	1.729	2.723	4.3	20.3
9 18	23 47.05	-18 15.3	2.231	3.208	5.1	20.9	9 18	23 46.94	-7 56.8	1.718	2.719	2.3	20.2
9 28	23 39.16	-18 37.2	2.252	3.199	7.0	21.0	9 28	23 40.43	-9 6.8	1.735	2.716	5.3	20.4
10 8	23 32.00	-18 42.4	2.299	3.191	9.5	21.2	10 8	23 34.71	-10 3.7	1.777	2.713	9.1	20.6
10 18	23 26.22	-18 30.2	2.370	3.182	12.1	21.3	10 18	23 30.51	-10 43.2	1.844	2.711	12.6	20.8
10 28	23 22.30	-18 1.1	2.461	3.174	14.2	21.5	10 28	23 28.34	-11 3.2	1.931	2.710	15.5	21.0
238310	2003 <i>YH</i> ₂₃		9 19.0 344°28	9°1/10.7	18		159526	2001 <i>FB</i> ₁₂₁		9 19.0 179°35	2°1/16.2	18	
8 19	0 6.17	-19 59.7	1.343	2.263	13.9	19.2	8 19	0 5.04	-6 44.4	2.579	3.473	9.1	20.3
8 29	0 1.78	-21 33.1	1.298	2.253	11.0	19.0	8 29	0 0.05	-7 37.0	2.518	3.474	6.3	20.1
9 8	23 55.10	-22 57.6	1.274	2.245	9.2	18.9	9 8	23 53.86	-8 33.0	2.483	3.474	3.5	19.9
9 18	23 47.07	-24 2.0	1.274	2.237	9.8	18.9	9 18	23 46.99	-9 27.6	2.476	3.474	2.2	19.8
9 28	23 38.99	-24 37.0	1.297	2.231	12.3	19.0	9 28	23 40.08	-10 16.2	2.499	3.474	4.4	20.0
10 8	23 32.15	-24 38.6	1.341	2.225	15.5	19.2	10 8	23 33.78	-10 54.8	2.550	3.474	7.3	20.2
10 18	23 27.53	-24 7.8	1.404	2.220	18.6	19.4	10 18	23 28.65	-11 20.6	2.627	3.474	10.0	20.3
10 28	23 25.72	-23 8.3	1.483	2.217	21.3	19.6	10 28	23 25.10	-11 32.5	2.726	3.473	12.2	20.5
513938	2014 <i>DN</i> ₇₉		9 19.0 267°92	6°2/14.6	18		127229	2002 <i>JH</i> ₁₁		9 19.0 212°12	2°4/15.9	18	
8 19	0 17.34	-18 47.0	1.802	2.694	12.4	21.5	8 19	0 6.65	-8 24.0	2.608	3.501	9.0	20.6
8 29	0 9.10	-19 6.0	1.745	2.690	9.4	21.3	8 29	0 1.20	-9 7.6	2.540	3.496	6.3	20.4
9 8	23 58.83	-19 16.5	1.712	2.686	6.9	21.1	9 8	23 54.49	-9 53.3	2.499	3.490	3.6	20.2
9 18	23 47.42	-19 12.3	1.706	2.682	6.4	21.1	9 18	23 47.06	-10 36.7	2.487	3.483	2.5	20.2
9 28	23 36.08	-18 49.1	1.728	2.678	8.5	21.2	9 28	23 39.55	-11 13.4	2.504	3.477	4.7	20.3
10 8	23 25.96	-18 5.6	1.777	2.674	11.6	21.4	10 8	23 32.65	-11 39.9	2.549	3.470	7.5	20.5
10 18	23 17.95	-17 3.6	1.849	2.670	14.6	21.6	10 18	23 26.94	-11 53.7	2.621	3.462	10.1	20.6
10 28	23 12.60	-15 45.9	1.942	2.666	17.2	21.8	10 28	23 22.86	-11 54.0	2.714	3.455	12.4	20.8
195540	2002 <i>JG</i> ₄₆		9 19.0 103°26	1°6/20.5	18		22483	1997 <i>GX</i> ₁₆		9 19.0 147°78	1°8/17.4	18	
8 19	0 8.18	+5 2.7	1.742	2.616	13.7	20.5	8 19	0 11.81	-5 52.3	2.054	2.943	11.3	19.7
8 29	0 2.71	+4 38.6	1.679	2.620	10.0	20.3	8 29	0 4.98	-6 15.8	1.996	2.949	7.9	19.5
9 8	23 55.44	+3 59.4	1.639	2.623	5.9	20.0	9 8	23 56.56	-6 42.9	1.964	2.956	4.2	19.3
9 18	23 47.12	+3 8.9	1.625	2.627	2.0	19.9	9 18	23 47.25	-7 9.3	1.960	2.962	1.8	19.1
9 28	23 38.73	+2 12.9	1.638	2.630	3.8	19.9	9 28	23 37.96	-7 30.2	1.985	2.968	4.6	19.4
10 8	23 31.29	+1 18.5	1.678	2.634	7.9	20.2	10 8	23 29.59	-7 41.8	2.039	2.973	8.2	19.6
10 18	23 25.59	+0 31.8	1.743	2.637	11.8	20.4	10 18	23 22.85	-7 41.8	2.118	2.978	11.5	19.8
10 28	23 22.19	-0 2.7	1.830	2.640	15.0	20.7	10 28	23 18.24	-7 29.3	2.219	2.983	14.2	20.0
359341	2009 <i>SS</i> ₁₄		9 19.0 28°85	2°2/21.3	18		98643	2000 <i>WR</i> ₁₂₅		9 19.0 11°14	1°1/19.9	18	
8 19	0 5.22	+6 50.1	1.888	2.756	13.1	20.2	8 19	0 4.75	+3 14.1	1.136	2.042	17.0	18.4
8 29	0 0.50	+6 30.4	1.827	2.763	9.7	20.1	8 29	0 0.89	+2 49.2	1.087	2.045	12.3	18.2
9 8	23 54.20	+5 55.5	1.790	2.770	6.0	19.8	9 8	23 54.67	+2 5.4	1.058	2.049	7.0	17.9
9 18	23 47.00	+5 8.6	1.778	2.778	2.6	19.6	9 18	23 47.08	+1 8.5	1.051	2.055	1.6	17.6
9 28	23 39.77	+4 14.9	1.793	2.786	3.6	19.7	9 28	23 39.46	+0 7.7	1.068	2.062	4.8	17.8
10 8	23 33.38	+3 20.8	1.836	2.794	7.2	20.0	10 8	23 33.16	-0 47.2	1.108	2.070	10.2	18.2
10 18	23 28.54	+2 32.0	1.904	2.803	10.7	20.2	10 18	23 29.17	-1 28.6	1.170	2.080	14.9	18.5
10 28	23 25.75	+1 53.5	1.995	2.812	13.7	20.4	10 28	23 28.09	-1 51.4	1.250	2.091	18.8	18.7
178496	1999 <i>TO</i> ₁₁₄		9 19.0 3°72	1°6/20.3	17		6561	Gruppeta		9 19.0 10°06	2°4/16.6	18	R
8 19	0 0.35	+5 55.7	0.921	1.835	19.2	19.1	8 19	0 0.78	-0 34.6	1.191	2.109	15.5	16.0
8 29	23 58.14	+5 4.5	0.872	1.833	14.1	18.8	8 29	23 57.99	-2 34.2	1.143	2.111	10.7	15.8
9 8	23 53.33	+3 44.5	0.841	1.833	8.2	18.5	9 8	23 53.08	-4 51.1	1.118	2.114	5.5	15.5
9 18	23 46.93	+2 4.0	0.831	1.834	2.2	18.2	9 18	23 46.93	-7 12.5	1.116	2.119	2.6	15.3
9 28	23 40.43	+0 16.6	0.842	1.838	5.3	18.4	9 28	23 40.75	-9 23.5	1.140	2.125	6.9	15.6
10 8	23 35.35	-1 22.2	0.875	1.843	11.3	18.7	10 8	23 35.73	-11 11.3	1.188	2.132	11.9	15.9
10 18	23 32.79	-2 40.6	0.928	1.849	16.6	19.1	10 18	23 32.79	-12 28.5	1.257	2.140	16.2	16.2
10 28	23 33.39	-3 31.3	0.998	1.858	21.1	19.4	10 28	23 32.47	-13 12.8	1.345	2.149	19.8	16.5
67921	2000 <i>WG</i> ₁₁₃		9 19.0 151°65	6°3/25.9	18		152153	2005 <i>MD</i> ₃₉		9 19.0 197°44	3°1/16.1	18	
8 19	0 8.89	+19 13.3	2.012	2.810	15.1	19.4	8 19	0 8.52	-5 56.9	1.557	2.463	13.3	20.2
8 29	0 3.15	+19 20.9	1.940	2.815	12.4	19.2	8 29	0 3.13	-7 10.9	1.501	2.462	9.2	20.0
9 8	23 55.67	+19 5.3	1.888	2.820	9.5	19.1	9 8	23 55.75	-8 32.0	1.468	2.461	5.1	19.7
9 18	23 47.15	+18 26.6	1.861	2.824	7.1	18.9	9 18	23 47.19	-9 51.8	1.461	2.460	3.3	19.6
9 28	23 38.51	+17 27.8	1.860	2.829	6.4	18.9	9 28	23 38.56	-11 1.2	1.481	2.459	6.6	19.8
10 8	23 30.71	+16 15.3	1.886	2.832	7.9	19.0	10 8	23 30.99	-11 53.1	1.527	2.458	10.8	20.0
10 18	23 24.54	+14 56.7	1.938	2.836	10.6	19.2	10 18	23 25.36	-12 23.5	1.596	2.456	14.6	20.3
10 28	23 20.58	+13 40.0	2.014	2.839	13.3	19.4	10 28	23 22.24	-12 31.3	1.684	2.455	17.7	20.5
227933	2007 <i>GV</i> ₁₅		9 19.0 195°39	0°2/19.3	17		317741	2003 <i>SS</i> ₁₅		9 19.0 49°69	8°4/28.6	18	
8 19	0 9.59	+1 34.4	1.910	2.788	12.5	22.1	8 19	0 8.80	+24 14.1	2.014	2.780	16.1	19.7
8 29	0 3.63	+0 59.4	1.840	2.787	8.9	21.9	8 29	0 3.09	+24 55.8	1.956	2.797	13.7	19.6
9 8	23 55.92	+0 12.8	1.795	2.784	4.9	21.6	9 8	23 55.64	+25 12.4	1.916	2.815	11.3	19.5
9 18	23 47.18	-0 41.0	1.777	2.781	0.6	21.3	9 18	23 47.18	+25 2.6	1.900	2.832	9.3	19.4
9 28	23 38.32	-1 36.2	1.787	2.778	3.8	21.5	9 28	23 38.66	+24 28.0	1.908	2.851	8.4	19.4
10 8	23 30.31	-2 26.4	1.825	2.774	8.0	21.8	10 8	23 31.05	+23 34.0	1.942	2.869	9.0	19.4
10 18	23 23.95	-3 6.6	1.889	2.770	11.7	22.0	10 18	23 25.15	+22 27.8	2.000	2.888	10.8	19.6
10 28	23 19.79	-3 33.1	1.975	2.765	14.8	22.2	10 28	23 21.48	+21 17.7	2.082	2.906	12.9	19.8
14264	2000 <i>AH</i> ₁₄₂		9 19.0 289°48	0°2/18.8	18		311900	2006 <i>YR</i> ₄₆		9 19.0 193°74	4°3/24.7	18	
8 19													

EPHEMERIDES

9 19.0

9 19.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
318247	2004 <i>RB</i> ₃₀₅		9 19.0 289°37	2°5/21.5	17		206508	2003 <i>UP</i> ₁₂₂		9 19.0 345°63	8°1/10.6	18	
8 19	0 7.90	+ 7 0.1	2.141	2.998	12.2	21.8	8 19	0 0.97	-14 30.7	1.207	2.139	14.1	18.8
8 29	0 2.37	+ 7 3.8	2.062	2.991	9.2	21.6	8 29	23 58.29	-16 48.0	1.159	2.127	10.5	18.5
9 8	23 55.26	+ 6 54.5	2.007	2.983	5.8	21.3	9 8	23 53.35	-19 5.3	1.133	2.116	8.3	18.4
9 18	23 47.16	+ 6 33.8	1.979	2.976	2.9	21.1	9 18	23 47.00	-21 7.7	1.131	2.106	9.1	18.4
9 28	23 38.90	+ 6 5.2	1.979	2.969	3.6	21.2	9 28	23 40.51	-22 41.5	1.152	2.098	12.3	18.6
10 8	23 31.34	+ 5 33.2	2.007	2.962	6.9	21.4	10 8	23 35.15	-23 38.4	1.194	2.091	16.0	18.8
10 18	23 25.20	+ 5 2.7	2.061	2.955	10.2	21.6	10 18	23 31.96	-23 56.5	1.254	2.085	19.6	19.0
10 28	23 21.05	+ 4 38.1	2.138	2.948	13.2	21.8	10 28	23 31.56	-23 38.4	1.329	2.081	22.5	19.2
214522	2006 <i>HF</i> ₉₇		9 19.0 236°92	2°2/17.3	17		131600	2001 <i>XG</i> ₉		9 19.0 337°66	4°3/16.7	18	
8 19	0 12.26	- 4 34.9	1.455	2.356	14.3	20.8	8 19	0 13.19	- 9 17.1	1.070	1.989	16.7	19.6
8 29	0 6.00	- 5 18.0	1.390	2.348	10.1	20.5	8 29	0 7.19	- 9 38.7	1.016	1.982	11.9	19.3
9 8	23 57.41	- 6 9.4	1.347	2.340	5.4	20.2	9 8	23 58.24	-10 2.4	0.981	1.975	6.8	19.0
9 18	23 47.38	- 7 2.3	1.329	2.332	2.3	20.0	9 18	23 47.49	-10 19.8	0.969	1.969	4.3	18.9
9 28	23 37.15	- 7 48.5	1.339	2.323	6.1	20.2	9 28	23 36.59	-10 22.8	0.981	1.963	8.2	19.1
10 8	23 28.06	- 8 20.9	1.373	2.314	10.9	20.5	10 8	23 27.27	-10 6.1	1.015	1.959	13.4	19.4
10 18	23 21.13	- 8 35.4	1.431	2.304	15.2	20.7	10 18	23 20.80	- 9 28.7	1.070	1.955	18.2	19.6
10 28	23 17.08	- 8 30.3	1.508	2.295	18.8	21.0	10 28	23 17.87	- 8 31.6	1.141	1.952	22.2	19.9
437792	2015 <i>CV</i> ₄₀		9 19.0 181°45	2°7/16.4	17		260394	2004 <i>VK</i> ₉₁		9 19.0 208°34	7°0/ 9.3	18	
8 19	0 8.92	- 4 54.2	1.683	2.584	12.7	21.4	8 19	0 12.12	-29 56.1	3.041	3.903	8.8	21.1
8 29	0 3.30	- 6 11.0	1.625	2.584	8.9	21.2	8 29	0 4.92	-30 40.7	2.993	3.896	7.6	21.0
9 8	23 55.81	- 7 35.6	1.592	2.585	4.8	21.0	9 8	23 56.45	-31 14.0	2.972	3.890	7.0	20.9
9 18	23 47.22	- 9 0.0	1.585	2.585	2.8	20.9	9 18	23 47.30	-31 31.4	2.977	3.882	7.4	20.9
9 28	23 38.56	-10 15.7	1.606	2.584	6.1	21.1	9 28	23 38.19	-31 29.9	3.010	3.875	8.5	21.0
10 8	23 30.89	-11 15.3	1.653	2.583	10.1	21.3	10 8	23 29.83	-31 8.6	3.068	3.866	10.0	21.1
10 18	23 25.04	-11 54.8	1.724	2.582	13.8	21.5	10 18	23 22.80	-30 28.7	3.148	3.858	11.5	21.2
10 28	23 21.59	-12 12.5	1.815	2.580	16.8	21.7	10 28	23 17.53	-29 32.3	3.248	3.849	12.9	21.3
42968	1999 <i>TT</i> ₁₆₅		9 19.0 298°09	4°9/24.3	18		348136	2004 <i>BJ</i> ₁₃₃		9 19.0 245°81	7°0/10.5	18	
8 19	0 5.22	+15 16.1	1.725	2.560	15.6	19.5	8 19	0 7.66	-20 10.1	2.055	2.956	10.7	20.6
8 29	0 0.81	+14 48.8	1.646	2.554	12.4	19.3	8 29	0 2.29	-21 43.3	2.001	2.946	8.4	20.4
9 8	23 54.54	+13 55.8	1.589	2.547	8.9	19.0	9 8	23 55.25	-23 10.5	1.973	2.936	7.1	20.3
9 18	23 47.10	+12 38.9	1.556	2.541	5.7	18.8	9 18	23 47.20	-24 23.5	1.971	2.925	7.6	20.3
9 28	23 39.48	+11 4.0	1.549	2.535	5.2	18.8	9 28	23 39.04	-25 15.6	1.996	2.914	9.6	20.5
10 8	23 32.70	+ 9 19.9	1.569	2.528	8.0	19.0	10 8	23 31.70	-25 42.8	2.045	2.902	12.1	20.6
10 18	23 27.64	+ 7 36.7	1.614	2.522	11.7	19.2	10 18	23 25.94	-25 44.7	2.116	2.891	14.5	20.7
10 28	23 24.91	+ 6 3.4	1.682	2.516	15.1	19.4	10 28	23 22.31	-25 22.9	2.204	2.879	16.6	20.9
1406	Komppa		9 19.0 308°99	3°6/21.8	18		485191	2010 <i>TP</i> ₇₉		9 19.0 285°44	1°2/20.5	17	
8 19	0 11.26	+ 7 38.1	1.716	2.576	14.6	15.4	8 19	0 4.09	+ 5 48.1	2.083	2.952	12.0	21.8
8 29	0 5.12	+ 8 6.0	1.638	2.567	11.1	15.2	8 29	23 59.74	+ 4 57.8	2.001	2.940	8.8	21.5
9 8	23 56.90	+ 8 18.9	1.583	2.558	7.3	15.0	9 8	23 53.87	+ 3 51.9	1.944	2.928	5.2	21.3
9 18	23 47.34	+ 8 17.3	1.554	2.549	4.0	14.8	9 18	23 47.07	+ 2 34.5	1.914	2.917	1.6	21.0
9 28	23 37.50	+ 8 4.0	1.551	2.540	4.7	14.8	9 28	23 40.10	+ 1 11.8	1.912	2.905	3.3	21.1
10 8	23 28.55	+ 7 43.9	1.576	2.532	8.3	15.0	10 8	23 33.79	- 0 9.2	1.939	2.894	7.1	21.4
10 18	23 21.44	+ 7 22.8	1.625	2.524	12.2	15.2	10 18	23 28.85	- 1 21.8	1.992	2.882	10.7	21.6
10 28	23 16.88	+ 7 6.2	1.696	2.516	15.6	15.4	10 28	23 25.81	- 2 21.0	2.067	2.870	13.8	21.8
514414	2016 <i>TX</i> ₈₁		9 19.0 258°41	5°2/15.3	18		518417	2018 <i>DG</i> ₄		9 19.0 187°20	1°6/20.7	18	
8 19	0 17.01	-15 59.2	1.838	2.731	12.2	20.8	8 19	0 10.75	+ 4 27.4	2.408	3.264	11.0	21.8
8 29	0 8.91	-16 13.6	1.775	2.725	9.0	20.6	8 29	0 4.19	+ 4 28.0	2.332	3.264	8.1	21.6
9 8	23 58.79	-16 22.1	1.737	2.718	6.1	20.4	9 8	23 56.18	+ 4 18.5	2.282	3.263	4.9	21.4
9 18	23 47.51	-16 19.1	1.727	2.712	5.3	20.4	9 18	23 47.29	+ 4 0.9	2.260	3.261	1.9	21.2
9 28	23 36.22	-16 0.2	1.745	2.705	7.6	20.5	9 28	23 38.30	+ 3 38.4	2.268	3.259	3.1	21.3
10 8	23 26.07	-15 23.7	1.790	2.698	10.9	20.7	10 8	23 30.00	+ 3 15.0	2.306	3.257	6.4	21.5
10 18	23 17.94	-14 30.3	1.859	2.692	14.1	20.9	10 18	23 23.06	+ 2 54.3	2.371	3.254	9.5	21.7
10 28	23 12.42	-13 22.2	1.950	2.685	16.8	21.1	10 28	23 17.97	+ 2 39.9	2.460	3.251	12.2	21.8
55311	2001 <i>SR</i> ₅₉		9 19.0 52°95	0°9/18.1	18		445455	2010 <i>VB</i> ₁₄		9 19.0 343°16	4°3/23.6	17	
8 19	0 6.39	- 1 28.7	1.871	2.764	12.0	18.9	8 19	0 2.73	+12 55.6	1.676	2.529	15.2	20.8
8 29	0 1.34	- 2 14.3	1.813	2.768	8.4	18.7	8 29	23 59.09	+12 31.6	1.600	2.520	11.9	20.5
9 8	23 54.69	- 3 8.8	1.779	2.772	4.4	18.5	9 8	23 53.63	+11 43.7	1.545	2.512	8.3	20.3
9 18	23 47.12	- 4 6.9	1.773	2.777	0.9	18.2	9 18	23 47.05	+10 34.4	1.514	2.504	5.0	20.1
9 28	23 39.52	- 5 2.2	1.793	2.781	4.3	18.5	9 28	23 40.29	+ 9 9.4	1.508	2.497	4.7	20.1
10 8	23 32.79	- 5 48.7	1.841	2.786	8.2	18.7	10 8	23 34.35	+ 7 37.3	1.529	2.491	7.9	20.3
10 18	23 27.64	- 6 22.3	1.914	2.791	11.8	19.0	10 18	23 30.07	+ 6 7.5	1.575	2.486	11.7	20.5
10 28	23 24.58	- 6 40.2	2.009	2.796	14.7	19.2	10 28	23 28.06	+ 4 48.3	1.643	2.482	15.1	20.7
436857	2012 <i>SB</i> ₅₁		9 19.0 23°24	1°1/19.7	18		263040	2007 <i>GY</i> ₄₂		9 19.0 228°66	1°0/20.4	17	
8 19	0 9.98	+ 1 7.8	1.150	2.054	17.1	19.9	8 19	0 5.10	+ 4 35.2	2.553	3.417	10.3	21.9
8 29	0 4.50	+ 1 16.9	1.107	2.064	12.3	19.6	8 29	0 0.19	+ 4 3.0	2.473	3.409	7.5	21.7
9 8	23 56.58	+ 1 11.8	1.084	2.075	6.9	19.4	9 8	23 54.02	+ 3 19.8	2.418	3.401	4.4	21.5
9 18	23 47.30	+ 0 56.7	1.083	2.087	1.5	19.1	9 18	23 47.09	+ 2 28.7	2.391	3.393	1.3	21.2
9 28	23 38.12	+ 0 37.8	1.107	2.101	4.8	19.3	9 28	23 40.04	+ 1 33.7	2.393	3.385	2.8	21.3
10 8	23 30.43	+ 0 22.0	1.155	2.116	10.1	19.7	10 8	23 33.55	+ 0 39.8	2.424	3.376	6.1	21.5
10 18	23 25.24	+ 0 14.7	1.225	2.132	14.7	20.0	10 18	23 28.21	- 0 8.6	2.483	3.368	9.1	21.7
10 28	23 23.10	+ 0 19.8	1.314	2.148	18.5	20.3	10 28	23 24.48	- 0 47.8	2.565	3.358	11.7	21.9
15068	Wiegert		9 19.0 301°40	0°1/19.2	16		226499	2003 <i>SP</i> ₂₉₆		9 19.0			

EPHEMERIDES

9 19.0

9 19.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
361499	2007 <i>EH</i> ₆₀		9 19.0 98°04'	3°6'/23.0	18		12461	1997 <i>AM</i> ₅		9 19.1 210°68'	0°9'/18.3	18	
8 19	0 9.80	+11 13.5	2.379	3.208	12.0	20.4	8 19	0 11.45	-1 40.3	1.756	2.644	13.0	18.6
8 29	0 3.47	+11 27.7	2.317	3.224	9.3	20.3	8 29	0 5.13	-2 16.2	1.687	2.639	9.2	18.4
9 8	23 55.75	+11 27.6	2.280	3.240	6.4	20.1	9 8	23 56.85	-3 1.6	1.641	2.633	4.9	18.1
9 18	23 47.25	+11 14.2	2.269	3.256	4.0	20.0	9 18	23 47.39	-3 51.4	1.623	2.627	0.9	17.8
9 28	23 38.75	+10 50.3	2.288	3.271	4.0	20.0	9 28	23 37.78	-4 39.1	1.632	2.620	4.6	18.1
10 8	23 31.00	+10 20.0	2.335	3.286	6.3	20.2	10 8	23 29.10	-5 18.4	1.669	2.613	9.0	18.3
10 18	23 24.65	+9 47.8	2.409	3.301	9.0	20.4	10 18	23 22.24	-5 44.8	1.731	2.605	12.9	18.5
10 28	23 20.15	+9 18.5	2.508	3.316	11.5	20.6	10 28	23 17.81	-5 55.6	1.814	2.597	16.2	18.7
180905	2005 <i>JU</i> ₁₈₁		9 19.0 111°34'	1°6'/20.4	17		223373	2003 <i>SD</i> ₅₄		9 19.1 214°25'	0°7'/18.3	18	
8 19	0 9.65	+4 56.8	1.453	2.334	15.5	20.5	8 19	0 7.58	-2 35.4	2.395	3.278	10.1	20.2
8 29	0 4.05	+4 26.4	1.393	2.338	11.3	20.3	8 29	0 1.95	-2 54.7	2.326	3.276	7.1	20.0
9 8	23 56.32	+3 38.1	1.356	2.342	6.6	20.0	9 8	23 54.97	-3 19.7	2.283	3.274	3.7	19.8
9 18	23 47.31	+2 36.7	1.343	2.346	2.0	19.7	9 18	23 47.20	-3 47.0	2.268	3.272	0.7	19.6
9 28	23 38.24	+1 29.6	1.357	2.350	4.3	19.9	9 28	23 39.37	-4 12.6	2.282	3.270	3.5	19.8
10 8	23 30.32	+0 25.8	1.397	2.354	9.1	20.2	10 8	23 32.21	-4 32.7	2.325	3.268	6.9	20.0
10 18	23 24.48	-0 27.6	1.460	2.358	13.4	20.5	10 18	23 26.34	-4 44.5	2.395	3.266	9.9	20.2
10 28	23 21.33	-1 5.1	1.544	2.361	17.0	20.7	10 28	23 22.23	-4 46.0	2.487	3.263	12.5	20.4
269622	2010 <i>VF</i> ₃₈		9 19.0 247°65'	3°6'/10.8	18		133937	2004 <i>TA</i> ₁₃		9 19.1 91°62'	10°3'/29.9	17	
8 19	0 0.74	-22 9.9	4.781	5.668	5.4	20.4	8 19	0 6.85	+28 11.1	1.126	1.922	24.6	19.6
8 29	23 56.69	-22 47.5	4.725	5.658	4.3	20.3	8 29	0 2.70	+27 26.6	1.063	1.929	20.9	19.4
9 8	23 51.98	-23 21.0	4.695	5.649	3.6	20.3	9 8	23 55.82	+25 49.3	1.015	1.936	16.8	19.2
9 18	23 46.90	-23 47.9	4.695	5.639	3.8	20.3	9 18	23 47.29	+23 17.9	0.986	1.942	12.7	19.0
9 28	23 41.78	-24 6.1	4.722	5.629	4.7	20.3	9 28	23 38.69	+20 1.4	0.979	1.949	10.4	18.9
10 8	23 36.99	-24 14.2	4.777	5.620	5.9	20.4	10 8	23 31.62	+16 19.2	0.996	1.956	11.5	19.0
10 18	23 32.83	-24 11.7	4.856	5.610	7.2	20.5	10 18	23 27.23	+12 35.3	1.039	1.962	15.0	19.2
10 28	23 29.56	-23 58.6	4.957	5.600	8.2	20.6	10 28	23 26.17	+9 11.3	1.103	1.969	19.1	19.5
338592	2003 <i>SA</i> ₁₄₈		9 19.0 17°14'	9°7'/9.6	18		41620	2000 <i>SU</i> ₁₆₀		9 19.1 316°35'	0°5'/18.7	18	
8 19	23 58.57	-15 2.9	0.938	1.882	15.8	18.4	8 19	0 7.46	-0 38.7	1.437	2.337	14.5	18.1
8 29	23 56.73	-17 55.3	0.921	1.894	11.8	18.2	8 29	0 2.73	-1 5.7	1.361	2.319	10.4	17.9
9 8	23 52.48	-20 38.1	0.926	1.908	9.7	18.2	9 8	23 55.76	-1 45.4	1.307	2.301	5.6	17.5
9 18	23 46.94	-22 52.8	0.952	1.924	10.8	18.3	9 18	23 47.30	-2 32.6	1.278	2.283	0.6	17.1
9 28	23 41.54	-24 25.9	0.999	1.942	14.0	18.5	9 28	23 38.52	-3 19.9	1.275	2.266	5.0	17.4
10 8	23 37.61	-25 12.7	1.065	1.962	17.6	18.8	10 8	23 30.69	-3 59.7	1.297	2.250	10.1	17.7
10 18	23 36.01	-25 15.4	1.148	1.983	20.7	19.1	10 18	23 24.87	-4 25.9	1.341	2.234	14.7	17.9
10 28	23 37.18	-24 40.4	1.245	2.006	23.3	19.4	10 28	23 21.81	-4 34.6	1.404	2.219	18.6	18.1
403975	2012 <i>BV</i> ₈₇		9 19.0 249°00'	2°8'/15.6	18		362857	2012 <i>BL</i> ₄₃		9 19.1 102°14'	3°3'/14.8	18	
8 19	0 6.70	-8 50.4	2.449	3.344	9.5	21.5	8 19	0 5.88	-10 21.7	2.361	3.261	9.6	21.1
8 29	0 1.39	-9 42.0	2.373	3.329	6.6	21.3	8 29	0 0.69	-11 25.4	2.317	3.274	6.7	20.9
9 8	23 54.70	-10 36.3	2.324	3.314	3.9	21.0	9 8	23 54.25	-12 29.5	2.299	3.287	4.1	20.8
9 18	23 47.16	-11 28.3	2.304	3.299	2.9	21.0	9 18	23 47.14	-13 28.4	2.309	3.300	3.5	20.7
9 28	23 39.49	-12 12.7	2.312	3.283	5.2	21.1	9 28	23 40.07	-14 16.9	2.348	3.313	5.6	20.9
10 8	23 32.42	-12 45.3	2.349	3.267	8.2	21.3	10 8	23 33.74	-14 51.3	2.415	3.325	8.3	21.1
10 18	23 26.59	-13 3.6	2.410	3.250	11.0	21.5	10 18	23 28.72	-15 9.8	2.506	3.337	10.9	21.3
10 28	23 22.49	-13 6.4	2.494	3.233	13.4	21.6	10 28	23 25.41	-15 11.9	2.619	3.349	13.0	21.5
511933	2015 <i>HT</i> ₁₆₆		9 19.0 349°83'	12°2'/10.1	18		231624	2009 <i>SN</i> ₂₃₂		9 19.1 334°53'	7°2'/14.9	18	
8 19	0 13.38	-28 12.5	1.291	2.192	15.7	20.2	8 19	0 13.36	-16 4.9	1.142	2.061	15.9	19.6
8 29	0 6.98	-29 19.1	1.253	2.186	13.4	20.1	8 29	0 7.30	-16 32.8	1.084	2.046	11.9	19.4
9 8	23 57.95	-30 5.2	1.236	2.181	12.2	20.0	9 8	23 58.32	-16 53.5	1.047	2.033	8.3	19.1
9 18	23 47.47	-30 20.1	1.240	2.177	12.7	20.0	9 18	23 47.55	-16 57.8	1.033	2.020	7.5	19.0
9 28	23 37.14	-29 57.3	1.266	2.173	14.7	20.1	9 28	23 36.61	-16 37.8	1.042	2.009	10.4	19.2
10 8	23 28.47	-28 57.1	1.312	2.171	17.4	20.3	10 8	23 27.19	-15 50.8	1.073	1.998	14.8	19.4
10 18	23 22.51	-27 24.6	1.376	2.169	20.1	20.5	10 18	23 20.55	-14 38.5	1.124	1.989	19.0	19.6
10 28	23 19.79	-25 26.9	1.456	2.169	22.5	20.7	10 28	23 17.40	-13 5.1	1.192	1.981	22.6	19.8
150052	2006 <i>QO</i> ₁₀		9 19.1 18°26'	2°2'/16.9	18		339220	2004 <i>TW</i> ₃₀₈		9 19.1 43°26'	6°2'/24.5	18	
8 19	0 6.18	-4 23.8	1.612	2.517	12.9	19.8	8 19	0 8.81	+14 48.4	1.290	2.142	18.9	19.7
8 29	0 1.40	-5 19.7	1.559	2.520	9.0	19.6	8 29	0 3.54	+14 57.7	1.247	2.162	14.9	19.5
9 8	23 54.81	-6 23.2	1.529	2.523	4.8	19.3	9 8	23 56.04	+14 38.3	1.223	2.183	10.7	19.3
9 18	23 47.18	-7 27.2	1.525	2.527	2.3	19.2	9 18	23 47.31	+13 52.2	1.220	2.204	7.1	19.2
9 28	23 39.53	-8 24.0	1.547	2.531	5.6	19.4	9 28	23 38.70	+12 45.7	1.242	2.226	6.5	19.2
10 8	23 32.87	-9 7.2	1.596	2.535	9.7	19.7	10 8	23 31.47	+11 28.9	1.288	2.249	9.3	19.4
10 18	23 28.00	-9 32.7	1.667	2.540	13.4	19.9	10 18	23 26.53	+10 12.3	1.358	2.271	13.0	19.7
10 28	23 25.47	-9 39.1	1.759	2.545	16.5	20.1	10 28	23 24.42	+9 5.0	1.448	2.295	16.4	20.0
33638	1999 <i>JZ</i> ₈₀		9 19.1 56°53'	8°8'/10.1	18		318308	2004 <i>TV</i> ₁₁₁		9 19.1 275°39'	2°3'/21.9	18	
8 19	0 7.54	-19 52.2	1.483	2.397	13.2	17.2	8 19	0 4.00	+9 3.6	2.254	3.107	11.8	20.4
8 29	0 2.48	-21 54.2	1.455	2.406	10.4	17.1	8 29	23 59.58	+8 24.9	2.175	3.101	8.9	20.2
9 8	23 55.41	-23 46.0	1.450	2.416	8.8	17.0	9 8	23 53.77	+7 30.2	2.120	3.095	5.7	20.0
9 18	23 47.23	-25 16.4	1.470	2.425	9.5	17.1	9 18	23 47.12	+6 22.5	2.091	3.089	2.7	19.8
9 28	23 39.15	-26 16.7	1.514	2.435	11.8	17.3	9 28	23 40.35	+5 6.9	2.092	3.083	3.2	19.9
10 8	23 32.31	-26 43.6	1.581	2.445	14.6	17.5	10 8	23 34.22	+3 49.7	2.120	3.077	6.4	20.1
10 18	23 27.55	-26 38.3	1.666	2.455	17.3	17.7	10 18	23 29.36	+2 37.1	2.176	3.072	9.7	20.3
10 28	23 25.37	-26 4.7	1.768	2.465	19.5	17.9	10 28	23 26.28	+1 34.4	2.255	3.066	12.5	20.4
178570	1999 <i>VS</i> ₂₁₂		9 19.1 107°12'	5°6'/14.7	18		268348	2005 <i>SG</i> ₂₄₆		9 19.1 176°82'			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
390923	2005 <i>EG</i> ₂₄₇		9 19.1 217°06'	2°4/16.3	18		156183	2001 <i>TN</i> ₂₁₉		9 19.1 236°03'	1°5/17.8	18	
8 19	0 6.52	- 4 57.0	2.035	2.931	11.0	21.3	8 19	0 10.64	- 3 34.8	1.686	2.580	13.0	20.6
8 29	0 1.45	- 6 11.7	1.969	2.926	7.7	21.1	8 29	0 4.63	- 4 9.5	1.619	2.575	9.2	20.3
9 8	23 54.81	- 7 33.3	1.928	2.921	4.1	20.8	9 8	23 56.65	- 4 52.0	1.576	2.569	4.9	20.0
9 18	23 47.23	- 8 55.4	1.915	2.915	2.5	20.7	9 18	23 47.46	- 5 36.8	1.560	2.563	1.5	19.8
9 28	23 39.54	-10 10.7	1.931	2.909	5.3	20.9	9 28	23 38.14	- 6 17.3	1.571	2.557	5.1	20.0
10 8	23 32.60	-11 12.8	1.975	2.903	8.9	21.1	10 8	23 29.79	- 6 47.5	1.608	2.551	9.4	20.3
10 18	23 27.13	-11 57.6	2.043	2.896	12.2	21.3	10 18	23 23.29	- 7 3.5	1.670	2.544	13.3	20.5
10 28	23 23.65	-12 23.3	2.132	2.889	14.9	21.5	10 28	23 19.27	- 7 3.2	1.753	2.537	16.6	20.7
390034	2012 <i>UG</i> ₅₁		9 19.1 248°42'	0°3/19.3	18		227850	2007 <i>DV</i> ₃₇		9 19.1 276°51'	0°2/19.3	18	
8 19	0 7.87	+ 1 45.4	1.812	2.695	12.9	21.9	8 19	0 9.22	+ 1 24.6	1.589	2.477	14.1	20.9
8 29	0 2.57	+ 1 10.0	1.741	2.689	9.2	21.7	8 29	0 3.85	+ 0 53.6	1.510	2.461	10.1	20.6
9 8	23 55.48	+ 0 22.1	1.694	2.684	5.1	21.4	9 8	23 56.35	+ 0 8.6	1.455	2.445	5.6	20.3
9 18	23 47.30	- 0 33.8	1.673	2.678	0.7	21.1	9 18	23 47.44	- 0 45.8	1.424	2.429	0.7	19.9
9 28	23 38.97	- 1 31.4	1.680	2.672	3.9	21.3	9 28	23 38.24	- 1 42.8	1.421	2.413	4.4	20.2
10 8	23 31.49	- 2 24.0	1.715	2.666	8.2	21.6	10 8	23 29.92	- 2 34.6	1.444	2.396	9.3	20.4
10 18	23 25.67	- 3 6.2	1.774	2.660	12.1	21.8	10 18	23 23.48	- 3 14.8	1.491	2.380	13.7	20.6
10 28	23 22.09	- 3 33.9	1.855	2.653	15.3	22.0	10 28	23 19.65	- 3 38.9	1.558	2.363	17.4	20.8
168655	2000 <i>DV</i> ₈₄		9 19.1 211°24'	2°0/17.0	18		439244	2012 <i>TO</i> ₁₉₅		9 19.1 357°00'	4°2/21.8	18	
8 19	0 8.58	- 5 20.6	1.988	2.882	11.3	20.5	8 19	0 6.25	+ 7 8.0	1.108	2.002	18.3	19.8
8 29	0 2.90	- 6 3.3	1.923	2.880	7.9	20.3	8 29	0 2.24	+ 7 36.1	1.050	1.996	13.9	19.5
9 8	23 55.59	- 6 51.2	1.884	2.877	4.2	20.0	9 8	23 55.63	+ 7 42.7	1.010	1.992	9.1	19.2
9 18	23 47.32	- 7 39.2	1.872	2.874	2.1	19.9	9 18	23 47.37	+ 7 29.0	0.991	1.989	4.8	19.0
9 28	23 38.98	- 8 21.3	1.889	2.870	4.9	20.1	9 28	23 38.89	+ 7 0.2	0.995	1.988	5.6	19.0
10 8	23 31.45	- 8 52.6	1.932	2.867	8.6	20.3	10 8	23 31.69	+ 6 24.5	1.022	1.988	10.2	19.3
10 18	23 25.48	- 9 9.9	2.001	2.863	12.0	20.5	10 18	23 26.95	+ 5 50.8	1.070	1.990	15.0	19.6
10 28	23 21.61	- 9 11.6	2.091	2.859	14.8	20.7	10 28	23 25.41	+ 5 26.7	1.136	1.994	19.2	19.8
509936	2009 <i>QT</i> ₁₉		9 19.1 358°97'	0°7/19.5	17		105645	2000 <i>SQ</i> ₂₀		9 19.1 23°70'	2°3/21.3	18	
8 19	0 5.15	+ 0 56.3	0.942	1.862	18.3	20.2	8 19	0 5.26	+ 7 6.0	1.631	2.506	14.5	18.9
8 29	0 1.64	+ 0 54.3	0.891	1.856	13.2	19.9	8 29	0 0.79	+ 6 42.3	1.574	2.513	10.7	18.7
9 8	23 55.34	+ 0 35.0	0.859	1.853	7.4	19.5	9 8	23 54.54	+ 6 0.8	1.539	2.521	6.6	18.4
9 18	23 47.31	+ 0 3.7	0.847	1.851	1.2	19.2	9 18	23 47.26	+ 5 5.4	1.529	2.529	2.8	18.2
9 28	23 39.13	- 0 31.0	0.857	1.851	5.5	19.4	9 28	23 39.95	+ 4 2.5	1.545	2.538	3.9	18.3
10 8	23 32.43	- 0 59.7	0.888	1.854	11.5	19.8	10 8	23 33.61	+ 2 59.8	1.588	2.548	7.9	18.6
10 18	23 28.43	- 1 15.2	0.939	1.857	16.8	20.1	10 18	23 29.02	+ 2 4.1	1.655	2.558	11.7	18.8
10 28	23 27.82	- 1 12.9	1.007	1.863	21.2	20.4	10 28	23 26.70	+ 1 20.9	1.744	2.569	15.0	19.1
283709	2002 <i>TJ</i> ₁₇		9 19.1 314°20'	0°4/19.3	18		93631	2000 <i>UV</i> ₇₈		9 19.1 214°05'	4°8/13.6	18	
8 19	0 9.28	+ 0 33.6	1.256	2.157	16.1	20.3	8 19	0 7.92	-15 24.8	2.254	3.154	10.0	19.1
8 29	0 4.36	+ 0 24.1	1.180	2.137	11.7	20.0	8 29	0 2.30	-16 20.5	2.199	3.152	7.3	18.9
9 8	23 56.81	+ 0 0.3	1.124	2.116	6.5	19.7	9 8	23 55.23	-17 13.3	2.170	3.149	5.2	18.8
9 18	23 47.47	- 0 33.6	1.092	2.097	0.9	19.2	9 18	23 47.33	-17 57.2	2.168	3.146	5.1	18.8
9 28	23 37.67	- 1 10.6	1.085	2.078	5.1	19.5	9 28	23 39.41	-18 27.1	2.194	3.143	7.0	18.9
10 8	23 28.93	- 1 42.6	1.101	2.059	10.8	19.8	10 8	23 32.26	-18 39.8	2.247	3.140	9.7	19.1
10 18	23 22.50	- 2 2.8	1.140	2.042	15.9	20.0	10 18	23 26.53	-18 34.4	2.323	3.137	12.2	19.2
10 28	23 19.26	- 2 6.5	1.196	2.025	20.3	20.2	10 28	23 22.71	-18 11.4	2.420	3.134	14.4	19.4
305573	2008 <i>XJ</i> ₃		9 19.1 178°16'	12°0/6.1	18		513381	2008 <i>GZ</i> ₇		9 19.1 45°22'	6°7/13.7	18	
8 19	0 8.60	+37 56.0	2.085	2.738	18.6	20.8	8 19	0 13.27	-20 13.1	1.811	2.708	12.1	19.9
8 29	0 3.32	+38 27.9	2.004	2.738	17.0	20.7	8 29	0 6.10	-20 44.0	1.778	2.724	9.2	19.7
9 8	23 55.99	+38 27.3	1.938	2.739	15.2	20.6	9 8	23 57.22	-21 5.2	1.770	2.740	7.1	19.7
9 18	23 47.37	+37 50.3	1.890	2.739	13.6	20.5	9 18	23 47.52	-21 10.9	1.788	2.756	6.9	19.7
9 28	23 38.55	+36 36.4	1.863	2.739	12.4	20.4	9 28	23 38.07	-20 57.1	1.832	2.772	8.8	19.8
10 8	23 30.65	+34 50.3	1.859	2.739	12.0	20.4	10 8	23 29.88	-20 23.0	1.901	2.789	11.4	20.0
10 18	23 24.62	+32 40.6	1.879	2.739	12.7	20.4	10 18	23 23.66	-19 30.3	1.994	2.806	14.0	20.2
10 28	23 21.13	+30 18.5	1.922	2.738	14.2	20.5	10 28	23 19.82	-18 21.9	2.106	2.824	16.2	20.4
451148	2009 <i>RJ</i> ₁₆		9 19.1 57°02'	2°7/16.4	18		174098	2002 <i>JO</i> ₁₅		9 19.1 43°19'	6°3/14.7	17	
8 19	0 9.04	- 9 11.9	2.152	3.048	10.5	20.6	8 19	0 10.76	-12 7.1	1.081	2.005	16.1	19.3
8 29	0 3.04	- 9 36.8	2.098	3.054	7.4	20.4	8 29	0 5.09	-13 19.7	1.053	2.020	11.5	19.0
9 8	23 55.58	-10 2.5	2.070	3.061	4.2	20.2	9 8	23 56.92	-14 29.6	1.046	2.035	7.4	18.9
9 18	23 47.32	-10 24.7	2.070	3.067	2.8	20.1	9 18	23 47.49	-15 25.7	1.062	2.052	6.6	18.9
9 28	23 39.10	-10 38.8	2.098	3.073	5.2	20.3	9 28	23 38.35	-15 58.7	1.101	2.069	9.8	19.1
10 8	23 31.71	-10 41.9	2.153	3.080	8.3	20.5	10 8	23 30.92	-16 4.1	1.162	2.087	13.9	19.4
10 18	23 25.83	-10 32.4	2.234	3.086	11.3	20.7	10 18	23 26.13	-15 42.6	1.243	2.105	17.8	19.7
10 28	23 21.89	-10 9.8	2.336	3.093	13.8	20.9	10 28	23 24.43	-14 57.1	1.340	2.124	20.9	20.0
407568	2010 <i>YR</i> ₂		9 19.1 286°48'	4°8/13.6	18		438599	2007 <i>VZ</i> ₉₆		9 19.1 21°21'	1°6/20.6	18	
8 19	0 7.02	-15 12.3	2.246	3.148	9.9	20.9	8 19	0 8.39	+ 4 42.4	1.845	2.717	13.2	21.3
8 29	0 1.68	-16 5.6	2.187	3.141	7.3	20.7	8 29	0 2.90	+ 4 28.0	1.777	2.717	9.7	21.1
9 8	23 54.90	-16 56.2	2.154	3.134	5.2	20.6	9 8	23 55.66	+ 3 59.9	1.733	2.717	5.7	20.8
9 18	23 47.26	-17 38.4	2.148	3.127	5.0	20.6	9 18	23 47.38	+ 3 21.2	1.715	2.717	2.0	20.6
9 28	23 39.58	-18 7.0	2.170	3.120	7.0	20.7	9 28	23 39.00	+ 2 37.0	1.725	2.717	3.6	20.7
10 8	23 32.63	-18 18.6	2.217	3.113	9.7	20.8	10 8	23 31.49	+ 1 53.3	1.762	2.718	7.6	20.9
10 18	23 27.09	-18 12.2	2.289	3.106	12.3	21.0	10 18	23 25.62	+ 1 15.6	1.824	2.718	11.4	21.2
10 28	23 23.43	-17 48.3	2.381	3.099	14.5	21.2	10 28	23 21.97	+ 0 48.4	1.909	2.718	14.5	21.4
239548	2008 <i>SL</i> ₁₀₃		9 19.1 274°21'	1°9/20.9	18		450425	2005 <i>UM</i> <					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
169777	2002 <i>PU</i> ₁₀₂		9 19.1	6°84	2°9/15.9	18	139979	2001 <i>SH</i> ₂₃		9 19.1	313°72	0°2/18.9	18
8 19	0 2.27	- 2 39.5	1.389	2.302	14.0	18.6	8 19	0 7.28	+ 0 0.5	1.836	2.724	12.5	20.4
8 29	23 58.92	- 4 36.0	1.337	2.303	9.6	18.4	8 29	0 2.16	- 0 28.2	1.767	2.718	8.9	20.2
9 8	23 53.63	- 6 45.6	1.309	2.304	5.1	18.1	9 8	23 55.30	- 1 7.2	1.721	2.712	4.8	20.0
9 18	23 47.19	- 8 57.0	1.306	2.306	3.1	18.0	9 18	23 47.38	- 1 52.1	1.702	2.707	0.4	19.6
9 28	23 40.68	-10 57.4	1.329	2.309	6.9	18.2	9 28	23 39.34	- 2 37.2	1.711	2.701	4.0	19.9
10 8	23 35.21	-12 36.0	1.378	2.313	11.3	18.5	10 8	23 32.12	- 3 16.5	1.746	2.696	8.2	20.1
10 18	23 31.62	-13 46.7	1.449	2.317	15.3	18.8	10 18	23 26.52	- 3 45.4	1.806	2.691	11.9	20.4
10 28	23 30.46	-14 27.6	1.538	2.322	18.6	19.0	10 28	23 23.11	- 4 0.6	1.888	2.686	15.1	20.6
511949	2015 <i>HO</i> ₁₈₅		9 19.1	127°87	0°9/19.9	18	149353	2002 <i>XN</i> ₅		9 19.1	309°77	0°7/18.6	18
8 19	0 10.39	+ 2 44.7	1.736	2.614	13.6	21.5	8 19	0 7.40	- 0 11.4	1.322	2.225	15.3	20.2
8 29	0 4.33	+ 2 24.8	1.675	2.620	9.8	21.2	8 29	0 2.89	- 0 52.9	1.249	2.208	10.9	19.9
9 8	23 56.43	+ 1 52.2	1.638	2.625	5.5	21.0	9 8	23 55.97	- 1 49.8	1.197	2.191	5.9	19.6
9 18	23 47.46	+ 1 10.7	1.627	2.631	1.3	20.7	9 18	23 47.47	- 2 55.8	1.169	2.174	0.7	19.2
9 28	23 38.45	+ 0 26.2	1.644	2.636	3.8	20.9	9 28	23 38.62	- 4 1.8	1.166	2.157	5.4	19.4
10 8	23 30.43	- 0 15.1	1.688	2.641	8.1	21.2	10 8	23 30.79	- 4 58.4	1.188	2.141	10.8	19.7
10 18	23 24.23	- 0 47.9	1.757	2.646	12.0	21.5	10 18	23 25.11	- 5 38.4	1.232	2.126	15.6	19.9
10 28	23 20.39	- 1 8.6	1.848	2.651	15.2	21.7	10 28	23 22.36	- 5 57.3	1.294	2.111	19.7	20.2
483287	2015 <i>TX</i> ₃₁₇		9 19.1	181°54	1°5/17.5	18	449293	2013 <i>EC</i> ₉₄		9 19.1	81°98	3°7/22.9	18
8 19	0 1.65	- 4 18.4	2.235	3.126	10.4	21.3	8 19	0 11.20	+11 2.4	2.277	3.108	12.5	20.7
8 29	0 1.65	- 4 54.3	2.172	3.127	7.3	21.1	8 29	0 4.51	+11 19.4	2.224	3.131	9.6	20.5
9 8	23 54.88	- 5 35.4	2.134	3.127	3.8	20.9	9 8	23 56.38	+11 21.5	2.194	3.155	6.6	20.4
9 18	23 47.31	- 6 17.4	2.124	3.127	1.5	20.7	9 18	23 47.49	+11 10.1	2.192	3.178	4.1	20.3
9 28	23 39.69	- 6 55.2	2.142	3.126	4.2	20.9	9 28	23 38.66	+10 47.8	2.218	3.202	4.1	20.3
10 8	23 32.78	- 7 24.7	2.189	3.126	7.6	21.1	10 8	23 30.67	+10 19.1	2.273	3.224	6.5	20.5
10 18	23 27.24	- 7 42.7	2.261	3.126	10.7	21.3	10 18	23 24.18	+ 9 48.7	2.355	3.247	9.2	20.7
10 28	23 23.54	- 7 47.6	2.355	3.126	13.3	21.5	10 28	23 19.63	+ 9 21.2	2.461	3.269	11.7	20.9
73609	5114 <i>T-2</i>		9 19.1	278°65	5°6/24.9	18	128079	2003 <i>OL</i> ₁₇		9 19.1	273°39	1°8/16.8	18
8 19	0 6.72	+16 24.8	1.811	2.635	15.5	19.6	8 19	0 4.07	- 3 57.5	2.251	3.145	10.2	19.8
8 29	0 1.87	+16 17.5	1.734	2.631	12.5	19.4	8 29	23 59.64	- 5 6.5	2.183	3.140	7.1	19.6
9 8	23 55.18	+15 46.1	1.678	2.628	9.2	19.2	9 8	23 53.85	- 6 22.4	2.141	3.134	3.8	19.4
9 18	23 47.35	+14 51.5	1.646	2.624	6.3	19.1	9 18	23 47.25	- 7 39.6	2.127	3.128	1.9	19.2
9 28	23 39.33	+13 37.8	1.640	2.620	5.7	19.0	9 28	23 40.55	- 8 51.9	2.142	3.122	4.6	19.4
10 8	23 32.14	+12 12.6	1.660	2.616	8.0	19.2	10 8	23 34.50	- 9 53.5	2.185	3.117	7.9	19.6
10 18	23 26.64	+10 44.7	1.706	2.612	11.3	19.3	10 18	23 29.71	-10 40.3	2.253	3.111	11.0	19.8
10 28	23 23.44	+ 9 22.6	1.776	2.609	14.5	19.5	10 28	23 26.68	-11 10.3	2.343	3.105	13.6	20.0
314018	2004 <i>WK</i> ₅		9 19.1	18°53	1°4/17.9	18	352920	2008 <i>YS</i> ₁₅₇		9 19.1	282°72	10°4/28.3	18
8 19	0 8.94	- 4 42.0	1.886	2.781	11.8	19.3	8 19	0 13.79	+26 11.1	1.915	2.663	17.4	20.5
8 29	0 3.18	- 4 55.7	1.829	2.784	8.3	19.1	8 29	0 7.14	+27 31.5	1.835	2.659	15.2	20.3
9 8	23 55.75	- 5 14.2	1.795	2.788	4.4	18.9	9 8	23 58.20	+28 26.9	1.775	2.654	13.0	20.1
9 18	23 47.39	- 5 33.3	1.789	2.792	1.4	18.7	9 18	23 47.71	+28 53.0	1.736	2.650	11.2	20.0
9 28	23 39.03	- 5 48.4	1.810	2.797	4.5	18.9	9 28	23 36.76	+28 48.3	1.722	2.645	10.4	20.0
10 8	23 31.57	- 5 55.6	1.859	2.802	8.3	19.2	10 8	23 26.61	+28 16.1	1.732	2.641	11.1	20.0
10 18	23 25.76	- 5 52.1	1.932	2.807	11.7	19.4	10 18	23 18.36	+27 23.5	1.765	2.636	12.9	20.1
10 28	23 22.12	- 5 36.6	2.027	2.813	14.6	19.6	10 28	23 12.80	+26 20.0	1.821	2.632	15.1	20.2
227816	2007 <i>BL</i> ₆₆		9 19.1	338°91	3°1/21.2	18	28088	1998 <i>RQ</i> ₂		9 19.1	296°19	2°2/17.7	18
8 19	0 9.68	+ 5 48.7	1.287	2.172	16.9	20.1	8 19	0 13.55	- 4 47.7	1.210	2.117	16.1	18.3
8 29	0 4.49	+ 6 3.4	1.221	2.165	12.7	19.9	8 29	0 7.31	- 5 11.2	1.149	2.111	11.4	18.0
9 8	23 56.80	+ 5 59.7	1.175	2.158	7.9	19.6	9 8	23 58.36	- 5 42.7	1.110	2.104	6.1	17.7
9 18	23 47.52	+ 5 39.6	1.151	2.152	3.6	19.3	9 18	23 47.71	- 6 15.5	1.095	2.098	2.2	17.5
9 28	23 37.96	+ 5 8.3	1.153	2.146	4.9	19.4	9 28	23 36.87	- 6 41.4	1.104	2.092	6.4	17.7
10 8	23 29.56	+ 4 33.2	1.179	2.141	9.7	19.6	10 8	23 27.40	- 6 53.7	1.138	2.086	11.8	18.0
10 18	23 23.47	+ 4 2.0	1.227	2.137	14.4	19.9	10 18	23 20.51	- 6 48.6	1.193	2.080	16.6	18.3
10 28	23 20.43	+ 3 41.1	1.295	2.133	18.5	20.2	10 28	23 16.91	- 6 24.7	1.266	2.074	20.6	18.5
92056	1999 <i>VM</i> ₂₁₃		9 19.1	204°51	3°9/13.5	18	313346	2002 <i>GM</i> ₁₀₈		9 19.1	180°34	5°1/14.2	17
8 19	0 6.54	-14 49.1	2.840	3.735	8.3	19.4	8 19	0 12.67	-12 49.7	1.818	2.718	12.0	21.8
8 29	0 1.13	-15 45.6	2.780	3.730	6.1	19.3	8 29	0 5.92	-14 4.7	1.765	2.720	8.6	21.6
9 8	23 54.55	-16 40.2	2.746	3.725	4.3	19.1	9 8	23 57.30	-15 18.8	1.737	2.721	5.8	21.4
9 18	23 47.30	-17 28.1	2.742	3.719	4.2	19.1	9 18	23 47.60	-16 24.0	1.737	2.721	5.3	21.4
9 28	23 40.00	-18 5.1	2.766	3.713	5.9	19.2	9 28	23 37.88	-17 13.0	1.764	2.720	7.8	21.6
10 8	23 33.27	-18 28.2	2.818	3.706	8.1	19.4	10 8	23 29.19	-17 41.0	1.818	2.719	11.1	21.8
10 18	23 27.65	-18 36.1	2.895	3.699	10.3	19.5	10 18	23 22.35	-17 46.8	1.894	2.717	14.2	22.0
10 28	23 23.57	-18 28.6	2.993	3.692	12.2	19.6	10 28	23 17.93	-17 31.3	1.990	2.714	16.8	22.2
516323	2017 <i>AJ</i> ₂₀		9 19.1	258°47	5°6/11.8	18	159633	2002 <i>CY</i> ₂₁		9 19.1	337°03	1°4/16.3	17
8 19	0 5.67	-17 37.5	2.278	3.180	9.7	20.6	8 19	23 59.70	- 7 0.9	4.036	4.927	6.2	19.4
8 29	0 0.76	-18 56.3	2.227	3.177	7.4	20.5	8 29	23 56.09	- 7 41.3	3.970	4.925	4.3	19.2
9 8	23 54.43	-20 10.9	2.201	3.173	5.8	20.4	9 8	23 51.77	- 8 23.6	3.933	4.924	2.3	19.1
9 18	23 47.29	-21 14.7	2.204	3.169	6.0	20.4	9 18	23 47.05	- 9 5.2	3.924	4.923	1.5	19.0
9 28	23 40.10	-22 2.0	2.233	3.165	7.9	20.5	9 28	23 42.30	- 9 43.1	3.946	4.921	3.0	19.1
10 8	23 33.63	-22 29.3	2.288	3.161	10.3	20.7	10 8	23 37.88	-10 15.1	3.997	4.920	4.9	19.3
10 18	23 28.52	-22 35.6	2.365	3.157	12.7	20.8	10 18	23 34.14	-10 39.3	4.074	4.919	6.8	19.4
10 28	23 25.26	-22 21.7	2.462	3.153	14.7	21.0	10 28	23 31.35	-10 54.5	4.176	4.918	8.4	19.5
438281													

EPHEMERIDES

9 19.1

9 19.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
315096	2007 <i>DG</i> ₁₁₂		9 19.1 80°72	0°3/19.4	18		5916	van der Woude		9 19.1 63°87	7°1/25.5	18	
8 19	0 6.21	+ 1 31.5	2.223	3.101	11.0	21.0	8 19	0 9.64	+17 29.6	1.358	2.192	19.1	16.3
8 29	0 1.07	+ 0 59.9	2.166	3.111	7.8	20.8	8 29	0 4.28	+17 37.6	1.303	2.205	15.5	16.1
9 8	23 54.58	+ 0 18.9	2.133	3.122	4.3	20.6	9 8	23 56.62	+17 14.9	1.267	2.217	11.5	15.9
9 18	23 47.35	- 0 27.6	2.128	3.133	0.6	20.3	9 18	23 47.61	+16 22.3	1.253	2.230	8.1	15.8
9 28	23 40.12	- 1 14.7	2.152	3.143	3.2	20.6	9 28	23 38.56	+15 5.4	1.263	2.243	7.2	15.8
10 8	23 33.64	- 1 57.7	2.204	3.154	6.7	20.8	10 8	23 30.79	+13 34.3	1.298	2.255	9.6	16.0
10 18	23 28.50	- 2 32.4	2.283	3.165	9.9	21.0	10 18	23 25.30	+12 0.6	1.357	2.269	13.1	16.2
10 28	23 25.16	- 2 55.9	2.384	3.175	12.5	21.2	10 28	23 22.69	+10 35.0	1.436	2.282	16.6	16.5
98092	2000 <i>RT</i> ₇₃		9 19.1 340°48	1°6/20.3	18		448633	2010 <i>VT</i> ₃₇		9 19.1 272°53	6°2/11.7	18	
8 19	0 1.85	+ 4 32.9	1.108	2.015	17.3	18.7	8 19	0 8.12	-19 43.5	2.243	3.141	10.1	20.9
8 29	23 59.21	+ 4 5.1	1.039	1.996	12.8	18.3	8 29	0 2.60	-20 49.0	2.181	3.126	7.8	20.7
9 8	23 54.10	+ 3 14.0	0.988	1.979	7.5	18.0	9 8	23 55.52	-21 48.9	2.145	3.111	6.4	20.6
9 18	23 47.33	+ 2 4.5	0.960	1.963	2.1	17.6	9 18	23 47.50	-22 36.7	2.135	3.095	6.6	20.6
9 28	23 40.20	+ 0 46.1	0.954	1.949	4.9	17.8	9 28	23 39.36	-23 6.8	2.152	3.080	8.5	20.7
10 8	23 34.17	- 0 29.4	0.970	1.936	10.7	18.0	10 8	23 31.97	-23 16.0	2.195	3.064	10.9	20.8
10 18	23 30.43	- 1 31.4	1.008	1.925	16.0	18.3	10 18	23 26.02	-23 3.8	2.260	3.048	13.3	21.0
10 28	23 29.79	- 2 12.3	1.063	1.916	20.5	18.6	10 28	23 22.06	-22 31.4	2.344	3.032	15.4	21.1
378004	2006 <i>SX</i> ₂₅		9 19.1 6°01	7°4/23.8	17		30453	2000 <i>NQ</i> ₂₅		9 19.1 96°80	5°2/24.6	18	
8 19	0 4.69	+11 48.0	0.876	1.771	21.9	19.7	8 19	0 10.18	+15 18.6	2.106	2.921	13.9	17.4
8 29	0 1.54	+12 41.8	0.829	1.770	17.4	19.4	8 29	0 4.03	+15 37.6	2.043	2.934	11.1	17.3
9 8	23 55.43	+13 4.3	0.797	1.771	12.5	19.2	9 8	23 56.27	+15 37.8	2.002	2.948	8.2	17.1
9 18	23 47.46	+12 54.3	0.785	1.775	8.3	19.0	9 18	23 47.57	+15 19.5	1.986	2.961	5.8	17.0
9 28	23 39.32	+12 16.8	0.792	1.780	7.9	19.0	9 28	23 38.82	+14 45.5	1.998	2.974	5.4	17.0
10 8	23 32.76	+11 22.5	0.819	1.788	11.6	19.2	10 8	23 30.92	+14 1.0	2.037	2.986	7.3	17.2
10 18	23 29.06	+10 24.3	0.866	1.798	16.2	19.5	10 18	23 24.58	+13 12.1	2.103	2.999	10.0	17.3
10 28	23 28.95	+ 9 34.0	0.930	1.810	20.5	19.8	10 28	23 20.34	+12 24.9	2.192	3.011	12.6	17.5
285842	2001 <i>FK</i> ₈₅		9 19.1 282°55	0°9/20.0	18		294060	2007 <i>TY</i> ₁₅₈		9 19.1 52°40	3°1/22.1	18	
8 19	0 5.52	+ 5 1.9	1.780	2.658	13.3	21.3	8 19	0 7.60	+ 9 1.4	1.731	2.591	14.5	20.6
8 29	0 1.08	+ 4 3.4	1.697	2.641	9.7	21.1	8 29	0 2.46	+ 8 45.4	1.667	2.595	10.9	20.4
9 8	23 54.83	+ 2 46.8	1.637	2.624	5.6	20.8	9 8	23 55.52	+ 8 10.9	1.624	2.599	7.1	20.1
9 18	23 47.41	+ 1 16.9	1.603	2.607	1.3	20.5	9 18	23 47.50	+ 7 20.6	1.607	2.604	3.6	19.9
9 28	23 39.72	- 0 18.7	1.597	2.590	3.8	20.6	9 28	23 39.40	+ 6 20.2	1.617	2.608	4.1	20.0
10 8	23 32.78	- 1 50.9	1.618	2.572	8.3	20.9	10 8	23 32.22	+ 5 16.8	1.653	2.612	7.7	20.2
10 18	23 27.44	- 3 11.7	1.665	2.555	12.4	21.1	10 18	23 26.77	+ 4 17.7	1.715	2.617	11.5	20.5
10 28	23 24.33	- 4 15.3	1.733	2.538	16.0	21.3	10 28	23 23.62	+ 3 28.8	1.799	2.622	14.7	20.7
364090	2005 <i>YN</i> ₁₂₅		9 19.1 17°73	2°4/16.7	18		437573	2014 <i>AK</i> ₂₀		9 19.1 127°09	5°2/14.4	18	
8 19	0 6.49	- 6 26.3	1.881	2.783	11.5	20.4	8 19	0 11.08	-12 43.9	1.632	2.538	12.7	20.6
8 29	0 1.50	- 7 9.3	1.827	2.786	8.0	20.2	8 29	0 4.91	-13 51.6	1.587	2.545	9.1	20.4
9 8	23 54.91	- 7 56.6	1.796	2.789	4.4	20.0	9 8	23 56.80	-14 57.8	1.565	2.551	6.0	20.3
9 18	23 47.41	- 8 42.4	1.793	2.793	2.5	19.9	9 18	23 47.63	-15 54.3	1.570	2.556	5.5	20.3
9 28	23 39.90	- 9 20.8	1.817	2.797	5.3	20.1	9 28	23 38.50	-16 33.8	1.601	2.562	8.1	20.4
10 8	23 33.26	- 9 47.2	1.867	2.801	8.9	20.3	10 8	23 30.51	-16 51.8	1.657	2.567	11.5	20.7
10 18	23 28.20	- 9 58.6	1.942	2.806	12.2	20.5	10 18	23 24.50	-16 47.5	1.736	2.572	14.7	20.9
10 28	23 25.21	- 9 53.9	2.037	2.811	15.0	20.7	10 28	23 20.99	-16 22.0	1.834	2.577	17.5	21.1
3612	Peale		9 19.1 6°78	3°4/16.7	18		356432	2010 <i>VW</i> ₁₉₂		9 19.1 267°19	1°7/22.5	18	
8 19	0 6.51	- 6 9.7	1.064	1.988	16.3	16.1	8 19	23 59.98	+ 9 3.3	4.481	5.314	6.8	21.2
8 29	0 2.35	- 6 56.2	1.019	1.989	11.4	15.8	8 29	23 56.27	+ 8 51.8	4.396	5.308	5.1	21.1
9 8	23 55.66	- 7 50.0	0.994	1.990	6.2	15.6	9 8	23 51.90	+ 8 32.9	4.337	5.303	3.4	20.9
9 18	23 47.49	- 8 42.0	0.992	1.993	3.5	15.4	9 18	23 47.13	+ 8 7.8	4.306	5.298	1.9	20.8
9 28	23 39.32	- 9 22.0	1.012	1.997	7.5	15.7	9 28	23 42.32	+ 7 38.2	4.305	5.293	2.0	20.8
10 8	23 32.59	- 9 42.7	1.055	2.003	12.5	16.0	10 8	23 37.79	+ 7 6.5	4.334	5.288	3.6	20.9
10 18	23 28.36	- 9 40.8	1.118	2.010	17.1	16.3	10 18	23 33.86	+ 6 34.8	4.391	5.282	5.3	21.1
10 28	23 27.21	- 9 15.9	1.198	2.018	20.8	16.5	10 28	23 30.81	+ 6 5.6	4.475	5.277	6.9	21.2
523612	2006 <i>BH</i>		9 19.1 172°42	6°1/ 3.8	18		5230	Asahina		9 19.1 299°60	4°5/23.7	18	R
8 19	0 8.38	+36 12.8	4.705	5.306	9.3	25.8	8 19	0 6.31	+15 24.8	1.556	2.396	16.8	17.0
8 29	0 2.22	+36 33.2	4.614	5.311	8.5	25.7	8 29	0 2.23	+14 24.1	1.441	2.354	13.5	16.6
9 8	23 55.12	+36 38.4	4.542	5.315	7.5	25.7	9 8	23 55.79	+12 47.4	1.347	2.311	9.5	16.3
9 18	23 47.45	+36 27.4	4.494	5.318	6.7	25.6	9 18	23 47.58	+10 35.0	1.276	2.268	5.5	16.0
9 28	23 39.68	+36 0.5	4.471	5.321	6.2	25.6	9 28	23 38.65	+ 7 53.4	1.233	2.224	5.2	15.8
10 8	23 32.30	+35 19.3	4.474	5.323	6.2	25.6	10 8	23 30.30	+ 4 55.8	1.218	2.180	9.5	15.9
10 18	23 25.75	+34 26.8	4.504	5.324	6.6	25.6	10 18	23 23.76	+ 1 58.7	1.228	2.135	14.6	16.1
10 28	23 20.38	+33 26.6	4.560	5.325	7.4	25.7	10 28	23 20.02	- 0 42.2	1.261	2.090	19.4	16.3
523298	2017 <i>BJ</i> ₈₄		9 19.1 204°19	4°8/25.6	18		4902	Thessandrus		9 19.1 280°31	0°2/18.7	18	R
8 19	0 5.30	+17 46.4	2.558	3.355	12.2	20.9	8 19	23 59.28	- 0 43.7	4.307	5.182	6.2	17.0
8 29	0 0.47	+17 40.8	2.475	3.353	9.9	20.7	8 29	23 55.80	- 1 17.6	4.233	5.179	4.3	16.9
9 8	23 54.32	+17 16.9	2.415	3.351	7.5	20.6	9 8	23 51.65	- 1 55.7	4.186	5.176	2.3	16.7
9 18	23 47.37	+16 35.6	2.381	3.349	5.5	20.5	9 18	23 47.12	- 2 36.0	4.168	5.173	0.3	16.5
9 28	23 40.31	+15 39.6	2.374	3.347	4.9	20.4	9 28	23 42.55	- 3 16.0	4.181	5.169	2.0	16.7
10 8	23 33.83	+14 33.7	2.396	3.344	6.3	20.5	10 8	23 38.28	- 3 53.2	4.223	5.166	4.1	16.9
10 18	23 28.55	+13 23.6	2.444	3.342	8.7	20.7	10 18	23 34.63	- 4 25.5	4.294	5.163	5.9	17.0
10 28	23 24.95	+12 15.2	2.518	3.339	11.1	20.8	10 28	23 31.87	- 4 51.1	4.390	5.160	7.6	17.1
338793	2003 <i>UH</i> ₃₄₄		9 19.1 190°59	1°5/20.6	18		356230	2009 <i>SK</i> ₂₇₇		9 19.1 74°70	2°0/21.9	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
477367	2009 <i>UM</i> ₁₀₇		9 19.1 283°07	3°0/16.6	18		250793	2005 <i>TF</i> ₁₁₈		9 19.1 334°09	0°5/19.6	18	
8 19	0 9.64	- 6 13.5	1.558	2.462	13.3	21.6	8 19	0 6.11	+ 1 54.2	1.775	2.661	12.9	20.8
8 29	0 4.25	- 7 6.4	1.483	2.444	9.4	21.3	8 29	0 1.44	+ 1 28.1	1.704	2.654	9.3	20.6
9 8	23 56.67	- 8 6.8	1.432	2.425	5.2	21.0	9 8	23 55.01	+ 0 49.5	1.657	2.647	5.2	20.3
9 18	23 47.66	- 9 7.3	1.406	2.406	3.1	20.9	9 18	23 47.50	+ 0 2.8	1.635	2.640	0.9	20.0
9 28	23 38.34	- 9 59.6	1.407	2.387	6.5	21.0	9 28	23 39.84	- 0 46.4	1.641	2.633	3.8	20.2
10 8	23 29.94	-10 36.7	1.433	2.368	11.0	21.2	10 8	23 33.00	- 1 31.7	1.673	2.628	8.1	20.5
10 18	23 23.48	-10 54.1	1.482	2.349	15.1	21.4	10 18	23 27.78	- 2 7.5	1.730	2.622	12.0	20.7
10 28	23 19.68	-10 50.2	1.550	2.330	18.6	21.6	10 28	23 24.76	- 2 30.0	1.808	2.617	15.2	20.9
150850	2001 <i>SB</i> ₉₂		9 19.1 269°98	1°3/20.2	18		513518	2009 <i>UC</i> ₇₂		9 19.1 337°62	1°6/20.2	18	
8 19	0 11.36	+ 3 0.4	1.597	2.476	14.5	20.1	8 19	0 6.42	+ 3 26.5	1.155	2.057	17.1	20.9
8 29	0 5.38	+ 2 55.4	1.523	2.467	10.6	19.8	8 29	0 2.43	+ 3 17.2	1.088	2.044	12.6	20.6
9 8	23 57.23	+ 2 36.7	1.472	2.458	6.1	19.6	9 8	23 55.87	+ 2 48.9	1.041	2.031	7.4	20.3
9 18	23 47.71	+ 2 7.4	1.446	2.449	1.7	19.3	9 18	23 47.61	+ 2 5.7	1.016	2.020	2.1	19.9
9 28	23 37.95	+ 1 33.0	1.447	2.440	4.2	19.4	9 28	23 39.03	+ 1 15.1	1.015	2.009	4.9	20.1
10 8	23 29.13	+ 0 59.6	1.475	2.430	8.8	19.7	10 8	23 31.61	+ 0 26.7	1.037	2.000	10.5	20.4
10 18	23 22.27	+ 0 33.2	1.527	2.421	13.1	19.9	10 18	23 26.55	- 0 11.1	1.080	1.992	15.7	20.6
10 28	23 18.05	+ 0 18.3	1.600	2.412	16.8	20.1	10 28	23 24.66	- 0 32.1	1.141	1.986	20.0	20.9
118924	2000 <i>VG</i> ₅₃		9 19.1 205°91	1°5/17.5	18		11611	1995 <i>YQ</i>		9 19.1 49°18	5°2/13.3	18	
8 19	0 8.96	- 5 10.9	2.335	3.222	10.2	19.7	8 19	0 6.01	-13 41.8	1.910	2.819	11.0	17.6
8 29	0 3.04	- 5 35.1	2.267	3.220	7.1	19.5	8 29	0 1.16	-15 4.5	1.867	2.825	8.0	17.5
9 8	23 55.71	- 6 3.3	2.225	3.217	3.8	19.3	9 8	23 54.75	-16 25.2	1.850	2.832	5.6	17.3
9 18	23 47.55	- 6 31.7	2.212	3.214	1.5	19.2	9 18	23 47.48	-17 36.3	1.859	2.839	5.5	17.4
9 28	23 39.32	- 6 56.0	2.228	3.211	4.1	19.3	9 28	23 40.21	-18 30.9	1.894	2.846	7.8	17.5
10 8	23 31.79	- 7 12.6	2.272	3.208	7.4	19.6	10 8	23 33.84	-19 4.8	1.956	2.853	10.7	17.7
10 18	23 25.62	- 7 18.8	2.342	3.204	10.5	19.7	10 18	23 29.04	-19 16.6	2.040	2.860	13.4	17.9
10 28	23 21.28	- 7 13.2	2.435	3.201	13.0	19.9	10 28	23 26.29	-19 7.0	2.143	2.868	15.8	18.1
258833	2002 <i>PB</i> ₁₀		9 19.1 92°44	1°7/21.3	18		353812	2012 <i>TW</i> ₂₂₂		9 19.1 278°03	2°9/16.5	18	
8 19	0 5.26	+ 6 43.1	2.392	3.250	11.1	20.7	8 19	0 9.75	- 7 12.5	1.795	2.694	12.1	21.0
8 29	0 0.40	+ 6 17.5	2.327	3.257	8.2	20.6	8 29	0 4.12	- 7 58.9	1.716	2.674	8.5	20.7
9 8	23 54.26	+ 5 39.4	2.286	3.265	5.0	20.4	9 8	23 56.54	- 8 50.5	1.661	2.653	4.8	20.4
9 18	23 47.40	+ 4 51.7	2.272	3.272	2.1	20.2	9 18	23 47.68	- 9 41.2	1.633	2.632	3.0	20.3
9 28	23 40.50	+ 3 58.9	2.287	3.279	3.0	20.3	9 28	23 38.54	-10 23.9	1.633	2.611	6.0	20.4
10 8	23 34.26	+ 3 5.8	2.331	3.286	6.0	20.5	10 8	23 30.19	-10 52.9	1.659	2.589	10.1	20.6
10 18	23 29.25	+ 2 17.1	2.402	3.294	9.0	20.7	10 18	23 23.55	-11 4.5	1.708	2.568	13.8	20.8
10 28	23 25.93	+ 1 37.0	2.496	3.301	11.7	20.9	10 28	23 19.29	-10 57.4	1.778	2.546	17.0	21.0
456144	2006 <i>EQ</i> ₂		9 19.1 76°69	1°6/20.2	16		255152	2005 <i>UQ</i> ₁₇₆		9 19.1 328°96	0°3/18.9	18	
8 19	0 16.11	+ 3 15.6	1.245	2.131	17.3	21.2	8 19	0 6.80	- 0 24.8	1.937	2.825	11.9	20.3
8 29	0 8.68	+ 3 11.7	1.207	2.154	12.5	21.0	8 29	0 1.78	- 0 52.7	1.869	2.820	8.5	20.1
9 8	23 58.88	+ 2 51.5	1.190	2.177	7.1	20.8	9 8	23 55.14	- 1 29.9	1.824	2.815	4.5	19.8
9 18	23 47.86	+ 2 19.7	1.197	2.200	2.0	20.5	9 18	23 47.52	- 2 12.3	1.806	2.811	0.5	19.5
9 28	23 37.10	+ 1 43.1	1.230	2.223	4.6	20.8	9 28	23 39.79	- 2 54.4	1.816	2.807	3.9	19.8
10 8	23 27.98	+ 1 9.4	1.289	2.246	9.7	21.1	10 8	23 32.84	- 3 30.8	1.853	2.803	7.8	20.0
10 18	23 21.44	+ 0 44.6	1.370	2.268	14.1	21.5	10 18	23 27.41	- 3 57.2	1.916	2.799	11.4	20.2
10 28	23 17.98	+ 0 32.9	1.472	2.290	17.7	21.8	10 28	23 24.04	- 4 10.5	2.000	2.795	14.5	20.5
394562	2007 <i>UY</i> ₁₄₀		9 19.1 220°37	1°6/20.7	18		70027	1999 <i>BQ</i> ₁₅		9 19.1 305°00	1°0/18.3	18	
8 19	0 8.11	+ 4 56.8	1.887	2.758	13.0	21.5	8 19	0 13.96	- 5 18.1	2.152	3.035	11.1	17.4
8 29	0 2.73	+ 4 38.2	1.818	2.757	9.5	21.3	8 29	0 6.81	- 5 3.5	2.068	3.017	7.9	17.1
9 8	23 55.65	+ 4 5.7	1.773	2.757	5.7	21.1	9 8	23 57.87	- 4 51.4	2.008	2.999	4.3	16.9
9 18	23 47.55	+ 3 22.6	1.754	2.756	2.0	20.9	9 18	23 47.81	- 4 39.2	1.978	2.982	1.0	16.6
9 28	23 39.34	+ 2 34.0	1.763	2.756	3.5	21.0	9 28	23 37.53	- 4 23.8	1.977	2.964	4.1	16.8
10 8	23 31.96	+ 1 46.0	1.799	2.755	7.5	21.2	10 8	23 27.98	- 4 2.7	2.005	2.947	7.9	17.0
10 18	23 26.18	+ 1 4.2	1.861	2.755	11.2	21.4	10 18	23 19.97	- 3 34.3	2.060	2.930	11.4	17.2
10 28	23 22.56	+ 0 33.1	1.945	2.754	14.3	21.7	10 28	23 14.13	- 2 57.4	2.138	2.913	14.3	17.4
72476	2001 <i>DZ</i> ₃₆		9 19.1 66°93	4°3/23.6	18		484969	2009 <i>TE</i> ₃₂		9 19.1 320°07	7°2/12.5	18	
8 19	0 9.17	+12 36.1	2.146	2.975	13.2	18.8	8 19	0 11.84	-21 59.7	1.955	2.850	11.5	20.2
8 29	0 3.27	+12 52.7	2.085	2.990	10.3	18.6	8 29	0 5.39	-22 37.8	1.895	2.836	9.1	20.1
9 8	23 55.85	+12 52.7	2.048	3.005	7.3	18.5	9 8	23 57.09	-23 6.4	1.859	2.822	7.4	19.9
9 18	23 47.57	+12 36.9	2.037	3.020	4.8	18.4	9 18	23 47.73	-23 19.0	1.849	2.809	7.5	19.9
9 28	23 39.27	+12 8.4	2.053	3.035	4.6	18.4	9 28	23 38.31	-23 10.7	1.866	2.796	9.4	20.0
10 8	23 31.78	+11 31.9	2.098	3.050	6.8	18.5	10 8	23 29.87	-22 39.5	1.907	2.783	12.0	20.1
10 18	23 25.80	+10 52.9	2.168	3.066	9.6	18.7	10 18	23 23.22	-21 46.5	1.971	2.771	14.6	20.3
10 28	23 21.81	+10 16.6	2.263	3.081	12.3	19.0	10 28	23 18.92	-20 34.5	2.054	2.759	16.9	20.5
438300	2006 <i>DS</i> ₃₇		9 19.1 157°88	0°4/18.7	18		515104	2010 <i>VW</i> ₂₀₈		9 19.1 22°84	4°8/24.3	18	
8 19	0 9.90	- 0 34.3	2.303	3.179	10.8	22.4	8 19	0 5.13	+14 30.3	1.815	2.651	14.9	20.8
8 29	0 3.66	- 1 9.4	2.241	3.187	7.6	22.2	8 29	0 0.71	+14 18.3	1.748	2.656	11.8	20.7
9 8	23 56.02	- 1 52.2	2.205	3.195	4.0	22.0	9 8	23 54.59	+13 44.0	1.703	2.661	8.4	20.5
9 18	23 47.59	- 2 38.8	2.197	3.201	0.5	21.7	9 18	23 47.47	+12 49.2	1.682	2.666	5.5	20.3
9 28	23 39.14	- 3 24.3	2.219	3.208	3.5	22.0	9 28	23 40.26	+11 38.9	1.687	2.672	5.0	20.3
10 8	23 31.44	- 4 4.0	2.270	3.213	7.0	22.2	10 8	23 33.91	+10 20.3	1.719	2.678	7.5	20.5
10 18	23 25.15	- 4 34.3	2.347	3.218	10.1	22.4	10 18	23 29.17	+ 9 1.7	1.776	2.684	10.8	20.7
10 28	23 20.71	- 4 52.8	2.448	3.222	12.7	22.6	10 28	23 26.59	+ 7 50.5	1.857	2.691	13.9	20.9
286735	2002 <i>GS</i>												

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
225224	2008 <i>SH</i> ₄₁		9 19.1 267°66	1.2/16.7	18		445469	2010 <i>VG</i> ₈₂		9 19.1 270°76	7.7/10.1	18	
8 19	0 0.33	- 6 51.1	4.423	5.311	5.7	19.9	8 19	0 10.33	-25 25.9	2.262	3.149	10.5	20.8
8 29	23 56.52	- 7 17.8	4.353	5.306	4.0	19.8	8 29	0 4.18	-26 27.0	2.208	3.135	8.7	20.7
9 8	23 52.05	- 7 46.0	4.310	5.301	2.2	19.6	9 8	23 56.41	-27 17.7	2.178	3.122	7.7	20.6
9 18	23 47.21	- 8 13.6	4.297	5.296	1.2	19.6	9 18	23 47.69	-27 51.6	2.174	3.109	8.1	20.6
9 28	23 42.33	- 8 38.4	4.313	5.291	2.6	19.7	9 28	23 38.90	-28 3.8	2.196	3.095	9.7	20.7
10 8	23 37.76	- 8 58.5	4.360	5.286	4.5	19.8	10 8	23 30.96	-27 52.1	2.243	3.081	11.9	20.8
10 18	23 33.80	- 9 12.2	4.433	5.281	6.2	19.9	10 18	23 24.59	-27 17.5	2.311	3.068	14.0	21.0
10 28	23 30.73	- 9 18.4	4.531	5.276	7.7	20.0	10 28	23 20.31	-26 22.3	2.397	3.054	15.8	21.1
449826	2014 <i>PT</i> ₄₄		9 19.1 47°46	3.8/14.6	18		441247	2007 <i>VU</i> ₂₅₀		9 19.1 225°57	4.2/23.3	18	
8 19	0 4.80	- 9 39.0	1.986	2.892	10.8	20.5	8 19	0 8.69	+12 1.9	1.968	2.806	13.9	20.9
8 29	0 0.26	-11 1.0	1.940	2.900	7.5	20.3	8 29	0 3.20	+12 4.4	1.892	2.803	10.8	20.7
9 8	23 54.25	-12 24.8	1.919	2.908	4.6	20.1	9 8	23 55.96	+11 48.6	1.838	2.800	7.5	20.5
9 18	23 47.44	-13 43.1	1.926	2.917	4.1	20.1	9 18	23 47.65	+11 15.6	1.810	2.798	4.7	20.3
9 28	23 40.63	-14 48.9	1.961	2.925	6.5	20.3	9 28	23 39.18	+10 29.1	1.809	2.795	4.6	20.3
10 8	23 34.63	-15 37.2	2.021	2.934	9.6	20.5	10 8	23 31.47	+ 9 35.0	1.836	2.792	7.4	20.5
10 18	23 30.11	-16 5.6	2.106	2.943	12.5	20.7	10 18	23 25.35	+ 8 39.8	1.888	2.788	10.7	20.7
10 28	23 27.50	-16 13.6	2.211	2.952	14.9	20.9	10 28	23 21.39	+ 7 49.9	1.964	2.785	13.7	20.9
475404	2006 <i>JV</i> ₄		9 19.1 133°85	0.8/18.4	18		389131	2009 <i>AW</i> ₁		9 19.1 337°76	1.8/17.8	18	
8 19	0 8.09	- 0 47.7	1.871	2.760	12.3	21.7	8 19	0 7.37	- 4 4.5	1.248	2.162	15.2	19.8
8 29	0 2.67	- 1 36.1	1.812	2.765	8.6	21.5	8 29	0 2.96	- 4 27.5	1.182	2.147	10.8	19.5
9 8	23 55.60	- 2 34.2	1.778	2.770	4.5	21.3	9 8	23 56.11	- 4 59.6	1.137	2.132	5.8	19.2
9 18	23 47.58	- 3 36.5	1.770	2.774	0.8	21.0	9 18	23 47.68	- 5 34.5	1.116	2.119	1.8	18.9
9 28	23 39.53	- 4 36.6	1.791	2.779	4.2	21.3	9 28	23 38.98	- 6 4.4	1.118	2.107	6.0	19.1
10 8	23 32.36	- 5 28.0	1.838	2.783	8.2	21.5	10 8	23 31.40	- 6 22.0	1.144	2.096	11.2	19.4
10 18	23 26.80	- 6 6.4	1.911	2.788	11.8	21.7	10 18	23 26.07	- 6 22.8	1.192	2.087	16.0	19.6
10 28	23 23.38	- 6 29.0	2.006	2.791	14.8	22.0	10 28	23 23.74	- 6 4.6	1.257	2.078	19.9	19.9
493531	2015 <i>FF</i> ₁₁₂		9 19.1 354°85	0.5/20.2	18		236536	2006 <i>HR</i> ₃₄		9 19.1 211°57	2.1/16.8	18	
8 19	0 0.57	+ 2 31.6	4.243	5.105	6.5	21.0	8 19	0 9.51	- 5 47.0	2.251	3.140	10.4	21.3
8 29	23 56.71	+ 2 16.8	4.168	5.104	4.7	20.8	8 29	0 3.55	- 6 36.6	2.179	3.133	7.3	21.1
9 8	23 52.17	+ 1 56.7	4.120	5.104	2.7	20.7	9 8	23 56.07	- 7 31.1	2.133	3.125	4.0	20.9
9 18	23 47.23	+ 1 33.1	4.101	5.104	0.7	20.5	9 18	23 47.67	- 8 25.5	2.116	3.116	2.1	20.7
9 28	23 42.25	+ 1 7.9	4.112	5.104	1.8	20.6	9 28	23 39.14	- 9 14.0	2.128	3.107	4.8	20.9
10 8	23 37.59	+ 0 43.4	4.153	5.103	3.8	20.8	10 8	23 31.32	- 9 52.1	2.168	3.097	8.2	21.1
10 18	23 33.58	+ 0 21.6	4.222	5.103	5.7	20.9	10 18	23 24.89	-10 16.4	2.235	3.087	11.3	21.3
10 28	23 30.48	+ 0 4.5	4.317	5.103	7.4	21.1	10 28	23 20.38	-10 25.3	2.323	3.075	13.9	21.5
482574	2012 <i>WE</i> ₂₇		9 19.1 327°58	0.3/18.9	16		509638	2008 <i>FW</i> ₁₃₅		9 19.1 137°77	2.1/16.7	18	
8 19	0 8.01	- 0 32.7	1.468	2.366	14.4	21.2	8 19	0 8.45	- 7 4.5	2.465	3.355	9.6	21.8
8 29	0 3.12	- 0 55.9	1.399	2.355	10.3	20.9	8 29	0 2.57	- 7 43.2	2.411	3.365	6.7	21.6
9 8	23 56.07	- 1 31.1	1.352	2.345	5.6	20.7	9 8	23 55.43	- 8 24.3	2.384	3.375	3.7	21.5
9 18	23 47.65	- 2 13.1	1.330	2.335	0.6	20.3	9 18	23 47.60	- 9 3.7	2.385	3.384	2.2	21.4
9 28	23 39.01	- 2 55.1	1.334	2.325	4.7	20.6	9 28	23 39.78	- 9 36.8	2.415	3.393	4.4	21.6
10 8	23 31.36	- 3 30.0	1.363	2.316	9.6	20.8	10 8	23 32.69	-10 0.2	2.474	3.401	7.4	21.8
10 18	23 25.69	- 3 52.3	1.415	2.308	14.0	21.1	10 18	23 26.89	-10 11.8	2.559	3.409	10.1	22.0
10 28	23 22.68	- 3 58.5	1.487	2.300	17.7	21.3	10 28	23 22.81	-10 10.4	2.667	3.417	12.4	22.1
286696	2002 <i>FC</i> ₂₅		9 19.1 128°51	0.5/18.7	18		180855	Debrarose		9 19.1 194°41	0.4/19.5	17	
8 19	0 8.75	- 1 49.0	2.254	3.136	10.7	20.3	8 19	0 9.68	+ 3 3.3	1.637	2.518	14.1	20.8
8 29	0 2.92	- 2 5.8	2.191	3.140	7.5	20.1	8 29	0 4.08	+ 2 14.0	1.570	2.517	10.1	20.5
9 8	23 55.67	- 2 29.0	2.152	3.143	4.0	19.9	9 8	23 56.50	+ 1 9.0	1.526	2.515	5.6	20.3
9 18	23 47.60	- 2 55.2	2.142	3.146	0.5	19.6	9 18	23 47.72	- 0 6.1	1.509	2.513	0.9	19.9
9 28	23 39.49	- 3 20.3	2.160	3.149	3.5	19.9	9 28	23 38.81	- 1 23.6	1.519	2.511	4.2	20.2
10 8	23 32.13	- 3 40.2	2.207	3.152	7.0	20.1	10 8	23 30.87	- 2 34.9	1.556	2.508	8.8	20.5
10 18	23 26.15	- 3 52.1	2.280	3.155	10.2	20.3	10 18	23 24.79	- 3 33.3	1.618	2.505	12.9	20.7
10 28	23 22.04	- 3 53.6	2.376	3.158	12.9	20.5	10 28	23 21.19	- 4 14.4	1.700	2.501	16.4	20.9
381416	2008 <i>KX</i> ₈		9 19.1 330°13	5.4/15.0	18		205192	2000 <i>DS</i> ₆₂		9 19.1 248°72	0.0/19.1	18	
8 19	0 9.51	-11 8.0	1.285	2.202	14.6	20.1	8 19	0 7.54	+ 1 10.2	2.069	2.948	11.6	21.4
8 29	0 4.36	-12 8.9	1.229	2.194	10.5	19.8	8 29	0 2.32	+ 0 29.7	1.989	2.936	8.3	21.2
9 8	23 56.78	-13 11.3	1.196	2.186	6.6	19.6	9 8	23 55.48	- 0 22.1	1.934	2.924	4.5	21.0
9 18	23 47.72	-14 5.5	1.186	2.179	5.6	19.5	9 18	23 47.62	- 1 20.9	1.906	2.911	0.5	20.6
9 28	23 38.53	-14 42.2	1.201	2.172	8.8	19.7	9 28	23 39.57	- 2 20.8	1.907	2.897	3.7	20.9
10 8	23 30.59	-14 55.2	1.239	2.165	13.1	19.9	10 8	23 32.21	- 3 15.9	1.935	2.884	7.6	21.1
10 18	23 24.97	-14 42.8	1.297	2.160	17.2	20.1	10 18	23 26.28	- 4 1.0	1.990	2.870	11.2	21.3
10 28	23 22.32	-14 6.2	1.373	2.154	20.6	20.4	10 28	23 22.36	- 4 32.4	2.067	2.856	14.3	21.5
132978	2002 <i>TT</i> ₁₈₃		9 19.1 304°26	3.2/22.1	18		444997	2008 <i>GW</i> ₇₅		9 19.1 180°06	0.2/18.9	18	
8 19	0 7.16	+ 9 0.8	1.753	2.613	14.3	19.3	8 19	0 7.38	- 0 4.7	2.269	3.149	10.8	21.8
8 29	0 2.31	+ 8 52.5	1.673	2.601	10.9	19.1	8 29	0 1.99	- 0 34.9	2.202	3.149	7.6	21.7
9 8	23 55.56	+ 8 25.8	1.615	2.590	7.2	18.8	9 8	23 55.21	- 1 13.3	2.159	3.149	4.1	21.4
9 18	23 47.60	+ 7 42.6	1.583	2.579	3.8	18.6	9 18	23 47.60	- 1 56.3	2.145	3.150	0.4	21.1
9 28	23 39.39	+ 6 47.8	1.577	2.568	4.2	18.6	9 28	23 39.92	- 2 39.1	2.159	3.149	3.4	21.4
10 8	23 31.97	+ 5 48.3	1.598	2.557	7.9	18.8	10 8	23 32.94	- 3 17.1	2.202	3.149	6.9	21.6
10 18	23 26.23	+ 4 51.2	1.643	2.547	11.8	19.0	10 18	23 27.29	- 3 46.3	2.271	3.149	10.1	21.8
10 28	23 22.83	+ 4 3.2	1.711	2.536	15.3	19.2	10 28	23 23.46	- 4 4.1	2.364	3.148	12.8	22.0
94202	2001 <i>BF</i> ₂₀		9 19.1 359°32	5.5/12.8	18		478718	2012 <i>UY</i> ₅₀		9 19.1			

EPHEMERIDES

9 19.1

9 19.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
425097	2009 <i>SN</i> ₇₆		9 19.1 111°39	5°0/14.9	17		63161	2000 <i>YZ</i> ₁₀		9 19.2 159°47	0°1/19.2	18	
8 19	0 12.11	-12 5.0	1.581	2.487	13.1	20.9	8 19	0 7.45	+ 0 21.0	2.810	3.680	9.2	20.3
8 29	0 5.70	-13 4.7	1.537	2.495	9.3	20.7	8 29	0 1.80	- 0 2.0	2.744	3.687	6.5	20.1
9 8	23 57.30	-14 3.2	1.516	2.503	6.0	20.6	9 8	23 55.03	- 0 31.7	2.704	3.692	3.6	19.9
9 18	23 47.82	-14 52.7	1.522	2.511	5.2	20.5	9 18	23 47.61	- 1 5.3	2.693	3.697	0.4	19.7
9 28	23 38.41	-15 25.8	1.554	2.519	7.8	20.7	9 28	23 40.16	- 1 39.2	2.712	3.702	2.8	19.9
10 8	23 30.22	-15 38.4	1.611	2.526	11.4	21.0	10 8	23 33.29	- 2 9.8	2.760	3.706	5.8	20.1
10 18	23 24.07	-15 29.6	1.691	2.533	14.8	21.2	10 18	23 27.52	- 2 34.3	2.837	3.710	8.5	20.3
10 28	23 20.50	-15 0.5	1.790	2.540	17.6	21.4	10 28	23 23.27	- 2 50.2	2.937	3.714	10.8	20.5
483599	2004 <i>PT</i> ₁₀₆		9 19.1 317°60	1°3/17.6	18		367905	2012 <i>BF</i> ₅₂		9 19.2 160°06	2°0/21.6	18	
8 19	0 4.33	- 1 45.1	1.993	2.887	11.3	20.5	8 19	0 6.45	+ 7 25.0	2.605	3.454	10.5	21.1
8 29	0 0.04	- 2 51.9	1.925	2.881	7.9	20.3	8 29	0 1.22	+ 7 7.7	2.533	3.458	7.9	21.0
9 8	23 54.23	- 4 8.4	1.883	2.876	4.2	20.0	9 8	23 54.76	+ 6 38.6	2.486	3.461	4.9	20.8
9 18	23 47.51	- 5 28.7	1.867	2.870	1.3	19.8	9 18	23 47.59	+ 6 0.0	2.466	3.464	2.3	20.6
9 28	23 40.67	- 6 45.6	1.879	2.865	4.5	20.0	9 28	23 40.35	+ 5 15.5	2.476	3.467	2.9	20.7
10 8	23 34.56	- 7 52.4	1.919	2.860	8.3	20.3	10 8	23 33.71	+ 4 29.4	2.515	3.470	5.7	20.9
10 18	23 29.86	- 8 44.3	1.984	2.855	11.7	20.5	10 18	23 28.23	+ 3 46.1	2.582	3.473	8.6	21.1
10 28	23 27.09	- 9 18.2	2.071	2.850	14.6	20.7	10 28	23 24.35	+ 3 9.4	2.673	3.475	11.0	21.2
109737	2001 <i>RX</i> ₆₂		9 19.2 233°82	0°3/18.7	18		12973	Melanthios		9 19.2 325°04	0°1/19.1	18	
8 19	0 5.02	+ 1 48.1	2.154	3.034	11.2	19.5	8 19	0 1.06	- 0 30.9	4.014	4.887	6.6	18.4
8 29	0 0.45	+ 0 35.7	2.079	3.027	8.0	19.3	8 29	23 57.12	- 0 49.7	3.940	4.884	4.7	18.2
9 8	23 54.43	- 0 49.2	2.031	3.021	4.3	19.0	9 8	23 52.44	- 1 12.8	3.892	4.881	2.5	18.1
9 18	23 47.53	- 2 21.2	2.010	3.015	0.4	18.7	9 18	23 47.35	- 1 38.2	3.874	4.879	0.3	17.8
9 28	23 40.51	- 3 53.2	2.018	3.008	3.7	19.0	9 28	23 42.21	- 2 3.8	3.886	4.876	2.0	18.0
10 8	23 34.15	- 5 18.1	2.056	3.001	7.5	19.2	10 8	23 37.40	- 2 27.2	3.927	4.873	4.2	18.2
10 18	23 29.12	- 6 30.1	2.119	2.994	10.9	19.4	10 18	23 33.28	- 2 46.3	3.997	4.870	6.2	18.3
10 28	23 25.93	- 7 25.4	2.205	2.986	13.7	19.6	10 28	23 30.14	- 2 59.4	4.092	4.868	8.0	18.5
151345	2002 <i>CD</i> ₂₄₇		9 19.2 289°99	0°0/19.1	18		204441	2004 <i>XJ</i> ₈₈		9 19.2 274°18	2°3/17.0	18	
8 19	0 5.98	+ 0 56.6	2.075	2.957	11.5	20.1	8 19	0 8.65	- 4 54.0	1.714	2.613	12.6	20.8
8 29	0 1.18	+ 0 19.8	2.001	2.949	8.2	19.9	8 29	0 3.36	- 5 45.0	1.644	2.603	8.8	20.6
9 8	23 54.85	- 0 27.4	1.951	2.941	4.5	19.7	9 8	23 56.15	- 6 43.5	1.599	2.592	4.8	20.3
9 18	23 47.58	- 1 21.0	1.929	2.933	0.5	19.4	9 18	23 47.75	- 7 43.1	1.579	2.581	2.3	20.1
9 28	23 40.17	- 2 15.4	1.934	2.925	3.6	19.6	9 28	23 39.17	- 8 36.4	1.587	2.570	5.6	20.3
10 8	23 33.46	- 3 5.0	1.968	2.917	7.4	19.8	10 8	23 31.46	- 9 17.0	1.621	2.559	9.8	20.5
10 18	23 28.15	- 3 44.9	2.027	2.910	10.9	20.0	10 18	23 25.50	- 9 40.7	1.679	2.547	13.6	20.7
10 28	23 24.77	- 4 11.6	2.108	2.902	13.9	20.2	10 28	23 21.91	- 9 45.5	1.757	2.536	16.8	20.9
480044	2015 <i>BK</i> ₄₃₇		9 19.2 74°45	2°0/17.5	17		258220	2001 <i>TV</i> ₃₅		9 19.2 309°83	3°4/16.3	18	
8 19	0 10.71	- 3 18.0	1.452	2.353	14.3	20.9	8 19	0 9.80	- 9 9.8	1.740	2.643	12.2	19.6
8 29	0 4.70	- 4 15.8	1.414	2.373	9.9	20.7	8 29	0 4.24	- 9 39.9	1.663	2.622	8.7	19.4
9 8	23 56.74	- 5 21.6	1.400	2.393	5.2	20.5	9 8	23 56.67	- 10 12.4	1.610	2.601	5.1	19.1
9 18	23 47.77	- 6 27.7	1.411	2.414	2.0	20.3	9 18	23 47.82	- 10 41.4	1.584	2.581	3.5	19.0
9 28	23 38.97	- 7 25.9	1.449	2.434	5.6	20.6	9 28	23 38.70	- 11 0.8	1.584	2.561	6.3	19.1
10 8	23 31.46	- 8 9.6	1.512	2.454	9.9	20.9	10 8	23 30.42	- 11 5.7	1.610	2.541	10.3	19.3
10 18	23 26.04	- 8 35.0	1.599	2.474	13.8	21.2	10 18	23 23.91	- 10 53.8	1.659	2.521	14.0	19.5
10 28	23 23.19	- 8 41.0	1.706	2.494	16.9	21.4	10 28	23 19.84	- 10 24.5	1.729	2.502	17.2	19.7
263015	2007 <i>EM</i> ₁₇₁		9 19.2 171°55	0°9/18.0	18		154169	2002 <i>GQ</i> ₆₇		9 19.2 147°88	0°2/18.9	18	
8 19	0 7.07	- 3 10.3	2.630	3.513	9.4	21.1	8 19	0 6.46	+ 0 2.3	2.413	3.291	10.2	21.0
8 29	0 1.61	- 3 40.9	2.565	3.515	6.5	21.0	8 29	0 1.28	- 0 33.0	2.348	3.295	7.2	20.8
9 8	23 54.95	- 4 16.5	2.525	3.517	3.4	20.8	9 8	23 54.81	- 1 16.4	2.310	3.300	3.9	20.6
9 18	23 47.59	- 4 53.7	2.515	3.518	0.9	20.6	9 18	23 47.61	- 2 3.9	2.299	3.304	0.4	20.3
9 28	23 40.20	- 5 28.4	2.534	3.520	3.4	20.8	9 28	23 40.37	- 2 51.0	2.318	3.308	3.2	20.5
10 8	23 33.41	- 5 56.9	2.582	3.521	6.5	21.0	10 8	23 33.78	- 3 33.1	2.365	3.311	6.6	20.8
10 18	23 27.79	- 6 16.5	2.657	3.521	9.3	21.2	10 18	23 28.44	- 4 6.5	2.439	3.315	9.6	21.0
10 28	23 23.76	- 6 25.3	2.755	3.522	11.6	21.3	10 28	23 24.79	- 4 28.7	2.536	3.318	12.1	21.2
169933	2002 <i>TB</i> ₁₂		9 19.2 292°08	0°7/18.5	18		289396	2005 <i>CB</i> ₄₁		9 19.2 74°78	5°5/14.6	17	
8 19	0 8.23	- 1 21.8	1.804	2.695	12.5	20.2	8 19	0 11.20	- 10 35.1	1.280	2.195	14.8	20.7
8 29	0 2.95	- 1 54.2	1.735	2.688	8.8	19.9	8 29	0 5.27	- 12 5.8	1.249	2.213	10.5	20.5
9 8	23 55.87	- 2 36.1	1.689	2.681	4.7	19.7	9 8	23 57.12	- 13 36.3	1.241	2.231	6.6	20.3
9 18	23 47.70	- 3 22.6	1.670	2.675	0.7	19.4	9 18	23 47.85	- 14 55.7	1.258	2.248	5.8	20.3
9 28	23 39.38	- 4 7.6	1.679	2.668	4.3	19.6	9 28	23 38.78	- 15 54.2	1.300	2.266	8.9	20.5
10 8	23 31.91	- 4 45.2	1.714	2.662	8.5	19.9	10 8	23 31.19	- 16 26.4	1.365	2.284	12.8	20.8
10 18	23 26.10	- 5 11.0	1.775	2.655	12.3	20.1	10 18	23 25.94	- 16 31.5	1.452	2.301	16.4	21.1
10 28	23 22.53	- 5 21.9	1.856	2.649	15.5	20.3	10 28	23 23.51	- 16 11.5	1.556	2.319	19.3	21.4
75245	1999 <i>WH</i> ₁₈		9 19.2 207°46	6°0/13.6	18		152767	1999 <i>NP</i> ₁₂		9 19.2 61°97	8°3/27.6	18	
8 19	0 12.67	- 15 31.3	1.783	2.684	12.1	19.8	8 19	0 11.34	+ 21 50.5	1.521	2.320	19.0	19.4
8 29	0 6.09	- 16 41.3	1.727	2.680	8.9	19.6	8 29	0 5.26	+ 22 9.2	1.477	2.348	15.8	19.3
9 8	23 57.56	- 17 48.0	1.696	2.675	6.4	19.5	9 8	23 57.11	+ 21 56.6	1.451	2.376	12.3	19.1
9 18	23 47.87	- 18 43.3	1.692	2.669	6.3	19.5	9 18	23 47.85	+ 21 13.0	1.448	2.404	9.5	19.0
9 28	23 38.11	- 19 19.9	1.714	2.663	8.6	19.6	9 28	23 38.71	+ 20 3.1	1.469	2.433	8.3	19.0
10 8	23 29.38	- 19 34.0	1.762	2.656	11.8	19.8	10 8	23 30.88	+ 18 36.0	1.515	2.461	9.5	19.2
10 18	23 22.54	- 19 24.6	1.832	2.649	14.9	20.0	10 18	23 25.23	+ 17 2.4	1.585	2.489	12.1	19.4
10 28	23 18.17	- 18 53.4	1.921	2.641	17.5	20.1	10 28	23 22.27	+ 15 32.6	1.678	2.516	14.9	19.7
446561	2014 <i>OT</i> ₅₁		9 19.2 69°08	4°0/14.3	18		328999	2010 <i>X</i>					

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9 19.2

9 19.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
12982	1979 <i>MS</i> ₅		9 19.2 117°06'	3°5/15.9	18	R	250752	2005 <i>SB</i> ₂₀₅		9 19.2 339°30'	0°8/18.3	18	
8 19	0 10.13	- 7 8.1	1.579	2.483	13.2	18.7	8 19	0 4.80	- 0 12.2	1.887	2.779	12.0	20.0
8 29	0 4.33	- 8 22.4	1.533	2.493	9.2	18.5	8 29	0 0.45	- 1 13.2	1.822	2.776	8.4	19.8
9 8	23 56.60	- 9 41.4	1.510	2.502	5.2	18.3	9 8	23 54.52	- 2 25.3	1.780	2.773	4.5	19.6
9 18	23 47.81	-10 56.6	1.514	2.511	3.6	18.2	9 18	23 47.63	- 3 42.8	1.766	2.770	0.8	19.3
9 28	23 39.05	-11 59.5	1.545	2.520	6.7	18.5	9 28	23 40.64	- 4 58.4	1.779	2.768	4.2	19.5
10 8	23 31.42	-12 44.0	1.601	2.528	10.6	18.7	10 8	23 34.42	- 6 5.1	1.820	2.765	8.2	19.8
10 18	23 25.74	-13 7.1	1.681	2.536	14.2	19.0	10 18	23 29.70	- 6 57.7	1.885	2.763	11.8	20.0
10 28	23 22.54	-13 8.5	1.780	2.544	17.2	19.2	10 28	23 27.01	- 7 32.7	1.972	2.762	14.8	20.2
227983	2007 <i>JR</i> ₁		9 19.2 112°89'	3°0/23.4	18		377302	2004 <i>FG</i> ₁₀₀		9 19.2 193°41'	0°8/19.9	17	
8 19	0 4.49	+12 37.2	2.493	3.322	11.6	20.4	8 19	0 8.29	+ 4 28.7	1.618	2.498	14.3	21.2
8 29	23 59.89	+11 56.0	2.424	3.332	8.9	20.2	8 29	0 3.14	+ 3 35.1	1.552	2.497	10.4	21.0
9 8	23 54.06	+10 58.3	2.378	3.341	6.0	20.1	9 8	23 56.06	+ 2 24.2	1.509	2.496	5.9	20.7
9 18	23 47.54	+ 9 46.9	2.360	3.350	3.5	19.9	9 18	23 47.80	+ 1 1.3	1.491	2.495	1.3	20.4
9 28	23 41.00	+ 8 26.5	2.371	3.360	3.4	19.9	9 28	23 39.41	- 0 25.2	1.501	2.494	4.0	20.6
10 8	23 35.09	+ 7 3.0	2.412	3.368	5.8	20.1	10 8	23 31.98	- 1 46.4	1.538	2.492	8.7	20.9
10 18	23 30.37	+ 5 42.3	2.480	3.377	8.6	20.3	10 18	23 26.38	- 2 54.9	1.599	2.491	12.8	21.2
10 28	23 27.27	+ 4 29.8	2.573	3.386	11.1	20.5	10 28	23 23.21	- 3 45.4	1.682	2.489	16.3	21.4
245796	2006 <i>HM</i> ₅₃		9 19.2 94°77'	3°7/15.6	18		38161	1999 <i>JN</i> ₇₄		9 19.2 220°97'	4°6/15.3	18	
8 19	0 9.50	- 9 7.3	1.782	2.685	12.0	20.5	8 19	0 10.70	- 9 2.6	1.399	2.310	14.1	18.9
8 29	0 3.68	-10 9.5	1.739	2.698	8.4	20.3	8 29	0 5.06	-10 20.0	1.345	2.308	10.0	18.7
9 8	23 56.18	-11 13.4	1.720	2.710	4.9	20.2	9 8	23 57.16	-11 41.6	1.314	2.305	6.0	18.5
9 18	23 47.77	-12 11.9	1.728	2.723	3.8	20.1	9 18	23 47.91	-12 57.7	1.309	2.303	4.8	18.4
9 28	23 39.43	-12 58.3	1.764	2.735	6.4	20.3	9 28	23 38.57	-13 58.3	1.329	2.300	8.1	18.6
10 8	23 32.12	-13 27.9	1.826	2.747	9.9	20.5	10 8	23 30.43	-14 36.5	1.373	2.298	12.3	18.8
10 18	23 26.56	-13 38.7	1.912	2.759	13.1	20.8	10 18	23 24.46	-14 49.5	1.440	2.295	16.2	19.1
10 28	23 23.24	-13 30.7	2.017	2.771	15.7	21.0	10 28	23 21.31	-14 37.7	1.524	2.292	19.4	19.3
509428	2007 <i>ES</i> ₉₃		9 19.2 264°26'	0°4/19.5	18		234300	2000 <i>YO</i> ₁₂₅		9 19.2 280°69'	2°8/16.9	18	
8 19	0 9.34	+ 2 2.4	1.655	2.539	13.8	22.7	8 19	0 12.20	- 7 42.2	1.732	2.630	12.6	19.8
8 29	0 3.98	+ 1 27.1	1.577	2.526	10.0	22.4	8 29	0 5.95	- 8 8.8	1.655	2.612	8.9	19.6
9 8	23 56.57	+ 0 37.4	1.522	2.512	5.6	22.2	9 8	23 57.63	- 8 38.9	1.603	2.595	5.0	19.3
9 18	23 47.83	- 0 22.2	1.493	2.497	0.8	21.8	9 18	23 47.98	- 9 6.9	1.577	2.577	2.9	19.1
9 28	23 38.81	- 1 24.6	1.491	2.483	4.2	22.0	9 28	23 38.07	- 9 26.8	1.579	2.560	5.9	19.3
10 8	23 30.65	- 2 22.2	1.515	2.468	8.9	22.3	10 8	23 29.04	- 9 33.7	1.608	2.542	10.0	19.5
10 18	23 24.30	- 3 8.6	1.564	2.453	13.2	22.5	10 18	23 21.86	- 9 25.0	1.660	2.524	13.9	19.7
10 28	23 20.44	- 3 39.0	1.634	2.438	16.8	22.7	10 28	23 17.19	- 8 59.9	1.732	2.506	17.2	19.9
303712	2005 <i>PR</i> ₂₁		9 19.2 53°81'	0°0/19.4	15		316731	1998 <i>RG</i> ₈₁		9 19.2 6°24'	0°2/19.0	18	
8 19	23 48.98	- 0 45.0	41.092	41.963	0.7	22.5	8 19	0 8.85	- 1 2.7	2.132	3.014	11.2	20.8
8 29	23 48.32	- 0 49.1	41.022	41.965	0.5	22.5	8 29	0 3.14	- 1 13.3	2.065	3.014	8.0	20.6
9 8	23 47.62	- 0 53.6	40.979	41.968	0.3	22.4	9 8	23 55.91	- 1 31.1	2.024	3.014	4.3	20.4
9 18	23 46.88	- 0 58.3	40.966	41.970	0.0	22.4	9 18	23 47.79	- 1 52.9	2.010	3.014	0.4	20.1
9 28	23 46.15	- 1 3.0	40.982	41.973	0.2	22.4	9 28	23 39.60	- 2 14.6	2.024	3.015	3.5	20.4
10 8	23 45.43	- 1 7.6	41.028	41.976	0.4	22.5	10 8	23 32.17	- 2 31.9	2.067	3.015	7.2	20.6
10 18	23 44.77	- 1 11.9	41.102	41.978	0.7	22.5	10 18	23 26.19	- 2 41.8	2.135	3.016	10.5	20.8
10 28	23 44.18	- 1 15.7	41.203	41.981	0.9	22.5	10 28	23 22.17	- 2 41.7	2.227	3.017	13.3	21.0
129036	2004 <i>UC</i> ₄		9 19.2 251°53'	6°0/26.1	17		479762	2014 <i>EN</i> ₂₅		9 19.2 264°30'	5°5/13.9	18	
8 19	0 9.21	+19 46.2	2.588	3.365	12.6	20.0	8 19	0 11.04	-14 20.4	1.797	2.701	11.9	20.9
8 29	0 3.42	+20 16.3	2.494	3.352	10.5	19.9	8 29	0 5.08	-15 24.2	1.729	2.684	8.7	20.6
9 8	23 56.11	+20 28.9	2.421	3.339	8.4	19.7	9 8	23 57.12	-16 26.6	1.685	2.667	6.1	20.4
9 18	23 47.80	+20 23.1	2.374	3.326	6.6	19.6	9 18	23 47.93	-17 19.9	1.668	2.650	5.8	20.4
9 28	23 39.21	+19 59.8	2.355	3.312	6.1	19.5	9 28	23 38.53	-17 56.7	1.678	2.633	8.3	20.5
10 8	23 31.14	+19 22.3	2.363	3.299	7.2	19.6	10 8	23 30.01	-18 12.2	1.713	2.615	11.6	20.7
10 18	23 24.31	+18 35.6	2.398	3.285	9.3	19.7	10 18	23 23.29	-18 4.9	1.770	2.597	14.9	20.8
10 28	23 19.29	+17 45.6	2.457	3.270	11.6	19.8	10 28	23 19.00	-17 35.7	1.847	2.578	17.7	21.0
460253	2014 <i>QD</i> ₂₇₈		9 19.2 357°12'	0°9/18.2	17		64645	2001 <i>XM</i> ₅₃		9 19.2 120°39'	4°3/15.7	18	
8 19	0 4.95	- 1 46.4	1.800	2.697	12.2	21.0	8 19	0 12.17	- 8 17.7	1.373	2.282	14.5	19.2
8 29	0 0.61	- 2 25.7	1.737	2.694	8.6	20.7	8 29	0 6.00	- 9 31.3	1.328	2.290	10.1	19.0
9 8	23 54.61	- 3 14.1	1.699	2.692	4.5	20.5	9 8	23 57.61	-10 48.7	1.307	2.298	5.9	18.8
9 18	23 47.63	- 4 6.3	1.687	2.691	1.0	20.2	9 18	23 47.97	-12 0.4	1.310	2.306	4.4	18.7
9 28	23 40.57	- 4 56.0	1.701	2.690	4.3	20.5	9 28	23 38.38	-12 57.1	1.339	2.313	7.7	18.9
10 8	23 34.34	- 5 37.3	1.742	2.690	8.4	20.7	10 8	23 30.12	-13 32.2	1.393	2.320	11.9	19.2
10 18	23 29.67	- 6 5.7	1.808	2.690	12.0	21.0	10 18	23 24.12	-13 43.4	1.469	2.327	15.7	19.4
10 28	23 27.10	- 6 18.5	1.894	2.692	15.1	21.2	10 28	23 20.94	-13 31.3	1.564	2.334	18.9	19.7
424476	2008 <i>CO</i> ₁₉₈		9 19.2 146°33'	0°1/19.3	17		249737	2000 <i>SE</i> ₁₃₈		9 19.2 348°64'	4°9/22.9	18	
8 19	0 11.03	+ 1 40.9	1.688	2.570	13.7	22.1	8 19	0 5.88	+11 13.7	1.100	1.981	19.4	19.6
8 29	0 4.93	+ 0 59.0	1.630	2.577	9.8	21.9	8 29	0 2.17	+11 6.0	1.038	1.975	15.1	19.3
9 8	23 56.95	+ 0 4.2	1.595	2.584	5.3	21.6	9 8	23 55.83	+10 28.4	0.994	1.970	10.2	19.0
9 18	23 47.88	- 0 58.1	1.586	2.591	0.6	21.3	9 18	23 47.80	+ 9 22.9	0.971	1.966	5.8	18.8
9 28	23 38.78	- 2 0.9	1.606	2.597	4.1	21.6	9 28	23 39.50	+ 7 57.6	0.971	1.963	5.8	18.8
10 8	23 30.71	- 2 56.9	1.652	2.603	8.5	21.9	10 8	23 32.46	+ 6 24.8	0.993	1.961	10.3	19.0
10 18	23 24.50	- 3 40.6	1.724	2.608	12.5	22.1	10 18	23 27.89	+ 4 57.5	1.037	1.959	15.2	19.3
10 28	23 20.70	- 4 8.5	1.817	2.612	15.7	22.3	10 28	23 26.53	+ 3 46.1	1.100	1.959	19.6	19.6
314543	2005 <i>YA</i> ₉₂		9 19.2 17°28'	4°8/24.0	18		26385						

EPHEMERIDES

9 19.2

9 19.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
363432	2003 <i>SN</i> ₅₉		9 19.2 359°14	1.7°/17.2	18		476889	2008 <i>VK</i> ₇₄		9 19.2 276°30	4.2°/23.3	16	
8 19	23 58.75	+ 0 36.7	1.396	2.307	14.1	19.0	8 19	0 7.43	+12 25.1	1.782	2.626	14.8	21.9
8 29	23 56.58	- 1 16.8	1.338	2.303	9.8	18.8	8 29	0 2.60	+12 10.3	1.698	2.613	11.6	21.6
9 8	23 52.57	- 3 28.2	1.304	2.300	5.1	18.5	9 8	23 55.86	+11 33.7	1.634	2.599	8.0	21.4
9 18	23 47.46	- 5 46.9	1.295	2.298	1.8	18.3	9 18	23 47.87	+10 36.7	1.596	2.586	4.8	21.2
9 28	23 42.25	- 7 59.8	1.312	2.298	5.8	18.6	9 28	23 39.59	+ 9 24.2	1.584	2.572	4.7	21.2
10 8	23 37.95	- 9 54.8	1.354	2.300	10.5	18.8	10 8	23 32.08	+ 8 3.7	1.599	2.559	7.9	21.3
10 18	23 35.39	-11 23.8	1.419	2.303	14.6	19.1	10 18	23 26.23	+ 6 43.8	1.640	2.545	11.7	21.5
10 28	23 35.12	-12 23.0	1.504	2.307	18.1	19.3	10 28	23 22.72	+ 5 32.4	1.703	2.531	15.2	21.7
361440	2007 <i>BN</i> ₁₃		9 19.2 194°87	2°2/16.7	18		333990	2000 <i>SF</i> ₂₂₅		9 19.2 311°45	3°5/22.9	18	
8 19	0 6.85	- 6 7.8	2.236	3.131	10.3	21.7	8 19	0 4.34	+12 19.2	1.535	2.393	16.1	20.4
8 29	0 1.69	- 6 56.8	2.174	3.130	7.1	21.5	8 29	0 4.58	+11 22.7	1.456	2.381	12.4	20.1
9 8	23 55.12	- 7 50.0	2.137	3.129	3.9	21.3	9 8	23 54.81	+ 9 58.2	1.397	2.370	8.3	19.9
9 18	23 47.74	- 8 42.4	2.128	3.128	2.2	21.2	9 18	23 47.76	+ 8 9.4	1.363	2.359	4.3	19.6
9 28	23 40.29	- 9 28.6	2.148	3.127	4.7	21.3	9 28	23 40.45	+ 6 4.8	1.356	2.348	4.4	19.6
10 8	23 33.55	-10 4.1	2.196	3.126	8.0	21.5	10 8	23 34.02	+ 3 56.3	1.375	2.338	8.5	19.8
10 18	23 28.16	-10 25.9	2.268	3.124	11.0	21.7	10 18	23 29.41	+ 1 55.8	1.419	2.328	12.9	20.1
10 28	23 24.59	-10 32.6	2.363	3.123	13.5	21.9	10 28	23 27.29	+ 0 13.0	1.485	2.318	16.8	20.3
482868	2014 <i>DM</i> ₁₃₄		9 19.2 8°16	1°1/18.3	18		239191	2006 <i>KV</i> ₁₀₄		9 19.2 166°18	1°7/17.5	18	
8 19	0 10.19	- 2 53.0	1.660	2.554	13.2	20.8	8 19	0 8.91	- 3 53.1	1.785	2.681	12.4	20.5
8 29	0 4.42	- 3 16.4	1.599	2.555	9.3	20.6	8 29	0 3.43	- 4 37.8	1.725	2.682	8.6	20.3
9 8	23 56.73	- 3 47.6	1.562	2.555	4.9	20.3	9 8	23 56.18	- 5 29.7	1.689	2.682	4.6	20.1
9 18	23 47.92	- 4 21.7	1.551	2.555	1.1	20.1	9 18	23 47.89	- 6 23.1	1.680	2.682	1.8	19.9
9 28	23 39.02	- 4 52.6	1.568	2.556	4.7	20.3	9 28	23 39.54	- 7 11.2	1.698	2.683	5.0	20.1
10 8	23 31.13	- 5 15.0	1.610	2.557	9.0	20.6	10 8	23 32.10	- 7 48.4	1.743	2.683	9.0	20.4
10 18	23 25.09	- 5 25.0	1.677	2.558	12.9	20.8	10 18	23 26.36	- 8 10.8	1.812	2.683	12.6	20.6
10 28	23 21.48	- 5 20.6	1.765	2.559	16.1	21.0	10 28	23 22.86	- 8 16.6	1.902	2.683	15.6	20.8
271014	2002 <i>YO</i> ₃₀		9 19.2 222°11	2°9/16.3	18		84267	2002 <i>TF</i> ₆		9 19.2 284°72	6°2/13.4	18	
8 19	0 10.02	- 6 36.6	1.885	2.781	11.8	21.7	8 19	0 11.55	-17 34.5	1.852	2.753	11.7	19.4
8 29	0 4.23	- 7 41.3	1.816	2.773	8.3	21.5	8 29	0 5.36	-18 25.1	1.790	2.740	8.9	19.2
9 8	23 56.63	- 8 51.7	1.772	2.764	4.6	21.3	9 8	23 57.26	-19 10.3	1.752	2.728	6.6	19.0
9 18	23 47.92	-10 1.1	1.756	2.754	3.0	21.1	9 18	23 48.01	-19 43.1	1.741	2.715	6.5	19.0
9 28	23 39.05	-11 2.2	1.768	2.744	5.9	21.3	9 28	23 38.65	-19 57.4	1.756	2.702	8.7	19.1
10 8	23 31.00	-11 48.7	1.807	2.733	9.7	21.5	10 8	23 30.23	-19 49.8	1.796	2.689	11.7	19.2
10 18	23 24.61	-12 17.1	1.870	2.722	13.2	21.7	10 18	23 23.61	-19 20.3	1.859	2.676	14.7	19.4
10 28	23 20.46	-12 26.0	1.954	2.710	16.1	21.9	10 28	23 19.39	-18 30.6	1.941	2.664	17.2	19.6
257994	2001 <i>DB</i> ₁₀₉		9 19.2 266°99	5°4/25.4	17		447109	2004 <i>TS</i> ₁₉₀		9 19.2 323°16	0°3/18.9	16	
8 19	0 7.58	+17 32.3	2.429	3.227	12.8	20.4	8 19	0 6.03	- 0 19.6	1.851	2.742	12.2	21.5
8 29	0 2.35	+17 45.3	2.333	3.210	10.5	20.2	8 29	0 1.46	- 0 49.3	1.775	2.728	8.7	21.2
9 8	23 55.59	+17 40.1	2.259	3.194	8.0	20.1	9 8	23 55.17	- 1 29.2	1.723	2.715	4.7	21.0
9 18	23 47.82	+17 16.6	2.210	3.176	6.0	19.9	9 18	23 47.79	- 2 15.1	1.697	2.702	0.5	20.6
9 28	23 39.77	+16 36.5	2.189	3.159	5.5	19.8	9 28	23 40.22	- 3 1.1	1.698	2.689	4.0	20.9
10 8	23 32.26	+15 44.0	2.195	3.142	7.0	19.9	10 8	23 33.39	- 3 41.3	1.726	2.677	8.2	21.1
10 18	23 26.01	+14 44.8	2.228	3.124	9.5	20.0	10 18	23 28.10	- 4 10.9	1.779	2.665	12.0	21.3
10 28	23 21.60	+13 45.2	2.286	3.106	12.1	20.2	10 28	23 24.95	- 4 26.4	1.853	2.654	15.2	21.5
307635	2003 <i>SX</i> ₁₁₅		9 19.2 335°64	9°3/29.7	18		461232	2015 <i>WJ</i> ₄		9 19.2 261°92	2°1/16.6	18	
8 19	0 4.03	+25 58.1	1.861	2.628	17.2	19.0	8 19	0 5.58	- 6 15.9	2.359	3.254	9.8	21.2
8 29	0 0.27	+26 24.9	1.773	2.613	15.0	18.8	8 29	0 0.76	- 7 5.5	2.296	3.252	6.8	21.0
9 8	23 54.62	+26 23.4	1.704	2.600	12.6	18.6	9 8	23 54.63	- 7 59.0	2.258	3.250	3.7	20.8
9 18	23 47.72	+25 51.1	1.655	2.587	10.4	18.4	9 18	23 47.73	- 8 51.7	2.249	3.248	2.2	20.7
9 28	23 40.50	+24 48.8	1.630	2.575	9.3	18.3	9 28	23 40.76	- 9 38.5	2.268	3.246	4.6	20.8
10 8	23 34.02	+23 22.2	1.628	2.563	9.9	18.3	10 8	23 34.45	-10 15.0	2.315	3.244	7.7	21.0
10 18	23 29.18	+21 39.9	1.651	2.553	11.9	18.4	10 18	23 29.38	-10 38.3	2.387	3.242	10.5	21.2
10 28	23 26.69	+19 52.4	1.697	2.543	14.4	18.6	10 28	23 26.01	-10 47.0	2.481	3.240	13.0	21.4
58499	Stüber		9 19.2 67°86	5°6/25.2	17		290573	2005 <i>UG</i> ₁₂₇		9 19.2 32°43	1°2/18.1	18	
8 19	0 7.23	+17 8.9	1.583	2.411	17.1	19.1	8 19	0 7.56	- 2 51.6	1.712	2.610	12.7	20.4
8 29	0 2.38	+16 38.9	1.526	2.427	13.6	18.9	8 29	0 2.44	- 3 24.9	1.662	2.619	8.9	20.2
9 8	23 55.63	+15 40.6	1.490	2.442	9.9	18.7	9 8	23 55.61	- 4 5.7	1.636	2.629	4.7	20.0
9 18	23 47.81	+14 16.9	1.477	2.458	6.6	18.6	9 18	23 47.83	- 4 48.7	1.635	2.639	1.2	19.7
9 28	23 40.00	+12 34.7	1.490	2.473	5.7	18.6	9 28	23 40.07	- 5 27.8	1.662	2.649	4.6	20.0
10 8	23 33.27	+10 44.3	1.529	2.489	8.2	18.8	10 8	23 33.29	- 5 57.5	1.714	2.661	8.6	20.3
10 18	23 28.44	+ 8 56.2	1.594	2.505	11.6	19.0	10 18	23 28.23	- 6 14.3	1.791	2.672	12.2	20.5
10 28	23 26.04	+ 7 19.7	1.682	2.520	14.9	19.3	10 28	23 25.39	- 6 16.1	1.890	2.684	15.2	20.8
144130	2004 <i>BM</i> ₈₉		9 19.2 229°32	2°7/21.8	18		439819	2015 <i>KU</i> ₅₈		9 19.2 46°90	7°2/13.6	18	
8 19	0 10.58	+ 8 38.9	1.875	2.728	13.9	20.8	8 19	0 11.57	-16 52.4	1.387	2.300	14.1	19.7
8 29	0 4.74	+ 8 17.2	1.791	2.716	10.5	20.6	8 29	0 5.46	-17 57.7	1.359	2.316	10.5	19.6
9 8	23 56.98	+ 7 37.3	1.729	2.704	6.7	20.4	9 8	23 57.25	-18 55.1	1.354	2.333	7.7	19.4
9 18	23 47.99	+ 6 41.8	1.694	2.691	3.2	20.1	9 18	23 48.00	-19 35.7	1.373	2.350	7.5	19.5
9 28	23 38.72	+ 5 35.8	1.687	2.678	3.9	20.1	9 28	23 39.00	-19 52.9	1.416	2.367	9.9	19.7
10 8	23 30.22	+ 4 26.5	1.707	2.664	7.8	20.3	10 8	23 31.44	-19 44.2	1.483	2.385	13.1	19.9
10 18	23 23.37	+ 3 21.1	1.754	2.649	11.7	20.5	10 18	23 26.14	-19 11.1	1.571	2.404	16.2	20.2
10 28	23 18.84	+ 2 26.1	1.824	2.634	15.1	20.7	10 28	23 23.54	-18 16.8	1.677	2.422	18.8	20.4
506415	1997 <i>EH</i> ₁		9 19.2 237°84	1°8/21.0	18		260031	2004 <i></i>					

EPHEMERIDES

9 19.2

9 19.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
64547 Saku			9 19.2 264°92	2°6/16.6	18		206559 2003 <i>UL</i> ₂₅₆			9 19.2 271°21	1°6/17.6	18	
8 19	0 7.81	- 4 34.9	1.650	2.552	12.8	19.1	8 19	0 8.14	- 3 20.2	1.891	2.784	11.9	20.7
8 29	0 2.87	- 5 48.3	1.583	2.542	9.0	18.8	8 29	0 2.97	- 4 10.4	1.812	2.767	8.4	20.5
9 8	23 55.98	- 7 10.9	1.539	2.533	4.9	18.6	9 8	23 56.02	- 5 9.3	1.758	2.750	4.5	20.2
9 18	23 47.89	- 8 35.0	1.522	2.523	2.7	18.4	9 18	23 47.92	- 6 11.3	1.730	2.733	1.7	20.0
9 28	23 39.61	- 9 51.6	1.533	2.513	6.0	18.6	9 28	23 39.58	- 7 9.7	1.731	2.716	4.9	20.2
10 8	23 32.23	-10 52.9	1.569	2.503	10.3	18.8	10 8	23 31.98	- 7 57.9	1.759	2.698	9.0	20.4
10 18	23 26.62	-11 34.1	1.629	2.493	14.1	19.0	10 18	23 25.94	- 8 31.5	1.811	2.680	12.7	20.6
10 28	23 23.42	-11 53.0	1.708	2.483	17.4	19.3	10 28	23 22.09	- 8 47.6	1.884	2.662	15.9	20.8
38623 2000 <i>AQ</i> ₂₃₃			9 19.2 258°20	0°6/19.9	18		432294 2009 <i>SD</i> ₂₇₂			9 19.2 339°35	1°5/21.9	17	
8 19	0 4.54	+ 4 3.2	2.216	3.088	11.3	18.3	8 19	0 0.24	+ 7 37.7	3.928	4.771	7.4	20.9
8 29	0 0.12	+ 3 8.3	2.144	3.086	8.1	18.1	8 29	23 56.64	+ 7 17.6	3.847	4.768	5.5	20.8
9 8	23 54.33	+ 2 0.4	2.096	3.083	4.6	17.9	9 8	23 52.29	+ 6 49.5	3.792	4.765	3.5	20.6
9 18	23 47.71	+ 0 44.1	2.077	3.081	1.0	17.6	9 18	23 47.50	+ 6 15.0	3.766	4.762	1.7	20.5
9 28	23 40.99	- 0 34.9	2.086	3.078	3.2	17.8	9 28	23 42.66	+ 5 36.3	3.769	4.760	2.0	20.5
10 8	23 34.92	- 1 49.9	2.123	3.076	6.8	18.0	10 8	23 38.16	+ 4 56.3	3.802	4.757	3.9	20.6
10 18	23 30.14	- 2 55.6	2.188	3.073	10.1	18.2	10 18	23 34.34	+ 4 17.7	3.863	4.755	5.9	20.8
10 28	23 27.12	- 3 47.6	2.275	3.070	12.9	18.4	10 28	23 31.50	+ 3 43.1	3.950	4.752	7.8	20.9
438010 2003 <i>WT</i> ₂₅			9 19.2 247°66	11°4/1.5	18		401654 2013 <i>GS</i> ₁₀₅			9 19.2 84°21	4°8/24.3	18	
8 19	0 13.16	+33 15.4	2.104	2.790	17.7	21.3	8 19	0 10.95	+14 25.6	2.284	3.097	13.0	20.3
8 29	0 6.92	+33 58.5	1.999	2.769	16.0	21.1	8 29	0 4.58	+14 52.2	2.221	3.113	10.4	20.2
9 8	23 58.37	+34 12.6	1.911	2.746	14.1	20.9	9 8	23 56.72	+15 2.1	2.182	3.129	7.6	20.0
9 18	23 48.18	+33 52.8	1.843	2.722	12.5	20.7	9 18	23 47.99	+14 55.6	2.169	3.144	5.3	19.9
9 28	23 37.40	+32 57.2	1.797	2.697	11.5	20.6	9 28	23 39.21	+14 34.9	2.184	3.160	5.0	19.9
10 8	23 27.27	+31 29.0	1.776	2.672	11.7	20.6	10 8	23 31.22	+14 4.4	2.227	3.175	6.8	20.1
10 18	23 18.93	+29 36.0	1.780	2.645	13.1	20.6	10 18	23 24.69	+13 29.0	2.297	3.190	9.4	20.2
10 28	23 13.24	+27 29.4	1.807	2.618	15.2	20.7	10 28	23 20.12	+12 54.3	2.391	3.205	11.8	20.4
353210 2009 <i>SO</i> ₃₅₅			9 19.2 244°97	2°3/24.1	18		53072 1998 <i>XB</i> ₆₁			9 19.2 163°54	2°0/16.9	18	
8 19	0 0.58	+12 46.8	4.486	5.297	7.1	20.2	8 19	0 7.49	- 4 48.0	2.060	2.955	11.0	19.8
8 29	23 56.80	+12 40.2	4.401	5.294	5.6	20.1	8 29	0 2.25	- 5 44.1	2.001	2.957	7.7	19.6
9 8	23 52.35	+12 25.0	4.340	5.291	4.0	20.0	9 8	23 55.49	- 6 46.0	1.966	2.959	4.1	19.4
9 18	23 47.49	+12 2.1	4.307	5.288	2.6	19.9	9 18	23 47.86	- 7 48.2	1.959	2.960	2.1	19.3
9 28	23 42.58	+11 33.0	4.304	5.285	2.5	19.9	9 28	23 40.18	- 8 44.3	1.981	2.962	4.8	19.5
10 8	23 37.96	+11 0.1	4.331	5.282	3.7	19.9	10 8	23 33.27	- 9 29.1	2.029	2.963	8.3	19.7
10 18	23 33.96	+10 25.7	4.386	5.279	5.3	20.1	10 18	23 27.83	- 9 59.1	2.104	2.964	11.5	19.9
10 28	23 30.83	+ 9 52.5	4.467	5.276	6.8	20.2	10 28	23 24.35	-10 12.6	2.199	2.965	14.2	20.1
263455 2008 <i>ER</i> ₁₄			9 19.2 86°61	0°2/19.0	18		18707 Annchi			9 19.2 243°14	3°5/15.7	18	
8 19	0 6.90	+ 0 31.3	2.091	2.973	11.4	21.4	8 19	0 10.51	- 9 27.3	1.980	2.877	11.3	18.9
8 29	0 1.76	- 0 8.2	2.034	2.982	8.1	21.2	8 29	0 4.56	-10 21.8	1.908	2.864	8.0	18.6
9 8	23 55.18	- 0 57.1	2.002	2.992	4.3	21.0	9 8	23 56.85	-11 19.0	1.861	2.850	4.8	18.4
9 18	23 47.80	- 1 50.8	1.997	3.002	0.4	20.7	9 18	23 48.02	-12 12.7	1.841	2.835	3.7	18.3
9 28	23 40.41	- 2 44.0	2.021	3.011	3.5	21.0	9 28	23 39.01	-12 56.3	1.849	2.820	6.3	18.5
10 8	23 33.80	- 3 31.2	2.072	3.021	7.2	21.2	10 8	23 30.77	-13 24.7	1.885	2.804	9.8	18.7
10 18	23 28.62	- 4 8.2	2.150	3.030	10.5	21.4	10 18	23 24.13	-13 35.3	1.945	2.788	13.1	18.8
10 28	23 25.34	- 4 32.2	2.250	3.039	13.2	21.6	10 28	23 19.68	-13 27.4	2.025	2.772	15.9	19.0
449788 2014 <i>OU</i> ₁₈₁			9 19.2 264°87	5°2/12.7	18		223313 2003 <i>PS</i> ₅			9 19.2 15°03	2°7/22.1	18	
8 19	0 6.62	-16 34.0	2.341	3.242	9.6	20.6	8 19	0 5.29	+ 8 30.2	1.845	2.707	13.6	19.2
8 29	0 1.57	-17 41.4	2.282	3.233	7.2	20.5	8 29	0 0.87	+ 8 13.5	1.781	2.711	10.3	19.0
9 8	23 55.10	-18 45.6	2.249	3.224	5.4	20.3	9 8	23 54.81	+ 7 39.9	1.739	2.715	6.6	18.8
9 18	23 47.80	-19 40.6	2.243	3.215	5.5	20.3	9 18	23 47.79	+ 6 52.1	1.722	2.720	3.3	18.6
9 28	23 40.41	-20 20.9	2.265	3.205	7.4	20.4	9 28	23 40.69	+ 5 55.4	1.733	2.725	3.7	18.6
10 8	23 33.70	-20 43.0	2.313	3.196	9.9	20.6	10 8	23 34.42	+ 4 56.3	1.770	2.730	7.2	18.8
10 18	23 28.31	-20 45.7	2.384	3.187	12.3	20.7	10 18	23 29.69	+ 4 1.4	1.833	2.736	10.7	19.1
10 28	23 24.74	-20 29.5	2.475	3.177	14.4	20.9	10 28	23 27.05	+ 3 16.1	1.918	2.743	13.9	19.3
115028 2003 <i>QY</i> ₁₀₂			9 19.2 298°87	3°6/21.6	18		301296 2009 <i>BJ</i> ₁₂₄			9 19.2 95°62	2°8/21.9	18	
8 19	0 13.12	+ 6 50.0	1.646	2.509	15.0	19.9	8 19	0 10.14	+ 7 58.9	1.933	2.787	13.4	20.8
8 29	0 6.87	+ 7 23.4	1.560	2.491	11.4	19.7	8 29	0 4.19	+ 7 57.9	1.871	2.797	10.1	20.6
9 8	23 58.31	+ 7 42.6	1.497	2.473	7.5	19.4	9 8	23 56.57	+ 7 41.8	1.833	2.807	6.5	20.5
9 18	23 48.18	+ 7 47.7	1.458	2.455	4.0	19.1	9 18	23 47.99	+ 7 12.6	1.820	2.817	3.3	20.3
9 28	23 37.60	+ 7 41.0	1.447	2.437	4.8	19.1	9 28	23 39.36	+ 6 34.6	1.836	2.827	3.8	20.3
10 8	23 27.83	+ 7 27.4	1.462	2.419	8.8	19.3	10 8	23 31.62	+ 5 53.3	1.879	2.836	7.2	20.6
10 18	23 19.98	+ 7 12.4	1.502	2.402	12.9	19.5	10 18	23 25.51	+ 5 14.4	1.949	2.846	10.6	20.8
10 28	23 14.84	+ 7 1.8	1.564	2.385	16.7	19.7	10 28	23 21.56	+ 4 42.7	2.041	2.855	13.6	21.0
259307 2003 <i>EF</i> ₆₃			9 19.2 135°53	1°8/17.2	18		436409 2010 <i>XW</i> ₈₁			9 19.2 320°27	2°2/14.9	16	
8 19	0 6.61	- 4 10.0	2.086	2.980	10.9	20.8	8 19	0 0.85	-11 29.5	4.117	5.011	6.0	21.2
8 29	0 1.61	- 5 4.6	2.026	2.982	7.6	20.6	8 29	23 57.02	-12 3.4	4.053	5.007	4.2	21.1
9 8	23 55.13	- 6 5.4	1.991	2.984	4.0	20.3	9 8	23 52.48	-12 37.1	4.016	5.002	2.6	21.0
9 18	23 47.81	- 7 7.0	1.984	2.986	1.8	20.2	9 18	23 47.54	-13 8.1	4.009	4.998	2.3	21.0
9 28	23 40.44	- 8 3.4	2.005	2.987	4.6	20.4	9 28	23 42.56	-13 33.7	4.031	4.994	3.5	21.1
10 8	23 33.82	- 8 49.1	2.053	2.989	8.1	20.6	10 8	23 37.91	-13 52.0	4.082	4.990	5.3	21.2
10 18	23 28.62	- 9 20.8	2.127	2.991	11.3	20.8	10 18	23 33.95	-14 1.6	4.160	4.986	7.0	21.3
10 28	23 25.32	- 9 36.4	2.223	2.992	14.0	21.0	10 28	23 30.94	-14 1.8	4.261	4.983	8.5	21.4
183727 2003 <i>YC</i> ₉₇			9 19.2 347°48	5°7/23.2	18		270702 2002 <i>QU</i> ₇₇						

EPHEMERIDES

9 19.2

9 19.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
429132	2009 SZ ₃₅₅		9 19.2 341°00	3°4/13.4	16		78186	2002 NH ₃₈		9 19.2 7°40	6°1/26.7	18	
8 19	0 4.28	-17 57.5	3.826	4.716	6.5	21.0	8 19	0 6.95	+20 1.2	2.355	3.140	13.5	18.8
8 29	23 59.45	-18 21.3	3.769	4.713	4.9	20.9	8 29	0 1.90	+20 20.2	2.277	3.141	11.2	18.7
9 8	23 53.79	-18 41.6	3.739	4.710	3.7	20.8	9 8	23 55.36	+20 19.4	2.219	3.141	8.8	18.5
9 18	23 47.69	-18 55.6	3.738	4.708	3.6	20.8	9 18	23 47.89	+19 58.3	2.186	3.141	6.9	18.4
9 28	23 41.58	-19 0.9	3.766	4.705	4.8	20.8	9 28	23 40.27	+19 19.1	2.180	3.142	6.2	18.4
10 8	23 35.91	-18 56.2	3.822	4.703	6.4	21.0	10 8	23 33.29	+18 26.1	2.201	3.142	7.3	18.4
10 18	23 31.05	-18 40.8	3.903	4.700	8.0	21.1	10 18	23 27.65	+17 25.1	2.248	3.143	9.4	18.6
10 28	23 27.31	-18 14.8	4.008	4.698	9.4	21.2	10 28	23 23.88	+16 22.9	2.319	3.144	11.8	18.7
7597	Shigemi		9 19.2 260°03	1°2/17.8	18		316132	2009 SO ₁₉		9 19.2 300°00	0°5/18.2	16	
8 19	0 6.72	- 2 43.9	2.106	2.996	11.0	17.5	8 19	23 59.96	- 2 0.2	4.037	4.916	6.4	21.0
8 29	0 1.75	- 3 30.1	2.036	2.990	7.7	17.3	8 29	23 56.45	- 2 36.5	3.956	4.905	4.5	20.8
9 8	23 55.26	- 4 23.8	1.992	2.984	4.1	17.0	9 8	23 52.21	- 3 17.0	3.903	4.894	2.4	20.7
9 18	23 47.86	- 5 20.3	1.974	2.978	1.2	16.8	9 18	23 47.54	- 3 59.4	3.879	4.883	0.5	20.5
9 28	23 40.34	- 6 13.6	1.985	2.971	4.2	17.0	9 28	23 42.81	- 4 41.0	3.886	4.873	2.3	20.6
10 8	23 33.53	- 6 58.4	2.024	2.965	7.9	17.2	10 8	23 38.38	- 5 19.0	3.922	4.862	4.4	20.8
10 18	23 28.12	- 7 30.8	2.088	2.959	11.2	17.4	10 18	23 34.61	- 5 51.2	3.985	4.851	6.4	20.9
10 28	23 24.62	- 7 48.2	2.175	2.952	14.0	17.6	10 28	23 31.78	- 6 15.8	4.074	4.840	8.2	21.0
199479	2006 DM ₇₃		9 19.2 329°17	4°6/16.5	18		364479	2007 DQ ₃₆		9 19.2 165°38	0°8/18.2	18	
8 19	0 16.02	-12 33.8	1.430	2.335	14.3	19.0	8 19	0 6.34	- 1 55.4	2.547	3.429	9.6	21.6
8 29	0 8.95	-12 38.6	1.366	2.324	10.3	18.8	8 29	0 1.22	- 2 36.9	2.482	3.432	6.7	21.5
9 8	23 59.39	-12 40.1	1.325	2.314	6.4	18.5	9 8	23 54.88	- 3 24.8	2.443	3.435	3.6	21.3
9 18	23 48.32	-12 32.1	1.309	2.304	4.7	18.4	9 18	23 47.84	- 4 15.2	2.433	3.437	0.8	21.0
9 28	23 37.11	-12 9.4	1.320	2.295	7.5	18.5	9 28	23 40.74	- 5 3.5	2.452	3.439	3.4	21.3
10 8	23 27.18	-11 29.5	1.355	2.287	11.8	18.8	10 8	23 34.27	- 5 45.4	2.500	3.441	6.6	21.5
10 18	23 19.60	-10 32.7	1.414	2.279	15.8	19.0	10 18	23 28.96	- 6 17.6	2.575	3.443	9.4	21.7
10 28	23 15.05	- 9 20.7	1.491	2.272	19.2	19.2	10 28	23 25.26	- 6 37.8	2.673	3.444	11.9	21.8
118489	2000 CR ₄₀		9 19.2 233°07	1°7/17.8	18		147099	2002 TL ₂₈		9 19.2 301°27	2°7/17.3	18	
8 19	0 11.24	- 3 27.2	1.701	2.594	13.0	19.8	8 19	0 10.87	- 5 34.0	1.365	2.272	14.6	19.8
8 29	0 5.28	- 4 9.7	1.631	2.586	9.2	19.5	8 29	0 5.49	- 6 10.6	1.293	2.254	10.4	19.5
9 8	23 57.31	- 5 0.6	1.585	2.578	4.9	19.3	9 8	23 57.64	- 6 54.9	1.243	2.237	5.7	19.2
9 18	23 48.10	- 5 54.2	1.565	2.569	1.7	19.0	9 18	23 48.17	- 7 40.2	1.217	2.219	2.7	18.9
9 28	23 38.69	- 6 43.4	1.574	2.559	5.1	19.3	9 28	23 38.34	- 8 18.0	1.217	2.202	6.5	19.1
10 8	23 30.21	- 7 21.7	1.608	2.550	9.5	19.5	10 8	23 29.56	- 8 41.2	1.242	2.185	11.5	19.4
10 18	23 23.56	- 7 44.8	1.667	2.540	13.4	19.7	10 18	23 22.98	- 8 45.4	1.288	2.169	16.0	19.6
10 28	23 19.38	- 7 50.6	1.747	2.529	16.8	19.9	10 28	23 19.38	- 8 29.1	1.353	2.153	19.9	19.8
235703	2004 TC ₄₅		9 19.2 294°43	1°3/18.2	18		25453	1999 XU ₁₁		9 19.2 320°38	7°4/27.4	18	
8 19	0 10.78	- 3 17.4	1.595	2.491	13.5	21.4	8 19	0 6.31	+21 40.9	2.029	2.814	15.3	17.2
8 29	0 5.11	- 3 40.4	1.520	2.477	9.6	21.1	8 29	0 1.73	+22 3.0	1.943	2.804	13.0	17.0
9 8	23 57.30	- 4 11.6	1.469	2.462	5.2	20.8	9 8	23 55.39	+22 1.3	1.877	2.794	10.4	16.9
9 18	23 48.10	- 4 46.1	1.443	2.447	1.3	20.5	9 18	23 47.91	+21 34.7	1.834	2.785	8.3	16.7
9 28	23 38.63	- 5 17.3	1.445	2.433	5.1	20.8	9 28	23 40.16	+20 44.7	1.816	2.775	7.4	16.6
10 8	23 30.09	- 5 39.4	1.472	2.419	9.7	21.0	10 8	23 33.10	+19 36.8	1.824	2.766	8.5	16.7
10 18	23 23.45	- 5 48.2	1.523	2.404	13.9	21.2	10 18	23 27.56	+18 18.1	1.858	2.758	10.8	16.8
10 28	23 19.43	- 5 41.0	1.594	2.391	17.5	21.4	10 28	23 24.18	+16 57.3	1.914	2.750	13.5	17.0
387205	2012 TX ₃₁₁		9 19.2 13°18	1°9/17.6	18		13008	1984 SE ₆		9 19.2 20°39	0°6/18.8	18	
8 19	0 3.08	- 1 37.7	1.058	1.980	16.6	19.4	8 19	0 9.50	- 1 40.0	0.971	1.889	18.1	16.3
8 29	0 0.00	- 2 44.8	1.017	1.985	11.6	19.1	8 29	0 4.69	- 1 49.3	0.932	1.898	12.8	16.0
9 8	23 54.57	- 4 6.3	0.996	1.992	6.1	18.9	9 8	23 57.15	- 2 11.4	0.912	1.907	6.9	15.7
9 18	23 47.79	- 5 31.8	0.997	2.001	1.9	18.6	9 18	23 48.09	- 2 39.6	0.914	1.919	0.8	15.4
9 28	23 41.02	- 6 49.4	1.021	2.011	6.4	19.0	9 28	23 39.13	- 3 5.6	0.938	1.931	5.7	15.7
10 8	23 35.60	- 7 48.9	1.069	2.022	11.6	19.3	10 8	23 31.84	- 3 21.6	0.985	1.945	11.4	16.1
10 18	23 32.48	- 8 24.3	1.136	2.036	16.2	19.6	10 18	23 27.27	- 3 22.7	1.052	1.960	16.3	16.5
10 28	23 32.20	- 8 33.8	1.222	2.050	19.9	19.9	10 28	23 26.00	- 3 6.7	1.136	1.977	20.3	16.8
161024	2002 FM ₇		9 19.2 347°94	1°3/16.8	16		255170	2005 UN ₂₁₇		9 19.2 322°71	6°1/13.9	18	
8 19	0 3.20	- 7 58.3	4.202	5.087	6.1	19.6	8 19	0 10.29	-16 39.1	1.735	2.641	12.1	20.0
8 29	23 58.63	- 8 11.8	4.135	5.086	4.2	19.5	8 29	0 4.60	-17 22.8	1.672	2.626	9.1	19.8
9 8	23 53.35	- 8 26.0	4.096	5.086	2.3	19.4	9 8	23 56.94	-18 1.7	1.632	2.611	6.6	19.6
9 18	23 47.66	- 8 39.1	4.087	5.086	1.4	19.3	9 18	23 48.08	-18 28.6	1.618	2.597	6.4	19.6
9 28	23 41.95	- 8 49.0	4.108	5.085	2.8	19.4	9 28	23 39.08	-18 37.4	1.630	2.583	8.6	19.7
10 8	23 36.59	- 8 53.9	4.158	5.085	4.7	19.5	10 8	23 31.04	-18 24.6	1.667	2.570	11.8	19.9
10 18	23 31.93	- 8 52.5	4.237	5.084	6.5	19.7	10 18	23 24.86	-17 49.9	1.726	2.558	15.0	20.1
10 28	23 28.24	- 8 44.1	4.340	5.084	8.0	19.8	10 28	23 21.12	-16 55.3	1.804	2.546	17.7	20.2
320994	2008 KO ₅		9 19.2 96°44	3°3/14.9	18		455657	2005 AJ ₈₁		9 19.2 296°19	9°2/27.9	15	
8 19	0 5.78	- 9 2.2	2.276	3.176	9.9	20.6	8 19	0 13.22	+26 8.3	2.349	3.081	14.9	20.8
8 29	0 0.88	-10 22.7	2.233	3.190	6.9	20.5	8 29	0 6.68	+27 24.4	2.254	3.066	13.1	20.7
9 8	23 54.69	-11 44.8	2.216	3.205	4.1	20.3	9 8	23 58.16	+28 20.2	2.180	3.051	11.3	20.5
9 18	23 47.81	-13 2.2	2.227	3.219	3.5	20.3	9 18	23 48.24	+28 52.2	2.129	3.036	9.8	20.4
9 28	23 40.95	-14 8.8	2.267	3.233	5.7	20.5	9 28	23 37.81	+28 58.7	2.104	3.021	9.2	20.3
10 8	23 34.82	-15 0.2	2.335	3.246	8.5	20.7	10 8	23 27.90	+28 41.9	2.104	3.007	9.8	20.3
10 18	23 30.02	-15 33.9	2.427	3.260	11.2	20.9	10 18	23 19.47	+28 6.7	2.129	2.992	11.3	20.4
10 28	23 26.94	-15 49.3	2.540	3.273	13.4	21.1	10 28	23 13.26	+27 20.2	2.177	2.977	13.3	20.5
339237	2004 UT ₉		9 19.2 355°08	23°4/ 8.9	17		116970	2004 HJ ₁₅		9 19.2 307°94	0°6/20.3	17	R
8 19	0 10.97	+36 53.											

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
217656	1998 <i>RY</i> ₄₃		9 19.2 23°78'	2°3'/17.8	17		484957	2009 <i>SK</i> ₃₄₂		9 19.2 35°91'	2°3'/22.1	17	
8 19	0 9.41	- 4 22.7	1.012	1.933	17.3	18.9	8 19	0 4.57	+ 9 1.1	2.169	3.023	12.2	21.7
8 29	0 4.52	- 4 51.9	0.975	1.943	12.1	18.6	8 29	0 0.20	+ 8 24.7	2.100	3.026	9.2	21.5
9 8	23 57.02	- 5 30.0	0.958	1.954	6.4	18.4	9 8	23 54.43	+ 7 32.4	2.055	3.030	5.8	21.3
9 18	23 48.08	- 6 8.9	0.963	1.966	2.3	18.1	9 18	23 47.84	+ 6 27.4	2.036	3.033	2.8	21.1
9 28	23 39.29	- 6 39.3	0.991	1.980	6.6	18.5	9 28	23 41.18	+ 5 14.8	2.045	3.037	3.2	21.2
10 8	23 32.13	- 6 54.3	1.041	1.995	11.9	18.8	10 8	23 35.21	+ 4 1.2	2.082	3.041	6.4	21.4
10 18	23 27.61	- 6 50.5	1.112	2.011	16.5	19.1	10 18	23 30.56	+ 2 52.4	2.146	3.045	9.7	21.6
10 28	23 26.26	- 6 27.2	1.200	2.028	20.3	19.4	10 28	23 27.71	+ 1 53.8	2.234	3.049	12.5	21.8
63837	2001 <i>RA</i> ₇₆		9 19.2 308°88'	0°3'/19.5	18		178324	1995 <i>OB</i> ₁₄		9 19.2 211°66'	0°5'/19.7	17	
8 19	0 7.45	+ 2 0.3	1.410	2.305	15.1	19.0	8 19	0 9.43	+ 3 19.4	1.617	2.498	14.2	21.0
8 29	0 3.00	+ 1 24.2	1.333	2.287	10.9	18.7	8 29	0 4.07	+ 2 27.3	1.548	2.495	10.3	20.8
9 8	23 56.27	+ 0 31.4	1.278	2.269	6.1	18.4	9 8	23 56.70	+ 1 18.7	1.502	2.491	5.7	20.5
9 18	23 48.03	- 0 33.1	1.248	2.252	0.9	18.0	9 18	23 48.10	- 0 0.6	1.482	2.487	0.9	20.2
9 28	23 39.43	- 1 41.2	1.242	2.235	4.7	18.2	9 28	23 39.34	- 1 22.8	1.490	2.482	4.2	20.4
10 8	23 31.77	- 2 43.5	1.262	2.219	9.9	18.5	10 8	23 31.51	- 2 38.8	1.524	2.477	8.9	20.7
10 18	23 26.11	- 3 32.6	1.305	2.203	14.6	18.7	10 18	23 25.54	- 3 41.6	1.583	2.472	13.1	20.9
10 28	23 23.22	- 4 2.8	1.367	2.187	18.7	18.9	10 28	23 22.05	- 4 26.3	1.663	2.466	16.6	21.2
284902	2009 <i>VL</i> ₁₄		9 19.2 283°32'	4°7'/25.0	18		386620	2009 <i>RX</i> ₅₄		9 19.2 331°53'	1°2'/16.9	18	
8 19	0 5.27	+16 18.4	2.406	3.216	12.5	21.0	8 19	0 1.05	- 6 43.3	4.145	5.033	6.1	20.9
8 29	0 0.74	+16 10.3	2.311	3.199	10.1	20.8	8 29	23 57.18	- 7 10.0	4.078	5.031	4.2	20.7
9 8	23 54.77	+15 43.4	2.237	3.182	7.5	20.6	9 8	23 52.61	- 7 38.4	4.038	5.029	2.3	20.6
9 18	23 47.85	+14 58.5	2.190	3.165	5.3	20.4	9 18	23 47.64	- 8 6.3	4.027	5.027	1.3	20.5
9 28	23 40.71	+13 58.2	2.169	3.147	4.8	20.4	9 28	23 42.64	- 8 31.2	4.046	5.025	2.7	20.6
10 8	23 34.11	+12 47.8	2.177	3.130	6.6	20.5	10 8	23 37.97	- 8 51.0	4.095	5.023	4.7	20.8
10 18	23 28.73	+11 33.4	2.212	3.113	9.3	20.6	10 18	23 33.96	- 9 4.1	4.171	5.022	6.5	20.9
10 28	23 25.11	+10 21.6	2.271	3.096	12.0	20.8	10 28	23 30.89	- 9 9.4	4.271	5.020	8.1	21.0
289567	2005 <i>EL</i> ₂₈₉		9 19.2 125°62'	4°3'/15.6	17		392951	2012 <i>WY</i> ₁₈		9 19.2 233°97'	11°5'/7.7	18	
8 19	0 12.25	- 9 7.3	1.517	2.422	13.6	20.6	8 19	0 16.66	-34 19.8	1.891	2.753	13.3	20.2
8 29	0 5.96	-10 18.0	1.472	2.431	9.5	20.4	8 29	0 9.00	-35 28.5	1.857	2.750	12.0	20.1
9 8	23 57.63	-11 31.1	1.451	2.441	5.7	20.2	9 8	23 59.24	-36 16.6	1.846	2.747	11.5	20.0
9 18	23 48.16	-12 37.9	1.455	2.450	4.4	20.2	9 18	23 48.37	-36 36.2	1.857	2.743	12.0	20.1
9 28	23 38.75	-13 30.1	1.487	2.458	7.4	20.4	9 28	23 37.65	-36 22.8	1.892	2.740	13.5	20.2
10 8	23 30.57	-14 2.1	1.544	2.466	11.3	20.6	10 8	23 28.28	-35 36.8	1.948	2.737	15.3	20.3
10 18	23 24.47	-14 11.7	1.623	2.474	14.9	20.8	10 18	23 21.14	-34 22.1	2.023	2.733	17.1	20.4
10 28	23 21.00	-13 59.6	1.722	2.482	17.8	21.1	10 28	23 16.74	-32 44.3	2.114	2.729	18.7	20.6
48117	2001 <i>FL</i> ₉₀		9 19.2 153°40'	0°3'/18.9	18		504111	2006 <i>KN</i> ₂₄		9 19.2 112°35'	4°0'/22.7	17	
8 19	0 7.95	+ 0 33.4	1.963	2.845	12.0	19.8	8 19	0 10.01	+10 56.2	1.377	2.240	17.4	21.4
8 29	0 2.66	+ 0 15.3	1.900	2.849	8.5	19.6	8 29	0 4.72	+10 35.4	1.315	2.243	13.3	21.1
9 8	23 55.77	- 1 14.6	1.862	2.852	4.6	19.3	9 8	23 57.14	+ 9 49.4	1.273	2.246	8.8	20.9
9 18	23 47.97	- 2 19.4	1.851	2.856	0.5	19.0	9 18	23 48.16	+ 8 41.2	1.255	2.250	4.7	20.7
9 28	23 40.09	- 3 23.5	1.869	2.858	3.8	19.3	9 28	23 39.04	+ 7 18.2	1.262	2.253	4.9	20.7
10 8	23 33.04	- 4 20.5	1.914	2.861	7.8	19.5	10 8	23 31.09	+ 5 50.8	1.294	2.256	9.1	20.9
10 18	23 27.51	- 5 5.6	1.985	2.864	11.3	19.8	10 18	23 25.32	+ 4 29.3	1.351	2.259	13.4	21.2
10 28	23 24.03	- 5 35.6	2.078	2.866	14.2	20.0	10 28	23 22.38	+ 3 22.0	1.428	2.262	17.3	21.5
177752	2005 <i>JR</i> ₇₅		9 19.2 174°48'	2°6'/17.1	17		96432	1998 <i>FY</i> ₅₈		9 19.2 161°93'	1°4'/17.9	18	
8 19	0 12.67	- 5 45.0	1.581	2.480	13.5	20.6	8 19	0 11.64	- 3 58.5	2.067	2.953	11.4	20.4
8 29	0 6.30	- 6 31.0	1.524	2.481	9.5	20.4	8 29	0 5.18	- 4 30.8	2.006	2.958	8.0	20.2
9 8	23 57.86	- 7 22.9	1.490	2.483	5.2	20.2	9 8	23 57.12	- 5 8.8	1.971	2.963	4.2	20.0
9 18	23 48.20	- 8 14.1	1.482	2.484	2.6	20.0	9 18	23 48.15	- 5 47.9	1.964	2.967	1.4	19.8
9 28	23 38.48	- 8 57.0	1.502	2.484	5.9	20.2	9 28	23 39.15	- 6 22.8	1.986	2.971	4.3	20.0
10 8	23 29.87	- 9 25.8	1.548	2.484	10.2	20.5	10 8	23 31.00	- 6 49.0	2.035	2.974	8.0	20.3
10 18	23 23.27	- 9 37.2	1.617	2.484	14.1	20.7	10 18	23 24.43	- 7 3.5	2.111	2.977	11.3	20.5
10 28	23 19.28	- 9 30.1	1.706	2.483	17.3	20.9	10 28	23 19.93	- 7 4.6	2.209	2.979	14.1	20.7
301418	2009 <i>DX</i> ₅₀		9 19.2 270°79'	0°4'/18.8	18		263419	2008 <i>DE</i> ₄₇		9 19.2 186°08'	1°9'/17.5	17	
8 19	0 9.24	- 0 56.9	1.893	2.779	12.2	20.9	8 19	0 10.76	- 3 28.9	1.696	2.590	13.0	21.2
8 29	0 3.67	- 1 21.4	1.825	2.776	8.7	20.7	8 29	0 4.89	- 4 26.3	1.634	2.590	9.1	20.9
9 8	23 56.37	- 1 54.7	1.781	2.772	4.7	20.5	9 8	23 57.09	- 5 32.3	1.597	2.590	4.8	20.7
9 18	23 48.04	- 2 32.7	1.764	2.769	0.5	20.2	9 18	23 48.15	- 6 40.2	1.586	2.589	1.9	20.5
9 28	23 39.59	- 3 10.0	1.776	2.766	4.0	20.4	9 28	23 39.12	- 7 42.3	1.604	2.588	5.3	20.7
10 8	23 31.98	- 3 41.3	1.814	2.762	8.1	20.7	10 8	23 31.06	- 8 31.8	1.648	2.586	9.5	21.0
10 18	23 25.96	- 4 2.4	1.878	2.759	11.7	20.9	10 18	23 24.83	- 9 4.3	1.716	2.584	13.3	21.2
10 28	23 22.12	- 4 10.5	1.963	2.756	14.8	21.1	10 28	23 21.01	- 9 17.9	1.804	2.581	16.5	21.4
133389	2003 <i>SA</i> ₁₆₀		9 19.2 101°63'	3°8'/23.7	18		253627	2003 <i>UT</i> ₉₃		9 19.2 298°02'	0°8'/19.9	18	
8 19	0 6.45	+13 46.0	1.819	2.656	14.8	19.8	8 19	0 9.11	+ 2 58.4	1.314	2.207	16.1	21.0
8 29	0 1.74	+12 59.7	1.752	2.663	11.5	19.7	8 29	0 4.44	+ 2 29.8	1.232	2.184	11.8	20.7
9 8	23 55.33	+11 50.0	1.707	2.670	7.9	19.5	9 8	23 57.21	+ 1 42.2	1.171	2.161	6.8	20.3
9 18	23 47.93	+10 20.4	1.687	2.677	4.6	19.3	9 18	23 48.20	+ 0 40.2	1.134	2.138	1.4	19.9
9 28	23 40.46	+ 8 37.5	1.695	2.684	4.3	19.3	9 28	23 38.66	- 0 28.3	1.121	2.115	4.8	20.1
10 8	23 33.88	+ 6 50.5	1.730	2.691	7.3	19.5	10 8	23 30.05	- 1 33.2	1.134	2.092	10.5	20.3
10 18	23 28.93	+ 5 8.6	1.793	2.697	10.9	19.7	10 18	23 23.62	- 2 25.6	1.168	2.070	15.7	20.6
10 28	23 26.14	+ 3 39.3	1.878	2.704	14.1	19.9	10 28	23 20.25	- 2 59.2	1.221	2.048	20.1	20.8
356551	2011 <i>SB</i> ₁₈₆		9 19.2 335°45'	1°8'/20.9	18		486860						

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
253519	2003 <i>SF</i> ₁₆₈		9 19.2 10°93	5°6/16.2	18		129884	1999 <i>TB</i> ₄		9 19.2 278°37	0°7/19.9	18	
8 19	0 11.29	-11 16.8	0.919	1.849	17.7	19.4	8 19	0 7.56	+ 2 11.5	2.199	3.073	11.3	20.4
8 29	0 6.16	-11 44.3	0.881	1.851	12.6	19.1	8 29	0 2.37	+ 1 53.5	2.122	3.065	8.2	20.2
9 8	23 58.06	-12 10.6	0.861	1.854	7.7	18.9	9 8	23 55.67	+ 1 25.5	2.069	3.056	4.6	20.0
9 18	23 48.27	-12 26.0	0.862	1.859	5.7	18.8	9 18	23 48.05	+ 0 50.5	2.044	3.048	1.0	19.7
9 28	23 38.59	-12 22.2	0.886	1.866	9.3	19.0	9 28	23 40.27	+ 0 12.7	2.047	3.039	3.2	19.9
10 8	23 30.73	-11 55.0	0.930	1.874	14.2	19.3	10 8	23 33.14	- 0 22.9	2.078	3.031	6.9	20.1
10 18	23 25.83	-11 5.0	0.993	1.883	18.8	19.6	10 18	23 27.37	- 0 52.0	2.135	3.022	10.3	20.3
10 28	23 24.46	- 9 55.0	1.072	1.894	22.6	19.9	10 28	23 23.47	- 1 11.4	2.216	3.014	13.2	20.5
318345	2004 <i>TT</i> ₂₆₅		9 19.2 290°64	4°6/14.5	18		249732	2000 <i>SC</i> ₈₂		9 19.2 12°89	7°0/15.4	17	
8 19	0 10.31	-15 11.7	2.207	3.103	10.3	20.0	8 19	0 10.08	-13 7.2	0.870	1.804	17.9	19.0
8 29	0 4.21	-15 47.3	2.150	3.101	7.5	19.9	8 29	0 5.38	-13 50.0	0.836	1.807	13.0	18.8
9 8	23 56.58	-16 19.4	2.119	3.099	5.2	19.7	9 8	23 57.65	-14 28.7	0.821	1.812	8.4	18.5
9 18	23 48.11	-16 42.8	2.115	3.097	4.8	19.7	9 18	23 48.26	-14 52.3	0.826	1.819	7.2	18.5
9 28	23 39.61	-16 53.1	2.139	3.094	6.7	19.8	9 28	23 39.03	-14 51.5	0.852	1.827	10.5	18.7
10 8	23 31.94	-16 47.6	2.190	3.092	9.5	20.0	10 8	23 31.69	-14 22.7	0.898	1.837	15.2	19.0
10 18	23 25.76	-16 25.7	2.265	3.090	12.1	20.2	10 18	23 27.35	-13 27.6	0.962	1.849	19.6	19.3
10 28	23 21.56	-15 48.2	2.361	3.088	14.4	20.3	10 28	23 26.55	-12 10.2	1.042	1.862	23.3	19.6
210220	2007 <i>RN</i> ₅₄		9 19.2 356°02	3°2/21.6	18		379186	2009 <i>RH</i> ₅₉		9 19.2 352°98	0°6/18.8	18	
8 19	0 9.33	+ 6 21.8	1.413	2.291	16.0	20.0	8 19	0 4.89	+ 0 55.9	1.117	2.029	16.8	20.4
8 29	0 4.24	+ 6 38.0	1.348	2.288	12.1	19.8	8 29	0 1.42	+ 0 2.9	1.060	2.023	12.0	20.1
9 8	23 56.90	+ 6 36.9	1.304	2.285	7.7	19.5	9 8	23 55.50	- 1 8.6	1.024	2.018	6.4	19.8
9 18	23 48.16	+ 6 20.2	1.284	2.283	3.7	19.3	9 18	23 48.04	- 2 30.7	1.010	2.015	0.7	19.4
9 28	23 39.22	+ 5 52.5	1.290	2.282	4.6	19.3	9 28	23 40.40	- 3 51.9	1.020	2.012	5.5	19.7
10 8	23 31.35	+ 5 20.6	1.320	2.282	8.9	19.6	10 8	23 33.99	- 5 1.1	1.053	2.011	11.2	20.0
10 18	23 25.56	+ 4 51.3	1.374	2.283	13.2	19.9	10 18	23 29.91	- 5 50.0	1.107	2.011	16.1	20.3
10 28	23 22.54	+ 4 30.6	1.448	2.284	17.0	20.1	10 28	23 28.83	- 6 14.3	1.178	2.012	20.2	20.6
418233	2008 <i>DV</i>		9 19.2 146°78	16°7/ 6.6	15		386768	2010 <i>CJ</i> ₁₆₉		9 19.2 211°68	2°5/16.5	18	
8 19	0 35.48	+43 18.1	1.807	2.390	23.0	22.6	8 19	0 7.91	- 4 55.9	1.917	2.813	11.6	21.8
8 29	0 23.69	+45 18.6	1.746	2.412	21.3	22.5	8 29	0 2.75	- 6 10.8	1.852	2.809	8.1	21.5
9 8	0 7.94	+46 40.5	1.700	2.431	19.6	22.4	9 8	23 55.92	- 7 33.1	1.812	2.805	4.4	21.3
9 18	23 49.44	+47 13.8	1.670	2.449	18.1	22.3	9 18	23 48.08	- 8 55.7	1.800	2.800	2.6	21.2
9 28	23 30.27	+46 53.3	1.661	2.464	17.0	22.3	9 28	23 40.11	-10 11.1	1.817	2.795	5.5	21.4
10 8	23 12.79	+45 43.1	1.673	2.477	16.7	22.3	10 8	23 32.95	-11 12.5	1.860	2.790	9.2	21.6
10 18	23 58.84	+43 54.8	1.706	2.488	17.2	22.3	10 18	23 27.34	-11 55.8	1.928	2.784	12.6	21.8
10 28	22 49.40	+41 44.7	1.759	2.497	18.2	22.5	10 28	23 23.84	-12 19.1	2.017	2.778	15.5	22.0
458428	2011 <i>AP</i> ₃₇		9 19.2 172°39	14°7/28.1	17		221897	2008 <i>KQ</i> ₁₀		9 19.3 7°81	3°4/16.2	18	
8 19	0 22.37	+26 23.7	1.235	2.011	23.8	20.5	8 19	0 3.07	- 6 30.9	1.317	2.238	14.0	18.8
8 29	0 14.50	+28 31.7	1.171	2.013	21.0	20.3	8 29	23 59.73	- 7 31.7	1.273	2.241	9.8	18.6
9 8	0 3.00	+30 5.8	1.124	2.014	18.0	20.1	9 8	23 54.39	- 8 38.4	1.251	2.246	5.4	18.4
9 18	23 48.89	+30 56.1	1.096	2.015	15.7	20.0	9 18	23 47.90	- 9 42.5	1.253	2.253	3.5	18.3
9 28	23 34.02	+30 57.9	1.089	2.016	14.7	19.9	9 28	23 41.42	-10 34.9	1.279	2.261	6.8	18.5
10 8	23 20.56	+30 15.9	1.103	2.016	15.6	20.0	10 8	23 36.05	-11 8.9	1.329	2.270	11.1	18.8
10 18	23 10.29	+29 2.6	1.138	2.016	17.9	20.1	10 18	23 32.63	-11 21.1	1.401	2.281	15.0	19.1
10 28	23 4.28	+27 34.3	1.191	2.015	20.6	20.3	10 28	23 31.68	-11 11.0	1.491	2.294	18.2	19.3
116457	2004 <i>AL</i> ₅		9 19.2 121°41	1°5/17.8	17		103115	1999 <i>XN</i> ₁₈₀		9 19.3 264°59	4°5/14.9	18	
8 19	0 11.46	- 2 27.2	1.687	2.578	13.2	19.7	8 19	0 11.14	-12 39.6	1.987	2.886	11.2	19.5
8 29	0 5.25	- 3 22.8	1.638	2.592	9.2	19.5	8 29	0 5.10	-13 28.9	1.914	2.868	8.1	19.3
9 8	23 57.22	- 4 26.9	1.613	2.605	4.9	19.2	9 8	23 57.24	-14 17.9	1.865	2.850	5.3	19.1
9 18	23 48.18	- 5 33.0	1.615	2.618	1.5	19.0	9 18	23 48.24	-15 0.3	1.844	2.832	4.6	19.0
9 28	23 39.21	- 6 33.7	1.645	2.630	4.9	19.3	9 28	23 39.03	-15 29.9	1.851	2.813	7.0	19.1
10 8	23 31.31	- 7 22.4	1.701	2.642	9.1	19.6	10 8	23 30.60	-15 42.3	1.884	2.794	10.3	19.3
10 18	23 25.27	- 7 55.1	1.783	2.654	12.8	19.8	10 18	23 23.79	-15 35.8	1.941	2.775	13.5	19.4
10 28	23 21.62	- 8 9.9	1.885	2.665	15.8	20.1	10 28	23 19.20	-15 10.4	2.018	2.755	16.2	19.6
373157	2012 <i>CR</i> ₁₉		9 19.2 95°61	0°5/19.6	17		436397	2010 <i>VA</i> ₁₈₆		9 19.3 324°12	3°7/12.6	16	
8 19	0 15.74	+ 1 21.4	1.485	2.367	15.3	20.9	8 19	0 3.62	-19 41.9	3.998	4.887	6.3	21.2
8 29	0 8.35	+ 1 3.2	1.442	2.389	10.9	20.7	8 29	23 59.03	-20 10.6	3.942	4.883	4.8	21.1
9 8	23 58.90	+ 0 32.6	1.423	2.411	6.0	20.4	9 8	23 53.64	-20 35.2	3.914	4.879	3.8	21.1
9 18	23 48.37	- 0 5.5	1.429	2.433	1.0	20.2	9 18	23 47.82	-20 53.1	3.914	4.875	3.9	21.1
9 28	23 38.02	- 0 44.5	1.462	2.454	4.3	20.5	9 28	23 41.99	-21 1.8	3.943	4.871	4.9	21.1
10 8	23 29.04	- 1 18.0	1.522	2.475	8.9	20.8	10 8	23 36.56	-21 0.0	3.999	4.868	6.4	21.2
10 18	23 22.29	- 1 41.3	1.607	2.495	13.0	21.1	10 18	23 31.91	-20 47.1	4.081	4.864	7.9	21.3
10 28	23 18.27	- 1 51.1	1.713	2.515	16.3	21.3	10 28	23 28.33	-20 23.2	4.185	4.861	9.3	21.5
461260	2015 <i>XB</i> ₄₂		9 19.2 4°87	3°0/22.2	18		323545	2004 <i>RS</i> ₃₄₅		9 19.3 253°60	3°5/15.3	17	
8 19	0 2.39	+ 8 55.3	1.452	2.330	15.7	20.2	8 19	0 10.16	-12 32.2	2.565	3.456	9.2	21.7
8 29	23 59.19	+ 8 27.0	1.392	2.330	11.9	20.0	8 29	0 4.04	-13 4.8	2.489	3.440	6.6	21.5
9 8	23 54.10	+ 7 36.7	1.352	2.332	7.6	19.7	9 8	23 56.53	-13 36.4	2.439	3.423	4.3	21.3
9 18	23 47.85	+ 6 28.3	1.336	2.335	3.6	19.5	9 18	23 48.16	-14 2.8	2.418	3.407	3.6	21.2
9 28	23 41.51	+ 5 9.2	1.345	2.339	4.2	19.6	9 28	23 39.65	-14 19.8	2.426	3.389	5.5	21.3
10 8	23 36.12	+ 3 48.9	1.380	2.345	8.3	19.8	10 8	23 31.75	-14 24.2	2.462	3.372	8.2	21.5
10 18	23 32.55	+ 2 36.2	1.438	2.352	12.4	20.1	10 18	23 25.11	-14 14.7	2.524	3.354	10.9	21.6
10 28	23 31.34	+ 1 38.0	1.517	2.360	16.0	20.3	10 28	23 20.22	-13 51.2	2.608	3.336	13.2	21.8
105646	2000 <i>SL</i> ₂₁		9 19.2 242°48	0°4/18.9	18		445825 </						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
248170	2004 <i>XF</i> ₆₀		9 19.3 200°99	2°4/16.7	18		332511	2008 <i>GD</i> ₈₇		9 19.3 154°89	1°3/18.1	17	
8 19	0 9.23	- 6 2.3	2.086	2.979	11.0	21.5	8 19	0 12.53	- 2 43.1	1.729	2.618	13.1	21.9
8 29	0 3.56	- 6 56.2	2.021	2.976	7.7	21.2	8 29	0 6.08	- 3 24.5	1.672	2.624	9.2	21.7
9 8	23 56.32	- 7 55.1	1.981	2.972	4.2	21.0	9 8	23 57.74	- 4 14.1	1.638	2.630	4.9	21.5
9 18	23 48.13	- 8 53.3	1.969	2.969	2.4	20.9	9 18	23 48.32	- 5 6.2	1.632	2.635	1.3	21.3
9 28	23 39.85	- 9 44.8	1.986	2.964	5.1	21.1	9 28	23 38.87	- 5 54.0	1.653	2.640	4.8	21.5
10 8	23 32.33	-10 24.4	2.030	2.960	8.6	21.3	10 8	23 30.44	- 6 31.7	1.702	2.644	9.0	21.8
10 18	23 26.30	-10 48.8	2.100	2.954	11.8	21.5	10 18	23 23.87	- 6 55.2	1.776	2.648	12.7	22.0
10 28	23 22.27	-10 56.7	2.191	2.949	14.5	21.7	10 28	23 19.71	- 7 2.5	1.870	2.651	15.9	22.2
315926	2008 <i>SW</i> ₁₄₉		9 19.3 328°87	0°7/20.5	18		70685	1999 <i>UR</i> ₁₂		9 19.3 318°22	4°0/16.8	18	
8 19	0 1.64	+ 3 4.6	4.099	4.958	6.8	20.4	8 19	0 15.49	-11 3.7	1.469	2.373	14.0	17.8
8 29	23 57.64	+ 2 55.2	4.019	4.953	4.9	20.3	8 29	0 8.67	-11 8.4	1.399	2.356	10.1	17.5
9 8	23 52.91	+ 2 40.3	3.966	4.949	2.9	20.2	9 8	23 59.39	-11 11.7	1.351	2.341	6.0	17.3
9 18	23 47.75	+ 2 21.4	3.942	4.944	0.9	20.0	9 18	23 48.53	-11 7.6	1.328	2.326	4.0	17.1
9 28	23 42.53	+ 2 0.4	3.948	4.940	1.8	20.1	9 28	23 37.41	-10 50.8	1.332	2.311	7.0	17.3
10 8	23 37.63	+ 1 39.7	3.984	4.936	3.9	20.2	10 8	23 27.43	-10 18.1	1.362	2.297	11.4	17.5
10 18	23 33.40	+ 1 21.2	4.048	4.932	5.9	20.4	10 18	23 19.70	- 9 28.9	1.414	2.283	15.6	17.7
10 28	23 30.13	+ 1 7.0	4.138	4.928	7.6	20.5	10 28	23 14.96	- 8 24.5	1.486	2.270	19.1	17.9
269540	2009 <i>VJ</i> ₉₂		9 19.3 254°56	4°5/25.5	18		237970	2002 <i>RW</i> ₂₀₇		9 19.3 54°79	2°1/17.4	18	
8 19	0 4.98	+17 18.4	2.622	3.421	11.9	20.8	8 19	0 9.46	- 4 10.6	1.532	2.434	13.7	20.3
8 29	0 0.44	+17 3.1	2.530	3.410	9.7	20.6	8 29	0 3.91	- 5 1.4	1.494	2.453	9.5	20.1
9 8	23 54.60	+16 29.7	2.461	3.399	7.2	20.4	9 8	23 56.52	- 5 58.8	1.479	2.473	5.0	19.9
9 18	23 47.95	+15 39.1	2.417	3.388	5.1	20.3	9 18	23 48.18	- 6 55.9	1.490	2.493	2.1	19.8
9 28	23 41.13	+14 34.1	2.401	3.377	4.6	20.2	9 28	23 39.97	- 7 45.2	1.528	2.513	5.4	20.1
10 8	23 34.84	+13 19.7	2.414	3.366	6.1	20.3	10 8	23 32.95	- 8 20.8	1.592	2.534	9.5	20.4
10 18	23 29.68	+12 1.7	2.455	3.354	8.6	20.5	10 18	23 27.86	- 8 39.6	1.679	2.554	13.2	20.6
10 28	23 26.13	+10 46.2	2.521	3.343	11.0	20.6	10 28	23 25.17	- 8 40.4	1.786	2.575	16.2	20.9
77073	2001 <i>DE</i> ₂₇		9 19.3 208°99	2°1/17.2	18		443522	2014 <i>JX</i> ₆₀		9 19.3 195°38	3°9/14.6	18	
8 19	0 10.30	- 3 26.9	1.660	2.555	13.1	20.1	8 19	0 8.95	-12 2.1	2.304	3.200	9.9	22.2
8 29	0 4.66	- 4 33.9	1.595	2.552	9.2	19.9	8 29	0 3.26	-13 3.5	2.244	3.198	7.1	22.0
9 8	23 57.05	- 5 50.5	1.554	2.547	4.9	19.6	9 8	23 56.12	-14 4.8	2.211	3.196	4.6	21.8
9 18	23 48.23	- 7 9.5	1.540	2.542	2.2	19.4	9 18	23 48.15	-15 0.2	2.206	3.192	4.1	21.8
9 28	23 39.27	- 8 22.2	1.554	2.537	5.6	19.6	9 28	23 40.11	-15 44.2	2.229	3.189	6.2	21.9
10 8	23 31.25	- 9 21.2	1.594	2.531	9.9	19.9	10 8	23 32.78	-16 12.7	2.280	3.185	9.0	22.1
10 18	23 25.08	-10 1.6	1.658	2.525	13.8	20.1	10 18	23 26.83	-16 24.1	2.355	3.180	11.7	22.3
10 28	23 21.35	-10 21.1	1.742	2.518	17.0	20.3	10 28	23 22.74	-16 18.1	2.452	3.176	14.0	22.5
282231	2002 <i>BS</i> ₂₄		9 19.3 145°74	5°6/12.4	18		266791	2009 <i>SA</i> ₂₇₁		9 19.3 294°26	0°3/19.9	18	
8 19	0 10.55	-17 19.1	2.250	3.146	10.2	20.8	8 19	0 1.32	+ 1 28.8	4.157	5.022	6.6	20.2
8 29	0 4.33	-18 42.2	2.212	3.158	7.6	20.7	8 29	23 57.44	+ 1 12.6	4.070	5.009	4.7	20.1
9 8	23 56.65	-20 0.3	2.199	3.170	5.9	20.6	9 8	23 52.83	+ 0 51.4	4.010	4.996	2.7	19.9
9 18	23 48.18	-21 6.5	2.214	3.180	6.0	20.6	9 18	23 47.77	+ 0 26.8	3.979	4.983	0.5	19.7
9 28	23 39.75	-21 55.2	2.258	3.190	7.8	20.7	9 28	23 42.65	+ 0 1.0	3.978	4.970	1.8	19.8
10 8	23 32.18	-22 23.2	2.328	3.200	10.3	20.9	10 8	23 37.82	+ 0 23.7	4.008	4.957	4.0	20.0
10 18	23 26.11	-22 30.1	2.421	3.208	12.6	21.1	10 18	23 33.63	+ 0 45.2	4.065	4.944	6.0	20.1
10 28	23 21.99	-22 17.2	2.533	3.216	14.5	21.3	10 28	23 30.37	+ 1 1.7	4.148	4.931	7.7	20.2
452462	2003 <i>UC</i> ₂₄₀		9 19.3 340°65	4°9/23.9	17		28641	2000 <i>FS</i> ₄₉		9 19.3 119°90	3°1/22.9	18	
8 19	0 5.48	+12 57.5	1.803	2.647	14.7	20.5	8 19	0 8.35	+11 6.1	2.189	3.026	12.7	18.8
8 29	0 1.27	+13 10.0	1.723	2.635	11.7	20.3	8 29	0 2.85	+10 45.7	2.126	3.039	9.7	18.6
9 8	23 55.24	+13 2.7	1.664	2.624	8.4	20.1	9 8	23 55.90	+10 8.8	2.086	3.052	6.5	18.4
9 18	23 48.04	+12 35.9	1.629	2.614	5.5	19.9	9 18	23 48.12	+ 9 17.8	2.072	3.064	3.7	18.3
9 28	23 40.59	+11 53.0	1.620	2.604	5.2	19.9	9 28	23 40.32	+ 8 17.1	2.087	3.075	3.7	18.3
10 8	23 33.87	+10 59.9	1.637	2.595	7.8	20.0	10 8	23 33.29	+ 7 12.7	2.130	3.087	6.4	18.5
10 18	23 28.75	+10 3.7	1.678	2.588	11.2	20.2	10 18	23 27.68	+ 6 10.5	2.201	3.098	9.5	18.7
10 28	23 25.86	+ 9 11.6	1.742	2.580	14.4	20.4	10 28	23 23.97	+ 5 16.0	2.295	3.108	12.3	18.9
360657	2004 <i>RL</i> ₂₈		9 19.3 34°06	1°2/20.3	18		80841	2000 <i>DR</i> ₁₄		9 19.3 268°57	3°1/16.5	18	
8 19	0 10.00	+ 2 28.0	1.832	2.709	13.0	20.2	8 19	0 10.35	- 6 18.2	1.591	2.493	13.2	19.6
8 29	0 4.21	+ 2 30.5	1.773	2.716	9.4	20.0	8 29	0 4.91	- 7 19.9	1.517	2.476	9.3	19.3
9 8	23 56.69	+ 2 22.1	1.739	2.725	5.4	19.8	9 8	23 57.31	- 8 29.2	1.467	2.459	5.2	19.0
9 18	23 48.19	+ 2 5.6	1.730	2.733	1.5	19.6	9 18	23 48.30	- 9 38.6	1.442	2.442	3.2	18.9
9 28	23 39.66	+ 1 45.2	1.749	2.742	3.5	19.7	9 28	23 39.00	-10 39.3	1.445	2.424	6.6	19.0
10 8	23 32.06	+ 1 25.8	1.795	2.751	7.5	20.0	10 8	23 30.59	-11 24.0	1.473	2.406	10.9	19.2
10 18	23 26.14	+ 1 11.5	1.867	2.761	11.1	20.3	10 18	23 24.08	-11 48.3	1.524	2.388	15.0	19.4
10 28	23 22.43	+ 1 5.9	1.961	2.770	14.2	20.5	10 28	23 20.18	-11 50.3	1.595	2.369	18.4	19.6
33799	Myra		9 19.3 63°26	4°5/15.6	18		117339	2004 <i>XO</i> ₂₀		9 19.3 247°56	6°2/11.4	18	
8 19	0 12.62	-10 45.4	1.504	2.411	13.6	17.7	8 19	0 7.89	-20 58.8	2.419	3.314	9.6	19.2
8 29	0 6.07	-11 39.4	1.476	2.436	9.6	17.5	8 29	0 2.50	-22 3.6	2.368	3.308	7.5	19.0
9 8	23 57.63	-12 32.3	1.472	2.461	5.8	17.4	9 8	23 55.71	-23 1.8	2.341	3.302	6.3	18.9
9 18	23 48.29	-13 16.5	1.493	2.486	4.6	17.3	9 18	23 48.11	-23 47.5	2.342	3.296	6.5	18.9
9 28	23 39.22	-13 45.5	1.541	2.511	7.3	17.6	9 28	23 40.46	-24 15.7	2.370	3.290	8.2	19.0
10 8	23 31.50	-13 55.5	1.614	2.536	10.9	17.8	10 8	23 33.53	-24 24.1	2.423	3.283	10.3	19.2
10 18	23 25.88	-13 45.9	1.709	2.561	14.2	18.1	10 18	23 27.95	-24 12.2	2.499	3.277	12.5	19.3
10 28	23 22.80	-13 18.0	1.824	2.586	16.9	18.4	10 28	23 24.18	-23 41.4	2.595	3.271	14.4	19.5
183285	2002 <i>TD</i> ₂₉₈		9 19.3 359°28	2°8/22.0	18		400737	2009 <i>TH</i> ₄₅		9 19.3 6°03</			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
188098	2001 YT ₁₃		9 19.3 134°23	0°1/19.2	18		114972	2003 QV ₆₃		9 19.3 347°61	3°4/16.3	18	
8 19	0 7.19	+ 0 49.1	2.151	3.030	11.3	20.7	8 19	23 59.14	- 3 40.5	1.036	1.967	16.0	17.8
8 29	0 2.06	+ 0 9.4	2.087	3.034	8.0	20.5	8 29	23 57.52	- 5 5.3	0.976	1.950	11.2	17.5
9 8	23 55.49	- 0 40.0	2.049	3.038	4.3	20.3	9 8	23 53.49	- 6 46.2	0.937	1.935	6.1	17.2
9 18	23 48.09	- 1 34.8	2.038	3.042	0.5	20.0	9 18	23 47.91	- 8 31.8	0.920	1.921	3.5	17.0
9 28	23 40.63	- 2 29.6	2.055	3.046	3.4	20.2	9 28	23 42.05	- 10 7.6	0.925	1.910	7.9	17.2
10 8	23 33.90	- 3 18.9	2.101	3.050	7.1	20.5	10 8	23 37.34	- 11 21.0	0.951	1.901	13.2	17.5
10 18	23 28.56	- 3 58.4	2.173	3.053	10.4	20.7	10 18	23 34.87	- 12 4.2	0.997	1.894	18.1	17.7
10 28	23 25.08	- 4 25.1	2.267	3.056	13.2	20.9	10 28	23 35.38	- 12 14.6	1.059	1.890	22.2	18.0
450199	2002 GN ₁₂₀		9 19.3 45°48	4°8/15.5	18		263380	2008 CN ₁₈₄		9 19.3 238°90	5°2/15.2	18	
8 19	0 13.58	- 14 38.4	1.804	2.703	12.1	19.9	8 19	0 12.78	- 11 31.5	1.451	2.359	13.9	20.6
8 29	0 6.55	- 14 58.6	1.770	2.723	8.7	19.7	8 29	0 6.64	- 12 32.1	1.396	2.355	10.0	20.3
9 8	23 57.85	- 15 14.2	1.759	2.743	5.7	19.6	9 8	23 58.22	- 13 33.2	1.364	2.352	6.3	20.1
9 18	23 48.34	- 15 19.9	1.776	2.763	4.9	19.6	9 18	23 48.44	- 14 26.0	1.357	2.348	5.4	20.1
9 28	23 39.07	- 15 11.7	1.820	2.784	7.0	19.7	9 28	23 38.57	- 15 2.2	1.376	2.344	8.3	20.2
10 8	23 30.98	- 14 48.0	1.890	2.804	10.0	20.0	10 8	23 29.89	- 15 16.4	1.420	2.340	12.3	20.4
10 18	23 24.78	- 14 9.0	1.984	2.826	12.9	20.2	10 18	23 23.41	- 15 7.0	1.485	2.336	16.0	20.7
10 28	23 20.91	- 13 16.4	2.099	2.847	15.4	20.4	10 28	23 19.74	- 14 35.3	1.569	2.332	19.2	20.9
518351	2017 DL ₃₂		9 19.3 255°89	1°3/20.8	18		47391	1999 XL ₁₀₈		9 19.3 231°47	0°7/19.9	18	
8 19	0 6.92	+ 4 36.6	2.425	3.287	10.8	21.6	8 19	0 9.68	+ 3 38.2	1.608	2.488	14.3	19.3
8 29	0 1.84	+ 4 18.8	2.343	3.278	7.9	21.4	8 29	0 4.35	+ 2 54.4	1.537	2.482	10.4	19.1
9 8	23 55.39	+ 3 50.1	2.286	3.268	4.7	21.2	9 8	23 56.97	+ 1 54.2	1.488	2.476	5.9	18.8
9 18	23 48.09	+ 3 13.0	2.257	3.258	1.6	20.9	9 18	23 48.31	+ 0 42.3	1.465	2.469	1.2	18.5
9 28	23 40.64	+ 2 31.3	2.256	3.249	2.9	21.0	9 28	23 39.44	- 0 33.3	1.469	2.462	4.1	18.7
10 8	23 33.76	+ 1 49.7	2.284	3.238	6.2	21.2	10 8	23 31.49	- 1 44.3	1.500	2.455	8.8	18.9
10 18	23 28.09	+ 1 12.5	2.339	3.228	9.4	21.4	10 18	23 25.41	- 2 43.4	1.556	2.447	13.1	19.2
10 28	23 24.13	+ 0 43.4	2.418	3.218	12.1	21.6	10 28	23 21.84	- 3 25.5	1.632	2.439	16.7	19.4
328129	2008 BD ₇		9 19.3 127°06	1°9/17.5	17		254224	2004 RG ₉₇		9 19.3 211°74	4°1/24.2	18	
8 19	0 9.85	- 2 16.3	1.526	2.424	14.0	20.8	8 19	0 6.49	+ 14 5.3	2.282	3.104	12.7	20.3
8 29	0 4.36	- 3 30.4	1.474	2.432	9.7	20.6	8 29	0 1.62	+ 13 56.2	2.204	3.103	10.1	20.1
9 8	23 56.88	- 4 55.1	1.445	2.439	5.1	20.4	9 8	23 55.31	+ 13 29.3	2.148	3.102	7.2	19.9
9 18	23 48.26	- 6 22.5	1.443	2.445	1.9	20.2	9 18	23 48.11	+ 12 45.8	2.119	3.101	4.7	19.8
9 28	23 39.61	- 7 43.0	1.467	2.452	5.6	20.4	9 28	23 40.78	+ 11 49.3	2.117	3.100	4.3	19.8
10 8	23 32.07	- 8 48.5	1.518	2.458	10.0	20.7	10 8	23 34.10	+ 10 45.3	2.143	3.099	6.5	19.9
10 18	23 26.48	- 9 34.1	1.592	2.464	14.0	21.0	10 18	23 28.74	+ 9 39.8	2.197	3.098	9.3	20.1
10 28	23 23.41	- 9 57.6	1.686	2.470	17.2	21.2	10 28	23 25.20	+ 8 38.8	2.274	3.096	12.1	20.3
81104	2000 EW ₁₁₂		9 19.3 99°01	1°1/18.3	18		275344	2010 XO ₅₂		9 19.3 170°75	1°3/18.0	18	
8 19	0 12.97	- 2 17.7	1.632	2.522	13.6	19.0	8 19	0 10.66	- 2 18.6	1.849	2.737	12.4	21.2
8 29	0 6.35	- 2 53.4	1.587	2.540	9.6	18.8	8 29	0 4.72	- 3 8.2	1.787	2.740	8.7	20.9
9 8	23 57.85	- 3 37.2	1.565	2.557	5.1	18.5	9 8	23 57.03	- 4 6.5	1.750	2.742	4.6	20.7
9 18	23 48.36	- 4 23.5	1.570	2.574	1.1	18.3	9 18	23 48.31	- 5 7.6	1.741	2.744	1.3	20.5
9 28	23 38.98	- 5 5.7	1.603	2.591	4.7	18.6	9 28	23 39.52	- 6 5.0	1.759	2.746	4.6	20.7
10 8	23 30.77	- 5 38.1	1.662	2.607	8.9	18.9	10 8	23 31.63	- 6 52.3	1.805	2.747	8.6	21.0
10 18	23 24.53	- 5 56.9	1.746	2.623	12.7	19.2	10 18	23 25.43	- 7 25.4	1.877	2.747	12.2	21.2
10 28	23 20.75	- 6 0.4	1.851	2.639	15.8	19.4	10 28	23 21.46	- 7 41.9	1.969	2.747	15.3	21.4
383228	2006 AQ ₁₀₀		9 19.3 162°41	1°6/20.8	17		150720	2001 QB ₁₉		9 19.3 33°28	0°1/19.3	17	
8 19	0 10.37	+ 5 17.4	1.989	2.852	12.7	21.8	8 19	0 8.62	+ 1 21.7	1.107	2.014	17.3	19.0
8 29	0 4.43	+ 4 55.7	1.922	2.856	9.4	21.6	8 29	0 3.87	+ 0 46.8	1.069	2.028	12.3	18.7
9 8	23 56.84	+ 4 20.4	1.878	2.860	5.6	21.4	9 8	23 56.72	- 0 4.3	1.051	2.044	6.7	18.5
9 18	23 48.26	+ 3 34.7	1.862	2.864	2.0	21.2	9 18	23 48.27	- 1 4.3	1.056	2.060	0.8	18.1
9 28	23 39.60	+ 2 43.7	1.874	2.867	3.4	21.3	9 28	23 39.94	- 2 3.5	1.085	2.078	5.0	18.5
10 8	23 31.76	+ 1 53.3	1.914	2.869	7.2	21.5	10 8	23 33.10	- 2 52.7	1.137	2.097	10.4	18.8
10 18	23 25.50	+ 1 9.1	1.981	2.871	10.8	21.8	10 18	23 28.68	- 3 25.6	1.211	2.116	15.0	19.2
10 28	23 21.35	+ 0 35.2	2.070	2.873	13.8	22.0	10 28	23 27.21	- 3 39.0	1.304	2.136	18.8	19.5
321526	2009 ST ₂₃₅		9 19.3 283°80	1°7/22.9	18		479722	2014 DZ ₁₃₂		9 19.3 179°76	1°1/20.3	18	
8 19	0 0.07	+ 9 46.3	4.277	5.107	7.1	20.7	8 19	0 11.93	+ 3 1.3	2.094	2.960	12.1	21.6
8 29	23 56.56	+ 9 25.0	4.190	5.101	5.4	20.6	8 29	0 5.50	+ 2 55.2	2.024	2.961	8.8	21.4
9 8	23 52.36	+ 8 55.4	4.129	5.094	3.6	20.5	9 8	23 57.42	+ 2 38.6	1.977	2.962	5.1	21.2
9 18	23 47.75	+ 8 18.8	4.096	5.087	2.0	20.3	9 18	23 48.36	+ 2 14.0	1.959	2.962	1.5	20.9
9 28	23 43.07	+ 7 37.3	4.092	5.081	2.1	20.3	9 28	23 39.18	+ 1 45.7	1.969	2.962	3.3	21.1
10 8	23 38.70	+ 6 53.6	4.119	5.074	3.7	20.4	10 8	23 30.80	+ 1 18.1	2.009	2.961	7.1	21.3
10 18	23 34.94	+ 6 10.3	4.174	5.068	5.5	20.6	10 18	23 23.95	+ 0 55.7	2.074	2.960	10.6	21.5
10 28	23 32.09	+ 5 30.1	4.256	5.061	7.2	20.7	10 28	23 19.18	+ 0 41.8	2.163	2.959	13.5	21.7
468143	2014 UF ₁₅₇		9 19.3 84°59	2°8/17.3	17		9469	Shashank		9 19.3 47°10	1°5/20.4	18	
8 19	0 15.13	- 5 31.8	1.276	2.180	15.7	20.7	8 19	0 9.39	+ 4 53.2	1.183	2.076	17.5	18.3
8 29	0 8.19	- 6 16.0	1.239	2.198	10.9	20.5	8 29	0 4.33	+ 4 16.8	1.142	2.092	12.7	18.0
9 8	23 58.94	- 7 6.2	1.223	2.217	5.9	20.2	9 8	23 56.95	+ 3 20.1	1.121	2.109	7.3	17.8
9 18	23 48.49	- 7 54.4	1.233	2.235	2.8	20.1	9 18	23 48.30	+ 2 9.8	1.123	2.126	2.0	17.5
9 28	23 38.26	- 8 32.4	1.268	2.252	6.4	20.4	9 28	23 39.76	+ 0 55.6	1.150	2.144	4.5	17.8
10 8	23 29.56	- 8 54.2	1.329	2.270	11.1	20.7	10 8	23 32.64	- 0 12.3	1.201	2.162	9.7	18.1
10 18	23 23.33	- 8 57.3	1.411	2.287	15.2	21.0	10 18	23 27.87	- 1 6.1	1.275	2.181	14.3	18.4
10 28	23 20.07	- 8 41.4	1.513	2.304	18.5	21.3	10 28	23 25.98	- 1 40.8	1.368	2.200	18.0	18.7
40763	1999 TS ₁₄		9 19.3 330°92	0°6/19.9	18		13364	1998 UK ₂₀		9 19.3 86°97	4°2/15.9	18 R	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
428624	2008 FA ₅₁		9 19.3 78°81	2°1/17.7 16			487616	2015 MP ₇₁		9 19.3 334°98	6°2/25.5 16		
8 19	0 14.52	- 4 46.3	1.442	2.340	14.6	21.2	8 19	0 7.63	+17 7.3	1.743	2.565	16.1	20.8
8 29	0 7.55	- 5 21.1	1.405	2.362	10.2	21.0	8 29	0 2.87	+17 15.8	1.668	2.561	13.1	20.6
9 8	23 58.54	- 6 1.8	1.391	2.384	5.4	20.7	9 8	23 56.19	+16 59.9	1.613	2.558	9.9	20.4
9 18	23 48.48	- 6 41.8	1.403	2.405	2.1	20.6	9 18	23 48.28	+16 19.5	1.581	2.554	7.1	20.3
9 28	23 38.65	- 7 14.2	1.441	2.427	5.6	20.9	9 28	23 40.14	+15 18.2	1.574	2.551	6.3	20.2
10 8	23 30.21	- 7 33.8	1.506	2.448	9.9	21.2	10 8	23 32.85	+14 3.0	1.594	2.549	8.4	20.3
10 18	23 23.99	- 7 37.9	1.594	2.469	13.8	21.5	10 18	23 27.30	+12 42.7	1.638	2.546	11.5	20.5
10 28	23 20.47	- 7 25.8	1.702	2.489	16.9	21.7	10 28	23 24.14	+11 26.0	1.705	2.544	14.7	20.7
422184	2014 RX ₂₆		9 19.3 61°23	6°9/28.5 18			326840	2003 UP ₉₀		9 19.3 353°60	0°8/18.7 16		
8 19	0 6.17	+23 31.6	2.269	3.034	14.5	20.0	8 19	0 3.05	+ 1 36.3	0.983	1.902	17.8	20.2
8 29	0 1.43	+23 36.2	2.198	3.044	12.3	19.9	8 29	0 0.37	+ 0 28.4	0.930	1.896	12.7	19.9
9 8	23 55.21	+23 17.5	2.148	3.054	9.9	19.7	9 8	23 55.09	- 1 2.1	0.895	1.890	6.9	19.6
9 18	23 48.12	+22 35.3	2.121	3.064	7.8	19.6	9 18	23 48.15	- 2 45.4	0.882	1.886	0.9	19.1
9 28	23 40.95	+21 32.5	2.120	3.074	6.9	19.6	9 28	23 41.02	- 4 27.5	0.891	1.884	6.0	19.5
10 8	23 34.51	+20 14.4	2.146	3.084	7.6	19.7	10 8	23 35.20	- 5 54.5	0.923	1.883	12.0	19.8
10 18	23 29.47	+18 48.2	2.198	3.095	9.5	19.8	10 18	23 31.86	- 6 56.4	0.974	1.883	17.3	20.1
10 28	23 26.33	+17 21.5	2.274	3.105	11.8	20.0	10 28	23 31.67	- 7 28.7	1.042	1.885	21.6	20.4
371868	2008 CQ ₂₁		9 19.3 225°82	0°1/19.2 17			68154	2001 BD ₁		9 19.3 174°82	3°3/23.6 18		
8 19	0 12.11	+ 0 34.6	1.612	2.497	14.1	21.7	8 19	0 5.81	+12 34.6	2.449	3.277	11.8	19.8
8 29	0 6.08	+ 0 4.6	1.541	2.491	10.1	21.5	8 29	0 1.06	+12 12.6	2.372	3.278	9.2	19.7
9 8	23 57.93	- 0 37.8	1.494	2.484	5.5	21.2	9 8	23 54.99	+11 34.4	2.319	3.279	6.3	19.5
9 18	23 48.45	- 0 27.9	1.472	2.477	0.6	20.8	9 18	23 48.13	+10 41.9	2.292	3.279	3.9	19.3
9 28	23 38.76	- 2 18.9	1.478	2.470	4.4	21.1	9 28	23 41.17	+ 9 38.9	2.293	3.280	3.6	19.3
10 8	23 30.04	- 3 3.5	1.511	2.462	9.1	21.4	10 8	23 34.82	+ 8 30.8	2.323	3.280	6.0	19.5
10 18	23 23.24	- 3 36.4	1.568	2.454	13.3	21.6	10 18	23 29.69	+ 7 23.4	2.381	3.280	8.8	19.7
10 28	23 19.04	- 3 53.7	1.645	2.445	16.9	21.8	10 28	23 26.23	+ 6 21.9	2.463	3.280	11.4	19.8
381825	2009 VF ₈₅		9 19.3 218°50	1°9/17.4 17			243084	2007 NL ₇		9 19.3 316°73	3°9/11.5 16		
8 19	0 10.56	- 4 13.8	1.872	2.764	12.1	22.0	8 19	0 2.59	-21 28.6	4.170	5.057	6.1	19.5
8 29	0 4.73	- 5 3.7	1.803	2.757	8.5	21.8	8 29	23 58.34	-22 5.1	4.119	5.054	4.8	19.4
9 8	23 57.09	- 6 1.0	1.758	2.751	4.6	21.5	9 8	23 53.35	-22 37.1	4.095	5.051	4.0	19.3
9 18	23 48.36	- 6 59.7	1.741	2.743	1.9	21.3	9 18	23 47.94	-23 1.8	4.099	5.049	4.1	19.4
9 28	23 39.46	- 7 53.2	1.752	2.736	5.0	21.5	9 28	23 42.51	-23 16.8	4.131	5.046	5.1	19.4
10 8	23 31.40	- 8 35.4	1.790	2.727	9.0	21.8	10 8	23 37.46	-23 20.8	4.190	5.043	6.5	19.5
10 18	23 24.99	- 9 2.3	1.853	2.719	12.6	22.0	10 18	23 33.15	-23 13.1	4.274	5.040	7.9	19.6
10 28	23 20.83	- 9 12.0	1.938	2.709	15.7	22.2	10 28	23 29.85	-22 54.1	4.379	5.038	9.1	19.7
102789	1999 VJ ₁₅₆		9 19.3 355°85	1°9/20.7 18			213512	2002 GC ₁₁₉		9 19.3 137°44	2°3/17.3 18		
8 19	0 6.01	+ 5 3.0	1.070	1.972	18.2	19.8	8 19	0 12.42	- 4 8.4	1.545	2.442	13.9	20.7
8 29	0 2.37	+ 4 41.9	1.013	1.967	13.4	19.5	8 29	0 6.18	- 5 7.1	1.493	2.450	9.7	20.5
9 8	23 56.13	+ 3 58.0	0.975	1.964	8.0	19.2	9 8	23 57.90	- 6 13.7	1.466	2.458	5.2	20.2
9 18	23 48.25	+ 2 56.3	0.958	1.961	2.6	18.8	9 18	23 48.47	- 7 20.7	1.464	2.466	2.3	20.0
9 28	23 40.17	+ 1 46.1	0.965	1.960	4.9	19.0	9 28	23 39.05	- 8 19.9	1.490	2.474	5.7	20.3
10 8	23 33.37	+ 0 38.8	0.994	1.960	10.5	19.3	10 8	23 30.77	- 9 4.5	1.542	2.480	10.1	20.6
10 18	23 29.03	+ 0 15.7	1.045	1.961	15.7	19.6	10 18	23 24.53	- 9 30.6	1.618	2.487	14.0	20.8
10 28	23 27.84	+ 0 50.7	1.113	1.964	20.0	19.9	10 28	23 20.88	- 9 36.9	1.713	2.492	17.1	21.1
175310	2005 MA ₁₀		9 19.3 119°02	4°7/24.4 18			432671	2011 AO ₅₇		9 19.3 179°79	0°6/19.8 17		
8 19	0 10.78	+14 34.0	2.229	3.043	13.3	20.1	8 19	0 10.98	+ 2 55.1	1.883	2.756	12.9	22.3
8 29	0 4.64	+14 49.9	2.161	3.054	10.5	20.0	8 29	0 4.98	+ 2 17.1	1.815	2.758	9.3	22.1
9 8	23 56.95	+14 48.4	2.116	3.064	7.7	19.8	9 8	23 57.22	+ 1 26.0	1.772	2.759	5.2	21.9
9 18	23 48.34	+14 29.8	2.098	3.075	5.3	19.7	9 18	23 48.40	+ 0 26.3	1.755	2.759	1.0	21.6
9 28	23 39.65	+13 57.0	2.107	3.085	4.9	19.7	9 28	23 39.47	- 0 35.8	1.767	2.759	3.7	21.8
10 8	23 31.72	+13 14.6	2.144	3.094	6.9	19.8	10 8	23 31.40	- 1 33.6	1.806	2.758	7.8	22.0
10 18	23 25.27	+12 28.4	2.208	3.104	9.6	20.0	10 18	23 24.99	- 2 21.6	1.872	2.756	11.6	22.3
10 28	23 20.81	+11 44.0	2.296	3.113	12.1	20.2	10 28	23 20.81	- 2 55.6	1.960	2.754	14.8	22.5
263122	2007 VC ₆		9 19.3 279°49	0°8/20.9 15			316497	2010 VG ₁₀₃		9 19.3 26°89	5°7/13.4 18		
8 19	0 0.29	+ 4 43.6	4.301	5.154	6.6	20.6	8 19	0 8.84	-16 46.0	1.991	2.894	10.9	20.1
8 29	23 56.72	+ 4 20.7	4.221	5.151	4.8	20.5	8 29	0 3.35	-17 42.2	1.945	2.897	8.2	19.9
9 8	23 52.47	+ 3 51.5	4.167	5.147	2.9	20.4	9 8	23 56.26	-18 33.5	1.923	2.900	6.0	19.8
9 18	23 47.82	+ 3 17.7	4.143	5.144	1.0	20.2	9 18	23 48.29	-19 13.5	1.928	2.903	5.9	19.8
9 28	23 43.13	+ 2 41.5	4.148	5.141	1.7	20.3	9 28	23 40.34	-19 36.8	1.960	2.906	7.9	19.9
10 8	23 38.73	+ 2 5.4	4.184	5.137	3.7	20.4	10 8	23 33.28	-19 40.4	2.017	2.910	10.6	20.1
10 18	23 34.95	+ 1 31.6	4.248	5.134	5.6	20.5	10 18	23 27.83	-19 24.0	2.097	2.914	13.3	20.3
10 28	23 32.06	+ 1 2.4	4.338	5.130	7.3	20.7	10 28	23 24.46	-18 48.9	2.197	2.918	15.5	20.5
516179	2016 PG ₉₈		9 19.3 273°50	0°7/19.8 18			390230	2012 XM ₄₅		9 19.3 176°04	4°5/24.4 18		
8 19	0 11.71	+ 1 21.5	1.786	2.665	13.2	20.9	8 19	0 7.97	+14 52.7	1.987	2.812	14.3	21.1
8 29	0 5.73	+ 1 15.3	1.706	2.651	9.6	20.6	8 29	0 2.87	+14 33.5	1.912	2.813	11.3	21.0
9 8	23 57.74	+ 0 58.2	1.649	2.636	5.4	20.3	9 8	23 56.08	+13 52.8	1.859	2.813	8.1	20.8
9 18	23 48.45	+ 0 33.3	1.618	2.622	1.1	20.0	9 18	23 48.28	+12 52.2	1.831	2.814	5.2	20.6
9 28	23 38.88	+ 0 5.3	1.615	2.607	3.9	20.2	9 28	23 40.35	+11 36.3	1.830	2.814	4.8	20.6
10 8	23 30.10	- 0 20.3	1.639	2.592	8.3	20.4	10 8	23 33.19	+10 12.4	1.857	2.814	7.2	20.7
10 18	23 23.06	- 0 38.7	1.688	2.577	12.4	20.6	10 18	23 27.57	+ 8 48.3	1.911	2.814	10.4	20.9
10 28	23 18.42	- 0 46.2	1.759	2.562	15.8	20.8	10 28	23 24.05	+ 7 31.2	1.988	2.814	13.4	21.1
462816	2010 RZ ₁₀₂		9 19.3 35°58	1°9/20.7 17			86177	1999 RY ₂₁₅		9 19.3 352°66	0°4/25.4 12 C		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
47254	1999 VO ₆₇	9 19.3 158°43		3°0/22.1 18			107784	2001 FA ₅₁	9 19.3 191°83		2°4/22.4 18		
8 19	0 9.68	+ 9 31.3	1.591	2.451	15.5	19.3	8 19	0 7.49	+10 16.9	2.322	3.162	12.0	20.2
8 29	0 4.34	+ 8 59.6	1.525	2.454	11.8	19.1	8 29	0 2.32	+ 9 33.4	2.243	3.160	9.1	20.0
9 8	23 56.99	+ 8 6.2	1.480	2.456	7.5	18.8	9 8	23 55.73	+ 8 33.2	2.188	3.158	5.9	19.8
9 18	23 48.40	+ 6 54.9	1.461	2.458	3.6	18.6	9 18	23 48.28	+ 7 19.3	2.160	3.156	3.0	19.6
9 28	23 39.69	+ 5 32.5	1.468	2.460	4.2	18.7	9 28	23 40.72	+ 5 56.7	2.161	3.152	3.2	19.6
10 8	23 31.98	+ 4 8.4	1.502	2.462	8.2	18.9	10 8	23 33.79	+ 4 32.1	2.192	3.149	6.3	19.8
10 18	23 26.16	+ 2 51.0	1.561	2.463	12.4	19.2	10 18	23 28.17	+ 3 11.9	2.251	3.144	9.5	20.0
10 28	23 22.85	+ 1 47.5	1.642	2.465	15.9	19.4	10 28	23 24.34	+ 2 1.5	2.334	3.140	12.3	20.2
81097	2000 EE ₁₀₇	9 19.3 66°72		3°0/17.1 18			319893	2006 WB ₁₇₆	9 19.3 238°08		0°5/18.8 18		
8 19	0 13.59	- 6 57.0	1.401	2.305	14.5	18.8	8 19	0 7.08	- 0 17.1	2.122	3.005	11.2	21.4
8 29	0 7.08	- 7 30.8	1.358	2.318	10.2	18.5	8 29	0 2.11	- 0 59.1	2.052	3.001	8.0	21.2
9 8	23 58.40	- 8 8.6	1.338	2.331	5.6	18.3	9 8	23 55.64	- 1 50.4	2.007	2.998	4.3	21.0
9 18	23 48.56	- 8 43.4	1.343	2.344	3.0	18.2	9 18	23 48.27	- 2 46.6	1.990	2.994	0.6	20.7
9 28	23 38.84	- 9 8.3	1.374	2.357	6.3	18.4	9 28	23 40.79	- 3 42.0	2.001	2.991	3.7	20.9
10 8	23 30.46	- 9 18.4	1.431	2.370	10.6	18.7	10 8	23 34.02	- 4 31.0	2.040	2.987	7.4	21.2
10 18	23 24.33	- 9 11.5	1.510	2.383	14.5	19.0	10 18	23 28.62	- 5 9.4	2.105	2.983	10.8	21.4
10 28	23 20.97	- 8 47.5	1.609	2.396	17.7	19.3	10 28	23 25.11	- 5 34.1	2.192	2.979	13.6	21.6
39496	1981 EM ₁₄	9 19.3 55°23		3°1/22.4 18			180387	2003 YQ ₁₆₈	9 19.3 275°34		3°2/16.9 17		
8 19	0 7.65	+ 9 54.9	1.719	2.576	14.7	19.2	8 19	0 12.27	- 6 49.5	1.425	2.330	14.3	20.0
8 29	0 2.80	+ 9 25.6	1.650	2.576	11.2	18.9	8 29	0 6.40	- 7 34.2	1.363	2.323	10.1	19.8
9 8	23 56.11	+ 8 35.9	1.603	2.577	7.3	18.7	9 8	23 58.22	- 8 24.6	1.324	2.316	5.6	19.5
9 18	23 48.31	+ 7 28.9	1.581	2.578	3.7	18.5	9 18	23 48.59	- 9 13.4	1.309	2.309	3.3	19.3
9 28	23 40.37	+ 6 11.0	1.586	2.578	4.0	18.5	9 28	23 38.79	- 9 52.4	1.321	2.302	6.7	19.5
10 8	23 33.31	+ 4 50.4	1.618	2.579	7.7	18.8	10 8	23 30.11	-10 15.1	1.358	2.295	11.2	19.8
10 18	23 27.96	+ 3 35.1	1.676	2.580	11.6	19.0	10 18	23 23.60	-10 18.3	1.417	2.288	15.4	20.0
10 28	23 24.91	+ 2 31.9	1.756	2.580	15.0	19.2	10 28	23 19.93	-10 1.1	1.495	2.281	18.9	20.2
476652	2008 SF ₂₈₃	9 19.3 328°04		3°0/22.0 16			294356	2007 VB ₉₇	9 19.3 342°11		0°7/18.7 18		
8 19	0 4.37	+ 8 59.1	1.346	2.225	16.7	21.3	8 19	0 10.37	- 1 55.1	1.767	2.657	12.8	20.7
8 29	0 0.99	+ 8 27.0	1.269	2.208	12.7	21.0	8 29	0 4.65	- 2 15.7	1.703	2.656	9.1	20.5
9 8	23 55.36	+ 7 29.3	1.212	2.192	8.1	20.7	9 8	23 57.10	- 2 44.4	1.663	2.655	4.9	20.2
9 18	23 48.24	+ 6 9.4	1.178	2.177	3.8	20.4	9 18	23 48.46	- 3 17.0	1.649	2.654	0.8	19.9
9 28	23 40.77	+ 4 35.4	1.168	2.163	4.5	20.4	9 28	23 39.71	- 3 47.9	1.663	2.653	4.2	20.2
10 8	23 34.22	+ 2 58.3	1.184	2.149	9.3	20.6	10 8	23 31.86	- 4 11.9	1.703	2.652	8.5	20.5
10 18	23 29.68	+ 1 29.3	1.222	2.136	14.1	20.9	10 18	23 25.76	- 4 25.0	1.769	2.651	12.3	20.7
10 28	23 27.89	+ 0 17.4	1.281	2.125	18.3	21.1	10 28	23 21.96	- 4 24.8	1.855	2.651	15.4	20.9
174089	2002 GX ₁₃₇	9 19.3 95°80		1°4/21.5 18			518189	2016 OT ₆	9 19.3 238°83		5°7/25.8 18		
8 19	0 4.34	+ 6 10.1	3.246	4.095	8.7	20.3	8 19	0 7.99	+18 16.9	2.121	2.922	14.3	21.6
8 29	23 59.70	+ 5 53.3	3.183	4.108	6.4	20.2	8 29	0 2.92	+18 14.3	2.034	2.914	11.7	21.4
9 8	23 54.14	+ 5 27.9	3.145	4.122	3.9	20.0	9 8	23 56.17	+17 49.6	1.969	2.905	8.9	21.2
9 18	23 48.07	+ 4 55.9	3.136	4.135	1.7	19.9	9 18	23 48.36	+17 3.1	1.928	2.897	6.5	21.0
9 28	23 41.99	+ 4 20.0	3.156	4.148	2.3	19.9	9 28	23 40.31	+15 57.6	1.914	2.888	5.8	21.0
10 8	23 36.38	+ 3 43.6	3.206	4.161	4.6	20.1	10 8	23 32.93	+14 39.2	1.927	2.878	7.5	21.1
10 18	23 31.67	+ 3 9.7	3.284	4.174	7.0	20.3	10 18	23 27.02	+13 15.5	1.967	2.869	10.2	21.2
10 28	23 28.21	+ 2 41.1	3.388	4.186	9.0	20.5	10 28	23 23.15	+11 54.1	2.031	2.859	13.1	21.4
70696	1999 UA ₂₆	9 19.3 69°08		2°6/17.4 18			407252	2009 WA ₂₂₁	9 19.3 307°65		0°8/20.3 17		
8 19	0 14.41	- 7 48.3	1.683	2.578	13.0	18.8	8 19	0 5.11	+ 3 47.1	2.196	3.068	11.3	21.0
8 29	0 7.50	- 8 2.4	1.627	2.583	9.2	18.6	8 29	0 0.73	+ 3 10.8	2.118	3.059	8.2	20.8
9 8	23 58.61	- 8 18.6	1.595	2.587	5.1	18.4	9 8	23 54.91	+ 2 22.4	2.065	3.050	4.7	20.6
9 18	23 48.61	- 8 31.9	1.590	2.591	2.6	18.3	9 18	23 48.20	+ 1 25.3	2.038	3.042	1.2	20.3
9 28	23 38.60	- 8 37.3	1.613	2.595	5.6	18.5	9 28	23 41.35	+ 0 24.7	2.040	3.033	3.1	20.5
10 8	23 29.71	- 8 31.2	1.662	2.599	9.6	18.7	10 8	23 35.12	- 0 33.6	2.070	3.025	6.8	20.7
10 18	23 22.79	- 8 11.8	1.736	2.604	13.2	18.9	10 18	23 30.17	- 1 24.5	2.126	3.016	10.1	20.9
10 28	23 18.39	- 7 38.9	1.831	2.608	16.3	19.2	10 28	23 27.02	- 2 3.8	2.206	3.008	13.1	21.1
381092	2007 BL ₇₇	9 19.3 306°65		3°0/21.5 18			473410	2015 VY ₁₁₆	9 19.3 352°59		2°6/22.4 18		
8 19	0 11.44	+ 6 22.2	1.424	2.300	16.2	20.7	8 19	0 4.65	+ 9 40.1	2.040	2.893	12.9	20.6
8 29	0 5.93	+ 6 32.3	1.351	2.289	12.2	20.5	8 29	0 0.47	+ 9 3.6	1.966	2.891	9.7	20.4
9 8	23 58.04	+ 6 24.7	1.298	2.279	7.7	20.2	9 8	23 54.78	+ 8 9.4	1.916	2.890	6.3	20.2
9 18	23 48.56	+ 6 1.0	1.270	2.269	3.6	19.9	9 18	23 48.19	+ 7 0.8	1.892	2.889	3.1	20.0
9 28	23 38.75	+ 5 26.1	1.267	2.259	4.6	20.0	9 28	23 41.48	+ 5 43.1	1.896	2.888	3.4	20.0
10 8	23 29.94	+ 4 47.2	1.289	2.250	9.2	20.2	10 8	23 35.46	+ 4 23.6	1.927	2.887	6.7	20.2
10 18	23 23.25	+ 4 11.5	1.335	2.241	13.8	20.5	10 18	23 30.84	+ 3 8.8	1.985	2.887	10.2	20.4
10 28	23 19.45	+ 3 45.6	1.401	2.232	17.7	20.7	10 28	23 28.12	+ 2 4.8	2.066	2.887	13.2	20.6
451829	2013 JG ₅	9 19.3 108°61		8°1/ 2.5 18			85294	1994 SO ₉	9 19.3 184°32		0°8/18.5 18		
8 19	0 6.46	+31 22.6	2.524	3.220	14.8	20.6	8 19	0 11.85	- 1 27.6	1.843	2.727	12.6	20.5
8 29	0 1.61	+31 16.5	2.446	3.229	13.0	20.5	8 29	0 5.65	- 2 5.4	1.778	2.728	8.9	20.2
9 8	23 55.34	+30 44.6	2.386	3.238	11.1	20.3	9 8	23 57.63	- 2 52.3	1.737	2.728	4.8	20.0
9 18	23 48.23	+29 45.9	2.349	3.247	9.4	20.2	9 18	23 48.53	- 3 43.3	1.723	2.727	0.9	19.7
9 28	23 41.06	+28 22.5	2.336	3.256	8.3	20.2	9 28	23 39.32	- 4 32.1	1.737	2.726	4.3	20.0
10 8	23 34.61	+26 39.7	2.350	3.264	8.3	20.2	10 8	23 31.01	- 5 12.9	1.780	2.724	8.5	20.2
10 18	23 29.53	+24 44.8	2.390	3.273	9.5	20.3	10 18	23 24.42	- 5 41.2	1.847	2.722	12.2	20.4
10 28	23 26.29	+22 46.2	2.457	3.281	11.2	20.4	10 28	23 20.11	- 5 54.6	1.936	2.719	15.3	20.7
327189	2005 MA ₇	9 19.3 15°59		7°2/13.9 18			441735	2009 BC ₈₉	9 19.3 167°48		1°7/17.5 18		

EPHEMERIDES

9 19.3

9 19.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
47987	2000 <i>YY</i> ₈		9 19.3 336°29	2°1/21.0	18		376543	2013 <i>BB</i> ₂₅		9 19.3 256°51	1°1/17.1	18	
8 19	0 7.73	+ 5 35.4	1.454	2.336	15.5	18.8	8 19	0 0.21	- 5 42.4	4.427	5.313	5.8	20.9
8 29	0 3.18	+ 5 19.4	1.385	2.329	11.5	18.5	8 29	23 56.67	- 6 16.7	4.360	5.312	4.0	20.8
9 8	23 56.48	+ 4 45.0	1.337	2.322	7.0	18.3	9 8	23 52.49	- 6 53.2	4.320	5.311	2.2	20.7
9 18	23 48.40	+ 3 55.8	1.313	2.315	2.6	18.0	9 18	23 47.93	- 7 29.5	4.310	5.310	1.1	20.6
9 28	23 40.10	+ 2 58.4	1.315	2.309	4.2	18.1	9 28	23 43.34	- 8 3.3	4.330	5.310	2.5	20.7
10 8	23 32.77	+ 2 1.0	1.342	2.304	8.9	18.4	10 8	23 39.05	- 8 32.4	4.379	5.309	4.3	20.8
10 18	23 27.40	+ 1 11.3	1.393	2.299	13.3	18.6	10 18	23 35.36	- 8 55.1	4.456	5.308	6.1	20.9
10 28	23 24.67	+ 0 35.3	1.464	2.295	17.1	18.8	10 28	23 32.53	- 9 10.2	4.557	5.307	7.6	21.1
225754	2001 <i>SL</i> ₁₅₉		9 19.3 307°63	2°4/21.4	18		242103	2002 <i>UL</i> ₅₇		9 19.3 33°55	7°2/13.1	18	
8 19	0 8.61	+ 6 46.6	1.472	2.348	15.7	19.9	8 19	0 10.20	- 17 42.7	1.542	2.453	13.1	20.0
8 29	0 3.83	+ 6 28.0	1.399	2.339	11.7	19.7	8 29	0 4.62	- 18 51.1	1.506	2.460	9.9	19.8
9 8	23 56.85	+ 5 49.5	1.347	2.329	7.3	19.4	9 8	23 57.07	- 19 52.2	1.493	2.469	7.5	19.7
9 18	23 48.45	+ 4 54.5	1.320	2.320	3.0	19.1	9 18	23 48.47	- 20 37.4	1.505	2.478	7.5	19.7
9 28	23 39.78	+ 3 49.5	1.318	2.312	4.2	19.2	9 28	23 39.96	- 21 0.0	1.542	2.487	9.8	19.9
10 8	23 32.05	+ 2 43.3	1.342	2.303	8.9	19.5	10 8	23 32.67	- 20 57.2	1.602	2.497	12.8	20.1
10 18	23 26.30	+ 1 44.2	1.389	2.295	13.4	19.7	10 18	23 27.40	- 20 29.7	1.684	2.507	15.7	20.3
10 28	23 23.23	+ 0 58.8	1.458	2.287	17.2	19.9	10 28	23 24.66	- 19 40.2	1.783	2.518	18.2	20.5
187807	1999 <i>RM</i> ₁₈₉		9 19.3 0°01	0°7/18.5	18		451172	2009 <i>SY</i> ₂₅₂		9 19.3 274°68	3°9/14.9	18	
8 19	0 3.12	+ 0 59.6	1.601	2.499	13.4	19.4	8 19	0 8.83	- 13 3.9	2.316	3.213	9.8	21.3
8 29	23 59.66	- 0 12.7	1.540	2.497	9.5	19.1	8 29	0 3.26	- 13 44.2	2.253	3.206	7.1	21.1
9 8	23 54.43	- 1 39.5	1.502	2.495	5.0	18.9	9 8	23 56.25	- 14 23.2	2.215	3.199	4.7	21.0
9 18	23 48.16	- 3 13.7	1.490	2.495	0.8	18.6	9 18	23 48.39	- 14 55.9	2.205	3.192	4.1	20.9
9 28	23 41.77	- 4 46.1	1.505	2.495	4.6	18.9	9 28	23 40.45	- 15 17.5	2.223	3.184	6.1	21.0
10 8	23 36.26	- 6 7.7	1.546	2.497	9.0	19.1	10 8	23 33.22	- 15 24.8	2.268	3.177	8.9	21.2
10 18	23 32.40	- 7 12.0	1.611	2.499	12.9	19.4	10 18	23 27.35	- 15 16.5	2.338	3.170	11.6	21.4
10 28	23 30.74	- 7 55.1	1.696	2.502	16.2	19.6	10 28	23 23.32	- 14 52.7	2.429	3.163	13.9	21.5
52442	1994 <i>SF</i> ₁₀		9 19.3 334°14	1°3/18.4	18		439768	2015 <i>GP</i> ₅		9 19.3 95°65	5°7/14.7	17	
8 19	0 7.69	- 2 14.0	1.142	2.056	16.3	18.2	8 19	0 14.85	- 15 40.3	1.711	2.610	12.6	20.5
8 29	0 3.62	- 2 40.9	1.077	2.041	11.6	17.9	8 29	0 7.68	- 16 26.4	1.673	2.625	9.2	20.3
9 8	23 56.92	- 3 20.6	1.031	2.026	6.3	17.6	9 8	23 58.65	- 17 7.0	1.660	2.639	6.4	20.2
9 18	23 48.47	- 4 6.7	1.008	2.012	1.3	17.2	9 18	23 48.67	- 17 35.3	1.673	2.654	5.9	20.2
9 28	23 39.67	- 4 50.0	1.008	1.999	5.9	17.5	9 28	23 38.85	- 17 45.9	1.712	2.668	8.1	20.4
10 8	23 32.04	- 5 21.8	1.031	1.988	11.6	17.8	10 8	23 30.28	- 17 36.3	1.778	2.682	11.2	20.6
10 18	23 26.80	- 5 35.9	1.075	1.978	16.6	18.0	10 18	23 23.72	- 17 7.0	1.866	2.695	14.2	20.8
10 28	23 24.75	- 5 29.0	1.136	1.969	20.9	18.3	10 28	23 19.65	- 16 20.1	1.974	2.708	16.6	21.0
36020	1999 <i>NL</i> ₄₈		9 19.3 18°90	0°4/18.9	18		479937	2014 <i>HH</i> ₁₄₂		9 19.3 206°09	1°4/20.7	18	
8 19	0 4.59	+ 1 47.0	1.792	2.681	12.7	18.6	8 19	0 8.47	+ 4 48.4	1.994	2.861	12.5	21.9
8 29	0 0.52	+ 0 38.0	1.732	2.684	9.0	18.3	8 29	0 3.19	+ 4 23.2	1.922	2.860	9.2	21.7
9 8	23 54.83	- 0 44.5	1.696	2.687	4.8	18.1	9 8	23 56.29	+ 3 44.5	1.875	2.858	5.4	21.5
9 18	23 48.20	- 2 14.1	1.686	2.691	0.5	17.8	9 18	23 48.41	+ 2 55.8	1.854	2.857	1.8	21.2
9 28	23 41.50	- 3 42.9	1.705	2.695	4.0	18.1	9 28	23 40.39	+ 2 2.1	1.862	2.855	3.3	21.4
10 8	23 35.62	- 5 2.7	1.750	2.700	8.2	18.3	10 8	23 33.13	+ 1 9.6	1.897	2.853	7.2	21.6
10 18	23 31.28	- 6 7.7	1.820	2.705	11.9	18.6	10 18	23 27.38	+ 0 23.7	1.958	2.851	10.8	21.8
10 28	23 28.99	- 6 54.0	1.912	2.710	14.9	18.8	10 28	23 23.67	- 0 11.2	2.042	2.848	13.8	22.0
258582	2002 <i>CC</i> ₁₆₄		9 19.3 171°63	3°6/24.0	18		304224	2006 <i>QP</i> ₁₆₂		9 19.3 328°88	2°9/22.1	17	
8 19	0 7.65	+ 13 29.6	2.620	3.437	11.4	21.2	8 19	0 3.86	+ 8 53.2	1.489	2.364	15.6	20.5
8 29	0 2.32	+ 13 22.8	2.542	3.439	9.0	21.0	8 29	0 0.49	+ 8 21.4	1.407	2.344	11.9	20.2
9 8	23 55.70	+ 13 0.7	2.488	3.442	6.4	20.9	9 8	23 55.08	+ 7 26.3	1.346	2.326	7.6	19.9
9 18	23 48.30	+ 12 24.6	2.461	3.443	4.2	20.7	9 18	23 48.29	+ 6 10.8	1.309	2.308	3.6	19.6
9 28	23 40.81	+ 11 37.6	2.462	3.445	3.9	20.7	9 28	23 41.16	+ 4 42.2	1.297	2.291	4.2	19.6
10 8	23 33.90	+ 10 44.0	2.493	3.446	5.9	20.8	10 8	23 34.85	+ 3 10.2	1.310	2.275	8.7	19.9
10 18	23 28.16	+ 9 48.9	2.551	3.447	8.4	21.0	10 18	23 30.34	+ 1 45.0	1.348	2.259	13.2	20.1
10 28	23 24.06	+ 8 57.3	2.634	3.447	10.9	21.2	10 28	23 28.37	+ 0 35.0	1.406	2.245	17.2	20.3
495309	2014 <i>DU</i> ₁₁₂		9 19.3 43°24	5°4/13.7	17		514974	2009 <i>CH</i> ₆₂		9 19.3 247°09	0°4/19.7	18	
8 19	0 3.80	+ 0 28.1	0.847	1.774	19.0	20.0	8 19	0 8.34	+ 2 29.0	2.110	2.983	11.7	22.5
8 29	0 1.08	- 3 45.3	0.807	1.781	12.9	19.6	8 29	0 3.12	+ 1 50.0	2.027	2.969	8.5	22.3
9 8	23 55.54	- 8 27.2	0.790	1.787	7.0	19.4	9 8	23 56.29	+ 0 58.8	1.968	2.955	4.8	22.0
9 18	23 48.29	- 13 7.3	0.799	1.795	6.3	19.4	9 18	23 48.42	- 0 0.5	1.937	2.941	0.8	21.7
9 28	23 41.00	- 17 13.1	0.832	1.803	11.7	19.7	9 28	23 40.34	- 1 2.6	1.934	2.926	3.4	21.9
10 8	23 35.29	- 20 22.6	0.888	1.811	17.3	20.0	10 8	23 32.90	- 2 1.1	1.960	2.911	7.4	22.1
10 18	23 32.32	- 22 29.1	0.962	1.820	22.1	20.4	10 18	23 26.86	- 2 50.8	2.012	2.895	11.0	22.3
10 28	23 32.67	- 23 36.7	1.051	1.829	25.8	20.7	10 28	23 22.79	- 3 27.6	2.087	2.880	14.0	22.5
117807	2005 <i>GC</i> ₁₇₅		9 19.3 151°58	2°1/21.5	18		1816	<i>Liberia</i>		9 19.3 238°28	5°2/12.9	18	
8 19	0 8.35	+ 7 10.3	2.001	2.860	12.8	19.8	8 19	0 9.05	- 9 41.7	1.816	2.720	11.8	16.1
8 29	0 3.08	+ 6 45.8	1.933	2.863	9.6	19.6	8 29	0 3.89	- 12 5.1	1.747	2.705	8.4	15.9
9 8	23 56.21	+ 6 6.0	1.887	2.866	5.9	19.4	9 8	23 56.82	- 14 35.5	1.705	2.690	5.6	15.7
9 18	23 48.37	+ 5 14.1	1.869	2.868	2.5	19.2	9 18	23 48.50	- 17 1.7	1.692	2.674	5.7	15.6
9 28	23 40.44	+ 4 15.2	1.878	2.871	3.4	19.3	9 28	23 39.88	- 19 11.7	1.707	2.658	8.6	15.8
10 8	23 33.29	+ 3 15.7	1.915	2.873	7.0	19.5	10 8	23 32.02	- 20 56.5	1.750	2.641	12.1	16.0
10 18	23 27.64	+ 2 21.3	1.979	2.875	10.5	19.7	10 18	23 25.81	- 22 11.4	1.816	2.623	15.4	16.1
10 28	23 24.03	+ 1 37.1	2.066	2.877	13.5	20.0	10 28	23 21.91	- 22 55.7	1.900	2.604	18.1	16.3
511390	2014 <i>GD</i> ₄₆		9 19.3 218°92	1°3/17.8	18								

EPHEMERIDES

9 19.3

9 19.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
22380	1994 <i>CF</i> ₁₀		9 19.3 331°39	2°9/17.3	18		217692	1999 <i>RZ</i> ₂₁₀		9 19.3 328°41	3°9/22.6	18	
8 19	0 8.37	- 4 51.4	1.106	2.025	16.3	17.6	8 19	0 7.48	+ 9 15.2	1.692	2.553	14.7	19.1
8 29	0 4.17	- 5 34.9	1.044	2.011	11.6	17.3	8 29	0 2.94	+ 9 31.8	1.607	2.533	11.4	18.9
9 8	23 57.25	- 6 29.1	1.002	1.998	6.3	17.0	9 8	23 56.39	+ 9 31.0	1.542	2.514	7.7	18.6
9 18	23 48.56	- 7 25.3	0.983	1.985	2.9	16.8	9 18	23 48.48	+ 9 13.4	1.503	2.496	4.5	18.4
9 28	23 39.55	- 8 13.1	0.987	1.974	7.1	17.0	9 28	23 40.19	+ 8 42.3	1.489	2.478	4.7	18.3
10 8	23 31.78	- 8 43.6	1.013	1.963	12.6	17.2	10 8	23 32.63	+ 8 3.5	1.500	2.461	8.2	18.5
10 18	23 26.49	- 8 51.6	1.059	1.954	17.6	17.5	10 18	23 26.77	+ 7 23.5	1.537	2.445	12.1	18.7
10 28	23 24.47	- 8 35.2	1.123	1.946	21.7	17.8	10 28	23 23.34	+ 6 49.2	1.594	2.430	15.7	18.9
482760	2013 <i>GO</i> ₃₈		9 19.3 285°32	4°2/14.7	18		472460	2015 <i>BU</i> ₄₁₃		9 19.3 132°81	1°4/18.1	17	
8 19	0 8.03	- 9 58.6	1.901	2.804	11.3	21.4	8 19	0 12.18	- 2 29.0	1.717	2.607	13.1	22.1
8 29	0 3.14	- 11 17.3	1.820	2.778	8.1	21.2	8 29	0 5.90	- 3 16.0	1.665	2.617	9.2	21.9
9 8	23 56.41	- 12 40.7	1.763	2.752	5.1	21.0	9 8	23 57.77	- 4 11.4	1.636	2.628	4.9	21.7
9 18	23 48.46	- 14 1.1	1.734	2.725	4.5	20.9	9 18	23 48.62	- 5 9.1	1.634	2.637	1.4	21.5
9 28	23 40.18	- 15 10.2	1.733	2.698	7.2	21.0	9 28	23 39.47	- 6 2.3	1.660	2.647	4.8	21.7
10 8	23 32.57	- 16 1.5	1.757	2.670	10.7	21.1	10 8	23 31.36	- 6 44.7	1.713	2.655	8.9	22.0
10 18	23 26.50	- 16 31.1	1.805	2.643	14.2	21.3	10 18	23 25.10	- 7 12.4	1.791	2.664	12.6	22.2
10 28	23 22.64	- 16 37.7	1.872	2.615	17.1	21.5	10 28	23 21.21	- 7 23.4	1.890	2.671	15.7	22.5
487983	2015 <i>TZ</i> ₃₁₉		9 19.3 218°13	2°8/16.2	18		341987	2008 <i>QG</i> ₄₇		9 19.3 26°17	1°2/18.4	17	
8 19	0 9.78	- 9 55.6	2.482	3.373	9.5	21.4	8 19	0 9.13	- 1 53.5	1.236	2.144	15.8	20.3
8 29	0 3.84	- 10 26.3	2.415	3.368	6.7	21.3	8 29	0 4.22	- 2 28.7	1.191	2.152	11.1	20.0
9 8	23 56.55	- 10 57.6	2.374	3.363	4.0	21.1	9 8	23 57.03	- 3 15.3	1.166	2.160	5.9	19.8
9 18	23 48.46	- 11 25.3	2.362	3.357	2.9	21.0	9 18	23 48.54	- 4 6.0	1.166	2.170	1.2	19.5
9 28	23 40.29	- 11 45.4	2.380	3.352	4.9	21.1	9 28	23 40.08	- 4 52.5	1.190	2.181	5.4	19.8
10 8	23 32.79	- 11 54.5	2.425	3.346	7.8	21.3	10 8	23 32.93	- 5 27.1	1.238	2.192	10.4	20.1
10 18	23 26.57	- 11 51.1	2.496	3.340	10.5	21.5	10 18	23 28.05	- 5 45.1	1.309	2.204	14.8	20.4
10 28	23 22.10	- 11 34.5	2.590	3.333	12.9	21.6	10 28	23 25.99	- 5 44.3	1.398	2.216	18.4	20.7
324378	2006 <i>RO</i> ₃₃		9 19.3 38°79	1°5/20.4	17		2254	Requiem		9 19.3 355°80	1°7/20.4	18	A
8 19	0 9.86	+ 4 11.0	1.043	1.944	18.6	20.5	8 19	0 10.54	+ 2 26.9	1.102	2.004	17.8	15.0
8 29	0 4.92	+ 3 44.8	1.006	1.960	13.5	20.3	8 29	0 5.65	+ 2 39.7	1.045	2.000	13.1	14.8
9 8	23 57.43	+ 2 58.0	0.988	1.977	7.8	20.0	9 8	23 58.03	+ 2 36.2	1.007	1.997	7.6	14.5
9 18	23 48.56	+ 1 57.0	0.992	1.995	2.1	19.7	9 18	23 48.69	+ 2 19.5	0.991	1.994	2.3	14.1
9 28	23 39.83	+ 0 52.1	1.019	2.014	4.8	20.0	9 28	23 39.11	+ 1 56.0	0.998	1.993	4.9	14.3
10 8	23 32.68	- 0 6.5	1.070	2.033	10.3	20.3	10 8	23 30.89	+ 1 33.5	1.029	1.993	10.5	14.6
10 18	23 28.11	- 0 50.6	1.142	2.053	15.1	20.7	10 18	23 25.23	+ 1 18.8	1.081	1.994	15.6	14.9
10 28	23 26.64	- 1 15.7	1.233	2.074	19.0	21.0	10 28	23 22.87	+ 1 17.1	1.151	1.996	19.8	15.2
484226	2007 <i>DD</i> ₁₁₇		9 19.3 164°17	1°8/16.8	18		439278	2012 <i>UH</i> ₆₄		9 19.3 239°86	0°2/19.6	18	
8 19	0 5.51	- 4 27.3	2.622	3.510	9.2	21.6	8 19	0 7.89	+ 2 40.1	2.033	2.908	12.0	21.8
8 29	0 0.76	- 5 38.3	2.560	3.514	6.4	21.5	8 29	0 2.85	+ 1 48.4	1.953	2.897	8.7	21.6
9 8	23 54.85	- 6 54.6	2.526	3.517	3.4	21.3	9 8	23 56.17	+ 0 43.3	1.898	2.886	4.8	21.3
9 18	23 48.26	- 8 11.2	2.520	3.520	1.8	21.2	9 18	23 48.46	- 0 30.4	1.870	2.874	0.7	21.0
9 28	23 41.62	- 9 22.5	2.545	3.523	4.1	21.3	9 28	23 40.55	- 1 46.4	1.870	2.862	3.6	21.2
10 8	23 35.55	- 10 23.8	2.598	3.526	7.0	21.5	10 8	23 33.32	- 2 57.8	1.899	2.849	7.6	21.4
10 18	23 30.59	- 11 11.8	2.678	3.528	9.7	21.7	10 18	23 27.52	- 3 58.5	1.954	2.836	11.3	21.6
10 28	23 27.17	- 11 44.5	2.780	3.530	12.0	21.9	10 28	23 23.74	- 4 44.3	2.031	2.823	14.4	21.8
222195	2000 <i>DW</i> ₅₆		9 19.3 225°39	0°3/18.9	18		93866	2000 <i>WK</i> ₁₁₅		9 19.3 300°00	5°5/25.4	18	
8 19	0 5.54	- 0 1.5	2.690	3.566	9.4	21.0	8 19	0 7.92	+ 16 53.8	2.150	2.958	13.9	19.5
8 29	0 0.82	- 0 45.7	2.613	3.559	6.6	20.8	8 29	0 2.86	+ 17 6.2	2.070	2.954	11.3	19.3
9 8	23 54.90	- 1 37.9	2.562	3.552	3.6	20.6	9 8	23 56.17	+ 16 58.9	2.011	2.951	8.5	19.2
9 18	23 48.27	- 2 34.2	2.539	3.544	0.4	20.4	9 18	23 48.46	+ 16 31.8	1.977	2.948	6.2	19.0
9 28	23 41.53	- 3 30.4	2.546	3.536	3.0	20.6	9 28	23 40.56	+ 15 47.5	1.970	2.944	5.6	19.0
10 8	23 35.30	- 4 21.7	2.582	3.527	6.2	20.8	10 8	23 33.33	+ 14 51.2	1.990	2.941	7.3	19.1
10 18	23 30.14	- 5 4.5	2.646	3.519	9.0	21.0	10 18	23 27.53	+ 13 49.3	2.037	2.938	10.0	19.2
10 28	23 26.48	- 5 35.9	2.733	3.510	11.5	21.1	10 28	23 23.74	+ 12 48.6	2.107	2.935	12.7	19.4
504348	2007 <i>TG</i> ₃₁₆		9 19.3 21°69	6°8/15.7	17		20947	Polyneikes		9 19.3 271°84	0°5/18.4	18	
8 19	0 11.37	- 12 46.0	0.836	1.770	18.4	19.6	8 19	0 1.19	- 2 30.5	4.197	5.074	6.3	19.0
8 29	0 6.35	- 13 26.0	0.809	1.780	13.3	19.4	8 29	23 57.41	- 2 56.3	4.125	5.072	4.4	18.9
9 8	23 58.31	- 14 1.8	0.799	1.791	8.5	19.2	9 8	23 52.94	- 3 25.5	4.080	5.070	2.3	18.7
9 18	23 48.66	- 14 22.4	0.810	1.804	7.0	19.1	9 18	23 48.06	- 3 56.2	4.064	5.069	0.5	18.6
9 28	23 39.32	- 14 19.2	0.841	1.818	10.3	19.4	9 28	23 43.15	- 4 25.8	4.079	5.067	2.1	18.7
10 8	23 31.99	- 13 49.0	0.893	1.834	15.0	19.7	10 8	23 38.54	- 4 52.2	4.124	5.065	4.2	18.9
10 18	23 27.72	- 12 53.8	0.963	1.851	19.4	20.0	10 18	23 34.58	- 5 13.4	4.196	5.063	6.1	19.0
10 28	23 26.99	- 11 37.6	1.048	1.870	23.0	20.4	10 28	23 31.55	- 5 27.9	4.294	5.061	7.8	19.1
101116	1998 <i>RD</i> ₅₂		9 19.3 7°92	2°7/16.9	18		357155	2002 <i>CE</i> ₃₁		9 19.3 150°87	0°8/20.2	18	
8 19	0 7.17	- 5 3.7	1.435	2.344	13.9	19.2	8 19	0 10.51	+ 2 0.8	2.288	3.155	11.1	20.4
8 29	0 2.67	- 6 1.2	1.382	2.345	9.7	19.0	8 29	0 4.45	+ 1 56.1	2.220	3.159	8.1	20.2
9 8	23 56.15	- 7 6.4	1.352	2.346	5.3	18.7	9 8	23 56.93	+ 1 42.6	2.177	3.162	4.6	20.0
9 18	23 48.43	- 8 11.5	1.347	2.348	2.8	18.6	9 18	23 48.55	+ 1 22.8	2.161	3.165	1.1	19.7
9 28	23 40.64	- 9 7.8	1.368	2.351	6.2	18.8	9 28	23 40.09	+ 1 0.4	2.175	3.168	3.0	19.9
10 8	23 33.93	- 9 48.3	1.413	2.355	10.5	19.1	10 8	23 32.35	+ 0 39.3	2.218	3.170	6.6	20.1
10 18	23 29.18	- 10 9.1	1.481	2.359	14.5	19.3	10 18	23 25.98	+ 0 23.1	2.288	3.173	9.8	20.3
10 28	23 26.96	- 10 8.6	1.568	2.363	17.8	19.6	10 28	23 21.49	+ 0 14.7	2.381	3.175	12.5	20.5
183854	2004 <i>CG</i> ₂		9 19.3 157°00	1°9/17.5	18		101412	1998					

EPHEMERIDES

9 19.3

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
84473	2002 <i>TP</i> ₂₆₁		9 19.3 81°65	4.4/15.6	18		474868	2005 <i>SE</i> ₁₃₉		9 19.4 302°38	1°0/18.5	18	
8 19	0 10.78	- 8 59.8	1.450	2.359	13.8	18.9	8 19	0 8.29	- 0 31.5	1.413	2.313	14.7	21.5
8 29	0 5.18	-10 11.8	1.405	2.366	9.7	18.6	8 29	0 3.80	- 1 19.5	1.335	2.293	10.5	21.2
9 8	23 57.49	-11 26.8	1.382	2.373	5.8	18.4	9 8	23 56.99	- 2 22.4	1.279	2.272	5.7	20.9
9 18	23 48.61	-12 35.7	1.385	2.380	4.5	18.4	9 18	23 48.63	- 3 34.1	1.248	2.252	1.0	20.5
9 28	23 39.75	-13 29.8	1.414	2.386	7.6	18.6	9 28	23 39.86	- 4 45.4	1.242	2.232	5.3	20.7
10 8	23 32.08	-14 2.9	1.468	2.393	11.5	18.8	10 8	23 31.99	- 5 47.0	1.261	2.212	10.5	21.0
10 18	23 26.50	-14 12.8	1.543	2.400	15.2	19.1	10 18	23 26.11	- 6 31.7	1.302	2.193	15.2	21.2
10 28	23 23.55	-14 0.0	1.638	2.407	18.2	19.3	10 28	23 23.03	- 6 55.0	1.363	2.174	19.2	21.4
102441	1999 <i>TX</i> ₂₁₃		9 19.3 307°62	0.4/19.7	18		220168	2002 <i>TL</i> ₂₈₂		9 19.4 290°51	4°5/23.2	18	
8 19	0 6.93	+ 2 32.2	1.535	2.425	14.3	20.1	8 19	0 9.04	+11 41.8	1.486	2.342	16.7	20.2
8 29	0 2.71	+ 1 51.3	1.449	2.400	10.5	19.8	8 29	0 4.25	+11 35.0	1.408	2.331	13.0	19.9
9 8	23 56.35	+ 0 53.3	1.385	2.375	5.9	19.5	9 8	23 57.20	+11 4.0	1.350	2.319	8.9	19.7
9 18	23 48.51	- 0 17.2	1.346	2.350	0.9	19.0	9 18	23 48.65	+10 10.2	1.316	2.308	5.3	19.4
9 28	23 40.24	- 1 32.4	1.333	2.326	4.4	19.2	9 28	23 39.75	+ 8 59.0	1.307	2.297	5.2	19.4
10 8	23 32.73	- 2 43.2	1.345	2.301	9.4	19.5	10 8	23 31.76	+ 7 39.2	1.323	2.285	8.9	19.6
10 18	23 27.04	- 3 41.5	1.381	2.277	14.1	19.7	10 18	23 25.76	+ 6 20.7	1.364	2.274	13.2	19.8
10 28	23 23.94	- 4 21.6	1.437	2.254	18.1	19.9	10 28	23 22.49	+ 5 12.5	1.425	2.263	17.1	20.0
451610	2012 <i>DW</i> ₂₄		9 19.3 170°85	2°6/16.2	18		94593	2001 <i>VX</i> ₆₁		9 19.4 327°59	0°5/19.6	18	
8 19	0 8.60	- 9 24.9	2.601	3.491	9.1	21.3	8 19	0 11.63	+ 0 50.1	1.121	2.025	17.4	18.6
8 29	0 2.94	- 9 57.8	2.540	3.493	6.4	21.1	8 29	0 6.50	+ 0 41.0	1.059	2.016	12.7	18.3
9 8	23 56.04	-10 31.6	2.506	3.495	3.8	21.0	9 8	23 58.57	+ 0 16.2	1.016	2.008	7.1	18.0
9 18	23 48.44	-11 2.3	2.500	3.496	2.7	20.9	9 18	23 48.82	- 0 19.3	0.996	2.000	1.1	17.6
9 28	23 40.81	-11 25.9	2.524	3.497	4.6	21.0	9 28	23 38.74	- 0 57.8	0.999	1.993	5.2	17.8
10 8	23 33.81	-11 39.2	2.576	3.498	7.4	21.2	10 8	23 29.97	- 1 30.6	1.026	1.987	11.1	18.1
10 18	23 28.02	-11 40.6	2.654	3.498	10.0	21.4	10 18	23 23.77	- 1 50.6	1.074	1.981	16.3	18.4
10 28	23 23.87	-11 29.5	2.754	3.498	12.2	21.6	10 28	23 20.93	- 1 53.4	1.140	1.976	20.6	18.7
227309	2005 <i>TN</i> ₂₀		9 19.3 270°95	0°5/19.8	18		483310	2015 <i>VY</i> ₆₆		9 19.4 91°25	5°4/13.9	18	
8 19	0 10.81	+ 2 1.2	1.648	2.530	14.0	21.4	8 19	0 12.05	-18 30.3	2.285	3.177	10.2	20.7
8 29	0 5.32	+ 1 35.6	1.567	2.513	10.2	21.1	8 29	0 5.46	-19 5.3	2.241	3.185	7.7	20.5
9 8	23 57.70	+ 0 56.0	1.508	2.496	5.7	20.8	9 8	23 57.44	-19 34.0	2.221	3.193	5.8	20.4
9 18	23 48.67	+ 0 6.6	1.475	2.479	1.0	20.5	9 18	23 48.65	-19 51.4	2.230	3.200	5.6	20.4
9 28	23 39.29	- 0 46.4	1.469	2.462	4.1	20.7	9 28	23 39.94	-19 53.5	2.266	3.208	7.3	20.5
10 8	23 30.73	- 1 35.6	1.490	2.444	8.9	20.9	10 8	23 32.12	-19 38.7	2.328	3.215	9.6	20.7
10 18	23 23.99	- 2 14.9	1.535	2.426	13.3	21.1	10 18	23 25.82	-19 7.1	2.415	3.223	12.0	20.9
10 28	23 19.79	- 2 39.4	1.601	2.408	17.0	21.3	10 28	23 21.48	-18 20.3	2.523	3.230	14.0	21.1
392205	2009 <i>SZ</i> ₂₉₉		9 19.3 356°28	1°6/16.4	17		49188	1998 <i>SZ</i> ₇₉		9 19.4 277°34	1°1/20.2	18	
8 19	0 1.25	- 7 47.2	3.866	4.756	6.4	20.7	8 19	0 10.78	+ 3 12.7	1.538	2.420	14.8	19.5
8 29	23 57.51	- 8 21.8	3.802	4.756	4.5	20.6	8 29	0 5.40	+ 2 52.0	1.460	2.406	10.8	19.2
9 8	23 53.01	- 8 57.9	3.765	4.755	2.5	20.4	9 8	23 57.80	+ 2 15.6	1.405	2.392	6.3	18.9
9 18	23 48.09	- 9 32.7	3.757	4.754	1.6	20.4	9 18	23 48.72	+ 1 27.4	1.374	2.378	1.6	18.6
9 28	23 43.13	-10 3.7	3.779	4.754	3.1	20.5	9 28	23 39.31	+ 0 33.9	1.370	2.364	4.2	18.7
10 8	23 38.52	-10 28.4	3.830	4.754	5.1	20.6	10 8	23 30.79	- 0 17.1	1.392	2.349	9.1	19.0
10 18	23 34.62	-10 45.1	3.907	4.753	7.0	20.8	10 18	23 24.22	- 0 58.9	1.439	2.335	13.6	19.2
10 28	23 31.72	-10 52.6	4.009	4.753	8.6	20.9	10 28	23 20.32	- 1 26.1	1.505	2.321	17.5	19.4
51704	2001 <i>KO</i> ₂₆		9 19.3 41°85	1°6/17.9	18		890	Waltraut		9 19.4 100°12	1°3/17.7	18	
8 19	0 9.64	- 3 37.6	1.680	2.577	13.0	18.8	8 19	0 5.82	- 2 4.4	2.156	3.045	10.8	15.5
8 29	0 4.18	- 4 13.0	1.625	2.582	9.1	18.6	8 29	0 1.20	- 3 11.8	2.098	3.051	7.5	15.4
9 8	23 56.90	- 4 55.6	1.594	2.587	4.8	18.4	9 8	23 55.19	- 4 27.2	2.065	3.057	4.0	15.1
9 18	23 48.57	- 5 39.9	1.589	2.593	1.6	18.2	9 18	23 48.39	- 5 45.0	2.060	3.063	1.4	15.0
9 28	23 40.20	- 6 19.3	1.611	2.598	4.9	18.4	9 28	23 41.54	- 6 58.6	2.084	3.069	4.2	15.2
10 8	23 32.83	- 6 48.4	1.660	2.604	9.0	18.7	10 8	23 35.40	- 8 2.2	2.135	3.074	7.7	15.4
10 18	23 27.24	- 7 3.5	1.733	2.610	12.7	18.9	10 18	23 30.59	- 8 51.6	2.213	3.080	10.8	15.6
10 28	23 23.98	- 7 27.7	1.826	2.617	15.8	19.2	10 28	23 27.59	- 9 24.4	2.313	3.085	13.4	15.8
356215	2009 <i>SX</i> ₄₀		9 19.3 236°83	0°7/20.9	18		398442	2011 <i>UZ</i> ₄₇		9 19.4 343°52	2°0/21.1	18	
8 19	0 0.15	+ 4 30.5	4.583	5.435	6.3	21.4	8 19	0 5.42	+ 5 32.8	1.419	2.306	15.5	20.5
8 29	23 56.66	+ 4 7.1	4.503	5.432	4.6	21.2	8 29	0 1.63	+ 5 13.8	1.349	2.295	11.5	20.3
9 8	23 52.54	+ 3 37.8	4.449	5.429	2.7	21.1	9 8	23 55.73	+ 4 35.8	1.300	2.285	7.0	20.0
9 18	23 48.05	+ 3 4.4	4.425	5.426	1.0	21.0	9 18	23 48.47	+ 3 42.6	1.274	2.276	2.6	19.7
9 28	23 43.51	+ 2 28.8	4.431	5.423	1.6	21.0	9 28	23 40.96	+ 2 41.0	1.274	2.268	4.1	19.8
10 8	23 39.24	+ 1 53.3	4.467	5.420	3.5	21.2	10 8	23 34.38	+ 1 39.7	1.298	2.261	8.9	20.0
10 18	23 35.55	+ 1 20.1	4.531	5.417	5.3	21.3	10 18	23 29.72	+ 0 46.8	1.346	2.255	13.4	20.3
10 28	23 32.69	+ 0 51.3	4.622	5.413	6.9	21.4	10 28	23 27.66	+ 0 8.4	1.414	2.251	17.3	20.5
358319	2006 <i>UE</i> ₂₉₀		9 19.4 274°32	0°1/19.3	18		166471	2002 <i>PE</i> ₁₀₉		9 19.4 330°85	4°1/15.3	18	
8 19	0 9.56	- 0 8.8	1.977	2.859	12.0	21.0	8 19	0 8.09	- 9 18.5	1.664	2.572	12.4	19.7
8 29	0 4.01	- 0 28.3	1.907	2.855	8.6	20.8	8 29	0 3.19	-10 27.7	1.608	2.569	8.8	19.5
9 8	23 56.80	- 0 56.7	1.862	2.852	4.7	20.5	9 8	23 56.43	-11 40.2	1.575	2.565	5.3	19.3
9 18	23 48.58	- 1 30.5	1.843	2.848	0.5	20.2	9 18	23 48.55	-12 47.8	1.568	2.562	4.3	19.2
9 28	23 40.22	- 2 4.7	1.853	2.844	3.6	20.5	9 28	23 40.56	-13 42.8	1.588	2.558	7.1	19.4
10 8	23 32.65	- 2 34.1	1.891	2.841	7.6	20.7	10 8	23 33.51	-14 19.1	1.633	2.556	10.8	19.6
10 18	23 26.61	- 2 54.9	1.954	2.837	11.2	20.9	10 18	23 28.23	-14 33.9	1.701	2.553	14.2	19.8
10 28	23 22.65	- 3 3.9	2.039	2.834	14.2	21.1	10 28	23 25.29	-14 27.1	1.788	2.550	17.1	20.0
209956	2006 <i>GH</i> _{2</}												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
130370	2000 <i>GP</i> ₁₂₉		9 19.4 305°06	2°1/21.9	17		154413	2003 <i>BQ</i> ₈		9 19.4 273°99	0°5/19.8	18	
8 19	0 3.99	+ 9 8.4	2.108	2.963	12.4	20.3	8 19	0 9.21	+ 2 59.1	1.610	2.493	14.2	20.6
8 29	0 0.15	+ 8 15.2	2.013	2.941	9.4	20.1	8 29	0 4.24	+ 2 16.4	1.529	2.476	10.3	20.4
9 8	23 54.76	+ 7 3.0	1.941	2.918	6.0	19.8	9 8	23 57.17	+ 1 17.0	1.471	2.459	5.9	20.1
9 18	23 48.37	+ 5 34.9	1.896	2.895	2.6	19.6	9 18	23 48.70	+ 0 5.9	1.438	2.442	1.0	19.7
9 28	23 41.72	+ 3 57.0	1.880	2.873	3.3	19.6	9 28	23 39.89	- 1 9.4	1.432	2.424	4.2	19.9
10 8	23 35.63	+ 2 17.1	1.892	2.851	6.9	19.8	10 8	23 31.90	- 2 20.3	1.452	2.407	9.1	20.1
10 18	23 30.83	+ 0 42.9	1.930	2.829	10.6	20.0	10 18	23 25.72	- 3 19.1	1.497	2.389	13.5	20.3
10 28	23 27.92	- 0 38.8	1.993	2.807	13.8	20.1	10 28	23 22.06	- 4 0.6	1.563	2.371	17.2	20.6
118656	2000 <i>JR</i> ₄₀		9 19.4 22°69	6°2/14.7	18		169485	2002 <i>CS</i> ₁₅₉		9 19.4 34°10	1°1/18.5	17	
8 19	0 10.41	-12 51.0	1.217	2.137	15.1	18.6	8 19	0 10.15	- 0 42.8	1.188	2.094	16.5	19.9
8 29	0 5.21	-13 56.5	1.178	2.142	10.9	18.4	8 29	0 5.13	- 1 32.7	1.138	2.098	11.6	19.6
9 8	23 57.62	-14 59.8	1.161	2.148	7.2	18.2	9 8	23 57.66	- 2 36.9	1.109	2.103	6.2	19.3
9 18	23 48.71	-15 50.8	1.167	2.155	6.5	18.2	9 18	23 48.75	- 3 47.5	1.104	2.108	1.2	19.0
9 28	23 39.87	-16 20.7	1.196	2.163	9.4	18.4	9 28	23 39.79	- 4 54.1	1.123	2.114	5.6	19.3
10 8	23 32.45	-16 24.8	1.249	2.171	13.4	18.6	10 8	23 32.16	- 5 47.5	1.166	2.120	10.9	19.6
10 18	23 27.41	-16 2.9	1.322	2.181	17.1	18.9	10 18	23 26.92	- 6 21.6	1.231	2.126	15.6	19.9
10 28	23 25.30	-15 17.4	1.412	2.190	20.2	19.2	10 28	23 24.67	- 6 33.6	1.315	2.132	19.4	20.2
35068	1989 <i>SF</i> ₄		9 19.4 42°70	3°8/15.8	18		432649	2010 <i>WV</i> ₆₅		9 19.4 301°36	4°8/15.7	18	
8 19	0 10.61	-11 27.5	1.977	2.876	11.2	18.5	8 19	0 10.95	- 9 17.0	1.292	2.206	14.8	21.1
8 29	0 4.67	-12 1.9	1.924	2.880	8.0	18.3	8 29	0 5.92	-10 17.7	1.221	2.184	10.6	20.8
9 8	23 57.11	-12 35.6	1.896	2.884	4.9	18.1	9 8	23 58.27	-11 24.1	1.171	2.162	6.5	20.5
9 18	23 48.65	-13 3.1	1.896	2.888	3.9	18.1	9 18	23 48.85	-12 26.6	1.145	2.141	5.0	20.4
9 28	23 40.18	-13 19.6	1.922	2.892	6.2	18.2	9 28	23 38.99	-13 14.7	1.144	2.119	8.5	20.5
10 8	23 32.62	-13 21.6	1.976	2.896	9.3	18.4	10 8	23 30.19	-13 40.6	1.166	2.098	13.2	20.7
10 18	23 26.68	-13 7.9	2.054	2.901	12.3	18.6	10 18	23 23.68	-13 40.4	1.209	2.077	17.7	20.9
10 28	23 22.83	-12 38.9	2.153	2.905	14.9	18.8	10 28	23 20.29	-13 14.0	1.269	2.057	21.6	21.1
115074	2003 <i>RW</i> ₂₃		9 19.4 313°39	15°0/ 5.2	18		444211	2005 <i>TL</i> ₅₈		9 19.4 314°65	1°2/18.3	17	
8 19	0 4.24	+34 51.4	1.337	2.072	24.1	18.4	8 19	0 7.75	- 2 38.0	1.830	2.724	12.2	21.9
8 29	0 1.52	+35 30.2	1.244	2.047	22.1	18.2	8 29	0 2.93	- 3 10.3	1.755	2.710	8.6	21.7
9 8	23 56.06	+35 24.6	1.164	2.023	19.7	18.0	9 8	23 56.33	- 3 51.0	1.704	2.696	4.6	21.4
9 18	23 48.57	+34 25.5	1.100	2.000	17.3	17.7	9 18	23 48.59	- 4 35.3	1.678	2.682	1.2	21.1
9 28	23 40.40	+32 28.7	1.053	1.977	15.5	17.5	9 28	23 40.64	- 5 17.2	1.681	2.669	4.5	21.4
10 8	23 33.20	+29 39.2	1.027	1.954	15.1	17.4	10 8	23 33.44	- 5 51.0	1.709	2.656	8.6	21.6
10 18	23 28.43	+26 11.4	1.023	1.933	16.6	17.5	10 18	23 27.82	- 6 12.2	1.763	2.643	12.4	21.8
10 28	23 27.11	+22 26.7	1.040	1.912	19.4	17.6	10 28	23 24.39	- 6 18.2	1.837	2.631	15.6	22.0
323526	2004 <i>RO</i> ₁₃₅		9 19.4 293°08	0°2/19.2	17		395017	2009 <i>CJ</i> ₂		9 19.4 219°37	5°6/12.6	18	
8 19	0 10.21	- 1 6.4	2.094	2.975	11.5	21.0	8 19	0 8.31	-15 2.3	2.057	2.959	10.6	21.0
8 29	0 4.56	- 1 16.0	2.005	2.953	8.2	20.7	8 29	0 3.14	-16 35.4	2.001	2.954	7.9	20.8
9 8	23 57.19	- 1 33.3	1.941	2.931	4.5	20.5	9 8	23 56.35	-18 6.9	1.971	2.948	5.8	20.7
9 18	23 48.68	- 1 55.1	1.904	2.908	0.5	20.1	9 18	23 48.59	-19 28.7	1.969	2.942	5.9	20.7
9 28	23 39.87	- 2 17.2	1.895	2.886	3.7	20.3	9 28	23 40.72	-20 33.7	1.994	2.936	8.1	20.8
10 8	23 31.68	- 2 35.2	1.915	2.864	7.6	20.5	10 8	23 33.61	-21 17.1	2.045	2.929	10.9	21.0
10 18	23 24.92	- 2 45.4	1.960	2.841	11.3	20.7	10 18	23 28.01	-21 37.2	2.118	2.922	13.6	21.1
10 28	23 20.22	- 2 44.9	2.028	2.819	14.4	20.9	10 28	23 24.43	-21 34.4	2.211	2.915	15.9	21.3
210112	2006 <i>QB</i> ₁₆₈		9 19.4 357°34	2°2/17.4	18		352406	2007 <i>XG</i> ₃₀		9 19.4 294°57	7°8/11.4	18	
8 19	0 9.43	- 5 31.1	1.654	2.555	12.9	19.8	8 19	0 10.20	-20 47.1	1.792	2.694	12.0	20.4
8 29	0 4.14	- 6 6.0	1.595	2.554	9.0	19.6	8 29	0 4.69	-22 5.4	1.741	2.685	9.5	20.3
9 8	23 56.96	- 6 46.5	1.560	2.553	4.9	19.3	9 8	23 57.27	-23 15.8	1.713	2.677	7.9	20.2
9 18	23 48.65	- 7 26.8	1.550	2.552	2.3	19.1	9 18	23 48.71	-24 9.7	1.712	2.669	8.2	20.2
9 28	23 40.26	- 8 0.5	1.567	2.552	5.4	19.4	9 28	23 40.07	-24 40.4	1.735	2.660	10.3	20.3
10 8	23 32.84	- 8 22.2	1.611	2.552	9.5	19.6	10 8	23 32.39	-24 44.4	1.782	2.652	13.0	20.4
10 18	23 27.21	- 8 28.6	1.677	2.552	13.2	19.8	10 18	23 26.53	-24 22.1	1.850	2.644	15.6	20.6
10 28	23 23.97	- 8 18.5	1.765	2.553	16.4	20.0	10 28	23 23.06	-23 35.9	1.936	2.636	18.0	20.8
228128	2009 <i>PN</i> ₈		9 19.4 19°65	2°5/17.6	18		501569	2014 <i>OE</i> ₅		9 19.4 47°55	12°3/26.7	17	
8 19	0 5.98	- 3 7.5	0.943	1.869	17.7	19.0	8 19	0 18.90	+20 50.4	1.109	1.930	23.3	21.4
8 29	0 2.41	- 4 4.9	0.908	1.878	12.3	18.7	8 29	0 12.06	+22 40.1	1.053	1.935	19.8	21.1
9 8	23 56.22	- 5 14.5	0.892	1.888	6.5	18.4	9 8	0 1.83	+23 56.8	1.014	1.940	16.2	20.9
9 18	23 48.56	- 6 25.7	0.897	1.900	2.5	18.2	9 18	23 49.31	+24 33.0	0.994	1.946	13.3	20.8
9 28	23 40.99	- 7 26.6	0.925	1.914	6.9	18.6	9 28	23 36.34	+24 26.9	0.995	1.951	12.4	20.8
10 8	23 34.98	- 8 7.7	0.974	1.929	12.3	18.9	10 8	23 24.91	+23 45.4	1.018	1.957	13.9	20.9
10 18	23 31.54	- 8 24.5	1.043	1.946	17.1	19.2	10 18	23 16.60	+22 41.1	1.062	1.964	16.9	21.1
10 28	23 31.19	- 8 16.2	1.130	1.963	20.9	19.6	10 28	23 12.32	+21 29.0	1.124	1.970	20.1	21.3
259739	2003 <i>YT</i> ₁₅₀		9 19.4 211°67	1°6/17.9	18		508773	1998 <i>WQ</i> ₃₉		9 19.4 306°65	5°1/15.4	18	
8 19	0 14.10	- 4 13.6	1.992	2.875	11.9	20.8	8 19	0 11.71	-11 11.9	1.395	2.306	14.1	21.4
8 29	0 7.29	- 4 47.3	1.917	2.867	8.4	20.6	8 29	0 6.17	-12 6.1	1.334	2.295	10.2	21.2
9 8	23 58.65	- 5 27.2	1.868	2.859	4.5	20.3	9 8	23 58.25	-13 1.6	1.295	2.284	6.4	20.9
9 18	23 48.87	- 6 8.6	1.847	2.850	1.6	20.1	9 18	23 48.85	-13 49.7	1.281	2.274	5.3	20.9
9 28	23 38.90	- 6 45.6	1.855	2.840	4.6	20.3	9 28	23 39.25	-14 21.7	1.293	2.264	8.3	21.0
10 8	23 29.75	- 7 13.4	1.891	2.829	8.6	20.5	10 8	23 30.78	-14 32.1	1.328	2.254	12.5	21.2
10 18	23 22.23	- 7 28.4	1.953	2.817	12.1	20.7	10 18	23 24.51	-14 18.7	1.385	2.244	16.4	21.4
10 28	23 16.97	- 7 28.9	2.037	2.805	15.2	20.9	10 28	23 21.12	-13 42.5	1.460	2.235	19.8	21.7
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
431334	2006 <i>XL</i> ₄₅	9 19.4 275°24		2°1/21.1 17			373721	2002 <i>RV</i> ₂₈₂	9 19.4 296°24		0°6/19.8 18		
8 19	0 10.41	+ 5 50.9	1.510	2.385	15.4	21.4	8 19	0 9.20	+ 2 41.3	1.406	2.296	15.4	21.0
8 29	0 5.14	+ 5 32.6	1.438	2.378	11.5	21.2	8 29	0 4.51	+ 2 7.6	1.327	2.278	11.2	20.7
9 8	23 57.67	+ 4 56.0	1.387	2.370	7.0	20.9	9 8	23 57.45	+ 1 16.3	1.270	2.259	6.4	20.4
9 18	23 48.79	+ 4 4.5	1.361	2.363	2.6	20.6	9 18	23 48.80	+ 0 12.2	1.237	2.241	1.2	20.0
9 28	23 39.64	+ 3 4.5	1.361	2.355	4.1	20.7	9 28	23 39.73	- 0 56.8	1.229	2.223	4.5	20.2
10 8	23 31.45	+ 2 4.4	1.387	2.347	8.8	21.0	10 8	23 31.58	- 2 1.2	1.247	2.205	9.9	20.4
10 18	23 25.23	+ 1 11.6	1.438	2.339	13.3	21.2	10 18	23 25.46	- 2 53.0	1.288	2.187	14.7	20.7
10 28	23 21.68	+ 0 32.5	1.509	2.332	17.1	21.4	10 28	23 22.17	- 3 26.5	1.349	2.170	18.8	20.9
114842	2003 <i>PF</i> ₁	9 19.4 352°58		4°5/23.9 18			518616	2008 <i>BV</i> ₅₄	9 19.4 88°42		1°1/18.2 18		
8 19	0 7.47	+12 52.5	1.946	2.782	14.1	19.3	8 19	0 7.83	- 1 56.6	1.957	2.847	11.7	21.0
8 29	0 2.67	+13 2.5	1.872	2.780	11.1	19.1	8 29	0 2.79	- 2 43.2	1.896	2.849	8.2	20.8
9 8	23 56.16	+12 53.8	1.819	2.778	7.9	18.9	9 8	23 56.17	- 3 38.2	1.859	2.851	4.4	20.6
9 18	23 48.60	+12 27.3	1.791	2.776	5.2	18.7	9 18	23 48.62	- 4 36.3	1.849	2.853	1.1	20.4
9 28	23 40.85	+11 46.3	1.790	2.774	4.8	18.7	9 28	23 40.99	- 5 31.5	1.867	2.854	4.2	20.6
10 8	23 33.85	+10 56.4	1.816	2.773	7.3	18.8	10 8	23 34.15	- 6 17.9	1.912	2.856	8.0	20.9
10 18	23 28.37	+10 4.0	1.867	2.772	10.5	19.0	10 18	23 28.82	- 6 51.3	1.983	2.858	11.5	21.1
10 28	23 25.00	+ 9 15.6	1.941	2.772	13.5	19.2	10 28	23 25.50	- 7 9.4	2.075	2.860	14.4	21.3
68067	2000 <i>YM</i> ₇₂	9 19.4 221°70		11°3/ 2.7 18			378209	2007 <i>AA</i> ₄	9 19.4 286°58		2°4/21.1 18		
8 19	0 11.27	+32 44.8	2.009	2.706	18.1	19.2	8 19	0 12.95	+ 5 8.6	1.537	2.409	15.3	21.1
8 29	0 5.69	+33 35.4	1.926	2.703	16.3	19.1	8 29	0 7.19	+ 5 13.5	1.445	2.384	11.5	20.8
9 8	23 57.98	+33 56.5	1.860	2.699	14.3	18.9	9 8	23 58.97	+ 5 2.5	1.376	2.358	7.1	20.5
9 18	23 48.84	+33 44.1	1.814	2.695	12.6	18.8	9 18	23 49.00	+ 4 37.2	1.331	2.332	2.9	20.2
9 28	23 39.34	+32 57.4	1.790	2.691	11.5	18.7	9 28	23 38.43	+ 4 2.1	1.312	2.305	4.4	20.2
10 8	23 30.64	+31 40.6	1.790	2.687	11.5	18.7	10 8	23 28.62	+ 3 24.0	1.320	2.279	9.3	20.4
10 18	23 23.77	+30 1.6	1.813	2.682	12.7	18.8	10 18	23 20.77	+ 2 49.8	1.352	2.252	14.0	20.6
10 28	23 19.46	+28 11.0	1.858	2.677	14.5	18.9	10 28	23 15.77	+ 2 25.9	1.404	2.225	18.2	20.8
482183	2010 <i>UY</i> ₃₇	9 19.4 243°53		1°4/20.8 18			517949	2015 <i>TD</i> ₃₀₈	9 19.4 326°96		9°5/ 8.1 18		
8 19	0 9.69	+ 4 8.4	2.227	3.090	11.6	21.5	8 19	0 8.20	-26 37.9	1.857	2.752	12.0	20.8
8 29	0 4.02	+ 4 4.0	2.151	3.085	8.5	21.3	8 29	0 3.30	-28 11.4	1.814	2.742	10.2	20.6
9 8	23 56.82	+ 3 48.9	2.098	3.080	5.1	21.1	9 8	23 56.53	-29 32.2	1.794	2.733	9.5	20.6
9 18	23 48.69	+ 3 25.4	2.073	3.075	1.8	20.8	9 18	23 48.66	-30 31.5	1.799	2.723	10.2	20.6
9 28	23 40.39	+ 2 56.9	2.077	3.070	3.1	20.9	9 28	23 40.71	-31 2.9	1.827	2.714	12.0	20.7
10 8	23 32.76	+ 2 28.1	2.110	3.065	6.6	21.2	10 8	23 33.71	-31 3.8	1.877	2.706	14.2	20.8
10 18	23 26.51	+ 2 3.1	2.169	3.059	10.0	21.4	10 18	23 28.48	-30 35.5	1.946	2.698	16.4	21.0
10 28	23 22.15	+ 1 45.7	2.251	3.054	12.8	21.5	10 28	23 25.58	-29 41.3	2.032	2.690	18.3	21.1
417611	2006 <i>WY</i> ₂₄	9 19.4 186°20		1°7/16.3 17			244897	2003 <i>WO</i> ₇₂	9 19.4 338°04		9°7/28.9 18		
8 19	0 3.29	- 7 50.7	3.842	4.729	6.6	22.3	8 19	0 6.88	+24 1.6	1.572	2.362	18.9	19.5
8 29	23 58.98	- 8 30.8	3.776	4.729	4.6	22.2	8 29	0 2.79	+24 36.0	1.494	2.353	16.3	19.3
9 8	23 53.87	- 9 12.4	3.738	4.728	2.6	22.0	9 8	23 56.47	+24 39.5	1.434	2.346	13.4	19.1
9 18	23 48.32	- 9 52.7	3.730	4.727	1.7	21.9	9 18	23 48.68	+24 9.2	1.394	2.338	10.9	18.9
9 28	23 42.71	-10 28.9	3.751	4.725	3.2	22.1	9 28	23 40.53	+23 6.5	1.376	2.332	9.7	18.9
10 8	23 37.48	-10 58.3	3.803	4.724	5.2	22.2	10 8	23 33.28	+21 38.1	1.383	2.326	10.6	18.9
10 18	23 32.98	-11 19.3	3.881	4.722	7.2	22.3	10 18	23 27.97	+19 54.5	1.412	2.321	13.0	19.0
10 28	23 29.53	-11 30.7	3.983	4.720	8.8	22.5	10 28	23 25.38	+18 7.9	1.464	2.316	16.0	19.2
96844	1999 <i>RO</i> ₂₀₉	9 19.4 277°64		5°3/23.6 18			124020	2001 <i>FP</i> ₁₀₉	9 19.4 189°45		0°5/18.7 18		
8 19	0 13.69	+12 27.0	1.783	2.617	15.3	19.0	8 19	0 6.79	- 1 8.0	2.630	3.508	9.5	20.6
8 29	0 7.30	+13 6.3	1.706	2.613	12.1	18.8	8 29	0 1.75	- 1 45.2	2.560	3.507	6.7	20.4
9 8	23 58.80	+13 27.4	1.652	2.609	8.7	18.6	9 8	23 55.50	- 2 29.1	2.516	3.506	3.6	20.2
9 18	23 48.94	+13 29.6	1.622	2.605	5.9	18.4	9 18	23 48.54	- 3 16.2	2.500	3.505	0.6	19.9
9 28	23 38.79	+13 14.8	1.619	2.600	5.7	18.4	9 28	23 41.50	- 4 2.3	2.514	3.503	3.1	20.1
10 8	23 29.49	+12 47.8	1.644	2.596	8.3	18.5	10 8	23 35.03	- 4 43.0	2.557	3.501	6.3	20.3
10 18	23 22.02	+12 14.9	1.693	2.593	11.7	18.7	10 18	23 29.67	- 5 15.1	2.627	3.499	9.1	20.5
10 28	23 17.07	+11 43.1	1.765	2.589	14.9	18.9	10 28	23 25.87	- 5 36.2	2.721	3.496	11.6	20.7
161720	2006 <i>QK</i> ₁₂₆	9 19.4 12°97		3°1/16.4 18			84546	2002 <i>UR</i> ₂₉	9 19.4 300°04		4°3/15.6 18		
8 19	0 7.76	- 6 41.5	1.677	2.582	12.5	19.7	8 19	0 8.81	- 7 52.4	1.390	2.303	14.1	19.0
8 29	0 2.93	- 7 42.4	1.623	2.583	8.8	19.5	8 29	0 4.16	- 9 10.3	1.325	2.289	10.0	18.8
9 8	23 56.30	- 8 48.4	1.592	2.585	4.9	19.3	9 8	23 57.21	-10 35.5	1.282	2.275	5.9	18.5
9 18	23 48.62	- 9 52.4	1.588	2.587	3.1	19.2	9 18	23 48.77	-11 58.3	1.265	2.261	4.5	18.4
9 28	23 40.88	-10 46.9	1.610	2.589	6.1	19.4	9 28	23 40.06	-13 8.1	1.272	2.247	7.9	18.5
10 8	23 34.07	-11 25.9	1.658	2.591	9.9	19.6	10 8	23 32.36	-13 56.6	1.304	2.233	12.3	18.8
10 18	23 28.99	-11 46.0	1.730	2.594	13.4	19.8	10 18	23 26.74	-14 19.5	1.357	2.220	16.5	19.0
10 28	23 26.19	-11 46.2	1.821	2.597	16.4	20.1	10 28	23 23.90	-14 15.8	1.427	2.207	20.0	19.2
479712	2014 <i>DZ</i> ₁₂₅	9 19.4 153°70		2°0/20.9 18			320348	2007 <i>TY</i> ₁₈₃	9 19.4 347°14		6°7/14.4 18		
8 19	0 14.24	+ 4 14.9	1.866	2.729	13.4	20.9	8 19	0 7.93	-11 16.7	1.018	1.947	16.4	19.2
8 29	0 7.45	+ 4 29.1	1.798	2.732	9.9	20.7	8 29	0 3.97	-12 42.5	0.971	1.940	11.8	18.9
9 8	23 58.76	+ 4 31.5	1.753	2.734	6.0	20.5	9 8	23 57.23	-14 10.8	0.943	1.934	7.8	18.7
9 18	23 48.93	+ 4 23.8	1.735	2.736	2.4	20.2	9 18	23 48.77	-15 28.5	0.938	1.929	7.1	18.6
9 28	23 38.97	+ 4 9.7	1.745	2.737	3.7	20.3	9 28	23 40.16	-16 22.8	0.954	1.925	10.6	18.8
10 8	23 29.91	+ 3 53.6	1.784	2.739	7.6	20.6	10 8	23 33.00	-16 45.7	0.992	1.922	15.2	19.0
10 18	23 22.61	+ 3 40.1	1.848	2.741	11.3	20.8	10 18	23 28.47	-16 35.5	1.048	1.920	19.6	19.3
10 28	23 17.67	+ 3 33.2	1.935	2.742	14.5	21.0	10 28	23 27.23	-15 54.6	1.119	1.919	23.2	19.6
517275	2014 <i>FF</i> ₇₄	9 19.4 214°75		5°0/14.2 18			493472	2014 <i>WU</i> <					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
400296	2007 <i>TJ</i> ₁₁₉		9 19.4 230°93	5°4/25.6	18		343917	2011 <i>JF</i> ₂₉		9 19.4 48°09	2°6/21.9	18	
8 19	0 8.62	+17 41.8	2.200	3.001	13.8	21.4	8 19	0 7.34	+9 1.0	1.475	2.345	16.0	19.9
8 29	0 3.42	+17 41.0	2.113	2.993	11.3	21.2	8 29	0 2.81	+8 17.3	1.421	2.356	12.0	19.6
9 8	23 56.58	+17 19.3	2.047	2.985	8.5	21.0	9 8	23 56.32	+7 11.5	1.389	2.368	7.5	19.4
9 18	23 48.70	+16 37.1	2.006	2.976	6.2	20.9	9 18	23 48.70	+5 48.6	1.381	2.380	3.3	19.2
9 28	23 40.58	+15 37.1	1.993	2.967	5.5	20.8	9 28	23 41.06	+4 16.9	1.399	2.392	4.0	19.3
10 8	23 33.11	+14 24.9	2.007	2.958	7.2	20.9	10 8	23 34.50	+2 46.6	1.443	2.405	8.3	19.6
10 18	23 27.04	+13 7.6	2.048	2.948	10.0	21.0	10 18	23 29.84	+1 26.3	1.512	2.418	12.4	19.9
10 28	23 22.96	+11 52.4	2.113	2.938	12.7	21.2	10 28	23 27.65	+0 22.7	1.602	2.432	15.9	20.1
218532	2004 <i>TM</i> ₃₅₈		9 19.4 5°20	0°9/20.2	18		490809	2010 <i>VE</i> ₁₁₅		9 19.4 265°54	0°2/19.8	15	
8 19	0 9.71	+1 56.4	1.940	2.816	12.4	19.5	8 19	0 0.53	+1 33.5	4.355	5.220	6.3	21.9
8 29	0 4.17	+1 55.1	1.873	2.816	9.0	19.3	8 29	23 57.02	+1 4.0	4.275	5.214	4.5	21.7
9 8	23 56.96	+1 43.8	1.830	2.817	5.2	19.1	9 8	23 52.85	+0 29.3	4.222	5.208	2.5	21.6
9 18	23 48.74	+1 25.2	1.814	2.818	1.3	18.8	9 18	23 48.27	+0 8.5	4.198	5.202	0.4	21.4
9 28	23 40.42	+1 3.3	1.826	2.819	3.4	19.0	9 28	23 43.65	+0 47.3	4.204	5.196	1.8	21.5
10 8	23 32.90	+0 42.9	1.865	2.820	7.3	19.2	10 8	23 39.30	+1 24.4	4.241	5.190	3.8	21.7
10 18	23 26.95	+0 28.1	1.929	2.822	10.9	19.5	10 18	23 35.56	+1 57.8	4.306	5.184	5.7	21.8
10 28	23 23.10	+0 22.2	2.017	2.824	13.9	19.7	10 28	23 32.69	+2 25.3	4.396	5.178	7.4	21.9
389342	2009 <i>TD</i> ₂₉		9 19.4 324°25	1°4/22.1	15		220685	2004 <i>RG</i> ₂₃₃		9 19.4 353°46	0°4/18.9	18	
8 19	0 1.29	+7 16.6	4.215	5.056	7.0	21.6	8 19	0 6.71	+0 19.5	1.964	2.851	11.8	20.3
8 29	23 57.56	+7 2.2	4.136	5.055	5.2	21.4	8 29	0 2.05	+0 56.4	1.898	2.849	8.4	20.0
9 8	23 53.12	+6 40.6	4.082	5.054	3.3	21.3	9 8	23 55.82	+1 42.8	1.857	2.848	4.5	19.8
9 18	23 48.27	+6 13.1	4.056	5.053	1.6	21.2	9 18	23 48.65	+2 34.3	1.842	2.846	0.6	19.5
9 28	23 43.37	+5 41.9	4.061	5.052	1.9	21.2	9 28	23 41.38	+3 25.1	1.855	2.846	3.8	19.8
10 8	23 38.77	+5 9.4	4.095	5.051	3.7	21.3	10 8	23 34.86	+4 9.4	1.895	2.845	7.7	20.0
10 18	23 34.81	+4 37.9	4.158	5.050	5.6	21.5	10 18	23 29.80	+4 42.8	1.961	2.845	11.2	20.2
10 28	23 31.77	+4 9.8	4.247	5.049	7.3	21.6	10 28	23 26.72	+5 2.3	2.048	2.845	14.1	20.4
461848	2006 <i>ER</i> ₅₀		9 19.4 65°95	3°7/16.3	17		72087	2000 <i>YP</i> ₄₁		9 19.4 280°22	2°3/17.6	18	
8 19	0 10.35	-4 50.0	1.162	2.076	16.1	21.0	8 19	0 11.21	-3 44.1	1.420	2.322	14.5	20.4
8 29	0 5.18	-6 25.5	1.127	2.092	11.2	20.8	8 29	0 5.95	-4 36.5	1.345	2.303	10.3	20.1
9 8	23 57.65	-8 9.6	1.113	2.107	6.1	20.5	9 8	23 58.28	-5 40.0	1.291	2.284	5.6	19.8
9 18	23 48.83	-9 50.5	1.123	2.122	3.8	20.4	9 18	23 48.99	-6 47.6	1.263	2.265	2.3	19.5
9 28	23 40.14	-11 15.9	1.158	2.138	7.6	20.7	9 28	23 39.29	-7 49.8	1.260	2.246	6.1	19.7
10 8	23 32.91	-12 16.9	1.217	2.154	12.3	21.0	10 8	23 30.53	-8 38.2	1.283	2.226	11.2	20.0
10 18	23 28.08	-12 50.0	1.296	2.170	16.4	21.3	10 18	23 23.86	-9 6.8	1.328	2.207	15.7	20.2
10 28	23 26.16	-12 55.4	1.394	2.186	19.8	21.6	10 28	23 20.07	-9 13.1	1.391	2.187	19.6	20.4
22248	5029 <i>T</i> ₃		9 19.4 82°36	3°2/15.5	18		325630	2009 <i>SY</i> ₂₇₈		9 19.4 156°72	0°9/18.3	18	
8 19	0 6.30	-8 32.8	2.164	3.064	10.3	18.5	8 19	0 6.54	+1 58.5	2.389	3.273	10.1	20.9
8 29	0 1.61	-9 43.0	2.109	3.066	7.2	18.3	8 29	0 1.68	+2 41.7	2.324	3.275	7.1	20.7
9 8	23 55.50	-10 56.0	2.079	3.069	4.3	18.1	9 8	23 55.53	+3 31.7	2.285	3.276	3.8	20.5
9 18	23 48.58	-12 5.6	2.078	3.072	3.4	18.1	9 18	23 48.62	+4 24.4	2.274	3.278	0.9	20.3
9 28	23 41.60	-13 5.5	2.104	3.074	5.7	18.2	9 28	23 41.64	+5 14.9	2.291	3.279	3.6	20.5
10 8	23 35.35	-13 50.9	2.158	3.077	8.7	18.4	10 8	23 35.29	+5 58.4	2.338	3.280	6.9	20.7
10 18	23 30.44	-14 19.0	2.236	3.079	11.6	18.6	10 18	23 30.16	+6 31.4	2.410	3.281	9.9	20.9
10 28	23 27.35	-14 29.0	2.335	3.082	14.0	18.8	10 28	23 26.71	+6 51.7	2.505	3.282	12.4	21.1
136811	1997 <i>GG</i> ₁₃		9 19.4 210°83	1°3/20.6	18		477953	2011 <i>RX</i> ₁₂		9 19.4 18°90	0°1/19.5	18	
8 19	0 9.40	+5 32.8	1.601	2.475	14.7	20.0	8 19	0 6.82	+2 20.8	1.670	2.557	13.6	21.1
8 29	0 4.29	+4 46.1	1.532	2.473	10.8	19.8	8 29	0 2.33	+1 26.5	1.609	2.558	9.7	20.9
9 8	23 57.17	+3 40.9	1.486	2.471	6.3	19.5	9 8	23 56.04	+0 17.7	1.570	2.560	5.3	20.7
9 18	23 48.81	+2 22.2	1.465	2.468	1.8	19.2	9 18	23 48.69	+0 59.7	1.558	2.562	0.7	20.3
9 28	23 40.27	+0 57.7	1.472	2.465	3.9	19.4	9 28	23 41.23	+2 17.8	1.573	2.565	4.0	20.6
10 8	23 32.67	+0 23.3	1.505	2.462	8.5	19.6	10 8	23 34.67	+3 28.7	1.614	2.568	8.4	20.9
10 18	23 26.91	+1 33.1	1.563	2.459	12.8	19.9	10 18	23 29.81	+4 25.9	1.680	2.571	12.3	21.1
10 28	23 23.62	+2 26.0	1.642	2.455	16.3	20.1	10 28	23 27.18	+5 5.4	1.767	2.574	15.6	21.3
86255	1999 <i>TC</i> ₁₈₉		9 19.4 16°88	3°6/22.4	18		373634	2002 <i>NJ</i> ₇₀		9 19.4 7°62	3°6/22.2	16	
8 19	0 10.70	+8 19.3	1.751	2.609	14.5	18.6	8 19	0 1.01	+8 32.9	0.855	1.766	20.7	19.9
8 29	0 5.05	+8 45.9	1.687	2.613	11.0	18.4	8 29	23 59.22	+8 12.3	0.811	1.766	15.7	19.6
9 8	23 57.51	+8 56.8	1.646	2.618	7.3	18.2	9 8	23 54.72	+7 19.8	0.783	1.769	10.0	19.4
9 18	23 48.85	+8 53.0	1.630	2.623	4.1	18.0	9 18	23 48.54	+6 0.9	0.774	1.774	4.5	19.1
9 28	23 40.05	+8 37.6	1.640	2.629	4.4	18.1	9 28	23 42.24	+4 27.7	0.785	1.782	5.3	19.2
10 8	23 32.17	+8 15.6	1.677	2.636	7.7	18.3	10 8	23 37.39	+2 55.3	0.818	1.791	10.7	19.5
10 18	23 26.05	+7 52.6	1.740	2.643	11.2	18.5	10 18	23 35.13	+1 36.9	0.870	1.803	16.1	19.8
10 28	23 22.27	+7 33.8	1.824	2.651	14.4	18.7	10 28	23 36.08	+0 41.6	0.940	1.816	20.6	20.2
120341	2004 <i>QX</i> ₁₂		9 19.4 131°42	3°7/15.4	18		275341	2010 <i>XQ</i> ₁₁		9 19.4 283°74	0°1/19.5	18	
8 19	0 10.22	-12 5.1	2.246	3.142	10.2	20.0	8 19	0 8.55	+0 25.1	2.164	3.042	11.3	21.3
8 29	0 4.29	-12 45.1	2.193	3.146	7.3	19.8	8 29	0 3.36	+0 3.4	2.078	3.024	8.1	21.1
9 8	23 56.93	-13 24.1	2.166	3.151	4.6	19.7	9 8	23 56.58	+0 27.7	2.017	3.006	4.5	20.8
9 18	23 48.76	-13 57.0	2.166	3.155	3.8	19.6	9 18	23 48.77	+1 4.7	1.983	2.988	0.6	20.5
9 28	23 40.59	-14 19.2	2.195	3.160	5.9	19.8	9 28	23 40.72	+1 43.1	1.978	2.969	3.4	20.7
10 8	23 33.22	-14 27.5	2.251	3.164	8.7	20.0	10 8	23 33.27	+2 17.8	2.001	2.951	7.3	20.9
10 18	23 27.27	-14 20.7	2.331	3.168	11.4	20.1	10 18	23 27.17	+2 44.6	2.049	2.933	10.8	21.1
10 28	23 23.21	-13 58.9	2.434	3.172	13.8	20.3	10 28	23 23.00	+3 0.1	2.121	2.914	13.8	21.2
515017	2009 <i>SJ</i> ₁₁₈		9 19.4 109°46	1°4/17.9	18		448618	2010 <i>UN</i> ₆₇					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
20770	2000 <i>QT</i> ₁₂₃		9 19.4 345°49	3°5/22.2	18		115297	2003 <i>SQ</i> ₂₀₀		9 19.4 243°34	8°9/2.4	18	
8 19	0 0.93	+ 8 22.4	1.042	1.942	18.7	18.1	8 19	0 8.28	+32 10.0	2.667	3.349	14.4	19.6
8 29	23 59.05	+ 8 5.9	0.974	1.924	14.3	17.8	8 29	0 3.17	+32 41.4	2.575	3.342	12.9	19.4
9 8	23 54.65	+ 7 20.7	0.924	1.909	9.2	17.4	9 8	23 56.49	+32 49.7	2.502	3.334	11.3	19.3
9 18	23 48.55	+ 6 10.0	0.895	1.895	4.3	17.1	9 18	23 48.81	+32 32.5	2.449	3.327	9.8	19.2
9 28	23 42.06	+ 4 42.4	0.887	1.883	5.0	17.1	9 28	23 40.87	+31 50.1	2.421	3.319	9.0	19.1
10 8	23 36.67	+ 3 11.2	0.902	1.873	10.3	17.4	10 8	23 33.51	+30 45.5	2.418	3.312	9.0	19.1
10 18	23 33.60	+ 1 49.1	0.936	1.865	15.7	17.7	10 18	23 27.44	+29 24.3	2.439	3.304	10.0	19.2
10 28	23 33.66	+ 0 46.6	0.989	1.860	20.3	17.9	10 28	23 23.24	+27 53.8	2.485	3.296	11.5	19.3
447729	2007 <i>EH</i> ₂₀₉		9 19.4 348°99	3°0/21.8	18		91043	1998 <i>FG</i> ₁₅		9 19.4 83°00	8°8/16.8	18	
8 19	0 11.39	+ 6 27.7	1.814	2.676	13.8	20.3	8 19	0 33.11	-20 12.5	1.000	1.898	19.5	18.5
8 29	0 5.57	+ 6 53.5	1.742	2.672	10.5	20.1	8 29	0 21.88	-20 4.1	0.957	1.904	14.9	18.2
9 8	23 57.85	+ 7 5.9	1.693	2.669	6.7	19.9	9 8	0 6.95	-19 37.8	0.934	1.911	10.5	18.0
9 18	23 48.93	+ 7 5.8	1.669	2.666	3.4	19.7	9 18	23 50.10	-18 44.9	0.934	1.917	8.8	18.0
9 28	23 39.81	+ 6 56.2	1.672	2.663	4.1	19.7	9 28	23 33.71	-17 21.7	0.959	1.924	11.4	18.1
10 8	23 31.52	+ 6 41.5	1.703	2.661	7.6	19.9	10 8	23 19.96	-15 32.6	1.008	1.931	15.8	18.4
10 18	23 24.93	+ 6 26.7	1.759	2.659	11.3	20.1	10 18	23 10.18	-13 25.6	1.078	1.937	20.1	18.7
10 28	23 20.68	+ 6 16.6	1.837	2.658	14.5	20.4	10 28	23 4.83	-11 8.5	1.166	1.943	23.7	19.0
365739	Peterbecker		9 19.4 307°62	4°2/24.3	18		515695	2014 <i>QM</i> ₉₁		9 19.4 57°12	0°1/19.3	18	
8 19	0 5.93	+14 9.0	2.081	2.910	13.6	20.8	8 19	0 5.25	+ 2 6.2	2.085	2.965	11.5	21.2
8 29	0 1.56	+13 52.7	1.999	2.902	10.7	20.6	8 29	0 0.89	+ 1 2.9	2.030	2.977	8.2	21.0
9 8	23 55.61	+13 16.4	1.938	2.895	7.7	20.4	9 8	23 55.15	- 0 11.6	1.999	2.989	4.4	20.8
9 18	23 48.67	+12 21.5	1.903	2.887	4.9	20.2	9 18	23 48.63	- 1 32.1	1.996	3.001	0.5	20.5
9 28	23 41.53	+11 12.1	1.895	2.880	4.5	20.2	9 28	23 42.09	- 2 51.9	2.022	3.013	3.4	20.8
10 8	23 35.05	+ 9 54.6	1.914	2.873	6.9	20.3	10 8	23 36.30	- 4 4.5	2.076	3.025	7.1	21.0
10 18	23 29.97	+ 8 36.3	1.960	2.866	10.0	20.5	10 18	23 31.85	- 5 4.8	2.156	3.038	10.4	21.2
10 28	23 26.83	+ 7 24.2	2.030	2.859	13.0	20.7	10 28	23 29.21	- 5 49.7	2.258	3.051	13.1	21.5
188938	2007 <i>DO</i> ₁		9 19.4 122°92	0°9/20.5	18		312712	2010 <i>PB</i> ₇₆		9 19.4 348°90	1°8/17.8	18	
8 19	0 5.86	+ 4 52.4	2.247	3.114	11.3	20.4	8 19	0 8.03	- 4 1.1	1.756	2.654	12.4	20.3
8 29	0 1.29	+ 4 4.7	2.179	3.117	8.3	20.2	8 29	0 3.16	- 4 40.6	1.694	2.651	8.7	20.1
9 8	23 55.36	+ 3 4.2	2.135	3.120	4.8	20.0	9 8	23 56.52	- 5 27.2	1.655	2.648	4.7	19.8
9 18	23 48.63	+ 1 54.9	2.119	3.122	1.3	19.8	9 18	23 48.82	- 6 15.4	1.643	2.646	1.8	19.6
9 28	23 41.82	+ 0 42.4	2.132	3.125	3.0	19.9	9 28	23 41.01	- 6 58.8	1.658	2.644	4.9	19.8
10 8	23 35.67	- 0 27.3	2.173	3.128	6.5	20.2	10 8	23 34.05	- 7 31.5	1.699	2.642	8.9	20.1
10 18	23 30.79	- 1 28.8	2.241	3.130	9.7	20.4	10 18	23 28.75	- 7 49.8	1.764	2.641	12.6	20.3
10 28	23 27.66	- 2 18.0	2.333	3.133	12.5	20.6	10 28	23 25.67	- 7 51.8	1.850	2.640	15.7	20.5
40966	1999 <i>TM</i> ₂₅₀		9 19.4 68°73	4°3/23.8	18		196490	2003 <i>KB</i> ₁₇		9 19.4 51°16	3°1/16.7	17	
8 19	0 8.73	+13 13.8	1.638	2.482	16.0	18.8	8 19	0 8.85	- 4 57.7	1.376	2.285	14.4	19.6
8 29	0 3.68	+12 50.5	1.582	2.496	12.4	18.6	8 29	0 3.89	- 6 15.1	1.359	2.301	10.0	19.4
9 8	23 56.78	+12 3.7	1.547	2.511	8.5	18.4	9 8	23 56.92	- 7 39.4	1.324	2.318	5.5	19.2
9 18	23 48.81	+10 56.5	1.537	2.526	5.1	18.3	9 18	23 48.86	- 9 1.4	1.335	2.335	3.1	19.1
9 28	23 40.83	+ 9 35.2	1.552	2.541	4.7	18.3	9 28	23 40.90	-10 11.6	1.372	2.353	6.5	19.3
10 8	23 33.87	+ 8 8.7	1.595	2.556	7.8	18.5	10 8	23 34.18	-11 2.8	1.433	2.371	10.7	19.6
10 18	23 28.73	+ 6 45.7	1.663	2.571	11.4	18.8	10 18	23 29.50	-11 31.4	1.517	2.389	14.5	19.9
10 28	23 25.94	+ 5 33.7	1.753	2.586	14.6	19.0	10 28	23 27.37	-11 37.0	1.620	2.407	17.7	20.2
479224	2013 <i>CY</i> ₁₇₈		9 19.4 280°81	2°4/17.0	18		165959	2001 <i>XK</i> ₁₁₁		9 19.4 113°06	3°6/16.5	18	
8 19	0 8.48	- 5 14.3	1.884	2.781	11.8	21.5	8 19	0 11.72	- 6 1.4	1.314	2.222	15.0	19.8
8 29	0 3.50	- 6 9.2	1.807	2.764	8.3	21.3	8 29	0 6.18	- 7 14.2	1.264	2.226	10.5	19.5
9 8	23 56.74	- 7 11.3	1.754	2.747	4.6	21.0	9 8	23 58.30	- 8 34.5	1.236	2.229	5.9	19.3
9 18	23 48.83	- 8 14.5	1.729	2.729	2.4	20.8	9 18	23 49.06	- 9 52.8	1.233	2.232	3.7	19.1
9 28	23 40.67	- 9 11.9	1.731	2.712	5.4	21.0	9 28	23 39.75	-10 58.8	1.255	2.235	7.2	19.4
10 8	23 33.23	- 9 57.1	1.760	2.695	9.3	21.2	10 8	23 31.71	-11 44.6	1.302	2.238	11.8	19.6
10 18	23 27.34	-10 25.9	1.813	2.677	12.9	21.4	10 18	23 25.92	-12 6.6	1.371	2.241	15.9	19.9
10 28	23 23.62	-10 36.2	1.886	2.660	16.0	21.6	10 28	23 23.01	-12 4.1	1.458	2.244	19.3	20.2
407618	2011 <i>CR</i> ₇		9 19.4 282°92	4°3/13.0	18		401742	2013 <i>JE</i> ₄₃		9 19.4 147°51	1°5/21.3	18	
8 19	0 4.94	-10 50.5	2.325	3.227	9.6	20.8	8 19	0 7.15	+ 5 59.3	2.478	3.334	10.8	21.6
8 29	0 0.76	-12 46.3	2.252	3.209	6.9	20.6	8 29	0 2.11	+ 5 32.6	2.409	3.339	8.0	21.4
9 8	23 55.15	-14 45.9	2.207	3.191	4.7	20.4	9 8	23 55.80	+ 4 54.1	2.364	3.343	4.8	21.2
9 18	23 48.63	-16 41.6	2.191	3.173	4.7	20.4	9 18	23 48.74	+ 4 6.8	2.347	3.348	1.9	21.0
9 28	23 41.89	-18 25.4	2.205	3.155	6.9	20.5	9 28	23 41.61	+ 3 14.9	2.359	3.352	2.8	21.1
10 8	23 35.70	-19 50.7	2.246	3.137	9.8	20.7	10 8	23 35.09	+ 2 23.1	2.400	3.356	5.9	21.3
10 18	23 30.71	-20 53.9	2.311	3.118	12.5	20.8	10 18	23 29.77	+ 1 36.0	2.469	3.360	8.9	21.5
10 28	23 27.46	-21 33.8	2.397	3.100	14.8	21.0	10 28	23 26.10	+ 0 57.4	2.561	3.363	11.5	21.7
304284	2006 <i>SB</i> ₅₃		9 19.4 337°37	0°2/19.6	18		106259	2000 <i>UX</i> ₅₉		9 19.4 329°10	0°8/18.7	18	
8 19	0 7.26	+ 1 47.3	1.695	2.582	13.4	20.6	8 19	0 10.61	- 2 41.9	2.005	2.891	11.7	19.4
8 29	0 2.70	+ 1 11.6	1.627	2.576	9.6	20.3	8 29	0 4.82	- 2 56.3	1.939	2.889	8.3	19.2
9 8	23 56.31	+ 0 22.7	1.581	2.571	5.4	20.1	9 8	23 57.37	- 3 17.1	1.897	2.887	4.5	19.0
9 18	23 48.78	- 0 34.7	1.562	2.566	0.8	19.7	9 18	23 48.95	- 3 40.6	1.881	2.886	0.8	18.7
9 28	23 41.09	- 1 33.9	1.569	2.562	3.9	20.0	9 28	23 40.41	- 4 2.2	1.895	2.884	3.9	18.9
10 8	23 34.24	- 2 27.7	1.603	2.558	8.3	20.2	10 8	23 32.67	- 4 17.7	1.936	2.883	7.7	19.2
10 18	23 29.07	- 3 10.3	1.662	2.555	12.3	20.5	10 18	23 26.47	- 4 23.7	2.002	2.881	11.2	19.4
10 28	23 26.18	- 3 37.7	1.741	2.551	15.7	20.7	10 28	23 22.35	- 4 18.4	2.091	2.880	14.1	19.6
185048	2006 <i>RS</i> ₄		9 19.4 95°59	3°1/18.3	17		102539	1999 <i>UT</i> ₁₀					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
21285	1996 <i>UZ</i>		9 19.4 259°38	1°9/21.1	18		426128	2012 <i>GZ</i> ₂₃		9 19.4 201°38	2°3/17.5	17	
8 19	0 10.31	+ 6 13.4	1.527	2.401	15.3	18.3	8 19	0 14.81	- 5 30.2	1.645	2.538	13.4	22.0
8 29	0 5.17	+ 5 42.0	1.451	2.390	11.4	18.0	8 29	0 8.12	- 6 8.0	1.581	2.535	9.5	21.7
9 8	23 57.82	+ 4 51.0	1.396	2.379	6.9	17.7	9 8	23 59.32	- 6 51.8	1.540	2.532	5.2	21.5
9 18	23 49.02	+ 3 44.0	1.366	2.367	2.5	17.4	9 18	23 49.24	- 7 35.6	1.527	2.528	2.4	21.3
9 28	23 39.91	+ 2 28.4	1.362	2.356	4.1	17.5	9 28	23 39.00	- 8 12.3	1.540	2.524	5.6	21.5
10 8	23 31.71	+ 1 13.2	1.385	2.344	8.9	17.8	10 8	23 29.80	- 8 36.4	1.581	2.519	9.9	21.7
10 18	23 25.44	+ 0 6.9	1.432	2.332	13.4	18.0	10 18	23 22.56	- 8 44.5	1.645	2.513	13.8	22.0
10 28	23 21.82	- 0 43.9	1.499	2.320	17.3	18.2	10 28	23 17.94	- 8 35.3	1.730	2.507	17.1	22.2
401424	2013 <i>CR</i> ₈₅		9 19.4 213°16	1°0/18.4	18		453697	2010 <i>WF</i> ₄₆		9 19.4 201°39	5°7/12.7	18	
8 19	0 10.11	- 2 37.2	2.143	3.027	11.1	21.4	8 19	0 9.15	-18 29.3	2.285	3.182	10.0	20.9
8 29	0 4.40	- 3 8.4	2.073	3.022	7.9	21.1	8 29	0 3.64	-19 28.4	2.236	3.181	7.6	20.7
9 8	23 57.14	- 3 46.4	2.027	3.018	4.2	20.9	9 8	23 56.67	-20 22.2	2.211	3.181	5.9	20.6
9 18	23 48.93	- 4 27.0	2.010	3.014	1.0	20.7	9 18	23 48.89	-21 4.7	2.214	3.180	6.0	20.6
9 28	23 40.59	- 5 5.4	2.021	3.009	3.9	20.9	9 28	23 41.08	-21 30.9	2.244	3.179	7.7	20.7
10 8	23 32.97	- 5 36.5	2.060	3.003	7.6	21.1	10 8	23 34.03	-21 38.1	2.300	3.179	10.1	20.9
10 18	23 26.79	- 5 57.1	2.126	2.998	10.9	21.3	10 18	23 28.40	-21 25.9	2.379	3.178	12.4	21.0
10 28	23 22.56	- 6 4.7	2.213	2.992	13.8	21.5	10 28	23 24.65	-20 55.5	2.478	3.177	14.5	21.2
380722	2005 <i>QY</i> ₁₃₃		9 19.4 44°51	0°1/19.5	16		46001	2001 <i>CG</i> ₁		9 19.4 123°25	3°3/16.5	18	
8 19	0 11.75	+ 0 51.0	1.196	2.096	16.8	20.8	8 19	0 11.57	- 6 17.6	1.510	2.413	13.8	19.6
8 29	0 6.17	+ 0 26.6	1.157	2.112	12.0	20.6	8 29	0 5.82	- 7 30.1	1.461	2.420	9.6	19.4
9 8	23 58.25	- 0 12.1	1.138	2.129	6.6	20.3	9 8	23 58.03	- 8 48.7	1.436	2.428	5.4	19.2
9 18	23 49.06	- 0 58.8	1.143	2.147	0.9	20.0	9 18	23 49.07	-10 4.8	1.436	2.435	3.4	19.1
9 28	23 40.00	- 1 45.2	1.172	2.166	4.8	20.3	9 28	23 40.09	-11 9.4	1.464	2.442	6.6	19.3
10 8	23 32.39	- 2 23.5	1.226	2.184	9.9	20.7	10 8	23 32.25	-11 55.8	1.517	2.448	10.7	19.5
10 18	23 27.17	- 2 47.9	1.303	2.204	14.4	21.0	10 18	23 26.43	-12 20.4	1.592	2.455	14.5	19.8
10 28	23 24.86	- 2 55.5	1.399	2.223	18.1	21.3	10 28	23 23.18	-12 22.9	1.688	2.461	17.6	20.0
274826	2009 <i>PX</i> ₁₀		9 19.4 10°18	3°7/16.9	17		150033	2005 <i>VQ</i> ₁₀₆		9 19.4 280°45	0°5/20.2	17	
8 19	0 4.75	- 5 26.3	0.883	1.816	17.7	19.1	8 19	0 4.14	+ 2 35.5	3.126	3.991	8.5	21.2
8 29	0 1.80	- 6 22.6	0.845	1.819	12.4	18.8	8 29	23 59.88	+ 2 8.5	3.037	3.975	6.2	21.0
9 8	23 56.11	- 7 28.4	0.827	1.824	6.8	18.5	9 8	23 54.58	+ 1 33.7	2.973	3.958	3.5	20.8
9 18	23 48.81	- 8 32.6	0.829	1.830	3.7	18.4	9 18	23 48.64	+ 0 53.4	2.938	3.942	0.8	20.6
9 28	23 41.51	- 9 22.9	0.852	1.839	7.9	18.6	9 28	23 42.56	+ 0 10.8	2.933	3.926	2.3	20.7
10 8	23 35.79	- 9 50.4	0.896	1.849	13.3	19.0	10 8	23 36.88	- 0 30.3	2.957	3.909	5.1	20.8
10 18	23 32.70	- 9 51.5	0.958	1.862	18.1	19.3	10 18	23 32.07	- 1 6.8	3.009	3.893	7.7	21.0
10 28	23 32.82	- 9 26.4	1.037	1.876	22.0	19.6	10 28	23 28.53	- 1 35.7	3.086	3.876	10.0	21.1
41026	1999 <i>UC</i> ₄₀		9 19.4 335°80	4°1/23.3	18		360876	2005 <i>ST</i> ₃₆		9 19.4 340°72	0°3/19.8	18	
8 19	0 9.56	+10 54.8	1.974	2.815	13.7	18.8	8 19	0 6.09	+ 2 34.0	1.779	2.664	13.0	21.0
8 29	0 4.22	+11 12.0	1.897	2.811	10.7	18.6	8 29	0 1.83	+ 1 51.4	1.710	2.658	9.4	20.8
9 8	23 57.13	+11 12.8	1.843	2.807	7.4	18.4	9 8	23 55.85	+ 0 55.0	1.664	2.653	5.3	20.6
9 18	23 48.95	+10 57.8	1.815	2.803	4.6	18.2	9 18	23 48.80	- 0 10.3	1.644	2.649	0.9	20.2
9 28	23 40.55	+10 29.8	1.813	2.800	4.5	18.2	9 28	23 41.61	- 1 17.9	1.652	2.645	3.7	20.5
10 8	23 32.88	+ 9 54.0	1.839	2.796	7.3	18.4	10 8	23 35.19	- 2 20.4	1.686	2.641	8.0	20.7
10 18	23 26.75	+ 9 16.0	1.891	2.793	10.5	18.6	10 18	23 30.35	- 3 11.8	1.745	2.638	11.8	20.9
10 28	23 22.76	+ 8 41.7	1.965	2.790	13.6	18.8	10 28	23 27.64	- 3 47.9	1.825	2.635	15.1	21.1
342311	2008 <i>TQ</i> ₆₆		9 19.4 74°96	2°1/21.6	16		342127	2008 <i>SW</i> ₁₁₈		9 19.4 288°10	1°3/20.6	18	
8 19	0 8.38	+ 8 13.6	1.610	2.476	15.1	20.8	8 19	0 8.34	+ 5 6.8	1.692	2.567	14.0	21.5
8 29	0 3.43	+ 7 20.9	1.557	2.491	11.2	20.6	8 29	0 3.71	+ 4 28.0	1.602	2.543	10.4	21.2
9 8	23 56.67	+ 6 8.2	1.526	2.506	6.8	20.4	9 8	23 57.04	+ 3 31.0	1.534	2.519	6.2	20.9
9 18	23 48.88	+ 4 41.0	1.521	2.522	2.7	20.2	9 18	23 48.98	+ 2 19.6	1.492	2.495	1.8	20.6
9 28	23 41.10	+ 3 7.4	1.543	2.537	3.7	20.3	9 28	23 40.51	+ 1 0.6	1.477	2.471	3.9	20.7
10 8	23 34.35	+ 1 36.7	1.592	2.552	7.9	20.6	10 8	23 32.74	- 0 17.5	1.489	2.447	8.6	20.9
10 18	23 29.40	+ 0 17.0	1.666	2.567	11.8	20.9	10 18	23 26.64	- 1 26.6	1.526	2.423	13.0	21.1
10 28	23 26.77	- 0 46.1	1.763	2.582	15.1	21.1	10 28	23 22.97	- 2 20.1	1.584	2.398	16.8	21.3
408682	2014 <i>MA</i> ₄₃		9 19.4 325°96	1°7/21.2	17		265283	2004 <i>FL</i> ₁₂₄		9 19.4 130°22	0°8/20.2	17	
8 19	0 5.96	+ 5 43.5	1.885	2.756	13.0	20.7	8 19	0 12.58	+ 3 11.9	1.719	2.592	13.9	21.5
8 29	0 1.72	+ 5 19.5	1.806	2.744	9.6	20.5	8 29	0 6.37	+ 2 44.0	1.661	2.602	10.1	21.3
9 8	23 55.79	+ 4 40.2	1.750	2.732	5.9	20.3	9 8	23 58.28	+ 2 2.6	1.626	2.612	5.7	21.1
9 18	23 48.78	+ 3 48.8	1.719	2.721	2.2	20.0	9 18	23 49.12	+ 1 12.2	1.618	2.622	1.3	20.8
9 28	23 41.55	+ 2 50.7	1.716	2.709	3.4	20.1	9 28	23 39.92	+ 0 18.8	1.638	2.631	3.7	21.0
10 8	23 35.02	+ 1 52.3	1.739	2.699	7.4	20.3	10 8	23 31.72	- 0 30.7	1.685	2.639	8.0	21.3
10 18	23 29.97	+ 1 0.1	1.788	2.689	11.2	20.5	10 18	23 25.36	- 1 10.9	1.758	2.648	11.9	21.6
10 28	23 27.00	+ 0 19.2	1.860	2.679	14.5	20.7	10 28	23 21.39	- 1 37.7	1.852	2.655	15.1	21.8
168093	2006 <i>DT</i> ₁₀₃		9 19.4 48°39	0°1/19.4	18		487218	2014 <i>ON</i> ₃₈₆		9 19.4 352°50	7°8/26.9	17	
8 19	0 11.67	+ 0 8.4	1.426	2.318	15.1	20.3	8 19	0 9.44	+20 8.8	1.885	2.681	16.0	20.7
8 29	0 5.87	- 0 11.5	1.382	2.335	10.7	20.1	8 29	0 4.34	+20 58.3	1.809	2.677	13.5	20.5
9 8	23 58.01	- 0 42.8	1.361	2.352	5.8	19.9	9 8	23 57.31	+21 25.2	1.752	2.673	10.8	20.3
9 18	23 49.05	- 1 20.5	1.364	2.369	0.7	19.6	9 18	23 49.01	+21 27.6	1.718	2.671	8.6	20.2
9 28	23 40.17	- 1 57.8	1.394	2.387	4.3	19.9	9 28	23 40.42	+21 6.3	1.710	2.668	7.8	20.2
10 8	23 32.54	- 2 28.3	1.450	2.405	9.0	20.2	10 8	23 32.59	+20 25.8	1.726	2.667	9.0	20.2
10 18	23 27.00	- 2 47.2	1.529	2.423	13.1	20.5	10 18	23 26.42	+19 33.0	1.767	2.666	11.4	20.4
10 28	23 24.07	- 2 51.9	1.628	2.442	16.5	20.8	10 28	23 22.59	+18 36.2	1.831	2.665	14.0	20.5
381107	2007 <i>DR</i> ₅		9 19.4 294°49	1°3/20.4	18		322071	2010 <i>VU</i>					

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9 19.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
430847	2005 <i>LA</i> ₁₉		9 19.4 35°89	3°8/16.3	15		133385	2003 <i>SP</i> ₁₅₆		9 19.5 331°41	0°9/20.2	18	
8 19	0 8.57	- 5 40.0	1.208	2.124	15.4	20.7	8 19	0 9.25	+ 3 5.7	1.671	2.551	13.9	19.9
8 29	0 4.02	- 7 4.8	1.166	2.132	10.8	20.5	8 29	0 4.18	+ 2 39.5	1.603	2.549	10.1	19.7
9 8	23 57.16	- 8 37.6	1.146	2.140	6.0	20.2	9 8	23 57.20	+ 1 59.2	1.559	2.546	5.8	19.5
9 18	23 48.98	-10 7.6	1.150	2.149	3.9	20.1	9 18	23 49.04	+ 1 9.0	1.540	2.544	1.4	19.2
9 28	23 40.82	-11 23.4	1.178	2.158	7.5	20.4	9 28	23 40.71	+ 0 15.1	1.548	2.542	3.8	19.3
10 8	23 33.97	-12 16.5	1.230	2.168	12.1	20.7	10 8	23 33.28	- 0 35.5	1.583	2.540	8.2	19.6
10 18	23 29.38	-12 43.3	1.303	2.178	16.3	20.9	10 18	23 27.61	- 1 16.7	1.642	2.538	12.3	19.8
10 28	23 27.62	-12 43.5	1.394	2.189	19.6	21.2	10 28	23 24.29	- 1 44.1	1.723	2.536	15.7	20.1
387386	2013 <i>AZ</i> ₁₀₇		9 19.4 272°59	0°1/19.2	18		188545	2004 <i>SD</i> ₁₇		9 19.5 358°11	5°9/13.2	18	
8 19	0 1.03	- 0 16.7	4.238	5.109	6.3	21.2	8 19	0 9.36	-17 25.0	2.036	2.937	10.8	19.9
8 29	23 57.44	- 0 45.7	4.162	5.105	4.5	21.0	8 29	0 3.94	-18 24.3	1.987	2.936	8.2	19.7
9 8	23 53.16	- 1 19.2	4.113	5.101	2.4	20.9	9 8	23 56.92	-19 18.6	1.962	2.936	6.2	19.6
9 18	23 48.47	- 1 55.1	4.093	5.097	0.3	20.7	9 18	23 49.00	-20 1.3	1.964	2.936	6.1	19.6
9 28	23 43.73	- 2 31.0	4.103	5.093	1.9	20.8	9 28	23 41.04	-20 26.9	1.993	2.936	8.1	19.7
10 8	23 39.29	- 3 4.5	4.143	5.089	4.0	21.0	10 8	23 33.94	-20 32.5	2.047	2.936	10.7	19.9
10 18	23 35.47	- 3 33.5	4.211	5.085	5.9	21.1	10 18	23 28.40	-20 17.4	2.124	2.936	13.3	20.0
10 28	23 32.55	- 3 56.1	4.305	5.081	7.6	21.2	10 28	23 24.91	-19 43.1	2.221	2.936	15.5	20.2
241659	2000 <i>JS</i> ₄₀		9 19.4 113°56	5°6/14.5	17		471544	2012 <i>JB</i> ₆₅		9 19.5 31°92	5°6/15.6	16	
8 19	0 15.30	-15 3.6	1.783	2.680	12.3	20.3	8 19	0 10.20	-10 15.4	1.016	1.942	16.7	20.2
8 29	0 8.11	-16 3.5	1.747	2.698	9.0	20.2	8 29	0 5.28	-11 21.3	0.991	1.959	11.8	20.0
9 8	23 59.12	-16 58.6	1.737	2.716	6.3	20.1	9 8	23 57.83	-12 26.9	0.986	1.978	7.2	19.8
9 18	23 49.22	-17 41.9	1.753	2.733	5.8	20.1	9 18	23 49.10	-13 21.3	1.003	1.997	5.8	19.8
9 28	23 39.49	-18 7.4	1.797	2.750	7.9	20.2	9 28	23 40.64	-13 54.8	1.043	2.018	9.1	20.0
10 8	23 30.94	-18 12.2	1.866	2.766	11.0	20.4	10 8	23 33.86	-14 2.6	1.105	2.040	13.4	20.3
10 18	23 24.33	-17 56.6	1.959	2.782	13.8	20.7	10 18	23 29.67	-13 44.5	1.186	2.063	17.4	20.7
10 28	23 20.13	-17 22.2	2.072	2.797	16.2	20.9	10 28	23 28.52	-13 3.1	1.285	2.087	20.6	21.0
209454	2004 <i>GV</i> ₁₁		9 19.4 125°17	20°1/29.1	17		436754	2011 <i>YU</i> ₁₁		9 19.5 237°11	4°3/29.3	15	
8 19	0 16.99	-40 10.9	1.025	1.904	20.7	19.9	8 19	0 2.13	+24 50.6	4.721	5.440	8.1	21.0
8 29	0 11.03	-43 27.2	1.023	1.908	20.1	19.9	8 29	23 58.24	+24 58.2	4.628	5.436	6.9	20.9
9 8	0 1.33	-45 58.1	1.040	1.911	20.6	19.9	9 8	23 53.63	+24 54.1	4.557	5.432	5.7	20.8
9 18	23 49.51	-47 28.8	1.072	1.915	22.0	20.0	9 18	23 48.58	+24 38.3	4.511	5.429	4.7	20.8
9 28	23 37.92	-47 53.5	1.120	1.918	23.8	20.2	9 28	23 43.44	+24 11.7	4.493	5.425	4.3	20.7
10 8	23 28.70	-47 17.4	1.180	1.921	25.7	20.4	10 8	23 38.59	+23 36.1	4.502	5.421	4.6	20.7
10 18	23 23.17	-45 51.0	1.250	1.924	27.3	20.5	10 18	23 34.36	+22 54.0	4.539	5.417	5.4	20.8
10 28	23 21.79	-43 46.1	1.328	1.927	28.7	20.7	10 28	23 31.03	+22 8.6	4.603	5.413	6.6	20.9
362905	2012 <i>CB</i> ₁₉		9 19.4 181°02	4°2/14.3	18		273358	2006 <i>UQ</i> ₁₇₃		9 19.5 294°62	0°5/19.8	18	
8 19	0 7.70	-13 2.3	2.311	3.210	9.8	20.3	8 19	0 10.61	+ 1 54.9	1.427	2.317	15.2	21.5
8 29	0 2.61	-14 4.8	2.257	3.210	7.1	20.1	8 29	0 5.59	+ 1 30.7	1.349	2.299	11.1	21.2
9 8	23 56.13	-15 6.4	2.228	3.211	4.8	20.0	9 8	23 58.20	+ 0 50.9	1.292	2.282	6.3	20.9
9 18	23 48.85	-16 1.2	2.227	3.211	4.4	20.0	9 18	23 49.20	- 0 0.1	1.260	2.264	1.1	20.5
9 28	23 41.53	-16 43.9	2.254	3.210	6.4	20.1	9 28	23 39.78	- 0 55.1	1.253	2.247	4.5	20.7
10 8	23 34.89	-17 10.7	2.308	3.210	9.0	20.3	10 8	23 31.27	- 1 45.7	1.272	2.229	9.8	21.0
10 18	23 29.58	-17 20.0	2.386	3.210	11.6	20.4	10 18	23 24.80	- 2 24.8	1.314	2.212	14.5	21.2
10 28	23 26.05	-17 11.8	2.485	3.209	13.8	20.6	10 28	23 21.17	- 2 47.2	1.375	2.195	18.6	21.5
149351	2002 <i>WD</i> ₈		9 19.5 336°65	1°3/20.4	18		338512	2003 <i>QL</i> ₂₉		9 19.5 175°36	0°2/19.7	18	
8 19	0 6.62	+ 3 52.0	1.144	2.045	17.3	19.7	8 19	0 6.93	+ 4 4.5	1.741	2.621	13.5	20.0
8 29	0 3.03	+ 3 29.3	1.077	2.032	12.8	19.4	8 29	0 2.45	+ 2 48.0	1.675	2.621	9.7	19.7
9 8	23 56.87	+ 2 45.6	1.029	2.019	7.5	19.0	9 8	23 56.21	+ 1 14.5	1.633	2.621	5.4	19.5
9 18	23 49.00	+ 1 45.7	1.004	2.008	2.0	18.7	9 18	23 48.92	- 0 29.5	1.617	2.621	0.8	19.2
9 28	23 40.76	+ 0 38.5	1.002	1.997	4.8	18.8	9 28	23 41.50	- 2 15.1	1.629	2.621	3.9	19.4
10 8	23 33.65	- 0 25.3	1.023	1.988	10.5	19.1	10 8	23 34.93	- 3 53.0	1.669	2.621	8.3	19.7
10 18	23 28.85	- 1 16.3	1.066	1.980	15.7	19.4	10 18	23 29.97	- 5 15.8	1.734	2.621	12.2	19.9
10 28	23 27.17	- 1 47.8	1.127	1.973	20.1	19.6	10 28	23 27.21	- 6 18.6	1.821	2.621	15.5	20.1
239204	2006 <i>ON</i> ₁₆		9 19.5 52°08	5°6/24.5	18		367776	2010 <i>XR</i> ₄₉		9 19.5 347°34	9°1/12.2	18	
8 19	0 11.42	+14 12.5	1.578	2.415	16.8	19.8	8 19	0 1.41	-13 40.1	0.837	1.782	17.0	19.6
8 29	0 5.66	+14 28.6	1.530	2.436	13.2	19.6	8 29	23 59.80	-15 32.4	0.792	1.767	12.7	19.3
9 8	23 57.93	+14 21.4	1.502	2.457	9.5	19.5	9 8	23 55.26	-17 25.7	0.765	1.754	9.5	19.1
9 18	23 49.10	+13 51.9	1.497	2.479	6.3	19.3	9 18	23 48.82	-19 2.8	0.757	1.742	9.8	19.0
9 28	23 40.30	+13 4.7	1.518	2.501	5.8	19.4	9 28	23 42.11	-20 7.1	0.769	1.733	13.5	19.2
10 8	23 32.64	+12 7.4	1.566	2.523	8.2	19.6	10 8	23 36.86	-20 29.3	0.799	1.726	18.2	19.4
10 18	23 26.95	+11 8.0	1.637	2.545	11.5	19.8	10 18	23 34.34	-20 8.2	0.844	1.722	22.5	19.7
10 28	23 23.78	+10 14.1	1.732	2.568	14.6	20.1	10 28	23 35.27	-19 8.1	0.903	1.720	26.2	19.9
359674	2011 <i>SL</i> ₁₁₅		9 19.5 324°48	0°3/19.7	18		67128	2000 <i>AQ</i> ₁₃₉		9 19.5 20°53	1°1/20.8	18	
8 19	0 6.03	+ 2 54.4	1.606	2.494	13.9	20.5	8 19	0 5.24	+ 5 49.7	1.978	2.848	12.5	18.5
8 29	0 2.00	+ 2 4.5	1.533	2.483	10.1	20.3	8 29	0 1.07	+ 4 56.8	1.911	2.850	9.2	18.3
9 8	23 56.06	+ 0 58.2	1.483	2.472	5.7	20.0	9 8	23 55.39	+ 3 48.5	1.869	2.852	5.4	18.1
9 18	23 48.89	- 0 19.0	1.458	2.462	0.9	19.6	9 18	23 48.82	+ 2 29.4	1.853	2.855	1.6	17.8
9 28	23 41.48	- 1 39.3	1.459	2.452	4.1	19.8	9 28	23 42.15	+ 1 6.1	1.865	2.858	3.2	18.0
10 8	23 34.91	- 2 53.7	1.487	2.443	8.7	20.1	10 8	23 36.22	- 0 14.2	1.904	2.862	7.0	18.2
10 18	23 30.04	- 3 55.2	1.538	2.434	13.0	20.3	10 18	23 31.69	- 1 24.9	1.970	2.865	10.6	18.4
10 28	23 27.53	- 4 38.5	1.611	2.426	16.5	20.5	10 28	23 29.08	- 2 21.4	2.059	2.869	13.6	18.6
281243	2007 <i>LA</i> ₂₂		9 19.5 29°85	1°3/18.2	16		17584	1994					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
283330	1998 <i>FL</i> ₁₄		9 19.5 158°70	1°1/20.6	18		131205	2001 <i>DK</i> ₃₆		9 19.5 196°03	0°4/19.1	18	
8 19	0 11.59	+ 4 3.6	2.215	3.075	11.7	21.5	8 19	0 9.07	+ 0 24.6	1.828	2.713	12.7	19.8
8 29	0 5.40	+ 3 40.0	2.149	3.083	8.6	21.3	8 29	0 3.91	- 0 21.6	1.763	2.712	9.0	19.6
9 8	23 57.71	+ 3 5.0	2.107	3.090	5.0	21.1	9 8	23 57.02	- 1 19.2	1.721	2.711	4.9	19.4
9 18	23 49.13	+ 2 21.8	2.093	3.096	1.5	20.9	9 18	23 49.07	- 2 22.9	1.706	2.711	0.6	19.0
9 28	23 40.48	+ 1 35.0	2.108	3.101	3.1	21.0	9 28	23 41.01	- 3 26.1	1.719	2.710	4.0	19.3
10 8	23 32.59	+ 0 49.8	2.153	3.106	6.7	21.2	10 8	23 33.77	- 4 21.9	1.759	2.709	8.2	19.6
10 18	23 26.13	+ 0 10.8	2.224	3.110	10.0	21.4	10 18	23 28.14	- 5 5.3	1.824	2.707	11.9	19.8
10 28	23 21.60	- 0 18.4	2.320	3.114	12.8	21.6	10 28	23 24.69	- 5 32.7	1.911	2.706	15.1	20.0
365215	2009 <i>HJ</i> ₃₈		9 19.5 76°73	0°8/20.4	18		364552	2007 <i>GO</i> ₃₅		9 19.5 217°04	0°9/20.7	18	
8 19	0 6.47	+ 5 43.8	1.905	2.775	12.9	20.5	8 19	0 5.71	+ 5 11.9	2.394	3.257	10.9	21.1
8 29	0 1.91	+ 4 32.7	1.849	2.788	9.4	20.3	8 29	0 1.23	+ 4 24.5	2.319	3.254	8.0	20.9
9 8	23 55.83	+ 3 5.9	1.816	2.801	5.4	20.1	9 8	23 55.45	+ 3 24.4	2.269	3.252	4.7	20.7
9 18	23 48.88	+ 1 29.1	1.811	2.814	1.3	19.8	9 18	23 48.87	+ 2 15.4	2.246	3.249	1.4	20.5
9 28	23 41.92	- 0 10.0	1.834	2.827	3.3	20.0	9 28	23 42.19	+ 1 2.7	2.253	3.246	2.8	20.6
10 8	23 35.78	- 1 43.1	1.885	2.840	7.3	20.3	10 8	23 36.09	- 0 8.0	2.288	3.243	6.2	20.8
10 18	23 31.14	- 3 3.6	1.963	2.853	10.9	20.5	10 18	23 31.18	- 1 11.3	2.351	3.240	9.4	21.0
10 28	23 28.47	- 4 7.1	2.064	2.866	13.8	20.8	10 28	23 27.92	- 2 3.2	2.438	3.237	12.1	21.2
305064	2007 <i>UM</i> ₈₅		9 19.5 256°98	1°7/17.8	18		396565	1999 <i>VH</i> ₁₄₃		9 19.5 353°66	16°7/7.8	16	
8 19	0 9.65	- 4 4 3.5	1.895	2.788	11.9	20.9	8 19	0 4.48	+36 46.0	1.013	1.769	29.1	20.4
8 29	0 4.30	- 4 44.9	1.828	2.782	8.4	20.7	8 29	0 2.19	+37 25.8	0.950	1.766	26.6	20.2
9 8	23 57.21	- 5 33.2	1.785	2.777	4.5	20.5	9 8	23 56.72	+37 8.9	0.896	1.763	23.6	20.0
9 18	23 49.07	- 6 23.1	1.769	2.772	1.7	20.3	9 18	23 49.07	+35 45.4	0.856	1.762	20.4	19.8
9 28	23 40.79	- 7 8.4	1.781	2.766	4.7	20.5	9 28	23 41.00	+33 12.9	0.831	1.761	17.8	19.7
10 8	23 33.31	- 7 43.5	1.820	2.760	8.6	20.7	10 8	23 34.44	+29 42.3	0.825	1.760	16.7	19.6
10 18	23 27.40	- 8 4.8	1.883	2.755	12.2	20.9	10 18	23 30.88	+25 35.6	0.839	1.761	17.9	19.7
10 28	23 23.65	- 8 10.2	1.968	2.749	15.2	21.1	10 28	23 31.18	+21 21.8	0.874	1.762	20.6	19.9
205163	2000 <i>AK</i> ₁₃₃		9 19.5 283°80	5°3/15.7	17		26507	Mikelin		9 19.5 1°63	0°4/19.8	18	
8 19	0 20.95	-16 8.6	1.921	2.805	12.2	19.4	8 19	0 7.56	+ 2 17.8	1.515	2.405	14.5	18.6
8 29	0 12.59	-16 23.4	1.832	2.776	9.1	19.1	8 29	0 3.11	+ 1 43.6	1.454	2.404	10.5	18.4
9 8	0 1.91	-16 32.6	1.769	2.747	6.3	18.9	9 8	23 56.68	+ 0 54.6	1.414	2.404	5.9	18.1
9 18	23 49.71	-16 30.2	1.733	2.717	5.4	18.8	9 18	23 49.04	- 0 4.0	1.400	2.404	1.0	17.8
9 28	23 37.11	-16 10.9	1.727	2.687	7.6	18.9	9 28	23 41.27	- 1 4.8	1.411	2.405	4.1	18.0
10 8	23 25.37	-15 32.4	1.748	2.656	11.1	19.0	10 8	23 34.46	- 1 59.9	1.449	2.406	8.8	18.3
10 18	23 15.55	-14 34.9	1.795	2.625	14.6	19.2	10 18	23 29.50	- 2 43.1	1.510	2.408	13.0	18.6
10 28	23 8.40	-13 20.8	1.863	2.594	17.6	19.3	10 28	23 27.00	- 3 9.9	1.591	2.410	16.5	18.8
116924	2004 <i>GL</i> ₂₆		9 19.5 168°37	2°6/16.9	18		334734	2003 <i>OM</i> ₁₅		9 19.5 9°42	10°4/28.6	18	
8 19	0 10.40	- 4 44.8	1.688	2.585	12.9	20.0	8 19	0 7.18	+22 7.3	1.264	2.083	21.1	19.2
8 29	0 4.93	- 5 56.5	1.630	2.587	9.0	19.7	8 29	0 3.35	+23 1.4	1.205	2.085	18.0	19.0
9 8	23 57.58	- 7 15.9	1.597	2.589	4.9	19.5	9 8	23 57.03	+23 21.3	1.162	2.088	14.6	18.8
9 18	23 49.12	- 8 35.3	1.591	2.591	2.7	19.4	9 18	23 49.10	+23 4.0	1.139	2.093	11.7	18.7
9 28	23 40.57	- 9 46.5	1.612	2.592	5.8	19.6	9 28	23 40.91	+22 11.6	1.137	2.099	10.4	18.7
10 8	23 32.98	-10 42.4	1.659	2.593	9.8	19.8	10 8	23 33.89	+20 52.3	1.157	2.107	11.4	18.7
10 18	23 27.17	-11 18.8	1.731	2.594	13.5	20.0	10 18	23 29.18	+19 18.3	1.199	2.115	14.1	18.9
10 28	23 23.71	-11 34.3	1.823	2.594	16.5	20.3	10 28	23 27.51	+17 43.0	1.261	2.125	17.2	19.2
192021	2005 <i>YN</i> ₁₄₈		9 19.5 91°57	1°2/18.4	18		390759	2003 <i>SU</i> ₃₆₅		9 19.5 126°55	1°2/20.9	18	
8 19	0 11.66	- 2 27.9	1.633	2.525	13.5	20.5	8 19	0 6.84	+ 7 8.2	1.791	2.658	13.7	20.9
8 29	0 5.83	- 3 2.0	1.577	2.530	9.5	20.2	8 29	0 2.36	+ 5 53.9	1.724	2.660	10.1	20.7
9 8	23 58.07	- 3 44.6	1.544	2.536	5.1	20.0	9 8	23 56.18	+ 4 20.2	1.680	2.663	6.0	20.4
9 18	23 49.19	- 4 30.3	1.537	2.541	1.2	19.7	9 18	23 48.98	+ 2 33.0	1.663	2.666	1.8	20.2
9 28	23 40.25	- 5 12.4	1.558	2.547	4.7	20.0	9 28	23 41.68	+ 0 40.9	1.674	2.668	3.5	20.3
10 8	23 32.35	- 5 45.0	1.605	2.552	9.0	20.3	10 8	23 35.20	- 1 6.5	1.714	2.670	7.7	20.6
10 18	23 26.31	- 6 3.8	1.676	2.557	12.9	20.5	10 18	23 30.31	- 2 41.1	1.779	2.672	11.6	20.8
10 28	23 22.72	- 6 6.9	1.769	2.563	16.1	20.8	10 28	23 27.55	- 3 57.2	1.867	2.675	14.9	21.0
44336	1998 <i>RE</i> ₆₄		9 19.5 160°24	1°3/18.0	18		297288	1997 <i>TT</i> ₁		9 19.5 328°42	0°5/19.9	18	
8 19	0 9.59	- 2 47.6	2.128	3.013	11.1	18.9	8 19	0 10.00	+ 1 16.0	1.727	2.610	13.4	20.7
8 29	0 4.04	- 3 36.9	2.067	3.018	7.8	18.7	8 29	0 4.71	+ 1 2.6	1.657	2.604	9.7	20.5
9 8	23 56.98	- 4 33.3	2.031	3.022	4.2	18.5	9 8	23 57.53	+ 0 37.9	1.610	2.599	5.5	20.3
9 18	23 49.05	- 5 31.8	2.023	3.026	1.3	18.3	9 18	23 49.17	+ 0 5.5	1.589	2.594	1.0	19.9
9 28	23 41.05	- 6 26.4	2.044	3.029	4.1	18.5	9 28	23 40.62	- 0 29.2	1.596	2.589	3.8	20.1
10 8	23 33.82	- 7 12.0	2.093	3.032	7.7	18.8	10 8	23 32.93	- 1 0.5	1.629	2.584	8.2	20.4
10 18	23 28.01	- 7 44.8	2.167	3.035	11.0	19.0	10 18	23 26.95	- 1 23.4	1.687	2.580	12.1	20.6
10 28	23 24.14	- 8 2.8	2.264	3.037	13.7	19.2	10 28	23 23.31	- 1 34.2	1.766	2.576	15.5	20.8
441906	2010 <i>EC</i> ₁₁₁		9 19.5 122°33	0°1/19.4	17		521941	2015 <i>VN</i> ₃₈		9 19.5 310°73	5°4/25.9	18	
8 19	0 14.12	- 0 31.8	2.128	3.000	11.7	21.7	8 19	0 6.18	+17 40.2	2.095	2.903	14.2	20.9
8 29	0 7.15	- 0 42.9	2.072	3.015	8.3	21.6	8 29	0 1.86	+17 33.7	2.010	2.895	11.6	20.7
9 8	23 58.63	- 1 1.4	2.042	3.030	4.5	21.4	9 8	23 55.92	+17 5.3	1.946	2.886	8.8	20.5
9 18	23 49.26	- 1 24.1	2.040	3.044	0.6	21.1	9 18	23 48.96	+16 15.4	1.906	2.878	6.3	20.4
9 28	23 39.92	- 1 46.7	2.067	3.058	3.4	21.3	9 28	23 41.78	+15 7.4	1.893	2.870	5.5	20.3
10 8	23 31.46	- 2 5.2	2.124	3.072	7.1	21.6	10 8	23 35.25	+13 47.4	1.907	2.862	7.2	20.4
10 18	23 24.58	- 2 16.5	2.207	3.085	10.4	21.8	10 18	23 30.12	+12 22.8	1.948	2.854	10.0	20.6
10 28	23 19.74	- 2 18.1	2.313	3.097	13.1	22.0	10 28	23 26.96	+11 1.5	2.012	2.847	12.9	20.7
435150	2007 <i>JK</i> ₂₆		9 19.5 88°00	10°9/9.2	16		476655	2008 <i>SD</i> ₂₈₈		9 19.			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
63231	2001 BA ₁₅		9 19.5 213°88	1°0/17.2 18			342584	2008 UG ₂₇₇		9 19.5 288°61	2°1/17.7 18		
8 19	0 0.57	- 5 48.5	4.742	5.626	5.5	20.0	8 19	0 11.11	- 4 47.7	1.646	2.543	13.1	20.8
8 29	23 57.09	- 6 21.0	4.672	5.623	3.8	19.9	8 29	0 5.68	- 5 24.2	1.571	2.527	9.3	20.5
9 8	23 53.01	- 6 55.6	4.631	5.621	2.1	19.7	9 8	23 58.17	- 6 8.1	1.519	2.511	5.1	20.2
9 18	23 48.57	- 7 29.9	4.619	5.619	1.0	19.6	9 18	23 49.29	- 6 53.6	1.493	2.495	2.1	20.0
9 28	23 44.09	- 8 2.0	4.637	5.617	2.3	19.7	9 28	23 40.13	- 7 33.7	1.494	2.480	5.4	20.2
10 8	23 39.88	- 8 29.7	4.685	5.615	4.1	19.9	10 8	23 31.82	- 8 2.1	1.522	2.464	9.8	20.4
10 18	23 36.23	- 8 51.5	4.760	5.612	5.7	20.0	10 18	23 25.32	- 8 14.8	1.572	2.448	13.9	20.6
10 28	23 33.38	- 9 6.1	4.861	5.610	7.2	20.1	10 28	23 21.34	- 8 9.7	1.643	2.433	17.4	20.8
205035	1998 QD ₈₄		9 19.5 11°86	9°1/27.7 18			234100	1999 TU ₂₉₉		9 19.5 38°18	5°1/15.5 18		
8 19	0 10.13	+21 32.4	1.563	2.364	18.5	19.5	8 19	0 13.81	-13 16.1	1.596	2.499	13.1	19.9
8 29	0 5.14	+22 21.4	1.496	2.365	15.7	19.3	8 29	0 7.40	-13 53.7	1.547	2.503	9.5	19.7
9 8	23 57.91	+22 42.3	1.447	2.368	12.7	19.1	9 8	23 58.96	-14 28.5	1.522	2.507	6.2	19.5
9 18	23 49.24	+22 32.5	1.419	2.370	10.1	19.0	9 18	23 49.38	-14 53.8	1.523	2.512	5.2	19.4
9 28	23 40.28	+21 53.4	1.415	2.374	9.1	18.9	9 28	23 39.82	-15 3.4	1.550	2.517	7.7	19.6
10 8	23 32.31	+20 51.4	1.435	2.378	10.2	19.0	10 8	23 31.43	-14 54.1	1.602	2.521	11.2	19.8
10 18	23 26.36	+19 35.9	1.478	2.383	12.8	19.2	10 18	23 25.08	-14 25.5	1.677	2.527	14.5	20.1
10 28	23 23.14	+18 17.6	1.543	2.388	15.6	19.4	10 28	23 21.30	-13 39.1	1.772	2.532	17.4	20.3
364075	2005 YL ₃₂		9 19.5 281°80	4°3/14.1 18			49467	1999 AC ₁₆		9 19.5 297°94	4°5/14.8 18		
8 19	0 6.68	-12 21.4	2.198	3.100	10.1	20.5	8 19	0 8.02	-10 32.7	1.778	2.685	11.8	18.6
8 29	0 2.02	-13 36.2	2.140	3.095	7.3	20.3	8 29	0 3.31	-11 48.1	1.714	2.673	8.5	18.4
9 8	23 55.92	-14 51.2	2.107	3.091	4.9	20.2	9 8	23 56.78	-13 6.1	1.675	2.662	5.4	18.2
9 18	23 48.96	-15 59.8	2.102	3.086	4.6	20.2	9 18	23 49.11	-14 19.0	1.661	2.651	4.7	18.1
9 28	23 41.90	-16 55.9	2.125	3.082	6.7	20.3	9 28	23 41.27	-15 18.7	1.675	2.640	7.3	18.3
10 8	23 35.52	-17 34.8	2.175	3.077	9.5	20.5	10 8	23 34.23	-15 59.1	1.714	2.630	10.8	18.4
10 18	23 30.48	-17 54.5	2.248	3.073	12.2	20.6	10 18	23 28.84	-16 17.5	1.776	2.619	14.1	18.6
10 28	23 27.27	-17 54.7	2.341	3.068	14.5	20.8	10 28	23 25.69	-16 13.4	1.857	2.608	17.0	18.8
114895	2003 QG ₂₁		9 19.5 318°05	0°9/18.7 18			391247	2006 QC ₇₀		9 19.5 28°53	0°2/19.6 18		
8 19	0 9.81	- 3 5.5	1.964	2.852	11.7	18.8	8 19	0 10.55	+ 0 18.3	1.491	2.383	14.6	20.6
8 29	0 4.46	- 3 16.2	1.885	2.837	8.4	18.5	8 29	0 5.17	+ 0 6.7	1.440	2.391	10.4	20.3
9 8	23 57.37	- 3 33.2	1.830	2.821	4.5	18.3	9 8	23 57.78	- 0 16.1	1.411	2.401	5.8	20.1
9 18	23 49.16	- 3 52.8	1.802	2.806	0.9	18.0	9 18	23 49.24	- 0 45.8	1.407	2.411	0.8	19.8
9 28	23 40.72	- 4 10.6	1.801	2.791	4.0	18.2	9 28	23 40.68	- 1 16.3	1.429	2.422	4.1	20.1
10 8	23 32.98	- 4 22.1	1.828	2.776	8.0	18.4	10 8	23 33.23	- 1 41.6	1.477	2.433	8.7	20.4
10 18	23 26.76	- 4 24.1	1.881	2.762	11.7	18.6	10 18	23 27.76	- 1 57.1	1.548	2.445	12.8	20.6
10 28	23 22.65	- 4 14.3	1.955	2.749	14.8	18.8	10 28	23 24.81	- 1 59.5	1.641	2.457	16.2	20.9
149702	2004 HF ₅₀		9 19.5 225°13	4°2/15.6 18			20383	1998 KU ₅₁		9 19.5 44°67	4°1/14.8 18		
8 19	0 11.22	- 9 13.9	1.612	2.516	13.0	20.0	8 19	0 6.57	- 9 47.3	1.877	2.783	11.3	17.6
8 29	0 5.66	-10 24.3	1.554	2.512	9.2	19.8	8 29	0 2.06	-11 11.6	1.831	2.790	8.0	17.4
9 8	23 58.07	-11 38.3	1.519	2.509	5.6	19.6	9 8	23 55.98	-12 37.8	1.810	2.799	5.0	17.2
9 18	23 49.25	-12 47.5	1.511	2.505	4.4	19.5	9 18	23 49.00	-13 57.9	1.817	2.807	4.3	17.2
9 28	23 40.30	-13 43.4	1.529	2.500	7.3	19.6	9 28	23 42.01	-15 4.8	1.850	2.816	6.8	17.4
10 8	23 32.33	-14 20.0	1.573	2.496	11.1	19.9	10 8	23 35.87	-15 52.9	1.910	2.824	9.9	17.6
10 18	23 26.27	-14 34.3	1.640	2.491	14.7	20.1	10 18	23 31.26	-16 20.0	1.993	2.833	12.9	17.8
10 28	23 22.71	-14 26.2	1.725	2.486	17.7	20.3	10 28	23 28.66	-16 25.6	2.096	2.843	15.4	18.0
289537	2005 EM ₂₁₀		9 19.5 115°28	0°1/19.6 17			263114	2007 UV		9 19.5 9°24	24°6/ 2.2 17		
8 19	0 12.64	+ 2 21.9	1.609	2.489	14.4	21.1	8 19	0 31.07	-49 41.9	0.957	1.792	25.2	19.5
8 29	0 6.48	+ 1 31.3	1.559	2.505	10.3	20.9	8 29	0 21.39	-51 20.2	0.950	1.792	24.6	19.5
9 8	23 58.41	+ 0 26.8	1.532	2.521	5.7	20.7	9 8	0 6.96	-52 4.2	0.955	1.793	24.7	19.5
9 18	23 49.29	- 0 45.5	1.532	2.536	0.8	20.4	9 18	23 50.38	-51 40.8	0.973	1.794	25.3	19.6
9 28	23 40.19	- 1 57.6	1.559	2.551	4.1	20.7	9 28	23 34.99	-50 7.3	1.004	1.796	26.4	19.7
10 8	23 32.21	- 3 1.8	1.614	2.566	8.6	21.0	10 8	23 23.36	-47 33.0	1.047	1.798	27.8	19.8
10 18	23 26.16	- 3 52.3	1.693	2.579	12.5	21.2	10 18	23 16.60	-44 12.8	1.102	1.801	29.2	20.0
10 28	23 22.57	- 4 25.6	1.794	2.592	15.7	21.5	10 28	23 14.75	-40 22.1	1.168	1.804	30.5	20.1
399687	2004 TY ₇₄		9 19.5 339°77	3°7/23.4 18			257385	2009 ST ₁₂₁		9 19.5 271°16	1°0/21.5 16		
8 19	0 4.08	+11 39.4	1.714	2.569	14.8	19.5	8 19	0 1.08	+ 5 37.3	4.284	5.132	6.8	20.6
8 29	0 0.60	+11 14.9	1.635	2.557	11.5	19.3	8 29	23 57.53	+ 5 13.8	4.202	5.128	5.0	20.5
9 8	23 55.33	+10 28.1	1.576	2.546	7.9	19.1	9 8	23 53.30	+ 4 43.5	4.146	5.123	3.0	20.3
9 18	23 48.90	+ 9 21.4	1.542	2.535	4.5	18.9	9 18	23 48.66	+ 4 8.2	4.119	5.119	1.2	20.2
9 28	23 42.23	+ 8 0.4	1.535	2.526	4.3	18.8	9 28	23 43.95	+ 3 30.1	4.122	5.115	1.7	20.2
10 8	23 36.31	+ 6 33.4	1.553	2.517	7.6	19.0	10 8	23 39.54	+ 2 51.6	4.155	5.110	3.6	20.4
10 18	23 31.97	+ 5 9.1	1.596	2.509	11.5	19.2	10 18	23 35.74	+ 2 15.2	4.217	5.106	5.6	20.5
10 28	23 29.84	+ 3 55.6	1.662	2.502	15.0	19.4	10 28	23 32.84	+ 1 43.2	4.305	5.102	7.3	20.6
278776	2008 SR ₁₅₈		9 19.5 18°22	0°3/19.7 18			298134	2002 RD ₂₇₂		9 19.5 342°05	2°7/21.4 18		
8 19	0 7.57	+ 1 49.8	1.173	2.077	16.8	20.4	8 19	0 10.36	+ 4 54.1	1.398	2.280	16.0	19.9
8 29	0 3.43	+ 1 16.5	1.126	2.083	12.0	20.2	8 29	0 5.42	+ 5 16.0	1.327	2.269	12.0	19.6
9 8	23 56.95	+ 0 26.4	1.098	2.090	6.7	19.9	9 8	23 58.14	+ 5 22.5	1.276	2.259	7.5	19.3
9 18	23 49.10	- 0 33.9	1.094	2.099	1.0	19.6	9 18	23 49.32	+ 5 15.1	1.250	2.250	3.3	19.1
9 28	23 41.22	- 1 35.2	1.114	2.108	4.7	19.9	9 28	23 40.16	+ 4 57.9	1.249	2.242	4.5	19.1
10 8	23 34.61	- 2 28.1	1.158	2.119	10.0	20.2	10 8	23 32.00	+ 4 37.1	1.272	2.235	9.1	19.4
10 18	23 30.26	- 3 5.7	1.223	2.130	14.7	20.5	10 18	23 25.90	+ 4 18.9	1.319	2.229	13.6	19.6
10 28	23 28.76	- 3 24.0	1.308	2.142	18.5	20.8	10 28	23 22.64	+ 4 9.0	1.386	2.224	17.5	19.9
297537	2001 KF ₆₄		9 19.5 116°11	2°7/22.8 17			224884	2007 BS ₇₉		9 19.5 194°20	0°8/20.2 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
91871	1999 <i>UT</i> ₃₉		9 19.5 312°39	3°6/16.0	18		309250	2007 <i>RZ</i> ₃₈		9 19.5 24°62	0°2/19.6	18	
8 19	0 10.66	-10 53.9	2.044	2.941	11.0	19.3	8 19	0 15.67	-2 8.4	1.148	2.051	17.2	19.0
8 29	0 4.92	-11 26.9	1.981	2.936	7.8	19.1	8 29	0 9.13	-1 34.7	1.108	2.065	12.3	18.7
9 8	23 57.56	-12 0.0	1.943	2.931	4.8	18.9	9 8	0 0.04	-1 10.1	1.089	2.081	6.8	18.5
9 18	23 49.23	-12 28.0	1.932	2.926	3.7	18.8	9 18	23 49.57	-0 51.5	1.094	2.098	1.0	18.2
9 28	23 40.81	-12 45.9	1.950	2.921	5.9	18.9	9 28	23 39.26	-0 34.8	1.123	2.117	4.8	18.5
10 8	23 33.18	-12 50.0	1.994	2.916	9.1	19.1	10 8	23 30.57	-0 15.7	1.177	2.136	10.0	18.9
10 18	23 27.09	-12 38.7	2.062	2.912	12.2	19.3	10 18	23 24.49	+0 9.1	1.252	2.157	14.6	19.2
10 28	23 23.06	-12 12.1	2.152	2.907	14.8	19.5	10 28	23 21.57	+0 42.1	1.348	2.179	18.3	19.5
163912	2003 <i>SN</i> ₂₄₅		9 19.5 24°47	0°8/20.4	18		261399	2005 <i>UR</i> ₄₄₁		9 19.5 89°82	5°6/14.7	18	
8 19	0 6.47	+5 49.7	1.675	2.551	14.1	19.6	8 19	0 13.09	-13 30.5	1.559	2.465	13.2	20.2
8 29	0 2.22	+4 37.9	1.610	2.552	10.3	19.3	8 29	0 6.90	-14 34.4	1.517	2.474	9.6	20.0
9 8	23 56.17	+3 7.0	1.567	2.553	5.9	19.1	9 8	23 58.70	-15 35.7	1.499	2.483	6.5	19.8
9 18	23 49.05	+1 23.4	1.551	2.555	1.4	18.8	9 18	23 49.40	-16 25.9	1.507	2.492	5.9	19.8
9 28	23 41.80	-0 24.2	1.563	2.556	3.7	19.0	9 28	23 40.15	-16 58.0	1.540	2.501	8.3	20.0
10 8	23 35.42	-2 5.8	1.601	2.558	8.2	19.2	10 8	23 32.10	-17 7.8	1.599	2.510	11.7	20.2
10 18	23 30.70	-3 33.3	1.665	2.560	12.2	19.5	10 18	23 26.09	-16 55.0	1.679	2.518	15.0	20.5
10 28	23 28.22	-4 41.1	1.751	2.562	15.6	19.7	10 28	23 22.65	-16 21.1	1.778	2.527	17.7	20.7
483761	2005 <i>UZ</i> ₁₇₂		9 19.5 301°43	2°1/21.7	17		22279	1984 <i>DM</i>		9 19.5 148°61	3°1/23.7	18	
8 19	0 7.03	+6 59.1	1.982	2.844	12.8	21.9	8 19	0 9.33	+12 3.5	2.986	3.801	10.2	18.6
8 29	0 2.52	+6 36.5	1.897	2.830	9.6	21.7	8 29	0 3.58	+12 4.5	2.913	3.810	8.0	18.5
9 8	23 56.34	+5 58.1	1.836	2.815	6.0	21.4	9 8	23 56.69	+11 53.3	2.864	3.819	5.6	18.3
9 18	23 49.08	+5 6.7	1.801	2.800	2.6	21.2	9 18	23 49.14	+11 30.8	2.843	3.828	3.5	18.2
9 28	23 41.57	+4 7.2	1.793	2.786	3.4	21.2	9 28	23 41.52	+10 59.4	2.852	3.836	3.3	18.2
10 8	23 34.70	+3 6.1	1.812	2.772	7.1	21.4	10 8	23 34.43	+10 22.7	2.891	3.843	5.2	18.4
10 18	23 29.26	+2 9.5	1.858	2.758	10.8	21.6	10 18	23 28.40	+9 44.4	2.958	3.851	7.5	18.5
10 28	23 25.85	+1 23.1	1.926	2.744	14.1	21.8	10 28	23 23.83	+9 8.6	3.051	3.857	9.7	18.7
353123	2009 <i>FW</i> ₅₀		9 19.5 192°73	1°8/17.6	18		452704	2005 <i>YK</i> ₈₈		9 19.5 287°67	3°7/23.5	17	
8 19	0 8.51	-3 47.0	1.996	2.888	11.4	20.9	8 19	0 8.30	+11 31.9	2.201	3.035	12.7	21.5
8 29	0 3.42	-4 41.7	1.933	2.887	8.0	20.7	8 29	0 3.30	+11 33.9	2.116	3.026	9.9	21.3
9 8	23 56.75	-5 43.4	1.895	2.887	4.3	20.5	9 8	23 56.74	+11 19.8	2.055	3.017	6.9	21.1
9 18	23 49.13	-6 46.6	1.884	2.886	1.8	20.3	9 18	23 49.17	+10 50.6	2.020	3.008	4.3	20.9
9 28	23 41.41	-7 44.8	1.901	2.885	4.6	20.5	9 28	23 41.38	+10 9.4	2.012	2.999	4.1	20.9
10 8	23 34.46	-8 32.3	1.946	2.884	8.3	20.7	10 8	23 34.19	+9 21.2	2.032	2.990	6.7	21.0
10 18	23 28.98	-9 5.2	2.016	2.883	11.7	20.9	10 18	23 28.36	+8 31.7	2.079	2.981	9.8	21.2
10 28	23 25.50	-9 21.4	2.107	2.882	14.5	21.1	10 28	23 24.42	+7 46.5	2.149	2.972	12.7	21.4
516231	2016 <i>UE</i> ₃₀		9 19.5 337°75	1°1/18.6	18		264050	2009 <i>RJ</i> ₅₂		9 19.5 261°05	1°5/22.9	16	
8 19	0 10.89	-2 40.1	1.584	2.479	13.7	21.4	8 19	0 0.44	+9 41.9	4.576	5.403	6.7	20.9
8 29	0 5.48	-3 2.3	1.519	2.474	9.7	21.1	8 29	23 57.08	+9 13.7	4.486	5.395	5.1	20.7
9 8	23 58.02	-3 33.0	1.478	2.470	5.3	20.8	9 8	23 53.07	+8 37.5	4.422	5.387	3.4	20.6
9 18	23 49.31	-4 7.3	1.462	2.466	1.1	20.6	9 18	23 48.68	+7 54.7	4.387	5.380	1.8	20.5
9 28	23 40.43	-4 38.8	1.473	2.463	4.7	20.8	9 28	23 44.22	+7 7.5	4.382	5.372	1.8	20.5
10 8	23 32.52	-5 1.7	1.510	2.460	9.2	21.1	10 8	23 40.03	+6 18.4	4.407	5.364	3.4	20.6
10 18	23 26.50	-5 11.9	1.570	2.457	13.3	21.3	10 18	23 36.41	+5 30.0	4.462	5.356	5.2	20.7
10 28	23 22.99	-5 7.0	1.651	2.454	16.7	21.5	10 28	23 33.62	+4 44.8	4.543	5.348	6.8	20.8
16831	1997 <i>WM</i> ₂₁		9 19.5 232°94	3°1/22.3	18		465618	2009 <i>EJ</i> ₂₉		9 19.5 92°32	1°7/17.9	17	
8 19	0 11.63	+9 28.3	1.646	2.501	15.3	17.9	8 19	0 13.13	-1 42.5	1.422	2.317	15.0	21.6
8 29	0 6.11	+9 4.0	1.565	2.491	11.7	17.7	8 29	0 6.94	-2 53.9	1.384	2.339	10.4	21.4
9 8	23 58.44	+8 18.4	1.507	2.481	7.6	17.4	9 8	23 58.72	-4 15.6	1.368	2.361	5.5	21.2
9 18	23 49.38	+7 14.0	1.473	2.470	3.8	17.2	9 18	23 49.42	-5 39.1	1.379	2.382	1.7	21.0
9 28	23 39.98	+5 57.1	1.466	2.458	4.2	17.2	9 28	23 40.27	-6 55.0	1.416	2.403	5.4	21.3
10 8	23 31.44	+4 36.1	1.487	2.446	8.3	17.4	10 8	23 32.42	-7 55.3	1.480	2.424	9.9	21.6
10 18	23 24.74	+3 19.9	1.532	2.434	12.6	17.6	10 18	23 26.70	-8 35.7	1.567	2.444	13.9	21.9
10 28	23 20.61	+2 16.0	1.599	2.421	16.3	17.8	10 28	23 23.62	-8 54.6	1.674	2.463	17.1	22.2
108807	2001 <i>ON</i> ₇₄		9 19.5 18°30	7°4/24.9	18		481699	2008 <i>BY</i> ₁₂		9 19.5 199°01	5°3/25.3	18	
8 19	0 11.47	+14 30.8	1.340	2.186	18.6	18.2	8 19	0 11.22	+16 48.2	2.349	3.147	13.2	21.8
8 29	0 6.19	+15 31.9	1.286	2.195	15.1	18.0	8 29	0 5.32	+17 9.1	2.267	3.145	10.7	21.6
9 8	23 58.52	+16 8.1	1.252	2.205	11.3	17.8	9 8	23 57.83	+17 12.2	2.207	3.142	8.1	21.5
9 18	23 49.38	+16 17.8	1.239	2.216	8.2	17.7	9 18	23 49.33	+16 57.2	2.172	3.140	6.0	21.3
9 28	23 40.09	+16 3.2	1.251	2.228	7.5	17.7	9 28	23 40.60	+16 25.9	2.165	3.136	5.4	21.3
10 8	23 32.01	+15 30.9	1.286	2.242	9.8	17.8	10 8	23 32.51	+15 42.8	2.186	3.133	7.0	21.4
10 18	23 26.19	+14 49.6	1.344	2.256	13.2	18.1	10 18	23 25.78	+14 53.2	2.234	3.129	9.5	21.5
10 28	23 23.29	+14 8.4	1.422	2.272	16.5	18.3	10 28	23 20.98	+14 3.3	2.307	3.125	12.0	21.7
395889	2013 <i>AN</i> ₄₂		9 19.5 112°30	1°4/18.0	18		474835	2005 <i>SV</i> ₆₃		9 19.5 275°38	0°4/19.9	18	
8 19	0 9.03	-2 59.4	2.066	2.953	11.3	21.4	8 19	0 10.13	+2 34.6	1.627	2.509	14.1	21.5
8 29	0 3.68	-3 46.0	2.010	2.962	7.9	21.2	8 29	0 5.08	+1 57.2	1.545	2.492	10.3	21.2
9 8	23 56.84	-4 39.4	1.979	2.971	4.2	21.0	9 8	23 57.93	+1 4.2	1.486	2.474	5.8	20.9
9 18	23 49.15	-5 34.5	1.976	2.979	1.4	20.8	9 18	23 49.36	+0 0.1	1.452	2.457	1.0	20.5
9 28	23 41.43	-6 25.5	2.001	2.987	4.2	21.1	9 28	23 40.42	-1 7.9	1.446	2.439	4.1	20.7
10 8	23 34.51	-7 7.2	2.054	2.995	7.8	21.3	10 8	23 32.28	-2 11.6	1.466	2.421	8.9	21.0
10 18	23 29.03	-7 36.1	2.133	3.003	11.0	21.5	10 18	23 25.93	-3 4.0	1.510	2.402	13.3	21.2
10 28	23 25.50	-7 50.3	2.233	3.011	13.7	21.7	10 28	23 22.09	-3 39.8	1.575	2.384	17.1	21.4
482305	2011 <i>UC</i> ₉₇		9 19.5 329°47	0°8/20.2	18		282712	2006 <i>BN</i> ₁₉₉					

EPHEMERIDES

9 19.5

9 19.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
3795	Nigel		9 19.5	68°02'	7.3/14.2	18	185463	2007 BQ ₄		9 19.5	61°90'	9.3/6.4	18
8 19	0 15.58	-16 21.9	1.331	2.240	14.8	16.0	8 19	0 7.56	-26 54.2	2.017	2.909	11.3	19.0
8 29	0 8.75	-17 30.0	1.305	2.260	11.0	15.8	8 29	0 2.85	-29 10.5	1.999	2.922	9.7	19.0
9 8	23 59.70	-18 30.3	1.302	2.281	7.9	15.7	9 8	23 56.48	-31 12.3	2.007	2.935	9.3	19.0
9 18	23 49.55	-19 13.4	1.323	2.301	7.5	15.8	9 18	23 49.19	-32 50.6	2.041	2.948	10.1	19.0
9 28	23 39.69	-19 32.3	1.368	2.322	9.9	16.0	9 28	23 41.90	-33 59.4	2.099	2.961	11.8	19.2
10 8	23 31.40	-19 24.6	1.438	2.342	13.3	16.2	10 8	23 35.51	-34 36.5	2.179	2.975	13.6	19.3
10 18	23 25.51	-18 52.0	1.528	2.363	16.5	16.5	10 18	23 30.73	-34 43.5	2.278	2.988	15.4	19.5
10 28	23 22.49	-17 57.9	1.636	2.383	19.1	16.7	10 28	23 28.06	-34 23.7	2.393	3.002	16.8	19.7
23285	2000 YH ₁₁₉		9 19.5	265°07'	2.1/23.5	18	312786	2010 VC ₉₆		9 19.5	288°49'	3.0/13.2	16
8 19	0 3.31	+10 42.5	4.342	5.160	7.2	18.3	8 19	0 1.79	-16 20.9	4.320	5.212	5.8	20.3
8 29	23 59.12	+10 44.3	4.255	5.156	5.6	18.2	8 29	23 58.07	-17 3.0	4.262	5.208	4.3	20.2
9 8	23 54.20	+10 38.2	4.194	5.152	3.9	18.0	9 8	23 53.64	-17 43.1	4.231	5.204	3.2	20.1
9 18	23 48.84	+10 25.0	4.162	5.148	2.4	17.9	9 18	23 48.82	-18 18.3	4.229	5.200	3.1	20.1
9 28	23 43.40	+10 6.2	4.159	5.143	2.3	17.9	9 28	23 43.94	-18 46.3	4.256	5.196	4.2	20.2
10 8	23 38.26	+9 43.9	4.186	5.139	3.7	18.0	10 8	23 39.39	-19 5.0	4.311	5.192	5.7	20.3
10 18	23 31.40	+9 20.4	4.242	5.135	5.4	18.1	10 18	23 35.49	-19 13.6	4.392	5.188	7.2	20.4
10 28	23 30.15	+8 58.1	4.324	5.131	7.1	18.3	10 28	23 32.51	-19 11.6	4.495	5.185	8.5	20.5
29098	1981 EN ₁₆		9 19.5	166°53'	2.4/21.7	18	511326	2014 DB ₁₄₀		9 19.5	218°85'	0.6/18.9	18
8 19	0 13.68	+6 56.0	1.923	2.776	13.5	20.2	8 19	0 10.61	-0 50.3	1.966	2.848	12.0	22.2
8 29	0 7.19	+6 49.2	1.853	2.780	10.1	20.0	8 29	0 5.02	-1 26.9	1.894	2.843	8.6	21.9
9 8	23 58.88	+6 27.6	1.808	2.784	6.4	19.8	9 8	23 57.73	-2 13.0	1.847	2.838	4.7	21.7
9 18	23 49.48	+5 53.5	1.789	2.787	2.9	19.6	9 18	23 49.38	-3 3.9	1.827	2.832	0.7	21.4
9 28	23 39.95	+5 11.3	1.798	2.790	3.6	19.6	9 28	23 40.87	-3 53.7	1.836	2.826	3.9	21.6
10 8	23 31.28	+4 27.0	1.836	2.792	7.3	19.9	10 8	23 33.11	-4 36.8	1.872	2.819	7.9	21.9
10 18	23 24.28	+3 46.3	1.900	2.794	11.0	20.1	10 18	23 26.90	-5 8.6	1.934	2.813	11.6	22.1
10 28	23 19.55	+3 13.9	1.987	2.795	14.1	20.3	10 28	23 22.79	-5 26.3	2.018	2.806	14.6	22.3
395550	2011 UE ₁₈₈		9 19.5	43°12'	1.0/18.8	18	412595	2014 OF ₆₈		9 19.5	314°17'	1.9/17.4	18
8 19	0 14.36	-3 20.8	1.474	2.368	14.6	20.0	8 19	0 7.62	-5 6.5	2.138	3.031	10.7	20.3
8 29	0 7.81	-3 22.7	1.431	2.385	10.3	19.8	8 29	0 2.77	-5 49.4	2.072	3.027	7.5	20.1
9 8	23 59.21	-3 31.5	1.410	2.402	5.5	19.6	9 8	23 56.43	-6 37.6	2.030	3.022	4.1	19.9
9 18	23 49.51	-3 42.7	1.416	2.420	1.0	19.3	9 18	23 49.20	-7 26.2	2.016	3.018	1.9	19.8
9 28	23 39.93	-3 51.2	1.448	2.438	4.6	19.6	9 28	23 41.86	-8 9.7	2.030	3.013	4.5	19.9
10 8	23 31.64	-3 52.4	1.505	2.457	9.1	20.0	10 8	23 35.20	-8 43.3	2.072	3.009	8.0	20.1
10 18	23 25.47	-3 43.5	1.587	2.476	13.1	20.2	10 18	23 29.90	-9 3.9	2.139	3.005	11.1	20.3
10 28	23 21.94	-3 23.0	1.690	2.495	16.3	20.5	10 28	23 26.47	-9 9.5	2.227	3.001	13.8	20.5
491138	2011 SN ₁₅₆		9 19.5	328°59'	0.1/19.4	18	216067	2006 QP ₁₃		9 19.5	33°14'	6.9/14.6	17
8 19	0 7.94	+1 7.6	1.677	2.565	13.4	21.6	8 19	0 11.98	-13 12.0	1.109	2.030	16.0	19.5
8 29	0 3.34	+0 28.3	1.608	2.559	9.6	21.4	8 29	0 6.67	-14 26.3	1.074	2.039	11.6	19.3
9 8	23 56.86	+0 23.9	1.563	2.553	5.3	21.1	9 8	23 58.80	-15 37.6	1.061	2.048	7.9	19.1
9 18	23 49.23	-1 23.9	1.543	2.548	0.7	20.8	9 18	23 49.51	-16 34.5	1.070	2.058	7.2	19.1
9 28	23 41.41	-2 24.9	1.550	2.542	4.0	21.0	9 28	23 40.34	-17 7.2	1.102	2.068	10.1	19.3
10 8	23 34.43	-3 19.6	1.584	2.538	8.5	21.3	10 8	23 32.74	-17 11.1	1.157	2.079	14.2	19.6
10 18	23 29.15	-4 2.0	1.642	2.533	12.5	21.5	10 18	23 27.70	-16 46.6	1.231	2.091	18.0	19.9
10 28	23 26.16	-4 28.3	1.720	2.529	15.9	21.8	10 28	23 25.77	-15 57.0	1.321	2.103	21.2	20.2
176085	2000 YE ₁₄		9 19.5	309°28'	2.7/17.4	18	145480	2005 TB ₁₉₀		9 19.5	2°20'	0.0/20.2	18
8 19	0 9.40	-3 43.8	1.235	2.145	15.6	20.2	8 19	23 49.99	+0 39.1	45.394	46.258	0.7	21.1
8 29	0 5.00	-4 43.8	1.167	2.130	11.1	19.9	8 29	23 49.43	+0 34.5	45.321	46.258	0.5	21.1
9 8	23 58.05	-5 56.5	1.121	2.115	6.0	19.5	9 8	23 48.82	+0 29.6	45.274	46.259	0.3	21.1
9 18	23 49.40	-7 13.3	1.098	2.101	2.7	19.3	9 18	23 48.18	+0 24.3	45.256	46.260	0.1	21.0
9 28	23 40.39	-8 23.4	1.100	2.087	6.7	19.5	9 28	23 47.54	+0 19.1	45.268	46.261	0.2	21.1
10 8	23 32.46	-9 16.7	1.126	2.073	12.0	19.8	10 8	23 46.92	+0 13.8	45.310	46.262	0.4	21.1
10 18	23 26.80	-9 47.1	1.173	2.060	16.8	20.0	10 18	23 46.34	+0 8.8	45.380	46.263	0.6	21.1
10 28	23 24.18	-9 51.9	1.237	2.047	20.8	20.2	10 28	23 45.83	+0 4.2	45.476	46.263	0.8	21.1
24507	2001 BH ₁₈		9 19.5	88°98'	6.7/26.6	18	62218	2000 SA ₆₅		9 19.5	82°58'	1.1/18.7	17 R
8 19	0 12.06	+19 20.2	1.876	2.672	16.0	18.5	8 19	0 14.28	-2 33.0	1.599	2.489	13.9	19.2
8 29	0 6.09	+19 39.4	1.815	2.689	13.2	18.3	8 29	0 7.67	-2 57.2	1.554	2.506	9.8	19.0
9 8	23 58.30	+19 34.6	1.776	2.705	10.2	18.2	9 8	23 59.14	-3 29.1	1.532	2.523	5.3	18.8
9 18	23 49.43	+19 5.6	1.760	2.722	7.6	18.0	9 18	23 49.56	-4 3.6	1.536	2.541	1.1	18.5
9 28	23 40.49	+18 15.5	1.770	2.738	6.8	18.0	9 28	23 40.08	-4 34.7	1.568	2.558	4.5	18.8
10 8	23 32.50	+17 10.8	1.807	2.754	8.2	18.2	10 8	23 31.77	-4 56.9	1.627	2.574	8.9	19.1
10 18	23 26.27	+15 59.4	1.869	2.769	10.8	18.3	10 18	23 25.45	-5 6.9	1.710	2.591	12.7	19.4
10 28	23 22.36	+14 49.4	1.955	2.785	13.4	18.6	10 28	23 21.63	-5 2.8	1.813	2.608	15.8	19.6
399275	2014 HY ₈₁		9 19.5	9°02'	1.5/18.1	15	177077	2003 FL ₄₅		9 19.5	114°44'	0.4/19.0	18
8 19	0 7.35	-2 11.7	1.615	2.514	13.3	21.0	8 19	0 9.19	-0 29.8	2.392	3.267	10.4	21.0
8 29	0 2.90	-3 5.9	1.557	2.514	9.3	20.8	8 29	0 3.63	-1 7.5	2.338	3.283	7.4	20.9
9 8	23 56.60	-4 10.2	1.523	2.516	5.0	20.5	9 8	23 56.80	-1 52.5	2.309	3.299	4.0	20.7
9 18	23 49.21	-5 17.9	1.514	2.518	1.5	20.3	9 18	23 49.25	-2 40.8	2.309	3.314	0.6	20.4
9 28	23 41.71	-6 21.1	1.532	2.520	4.9	20.5	9 28	23 41.72	-3 27.7	2.339	3.329	3.2	20.7
10 8	23 35.14	-7 12.9	1.576	2.523	9.2	20.8	10 8	23 34.89	-4 8.8	2.398	3.343	6.5	20.9
10 18	23 30.31	-7 48.2	1.644	2.526	13.0	21.1	10 18	23 29.35	-4 40.7	2.483	3.358	9.5	21.1
10 28	23 27.78	-8 4.7	1.732	2.530	16.3	21.3	10 28	23 25.52	-5 0.9	2.591	3.371	12.0	21.3
383180	2005 WP ₁₁₉		9 19.5	268°65'	0.5/19.0	18	331392	2012 FV ₁₈		9 19.5	258°47'	0.5/19.0	18
8 19	0 10.29	+0 7.5	1.681	2.568	13.5	21.6	8 19	0 8.33	-				

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
12019	1996 <i>XF</i> ₁₉		9 19.5 339°57	3°7/22.3	18		186722	2004 <i>BT</i> ₁₀₈		9 19.5 225°56	2°0/17.8	17	
8 19	0 7.31	+ 8 34.3	1.128	2.014	18.6	17.4	8 19	0 13.70	- 4 31.5	1.789	2.679	12.7	21.4
8 29	0 3.67	+ 8 28.2	1.061	2.004	14.3	17.1	8 29	0 7.43	- 5 12.5	1.717	2.669	9.0	21.1
9 8	23 57.40	+ 7 56.1	1.014	1.995	9.3	16.8	9 8	23 59.16	- 6 0.6	1.668	2.660	4.9	20.9
9 18	23 49.37	+ 7 0.6	0.987	1.986	4.6	16.6	9 18	23 49.63	- 6 50.1	1.647	2.649	2.0	20.6
9 28	23 40.98	+ 5 49.1	0.984	1.979	5.1	16.6	9 28	23 39.87	- 7 34.4	1.654	2.638	5.1	20.8
10 8	23 33.72	+ 4 32.8	1.004	1.972	10.1	16.8	10 8	23 30.97	- 8 7.5	1.688	2.627	9.3	21.1
10 18	23 28.84	+ 3 23.1	1.045	1.967	15.2	17.1	10 18	23 23.84	- 8 25.5	1.747	2.615	13.1	21.3
10 28	23 27.14	+ 2 29.1	1.105	1.962	19.6	17.4	10 28	23 19.11	- 8 26.6	1.826	2.602	16.4	21.5
118993	2000 <i>YL</i> ₁₂		9 19.5 157°93	0°3/19.8	18		96539	1998 <i>SW</i> ₂₇		9 19.5 324°26	8°9/28.4	18	
8 19	0 8.01	+ 1 44.8	2.527	3.395	10.2	20.2	8 19	0 8.61	+23 55.4	1.972	2.742	16.3	19.1
8 29	0 2.82	+ 1 12.5	2.459	3.400	7.3	20.0	8 29	0 3.96	+24 43.7	1.882	2.726	14.1	19.0
9 8	23 56.38	+ 0 31.5	2.417	3.404	4.1	19.8	9 8	23 57.35	+25 8.1	1.811	2.711	11.7	18.8
9 18	23 49.21	- 0 14.9	2.403	3.408	0.7	19.6	9 18	23 49.40	+25 5.8	1.762	2.696	9.8	18.6
9 28	23 41.96	- 1 2.4	2.419	3.411	2.8	19.8	9 28	23 41.02	+24 36.7	1.736	2.681	8.9	18.5
10 8	23 35.32	- 1 46.5	2.464	3.414	6.1	20.0	10 8	23 33.28	+23 44.8	1.736	2.667	9.6	18.6
10 18	23 29.86	- 2 23.5	2.536	3.417	9.1	20.2	10 18	23 27.10	+22 36.8	1.759	2.654	11.7	18.7
10 28	23 26.01	- 2 50.3	2.632	3.420	11.6	20.4	10 28	23 23.24	+21 21.8	1.806	2.641	14.1	18.8
356266	2009 <i>VY</i> ₄₅		9 19.5 253°68	1°0/17.6	18		379904	2012 <i>JG</i> ₂₆		9 19.5 97°31	5°2/14.6	18	
8 19	0 2.37	- 5 42.6	4.517	5.399	5.8	20.6	8 19	0 11.09	-10 18.3	1.485	2.393	13.6	20.6
8 29	23 58.44	- 6 3.2	4.445	5.394	4.0	20.5	8 29	0 5.61	-11 55.4	1.445	2.405	9.6	20.4
9 8	23 53.84	- 6 25.6	4.400	5.390	2.2	20.3	9 8	23 58.11	-13 33.8	1.429	2.417	6.2	20.3
9 18	23 48.87	- 6 47.9	4.384	5.386	1.0	20.2	9 18	23 49.47	-15 3.3	1.439	2.428	5.5	20.3
9 28	23 43.84	- 7 8.1	4.399	5.381	2.3	20.3	9 28	23 40.87	-16 14.3	1.475	2.439	8.3	20.5
10 8	23 39.11	- 7 24.3	4.444	5.377	4.2	20.5	10 8	23 33.45	-17 0.8	1.536	2.450	11.9	20.7
10 18	23 34.98	- 7 34.9	4.516	5.373	5.9	20.6	10 18	23 28.04	-17 20.8	1.619	2.461	15.3	20.9
10 28	23 31.71	- 7 38.8	4.613	5.368	7.4	20.7	10 28	23 25.18	-17 15.4	1.720	2.471	18.1	21.2
117705	2005 <i>FS</i> ₂		9 19.5 65°56	7°0/13.3	18		111514	2001 <i>YA</i> ₈₇		9 19.5 15°66	5°5/13.7	18	
8 19	0 13.19	-18 54.0	1.700	2.601	12.6	19.2	8 19	0 8.32	-14 29.0	1.870	2.776	11.4	19.2
8 29	0 6.80	-19 57.2	1.672	2.620	9.6	19.0	8 29	0 3.42	-15 42.9	1.822	2.777	8.3	19.0
9 8	23 58.60	-20 51.8	1.668	2.639	7.4	19.0	9 8	23 56.85	-16 54.5	1.799	2.779	6.0	18.9
9 18	23 49.50	-21 30.1	1.690	2.658	7.3	19.0	9 18	23 49.31	-17 56.1	1.802	2.781	5.8	18.9
9 28	23 40.59	-21 46.7	1.738	2.677	9.3	19.2	9 28	23 41.74	-18 41.1	1.831	2.783	7.9	19.0
10 8	23 32.90	-21 39.6	1.810	2.696	12.0	19.4	10 8	23 35.03	-19 5.2	1.886	2.785	10.9	19.2
10 18	23 27.15	-21 10.0	1.903	2.715	14.6	19.6	10 18	23 29.93	-19 7.2	1.963	2.788	13.7	19.4
10 28	23 23.80	-20 20.7	2.016	2.734	16.8	19.8	10 28	23 26.94	-18 48.0	2.059	2.790	16.1	19.6
411523	2011 <i>BR</i> ₇₈		9 19.5 272°92	5°4/25.4	17		319412	2006 <i>HJ</i> ₂₇		9 19.5 171°52	0°9/18.9	17	
8 19	0 9.97	+17 7.9	2.496	3.290	12.6	21.2	8 19	0 13.93	- 1 0.1	1.440	2.332	15.0	21.5
8 29	0 4.50	+17 32.8	2.398	3.273	10.3	21.0	8 29	0 7.82	- 1 37.0	1.380	2.333	10.7	21.2
9 8	23 57.47	+17 41.1	2.323	3.256	7.9	20.9	9 8	23 59.44	- 2 25.7	1.343	2.334	5.8	20.9
9 18	23 49.39	+17 32.1	2.274	3.238	5.9	20.7	9 18	23 49.68	- 3 20.1	1.331	2.335	1.0	20.6
9 28	23 40.99	+17 7.0	2.252	3.221	5.4	20.6	9 28	23 39.78	- 4 12.3	1.346	2.336	4.9	20.9
10 8	23 33.08	+16 29.5	2.258	3.203	6.9	20.7	10 8	23 31.02	- 4 54.8	1.386	2.337	9.8	21.2
10 18	23 26.38	+15 44.4	2.291	3.185	9.3	20.8	10 18	23 24.41	- 5 22.2	1.450	2.337	14.2	21.5
10 28	23 21.50	+14 57.7	2.348	3.167	11.8	21.0	10 28	23 20.58	- 5 31.7	1.534	2.336	17.8	21.7
264012	2009 <i>PJ</i> ₅		9 19.5 37°13	0°7/19.0	18		448095	2008 <i>KL</i> ₄		9 19.5 41°70	3°3/15.8	15	
8 19	0 9.45	+ 0 33.3	1.120	2.027	17.2	19.5	8 19	0 6.37	- 7 27.1	1.907	2.810	11.3	21.0
8 29	0 4.82	- 0 17.2	1.081	2.040	12.1	19.2	8 29	0 1.95	- 8 43.6	1.860	2.819	7.9	20.9
9 8	23 57.79	+ 1 23.4	1.062	2.055	6.6	19.0	9 8	23 56.01	-10 3.9	1.838	2.829	4.6	20.7
9 18	23 49.42	+ 2 36.7	1.066	2.070	0.9	18.7	9 18	23 49.20	-11 20.8	1.844	2.839	3.4	20.6
9 28	23 41.12	+ 3 46.7	1.094	2.086	5.3	19.0	9 28	23 42.38	-12 27.0	1.877	2.850	5.9	20.8
10 8	23 34.25	+ 4 43.6	1.146	2.103	10.6	19.4	10 8	23 36.38	-13 17.2	1.936	2.861	9.2	21.0
10 18	23 29.77	+ 5 21.2	1.219	2.120	15.2	19.7	10 18	23 31.87	-13 48.3	2.019	2.872	12.3	21.3
10 28	23 28.20	+ 5 36.9	1.311	2.138	18.9	20.0	10 28	23 29.32	-13 59.6	2.123	2.883	14.9	21.5
66585	1999 <i>RC</i> ₁₆₂		9 19.5 119°43	2°8/22.2	18		34621	2000 <i>UR</i> ₅₅		9 19.5 20°07	5°5/13.9	18	R
8 19	0 13.77	+ 8 0.8	1.981	2.828	13.4	19.3	8 19	0 8.99	-14 42.8	1.844	2.749	11.5	18.0
8 29	0 7.16	+ 8 1.4	1.921	2.843	10.1	19.1	8 29	0 3.89	-15 47.4	1.797	2.752	8.5	17.9
9 8	23 58.85	+ 7 47.1	1.885	2.857	6.5	19.0	9 8	23 57.10	-16 49.1	1.774	2.755	6.0	17.7
9 18	23 49.57	+ 7 20.0	1.875	2.871	3.3	18.8	9 18	23 49.35	-17 40.6	1.778	2.758	5.7	17.7
9 28	23 40.26	+ 6 44.2	1.894	2.885	3.7	18.8	9 28	23 41.57	-18 15.5	1.808	2.762	7.9	17.8
10 8	23 31.85	+ 6 5.1	1.941	2.898	7.0	19.1	10 8	23 34.71	-18 30.2	1.863	2.766	10.8	18.0
10 18	23 25.10	+ 5 28.0	2.015	2.910	10.4	19.3	10 18	23 29.49	-18 23.6	1.941	2.770	13.7	18.2
10 28	23 20.52	+ 4 57.7	2.112	2.922	13.3	19.5	10 28	23 26.43	-17 56.8	2.038	2.774	16.1	18.4
225218	2008 <i>RD</i> ₉₅		9 19.5 232°78	0°4/20.3	18		94189	2001 <i>BU</i>		9 19.5 218°42	3°1/15.5	18	
8 19	0 1.46	+ 2 24.5	4.392	5.252	6.4	21.1	8 19	0 8.03	-10 8.4	2.602	3.495	9.1	19.6
8 29	23 57.83	+ 2 1.4	4.314	5.250	4.6	21.0	8 29	0 2.88	-11 2.3	2.535	3.489	6.4	19.4
9 8	23 53.54	+ 1 33.1	4.263	5.247	2.6	20.8	9 8	23 56.46	-11 57.5	2.495	3.482	4.0	19.3
9 18	23 48.85	+ 1 1.2	4.241	5.245	0.6	20.7	9 18	23 49.27	-12 49.3	2.483	3.474	3.2	19.2
9 28	23 44.11	+ 0 28.1	4.250	5.242	1.7	20.8	9 28	23 41.97	-13 32.7	2.500	3.467	5.1	19.3
10 8	23 39.66	- 0 4.1	4.288	5.240	3.7	20.9	10 8	23 35.25	-14 4.0	2.545	3.459	7.8	19.5
10 18	23 35.81	- 0 33.1	4.355	5.237	5.6	21.0	10 18	23 29.68	-14 21.1	2.616	3.451	10.4	19.6
10 28	23 32.83	- 0 57.0	4.448	5.235	7.2	21.2	10 28	23 25.71	-14 23.0	2.708	3.442	12.6	19.8
478563	2012 <i>TM</i> ₆₄		9 19.5 11°03	2°6/18.3	16		407018	2009 <i>SK</i> ₂₆		9 1			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
284422	2006 YD		9 19.5	65°49'	2°6'/22.5	15 C	343487	2010 EY ₈₇		9 19.6	121°19'	7°1'/13.2	18
8 19	0 19.72	+10 59.4	2.052	2.874	14.0	22.1	8 19	0 15.49	-20 40.3	1.876	2.768	12.0	20.1
8 29	0 10.79	+10 7.8	2.032	2.939	10.4	21.9	8 29	0 8.44	-21 31.4	1.835	2.776	9.3	20.0
9 8	0 0.53	+9 0.0	2.036	3.003	6.6	21.8	9 8	23 59.57	-22 13.4	1.818	2.782	7.4	19.9
9 18	23 49.79	+7 40.7	2.070	3.065	3.2	21.7	9 18	23 49.72	-22 39.3	1.827	2.789	7.4	19.9
9 28	23 39.52	+6 16.5	2.135	3.126	3.4	21.9	9 28	23 39.95	-22 44.1	1.863	2.796	9.2	20.0
10 8	23 30.55	+4 54.7	2.231	3.184	6.5	22.2	10 8	23 31.31	-22 26.0	1.924	2.802	11.8	20.2
10 18	23 23.44	+3 41.1	2.356	3.241	9.5	22.4	10 18	23 24.56	-21 46.2	2.007	2.808	14.3	20.4
10 28	23 18.51	+2 39.8	2.505	3.296	12.0	22.7	10 28	23 20.21	-20 47.6	2.110	2.814	16.5	20.6
210072	2006 QN ₁₅		9 19.5	3°57'	1°4'/20.9	18	19135	Takashionaka		9 19.6	321°94'	8°5'/26.1	18
8 19	0 7.93	+5 23.8	1.759	2.632	13.7	20.4	8 19	0 6.80	+18 2.3	1.341	2.177	19.2	17.5
8 29	0 3.27	+4 48.8	1.692	2.632	10.1	20.2	8 29	0 3.37	+18 38.3	1.249	2.148	16.1	17.2
9 8	23 56.84	+3 57.8	1.648	2.632	6.0	20.0	9 8	23 57.38	+18 45.3	1.175	2.120	12.7	16.9
9 18	23 49.34	+2 54.9	1.630	2.632	1.9	19.7	9 18	23 49.48	+18 19.8	1.121	2.093	9.6	16.7
9 28	23 41.69	+1 46.6	1.639	2.633	3.5	19.8	9 28	23 40.87	+17 22.4	1.090	2.066	8.6	16.6
10 8	23 34.88	+0 40.3	1.674	2.633	7.7	20.1	10 8	23 33.00	+16 0.2	1.082	2.041	10.8	16.6
10 18	23 29.69	-0 17.3	1.735	2.634	11.6	20.3	10 18	23 27.22	+14 24.5	1.095	2.016	14.7	16.7
10 28	23 26.69	-1 1.3	1.818	2.635	14.9	20.5	10 28	23 24.56	+12 48.5	1.128	1.993	18.8	16.9
334795	2003 SK ₁₈₅		9 19.5	70°73'	7°1'/25.7	18	207079	2004 XQ ₁₄₃		9 19.6	27°69'	2°1'/20.9	18
8 19	0 13.93	+17 18.4	1.698	2.510	16.8	20.0	8 19	0 11.83	+3 50.3	0.945	1.850	19.7	19.1
8 29	0 7.70	+18 1.7	1.633	2.519	13.8	19.9	8 29	0 6.91	+3 55.7	0.905	1.860	14.5	18.8
9 8	23 59.35	+18 21.7	1.589	2.527	10.6	19.7	9 8	23 59.13	+3 40.2	0.882	1.871	8.6	18.6
9 18	23 49.68	+18 16.9	1.569	2.536	7.9	19.6	9 18	23 49.68	+3 8.4	0.881	1.884	2.8	18.3
9 28	23 39.82	+17 49.6	1.574	2.544	7.2	19.5	9 28	23 40.26	+2 28.8	0.902	1.898	5.0	18.5
10 8	23 30.95	+17 5.4	1.605	2.553	8.9	19.7	10 8	23 32.52	+1 51.1	0.946	1.912	10.7	18.9
10 18	23 24.02	+16 12.3	1.660	2.561	11.8	19.9	10 18	23 27.60	+1 23.4	1.009	1.928	15.9	19.2
10 28	23 19.69	+15 18.6	1.738	2.570	14.8	20.1	10 28	23 26.09	+1 11.2	1.091	1.945	20.1	19.5
24097	1999 VB ₆		9 19.5	339°46'	1°9'/18.2	18 R	521965	2015 VL ₁₆₀		9 19.6	321°48'	4°7'/14.2	17
8 19	0 6.71	-2 28.9	1.037	1.957	17.0	17.6	8 19	0 5.76	-11 19.4	1.845	2.754	11.3	20.6
8 29	0 3.38	-3 10.9	0.976	1.943	12.1	17.3	8 29	0 1.79	-12 40.4	1.775	2.735	8.2	20.4
9 8	23 57.31	-4 7.5	0.934	1.929	6.6	17.0	9 8	23 56.09	-14 4.0	1.730	2.717	5.4	20.2
9 18	23 49.43	-5 10.6	0.914	1.917	1.9	16.7	9 18	23 49.28	-15 22.5	1.711	2.698	5.0	20.1
9 28	23 41.19	-6 9.1	0.916	1.907	6.5	16.9	9 28	23 42.23	-16 27.7	1.719	2.681	7.5	20.3
10 8	23 34.16	-6 52.6	0.940	1.898	12.3	17.2	10 8	23 35.90	-17 13.4	1.752	2.664	10.9	20.4
10 18	23 29.62	-7 14.1	0.984	1.890	17.5	17.5	10 18	23 31.08	-17 36.5	1.808	2.647	14.1	20.6
10 28	23 28.36	-7 10.6	1.045	1.883	21.9	17.7	10 28	23 28.38	-17 36.1	1.883	2.631	16.9	20.8
7040	Harwood		9 19.5	107°53'	0°4'/19.9	18	352503	2008 CL ₅₂		9 19.6	337°38'	2°8'/16.7	18
8 19	0 11.75	+3 55.0	1.432	2.314	15.7	17.6	8 19	0 7.53	-5 36.9	1.680	2.583	12.6	20.5
8 29	0 6.15	+2 51.0	1.382	2.328	11.3	17.3	8 29	0 3.07	-6 41.4	1.618	2.578	8.8	20.3
9 8	23 58.45	+1 29.3	1.354	2.342	6.3	17.1	9 8	23 56.78	-7 53.0	1.581	2.573	4.9	20.1
9 18	23 49.55	-0 3.0	1.351	2.355	1.1	16.8	9 18	23 49.37	-9 4.3	1.569	2.569	2.9	19.9
9 28	23 40.67	-1 36.0	1.375	2.368	4.3	17.0	9 28	23 41.81	-10 7.4	1.584	2.565	5.9	20.1
10 8	23 32.96	-2 59.8	1.426	2.381	9.2	17.4	10 8	23 35.12	-10 55.6	1.625	2.561	9.8	20.3
10 18	23 27.33	-4 7.1	1.500	2.393	13.4	17.7	10 18	23 30.11	-11 24.7	1.690	2.558	13.5	20.6
10 28	23 24.33	-4 53.5	1.596	2.404	16.9	17.9	10 28	23 27.36	-11 33.1	1.774	2.555	16.6	20.8
12578	Bensaur		9 19.5	39°67'	3°5'/21.8	18 R	397787	2008 JV ₂₀		9 19.6	49°49'	6°9'/28.4	15
8 19	0 14.69	+6 22.0	1.182	2.063	18.3	17.9	8 19	0 7.09	+22 28.8	1.982	2.763	15.8	20.6
8 29	0 8.65	+6 45.7	1.132	2.073	13.8	17.6	8 29	0 2.54	+22 23.3	1.922	2.781	13.2	20.4
9 8	23 59.99	+6 49.5	1.102	2.083	8.7	17.4	9 8	23 56.38	+21 51.9	1.881	2.798	10.4	20.3
9 18	23 49.77	+6 35.4	1.095	2.094	4.1	17.2	9 18	23 49.30	+20 55.3	1.863	2.816	8.0	20.2
9 28	23 39.50	+6 8.7	1.112	2.105	5.0	17.3	9 28	23 42.19	+19 37.3	1.871	2.834	6.9	20.1
10 8	23 30.66	+5 37.4	1.154	2.117	9.7	17.6	10 8	23 35.92	+18 5.1	1.905	2.853	7.8	20.2
10 18	23 24.38	+5 9.2	1.218	2.130	14.3	17.9	10 18	23 31.20	+16 27.1	1.966	2.871	10.0	20.4
10 28	23 21.28	+4 50.4	1.301	2.142	18.2	18.2	10 28	23 28.54	+14 52.0	2.051	2.890	12.5	20.6
118602	2000 GQ ₁₁₁		9 19.5	136°16'	0°5'/20.1	18	231441	2007 GM ₂₉		9 19.6	80°95'	0°4'/19.9	16
8 19	0 12.65	+2 36.2	1.788	2.662	13.5	20.8	8 19	0 12.54	+1 44.5	1.589	2.471	14.4	20.7
8 29	0 6.51	+2 4.3	1.730	2.672	9.7	20.6	8 29	0 6.52	+1 16.9	1.541	2.487	10.3	20.5
9 8	23 58.57	+1 19.8	1.695	2.681	5.5	20.3	9 8	23 58.60	+0 36.8	1.515	2.503	5.8	20.3
9 18	23 49.58	+0 27.0	1.686	2.690	1.1	20.0	9 18	23 49.60	-0 10.9	1.515	2.519	1.0	20.0
9 28	23 40.54	-0 27.7	1.706	2.699	3.6	20.3	9 28	23 40.65	-0 59.5	1.542	2.535	3.9	20.2
10 8	23 32.45	-1 17.8	1.753	2.707	7.9	20.5	10 8	23 32.80	-1 42.5	1.596	2.551	8.4	20.5
10 18	23 26.12	-1 58.1	1.826	2.714	11.7	20.8	10 18	23 26.89	-2 14.6	1.675	2.566	12.3	20.8
10 28	23 22.08	-2 24.9	1.921	2.721	14.8	21.0	10 28	23 23.43	-2 32.5	1.774	2.582	15.6	21.1
39495	1981 EP ₁₁		9 19.6	5°75'	4°1'/21.7	18	99865	2002 PN ₂₀		9 19.6	297°09'	6°1'/10.8	18
8 19	0 9.09	+4 52.4	0.849	1.761	20.7	17.3	8 19	0 5.54	-16 56.2	2.210	3.114	9.9	19.1
8 29	0 5.33	+5 42.0	0.803	1.760	15.6	17.0	8 29	0 1.42	-18 49.3	2.149	3.099	7.6	19.0
9 8	23 58.44	+6 10.2	0.774	1.761	9.9	16.7	9 8	23 55.80	-20 40.7	2.115	3.085	6.1	18.9
9 18	23 49.58	+6 17.7	0.764	1.764	4.8	16.5	9 18	23 49.24	-22 21.9	2.109	3.070	6.6	18.9
9 28	23 40.52	+6 9.5	0.775	1.770	5.8	16.5	9 28	23 42.48	-23 45.4	2.130	3.055	8.6	19.0
10 8	23 33.10	+5 54.2	0.806	1.777	11.3	16.9	10 8	23 36.33	-24 46.1	2.176	3.041	11.2	19.1
10 18	23 28.63	+5 40.6	0.856	1.787	16.6	17.2	10 18	23 31.48	-25 21.8	2.245	3.027	13.6	19.2
10 28	23 27.85	+5 36.1	0.923	1.798	21.1	17.5	10 28	23 28.49	-25 32.8	2.332	3.013	15.7	19.4
150595	2000 WK ₁₃₂		9 19.6	1°84'	2°8'/21.9	18	394546	2007 UW ₄₈		9 19.6	219°04'	7°4'/11.6	18
8 19	0 11.46	+6 16.5	1.751	2.615	14.1	19.0	8 19	0 12.46	-22 17.6	2.072			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
286912	2002 <i>PL</i> ₈₇		9 19.6	31°70	3°1/21.5	18	505771	2015 <i>BH</i> ₂₅₄		9 19.6	305°48	1°7/18.2	18
8 19	0 15.91	+ 4 32.5	1.320	2.199	17.0	19.6	8 19	0 8.09	- 0 34.2	1.192	2.100	16.2	21.7
8 29	0 9.24	+ 5 16.2	1.274	2.214	12.6	19.4	8 29	0 4.25	- 1 43.6	1.118	2.080	11.6	21.3
9 8	0 0.20	+ 5 44.5	1.249	2.230	7.8	19.2	9 8	23 57.81	- 3 12.2	1.065	2.060	6.3	21.0
9 18	23 49.83	+ 5 58.5	1.248	2.247	3.6	19.0	9 18	23 49.56	- 4 51.6	1.036	2.040	1.7	20.6
9 28	23 39.50	+ 6 1.6	1.273	2.265	4.6	19.1	9 28	23 40.82	- 6 29.4	1.031	2.021	6.2	20.9
10 8	23 30.55	+ 5 59.2	1.323	2.284	9.0	19.4	10 8	23 33.09	- 7 53.0	1.050	2.002	12.0	21.1
10 18	23 23.99	+ 5 56.9	1.397	2.304	13.2	19.7	10 18	23 27.63	- 8 53.2	1.089	1.983	17.2	21.4
10 28	23 20.38	+ 5 59.8	1.491	2.324	16.7	20.0	10 28	23 25.30	- 9 25.0	1.146	1.966	21.6	21.6
309570	2008 <i>AE</i> ₄₄		9 19.6	200°05	4°7/24.9	18	234315	2001 <i>BA</i> ₄₆		9 19.6	159°11	2°1/22.1	18
8 19	0 11.51	+15 49.3	2.547	3.345	12.2	21.7	8 19	0 9.46	+ 8 46.5	2.233	3.078	12.2	21.0
8 29	0 5.49	+16 6.5	2.462	3.342	9.9	21.5	8 29	0 4.04	+ 8 9.6	2.163	3.084	9.2	20.8
9 8	23 57.99	+16 7.5	2.399	3.338	7.4	21.4	9 8	23 57.17	+ 7 17.3	2.116	3.090	5.8	20.6
9 18	23 49.54	+15 52.5	2.363	3.334	5.3	21.2	9 18	23 49.43	+ 6 12.7	2.097	3.095	2.7	20.4
9 28	23 40.89	+15 23.2	2.356	3.329	4.8	21.2	9 28	23 41.61	+ 5 0.9	2.108	3.100	3.1	20.5
10 8	23 32.80	+14 43.6	2.377	3.324	6.5	21.3	10 8	23 34.48	+ 3 48.2	2.147	3.104	6.4	20.7
10 18	23 25.97	+13 58.5	2.425	3.319	8.9	21.4	10 18	23 28.72	+ 2 40.5	2.213	3.108	9.6	20.9
10 28	23 20.92	+13 13.5	2.499	3.313	11.4	21.6	10 28	23 24.81	+ 1 42.8	2.304	3.111	12.4	21.1
483244	2015 <i>RP</i> ₁₉₉		9 19.6	261°48	2°8/16.6	18	408054	2012 <i>FW</i> ₇₅		9 19.6	256°83	0°8/20.6	18
8 19	0 10.29	- 8 49.2	2.184	3.078	10.5	21.1	8 19	0 5.82	+ 5 36.3	2.420	3.281	10.9	21.1
8 29	0 4.68	- 9 23.9	2.118	3.072	7.4	20.9	8 29	0 1.48	+ 4 33.3	2.333	3.267	8.0	20.9
9 8	23 57.54	-10 0.5	2.077	3.066	4.3	20.7	9 8	23 55.79	+ 3 16.1	2.271	3.254	4.7	20.6
9 18	23 49.48	-10 34.2	2.063	3.060	2.9	20.6	9 18	23 49.26	+ 1 48.7	2.237	3.240	1.3	20.4
9 28	23 41.30	-11 0.0	2.078	3.054	5.2	20.7	9 28	23 42.54	+ 0 16.9	2.233	3.226	2.8	20.5
10 8	23 33.84	-11 14.1	2.121	3.048	8.4	20.9	10 8	23 36.34	- 1 12.6	2.258	3.212	6.4	20.7
10 18	23 27.79	-11 14.3	2.188	3.042	11.4	21.1	10 18	23 31.29	- 2 34.0	2.311	3.197	9.6	20.9
10 28	23 23.67	-10 59.9	2.278	3.036	14.0	21.3	10 28	23 27.89	- 3 42.4	2.388	3.182	12.4	21.0
142312	2002 <i>RU</i> ₁₆₄		9 19.6	72°87	0°5/19.9	17	287285	2002 <i>TE</i> ₁₈₄		9 19.6	303°99	4°0/23.4	18
8 19	0 11.97	+ 2 50.0	1.359	2.247	16.0	20.1	8 19	0 7.30	+11 57.0	1.722	2.570	15.1	19.6
8 29	0 6.37	+ 2 8.2	1.313	2.263	11.5	19.9	8 29	0 3.18	+11 38.6	1.623	2.542	11.9	19.3
9 8	23 58.60	+ 1 10.4	1.289	2.278	6.4	19.6	9 8	23 57.03	+10 57.2	1.546	2.513	8.2	19.0
9 18	23 49.62	+ 0 2.9	1.289	2.293	1.1	19.3	9 18	23 49.46	+ 9 53.9	1.493	2.485	4.8	18.8
9 28	23 40.68	- 1 5.7	1.316	2.309	4.3	19.6	9 28	23 41.39	+ 8 33.3	1.466	2.457	4.6	18.7
10 8	23 33.00	- 2 6.4	1.368	2.325	9.2	19.9	10 8	23 33.95	+ 7 3.6	1.466	2.429	8.1	18.8
10 18	23 27.49	- 2 53.0	1.443	2.340	13.6	20.2	10 18	23 28.12	+ 5 34.0	1.491	2.401	12.3	19.0
10 28	23 24.68	- 3 21.5	1.539	2.355	17.1	20.5	10 28	23 24.70	+ 4 13.7	1.537	2.373	16.2	19.2
220540	2004 <i>FQ</i> ₈₀		9 19.6	129°51	1°2/18.5	17	449820	2014 <i>PG</i>		9 19.6	315°54	5°9/13.4	18
8 19	0 13.34	- 2 10.9	1.759	2.645	13.0	20.9	8 19	0 10.20	-17 39.5	2.031	2.930	10.9	20.1
8 29	0 6.99	- 2 53.4	1.706	2.657	9.2	20.7	8 29	0 4.74	-18 33.3	1.974	2.922	8.3	19.9
9 8	23 58.83	- 3 44.2	1.677	2.668	4.9	20.5	9 8	23 57.61	-19 22.2	1.942	2.915	6.3	19.7
9 18	23 49.65	- 4 37.7	1.675	2.679	1.2	20.2	9 18	23 49.50	-19 59.5	1.936	2.907	6.2	19.7
9 28	23 40.46	- 5 27.4	1.702	2.690	4.5	20.5	9 28	23 41.30	-20 19.9	1.957	2.900	8.1	19.8
10 8	23 32.29	- 6 7.2	1.755	2.700	8.6	20.8	10 8	23 33.93	-20 20.1	2.003	2.893	10.8	20.0
10 18	23 25.91	- 6 33.3	1.834	2.709	12.3	21.0	10 18	23 28.11	-19 59.7	2.072	2.887	13.5	20.2
10 28	23 21.87	- 6 43.6	1.934	2.718	15.3	21.2	10 28	23 24.39	-19 20.0	2.161	2.880	15.8	20.3
265181	2003 <i>YF</i> ₄₄		9 19.6	183°36	3°1/16.5	18	70845	1999 <i>VO</i> ₁₀₆		9 19.6	35°26	1°3/20.8	18
8 19	0 12.70	- 7 9.7	1.872	2.766	12.0	21.5	8 19	0 9.09	+ 4 38.6	1.543	2.423	14.9	19.6
8 29	0 6.57	- 8 14.3	1.812	2.766	8.5	21.3	8 29	0 4.24	+ 4 9.5	1.486	2.430	10.9	19.4
9 8	23 58.64	- 9 23.6	1.777	2.767	4.8	21.1	9 8	23 57.44	+ 3 23.9	1.451	2.436	6.4	19.1
9 18	23 49.63	-10 30.6	1.769	2.766	3.2	21.0	9 18	23 49.48	+ 2 26.4	1.440	2.443	1.9	18.9
9 28	23 40.52	-11 28.1	1.789	2.765	5.9	21.1	9 28	23 41.44	+ 1 24.2	1.456	2.450	3.8	19.0
10 8	23 32.30	-12 10.4	1.837	2.763	9.6	21.4	10 8	23 34.40	+ 0 25.0	1.498	2.458	8.3	19.3
10 18	23 25.76	-12 34.4	1.909	2.761	12.9	21.6	10 18	23 29.21	+ 0 24.4	1.564	2.465	12.4	19.6
10 28	23 21.48	-12 39.2	2.002	2.757	15.8	21.8	10 28	23 26.46	- 0 59.2	1.651	2.474	15.9	19.8
226692	2004 <i>JO</i> ₂₅		9 19.6	80°41	0°8/20.2	18	77403	2001 <i>FB</i> ₁₆₉		9 19.6	111°69	6°6/12.8	18
8 19	0 12.33	+ 3 29.3	1.520	2.400	15.1	20.4	8 19	0 13.08	-19 23.2	1.989	2.883	11.3	18.9
8 29	0 6.41	+ 2 52.0	1.475	2.420	10.9	20.2	8 29	0 6.64	-20 30.1	1.954	2.897	8.7	18.8
9 8	23 58.54	+ 1 59.8	1.452	2.439	6.2	20.0	9 8	23 58.56	-21 29.2	1.944	2.911	6.9	18.7
9 18	23 49.61	+ 0 58.1	1.455	2.459	1.4	19.8	9 18	23 49.63	-22 13.7	1.961	2.924	6.9	18.7
9 28	23 40.75	- 0 5.4	1.485	2.478	3.9	20.0	9 28	23 40.78	-22 38.3	2.005	2.937	8.7	18.8
10 8	23 33.06	- 1 3.1	1.541	2.498	8.4	20.3	10 8	23 32.96	-22 40.8	2.074	2.950	11.2	19.0
10 18	23 27.37	- 1 48.9	1.622	2.517	12.5	20.6	10 18	23 26.85	-22 21.5	2.166	2.962	13.6	19.2
10 28	23 24.19	- 2 19.1	1.724	2.535	15.8	20.9	10 28	23 22.92	-21 42.9	2.277	2.974	15.6	19.4
476698	2008 <i>TG</i> ₁₂₆		9 19.6	215°51	3°9/23.9	18	234757	2002 <i>OH</i> ₁₇		9 19.6	39°52	0°8/18.8	17
8 19	0 8.97	+13 23.0	1.930	2.762	14.3	21.3	8 19	0 6.97	+ 1 46.7	1.303	2.203	15.7	19.6
8 29	0 4.00	+12 53.9	1.850	2.757	11.2	21.1	8 29	0 2.78	+ 0 23.8	1.268	2.225	11.0	19.4
9 8	23 57.28	+12 3.0	1.792	2.753	7.8	20.9	9 8	23 56.59	- 1 14.2	1.256	2.248	5.9	19.2
9 18	23 49.46	+10 52.6	1.759	2.748	4.7	20.7	9 18	23 49.36	- 2 58.0	1.268	2.272	0.9	18.9
9 28	23 41.43	+ 9 27.9	1.754	2.743	4.3	20.7	9 28	23 42.24	- 4 36.2	1.306	2.297	4.9	19.3
10 8	23 34.14	+ 7 56.5	1.777	2.737	7.2	20.9	10 8	23 36.35	- 5 59.3	1.369	2.322	9.6	19.6
10 18	23 28.41	+ 6 26.9	1.827	2.731	10.7	21.1	10 18	23 32.46	- 7 0.9	1.455	2.347	13.8	20.0
10 28	23 24.81	+ 5 6.6	1.900	2.725	14.0	21.3	10 28	23 31.06	- 7 38.4	1.561	2.373	17.1	20.2
92274	2000 <i>CO</i> ₈₆		9 19.6	67°63	4°2/16.5	18	223610	2004 <i>HQ</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
167553	2004 <i>BO</i> ₁₃		9 19.6 324°80	0.4/19.9	18		315240	2007 <i>RP</i> ₂₈₄		9 19.6 338°13	2.5/18.2	18	
8 19	0 8.88	+ 0 55.7	1.390	2.286	15.2	19.7	8 19	0 13.86	- 5 30.3	1.061	1.975	17.2	20.3
8 29	0 4.59	+ 0 46.3	1.308	2.261	11.1	19.4	8 29	0 8.50	- 5 43.2	1.003	1.967	12.3	20.0
9 8	23 57.92	+ 0 23.2	1.247	2.237	6.3	19.1	9 8	0 0.17	- 6 3.4	0.965	1.959	6.8	19.7
9 18	23 49.59	- 0 9.8	1.209	2.214	1.1	18.7	9 18	23 49.94	- 6 24.0	0.949	1.952	2.5	19.4
9 28	23 40.76	- 0 46.5	1.197	2.191	4.5	18.9	9 28	23 39.40	- 6 36.8	0.956	1.945	6.7	19.7
10 8	23 32.77	- 1 19.3	1.209	2.169	9.8	19.1	10 8	23 30.29	- 6 35.2	0.986	1.940	12.3	19.9
10 18	23 26.78	- 1 41.9	1.244	2.149	14.7	19.4	10 18	23 23.91	- 6 15.8	1.037	1.936	17.4	20.2
10 28	23 23.63	- 1 49.2	1.298	2.129	18.9	19.6	10 28	23 21.04	- 5 37.7	1.104	1.932	21.7	20.5
35570	1998 <i>GF</i> ₁₀		9 19.6 43°50	9.9/10.9	18		392773	2012 <i>TG</i> ₉₂		9 19.6 216°71	0.7/20.4	18	
8 19	0 10.77	-21 26.3	1.289	2.203	14.8	17.6	8 19	0 7.84	+ 5 59.0	1.912	2.778	13.0	21.4
8 29	0 5.52	-23 17.2	1.275	2.224	11.7	17.5	8 29	0 3.18	+ 4 40.8	1.836	2.774	9.5	21.2
9 8	23 58.08	-24 53.0	1.283	2.246	10.0	17.4	9 8	23 56.84	+ 3 4.4	1.784	2.769	5.5	20.9
9 18	23 49.56	-26 2.4	1.315	2.269	10.5	17.5	9 18	23 49.46	+ 1 15.5	1.760	2.764	1.3	20.6
9 28	23 41.30	-26 38.1	1.369	2.292	12.6	17.7	9 28	23 41.91	- 0 37.8	1.765	2.758	3.4	20.8
10 8	23 34.53	-26 38.9	1.445	2.316	15.4	18.0	10 8	23 35.09	- 2 26.0	1.799	2.752	7.7	21.0
10 18	23 30.05	-26 7.9	1.539	2.340	18.0	18.2	10 18	23 29.76	- 4 1.4	1.859	2.746	11.5	21.2
10 28	23 28.30	-25 10.4	1.649	2.365	20.1	18.5	10 28	23 26.50	- 5 18.3	1.942	2.740	14.7	21.5
22437	1996 <i>GR</i> ₂₀		9 19.6 88°82	1.3/17.9	18		49943	1999 <i>XW</i> ₁₉₂		9 19.6 252°38	2.3/17.9	18	
8 19	0 8.65	- 3 36.3	2.336	3.221	10.3	18.6	8 19	0 15.04	- 5 38.2	1.535	2.431	14.0	18.8
8 29	0 3.30	- 4 18.1	2.287	3.238	7.2	18.5	8 29	0 8.65	- 6 4.0	1.469	2.424	10.0	18.5
9 8	23 56.69	- 5 4.9	2.265	3.256	3.8	18.3	9 8	23 59.99	- 6 35.7	1.426	2.417	5.5	18.2
9 18	23 49.38	- 5 52.5	2.270	3.273	1.3	18.1	9 18	23 49.91	- 7 7.2	1.408	2.410	2.3	18.0
9 28	23 42.10	- 6 35.9	2.305	3.291	3.8	18.4	9 28	23 39.61	- 7 32.1	1.418	2.403	5.6	18.2
10 8	23 35.55	- 7 11.0	2.368	3.308	7.0	18.6	10 8	23 30.36	- 7 44.8	1.453	2.396	10.2	18.5
10 18	23 30.29	- 7 34.9	2.457	3.324	9.8	18.8	10 18	23 23.18	- 7 42.1	1.513	2.389	14.3	18.7
10 28	23 26.75	- 7 46.0	2.569	3.341	12.3	19.0	10 28	23 18.75	- 7 22.8	1.592	2.381	17.8	18.9
356571	2011 <i>SV</i> ₂₃₃		9 19.6 317°79	4.5/23.9	18		152972	2000 <i>GD</i> ₁₂₁		9 19.6 340°49	1.6/18.6	18	
8 19	0 5.93	+12 51.2	1.601	2.452	15.9	20.2	8 19	0 11.34	- 3 35.2	1.177	2.087	16.2	19.5
8 29	0 2.25	+12 33.5	1.513	2.431	12.6	20.0	8 29	0 6.49	- 3 48.3	1.115	2.077	11.6	19.2
9 8	23 56.52	+11 50.7	1.445	2.411	8.8	19.7	9 8	23 58.99	- 4 10.8	1.073	2.067	6.4	18.9
9 18	23 49.41	+10 44.4	1.400	2.391	5.3	19.5	9 18	23 49.78	- 4 36.8	1.055	2.059	1.6	18.6
9 28	23 41.89	+ 9 19.5	1.381	2.371	4.9	19.4	9 28	23 40.27	- 4 58.5	1.060	2.051	5.7	18.8
10 8	23 35.10	+ 7 45.0	1.388	2.352	8.3	19.5	10 8	23 31.97	- 5 9.2	1.089	2.045	11.2	19.1
10 18	23 30.03	+ 6 11.1	1.419	2.334	12.5	19.7	10 18	23 26.09	- 5 4.4	1.139	2.039	16.1	19.4
10 28	23 27.44	+ 4 47.2	1.472	2.317	16.3	19.9	10 28	23 23.37	- 4 41.9	1.207	2.035	20.2	19.7
353188	2009 <i>RR</i> ₆₈		9 19.6 238°19	1.2/17.1	18		476875	2008 <i>VT</i> ₂₄		9 19.6 339°31	7.4/13.8	16	
8 19	0 1.96	- 6 54.2	4.619	5.503	5.6	21.3	8 19	0 6.91	-14 1.5	1.128	2.055	15.3	20.6
8 29	23 58.19	- 7 19.2	4.549	5.500	3.9	21.2	8 29	0 3.46	-15 14.8	1.069	2.036	11.4	20.3
9 8	23 53.78	- 7 45.6	4.506	5.496	2.2	21.0	9 8	23 57.38	-16 27.5	1.032	2.018	8.1	20.1
9 18	23 49.00	- 8 11.5	4.493	5.493	1.2	20.9	9 18	23 49.57	-17 27.8	1.016	2.002	7.8	20.0
9 28	23 44.17	- 8 34.7	4.510	5.489	2.5	21.0	9 28	23 41.44	-18 4.2	1.023	1.987	10.9	20.1
10 8	23 39.63	- 8 53.3	4.557	5.486	4.2	21.2	10 8	23 34.51	-18 10.0	1.050	1.974	15.2	20.3
10 18	23 35.67	- 9 5.9	4.631	5.482	5.9	21.3	10 18	23 29.97	-17 43.5	1.097	1.963	19.3	20.5
10 28	23 32.55	- 9 11.4	4.730	5.478	7.4	21.4	10 28	23 28.56	-16 47.1	1.158	1.953	22.9	20.8
361987	2008 <i>MB</i>		9 19.6 47°34	3.7/14.9	18		285353	1999 <i>RB</i> ₁₇₆		9 19.6 343°33	3.5/21.5	18	
8 19	0 6.59	- 9 25.9	2.072	2.974	10.6	20.5	8 19	0 13.38	+ 4 42.6	1.275	2.158	17.1	19.1
8 29	0 2.11	-10 47.3	2.020	2.977	7.5	20.3	8 29	0 7.94	+ 5 31.9	1.204	2.147	13.0	18.8
9 8	23 56.15	-12 11.1	1.993	2.981	4.6	20.2	9 8	23 59.83	+ 6 6.9	1.154	2.136	8.3	18.5
9 18	23 49.46	-13 30.3	1.993	2.984	3.9	20.1	9 18	23 49.92	+ 6 27.7	1.128	2.127	4.0	18.3
9 28	23 42.46	-14 38.0	2.021	2.987	6.2	20.3	9 28	23 39.58	+ 6 36.6	1.126	2.118	5.1	18.3
10 8	23 36.31	-15 29.1	2.076	2.990	9.3	20.5	10 8	23 30.32	+ 6 38.5	1.148	2.111	9.8	18.6
10 18	23 31.55	-16 0.7	2.155	2.994	12.2	20.7	10 18	23 23.39	+ 6 39.4	1.192	2.105	14.5	18.8
10 28	23 28.66	-16 12.2	2.255	2.998	14.6	20.9	10 28	23 19.64	+ 6 44.9	1.257	2.101	18.6	19.1
115441	2003 <i>TO</i> ₇		9 19.6 289°15	7.4/11.9	18		106763	2000 <i>XK</i> ₁₀		9 19.6 173°10	6.9/12.6	18	
8 19	0 14.59	-25 12.5	2.284	3.163	10.7	19.1	8 19	0 13.78	-20 21.0	2.000	2.893	11.4	19.6
8 29	0 7.71	-25 51.6	2.230	3.156	8.7	18.9	8 29	0 7.26	-21 25.6	1.954	2.895	8.9	19.5
9 8	23 59.19	-26 19.9	2.202	3.148	7.5	18.8	9 8	23 59.00	-22 22.5	1.933	2.897	7.1	19.4
9 18	23 49.75	-26 31.5	2.200	3.141	7.7	18.8	9 18	23 49.77	-23 4.4	1.939	2.898	7.2	19.4
9 28	23 40.31	-26 22.4	2.224	3.133	9.2	18.9	9 28	23 40.52	-23 25.9	1.971	2.899	9.0	19.5
10 8	23 31.77	-25 51.4	2.274	3.126	11.2	19.1	10 8	23 32.24	-23 24.3	2.028	2.899	11.6	19.7
10 18	23 24.84	-24 59.6	2.347	3.118	13.4	19.2	10 18	23 25.69	-23 0.1	2.107	2.900	14.0	19.8
10 28	23 20.03	-23 50.0	2.439	3.111	15.3	19.3	10 28	23 21.38	-22 15.8	2.206	2.899	16.2	20.0
389772	2011 <i>SP</i> ₂₅₆		9 19.6 45°90	1.3/20.9	18		482696	2013 <i>CL</i> ₁₂₄		9 19.6 291°12	1.1/20.6	16	
8 19	0 7.15	+ 6 11.6	1.623	2.498	14.5	20.6	8 19	0 10.55	+ 3 26.8	1.774	2.648	13.5	21.9
8 29	0 2.76	+ 5 18.0	1.569	2.510	10.6	20.3	8 29	0 5.41	+ 3 11.0	1.683	2.625	10.0	21.7
9 8	23 56.59	+ 4 6.4	1.538	2.522	6.3	20.1	9 8	23 58.24	+ 2 41.3	1.616	2.601	5.9	21.4
9 18	23 49.41	+ 2 42.5	1.532	2.534	1.9	19.9	9 18	23 49.70	+ 2 0.5	1.574	2.577	1.7	21.1
9 28	23 42.19	+ 1 14.4	1.553	2.547	3.6	20.0	9 28	23 40.73	+ 1 14.1	1.560	2.554	3.7	21.2
10 8	23 35.92	- 0 9.1	1.601	2.560	7.9	20.3	10 8	23 32.42	+ 0 28.3	1.573	2.530	8.2	21.4
10 18	23 31.38	- 1 20.7	1.673	2.573	11.8	20.6	10 18	23 25.75	- 0 10.5	1.610	2.506	12.5	21.6
10 28	23 29.06	- 2 15.2	1.768	2.587	15.1	20.8	10 28	23 21.45	- 0 37.3	1.669	2.483	16.1	21.8
35200	1994 <i>PX</i> ₄		9 19.6 345°71	4.9/23.6	18		176677	2002					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
23857	1998 <i>RT</i> ₅₀		9 19.6	98°18'	0°7'/20.1	18	309099	2006 <i>WC</i>		9 19.6	286°53'	4°3'/15.1	18
8 19	0 16.44	+ 1 43.7	1.568	2.444	14.9	17.4	8 19	0 9.78	-11 32.4	1.973	2.874	11.1	20.7
8 29	0 9.35	+ 1 34.8	1.519	2.462	10.7	17.2	8 29	0 4.63	-12 31.6	1.898	2.854	8.0	20.4
9 8	0 0.21	+ 1 13.8	1.493	2.480	6.1	17.0	9 8	23 57.72	-13 32.2	1.848	2.834	5.2	20.2
9 18	23 49.94	+ 0 44.7	1.493	2.497	1.3	16.7	9 18	23 49.66	-14 27.6	1.825	2.814	4.5	20.1
9 28	23 39.74	+ 0 13.3	1.521	2.514	3.9	17.0	9 28	23 41.36	-15 11.1	1.830	2.794	6.9	20.3
10 8	23 30.75	- 0 14.6	1.575	2.530	8.5	17.3	10 8	23 33.75	-15 37.6	1.860	2.774	10.2	20.4
10 18	23 23.85	- 0 34.2	1.655	2.546	12.5	17.6	10 18	23 27.66	-15 44.5	1.914	2.754	13.4	20.6
10 28	23 19.58	- 0 42.1	1.756	2.562	15.7	17.8	10 28	23 23.70	-15 31.3	1.988	2.734	16.2	20.8
221386	2005 <i>YE</i> ₂₃		9 19.6	172°74'	2°2'/16.7	18	339174	2004 <i>TQ</i> ₁₀₅		9 19.6	285°90'	1°1'/20.7	18
8 19	0 7.69	- 7 1.7	2.621	3.510	9.1	20.8	8 19	0 8.86	+ 4 48.7	1.666	2.542	14.2	21.3
8 29	0 2.64	- 7 52.2	2.559	3.512	6.4	20.7	8 29	0 4.26	+ 4 8.6	1.581	2.523	10.5	21.1
9 8	23 56.38	- 8 45.8	2.524	3.514	3.6	20.5	9 8	23 57.64	+ 3 10.6	1.519	2.505	6.2	20.8
9 18	23 49.42	- 9 38.0	2.517	3.515	2.3	20.4	9 18	23 49.67	+ 1 58.9	1.483	2.486	1.7	20.4
9 28	23 42.39	-10 24.0	2.540	3.516	4.3	20.5	9 28	23 41.32	+ 0 40.5	1.473	2.467	3.8	20.6
10 8	23 35.95	-11 0.2	2.591	3.517	7.1	20.7	10 8	23 33.72	- 0 36.0	1.491	2.449	8.5	20.8
10 18	23 30.63	-11 23.8	2.668	3.517	9.8	20.9	10 18	23 27.81	- 1 42.8	1.532	2.430	12.9	21.0
10 28	23 26.88	-11 33.6	2.768	3.517	12.0	21.1	10 28	23 24.32	- 2 33.5	1.595	2.411	16.6	21.2
471537	2012 <i>JS</i> ₁₂		9 19.6	72°75'	3°1'/22.4	17	407338	2010 <i>RQ</i> ₃₀		9 19.6	248°71'	2°8'/17.6	18
8 19	0 10.88	+ 9 21.4	1.417	2.282	16.8	21.4	8 19	0 24.10	- 1 58.5	1.300	2.183	16.9	21.2
8 29	0 5.65	+ 8 52.1	1.364	2.295	12.7	21.2	8 29	0 16.24	- 3 27.2	1.204	2.153	12.3	20.8
9 8	23 58.29	+ 8 0.1	1.331	2.308	8.1	21.0	9 8	0 4.88	- 5 17.5	1.130	2.121	6.8	20.4
9 18	23 49.70	+ 6 49.7	1.323	2.321	3.8	20.8	9 18	23 50.75	- 7 19.9	1.083	2.085	2.8	20.1
9 28	23 41.07	+ 5 28.7	1.341	2.334	4.3	20.9	9 28	23 35.41	- 9 20.1	1.064	2.047	7.6	20.2
10 8	23 33.60	+ 4 7.1	1.384	2.347	8.5	21.1	10 8	23 20.82	-11 3.0	1.072	2.006	13.9	20.5
10 18	23 28.20	+ 2 53.7	1.452	2.360	12.7	21.4	10 18	23 8.77	-12 18.1	1.103	1.962	19.8	20.7
10 28	23 25.45	+ 1 55.3	1.541	2.373	16.3	21.7	10 28	23 0.53	-13 0.7	1.151	1.915	24.7	20.9
228488	2001 <i>SD</i> ₁₇₂		9 19.6	338°02'	0°1'/19.7	18	223175	2002 <i>YP</i> ₂₅		9 19.6	293°29'	1°9'/18.0	18
8 19	0 6.98	+ 1 21.8	1.155	2.062	16.7	19.7	8 19	0 11.01	- 3 15.8	1.455	2.355	14.4	20.3
8 29	0 3.45	+ 0 53.1	1.089	2.048	12.2	19.4	8 29	0 6.02	- 4 1.0	1.379	2.337	10.2	20.0
9 8	23 57.37	+ 0 6.5	1.042	2.035	6.8	19.0	9 8	23 58.70	- 4 57.1	1.326	2.319	5.6	19.7
9 18	23 49.60	- 0 52.1	1.018	2.023	1.0	18.6	9 18	23 49.82	- 5 57.6	1.297	2.300	1.9	19.4
9 28	23 41.46	- 1 53.6	1.018	2.012	5.0	18.9	9 28	23 40.55	- 6 53.8	1.295	2.282	5.7	19.6
10 8	23 34.42	- 2 47.9	1.040	2.002	10.7	19.2	10 8	23 32.18	- 7 37.8	1.318	2.265	10.6	19.8
10 18	23 29.65	- 3 26.7	1.083	1.994	15.8	19.4	10 18	23 25.81	- 8 3.9	1.363	2.247	15.1	20.1
10 28	23 27.94	- 3 44.9	1.145	1.987	20.2	19.7	10 28	23 22.20	- 8 9.2	1.428	2.229	18.9	20.3
521700	2015 <i>RT</i> ₂₆₃		9 19.6	42°56'	5°4'/13.7	18	248688	2006 <i>KR</i> ₆₁		9 19.6	297°97'	8°4'/11.0	18
8 19	0 8.36	-14 34.9	1.890	2.795	11.3	20.5	8 19	0 10.81	-20 27.9	1.632	2.538	12.8	20.2
8 29	0 3.44	-15 48.1	1.849	2.804	8.3	20.3	8 29	0 5.70	-21 59.4	1.573	2.519	10.2	20.0
9 8	23 56.92	-16 58.3	1.833	2.813	5.9	20.2	9 8	23 58.43	-23 24.2	1.537	2.501	8.5	19.9
9 18	23 49.51	-17 58.2	1.843	2.822	5.7	20.2	9 18	23 49.77	-24 32.2	1.526	2.483	9.0	19.9
9 28	23 42.10	-18 41.3	1.880	2.832	7.8	20.4	9 28	23 40.86	-25 14.7	1.539	2.465	11.3	20.0
10 8	23 35.59	-19 3.9	1.942	2.841	10.6	20.6	10 8	23 32.90	-25 27.0	1.575	2.447	14.3	20.1
10 18	23 30.67	-19 5.0	2.027	2.851	13.4	20.8	10 18	23 26.87	-25 8.8	1.631	2.429	17.2	20.3
10 28	23 27.81	-18 45.6	2.131	2.862	15.7	21.0	10 28	23 23.44	-24 22.9	1.704	2.412	19.8	20.5
435861	2008 <i>XE</i> ₃₉		9 19.6	23°39'	3°6'/22.5	18	157062	2003 <i>SU</i> ₂₀₉		9 19.6	14°90'	2°7'/22.9	18
8 19	0 9.08	+ 8 34.6	1.280	2.157	17.5	19.9	8 19	0 5.60	+10 39.2	2.174	3.018	12.5	19.3
8 29	0 4.56	+ 8 34.0	1.229	2.166	13.3	19.7	8 29	0 1.43	+10 1.5	2.101	3.020	9.6	19.1
9 8	23 57.77	+ 8 11.0	1.197	2.175	8.6	19.5	9 8	23 55.84	+ 9 6.4	2.051	3.021	6.3	18.9
9 18	23 49.64	+ 7 28.8	1.188	2.186	4.4	19.3	9 18	23 49.40	+ 7 56.9	2.028	3.022	3.3	18.8
9 28	23 41.42	+ 6 34.0	1.204	2.197	4.7	19.3	9 28	23 42.84	+ 6 38.3	2.032	3.024	3.3	18.8
10 8	23 34.41	+ 5 35.5	1.244	2.209	8.9	19.6	10 8	23 36.93	+ 5 17.1	2.065	3.026	6.3	19.0
10 18	23 29.57	+ 4 42.1	1.307	2.222	13.2	19.9	10 18	23 32.31	+ 3 59.9	2.125	3.028	9.5	19.2
10 28	23 27.50	+ 4 0.8	1.390	2.236	17.0	20.2	10 28	23 29.48	+ 2 52.5	2.209	3.030	12.4	19.4
181481	2006 <i>TR</i> ₉₂		9 19.6	340°66'	1°8'/17.8	18	251701	1996 <i>TD</i> ₁₆		9 19.6	276°45'	1°6'/22.9	18
8 19	0 8.97	- 4 2.8	1.821	2.716	12.2	20.3	8 19	0 1.75	+ 8 59.7	4.421	5.250	6.9	20.5
8 29	0 4.01	- 4 48.0	1.758	2.714	8.6	20.1	8 29	23 58.13	+ 8 46.3	4.335	5.245	5.2	20.4
9 8	23 57.32	- 5 40.4	1.720	2.712	4.6	19.8	9 8	23 53.83	+ 8 25.4	4.275	5.240	3.5	20.3
9 18	23 49.58	- 6 34.2	1.707	2.710	1.9	19.7	9 18	23 49.11	+ 7 58.2	4.243	5.236	1.9	20.2
9 28	23 41.73	- 7 22.9	1.723	2.708	4.8	19.9	9 28	23 44.33	+ 7 26.6	4.241	5.231	1.9	20.2
10 8	23 34.70	- 8 0.7	1.765	2.707	8.7	20.1	10 8	23 39.82	+ 6 52.8	4.269	5.226	3.5	20.3
10 18	23 29.26	- 8 23.8	1.831	2.705	12.3	20.3	10 18	23 35.91	+ 6 19.3	4.326	5.221	5.3	20.4
10 28	23 25.98	- 8 30.2	1.919	2.704	15.3	20.5	10 28	23 32.87	+ 5 48.3	4.409	5.216	6.9	20.5
160325	2003 <i>NV</i> ₁		9 19.6	64°06'	8°6'/30.3	18	130188	2000 <i>AZ</i> ₈₅		9 19.6	0°96'	9°5'/27.2	18
8 19	0 11.32	+27 4.8	2.261	2.993	15.5	19.2	8 19	0 8.75	+19 29.3	1.310	2.138	20.0	18.0
8 29	0 5.59	+27 49.8	2.196	3.008	13.4	19.1	8 29	0 4.63	+20 31.1	1.246	2.136	16.8	17.8
9 8	23 58.17	+28 10.8	2.150	3.023	11.3	19.0	9 8	23 58.01	+21 3.3	1.199	2.134	13.5	17.6
9 18	23 49.71	+28 6.0	2.126	3.038	9.5	18.9	9 18	23 49.73	+21 2.6	1.173	2.134	10.6	17.5
9 28	23 41.11	+27 36.4	2.127	3.053	8.6	18.9	9 28	23 41.10	+20 30.2	1.168	2.135	9.5	17.4
10 8	23 33.28	+26 46.1	2.153	3.069	8.9	18.9	10 8	23 33.54	+19 33.0	1.186	2.138	11.0	17.5
10 18	23 26.98	+25 41.6	2.205	3.084	10.3	19.0	10 18	23 28.22	+18 21.5	1.226	2.142	13.9	17.7
10 28	23 22.77	+24 30.7	2.280	3.099	12.1	19.2	10 28	23 25.92	+17 7.5	1.286	2.147	17.2	17.9
214155	2005 <i>CF</i> ₁₁												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
398045	Vitudurum		9 19.6 133°03	2°5/16.4	18		3445	Pinson		9 19.6 186°05	2°4/21.9	18	
8 19	0 7.96	- 5 17.7	2.147	3.040	10.7	21.1	8 19	0 12.85	+ 7 8.4	2.176	3.023	12.4	17.3
8 29	0 3.04	- 6 42.1	2.093	3.048	7.5	21.0	8 29	0 6.61	+ 7 10.8	2.101	3.023	9.3	17.1
9 8	23 56.69	- 8 12.2	2.065	3.056	4.1	20.8	9 8	23 58.73	+ 7 0.1	2.049	3.023	6.0	16.9
9 18	23 49.52	- 9 41.2	2.066	3.064	2.6	20.7	9 18	23 49.84	+ 6 38.2	2.025	3.022	2.9	16.7
9 28	23 42.30	-11 2.1	2.096	3.072	5.1	20.9	9 28	23 40.78	+ 6 8.4	2.029	3.021	3.4	16.8
10 8	23 35.81	-12 9.0	2.153	3.079	8.4	21.1	10 8	23 32.43	+ 5 35.3	2.063	3.019	6.7	17.0
10 18	23 30.69	-12 58.2	2.236	3.086	11.4	21.3	10 18	23 25.53	+ 5 3.7	2.123	3.017	10.0	17.2
10 28	23 27.40	-13 28.3	2.341	3.093	13.9	21.5	10 28	23 20.65	+ 4 38.2	2.207	3.014	12.9	17.4
162247	1999 <i>TJ</i> ₂₅₃		9 19.6 324°34	6°2/14.7	18		360099	2013 <i>BQ</i> ₆₄		9 19.6 331°16	1°5/20.9	18	
8 19	0 9.34	-12 32.4	1.290	2.208	14.5	18.8	8 19	0 10.74	+ 4 11.2	1.818	2.688	13.4	20.5
8 29	0 5.14	-13 33.2	1.216	2.179	10.7	18.5	8 29	0 5.34	+ 4 3.2	1.748	2.686	9.9	20.3
9 8	23 58.36	-14 36.0	1.163	2.151	7.2	18.2	9 8	23 58.11	+ 3 42.0	1.701	2.684	5.9	20.1
9 18	23 49.80	-15 30.7	1.134	2.123	6.5	18.1	9 18	23 49.75	+ 3 10.5	1.680	2.682	2.0	19.8
9 28	23 40.73	-16 6.9	1.128	2.097	9.6	18.2	9 28	23 41.22	+ 2 33.5	1.686	2.680	3.5	19.9
10 8	23 32.63	-16 17.3	1.145	2.071	14.0	18.4	10 8	23 33.50	+ 1 56.8	1.720	2.678	7.6	20.2
10 18	23 26.72	-15 59.1	1.182	2.047	18.3	18.6	10 18	23 27.43	+ 1 25.5	1.779	2.676	11.4	20.4
10 28	23 23.89	-15 13.0	1.235	2.023	22.1	18.8	10 28	23 23.60	+ 1 4.3	1.860	2.675	14.6	20.6
93028	2000 <i>RF</i> ₉₈		9 19.6 274°25	8°6/27.8	18		12775	Brackett		9 19.6 280°32	1°4/18.2	18	
8 19	0 11.41	+22 19.4	1.748	2.533	17.5	17.8	8 19	0 9.79	- 2 17.3	1.873	2.762	12.2	19.2
8 29	0 6.14	+22 54.9	1.668	2.527	14.8	17.7	8 29	0 4.79	- 3 9.0	1.785	2.737	8.7	18.9
9 8	23 58.70	+23 3.5	1.607	2.522	12.0	17.5	9 8	23 57.91	- 4 11.1	1.721	2.712	4.7	18.7
9 18	23 49.83	+22 42.9	1.568	2.517	9.6	17.3	9 18	23 49.74	- 5 18.4	1.684	2.687	1.4	18.4
9 28	23 40.59	+21 54.4	1.554	2.511	8.6	17.2	9 28	23 41.21	- 6 23.7	1.675	2.662	4.7	18.5
10 8	23 32.18	+20 43.9	1.564	2.506	9.7	17.3	10 8	23 33.32	- 7 19.9	1.693	2.636	9.0	18.8
10 18	23 25.61	+19 20.1	1.599	2.500	12.2	17.4	10 18	23 26.95	- 8 1.6	1.736	2.610	12.9	18.9
10 28	23 21.61	+17 53.5	1.657	2.495	15.1	17.6	10 28	23 22.80	- 8 25.4	1.800	2.584	16.3	19.1
160853	2001 <i>DA</i> ₁₁		9 19.6 97°26	3°2/22.2	18		326548	2002 <i>PM</i> ₆₈		9 19.6 22°58	0°3/19.4	18	
8 19	0 15.16	+ 7 19.8	1.797	2.649	14.4	19.6	8 19	0 7.00	+ 2 25.3	1.075	1.983	17.6	20.1
8 29	0 8.48	+ 7 44.2	1.730	2.654	10.9	19.4	8 29	0 3.34	+ 1 22.9	1.030	1.990	12.6	19.8
9 8	23 59.83	+ 7 54.2	1.686	2.659	7.1	19.2	9 8	23 57.21	+ 0 0.4	1.005	1.998	6.9	19.5
9 18	23 49.97	+ 7 50.5	1.668	2.664	3.7	19.0	9 18	23 49.63	- 1 33.2	1.002	2.006	0.9	19.2
9 28	23 39.96	+ 7 36.4	1.678	2.669	4.2	19.0	9 28	23 42.00	- 3 5.6	1.023	2.016	5.2	19.5
10 8	23 30.87	+ 7 16.6	1.716	2.673	7.7	19.3	10 8	23 35.71	- 4 24.8	1.067	2.027	10.8	19.9
10 18	23 23.60	+ 6 56.5	1.779	2.678	11.3	19.5	10 18	23 31.77	- 5 22.6	1.132	2.039	15.6	20.2
10 28	23 18.75	+ 6 41.1	1.865	2.683	14.5	19.7	10 28	23 30.78	- 5 54.9	1.215	2.051	19.6	20.5
21129	1993 <i>BJ</i> ₇		9 19.6 100°38	4°8/14.2	18		121094	1999 <i>FY</i> ₄₈		9 19.6 183°41	1°5/18.3	18	
8 19	0 8.70	-10 9.0	1.727	2.633	12.1	17.5	8 19	0 14.37	- 4 2.6	1.790	2.677	12.8	19.8
8 29	0 3.84	-11 56.5	1.682	2.641	8.6	17.3	8 29	0 7.89	- 4 27.8	1.726	2.678	9.1	19.5
9 8	23 57.22	-13 46.1	1.663	2.649	5.6	17.2	9 8	23 59.49	- 4 59.4	1.687	2.678	4.9	19.3
9 18	23 49.60	-15 28.1	1.670	2.657	5.1	17.2	9 18	23 49.95	- 5 32.4	1.674	2.677	1.5	19.1
9 28	23 41.93	-16 53.5	1.705	2.665	7.7	17.3	9 28	23 40.29	- 6 1.1	1.690	2.677	4.6	19.3
10 8	23 35.20	-17 56.0	1.765	2.672	11.1	17.6	10 8	23 31.56	- 6 20.6	1.732	2.676	8.8	19.5
10 18	23 30.16	-18 33.0	1.848	2.680	14.2	17.8	10 18	23 24.62	- 6 27.6	1.800	2.674	12.5	19.8
10 28	23 27.33	-18 44.8	1.950	2.687	16.7	18.0	10 28	23 20.06	- 6 20.4	1.889	2.673	15.6	20.0
218527	2004 <i>TO</i> ₃₀₇		9 19.6 75°22	1°7/21.3	18		395784	2012 <i>VS</i> ₁₀₀		9 19.6 248°49	6°6/12.4	18	
8 19	0 10.11	+ 4 59.2	2.194	3.053	11.8	19.7	8 19	0 13.18	-19 38.5	2.110	3.002	10.9	21.6
8 29	0 4.59	+ 4 55.5	2.125	3.057	8.8	19.6	8 29	0 6.98	-20 45.6	2.044	2.986	8.5	21.4
9 8	23 57.57	+ 4 40.4	2.081	3.061	5.3	19.4	9 8	23 58.99	-21 47.0	2.005	2.969	6.8	21.3
9 18	23 49.66	+ 4 16.2	2.064	3.064	2.1	19.1	9 18	23 49.90	-22 35.5	1.991	2.953	6.9	21.3
9 28	23 41.64	+ 3 46.6	2.075	3.068	3.1	19.2	9 28	23 40.61	-23 4.9	2.005	2.935	8.8	21.3
10 8	23 34.32	+ 3 16.2	2.115	3.072	6.5	19.5	10 8	23 32.09	-23 11.9	2.045	2.917	11.4	21.5
10 18	23 28.39	+ 2 49.1	2.181	3.076	9.7	19.7	10 18	23 25.17	-22 55.9	2.107	2.899	14.0	21.6
10 28	23 24.34	+ 2 29.4	2.271	3.079	12.5	19.9	10 28	23 20.42	-22 18.5	2.188	2.880	16.3	21.8
510904	2013 <i>CX</i> ₂₁₀		9 19.6 265°15	0°9/21.6	17		70831	1999 <i>VG</i> ₈₉		9 19.6 342°10	6°2/25.8	18	
8 19	0 0.65	+ 6 12.9	4.485	5.330	6.5	20.9	8 19	0 6.21	+17 11.9	1.516	2.349	17.5	19.0
8 29	23 57.35	+ 5 37.5	4.403	5.327	4.8	20.8	8 29	0 2.51	+16 59.6	1.441	2.342	14.3	18.7
9 8	23 53.40	+ 4 55.2	4.348	5.325	2.9	20.6	9 8	23 56.73	+16 17.9	1.385	2.336	10.6	18.5
9 18	23 49.08	+ 4 7.9	4.322	5.322	1.2	20.5	9 18	23 49.59	+15 7.6	1.352	2.331	7.3	18.3
9 28	23 44.69	+ 3 17.7	4.327	5.320	1.6	20.5	9 28	23 42.19	+13 34.0	1.343	2.326	6.3	18.3
10 8	23 40.59	+ 2 27.5	4.361	5.317	3.5	20.7	10 8	23 35.67	+11 46.9	1.359	2.322	8.6	18.4
10 18	23 37.06	+ 1 39.7	4.425	5.314	5.3	20.8	10 18	23 31.02	+ 9 57.6	1.400	2.319	12.3	18.6
10 28	23 34.36	+ 0 56.8	4.516	5.312	7.0	20.9	10 28	23 28.90	+ 8 17.0	1.463	2.316	15.9	18.8
514408	2016 <i>TE</i> ₄₇		9 19.6 332°96	1°0/18.7	18		178410	1998 <i>RE</i> ₆		9 19.6 22°63	2°4/21.2	18	
8 19	0 11.59	- 2 21.4	1.777	2.665	12.8	21.1	8 19	0 10.13	+ 4 17.8	0.944	1.850	19.7	18.4
8 29	0 5.92	- 2 47.3	1.713	2.665	9.1	20.9	8 29	0 5.74	+ 4 27.5	0.907	1.862	14.5	18.2
9 8	23 58.41	- 3 21.2	1.673	2.664	4.9	20.7	9 8	23 58.58	+ 4 15.9	0.887	1.875	8.7	17.9
9 18	23 49.79	- 3 58.5	1.659	2.664	1.0	20.4	9 18	23 49.84	+ 3 47.5	0.888	1.890	3.2	17.6
9 28	23 41.04	- 4 33.3	1.674	2.663	4.3	20.6	9 28	23 41.15	+ 3 10.1	0.911	1.907	4.9	17.8
10 8	23 33.18	- 5 0.3	1.715	2.663	8.5	20.9	10 8	23 34.09	+ 2 33.6	0.957	1.925	10.4	18.2
10 18	23 27.03	- 5 15.5	1.781	2.663	12.2	21.1	10 18	23 29.74	+ 2 6.1	1.023	1.944	15.4	18.5
10 28	23 23.17	- 5 16.7	1.868	2.662	15.4	21.3	10 28	23 28.67	+ 1 53.1	1.107	1.965	19.5	18.9
16302	6634 <i>P-L</i>		9 19.6 260°43	1°7/17.7	18		515183	2011 <i>UJ</i> ₆₆		9 19.6 250°76	4°8/14.6		

EPHEMERIDES

9 19.6

9 19.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
45866	2000 U _{X109}		9 19.6 359°11	0°6/18.9	18		453458	2009 S _{T55}		9 19.6 11°28	1°5/21.1	17	
8 19	0 5.75	+ 0 56.2	1.790	2.679	12.7	18.5	8 19	0 10.07	+ 4 5.5	2.043	2.909	12.3	20.9
8 29	0 1.78	- 0 8.3	1.726	2.678	9.0	18.2	8 29	0 4.69	+ 4 6.2	1.975	2.911	9.1	20.7
9 8	23 56.15	- 1 25.7	1.686	2.677	4.9	18.0	9 8	23 57.70	+ 3 55.5	1.930	2.912	5.5	20.5
9 18	23 49.51	- 2 49.8	1.672	2.677	0.7	17.7	9 18	23 49.74	+ 3 36.0	1.912	2.914	2.0	20.3
9 28	23 42.75	- 4 12.9	1.686	2.677	4.1	17.9	9 28	23 41.66	+ 3 11.3	1.922	2.916	3.2	20.4
10 8	23 36.76	- 5 27.1	1.727	2.677	8.2	18.2	10 8	23 34.31	+ 2 46.0	1.960	2.918	6.8	20.6
10 18	23 32.30	- 6 26.6	1.792	2.678	12.0	18.4	10 18	23 28.44	+ 2 24.6	2.024	2.920	10.3	20.8
10 28	23 29.90	- 7 7.5	1.879	2.679	15.1	18.6	10 28	23 24.56	+ 2 10.7	2.111	2.923	13.2	21.0
116778	2004 E _{Y25}		9 19.6 107°07	1°5/21.0	18		509982	2009 T _{N25}		9 19.6 354°53	0°8/19.1	18	
8 19	0 11.86	+ 4 11.8	2.034	2.898	12.5	20.0	8 19	0 8.48	- 1 43.2	1.009	1.927	17.6	20.0
8 29	0 5.91	+ 4 6.2	1.971	2.905	9.2	19.8	8 29	0 4.71	- 1 53.6	0.955	1.920	12.6	19.7
9 8	23 58.34	+ 3 49.0	1.932	2.913	5.5	19.6	9 8	23 58.16	- 2 17.0	0.919	1.914	6.9	19.3
9 18	23 49.82	+ 3 22.8	1.919	2.921	1.9	19.4	9 18	23 49.83	- 2 47.4	0.905	1.910	1.1	18.9
9 28	23 41.22	+ 2 51.9	1.935	2.928	3.2	19.5	9 28	23 41.25	- 3 16.3	0.913	1.907	5.6	19.3
10 8	23 33.43	+ 2 21.0	1.979	2.936	6.9	19.7	10 8	23 34.01	- 3 35.3	0.944	1.906	11.5	19.6
10 18	23 27.17	+ 1 54.7	2.050	2.943	10.3	20.0	10 18	23 29.35	- 3 38.7	0.994	1.907	16.7	19.9
10 28	23 22.96	+ 1 36.7	2.144	2.950	13.2	20.2	10 28	23 27.99	- 3 23.4	1.061	1.909	21.0	20.2
452772	2006 D _{B12}		9 19.6 292°63	2°3/16.5	18		215613	2003 S _{W110}		9 19.6 350°47	2°8/21.9	18	
8 19	0 5.46	- 4 2.3	2.143	3.038	10.6	20.9	8 19	0 6.93	+ 8 28.0	1.145	2.031	18.4	19.3
8 29	0 1.44	- 5 32.2	2.065	3.022	7.5	20.7	8 29	0 3.41	+ 7 51.4	1.083	2.027	13.9	19.0
9 8	23 55.94	- 7 11.1	2.013	3.005	4.1	20.5	9 8	23 57.37	+ 6 47.1	1.040	2.023	8.7	18.7
9 18	23 49.49	- 8 52.5	1.990	2.989	2.4	20.3	9 18	23 49.72	+ 5 20.0	1.019	2.020	3.7	18.4
9 28	23 42.82	- 10 28.5	1.995	2.973	5.1	20.5	9 28	23 41.80	+ 3 40.2	1.022	2.017	4.6	18.5
10 8	23 36.73	- 11 51.9	2.028	2.957	8.6	20.7	10 8	23 35.05	+ 2 0.7	1.049	2.016	9.9	18.8
10 18	23 31.90	- 12 57.6	2.086	2.941	11.9	20.9	10 18	23 30.59	+ 0 33.5	1.097	2.015	15.0	19.1
10 28	23 28.90	- 13 42.8	2.166	2.925	14.6	21.0	10 28	23 29.16	- 0 32.8	1.165	2.015	19.3	19.3
413091	2001 U _{V16}		9 19.6 256°22	14°5/1.6	14 C		22383	Nikolauspacassi		9 19.6 133°84	0°8/20.4	18	
8 19	0 38.70	- 47 26.7	2.184	2.951	15.0	23.1	8 19	0 13.08	+ 3 55.8	1.696	2.568	14.2	20.0
8 29	0 25.95	- 48 53.6	2.128	2.919	14.5	23.0	8 29	0 6.99	+ 3 14.8	1.639	2.579	10.3	19.8
9 8	0 9.77	- 49 52.3	2.094	2.885	14.6	22.9	9 8	23 59.02	+ 2 18.9	1.605	2.590	5.9	19.6
9 18	23 51.46	- 50 12.0	2.081	2.850	15.3	22.9	9 18	23 49.95	+ 1 13.1	1.597	2.601	1.4	19.3
9 28	23 32.97	- 49 46.4	2.090	2.813	16.5	22.9	9 28	23 40.84	+ 0 4.6	1.618	2.611	3.7	19.5
10 8	23 16.33	- 48 36.2	2.119	2.775	17.9	23.0	10 8	23 32.73	- 0 59.1	1.666	2.621	8.1	19.8
10 18	23 2.97	- 46 47.9	2.166	2.735	19.3	23.0	10 18	23 26.46	- 1 51.9	1.739	2.629	12.0	20.0
10 28	22 53.62	- 44 30.5	2.226	2.693	20.6	23.1	10 28	23 22.57	- 2 29.5	1.834	2.638	15.3	20.3
309739	2008 T _{B158}		9 19.6 338°93	0°7/19.9	18		452145	2015 R _{P28}		9 19.6 15°72	1°9/21.8	18	
8 19	0 14.70	- 1 16.5	1.213	2.112	16.7	19.4	8 19	0 6.88	+ 7 49.4	1.960	2.820	13.0	20.7
8 29	0 9.04	- 0 39.1	1.142	2.097	12.2	19.1	8 29	0 2.49	+ 7 4.8	1.890	2.821	9.7	20.5
9 8	0 0.57	+ 0 9.8	1.092	2.083	7.0	18.8	9 8	23 56.53	+ 6 3.2	1.843	2.821	6.0	20.3
9 18	23 50.18	+ 0 13.5	1.066	2.070	1.4	18.4	9 18	23 49.60	+ 4 48.4	1.822	2.822	2.5	20.0
9 28	23 39.33	+ 0 34.4	1.064	2.058	4.8	18.6	9 28	23 42.55	+ 3 26.7	1.829	2.823	3.2	20.1
10 8	23 29.63	+ 0 56.9	1.086	2.048	10.4	18.9	10 8	23 36.22	+ 2 5.4	1.864	2.824	6.9	20.3
10 18	23 22.40	+ 1 24.9	1.131	2.039	15.5	19.2	10 18	23 31.34	+ 0 51.5	1.925	2.825	10.5	20.5
10 28	23 18.49	+ 2 1.3	1.194	2.031	19.8	19.4	10 28	23 28.42	- 0 9.6	2.010	2.826	13.6	20.8
275380	2011 A _{J67}		9 19.6 225°47	0°7/20.4	18		317893	2003 U _{Q178}		9 19.6 311°76	1°2/20.7	18	
8 19	0 7.54	+ 3 2.6	2.479	3.345	10.4	21.1	8 19	0 9.48	+ 3 50.9	1.610	2.490	14.4	20.9
8 29	0 2.68	+ 2 35.8	2.404	3.342	7.6	20.9	8 29	0 4.73	+ 3 30.6	1.534	2.478	10.6	20.7
9 8	23 56.52	+ 1 59.2	2.354	3.338	4.4	20.7	9 8	23 57.94	+ 2 54.8	1.481	2.467	6.2	20.4
9 18	23 49.57	+ 1 15.8	2.331	3.335	1.1	20.4	9 18	23 49.82	+ 2 7.2	1.452	2.456	1.8	20.1
9 28	23 42.49	+ 0 29.7	2.338	3.331	2.7	20.5	9 28	23 41.41	+ 1 13.9	1.451	2.445	3.8	20.2
10 8	23 35.98	- 0 14.4	2.374	3.328	6.1	20.8	10 8	23 33.82	+ 0 22.3	1.475	2.434	8.4	20.5
10 18	23 30.63	- 0 52.5	2.437	3.324	9.1	21.0	10 18	23 28.01	- 0 20.9	1.523	2.424	12.7	20.7
10 28	23 26.91	- 1 21.2	2.523	3.320	11.8	21.1	10 28	23 24.66	- 0 50.7	1.593	2.414	16.4	20.9
504374	2007 V _{L73}		9 19.6 238°48	10°6/1.5	18		434	Hungaria		9 19.6 50°08	0°6/19.1	18 R	
8 19	0 12.88	+ 31 12.2	1.938	2.649	18.3	22.0	8 19	0 5.74	+ 9 46.3	0.942	1.838	20.6	13.4
8 29	0 7.28	+ 31 32.4	1.839	2.633	16.3	22.0	8 29	0 2.75	+ 6 32.0	0.890	1.844	14.9	13.1
9 8	23 59.43	+ 31 20.9	1.757	2.617	14.1	21.8	9 8	23 57.05	+ 2 33.6	0.860	1.851	8.1	12.8
9 18	23 50.01	+ 30 33.3	1.696	2.600	12.0	21.6	9 18	23 49.70	- 1 49.2	0.854	1.859	1.0	12.4
9 28	23 40.11	+ 29 9.4	1.657	2.582	10.7	21.5	9 28	23 42.25	- 6 7.4	0.875	1.867	6.5	12.8
10 8	23 30.96	+ 27 14.4	1.644	2.563	11.0	21.5	10 8	23 36.24	- 9 53.3	0.921	1.875	13.1	13.2
10 18	23 23.63	+ 24 58.2	1.656	2.543	12.7	21.6	10 18	23 32.81	- 12 50.1	0.990	1.883	18.6	13.5
10 28	23 18.93	+ 22 33.4	1.693	2.523	15.2	21.7	10 28	23 32.55	- 14 52.6	1.076	1.892	22.9	13.8
454880	2015 T _{X69}		9 19.6 55°14	3°8/24.1	18		451646	2012 J _{X60}		9 19.6 254°45	4°2/14.3	18	
8 19	0 7.71	+ 12 52.0	2.154	2.984	13.1	20.2	8 19	0 9.45	- 14 27.3	2.573	3.467	9.1	21.7
8 29	0 2.95	+ 12 42.0	2.085	2.991	10.3	20.0	8 29	0 4.06	- 15 18.7	2.502	3.451	6.7	21.5
9 8	23 56.72	+ 12 14.4	2.039	2.998	7.2	19.9	9 8	23 57.32	- 16 8.6	2.457	3.436	4.7	21.3
9 18	23 49.60	+ 11 30.7	2.019	3.005	4.5	19.7	9 18	23 49.73	- 16 51.9	2.440	3.420	4.4	21.3
9 28	23 42.38	+ 10 35.0	2.026	3.012	4.1	19.7	9 28	23 42.00	- 17 23.9	2.452	3.404	6.2	21.4
10 8	23 35.86	+ 9 33.0	2.061	3.020	6.5	19.9	10 8	23 34.83	- 17 41.3	2.490	3.388	8.7	21.5
10 18	23 30.71	+ 8 30.9	2.123	3.027	9.4	20.1	10 18	23 28.85	- 17 42.4	2.554	3.371	11.1	21.7
10 28	23 27.43	+ 7 34.6	2.208	3.035	12.2	20.3	10 28	23 24.55	- 17 27.1	2.639	3.354	13.3	21.8
130915	2000 W _{O2}		9 19.6 270°44	3°2/16.5	18		490820	2010 V _{A148}		9 19.6 301°90	0°8/21.1	15	

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9 19.6

9 19.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
513020	2017 <i>UY</i> ₅₀		9 19.6	97°68	3°3/22.4	18	17233	Stanshapiro		9 19.6	49°28	1°1/18.6	18
8 19	0 13.64	+ 8 59.1	1.422	2.284	16.9	20.6	8 19	0 8.88	+ 1 37.5	1.192	2.094	16.7	17.6
8 29	0 7.70	+ 8 43.4	1.368	2.297	12.8	20.3	8 29	0 4.36	+ 0 4.8	1.159	2.117	11.7	17.4
9 8	23 59.53	+ 8 6.1	1.334	2.310	8.2	20.1	9 8	23 57.65	- 1 44.0	1.148	2.141	6.2	17.1
9 18	23 50.06	+ 7 10.6	1.325	2.323	4.0	19.9	9 18	23 49.80	- 3 38.0	1.161	2.165	1.2	16.9
9 28	23 40.54	+ 6 3.7	1.342	2.335	4.4	20.0	9 28	23 42.10	- 5 24.5	1.200	2.190	5.3	17.2
10 8	23 32.22	+ 4 54.7	1.385	2.347	8.6	20.2	10 8	23 35.76	- 6 52.8	1.263	2.215	10.4	17.6
10 18	23 26.06	+ 3 52.0	1.452	2.359	12.8	20.5	10 18	23 31.63	- 7 56.7	1.348	2.241	14.7	17.9
10 28	23 22.66	+ 3 2.3	1.541	2.370	16.5	20.8	10 28	23 30.18	- 8 33.8	1.453	2.266	18.1	18.2
66341	1999 <i>JK</i> ₆₆		9 19.6	18°63	7°7/14.9	18	78187	2002 <i>NY</i> ₃₈		9 19.6	9°56	1°9/21.7	18
8 19	0 10.94	-13 52.1	0.895	1.827	17.7	17.5	8 19	0 6.73	+ 8 47.6	1.711	2.574	14.5	19.1
8 29	0 6.45	-14 54.6	0.865	1.833	13.0	17.3	8 29	0 2.60	+ 7 41.0	1.642	2.574	10.8	18.9
9 8	23 59.03	-15 52.2	0.853	1.842	8.9	17.1	9 8	23 56.68	+ 6 12.8	1.595	2.575	6.7	18.7
9 18	23 49.99	-16 32.4	0.862	1.852	8.0	17.1	9 18	23 49.68	+ 4 28.4	1.575	2.575	2.6	18.4
9 28	23 41.10	-16 45.5	0.892	1.863	11.1	17.3	9 28	23 42.54	+ 2 36.2	1.582	2.576	3.5	18.5
10 8	23 34.02	-16 27.5	0.943	1.876	15.4	17.6	10 8	23 36.22	+ 0 46.3	1.616	2.577	7.7	18.7
10 18	23 29.81	-15 40.2	1.011	1.890	19.5	17.9	10 18	23 31.52	- 0 52.5	1.677	2.578	11.7	19.0
10 28	23 28.98	-14 28.3	1.095	1.905	23.0	18.2	10 28	23 29.02	- 2 13.2	1.759	2.579	15.2	19.2
521465	2015 <i>OY</i> ₉₁		9 19.6	343°86	1°1/20.6	18	99129	2001 <i>FT</i> ₉₆		9 19.6	285°01	3°8/15.9	18
8 19	0 11.28	+ 3 1.1	1.795	2.669	13.4	21.5	8 19	0 10.81	- 8 28.2	1.777	2.677	12.2	19.7
8 29	0 5.77	+ 2 51.5	1.727	2.668	9.8	21.3	8 29	0 5.66	- 9 31.4	1.695	2.652	8.7	19.5
9 8	23 58.41	+ 2 29.7	1.682	2.667	5.7	21.0	9 8	23 58.49	-10 40.2	1.636	2.626	5.2	19.2
9 18	23 49.92	+ 1 58.6	1.663	2.666	1.6	20.7	9 18	23 49.96	-11 47.4	1.604	2.600	3.9	19.1
9 28	23 41.26	+ 1 23.4	1.672	2.665	3.5	20.9	9 28	23 41.04	-12 45.0	1.600	2.573	6.7	19.2
10 8	23 33.45	+ 0 49.7	1.707	2.665	7.7	21.1	10 8	23 32.82	-13 26.0	1.621	2.546	10.6	19.4
10 18	23 27.31	+ 0 22.6	1.768	2.664	11.5	21.4	10 18	23 26.25	-13 46.7	1.666	2.520	14.4	19.5
10 28	23 23.43	+ 0 6.0	1.851	2.664	14.8	21.6	10 28	23 22.06	-13 45.4	1.730	2.493	17.6	19.7
274959	2009 <i>SS</i> ₃₀₄		9 19.6	303°33	0°2/19.8	18	22051	2000 <i>AS</i> ₇		9 19.6	195°96	5°4/26.5	18
8 19	0 10.80	+ 1 18.2	1.379	2.272	15.5	21.3	8 19	0 9.65	+19 7.9	2.644	3.423	12.3	18.8
8 29	0 6.05	+ 0 53.0	1.301	2.253	11.3	21.0	8 29	0 4.25	+19 24.5	2.559	3.421	10.2	18.7
9 8	23 58.87	+ 0 12.3	1.244	2.234	6.4	20.7	9 8	23 57.47	+19 23.7	2.497	3.419	8.0	18.5
9 18	23 50.01	- 0 39.2	1.211	2.215	1.0	20.3	9 18	23 49.80	+19 5.3	2.460	3.417	6.1	18.4
9 28	23 40.70	- 1 34.0	1.204	2.197	4.6	20.5	9 28	23 41.94	+18 30.9	2.451	3.415	5.4	18.4
10 8	23 32.29	- 2 23.4	1.221	2.179	10.0	20.8	10 8	23 34.63	+17 44.5	2.470	3.413	6.5	18.4
10 18	23 25.95	- 3 0.3	1.262	2.162	14.9	21.0	10 18	23 28.49	+16 50.9	2.516	3.410	8.6	18.6
10 28	23 22.50	- 3 19.6	1.321	2.145	19.0	21.2	10 28	23 24.05	+15 56.0	2.587	3.407	10.8	18.7
262504	2006 <i>UN</i> ₂₅₇		9 19.6	259°23	2°5/17.8	15	350333	2012 <i>UM</i> ₀₀		9 19.7	260°98	0°0/19.6	18
8 19	0 14.73	- 5 41.7	1.498	2.395	14.2	21.1	8 19	0 9.68	+ 1 37.5	1.879	2.758	12.7	21.1
8 29	0 8.56	- 6 13.0	1.432	2.388	10.1	20.8	8 29	0 4.67	+ 0 54.9	1.799	2.745	9.1	20.9
9 8	0 0.09	- 6 50.5	1.389	2.381	5.6	20.5	9 8	23 57.86	- 0 0.6	1.744	2.732	5.1	20.6
9 18	23 50.17	- 7 28.0	1.371	2.373	2.5	20.3	9 18	23 49.89	- 1 4.3	1.714	2.719	0.7	20.3
9 28	23 40.02	- 7 58.3	1.381	2.366	5.8	20.5	9 28	23 41.65	- 2 9.9	1.713	2.705	3.7	20.5
10 8	23 30.91	- 8 15.5	1.416	2.358	10.4	20.8	10 8	23 34.12	- 3 10.4	1.739	2.692	8.0	20.7
10 18	23 23.90	- 8 16.2	1.474	2.350	14.6	21.0	10 18	23 28.13	- 3 59.8	1.791	2.678	11.9	20.9
10 28	23 19.65	- 7 59.0	1.552	2.343	18.1	21.2	10 28	23 24.30	- 4 34.1	1.865	2.664	15.2	21.1
36166	1999 <i>RY</i> ₂₂₈		9 19.6	128°47	0°4/20.1	18	230357	2002 <i>EJ</i> ₃₂		9 19.7	96°94	2°2/17.6	18
8 19	0 8.39	+ 2 23.5	2.245	3.116	11.2	19.7	8 19	0 10.94	- 4 14.5	1.682	2.578	13.0	19.9
8 29	0 3.37	+ 1 48.7	2.180	3.121	8.1	19.5	8 29	0 5.52	- 5 10.1	1.630	2.585	9.1	19.7
9 8	23 56.95	+ 1 3.6	2.139	3.125	4.6	19.3	9 8	23 58.25	- 6 13.0	1.601	2.593	5.0	19.5
9 18	23 49.70	+ 0 11.9	2.126	3.130	0.9	19.1	9 18	23 49.93	- 7 16.5	1.598	2.600	2.2	19.3
9 28	23 42.38	- 0 41.4	2.142	3.135	3.0	19.2	9 28	23 41.55	- 8 13.0	1.622	2.607	5.2	19.6
10 8	23 35.73	- 1 31.0	2.186	3.139	6.6	19.5	10 8	23 34.15	- 8 56.3	1.673	2.614	9.3	19.8
10 18	23 30.38	- 2 12.6	2.257	3.143	9.8	19.7	10 18	23 28.52	- 9 22.7	1.749	2.620	12.9	20.1
10 28	23 26.09	- 2 42.8	2.351	3.147	12.5	19.9	10 28	23 25.20	- 9 30.5	1.844	2.627	16.0	20.3
349360	2007 <i>VL</i> ₁₉₀		9 19.6	19°04	3°0/22.6	18	473294	2015 <i>PM</i> ₃₁₀		9 19.7	347°68	6°3/13.6	18
8 19	0 9.12	+ 9 13.4	1.745	2.601	14.5	20.6	8 19	0 9.64	-15 58.8	1.683	2.591	12.3	19.8
8 29	0 4.28	+ 8 57.8	1.677	2.602	11.1	20.4	8 29	0 4.70	-17 4.0	1.632	2.586	9.2	19.6
9 8	23 57.61	+ 8 23.4	1.630	2.604	7.2	20.2	9 8	23 57.85	-18 5.3	1.604	2.582	6.8	19.5
9 18	23 49.81	+ 7 33.1	1.609	2.606	3.7	20.0	9 18	23 49.87	-18 54.6	1.601	2.579	6.6	19.5
9 28	23 41.85	+ 6 32.0	1.615	2.607	3.9	20.0	9 28	23 41.81	-19 24.9	1.624	2.576	8.8	19.6
10 8	23 34.73	+ 5 27.6	1.648	2.609	7.5	20.2	10 8	23 34.71	-19 32.2	1.672	2.573	11.9	19.8
10 18	23 29.28	+ 4 27.0	1.706	2.612	11.3	20.4	10 18	23 29.39	-19 15.8	1.741	2.571	15.0	20.0
10 28	23 26.09	+ 3 36.5	1.786	2.614	14.6	20.7	10 28	23 26.43	-18 37.4	1.828	2.570	17.6	20.2
158786	2003 <i>SB</i> ₁₂₁		9 19.6	9°01	3°6/15.3	18	317855	2003 <i>TL</i> ₂₇		9 19.7	149°45	1°5/21.5	18
8 19	0 6.72	- 9 29.2	2.086	2.988	10.6	19.4	8 19	0 8.73	+ 5 42.3	2.612	3.464	10.4	20.9
8 29	0 2.29	-10 40.7	2.031	2.988	7.5	19.3	8 29	0 3.48	+ 5 29.0	2.541	3.468	7.7	20.8
9 8	23 56.39	-11 54.5	2.001	2.989	4.6	19.1	9 8	23 56.98	+ 5 5.2	2.495	3.472	4.7	20.6
9 18	23 49.63	-13 4.0	1.998	2.990	3.8	19.0	9 18	23 49.75	+ 4 33.2	2.476	3.476	1.9	20.4
9 28	23 42.78	-14 2.9	2.023	2.991	6.0	19.2	9 28	23 42.42	+ 3 56.4	2.487	3.480	2.6	20.5
10 8	23 36.65	-14 46.0	2.075	2.993	9.1	19.4	10 8	23 35.67	+ 3 18.9	2.527	3.484	5.6	20.7
10 18	23 31.89	-15 10.8	2.151	2.994	12.0	19.6	10 18	23 30.06	+ 2 44.5	2.595	3.487	8.5	20.9
10 28	23 28.99	-15 16.6	2.247	2.996	14.5	19.8	10 28	23 26.03	+ 2 16.9	2.687	3.490	11.0	21.0
223409	2003 <i>SV</i> ₁₆₉		9 19.6	336°32	0°4/19.3	18	248412	2005 <i>SE</i> ₁₆₅					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
442320	2011 <i>SH</i> ₁₂₆		9 19.7 346°22	2°0/17.9	18		139610	2001 <i>QX</i> ₁₃₂		9 19.7 12°44	7°3/16.9	18	
8 19	0 10.54	- 4 46.2	1.663	2.560	13.0	20.7	8 19	0 19.13	-18 29.8	1.057	1.971	17.3	17.1
8 29	0 5.35	- 5 19.8	1.601	2.557	9.2	20.5	8 29	0 11.93	-18 6.3	1.022	1.980	13.0	16.9
9 8	23 58.23	- 5 59.8	1.562	2.554	5.0	20.2	9 8	0 1.90	-17 29.5	1.007	1.990	9.0	16.7
9 18	23 49.94	- 6 40.6	1.549	2.552	2.0	20.0	9 18	23 50.46	-16 33.6	1.015	2.003	7.4	16.7
9 28	23 41.52	- 7 15.9	1.563	2.550	5.1	20.2	9 28	23 39.37	-15 16.2	1.046	2.017	9.7	16.9
10 8	23 34.01	- 7 39.9	1.604	2.548	9.3	20.5	10 8	23 30.23	-13 39.5	1.100	2.034	13.6	17.1
10 18	23 28.27	- 7 49.2	1.668	2.546	13.1	20.7	10 18	23 24.07	-11 48.5	1.176	2.053	17.5	17.4
10 28	23 24.90	- 7 42.1	1.752	2.545	16.3	20.9	10 28	23 21.33	- 9 48.0	1.270	2.073	20.8	17.7
482311	2011 <i>UV</i> ₁₈₀		9 19.7 165°79	0°9/18.7	18		207080	2004 <i>XR</i> ₁₄₇		9 19.7 6°78	8°2/11.8	18	
8 19	0 10.54	- 2 11.3	2.203	3.083	11.0	21.9	8 19	0 4.69	-14 43.7	1.173	2.102	14.7	18.4
8 29	0 4.94	- 2 43.0	2.138	3.086	7.8	21.7	8 29	0 1.68	-16 49.5	1.137	2.103	11.0	18.2
9 8	23 57.85	- 3 21.4	2.098	3.088	4.2	21.5	9 8	23 56.37	-18 52.0	1.123	2.105	8.5	18.1
9 18	23 49.88	- 4 2.7	2.086	3.090	0.9	21.3	9 18	23 49.69	-20 37.2	1.132	2.108	8.8	18.1
9 28	23 41.83	- 4 41.7	2.103	3.092	3.7	21.5	9 28	23 42.96	-21 52.9	1.163	2.113	11.7	18.3
10 8	23 34.49	- 5 14.1	2.148	3.093	7.2	21.7	10 8	23 37.44	-22 32.8	1.216	2.118	15.3	18.5
10 18	23 28.53	- 5 36.2	2.220	3.094	10.4	21.9	10 18	23 34.10	-22 36.4	1.287	2.126	18.7	18.7
10 28	23 24.44	- 5 46.0	2.314	3.095	13.2	22.1	10 28	23 33.49	-22 7.1	1.374	2.134	21.5	19.0
404477	2013 <i>GL</i> ₁₃₆		9 19.7 115°05	8°0/ 9.7	18		404025	2012 <i>CG</i> ₃₀		9 19.7 255°98	0°1/19.6	18	
8 19	0 11.24	-26 45.5	2.297	3.179	10.5	21.1	8 19	0 11.33	- 0 26.7	2.194	3.069	11.2	21.2
8 29	0 5.41	-27 57.9	2.264	3.185	8.9	21.0	8 29	0 5.57	- 0 36.8	2.120	3.064	8.1	21.0
9 8	23 58.07	-28 58.4	2.256	3.190	8.0	20.9	9 8	23 58.25	- 0 54.6	2.071	3.059	4.5	20.8
9 18	23 49.91	-29 40.7	2.273	3.196	8.4	21.0	9 18	23 49.97	- 1 16.9	2.049	3.054	0.6	20.5
9 28	23 41.78	-30 0.5	2.316	3.202	9.9	21.1	9 28	23 41.52	- 1 39.7	2.056	3.048	3.3	20.7
10 8	23 34.51	-29 56.1	2.382	3.207	11.7	21.2	10 8	23 33.76	- 1 58.9	2.092	3.043	7.0	20.9
10 18	23 28.76	-29 28.8	2.470	3.212	13.5	21.4	10 18	23 27.38	- 2 11.1	2.154	3.037	10.3	21.1
10 28	23 25.00	-28 41.2	2.575	3.217	15.1	21.5	10 28	23 22.92	- 2 13.7	2.239	3.032	13.2	21.3
45301	2000 <i>AW</i> ₄₅		9 19.7 295°20	4°9/13.9	18		47252	1999 <i>VJ</i> ₆₅		9 19.7 197°98	1°2/20.8	18	
8 19	0 8.21	-14 12.0	2.165	3.066	10.3	19.0	8 19	0 12.11	+ 4 47.7	1.708	2.577	14.2	19.7
8 29	0 3.37	-15 19.2	2.106	3.059	7.5	18.8	8 29	0 6.49	+ 4 12.4	1.637	2.575	10.4	19.5
9 8	23 57.02	-16 24.9	2.073	3.053	5.3	18.6	9 8	23 58.89	+ 3 20.8	1.589	2.573	6.1	19.2
9 18	23 49.77	-17 22.7	2.067	3.047	5.1	18.6	9 18	23 50.07	+ 2 17.4	1.567	2.570	1.8	18.9
9 28	23 42.41	-18 6.7	2.088	3.041	7.1	18.7	9 28	23 41.04	+ 1 8.6	1.573	2.567	3.7	19.1
10 8	23 35.75	-18 32.8	2.136	3.035	9.8	18.9	10 8	23 32.88	+ 0 2.5	1.606	2.563	8.1	19.3
10 18	23 30.46	-18 39.3	2.207	3.029	12.5	19.1	10 18	23 26.50	- 0 54.3	1.665	2.559	12.2	19.6
10 28	23 27.07	-18 26.5	2.298	3.023	14.8	19.2	10 28	23 22.52	- 1 36.5	1.745	2.555	15.7	19.8
288320	2004 <i>BT</i> ₅₁		9 19.7 323°70	4°8/22.9	17		282312	2002 <i>TP</i> ₉₅		9 19.7 333°63	5°6/24.8	18	
8 19	0 9.89	+ 9 19.8	1.395	2.263	16.8	19.4	8 19	0 7.92	+14 25.4	1.589	2.430	16.5	19.5
8 29	0 5.60	+ 9 52.0	1.304	2.234	13.3	19.1	8 29	0 3.74	+14 32.2	1.512	2.420	13.2	19.3
9 8	23 58.77	+10 5.1	1.232	2.205	9.2	18.8	9 8	23 57.50	+14 14.8	1.454	2.411	9.6	19.1
9 18	23 50.08	+ 9 58.4	1.184	2.177	5.5	18.5	9 18	23 49.88	+13 33.7	1.419	2.403	6.4	18.9
9 28	23 40.68	+ 9 34.1	1.159	2.149	5.6	18.4	9 28	23 41.94	+12 32.6	1.410	2.394	5.8	18.8
10 8	23 31.98	+ 8 58.5	1.159	2.123	9.6	18.6	10 8	23 34.82	+11 19.4	1.425	2.387	8.4	18.9
10 18	23 25.29	+ 8 19.4	1.181	2.097	14.3	18.8	10 18	23 29.50	+10 3.0	1.465	2.380	12.1	19.1
10 28	23 21.58	+ 7 45.3	1.223	2.073	18.6	19.0	10 28	23 26.68	+ 8 52.5	1.527	2.374	15.7	19.4
487107	2014 <i>OS</i> ₁₅₈		9 19.7 16°62	0°5/20.1	18		236845	2007 <i>RZ</i> ₁₁₈		9 19.7 43°02	3°1/21.8	18	
8 19	0 11.03	+ 0 50.3	1.948	2.825	12.4	20.6	8 19	0 15.30	+ 5 54.1	1.410	2.281	16.5	19.2
8 29	0 5.45	+ 0 47.3	1.883	2.827	8.9	20.4	8 29	0 8.84	+ 6 21.1	1.363	2.299	12.3	19.0
9 8	23 58.19	+ 0 35.0	1.842	2.830	5.1	20.2	9 8	0 0.16	+ 6 31.5	1.338	2.317	7.8	18.8
9 18	23 49.94	+ 0 16.6	1.828	2.832	1.0	19.9	9 18	23 50.24	+ 6 27.1	1.337	2.336	3.7	18.6
9 28	23 41.59	- 0 3.8	1.842	2.836	3.3	20.1	9 28	23 40.36	+ 6 12.1	1.362	2.355	4.4	18.7
10 8	23 34.03	- 0 21.6	1.884	2.839	7.3	20.4	10 8	23 31.76	+ 5 52.8	1.413	2.375	8.5	19.0
10 18	23 28.02	- 0 33.2	1.951	2.843	10.8	20.6	10 18	23 25.38	+ 5 35.0	1.488	2.395	12.6	19.3
10 28	23 24.11	- 0 35.4	2.041	2.847	13.8	20.8	10 28	23 21.77	+ 5 24.1	1.584	2.415	16.0	19.6
46369	2001 <i>VX</i> ₄₂		9 19.7 258°88	3°3/17.1	18		366387	2001 <i>CT</i> ₂₀		9 19.7 198°82	5°9/ 7.8	17 R	
8 19	0 14.37	- 6 29.7	1.370	2.273	14.9	19.2	8 19	0 9.06	-28 41.2	3.767	4.631	7.2	22.7
8 29	0 8.51	- 7 19.8	1.305	2.264	10.6	18.9	8 29	0 3.52	-29 56.0	3.723	4.626	6.2	22.7
9 8	0 0.18	- 8 16.9	1.263	2.255	6.0	18.6	9 8	23 56.96	-31 2.8	3.705	4.619	5.9	22.6
9 18	23 50.25	- 9 13.0	1.245	2.245	3.4	18.5	9 18	23 49.79	-31 57.3	3.716	4.613	6.3	22.7
9 28	23 40.04	- 9 59.1	1.254	2.236	6.8	18.6	9 28	23 42.52	-32 36.2	3.754	4.605	7.3	22.7
10 8	23 30.94	-10 28.0	1.287	2.226	11.6	18.9	10 8	23 35.70	-32 57.9	3.817	4.597	8.5	22.8
10 18	23 24.07	-10 35.8	1.342	2.216	15.9	19.1	10 18	23 29.79	-33 2.3	3.903	4.588	9.8	22.9
10 28	23 20.16	-10 21.7	1.416	2.206	19.6	19.4	10 28	23 25.18	-32 50.5	4.007	4.579	10.9	23.0
434648	2005 <i>YL</i> ₇		9 19.7 107°92	4°0/15.6	17		133928	2004 <i>SR</i> ₃₈		9 19.7 284°87	0°8/20.5	18	
8 19	0 12.50	- 9 56.5	1.871	2.768	11.8	21.1	8 19	0 7.89	+ 5 11.1	1.674	2.550	14.1	20.4
8 29	0 6.39	-11 6.0	1.831	2.786	8.4	20.9	8 29	0 3.64	+ 4 9.6	1.589	2.532	10.4	20.1
9 8	23 58.63	-12 16.1	1.817	2.804	5.1	20.8	9 8	23 57.42	+ 2 48.3	1.527	2.513	6.1	19.8
9 18	23 50.00	-13 19.8	1.830	2.822	4.1	20.7	9 18	23 49.88	+ 1 12.2	1.491	2.495	1.4	19.4
9 28	23 41.43	-14 10.4	1.871	2.839	6.5	20.9	9 28	23 41.99	- 0 30.3	1.483	2.476	3.8	19.6
10 8	23 33.86	-14 43.3	1.939	2.856	9.7	21.2	10 8	23 34.82	- 2 9.3	1.501	2.458	8.6	19.8
10 18	23 27.99	-14 57.0	2.031	2.872	12.7	21.4	10 18	23 29.31	- 3 35.9	1.544	2.439	12.9	20.0
10 28	23 24.28	-14 51.6	2.143	2.888	15.2	21.6	10 28	23 26.16	- 4 43.5	1.609	2.421	16.7	20.2
19105	1981 <i>EB</i> ₁₅		9 19.7 259°34	1°5/21.1	18		109804						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
379543	2011 AZ ₇		9 19.7 208°68	0°7/20.4	17		349737	2008 YU ₁₀₉		9 19.7 20°02	7°2/26.6	18	
8 19	0 12.72	+ 3 18.1	1.817	2.687	13.4	22.1	8 19	0 9.83	+18 41.8	1.596	2.411	17.6	20.8
8 29	0 6.86	+ 2 45.8	1.742	2.682	9.8	21.9	8 29	0 5.07	+18 59.3	1.527	2.414	14.5	20.6
9 8	23 59.09	+ 1 59.5	1.692	2.677	5.7	21.6	9 8	23 58.21	+18 49.6	1.478	2.416	11.1	20.5
9 18	23 50.11	+ 1 3.4	1.667	2.671	1.3	21.3	9 18	23 50.01	+18 12.2	1.451	2.419	8.2	20.3
9 28	23 40.91	+ 0 3.6	1.671	2.665	3.6	21.5	9 28	23 41.58	+17 10.5	1.449	2.422	7.2	20.3
10 8	23 32.53	- 0 53.0	1.703	2.658	8.0	21.7	10 8	23 34.10	+15 52.1	1.471	2.426	8.9	20.4
10 18	23 25.83	- 1 40.4	1.761	2.650	11.9	22.0	10 18	23 28.51	+14 26.8	1.519	2.430	12.0	20.6
10 28	23 21.44	- 2 14.1	1.840	2.642	15.3	22.2	10 28	23 25.48	+13 4.5	1.588	2.434	15.2	20.8
220530	2004 FT ₁₈		9 19.7 55°16	1°9/23.8	17		223339	2003 QC ₈₉		9 19.7 323°55	2°6/22.1	17	
8 19	0 1.41	+11 18.8	4.185	5.005	7.4	20.6	8 19	0 10.12	+ 6 47.2	1.983	2.841	13.0	20.1
8 29	23 57.99	+10 51.3	4.107	5.009	5.7	20.5	8 29	0 4.95	+ 6 58.6	1.902	2.830	9.9	19.9
9 8	23 53.87	+10 14.8	4.054	5.014	3.9	20.4	9 8	23 58.04	+ 6 56.7	1.843	2.819	6.3	19.7
9 18	23 49.34	+ 9 30.6	4.030	5.018	2.3	20.3	9 18	23 49.99	+ 6 42.7	1.810	2.808	3.1	19.4
9 28	23 44.77	+ 8 41.2	4.035	5.023	2.1	20.3	9 28	23 41.67	+ 6 20.0	1.805	2.797	3.6	19.5
10 8	23 40.51	+ 7 49.2	4.070	5.027	3.6	20.4	10 8	23 34.01	+ 5 53.3	1.828	2.787	7.1	19.7
10 18	23 36.88	+ 6 57.7	4.134	5.032	5.4	20.5	10 18	23 27.83	+ 5 27.4	1.876	2.777	10.6	19.9
10 28	23 34.17	+ 6 9.4	4.225	5.036	7.1	20.7	10 28	23 23.75	+ 5 7.3	1.946	2.768	13.8	20.0
49101	1998 RE ₇₆		9 19.7 24°76	2°6/18.0	18		21840	Ghoshchoudhury		9 19.7 312°69	6°1/14.7	18	
8 19	0 14.45	- 5 58.0	1.185	2.094	16.2	17.6	8 19	0 11.20	-11 50.0	1.291	2.206	14.7	17.9
8 29	0 8.58	- 6 15.6	1.139	2.100	11.5	17.4	8 29	0 6.36	-13 9.7	1.234	2.196	10.7	17.6
9 8	0 0.16	- 6 38.9	1.113	2.106	6.3	17.1	9 8	23 59.04	-14 31.5	1.199	2.186	7.1	17.4
9 18	23 50.26	- 7 1.1	1.111	2.114	2.6	16.9	9 18	23 50.14	-15 44.2	1.188	2.176	6.4	17.4
9 28	23 40.36	- 7 15.1	1.134	2.122	6.2	17.2	9 28	23 41.00	-16 37.4	1.201	2.167	9.5	17.5
10 8	23 31.89	- 7 15.3	1.180	2.130	11.2	17.5	10 8	23 33.02	-17 3.8	1.237	2.158	13.6	17.7
10 18	23 25.92	- 6 59.2	1.248	2.139	15.7	17.8	10 18	23 27.29	-17 1.3	1.294	2.150	17.6	17.9
10 28	23 23.05	- 6 26.4	1.335	2.149	19.4	18.1	10 28	23 24.52	-16 31.3	1.367	2.142	21.0	18.2
491623	2012 TR ₁₀₁		9 19.7 23°15	4°5/17.3	16		441316	2008 AV ₁₂₅		9 19.7 335°49	5°7/14.3	15	
8 19	0 19.06	-12 5.8	1.268	2.173	15.7	21.1	8 19	0 5.61	-10 39.7	1.342	2.263	13.8	21.0
8 29	0 11.70	-12 1.4	1.222	2.180	11.3	20.8	8 29	0 2.32	-12 7.2	1.279	2.244	10.0	20.7
9 8	0 1.80	-11 53.7	1.199	2.188	6.8	20.6	9 8	23 56.80	-13 39.4	1.237	2.227	6.6	20.5
9 18	23 50.49	-11 36.7	1.200	2.197	4.5	20.5	9 18	23 49.82	-15 5.5	1.220	2.210	6.0	20.4
9 28	23 39.30	-11 6.0	1.226	2.206	7.3	20.7	9 28	23 42.54	-16 14.6	1.227	2.195	9.1	20.6
10 8	23 29.67	-10 19.8	1.278	2.216	11.7	21.0	10 8	23 36.21	-16 58.3	1.257	2.181	13.2	20.8
10 18	23 22.64	- 9 18.9	1.351	2.227	15.7	21.3	10 18	23 31.87	-17 12.8	1.307	2.168	17.2	21.0
10 28	23 18.76	- 8 5.3	1.444	2.239	19.1	21.5	10 28	23 30.21	-16 58.1	1.375	2.156	20.5	21.2
306933	2001 UT ₉₀		9 19.7 54°77	2°5/18.0	17		265085	2003 SM ₂₀₉		9 19.7 0°31	5°1/23.3	18	
8 19	0 14.65	- 4 12.2	1.118	2.027	17.0	19.9	8 19	0 5.55	+10 4.7	0.932	1.828	20.8	19.2
8 29	0 8.78	- 4 52.9	1.076	2.037	12.0	19.6	8 29	0 2.84	+10 15.1	0.879	1.824	16.2	18.9
9 8	0 0.28	- 5 42.8	1.054	2.047	6.5	19.4	9 8	23 57.30	+ 9 55.1	0.842	1.821	10.9	18.6
9 18	23 50.28	- 6 33.4	1.055	2.058	2.5	19.2	9 18	23 49.90	+ 9 6.5	0.824	1.821	6.1	18.4
9 28	23 40.32	- 7 15.3	1.081	2.069	6.4	19.4	9 28	23 42.22	+ 7 57.2	0.828	1.822	5.9	18.4
10 8	23 31.89	- 7 41.0	1.130	2.080	11.6	19.8	10 8	23 35.89	+ 6 39.8	0.852	1.824	10.6	18.6
10 18	23 26.06	- 7 46.9	1.200	2.091	16.2	20.1	10 18	23 32.19	+ 5 27.3	0.897	1.829	15.8	18.9
10 28	23 23.41	- 7 32.0	1.289	2.102	19.9	20.4	10 28	23 31.86	+ 4 30.5	0.959	1.835	20.3	19.2
264204	2010 NQ ₅₃		9 19.7 321°97	1°0/20.3	18		466258	2013 JJ ₄₂		9 19.7 66°72	2°9/17.5	17	
8 19	0 10.52	+ 2 29.6	1.152	2.052	17.4	20.3	8 19	0 13.50	- 3 49.9	1.143	2.052	16.7	20.9
8 29	0 6.18	+ 2 15.7	1.083	2.037	12.8	20.0	8 29	0 7.80	- 5 1.2	1.109	2.070	11.7	20.7
9 8	23 59.10	+ 1 43.5	1.033	2.023	7.4	19.6	9 8	23 59.66	- 6 21.8	1.095	2.089	6.3	20.5
9 18	23 50.16	+ 0 57.4	1.005	2.009	1.7	19.2	9 18	23 50.21	- 7 41.5	1.106	2.108	2.9	20.3
9 28	23 40.75	+ 0 5.4	1.001	1.996	4.8	19.4	9 28	23 40.92	- 8 49.2	1.141	2.127	6.7	20.6
10 8	23 32.44	- 0 42.9	1.021	1.984	10.7	19.7	10 8	23 33.16	- 9 36.9	1.201	2.146	11.6	21.0
10 18	23 26.53	- 1 18.9	1.061	1.973	16.0	20.0	10 18	23 27.89	- 10 0.7	1.281	2.165	15.9	21.3
10 28	23 23.88	- 1 36.9	1.120	1.962	20.5	20.2	10 28	23 25.61	- 10 0.4	1.381	2.184	19.4	21.6
104705	2000 GS ₁₆₇		9 19.7 300°22	2°4/22.3	18		39157	2000 WK ₁₁₁		9 19.7 146°40	1°8/17.8	18	
8 19	0 7.24	+ 9 9.4	1.836	2.693	13.9	19.8	8 19	0 12.96	- 4 53.0	2.061	2.947	11.4	19.5
8 29	0 2.96	+ 8 28.0	1.759	2.686	10.5	19.5	8 29	0 6.71	- 5 31.8	2.005	2.955	8.0	19.3
9 8	23 56.94	+ 7 26.9	1.704	2.679	6.7	19.3	9 8	23 58.86	- 6 15.6	1.973	2.963	4.4	19.1
9 18	23 49.82	+ 6 9.6	1.674	2.673	3.1	19.1	9 18	23 50.11	- 6 59.4	1.969	2.971	1.8	19.0
9 28	23 42.48	+ 4 42.5	1.672	2.666	3.5	19.1	9 28	23 41.32	- 7 37.8	1.994	2.978	4.5	19.2
10 8	23 35.88	+ 3 13.9	1.698	2.660	7.3	19.3	10 8	23 33.37	- 8 6.3	2.047	2.985	8.0	19.4
10 18	23 30.81	+ 1 51.6	1.749	2.653	11.2	19.5	10 18	23 26.96	- 8 21.8	2.126	2.991	11.3	19.6
10 28	23 27.86	+ 0 42.5	1.824	2.647	14.5	19.7	10 28	23 22.59	- 8 23.1	2.227	2.996	14.0	19.8
352296	2007 TW ₄₂₆		9 19.7 264°30	1°7/17.9	18		215406	2002 EJ ₁₁₁		9 19.7 199°76	4°2/16.2	18	
8 19	0 10.57	- 3 51.6	1.957	2.846	11.8	21.9	8 19	0 15.50	- 9 34.8	1.562	2.461	13.6	20.3
8 29	0 5.28	- 4 35.5	1.878	2.831	8.3	21.7	8 29	0 9.03	-10 29.9	1.503	2.459	9.7	20.1
9 8	23 58.21	- 5 27.0	1.825	2.816	4.6	21.5	9 8	0 0.35	-11 27.5	1.468	2.456	5.9	19.8
9 18	23 50.01	- 6 20.8	1.798	2.800	1.7	21.2	9 18	23 50.34	-12 19.7	1.459	2.454	4.3	19.8
9 28	23 41.55	- 7 10.7	1.799	2.785	4.6	21.4	9 28	23 40.18	-12 58.7	1.477	2.450	7.2	19.9
10 8	23 33.78	- 7 50.9	1.828	2.769	8.6	21.6	10 8	23 31.11	-13 18.9	1.520	2.446	11.2	20.1
10 18	23 27.51	- 8 17.2	1.882	2.752	12.2	21.8	10 18	23 24.10	-13 18.2	1.587	2.442	14.9	20.4
10 28	23 23.37	- 8 27.2	1.957	2.736	15.3	22.0	10 28	23 19.78	-12 56.9	1.672	2.437	18.1	20.6
192423	1997 SM ₂₆		9 19.7 164°90	0°4/20.5	18		93457	2000 ST ₃₅₈		9 19.7 336°68	6°6/12.8	18	
8 19	0 2.6												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
177408	2004 BC ₁₄₇		9 19.7 67°10	0°9/20.4	18		186761	2004 CS ₉₉		9 19.7 259°84	2°2/17.8	18	
8 19	0 13.68	+ 2 39.2	1.397	2.281	15.9	19.7	8 19	0 12.71	- 4 1.2	1.604	2.499	13.6	20.3
8 29	0 7.80	+ 2 23.9	1.344	2.290	11.5	19.4	8 29	0 7.14	- 4 50.5	1.530	2.485	9.7	20.0
9 8	23 59.68	+ 1 53.7	1.311	2.299	6.6	19.2	9 8	23 59.40	- 5 49.0	1.478	2.470	5.3	19.7
9 18	23 50.24	+ 1 13.1	1.304	2.308	1.6	18.9	9 18	23 50.23	- 6 50.3	1.452	2.455	2.2	19.5
9 28	23 40.73	+ 0 28.9	1.322	2.316	4.1	19.1	9 28	23 40.73	- 7 46.4	1.454	2.439	5.5	19.7
10 8	23 32.41	- 0 11.4	1.367	2.326	9.0	19.4	10 8	23 32.09	- 8 29.9	1.481	2.423	10.1	19.9
10 18	23 26.26	- 0 41.8	1.435	2.335	13.4	19.7	10 18	23 25.31	- 8 56.0	1.533	2.407	14.3	20.1
10 28	23 22.86	- 0 58.0	1.523	2.344	17.0	20.0	10 28	23 21.13	- 9 2.3	1.604	2.391	17.8	20.3
479992	2014 KT ₂₂		9 19.7 167°90	4°4/14.4	18		136589	1993 FD ₈		9 19.7 209°07	1°9/17.9	18	
8 19	0 9.12	-11 25.7	2.091	2.991	10.6	21.5	8 19	0 13.09	- 3 45.4	1.823	2.711	12.5	21.1
8 29	0 4.04	-12 52.0	2.038	2.993	7.6	21.3	8 29	0 7.11	- 4 34.6	1.754	2.706	8.9	20.9
9 8	23 57.42	-14 19.2	2.011	2.995	5.0	21.1	9 8	23 59.25	- 5 31.7	1.710	2.701	4.8	20.6
9 18	23 49.91	-15 39.9	2.012	2.997	4.6	21.1	9 18	23 50.20	- 6 30.8	1.692	2.695	1.9	20.4
9 28	23 42.31	-16 47.2	2.041	2.999	6.8	21.2	9 28	23 40.96	- 7 25.1	1.703	2.688	4.9	20.6
10 8	23 35.46	-17 36.0	2.096	3.000	9.8	21.4	10 8	23 32.57	- 8 8.1	1.741	2.681	9.0	20.9
10 18	23 30.05	-18 4.0	2.175	3.001	12.5	21.6	10 18	23 25.86	- 8 35.9	1.804	2.673	12.7	21.1
10 28	23 26.57	-18 11.1	2.275	3.001	14.9	21.8	10 28	23 21.47	- 8 46.3	1.888	2.665	15.9	21.3
221644	2007 BQ ₅₇		9 19.7 300°29	4°0/22.4	18		208919	2002 UW ₁		9 19.7 338°92	1°4/20.9	18	
8 19	0 14.46	+ 7 57.8	1.458	2.321	16.5	19.8	8 19	0 9.22	+ 4 18.3	1.623	2.502	14.3	19.9
8 29	0 8.66	+ 8 26.5	1.380	2.309	12.7	19.6	8 29	0 4.55	+ 4 1.9	1.553	2.496	10.6	19.6
9 8	0 0.37	+ 8 37.6	1.323	2.297	8.5	19.3	9 8	23 57.90	+ 3 30.2	1.505	2.490	6.3	19.4
9 18	23 50.38	+ 8 31.3	1.289	2.285	4.6	19.0	9 18	23 50.01	+ 2 46.7	1.482	2.485	2.0	19.1
9 28	23 39.92	+ 8 10.8	1.282	2.273	5.0	19.0	9 28	23 41.90	+ 1 57.2	1.486	2.480	3.7	19.2
10 8	23 30.38	+ 7 42.1	1.300	2.261	9.1	19.3	10 8	23 34.63	+ 1 8.9	1.515	2.476	8.1	19.4
10 18	23 22.92	+ 7 12.4	1.342	2.250	13.6	19.5	10 18	23 29.12	+ 0 28.1	1.569	2.472	12.3	19.7
10 28	23 18.42	+ 6 48.7	1.404	2.238	17.5	19.7	10 28	23 26.01	- 0 0.2	1.645	2.469	15.8	19.9
139781	2001 QG ₃₂₉		9 19.7 109°46	0°2/19.5	18		324240	2006 BZ ₁₅₃		9 19.7 223°98	2°5/23.0	17	
8 19	0 8.90	+ 1 1.8	1.965	2.844	12.1	20.8	8 19	0 8.50	+ 9 54.0	2.886	3.715	10.2	21.6
8 29	0 3.94	+ 0 16.7	1.902	2.848	8.7	20.6	8 29	0 3.36	+ 9 43.5	2.796	3.706	7.8	21.4
9 8	23 57.40	- 0 39.4	1.863	2.852	4.8	20.3	9 8	23 57.00	+ 9 20.8	2.731	3.696	5.2	21.3
9 18	23 49.91	- 1 41.5	1.851	2.855	0.6	20.0	9 18	23 49.87	+ 8 47.4	2.693	3.685	2.9	21.1
9 28	23 42.33	- 2 43.6	1.867	2.859	3.6	20.3	9 28	23 42.57	+ 8 6.1	2.685	3.674	2.9	21.1
10 8	23 35.51	- 3 39.3	1.911	2.862	7.5	20.5	10 8	23 35.73	+ 7 20.9	2.707	3.663	5.3	21.2
10 18	23 30.17	- 4 23.8	1.981	2.866	11.0	20.8	10 18	23 29.89	+ 6 35.7	2.756	3.651	7.9	21.4
10 28	23 26.83	- 4 53.8	2.073	2.869	14.0	21.0	10 28	23 25.51	+ 5 54.8	2.831	3.639	10.3	21.5
480588	2015 MK ₈₂		9 19.7 10°76	2°9/22.6	18		351141	2003 WT ₁₇₀		9 19.7 309°52	1°3/21.1	18	
8 19	0 8.89	+ 9 23.8	1.787	2.642	14.3	21.1	8 19	0 5.91	+ 6 56.7	1.561	2.437	14.9	20.6
8 29	0 4.14	+ 9 2.8	1.718	2.643	10.9	20.9	8 29	0 2.44	+ 5 53.4	1.468	2.410	11.2	20.3
9 8	23 57.60	+ 8 23.0	1.670	2.643	7.1	20.6	9 8	23 56.89	+ 4 25.9	1.398	2.382	6.7	20.0
9 18	23 49.95	+ 7 27.3	1.647	2.644	3.6	20.4	9 18	23 49.90	+ 2 38.7	1.353	2.355	2.1	19.7
9 28	23 42.13	+ 6 21.1	1.652	2.644	3.8	20.5	9 28	23 42.44	+ 0 40.7	1.334	2.329	3.9	19.7
10 8	23 35.12	+ 5 11.8	1.684	2.645	7.4	20.7	10 8	23 35.67	- 1 16.5	1.341	2.302	9.0	20.0
10 18	23 29.74	+ 4 6.6	1.741	2.646	11.1	20.9	10 18	23 30.59	- 3 2.1	1.374	2.276	13.7	20.2
10 28	23 26.55	+ 3 12.0	1.820	2.647	14.4	21.1	10 28	23 28.01	- 4 27.4	1.427	2.251	17.8	20.4
395110	2009 UX ₁₄₈		9 19.7 263°42	1°5/16.5	14	C	235366	2003 WW ₁₁		9 19.7 304°90	8°5/30.5	18	
8 19	0 1.77	- 7 55.7	4.508	5.395	5.7	21.5	8 19	0 8.23	+27 39.8	2.338	3.068	15.1	19.9
8 29	23 58.22	- 8 31.5	4.435	5.386	4.0	21.4	8 29	0 3.63	+28 10.8	2.245	3.055	13.2	19.8
9 8	23 54.01	- 9 8.7	4.389	5.378	2.3	21.2	9 8	23 57.35	+28 18.2	2.171	3.043	11.3	19.6
9 18	23 49.41	- 9 45.0	4.373	5.370	1.5	21.2	9 18	23 49.95	+27 59.8	2.119	3.031	9.5	19.5
9 28	23 44.75	-10 18.0	4.387	5.361	2.8	21.2	9 28	23 42.23	+27 15.9	2.091	3.020	8.6	19.4
10 8	23 40.37	-10 45.5	4.430	5.353	4.5	21.4	10 8	23 35.07	+26 10.4	2.088	3.008	8.9	19.4
10 18	23 36.56	-11 5.9	4.501	5.345	6.2	21.5	10 18	23 29.28	+24 49.5	2.110	2.996	10.4	19.5
10 28	23 33.60	-11 18.1	4.596	5.336	7.7	21.6	10 28	23 25.47	+23 21.2	2.157	2.985	12.4	19.6
269295	2008 SZ ₅₀		9 19.7 56°28	0°7/20.3	16		242534	2005 AJ ₈₂		9 19.7 95°25	2°7/17.0	18	
8 19	0 10.39	+ 4 37.4	1.357	2.242	16.2	20.8	8 19	0 10.74	- 6 4.6	1.785	2.681	12.3	20.9
8 29	0 5.30	+ 3 36.9	1.319	2.266	11.7	20.6	8 29	0 5.34	- 7 1.2	1.733	2.689	8.6	20.7
9 8	23 58.19	+ 2 18.6	1.303	2.291	6.6	20.4	9 8	23 58.20	- 8 2.8	1.705	2.696	4.8	20.5
9 18	23 50.01	+ 0 50.0	1.312	2.316	1.4	20.1	9 18	23 50.06	- 9 3.0	1.704	2.704	2.7	20.4
9 28	23 41.97	- 0 39.1	1.347	2.341	4.1	20.4	9 28	23 41.88	- 9 54.7	1.731	2.711	5.5	20.6
10 8	23 35.17	- 1 58.8	1.408	2.367	8.9	20.7	10 8	23 34.62	-10 32.4	1.784	2.718	9.2	20.8
10 18	23 30.44	- 3 2.4	1.493	2.392	13.0	21.0	10 18	23 29.04	-10 52.9	1.861	2.725	12.6	21.1
10 28	23 28.26	- 3 45.7	1.599	2.418	16.4	21.3	10 28	23 25.65	-10 55.3	1.959	2.732	15.5	21.3
96611	1999 BJ ₂₉		9 19.7 116°35	0°5/20.1	17		474177	1999 US ₃₆		9 19.7 296°49	1°6/21.3	18	
8 19	0 14.86	+ 2 33.7	1.449	2.330	15.6	19.7	8 19	0 7.85	+ 6 36.8	1.655	2.526	14.5	21.4
8 29	0 8.56	+ 2 0.7	1.396	2.342	11.3	19.5	8 29	0 3.70	+ 5 52.3	1.567	2.505	10.8	21.1
9 8	0 0.06	+ 1 12.6	1.366	2.354	6.4	19.2	9 8	23 57.53	+ 4 47.4	1.502	2.485	6.6	20.9
9 18	23 50.30	+ 0 15.0	1.361	2.365	1.2	18.9	9 18	23 49.99	+ 3 25.9	1.462	2.464	2.3	20.5
9 28	23 40.51	- 0 44.4	1.383	2.376	4.2	19.2	9 28	23 42.06	+ 1 55.3	1.449	2.443	3.7	20.6
10 8	23 31.93	- 1 37.7	1.431	2.387	9.0	19.5	10 8	23 34.84	+ 0 24.7	1.462	2.423	8.4	20.8
10 18	23 25.48	- 2 18.6	1.503	2.397	13.3	19.8	10 18	23 29.29	- 0 56.8	1.500	2.402	12.8	21.0
10 28	23 21.76	- 2 43.3	1.596	2.407	16.9	20.0	10 28	23 26.13	- 2 2.1	1.560	2.382	16.6	21.2
259651	2003 WY ₁₀₃		9 19.7 291°58	1°6/18.5	18		395413	2					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
379942	2012 <i>LH</i> ₁₉		9 19.7 130°11	0°4/19.4	17		516322	2017 <i>AT</i> ₁₄		9 19.7 229°33	4°1/14.3	18	
8 19	0 12.79	+ 1 4.7	1.702	2.582	13.7	21.4	8 19	0 8.40	-12 58.7	2.465	3.361	9.4	21.1
8 29	0 6.86	+ 0 13.0	1.647	2.594	9.8	21.2	8 29	0 3.42	-14 5.5	2.402	3.354	6.8	20.9
9 8	23 59.06	- 0 51.1	1.616	2.605	5.3	21.0	9 8	23 57.09	-15 12.0	2.365	3.346	4.6	20.8
9 18	23 50.20	- 2 1.5	1.612	2.616	0.7	20.7	9 18	23 49.94	-16 12.6	2.356	3.339	4.3	20.8
9 28	23 41.30	- 3 10.8	1.635	2.627	4.0	20.9	9 28	23 42.67	-17 1.8	2.376	3.331	6.2	20.9
10 8	23 33.40	- 4 11.6	1.686	2.636	8.4	21.2	10 8	23 35.99	-17 35.6	2.422	3.322	8.8	21.0
10 18	23 27.30	- 4 58.6	1.762	2.646	12.2	21.5	10 18	23 30.52	-17 52.1	2.494	3.314	11.3	21.2
10 28	23 23.55	- 5 28.6	1.860	2.654	15.4	21.7	10 28	23 26.74	-17 51.0	2.586	3.305	13.5	21.3
376397	2012 <i>FB</i> ₂₆		9 19.7 73°70	0°6/20.3	17		94126	2000 <i>YN</i> ₁₁₂		9 19.7 193°73	5°4/13.2	18	
8 19	0 11.04	+ 4 23.3	1.344	2.229	16.3	21.1	8 19	0 9.11	-16 29.5	2.212	3.111	10.2	19.3
8 29	0 5.92	+ 3 24.0	1.297	2.244	11.8	20.8	8 29	0 4.01	-17 39.2	2.161	3.111	7.6	19.2
9 8	23 58.64	+ 2 5.9	1.271	2.259	6.7	20.6	9 8	23 57.43	-18 45.4	2.136	3.110	5.7	19.1
9 18	23 50.14	+ 0 36.2	1.269	2.273	1.4	20.3	9 18	23 49.99	-19 41.5	2.138	3.110	5.7	19.1
9 28	23 41.64	- 0 55.0	1.294	2.288	4.2	20.5	9 28	23 42.48	-20 21.9	2.168	3.110	7.5	19.2
10 8	23 34.36	- 2 17.5	1.345	2.303	9.2	20.9	10 8	23 35.71	-20 43.1	2.223	3.109	10.1	19.3
10 18	23 29.20	- 3 23.5	1.419	2.318	13.6	21.2	10 18	23 30.34	-20 44.2	2.301	3.109	12.5	19.5
10 28	23 26.70	- 4 8.5	1.514	2.332	17.2	21.4	10 28	23 26.83	-20 25.8	2.399	3.108	14.6	19.7
320005	2007 <i>DJ</i> ₃₅		9 19.7 82°17	1°5/17.7	18		111684	2002 <i>BD</i> ₂₄		9 19.7 118°11	5°2/14.1	18	
8 19	0 6.33	- 1 46.9	2.186	3.073	10.8	20.0	8 19	0 11.85	-16 38.5	2.233	3.127	10.3	19.4
8 29	0 1.99	- 3 7.6	2.129	3.081	7.5	19.8	8 29	0 5.86	-17 28.5	2.187	3.134	7.7	19.2
9 8	23 56.28	- 4 36.7	2.097	3.089	4.0	19.6	9 8	23 58.40	-18 14.0	2.167	3.142	5.6	19.1
9 18	23 49.79	- 6 8.1	2.094	3.097	1.5	19.5	9 18	23 50.13	-18 49.4	2.174	3.149	5.4	19.1
9 28	23 43.24	- 7 34.8	2.120	3.105	4.2	19.7	9 28	23 41.87	-19 9.8	2.209	3.156	7.1	19.2
10 8	23 37.37	- 8 50.5	2.174	3.112	7.6	19.9	10 8	23 34.43	-19 12.8	2.270	3.162	9.6	19.4
10 18	23 32.77	- 9 50.8	2.254	3.120	10.7	20.1	10 18	23 28.46	-18 57.9	2.355	3.169	12.1	19.6
10 28	23 29.91	- 10 33.2	2.357	3.128	13.3	20.3	10 28	23 24.42	-18 26.1	2.461	3.175	14.2	19.8
23241	<i>Yada</i>		9 19.7 69°53	1°6/21.3	18		472410	2015 <i>BR</i> ₂₄₆		9 19.7 178°97	0°7/20.3	17	
8 19	0 9.95	+ 6 15.1	1.602	2.473	14.9	18.6	8 19	0 13.24	+ 3 19.1	1.763	2.634	13.7	21.8
8 29	0 4.95	+ 5 36.8	1.545	2.483	11.0	18.4	8 29	0 7.26	+ 2 43.5	1.696	2.636	10.0	21.6
9 8	23 58.06	+ 4 40.7	1.511	2.494	6.6	18.2	9 8	23 59.37	+ 1 53.8	1.652	2.637	5.7	21.4
9 18	23 50.06	+ 3 31.5	1.503	2.504	2.3	17.9	9 18	23 50.30	+ 0 54.3	1.634	2.638	1.3	21.1
9 28	23 42.00	+ 2 16.7	1.521	2.515	3.6	18.1	9 28	23 41.07	- 0 8.3	1.644	2.638	3.6	21.2
10 8	23 34.93	+ 1 4.6	1.566	2.526	8.0	18.3	10 8	23 32.73	- 1 6.9	1.682	2.637	8.0	21.5
10 18	23 29.66	+ 0 2.3	1.635	2.537	12.0	18.6	10 18	23 26.14	- 1 55.5	1.746	2.636	12.0	21.7
10 28	23 26.76	- 0 44.9	1.727	2.548	15.3	18.9	10 28	23 21.90	- 2 29.7	1.831	2.634	15.3	22.0
284812	2008 <i>YY</i> ₁₄₁		9 19.7 290°91	7°2/25.8	18		50826	2000 <i>FE</i> ₃₇		9 19.7 256°20	1°4/18.1	18	
8 19	0 12.70	+ 17 47.7	1.785	2.593	16.3	20.5	8 19	0 9.78	- 2 44.6	2.077	2.963	11.3	19.5
8 29	0 7.17	+ 18 29.6	1.700	2.581	13.5	20.3	8 29	0 4.68	- 3 35.6	1.996	2.947	8.0	19.3
9 8	23 59.48	+ 18 49.3	1.635	2.570	10.5	20.1	9 8	23 57.92	- 4 35.1	1.941	2.932	4.4	19.1
9 18	23 50.31	+ 18 44.9	1.594	2.558	8.0	19.9	9 18	23 50.09	- 5 38.0	1.913	2.916	1.4	18.8
9 28	23 40.70	+ 18 17.4	1.578	2.547	7.3	19.9	9 28	23 42.01	- 6 38.2	1.913	2.900	4.3	19.0
10 8	23 31.82	+ 17 31.8	1.587	2.536	9.0	19.9	10 8	23 34.57	- 7 29.5	1.942	2.883	8.1	19.2
10 18	23 24.69	+ 16 35.3	1.622	2.525	12.0	20.1	10 18	23 28.52	- 8 7.5	1.996	2.866	11.6	19.4
10 28	23 20.08	+ 15 36.8	1.679	2.514	15.1	20.3	10 28	23 24.45	- 8 29.4	2.072	2.849	14.6	19.6
207700	2007 <i>RJ</i> ₇₀		9 19.7 343°59	1°8/18.0	18		43702	1142 <i>T</i> ₋₁		9 19.7 287°78	2°0/21.3	18	
8 19	0 10.51	- 3 36.4	1.703	2.598	12.9	20.2	8 19	0 11.77	+ 5 41.4	1.369	2.248	16.4	18.8
8 29	0 5.33	- 4 21.6	1.642	2.597	9.1	20.0	8 29	0 6.78	+ 5 22.8	1.296	2.238	12.3	18.5
9 8	23 58.29	- 5 14.8	1.604	2.596	5.0	19.7	9 8	23 59.36	+ 4 44.4	1.244	2.228	7.5	18.3
9 18	23 50.11	- 6 10.0	1.593	2.595	1.8	19.5	9 18	23 50.32	+ 3 49.6	1.216	2.217	2.7	17.9
9 28	23 41.80	- 7 0.1	1.608	2.595	4.9	19.7	9 28	23 40.90	+ 2 45.5	1.213	2.207	4.3	18.0
10 8	23 34.39	- 7 39.0	1.650	2.594	9.1	20.0	10 8	23 32.46	+ 1 41.3	1.235	2.197	9.4	18.3
10 18	23 28.69	- 8 2.6	1.716	2.594	12.8	20.2	10 18	23 26.14	+ 0 45.7	1.280	2.187	14.2	18.5
10 28	23 25.31	- 8 8.8	1.803	2.593	16.0	20.4	10 28	23 22.71	+ 0 5.4	1.346	2.177	18.3	18.8
235344	2003 <i>UC</i> ₂₄₈		9 19.7 343°16	1°9/18.2	18		362576	2010 <i>VT</i> ₁₁₅		9 19.7 28°26	2°0/17.9	18	
8 19	0 11.26	- 4 13.9	1.498	2.398	14.0	20.2	8 19	0 11.99	- 6 6.3	1.870	2.763	12.0	20.2
8 29	0 6.10	- 4 41.7	1.435	2.393	9.9	19.9	8 29	0 6.19	- 6 24.2	1.814	2.768	8.5	20.0
9 8	23 58.81	- 5 17.1	1.395	2.388	5.4	19.7	9 8	23 58.68	- 6 45.8	1.782	2.773	4.7	19.8
9 18	23 50.20	- 5 54.3	1.381	2.384	1.9	19.4	9 18	23 50.19	- 7 6.6	1.777	2.779	2.0	19.6
9 28	23 41.40	- 6 26.3	1.392	2.380	5.2	19.6	9 28	23 41.65	- 7 21.8	1.800	2.785	4.7	19.8
10 8	23 33.60	- 6 47.2	1.428	2.377	9.8	19.9	10 8	23 34.01	- 7 27.4	1.849	2.791	8.4	20.0
10 18	23 27.75	- 6 53.0	1.488	2.374	13.9	20.1	10 18	23 28.01	- 7 21.1	1.924	2.798	11.8	20.3
10 28	23 24.49	- 6 42.1	1.568	2.372	17.4	20.4	10 28	23 24.19	- 7 1.9	2.020	2.805	14.7	20.5
117256	2004 <i>SQ</i> ₅₀		9 19.7 232°50	1°4/21.5	18		213027	1996 <i>VZ</i> ₆		9 19.7 0°56	6°5/16.1	17	
8 19	0 6.90	+ 6 31.9	2.321	3.178	11.4	19.7	8 19	0 10.48	-12 6.3	0.890	1.823	17.8	18.6
8 29	0 2.41	+ 5 51.7	2.244	3.175	8.4	19.5	8 29	0 6.42	-12 43.0	0.848	1.819	12.9	18.3
9 8	23 56.56	+ 4 57.7	2.192	3.172	5.1	19.3	9 8	23 59.29	-13 18.1	0.824	1.816	8.3	18.1
9 18	23 49.86	+ 3 53.4	2.168	3.169	1.9	19.1	9 18	23 50.30	-13 40.8	0.820	1.816	6.6	18.0
9 28	23 43.03	+ 2 43.8	2.172	3.166	2.8	19.2	9 28	23 41.21	-13 41.4	0.838	1.817	9.9	18.2
10 8	23 36.78	+ 1 34.8	2.205	3.163	6.2	19.4	10 8	23 33.80	-13 15.3	0.875	1.820	14.8	18.4
10 18	23 31.76	+ 0 31.8	2.265	3.159	9.4	19.6	10 18	23 29.28	-12 22.9	0.931	1.825	19.4	18.7
10 28	23 28.43	- 0 20.7	2.349	3.156	12.2	19.8	10 28	23 28.30	-11 7.4	1.002	1.832	23.3	19.0
285011	2011 <i>BY</i> ₁₉		9 19.7 193°23	1°0/18.8	17		494224	2016 <i>NQ</i> _{17</}					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
362754	2011 <i>UX</i> ₄₀₄		9 19.7 249°86	0°1/19.8	18		126805	2002 <i>EN</i> ₃₅		9 19.7 81°06	0°8/20.7	18	
8 19	0 8.36	+ 2 17.0	2.170	3.043	11.5	21.3	8 19	0 9.29	+ 3 36.6	2.144	3.012	11.8	20.8
8 29	0 3.60	+ 1 24.6	2.088	3.030	8.3	21.1	8 29	0 4.10	+ 3 8.8	2.087	3.025	8.6	20.6
9 8	23 57.30	+ 0 19.8	2.030	3.017	4.6	20.8	9 8	23 57.49	+ 2 29.9	2.055	3.039	5.0	20.4
9 18	23 50.01	- 0 52.9	1.999	3.004	0.7	20.5	9 18	23 50.06	+ 1 43.4	2.049	3.052	1.3	20.2
9 28	23 42.50	- 2 7.6	1.998	2.990	3.3	20.7	9 28	23 42.60	+ 0 54.2	2.072	3.066	2.9	20.3
10 8	23 35.58	- 3 17.7	2.025	2.976	7.2	20.9	10 8	23 35.89	+ 0 7.6	2.123	3.079	6.5	20.6
10 18	23 29.96	- 4 17.7	2.079	2.962	10.7	21.1	10 18	23 30.57	- 0 31.8	2.201	3.092	9.8	20.8
10 28	23 26.21	- 5 3.4	2.155	2.947	13.7	21.3	10 28	23 27.09	- 1 0.6	2.302	3.105	12.5	21.0
218250	2002 <i>XV</i> ₁₁₉		9 19.7 35°51	7°1/25.9	18		86731	2000 <i>GV</i> ₃₈		9 19.7 41°68	1°5/18.6	18	
8 19	0 8.80	+16 53.6	1.085	1.940	21.5	19.2	8 19	0 12.43	- 2 31.9	1.235	2.139	16.1	18.7
8 29	0 4.75	+16 51.6	1.043	1.958	17.2	19.0	8 29	0 7.04	- 3 7.7	1.194	2.153	11.3	18.4
9 8	23 58.16	+16 13.9	1.019	1.977	12.6	18.8	9 8	23 59.33	- 3 53.7	1.174	2.167	6.1	18.2
9 18	23 50.13	+15 2.8	1.014	1.997	8.5	18.6	9 18	23 50.34	- 4 42.7	1.178	2.182	1.6	18.0
9 28	23 42.11	+13 26.7	1.032	2.018	7.2	18.6	9 28	23 41.41	- 5 26.1	1.207	2.197	5.4	18.3
10 8	23 35.55	+11 39.3	1.074	2.040	9.8	18.8	10 8	23 33.84	- 5 56.9	1.261	2.213	10.3	18.6
10 18	23 31.45	+ 9 54.2	1.137	2.063	13.8	19.1	10 18	23 28.57	- 6 10.9	1.336	2.230	14.7	18.9
10 28	23 30.37	+ 8 23.0	1.221	2.086	17.6	19.5	10 28	23 26.15	- 6 6.3	1.431	2.247	18.2	19.2
127276	2002 <i>JF</i> ₆₅		9 19.7 120°71	3°0/16.6	18		251368	2007 <i>UO</i> ₄₁		9 19.7 48°80	1°2/18.9	17	
8 19	0 12.59	- 8 0.4	2.049	2.940	11.2	20.2	8 19	0 13.63	- 1 25.6	1.130	2.035	17.2	20.8
8 29	0 6.43	- 8 56.3	2.004	2.956	7.9	20.0	8 29	0 8.10	- 2 1.6	1.087	2.046	12.2	20.6
9 8	23 58.74	- 9 54.5	1.983	2.972	4.6	19.8	9 8	0 0.00	- 2 50.3	1.064	2.057	6.6	20.3
9 18	23 50.21	-10 49.0	1.991	2.987	3.1	19.8	9 18	23 50.45	- 3 44.0	1.065	2.069	1.3	20.0
9 28	23 41.71	-11 34.1	2.027	3.002	5.4	20.0	9 28	23 40.91	- 4 33.5	1.090	2.082	5.5	20.3
10 8	23 34.10	-12 5.3	2.091	3.016	8.6	20.2	10 8	23 32.85	- 5 10.4	1.139	2.094	10.9	20.7
10 18	23 28.05	-12 20.6	2.180	3.030	11.6	20.4	10 18	23 27.31	- 5 29.5	1.209	2.107	15.5	21.0
10 28	23 24.02	-12 19.3	2.291	3.043	14.1	20.6	10 28	23 24.86	- 5 28.8	1.298	2.120	19.3	21.3
394251	2006 <i>TK</i> ₁₂₀		9 19.7 72°33	0°2/19.5	18		237443	1999 <i>TE</i> ₅₄		9 19.7 321°39	1°0/18.9	18	
8 19	0 7.42	+ 3 6.9	1.854	2.733	12.8	21.1	8 19	0 11.96	- 2 28.1	1.511	2.406	14.2	19.8
8 29	0 2.93	+ 1 46.0	1.801	2.747	9.1	20.9	8 29	0 6.71	- 2 45.0	1.440	2.395	10.2	19.5
9 8	23 56.89	+ 0 11.1	1.772	2.761	5.0	20.7	9 8	23 59.25	- 3 10.9	1.392	2.383	5.6	19.3
9 18	23 49.95	+ 1 31.0	1.770	2.775	0.7	20.4	9 18	23 50.36	- 3 41.1	1.368	2.373	1.1	18.9
9 28	23 42.98	- 3 11.9	1.797	2.789	3.7	20.6	9 28	23 41.17	- 4 9.2	1.371	2.362	4.7	19.2
10 8	23 36.85	- 4 43.5	1.852	2.802	7.7	20.9	10 8	23 32.92	- 4 29.2	1.400	2.352	9.5	19.4
10 18	23 32.23	- 5 59.6	1.932	2.816	11.3	21.2	10 18	23 26.60	- 4 36.6	1.452	2.343	13.9	19.7
10 28	23 29.61	- 6 56.4	2.035	2.830	14.3	21.4	10 28	23 22.94	- 4 28.8	1.524	2.334	17.5	19.9
322058	2010 <i>VX</i> ₇₈		9 19.7 298°97	2°7/14.5	18		219981	2002 <i>LL</i> ₄₉		9 19.7 29°36	4°7/25.6	18	
8 19	0 3.87	-14 25.9	4.108	4.998	6.1	20.3	8 19	0 5.42	+16 47.9	1.899	2.720	15.0	19.2
8 29	23 59.78	-14 57.5	4.046	4.994	4.4	20.2	8 29	0 1.61	+16 8.9	1.832	2.728	12.0	19.0
9 8	23 54.94	-15 27.6	4.011	4.990	3.1	20.1	9 8	23 56.22	+15 5.6	1.787	2.737	8.7	18.8
9 18	23 49.66	-15 53.6	4.005	4.986	2.8	20.1	9 18	23 49.90	+13 40.5	1.766	2.747	5.7	18.7
9 28	23 44.34	-16 13.0	4.029	4.982	4.0	20.2	9 28	23 43.49	+11 59.5	1.772	2.757	4.8	18.7
10 8	23 39.36	-16 23.9	4.080	4.977	5.6	20.3	10 8	23 37.86	+10 11.3	1.806	2.768	6.9	18.8
10 18	23 35.06	-16 25.4	4.158	4.973	7.2	20.4	10 18	23 33.70	+ 8 24.8	1.866	2.779	10.1	19.0
10 28	23 31.75	-16 16.8	4.259	4.969	8.7	20.5	10 28	23 31.53	+ 6 48.1	1.951	2.790	13.1	19.2
152110	2004 <i>RS</i> ₁₇₀		9 19.7 335°69	0°4/20.1	18		23152	2000 <i>CS</i> ₈		9 19.7 306°72	2°1/15.6	18	
8 19	0 11.04	+ 0 51.0	2.013	2.889	12.1	19.5	8 19	0 2.20	- 9 53.5	3.973	4.864	6.3	18.7
8 29	0 5.54	+ 0 46.3	1.942	2.885	8.7	19.2	8 29	23 58.67	-10 37.9	3.901	4.853	4.4	18.6
9 8	23 58.38	+ 0 32.4	1.895	2.882	5.0	19.0	9 8	23 54.38	-11 23.2	3.855	4.842	2.7	18.4
9 18	23 50.19	+ 0 12.5	1.874	2.878	1.0	18.7	9 18	23 49.62	-12 6.6	3.840	4.831	2.1	18.4
9 28	23 41.84	- 0 9.5	1.882	2.875	3.3	18.9	9 28	23 44.79	-12 45.1	3.853	4.821	3.5	18.5
10 8	23 34.22	- 0 29.0	1.917	2.872	7.2	19.1	10 8	23 40.27	-13 16.2	3.896	4.810	5.3	18.6
10 18	23 28.08	- 0 42.2	1.979	2.869	10.7	19.3	10 18	23 36.40	-13 38.2	3.965	4.800	7.2	18.7
10 28	23 24.00	- 0 46.0	2.063	2.867	13.8	19.5	10 28	23 33.51	-13 50.0	4.058	4.789	8.8	18.8
66647	1999 <i>RV</i> ₂₃₇		9 19.7 66°44	8°1/27.5	18		521164	2015 <i>FK</i> ₄₀₈		9 19.7 79°52	8°3/12.9	16	
8 19	0 12.97	+20 58.5	1.703	2.495	17.6	18.8	8 19	0 17.18	-22 28.5	1.664	2.557	13.3	21.0
8 29	0 7.27	+21 36.7	1.639	2.506	14.7	18.6	8 29	0 10.04	-23 22.9	1.628	2.566	10.5	20.9
9 8	23 59.47	+21 48.4	1.595	2.516	11.7	18.4	9 8	0 0.85	-24 5.2	1.615	2.575	8.6	20.8
9 18	23 50.36	+21 32.0	1.573	2.526	9.1	18.3	9 18	23 50.59	-24 27.8	1.627	2.584	8.6	20.8
9 28	23 41.06	+20 49.7	1.575	2.537	8.1	18.3	9 28	23 40.47	-24 25.2	1.665	2.593	10.4	20.9
10 8	23 32.73	+19 47.8	1.603	2.547	9.3	18.4	10 8	23 31.64	-23 56.5	1.727	2.602	13.1	21.1
10 18	23 26.32	+18 35.1	1.656	2.558	11.8	18.6	10 18	23 24.95	-23 3.8	1.810	2.611	15.7	21.3
10 28	23 22.48	+17 21.1	1.731	2.568	14.6	18.8	10 28	23 20.89	-21 51.1	1.912	2.620	17.9	21.5
163050	2001 <i>XN</i> ₂₅₂		9 19.7 321°45	2°3/17.9	18		36070	1999 <i>RQ</i> ₅₃		9 19.7 8°79	0°8/20.6	18	
8 19	0 10.06	- 2 10.8	1.192	2.101	16.2	19.8	8 19	0 7.79	+ 3 59.4	2.031	2.902	12.2	18.4
8 29	0 5.70	- 3 18.9	1.132	2.094	11.5	19.5	8 29	0 3.21	+ 3 20.8	1.963	2.902	8.9	18.2
9 8	23 58.80	- 4 41.8	1.093	2.087	6.2	19.2	9 8	23 57.10	+ 2 29.1	1.918	2.903	5.2	18.0
9 18	23 50.27	- 6 10.3	1.078	2.081	2.3	18.9	9 18	23 50.05	+ 1 28.4	1.900	2.903	1.3	17.7
9 28	23 41.47	- 7 32.5	1.087	2.075	6.4	19.2	9 28	23 42.87	+ 0 24.4	1.910	2.904	3.1	17.8
10 8	23 33.83	- 8 37.9	1.120	2.070	11.7	19.4	10 8	23 36.39	- 0 36.5	1.948	2.904	7.0	18.1
10 18	23 28.50	- 9 19.6	1.174	2.065	16.5	19.7	10 18	23 31.31	- 1 29.0	2.012	2.905	10.5	18.3
10 28	23 26.20	- 9 34.9	1.246	2.060	20.5	20.0	10 28	23 28.14	- 2 8.9	2.098	2.906	13.5	18.5
224999	2007 <i>EE</i> ₁₃₈		9 19.7 296°12	1°7/21.1	18		288384	2004 <i>CP</</i>					

EPHEMERIDES

9 19.7

9 19.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
231613	2009 <i>SQ</i> ₂₅		9 19.7 273°01	1°0/21.8	18		366264	2013 <i>AM</i> ₂₂		9 19.7 276°34	2°2/14.8	18	
8 19	0 1.72	+ 6 11.4	4.300	5.144	6.8	20.0	8 19	0 1.63	-11 51.3	4.454	5.345	5.6	20.2
8 29	23 58.29	+ 5 41.8	4.212	5.135	5.0	19.9	8 29	23 58.20	-12 37.6	4.391	5.342	4.0	20.1
9 8	23 54.16	+ 5 5.1	4.151	5.126	3.1	19.8	9 8	23 54.10	-13 23.8	4.356	5.340	2.6	20.0
9 18	23 49.61	+ 4 23.0	4.118	5.117	1.3	19.6	9 18	23 49.62	-14 7.2	4.351	5.337	2.3	20.0
9 28	23 44.99	+ 3 37.7	4.115	5.108	1.7	19.6	9 28	23 45.08	-14 45.3	4.375	5.334	3.5	20.1
10 8	23 40.63	+ 2 52.1	4.143	5.099	3.6	19.8	10 8	23 40.83	-15 15.9	4.428	5.331	5.0	20.2
10 18	23 36.88	+ 2 8.5	4.200	5.090	5.5	19.9	10 18	23 37.18	-15 37.6	4.508	5.329	6.6	20.3
10 28	23 34.00	+ 1 29.6	4.283	5.081	7.3	20.0	10 28	23 34.38	-15 49.6	4.611	5.326	8.0	20.4
318358	2004 <i>TW</i> ₃₄₄		9 19.7 242°17	5°1/13.5	18		282229	2002 <i>AZ</i> ₆₅		9 19.7 186°30	3°5/16.1	18	
8 19	0 11.31	-18 1.9	2.518	3.408	9.4	20.3	8 19	0 10.82	- 7 35.9	1.851	2.748	11.9	21.2
8 29	0 5.50	-18 48.9	2.456	3.399	7.2	20.1	8 29	0 5.50	- 8 51.0	1.792	2.748	8.4	20.9
9 8	23 58.28	-19 31.4	2.420	3.390	5.5	20.0	9 8	23 58.42	-10 10.7	1.758	2.748	4.9	20.7
9 18	23 50.23	-20 4.3	2.411	3.380	5.4	20.0	9 18	23 50.28	-11 27.7	1.751	2.747	3.6	20.7
9 28	23 42.08	-20 23.0	2.431	3.370	7.0	20.1	9 28	23 42.02	-12 34.2	1.773	2.746	6.2	20.8
10 8	23 34.58	-20 25.0	2.477	3.360	9.3	20.2	10 8	23 34.60	-13 24.1	1.820	2.745	9.7	21.0
10 18	23 28.37	-20 9.6	2.548	3.350	11.6	20.4	10 18	23 28.79	-13 54.2	1.892	2.743	13.1	21.2
10 28	23 23.92	-19 37.5	2.639	3.340	13.6	20.5	10 28	23 25.16	-14 3.5	1.984	2.741	15.9	21.4
254193	2004 <i>RL</i> ₄₃		9 19.7 332°99	0°7/18.9	18		243907	2001 <i>FG</i> ₉₃		9 19.7 141°56	3°9/14.9	15	
8 19	0 6.50	+ 0 16.4	1.976	2.862	11.8	19.9	8 19	0 9.49	- 9 9.8	2.105	3.002	10.7	20.8
8 29	0 2.35	- 0 45.8	1.908	2.858	8.4	19.7	8 29	0 4.33	-10 48.4	2.056	3.011	7.6	20.6
9 8	23 56.65	- 1 59.4	1.863	2.854	4.6	19.4	9 8	23 57.68	-12 29.6	2.033	3.019	4.7	20.4
9 18	23 50.00	- 3 18.8	1.846	2.850	0.8	19.1	9 18	23 50.16	-14 5.6	2.039	3.028	4.1	20.4
9 28	23 43.19	- 4 37.0	1.857	2.847	3.9	19.4	9 28	23 42.59	-15 29.0	2.073	3.036	6.4	20.6
10 8	23 37.07	- 5 47.1	1.896	2.844	7.8	19.6	10 8	23 35.78	-16 34.2	2.135	3.043	9.4	20.8
10 18	23 32.34	- 6 43.6	1.959	2.841	11.3	19.8	10 18	23 30.39	-17 18.3	2.221	3.050	12.2	21.0
10 28	23 29.54	- 7 23.2	2.045	2.838	14.3	20.0	10 28	23 26.90	-17 40.9	2.328	3.056	14.6	21.2
328982	2010 <i>WV</i> ₇		9 19.7 308°71	0°3/20.0	18		159998	2006 <i>EA</i> ₁₈		9 19.7 348°89	1°6/18.3	18	
8 19	0 11.49	+ 0 22.5	2.008	2.885	12.1	20.8	8 19	0 10.20	- 2 27.2	1.582	2.478	13.7	19.9
8 29	0 5.94	+ 0 18.3	1.932	2.876	8.7	20.6	8 29	0 5.29	- 3 15.3	1.521	2.476	9.7	19.6
9 8	23 58.67	+ 0 5.4	1.879	2.867	4.9	20.4	9 8	23 58.39	- 4 13.3	1.483	2.475	5.2	19.4
9 18	23 50.31	+ 0 13.3	1.854	2.858	0.9	20.1	9 18	23 50.29	- 5 14.9	1.470	2.474	1.6	19.1
9 28	23 41.73	- 0 33.7	1.856	2.849	3.3	20.2	9 28	23 42.02	- 6 12.3	1.484	2.473	4.9	19.3
10 8	23 33.86	- 0 51.4	1.887	2.841	7.3	20.5	10 8	23 34.70	- 6 58.4	1.524	2.472	9.4	19.6
10 18	23 27.48	- 1 2.5	1.943	2.833	11.0	20.7	10 18	23 29.19	- 7 28.4	1.588	2.471	13.4	19.8
10 28	23 23.17	- 1 4.0	2.022	2.825	14.1	20.9	10 28	23 26.10	- 7 39.8	1.672	2.471	16.7	20.1
15913	Telemachus		9 19.7 301°57	1°5/16.9	18		47636	2000 <i>CV</i> ₂₅		9 19.7 64°07	0°8/20.5	18	
8 19	0 3.08	- 7 45.9	4.170	5.056	6.1	19.1	8 19	0 9.91	+ 3 31.4	1.813	2.688	13.3	19.0
8 29	23 59.24	- 8 13.9	4.101	5.051	4.3	19.0	8 29	0 4.87	+ 2 59.7	1.748	2.690	9.7	18.8
9 8	23 54.68	- 8 43.2	4.058	5.047	2.4	18.8	9 8	23 58.09	+ 2 14.3	1.706	2.692	5.6	18.6
9 18	23 49.70	- 9 11.5	4.045	5.043	1.5	18.7	9 18	23 50.24	+ 1 19.5	1.691	2.694	1.4	18.3
9 28	23 44.66	- 9 36.4	4.062	5.039	2.8	18.9	9 28	23 42.26	+ 0 21.4	1.703	2.696	3.4	18.4
10 8	23 39.93	- 9 55.7	4.108	5.035	4.7	19.0	10 8	23 35.10	- 0 33.4	1.742	2.699	7.6	18.7
10 18	23 35.85	-10 8.0	4.182	5.031	6.5	19.1	10 18	23 29.55	- 1 19.2	1.806	2.701	11.4	18.9
10 28	23 32.70	-10 12.1	4.280	5.027	8.1	19.2	10 28	23 26.16	- 1 51.6	1.893	2.703	14.6	19.2
121734	1999 <i>XF</i> ₁₇₈		9 19.7 240°20	5°8/26.9	18		207152	2005 <i>CT</i> ₂₁		9 19.7 250°58	0°3/20.0	18	
8 19	0 10.62	+20 22.3	2.706	3.473	12.4	20.0	8 19	0 12.57	+ 1 11.1	2.039	2.911	12.1	21.1
8 29	0 5.12	+20 46.4	2.611	3.462	10.4	19.8	8 29	0 6.76	+ 0 52.6	1.955	2.896	8.8	20.9
9 8	23 58.16	+20 53.1	2.538	3.451	8.3	19.7	9 8	23 59.17	+ 0 23.8	1.895	2.881	5.0	20.6
9 18	23 50.25	+20 41.8	2.490	3.440	6.5	19.6	9 18	23 50.43	- 0 11.9	1.862	2.866	0.9	20.3
9 28	23 42.06	+20 13.5	2.470	3.428	5.8	19.5	9 28	23 41.39	- 0 49.9	1.858	2.851	3.4	20.5
10 8	23 34.34	+19 31.5	2.478	3.416	6.8	19.5	10 8	23 33.00	- 1 24.8	1.882	2.835	7.5	20.7
10 18	23 27.77	+18 40.6	2.513	3.403	8.8	19.7	10 18	23 26.09	- 1 52.0	1.932	2.818	11.2	20.9
10 28	23 22.89	+17 46.6	2.573	3.391	11.0	19.8	10 28	23 21.29	- 2 8.0	2.005	2.801	14.4	21.1
188329	2003 <i>OO</i> ₃		9 19.7 33°83	3°3/23.3	18		282724	2006 <i>DV</i> ₄₆		9 19.7 85°47	0°2/19.6	16	
8 19	0 7.07	+10 52.0	1.738	2.591	14.7	19.2	8 19	0 10.83	+ 1 39.2	1.736	2.617	13.4	21.3
8 29	0 2.82	+10 26.1	1.684	2.606	11.3	19.0	8 29	0 5.45	+ 0 46.6	1.687	2.634	9.6	21.1
9 8	23 56.91	+ 9 40.3	1.652	2.622	7.5	18.8	9 8	23 58.34	- 0 18.1	1.662	2.651	5.3	20.9
9 18	23 50.04	+ 8 37.8	1.645	2.639	4.0	18.7	9 18	23 50.28	- 1 29.2	1.664	2.668	0.7	20.6
9 28	23 43.14	+ 7 25.0	1.664	2.656	3.9	18.7	9 28	23 42.24	- 2 39.3	1.693	2.685	3.8	20.8
10 8	23 37.13	+ 6 9.5	1.710	2.674	7.1	18.9	10 8	23 35.16	- 3 41.3	1.749	2.702	8.0	21.1
10 18	23 32.72	+ 4 58.7	1.782	2.692	10.6	19.2	10 18	23 29.79	- 4 29.9	1.831	2.718	11.7	21.4
10 28	23 30.42	+ 3 59.0	1.876	2.711	13.7	19.4	10 28	23 26.62	- 5 2.1	1.935	2.734	14.7	21.6
197062	2003 <i>UU</i> ₁₅₇		9 19.7 320°07	0°1/19.8	18		291999	2006 <i>QX</i> ₁₁₅		9 19.7 20°06	3°3/22.8	18	
8 19	0 7.25	+ 1 14.6	2.065	2.945	11.6	20.1	8 19	0 8.42	+ 9 21.2	1.524	2.388	15.8	19.9
8 29	0 2.89	+ 0 42.2	1.987	2.933	8.4	19.9	8 29	0 4.08	+ 9 7.5	1.464	2.394	12.1	19.7
9 8	23 56.97	- 0 1.0	1.933	2.922	4.7	19.7	9 8	23 57.75	+ 8 32.9	1.425	2.399	7.9	19.4
9 18	23 50.07	- 0 51.0	1.906	2.911	0.7	19.3	9 18	23 50.21	+ 7 40.6	1.410	2.406	4.1	19.2
9 28	23 42.96	- 1 42.6	1.907	2.900	3.3	19.5	9 28	23 42.55	+ 6 36.7	1.420	2.413	4.2	19.3
10 8	23 36.48	- 2 30.0	1.936	2.890	7.2	19.8	10 8	23 35.85	+ 5 29.5	1.457	2.421	8.0	19.5
10 18	23 31.34	- 3 8.5	1.990	2.880	10.7	20.0	10 18	23 30.99	+ 4 27.1	1.517	2.429	12.0	19.8
10 28	23 28.09	- 3 34.2	2.067	2.870	13.8	20.2	10 28	23 28.55	+ 3 36.2	1.600	2.439	15.5	20.0
66330	1999 <i>JS</i> ₅₉		9 19.7 124°98	0°9/18.8	17		368397	2002 <i>SU</i> ₄₈		9 1			

EPHEMERIDES

9 19.7

9 19.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
367238	2007 <i>HL</i> ₉₅		9 19.7 265°67	9°9/ 5.1 18			180076	2003 <i>CO</i> ₁₂		9 19.8 261°51	1°7/21.4 18		
8 19	0 11.59	-34 27.2	2.380	3.238	11.1	20.6	8 19	0 11.26	+ 4 55.6	2.027	2.889	12.6	20.3
8 29	0 5.95	-35 55.3	2.345	3.229	10.1	20.5	8 29	0 5.77	+ 4 49.8	1.954	2.886	9.3	20.1
9 8	23 58.64	-37 7.3	2.332	3.220	10.0	20.5	9 8	23 58.60	+ 4 31.6	1.903	2.884	5.7	19.9
9 18	23 50.34	-37 56.6	2.344	3.211	10.6	20.6	9 18	23 50.39	+ 4 3.3	1.880	2.881	2.2	19.6
9 28	23 41.96	-38 18.6	2.379	3.202	11.9	20.6	9 28	23 41.99	+ 3 29.2	1.884	2.878	3.2	19.7
10 8	23 34.41	-38 12.0	2.435	3.193	13.4	20.7	10 8	23 34.31	+ 2 54.2	1.917	2.875	6.9	19.9
10 18	23 28.44	-37 38.6	2.510	3.183	14.9	20.8	10 18	23 28.11	+ 2 23.4	1.976	2.872	10.5	20.1
10 28	23 24.56	-36 41.8	2.600	3.174	16.2	21.0	10 28	23 23.95	+ 2 0.9	2.057	2.869	13.5	20.3
436126	2009 <i>TE</i> ₃₄		9 19.7 317°21	10°1/27.1 18			507194	2010 <i>RT</i> ₁₇₃		9 19.8 11°42	0°4/19.9 17		
8 19	0 9.74	+20 25.1	1.329	2.150	20.2	20.2	8 19	0 12.44	- 0 30.1	0.908	1.824	19.3	19.9
8 29	0 5.82	+21 21.5	1.242	2.126	17.2	19.9	8 29	0 7.82	- 0 14.9	0.864	1.826	14.0	19.6
9 8	23 59.17	+21 48.6	1.172	2.103	14.0	19.7	9 8	0 0.15	- 0 13.9	0.837	1.830	7.9	19.3
9 18	23 50.49	+21 41.3	1.121	2.081	11.2	19.4	9 18	23 50.64	- 0 22.5	0.831	1.836	1.4	18.9
9 28	23 41.04	+20 58.9	1.092	2.059	10.1	19.3	9 28	23 41.01	- 0 33.5	0.848	1.843	5.3	19.2
10 8	23 32.37	+19 47.0	1.086	2.038	11.7	19.3	10 8	23 33.02	- 0 39.5	0.885	1.852	11.4	19.6
10 18	23 25.90	+18 16.5	1.101	2.018	15.0	19.5	10 18	23 27.93	- 0 34.7	0.943	1.862	16.7	19.9
10 28	23 22.67	+16 41.3	1.136	1.999	18.8	19.6	10 28	23 26.39	- 0 15.5	1.018	1.873	21.1	20.2
259608	2003 <i>UW</i> ₂₈₉		9 19.7 214°85	2°0/21.4 18			42138	2001 <i>BP</i> ₂₈		9 19.8 146°66	3°3/15.5 18		
8 19	0 13.03	+ 5 56.1	1.537	2.407	15.5	21.0	8 19	0 7.37	- 8 42.5	2.252	3.149	10.1	18.6
8 29	0 7.46	+ 5 35.5	1.467	2.404	11.5	20.7	8 29	0 2.82	- 9 58.6	2.195	3.150	7.1	18.4
9 8	23 59.69	+ 4 56.7	1.419	2.401	7.0	20.5	9 8	23 56.88	-11 17.6	2.163	3.152	4.3	18.3
9 18	23 50.53	+ 4 3.4	1.397	2.398	2.6	20.2	9 18	23 50.12	-12 33.2	2.160	3.153	3.4	18.2
9 28	23 41.11	+ 3 2.0	1.400	2.395	3.9	20.3	9 28	23 43.28	-13 39.2	2.185	3.154	5.6	18.3
10 8	23 32.65	+ 2 0.9	1.431	2.391	8.6	20.6	10 8	23 37.08	-14 30.5	2.238	3.155	8.6	18.5
10 18	23 26.15	+ 1 7.4	1.485	2.387	12.9	20.8	10 18	23 32.16	-15 4.3	2.315	3.156	11.4	18.7
10 28	23 22.29	+ 0 27.5	1.561	2.383	16.6	21.0	10 28	23 28.98	-15 19.7	2.414	3.157	13.7	18.9
226547	2003 <i>UY</i> ₂₇₉		9 19.8 341°21	4°0/25.0 18			211061	2002 <i>CA</i> ₁₃₇		9 19.8 170°47	4°0/16.1 17		
8 19	0 5.07	+15 32.4	2.123	2.945	13.6	20.0	8 19	0 15.57	- 9 14.4	1.705	2.600	12.9	20.8
8 29	0 1.34	+14 50.1	2.042	2.940	10.8	19.8	8 29	0 8.99	-10 19.8	1.651	2.604	9.2	20.6
9 8	23 56.12	+13 45.7	1.982	2.936	7.7	19.6	9 8	0 0.42	-11 27.7	1.620	2.608	5.5	20.4
9 18	23 49.98	+12 21.6	1.948	2.932	4.9	19.4	9 18	23 50.66	-12 30.5	1.617	2.611	4.1	20.3
9 28	23 43.68	+10 42.8	1.941	2.928	4.2	19.3	9 28	23 40.83	-13 20.6	1.641	2.613	6.8	20.5
10 8	23 38.01	+ 8 57.2	1.963	2.925	6.5	19.5	10 8	23 32.02	-13 52.4	1.692	2.614	10.5	20.7
10 18	23 33.65	+ 7 12.7	2.012	2.922	9.6	19.7	10 18	23 25.12	-14 3.5	1.767	2.615	14.0	20.9
10 28	23 31.12	+ 5 37.0	2.086	2.919	12.6	19.9	10 28	23 20.69	-13 54.2	1.861	2.614	16.9	21.1
353118	2009 <i>FJ</i> ₂₄		9 19.8 239°57	4°6/14.5 18			277010	2004 <i>XJ</i> ₁₃₅		9 19.8 349°50	5°9/16.4 18		
8 19	0 10.23	-12 6.3	2.075	2.973	10.8	20.7	8 19	0 8.21	-11 52.3	0.956	1.888	16.9	18.4
8 29	0 5.03	-13 21.8	2.010	2.963	7.8	20.5	8 29	0 4.89	-12 15.7	0.901	1.871	12.4	18.1
9 8	23 58.17	-14 38.3	1.970	2.953	5.2	20.4	9 8	23 58.63	-12 37.9	0.864	1.857	7.8	17.8
9 18	23 50.30	-15 48.7	1.957	2.942	4.8	20.3	9 18	23 50.43	-12 49.4	0.849	1.845	6.0	17.6
9 28	23 42.24	-16 46.2	1.973	2.931	7.0	20.4	9 28	23 41.90	-12 41.3	0.854	1.835	9.3	17.8
10 8	23 34.88	-17 25.5	2.015	2.920	10.0	20.6	10 8	23 34.76	-12 8.5	0.880	1.828	14.3	18.0
10 18	23 28.98	-17 44.4	2.080	2.908	12.9	20.8	10 18	23 30.30	-11 10.6	0.924	1.823	19.0	18.3
10 28	23 25.08	-17 42.6	2.166	2.896	15.5	20.9	10 28	23 29.30	- 9 50.0	0.985	1.821	23.1	18.6
451163	2009 <i>SX</i> ₁₄₆		9 19.8 320°16	4°1/15.7 18			300755	2007 <i>VY</i> ₂₂₁		9 19.8 277°89	0°8/19.0 18		
8 19	0 11.37	-12 39.3	2.086	2.983	10.8	20.6	8 19	0 10.04	- 0 59.1	1.878	2.764	12.4	20.9
8 29	0 5.77	-13 13.0	2.022	2.975	7.8	20.5	8 29	0 4.99	- 1 37.8	1.810	2.760	8.8	20.7
9 8	23 58.55	-13 45.5	1.983	2.968	5.1	20.3	9 8	23 58.20	- 2 26.2	1.765	2.755	4.8	20.4
9 18	23 50.36	-14 11.5	1.971	2.961	4.2	20.2	9 18	23 50.35	- 3 19.4	1.747	2.751	0.9	20.2
9 28	23 42.04	-14 25.9	1.987	2.954	6.3	20.3	9 28	23 42.33	- 4 11.2	1.757	2.747	4.0	20.4
10 8	23 34.49	-14 25.6	2.030	2.947	9.3	20.5	10 8	23 35.07	- 4 55.7	1.793	2.743	8.1	20.6
10 18	23 28.42	-14 9.1	2.097	2.941	12.2	20.7	10 18	23 29.36	- 5 28.1	1.855	2.738	11.7	20.8
10 28	23 24.37	-13 36.8	2.185	2.934	14.8	20.9	10 28	23 25.77	- 5 45.5	1.939	2.734	14.9	21.1
72413	2001 <i>CF</i> ₂₉		9 19.8 313°49	5°9/15.0 18			389138	2009 <i>AE</i> ₃₉		9 19.8 257°56	1°3/18.5 18		
8 19	0 11.12	-10 47.9	1.247	2.164	15.0	18.6	8 19	0 10.00	- 1 50.6	1.844	2.732	12.4	21.4
8 29	0 6.50	-12 7.9	1.189	2.152	10.9	18.3	8 29	0 5.01	- 2 40.4	1.774	2.726	8.8	21.1
9 8	23 59.32	-13 31.5	1.152	2.140	7.1	18.1	9 8	23 58.24	- 3 39.9	1.728	2.719	4.8	20.9
9 18	23 50.50	-14 47.7	1.138	2.129	6.1	18.0	9 18	23 50.37	- 4 43.6	1.709	2.713	1.3	20.6
9 28	23 41.38	-15 45.2	1.149	2.118	9.3	18.2	9 28	23 42.30	- 5 44.6	1.718	2.706	4.4	20.8
10 8	23 33.41	-16 16.3	1.182	2.108	13.7	18.4	10 8	23 34.99	- 6 36.3	1.754	2.700	8.5	21.1
10 18	23 27.73	-16 18.1	1.236	2.098	17.8	18.6	10 18	23 29.26	- 7 13.9	1.814	2.693	12.2	21.3
10 28	23 25.08	-15 51.6	1.307	2.089	21.4	18.8	10 28	23 25.68	- 7 34.5	1.896	2.686	15.4	21.5
86296	1999 <i>VA</i> ₂₁		9 19.8 56°13	15°8/ 6.9 17			516246	2016 <i>UA</i> ₈₂		9 19.8 273°40	5°4/15.0 18		
8 19	0 10.00	+36 12.1	1.097	1.840	28.0	18.6	8 19	0 14.50	-15 0.3	1.822	2.720	12.1	21.1
8 29	0 6.33	+36 49.2	1.039	1.846	25.3	18.4	8 29	0 8.23	-15 43.4	1.761	2.712	8.9	20.9
9 8	23 59.48	+36 33.2	0.990	1.852	22.2	18.2	9 8	0 0.02	-16 23.1	1.725	2.705	6.2	20.7
9 18	23 50.53	+35 16.2	0.956	1.859	19.1	18.0	9 18	23 50.64	-16 52.8	1.714	2.697	5.6	20.7
9 28	23 41.26	+32 57.8	0.939	1.865	16.6	17.9	9 28	23 41.12	-17 6.5	1.731	2.689	7.8	20.8
10 8	23 33.54	+29 49.3	0.942	1.872	15.8	17.9	10 8	23 32.53	-17 0.8	1.773	2.682	10.9	21.0
10 18	23 28.80	+26 11.3	0.966	1.879	17.0	18.0	10 18	23 25.74	-16 34.9	1.839	2.674	14.1	21.2
10 28	23 27.80	+22 28.6	1.011	1.886	19.6	18.2	10 28	23 21.32	-15 50.4	1.924	2.666	16.8	21.3
435842	2008 <i>WA</i> ₁₀₅		9 19.8 28°50	2°0/18.1 18									

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
329233	2012 <i>EE</i> ₁₁		9 19.8 314°28	0°8/18.8	18		507383	2012 <i>FV</i> ₃₉		9 19.8 95°48	3°4/22.7	17	
8 19	0 6.42	- 0 3.7	2.105	2.989	11.3	20.6	8 19	0 14.30	+ 9 31.5	1.491	2.347	16.6	21.4
8 29	0 2.28	- 1 4.3	2.033	2.983	8.0	20.4	8 29	0 8.26	+ 9 19.7	1.437	2.362	12.6	21.2
9 8	23 56.66	- 2 15.4	1.986	2.976	4.3	20.1	9 8	0 0.09	+ 8 46.8	1.404	2.377	8.2	21.0
9 18	23 50.13	- 3 31.9	1.966	2.970	0.8	19.9	9 18	23 50.66	+ 7 55.8	1.396	2.392	4.2	20.8
9 28	23 43.43	- 4 47.3	1.975	2.964	3.7	20.1	9 28	23 41.20	+ 6 53.1	1.414	2.406	4.4	20.8
10 8	23 37.37	- 5 55.0	2.011	2.958	7.5	20.3	10 8	23 32.89	+ 5 47.3	1.459	2.421	8.3	21.1
10 18	23 32.61	- 6 50.0	2.073	2.953	10.9	20.5	10 18	23 26.66	+ 4 46.4	1.528	2.434	12.3	21.4
10 28	23 29.67	- 7 28.9	2.158	2.947	13.7	20.7	10 28	23 23.08	+ 3 57.1	1.619	2.448	15.8	21.7
222688	2001 <i>YF</i> ₁₂₆		9 19.8 353°93	3°0/17.8	18		60921	2000 <i>JY</i> ₄₀		9 19.8 340°15	6°4/15.7	18	
8 19	0 13.08	- 6 52.2	1.222	2.133	15.7	19.3	8 19	0 10.90	- 11 10.8	0.952	1.881	17.3	17.9
8 29	0 7.83	- 7 10.6	1.166	2.128	11.2	19.1	8 29	0 6.87	- 12 8.2	0.900	1.869	12.6	17.6
9 8	0 0.04	- 7 33.9	1.131	2.124	6.3	18.8	9 8	23 59.77	- 13 7.8	0.867	1.858	8.1	17.3
9 18	23 50.65	- 7 55.2	1.120	2.121	3.0	18.6	9 18	23 50.66	- 13 57.6	0.854	1.848	6.6	17.2
9 28	23 41.09	- 8 7.4	1.133	2.120	6.5	18.8	9 28	23 41.23	- 14 25.8	0.863	1.840	10.1	17.4
10 8	23 32.79	- 8 4.8	1.170	2.119	11.4	19.1	10 8	23 33.26	- 14 25.0	0.892	1.833	15.1	17.6
10 18	23 26.85	- 7 44.9	1.228	2.119	15.9	19.3	10 18	23 28.10	- 13 53.8	0.940	1.827	19.9	17.9
10 28	23 23.98	- 7 7.2	1.305	2.120	19.7	19.6	10 28	23 26.51	- 12 54.5	1.003	1.823	23.9	18.1
218181	2002 <i>TX</i> ₂₉		9 19.8 10°85	1°0/20.4	18		167230	2003 <i>UJ</i> ₅₇		9 19.8 343°41	2°5/22.3	18	
8 19	0 6.35	+ 3 1.6	0.925	1.839	19.1	18.9	8 19	0 7.90	+ 8 30.0	1.790	2.647	14.2	19.8
8 29	0 3.38	+ 2 39.2	0.881	1.842	13.9	18.6	8 29	0 4.78	+ 8 4.3	1.720	2.647	10.7	19.6
9 8	23 57.67	+ 1 55.2	0.855	1.847	8.0	18.4	9 8	23 58.15	+ 7 20.4	1.671	2.647	6.9	19.3
9 18	23 50.29	+ 0 56.4	0.850	1.854	1.9	18.0	9 18	23 50.39	+ 6 21.4	1.649	2.647	3.2	19.1
9 28	23 42.80	- 0 6.5	0.866	1.862	4.9	18.3	9 28	23 42.45	+ 5 13.0	1.653	2.646	3.6	19.1
10 8	23 36.76	- 1 2.0	0.904	1.872	10.9	18.6	10 8	23 35.32	+ 4 2.8	1.685	2.646	7.4	19.4
10 18	23 33.27	- 1 41.5	0.962	1.884	16.1	19.0	10 18	23 29.80	+ 2 57.8	1.742	2.646	11.2	19.6
10 28	23 32.99	- 1 59.6	1.037	1.898	20.4	19.3	10 28	23 26.49	+ 2 4.2	1.822	2.646	14.5	19.8
115277	2003 <i>SS</i> ₁₈₅		9 19.8 334°13	2°7/22.2	18		220359	2003 <i>NN</i> ₁		9 19.8 13°52	8°4/28.5	18	
8 19	0 10.49	+ 7 52.7	1.666	2.528	14.8	19.9	8 19	0 8.36	+ 21 56.1	1.708	2.502	17.5	18.9
8 29	0 5.53	+ 7 40.1	1.595	2.525	11.2	19.7	8 29	0 4.08	+ 22 33.4	1.642	2.507	14.8	18.7
9 8	23 58.60	+ 7 9.3	1.547	2.523	7.2	19.5	9 8	23 57.83	+ 22 43.7	1.595	2.512	11.9	18.5
9 18	23 50.44	+ 6 23.0	1.523	2.521	3.4	19.3	9 18	23 50.35	+ 22 25.6	1.570	2.519	9.5	18.4
9 28	23 42.05	+ 5 26.7	1.526	2.519	3.9	19.3	9 28	23 42.65	+ 21 41.1	1.568	2.527	8.4	18.4
10 8	23 34.52	+ 4 27.7	1.555	2.517	7.8	19.5	10 8	23 35.81	+ 20 36.3	1.591	2.536	9.3	18.4
10 18	23 28.73	+ 3 33.2	1.610	2.516	11.8	19.8	10 18	23 30.74	+ 19 19.8	1.638	2.545	11.6	18.6
10 28	23 25.33	+ 2 49.4	1.686	2.514	15.3	20.0	10 28	23 28.07	+ 18 1.2	1.707	2.555	14.2	18.8
403391	2009 <i>QH</i> ₅₂		9 19.8 5°84	2°4/22.0	18		287984	2003 <i>UW</i> ₁₆₇		9 19.8 313°30	3°7/22.2	18	
8 19	0 10.95	+ 6 24.7	1.988	2.845	13.0	20.6	8 19	0 13.36	+ 7 3.1	1.261	2.138	17.7	20.3
8 29	0 5.58	+ 6 32.2	1.917	2.846	9.8	20.4	8 29	0 8.28	+ 7 23.7	1.187	2.124	13.6	20.0
9 8	23 58.52	+ 6 26.5	1.870	2.846	6.2	20.2	9 8	0 0.48	+ 7 24.8	1.132	2.111	8.8	19.7
9 18	23 50.42	+ 6 9.4	1.849	2.847	2.9	20.0	9 18	23 50.79	+ 7 7.1	1.099	2.097	4.4	19.4
9 28	23 42.16	+ 5 44.5	1.856	2.848	3.4	20.0	9 28	23 40.56	+ 6 35.1	1.091	2.085	5.0	19.4
10 8	23 34.63	+ 5 16.5	1.890	2.849	6.9	20.3	10 8	23 31.35	+ 5 56.4	1.108	2.072	9.8	19.6
10 18	23 28.61	+ 4 50.3	1.950	2.851	10.3	20.5	10 18	23 24.44	+ 5 19.5	1.146	2.061	14.8	19.9
10 28	23 24.66	+ 4 30.4	2.033	2.853	13.4	20.7	10 28	23 20.74	+ 4 52.0	1.204	2.050	19.1	20.1
229148	2004 <i>SP</i> ₁₇		9 19.8 35°71	8°1/13.6	16		21223	1995 <i>DL</i>		9 19.8 164°91	0°3/20.1	18	
8 19	0 11.29	- 15 44.3	1.133	2.055	15.7	18.9	8 19	0 9.19	+ 1 29.2	2.616	3.482	10.0	18.8
8 29	0 6.35	- 17 15.0	1.112	2.074	11.7	18.7	8 29	0 3.96	+ 1 5.7	2.546	3.484	7.2	18.7
9 8	23 59.02	- 18 37.7	1.112	2.093	8.6	18.6	9 8	23 57.49	+ 0 34.0	2.501	3.487	4.0	18.5
9 18	23 50.47	- 19 40.8	1.135	2.114	8.4	18.7	9 18	23 50.28	- 0 2.7	2.485	3.489	0.8	18.2
9 28	23 42.16	- 20 15.5	1.181	2.136	11.0	18.9	9 28	23 42.98	- 0 40.7	2.499	3.491	2.7	18.4
10 8	23 35.40	- 20 18.7	1.248	2.158	14.5	19.2	10 8	23 36.25	- 1 16.0	2.541	3.493	5.8	18.6
10 18	23 31.06	- 19 52.1	1.335	2.181	17.7	19.4	10 18	23 30.64	- 1 45.1	2.611	3.495	8.7	18.8
10 28	23 29.59	- 19 0.1	1.439	2.205	20.5	19.7	10 28	23 26.61	- 2 5.2	2.705	3.496	11.2	19.0
446131	2013 <i>EB</i> ₃₅		9 19.8 342°62	2°5/17.5	18		22241	4072 <i>T</i> ₋₃		9 19.8 271°23	0°8/18.8	18	
8 19	0 11.64	- 6 58.6	1.842	2.738	12.1	20.7	8 19	0 7.68	- 1 4.0	2.278	3.160	10.6	18.7
8 29	0 6.13	- 7 27.3	1.780	2.735	8.5	20.5	8 29	0 3.13	- 1 53.4	2.199	3.147	7.6	18.4
9 8	23 58.84	- 7 59.6	1.741	2.732	4.8	20.3	9 8	23 57.14	- 2 51.7	2.145	3.135	4.1	18.2
9 18	23 50.47	- 8 30.4	1.729	2.729	2.5	20.1	9 18	23 50.24	- 3 54.4	2.119	3.123	0.9	17.9
9 28	23 41.98	- 8 54.1	1.745	2.727	5.2	20.3	9 28	23 43.15	- 4 56.0	2.121	3.110	3.6	18.1
10 8	23 34.33	- 9 6.3	1.787	2.725	8.9	20.5	10 8	23 36.62	- 5 50.9	2.152	3.098	7.2	18.3
10 18	23 28.32	- 9 4.4	1.854	2.724	12.4	20.8	10 18	23 31.32	- 6 34.7	2.209	3.085	10.4	18.5
10 28	23 24.51	- 8 47.4	1.941	2.722	15.4	21.0	10 28	23 27.76	- 7 4.3	2.289	3.072	13.2	18.7
180849	2005 <i>GX</i> ₁₅₂		9 19.8 85°27	0°8/20.5	17		177423	2004 <i>CL</i> ₂₇		9 19.8 51°30	2°6/17.8	18	
8 19	0 11.04	+ 4 50.9	1.413	2.294	15.9	20.3	8 19	0 12.69	- 3 52.4	1.196	2.104	16.2	18.9
8 29	0 6.01	+ 3 53.1	1.360	2.305	11.6	20.1	8 29	0 7.24	- 4 53.4	1.164	2.125	11.3	18.7
9 8	23 58.87	+ 2 36.3	1.328	2.315	6.7	19.8	9 8	23 59.51	- 6 2.9	1.154	2.147	6.1	18.4
9 18	23 50.48	+ 1 7.0	1.321	2.325	1.6	19.5	9 18	23 50.58	- 7 11.6	1.167	2.169	2.6	18.3
9 28	23 42.02	- 0 25.2	1.341	2.335	4.0	19.7	9 28	23 41.82	- 8 9.7	1.205	2.192	6.2	18.6
10 8	23 34.67	- 1 50.1	1.386	2.345	9.0	20.1	10 8	23 34.50	- 8 50.0	1.267	2.214	10.9	18.9
10 18	23 29.36	- 2 59.7	1.456	2.355	13.3	20.3	10 18	23 29.53	- 9 9.0	1.352	2.237	15.1	19.2
10 28	23 26.64	- 3 49.2	1.546	2.365	16.9	20.6	10 28	23 27.37	- 9 6.2	1.455	2.261	18.4	19.5
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
507226	2010 <i>XR</i> ₈₄		9 19.8 310°23	5°5/23.7	18		77654	2001 <i>KX</i> ₇₂		9 19.8 213°43	1°8/18.1	18	
8 19	0 9.86	+11 44.5	1.240	2.106	18.7	21.5	8 19	0 13.64	- 3 24.6	1.797	2.684	12.7	20.7
8 29	0 5.94	+11 56.9	1.155	2.082	14.8	21.2	8 29	0 7.69	- 4 14.7	1.727	2.678	9.0	20.4
9 8	23 59.29	+11 42.8	1.088	2.058	10.5	20.9	9 8	23 59.79	- 5 13.2	1.681	2.671	4.9	20.2
9 18	23 50.63	+11 1.4	1.043	2.034	6.4	20.6	9 18	23 50.68	- 6 14.3	1.661	2.664	1.8	20.0
9 28	23 41.24	+ 9 56.8	1.020	2.011	6.0	20.5	9 28	23 41.34	- 7 10.9	1.670	2.656	4.9	20.2
10 8	23 32.67	+ 8 38.3	1.022	1.988	10.2	20.7	10 8	23 32.84	- 7 56.4	1.707	2.648	9.1	20.4
10 18	23 26.37	+ 7 17.8	1.045	1.966	15.2	20.9	10 18	23 26.05	- 8 26.4	1.768	2.639	12.9	20.6
10 28	23 23.30	+ 6 6.6	1.087	1.945	19.8	21.1	10 28	23 21.59	- 8 38.7	1.850	2.629	16.1	20.8
494552	2017 <i>BR</i> ₇		9 19.8 238°08	1°8/17.0	18		311330	2005 <i>NM</i> ₆₉		9 19.8 352°50	0°8/20.5	18	
8 19	0 6.77	- 2 46.8	2.605	3.488	9.4	20.8	8 19	0 8.55	+ 3 15.6	1.677	2.558	13.8	21.2
8 29	0 2.34	- 4 22.3	2.526	3.477	6.6	20.6	8 29	0 4.11	+ 2 47.0	1.611	2.555	10.1	20.9
9 8	23 56.65	- 6 6.4	2.475	3.465	3.6	20.4	9 8	23 57.82	+ 2 4.1	1.566	2.553	5.8	20.7
9 18	23 50.17	- 7 53.1	2.453	3.454	1.8	20.3	9 18	23 50.37	+ 1 11.1	1.547	2.551	1.4	20.4
9 28	23 43.51	- 9 35.9	2.463	3.442	4.2	20.4	9 28	23 42.74	+ 0 14.4	1.555	2.549	3.6	20.5
10 8	23 37.34	-11 8.3	2.502	3.430	7.3	20.6	10 8	23 35.95	- 0 38.9	1.589	2.548	8.0	20.8
10 18	23 32.22	-12 25.6	2.568	3.417	10.1	20.8	10 18	23 30.81	- 1 22.7	1.648	2.548	12.0	21.0
10 28	23 28.63	-13 25.2	2.658	3.404	12.5	20.9	10 28	23 27.94	- 1 52.5	1.728	2.547	15.4	21.3
182917	2002 <i>EX</i> ₁₂₆		9 19.8 94°77	1°8/22.1	18		378550	2008 <i>CU</i> ₁₀₃		9 19.8 269°22	1°6/22.2	17	
8 19	0 7.78	+ 8 17.7	2.279	3.128	11.9	20.0	8 19	0 5.43	+ 7 9.1	3.157	4.001	9.0	22.0
8 29	0 3.06	+ 7 31.9	2.218	3.142	8.8	19.8	8 29	0 1.19	+ 6 50.8	3.075	3.996	6.8	21.9
9 8	23 57.02	+ 6 31.6	2.181	3.156	5.5	19.6	9 8	23 55.95	+ 6 22.8	3.018	3.991	4.3	21.7
9 18	23 50.21	+ 5 20.3	2.171	3.170	2.4	19.5	9 18	23 50.09	+ 5 47.0	2.989	3.986	2.0	21.5
9 28	23 43.37	+ 4 3.4	2.190	3.184	2.8	19.5	9 28	23 44.12	+ 5 6.1	2.989	3.981	2.3	21.5
10 8	23 37.21	+ 2 47.2	2.239	3.198	6.0	19.7	10 8	23 38.55	+ 4 23.8	3.019	3.977	4.7	21.7
10 18	23 32.31	+ 1 37.3	2.314	3.211	9.1	20.0	10 18	23 33.85	+ 3 43.4	3.077	3.972	7.2	21.9
10 28	23 29.14	+ 0 38.4	2.414	3.224	11.8	20.2	10 28	23 30.41	+ 3 8.4	3.160	3.967	9.4	22.0
37054	2000 <i>UD</i> ₄₀		9 19.8 205°27	0°9/20.9	18		108439	2001 <i>KE</i> ₄₄		9 19.8 91°96	3°3/16.8	18	
8 19	0 9.20	+ 4 4.3	2.417	3.278	10.9	19.4	8 19	0 11.41	- 5 12.4	1.469	2.371	14.1	19.5
8 29	0 4.10	+ 3 37.7	2.341	3.275	8.0	19.2	8 29	0 6.22	- 6 35.2	1.421	2.380	9.9	19.3
9 8	23 57.63	+ 3 0.3	2.289	3.271	4.7	19.0	9 8	23 58.98	- 8 5.6	1.397	2.389	5.5	19.1
9 18	23 50.32	+ 2 15.0	2.265	3.268	1.4	18.7	9 18	23 50.56	- 9 34.4	1.399	2.398	3.3	19.0
9 28	23 42.86	+ 1 26.0	2.270	3.264	2.7	18.8	9 28	23 42.09	-10 51.8	1.428	2.407	6.5	19.2
10 8	23 35.97	+ 0 38.3	2.304	3.260	6.1	19.1	10 8	23 34.72	-11 50.2	1.481	2.416	10.7	19.4
10 18	23 30.30	- 0 3.7	2.366	3.255	9.3	19.2	10 18	23 29.33	-12 25.6	1.558	2.425	14.5	19.7
10 28	23 26.31	- 0 36.4	2.451	3.251	12.0	19.4	10 28	23 26.48	-12 37.1	1.654	2.434	17.7	19.9
96325	1997 <i>EG</i> ₇		9 19.8 347°30	10°9/25.7	18		439086	2011 <i>QP</i> ₅		9 19.8 101°02	7°5/27.5	18	
8 19	0 15.04	+17 56.3	1.260	2.090	20.6	19.0	8 19	0 14.18	+21 16.4	1.936	2.715	16.2	20.9
8 29	0 9.73	+19 52.3	1.188	2.079	17.4	18.8	8 29	0 8.03	+21 50.7	1.871	2.729	13.6	20.7
9 8	0 1.44	+21 24.6	1.135	2.069	14.2	18.6	9 8	23 59.96	+22 0.7	1.826	2.742	10.8	20.6
9 18	23 50.97	+22 26.4	1.103	2.060	11.6	18.4	9 18	23 50.73	+21 45.5	1.804	2.754	8.4	20.5
9 28	23 39.75	+22 54.1	1.092	2.053	11.0	18.3	9 28	23 41.33	+21 6.8	1.809	2.767	7.5	20.4
10 8	23 29.52	+22 51.0	1.104	2.047	12.7	18.4	10 8	23 32.82	+20 10.4	1.839	2.779	8.6	20.5
10 18	23 21.77	+22 25.0	1.137	2.042	15.7	18.6	10 18	23 26.04	+19 3.7	1.895	2.791	10.9	20.7
10 28	23 17.54	+21 47.6	1.189	2.040	19.0	18.8	10 28	23 21.61	+17 55.2	1.974	2.803	13.4	20.9
331718	2002 <i>RM</i> ₂₈₇		9 19.8 59°34	0°6/19.1	18		514935	2008 <i>UB</i> ₃₃₀		9 19.8 292°42	8°5/12.9	18	
8 19	0 8.35	+ 1 10.0	1.707	2.593	13.3	20.9	8 19	0 16.94	-21 59.9	1.638	2.533	13.3	21.3
8 29	0 3.84	+ 0 1.6	1.651	2.601	9.5	20.7	8 29	0 10.27	-22 54.4	1.580	2.520	10.6	21.1
9 8	23 57.58	- 1 19.9	1.619	2.609	5.1	20.5	9 8	0 1.31	-23 38.5	1.545	2.507	8.7	20.9
9 18	23 50.31	- 2 47.9	1.613	2.617	0.8	20.2	9 18	23 50.94	-24 3.8	1.535	2.494	8.8	20.9
9 28	23 42.96	- 4 13.8	1.635	2.625	4.1	20.4	9 28	23 40.41	-24 3.3	1.550	2.481	10.8	21.0
10 8	23 36.50	- 5 29.8	1.683	2.634	8.4	20.7	10 8	23 31.00	-23 34.7	1.588	2.468	13.7	21.2
10 18	23 31.67	- 6 29.9	1.757	2.642	12.2	21.0	10 18	23 23.71	-22 39.5	1.648	2.456	16.7	21.3
10 28	23 29.01	- 7 10.7	1.852	2.651	15.3	21.2	10 28	23 19.19	-21 21.4	1.726	2.444	19.3	21.5
211530	2003 <i>QD</i> ₁₀₀		9 19.8 85°30	0°8/19.1	17		158142	2001 <i>FA</i> ₁₀₆		9 19.8 199°42	1°0/18.7	18	
8 19	0 13.21	+ 1 17.4	1.337	2.228	16.0	20.3	8 19	0 11.02	- 3 33.2	2.568	3.445	9.7	20.6
8 29	0 7.52	+ 0 6.4	1.296	2.248	11.3	20.1	8 29	0 5.31	- 3 54.0	2.496	3.443	6.9	20.4
9 8	23 59.66	- 1 19.4	1.277	2.268	6.1	19.9	9 8	23 58.29	- 4 19.5	2.451	3.440	3.8	20.2
9 18	23 50.62	- 2 51.5	1.283	2.288	1.0	19.6	9 18	23 50.47	- 4 46.5	2.434	3.437	1.0	20.0
9 28	23 41.67	- 4 19.5	1.316	2.307	4.8	19.9	9 28	23 42.54	- 5 11.2	2.446	3.434	3.3	20.1
10 8	23 34.01	- 5 33.8	1.374	2.326	9.7	20.3	10 8	23 35.20	- 5 30.1	2.488	3.431	6.5	20.4
10 18	23 28.54	- 6 28.4	1.456	2.345	14.0	20.6	10 18	23 29.04	- 5 40.4	2.557	3.427	9.4	20.5
10 28	23 25.76	- 7 0.6	1.558	2.363	17.4	20.8	10 28	23 24.53	- 5 40.6	2.649	3.423	11.9	20.7
354334	2003 <i>AR</i> ₇₄		9 19.8 211°57	3°0/16.0	18		217253	2003 <i>UK</i> ₁₅₃		9 19.8 55°81	8°1/28.3	18	
8 19	0 10.76	- 9 51.1	2.635	3.522	9.2	22.1	8 19	0 10.88	+22 9.4	1.620	2.413	18.3	19.5
8 29	0 5.12	-10 40.3	2.564	3.514	6.5	21.9	8 29	0 5.91	+22 26.3	1.560	2.426	15.3	19.3
9 8	23 58.17	-11 31.0	2.520	3.506	4.0	21.7	9 8	23 58.86	+22 13.5	1.519	2.440	12.2	19.2
9 18	23 50.41	-12 18.5	2.505	3.498	3.0	21.6	9 18	23 50.57	+21 30.3	1.499	2.454	9.4	19.1
9 28	23 42.52	-12 58.1	2.520	3.488	4.9	21.7	9 28	23 42.16	+20 20.3	1.504	2.468	8.1	19.0
10 8	23 35.19	-13 26.1	2.562	3.479	7.7	21.9	10 8	23 34.76	+18 51.7	1.534	2.482	9.2	19.1
10 18	23 29.02	-13 40.3	2.631	3.468	10.3	22.1	10 18	23 29.29	+17 14.5	1.588	2.497	11.8	19.3
10 28	23 24.48	-13 40.0	2.723	3.458	12.5	22.2	10 28	23 26.36	+15 39.4	1.665	2.512	14.6	19.5
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
123964	2001 FZ ₁₆		9 19.8 135°64	0°7/18.8	18		56490	2000 GD ₁₃₃		9 19.8 28°49	6°7/15.8	18	
8 19	0 8.37	- 1 38.8	2.698	3.574	9.4	20.2	8 19	0 14.80	-14 4.6	1.069	1.988	16.7	17.3
8 29	0 3.34	- 2 20.0	2.638	3.583	6.6	20.1	8 29	0 9.02	-14 45.1	1.039	2.002	12.2	17.1
9 8	23 57.15	- 3 7.2	2.603	3.592	3.6	19.9	9 8	0 0.62	-15 20.2	1.030	2.017	8.1	17.0
9 18	23 50.30	- 3 56.8	2.597	3.601	0.8	19.7	9 18	23 50.84	-15 40.5	1.043	2.033	6.8	16.9
9 28	23 43.41	- 4 44.4	2.621	3.610	3.1	19.9	9 28	23 41.30	-15 38.7	1.079	2.050	9.6	17.2
10 8	23 37.08	- 5 26.1	2.675	3.618	6.1	20.1	10 8	23 33.46	-15 12.3	1.137	2.068	13.6	17.4
10 18	23 31.84	- 5 58.8	2.755	3.626	8.8	20.3	10 18	23 28.29	-14 22.8	1.215	2.087	17.4	17.7
10 28	23 28.10	- 6 20.2	2.859	3.634	11.1	20.5	10 28	23 26.26	-13 13.8	1.311	2.107	20.6	18.0
24390	2000 AD ₁₇₇		9 19.8 234°00	1°5/16.5	18		37636	1993 UQ ₄		9 19.8 27°75	3°0/17.7	18	
8 19	0 1.80	- 7 52.8	4.564	5.450	5.6	19.0	8 19	0 9.13	- 3 17.9	0.943	1.866	18.0	16.9
8 29	23 58.37	- 8 33.7	4.496	5.447	3.9	18.9	8 29	0 5.24	- 4 26.3	0.909	1.877	12.6	16.6
9 8	23 54.31	- 9 16.0	4.455	5.444	2.3	18.8	9 8	23 58.66	- 5 46.8	0.894	1.889	6.9	16.3
9 18	23 49.86	- 9 57.3	4.444	5.441	1.5	18.7	9 18	23 50.56	- 7 7.9	0.900	1.903	3.0	16.2
9 28	23 45.36	-10 35.1	4.464	5.438	2.7	18.8	9 28	23 42.51	- 8 16.9	0.930	1.918	7.1	16.5
10 8	23 41.13	-11 7.4	4.512	5.434	4.5	18.9	10 8	23 36.03	- 9 4.1	0.980	1.934	12.5	16.8
10 18	23 37.47	-11 32.3	4.588	5.431	6.1	19.1	10 18	23 32.16	- 9 25.0	1.051	1.951	17.2	17.2
10 28	23 34.64	-11 48.9	4.689	5.428	7.5	19.2	10 28	23 31.42	- 9 19.2	1.139	1.969	21.0	17.5
76146	2000 EU ₁₆		9 19.8 26°10	2°7/21.8	18		49664	1999 MV		9 19.8 11°01	27°2/14.2	18	
8 19	0 13.34	+ 5 30.2	1.469	2.343	15.8	17.8	8 19	0 22.35	+40 51.8	0.928	1.648	33.4	17.8
8 29	0 7.67	+ 5 51.0	1.414	2.351	11.9	17.6	8 29	0 17.16	+45 7.0	0.888	1.649	31.9	17.7
9 8	23 59.85	+ 5 56.1	1.380	2.360	7.4	17.4	9 8	0 6.82	+48 34.5	0.859	1.651	30.3	17.6
9 18	23 50.73	+ 5 47.5	1.371	2.370	3.4	17.2	9 18	23 52.03	+50 56.3	0.841	1.654	29.0	17.5
9 28	23 41.52	+ 5 29.4	1.388	2.381	4.1	17.3	9 28	23 35.22	+51 59.5	0.833	1.659	27.9	17.4
10 8	23 33.41	+ 5 7.8	1.430	2.392	8.3	17.5	10 8	23 19.95	+51 44.2	0.835	1.665	27.3	17.4
10 18	23 27.34	+ 4 48.6	1.496	2.404	12.4	17.8	10 18	23 9.38	+50 22.5	0.849	1.672	27.3	17.5
10 28	23 23.92	+ 4 36.8	1.584	2.417	15.9	18.1	10 28	23 5.32	+48 15.3	0.874	1.681	27.7	17.6
455069	2015 UE ₄₂		9 19.8 214°07	3°2/15.7	18		273582	2007 CT ₂₂		9 19.8 218°65	2°6/16.9	18	
8 19	0 7.71	- 9 5.3	2.369	3.264	9.7	21.6	8 19	0 11.03	- 4 26.9	1.888	2.779	12.0	20.9
8 29	0 3.07	-10 11.7	2.308	3.262	6.9	21.4	8 29	0 5.79	- 5 49.8	1.817	2.771	8.5	20.7
9 8	23 57.09	-11 20.5	2.273	3.261	4.2	21.2	9 8	23 58.76	- 7 21.4	1.772	2.763	4.7	20.5
9 18	23 50.30	-12 26.1	2.266	3.259	3.3	21.2	9 18	23 50.60	- 8 54.5	1.755	2.754	2.7	20.3
9 28	23 43.42	-13 22.8	2.288	3.257	5.4	21.3	9 28	23 42.22	-10 20.6	1.766	2.745	5.5	20.5
10 8	23 37.14	-14 6.1	2.337	3.255	8.2	21.5	10 8	23 34.59	-11 32.3	1.805	2.735	9.4	20.7
10 18	23 32.08	-14 33.3	2.411	3.253	10.9	21.7	10 18	23 28.51	-12 24.7	1.868	2.725	12.9	20.9
10 28	23 28.70	-14 43.4	2.507	3.251	13.3	21.8	10 28	23 24.59	-12 55.5	1.952	2.714	15.9	21.1
485881	2012 FU ₃₄		9 19.8 283°73	0°3/19.4	18		435081	2007 BV ₄₈		9 19.8 175°82	1°4/18.4	17	
8 19	0 6.15	+ 2 29.5	2.213	3.088	11.2	21.2	8 19	0 13.56	- 2 53.4	1.898	2.781	12.3	22.5
8 29	0 2.13	+ 1 12.1	2.129	3.074	8.0	20.9	8 29	0 7.50	- 3 36.0	1.834	2.783	8.7	22.3
9 8	23 56.65	- 0 18.9	2.071	3.059	4.4	20.7	9 8	23 59.65	- 4 26.3	1.795	2.785	4.8	22.1
9 18	23 50.25	- 1 58.5	2.040	3.045	0.6	20.4	9 18	23 50.74	- 5 19.0	1.783	2.786	1.4	21.9
9 28	23 43.63	- 3 39.4	2.039	3.030	3.4	20.6	9 28	23 41.70	- 6 7.9	1.799	2.787	4.4	22.1
10 8	23 37.56	- 5 14.2	2.067	3.015	7.2	20.8	10 8	23 33.51	- 6 47.3	1.844	2.787	8.4	22.3
10 18	23 32.70	- 6 36.5	2.121	3.001	10.6	21.0	10 18	23 26.95	- 7 13.2	1.913	2.786	11.9	22.6
10 28	23 29.60	- 7 41.8	2.199	2.986	13.6	21.2	10 28	23 22.59	- 7 23.6	2.005	2.785	14.9	22.8
421332	2013 TZ ₇₅		9 19.8 90°67	3°9/23.1	17		263901	2009 FF ₂₅		9 19.8 148°24	0°2/20.0	18	
8 19	0 14.00	+10 40.2	1.450	2.304	17.1	20.7	8 19	0 10.93	+ 1 41.3	2.254	3.122	11.2	21.2
8 29	0 8.14	+10 28.6	1.396	2.319	13.1	20.5	8 29	0 5.38	+ 1 9.3	2.189	3.129	8.1	21.0
9 8	0 0.10	+ 9 54.0	1.363	2.334	8.7	20.3	9 8	23 58.39	+ 0 27.7	2.150	3.136	4.6	20.8
9 18	23 50.78	+ 8 59.6	1.354	2.348	4.7	20.1	9 18	23 50.55	- 0 19.8	2.138	3.142	0.8	20.6
9 28	23 41.40	+ 7 51.8	1.371	2.363	4.6	20.2	9 28	23 42.64	- 1 8.4	2.155	3.148	3.0	20.8
10 8	23 33.19	+ 6 39.7	1.414	2.377	8.4	20.4	10 8	23 35.41	- 1 53.0	2.201	3.153	6.6	21.0
10 18	23 27.10	+ 5 32.1	1.482	2.391	12.5	20.7	10 18	23 29.52	- 2 29.5	2.274	3.158	9.8	21.2
10 28	23 23.71	+ 4 36.3	1.571	2.404	16.0	21.0	10 28	23 25.46	- 2 54.8	2.371	3.163	12.6	21.4
347707	2001 XR ₃		9 19.8 86°99	16°7/ 4.4	17		509752	2008 TH ₁₀₇		9 19.8 199°87	2°2/17.7	18	
8 19	0 18.26	+33 25.9	1.209	1.949	26.0	19.8	8 19	0 12.33	- 4 59.9	1.847	2.738	12.3	21.5
8 29	0 12.38	+35 14.9	1.153	1.956	23.6	19.7	8 29	0 6.69	- 5 48.4	1.783	2.737	8.7	21.2
9 8	0 3.05	+36 21.9	1.109	1.962	20.9	19.5	9 8	23 59.24	- 6 43.2	1.744	2.735	4.8	21.0
9 18	23 51.29	+36 37.7	1.081	1.969	18.5	19.4	9 18	23 50.70	- 7 38.5	1.731	2.732	2.2	20.8
9 28	23 38.92	+35 58.5	1.071	1.976	17.0	19.3	9 28	23 42.01	- 8 27.5	1.746	2.730	5.0	21.0
10 8	23 28.00	+34 30.5	1.080	1.983	16.8	19.3	10 8	23 34.15	- 9 4.6	1.789	2.727	8.9	21.2
10 18	23 20.19	+32 27.4	1.108	1.990	18.0	19.4	10 18	23 27.93	- 9 26.2	1.856	2.724	12.5	21.5
10 28	23 16.44	+30 7.7	1.154	1.996	20.0	19.6	10 28	23 23.92	- 9 30.5	1.944	2.720	15.5	21.7
37476	1107 T-1		9 19.8 157°38	0°6/20.6	18		479407	2013 YR ₄₇		9 19.8 169°60	8°5/29.4	18	
8 19	0 8.97	+ 3 22.6	2.389	3.253	10.9	20.4	8 19	0 13.34	+25 42.5	2.080	2.825	16.2	21.0
8 29	0 3.93	+ 2 49.8	2.320	3.257	7.9	20.2	8 29	0 7.51	+26 12.1	2.001	2.828	14.0	20.9
9 8	23 57.56	+ 2 6.6	2.276	3.260	4.6	20.0	9 8	23 59.77	+26 15.9	1.941	2.830	11.6	20.7
9 18	23 50.38	+ 1 16.2	2.260	3.263	1.1	19.8	9 18	23 50.80	+25 52.2	1.904	2.832	9.5	20.6
9 28	23 43.11	+ 0 23.3	2.272	3.266	2.8	19.9	9 28	23 41.56	+25 2.0	1.892	2.834	8.5	20.5
10 8	23 36.44	- 0 27.1	2.314	3.268	6.2	20.2	10 8	23 33.08	+23 50.4	1.906	2.835	9.1	20.6
10 18	23 31.00	- 1 10.7	2.383	3.271	9.3	20.4	10 18	23 26.24	+22 25.2	1.946	2.836	10.9	20.7
10 28	23 27.25	- 1 44.0	2.475	3.273	11.9	20.6	10 28	23 21.67	+20 55.5	2.009	2.836	13.2	20.8
109458	2001 QG ₂₁₁		9 19.8 34°35	3°2/21.7	17		138920	2001 AE ₂₄		9 19.8 273°36	0°5/20.3	18	
8 19	0 16.20	+ 4 54											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V		
171859	2001 <i>OH</i> ₅₁	9 19.8 65°57' 0.5"/19.3 18								424531	2008 <i>EB</i> ₉₅	9 19.8 168°70' 1.9"/17.9 17			
8 19	0 12.22	- 1 1.8	1.782	2.666	13.0	20.0	8 19	0 13.76	- 3 45.9	1.930	2.815	12.1	22.4		
8 29	0 6.56	- 1 25.3	1.727	2.675	9.2	19.8	8 29	0 7.62	- 4 43.1	1.869	2.820	8.6	22.2		
9 8	23 59.14	- 1 57.7	1.695	2.685	5.1	19.6	9 8	23 59.74	- 5 47.5	1.834	2.824	4.7	22.0		
9 18	23 50.69	- 2 34.5	1.689	2.694	0.8	19.3	9 18	23 50.82	- 6 53.0	1.825	2.827	1.9	21.8		
9 28	23 42.18	- 3 9.9	1.712	2.703	3.9	19.6	9 28	23 41.81	- 7 53.0	1.846	2.830	4.7	22.0		
10 8	23 34.60	- 3 38.8	1.761	2.713	8.0	19.9	10 8	23 33.64	- 8 41.5	1.894	2.832	8.6	22.2		
10 18	23 28.71	- 3 57.2	1.835	2.722	11.7	20.1	10 18	23 27.09	- 9 14.5	1.968	2.833	12.0	22.5		
10 28	23 25.05	- 4 2.4	1.932	2.732	14.7	20.3	10 28	23 22.71	- 9 30.2	2.064	2.834	14.9	22.7		
421563	2014 <i>OQ</i> ₁₉₀	9 19.8 54°45' 0"/19.8 17								189143	2002 <i>GU</i> ₁	9 19.8 78°95' 3"/15.8 18			
8 19	0 12.32	- 1 5.6	2.282	3.156	10.9	20.7	8 19	0 7.44	- 6 53.6	2.142	3.039	10.6	19.7		
8 29	0 6.33	- 1 6.0	2.221	3.164	7.8	20.5	8 29	0 2.94	- 8 24.3	2.096	3.052	7.4	19.6		
9 8	23 58.90	- 1 12.8	2.185	3.172	4.3	20.3	9 8	23 57.06	- 9 58.8	2.075	3.065	4.3	19.4		
9 18	23 50.65	- 1 23.2	2.176	3.181	0.7	20.0	9 18	23 50.40	- 11 30.3	2.083	3.078	3.2	19.4		
9 28	23 42.34	- 1 33.8	2.197	3.189	3.0	20.2	9 28	23 43.70	- 12 51.7	2.119	3.091	5.5	19.5		
10 8	23 34.76	- 1 41.2	2.247	3.198	6.5	20.5	10 8	23 37.72	- 13 57.3	2.183	3.104	8.6	19.7		
10 18	23 28.54	- 1 42.6	2.323	3.207	9.7	20.7	10 18	23 33.07	- 14 44.1	2.272	3.117	11.4	20.0		
10 28	23 24.16	- 1 36.1	2.423	3.216	12.3	20.9	10 28	23 30.19	- 15 11.0	2.382	3.130	13.8	20.2		
263812	2008 <i>RW</i> ₁₂₁	9 19.8 328°69' 0"/21.7 16								95249	2002 <i>CC</i> ₅₅	9 19.8 128°42' 1.6"/21.8 18			
8 19	0 2.27	+ 5 39.2	4.021	4.869	7.2	21.2	8 19	0 9.51	+ 6 21.6	2.361	3.213	11.4	20.1		
8 29	23 58.81	+ 5 11.5	3.940	4.866	5.3	21.0	8 29	0 4.36	+ 5 59.7	2.293	3.220	8.5	19.9		
9 8	23 54.62	+ 4 36.6	3.885	4.863	3.2	20.9	9 8	23 57.85	+ 5 25.5	2.250	3.227	5.2	19.7		
9 18	23 49.98	+ 3 56.3	3.859	4.860	1.3	20.7	9 18	23 50.53	+ 4 41.9	2.234	3.234	2.1	19.5		
9 28	23 45.27	+ 3 13.0	3.863	4.857	1.7	20.8	9 28	23 43.12	+ 3 52.9	2.247	3.241	2.8	19.6		
10 8	23 40.87	+ 2 29.6	3.897	4.854	3.8	20.9	10 8	23 36.34	+ 3 3.6	2.289	3.247	6.0	19.8		
10 18	23 37.11	+ 1 48.7	3.960	4.851	5.8	21.1	10 18	23 30.82	+ 2 18.6	2.358	3.253	9.1	20.0		
10 28	23 34.29	+ 1 12.9	4.048	4.849	7.6	21.2	10 28	23 27.02	+ 1 41.9	2.451	3.259	11.7	20.2		
25809	2000 <i>CU</i> ₁₂₅	9 19.8 346°26' 3"/17.8 18								361080	2006 <i>BA</i> ₈₈	9 19.8 356°82' 4.7"/14.5 18			
8 19	0 8.49	- 5 33.4	0.985	1.910	17.2	17.3	8 19	0 6.77	- 11 5.4	1.857	2.765	11.4	19.8		
8 29	0 5.10	- 6 3.3	0.928	1.897	12.3	17.0	8 29	0 2.74	- 12 30.0	1.804	2.763	8.2	19.6		
9 8	23 58.84	- 6 42.4	0.890	1.885	6.9	16.6	9 8	23 57.07	- 13 56.1	1.775	2.761	5.4	19.4		
9 18	23 50.68	- 7 22.3	0.873	1.875	3.1	16.4	9 18	23 50.41	- 15 15.9	1.773	2.760	4.9	19.4		
9 28	23 42.16	- 7 52.8	0.878	1.867	7.2	16.6	9 28	23 43.64	- 16 21.5	1.798	2.759	7.2	19.5		
10 8	23 34.94	- 8 5.6	0.904	1.860	12.8	16.9	10 8	23 37.64	- 17 7.6	1.848	2.759	10.4	19.7		
10 18	23 30.31	- 7 56.2	0.949	1.856	17.9	17.2	10 18	23 33.14	- 17 31.4	1.920	2.760	13.4	19.9		
10 28	23 29.06	- 7 23.5	1.011	1.853	22.2	17.4	10 28	23 30.65	- 17 32.7	2.013	2.760	16.0	20.1		
346493	2008 <i>UK</i> ₇₁	9 19.8 16°27' 6"/15.6 18								252111	2000 <i>WB</i> ₂₄	9 19.8 344°90' 2.3"/17.8 18			
8 19	0 16.06	- 15 45.5	1.301	2.210	15.1	19.4	8 19	0 9.42	- 5 24.4	1.617	2.519	13.1	19.4		
8 29	0 9.79	- 16 16.5	1.258	2.214	11.2	19.2	8 29	0 4.86	- 5 58.0	1.553	2.511	9.3	19.2		
9 8	0 1.07	- 16 41.1	1.236	2.219	7.7	19.0	9 8	23 58.35	- 6 37.8	1.511	2.503	5.1	18.9		
9 18	23 50.99	- 16 51.3	1.239	2.224	6.8	19.0	9 18	23 50.62	- 7 18.1	1.495	2.497	2.3	18.7		
9 28	23 40.97	- 16 40.7	1.266	2.231	9.2	19.2	9 28	23 42.70	- 7 52.1	1.505	2.491	5.3	18.9		
10 8	23 32.37	- 16 7.1	1.316	2.238	12.9	19.4	10 8	23 35.65	- 8 14.1	1.541	2.486	9.5	19.1		
10 18	23 26.19	- 15 11.9	1.388	2.246	16.5	19.7	10 18	23 30.34	- 8 20.6	1.599	2.481	13.4	19.4		
10 28	23 22.99	- 13 58.1	1.478	2.255	19.5	19.9	10 28	23 27.39	- 8 9.9	1.679	2.478	16.7	19.6		
284053	2005 <i>BD</i> ₃₇	9 19.8 49°74' 1.8"/21.4 18								334909	2003 <i>XT</i> ₄₃	9 19.8 45°96' 5.0"/23.9 17			
8 19	0 11.68	+ 5 16.3	1.661	2.531	14.5	21.0	8 19	0 11.97	+ 12 9.8	1.222	2.085	19.1	20.5		
8 29	0 6.36	+ 5 2.9	1.599	2.536	10.7	20.8	8 29	0 7.06	+ 12 7.9	1.171	2.096	14.9	20.3		
9 8	23 59.11	+ 4 34.0	1.560	2.541	6.5	20.6	9 8	23 59.69	+ 11 38.5	1.138	2.107	10.2	20.1		
9 18	23 50.70	+ 3 53.1	1.545	2.547	2.4	20.3	9 18	23 50.84	+ 10 43.8	1.128	2.120	6.0	19.9		
9 28	23 42.16	+ 3 5.7	1.558	2.552	3.6	20.4	9 28	23 41.88	+ 9 31.2	1.142	2.132	5.5	19.9		
10 8	23 34.54	+ 2 18.6	1.598	2.558	7.8	20.7	10 8	23 34.22	+ 8 11.3	1.180	2.145	9.2	20.1		
10 18	23 28.71	+ 1 38.0	1.662	2.564	11.8	21.0	10 18	23 28.89	+ 6 54.9	1.240	2.159	13.6	20.4		
10 28	23 25.24	+ 1 8.7	1.748	2.570	15.1	21.2	10 28	23 26.53	+ 5 51.1	1.322	2.173	17.4	20.7		
470105	2006 <i>TY</i> ₅₉	9 19.8 213°21' 3.8"/23.2 18								107253	2001 <i>BF</i> ₆₂	9 19.8 187°60' 1.6"/21.5 18			
8 19	0 12.33	+ 10 49.1	1.591	2.442	16.0	21.3	8 19	0 11.23	+ 5 56.2	2.009	2.867	12.8	20.0		
8 29	0 7.03	+ 10 36.7	1.519	2.440	12.4	21.1	8 29	0 5.85	+ 5 30.9	1.936	2.867	9.5	19.7		
9 8	23 59.60	+ 10 2.3	1.468	2.437	8.3	20.8	9 8	23 58.79	+ 4 51.2	1.887	2.867	5.8	19.5		
9 18	23 50.80	+ 9 8.1	1.441	2.435	4.6	20.6	9 18	23 50.69	+ 4 0.3	1.865	2.866	2.2	19.3		
9 28	23 41.73	+ 7 59.6	1.441	2.432	4.5	20.6	9 28	23 42.43	+ 3 3.3	1.871	2.864	3.2	19.4		
10 8	23 33.56	+ 6 45.2	1.467	2.429	8.2	20.8	10 8	23 34.89	+ 2 6.6	1.905	2.863	6.9	19.6		
10 18	23 27.28	+ 5 33.5	1.518	2.426	12.3	21.1	10 18	23 28.84	+ 1 15.7	1.965	2.861	10.5	19.8		
10 28	23 23.57	+ 4 32.3	1.591	2.423	15.9	21.3	10 28	23 24.83	+ 0 35.5	2.049	2.859	13.6	20.0		
288388	2004 <i>CR</i> ₈₂	9 19.8 239°64' 0"/18.8 18								390333	2013 <i>CK</i> ₁₀	9 19.8 228°06' 1.0"/17.5 16			
8 19	0 9.81	- 0 55.1	2.245	3.123	10.9	21.9	8 19	0 2.32	- 5 55.0	4.801	5.681	5.5	22.0		
8 29	0 4.74	- 1 46.3	2.163	3.110	7.8	21.7	8 29	23 58.76	- 6 25.5	4.727	5.675	3.8	21.9		
9 8	23 58.14	- 2 46.9	2.107	3.097	4.2	21.5	9 8	23 54.57	- 6 57.9	4.680	5.669	2.1	21.8		
9 18	23 50.57	- 3 52.2	2.079	3.083	0.9	21.2	9 18	23 50.02	- 7 30.2	4.663	5.663	1.0	21.7		
9 28	23 42.77	- 4 56.5	2.080	3.069	3.7	21.4	9 28	23 45.41	- 8 0.2	4.676	5.657	2.3	21.8		
10 8	23 35.55	- 5 54.0	2.110	3.054	7.3	21.6	10 8	23 41.06	- 8 26.1	4.719	5.651	4.0	21.9		
10 18	23 29.61	- 6 40.0	2.166	3.039	10.7	21.8	10 18	23 37.24	- 8 46.1	4.790	5.644	5.7	22.0		
10 28	23 25.50	- 7 11.4	2.244	3.024	13.6	21.9	10 28	23 34.22	- 8 59.1	4.886	5.638	7.1	22.1		
181919	1999 <i>TZ</i> ₇₆	9 19.8 205°53' 2.1"/21.8 17								473339	2015 <i>TP</i> ₁₄₇	9 19.8 31°83' 2.8"/17.2 18			
8 19	0 12.47	+ 7 11.4	1.692	2.553	14.7										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
33717	1999 <i>LS</i> ₂₆		9 19.8 200°06	9°2/10.4	18		253377	2003 <i>HC</i> ₄₃		9 19.8 176°52	0°8/18.2	18	
8 19	0 13.34	-23 30.2	1.694	2.591	12.9	16.5	8 19	0 3.30	-4 31.5	4.602	5.478	5.8	20.6
8 29	0 7.61	-25 5.9	1.654	2.590	10.5	16.3	8 29	23 59.46	-4 52.9	4.532	5.479	4.0	20.4
9 8	23 59.83	-26 30.2	1.638	2.590	9.2	16.3	9 8	23 54.98	-5 16.6	4.490	5.479	2.2	20.3
9 18	23 50.86	-27 33.5	1.647	2.589	9.7	16.3	9 18	23 50.13	-5 40.7	4.477	5.479	0.8	20.2
9 28	23 41.83	-28 8.6	1.680	2.588	11.6	16.4	9 28	23 45.22	-6 3.2	4.494	5.479	2.1	20.3
10 8	23 33.87	-28 12.8	1.735	2.587	14.1	16.6	10 8	23 40.60	-6 22.1	4.541	5.480	3.9	20.4
10 18	23 27.88	-27 47.4	1.811	2.586	16.6	16.7	10 18	23 36.55	-6 35.8	4.617	5.480	5.7	20.6
10 28	23 24.41	-26 56.0	1.903	2.585	18.7	16.9	10 28	23 33.35	-6 43.2	4.718	5.480	7.2	20.7
349790	2009 <i>BM</i> ₆₈		9 19.8 233°19	1°2/18.6	18		245277	2005 <i>BK</i> ₁₉		9 19.8 312°59	11°4/30.1	17	
8 19	0 11.64	-2 36.7	2.092	2.974	11.4	21.9	8 19	0 16.08	+30 24.9	2.170	2.871	16.8	20.0
8 29	0 6.13	-3 16.4	2.015	2.964	8.1	21.7	8 29	0 9.91	+32 1.3	2.073	2.852	15.2	19.8
9 8	23 58.96	-4 3.9	1.964	2.954	4.4	21.4	9 8	0 1.42	+33 15.3	1.996	2.834	13.5	19.6
9 18	23 50.74	-4 54.6	1.940	2.944	1.2	21.2	9 18	23 51.21	+34 1.5	1.940	2.816	12.1	19.5
9 28	23 42.30	-5 42.7	1.945	2.933	4.0	21.3	9 28	23 40.24	+34 16.8	1.907	2.798	11.4	19.4
10 8	23 34.54	-6 22.8	1.978	2.922	7.8	21.6	10 8	23 29.72	+34 2.2	1.898	2.781	11.7	19.4
10 18	23 28.19	-6 51.1	2.037	2.910	11.3	21.8	10 18	23 20.78	+33 22.7	1.912	2.764	12.9	19.5
10 28	23 23.84	-7 4.9	2.118	2.899	14.3	21.9	10 28	23 14.35	+32 26.6	1.948	2.747	14.7	19.6
52374	1993 <i>FS</i> ₅₀		9 19.8 51°57	0°6/20.3	17		7942	1991 <i>OK</i> ₁		9 19.8 129°09	3°5/23.9	18	
8 19	0 13.40	+2 5.1	1.318	2.207	16.3	19.1	8 19	0 10.07	+11 48.5	2.429	3.254	12.0	17.1
8 29	0 7.87	+1 43.6	1.269	2.219	11.8	18.9	8 29	0 4.81	+11 51.8	2.354	3.257	9.4	16.9
9 8	0 0.05	+1 6.9	1.242	2.230	6.7	18.6	9 8	23 58.15	+11 40.3	2.302	3.260	6.5	16.8
9 18	23 50.90	+0 20.6	1.238	2.242	1.4	18.3	9 18	23 50.64	+11 15.3	2.278	3.264	4.1	16.6
9 28	23 41.71	+0 28.0	1.260	2.254	4.2	18.5	9 28	23 42.98	+10 39.6	2.281	3.267	3.8	16.6
10 8	23 33.77	-1 10.8	1.307	2.266	9.3	18.9	10 8	23 35.92	+9 57.5	2.313	3.270	6.0	16.8
10 18	23 28.04	-1 41.9	1.377	2.279	13.7	19.2	10 18	23 30.09	+9 14.0	2.372	3.273	8.8	16.9
10 28	23 25.10	-1 57.2	1.467	2.292	17.4	19.4	10 28	23 26.00	+8 33.9	2.456	3.276	11.3	17.1
390288	2013 <i>AN</i> ₂₃		9 19.8 234°10	0°3/20.5	18		112303	2002 <i>LK</i> ₄₄		9 19.8 68°39	5°4/15.6	18	
8 19	0 2.59	+1 45.1	4.820	5.678	5.9	21.9	8 19	0 14.00	-10 34.5	1.295	2.206	15.0	19.4
8 29	23 58.95	+1 26.4	4.737	5.672	4.2	21.7	8 29	0 8.31	-11 49.6	1.256	2.217	10.7	19.2
9 8	23 54.69	+1 3.3	4.681	5.665	2.4	21.6	9 8	0 0.29	-13 5.5	1.240	2.228	6.8	19.0
9 18	23 50.06	+0 37.2	4.655	5.658	0.6	21.4	9 18	23 50.97	-14 12.1	1.247	2.239	5.6	19.0
9 28	23 45.36	+0 10.1	4.658	5.651	1.5	21.5	9 28	23 41.69	-15 0.0	1.280	2.250	8.5	19.2
10 8	23 40.91	-0 16.1	4.693	5.645	3.4	21.6	10 8	23 33.75	-15 23.6	1.336	2.261	12.5	19.4
10 18	23 36.99	-0 39.6	4.755	5.638	5.1	21.8	10 18	23 28.10	-15 21.5	1.414	2.272	16.2	19.7
10 28	23 33.85	-0 58.6	4.844	5.630	6.7	21.9	10 28	23 25.30	-14 55.4	1.509	2.284	19.3	20.0
60188	1999 <i>VH</i> ₂₅		9 19.8 327°02	1°4/18.9	18		144056	2004 <i>BH</i> ₃₅		9 19.8 171°66	2°0/17.9	18	
8 19	0 11.61	-2 28.9	1.163	2.072	16.5	17.8	8 19	0 13.78	-3 43.5	1.775	2.663	12.8	20.9
8 29	0 7.16	-2 50.1	1.096	2.056	11.9	17.5	8 29	0 7.79	-4 37.6	1.714	2.666	9.1	20.7
9 8	23 59.98	-3 23.2	1.048	2.041	6.6	17.2	9 8	23 59.92	-5 39.6	1.678	2.668	5.0	20.5
9 18	23 50.94	-4 2.1	1.023	2.027	1.5	16.8	9 18	23 50.92	-6 43.1	1.668	2.670	2.0	20.3
9 28	23 41.45	-4 38.4	1.022	2.014	5.6	17.0	9 28	23 41.80	-7 40.9	1.687	2.672	5.0	20.5
10 8	23 33.06	-5 3.7	1.044	2.001	11.3	17.3	10 8	23 33.59	-8 26.6	1.733	2.673	9.0	20.7
10 18	23 27.06	-5 12.2	1.087	1.990	16.4	17.6	10 18	23 27.11	-8 56.3	1.803	2.673	12.7	21.0
10 28	23 24.28	-5 0.9	1.147	1.979	20.8	17.8	10 28	23 22.95	-9 7.9	1.895	2.673	15.8	21.2
478980	2012 <i>XU</i> ₁₁₁		9 19.8 255°31	5°3/26.5	17		485712	2012 <i>AO</i> ₇		9 19.8 118°54	7°3/25.3	17	
8 19	0 11.51	+19 50.9	2.614	3.385	12.6	22.5	8 19	0 23.90	+17 4.3	1.217	2.041	21.5	21.9
8 29	0 6.00	+19 43.6	2.500	3.358	10.5	22.3	8 29	0 15.60	+17 18.6	1.170	2.066	17.2	21.7
9 8	23 58.93	+19 16.5	2.408	3.330	8.2	22.1	9 8	0 4.44	+16 59.8	1.141	2.090	12.6	21.5
9 18	23 50.76	+18 29.2	2.341	3.302	6.1	21.9	9 18	23 51.63	+16 8.3	1.135	2.113	8.5	21.4
9 28	23 42.22	+17 23.5	2.303	3.272	5.4	21.8	9 28	23 38.88	+14 50.4	1.153	2.134	7.5	21.4
10 8	23 34.09	+16 4.1	2.294	3.241	6.7	21.9	10 8	23 27.87	+13 17.9	1.197	2.154	10.3	21.6
10 18	23 27.10	+14 37.1	2.314	3.210	9.2	22.0	10 18	23 19.75	+11 44.1	1.265	2.172	14.3	21.9
10 28	23 21.88	+13 9.7	2.359	3.177	11.8	22.1	10 28	23 15.15	+10 20.3	1.354	2.189	18.0	22.2
263832	2008 <i>SU</i> ₂₇₉		9 19.8 293°85	0°3/19.2	18		11145	<i>Emanuelli</i>		9 19.8 75°44	4°3/23.2	18	
8 19	0 2.64	-1 27.3	4.294	5.165	6.3	21.0	8 19	0 15.23	+10 37.1	1.259	2.120	18.7	16.9
8 29	23 59.06	-1 53.2	4.216	5.160	4.4	20.9	8 29	0 9.29	+10 34.2	1.210	2.137	14.4	16.7
9 8	23 54.78	-2 22.9	4.165	5.154	2.4	20.7	9 8	0 0.90	+10 6.1	1.181	2.153	9.6	16.5
9 18	23 50.09	-2 54.6	4.143	5.148	0.4	20.5	9 18	23 51.08	+9 15.7	1.175	2.170	5.2	16.3
9 28	23 45.32	-3 25.8	4.152	5.142	1.9	20.7	9 28	23 41.23	+8 10.2	1.194	2.186	5.1	16.3
10 8	23 40.84	-3 54.3	4.190	5.136	4.0	20.8	10 8	23 32.75	+6 59.7	1.238	2.203	9.1	16.6
10 18	23 36.96	-4 18.2	4.257	5.130	5.9	21.0	10 18	23 26.67	+5 53.8	1.306	2.219	13.5	16.9
10 28	23 33.96	-4 35.7	4.348	5.124	7.5	21.1	10 28	23 23.58	+5 0.4	1.394	2.235	17.2	17.2
136678	1995 <i>SG</i> ₂₅		9 19.8 267°38	2°1/18.1	18		316571	2011 <i>RA</i> ₁₉		9 19.8 31°62	0°6/20.4	18	
8 19	0 13.19	-3 36.1	1.548	2.443	14.0	20.6	8 19	0 11.64	+1 54.5	1.599	2.482	14.3	20.7
8 29	0 7.77	-4 22.9	1.474	2.429	10.0	20.3	8 29	0 6.38	+1 40.2	1.542	2.488	10.4	20.5
9 8	0 0.11	-5 19.6	1.423	2.415	5.5	20.0	9 8	23 59.17	+1 13.4	1.508	2.495	5.9	20.2
9 18	23 50.97	-6 19.8	1.397	2.400	2.1	19.8	9 18	23 50.81	+0 38.2	1.498	2.502	1.3	20.0
9 28	23 41.47	-7 15.1	1.398	2.385	5.5	20.0	9 28	23 42.34	+0 0.4	1.516	2.510	3.7	20.1
10 8	23 32.84	-7 58.2	1.425	2.370	10.1	20.2	10 8	23 34.86	-0 33.7	1.560	2.518	8.2	20.4
10 18	23 26.13	-8 23.9	1.476	2.355	14.4	20.4	10 18	23 29.20	-0 59.0	1.628	2.527	12.2	20.7
10 28	23 22.06	-8 29.7	1.546	2.340	18.1	20.6	10 28	23 25.94	-1 11.8	1.717	2.535	15.5	20.9
76048	2000 <i>DY</i> ₅₆		9 19.8 303°43	0°8/20.5	18		108443	2001 <i>KU</i> ₄₅		9 19.8 18°01	4°0/16.1	18	
8 19	0 10.27	+2 5											

EPHEMERIDES

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9 19.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
276970	2004 VG ₂₁		9 19.8	3 ^o 14	11 ^o 8/11.2	18	435731	2008 UL ₉₅		9 19.9	340 ^o 01	0 ^o 6/19.4	18
8 19	0 15.25	-26 35.4	1.259	2.162	15.9	19.4	8 19	0 8.10	+ 0 50.3	1.351	2.250	15.3	20.7
8 29	0 9.45	-27 45.9	1.225	2.161	13.4	19.3	8 29	0 4.27	+ 0 1.0	1.286	2.242	11.0	20.4
9 8	0 1.01	-28 37.5	1.211	2.161	11.9	19.2	9 8	23 58.21	- 1 4.4	1.242	2.234	6.1	20.1
9 18	23 51.09	-28 59.5	1.218	2.161	12.3	19.2	9 18	23 50.72	- 2 19.3	1.222	2.227	0.9	19.7
9 28	23 41.26	-28 45.0	1.247	2.163	14.2	19.4	9 28	23 42.96	- 3 34.3	1.228	2.220	4.7	20.0
10 8	23 32.99	-27 53.8	1.297	2.166	16.9	19.5	10 8	23 36.16	- 4 39.9	1.258	2.215	9.8	20.3
10 18	23 27.31	-26 30.4	1.365	2.170	19.7	19.7	10 18	23 31.33	- 5 28.8	1.310	2.210	14.4	20.5
10 28	23 24.76	-24 41.7	1.449	2.174	22.0	20.0	10 28	23 29.18	- 5 56.4	1.382	2.206	18.3	20.8
520584	2014 NZ ₇₂		9 19.9	119 ^o 47	4 ^o 5/13.7	18	471335	2011 OD ₁₆		9 19.9	353 ^o 02	0 ^o 1/19.3	18
8 19	0 9.57	-15 43.2	2.686	3.577	8.9	22.0	8 19	23 53.54	- 1 58.0	18.715	19.584	1.5	21.6
8 29	0 4.23	-16 48.8	2.646	3.593	6.6	21.9	8 29	23 52.32	- 2 7.1	18.641	19.583	1.1	21.6
9 8	23 57.72	-17 51.2	2.634	3.608	4.8	21.8	9 8	23 50.97	- 2 17.0	18.594	19.582	0.6	21.5
9 18	23 50.57	-18 45.2	2.649	3.622	4.6	21.8	9 18	23 49.54	- 2 27.2	18.576	19.581	0.1	21.4
9 28	23 43.43	-19 26.3	2.694	3.637	6.2	21.9	9 28	23 48.11	- 2 37.4	18.589	19.580	0.5	21.5
10 8	23 36.93	-19 51.8	2.765	3.651	8.4	22.1	10 8	23 46.72	- 2 47.1	18.632	19.579	1.0	21.6
10 18	23 31.60	-20 0.7	2.861	3.664	10.5	22.3	10 18	23 45.45	- 2 56.0	18.703	19.577	1.4	21.6
10 28	23 27.84	-19 53.4	2.978	3.677	12.2	22.4	10 28	23 44.35	- 3 3.6	18.800	19.576	1.9	21.7
98707	2000 XL ₃₇		9 19.9	190 ^o 01	1 ^o 6/21.3	18	152328	2005 UM ₂₀		9 19.9	284 ^o 66	1 ^o 2/18.2	17
8 19	0 15.93	+ 3 59.3	1.997	2.855	12.9	19.0	8 19	0 6.58	- 4 19.8	3.049	3.930	8.3	20.3
8 29	0 9.25	+ 4 6.9	1.923	2.854	9.6	18.8	8 29	0 2.14	- 4 50.6	2.967	3.916	5.8	20.1
9 8	0 0.74	+ 4 3.2	1.873	2.853	5.8	18.6	9 8	23 56.63	- 5 25.5	2.912	3.902	3.2	19.9
9 18	23 51.09	+ 3 50.3	1.851	2.852	2.1	18.4	9 18	23 50.46	- 6 1.5	2.885	3.887	1.2	19.7
9 28	23 41.23	+ 3 31.7	1.857	2.850	3.3	18.4	9 28	23 44.15	- 6 35.1	2.888	3.873	3.1	19.9
10 8	23 32.16	+ 3 11.9	1.892	2.848	7.1	18.7	10 8	23 38.24	- 7 2.9	2.920	3.859	5.8	20.0
10 18	23 24.70	+ 2 55.3	1.953	2.846	10.8	18.9	10 18	23 33.23	- 7 22.5	2.978	3.844	8.3	20.2
10 28	23 19.45	+ 2 45.7	2.038	2.843	13.9	19.1	10 28	23 29.53	- 7 31.9	3.061	3.830	10.5	20.3
288146	2003 WN ₁₀₄		9 19.9	286 ^o 43	6 ^o 4/26.4	18	348384	2005 GH ₃₈		9 19.9	159 ^o 11	2 ^o 8/23.4	18
8 19	0 9.66	+18 49.9	1.896	2.699	15.7	20.3	8 19	0 10.38	+11 11.3	2.433	3.260	11.9	21.7
8 29	0 5.14	+18 51.3	1.797	2.676	13.0	20.1	8 29	0 5.01	+10 42.7	2.359	3.267	9.1	21.5
9 8	23 58.65	+18 27.8	1.717	2.653	10.1	19.8	9 8	23 58.28	+ 9 58.6	2.310	3.273	6.1	21.4
9 18	23 50.78	+17 38.5	1.661	2.630	7.4	19.6	9 18	23 50.72	+ 9 1.2	2.287	3.279	3.4	21.2
9 28	23 42.45	+16 25.8	1.631	2.606	6.4	19.5	9 28	23 43.06	+ 7 54.7	2.294	3.284	3.2	21.2
10 8	23 34.69	+14 56.2	1.627	2.582	8.2	19.6	10 8	23 36.02	+ 6 44.8	2.330	3.289	5.8	21.4
10 18	23 28.48	+13 18.4	1.649	2.559	11.4	19.7	10 18	23 30.23	+ 5 37.1	2.395	3.293	8.8	21.6
10 28	23 24.56	+11 42.3	1.695	2.535	14.7	19.9	10 28	23 26.16	+ 4 36.8	2.484	3.296	11.5	21.8
321986	2010 US ₅₈		9 19.9	302 ^o 78	1 ^o 6/23.2	16	242574	2005 GJ ₂₂		9 19.9	49 ^o 51	4 ^o 6/15.3	18
8 19	0 2.75	+ 9 9.0	4.345	5.173	7.0	21.3	8 19	0 9.49	- 9 18.6	1.566	2.474	13.0	19.7
8 29	23 59.15	+ 8 54.8	4.262	5.171	5.4	21.2	8 29	0 4.79	-10 47.6	1.531	2.491	9.2	19.5
9 8	23 54.85	+ 8 32.8	4.205	5.170	3.6	21.0	9 8	23 58.26	-12 18.3	1.519	2.507	5.7	19.4
9 18	23 50.14	+ 8 4.5	4.176	5.168	2.0	20.9	9 18	23 50.72	-13 41.6	1.532	2.524	4.7	19.3
9 28	23 45.36	+ 7 31.5	4.177	5.167	1.9	20.9	9 28	23 43.22	-14 48.9	1.573	2.541	7.4	19.5
10 8	23 40.86	+ 6 56.5	4.208	5.165	3.5	21.0	10 8	23 36.77	-15 34.5	1.638	2.559	10.9	19.8
10 18	23 36.97	+ 6 21.7	4.267	5.164	5.3	21.2	10 18	23 32.12	-15 56.3	1.725	2.576	14.1	20.0
10 28	23 33.95	+ 5 49.6	4.353	5.162	7.0	21.3	10 28	23 29.77	-15 54.6	1.832	2.594	16.8	20.3
1162	Larissa		9 19.9	97 ^o 86	0 ^o 4/19.2	18	353363	2010 XP ₅₀		9 19.9	191 ^o 09	3 ^o 2/28.1	18
8 19	0 6.38	- 1 13.2	3.125	3.998	8.3	15.5	8 19	0 2.12	+21 0.8	5.024	5.771	7.3	20.6
8 29	0 1.88	- 1 42.7	3.063	4.007	5.9	15.3	8 29	23 58.67	+20 45.2	4.932	5.770	6.1	20.5
9 8	23 56.41	- 2 17.5	3.027	4.016	3.2	15.2	9 8	23 54.59	+20 19.2	4.863	5.768	4.8	20.4
9 18	23 50.39	- 2 54.7	3.020	4.024	0.5	15.0	9 18	23 50.14	+19 43.3	4.821	5.767	3.7	20.4
9 28	23 44.32	- 3 30.9	3.043	4.033	2.5	15.2	9 28	23 45.63	+18 58.9	4.808	5.766	3.2	20.3
10 8	23 38.71	- 4 3.1	3.095	4.042	5.2	15.4	10 8	23 41.38	+18 8.1	4.824	5.764	3.7	20.4
10 18	23 34.01	- 4 28.5	3.175	4.050	7.6	15.5	10 18	23 37.67	+17 13.6	4.869	5.763	4.8	20.4
10 28	23 30.57	- 4 45.2	3.279	4.059	9.7	15.7	10 28	23 34.76	+16 18.1	4.942	5.761	6.0	20.5
393322	2014 AE ₅₀		9 19.9	21 ^o 41	0 ^o 7/19.2	18	246591	2008 UU ₁₄₄		9 19.9	224 ^o 95	0 ^o 4/20.3	18
8 19	0 7.58	+ 2 13.0	1.517	2.408	14.5	20.5	8 19	0 11.12	+ 2 48.1	1.950	2.821	12.6	21.4
8 29	0 3.61	+ 0 49.6	1.458	2.410	10.3	20.3	8 29	0 5.88	+ 2 10.2	1.875	2.815	9.2	21.1
9 8	23 57.70	- 0 50.8	1.422	2.413	5.6	20.0	9 8	23 58.92	+ 1 19.5	1.823	2.809	5.3	20.9
9 18	23 50.61	- 2 40.1	1.412	2.416	0.9	19.7	9 18	23 50.85	+ 0 19.9	1.798	2.802	1.1	20.6
9 28	23 43.39	- 4 27.8	1.428	2.420	4.5	20.0	9 28	23 42.57	- 0 42.4	1.802	2.795	3.4	20.7
10 8	23 37.08	- 6 3.8	1.471	2.423	9.2	20.3	10 8	23 35.00	- 1 40.9	1.833	2.788	7.5	21.0
10 18	23 32.55	- 7 20.5	1.538	2.427	13.3	20.5	10 18	23 28.93	- 2 30.0	1.890	2.780	11.2	21.2
10 28	23 30.38	- 8 13.7	1.625	2.432	16.8	20.8	10 28	23 24.94	- 3 5.6	1.970	2.772	14.4	21.4
88299	2001 NS ₂₁		9 19.9	349 ^o 12	0 ^o 9/19.2	18	325613	2009 SL ₂₃₂		9 19.9	350 ^o 63	4 ^o 1/15.9	18
8 19	0 5.17	+ 0 4.8	1.011	1.929	17.5	18.0	8 19	0 11.27	-11 58.0	1.978	2.876	11.2	19.8
8 29	0 2.67	- 0 35.2	0.952	1.917	12.6	17.7	8 29	0 5.89	-12 36.7	1.920	2.874	8.1	19.6
9 8	23 57.52	- 1 33.6	0.912	1.907	7.0	17.3	9 8	23 58.85	-13 14.8	1.887	2.872	5.2	19.4
9 18	23 50.62	- 2 42.9	0.894	1.898	1.2	16.9	9 18	23 50.84	-13 46.5	1.880	2.870	4.2	19.3
9 28	23 43.37	- 3 51.7	0.897	1.891	5.6	17.2	9 28	23 42.73	-14 6.5	1.900	2.869	6.3	19.5
10 8	23 37.31	- 4 48.7	0.923	1.886	11.5	17.5	10 8	23 35.43	-14 11.3	1.947	2.868	9.4	19.7
10 18	23 33.62	- 5 25.3	0.968	1.883	16.8	17.8	10 18	23 29.66	-13 59.4	2.018	2.867	12.5	19.9
10 28	23 33.09	- 5 37.1	1.030	1.882	21.2	18.1	10 28	23 25.96	-13 31.0	2.110	2.866	15.1	20.0
8987													

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
3474	Linsley		9 19.9	56°22	0°6/19.3	18	101589	1999 BP ₁₄		9 19.9	199°90	2°8/17.0	18
8 19	0 10.89	+ 1 26.2	1.392	2.284	15.4	16.2	8 19	0 11.84	- 5 31.1	1.790	2.684	12.4	19.9
8 29	0 5.90	+ 0 20.3	1.353	2.305	10.9	16.0	8 29	0 6.49	- 6 41.4	1.727	2.682	8.8	19.7
9 8	23 58.91	- 0 59.6	1.337	2.328	6.0	15.7	9 8	23 59.29	- 7 58.7	1.688	2.679	4.9	19.5
9 18	23 50.84	- 2 25.6	1.345	2.350	0.9	15.4	9 18	23 50.96	- 9 15.8	1.677	2.676	2.9	19.4
9 28	23 42.85	- 3 48.0	1.380	2.372	4.5	15.8	9 28	23 42.46	- 10 24.6	1.694	2.673	5.7	19.5
10 8	23 36.05	- 4 58.2	1.441	2.395	9.2	16.1	10 8	23 34.80	- 11 18.6	1.737	2.670	9.5	19.8
10 18	23 31.26	- 5 50.3	1.526	2.418	13.2	16.4	10 18	23 28.79	- 11 53.6	1.804	2.666	13.1	20.0
10 28	23 28.96	- 6 21.5	1.630	2.441	16.6	16.7	10 28	23 25.04	- 12 8.1	1.892	2.661	16.1	20.2
41900	2000 WV ₁₂₆		9 19.9	58°08	4°2/23.4	18	66972	1999 XE ₆₄		9 19.9	192°87	2°5/22.2	18
8 19	0 12.46	+ 11 3.4	1.255	2.119	18.6	18.5	8 19	0 11.98	+ 8 23.9	1.625	2.484	15.3	19.5
8 29	0 7.40	+ 10 49.4	1.204	2.131	14.3	18.3	8 29	0 6.78	+ 7 53.0	1.555	2.484	11.6	19.2
9 8	23 59.93	+ 10 9.0	1.171	2.144	9.5	18.0	9 8	23 59.54	+ 7 1.8	1.506	2.483	7.3	19.0
9 18	23 51.03	+ 9 5.7	1.162	2.157	5.2	17.8	9 18	23 51.01	+ 5 54.0	1.483	2.482	3.3	18.8
9 28	23 42.04	+ 7 47.2	1.177	2.170	4.9	17.9	9 28	23 42.25	+ 4 36.2	1.486	2.480	3.8	18.8
10 8	23 34.32	+ 6 24.4	1.217	2.183	9.0	18.1	10 8	23 34.38	+ 3 17.1	1.517	2.479	8.0	19.0
10 18	23 28.89	+ 5 7.6	1.280	2.196	13.4	18.4	10 18	23 28.33	+ 2 5.0	1.573	2.477	12.2	19.3
10 28	23 26.36	+ 4 5.2	1.364	2.210	17.3	18.7	10 28	23 24.74	+ 1 6.6	1.650	2.475	15.8	19.5
518010	2015 VJ ₆₁		9 19.9	58°10	3°1/23.9	18	60311	1999 XS ₂₁₆		9 19.9	350°40	6°6/14.6	18
8 19	0 6.96	+ 12 36.1	2.155	2.988	13.0	21.3	8 19	0 9.93	- 11 44.1	1.153	2.075	15.5	18.4
8 29	0 2.76	+ 11 52.0	2.082	2.992	10.1	21.1	8 29	0 5.84	- 13 10.5	1.105	2.070	11.3	18.2
9 8	23 57.10	+ 10 48.7	2.032	2.996	6.8	20.9	9 8	23 59.19	- 14 38.6	1.078	2.066	7.6	18.0
9 18	23 50.57	+ 9 29.2	2.009	3.000	3.8	20.8	9 18	23 50.95	- 15 56.2	1.073	2.062	6.9	17.9
9 28	23 43.92	+ 7 58.9	2.013	3.004	3.5	20.7	9 28	23 42.53	- 16 51.8	1.092	2.060	10.0	18.1
10 8	23 37.93	+ 6 25.2	2.046	3.008	6.2	20.9	10 8	23 35.37	- 17 18.1	1.133	2.058	14.2	18.3
10 18	23 33.25	+ 4 55.2	2.107	3.013	9.5	21.1	10 18	23 30.56	- 17 13.3	1.193	2.057	18.2	18.6
10 28	23 30.38	+ 3 35.3	2.192	3.017	12.4	21.3	10 28	23 28.77	- 16 39.4	1.270	2.057	21.6	18.8
54431	2000 LA ₃₁		9 19.9	152°33	0°5/19.4	18	298216	2002 TT ₃₇₅		9 19.9	17°13	4°0/17.3	18 R
8 19	0 11.15	+ 1 23.7	1.690	2.572	13.7	20.1	8 19	0 13.16	- 9 32.9	1.230	2.143	15.4	19.0
8 29	0 6.03	+ 0 23.0	1.628	2.576	9.8	19.9	8 29	0 7.83	- 9 51.7	1.189	2.151	11.0	18.7
9 8	23 59.03	- 0 51.4	1.590	2.579	5.4	19.6	9 8	0 0.12	- 10 11.4	1.169	2.160	6.5	18.5
9 18	23 50.89	- 2 13.2	1.577	2.582	0.8	19.3	9 18	23 51.09	- 10 25.0	1.172	2.171	4.1	18.4
9 28	23 42.61	- 3 34.3	1.593	2.585	4.1	19.5	9 28	23 42.10	- 10 26.1	1.200	2.183	7.0	18.6
10 8	23 35.22	- 4 46.6	1.636	2.587	8.5	19.8	10 8	23 34.48	- 10 10.8	1.252	2.196	11.4	18.9
10 18	23 29.56	- 5 43.9	1.703	2.589	12.5	20.1	10 18	23 29.19	- 9 38.0	1.325	2.210	15.4	19.2
10 28	23 26.19	- 6 22.6	1.793	2.591	15.7	20.3	10 28	23 26.77	- 8 48.8	1.418	2.225	18.7	19.5
322619	1995 SJ ₇₈		9 19.9	67°54	3°1/17.7	17	453984	2012 BM ₁₄₃		9 19.9	210°08	1°0/21.2	18
8 19	0 16.17	- 6 43.8	1.353	2.255	15.1	20.7	8 19	0 8.56	+ 5 6.1	2.597	3.451	10.4	21.9
8 29	0 9.86	- 7 18.1	1.306	2.264	10.7	20.4	8 29	0 3.72	+ 4 31.2	2.516	3.446	7.7	21.7
9 8	0 1.21	- 7 57.1	1.282	2.273	6.0	20.2	9 8	23 57.60	+ 3 45.1	2.461	3.441	4.6	21.5
9 18	23 51.24	- 8 33.6	1.282	2.282	3.1	20.0	9 18	23 50.69	+ 2 50.7	2.433	3.435	1.5	21.3
9 28	23 41.25	- 9 0.2	1.308	2.292	6.2	20.3	9 28	23 43.63	+ 1 52.2	2.436	3.430	2.5	21.4
10 8	23 32.58	- 9 11.6	1.359	2.301	10.7	20.6	10 8	23 37.08	+ 0 54.7	2.467	3.423	5.7	21.6
10 18	23 26.18	- 9 5.2	1.432	2.311	14.8	20.8	10 18	23 31.63	+ 0 2.5	2.526	3.417	8.7	21.8
10 28	23 22.63	- 8 40.8	1.525	2.320	18.2	21.1	10 28	23 27.75	- 0 40.5	2.610	3.410	11.3	21.9
236625	2006 KT ₉		9 19.9	103°34	7°9/11.9	18	387603	2002 CJ ₁₁₀		9 19.9	169°16	2°0/17.5	18
8 19	0 14.18	- 21 54.9	1.858	2.752	12.1	20.2	8 19	0 11.86	- 4 47.5	2.331	3.213	10.4	22.3
8 29	0 7.98	- 23 14.0	1.826	2.764	9.6	20.0	8 29	0 6.10	- 5 48.1	2.269	3.218	7.3	22.1
9 8	23 59.99	- 24 22.8	1.819	2.776	8.0	20.0	9 8	23 58.92	- 6 54.0	2.233	3.222	4.0	22.0
9 18	23 51.03	- 25 13.5	1.837	2.788	8.2	20.0	9 18	23 50.90	- 8 0.0	2.225	3.226	2.0	21.8
9 28	23 42.15	- 25 40.4	1.881	2.799	10.0	20.2	9 28	23 42.79	- 9 0.3	2.248	3.229	4.4	22.0
10 8	23 34.32	- 25 41.2	1.948	2.811	12.4	20.3	10 8	23 35.35	- 9 50.0	2.299	3.231	7.6	22.2
10 18	23 28.32	- 25 17.2	2.038	2.822	14.7	20.5	10 18	23 29.23	- 10 25.7	2.377	3.232	10.6	22.4
10 28	23 24.61	- 24 31.4	2.145	2.833	16.7	20.7	10 28	23 24.90	- 10 45.8	2.477	3.233	13.1	22.6
263051	2007 HV ₄₈		9 19.9	255°91	5°4/27.9	18	60399	2000 AY ₂₅₃		9 19.9	310°00	0°9/18.1	16
8 19	0 7.80	+ 22 6.3	2.584	3.347	13.0	20.8	8 19	0 3.00	- 4 15.6	4.018	4.898	6.5	19.6
8 29	0 3.32	+ 21 36.2	2.481	3.332	10.9	20.7	8 29	23 59.41	- 4 47.1	3.941	4.889	4.5	19.4
9 8	23 57.44	+ 20 43.6	2.400	3.316	8.5	20.5	9 8	23 55.07	- 5 21.8	3.891	4.880	2.5	19.3
9 18	23 50.65	+ 19 29.0	2.344	3.299	6.4	20.3	9 18	23 50.28	- 5 57.2	3.869	4.872	0.9	19.1
9 28	23 43.64	+ 17 55.3	2.315	3.283	5.4	20.2	9 28	23 45.41	- 6 30.8	3.878	4.863	2.4	19.2
10 8	23 37.12	+ 16 8.2	2.316	3.266	6.5	20.3	10 8	23 40.84	- 7 0.0	3.917	4.855	4.5	19.4
10 18	23 31.75	+ 14 14.9	2.346	3.249	8.7	20.4	10 18	23 36.91	- 7 22.8	3.983	4.847	6.5	19.5
10 28	23 28.07	+ 12 23.4	2.402	3.231	11.3	20.5	10 28	23 33.92	- 7 37.8	4.073	4.838	8.2	19.6
80307	1999 XU ₇₁		9 19.9	244°50	1°0/18.9	18 R	72918	2001 RB ₁₃₄		9 19.9	324°20	2°0/18.3	18 R
8 19	0 13.49	- 1 7.3	1.715	2.599	13.4	19.8	8 19	0 9.10	- 2 21.7	1.271	2.179	15.5	19.4
8 29	0 7.86	- 1 51.1	1.637	2.587	9.6	19.6	8 29	0 5.22	- 3 14.0	1.202	2.163	11.1	19.1
9 8	0 0.17	- 2 46.3	1.583	2.573	5.3	19.3	9 8	23 58.90	- 4 20.1	1.154	2.147	6.1	18.7
9 18	23 51.11	- 3 47.4	1.555	2.559	1.1	19.0	9 18	23 50.94	- 5 32.3	1.129	2.133	2.0	18.4
9 28	23 41.71	- 4 47.2	1.555	2.545	4.5	19.2	9 28	23 42.58	- 6 40.6	1.129	2.119	5.9	18.7
10 8	23 33.11	- 5 38.5	1.582	2.530	9.0	19.4	10 8	23 35.20	- 7 35.2	1.153	2.106	11.1	18.9
10 18	23 26.24	- 6 15.7	1.633	2.514	13.2	19.6	10 18	23 29.93	- 8 9.4	1.199	2.093	15.9	19.2
10 28	23 21.80	- 6 35.5	1.705	2.499	16.7	19.8	10 28	23 27.56	- 8 19.8	1.262	2.082	20.0	19.4
62379	2000 SA ₁₅₅		9 19.9	17°68	5°1/15.3	18	324815	2007 HU ₆₇		9 19.9	247°17	1°2/21.5	18

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
354714	2005 <i>SU</i> ₁₉		9 19.9 45°39'	3:1/22.9	18		389321	2009 <i>SQ</i> ₁₉₉		9 19.9 278°48'	0°0/19.8	18	
8 19	0 11.61	+ 8 47.6	1.921	2.770	13.7	20.3	8 19	0 4.07	- 0 20.8	4.273	5.138	6.4	21.4
8 29	0 6.23	+ 8 52.2	1.855	2.775	10.5	20.1	8 29	0 0.13	- 0 36.3	4.194	5.133	4.6	21.3
9 8	23 59.12	+ 8 41.1	1.810	2.781	6.9	19.9	9 8	23 55.47	- 0 55.8	4.141	5.128	2.5	21.1
9 18	23 50.96	+ 8 16.0	1.792	2.786	3.7	19.7	9 18	23 50.38	- 1 17.7	4.119	5.123	0.4	20.9
9 28	23 42.64	+ 7 40.7	1.801	2.792	3.8	19.8	9 28	23 45.22	- 1 39.9	4.126	5.118	1.8	21.0
10 8	23 35.11	+ 7 0.7	1.837	2.797	7.0	20.0	10 8	23 40.35	- 2 0.3	4.163	5.113	3.9	21.2
10 18	23 29.14	+ 6 21.7	1.899	2.803	10.4	20.2	10 18	23 36.10	- 2 16.9	4.229	5.108	5.8	21.3
10 28	23 25.30	+ 5 49.0	1.984	2.809	13.5	20.4	10 28	23 32.76	- 2 28.1	4.321	5.103	7.5	21.5
77317	2001 <i>FJ</i> ₈₃		9 19.9 96°05'	2°8/22.1	18		14331	1981 <i>EC</i> ₂₆		9 19.9 153°48'	0°2/19.7	18	
8 19	0 14.51	+ 7 1.0	1.473	2.339	16.2	19.6	8 19	0 13.95	+ 0 45.6	1.842	2.717	13.0	20.6
8 29	0 8.73	+ 6 59.0	1.410	2.343	12.2	19.3	8 29	0 7.91	+ 0 8.8	1.780	2.724	9.4	20.3
9 8	0 0.68	+ 6 38.4	1.368	2.346	7.7	19.1	9 8	0 0.06	- 0 38.9	1.742	2.730	5.2	20.1
9 18	23 51.22	+ 6 1.9	1.351	2.350	3.5	18.8	9 18	23 51.14	- 1 32.8	1.731	2.736	0.8	19.8
9 28	23 41.56	+ 5 15.2	1.360	2.353	4.1	18.9	9 28	23 42.11	- 2 26.7	1.749	2.741	3.7	20.1
10 8	23 32.95	+ 4 25.9	1.394	2.357	8.5	19.2	10 8	23 33.96	- 3 14.3	1.794	2.746	7.9	20.3
10 18	23 26.40	+ 3 41.3	1.454	2.360	12.8	19.4	10 18	23 27.48	- 3 50.8	1.865	2.750	11.6	20.6
10 28	23 22.58	+ 3 7.5	1.534	2.363	16.5	19.7	10 28	23 23.25	- 4 13.0	1.958	2.753	14.7	20.8
154225	2002 <i>JF</i> ₇₈		9 19.9 72°83'	1°8/18.1	18		252176	2001 <i>DA</i> ₂₂		9 19.9 171°56'	3°8/14.7	18	
8 19	0 12.35	- 5 34.0	2.128	3.014	11.1	19.7	8 19	0 10.28	- 14 6.5	2.802	3.691	8.6	20.5
8 29	0 6.48	- 5 57.4	2.077	3.027	7.8	19.5	8 29	0 4.81	- 14 56.5	2.747	3.694	6.3	20.3
9 8	23 59.13	- 6 24.6	2.050	3.040	4.3	19.4	9 8	23 58.16	- 15 44.6	2.718	3.696	4.3	20.2
9 18	23 50.96	- 6 51.3	2.052	3.054	1.8	19.2	9 18	23 50.83	- 16 26.5	2.717	3.698	4.0	20.2
9 28	23 42.78	- 7 13.1	2.082	3.067	4.2	19.4	9 28	23 43.44	- 16 57.9	2.746	3.700	5.5	20.3
10 8	23 35.41	- 7 26.1	2.139	3.080	7.5	19.6	10 8	23 36.63	- 17 16.1	2.803	3.701	7.8	20.4
10 18	23 29.50	- 7 28.3	2.223	3.093	10.6	19.9	10 18	23 30.92	- 17 19.8	2.885	3.702	10.0	20.6
10 28	23 25.51	- 7 18.3	2.329	3.106	13.2	20.1	10 28	23 26.75	- 17 8.8	2.989	3.702	11.9	20.7
314084	2005 <i>CN</i> ₄₄		9 19.9 155°25'	1°8/21.2	17		25943	2001 <i>EL</i> ₁₀		9 19.9 25°68'	2°1/17.9	18	
8 19	0 16.64	+ 4 20.1	1.499	2.370	15.7	20.6	8 19	0 13.68	- 7 15.8	2.082	2.969	11.2	18.3
8 29	0 10.23	+ 4 18.8	1.436	2.373	11.7	20.4	8 29	0 7.54	- 7 27.1	2.021	2.972	8.0	18.1
9 8	0 1.52	+ 4 2.0	1.394	2.376	7.0	20.1	9 8	23 59.79	- 7 40.5	1.985	2.974	4.5	17.8
9 18	23 51.37	+ 3 32.9	1.376	2.378	2.5	19.8	9 18	23 51.10	- 7 52.2	1.977	2.977	2.1	17.7
9 28	23 41.01	+ 2 56.8	1.386	2.380	3.9	20.0	9 28	23 42.34	- 7 58.2	1.997	2.981	4.5	17.9
10 8	23 31.72	+ 2 20.6	1.423	2.382	8.6	20.2	10 8	23 34.38	- 7 55.1	2.045	2.984	7.9	18.1
10 18	23 24.53	+ 1 50.6	1.483	2.384	13.0	20.5	10 18	23 27.94	- 7 41.2	2.119	2.988	11.1	18.3
10 28	23 20.11	+ 1 31.7	1.565	2.385	16.7	20.8	10 28	23 23.52	- 7 15.6	2.215	2.992	13.8	18.5
301352	2009 <i>CL</i> ₁₆		9 19.9 37°68'	0°2/19.6	18		280842	2005 <i>UH</i> ₁₆₇		9 19.9 237°96'	1°9/21.8	18	
8 19	0 9.00	+ 1 47.5	1.711	2.595	13.4	20.8	8 19	0 11.90	+ 7 6.7	1.916	2.771	13.5	22.1
8 29	0 4.49	+ 0 51.4	1.650	2.598	9.6	20.6	8 29	0 6.60	+ 6 35.0	1.830	2.759	10.1	21.9
9 8	23 58.19	- 0 18.3	1.613	2.602	5.4	20.4	9 8	23 59.45	+ 5 46.2	1.768	2.746	6.3	21.6
9 18	23 50.82	- 1 35.7	1.601	2.605	0.8	20.0	9 18	23 51.07	+ 4 43.5	1.733	2.733	2.5	21.4
9 28	23 43.32	- 2 53.2	1.617	2.609	3.8	20.3	9 28	23 42.37	+ 3 32.4	1.725	2.719	3.4	21.4
10 8	23 36.67	- 4 2.8	1.659	2.613	8.2	20.6	10 8	23 34.35	+ 2 20.2	1.746	2.705	7.4	21.6
10 18	23 31.65	- 4 58.6	1.727	2.617	12.1	20.8	10 18	23 27.85	+ 1 14.0	1.792	2.690	11.3	21.8
10 28	23 28.82	- 5 36.6	1.816	2.622	15.3	21.0	10 28	23 23.55	+ 0 19.6	1.862	2.675	14.7	22.0
83406	2001 <i>SF</i> ₃₅		9 19.9 324°38'	1°9/18.0	18		394479	2007 <i>TK</i> ₄₈		9 19.9 334°71'	0°3/19.6	18	
8 19	0 10.27	- 4 15.2	1.799	2.693	12.4	19.2	8 19	0 12.43	- 0 30.8	1.709	2.593	13.4	21.1
8 29	0 5.38	- 4 47.4	1.733	2.688	8.8	18.9	8 29	0 7.01	- 0 50.1	1.642	2.591	9.7	20.9
9 8	23 58.70	- 5 46.8	1.691	2.682	4.8	18.7	9 8	23 59.65	- 1 19.4	1.599	2.588	5.4	20.6
9 18	23 50.91	- 6 37.7	1.675	2.677	1.9	18.5	9 18	23 51.09	- 1 54.4	1.582	2.586	0.8	20.3
9 28	23 42.94	- 7 23.5	1.686	2.672	4.8	18.7	9 28	23 42.35	- 2 29.4	1.591	2.584	3.9	20.5
10 8	23 35.76	- 7 58.5	1.724	2.668	8.8	18.9	10 8	23 34.47	- 2 58.5	1.628	2.582	8.3	20.8
10 18	23 30.17	- 8 18.9	1.787	2.663	12.5	19.1	10 18	23 28.32	- 3 17.4	1.689	2.580	12.3	21.0
10 28	23 26.77	- 8 22.5	1.870	2.659	15.5	19.3	10 28	23 24.51	- 3 22.8	1.772	2.579	15.6	21.3
177226	2003 <i>UE</i> ₂₂₄		9 19.9 0°19'	1°8/19.0	16		452683	2005 <i>XB</i> ₅₉		9 19.9 207°85'	5°4/26.6	15	
8 19	0 11.57	- 4 43.0	0.864	1.790	18.9	19.1	8 19	0 9.48	+ 18 32.0	2.352	3.142	13.4	21.4
8 29	0 7.56	- 4 32.5	0.816	1.785	13.6	18.8	8 29	0 4.59	+ 18 36.4	2.270	3.141	11.0	21.3
9 8	0 0.39	- 4 30.1	0.787	1.782	7.5	18.5	9 8	23 58.20	+ 18 21.1	2.210	3.140	8.4	21.1
9 18	23 51.20	- 4 29.8	0.777	1.781	1.9	18.1	9 18	23 50.86	+ 17 46.5	2.174	3.138	6.2	21.0
9 28	23 41.79	- 4 24.3	0.789	1.782	6.3	18.4	9 28	23 43.32	+ 16 55.0	2.166	3.137	5.4	20.9
10 8	23 33.98	- 4 7.4	0.821	1.786	12.4	18.8	10 8	23 36.38	+ 15 51.4	2.185	3.135	6.8	21.0
10 18	23 29.10	- 3 35.8	0.872	1.791	17.8	19.1	10 18	23 30.71	+ 14 42.1	2.231	3.133	9.2	21.1
10 28	23 27.89	- 2 48.3	0.940	1.798	22.2	19.4	10 28	23 26.87	+ 13 33.5	2.301	3.131	11.7	21.3
438947	2010 <i>JG</i> ₁₄₉		9 19.9 75°68'	1°5/18.4	18		263732	2008 <i>HL</i> ₆₀		9 19.9 169°95'	5°6/13.2	18	
8 19	0 11.09	- 2 12.2	1.760	2.649	12.8	21.5	8 19	0 9.92	- 16 35.9	2.155	3.054	10.4	20.5
8 29	0 5.81	- 3 7.4	1.713	2.666	9.0	21.3	8 29	0 4.89	- 17 50.2	2.106	3.054	7.9	20.3
9 8	23 58.84	- 4 11.0	1.691	2.682	4.9	21.1	9 8	23 58.33	- 19 0.8	2.081	3.054	5.9	20.2
9 18	23 50.92	- 5 16.7	1.695	2.698	1.5	20.9	9 18	23 50.88	- 20 0.9	2.084	3.054	5.9	20.2
9 28	23 43.01	- 6 17.4	1.726	2.714	4.5	21.1	9 28	23 43.34	- 20 44.6	2.114	3.055	7.8	20.3
10 8	23 36.04	- 7 6.8	1.785	2.730	8.4	21.4	10 8	23 36.55	- 21 8.3	2.169	3.055	10.3	20.5
10 18	23 30.73	- 7 41.1	1.868	2.746	11.9	21.7	10 18	23 31.17	- 21 11.0	2.247	3.055	12.8	20.6
10 28	23 27.58	- 7 58.1	1.973	2.762	14.9	21.9	10 28	23 27.70	- 20 53.4	2.345	3.055	14.9	20.8
230314	2002 <i>CL</i> ₃		9 19.9 223°52'	7°7/10.8	18		5758						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
475178	2005 <i>UC</i> ₄₇₂		9 19.9 64°71'	2°0/21.6	16		427858	2005 <i>NR</i> ₉₃		9 19.9 99°44'	1°0/20.8	17	
8 19	0 12.97	+ 5 50.5	1.494	2.366	15.7	21.1	8 19	0 14.52	+ 4 5.2	1.557	2.430	15.1	21.9
8 29	0 7.54	+ 5 35.0	1.436	2.374	11.7	20.9	8 29	0 8.48	+ 3 33.4	1.506	2.446	11.0	21.7
9 8	23 59.99	+ 5 1.9	1.400	2.382	7.1	20.6	9 8	0 0.44	+ 2 46.2	1.478	2.462	6.4	21.5
9 18	23 51.16	+ 4 15.0	1.389	2.390	2.7	20.4	9 18	23 51.25	+ 1 48.4	1.474	2.478	1.7	21.2
9 28	23 42.22	+ 3 20.7	1.403	2.398	3.8	20.5	9 28	23 42.04	+ 0 47.2	1.499	2.493	3.7	21.4
10 8	23 34.32	+ 2 26.9	1.444	2.406	8.3	20.8	10 8	23 33.93	+ 0 9.7	1.549	2.508	8.2	21.7
10 18	23 28.40	+ 1 40.5	1.510	2.415	12.5	21.1	10 18	23 27.79	+ 0 56.1	1.625	2.522	12.3	22.0
10 28	23 25.07	+ 1 7.0	1.596	2.423	16.1	21.3	10 28	23 24.16	+ 1 27.7	1.722	2.536	15.7	22.3
515595	2014 <i>JU</i> ₃₆		9 19.9 297°21'	2°8/17.2	18		42380	2065 <i>P-L</i>		9 19.9 53°44'	2°3/22.4	18	
8 19	0 11.46	- 6 52.8	1.796	2.693	12.3	21.1	8 19	0 9.90	+ 7 45.4	1.983	2.837	13.1	19.0
8 29	0 6.29	- 7 36.6	1.727	2.683	8.7	20.8	8 29	0 4.92	+ 7 31.1	1.924	2.850	9.9	18.8
9 8	23 59.26	- 8 25.3	1.683	2.673	5.0	20.6	9 8	23 58.38	+ 7 1.8	1.888	2.863	6.3	18.6
9 18	23 51.05	- 9 12.9	1.664	2.664	2.9	20.4	9 18	23 50.93	+ 6 20.2	1.879	2.876	3.0	18.5
9 28	23 42.63	- 9 52.7	1.673	2.654	5.6	20.6	9 28	23 43.41	+ 5 31.2	1.897	2.890	3.3	18.5
10 8	23 34.99	- 10 19.3	1.709	2.645	9.4	20.8	10 8	23 36.67	+ 4 40.5	1.942	2.903	6.6	18.8
10 18	23 28.99	- 10 29.5	1.768	2.636	13.0	21.0	10 18	23 31.40	+ 3 53.7	2.014	2.917	10.0	19.0
10 28	23 25.24	- 10 21.9	1.848	2.627	16.1	21.2	10 28	23 28.11	+ 3 15.7	2.109	2.931	12.9	19.2
511296	2014 <i>DO</i> ₆₆		9 19.9 172°43'	3°2/16.9	18		179038	2001 <i>RD</i> ₁₃₇		9 19.9 355°51'	3°0/16.9	18	
8 19	0 15.20	- 9 43.7	2.073	2.962	11.2	21.6	8 19	0 6.31	- 4 22.8	1.444	2.353	13.8	19.5
8 29	0 8.65	- 10 15.8	2.013	2.964	8.0	21.4	8 29	0 2.88	- 5 41.7	1.387	2.349	9.7	19.3
9 8	0 0.43	- 10 48.7	1.978	2.965	4.8	21.3	9 8	23 57.46	- 7 10.5	1.352	2.346	5.4	19.0
9 18	23 51.23	- 11 17.4	1.971	2.967	3.3	21.2	9 18	23 50.80	- 8 40.5	1.343	2.343	3.0	18.9
9 28	23 41.95	- 11 36.9	1.993	2.968	5.5	21.3	9 28	23 43.95	- 10 1.6	1.359	2.342	6.3	19.1
10 8	23 33.50	- 11 43.5	2.042	2.968	8.7	21.5	10 8	23 38.03	- 11 5.1	1.399	2.341	10.6	19.3
10 18	23 26.62	- 11 35.8	2.117	2.969	11.8	21.7	10 18	23 33.90	- 11 45.9	1.463	2.341	14.6	19.6
10 28	23 21.84	- 11 13.3	2.213	2.969	14.5	21.9	10 28	23 32.19	- 12 2.0	1.545	2.343	17.9	19.8
242653	2005 <i>OL</i> ₁₆		9 19.9 339°22'	3°8/22.4	18		201099	2002 <i>GG</i> ₁₂₇		9 19.9 58°94'	1°8/21.6	16	
8 19	0 6.99	+ 7 15.5	1.049	1.944	19.0	19.6	8 19	0 12.18	+ 6 31.3	1.489	2.360	15.8	20.4
8 29	0 4.16	+ 7 28.6	0.978	1.926	14.6	19.3	8 29	0 6.79	+ 5 55.5	1.447	2.384	11.6	20.2
9 8	23 58.57	+ 7 17.8	0.925	1.908	9.6	19.0	9 8	23 59.47	+ 5 1.5	1.428	2.409	7.0	20.0
9 18	23 50.99	+ 6 44.4	0.893	1.892	4.7	18.6	9 18	23 51.10	+ 3 54.7	1.433	2.435	2.5	19.8
9 28	23 42.84	+ 5 54.3	0.883	1.878	5.2	18.6	9 28	23 42.81	+ 2 42.9	1.465	2.460	3.6	19.9
10 8	23 35.74	+ 4 57.6	0.894	1.865	10.4	18.9	10 8	23 35.68	+ 1 34.4	1.523	2.485	8.0	20.3
10 18	23 31.05	+ 4 5.1	0.926	1.854	15.8	19.1	10 18	23 30.50	+ 0 36.4	1.606	2.511	12.0	20.6
10 28	23 29.71	+ 3 26.4	0.975	1.846	20.6	19.4	10 28	23 27.76	+ 0 6.4	1.711	2.536	15.3	20.8
83104	2001 <i>QK</i> ₂₃₈		9 19.9 345°72'	0°5/20.4	18		69994	1998 <i>WT</i> ₃₇		9 19.9 1°24'	2°0/17.9	18	
8 19	0 9.35	+ 2 36.4	1.712	2.592	13.6	18.8	8 19	0 9.67	- 5 6.2	1.968	2.861	11.5	19.2
8 29	0 4.83	+ 2 5.8	1.644	2.589	9.9	18.6	8 29	0 4.82	- 5 41.7	1.906	2.860	8.1	19.0
9 8	23 58.46	+ 1 21.5	1.598	2.585	5.7	18.3	9 8	23 58.36	- 6 22.4	1.869	2.860	4.5	18.7
9 18	23 50.93	+ 0 28.0	1.578	2.582	1.2	18.0	9 18	23 50.94	- 7 3.4	1.858	2.860	2.0	18.6
9 28	23 43.21	+ 0 28.4	1.586	2.580	3.5	18.2	9 28	23 43.40	- 7 39.2	1.875	2.860	4.5	18.7
10 8	23 36.28	- 1 20.7	1.619	2.578	7.9	18.5	10 8	23 36.61	- 8 5.0	1.919	2.861	8.2	19.0
10 18	23 31.00	- 2 3.1	1.678	2.576	11.9	18.7	10 18	23 31.29	- 8 17.6	1.988	2.862	11.5	19.2
10 28	23 27.95	- 2 31.3	1.758	2.574	15.3	18.9	10 28	23 27.94	- 8 15.5	2.079	2.864	14.3	19.4
50025	2000 <i>AR</i> ₄₁		9 19.9 274°61'	0°1/19.9	18	R	247060	2000 <i>QC</i> ₉₉		9 19.9 15°78'	3°0/18.4	18	
8 19	0 15.21	+ 0 9.5	1.509	2.393	14.9	18.8	8 19	0 15.89	- 9 1.0	1.104	2.018	16.7	18.5
8 29	0 9.33	- 0 1.7	1.436	2.384	10.8	18.6	8 29	0 9.90	- 8 36.7	1.068	2.031	11.9	18.3
9 8	0 1.12	- 0 24.5	1.386	2.375	6.1	18.3	9 8	0 1.34	- 8 12.8	1.053	2.046	6.7	18.1
9 18	23 51.38	- 0 55.0	1.361	2.366	1.0	17.9	9 18	23 51.41	- 7 44.8	1.061	2.062	3.0	17.9
9 28	23 41.30	- 1 27.0	1.363	2.356	4.2	18.1	9 28	23 41.66	- 7 8.6	1.092	2.081	6.2	18.2
10 8	23 32.17	- 1 54.0	1.390	2.347	9.2	18.4	10 8	23 33.53	- 6 22.1	1.148	2.102	11.0	18.5
10 18	23 25.04	- 2 10.9	1.442	2.337	13.7	18.6	10 18	23 28.00	- 5 25.3	1.225	2.124	15.3	18.8
10 28	23 20.66	- 2 13.9	1.514	2.328	17.5	18.9	10 28	23 25.58	- 4 18.7	1.321	2.147	18.9	19.1
242935	2006 <i>QE</i> ₆₁		9 19.9 67°55'	3°1/16.5	18		262326	2006 <i>TG</i> ₃₁		9 19.9 53°69'	0°3/20.2	18	
8 19	0 9.18	- 5 23.6	1.725	2.625	12.5	20.1	8 19	0 10.04	+ 2 5.5	1.874	2.751	12.8	21.1
8 29	0 4.53	- 6 54.2	1.681	2.639	8.7	19.9	8 29	0 5.14	+ 1 30.1	1.811	2.755	9.2	20.9
9 8	23 58.18	- 8 30.9	1.662	2.653	4.9	19.7	9 8	23 58.56	+ 0 42.8	1.772	2.759	5.2	20.7
9 18	23 50.87	- 10 5.3	1.669	2.667	3.2	19.7	9 18	23 50.98	- 0 12.0	1.759	2.763	1.0	20.4
9 28	23 43.55	- 11 28.8	1.704	2.681	5.9	19.9	9 28	23 43.28	- 1 8.3	1.774	2.768	3.4	20.6
10 8	23 37.13	- 12 34.6	1.765	2.696	9.6	20.1	10 8	23 36.37	- 1 59.7	1.817	2.772	7.5	20.8
10 18	23 32.36	- 13 19.0	1.851	2.710	12.9	20.4	10 18	23 30.99	- 2 41.3	1.885	2.777	11.1	21.1
10 28	23 29.71	- 13 40.9	1.956	2.725	15.7	20.6	10 28	23 27.68	- 3 9.2	1.975	2.782	14.2	21.3
438516	2007 <i>RM</i> ₂₂₉		9 19.9 35°98'	1°1/20.6	18		359704	2011 <i>SP</i> ₂₄₉		9 19.9 330°28'	6°4/14.2	18	
8 19	0 18.63	+ 0 21.3	1.349	2.234	16.3	19.9	8 19	0 10.84	- 14 50.0	1.549	2.459	13.1	20.3
8 29	0 11.64	+ 0 54.1	1.302	2.248	11.8	19.7	8 29	0 6.12	- 15 56.3	1.491	2.447	9.7	20.0
9 8	0 2.26	+ 1 16.3	1.276	2.263	6.8	19.4	9 8	23 59.28	- 17 0.3	1.455	2.436	7.0	19.9
9 18	23 51.54	+ 1 30.1	1.275	2.279	1.8	19.1	9 18	23 51.11	- 17 53.4	1.443	2.425	6.6	19.8
9 28	23 40.84	+ 1 39.3	1.301	2.295	4.1	19.3	9 28	23 42.72	- 18 27.4	1.457	2.415	9.1	19.9
10 8	23 31.50	+ 1 48.3	1.352	2.312	9.0	19.7	10 8	23 35.29	- 18 37.3	1.495	2.405	12.5	20.1
10 18	23 24.52	+ 2 1.0	1.428	2.330	13.3	20.0	10 18	23 29.75	- 18 21.8	1.554	2.396	15.9	20.3
10 28	23 20.48	+ 2 20.8	1.524	2.348	16.8	20.3	10 28	23 26.76	- 17 42.4	1.631	2.388	18.8	20.5
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
358183	2006 <i>SE</i> ₈₂		9 19.9 306°38	0°1/19.8	18		92023	1999 <i>VM</i> ₁₆₇		9 19.9 315°96	3°1/16.9	18	
8 19	0 8.95	+ 1 33.8	1.821	2.702	12.9	21.6	8 19	0 10.90	- 8 33.8	1.944	2.840	11.5	19.2
8 29	0 4.51	+ 0 49.5	1.747	2.694	9.3	21.4	8 29	0 5.81	- 9 10.1	1.873	2.828	8.2	19.0
9 8	23 58.29	- 0 7.7	1.696	2.685	5.2	21.1	9 8	23 59.00	- 9 49.2	1.827	2.816	4.8	18.8
9 18	23 50.95	- 1 13.0	1.672	2.676	0.8	20.8	9 18	23 51.09	-10 25.6	1.807	2.805	3.1	18.6
9 28	23 43.37	- 2 19.8	1.675	2.668	3.7	21.0	9 28	23 42.97	-10 53.6	1.815	2.793	5.5	18.8
10 8	23 36.51	- 3 20.9	1.705	2.660	8.0	21.2	10 8	23 35.58	-11 8.7	1.850	2.782	9.1	19.0
10 18	23 31.18	- 4 10.3	1.760	2.652	11.8	21.5	10 18	23 29.69	-11 8.3	1.909	2.772	12.4	19.2
10 28	23 27.98	- 4 44.0	1.837	2.644	15.1	21.7	10 28	23 25.90	-10 51.6	1.988	2.761	15.3	19.3
363979	2005 <i>UA</i> ₁₈₅		9 19.9 183°70	3°4/15.2	18		44096	1998 <i>FJ</i> ₁₁₄		9 19.9 65°36	4°6/23.8	18	
8 19	0 10.48	-12 45.9	2.888	3.775	8.5	22.1	8 19	0 13.26	+11 50.8	1.345	2.201	18.1	18.3
8 29	0 4.97	-13 34.5	2.827	3.775	6.1	21.9	8 29	0 7.97	+11 46.1	1.290	2.212	14.1	18.1
9 8	23 58.29	-14 22.3	2.794	3.775	4.1	21.8	9 8	0 0.35	+11 16.0	1.255	2.223	9.6	17.9
9 18	23 50.93	-15 5.0	2.789	3.774	3.5	21.7	9 18	23 51.31	+10 23.0	1.243	2.235	5.6	17.7
9 28	23 43.50	-15 38.4	2.814	3.773	5.1	21.9	9 28	23 42.15	+ 9 13.4	1.255	2.246	5.1	17.7
10 8	23 36.60	-15 59.7	2.867	3.771	7.4	22.0	10 8	23 34.18	+ 7 57.2	1.293	2.258	8.8	17.9
10 18	23 30.78	-16 7.3	2.946	3.769	9.7	22.2	10 18	23 28.40	+ 6 44.2	1.355	2.270	12.9	18.2
10 28	23 26.43	-16 0.9	3.048	3.766	11.6	22.3	10 28	23 25.44	+ 5 42.7	1.438	2.281	16.7	18.5
356849	2011 <i>WM</i> ₉		9 19.9 122°27	1°4/18.4	18		936	<i>Kunigunde</i>		9 19.9 28°33	1°3/18.7	18	
8 19	0 10.85	- 3 14.7	1.996	2.883	11.7	21.5	8 19	0 9.58	- 2 42.1	1.750	2.643	12.7	14.5
8 29	0 5.64	- 3 54.4	1.933	2.884	8.3	21.3	8 29	0 4.84	- 3 17.4	1.699	2.653	9.0	14.3
9 8	23 58.82	- 4 41.1	1.895	2.885	4.5	21.1	9 8	23 58.40	- 4 0.4	1.672	2.663	4.9	14.1
9 18	23 51.03	- 5 29.7	1.883	2.887	1.5	20.9	9 18	23 50.98	- 4 45.7	1.671	2.674	1.3	13.8
9 28	23 43.12	- 6 14.6	1.900	2.888	4.2	21.1	9 28	23 43.52	- 5 27.3	1.696	2.686	4.3	14.1
10 8	23 35.96	- 6 50.6	1.945	2.889	7.9	21.3	10 8	23 36.95	- 5 59.6	1.749	2.698	8.2	14.3
10 18	23 30.28	- 7 14.0	2.015	2.890	11.3	21.5	10 18	23 31.99	- 6 18.9	1.825	2.710	11.8	14.6
10 28	23 26.59	- 7 22.7	2.106	2.892	14.2	21.7	10 28	23 29.16	- 6 23.2	1.923	2.723	14.8	14.8
198316	2004 <i>TU</i> ₃₃₉		9 19.9 2°22	0°1/19.9	18		138988	2001 <i>DQ</i> ₁₂		9 19.9 144°37	2°3/17.9	18	
8 19	0 10.66	+ 1 16.7	1.441	2.332	15.1	20.6	8 19	0 15.13	- 4 32.5	1.711	2.600	13.2	20.5
8 29	0 6.01	+ 0 41.3	1.380	2.331	10.9	20.3	8 29	0 8.86	- 5 25.9	1.657	2.609	9.3	20.3
9 8	23 59.23	- 0 8.6	1.341	2.331	6.1	20.1	9 8	0 0.68	- 6 26.1	1.627	2.617	5.1	20.1
9 18	23 51.11	- 1 7.2	1.327	2.331	1.0	19.7	9 18	23 51.37	- 7 26.5	1.624	2.625	2.3	19.9
9 28	23 42.79	- 2 6.8	1.338	2.332	4.2	19.9	9 28	23 42.00	- 8 19.8	1.649	2.633	5.2	20.1
10 8	23 35.48	- 2 59.3	1.375	2.333	9.1	20.2	10 8	23 33.63	- 8 59.9	1.701	2.640	9.2	20.4
10 18	23 30.10	- 3 38.3	1.435	2.334	13.5	20.5	10 18	23 27.09	- 9 23.4	1.777	2.646	12.9	20.6
10 28	23 27.31	- 3 59.9	1.516	2.336	17.1	20.8	10 28	23 22.94	- 9 28.6	1.874	2.652	16.0	20.8
76178	2000 <i>EL</i> ₃₆		9 19.9 124°60	4°4/15.6	18		29269	1993 <i>FD</i> ₂₅		9 19.9 64°36	0°4/20.2	18	
8 19	0 14.20	-12 54.3	2.051	2.944	11.1	19.4	8 19	0 16.17	+ 0 52.7	1.390	2.275	15.8	18.0
8 29	0 7.91	-13 39.8	2.002	2.953	8.1	19.2	8 29	0 9.91	+ 0 45.3	1.339	2.287	11.5	17.7
9 8	0 0.01	-14 23.6	1.979	2.961	5.3	19.1	9 8	0 1.36	+ 0 25.5	1.310	2.298	6.5	17.5
9 18	23 51.22	-14 59.7	1.983	2.970	4.5	19.0	9 18	23 51.49	- 0 2.5	1.306	2.310	1.3	17.2
9 28	23 42.41	-15 23.0	2.015	2.978	6.5	19.2	9 28	23 41.57	- 0 32.3	1.328	2.322	4.1	17.4
10 8	23 34.49	-15 30.3	2.074	2.986	9.4	19.4	10 8	23 32.88	- 0 57.5	1.376	2.334	9.0	17.7
10 18	23 28.16	-15 20.5	2.157	2.994	12.2	19.6	10 18	23 26.41	- 1 13.0	1.448	2.346	13.4	18.0
10 28	23 23.90	-14 54.3	2.262	3.002	14.6	19.8	10 28	23 22.73	- 1 15.4	1.540	2.359	17.0	18.3
13222	<i>Ichikawakazuo</i>		9 19.9 160°02	4°6/24.7	18		508498	2016 <i>QU</i> ₂		9 19.9 117°07	0°2/20.1	17	
8 19	0 12.44	+14 1.6	2.061	2.880	14.0	18.0	8 19	0 13.76	+ 2 24.2	1.713	2.587	13.9	21.6
8 29	0 6.86	+14 10.4	1.986	2.882	11.2	17.8	8 29	0 7.85	+ 1 40.7	1.659	2.602	10.0	21.4
9 8	23 59.55	+14 0.5	1.934	2.885	8.1	17.6	9 8	0 0.10	+ 0 44.1	1.629	2.615	5.6	21.2
9 18	23 51.17	+13 32.7	1.906	2.887	5.4	17.4	9 18	23 51.28	- 0 20.4	1.625	2.629	1.0	20.9
9 28	23 42.58	+12 49.9	1.906	2.889	4.8	17.4	9 28	23 42.42	- 1 25.6	1.649	2.642	3.6	21.1
10 8	23 34.70	+11 57.5	1.934	2.890	7.0	17.6	10 8	23 34.55	- 2 24.4	1.700	2.654	8.0	21.4
10 18	23 28.33	+11 2.0	1.988	2.892	10.0	17.7	10 18	23 28.46	- 3 11.2	1.777	2.666	11.8	21.7
10 28	23 24.03	+10 9.8	2.066	2.893	12.9	17.9	10 28	23 24.69	- 3 42.5	1.875	2.678	15.0	21.9
318399	2004 <i>XY</i> ₉₇		9 19.9 229°89	0°8/20.7	18		322768	2001 <i>FO</i> ₁₂₂		9 19.9 231°43	1°1/18.4	17	
8 19	0 12.19	+ 3 11.6	1.871	2.741	13.1	21.2	8 19	0 9.83	- 3 28.7	3.016	3.890	8.6	22.2
8 29	0 6.78	+ 2 49.2	1.798	2.737	9.6	21.0	8 29	0 4.56	- 4 4.5	2.930	3.875	6.1	22.1
9 8	23 59.55	+ 2 14.0	1.748	2.732	5.6	20.7	9 8	23 58.13	- 4 45.2	2.871	3.860	3.3	21.8
9 18	23 51.17	+ 1 29.6	1.725	2.728	1.5	20.5	9 18	23 50.97	- 5 27.6	2.841	3.844	1.1	21.7
9 28	23 42.57	+ 0 41.3	1.729	2.723	3.3	20.6	9 28	23 43.63	- 6 8.0	2.841	3.827	3.1	21.8
10 8	23 34.74	- 0 4.8	1.762	2.719	7.5	20.8	10 8	23 36.70	- 6 42.7	2.871	3.810	5.9	22.0
10 18	23 28.48	- 0 43.1	1.819	2.714	11.3	21.1	10 18	23 30.73	- 7 8.9	2.929	3.793	8.6	22.1
10 28	23 24.42	- 1 9.5	1.900	2.709	14.6	21.3	10 28	23 26.15	- 7 24.6	3.011	3.774	10.8	22.3
254447	2005 <i>BY</i> ₅		9 19.9 156°83	2°0/18.3	17		74672	1999 <i>RY</i> ₁₀₄		9 19.9 257°52	1°3/18.9	18	
8 19	0 15.47	- 3 38.1	1.522	2.414	14.3	21.0	8 19	0 15.85	- 2 48.1	1.466	2.358	14.8	19.4
8 29	0 9.34	- 4 25.0	1.465	2.419	10.2	20.8	8 29	0 9.81	- 3 11.1	1.400	2.353	10.6	19.2
9 8	0 1.03	- 5 20.5	1.431	2.422	5.6	20.6	9 8	0 1.42	- 3 43.4	1.357	2.347	5.9	18.9
9 18	23 51.42	- 6 17.8	1.423	2.426	2.0	20.3	9 18	23 51.53	- 4 19.4	1.338	2.342	1.4	18.6
9 28	23 41.67	- 7 9.1	1.442	2.429	5.3	20.6	9 28	23 41.37	- 4 52.2	1.346	2.336	4.9	18.8
10 8	23 33.01	- 7 47.4	1.487	2.431	9.8	20.8	10 8	23 32.24	- 5 15.5	1.380	2.331	9.8	19.1
10 18	23 26.37	- 8 8.7	1.555	2.433	13.9	21.1	10 18	23 25.21	- 5 24.8	1.437	2.325	14.2	19.3
10 28	23 22.37	- 8 11.2	1.644	2.435	17.3	21.3	10 28	23 20.96	- 5 17.8	1.515	2.319	17.9	19.6
434206	2003 <i>QZ</i> ₁₁₄		9 19.9 12°88	2°7/22.6	18		479331	2013 <i>TX</i> ₁₁₃		9 19.9 153°34			

EPHEMERIDES

9 19.9

9 19.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
351039	2003 SB ₁₇₀		9 19.9	0°45' 17.2"	1.5	17	175159	2005 EE ₆₈		9 19.9	208°09'	3°2'/22.5"	18
8 19	0 14.39	+27 22.7	0.946	1.755	27.3	19.5	8 19	0 15.30	+8 22.5	1.599	2.454	15.7	20.8
8 29	0 10.22	+29 44.3	0.892	1.752	24.4	19.3	8 29	0 9.34	+8 19.8	1.526	2.451	12.0	20.6
9 8	0 2.36	+31 25.4	0.851	1.751	21.4	19.1	9 8	0 1.15	+7 58.3	1.474	2.448	7.8	20.3
9 18	23 51.76	+32 14.4	0.825	1.750	18.8	19.0	9 18	23 51.52	+7 19.9	1.448	2.444	3.9	20.1
9 28	23 40.31	+32 5.7	0.816	1.751	17.3	18.9	9 28	23 41.58	+6 29.6	1.448	2.440	4.2	20.1
10 8	23 30.29	+31 4.6	0.824	1.753	17.6	18.9	10 8	23 32.54	+5 34.8	1.474	2.436	8.2	20.4
10 18	23 23.58	+29 25.5	0.849	1.756	19.4	19.0	10 18	23 25.44	+4 43.0	1.526	2.431	12.4	20.6
10 28	23 21.30	+27 28.3	0.891	1.760	22.1	19.2	10 28	23 20.97	+4 0.9	1.600	2.426	16.1	20.8
324433	2006 SP ₄₀₈		9 19.9	73°16'	1.4/21.1	17	321445	2009 QA ₅₈		9 19.9	303°48'	0°2'/19.7"	18
8 19	0 15.21	+4 34.4	1.357	2.235	16.6	20.4	8 19	0 6.91	+2 2.7	2.064	2.942	11.7	20.6
8 29	0 9.17	+4 10.7	1.313	2.255	12.2	20.2	8 29	0 2.93	+1 1.9	1.984	2.929	8.5	20.4
9 8	0 0.92	+3 29.7	1.290	2.275	7.2	20.0	9 8	23 57.41	-0 12.0	1.928	2.917	4.7	20.2
9 18	23 51.42	+2 36.4	1.292	2.294	2.2	19.7	9 18	23 50.89	-1 34.1	1.900	2.904	0.7	19.8
9 28	23 41.97	+1 38.5	1.319	2.314	3.9	19.9	9 28	23 44.15	-2 57.6	1.899	2.892	3.4	20.0
10 8	23 33.82	+0 44.5	1.372	2.333	8.8	20.2	10 8	23 38.00	-4 15.4	1.927	2.879	7.4	20.3
10 18	23 27.87	+0 1.0	1.449	2.353	13.1	20.5	10 18	23 33.15	-5 21.5	1.981	2.867	10.9	20.5
10 28	23 24.67	-0 27.4	1.547	2.372	16.6	20.8	10 28	23 30.16	-6 11.6	2.057	2.855	14.0	20.6
338497	2003 OC ₁₂		9 19.9	45°83'	6°0'/26.2"	16	45668	2000 EU ₉₄		9 19.9	325°37'	5°6'/23.5"	18
8 19	0 9.09	+17 51.9	1.417	2.247	18.7	20.2	8 19	0 15.04	+10 29.2	1.526	2.376	16.6	17.3
8 29	0 4.86	+17 24.6	1.365	2.265	15.0	20.0	8 29	0 9.47	+11 26.3	1.442	2.359	13.2	17.0
9 8	23 58.55	+16 26.1	1.333	2.284	11.0	19.8	9 8	0 1.42	+12 6.5	1.379	2.342	9.4	16.8
9 18	23 51.04	+14 59.4	1.323	2.303	7.3	19.7	9 18	23 51.60	+12 28.0	1.340	2.326	6.2	16.5
9 28	23 43.50	+13 12.0	1.338	2.323	6.1	19.6	9 28	23 41.18	+12 31.7	1.326	2.311	6.0	16.5
10 8	23 37.08	+11 15.5	1.379	2.343	8.4	19.8	10 8	23 31.53	+12 21.5	1.337	2.296	9.2	16.7
10 18	23 32.65	+9 21.7	1.444	2.363	11.9	20.1	10 18	23 23.85	+12 3.9	1.373	2.282	13.2	16.8
10 28	23 30.76	+7 40.8	1.532	2.384	15.4	20.4	10 28	23 19.03	+11 46.2	1.429	2.269	16.9	17.1
222459	2001 RO ₂₇		9 19.9	305°98'	0°4'/19.6"	18	283811	2003 SA ₂₀₄		9 19.9	302°22'	3°8'/23.1"	18
8 19	0 10.03	+1 36.5	1.454	2.345	15.0	20.1	8 19	0 11.13	+9 45.0	1.646	2.501	15.4	20.4
8 29	0 5.67	+0 43.1	1.384	2.336	10.8	19.8	8 29	0 6.46	+9 47.6	1.558	2.481	12.0	20.2
9 8	23 59.13	-0 26.9	1.337	2.327	6.1	19.5	9 8	23 59.63	+9 30.6	1.490	2.461	8.1	19.9
9 18	23 51.17	-1 47.1	1.313	2.318	0.9	19.2	9 18	23 51.29	+8 55.1	1.447	2.441	4.5	19.6
9 28	23 42.90	-3 8.5	1.316	2.309	4.4	19.4	9 28	23 42.47	+8 5.0	1.429	2.421	4.5	19.6
10 8	23 35.53	-4 21.6	1.345	2.301	9.5	19.7	10 8	23 34.33	+7 7.3	1.438	2.401	8.2	19.8
10 18	23 30.06	-5 18.8	1.397	2.293	14.0	19.9	10 18	23 27.92	+6 9.7	1.471	2.382	12.4	20.0
10 28	23 27.19	-5 55.3	1.469	2.285	17.8	20.2	10 28	23 24.02	+5 20.0	1.526	2.363	16.2	20.2
392349	2010 FE ₅₆		9 19.9	204°85'	2°0'/18.1"	18	80626	2000 AE ₁₉₄		9 19.9	259°48'	0°7'/19.2"	18
8 19	0 16.03	-6 12.2	2.190	3.069	11.1	21.7	8 19	0 10.16	+1 54.5	1.574	2.460	14.3	19.1
8 29	0 9.29	-6 34.9	2.118	3.065	7.9	21.5	8 29	0 5.66	+0 37.1	1.500	2.449	10.3	18.9
9 8	0 0.88	-7 1.2	2.071	3.060	4.4	21.3	9 8	23 59.10	-0 57.9	1.449	2.439	5.7	18.6
9 18	23 51.45	-7 26.9	2.053	3.054	2.0	21.1	9 18	23 51.19	-2 43.4	1.424	2.428	1.0	18.2
9 28	23 41.84	-7 47.2	2.064	3.047	4.4	21.3	9 28	23 42.97	-4 29.4	1.426	2.418	4.5	18.5
10 8	23 32.96	-7 58.6	2.104	3.041	7.9	21.5	10 8	23 35.56	-6 5.5	1.456	2.407	9.4	18.7
10 18	23 25.57	-7 58.4	2.170	3.033	11.1	21.7	10 18	23 29.93	-7 23.6	1.509	2.396	13.7	19.0
10 28	23 20.21	-7 45.5	2.259	3.025	13.9	21.9	10 28	23 26.76	-8 18.7	1.583	2.384	17.4	19.2
257367	2009 OD ₁₉		9 19.9	41°90'	0°6'/20.6"	18	441319	2008 AH ₁₃₆		9 19.9	256°74'	2°5'/17.4"	18
8 19	0 9.81	+2 45.4	1.881	2.756	12.8	20.5	8 19	0 12.91	-7 10.7	2.144	3.032	11.0	21.7
8 29	0 4.95	+2 19.4	1.824	2.766	9.3	20.3	8 29	0 7.18	-7 45.9	2.066	3.017	7.8	21.5
9 8	23 58.47	+1 41.5	1.791	2.776	5.4	20.1	9 8	23 59.77	-8 24.8	2.013	3.002	4.5	21.3
9 18	23 51.04	+0 55.9	1.783	2.787	1.3	19.9	9 18	23 51.29	-9 2.6	1.988	2.987	2.5	21.1
9 28	23 43.54	+0 7.8	1.804	2.798	3.2	20.0	9 28	23 42.57	-9 34.0	1.992	2.972	4.9	21.3
10 8	23 36.86	-0 36.6	1.852	2.809	7.2	20.3	10 8	23 34.49	-9 54.5	2.023	2.956	8.4	21.5
10 18	23 31.70	-1 12.7	1.925	2.821	10.7	20.5	10 18	23 27.82	-10 1.4	2.079	2.940	11.6	21.6
10 28	23 28.57	-1 36.8	2.021	2.833	13.7	20.8	10 28	23 23.14	-9 53.2	2.158	2.924	14.5	21.8
386728	2010 AY ₈		9 19.9	291°08'	2°2'/17.9"	18	386039	2007 EX ₇₄		9 19.9	239°60'	0°7'/20.6"	18
8 19	0 10.62	-3 8.9	1.554	2.452	13.8	20.9	8 19	0 12.89	+3 22.3	1.838	2.707	13.3	21.7
8 29	0 6.09	-4 12.1	1.476	2.433	9.8	20.6	8 29	0 7.42	+2 49.8	1.757	2.696	9.8	21.4
9 8	23 59.39	-5 27.1	1.421	2.413	5.4	20.3	9 8	0 0.02	+2 3.0	1.699	2.684	5.7	21.2
9 18	23 51.23	-6 46.9	1.392	2.394	2.2	20.1	9 18	23 51.35	+1 6.0	1.668	2.671	1.4	20.8
9 28	23 42.67	-8 2.3	1.389	2.375	5.6	20.2	9 28	23 42.37	+0 4.7	1.664	2.658	3.5	21.0
10 8	23 34.89	-9 4.5	1.412	2.356	10.3	20.5	10 8	23 34.10	-0 53.9	1.689	2.645	7.9	21.2
10 18	23 28.90	-9 47.4	1.457	2.337	14.6	20.7	10 18	23 27.44	-1 43.5	1.739	2.631	11.9	21.4
10 28	23 25.46	-10 7.7	1.523	2.318	18.3	20.9	10 28	23 23.04	-2 19.4	1.811	2.617	15.3	21.6
179744	2002 RV ₁₅₅		9 19.9	77°16'	0°4'/20.3"	17	85266	1993 YK ₁		9 19.9	97°02'	0°4'/19.6"	18
8 19	0 11.75	+3 48.2	1.398	2.282	15.9	20.3	8 19	0 10.84	+0 17.5	1.890	2.770	12.5	20.2
8 29	0 6.76	+2 50.2	1.346	2.293	11.5	20.1	8 29	0 5.76	-0 20.1	1.826	2.772	9.0	20.0
9 8	23 59.63	+1 34.3	1.317	2.304	6.5	19.8	9 8	23 58.97	-1 8.1	1.785	2.774	5.0	19.8
9 18	23 51.25	+0 7.4	1.312	2.316	1.3	19.5	9 18	23 51.16	-2 1.9	1.772	2.776	0.8	19.5
9 28	23 42.80	-1 20.8	1.333	2.327	4.1	19.7	9 28	23 43.22	-2 55.4	1.786	2.778	3.6	19.7
10 8	23 35.47	-2 40.6	1.380	2.339	9.0	20.1	10 8	23 36.05	-3 42.5	1.828	2.780	7.7	20.0
10 18	23 30.17	-3 44.4	1.452	2.350	13.4	20.3	10 18	23 30.43	-4 18.5	1.895	2.782	11.3	20.2
10 28	23 27.47	-4 27.8	1.543	2.361	17.0	20.6	10 28	23 26.88	-4 40.2	1.985	2.784	14.4	20.4
220377	2003 PV		9 19.9	9°22'	7°1'/24.4"	18	307530	2003 BL ₂₂		9 19.9	320°28'	5°1'/25.3"	18
8 19	0 18.67	+13 23.0	1.627	2.454	16.8	18.5	8 19	0 5.41	+15 56.7	1.553	2.391	1	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
315368	2007 VX ₂		9 19.9 310°58	3°1/25.7	18		227795	2006 YH ₁₉		9 19.9 169°60	1°6/18.5	17	
8 19	0 4.84	+15 19.8	4.091	4.882	8.1	20.2	8 19	0 14.29	-3 9.5	1.865	2.749	12.5	21.4
8 29	0 0.83	+15 25.4	3.999	4.874	6.5	20.0	8 29	0 8.24	-3 52.7	1.803	2.752	8.9	21.2
9 8	23 56.01	+15 20.9	3.931	4.867	4.9	19.9	9 8	0 0.38	-4 43.5	1.765	2.755	4.9	20.9
9 18	23 50.68	+15 6.8	3.890	4.860	3.5	19.8	9 18	23 51.43	-5 36.4	1.754	2.757	1.6	20.7
9 28	23 45.23	+14 44.5	3.878	4.852	3.1	19.8	9 28	23 42.36	-6 25.1	1.772	2.759	4.5	20.9
10 8	23 40.07	+14 16.2	3.895	4.845	4.1	19.9	10 8	23 34.14	-7 3.8	1.817	2.760	8.4	21.2
10 18	23 35.57	+13 44.5	3.941	4.838	5.7	20.0	10 18	23 27.58	-7 28.7	1.887	2.761	12.0	21.4
10 28	23 32.06	+13 12.5	4.013	4.831	7.3	20.1	10 28	23 23.25	-7 37.7	1.980	2.761	15.1	21.6
433279	2013 AP ₁₂₉		9 19.9 344°69	0°1/19.8	17		401624	2013 GD ₆₁		9 19.9 79°00	0°5/19.3	18	
8 19	0 2.35	+0 25.9	4.417	5.282	6.2	21.0	8 19	0 8.90	+0 10.1	2.156	3.035	11.3	21.4
8 29	23 58.97	-0 6.3	4.343	5.282	4.4	20.9	8 29	0 4.15	-0 39.2	2.100	3.046	8.0	21.2
9 8	23 54.93	-0 43.1	4.295	5.282	2.5	20.7	9 8	23 57.99	-1 37.6	2.069	3.058	4.4	21.0
9 18	23 50.50	-1 22.4	4.277	5.282	0.4	20.6	9 18	23 51.03	-2 40.3	2.065	3.070	0.7	20.7
9 28	23 46.01	-2 2.0	4.290	5.281	1.7	20.7	9 28	23 44.01	-3 41.6	2.090	3.081	3.3	21.0
10 8	23 41.79	-2 39.3	4.332	5.281	3.7	20.8	10 8	23 37.70	-4 35.9	2.143	3.093	6.9	21.2
10 18	23 38.15	-3 12.4	4.403	5.281	5.6	21.0	10 18	23 32.72	-5 19.1	2.223	3.105	10.1	21.4
10 28	23 35.35	-3 39.3	4.499	5.281	7.2	21.1	10 28	23 29.51	-5 48.3	2.325	3.116	12.8	21.7
10460	Correa-Otto		9 19.9 321°87	1°5/18.6	18		318106	2004 HM ₅₄		9 19.9 221°33	3°2/16.4	18	
8 19	0 9.77	-2 38.1	1.644	2.540	13.3	17.7	8 19	0 10.13	-7 44.5	2.079	2.973	10.9	20.4
8 29	0 5.32	-3 17.3	1.571	2.526	9.5	17.4	8 29	0 5.17	-8 51.1	2.015	2.969	7.8	20.2
9 8	23 58.90	-4 6.2	1.521	2.513	5.2	17.1	9 8	23 58.64	-10 1.7	1.977	2.965	4.6	20.0
9 18	23 51.19	-4 45.9	1.496	2.500	1.5	16.9	9 18	23 51.15	-11 10.2	1.966	2.961	3.2	19.9
9 28	23 43.18	-5 49.5	1.498	2.487	4.7	17.1	9 28	23 43.50	-12 9.8	1.983	2.957	5.6	20.1
10 8	23 35.95	-6 29.8	1.526	2.475	9.2	17.3	10 8	23 36.54	-12 55.3	2.027	2.952	8.8	20.3
10 18	23 30.42	-6 55.5	1.577	2.464	13.2	17.5	10 18	23 30.99	-13 23.5	2.096	2.948	12.0	20.5
10 28	23 27.24	-7 3.5	1.649	2.453	16.7	17.7	10 28	23 27.36	-13 33.0	2.187	2.943	14.6	20.7
478679	2012 TH ₂₉₅		9 19.9 329°91	4°9/24.4	16		405741	2005 YV ₄₀		9 19.9 301°18	4°7/14.2	18	
8 19	0 7.76	+13 7.3	1.431	2.285	17.3	21.1	8 19	0 8.60	-12 54.1	2.129	3.029	10.4	20.6
8 29	0 4.19	+12 55.9	1.353	2.272	13.7	20.8	8 29	0 4.08	-14 11.2	2.071	3.024	7.6	20.4
9 8	23 58.41	+12 17.8	1.295	2.260	9.7	20.6	9 8	23 58.03	-15 28.3	2.038	3.019	5.3	20.3
9 18	23 51.12	+11 14.1	1.259	2.249	5.9	20.3	9 18	23 51.06	-16 38.5	2.032	3.014	4.9	20.3
9 28	23 43.43	+9 50.6	1.247	2.238	5.2	20.3	9 28	23 43.94	-17 35.2	2.054	3.009	7.0	20.4
10 8	23 36.59	+8 17.0	1.261	2.228	8.6	20.4	10 8	23 37.50	-18 13.8	2.101	3.004	9.8	20.5
10 18	23 31.64	+6 44.2	1.298	2.218	12.9	20.7	10 18	23 32.41	-18 32.0	2.173	2.999	12.5	20.7
10 28	23 29.34	+5 22.4	1.357	2.210	16.9	20.9	10 28	23 29.19	-18 29.9	2.264	2.994	14.9	20.9
444539	2006 SV ₂₂₀		9 19.9 9°96	0°3/20.2	18		370590	2003 WJ ₃₁		9 19.9 294°00	3°6/22.6	18	
8 19	0 8.97	+2 32.7	1.605	2.490	14.1	21.2	8 19	0 13.05	+8 29.1	1.371	2.238	17.1	20.6
8 29	0 4.66	+1 51.8	1.544	2.491	10.2	21.0	8 29	0 8.19	+8 31.7	1.290	2.222	13.2	20.4
9 8	23 58.46	+0 56.4	1.504	2.493	5.8	20.7	9 8	0 0.77	+8 12.8	1.229	2.205	8.7	20.1
9 18	23 51.10	-0 8.4	1.490	2.495	1.1	20.4	9 18	23 51.56	+7 33.7	1.192	2.189	4.4	19.8
9 28	23 43.59	-1 15.1	1.503	2.497	3.7	20.6	9 28	23 41.80	+6 39.4	1.180	2.173	4.7	19.7
10 8	23 36.94	-2 16.0	1.542	2.500	8.3	20.9	10 8	23 32.91	+5 38.6	1.192	2.157	9.3	20.0
10 18	23 32.02	-3 4.8	1.605	2.504	12.3	21.2	10 18	23 26.11	+4 40.3	1.228	2.141	14.1	20.2
10 28	23 29.39	-3 37.1	1.690	2.508	15.7	21.4	10 28	23 22.29	+3 53.1	1.284	2.126	18.4	20.4
485235	2010 VL ₆₁		9 19.9 337°98	1°9/18.2	18		74348	1998 VT ₅₃		9 19.9 318°65	2°5/18.2	18	
8 19	0 12.21	-5 31.1	1.932	2.823	11.8	20.5	8 19	0 15.64	-7 0.6	1.642	2.535	13.4	18.9
8 29	0 6.73	-5 52.3	1.866	2.819	8.4	20.3	8 29	0 9.51	-7 11.0	1.572	2.526	9.6	18.6
9 8	23 59.54	-6 18.1	1.824	2.815	4.7	20.1	9 8	0 1.24	-7 24.8	1.527	2.517	5.4	18.4
9 18	23 51.28	-6 43.9	1.809	2.811	1.9	19.9	9 18	23 51.61	-7 36.9	1.507	2.508	2.5	18.2
9 28	23 42.87	-7 4.8	1.822	2.808	4.5	20.0	9 28	23 41.73	-7 42.0	1.514	2.499	5.3	18.3
10 8	23 35.24	-7 16.4	1.862	2.805	8.3	20.3	10 8	23 32.77	-7 36.0	1.547	2.491	9.6	18.6
10 18	23 29.16	-7 16.0	1.927	2.802	11.7	20.5	10 18	23 25.71	-7 16.6	1.605	2.483	13.5	18.8
10 28	23 25.18	-7 2.1	2.013	2.800	14.7	20.7	10 28	23 21.21	-6 43.0	1.683	2.476	16.9	19.0
97077	1999 VG ₃₃		9 19.9 133°18	3°7/24.6	18		411941	2012 GY ₂₃		9 19.9 231°15	1°8/17.8	18	
8 19	0 8.93	+13 38.7	2.385	3.204	12.4	19.7	8 19	0 11.06	-6 14.1	2.624	3.505	9.4	21.3
8 29	0 4.17	+13 24.2	2.310	3.207	9.8	19.5	8 29	0 5.59	-6 44.1	2.548	3.497	6.7	21.2
9 8	23 58.03	+12 52.9	2.257	3.211	6.9	19.3	9 8	23 58.79	-7 17.3	2.499	3.488	3.7	21.0
9 18	23 51.04	+12 6.2	2.231	3.215	4.4	19.2	9 18	23 51.19	-7 50.2	2.478	3.478	1.8	20.8
9 28	23 43.91	+11 7.7	2.233	3.218	3.9	19.1	9 28	23 43.43	-8 18.7	2.487	3.469	3.9	20.9
10 8	23 37.37	+10 2.7	2.263	3.222	6.0	19.3	10 8	23 36.21	-8 39.1	2.524	3.459	6.8	21.1
10 18	23 32.07	+8 57.1	2.320	3.225	8.8	19.5	10 18	23 30.12	-8 49.0	2.588	3.449	9.6	21.3
10 28	23 28.48	+7 56.5	2.403	3.228	11.4	19.7	10 28	23 25.63	-8 47.1	2.676	3.438	12.1	21.4
135533	2002 CF ₅₂		9 19.9 125°30	0°1/19.9	17		357453	2004 DK ₈		9 19.9 287°42	1°0/20.8	18	
8 19	0 16.46	+1 19.1	1.628	2.503	14.4	20.2	8 19	0 12.17	+2 56.7	1.853	2.724	13.2	21.3
8 29	0 9.88	+0 41.8	1.575	2.518	10.4	20.0	8 29	0 6.94	+2 44.4	1.768	2.708	9.7	21.0
9 8	0 1.30	-0 7.8	1.546	2.533	5.8	19.7	9 8	23 59.81	+2 19.6	1.707	2.691	5.7	20.8
9 18	23 51.58	-1 4.5	1.543	2.547	0.9	19.4	9 18	23 51.38	+1 45.4	1.672	2.675	1.6	20.5
9 28	23 41.83	-2 1.1	1.568	2.560	3.9	19.7	9 28	23 42.61	+1 6.4	1.664	2.658	3.4	20.6
10 8	23 33.18	-2 50.6	1.620	2.573	8.4	20.0	10 8	23 34.50	+0 28.7	1.684	2.642	7.7	20.8
10 18	23 26.47	-3 27.9	1.698	2.585	12.4	20.3	10 18	23 27.95	-0 2.5	1.729	2.626	11.7	21.0
10 28	23 22.26	-3 49.7	1.797	2.597	15.7	20.5	10 28	23 23.65	-0 22.7	1.796	2.609	15.1	21.2
192399	1996 XL ₂₉		9 19.9 337°28	1°6/18.8	18		113667	2002 TB ₉₁		9 19.9 295°97	1°2/18.8	17	
8 19	0 9.70	-2 23.2	1.259	2.166	15.6	19.3	8 19	0 12.84	-4 29.6	2.346	3.226	10.5	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
390915	2005 <i>EE</i> ₁₇₉		9 19.9 117°41'	0°1'/20.0	18		38004	1998 <i>KJ</i> ₄₇		9 19.9 105°97'	1°2'/21.2	18	
8 19	0 9.40	+ 3 18.3	1.950	2.822	12.6	21.6	8 19	0 11.74	+ 5 14.9	1.842	2.707	13.5	18.4
8 29	0 4.67	+ 2 9.5	1.889	2.831	9.0	21.4	8 29	0 6.41	+ 4 35.9	1.784	2.719	9.9	18.2
9 8	23 58.37	+ 0 47.0	1.852	2.839	5.1	21.2	9 8	23 59.36	+ 3 42.1	1.749	2.731	5.9	18.0
9 18	23 51.12	- 0 43.5	1.842	2.846	0.9	20.9	9 18	23 51.32	+ 2 37.9	1.741	2.743	1.8	17.7
9 28	23 43.79	- 2 14.6	1.861	2.854	3.4	21.2	9 28	23 43.21	+ 1 29.6	1.760	2.755	3.2	17.8
10 8	23 37.21	- 4 38.6	1.908	2.861	7.4	21.4	10 8	23 35.97	+ 0 24.3	1.808	2.766	7.2	18.1
10 18	23 32.09	- 4 49.5	1.982	2.868	10.9	21.7	10 18	23 30.33	- 0 32.0	1.881	2.777	10.9	18.4
10 28	23 28.94	- 5 43.2	2.078	2.875	13.9	21.9	10 28	23 26.82	- 1 14.8	1.977	2.788	14.0	18.6
115151	2003 <i>SP</i> ₆₇		9 19.9 284°06'	0°0'/19.9	18		343460	2010 <i>EB</i> ₄₂		9 19.9 188°76'	1°1'/18.9	18	
8 19	0 6.98	+ 2 28.4	2.341	3.212	10.8	19.6	8 19	0 12.13	- 1 59.8	1.826	2.711	12.6	21.1
8 29	0 2.87	+ 1 30.6	2.255	3.197	7.8	19.3	8 29	0 6.77	- 2 39.1	1.761	2.711	9.0	20.9
9 8	23 57.37	+ 0 20.8	2.194	3.181	4.4	19.1	9 8	23 59.62	- 3 27.3	1.721	2.711	4.9	20.7
9 18	23 50.97	- 0 56.9	2.161	3.165	0.7	18.8	9 18	23 51.38	- 4 19.0	1.707	2.711	1.2	20.4
9 28	23 44.35	- 2 16.6	2.157	3.150	3.0	19.0	9 28	23 42.97	- 5 8.1	1.721	2.710	4.2	20.6
10 8	23 38.23	- 3 32.1	2.182	3.134	6.7	19.2	10 8	23 35.38	- 5 48.5	1.762	2.710	8.3	20.9
10 18	23 33.26	- 4 37.8	2.233	3.118	10.0	19.4	10 18	23 29.41	- 6 16.0	1.828	2.709	12.0	21.1
10 28	23 29.95	- 5 29.8	2.308	3.102	12.8	19.5	10 28	23 25.62	- 6 27.9	1.915	2.709	15.1	21.3
108568	2001 <i>MA</i> ₁		9 19.9 74°97'	5°9'/13.9	18		27316	2000 <i>BS</i> ₃		9 19.9 188°65'	1°4'/18.6	18	
8 19	0 11.89	-14 50.1	1.784	2.686	12.0	19.0	8 19	0 14.56	- 2 36.9	1.897	2.778	12.4	19.3
8 29	0 6.50	-16 9.2	1.747	2.699	8.9	18.9	8 29	0 8.48	- 3 20.9	1.830	2.778	8.9	19.0
9 8	23 59.37	-17 24.7	1.734	2.712	6.4	18.8	9 8	0 0.57	- 4 13.2	1.787	2.777	4.9	18.8
9 18	23 51.29	-18 28.5	1.748	2.725	6.1	18.8	9 18	23 51.54	- 5 8.4	1.772	2.775	1.4	18.6
9 28	23 43.22	-19 13.9	1.788	2.739	8.2	18.9	9 28	23 42.34	- 6 0.1	1.785	2.773	4.3	18.8
10 8	23 36.13	-19 36.9	1.853	2.752	11.1	19.1	10 8	23 33.95	- 6 42.5	1.826	2.770	8.4	19.0
10 18	23 30.75	-19 36.9	1.941	2.765	13.9	19.3	10 18	23 27.19	- 7 11.3	1.892	2.766	12.0	19.2
10 28	23 27.58	-19 15.4	2.048	2.778	16.2	19.6	10 28	23 22.65	- 7 24.2	1.980	2.762	15.1	19.4
261547	2005 <i>WY</i> ₁₃₈		9 19.9 69°87'	1°6'/21.7	18		280915	2005 <i>YK</i> ₉₂		9 19.9 130°39'	1°3'/18.8	15	
8 19	0 10.09	+ 5 58.9	2.067	2.926	12.5	21.0	8 19	0 12.34	- 1 41.7	1.716	2.603	13.2	21.5
8 29	0 5.07	+ 5 35.4	2.008	2.939	9.3	20.8	8 29	0 6.98	- 2 30.6	1.657	2.608	9.4	21.3
9 8	23 58.55	+ 4 58.6	1.973	2.952	5.7	20.6	9 8	23 59.75	- 3 29.3	1.621	2.612	5.1	21.1
9 18	23 51.16	+ 4 11.6	1.964	2.965	2.2	20.4	9 18	23 51.40	- 4 31.8	1.612	2.616	1.3	20.8
9 28	23 43.70	+ 3 19.5	1.984	2.978	2.9	20.5	9 28	23 42.93	- 5 30.9	1.630	2.619	4.4	21.0
10 8	23 37.00	+ 2 28.0	2.031	2.991	6.5	20.7	10 8	23 35.35	- 6 20.0	1.675	2.623	8.7	21.3
10 18	23 31.70	+ 1 42.1	2.105	3.004	9.8	20.9	10 18	23 29.50	- 6 54.3	1.745	2.626	12.5	21.5
10 28	23 28.30	+ 1 6.1	2.202	3.017	12.7	21.2	10 28	23 25.93	- 7 11.3	1.836	2.630	15.6	21.8
264976	2003 <i>BW</i> ₄₂		9 19.9 242°73'	10°8'/7.9	16		99669	2002 <i>JE</i> ₅		9 19.9 89°34'	3°3'/24.2	18	
8 19	0 10.40	-13 57.9	1.041	1.968	16.4	19.4	8 19	0 8.31	+12 41.7	2.289	3.116	12.5	19.7
8 29	0 6.68	-18 24.4	1.002	1.964	12.5	19.2	8 29	0 3.77	+12 14.9	2.219	3.123	9.8	19.5
9 8	0 0.05	-22 53.3	0.988	1.960	10.8	19.1	9 8	23 57.85	+11 30.7	2.171	3.131	6.7	19.4
9 18	23 51.46	-26 56.9	1.000	1.956	12.6	19.2	9 18	23 51.09	+10 31.5	2.150	3.138	4.0	19.2
9 28	23 42.50	-30 11.5	1.036	1.952	16.4	19.4	9 28	23 44.22	+ 9 21.7	2.157	3.145	3.6	19.2
10 8	23 34.84	-32 25.5	1.092	1.948	20.4	19.7	10 8	23 37.98	+ 8 7.1	2.192	3.153	6.0	19.4
10 18	23 29.80	-33 39.1	1.165	1.944	23.8	19.9	10 18	23 33.00	+ 6 54.1	2.254	3.160	8.9	19.6
10 28	23 28.19	-33 59.9	1.250	1.939	26.6	20.1	10 28	23 29.76	+ 5 48.3	2.342	3.167	11.7	19.8
83678	2001 <i>TC</i> ₄₇		9 19.9 29°46'	7°5'/14.2	18		444991	2008 <i>FH</i> ₁₁₆		9 19.9 298°97'	0°1'/20.1	18	
8 19	0 14.81	-18 59.3	1.511	2.414	13.7	17.9	8 19	0 7.75	+ 3 9.9	2.017	2.891	12.1	21.5
8 29	0 8.79	-19 47.1	1.476	2.425	10.5	17.7	8 29	0 3.56	+ 2 6.7	1.944	2.887	8.8	21.2
9 8	0 0.71	-20 25.8	1.465	2.437	8.0	17.6	9 8	23 57.82	+ 0 49.6	1.896	2.883	5.0	21.0
9 18	23 51.52	-20 47.6	1.478	2.449	7.7	17.6	9 18	23 51.11	- 0 36.1	1.875	2.879	0.9	20.7
9 28	23 42.46	-20 46.8	1.515	2.463	9.7	17.8	9 28	23 44.22	- 2 3.7	1.883	2.876	3.3	20.9
10 8	23 34.66	-20 21.6	1.577	2.476	12.6	18.0	10 8	23 37.98	- 3 25.5	1.918	2.872	7.3	21.1
10 18	23 28.96	-19 33.7	1.660	2.491	15.5	18.2	10 18	23 33.11	- 4 35.5	1.980	2.868	10.8	21.4
10 28	23 25.86	-18 26.4	1.761	2.506	18.0	18.5	10 28	23 30.12	- 5 29.2	2.064	2.865	13.9	21.6
167134	2003 <i>SF</i> ₁₆₇		9 19.9 268°29'	1°4'/21.2	18		358779	2008 <i>DA</i> ₆₃		9 19.9 69°31'	0°1'/19.9	18	
8 19	0 15.15	+ 3 21.4	1.902	2.766	13.2	20.0	8 19	0 15.35	- 0 46.3	1.965	2.839	12.4	21.1
8 29	0 9.07	+ 3 26.6	1.817	2.751	9.8	19.7	8 29	0 8.82	- 0 48.1	1.914	2.857	8.9	20.9
9 8	0 1.01	+ 3 20.5	1.755	2.737	5.9	19.5	9 8	0 0.64	- 0 57.4	1.888	2.875	5.0	20.7
9 18	23 51.62	+ 3 5.0	1.719	2.721	2.0	19.2	9 18	23 51.57	- 1 11.0	1.889	2.893	0.8	20.4
9 28	23 41.86	+ 2 44.1	1.712	2.706	3.4	19.3	9 28	23 42.51	- 1 24.8	1.919	2.911	3.3	20.7
10 8	23 32.78	+ 2 22.4	1.733	2.691	7.6	19.5	10 8	23 34.37	- 1 35.0	1.977	2.930	7.2	20.9
10 18	23 25.29	+ 2 4.7	1.779	2.675	11.5	19.7	10 18	23 27.86	- 1 38.4	2.061	2.948	10.6	21.2
10 28	23 20.10	+ 1 55.3	1.849	2.659	14.9	19.9	10 28	23 23.47	- 1 32.8	2.168	2.966	13.4	21.4
322667	1999 <i>TC</i> ₇₉		9 19.9 29°50'	3°2'/18.1	17		155456	1998 <i>QQ</i> ₆₂		9 19.9 85°78'	1°3'/21.1	18	
8 19	0 16.71	- 6 58.0	1.119	2.029	16.9	19.9	8 19	0 14.19	+ 5 56.7	1.224	2.105	17.8	19.3
8 29	0 10.72	- 7 15.3	1.075	2.036	12.0	19.6	8 29	0 8.75	+ 5 5.2	1.177	2.121	13.1	19.1
9 8	0 2.02	- 7 37.2	1.052	2.044	6.8	19.4	9 8	0 0.89	+ 3 51.6	1.151	2.136	7.7	18.8
9 18	23 51.76	- 7 56.3	1.052	2.054	3.2	19.2	9 18	23 51.62	+ 2 23.0	1.148	2.151	2.3	18.5
9 28	23 41.51	- 8 5.4	1.076	2.063	6.6	19.4	9 28	23 42.34	+ 0 49.8	1.171	2.166	4.2	18.7
10 8	23 32.78	- 7 59.2	1.124	2.074	11.6	19.7	10 8	23 34.40	- 0 36.3	1.219	2.181	9.5	19.0
10 18	23 26.68	- 7 35.8	1.193	2.085	16.1	20.1	10 18	23 28.79	- 1 46.5	1.290	2.196	14.2	19.4
10 28	23 23.79	- 6 55.3	1.280	2.097	19.9	20.3	10 28	23 26.11	- 2 35.5	1.381	2.210	18.0	19.7
245335	2005 <i>EW</i> ₁₄₇		9 19.9 168°16'	0°6'/19.3	18		451147	2009 <i>RR</i>					

EPHEMERIDES

9 19.9

9 20.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
444658	2007 CX ₁₉		9 19.9 280°90	0°9/18.9	17		321439	2009 QW ₅₀		9 20.0 344°38	0°4/19.5	18	
8 19	0 9.20	- 0 41.4	2.104	2.986	11.4	21.6	8 19	0 7.13	+ 1 29.5	1.953	2.834	12.1	20.3
8 29	0 4.65	- 1 32.9	2.018	2.966	8.2	21.4	8 29	0 3.17	+ 0 29.1	1.884	2.831	8.7	20.1
9 8	23 58.49	- 2 34.8	1.957	2.947	4.5	21.1	9 8	23 57.63	- 0 43.8	1.838	2.828	4.8	19.9
9 18	23 51.25	- 3 42.6	1.923	2.927	1.0	20.8	9 18	23 51.12	- 2 3.8	1.820	2.825	0.8	19.6
9 28	23 43.72	- 4 49.9	1.917	2.907	3.8	21.0	9 28	23 44.45	- 3 24.0	1.830	2.822	3.6	19.8
10 8	23 36.74	- 5 50.4	1.939	2.887	7.7	21.2	10 8	23 38.44	- 4 37.0	1.867	2.820	7.5	20.1
10 18	23 31.08	- 6 38.9	1.987	2.867	11.3	21.4	10 18	23 33.81	- 5 37.3	1.930	2.818	11.1	20.3
10 28	23 27.32	- 7 11.8	2.058	2.847	14.3	21.5	10 28	23 31.10	- 6 20.9	2.015	2.816	14.2	20.5
228468	2001 RB ₁₁₃		9 19.9 312°67	0°3/20.2	18		98550	2000 VR ₆₀		9 20.0 239°95	4°9/15.2	18	
8 19	0 11.97	+ 1 16.5	1.355	2.247	15.7	20.6	8 19	0 13.86	- 12 41.6	1.874	2.771	11.8	19.2
8 29	0 7.40	+ 0 58.5	1.278	2.229	11.6	20.3	8 29	0 8.08	- 13 41.6	1.810	2.762	8.6	19.0
9 8	0 0.35	+ 0 25.4	1.222	2.211	6.7	20.0	9 8	0 0.43	- 14 41.4	1.771	2.754	5.8	18.8
9 18	23 51.59	- 0 18.4	1.189	2.193	1.3	19.6	9 18	23 51.60	- 15 33.9	1.758	2.744	5.0	18.7
9 28	23 42.34	- 1 5.7	1.182	2.176	4.4	19.7	9 28	23 42.57	- 16 12.2	1.773	2.735	7.3	18.9
10 8	23 33.97	- 1 48.4	1.199	2.159	9.8	20.0	10 8	23 34.37	- 16 31.6	1.814	2.725	10.5	19.0
10 18	23 27.65	- 2 19.4	1.239	2.143	14.7	20.2	10 18	23 27.82	- 16 30.4	1.878	2.715	13.7	19.2
10 28	23 24.24	- 2 33.6	1.298	2.128	18.9	20.5	10 28	23 23.53	- 16 8.8	1.962	2.705	16.5	19.4
322552	2011 YT ₄₆		9 19.9 300°05	5°4/13.9	18		168695	2000 GT ₁₁₈		9 20.0 261°25	0°8/20.8	18	
8 19	0 10.18	- 14 46.3	1.995	2.896	11.0	20.4	8 19	0 10.10	+ 4 3.3	1.928	2.797	12.8	20.9
8 29	0 5.34	- 15 58.3	1.937	2.889	8.2	20.2	8 29	0 5.36	+ 3 24.5	1.851	2.790	9.4	20.7
9 8	23 58.83	- 17 8.4	1.904	2.882	5.9	20.1	9 8	23 58.90	+ 2 31.4	1.798	2.782	5.5	20.4
9 18	23 51.30	- 18 9.6	1.897	2.875	5.7	20.0	9 18	23 51.35	+ 1 28.1	1.772	2.775	1.4	20.2
9 28	23 43.61	- 18 55.1	1.917	2.868	7.7	20.2	9 28	23 43.56	+ 0 20.7	1.773	2.767	3.2	20.3
10 8	23 36.67	- 19 20.5	1.963	2.862	10.6	20.3	10 8	23 36.45	- 0 44.0	1.802	2.760	7.3	20.5
10 18	23 31.22	- 19 24.4	2.032	2.855	13.4	20.5	10 18	23 30.81	- 1 39.9	1.857	2.752	11.1	20.7
10 28	23 27.80	- 19 7.1	2.120	2.849	15.8	20.7	10 28	23 27.24	- 2 22.2	1.935	2.744	14.4	20.9
330535	2007 YL ₄₂		9 19.9 232°87	0°8/20.7	17		467743	2009 SB ₅₇		9 20.0 35°75	1°9/23.7	16	
8 19	0 14.78	+ 3 23.2	1.680	2.551	14.3	21.5	8 19	0 3.86	+ 10 7.5	3.951	4.774	7.8	21.1
8 29	0 8.99	+ 2 55.6	1.602	2.541	10.6	21.2	8 29	0 0.16	+ 9 54.6	3.873	4.778	6.0	21.0
9 8	0 1.05	+ 2 13.1	1.546	2.530	6.2	20.9	9 8	23 55.70	+ 9 32.9	3.821	4.783	4.0	20.9
9 18	23 51.70	+ 1 19.4	1.516	2.519	1.6	20.6	9 18	23 50.79	+ 9 3.8	3.797	4.787	2.3	20.8
9 28	23 41.99	+ 0 20.9	1.513	2.507	3.7	20.7	9 28	23 45.80	+ 8 29.2	3.803	4.792	2.2	20.8
10 8	23 33.08	- 0 34.9	1.538	2.495	8.4	21.0	10 8	23 41.13	+ 7 52.0	3.838	4.796	3.8	20.9
10 18	23 25.96	- 1 21.4	1.588	2.482	12.7	21.2	10 18	23 37.14	+ 7 14.8	3.902	4.801	5.7	21.0
10 28	23 21.35	- 1 53.7	1.659	2.469	16.4	21.4	10 28	23 34.12	+ 6 40.3	3.992	4.806	7.5	21.2
350568	2000 XH ₄		9 19.9 341°03	7°7/25.9	18		437295	2013 BJ ₃₇		9 20.0 224°78	1°1/22.2	18	
8 19	0 11.74	+ 16 29.6	1.404	2.238	18.6	19.6	8 19	0 3.49	+ 6 11.7	4.507	5.346	6.6	21.5
8 29	0 7.23	+ 17 14.8	1.330	2.229	15.4	19.4	8 29	23 59.83	+ 5 56.0	4.424	5.343	4.9	21.4
9 8	0 0.25	+ 17 34.2	1.275	2.222	11.8	19.2	9 8	23 55.49	+ 5 34.0	4.367	5.340	3.1	21.3
9 18	23 51.58	+ 17 25.5	1.242	2.215	8.7	19.0	9 18	23 50.75	+ 5 7.0	4.339	5.337	1.4	21.1
9 28	23 42.44	+ 16 50.5	1.232	2.209	7.7	18.9	9 28	23 45.94	+ 4 36.8	4.341	5.334	1.6	21.1
10 8	23 34.21	+ 15 55.7	1.246	2.203	9.9	19.0	10 8	23 41.38	+ 4 5.8	4.373	5.331	3.4	21.3
10 18	23 28.06	+ 14 50.8	1.282	2.199	13.4	19.2	10 18	23 37.41	+ 3 36.1	4.435	5.328	5.2	21.4
10 28	23 24.83	+ 13 46.2	1.340	2.195	16.9	19.4	10 28	23 34.28	+ 3 9.9	4.522	5.324	6.8	21.5
194981	2002 AU ₂₀₃		9 20.0 29°35	0°3/19.8	18		454014	2012 DO ₄₄		9 20.0 242°85	1°6/17.6	18	
8 19	0 12.01	+ 0 28.2	1.510	2.399	14.6	20.1	8 19	0 7.40	- 1 31.3	2.474	3.354	10.0	21.3
8 29	0 6.96	- 0 3.9	1.453	2.403	10.5	19.9	8 29	0 3.12	- 3 8.2	2.396	3.345	7.0	21.1
9 8	23 59.86	- 0 48.5	1.417	2.407	5.9	19.6	9 8	23 57.53	- 4 54.8	2.345	3.335	3.8	20.9
9 18	23 51.49	- 1 40.2	1.406	2.411	0.9	19.3	9 18	23 51.11	- 6 45.3	2.324	3.326	1.6	20.7
9 28	23 42.99	- 2 31.9	1.422	2.415	4.1	19.6	9 28	23 44.51	- 8 32.5	2.334	3.316	4.1	20.9
10 8	23 35.48	- 3 16.2	1.464	2.420	8.8	19.8	10 8	23 38.40	- 10 9.5	2.373	3.306	7.3	21.1
10 18	23 29.86	- 3 47.8	1.529	2.425	13.0	20.1	10 18	23 33.40	- 11 31.2	2.439	3.296	10.3	21.3
10 28	23 26.75	- 4 3.1	1.615	2.430	16.5	20.4	10 28	23 29.98	- 12 34.4	2.529	3.285	12.8	21.5
37967	1998 HG ₉₃		9 20.0 206°28	4°5/16.1	18		96997	1999 TF ₂₂₅		9 20.0 291°40	0°6/20.6	18	
8 19	0 16.77	- 12 46.0	1.881	2.773	12.0	18.4	8 19	0 10.27	+ 3 29.5	1.689	2.566	13.9	20.7
8 29	0 10.08	- 13 23.1	1.821	2.770	8.8	18.2	8 29	0 5.80	+ 2 49.8	1.603	2.547	10.3	20.4
9 8	0 1.50	- 13 58.8	1.784	2.767	5.7	18.0	9 8	23 59.30	+ 1 53.7	1.541	2.527	6.0	20.1
9 18	23 51.77	- 14 26.7	1.775	2.764	4.6	18.0	9 18	23 51.43	+ 0 45.5	1.504	2.507	1.4	19.8
9 28	23 41.92	- 14 41.3	1.794	2.761	6.8	18.1	9 28	23 43.16	- 0 27.8	1.494	2.488	3.7	19.9
10 8	23 32.99	- 14 39.2	1.840	2.757	10.1	18.3	10 8	23 35.57	- 1 37.9	1.510	2.469	8.4	20.1
10 18	23 25.81	- 14 19.3	1.909	2.753	13.3	18.5	10 18	23 29.62	- 2 37.6	1.551	2.449	12.7	20.4
10 28	23 20.97	- 13 42.3	2.000	2.749	16.0	18.7	10 28	23 26.03	- 3 21.2	1.614	2.430	16.5	20.6
517218	2014 AL ₅₇		9 20.0 218°40	1°6/21.6	18		20988	1981 EC ₄₃		9 20.0 24°10	1°0/20.8	18	
8 19	0 12.70	+ 5 49.1	2.111	2.965	12.5	22.4	8 19	0 7.73	+ 5 12.8	0.971	1.876	19.3	17.0
8 29	0 7.12	+ 5 26.0	2.029	2.958	9.3	22.2	8 29	0 4.53	+ 4 19.8	0.929	1.885	14.1	16.7
9 8	23 59.86	+ 4 49.0	1.971	2.950	5.7	22.0	9 8	23 58.71	+ 3 1.7	0.906	1.896	8.2	16.4
9 18	23 51.50	+ 4 1.1	1.940	2.941	2.2	21.7	9 18	23 51.31	+ 1 27.0	0.905	1.908	2.1	16.1
9 28	23 42.90	+ 3 6.8	1.938	2.932	3.1	21.8	9 28	23 43.85	- 0 11.2	0.926	1.922	4.6	16.4
10 8	23 34.93	+ 2 12.1	1.964	2.922	6.8	22.0	10 8	23 37.80	- 1 39.3	0.969	1.936	10.5	16.7
10 18	23 28.38	+ 1 22.6	2.017	2.912	10.4	22.2	10 18	23 34.21	- 2 47.3	1.033	1.952	15.6	17.1
10 28	23 23.82	+ 0 43.0	2.094	2.901	13.5	22.4	10 28	23 33.68	- 3 29.7	1.116	1.969	19.8	17.4
83332	2001 RN ₁₃₁		9 20.0 326°87	1°6/18.5	18		36982	2000 SX ₃₃₆		9 20.0 1°27	0°9/18.9	18	