

EPHEMERIDES

8 5.9

8 6.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
444722	2007 <i>FQ</i> ₆		8 5.9 256°64	9°0/30.1	18		144410	2004 <i>EF</i> ₉		8 5.9 123°35	2°4/ 8.0	17	
6 30	21 42.27	-46 2.9	2.493	3.303	12.3	21.6	6 30	21 27.90	-7 6.7	2.330	3.140	13.0	20.7
7 10	21 35.00	-46 50.0	2.422	3.292	10.7	21.5	7 10	21 23.48	-7 20.5	2.255	3.151	10.3	20.5
7 20	21 25.11	-47 25.1	2.374	3.280	9.5	21.4	7 20	21 17.39	-7 46.7	2.202	3.162	7.2	20.3
7 30	21 13.35	-47 41.0	2.350	3.269	9.0	21.3	7 30	21 10.11	-8 23.7	2.174	3.172	4.1	20.2
8 9	21 0.86	-47 32.7	2.351	3.257	9.5	21.3	8 9	21 2.34	-9 8.2	2.174	3.182	2.4	20.1
8 19	20 48.93	-46 58.7	2.377	3.245	10.8	21.4	8 19	20 54.79	-9 56.7	2.202	3.191	4.6	20.2
8 29	20 38.73	-46 0.5	2.427	3.233	12.5	21.5	8 29	20 48.20	-10 45.3	2.258	3.201	7.7	20.4
9 8	20 31.09	-44 42.8	2.497	3.220	14.2	21.6	9 8	20 43.17	-11 30.2	2.339	3.210	10.6	20.6
35514	1998 <i>FZ</i> ₅₆		8 5.9 172°75	3°7/ 3.2	18		298695	2004 <i>EV</i> ₁₃		8 5.9 82°35	3°6/ 3.3	18	
6 30	21 31.47	-26 30.1	2.262	3.114	12.0	19.5	6 30	21 30.09	-24 26.2	1.994	2.852	13.1	20.3
7 10	21 26.43	-27 5.7	2.189	3.114	9.3	19.3	7 10	21 25.63	-25 17.4	1.928	2.857	10.0	20.2
7 20	21 19.41	-27 41.6	2.140	3.115	6.3	19.1	7 20	21 19.02	-26 11.1	1.884	2.863	6.7	20.0
7 30	21 10.95	-28 12.7	2.116	3.116	4.0	19.0	7 30	21 10.86	-27 1.6	1.866	2.868	4.0	19.8
8 9	21 1.89	-28 34.7	2.120	3.116	4.2	19.0	8 9	21 2.04	-27 43.2	1.874	2.873	4.3	19.8
8 19	20 53.13	-28 44.4	2.152	3.117	6.8	19.1	8 19	20 53.54	-28 11.8	1.909	2.878	7.2	20.0
8 29	20 45.56	-28 40.8	2.209	3.117	9.7	19.3	8 29	20 46.34	-28 25.3	1.970	2.883	10.4	20.2
9 8	20 39.85	-28 24.3	2.290	3.117	12.4	19.5	9 8	20 41.15	-28 23.9	2.053	2.888	13.3	20.4
342085	2008 <i>SC</i> ₄₄		8 5.9 237°78	5°2/10.0	18		210529	1999 <i>AF</i> ₁₅		8 5.9 304°76	0°7/ 5.5	18	
6 30	21 28.17	-0 3.0	2.134	2.917	14.9	21.8	6 30	21 26.75	-14 52.1	1.871	2.722	14.2	20.0
7 10	21 24.02	+0 3.9	2.036	2.906	12.4	21.6	7 10	21 23.24	-15 40.2	1.788	2.715	10.9	19.8
7 20	21 17.95	-0 6.8	1.959	2.894	9.6	21.4	7 20	21 17.60	-16 40.1	1.727	2.707	7.1	19.6
7 30	21 10.41	-0 35.6	1.906	2.882	6.8	21.2	7 30	21 10.33	-17 47.5	1.691	2.700	2.9	19.3
8 9	21 2.10	-1 20.9	1.878	2.870	5.2	21.1	8 9	21 2.26	-18 56.3	1.682	2.693	1.7	19.2
8 19	20 53.85	-2 19.5	1.878	2.857	6.3	21.1	8 19	20 54.33	-20 0.6	1.699	2.687	5.9	19.5
8 29	20 46.53	-3 26.2	1.904	2.843	9.1	21.3	8 29	20 47.55	-20 55.4	1.743	2.680	10.0	19.7
9 8	20 40.90	-4 35.4	1.954	2.830	12.2	21.4	9 8	20 42.72	-21 37.5	1.809	2.674	13.5	19.9
478072	2011 <i>UT</i> ₁₀		8 5.9 246°41	6°6/11.4	18		260366	2004 <i>US</i> ₃		8 5.9 254°86	6°0/31.9	18	
6 30	21 26.65	+4 0.2	2.184	2.946	15.2	21.8	6 30	21 34.63	-36 29.9	2.679	3.515	10.8	20.5
7 10	21 22.80	+4 17.3	2.090	2.938	13.0	21.6	7 10	21 28.83	-37 11.1	2.596	3.501	8.8	20.4
7 20	21 17.11	+4 15.3	2.015	2.929	10.5	21.4	7 20	21 21.00	-37 46.7	2.537	3.485	7.0	20.3
7 30	21 10.04	+3 52.8	1.963	2.920	8.1	21.3	7 30	21 11.68	-38 11.4	2.503	3.470	6.0	20.2
8 9	21 2.27	+3 10.8	1.935	2.911	6.6	21.2	8 9	21 1.69	-38 20.8	2.497	3.454	6.5	20.2
8 19	20 54.58	+2 11.9	1.934	2.902	7.2	21.2	8 19	20 51.95	-38 12.5	2.518	3.439	8.2	20.3
8 29	20 47.80	+1 1.1	1.960	2.893	9.3	21.3	8 29	20 43.36	-37 46.3	2.564	3.422	10.3	20.4
9 8	20 42.63	-0 15.4	2.009	2.883	12.0	21.4	9 8	20 36.64	-37 4.4	2.632	3.406	12.4	20.5
133525	2003 <i>SZ</i> ₃₁₄		8 5.9 147°37	2°3/ 3.9	18		431418	2007 <i>HZ</i> ₉₇		8 5.9 35°66	7°2/31.5	17	
6 30	21 28.34	-17 36.1	1.911	2.764	13.8	19.2	6 30	21 28.49	-27 8.9	1.369	2.252	16.5	20.0
7 10	21 24.41	-19 3.6	1.837	2.766	10.5	19.0	7 10	21 25.38	-29 11.7	1.323	2.264	12.8	19.8
7 20	21 18.31	-20 41.8	1.787	2.768	6.8	18.8	7 20	21 19.34	-31 16.9	1.298	2.276	9.2	19.7
7 30	21 10.57	-22 24.3	1.763	2.770	3.2	18.6	7 30	21 11.11	-33 12.5	1.297	2.289	7.2	19.6
8 9	21 2.04	-24 3.0	1.766	2.772	3.2	18.6	8 9	21 1.95	-34 46.9	1.321	2.302	8.3	19.7
8 19	20 53.69	-25 30.6	1.798	2.774	6.8	18.8	8 19	20 53.28	-35 52.7	1.368	2.317	11.4	19.9
8 29	20 46.53	-26 42.1	1.855	2.776	10.5	19.0	8 29	20 46.49	-36 27.9	1.437	2.331	14.7	20.1
9 8	20 41.36	-27 35.1	1.936	2.777	13.7	19.2	9 8	20 42.50	-36 34.8	1.524	2.346	17.7	20.4
453229	2008 <i>KZ</i> ₁₀		8 5.9 334°53	6°8/30.8	18		300764	2007 <i>VV</i> ₂₄₂		8 5.9 14°33	2°6/ 4.1	18	
6 30	21 29.16	-33 9.4	2.089	2.949	12.5	20.7	6 30	21 28.87	-20 39.0	1.774	2.636	14.3	21.1
7 10	21 25.13	-34 34.8	2.023	2.945	10.1	20.5	7 10	21 24.94	-21 27.0	1.704	2.637	10.9	20.8
7 20	21 18.82	-35 57.6	1.981	2.942	7.9	20.4	7 20	21 18.71	-22 21.4	1.656	2.638	7.1	20.6
7 30	21 10.80	-37 10.3	1.964	2.939	6.8	20.3	7 30	21 10.78	-23 16.6	1.632	2.639	3.5	20.4
8 9	21 1.98	-38 5.9	1.973	2.936	7.6	20.4	8 9	21 2.09	-24 6.4	1.634	2.641	3.4	20.4
8 19	20 53.39	-38 40.2	2.007	2.933	9.7	20.5	8 19	20 53.70	-24 45.5	1.663	2.642	7.0	20.6
8 29	20 46.11	-38 51.8	2.065	2.931	12.1	20.6	8 29	20 46.66	-25 10.7	1.717	2.644	10.8	20.9
9 8	20 40.94	-38 42.3	2.143	2.928	14.5	20.8	9 8	20 41.77	-25 21.1	1.793	2.646	14.1	21.1
440478	2005 <i>ST</i> ₂₈₈		8 5.9 42°75	1°2/ 7.0	18		425670	2010 <i>XP</i> ₆₇		8 5.9 154°86	0°0/ 5.8	17	
6 30	21 25.44	-9 26.8	2.067	2.898	13.7	20.8	6 30	21 31.97	-14 9.1	1.791	2.633	15.1	22.1
7 10	21 21.90	-10 10.0	1.991	2.903	10.7	20.6	7 10	21 27.19	-14 42.1	1.718	2.639	11.6	21.9
7 20	21 16.51	-11 7.2	1.936	2.907	7.2	20.4	7 20	21 20.12	-15 26.3	1.667	2.644	7.6	21.7
7 30	21 9.78	-12 15.2	1.907	2.912	3.5	20.2	7 30	21 11.36	-16 17.6	1.640	2.649	3.2	21.4
8 9	21 2.44	-13 29.1	1.905	2.917	1.4	20.0	8 9	21 1.85	-17 10.5	1.641	2.653	1.4	21.3
8 19	20 55.31	-14 43.3	1.930	2.922	4.9	20.3	8 19	20 52.63	-17 59.7	1.668	2.657	5.9	21.6
8 29	20 49.19	-15 52.8	1.983	2.927	8.6	20.5	8 29	20 44.76	-18 40.9	1.722	2.660	10.0	21.9
9 8	20 44.77	-16 53.2	2.060	2.932	11.8	20.7	9 8	20 39.04	-19 11.4	1.799	2.663	13.6	22.1
230932	2004 <i>VQ</i> ₇₈		8 5.9 47°80	5°5/ 9.4	18		112318	2002 <i>LD</i> ₆₀		8 6.0 50°69	2°7/ 7.8	18	
6 30	21 29.29	-2 49.0	1.672	2.484	17.3	19.9	6 30	21 28.03	-6 49.0	1.315	2.162	19.2	19.7
7 10	21 25.20	-2 18.3	1.599	2.488	14.2	19.7	7 10	21 24.78	-7 19.4	1.253	2.171	15.2	19.5
7 20	21 18.83	-2 5.4	1.545	2.493	10.7	19.5	7 20	21 18.82	-8 12.3	1.209	2.181	10.5	19.3
7 30	21 10.80	-2 11.2	1.513	2.498	7.3	19.3	7 30	21 10.88	-9 24.3	1.188	2.191	5.6	19.0
8 9	21 2.02	-2 34.1	1.506	2.503	5.5	19.2	8 9	21 2.07	-10 48.6	1.190	2.201	2.8	18.9
8 19	20 53.52	-3 10.5	1.525	2.508	7.1	19.3	8 19	20 53.67	-12 16.5	1.217	2.211	6.7	19.2
8 29	20 46.35	-3 55.3	1.568	2.513	10.3	19.5	8 29	20 46.93	-13 39.4	1.268	2.221	11.4	19.4
9 8	20 41.31	-4 42.6	1.634	2.518	13.7	19.8	9 8	20 42.75	-14 50.7	1.340	2.232	15.6	19.7
183388	2002 <i>XL</i> ₆₀		8 5.9 317°11	1°7/ 5.0	18		508030	2015 <i>BR</i> ₄₃₇		8 6.0 23°68	1°4/ 5.1	17	

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
293906	2007 RO ₃₁₇		8 6.0 55°96	1.1/ 6.8	18		522775	2016 NY ₇₆		8 6.0 329°83	0.2/ 6.1	18	
6 30	21 28.42	-11 37.9	1.850	2.690	14.8	21.1	6 30	21 27.51	-14 20.3	1.407	2.272	17.2	21.0
7 10	21 24.40	-11 55.8	1.775	2.692	11.5	20.9	7 10	21 24.49	-14 35.2	1.328	2.261	13.4	20.8
7 20	21 18.27	-12 25.9	1.720	2.694	7.7	20.7	7 20	21 18.77	-15 3.2	1.269	2.251	8.9	20.5
7 30	21 10.58	-13 5.4	1.690	2.696	3.6	20.4	7 30	21 10.95	-15 40.9	1.232	2.241	3.8	20.2
8 9	21 2.19	-13 50.1	1.686	2.698	1.5	20.3	8 9	21 2.07	-16 22.6	1.219	2.232	1.6	20.0
8 19	20 54.05	-14 35.2	1.709	2.700	5.4	20.6	8 19	20 53.40	-17 2.4	1.231	2.224	6.8	20.3
8 29	20 47.13	-15 16.3	1.758	2.703	9.4	20.8	8 29	20 46.27	-17 35.1	1.266	2.216	11.8	20.6
9 8	20 42.17	-15 50.2	1.830	2.705	12.9	21.0	9 8	20 41.68	-17 57.1	1.322	2.209	16.1	20.8
185823	2000 AA ₂₈		8 6.0 258°05	1.5/ 5.0	18 R		340417	2006 FE ₁₃		8 6.0 264°37	7.9/ 31.8	18	
6 30	21 31.59	-17 25.3	1.713	2.566	15.2	20.9	6 30	21 35.91	-35 31.8	1.839	2.693	14.2	21.2
7 10	21 27.32	-18 5.2	1.622	2.550	11.7	20.6	7 10	21 30.68	-36 35.2	1.770	2.686	11.6	21.0
7 20	21 20.50	-18 55.5	1.553	2.534	7.7	20.3	7 20	21 22.64	-37 33.0	1.723	2.679	9.2	20.8
7 30	21 11.64	-19 51.5	1.508	2.517	3.3	20.0	7 30	21 12.50	-38 16.7	1.700	2.672	7.9	20.7
8 9	21 1.70	-20 46.6	1.489	2.500	2.4	19.9	8 9	21 1.43	-38 39.2	1.702	2.665	8.6	20.8
8 19	20 51.82	-21 34.9	1.497	2.482	6.9	20.2	8 19	20 50.76	-38 36.7	1.729	2.657	10.8	20.9
8 29	20 43.25	-22 11.4	1.530	2.464	11.4	20.4	8 29	20 41.81	-38 9.6	1.778	2.650	13.5	21.0
9 8	20 36.99	-22 34.1	1.585	2.446	15.3	20.6	9 8	20 35.50	-37 21.3	1.848	2.643	16.1	21.2
198222	2004 TL ₁₇₆		8 6.0 354°56	4.8/ 3.5	18		396940	2005 JB ₂₅		8 6.0 127°03	4.3/ 9.3	16	
6 30	21 23.32	-23 40.0	1.058	1.961	18.7	18.6	6 30	21 28.02	-3 2.8	2.082	2.882	14.7	21.4
7 10	21 22.05	-24 22.9	0.998	1.952	14.4	18.4	7 10	21 23.83	-2 54.3	2.003	2.886	12.0	21.2
7 20	21 17.51	-25 11.9	0.955	1.945	9.7	18.1	7 20	21 17.78	-3 1.3	1.944	2.890	8.9	21.1
7 30	21 10.45	-25 58.3	0.933	1.939	5.5	17.8	7 30	21 10.37	-3 23.7	1.909	2.894	5.9	20.9
8 9	21 2.24	-26 32.9	0.931	1.936	5.8	17.8	8 9	21 2.35	-3 59.3	1.900	2.898	4.3	20.8
8 19	20 54.50	-26 48.9	0.951	1.934	10.2	18.1	8 19	20 54.54	-4 44.7	1.918	2.902	5.7	20.9
8 29	20 48.82	-26 43.2	0.992	1.935	15.0	18.3	8 29	20 47.77	-5 35.2	1.963	2.906	8.7	21.1
9 8	20 46.27	-26 16.8	1.050	1.937	19.2	18.6	9 8	20 42.71	-6 26.1	2.032	2.909	11.7	21.3
319288	2006 BD ₈₇		8 6.0 242°67	1.2/ 5.1	18		483863	2005 YO ₁₀₉		8 6.0 303°03	3.4/ 2.8	17	
6 30	21 29.69	-19 54.6	2.474	3.316	11.4	21.5	6 30	21 26.39	-20 55.0	2.032	2.892	12.9	21.3
7 10	21 24.89	-20 5.7	2.390	3.312	8.7	21.3	7 10	21 23.12	-22 22.5	1.933	2.865	9.9	21.1
7 20	21 18.35	-20 20.3	2.329	3.307	5.7	21.1	7 20	21 17.68	-24 0.3	1.857	2.839	6.6	20.8
7 30	21 10.56	-20 35.4	2.295	3.303	2.5	20.9	7 30	21 10.48	-25 42.0	1.808	2.812	3.8	20.6
8 9	21 2.21	-20 48.0	2.288	3.298	1.8	20.8	8 9	21 2.26	-27 19.9	1.786	2.786	4.3	20.6
8 19	20 54.07	-20 55.5	2.310	3.294	5.0	21.0	8 19	20 53.95	-28 46.5	1.791	2.759	7.6	20.7
8 29	20 46.90	-20 56.3	2.360	3.289	8.1	21.2	8 29	20 46.61	-29 56.2	1.822	2.733	11.2	20.9
9 8	20 41.33	-20 49.5	2.434	3.284	11.0	21.4	9 8	20 41.15	-30 46.4	1.876	2.707	14.5	21.0
431743	2008 FN ₁₃₇		8 6.0 227°69	8.5/ 12.2	18		509932	2009 OH ₂₄		8 6.0 327°69	0.7/ 6.2	18	
6 30	21 28.48	+ 6 0.2	1.764	2.529	18.2	22.0	6 30	21 31.35	-18 41.1	1.097	1.981	19.6	20.4
7 10	21 24.64	+ 6 31.2	1.679	2.525	15.7	21.8	7 10	21 28.53	-17 47.8	1.007	1.951	15.6	20.0
7 20	21 18.56	+ 6 38.5	1.611	2.521	12.9	21.6	7 20	21 22.09	-16 55.9	0.935	1.921	10.5	19.6
7 30	21 10.77	+ 6 19.4	1.564	2.516	10.2	21.4	7 30	21 12.59	-16 3.3	0.883	1.893	4.6	19.2
8 9	21 2.10	+ 5 33.9	1.541	2.511	8.6	21.3	8 9	21 1.32	-15 8.0	0.853	1.866	2.0	18.9
8 19	20 53.56	+ 4 25.4	1.541	2.505	9.0	21.3	8 19	20 50.04	-14 9.6	0.845	1.840	8.5	19.2
8 29	20 46.19	+ 3 0.4	1.567	2.500	11.2	21.5	8 29	20 40.70	-13 8.4	0.858	1.816	14.7	19.5
9 8	20 40.85	+ 1 27.2	1.616	2.494	14.1	21.6	9 8	20 34.80	-12 5.6	0.890	1.794	20.2	19.7
195028	2002 CD ₄₀		8 6.0 143°30	0.5/ 5.7	18		24238	Adkerson		8 6.0 81°31	4.8/ 3.1	18	
6 30	21 35.71	-18 19.3	1.936	2.777	14.2	19.5	6 30	21 33.21	-24 37.0	1.477	2.347	16.2	17.9
7 10	21 29.82	-18 13.3	1.862	2.782	10.9	19.3	7 10	21 28.71	-25 41.7	1.420	2.356	12.5	17.7
7 20	21 21.71	-18 12.0	1.810	2.788	7.1	19.0	7 20	21 21.38	-26 49.9	1.384	2.364	8.4	17.5
7 30	21 12.00	-18 12.4	1.784	2.793	3.0	18.8	7 30	21 11.97	-27 53.5	1.371	2.373	5.2	17.3
8 9	21 1.64	-18 11.2	1.785	2.797	1.5	18.7	8 9	21 1.71	-28 44.0	1.384	2.382	5.6	17.3
8 19	20 51.68	-18 5.9	1.815	2.802	5.7	19.0	8 19	20 51.96	-29 15.8	1.422	2.391	9.1	17.6
8 29	20 43.12	-17 55.2	1.871	2.806	9.5	19.2	8 29	20 44.04	-29 26.9	1.483	2.400	12.9	17.8
9 8	20 36.69	-17 38.5	1.951	2.810	12.9	19.5	9 8	20 38.83	-29 18.6	1.564	2.408	16.3	18.1
788	Hohensteina		8 6.0 72°86	4.6/ 10.4	18		478388	2012 BQ ₂₆		8 6.0 133°92	5.0/ 1.0	18	
6 30	21 25.54	+ 0 14.7	2.233	3.017	14.3	13.7	6 30	21 28.85	-29 32.3	2.407	3.262	11.3	21.3
7 10	21 21.76	+ 0 3.1	2.160	3.030	11.8	13.5	7 10	21 24.51	-30 51.1	2.342	3.265	8.8	21.1
7 20	21 16.32	- 0 26.2	2.107	3.043	9.0	13.3	7 20	21 18.25	-32 9.6	2.300	3.268	6.5	21.0
7 30	21 9.72	- 1 12.5	2.079	3.057	6.2	13.2	7 30	21 10.59	-33 21.5	2.285	3.271	5.1	20.9
8 9	21 2.61	- 2 13.0	2.076	3.070	4.6	13.1	8 9	21 2.28	-34 21.0	2.298	3.274	5.7	20.9
8 19	20 55.74	- 3 23.3	2.101	3.083	5.6	13.2	8 19	20 54.17	-35 4.3	2.338	3.277	7.8	21.1
8 29	20 49.82	- 4 38.4	2.154	3.096	8.0	13.4	8 29	20 47.13	-35 29.5	2.403	3.280	10.2	21.2
9 8	20 45.45	- 5 52.8	2.231	3.109	10.7	13.6	9 8	20 41.86	-35 37.1	2.489	3.283	12.5	21.4
373724	2002 SW ₁₆		8 6.0 272°92	1.0/ 5.4	18		382521	2001 SB ₁₉₀		8 6.0 273°57	0.6/ 5.6	18	
6 30	21 32.08	-17 12.9	1.642	2.497	15.6	20.9	6 30	21 31.60	-16 28.1	1.741	2.591	15.1	21.7
7 10	21 27.82	-17 35.3	1.550	2.478	12.2	20.7	7 10	21 27.33	-16 49.1	1.645	2.570	11.7	21.4
7 20	21 20.90	-18 7.4	1.478	2.459	8.0	20.4	7 20	21 20.52	-17 19.8	1.570	2.549	7.7	21.2
7 30	21 11.85	-18 44.8	1.430	2.439	3.4	20.0	7 30	21 11.70	-17 56.4	1.519	2.528	3.2	20.8
8 9	21 1.65	-19 22.2	1.408	2.419	2.1	19.9	8 9	21 1.77	-18 33.9	1.494	2.506	1.8	20.7
8 19	20 51.51	-19 54.0	1.412	2.399	6.9	20.2	8 19	20 51.87	-19 7.3	1.496	2.484	6.5	20.9
8 29	20 42.74	-20 16.1	1.441	2.379	11.6	20.4	8 29	20 43.23	-19 32.2	1.524	2.462	11.0	21.2
9 8	20 36.37	-20 26.5	1.491	2.359	15.7	20.6	9 8	20 36.84	-19 46.4	1.573	2.440	15.1	21.4
199990	2007 JT ₂₃		8 6.0 10°28	1.6/ 6.9	16		289555	2005 EF ₂₅₀		8 6.0 125°12	3.5/ 9.1	17	
6 30	21 24.74	-12 0.0	1.164	2.040	19.3								

EPHEMERIDES

8 6.0

8 6.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
504804	2010 <i>CT</i> ₆₅		8 6.0 141°23	3°9/ 9.0 17			459532	2013 <i>FL</i> ₆		8 6.0 73°39	5°6/ 3.3 17		
6 30	21 31.44	- 3 48.2	2.364	3.152	13.5	21.9	6 30	21 37.38	-26 2.9	1.214	2.090	18.6	21.0
7 10	21 26.15	- 3 34.0	2.287	3.164	11.0	21.8	7 10	21 32.30	-26 58.7	1.168	2.106	14.3	20.8
7 20	21 19.13	- 3 32.7	2.232	3.176	8.1	21.6	7 20	21 23.85	-27 55.7	1.142	2.123	9.8	20.6
7 30	21 10.91	- 3 44.2	2.202	3.187	5.3	21.5	7 30	21 13.02	-28 44.4	1.137	2.139	6.1	20.4
8 9	21 2.18	- 4 6.5	2.200	3.198	3.9	21.4	8 9	21 1.37	-29 15.8	1.157	2.155	6.5	20.5
8 19	20 53.69	- 4 36.9	2.226	3.208	5.3	21.5	8 19	20 50.59	-29 25.1	1.200	2.171	10.1	20.7
8 29	20 46.20	- 5 12.1	2.280	3.218	8.0	21.7	8 29	20 42.17	-29 12.3	1.266	2.187	14.2	21.0
9 8	20 40.31	- 5 48.4	2.360	3.226	10.7	21.9	9 8	20 37.02	-28 40.6	1.350	2.203	17.9	21.3
53778	2000 <i>ER</i> ₉₂		8 6.0 28°71	2°1/ 5.4 18			159303	2006 <i>BY</i> ₆₆		8 6.0 1°55	1°8/ 5.1 17		
6 30	21 33.93	-21 9.1	0.906	1.802	21.7	17.2	6 30	21 22.04	-17 55.2	1.037	1.936	19.3	18.7
7 10	21 30.20	-20 56.1	0.864	1.814	16.7	17.0	7 10	21 20.94	-18 21.8	0.980	1.933	14.8	18.4
7 20	21 22.68	-20 48.8	0.839	1.828	10.8	16.7	7 20	21 16.72	-19 0.6	0.940	1.931	9.6	18.1
7 30	21 12.53	-20 41.3	0.833	1.843	4.7	16.4	7 30	21 10.15	-19 45.7	0.921	1.931	4.1	17.8
8 9	21 1.54	-20 28.2	0.848	1.859	3.1	16.4	8 9	21 2.54	-20 28.8	0.922	1.934	3.0	17.8
8 19	20 51.63	-20 6.2	0.884	1.877	8.9	16.8	8 19	20 55.42	-21 2.5	0.945	1.938	8.4	18.1
8 29	20 44.40	-19 34.6	0.941	1.895	14.3	17.2	8 29	20 50.26	-21 21.8	0.989	1.944	13.6	18.4
9 8	20 40.75	-18 54.7	1.017	1.915	18.9	17.5	9 8	20 48.05	-21 24.6	1.052	1.952	18.1	18.7
129823	1999 <i>NJ</i> ₅₅		8 6.0 7°59	10°4/ 9.5 18			384839	2012 <i>SB</i> ₁		8 6.0 327°10	3°4/ 4.1 17		
6 30	21 28.03	- 2 58.9	0.955	1.814	23.8	18.2	6 30	21 29.53	-22 16.6	1.442	2.317	16.3	21.0
7 10	21 25.56	- 0 54.9	0.901	1.815	20.0	18.0	7 10	21 26.13	-22 52.4	1.366	2.305	12.6	20.7
7 20	21 19.75	+ 0 48.2	0.862	1.817	15.9	17.7	7 20	21 19.90	-23 34.2	1.310	2.294	8.4	20.5
7 30	21 11.41	+ 2 3.2	0.840	1.821	12.1	17.6	7 30	21 11.47	-24 15.8	1.277	2.284	4.3	20.2
8 9	21 1.95	+ 2 46.2	0.839	1.827	10.4	17.5	8 9	21 1.96	-24 49.8	1.268	2.274	4.2	20.2
8 19	20 53.03	+ 2 57.5	0.857	1.835	11.8	17.6	8 19	20 52.73	-25 10.6	1.283	2.264	8.4	20.4
8 29	20 46.24	+ 2 43.0	0.894	1.845	15.2	17.8	8 29	20 45.14	-25 15.2	1.322	2.256	12.8	20.6
9 8	20 42.66	+ 2 12.0	0.949	1.856	19.0	18.1	9 8	20 40.22	-25 3.4	1.381	2.248	16.8	20.9
465272	2007 <i>TS</i> ₁₁₂		8 6.0 142°74	3°6/ 8.2 17			461837	2006 <i>DQ</i> ₂₄		8 6.0 80°73	1°4/ 6.9 17		
6 30	21 30.80	- 6 23.7	1.466	2.299	18.3	21.8	6 30	21 31.38	-10 8.0	1.318	2.171	18.9	21.8
7 10	21 26.76	- 6 27.2	1.393	2.302	14.6	21.6	7 10	21 27.33	-10 42.0	1.261	2.184	14.7	21.6
7 20	21 20.10	- 6 50.0	1.339	2.304	10.4	21.3	7 20	21 20.50	-11 34.7	1.221	2.198	9.9	21.4
7 30	21 11.47	- 7 30.9	1.308	2.307	6.0	21.1	7 30	21 11.64	-12 41.5	1.205	2.212	4.6	21.1
8 9	21 1.92	- 8 25.5	1.301	2.309	3.6	20.9	8 9	21 1.94	-13 55.2	1.213	2.225	1.8	21.0
8 19	20 52.67	- 9 27.7	1.319	2.311	6.7	21.1	8 19	20 52.74	-15 7.6	1.246	2.239	6.7	21.3
8 29	20 44.95	-10 30.6	1.363	2.313	11.0	21.4	8 29	20 45.32	-16 11.7	1.303	2.252	11.5	21.6
9 8	20 39.68	-11 28.2	1.428	2.315	15.1	21.6	9 8	20 40.58	-17 2.9	1.381	2.265	15.7	21.9
185274	2006 <i>UR</i> ₁₇₄		8 6.0 294°54	4°8/ 3.5 18			426014	2011 <i>KN</i> ₃₁		8 6.0 358°24	6°9/ 31.9 18		
6 30	21 33.47	-25 35.0	1.449	2.321	16.4	20.2	6 30	21 24.76	-25 52.1	1.296	2.188	16.7	19.4
7 10	21 29.30	-26 16.1	1.370	2.306	12.8	20.0	7 10	21 22.80	-27 43.5	1.237	2.184	13.0	19.1
7 20	21 22.05	-27 0.4	1.311	2.292	8.8	19.7	7 20	21 17.87	-29 41.2	1.199	2.181	9.2	18.9
7 30	21 12.39	-27 40.2	1.275	2.278	5.4	19.5	7 30	21 10.65	-31 33.6	1.184	2.180	6.9	18.8
8 9	21 1.51	-28 7.6	1.264	2.264	5.7	19.4	8 9	21 2.33	-33 8.4	1.192	2.180	8.1	18.8
8 19	20 50.89	-28 17.0	1.277	2.250	9.4	19.6	8 19	20 54.34	-34 16.8	1.223	2.181	11.5	19.0
8 29	20 42.04	-28 6.3	1.313	2.236	13.7	19.8	8 29	20 48.15	-34 54.9	1.275	2.182	15.2	19.3
9 8	20 36.09	-27 37.0	1.369	2.223	17.6	20.0	9 8	20 44.79	-35 3.7	1.345	2.186	18.6	19.5
516101	2015 <i>UM</i> ₂		8 6.0 297°13	4°1/ 9.5 18			494228	2016 <i>ND</i> ₃₆		8 6.0 337°47	2°3/ 5.2 16		
6 30	21 24.81	- 2 20.3	2.262	3.060	13.8	21.2	6 30	21 23.98	-21 9.0	1.056	1.956	19.0	20.0
7 10	21 21.39	- 2 22.3	2.164	3.045	11.3	21.0	7 10	21 22.84	-21 3.5	0.973	1.926	14.9	19.7
7 20	21 16.24	- 2 40.1	2.086	3.031	8.5	20.8	7 20	21 18.34	-21 3.4	0.907	1.898	9.9	19.3
7 30	21 9.78	- 3 13.6	2.032	3.017	5.7	20.6	7 30	21 11.01	-21 3.7	0.861	1.871	4.5	18.9
8 9	21 2.64	- 4 0.6	2.005	3.003	4.1	20.5	8 9	21 2.12	-20 58.4	0.835	1.847	3.3	18.8
8 19	20 55.56	- 4 57.8	2.004	2.989	5.5	20.5	8 19	20 53.33	-20 42.5	0.831	1.824	9.1	19.0
8 29	20 49.31	- 6 0.6	2.031	2.975	8.3	20.7	8 29	20 46.45	-20 13.2	0.846	1.804	14.9	19.2
9 8	20 44.59	- 7 3.9	2.082	2.962	11.3	20.8	9 8	20 42.86	-19 30.6	0.879	1.786	20.1	19.5
220845	2004 <i>VP</i> ₆		8 6.0 257°28	0°5/ 5.6 18			507400	2012 <i>JT</i> ₉		8 6.0 29°52	1°4/ 5.3 17		
6 30	21 27.05	-16 10.7	2.555	3.392	11.2	21.1	6 30	21 29.85	-17 31.0	1.265	2.140	18.1	21.1
7 10	21 22.92	-16 38.0	2.461	3.380	8.6	20.9	7 10	21 26.36	-17 59.3	1.208	2.148	13.9	20.9
7 20	21 17.14	-17 12.2	2.391	3.368	5.6	20.7	7 20	21 19.96	-18 38.2	1.170	2.156	9.0	20.6
7 30	21 10.13	-17 50.5	2.347	3.356	2.3	20.4	7 30	21 11.43	-19 21.9	1.154	2.164	3.8	20.3
8 9	21 2.51	-18 29.2	2.331	3.343	1.3	20.3	8 9	21 2.04	-20 3.4	1.162	2.174	2.5	20.3
8 19	20 54.98	-19 5.0	2.344	3.331	4.6	20.6	8 19	20 53.19	-20 36.4	1.194	2.184	7.5	20.6
8 29	20 48.29	-19 35.0	2.385	3.318	7.9	20.7	8 29	20 46.21	-20 57.0	1.249	2.194	12.3	20.9
9 8	20 43.04	-19 57.3	2.450	3.305	10.7	20.9	9 8	20 42.01	-21 3.6	1.324	2.206	16.4	21.2
255453	2005 <i>YW</i> ₄₂		8 6.0 185°59	0°2/ 6.2 18			173606	2001 <i>EU</i> ₈		8 6.0 169°97	0°7/ 5.6 18		
6 30	21 27.18	-14 3.9	2.793	3.620	10.7	21.9	6 30	21 33.35	-15 55.2	1.854	2.696	14.6	21.1
7 10	21 22.78	-14 24.6	2.708	3.620	8.2	21.7	7 10	21 28.26	-16 29.4	1.779	2.700	11.3	20.9
7 20	21 16.91	-14 52.3	2.646	3.619	5.4	21.5	7 20	21 20.86	-17 13.0	1.725	2.703	7.3	20.7
7 30	21 9.99	-15 24.5	2.611	3.618	2.3	21.3	7 30	21 11.77	-18 1.8	1.697	2.706	3.0	20.4
8 9	21 2.59	-15 58.5	2.605	3.617	0.9	21.2	8 9	21 1.89	-18 50.2	1.696	2.708	1.7	20.3
8 19	20 55.33	-16 31.3	2.627	3.616	4.0	21.5	8 19	20 52.30	-19 33.3	1.723	2.709	6.0	20.6
8 29	20 48.85	-17 0.3	2.678	3.614	7.0	21.6	8 29	20 44.04	-20 7.2	1.776	2.710	10.0	20.9
9 8	20 43.70	-17 23.6	2.755	3.612	9.6	21.8	9 8	20 37.92	-20 30.0	1.852	2.710	13.5	21.1
273952	2007 <i>JZ</i> ₄₀		8 6.0 54°53										

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8 6.0

8 6.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
476151	2007 <i>TB</i> ₃₂₆		8 6.0 242°39	4.2/ 2.9 18			471521	2012 <i>FT</i> ₇₂		8 6.0 49°22	4.8/ 8.5 17		
6 30	21 33.38	-27 36.8	2.202	3.052	12.4	22.1	6 30	21 33.63	-6 19.4	1.195	2.039	20.9	20.2
7 10	21 28.17	-28 16.1	2.118	3.041	9.6	21.9	7 10	21 28.93	-5 49.5	1.155	2.067	16.7	20.0
7 20	21 20.77	-28 55.4	2.056	3.029	6.7	21.7	7 20	21 21.39	-5 40.3	1.132	2.096	11.9	19.8
7 30	21 11.73	-29 29.3	2.021	3.017	4.5	21.5	7 30	21 11.96	-5 51.0	1.130	2.126	7.2	19.6
8 9	21 1.91	-29 52.7	2.013	3.005	4.8	21.5	8 9	21 1.97	-6 17.6	1.151	2.156	4.8	19.6
8 19	20 52.30	-30 2.1	2.032	2.993	7.4	21.7	8 19	20 52.80	-6 54.4	1.196	2.186	7.4	19.8
8 29	20 43.89	-29 56.0	2.077	2.980	10.4	21.8	8 29	20 45.65	-7 34.9	1.265	2.217	11.5	20.1
9 8	20 37.48	-29 35.4	2.145	2.967	13.3	22.0	9 8	20 41.28	-8 13.3	1.354	2.248	15.3	20.5
323295	2003 <i>TC</i> ₅₃		8 6.0 261°67	3°3/ 4.0 17			35664	1998 <i>QC</i> ₆₄		8 6.0 61°51	6°6/ 13.0 18		
6 30	21 32.23	-21 6.8	1.522	2.388	16.1	21.6	6 30	21 24.71	+7 23.0	2.297	3.039	15.1	18.4
7 10	21 28.14	-21 59.2	1.443	2.377	12.4	21.3	7 10	21 21.22	+7 15.9	2.212	3.043	13.0	18.2
7 20	21 21.21	-22 59.9	1.384	2.367	8.2	21.0	7 20	21 16.08	+6 47.3	2.147	3.046	10.6	18.0
7 30	21 12.05	-24 2.2	1.349	2.356	4.2	20.8	7 30	21 9.74	+5 56.4	2.104	3.050	8.3	17.9
8 9	21 1.75	-24 57.9	1.340	2.345	4.2	20.8	8 9	21 2.84	+4 45.0	2.086	3.054	6.8	17.8
8 19	20 51.65	-25 40.2	1.356	2.334	8.3	21.0	8 19	20 56.10	+3 17.0	2.094	3.058	7.0	17.8
8 29	20 43.13	-26 5.1	1.395	2.323	12.7	21.2	8 29	20 50.25	+1 38.4	2.130	3.063	8.7	18.0
9 8	20 37.25	-26 11.9	1.456	2.312	16.6	21.4	9 8	20 45.90	-0 4.2	2.191	3.067	11.0	18.1
476836	2008 <i>UL</i> ₂₉₅		8 6.0 353°77	2°3/ 4.9 16			521341	2015 <i>LW</i> ₄₄		8 6.0 336°04	0°2/ 5.9 18		
6 30	21 24.32	-19 57.7	1.094	1.990	18.8	20.7	6 30	21 23.16	-12 53.9	1.436	2.304	16.7	20.5
7 10	21 22.69	-20 12.6	1.030	1.981	14.5	20.5	7 10	21 21.18	-13 43.6	1.354	2.289	13.0	20.2
7 20	21 17.90	-20 36.1	0.983	1.973	9.5	20.2	7 20	21 16.67	-14 51.1	1.292	2.275	8.6	19.9
7 30	21 10.69	-21 2.4	0.957	1.967	4.2	19.9	7 30	21 10.17	-16 11.9	1.252	2.262	3.6	19.6
8 9	21 2.36	-21 24.5	0.953	1.963	3.3	19.8	8 9	21 2.62	-17 38.5	1.236	2.249	1.7	19.4
8 19	20 54.46	-21 36.5	0.970	1.961	8.5	20.1	8 19	20 55.19	-19 2.3	1.246	2.238	6.9	19.7
8 29	20 48.51	-21 34.8	1.008	1.961	13.7	20.4	8 29	20 49.12	-20 15.5	1.279	2.227	11.8	20.0
9 8	20 45.56	-21 18.5	1.065	1.963	18.2	20.6	9 8	20 45.43	-21 12.8	1.333	2.218	16.1	20.2
263328	2008 <i>CU</i> ₆₁		8 6.0 77°44	1°6/ 7.1 17			482222	2010 <i>XW</i> ₂₇		8 6.0 302°34	0°5/ 6.4 18		
6 30	21 29.14	-9 22.6	1.501	2.346	17.3	20.7	6 30	21 27.57	-14 8.4	2.131	2.971	13.1	21.6
7 10	21 25.44	-9 55.5	1.432	2.351	13.6	20.5	7 10	21 23.67	-14 16.9	2.037	2.956	10.2	21.4
7 20	21 19.23	-10 46.4	1.382	2.356	9.2	20.3	7 20	21 17.83	-14 33.9	1.966	2.942	6.8	21.1
7 30	21 11.14	-11 51.9	1.355	2.361	4.5	20.0	7 30	21 10.53	-14 57.3	1.919	2.927	3.0	20.9
8 9	21 2.19	-13 5.5	1.353	2.366	1.9	19.9	8 9	21 2.49	-15 23.6	1.900	2.912	1.2	20.7
8 19	20 53.55	-14 20.2	1.378	2.371	6.2	20.2	8 19	20 54.56	-15 49.5	1.908	2.898	5.1	20.9
8 29	20 46.40	-15 28.8	1.427	2.376	10.8	20.4	8 29	20 47.61	-16 11.7	1.942	2.884	8.8	21.1
9 8	20 41.60	-16 26.3	1.498	2.381	14.8	20.7	9 8	20 42.39	-16 27.9	2.000	2.870	12.2	21.3
435793	2008 <i>UZ</i> ₃₅₈		8 6.0 330°53	1°3/ 5.2 17			510621	2012 <i>TA</i> ₁₄₂		8 6.0 274°22	0°8/ 6.6 18		
6 30	21 29.94	-18 4.9	1.661	2.520	15.3	21.3	6 30	21 29.00	-12 24.6	1.844	2.685	14.8	22.1
7 10	21 25.95	-18 30.2	1.585	2.516	11.7	21.0	7 10	21 25.07	-12 42.3	1.755	2.673	11.5	21.9
7 20	21 19.52	-19 3.7	1.531	2.513	7.6	20.8	7 20	21 18.91	-13 12.2	1.686	2.661	7.8	21.6
7 30	21 11.25	-19 40.9	1.500	2.509	3.2	20.5	7 30	21 11.03	-13 51.4	1.642	2.649	3.5	21.3
8 9	21 2.14	-20 16.3	1.495	2.506	2.2	20.4	8 9	21 2.28	-14 35.9	1.624	2.636	1.4	21.1
8 19	20 53.30	-20 45.0	1.516	2.503	6.6	20.7	8 19	20 53.63	-15 20.7	1.633	2.624	5.7	21.4
8 29	20 45.88	-21 3.6	1.562	2.501	10.8	20.9	8 29	20 46.14	-16 1.2	1.667	2.611	9.9	21.6
9 8	20 40.74	-21 10.5	1.630	2.498	14.6	21.2	9 8	20 40.66	-16 34.0	1.725	2.599	13.6	21.8
13865	1999 <i>XA</i> ₁₇₀		8 6.0 345°67	0°1/ 5.9 18			217212	2002 <i>TA</i> ₃₇₆		8 6.0 356°18	0°5/ 6.2 18		
6 30	21 25.89	-16 45.3	1.238	2.119	18.0	17.2	6 30	21 31.59	-16 15.9	1.232	2.104	18.7	19.2
7 10	21 23.59	-16 39.9	1.164	2.106	14.0	16.9	7 10	21 27.89	-15 56.0	1.165	2.101	14.6	19.0
7 20	21 18.37	-16 44.2	1.108	2.094	9.3	16.6	7 20	21 21.12	-15 45.1	1.115	2.098	9.7	18.7
7 30	21 10.88	-16 55.1	1.073	2.083	3.9	16.3	7 30	21 12.02	-15 40.6	1.087	2.097	4.2	18.4
8 9	21 2.28	-17 7.7	1.061	2.074	1.7	16.1	8 9	21 1.89	-15 38.5	1.083	2.096	1.7	18.2
8 19	20 53.97	-17 17.3	1.072	2.066	7.3	16.5	8 19	20 52.21	-15 35.2	1.102	2.096	7.3	18.5
8 29	20 47.38	-17 20.0	1.106	2.060	12.5	16.7	8 29	20 44.44	-15 27.7	1.144	2.097	12.4	18.8
9 8	20 43.57	-17 13.7	1.159	2.056	17.1	17.0	9 8	20 39.60	-15 14.5	1.206	2.098	16.9	19.1
385312	2001 <i>XA</i> ₂₃₂		8 6.0 308°68	1°1/ 5.4 18			389002	2008 <i>UH</i> ₁₄₈		8 6.0 264°12	0°3/ 5.8 18		
6 30	21 29.08	-17 9.7	1.420	2.289	16.9	21.2	6 30	21 30.17	-15 39.2	1.873	2.719	14.3	21.5
7 10	21 26.10	-17 29.9	1.320	2.256	13.2	20.8	7 10	21 25.93	-16 0.1	1.786	2.709	11.1	21.3
7 20	21 20.17	-18 1.7	1.240	2.224	8.8	20.5	7 20	21 19.45	-16 30.2	1.720	2.699	7.3	21.1
7 30	21 11.76	-18 41.0	1.182	2.192	3.7	20.1	7 30	21 11.25	-17 6.1	1.680	2.689	3.1	20.8
8 9	21 1.85	-19 21.7	1.148	2.160	2.3	19.9	8 9	21 2.20	-17 43.4	1.666	2.678	1.4	20.6
8 19	20 51.79	-19 57.2	1.138	2.128	7.8	20.2	8 19	20 53.31	-18 17.4	1.679	2.668	5.8	20.9
8 29	20 43.14	-20 22.1	1.152	2.097	13.1	20.4	8 29	20 45.61	-18 44.4	1.718	2.657	10.0	21.1
9 8	20 37.17	-20 33.4	1.185	2.066	17.9	20.6	9 8	20 39.95	-19 2.1	1.780	2.647	13.6	21.3
56424	2000 <i>GG</i> ₅		8 6.0 15°87	4°7/ 8.2 18			251817	1999 <i>TG</i> ₉₄		8 6.0 316°28	3°1/ 4.4 17		
6 30	21 28.82	-7 45.8	1.049	1.915	21.7	18.0	6 30	21 27.51	-20 4.7	1.199	2.085	18.2	19.9
7 10	21 26.01	-7 11.6	0.991	1.918	17.4	17.7	7 10	21 25.33	-20 44.6	1.112	2.058	14.2	19.6
7 20	21 19.99	-6 57.9	0.948	1.921	12.5	17.4	7 20	21 19.90	-21 36.2	1.044	2.032	9.4	19.3
7 30	21 11.55	-7 5.1	0.926	1.926	7.4	17.2	7 30	21 11.72	-22 33.1	0.998	2.007	4.5	18.9
8 9	21 2.05	-7 29.8	0.924	1.932	4.7	17.1	8 9	21 1.95	-23 26.4	0.973	1.982	4.2	18.8
8 19	20 53.05	-8 6.4	0.944	1.938	8.1	17.3	8 19	20 52.16	-24 7.3	0.972	1.958	9.4	19.0
8 29	20 46.08	-8 47.6	0.986	1.946	13.0	17.6	8 29	20 44.12	-24 29.7	0.991	1.935	14.9	19.2
9 8	20 42.19	-9 26.4	1.047	1.954	17.6	17.9	9 8	20 39.19	-24 31.8	1.029	1.913	19.8	19.5
211859	2004 <i>GP</i> ₁₉		8 6.0 283°12										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
25880	2000 QG ₁₉₆	8 6.1 205°67	0°2/ 5.9	18			353741	2011 YC ₂₅	8 6.1 173°23	0°9/ 6.7	18		
6 30	21 32.85	-13 47.3	1.901	2.736	14.6	18.9	6 30	21 29.05	-13 7.1	2.577	3.401	11.5	20.8
7 10	21 27.98	-14 33.1	1.814	2.731	11.3	18.7	7 10	21 24.33	-13 8.6	2.493	3.402	9.0	20.6
7 20	21 20.80	-15 31.4	1.749	2.725	7.4	18.4	7 20	21 18.02	-13 17.2	2.433	3.403	6.0	20.5
7 30	21 11.84	-16 37.9	1.709	2.718	3.1	18.1	7 30	21 10.56	-13 31.1	2.399	3.404	2.8	20.3
8 9	21 1.97	-17 46.8	1.697	2.710	1.5	18.0	8 9	21 2.61	-13 47.8	2.393	3.405	1.2	20.1
8 19	20 52.22	-18 51.8	1.714	2.701	5.9	18.3	8 19	20 54.84	-14 5.0	2.416	3.406	4.2	20.4
8 29	20 43.68	-19 48.0	1.757	2.691	10.1	18.5	8 29	20 47.96	-14 20.3	2.467	3.406	7.4	20.6
9 8	20 37.20	-20 32.0	1.823	2.681	13.7	18.7	9 8	20 42.53	-14 31.8	2.543	3.406	10.1	20.7
181096	2005 QC ₆₁	8 6.1 234°47	1°2/ 6.9	18			93537	2000 UV ₁₄	8 6.1 118°76	7°8/ 31.7	18		
6 30	21 29.02	-12 14.3	2.204	3.034	13.0	20.7	6 30	21 38.79	-36 59.4	1.999	2.843	13.7	19.4
7 10	21 24.60	-12 16.1	2.120	3.032	10.2	20.5	7 10	21 32.52	-38 7.0	1.949	2.857	11.2	19.2
7 20	21 18.33	-12 26.9	2.058	3.029	6.9	20.3	7 20	21 23.66	-39 6.8	1.922	2.870	8.9	19.1
7 30	21 10.71	-12 44.8	2.021	3.027	3.3	20.1	7 30	21 12.97	-39 50.9	1.920	2.884	7.8	19.1
8 9	21 2.47	-13 7.1	2.012	3.024	1.4	19.9	8 9	21 1.63	-40 13.3	1.944	2.897	8.4	19.1
8 19	20 54.42	-13 30.6	2.031	3.021	4.8	20.1	8 19	20 50.89	-40 11.6	1.993	2.909	10.2	19.3
8 29	20 47.39	-13 52.2	2.076	3.019	8.3	20.4	8 29	20 41.91	-39 46.8	2.065	2.921	12.5	19.4
9 8	20 42.03	-14 9.7	2.146	3.016	11.5	20.6	9 8	20 35.47	-39 2.7	2.158	2.933	14.7	19.6
255403	2005 WW ₁₈₉	8 6.1 295°75	1°3/ 7.1	18			246588	2008 UG ₉₄	8 6.1 282°82	6°2/ 10.5	18		
6 30	21 25.63	-9 42.8	2.112	2.943	13.5	21.0	6 30	21 27.08	+ 1 10.4	1.877	2.665	16.5	20.8
7 10	21 22.27	-10 15.4	2.011	2.923	10.7	20.8	7 10	21 23.64	+ 1 22.1	1.774	2.645	13.9	20.6
7 20	21 16.99	-11 2.1	1.932	2.903	7.3	20.6	7 20	21 18.05	+ 1 13.3	1.690	2.624	10.9	20.3
7 30	21 10.23	-12 0.6	1.878	2.883	3.6	20.3	7 30	21 10.75	+ 0 42.5	1.629	2.603	8.0	20.1
8 9	21 2.65	-13 6.8	1.851	2.863	1.5	20.1	8 9	21 2.48	- 0 9.4	1.592	2.582	6.2	20.0
8 19	20 55.08	-14 15.6	1.851	2.843	5.1	20.3	8 19	20 54.17	- 1 18.7	1.581	2.560	7.3	20.0
8 29	20 48.42	-15 21.7	1.878	2.823	8.9	20.5	8 29	20 46.85	- 2 39.5	1.595	2.539	10.3	20.1
9 8	20 43.42	-16 20.6	1.930	2.803	12.4	20.7	9 8	20 41.40	- 4 4.4	1.633	2.518	13.7	20.3
15980	1998 RC ₁₉	8 6.1 33°92	0°0/ 5.8	18			42777	1998 UY ₃₀	8 6.1 351°52	1°4/ 7.2	18		
6 30	21 26.11	-13 31.4	2.195	3.035	12.8	17.8	6 30	21 24.60	- 9 55.2	1.989	2.826	14.0	18.4
7 10	21 22.41	-14 12.0	2.118	3.037	9.8	17.6	7 10	21 21.46	-10 22.0	1.907	2.822	11.0	18.2
7 20	21 16.93	-15 2.7	2.062	3.039	6.4	17.4	7 20	21 16.41	-11 2.1	1.847	2.819	7.5	18.0
7 30	21 10.14	-16 0.2	2.033	3.041	2.7	17.1	7 30	21 9.97	-11 53.2	1.812	2.817	3.7	17.8
8 9	21 2.75	-16 59.9	2.031	3.044	1.1	17.0	8 9	21 2.85	-12 51.0	1.803	2.815	1.6	17.6
8 19	20 55.55	-17 57.0	2.057	3.046	4.9	17.3	8 19	20 55.91	-13 50.6	1.821	2.813	5.0	17.9
8 29	20 49.33	-18 47.4	2.110	3.049	8.4	17.5	8 29	20 49.99	-14 47.1	1.865	2.812	8.8	18.1
9 8	20 44.75	-19 28.5	2.187	3.051	11.5	17.7	9 8	20 45.80	-15 36.3	1.933	2.811	12.1	18.3
386822	2010 GY ₉₉	8 6.1 79°57	3°3/ 8.7	17			10811	Lau	8 6.1 286°09	0°9/ 5.3	18		
6 30	21 28.74	- 4 56.3	1.878	2.692	15.6	21.4	6 30	21 27.55	-16 6.1	2.114	2.960	13.0	17.3
7 10	21 24.51	- 5 12.1	1.815	2.710	12.4	21.2	7 10	21 23.82	-16 48.2	2.014	2.938	10.0	17.1
7 20	21 18.30	- 5 44.7	1.771	2.728	8.9	21.0	7 20	21 18.07	-17 40.3	1.937	2.916	6.5	16.9
7 30	21 10.70	- 6 32.1	1.752	2.746	5.3	20.8	7 30	21 10.73	-18 38.5	1.885	2.894	2.7	16.6
8 9	21 2.54	- 7 30.5	1.758	2.764	3.3	20.8	8 9	21 2.51	-19 38.0	1.860	2.872	1.8	16.5
8 19	20 54.73	- 8 34.7	1.792	2.782	5.4	20.9	8 19	20 54.31	-20 33.4	1.863	2.849	5.7	16.7
8 29	20 48.12	- 9 39.1	1.853	2.800	8.8	21.2	8 29	20 47.05	-21 20.4	1.893	2.827	9.5	16.9
9 8	20 43.40	-10 38.9	1.937	2.817	12.1	21.4	9 8	20 41.55	-21 56.1	1.946	2.804	13.0	17.0
107610	2001 EO ₄	8 6.1 97°66	0°3/ 5.8	17			478414	2012 DU	8 6.1 192°24	5°3/ 31.5	18		
6 30	21 32.20	-14 32.5	1.533	2.386	16.7	20.2	6 30	21 34.20	-37 18.9	3.284	4.111	9.2	22.6
7 10	21 27.71	-15 8.8	1.471	2.398	12.8	20.0	7 10	21 28.17	-38 4.6	3.211	4.108	7.6	22.4
7 20	21 20.66	-15 57.4	1.430	2.409	8.3	19.8	7 20	21 20.47	-38 44.9	3.163	4.105	6.1	22.3
7 30	21 11.76	-16 53.3	1.412	2.421	3.5	19.5	7 30	21 11.60	-39 15.5	3.143	4.102	5.3	22.3
8 9	21 2.10	-17 49.9	1.420	2.432	1.6	19.4	8 9	21 2.23	-39 32.8	3.150	4.097	5.7	22.3
8 19	20 52.87	-18 41.2	1.454	2.444	6.5	19.7	8 19	20 53.08	-39 34.9	3.185	4.093	7.1	22.4
8 29	20 45.23	-19 22.3	1.513	2.455	10.9	20.0	8 29	20 44.89	-39 21.6	3.245	4.088	8.8	22.5
9 8	20 40.03	-19 50.8	1.594	2.465	14.7	20.3	9 8	20 38.24	-38 54.3	3.329	4.082	10.4	22.6
448609	2010 UE ₃₆	8 6.1 313°59	4°6/ 8.9	17			371540	2006 UZ ₂₈₅	8 6.1 279°67	1°6/ 5.1	18		
6 30	21 27.74	- 4 29.0	2.059	2.866	14.6	21.2	6 30	21 31.37	-17 51.0	1.560	2.420	16.0	21.7
7 10	21 23.84	- 3 54.7	1.964	2.853	12.0	21.0	7 10	21 27.51	-18 25.2	1.469	2.401	12.5	21.4
7 20	21 17.98	- 3 33.3	1.890	2.839	9.0	20.8	7 20	21 20.89	-19 10.0	1.400	2.382	8.2	21.1
7 30	21 10.64	- 3 25.5	1.840	2.826	6.1	20.6	7 30	21 12.05	-20 0.5	1.353	2.363	3.5	20.8
8 9	21 2.54	- 3 30.6	1.815	2.813	4.6	20.4	8 9	21 1.99	-20 50.0	1.332	2.343	2.6	20.7
8 19	20 54.52	- 3 46.6	1.817	2.800	6.1	20.5	8 19	20 51.99	-21 32.2	1.337	2.324	7.4	20.9
8 29	20 47.48	- 4 10.2	1.845	2.788	9.2	20.7	8 29	20 43.40	-22 2.0	1.366	2.304	12.1	21.1
9 8	20 42.17	- 4 37.5	1.897	2.776	12.3	20.8	9 8	20 37.31	-22 17.5	1.416	2.284	16.4	21.3
155560	1999 VD ₁₅₉	8 6.1 198°48	2°5/ 3.5	18			344123	1999 VC ₁₉₇	8 6.1 325°34	10°7/ 29.4	18		
6 30	21 29.51	-24 45.0	3.058	3.897	9.5	21.3	6 30	21 29.14	-35 52.6	1.353	2.235	16.7	19.5
7 10	21 24.56	-25 20.7	2.974	3.894	7.3	21.2	7 10	21 26.75	-37 34.6	1.280	2.210	14.0	19.3
7 20	21 18.11	-25 57.6	2.915	3.889	4.9	21.0	7 20	21 20.90	-39 13.9	1.226	2.186	11.6	19.1
7 30	21 10.59	-26 32.1	2.884	3.885	2.9	20.8	7 30	21 12.19	-40 37.8	1.193	2.163	10.7	18.9
8 9	21 2.58	-27 0.9	2.881	3.880	3.0	20.8	8 9	21 1.92	-41 34.1	1.183	2.141	11.9	18.9
8 19	20 54.72	-27 21.3	2.908	3.874	5.1	21.0	8 19	20 51.81	-41 55.2	1.193	2.120	14.7	19.0
8 29	20 47.65	-27 31.9	2.962	3.868	7.6	21.1	8 29	20 43.71	-41 39.3	1.222	2.099	18.0	19.2
9 8	20 41.92	-27 32.4	3.042	3.862	9.8	21.3	9 8	20 38.95	-40 50.7	1.268	2.080	21.2	19.3
11250	1972 AU	8 6.1 329°58	5°4/ 3.9	18			314541	2005 YE ₈₄	8 6.1 275°52	2°1/ 3.9	18		
6 30	21 35.50	-28 43.9	1.405	2.276	16.8								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
451311	2010 <i>UE</i> ₁₁	8 6.1 250°20	5°5/31.8 18				442599	2012 <i>DD</i> ₁₃	8 6.1 282°27	4°3/10.0 18			
6 30	21 30.32	-32 19.2	2.510	3.359	11.0	21.1	6 30	21 25.19	-1 0.7	2.379	3.166	13.5	20.6
7 10	21 25.74	-33 24.8	2.432	3.349	8.8	21.0	7 10	21 21.61	-1 2.9	2.287	3.160	11.1	20.4
7 20	21 19.19	-34 28.4	2.379	3.340	6.7	20.8	7 20	21 16.40	-1 20.8	2.216	3.155	8.5	20.2
7 30	21 11.16	-35 24.2	2.351	3.330	5.5	20.7	7 30	21 9.98	-1 54.3	2.170	3.149	5.8	20.0
8 9	21 2.42	-36 6.8	2.351	3.320	6.1	20.7	8 9	21 2.97	-2 41.3	2.149	3.144	4.3	19.9
8 19	20 53.84	-36 32.7	2.377	3.309	8.1	20.8	8 19	20 56.07	-3 38.5	2.156	3.138	5.4	20.0
8 29	20 46.30	-36 40.6	2.429	3.299	10.4	21.0	8 29	20 49.99	-4 41.6	2.190	3.132	7.9	20.1
9 8	20 40.54	-36 31.3	2.502	3.288	12.6	21.1	9 8	20 45.35	-5 45.7	2.249	3.127	10.7	20.3
127147	2002 <i>GA</i> ₁₂₂	8 6.1 353°20	0°6/ 6.5 18				217458	2005 <i>UC</i> ₁₀₉	8 6.1 10°19	3°2/ 8.7 18			
6 30	21 28.34	-12 15.9	1.688	2.535	15.6	20.0	6 30	21 25.09	-5 0.4	1.922	2.741	15.1	19.7
7 10	21 24.67	-12 44.1	1.612	2.534	12.2	19.8	7 10	21 21.87	-5 19.8	1.843	2.743	12.1	19.5
7 20	21 18.70	-13 25.9	1.557	2.533	8.1	19.5	7 20	21 16.72	-5 56.4	1.785	2.744	8.7	19.3
7 30	21 11.00	-14 17.8	1.525	2.533	3.6	19.3	7 30	21 10.15	-6 48.7	1.750	2.746	5.2	19.1
8 9	21 2.49	-15 14.5	1.520	2.533	1.3	19.1	8 9	21 2.92	-7 52.7	1.741	2.748	3.2	19.0
8 19	20 54.22	-16 10.1	1.541	2.532	5.9	19.4	8 19	20 55.87	-9 3.5	1.759	2.750	5.4	19.2
8 29	20 47.25	-16 59.5	1.587	2.532	10.2	19.7	8 29	20 49.89	-10 15.0	1.804	2.753	8.8	19.4
9 8	20 42.41	-17 39.0	1.655	2.532	13.9	19.9	9 8	20 45.68	-11 21.9	1.872	2.757	12.2	19.6
477087	2009 <i>BS</i> ₁₁₃	8 6.1 260°06	0°5/ 6.4 16				310704	2002 <i>JV</i> ₁₁₇	8 6.1 97°03	8°5/27.8 18			
6 30	21 33.38	-14 48.1	2.167	2.997	13.2	22.7	6 30	21 34.61	-42 34.0	2.517	3.347	11.6	20.2
7 10	21 28.21	-14 44.2	2.063	2.976	10.4	22.5	7 10	21 29.23	-44 20.8	2.481	3.366	9.9	20.2
7 20	21 20.90	-14 47.3	1.981	2.954	6.9	22.3	7 20	21 21.55	-45 57.7	2.469	3.384	8.8	20.1
7 30	21 11.94	-14 55.3	1.925	2.932	3.1	22.0	7 30	21 12.19	-47 17.4	2.483	3.403	8.5	20.1
8 9	21 2.09	-15 5.4	1.896	2.909	1.2	21.8	8 9	21 2.09	-48 14.3	2.522	3.420	9.2	20.2
8 19	20 52.28	-15 14.8	1.896	2.885	5.2	22.0	8 19	20 52.32	-48 46.0	2.585	3.438	10.5	20.3
8 29	20 43.47	-15 20.9	1.924	2.862	9.2	22.2	8 29	20 43.93	-48 53.0	2.670	3.455	12.0	20.5
9 8	20 36.51	-15 22.1	1.976	2.837	12.7	22.4	9 8	20 37.70	-48 38.3	2.775	3.472	13.4	20.6
417339	2006 <i>DL</i> ₉₆	8 6.1 35°53	4°5/ 4.3 17				116677	2004 <i>CT</i> ₆₇	8 6.1 287°40	0°4/ 5.8 18			
6 30	21 35.47	-24 43.0	1.117	2.001	19.4	20.3	6 30	21 28.52	-13 30.2	1.491	2.349	16.8	19.9
7 10	21 31.15	-25 7.2	1.067	2.010	14.9	20.1	7 10	21 25.33	-14 19.7	1.405	2.335	13.1	19.6
7 20	21 23.33	-25 33.6	1.034	2.019	10.0	19.8	7 20	21 19.47	-15 26.0	1.340	2.321	8.6	19.4
7 30	21 12.99	-25 54.2	1.023	2.029	5.5	19.6	7 30	21 11.48	-16 44.4	1.298	2.308	3.6	19.0
8 9	21 1.73	-26 1.3	1.034	2.039	5.3	19.7	8 9	21 2.33	-18 7.3	1.282	2.294	1.8	18.9
8 19	20 51.31	-25 51.1	1.068	2.050	9.6	19.9	8 19	20 53.26	-19 26.4	1.291	2.281	7.0	19.2
8 29	20 43.29	-25 23.2	1.125	2.062	14.2	20.2	8 29	20 45.58	-20 34.4	1.324	2.267	11.9	19.4
9 8	20 38.61	-24 40.5	1.200	2.074	18.3	20.5	9 8	20 40.36	-21 26.7	1.378	2.254	16.2	19.6
136305	2004 <i>BA</i> ₃₄	8 6.1 263°86	0°8/ 5.4 18				27089	1998 <i>UE</i> ₁₅	8 6.1 348°18	2°8/ 4.1 18			
6 30	21 28.42	-16 6.0	1.985	2.832	13.6	20.1	6 30	21 14.04	-14 4.2	0.796	1.714	21.6	17.4
7 10	21 24.49	-16 45.9	1.902	2.826	10.5	19.9	7 10	21 15.56	-15 36.9	0.735	1.699	16.6	17.1
7 20	21 18.47	-17 35.3	1.840	2.820	6.8	19.7	7 20	21 13.77	-17 40.3	0.690	1.686	10.8	16.7
7 30	21 10.89	-18 30.1	1.805	2.814	2.8	19.4	7 30	21 9.24	-20 4.6	0.664	1.676	4.6	16.3
8 9	21 2.55	-19 25.2	1.796	2.808	1.7	19.3	8 9	21 3.26	-22 32.8	0.657	1.667	4.5	16.3
8 19	20 54.36	-20 15.4	1.815	2.801	5.7	19.6	8 19	20 57.54	-24 46.0	0.669	1.661	10.8	16.6
8 29	20 47.29	-20 56.7	1.860	2.795	9.6	19.8	8 29	20 53.95	-26 29.0	0.699	1.658	16.9	16.9
9 8	20 42.10	-21 26.5	1.928	2.789	13.0	20.0	9 8	20 53.80	-27 34.9	0.745	1.657	22.2	17.2
310074	2010 <i>KQ</i> ₁₀₁	8 6.1 18°11	1°1/ 6.7 18				315133	2007 <i>EV</i> ₁₀₃	8 6.1 199°93	1°0/ 5.3 18			
6 30	21 30.86	-14 0.0	1.872	2.713	14.6	19.8	6 30	21 28.53	-18 9.4	2.373	3.215	11.8	21.6
7 10	21 26.29	-13 43.8	1.797	2.715	11.3	19.6	7 10	21 24.17	-18 32.7	2.293	3.215	9.0	21.4
7 20	21 19.57	-13 35.7	1.743	2.718	7.6	19.4	7 20	21 18.05	-19 1.4	2.236	3.214	5.9	21.2
7 30	21 11.32	-13 33.7	1.715	2.721	3.5	19.2	7 30	21 10.67	-19 32.3	2.205	3.214	2.5	21.0
8 9	21 2.41	-13 35.4	1.712	2.724	1.5	19.0	8 9	21 2.73	-20 1.9	2.202	3.213	1.7	21.0
8 19	20 53.82	-13 38.2	1.737	2.728	5.4	19.3	8 19	20 54.98	-20 26.8	2.227	3.212	5.0	21.2
8 29	20 46.50	-13 39.5	1.788	2.732	9.3	19.6	8 29	20 48.20	-20 44.5	2.279	3.211	8.2	21.4
9 8	20 41.18	-13 37.5	1.862	2.737	12.7	19.8	9 8	20 43.03	-20 53.9	2.356	3.211	11.1	21.6
430155	2013 <i>TP</i> ₆₉	8 6.1 273°27	0°4/ 5.9 17				468613	2008 <i>AM</i> ₈₃	8 6.1 244°50	3°2/ 3.9 17			
6 30	21 32.75	-16 35.3	1.575	2.429	16.2	21.3	6 30	21 31.69	-20 18.5	1.538	2.403	16.0	21.4
7 10	21 28.38	-16 44.2	1.491	2.419	12.6	21.0	7 10	21 27.71	-21 23.1	1.463	2.397	12.3	21.2
7 20	21 21.33	-17 2.2	1.428	2.408	8.3	20.8	7 20	21 20.97	-22 37.4	1.408	2.391	8.1	20.9
7 30	21 12.19	-17 25.6	1.388	2.397	3.5	20.4	7 30	21 12.08	-23 54.0	1.377	2.384	4.1	20.7
8 9	21 2.01	-17 49.5	1.374	2.386	1.7	20.3	8 9	21 2.12	-25 4.5	1.372	2.378	4.2	20.6
8 19	20 52.03	-18 9.4	1.385	2.375	6.7	20.6	8 19	20 52.36	-26 1.4	1.393	2.371	8.2	20.9
8 29	20 43.54	-18 21.6	1.422	2.364	11.3	20.8	8 29	20 44.16	-26 40.0	1.438	2.364	12.5	21.1
9 8	20 37.52	-18 24.4	1.480	2.353	15.5	21.1	9 8	20 38.51	-26 59.3	1.503	2.357	16.3	21.3
342740	2008 <i>WM</i> ₅₁	8 6.1 224°42	1°1/ 5.3 17				359892	2011 <i>WP</i> ₅₂	8 6.1 252°39	0°1/ 6.0 18			
6 30	21 30.32	-17 14.9	1.908	2.756	14.0	21.8	6 30	21 28.83	-15 21.7	2.232	3.071	12.6	21.8
7 10	21 26.00	-17 48.2	1.828	2.753	10.8	21.6	7 10	21 24.55	-15 40.2	2.145	3.064	9.7	21.6
7 20	21 19.48	-18 29.8	1.770	2.750	7.0	21.4	7 20	21 18.40	-16 6.5	2.080	3.056	6.4	21.4
7 30	21 11.33	-19 15.5	1.738	2.747	2.9	21.1	7 30	21 10.85	-16 37.7	2.041	3.049	2.7	21.2
8 9	21 2.40	-20 0.1	1.732	2.743	1.9	21.0	8 9	21 2.65	-17 10.2	2.029	3.041	1.2	21.0
8 19	20 53.68	-20 39.0	1.753	2.739	6.0	21.3	8 19	20 54.58	-17 40.4	2.045	3.034	5.0	21.3
8 29	20 46.18	-21 8.4	1.801	2.735	9.9	21.5	8 29	20 47.52	-18 5.2	2.088	3.026	8.5	21.5
9 8	20 40.69	-21 26.5	1.871	2.731	13.3	21.7	9 8	20 42.13	-18 22.6	2.156	3.018	11.7	21.7
449282	2013 <i>EQ</i> ₆₇	8 6.1 61°23	5°1/ 2.0										

EPHEMERIDES

8 6.1

8 6.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
141766	2002 <i>MB</i> ₄		8 6.1 353°14	2°2/ 5.1	17		401479	2013 <i>CJ</i> ₁₉₈		8 6.1 10°47	2°6/ 4.5	18	
6 30	21 25.25	-19 33.5	0.981	1.881	20.0	19.2	6 30	21 31.54	-23 23.3	1.943	2.799	13.5	20.4
7 10	21 23.78	-19 45.3	0.919	1.872	15.5	18.9	7 10	21 26.85	-23 37.7	1.871	2.800	10.4	20.2
7 20	21 18.87	-20 6.7	0.875	1.865	10.2	18.6	7 20	21 19.98	-23 53.9	1.822	2.802	6.8	20.0
7 30	21 11.29	-20 31.9	0.850	1.860	4.5	18.3	7 30	21 11.54	-24 7.7	1.797	2.803	3.5	19.7
8 9	21 2.46	-20 53.4	0.845	1.856	3.3	18.2	8 9	21 2.46	-24 14.8	1.800	2.805	3.2	19.7
8 19	20 54.10	-21 4.6	0.862	1.855	8.9	18.5	8 19	20 53.73	-24 12.4	1.829	2.808	6.5	19.9
8 29	20 47.90	-21 1.8	0.899	1.855	14.5	18.8	8 29	20 46.34	-23 59.3	1.883	2.811	10.0	20.2
9 8	20 44.98	-20 44.1	0.953	1.857	19.3	19.1	9 8	20 41.01	-23 35.9	1.961	2.814	13.1	20.4
387504	1998 <i>DE</i> ₇		8 6.1 208°17	1°4/ 7.1	18		22399	1995 <i>CB</i>		8 6.1 264°31	0°3/ 5.8	18	
6 30	21 32.93	-11 37.3	2.232	3.051	13.2	22.5	6 30	21 26.85	-14 30.1	2.534	3.367	11.4	19.4
7 10	21 27.66	-11 35.9	2.140	3.045	10.4	22.3	7 10	21 22.93	-15 11.1	2.433	3.350	8.8	19.2
7 20	21 20.42	-11 43.5	2.071	3.038	7.1	22.1	7 20	21 17.33	-16 1.2	2.356	3.332	5.8	18.9
7 30	21 11.72	-11 58.6	2.027	3.031	3.5	21.9	7 30	21 10.44	-16 57.5	2.306	3.314	2.4	18.7
8 9	21 2.31	-12 18.4	2.012	3.023	1.6	21.7	8 9	21 2.88	-17 55.7	2.284	3.296	1.2	18.6
8 19	20 53.04	-12 40.0	2.025	3.015	4.9	21.9	8 19	20 55.34	-18 51.8	2.291	3.278	4.7	18.8
8 29	20 44.80	-13 0.4	2.066	3.006	8.5	22.2	8 29	20 48.58	-19 41.9	2.325	3.259	8.0	19.0
9 8	20 38.31	-13 17.2	2.132	2.996	11.8	22.3	9 8	20 43.25	-20 23.3	2.384	3.240	11.0	19.1
482172	2010 <i>TU</i> ₁₇₆		8 6.1 208°71	5°6/11.4	18		510462	2011 <i>WG</i> ₅₉		8 6.1 123°71	4°2/ 2.5	18	
6 30	21 26.88	+ 3 55.2	2.823	3.568	12.5	21.3	6 30	21 29.28	-25 55.2	2.171	3.028	12.3	21.1
7 10	21 22.64	+ 4 19.6	2.728	3.563	10.7	21.1	7 10	21 25.06	-27 1.5	2.101	3.029	9.4	20.9
7 20	21 16.95	+ 4 29.8	2.654	3.558	8.6	21.0	7 20	21 18.81	-28 9.9	2.055	3.031	6.5	20.8
7 30	21 10.21	+ 4 24.7	2.603	3.553	6.7	20.8	7 30	21 11.07	-29 14.4	2.035	3.032	4.4	20.6
8 9	21 2.95	+ 4 4.7	2.579	3.548	5.7	20.8	8 9	21 2.65	-30 9.0	2.042	3.034	4.8	20.7
8 19	20 55.78	+ 3 31.5	2.582	3.542	6.1	20.8	8 19	20 54.45	-30 49.4	2.076	3.035	7.4	20.8
8 29	20 49.30	+ 2 48.2	2.612	3.536	7.7	20.9	8 29	20 47.39	-31 13.2	2.135	3.036	10.3	21.0
9 8	20 44.08	+ 1 58.8	2.668	3.529	9.8	21.0	9 8	20 42.20	-31 20.6	2.217	3.037	12.9	21.2
471667	2012 <i>TQ</i> ₁₆₀		8 6.1 357°37	0°2/ 5.9	16		198565	2004 <i>XU</i> ₁₆₁		8 6.1 197°12	1°4/ 5.1	17	
6 30	21 27.60	-14 36.1	1.489	2.351	16.5	21.2	6 30	21 31.65	-18 41.7	1.968	2.815	13.7	20.9
7 10	21 24.43	-15 5.7	1.418	2.349	12.8	21.0	7 10	21 26.96	-19 10.2	1.889	2.814	10.5	20.7
7 20	21 18.72	-15 48.3	1.366	2.348	8.4	20.7	7 20	21 20.10	-19 45.2	1.833	2.812	6.8	20.5
7 30	21 11.10	-16 39.5	1.338	2.347	3.5	20.4	7 30	21 11.64	-20 22.4	1.802	2.811	3.0	20.2
8 9	21 2.58	-17 33.0	1.334	2.347	1.6	20.3	8 9	21 2.44	-20 57.2	1.799	2.809	2.2	20.2
8 19	20 54.36	-18 22.6	1.356	2.347	6.6	20.6	8 19	20 53.48	-21 25.3	1.822	2.807	6.0	20.4
8 29	20 47.61	-19 3.1	1.401	2.348	11.1	20.9	8 29	20 45.75	-21 43.8	1.872	2.804	9.7	20.6
9 8	20 43.23	-19 31.4	1.468	2.349	15.1	21.1	9 8	20 40.02	-21 51.5	1.945	2.802	13.1	20.8
238286	2003 <i>WE</i> ₁₄₀		8 6.1 271°95	5°2/ 1.9	18		129609	1997 <i>YO</i> ₁₆		8 6.1 215°03	0°8/ 6.7	18	
6 30	21 30.88	-27 24.5	1.912	2.774	13.5	20.2	6 30	21 32.16	-12 38.7	2.216	3.040	13.2	20.6
7 10	21 26.72	-28 35.3	1.834	2.763	10.5	20.0	7 10	21 27.14	-12 50.6	2.123	3.032	10.3	20.4
7 20	21 20.14	-29 48.5	1.778	2.752	7.5	19.8	7 20	21 20.14	-13 11.9	2.053	3.024	6.9	20.2
7 30	21 11.70	-30 56.7	1.747	2.742	5.4	19.6	7 30	21 11.66	-13 40.4	2.008	3.014	3.2	19.9
8 9	21 2.33	-31 52.7	1.743	2.731	6.0	19.7	8 9	21 2.43	-14 12.6	1.992	3.005	1.3	19.8
8 19	20 53.12	-32 31.1	1.764	2.720	8.7	19.8	8 19	20 53.31	-14 44.9	2.004	2.994	5.0	20.0
8 29	20 45.22	-32 49.3	1.810	2.709	12.0	20.0	8 29	20 45.21	-15 14.1	2.044	2.983	8.6	20.2
9 8	20 39.52	-32 47.8	1.877	2.697	14.9	20.2	9 8	20 38.85	-15 37.5	2.108	2.971	11.9	20.4
31297	1998 <i>FZ</i> ₇₄		8 6.1 238°81	4°4/ 2.7	18		118565	2000 <i>FZ</i> ₅₄		8 6.1 13°39	1°5/ 5.3	17	
6 30	21 32.12	-28 35.2	2.285	3.136	11.9	18.5	6 30	21 29.40	-18 6.6	1.258	2.135	18.1	20.1
7 10	21 27.16	-29 16.9	2.207	3.130	9.3	18.3	7 10	21 26.20	-18 29.8	1.197	2.138	13.9	19.8
7 20	21 20.14	-29 57.9	2.152	3.124	6.6	18.1	7 20	21 20.05	-19 2.9	1.155	2.141	9.0	19.6
7 30	21 11.61	-30 32.9	2.124	3.118	4.6	18.0	7 30	21 11.71	-19 40.5	1.135	2.145	3.8	19.3
8 9	21 2.40	-30 56.9	2.122	3.111	5.0	18.0	8 9	21 2.43	-20 15.6	1.138	2.150	2.6	19.2
8 19	20 53.42	-31 6.8	2.148	3.105	7.3	18.2	8 19	20 53.63	-20 42.4	1.166	2.155	7.6	19.5
8 29	20 45.62	-31 1.4	2.199	3.098	10.1	18.3	8 29	20 46.68	-20 56.9	1.215	2.162	12.5	19.8
9 8	20 39.71	-30 41.6	2.273	3.091	12.7	18.5	9 8	20 42.52	-20 58.0	1.285	2.169	16.7	20.1
182779	2001 <i>YR</i> ₄₉		8 6.1 233°40	4°6/ 9.1	18		479269	2013 <i>FO</i> ₁		8 6.1 141°27	5°2/ 1.7	18	
6 30	21 30.04	- 3 40.4	2.218	3.013	14.1	20.0	6 30	21 32.32	-31 42.7	2.457	3.304	11.3	21.5
7 10	21 25.39	- 3 3.7	2.132	3.011	11.6	19.8	7 10	21 27.16	-32 36.1	2.393	3.310	8.9	21.4
7 20	21 18.91	- 2 39.5	2.067	3.009	8.7	19.7	7 20	21 20.05	-33 26.6	2.353	3.316	6.6	21.3
7 30	21 11.08	- 2 28.4	2.026	3.008	6.0	19.5	7 30	21 11.57	-34 8.7	2.339	3.322	5.2	21.2
8 9	21 2.62	- 2 29.9	2.012	3.006	4.6	19.4	8 9	21 2.51	-34 37.7	2.352	3.327	5.7	21.2
8 19	20 54.32	- 2 42.0	2.025	3.004	5.9	19.5	8 19	20 53.76	-34 50.9	2.392	3.332	7.6	21.4
8 29	20 47.00	- 3 1.8	2.064	3.002	8.6	19.7	8 29	20 46.17	-34 47.4	2.458	3.337	10.0	21.5
9 8	20 41.34	- 3 25.6	2.129	3.000	11.5	19.8	9 8	20 40.42	-34 28.7	2.546	3.342	12.2	21.7
390114	2012 <i>VW</i> ₃₅		8 6.1 206°35	1°2/ 7.0	18		180105	2003 <i>FB</i> ₁₂		8 6.1 79°94	0°2/ 6.3	16	
6 30	21 28.73	-10 42.0	2.072	2.901	13.8	21.4	6 30	21 29.87	-14 14.9	2.160	2.995	13.1	21.3
7 10	21 24.58	-11 5.7	1.988	2.899	10.8	21.2	7 10	21 25.18	-14 34.9	2.099	3.015	10.0	21.2
7 20	21 18.48	-11 41.6	1.926	2.896	7.3	21.0	7 20	21 18.69	-15 3.0	2.060	3.035	6.6	21.0
7 30	21 10.93	-12 27.1	1.889	2.894	3.5	20.7	7 30	21 10.97	-15 36.3	2.046	3.054	2.8	20.8
8 9	21 2.68	-13 18.2	1.879	2.891	1.5	20.6	8 9	21 2.78	-16 10.8	2.061	3.074	1.1	20.7
8 19	20 54.59	-14 10.4	1.896	2.888	5.0	20.8	8 19	20 54.94	-16 43.2	2.103	3.093	4.8	21.0
8 29	20 47.55	-14 59.3	1.941	2.884	8.8	21.0	8 29	20 48.22	-17 10.3	2.173	3.112	8.2	21.2
9 8	20 42.27	-15 41.3	2.010	2.881	12.1	21.2	9 8	20 43.23	-17 30.2	2.267	3.131	11.2	21.4
58832	1998 <i>HU</i> ₃₁		8 6.1 214°04	17°5/17.6	18		426780	2013 <i>TW</i> ₁₁₄		8 6.1 346°68			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
371554	2006 VL ₂₉		8 6.1 303°31	2.4/ 4.9	18		196375	2003 FR ₁₃₁		8 6.1 14°90	7°5/12.0	17	
6 30	21 30.85	-19 44.7	1.377	2.249	17.1	21.2	6 30	21 23.00	+ 3 39.9	1.324	2.137	20.9	19.2
7 10	21 27.53	-20 12.8	1.289	2.227	13.3	20.9	7 10	21 21.05	+ 3 36.3	1.258	2.141	17.7	19.0
7 20	21 21.17	-20 50.1	1.221	2.206	8.8	20.5	7 20	21 16.60	+ 3 1.4	1.208	2.146	13.9	18.8
7 30	21 12.34	-21 31.1	1.176	2.185	4.0	20.2	7 30	21 10.28	+ 1 54.1	1.177	2.153	10.1	18.6
8 9	21 2.14	-22 8.7	1.154	2.164	3.3	20.1	8 9	21 3.10	+ 0 18.3	1.169	2.160	7.7	18.5
8 19	20 51.99	-22 36.3	1.157	2.143	8.2	20.3	8 19	20 56.21	- 1 38.0	1.184	2.169	8.3	18.5
8 29	20 43.46	-22 49.3	1.182	2.123	13.3	20.6	8 29	20 50.80	- 3 43.3	1.222	2.178	11.5	18.7
9 8	20 37.74	-22 46.6	1.227	2.103	17.8	20.8	9 8	20 47.74	- 5 46.0	1.282	2.188	15.1	19.0
361968	2008 JN ₃₆		8 6.1 224°37	0°3/ 5.8	18		203714	2002 PP ₁₆₃		8 6.1 287°55	0°4/ 5.8	18	
6 30	21 26.53	-14 17.4	2.347	3.184	12.1	20.9	6 30	21 28.17	-14 38.7	1.854	2.703	14.4	20.6
7 10	21 22.72	-15 3.0	2.264	3.183	9.3	20.7	7 10	21 24.54	-15 15.3	1.766	2.690	11.1	20.4
7 20	21 17.19	-15 58.2	2.205	3.181	6.1	20.5	7 20	21 18.70	-16 3.5	1.699	2.678	7.3	20.1
7 30	21 10.39	-16 59.2	2.171	3.180	2.5	20.3	7 30	21 11.16	-16 59.6	1.657	2.666	3.1	19.8
8 9	21 2.99	-18 1.7	2.166	3.178	1.2	20.2	8 9	21 2.74	-17 58.0	1.641	2.653	1.5	19.7
8 19	20 55.73	-19 1.1	2.189	3.177	4.8	20.4	8 19	20 54.41	-18 53.2	1.652	2.641	5.9	20.0
8 29	20 49.37	-19 53.4	2.240	3.175	8.2	20.6	8 29	20 47.22	-19 40.4	1.689	2.629	10.0	20.2
9 8	20 44.55	-20 35.9	2.315	3.173	11.2	20.8	9 8	20 42.02	-20 16.3	1.749	2.617	13.7	20.4
513422	2008 TD ₁₈₅		8 6.1 252°74	6°6/31.7	18		349160	2007 PB ₂₉		8 6.1 322°70	11°4/29.5	18	
6 30	21 33.69	-31 51.1	1.993	2.849	13.2	21.7	6 30	21 33.18	-39 21.3	1.436	2.305	16.7	20.0
7 10	21 28.97	-33 10.2	1.914	2.835	10.6	21.5	7 10	21 29.91	-40 47.7	1.361	2.279	14.2	19.8
7 20	21 21.70	-34 28.5	1.857	2.820	8.1	21.4	7 20	21 23.04	-42 6.8	1.305	2.254	12.2	19.6
7 30	21 12.43	-35 38.0	1.825	2.805	6.7	21.3	7 30	21 13.23	-43 6.3	1.270	2.229	11.4	19.5
8 9	21 2.13	-36 31.1	1.820	2.790	7.4	21.3	8 9	21 1.87	-43 35.4	1.258	2.205	12.4	19.5
8 19	20 51.97	-37 2.5	1.840	2.775	9.8	21.4	8 19	20 50.76	-43 27.9	1.266	2.182	14.8	19.5
8 29	20 43.16	-37 10.5	1.884	2.759	12.7	21.5	8 29	20 41.78	-42 43.7	1.294	2.160	17.8	19.7
9 8	20 36.67	-36 56.7	1.949	2.743	15.4	21.7	9 8	20 36.24	-41 28.5	1.338	2.139	20.8	19.8
34262	Michaelren		8 6.1 38°61	2°6/ 7.6	18		505775	2015 BJ ₂₆₆		8 6.1 117°06	0°5/ 6.5	17	
6 30	21 29.91	- 9 43.3	1.437	2.285	17.8	18.2	6 30	21 32.63	-13 5.5	1.746	2.586	15.5	21.6
7 10	21 26.09	- 9 36.7	1.375	2.294	14.1	18.0	7 10	21 27.80	-13 28.6	1.680	2.598	12.0	21.4
7 20	21 19.73	- 9 45.6	1.332	2.304	9.7	17.8	7 20	21 20.69	-14 3.3	1.634	2.609	7.9	21.2
7 30	21 11.53	-10 8.1	1.311	2.314	5.1	17.5	7 30	21 11.93	-14 45.9	1.613	2.620	3.5	21.0
8 9	21 2.55	-10 40.1	1.314	2.324	2.7	17.4	8 9	21 2.48	-15 31.4	1.619	2.631	1.3	20.8
8 19	20 54.01	-11 16.6	1.342	2.336	6.3	17.7	8 19	20 53.39	-16 14.8	1.651	2.642	5.7	21.2
8 29	20 47.05	-11 52.4	1.395	2.347	10.7	18.0	8 29	20 45.71	-16 51.9	1.710	2.652	9.8	21.4
9 8	20 42.50	-12 23.1	1.470	2.359	14.6	18.2	9 8	20 40.19	-17 19.9	1.792	2.662	13.4	21.7
202905	1995 UE ₃₁		8 6.1 356°35	3°7/ 4.6	17		10195	Nebraska		8 6.1 322°09	8°8/31.7	18	
6 30	21 28.29	-21 44.6	0.926	1.828	20.7	19.5	6 30	21 34.74	-37 2.0	1.700	2.559	15.0	16.3
7 10	21 26.37	-22 10.1	0.869	1.823	16.1	19.2	7 10	21 30.26	-37 58.4	1.626	2.543	12.4	16.1
7 20	21 20.71	-22 43.5	0.829	1.819	10.6	18.9	7 20	21 22.75	-38 47.8	1.572	2.526	10.0	15.9
7 30	21 12.15	-23 17.0	0.808	1.817	5.2	18.6	7 30	21 12.94	-39 21.2	1.541	2.511	8.8	15.8
8 9	21 2.28	-23 41.3	0.807	1.816	4.7	18.5	8 9	21 2.04	-39 30.9	1.534	2.495	9.5	15.8
8 19	20 53.00	-23 49.6	0.827	1.816	10.0	18.8	8 19	20 51.52	-39 13.3	1.551	2.481	11.7	15.9
8 29	20 46.12	-23 38.9	0.867	1.818	15.5	19.1	8 29	20 42.82	-38 28.7	1.590	2.467	14.5	16.1
9 8	20 42.82	-23 10.2	0.923	1.821	20.3	19.4	9 8	20 36.95	-37 21.5	1.648	2.453	17.3	16.2
4502	Elizabethahn		8 6.1 168°27	3°9/ 9.5	18		374890	2006 WU ₇₀		8 6.1 211°50	0°2/ 6.3	17	
6 30	21 28.23	- 2 9.0	2.089	2.884	14.8	16.5	6 30	21 32.92	-14 13.8	1.830	2.669	14.9	22.3
7 10	21 24.15	- 2 27.7	2.006	2.887	12.1	16.3	7 10	21 28.14	-14 31.4	1.746	2.664	11.6	22.0
7 20	21 18.19	- 3 4.4	1.942	2.889	9.0	16.1	7 20	21 21.02	-14 59.3	1.683	2.659	7.7	21.8
7 30	21 10.84	- 3 58.0	1.904	2.891	5.8	16.0	7 30	21 12.13	-15 34.4	1.645	2.653	3.3	21.5
8 9	21 2.82	- 5 5.2	1.891	2.892	3.9	15.9	8 9	21 2.37	-16 12.0	1.635	2.647	1.3	21.4
8 19	20 54.96	- 6 21.3	1.907	2.894	5.5	16.0	8 19	20 52.80	-16 47.6	1.651	2.641	5.8	21.7
8 29	20 48.12	- 7 40.4	1.949	2.894	8.6	16.1	8 29	20 44.51	-17 17.2	1.693	2.634	10.0	21.9
9 8	20 42.97	- 8 56.8	2.017	2.895	11.7	16.3	9 8	20 38.34	-17 38.3	1.759	2.626	13.7	22.1
92004	1999 VG ₁₅₁		8 6.1 6°63	0°2/ 5.9	18		314474	2005 WC ₈₂		8 6.1 239°47	6°9/30.1	18	
6 30	21 27.79	-15 46.5	1.980	2.828	13.6	19.4	6 30	21 32.18	-37 5.4	2.551	3.393	11.1	21.0
7 10	21 23.93	-16 2.0	1.905	2.829	10.5	19.2	7 10	21 27.34	-38 23.5	2.479	3.384	9.2	20.8
7 20	21 18.09	-16 25.6	1.851	2.830	6.9	19.0	7 20	21 20.38	-39 36.9	2.430	3.374	7.5	20.7
7 30	21 10.79	-16 54.0	1.822	2.831	2.9	18.8	7 30	21 11.83	-40 39.1	2.408	3.364	6.9	20.7
8 9	21 2.86	-17 23.5	1.820	2.832	1.3	18.6	8 9	21 2.49	-41 24.5	2.411	3.354	7.5	20.7
8 19	20 55.16	-17 50.1	1.844	2.834	5.3	18.9	8 19	20 53.31	-41 49.6	2.441	3.343	9.2	20.8
8 29	20 48.61	-18 10.8	1.895	2.836	9.1	19.2	8 29	20 45.24	-41 53.6	2.494	3.332	11.2	20.9
9 8	20 43.90	-18 23.7	1.969	2.839	12.3	19.4	9 8	20 39.07	-41 38.1	2.569	3.321	13.2	21.0
118930	2000 WB ₈		8 6.1 277°67	2°2/ 4.2	18		510020	2010 AW ₃₁		8 6.1 82°18	0°6/ 5.7	17	
6 30	21 27.65	-19 50.6	2.201	3.052	12.3	20.0	6 30	21 28.77	-13 18.7	1.783	2.629	15.0	21.2
7 10	21 23.82	-20 44.1	2.114	3.041	9.4	19.8	7 10	21 24.88	-14 25.2	1.717	2.640	11.5	21.0
7 20	21 18.05	-21 44.5	2.051	3.031	6.2	19.5	7 20	21 18.82	-15 45.1	1.672	2.651	7.4	20.8
7 30	21 10.81	-22 47.0	2.013	3.020	3.0	19.3	7 30	21 11.17	-17 13.0	1.653	2.662	3.1	20.5
8 9	21 2.83	-23 46.3	2.003	3.010	2.9	19.3	8 9	21 2.81	-18 41.7	1.661	2.673	1.6	20.4
8 19	20 54.95	-24 37.4	2.021	2.999	6.1	19.5	8 19	20 54.73	-20 4.1	1.697	2.684	5.9	20.8
8 29	20 48.07	-25 16.8	2.065	2.989	9.5	19.7	8 29	20 47.92	-21 14.6	1.758	2.695	9.9	21.0
9 8	20 42.90	-25 42.7	2.133	2.978	12.5	19.9	9 8	20 43.15	-22 10.1	1.843	2.706	13.4	21.3
124974	2001 TR ₁₁₁		8 6.1 184°40	1°0/ 6.7	17		242547	2005 EF ₁₈		8 6.1 165°27	0°6/ 6.6	17	
6 30	21 34.90	-12 54.9	1.586	2.427	16.7								

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
4841	Manjiro		8 6.1 248°77	0°5/ 6.5 18			521691	2015 RT ₂₆₂		8 6.1 5°53	4°9/ 9.9 18		
6 30	21 31.09	-12 28.8	1.597	2.443	16.4	17.4	6 30	21 26.01	-2 4.5	1.975	2.778	15.3	20.7
7 10	21 27.13	-12 57.4	1.513	2.434	12.8	17.2	7 10	21 22.58	-1 48.6	1.895	2.778	12.6	20.6
7 20	21 20.59	-13 40.7	1.448	2.425	8.6	16.9	7 20	21 17.25	-1 49.5	1.835	2.779	9.5	20.4
7 30	21 12.03	-14 35.2	1.407	2.415	3.8	16.6	7 30	21 10.52	-2 7.2	1.797	2.780	6.6	20.2
8 9	21 2.43	-15 35.1	1.392	2.405	1.4	16.4	8 9	21 3.15	-2 40.1	1.786	2.781	4.9	20.1
8 19	20 52.96	-16 34.1	1.403	2.395	6.4	16.7	8 19	20 55.96	-3 24.8	1.800	2.783	6.1	20.2
8 29	20 44.85	-17 26.1	1.439	2.384	11.0	17.0	8 29	20 49.80	-4 16.4	1.840	2.785	9.0	20.4
9 8	20 39.08	-18 7.2	1.498	2.374	15.2	17.2	9 8	20 45.38	-5 9.8	1.903	2.788	12.0	20.5
94228	Leesuikwan		8 6.1 269°76	5°8/ 3.5 18			377736	2005 XX ₂₁		8 6.1 172°53	1°7/ 4.9 18		
6 30	21 42.25	-32 21.4	1.890	2.733	14.3	18.4	6 30	21 33.65	-19 48.2	2.127	2.969	13.0	21.5
7 10	21 35.48	-32 34.6	1.805	2.721	11.5	18.2	7 10	21 28.35	-20 20.2	2.050	2.972	10.0	21.3
7 20	21 25.88	-32 41.9	1.743	2.708	8.4	18.0	7 20	21 20.98	-20 57.5	1.997	2.975	6.5	21.1
7 30	21 14.20	-32 36.7	1.705	2.695	6.1	17.8	7 30	21 12.10	-21 35.6	1.969	2.977	2.9	20.8
8 9	21 1.61	-32 13.9	1.695	2.682	6.2	17.8	8 9	21 2.54	-22 9.9	1.969	2.978	2.4	20.8
8 19	20 49.46	-31 31.3	1.711	2.669	8.8	17.9	8 19	20 53.24	-22 36.5	1.998	2.979	5.8	21.0
8 29	20 39.05	-30 30.4	1.754	2.655	12.1	18.1	8 29	20 45.12	-22 53.0	2.053	2.979	9.3	21.3
9 8	20 31.32	-29 15.1	1.819	2.642	15.2	18.3	9 8	20 38.93	-22 58.6	2.132	2.979	12.4	21.5
51653	2001 HW ₆₅		8 6.1 164°53	3°9/ 8.7 18			400900	2010 RY ₁₄₁		8 6.1 324°51	4°6/ 9.6 16		
6 30	21 31.25	-5 22.3	1.714	2.531	16.7	19.5	6 30	21 26.39	-2 44.8	2.019	2.823	15.0	21.6
7 10	21 26.88	-5 18.1	1.636	2.533	13.5	19.3	7 10	21 22.90	-2 31.7	1.931	2.816	12.3	21.4
7 20	21 20.20	-5 31.2	1.578	2.536	9.8	19.0	7 20	21 17.49	-2 34.7	1.863	2.810	9.3	21.2
7 30	21 11.79	-6 0.6	1.543	2.538	6.0	18.8	7 30	21 10.66	-2 54.0	1.819	2.804	6.3	21.0
8 9	21 2.57	-6 43.3	1.534	2.539	3.9	18.7	8 9	21 3.12	-3 27.7	1.800	2.798	4.6	20.9
8 19	20 53.58	-7 34.7	1.551	2.540	6.2	18.9	8 19	20 55.69	-4 12.7	1.808	2.792	6.0	21.0
8 29	20 45.90	-8 29.1	1.594	2.541	10.0	19.1	8 29	20 49.27	-5 4.2	1.841	2.787	9.0	21.2
9 8	20 40.34	-9 21.2	1.660	2.542	13.6	19.3	9 8	20 44.55	-5 57.1	1.898	2.782	12.1	21.3
6126	Hubelmatt		8 6.1 266°25	2°2/ 4.9 18			169922	2002 SE ₁₈		8 6.1 173°78	3°0/ 8.7 18		
6 30	21 33.67	-19 14.6	1.442	2.306	16.9	17.0	6 30	21 28.42	-5 16.5	2.302	3.105	13.4	20.7
7 10	21 29.52	-19 47.2	1.360	2.293	13.1	16.7	7 10	21 24.16	-5 27.0	2.217	3.107	10.8	20.6
7 20	21 22.38	-20 29.1	1.297	2.280	8.6	16.4	7 20	21 18.16	-5 51.3	2.154	3.108	7.8	20.4
7 30	21 12.87	-21 14.7	1.258	2.267	3.9	16.1	7 30	21 10.90	-6 28.3	2.116	3.109	4.7	20.2
8 9	21 2.11	-21 56.8	1.243	2.253	3.1	16.0	8 9	21 3.04	-7 15.1	2.105	3.110	3.0	20.1
8 19	20 51.51	-22 28.9	1.254	2.239	7.9	16.3	8 19	20 55.33	-8 8.0	2.122	3.111	4.9	20.2
8 29	20 42.55	-22 46.9	1.288	2.225	12.8	16.5	8 29	20 48.55	-9 2.8	2.167	3.111	7.9	20.4
9 8	20 36.34	-22 49.6	1.343	2.211	17.1	16.8	9 8	20 43.32	-9 55.2	2.237	3.110	10.9	20.6
440622	2005 WV ₂₂		8 6.1 72°46	4°7/ 9.7 18			503950	2003 WJ ₄₉		8 6.2 257°72	15°0/ 14.8 18		
6 30	21 28.28	-2 12.3	2.245	3.035	14.1	21.0	6 30	21 32.38	+18 40.5	1.848	2.516	20.5	20.9
7 10	21 24.00	-1 47.3	2.168	3.043	11.6	20.8	7 10	21 28.10	+20 29.9	1.755	2.499	19.0	20.7
7 20	21 18.00	-1 36.4	2.112	3.051	8.8	20.6	7 20	21 21.32	+21 55.6	1.676	2.482	17.5	20.5
7 30	21 10.77	-1 40.1	2.081	3.060	6.1	20.5	7 30	21 12.46	+22 50.1	1.615	2.464	16.1	20.4
8 9	21 3.01	-1 56.8	2.075	3.068	4.7	20.4	8 9	21 2.35	+23 7.8	1.573	2.445	15.2	20.3
8 19	20 55.46	-2 24.3	2.097	3.076	5.8	20.5	8 19	20 52.06	+22 46.6	1.551	2.426	15.1	20.2
8 29	20 48.89	-2 58.9	2.145	3.084	8.3	20.7	8 29	20 42.82	+21 49.1	1.550	2.406	15.9	20.2
9 8	20 43.89	-3 36.4	2.218	3.093	10.9	20.9	9 8	20 35.71	+20 22.7	1.568	2.386	17.5	20.3
85593	1998 FD ₅₇		8 6.1 43°63	1°4/ 7.2 18			104605	2000 GQ ₉₉		8 6.2 49°43	0°6/ 6.5 18		
6 30	21 28.62	-10 42.3	1.669	2.512	16.0	19.0	6 30	21 32.80	-14 29.0	1.363	2.222	18.0	18.8
7 10	21 24.67	-11 0.6	1.618	2.536	12.4	18.8	7 10	21 28.43	-14 29.3	1.308	2.236	13.9	18.6
7 20	21 18.57	-11 32.4	1.587	2.561	8.3	18.6	7 20	21 21.33	-14 41.0	1.271	2.251	9.2	18.4
7 30	21 11.02	-12 14.2	1.580	2.586	4.0	18.4	7 30	21 12.29	-15 0.7	1.257	2.265	4.0	18.1
8 9	21 2.94	-13 1.3	1.599	2.611	1.7	18.3	8 9	21 2.52	-15 23.4	1.268	2.281	1.5	18.0
8 19	20 55.34	-13 48.6	1.644	2.637	5.4	18.6	8 19	20 53.32	-15 44.5	1.303	2.296	6.5	18.4
8 29	20 49.13	-14 31.4	1.714	2.663	9.3	18.9	8 29	20 45.91	-16 0.2	1.363	2.312	11.2	18.7
9 8	20 44.97	-15 6.4	1.808	2.689	12.7	19.2	9 8	20 41.13	-16 8.1	1.444	2.328	15.1	19.0
469455	2002 QR ₁₄		8 6.1 326°67	1°9/ 6.9 17			348411	2005 JO ₁₇₄		8 6.2 162°04	0°7/ 5.6 18		
6 30	21 28.10	-13 47.0	1.375	2.239	17.5	20.6	6 30	21 30.24	-16 37.1	2.119	2.961	13.1	22.1
7 10	21 25.40	-13 16.4	1.277	2.208	14.0	20.2	7 10	21 25.74	-17 6.9	2.042	2.963	10.0	21.9
7 20	21 19.83	-12 54.8	1.197	2.177	9.6	19.9	7 20	21 19.28	-17 44.2	1.987	2.965	6.5	21.6
7 30	21 11.87	-12 41.5	1.139	2.146	4.8	19.5	7 30	21 11.39	-18 25.5	1.959	2.967	2.7	21.4
8 9	21 2.50	-12 34.1	1.105	2.117	2.2	19.3	8 9	21 2.86	-19 6.3	1.957	2.969	1.5	21.3
8 19	20 53.05	-12 29.9	1.094	2.089	7.1	19.5	8 19	20 54.55	-19 42.5	1.984	2.971	5.3	21.6
8 29	20 45.01	-12 25.6	1.106	2.062	12.4	19.7	8 29	20 47.34	-20 10.9	2.037	2.972	8.9	21.8
9 8	20 39.61	-12 18.4	1.139	2.036	17.3	19.9	9 8	20 41.93	-20 29.7	2.115	2.973	12.1	22.0
212727	2007 RW ₁₆₁		8 6.1 171°51	4°0/ 3.8 17			62321	2000 SP ₁₂₃		8 6.2 43°11	11°1/ 29.9 18		
6 30	21 36.25	-23 38.6	1.570	2.430	15.9	20.8	6 30	21 36.55	-40 10.6	1.510	2.370	16.5	17.2
7 10	21 31.13	-24 27.1	1.501	2.432	12.3	20.5	7 10	21 31.94	-41 49.7	1.468	2.378	13.9	17.0
7 20	21 23.18	-25 19.9	1.454	2.434	8.2	20.3	7 20	21 23.95	-43 17.4	1.446	2.387	11.9	16.9
7 30	21 13.11	-26 9.7	1.431	2.435	4.6	20.1	7 30	21 13.48	-44 22.1	1.446	2.396	11.1	16.9
8 9	21 2.09	-26 49.1	1.434	2.436	4.7	20.1	8 9	21 2.05	-44 55.4	1.469	2.406	11.9	17.0
8 19	20 51.47	-27 12.8	1.463	2.437	8.4	20.3	8 19	20 51.35	-44 54.1	1.514	2.415	13.8	17.1
8 29	20 42.57	-27 18.5	1.516	2.437	12.4	20.6	8 29	20 42.92	-44 20.4	1.579	2.425	16.2	17.3
9 8	20 36.36	-27 7.3	1.590	2.437	15.9	20.8	9 8	20 37.72	-43 20.6	1.661	2.436	18.4	17.5
479158	2013 CH ₈		8 6.1 252°42	1°1/ 6.9 16			331243	2011 BA ₁₁₉		8 6.2 321°36	2°5/ 4.5 18		
6 30	21 33.38	-13 10.6	2.432	3.251	12.3	22.6	6 30	21 26.48					

EPHEMERIDES

8 6.2

8 6.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
192341	1995 <i>QF</i> ₆	8 6.2 244°42	2°3/ 7.7 18				190945	2001 <i>VC</i> ₄₇	8 6.2 205°08	4°6/ 9.3 18			
6 30	21 31.26	-9 10.7	2.094	2.912	14.0	20.7	6 30	21 32.53	-2 54.2	2.225	3.010	14.3	20.3
7 10	21 26.66	-9 8.1	1.996	2.898	11.2	20.5	7 10	21 27.43	-2 27.0	2.132	3.005	11.8	20.2
7 20	21 20.02	-9 17.2	1.920	2.884	7.8	20.3	7 20	21 20.41	-2 13.3	2.060	3.000	8.9	20.0
7 30	21 11.79	-9 36.8	1.869	2.869	4.3	20.0	7 30	21 11.94	-2 13.6	2.013	2.994	6.1	19.8
8 9	21 2.73	-10 4.2	1.845	2.854	2.4	19.9	8 9	21 2.74	-2 27.0	1.993	2.987	4.6	19.7
8 19	20 53.72	-10 36.3	1.849	2.839	5.2	20.0	8 19	20 53.65	-2 51.2	2.000	2.980	6.0	19.7
8 29	20 45.72	-11 9.1	1.879	2.823	9.0	20.2	8 29	20 45.53	-3 22.9	2.035	2.972	8.8	19.9
9 8	20 39.51	-11 39.2	1.934	2.806	12.4	20.4	9 8	20 39.11	-3 58.0	2.095	2.963	11.7	20.1
277556	2005 <i>YF</i> ₁₁₅	8 6.2 47°67	1°7/ 5.3 16				86785	2000 <i>GW</i> ₉₄	8 6.2 129°95	0°0/ 5.9 17			
6 30	21 33.27	-19 16.6	1.414	2.280	17.1	20.5	6 30	21 33.42	-14 36.6	1.807	2.647	15.1	20.8
7 10	21 28.69	-19 35.4	1.365	2.299	13.0	20.3	7 10	21 28.42	-14 58.9	1.738	2.657	11.6	20.6
7 20	21 21.43	-20 1.0	1.336	2.319	8.4	20.1	7 20	21 21.15	-15 31.1	1.691	2.667	7.6	20.4
7 30	21 12.32	-20 28.1	1.330	2.339	3.6	19.9	7 30	21 12.24	-16 9.5	1.668	2.676	3.2	20.2
8 9	21 2.59	-20 50.9	1.349	2.360	2.5	19.9	8 9	21 2.64	-16 49.1	1.673	2.685	1.3	20.0
8 19	20 53.52	-21 5.2	1.394	2.381	7.0	20.2	8 19	20 53.39	-17 25.5	1.705	2.694	5.7	20.4
8 29	20 46.27	-21 8.7	1.462	2.403	11.3	20.5	8 29	20 45.51	-17 54.9	1.763	2.702	9.7	20.6
9 8	20 41.60	-21 1.0	1.552	2.424	14.9	20.8	9 8	20 39.76	-18 15.2	1.844	2.710	13.2	20.9
37346	2001 <i>SU</i> ₁₅₄	8 6.2 32°49	0°3/ 5.9 18 R				476925	2008 <i>WQ</i> ₁₀₉	8 6.2 288°19	0°9/ 5.6 18			
6 30	21 29.46	-15 54.3	1.956	2.802	13.8	18.9	6 30	21 30.42	-17 9.0	1.765	2.617	14.8	21.9
7 10	21 25.29	-16 13.5	1.880	2.803	10.7	18.7	7 10	21 26.41	-17 33.2	1.681	2.608	11.4	21.7
7 20	21 19.07	-16 40.9	1.827	2.805	7.0	18.5	7 20	21 20.03	-18 6.2	1.619	2.599	7.5	21.5
7 30	21 11.34	-17 13.2	1.799	2.807	2.9	18.2	7 30	21 11.85	-18 43.9	1.580	2.589	3.2	21.2
8 9	21 2.95	-17 46.1	1.797	2.810	1.3	18.1	8 9	21 2.78	-19 21.2	1.569	2.580	1.9	21.1
8 19	20 54.81	-18 15.6	1.823	2.812	5.4	18.4	8 19	20 53.87	-19 53.4	1.583	2.571	6.2	21.3
8 29	20 47.85	-18 38.5	1.874	2.814	9.2	18.6	8 29	20 46.25	-20 16.6	1.623	2.562	10.5	21.6
9 8	20 42.79	-18 52.8	1.949	2.817	12.6	18.8	9 8	20 40.77	-20 28.9	1.685	2.553	14.2	21.8
503946	2003 <i>UU</i> ₂₃₂	8 6.2 267°16	2°2/ 4.9 17				482365	2011 <i>YN</i> ₁₂	8 6.2 226°81	1°8/ 4.3 18			
6 30	21 33.82	-19 36.8	1.602	2.459	15.8	22.2	6 30	21 28.15	-19 24.3	2.600	3.441	10.9	21.6
7 10	21 29.48	-20 10.9	1.510	2.440	12.3	22.0	7 10	21 23.96	-20 19.7	2.511	3.433	8.4	21.5
7 20	21 22.33	-20 53.6	1.440	2.421	8.1	21.7	7 20	21 18.08	-21 21.2	2.446	3.424	5.4	21.3
7 30	21 12.93	-21 39.6	1.393	2.401	3.7	21.4	7 30	21 10.94	-22 24.8	2.408	3.415	2.6	21.1
8 9	21 2.28	-22 22.1	1.372	2.381	3.1	21.3	8 9	21 3.17	-23 25.6	2.400	3.406	2.4	21.0
8 19	20 51.67	-22 55.0	1.377	2.361	7.6	21.5	8 19	20 55.47	-24 19.6	2.420	3.397	5.3	21.2
8 29	20 42.49	-23 14.4	1.407	2.340	12.2	21.7	8 29	20 48.59	-25 3.5	2.467	3.387	8.3	21.4
9 8	20 35.84	-23 18.8	1.458	2.319	16.3	21.9	9 8	20 43.18	-25 35.6	2.539	3.377	11.0	21.6
144081	2004 <i>BR</i> ₅₀	8 6.2 61°66	0°6/ 6.6 18				105140	2000 <i>NL</i> ₁₀	8 6.2 99°61	35°8/ 8.0 18 R			
6 30	21 31.35	-12 27.2	1.385	2.240	18.0	19.7	6 30	23 57.93	+52 26.0	0.837	1.168	58.2	17.8
7 10	21 27.33	-12 53.8	1.329	2.255	13.9	19.5	7 10	23 25.70	+56 39.6	0.841	1.268	53.1	17.9
7 20	21 20.65	-13 35.4	1.292	2.271	9.2	19.3	7 20	22 40.95	+59 34.9	0.842	1.355	48.5	17.9
7 30	21 12.06	-14 27.4	1.278	2.286	4.1	19.0	7 30	21 45.74	+60 22.7	0.846	1.429	44.4	17.9
8 9	21 2.71	-15 23.3	1.289	2.302	1.4	18.9	8 9	20 50.55	+58 32.5	0.857	1.491	40.9	17.9
8 19	20 53.86	-16 16.5	1.325	2.317	6.4	19.2	8 19	20 6.64	+54 21.4	0.880	1.543	38.3	18.0
8 29	20 46.72	-17 1.5	1.385	2.333	11.1	19.5	8 29	19 37.77	+48 41.7	0.917	1.585	36.6	18.1
9 8	20 42.11	-17 35.0	1.467	2.349	15.0	19.8	9 8	19 21.74	+42 28.4	0.968	1.618	35.8	18.2
521592	2015 <i>PW</i> ₃₁₆	8 6.2 311°52	1°0/ 6.9 16				401802	2014 <i>HM</i> ₁₃₀	8 6.2 303°69	1°4/ 7.3 18			
6 30	21 27.60	-12 21.4	1.869	2.711	14.5	21.4	6 30	21 27.59	-10 9.0	1.912	2.747	14.6	20.6
7 10	21 24.11	-12 30.9	1.777	2.696	11.4	21.2	7 10	21 23.97	-10 32.6	1.829	2.742	11.5	20.4
7 20	21 18.47	-12 51.8	1.707	2.681	7.7	21.0	7 20	21 18.31	-11 9.8	1.766	2.737	7.8	20.2
7 30	21 11.17	-13 21.9	1.660	2.667	3.6	20.7	7 30	21 11.09	-11 58.3	1.728	2.732	3.8	19.9
8 9	21 3.01	-13 57.5	1.640	2.653	1.4	20.5	8 9	21 3.12	-12 53.6	1.716	2.728	1.6	19.8
8 19	20 54.95	-14 34.3	1.646	2.639	5.5	20.7	8 19	20 55.29	-13 50.8	1.731	2.723	5.3	20.0
8 29	20 47.98	-15 8.1	1.678	2.625	9.6	21.0	8 29	20 48.56	-14 44.8	1.773	2.719	9.2	20.2
9 8	20 42.11	-15 35.6	1.733	2.612	13.3	21.2	9 8	20 43.69	-15 31.5	1.838	2.715	12.7	20.4
117151	2004 <i>PL</i> ₁₀₅	8 6.2 13°28	5°1/ 2.0 18				467496	2006 <i>VM</i> ₆₃	8 6.2 343°98	0°6/ 5.9 17			
6 30	21 29.31	-27 49.9	1.975	2.837	13.0	19.4	6 30	21 10.55	-16 57.3	0.742	1.672	21.2	19.5
7 10	21 25.38	-28 58.5	1.909	2.839	10.1	19.2	7 10	21 13.14	-16 52.5	0.671	1.641	16.7	19.1
7 20	21 19.23	-30 8.0	1.866	2.840	7.2	19.0	7 20	21 12.46	-17 2.0	0.615	1.612	11.2	18.7
7 30	21 11.45	-31 11.5	1.848	2.842	5.2	18.9	7 30	21 8.96	-17 23.0	0.575	1.587	4.8	18.2
8 9	21 2.93	-32 2.5	1.857	2.844	5.8	19.0	8 9	21 3.90	-17 48.9	0.551	1.564	2.3	17.9
8 19	20 54.68	-32 36.4	1.891	2.846	8.3	19.1	8 19	20 58.97	-18 11.5	0.545	1.546	9.3	18.2
8 29	20 47.72	-32 51.4	1.950	2.848	11.2	19.3	8 29	20 56.15	-18 22.6	0.554	1.531	15.9	18.5
9 8	20 42.82	-32 48.2	2.031	2.851	14.0	19.5	9 8	20 56.91	-18 16.8	0.578	1.521	21.8	18.8
87225	2000 <i>OP</i> ₄₁	8 6.2 345°58	5°6/ 9.6 18				253886	2004 <i>BF</i> ₅₁	8 6.2 270°21	1°0/ 6.7 18			
6 30	21 27.47	-2 48.1	1.763	2.575	16.5	19.0	6 30	21 33.66	-13 23.7	1.655	2.497	16.1	21.2
7 10	21 23.99	-2 9.6	1.681	2.569	13.7	18.8	7 10	21 29.22	-13 22.7	1.557	2.476	12.7	20.9
7 20	21 18.36	-1 47.4	1.618	2.564	10.4	18.6	7 20	21 22.11	-13 32.7	1.479	2.454	8.6	20.6
7 30	21 11.11	-1 42.8	1.577	2.560	7.3	18.4	7 30	21 12.85	-13 51.4	1.426	2.432	4.0	20.3
8 9	21 3.06	-1 54.9	1.561	2.555	5.6	18.3	8 9	21 2.39	-14 15.1	1.398	2.410	1.6	20.0
8 19	20 55.17	-2 21.2	1.570	2.552	7.0	18.3	8 19	20 51.91	-14 39.6	1.396	2.388	6.4	20.3
8 29	20 48.44	-2 57.2	1.603	2.549	10.1	18.5	8 29	20 42.72	-15 0.5	1.420	2.365	11.1	20.5
9 8	20 43.68	-3 37.7	1.660	2.547	13.3	18.7	9 8	20 35.89	-15 15.0	1.466	2.342	15.4	20.7
361936	2008 <i>HO</i> ₂₄	8 6.2 224°36	1°4/ 7.5 18				328145	2008 <i>CE</i> ₂	8 6.2 164°63	5°			

EPHEMERIDES

8 6.2

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
66703	1999 <i>TL</i> ₈₉		8 6.2 307°45	1.7°/ 5.1	18		480146	2015 <i>FL</i> ₁₉₅		8 6.2 56°58	1.8°/ 7.2	17	
6 30	21 28.71	-18 0.6	1.582	2.446	15.7	19.5	6 30	21 32.35	-11 16.9	1.499	2.343	17.4	20.5
7 10	21 25.55	-18 35.8	1.489	2.423	12.2	19.2	7 10	21 27.82	-11 16.8	1.445	2.364	13.5	20.3
7 20	21 19.77	-19 21.7	1.417	2.400	8.0	18.9	7 20	21 20.83	-11 30.3	1.412	2.385	9.1	20.1
7 30	21 11.87	-20 13.4	1.368	2.378	3.5	18.6	7 30	21 12.15	-11 54.6	1.401	2.406	4.5	19.9
8 9	21 2.79	-21 4.5	1.345	2.355	2.6	18.5	8 9	21 2.85	-12 25.1	1.416	2.428	2.0	19.8
8 19	20 53.72	-21 48.6	1.346	2.333	7.3	18.7	8 19	20 54.09	-12 57.3	1.456	2.449	6.0	20.1
8 29	20 45.96	-22 20.7	1.372	2.312	11.9	18.9	8 29	20 46.96	-13 26.6	1.522	2.471	10.2	20.4
9 8	20 40.58	-22 38.1	1.419	2.291	16.1	19.1	9 8	20 42.20	-13 49.8	1.610	2.493	13.9	20.7
404487	2013 <i>HP</i> ₁₈		8 6.2 17°39	2.4°/ 4.4	18		87313	2000 <i>QB</i> ₃		8 6.2 303°21	1°8/ 5.2	18	
6 30	21 28.85	-21 53.0	2.095	2.950	12.7	20.7	6 30	21 31.10	-19 9.1	1.550	2.414	16.0	19.0
7 10	21 24.75	-22 24.4	2.023	2.952	9.7	20.5	7 10	21 27.42	-19 29.8	1.462	2.395	12.4	18.8
7 20	21 18.69	-22 59.4	1.975	2.955	6.4	20.3	7 20	21 21.00	-19 58.5	1.394	2.377	8.2	18.5
7 30	21 11.21	-23 33.8	1.951	2.958	3.2	20.1	7 30	21 12.42	-20 30.6	1.350	2.359	3.6	18.2
8 9	21 3.12	-24 3.0	1.955	2.961	3.0	20.1	8 9	21 2.67	-21 0.3	1.330	2.341	2.6	18.0
8 19	20 55.29	-24 23.3	1.985	2.964	6.1	20.3	8 19	20 53.03	-21 22.1	1.336	2.323	7.3	18.3
8 29	20 48.62	-24 32.8	2.042	2.968	9.4	20.5	8 29	20 44.83	-21 32.6	1.365	2.305	11.9	18.5
9 8	20 43.77	-24 30.8	2.122	2.972	12.3	20.7	9 8	20 39.13	-21 30.2	1.416	2.289	16.1	18.7
10797	Guatemala		8 6.2 111°54	1°8/ 7.3	18		480541	2015 <i>MS</i> ₄₅		8 6.2 330°19	2°8/ 3.8	18	
6 30	21 33.60	-10 12.9	1.524	2.362	17.4	18.5	6 30	21 27.90	-20 43.1	1.986	2.843	13.2	20.9
7 10	21 28.90	-10 27.1	1.459	2.374	13.7	18.3	7 10	21 24.27	-21 47.3	1.910	2.840	10.1	20.7
7 20	21 21.64	-10 56.8	1.415	2.386	9.3	18.1	7 20	21 18.55	-22 58.4	1.856	2.837	6.6	20.5
7 30	21 12.51	-11 38.9	1.393	2.398	4.6	17.8	7 30	21 11.25	-24 10.8	1.828	2.834	3.4	20.3
8 9	21 2.61	-12 28.1	1.397	2.409	2.0	17.7	8 9	21 3.19	-25 17.9	1.828	2.832	3.5	20.3
8 19	20 53.11	-13 18.7	1.427	2.420	6.1	18.0	8 19	20 55.30	-26 14.3	1.854	2.829	6.8	20.5
8 29	20 45.19	-14 5.3	1.483	2.430	10.6	18.3	8 29	20 48.55	-26 56.1	1.905	2.827	10.2	20.7
9 8	20 39.70	-14 43.7	1.561	2.441	14.5	18.5	9 8	20 43.69	-27 22.0	1.980	2.824	13.3	20.9
128913	2004 <i>TU</i> ₅₃		8 6.2 190°45	1°2/ 5.3	18		259512	2003 <i>SD</i> ₃₃₆		8 6.2 258°30	3°1/ 4.0	18	
6 30	21 31.92	-17 53.2	2.114	2.955	13.1	21.0	6 30	21 31.26	-19 21.9	1.518	2.382	16.2	20.7
7 10	21 27.12	-18 25.7	2.033	2.954	10.1	20.8	7 10	21 27.58	-20 33.0	1.440	2.374	12.4	20.4
7 20	21 20.27	-19 5.2	1.975	2.953	6.6	20.6	7 20	21 21.12	-21 55.7	1.383	2.366	8.2	20.1
7 30	21 11.91	-19 47.6	1.943	2.951	2.8	20.4	7 30	21 12.48	-23 22.6	1.350	2.358	4.1	19.9
8 9	21 2.84	-20 28.3	1.938	2.949	1.9	20.3	8 9	21 2.69	-24 44.6	1.343	2.349	4.1	19.9
8 19	20 53.97	-21 3.0	1.962	2.946	5.6	20.6	8 19	20 53.06	-25 53.3	1.362	2.341	8.2	20.1
8 29	20 46.22	-21 28.7	2.012	2.943	9.2	20.8	8 29	20 44.93	-26 43.3	1.404	2.332	12.7	20.3
9 8	20 40.33	-21 44.0	2.086	2.940	12.4	21.0	9 8	20 39.35	-27 12.7	1.467	2.323	16.6	20.6
320319	2007 <i>TU</i> ₂₂		8 6.2 255°73	2°6/ 4.6	17		467718	2009 <i>BD</i> ₁₆₇		8 6.2 75°08	0°6/ 6.6	17	
6 30	21 33.23	-19 30.3	1.526	2.387	16.3	21.5	6 30	21 32.93	-10 58.1	1.334	2.185	18.7	21.9
7 10	21 29.11	-20 18.5	1.442	2.375	12.6	21.2	7 10	21 28.60	-11 46.0	1.284	2.208	14.5	21.7
7 20	21 22.13	-21 16.7	1.380	2.362	8.3	20.9	7 20	21 21.52	-12 51.5	1.253	2.231	9.6	21.5
7 30	21 12.89	-22 18.5	1.341	2.349	3.9	20.7	7 30	21 12.51	-14 8.8	1.245	2.253	4.2	21.2
8 9	21 2.44	-23 16.3	1.327	2.336	3.5	20.6	8 9	21 2.77	-15 29.8	1.262	2.275	1.4	21.1
8 19	20 52.11	-24 2.9	1.340	2.322	7.9	20.8	8 19	20 53.61	-16 46.0	1.305	2.297	6.6	21.5
8 29	20 43.30	-24 33.7	1.376	2.308	12.5	21.1	8 29	20 46.25	-17 51.1	1.372	2.319	11.3	21.8
9 8	20 37.11	-24 47.2	1.433	2.294	16.6	21.3	9 8	20 41.53	-18 41.2	1.461	2.341	15.2	22.1
433133	2012 <i>TN</i> ₁₉₄		8 6.2 0°50	4°6/ 8.8	16		146284	2001 <i>FC</i> ₁₂₆		8 6.2 353°86	3°4/ 8.0	18	
6 30	21 19.33	- 6 22.5	1.028	1.905	21.2	20.0	6 30	21 22.51	- 8 43.1	1.025	1.905	21.0	19.4
7 10	21 18.91	- 6 8.3	0.967	1.900	17.1	19.7	7 10	21 21.51	- 8 34.6	0.960	1.897	16.8	19.1
7 20	21 15.61	- 6 18.7	0.922	1.897	12.4	19.5	7 20	21 17.44	- 8 48.3	0.911	1.891	11.9	18.8
7 30	21 10.10	- 6 53.4	0.896	1.897	7.5	19.2	7 30	21 10.97	- 9 23.2	0.881	1.886	6.5	18.5
8 9	21 3.56	- 7 48.0	0.890	1.898	4.6	19.0	8 9	21 3.32	-10 14.3	0.872	1.883	3.5	18.3
8 19	20 57.35	- 8 54.7	0.905	1.902	7.6	19.2	8 19	20 55.96	-11 13.9	0.884	1.881	7.6	18.5
8 29	20 52.90	-10 3.9	0.941	1.908	12.5	19.5	8 29	20 50.44	-12 13.1	0.916	1.882	13.0	18.8
9 8	20 51.19	-11 6.9	0.996	1.916	17.1	19.8	9 8	20 47.86	-13 4.3	0.968	1.884	17.9	19.1
399907	2005 <i>XY</i> ₂₄		8 6.2 133°88	2°9/ 8.4	18		132295	2002 <i>GC</i>		8 6.2 138°92	8°9/ 30.9	17	
6 30	21 30.66	- 7 4.1	2.686	3.482	11.9	20.7	6 30	21 38.04	-38 34.3	1.873	2.720	14.3	19.7
7 10	21 25.56	- 6 38.6	2.604	3.489	9.5	20.5	7 10	21 32.52	-39 50.8	1.818	2.724	11.9	19.6
7 20	21 18.95	- 6 22.1	2.544	3.496	6.9	20.4	7 20	21 24.14	-40 59.1	1.784	2.727	9.8	19.5
7 30	21 11.28	- 6 14.4	2.511	3.503	4.2	20.2	7 30	21 13.67	-41 50.0	1.774	2.730	8.9	19.4
8 9	21 3.14	- 6 14.3	2.507	3.509	2.9	20.1	8 9	21 2.34	-42 16.6	1.789	2.733	9.6	19.5
8 19	20 55.19	- 6 20.1	2.531	3.516	4.5	20.2	8 19	20 51.51	-42 15.7	1.827	2.736	11.4	19.6
8 29	20 48.10	- 6 29.6	2.584	3.522	7.1	20.4	8 29	20 42.51	-41 48.4	1.889	2.739	13.8	19.8
9 8	20 42.40	- 6 40.6	2.662	3.528	9.6	20.6	9 8	20 36.23	-40 59.0	1.970	2.741	16.0	19.9
360736	2004 <i>TP</i> ₃₅₅		8 6.2 353°18	6°5/ 11.8	18		312449	2008 <i>JA</i> ₃₄		8 6.2 178°77	3°1/ 9.0	18	
6 30	21 20.29	+ 2 54.8	1.547	2.355	18.6	19.4	6 30	21 26.65	- 4 31.7	2.443	3.242	12.8	21.1
7 10	21 18.80	+ 2 41.9	1.465	2.346	15.7	19.1	7 10	21 22.78	- 4 42.3	2.357	3.243	10.3	21.0
7 20	21 15.15	+ 2 0.8	1.400	2.339	12.4	18.9	7 20	21 17.31	- 5 6.4	2.292	3.243	7.5	20.8
7 30	21 9.83	+ 0 50.8	1.356	2.333	8.9	18.7	7 30	21 10.68	- 5 43.0	2.252	3.243	4.7	20.6
8 9	21 3.68	+ 0 45.0	1.336	2.329	6.6	18.6	8 9	21 3.49	- 6 29.6	2.240	3.243	3.1	20.5
8 19	20 57.66	- 2 39.7	1.339	2.325	7.4	18.6	8 19	20 56.43	- 7 22.7	2.255	3.243	4.7	20.6
8 29	20 52.82	- 4 43.4	1.367	2.324	10.5	18.8	8 29	20 50.21	- 8 18.2	2.298	3.243	7.5	20.8
9 8	20 49.99	- 6 45.8	1.418	2.323	14.0	19.0	9 8	20 45.41	- 9 12.1	2.367	3.243	10.3	21.0
93889	2000 <i>WQ</i> ₁₃₆		8 6.2 307°96	1°1/ 5.5	18		494352	2016 <i>TB</i> ₇₄		8 6.2 256°53			

EPHEMERIDES

8 6.2

8 6.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
374743	2006 <i>SJ</i> ₁₄₉		8 6.2 30°28'	2°9/ 7.8	17		374782	2006 <i>TS</i> ₁₅		8 6.2 261°90'	0°9/ 5.7	18	
6 30	21 30.33	- 8 50.0	1.352	2.200	18.7	21.2	6 30	21 33.67	-17 0.6	1.712	2.561	15.4	22.2
7 10	21 26.78	- 8 46.6	1.285	2.204	14.9	21.0	7 10	21 29.21	-17 24.1	1.618	2.542	12.0	21.9
7 20	21 20.50	- 9 0.7	1.237	2.208	10.4	20.7	7 20	21 22.14	-17 57.2	1.544	2.523	7.9	21.6
7 30	21 12.17	- 9 30.8	1.210	2.212	5.6	20.5	7 30	21 12.98	-18 35.8	1.495	2.504	3.4	21.3
8 9	21 2.92	-10 12.4	1.207	2.217	3.0	20.3	8 9	21 2.67	-19 14.4	1.472	2.484	1.9	21.1
8 19	20 54.02	-10 59.6	1.228	2.222	6.6	20.6	8 19	20 52.38	-19 47.8	1.476	2.464	6.6	21.4
8 29	20 46.76	-11 46.2	1.274	2.228	11.3	20.9	8 29	20 43.39	-20 11.7	1.505	2.443	11.2	21.6
9 8	20 42.06	-12 26.9	1.340	2.233	15.5	21.1	9 8	20 36.71	-20 24.1	1.556	2.422	15.3	21.8
126233	2002 <i>AC</i> ₅₈		8 6.2 272°56'	0°3/ 6.4	18		91986	1999 <i>VD</i> ₁₁₄		8 6.2 317°57'	2°1/ 7.5	18	
6 30	21 31.82	-14 20.8	1.816	2.658	14.9	20.2	6 30	21 28.32	-11 3.2	1.869	2.706	14.7	19.6
7 10	21 27.58	-14 33.4	1.719	2.638	11.7	20.0	7 10	21 24.78	-10 47.6	1.769	2.683	11.7	19.4
7 20	21 20.94	-14 56.4	1.642	2.618	7.8	19.7	7 20	21 19.05	-10 42.5	1.690	2.661	8.2	19.1
7 30	21 12.39	-15 27.1	1.590	2.598	3.4	19.4	7 30	21 11.60	-10 46.8	1.635	2.638	4.3	18.9
8 9	21 2.80	-16 1.2	1.564	2.577	1.3	19.2	8 9	21 3.22	-10 58.4	1.606	2.617	2.3	18.7
8 19	20 53.21	-16 34.0	1.565	2.556	5.9	19.5	8 19	20 54.85	-11 14.4	1.603	2.595	5.6	18.8
8 29	20 44.79	-17 1.6	1.592	2.534	10.4	19.7	8 29	20 47.54	-11 31.4	1.626	2.575	9.7	19.0
9 8	20 38.47	-17 21.1	1.641	2.513	14.3	19.9	9 8	20 42.16	-11 46.1	1.671	2.555	13.5	19.2
386644	2009 <i>SE</i> ₂₆₂		8 6.2 269°59'	2°2/ 7.5	18		246969	1999 <i>TV</i> ₁₃₅		8 6.2 292°34'	4°3/ 9.7	18	
6 30	21 31.60	-10 25.6	1.658	2.495	16.3	21.4	6 30	21 26.41	- 2 22.0	2.237	3.032	14.0	20.3
7 10	21 27.47	-10 20.1	1.571	2.484	13.0	21.1	7 10	21 22.83	- 2 17.1	2.144	3.023	11.5	20.1
7 20	21 20.87	-10 27.8	1.504	2.474	9.0	20.9	7 20	21 17.50	- 2 27.5	2.071	3.015	8.7	19.9
7 30	21 12.35	-10 47.2	1.460	2.464	4.7	20.6	7 30	21 10.85	- 2 53.3	2.022	3.006	5.9	19.7
8 9	21 2.84	-11 15.1	1.442	2.453	2.3	20.4	8 9	21 3.53	- 3 32.4	2.000	2.997	4.3	19.6
8 19	20 53.45	-11 47.1	1.450	2.442	6.1	20.6	8 19	20 56.29	- 4 21.9	2.004	2.988	5.5	19.6
8 29	20 45.37	-12 18.8	1.483	2.432	10.5	20.9	8 29	20 49.92	- 5 17.3	2.035	2.980	8.3	19.8
9 8	20 39.53	-12 46.2	1.539	2.421	14.5	21.1	9 8	20 45.09	- 6 13.8	2.091	2.971	11.3	20.0
184958	2005 <i>WR</i> ₁₁₁		8 6.2 334°37'	5°9/ 1.2	18		364095	2005 <i>Y7</i> ₁₅₀		8 6.2 248°29'	3°1/ 3.2	18	
6 30	21 29.11	-29 39.1	1.991	2.854	12.9	19.5	6 30	21 28.33	-23 30.8	2.416	3.267	11.4	20.8
7 10	21 25.39	-30 58.2	1.922	2.849	10.2	19.3	7 10	21 24.29	-24 30.7	2.336	3.262	8.7	20.6
7 20	21 19.39	-32 17.5	1.875	2.845	7.5	19.2	7 20	21 18.44	-25 34.3	2.279	3.257	5.9	20.4
7 30	21 11.67	-33 29.6	1.853	2.840	5.9	19.1	7 30	21 11.24	-26 36.6	2.250	3.252	3.5	20.3
8 9	21 3.12	-34 27.6	1.857	2.836	6.6	19.1	8 9	21 3.38	-27 32.5	2.248	3.246	3.7	20.3
8 19	20 54.77	-35 6.6	1.887	2.832	9.0	19.2	8 19	20 55.65	-28 17.7	2.274	3.241	6.3	20.4
8 29	20 47.69	-35 24.4	1.941	2.828	11.8	19.4	8 29	20 48.85	-28 49.5	2.326	3.235	9.2	20.6
9 8	20 42.69	-35 22.0	2.016	2.825	14.5	19.6	9 8	20 43.68	-29 7.1	2.402	3.230	11.8	20.8
470438	2007 <i>WA</i> ₂₂		8 6.2 322°53'	3°3/ 4.2	18		469640	2004 <i>TC</i> ₁₉		8 6.2 338°93'	11°9/ 6.6	16	
6 30	21 32.17	-23 47.3	1.767	2.628	14.4	20.7	6 30	21 27.50	- 5 39.4	1.000	1.865	22.6	20.2
7 10	21 27.82	-24 16.2	1.691	2.622	11.1	20.5	7 10	21 25.92	- 2 51.3	0.911	1.831	19.4	19.9
7 20	21 21.01	-24 48.0	1.637	2.617	7.5	20.3	7 20	21 20.86	- 0 4.0	0.840	1.798	15.8	19.6
7 30	21 12.36	-25 17.3	1.607	2.611	4.1	20.1	7 30	21 12.74	+ 2 33.3	0.788	1.768	12.8	19.3
8 9	21 2.88	-25 38.5	1.602	2.606	4.0	20.1	8 9	21 2.69	+ 4 50.3	0.755	1.740	12.0	19.1
8 19	20 53.68	-25 47.6	1.624	2.601	7.4	20.3	8 19	20 52.34	+ 6 37.2	0.742	1.715	14.3	19.1
8 29	20 45.90	-25 42.7	1.671	2.597	11.1	20.5	8 29	20 43.66	+ 7 49.8	0.748	1.693	18.3	19.3
9 8	20 40.40	-25 24.3	1.740	2.593	14.5	20.7	9 8	20 38.31	+ 8 31.0	0.769	1.674	22.6	19.4
510614	2012 <i>TT</i> ₁₀₁		8 6.2 256°96'	1°0/ 6.9	18		488054	2015 <i>UW</i> ₅₃		8 6.2 241°10'	0°2/ 6.4	18	
6 30	21 30.42	-12 18.8	1.942	2.776	14.4	22.2	6 30	21 27.43	-14 0.1	2.693	3.521	11.0	22.4
7 10	21 26.24	-12 31.8	1.851	2.766	11.3	21.9	7 10	21 23.32	-14 21.5	2.600	3.512	8.5	22.2
7 20	21 19.90	-12 56.0	1.782	2.754	7.6	21.7	7 20	21 17.67	-14 50.4	2.530	3.503	5.6	22.0
7 30	21 11.90	-13 29.0	1.737	2.743	3.6	21.4	7 30	21 10.88	-15 24.4	2.487	3.494	2.5	21.8
8 9	21 3.06	-14 6.9	1.719	2.732	1.3	21.2	8 9	21 3.53	-16 0.6	2.472	3.485	0.9	21.6
8 19	20 54.32	-14 45.6	1.728	2.720	5.4	21.5	8 19	20 56.27	-16 35.8	2.486	3.475	4.2	21.9
8 29	20 46.67	-15 20.8	1.764	2.708	9.4	21.7	8 29	20 49.78	-17 7.2	2.528	3.466	7.3	22.0
9 8	20 40.95	-15 49.4	1.823	2.696	13.0	21.9	9 8	20 44.63	-17 32.6	2.595	3.456	10.0	22.2
55329	2001 <i>SQ</i> ₁₁₁		8 6.2 5°00'	0°5/ 6.0	18		2766	Leeuwenhoek		8 6.2 200°23'	1°0/ 5.6	18	
6 30	21 33.05	-18 50.7	0.990	1.878	20.9	17.4	6 30	21 34.30	-18 13.8	2.168	3.004	13.0	17.5
7 10	21 29.82	-18 25.9	0.932	1.877	16.3	17.1	7 10	21 28.95	-18 31.9	2.082	3.000	10.0	17.3
7 20	21 22.95	-18 8.2	0.891	1.877	10.7	16.8	7 20	21 21.53	-18 55.6	2.020	2.996	6.6	17.1
7 30	21 13.34	-17 54.0	0.869	1.879	4.6	16.5	7 30	21 12.58	-19 21.6	1.984	2.992	2.8	16.9
8 9	21 2.55	-17 38.7	0.869	1.881	2.0	16.3	8 9	21 2.90	-19 45.7	1.975	2.987	1.7	16.8
8 19	20 52.40	-17 18.9	0.890	1.885	8.2	16.7	8 19	20 53.41	-20 4.7	1.995	2.981	5.4	17.0
8 29	20 44.62	-16 52.9	0.933	1.890	14.0	17.0	8 29	20 45.05	-20 16.0	2.043	2.974	9.1	17.2
9 8	20 40.29	-16 20.3	0.994	1.896	18.8	17.3	9 8	20 38.56	-20 18.5	2.114	2.967	12.3	17.4
271062	2003 <i>HF</i> ₁₃		8 6.2 73°58'	6°5/ 11.3	17		69751	1998 <i>MV</i> ₁₇		8 6.2 111°33'	0°9/ 6.9	18	
6 30	21 28.99	+ 2 9.3	1.674	2.463	18.2	21.1	6 30	21 31.11	-11 31.3	1.942	2.773	14.5	20.1
7 10	21 25.18	+ 2 18.3	1.607	2.476	15.2	20.9	7 10	21 26.54	-11 58.5	1.874	2.786	11.3	19.9
7 20	21 19.17	+ 2 3.9	1.558	2.490	11.8	20.8	7 20	21 19.93	-12 37.6	1.827	2.799	7.5	19.7
7 30	21 11.56	+ 1 25.6	1.531	2.503	8.6	20.6	7 30	21 11.87	-13 25.3	1.806	2.812	3.5	19.5
8 9	21 3.26	+ 0 26.0	1.528	2.516	6.6	20.5	8 9	21 3.19	-14 17.1	1.812	2.824	1.3	19.3
8 19	20 55.27	- 0 49.6	1.550	2.530	7.4	20.6	8 19	20 54.81	-15 8.2	1.845	2.836	5.1	19.6
8 29	20 48.58	- 2 13.9	1.598	2.543	10.1	20.8	8 29	20 47.64	-15 54.1	1.905	2.848	8.9	19.9
9 8	20 43.95	- 3 39.2	1.669	2.556	13.3	21.0	9 8	20 42.37	-16 31.9	1.989	2.859	12.2	20.1
298226	2002 <i>UA</i> ₄₅		8 6.2 292°53'	2°0/ 7.8	18		355054	2006 <i>SW</i> ₁₀₅		8 6.			

EPHEMERIDES

8 6.2

8 6.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
349244	2007 <i>TV</i> ₁₀₉		8 6.2 293°03	4°0/ 3.4	18		181503	2006 <i>UC</i> ₃₇		8 6.2 217°51	0°5/ 5.9	18	
6 30	21 30.82	-24 8.7	1.819	2.681	14.0	20.4	6 30	21 29.95	-16 25.0	2.279	3.117	12.4	21.3
7 10	21 26.94	-25 0.3	1.731	2.663	10.9	20.2	7 10	21 25.53	-16 46.7	2.195	3.114	9.6	21.1
7 20	21 20.59	-25 56.7	1.665	2.645	7.4	20.0	7 20	21 19.25	-17 15.3	2.133	3.110	6.3	20.9
7 30	21 12.30	-26 51.5	1.624	2.627	4.4	19.7	7 30	21 11.62	-17 47.9	2.098	3.106	2.6	20.7
8 9	21 2.99	-27 38.1	1.609	2.609	4.7	19.7	8 9	21 3.34	-18 20.5	2.090	3.102	1.3	20.5
8 19	20 53.77	-28 10.9	1.620	2.591	8.0	19.9	8 19	20 55.23	-18 49.8	2.110	3.098	4.9	20.8
8 29	20 45.81	-28 26.7	1.655	2.573	11.7	20.1	8 29	20 48.10	-19 12.8	2.157	3.093	8.4	21.0
9 8	20 40.09	-28 25.2	1.712	2.556	15.1	20.2	9 8	20 42.63	-19 27.7	2.229	3.089	11.5	21.2
91681	1999 <i>TF</i> ₁₂₀		8 6.2 246°25	1°4/ 5.0	18 R		178574	1999 <i>WD</i> ₂₆		8 6.2 164°40	1°4/ 5.2	18	
6 30	21 30.47	-20 8.5	2.734	3.570	10.6	19.8	6 30	21 34.22	-17 46.7	1.899	2.742	14.3	21.2
7 10	21 25.70	-20 30.5	2.636	3.554	8.2	19.6	7 10	21 29.14	-18 28.0	1.826	2.748	11.0	21.0
7 20	21 19.27	-20 56.3	2.561	3.538	5.4	19.4	7 20	21 21.78	-19 17.4	1.774	2.752	7.1	20.8
7 30	21 11.59	-21 22.8	2.514	3.521	2.4	19.2	7 30	21 12.74	-20 10.0	1.748	2.756	3.1	20.5
8 9	21 3.29	-21 46.7	2.496	3.505	1.9	19.1	8 9	21 2.93	-21 0.0	1.749	2.759	2.2	20.5
8 19	20 55.06	-22 5.3	2.506	3.487	4.8	19.3	8 19	20 53.38	-21 42.5	1.778	2.762	6.1	20.7
8 29	20 47.64	-22 16.4	2.544	3.470	7.8	19.5	8 29	20 45.15	-22 13.9	1.833	2.764	10.0	21.0
9 8	20 41.65	-22 19.1	2.608	3.452	10.5	19.6	9 8	20 39.01	-22 32.9	1.912	2.766	13.4	21.2
22585	1998 <i>HM</i> ₉₂		8 6.2 143°28	7°2/11.9	18		29520	1997 <i>YH</i> ₁₄		8 6.2 120°12	0°0/ 6.2	18	
6 30	21 28.61	+ 4 23.5	1.908	2.675	17.0	19.0	6 30	21 29.96	-15 12.3	2.164	3.002	13.0	19.1
7 10	21 24.76	+ 4 45.6	1.827	2.677	14.5	18.9	7 10	21 25.55	-15 31.3	2.088	3.006	10.0	18.9
7 20	21 18.88	+ 4 46.1	1.765	2.680	11.7	18.7	7 20	21 19.26	-15 58.2	2.035	3.011	6.6	18.7
7 30	21 11.48	+ 4 23.4	1.724	2.682	9.0	18.5	7 30	21 11.61	-16 30.0	2.007	3.015	2.8	18.5
8 9	21 3.34	+ 3 38.5	1.707	2.683	7.3	18.4	8 9	21 3.37	-17 2.8	2.006	3.019	1.1	18.4
8 19	20 55.37	+ 2 34.9	1.716	2.685	7.8	18.5	8 19	20 55.35	-17 33.1	2.034	3.023	4.9	18.7
8 29	20 48.50	+ 1 18.6	1.751	2.687	10.0	18.6	8 29	20 48.39	-17 57.8	2.088	3.027	8.5	18.9
9 8	20 43.47	- 0 3.3	1.809	2.689	12.8	18.8	9 8	20 43.17	-18 15.0	2.166	3.031	11.6	19.1
432825	2011 <i>HP</i> ₆		8 6.2 24°43	0°8/ 6.8	16		12548	<i>Erinriley</i>		8 6.2 221°81	0°1/ 6.1	18	
6 30	21 24.71	-10 48.3	1.106	1.983	20.0	19.7	6 30	21 32.62	-14 21.8	1.886	2.724	14.6	18.7
7 10	21 22.77	-11 30.0	1.061	1.999	15.5	19.5	7 10	21 28.04	-14 53.1	1.798	2.716	11.3	18.4
7 20	21 17.96	-12 31.9	1.035	2.017	10.3	19.3	7 20	21 21.17	-15 35.6	1.732	2.708	7.5	18.2
7 30	21 11.12	-13 48.3	1.028	2.037	4.6	19.0	7 30	21 12.54	-16 25.5	1.691	2.699	3.2	17.9
8 9	21 3.51	-15 9.9	1.045	2.058	1.5	18.9	8 9	21 2.99	-17 17.6	1.676	2.689	1.3	17.8
8 19	20 56.49	-16 27.5	1.085	2.081	6.9	19.3	8 19	20 53.55	-18 6.8	1.690	2.679	5.8	18.0
8 29	20 51.30	-17 33.4	1.147	2.104	11.9	19.6	8 29	20 45.30	-18 48.6	1.730	2.668	9.9	18.3
9 8	20 48.78	-18 22.8	1.230	2.129	16.1	20.0	9 8	20 39.09	-19 20.0	1.793	2.657	13.6	18.5
127152	2002 <i>GV</i> ₁₂₇		8 6.2 274°92	3°9/ 8.8	18		239622	2008 <i>UZ</i> ₃₂₀		8 6.2 105°36	10°1/ 14.9	18	
6 30	21 29.18	- 5 16.5	1.803	2.620	16.0	19.8	6 30	21 33.64	+13 50.6	2.288	2.968	16.7	20.0
7 10	21 25.40	- 5 10.1	1.715	2.612	13.0	19.6	7 10	21 28.20	+15 5.3	2.223	2.989	14.9	19.8
7 20	21 19.43	- 5 20.0	1.648	2.604	9.5	19.4	7 20	21 20.91	+15 58.6	2.175	3.009	13.0	19.7
7 30	21 11.76	- 5 46.1	1.603	2.596	5.9	19.2	7 30	21 12.30	+16 27.1	2.148	3.029	11.4	19.7
8 9	21 3.23	- 6 25.6	1.584	2.588	3.9	19.0	8 9	21 3.12	+16 29.3	2.144	3.048	10.3	19.6
8 19	20 54.81	- 7 14.5	1.591	2.580	6.0	19.1	8 19	20 54.18	+16 6.7	2.165	3.067	10.2	19.7
8 29	20 47.52	- 8 7.5	1.623	2.572	9.7	19.3	8 29	20 46.30	+15 22.8	2.210	3.086	11.0	19.8
9 8	20 42.21	- 8 59.3	1.679	2.564	13.3	19.5	9 8	20 40.14	+14 23.9	2.277	3.104	12.4	19.9
126409	2002 <i>BK</i> ₁₈		8 6.2 158°50	0°4/ 5.9	17		83369	2001 <i>SM</i> ₃		8 6.2 320°02	1°6/ 5.2	18	
6 30	21 32.03	-15 34.6	1.931	2.772	14.2	20.6	6 30	21 29.31	-18 49.0	1.845	2.701	14.1	18.7
7 10	21 27.39	-16 1.6	1.855	2.775	10.9	20.4	7 10	21 25.53	-19 17.7	1.764	2.693	10.9	18.5
7 20	21 20.58	-16 37.7	1.802	2.779	7.2	20.2	7 20	21 19.52	-19 53.5	1.704	2.685	7.1	18.2
7 30	21 12.20	-17 19.1	1.773	2.782	3.0	20.0	7 30	21 11.81	-20 32.2	1.669	2.678	3.1	18.0
8 9	21 3.09	-18 0.9	1.772	2.784	1.4	19.9	8 9	21 3.28	-21 8.7	1.660	2.670	2.3	17.9
8 19	20 54.24	-18 38.7	1.798	2.787	5.6	20.1	8 19	20 54.93	-21 38.4	1.678	2.663	6.2	18.1
8 29	20 46.61	-19 8.9	1.851	2.789	9.4	20.4	8 29	20 47.81	-21 58.0	1.721	2.657	10.2	18.4
9 8	20 40.97	-19 29.4	1.927	2.791	12.8	20.6	9 8	20 42.73	-22 6.0	1.786	2.650	13.7	18.6
184856	2005 <i>UW</i> ₆₁		8 6.2 52°15	1°9/ 4.8	18		428175	2006 <i>TR</i> ₃₅		8 6.2 248°00	1°4/ 5.4	17	
6 30	21 29.17	-20 3.0	2.175	3.024	12.5	20.4	6 30	21 33.95	-18 3.3	1.763	2.611	15.0	22.3
7 10	21 25.00	-20 38.5	2.100	3.026	9.6	20.2	7 10	21 29.33	-18 31.3	1.673	2.598	11.6	22.1
7 20	21 18.92	-21 19.2	2.049	3.029	6.2	20.0	7 20	21 22.16	-19 7.7	1.605	2.584	7.7	21.8
7 30	21 11.46	-22 0.8	2.024	3.031	2.9	19.8	7 30	21 13.01	-19 48.1	1.561	2.569	3.3	21.5
8 9	21 3.39	-22 38.8	2.026	3.034	2.5	19.8	8 9	21 2.81	-20 27.0	1.543	2.554	2.2	21.4
8 19	20 55.54	-23 9.3	2.055	3.037	5.7	20.0	8 19	20 52.71	-20 59.2	1.553	2.539	6.6	21.7
8 29	20 48.77	-23 29.8	2.111	3.039	9.0	20.2	8 29	20 43.90	-21 20.9	1.588	2.523	10.9	21.9
9 8	20 43.74	-23 39.2	2.190	3.042	12.0	20.4	9 8	20 37.37	-21 30.5	1.645	2.507	14.8	22.1
353146	2009 <i>HS</i> ₁₆		8 6.2 148°68	1°3/ 5.3	18		170450	2003 <i>UK</i> ₁₇₀		8 6.2 324°88	3°4/ 8.6	18	
6 30	21 29.67	-17 48.2	2.041	2.889	13.3	21.2	6 30	21 28.84	- 6 15.4	1.818	2.639	15.7	20.3
7 10	21 25.51	-18 23.2	1.965	2.889	10.2	21.0	7 10	21 25.07	- 6 11.6	1.736	2.636	12.7	20.1
7 20	21 19.33	-19 5.5	1.910	2.890	6.6	20.8	7 20	21 19.16	- 6 23.5	1.675	2.634	9.1	19.8
7 30	21 11.67	-19 51.0	1.882	2.890	2.8	20.6	7 30	21 11.65	- 6 50.2	1.637	2.632	5.5	19.6
8 9	21 3.31	-20 34.9	1.880	2.891	2.0	20.5	8 9	21 3.36	- 7 28.7	1.624	2.630	3.4	19.5
8 19	20 55.17	-21 12.7	1.906	2.891	5.6	20.8	8 19	20 55.24	- 8 15.0	1.638	2.628	5.7	19.6
8 29	20 48.16	-21 41.2	1.958	2.891	9.3	21.0	8 29	20 48.29	- 9 3.9	1.678	2.627	9.4	19.8
9 8	20 42.99	-21 58.8	2.033	2.892	12.5	21.2	9 8	20 43.27	- 9 50.7	1.741	2.625	13.0	20.1
505886	2015 <i>DY</i> ₁₄₂		8 6.2 204°16	2°9/ 8.1	17		249586	1995 <i>WJ</i> ₁₀		8 6.2 10°76			

EPHEMERIDES

8 6.2

8 6.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
245490	2005 <i>QR</i> ₃₁	8 6.2 303°80	4.8/10.4	18			186354	2002 <i>FX</i> ₂₅	8 6.3 98°74	4.1/2.3	18		
6 30	21 25.25	-0 2.3	1.956	2.751	15.7	19.9	6 30	21 30.10	-26 9.0	2.385	3.236	11.5	20.7
7 10	21 22.35	-0 20.8	1.851	2.730	13.1	19.7	7 10	21 25.64	-27 26.5	2.326	3.250	8.8	20.6
7 20	21 17.46	-1 1.0	1.766	2.708	10.0	19.4	7 20	21 19.33	-28 45.4	2.292	3.265	6.1	20.4
7 30	21 10.97	-2 3.1	1.704	2.687	6.8	19.2	7 30	21 11.70	-29 59.6	2.284	3.279	4.2	20.4
8 9	21 3.59	-3 24.5	1.667	2.665	4.8	19.1	8 9	21 3.50	-31 3.6	2.305	3.293	4.7	20.4
8 19	20 56.17	-5 0.3	1.657	2.644	6.1	19.1	8 19	20 55.53	-31 53.3	2.353	3.307	7.0	20.6
8 29	20 49.65	-6 43.1	1.674	2.623	9.4	19.2	8 29	20 48.62	-32 26.4	2.427	3.320	9.5	20.8
9 8	20 44.86	-8 25.3	1.714	2.603	12.9	19.4	9 8	20 43.42	-32 43.3	2.524	3.333	11.9	20.9
131126	2001 <i>BD</i> ₂₈	8 6.2 145°19	1.2/5.2	18			283118	2008 <i>VX</i>	8 6.3 314°64	0.8/5.7	18		
6 30	21 29.45	-15 3.9	1.940	2.784	14.0	19.7	6 30	21 28.62	-15 21.7	1.619	2.476	15.7	20.8
7 10	21 25.48	-16 14.3	1.865	2.788	10.7	19.5	7 10	21 25.34	-16 1.0	1.538	2.467	12.2	20.5
7 20	21 19.40	-17 36.6	1.812	2.791	7.0	19.2	7 20	21 19.61	-16 52.9	1.477	2.458	8.0	20.3
7 30	21 11.74	-19 5.3	1.785	2.794	2.9	19.0	7 30	21 11.97	-17 52.6	1.441	2.450	3.4	20.0
8 9	21 3.33	-20 33.7	1.787	2.797	2.0	18.9	8 9	21 3.37	-18 54.0	1.430	2.442	1.8	19.8
8 19	20 55.09	-21 54.9	1.816	2.800	6.0	19.2	8 19	20 54.91	-19 50.4	1.444	2.434	6.5	20.1
8 29	20 47.99	-23 3.7	1.871	2.803	9.8	19.4	8 29	20 47.78	-20 36.6	1.484	2.427	11.0	20.4
9 8	20 42.80	-23 57.2	1.950	2.805	13.1	19.7	9 8	20 42.89	-21 9.3	1.545	2.419	14.9	20.6
434091	2002 <i>CJ</i> ₂₅₈	8 6.2 151°33	0.3/6.4	17			155715	2000 <i>QK</i> ₁₉₁	8 6.3 338°27	4.5/3.7	18		
6 30	21 31.91	-13 45.2	1.958	2.793	14.2	22.3	6 30	21 27.13	-22 51.2	1.247	2.134	17.5	19.4
7 10	21 27.25	-14 7.9	1.882	2.798	11.0	22.1	7 10	21 25.01	-23 44.1	1.174	2.120	13.6	19.2
7 20	21 20.49	-14 40.7	1.829	2.803	7.3	21.9	7 20	21 19.81	-24 45.0	1.121	2.107	9.1	18.9
7 30	21 12.18	-15 20.3	1.800	2.808	3.2	21.6	7 30	21 12.17	-25 45.8	1.090	2.096	5.2	18.6
8 9	21 3.19	-16 2.2	1.799	2.812	1.1	21.5	8 9	21 3.28	-26 37.2	1.081	2.085	5.4	18.6
8 19	20 54.44	-16 42.1	1.826	2.816	5.3	21.8	8 19	20 54.63	-27 11.6	1.095	2.075	9.6	18.8
8 29	20 46.89	-17 16.2	1.879	2.819	9.2	22.0	8 29	20 47.76	-27 24.7	1.131	2.067	14.2	19.0
9 8	20 41.28	-17 41.9	1.955	2.822	12.5	22.3	9 8	20 43.79	-27 16.3	1.185	2.060	18.4	19.3
252682	2002 <i>AU</i> ₁₆₀	8 6.3 270°43	1.2/7.3	18			287011	2002 <i>QH</i> ₈₀	8 6.3 73°74	0.9/6.7	17		
6 30	21 26.85	-9 44.0	2.218	3.044	13.1	20.5	6 30	21 36.24	-13 59.0	1.409	2.259	18.0	20.0
7 10	21 23.22	-10 18.1	2.130	3.039	10.3	20.3	7 10	21 31.09	-13 54.4	1.354	2.277	14.0	19.8
7 20	21 17.80	-11 5.1	2.065	3.034	7.0	20.1	7 20	21 23.20	-14 1.2	1.319	2.295	9.3	19.6
7 30	21 11.05	-12 2.3	2.024	3.029	3.4	19.9	7 30	21 13.40	-14 16.0	1.306	2.314	4.2	19.4
8 9	21 3.62	-13 5.8	2.012	3.024	1.4	19.7	8 9	21 2.90	-14 34.4	1.319	2.332	1.5	19.2
8 19	20 56.31	-14 10.7	2.027	3.019	4.7	19.9	8 19	20 53.01	-14 52.1	1.358	2.350	6.4	19.6
8 29	20 49.90	-15 12.3	2.069	3.014	8.2	20.1	8 29	20 44.94	-15 5.4	1.421	2.368	10.9	19.9
9 8	20 45.08	-16 6.7	2.136	3.009	11.4	20.3	9 8	20 39.52	-15 12.3	1.506	2.386	14.8	20.2
442255	2011 <i>PL</i> ₃	8 6.3 30°15	2.9/3.8	18			191656	2004 <i>PY</i> ₈₁	8 6.3 341°54	0.9/6.9	18		
6 30	21 28.43	-18 46.8	1.767	2.626	14.5	20.2	6 30	21 23.51	-10 31.3	1.259	2.129	18.5	20.0
7 10	21 24.97	-20 13.9	1.697	2.629	11.0	20.0	7 10	21 21.97	-11 12.0	1.183	2.117	14.6	19.7
7 20	21 19.21	-21 51.5	1.649	2.631	7.2	19.8	7 20	21 17.69	-12 14.4	1.124	2.106	9.9	19.4
7 30	21 11.72	-23 32.2	1.627	2.634	3.6	19.6	7 30	21 11.24	-13 34.5	1.088	2.096	4.6	19.1
8 9	21 3.38	-25 7.8	1.632	2.636	3.7	19.6	8 9	21 3.64	-15 4.8	1.074	2.087	1.5	18.9
8 19	20 55.24	-26 30.6	1.663	2.639	7.3	19.8	8 19	20 56.18	-16 35.7	1.084	2.079	7.0	19.2
8 29	20 48.36	-27 35.5	1.720	2.642	11.1	20.1	8 29	20 50.24	-17 57.8	1.116	2.073	12.2	19.5
9 8	20 43.59	-28 20.6	1.799	2.646	14.4	20.3	9 8	20 46.88	-19 4.3	1.169	2.067	16.9	19.7
260990	2005 <i>SX</i> ₇₉	8 6.3 46°28	0.2/6.4	18			514966	2009 <i>BZ</i> ₁₄₉	8 6.3 226°92	1.4/7.5	18		
6 30	21 28.54	-13 54.0	2.072	2.912	13.4	20.9	6 30	21 29.41	-9 37.9	2.365	3.181	12.7	22.6
7 10	21 24.57	-14 16.9	1.996	2.915	10.4	20.7	7 10	21 25.13	-10 4.0	2.268	3.171	10.0	22.4
7 20	21 18.69	-14 49.2	1.942	2.918	6.9	20.5	7 20	21 19.07	-10 41.9	2.194	3.160	6.9	22.2
7 30	21 11.42	-15 28.0	1.913	2.921	3.0	20.2	7 30	21 11.65	-11 29.7	2.146	3.149	3.5	22.0
8 9	21 3.52	-16 9.1	1.911	2.924	1.1	20.1	8 9	21 3.53	-12 23.7	2.126	3.138	1.5	21.8
8 19	20 55.84	-16 48.5	1.937	2.927	5.0	20.4	8 19	20 55.46	-13 19.8	2.135	3.126	4.6	22.0
8 29	20 49.22	-17 22.6	1.989	2.931	8.6	20.6	8 29	20 48.25	-14 13.8	2.171	3.114	8.0	22.2
9 8	20 44.35	-17 48.7	2.065	2.934	11.9	20.8	9 8	20 42.57	-15 2.1	2.233	3.101	11.2	22.4
424612	2008 <i>JN</i> ₄	8 6.3 359°18	2.3/4.7	17			75471	1999 <i>XW</i> ₁₆₄	8 6.3 224°04	2.9/4.1	18		
6 30	21 27.37	-17 8.0	1.309	2.185	17.5	20.0	6 30	21 33.35	-20 34.3	1.893	2.743	14.1	19.6
7 10	21 24.84	-18 12.5	1.243	2.183	13.5	19.7	7 10	21 28.76	-21 35.8	1.808	2.734	10.8	19.3
7 20	21 19.47	-19 31.2	1.196	2.182	8.8	19.5	7 20	21 21.76	-22 45.3	1.745	2.724	7.2	19.1
7 30	21 11.92	-20 56.8	1.172	2.181	3.9	19.2	7 30	21 12.90	-23 56.6	1.708	2.714	3.7	18.9
8 9	21 3.32	-22 19.7	1.172	2.182	3.3	19.2	8 9	21 3.05	-25 2.8	1.699	2.703	3.6	18.9
8 19	20 55.01	-23 31.1	1.196	2.182	8.1	19.4	8 19	20 53.30	-25 57.6	1.716	2.692	7.2	19.0
8 29	20 48.36	-24 24.6	1.243	2.184	12.8	19.7	8 29	20 44.78	-26 36.9	1.760	2.680	11.0	19.3
9 8	20 44.37	-24 57.7	1.310	2.186	16.9	20.0	9 8	20 38.40	-26 59.6	1.826	2.668	14.4	19.5
349816	2009 <i>BR</i> ₁₆₃	8 6.3 258°45	2.6/4.6	18			96474	1998 <i>HE</i> ₁₁₉	8 6.3 92°74	4.1/3.7	17		
6 30	21 35.05	-23 1.9	2.173	3.016	12.7	21.9	6 30	21 36.29	-22 31.3	1.527	2.388	16.3	19.6
7 10	21 29.77	-23 23.6	2.074	2.996	9.9	21.7	7 10	21 31.14	-23 43.6	1.479	2.410	12.4	19.4
7 20	21 22.27	-23 48.2	1.999	2.976	6.6	21.5	7 20	21 23.25	-25 0.9	1.452	2.431	8.2	19.2
7 30	21 13.03	-24 11.1	1.950	2.955	3.4	21.2	7 30	21 13.45	-26 14.7	1.449	2.452	4.7	19.1
8 9	21 2.90	-24 27.8	1.928	2.933	3.1	21.2	8 9	21 2.91	-27 16.7	1.472	2.473	4.8	19.1
8 19	20 52.84	-24 35.0	1.935	2.912	6.4	21.3	8 19	20 52.96	-28 1.1	1.521	2.494	8.3	19.4
8 29	20 43.90	-24 30.5	1.968	2.890	9.9	21.5	8 29	20 44.81	-28 25.6	1.595	2.513	12.0	19.6
9 8	20 36.90	-24 14.5	2.025	2.867	13.2	21.7	9 8	20 39.28	-28 31.2	1.690	2.533	15.3	19.9
375757	2009 <i>SV</i> ₈₁	8 6.3 309°04	0.5/6.0	18			515383	2013 <i>ER</i> ₁₅₅	8 6.3 162°45	1.2/5.1	18		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
177008	2003 <i>BD</i> ₇		8 6.3 238°40	1°1/ 5.3 18			145500	2006 <i>BL</i> ₅₉		8 6.3 345°57	1°8/ 7.7 17		
6 30	21 28.14	-15 40.4	2.143	2.986	12.9	20.2	6 30	21 22.32	-6 48.3	1.273	2.132	19.0	18.9
7 10	21 24.36	-16 40.8	2.060	2.982	9.9	20.0	7 10	21 21.01	-7 46.6	1.195	2.122	15.1	18.7
7 20	21 18.66	-17 51.5	2.000	2.979	6.4	19.8	7 20	21 17.06	-9 12.3	1.136	2.113	10.5	18.4
7 30	21 11.51	-19 8.0	1.966	2.975	2.7	19.5	7 30	21 11.01	-11 1.9	1.099	2.105	5.3	18.1
8 9	21 3.63	-20 24.4	1.961	2.971	1.9	19.5	8 9	21 3.85	-13 6.6	1.085	2.098	2.0	17.8
8 19	20 55.86	-21 35.2	1.983	2.968	5.5	19.7	8 19	20 56.81	-15 14.9	1.096	2.092	6.7	18.1
8 29	20 49.08	-22 35.7	2.032	2.964	9.1	19.9	8 29	20 51.22	-17 14.7	1.130	2.088	12.0	18.4
9 8	20 44.01	-23 23.1	2.105	2.960	12.3	20.1	9 8	20 48.14	-18 57.0	1.185	2.084	16.6	18.7
263687	2008 <i>GN</i> ₁₃₃		8 6.3 322°29	4°9/ 2.2 18			123925	2001 <i>EA</i> ₂		8 6.3 82°93	2°5/ 3.8 18		
6 30	21 29.46	-27 50.5	2.081	2.941	12.6	20.3	6 30	21 27.97	-20 15.9	2.327	3.176	11.8	19.1
7 10	21 25.59	-28 53.3	2.007	2.934	9.8	20.1	7 10	21 24.05	-21 28.7	2.258	3.184	9.0	18.9
7 20	21 19.55	-29 57.2	1.955	2.928	7.0	19.9	7 20	21 18.35	-22 47.5	2.214	3.193	5.9	18.7
7 30	21 11.91	-30 55.9	1.928	2.922	5.0	19.8	7 30	21 11.35	-24 6.8	2.196	3.202	3.0	18.5
8 9	21 3.48	-31 43.1	1.929	2.916	5.5	19.8	8 9	21 3.76	-25 21.1	2.207	3.210	3.1	18.6
8 19	20 55.25	-32 14.6	1.955	2.910	8.0	19.9	8 19	20 56.35	-26 25.3	2.246	3.219	5.9	18.8
8 29	20 48.19	-32 28.1	2.006	2.905	10.9	20.1	8 29	20 49.91	-27 16.2	2.311	3.227	8.9	19.0
9 8	20 43.09	-32 24.2	2.079	2.900	13.7	20.3	9 8	20 45.08	-27 52.3	2.401	3.236	11.6	19.2
123223	2000 <i>UH</i> ₄₇		8 6.3 315°10	3°4/ 4.3 18			304425	2006 <i>TG</i> ₇₇		8 6.3 318°65	3°1/ 8.9 18		
6 30	21 29.72	-21 36.2	1.466	2.339	16.2	19.4	6 30	21 26.48	-4 44.6	1.968	2.782	15.0	20.5
7 10	21 26.66	-22 18.4	1.382	2.320	12.6	19.1	7 10	21 23.20	-5 9.0	1.881	2.777	12.1	20.3
7 20	21 20.77	-23 8.5	1.317	2.301	8.4	18.8	7 20	21 17.97	-5 51.0	1.815	2.772	8.7	20.1
7 30	21 12.60	-24 0.2	1.276	2.283	4.3	18.5	7 30	21 11.26	-6 49.2	1.773	2.768	5.2	19.9
8 9	21 3.21	-24 45.8	1.259	2.265	4.2	18.5	8 9	21 3.82	-7 59.7	1.757	2.764	3.1	19.7
8 19	20 53.91	-25 18.7	1.266	2.248	8.4	18.7	8 19	20 56.49	-9 17.2	1.768	2.760	5.3	19.9
8 29	20 46.12	-25 34.6	1.296	2.231	12.9	18.9	8 29	20 50.16	-10 35.6	1.806	2.756	8.8	20.1
9 8	20 40.95	-25 32.8	1.347	2.215	17.0	19.1	9 8	20 45.57	-11 49.2	1.868	2.752	12.2	20.3
14171	1998 <i>VO</i> ₆		8 6.3 238°12	1°4/ 7.2 18			139121	2001 <i>FU</i> ₆₂		8 6.3 38°58	0°5/ 5.9 18		
6 30	21 31.42	-11 51.9	2.098	2.925	13.7	18.1	6 30	21 30.06	-14 29.1	1.157	2.031	19.5	19.3
7 10	21 26.86	-11 49.4	2.010	2.919	10.8	17.9	7 10	21 26.93	-15 6.1	1.108	2.046	15.0	19.1
7 20	21 20.29	-11 56.5	1.942	2.912	7.4	17.7	7 20	21 20.81	-15 58.3	1.078	2.062	9.8	18.9
7 30	21 12.21	-12 11.4	1.901	2.905	3.6	17.5	7 30	21 12.52	-16 59.5	1.069	2.078	4.1	18.6
8 9	21 3.41	-12 31.4	1.886	2.898	1.6	17.3	8 9	21 3.39	-18 1.4	1.083	2.096	1.8	18.5
8 19	20 54.74	-12 53.2	1.899	2.890	5.0	17.5	8 19	20 54.87	-18 56.1	1.121	2.113	7.3	18.9
8 29	20 47.12	-13 13.8	1.939	2.883	8.7	17.7	8 29	20 48.30	-19 37.8	1.181	2.132	12.3	19.2
9 8	20 41.29	-13 30.6	2.003	2.875	12.1	17.9	9 8	20 44.56	-20 4.1	1.262	2.151	16.5	19.6
52839	1998 <i>RZ</i> ₅₅		8 6.3 72°13	0°4/ 6.1 18			252130	2000 <i>XG</i> ₅₂		8 6.3 262°48	5°1/ 1.6 18		
6 30	21 36.50	-16 38.2	1.227	2.092	19.2	17.0	6 30	21 31.72	-30 21.2	2.453	3.301	11.3	21.0
7 10	21 31.84	-16 43.7	1.170	2.102	14.9	16.8	7 10	21 27.15	-31 22.0	2.365	3.284	8.9	20.9
7 20	21 24.01	-16 59.7	1.131	2.112	9.8	16.5	7 20	21 20.54	-32 22.4	2.301	3.267	6.6	20.7
7 30	21 13.88	-17 21.5	1.114	2.123	4.1	16.2	7 30	21 12.37	-33 16.6	2.264	3.249	5.1	20.6
8 9	21 2.82	-17 43.2	1.121	2.133	1.8	16.1	8 9	21 3.40	-33 59.2	2.253	3.231	5.7	20.6
8 19	20 52.37	-17 59.6	1.152	2.144	7.3	16.5	8 19	20 54.51	-34 26.2	2.270	3.213	7.8	20.7
8 29	20 43.98	-18 7.3	1.207	2.155	12.4	16.8	8 29	20 46.62	-34 35.8	2.312	3.195	10.4	20.8
9 8	20 38.61	-18 4.9	1.282	2.165	16.7	17.1	9 8	20 40.50	-34 28.5	2.377	3.176	12.8	20.9
11978	Makotomasako		8 6.3 257°10	2°4/ 4.4 18			215812	2004 <i>TC</i> ₁₃₉		8 6.3 11°28	1°7/ 7.4 18		
6 30	21 33.40	-21 18.6	2.228	3.070	12.5	19.0	6 30	21 28.08	-11 17.1	1.850	2.689	14.8	19.5
7 10	21 28.55	-21 59.7	2.125	3.047	9.7	18.8	7 10	21 24.45	-11 13.7	1.776	2.691	11.6	19.3
7 20	21 21.54	-22 46.4	2.046	3.023	6.4	18.5	7 20	21 18.77	-11 21.5	1.723	2.694	7.9	19.1
7 30	21 12.82	-23 34.1	1.993	2.999	3.2	18.3	7 30	21 11.58	-11 38.8	1.693	2.697	4.0	18.9
8 9	21 3.15	-24 17.5	1.968	2.973	3.0	18.2	8 9	21 3.72	-12 2.3	1.690	2.701	1.8	18.7
8 19	20 53.46	-24 52.1	1.971	2.948	6.3	18.4	8 19	20 56.11	-12 28.4	1.713	2.706	5.2	19.0
8 29	20 44.74	-25 14.8	2.001	2.921	9.9	18.6	8 29	20 49.68	-12 53.4	1.761	2.711	9.0	19.2
9 8	20 37.85	-25 24.4	2.054	2.894	13.1	18.7	9 8	20 45.14	-13 14.2	1.833	2.716	12.5	19.4
478464	2012 <i>QT</i> ₁₃		8 6.3 255°53	2°7/ 4.8 16			443047	2013 <i>EX</i> ₁₀₆		8 6.3 102°09	2°2/ 4.3 18		
6 30	21 36.36	-23 16.6	1.796	2.648	14.6	21.7	6 30	21 28.34	-20 4.0	2.265	3.114	12.1	20.6
7 10	21 31.06	-23 27.9	1.717	2.642	11.3	21.5	7 10	21 24.41	-21 1.4	2.190	3.116	9.2	20.4
7 20	21 23.23	-23 41.2	1.659	2.637	7.5	21.2	7 20	21 18.63	-22 4.7	2.139	3.118	6.0	20.2
7 30	21 13.51	-23 51.9	1.625	2.631	3.8	21.0	7 30	21 11.51	-23 9.3	2.114	3.120	3.0	20.0
8 9	21 2.94	-23 55.2	1.619	2.626	3.3	21.0	8 9	21 3.75	-24 9.7	2.117	3.122	2.8	20.0
8 19	20 52.67	-23 47.9	1.639	2.620	6.9	21.2	8 19	20 56.15	-25 1.4	2.147	3.124	5.8	20.2
8 29	20 43.88	-23 29.0	1.685	2.614	10.8	21.4	8 29	20 49.55	-25 41.1	2.204	3.126	9.0	20.4
9 8	20 37.44	-22 59.1	1.754	2.608	14.3	21.6	9 8	20 44.62	-26 7.4	2.285	3.129	11.8	20.6
142301	2002 <i>RT</i> ₁₄₉		8 6.3 173°54	3°1/ 8.1 18			187728	2008 <i>FR</i> ₅₈		8 6.3 119°65	0°2/ 6.5 18		
6 30	21 33.41	-8 19.4	1.686	2.511	16.6	19.9	6 30	21 28.83	-13 41.0	2.439	3.268	12.0	21.4
7 10	21 28.78	-8 6.4	1.608	2.513	13.3	19.7	7 10	21 24.51	-14 7.4	2.364	3.277	9.2	21.3
7 20	21 21.73	-8 7.5	1.550	2.514	9.4	19.5	7 20	21 18.55	-14 42.0	2.313	3.286	6.1	21.1
7 30	21 12.88	-8 21.9	1.515	2.514	5.3	19.2	7 30	21 11.43	-15 22.1	2.287	3.294	2.7	20.9
8 9	21 3.18	-8 46.7	1.507	2.515	3.1	19.1	8 9	21 3.79	-16 3.9	2.290	3.303	0.9	20.7
8 19	20 53.72	-9 17.9	1.524	2.515	6.0	19.3	8 19	20 56.36	-16 44.1	2.321	3.311	4.4	21.0
8 29	20 45.61	-9 51.0	1.567	2.515	10.1	19.5	8 29	20 49.84	-17 19.5	2.380	3.319	7.6	21.2
9 8	20 39.71	-10 21.9	1.634	2.515	13.8	19.8	9 8	20 44.83	-17 47.8	2.464	3.327	10.4	21.4
39662	1995 <i>VR</i> ₃		8 6.3 258°67	7°6/31.5 18			196620	2003 <i>RN</i> ₄		8 6.3 16°28	9°6/11.8 16		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
186840	2004 FZ ₁₂₉		8 6.3 41°33	0.7/ 5.8	18		508957	2004 TN ₁₄₂		8 6.3 258°08	8.3/31.8	18	
6 30	21 29.03	-13 37.8	1.398	2.259	17.5	19.5	6 30	21 39.34	-37 1.8	1.878	2.724	14.3	21.4
7 10	21 25.85	-14 35.8	1.335	2.267	13.5	19.3	7 10	21 33.76	-38 3.4	1.804	2.713	11.8	21.2
7 20	21 20.01	-15 49.8	1.293	2.275	8.8	19.0	7 20	21 25.25	-38 58.5	1.751	2.701	9.6	21.0
7 30	21 12.21	-17 13.6	1.274	2.283	3.7	18.8	7 30	21 14.51	-39 38.3	1.723	2.689	8.3	20.9
8 9	21 3.51	-18 38.8	1.279	2.292	1.8	18.7	8 9	21 2.72	-39 55.7	1.719	2.676	8.9	20.9
8 19	20 55.16	-19 56.9	1.310	2.301	6.9	19.0	8 19	20 51.27	-39 46.8	1.741	2.664	11.1	21.0
8 29	20 48.40	-21 1.4	1.365	2.310	11.5	19.3	8 29	20 41.55	-39 12.0	1.785	2.651	13.7	21.2
9 8	20 44.11	-21 48.7	1.442	2.320	15.5	19.6	9 8	20 34.56	-38 15.3	1.850	2.638	16.3	21.3
513240	2005 YY ₁₆₀		8 6.3 220°30	3.0/ 8.7	18		336615	2009 VP ₂		8 6.3 164°50	1.4/ 5.4	18	
6 30	21 28.38	- 6 21.2	2.472	3.275	12.6	21.8	6 30	21 36.87	-20 1.4	2.198	3.032	12.9	20.6
7 10	21 24.20	- 6 12.1	2.383	3.273	10.1	21.6	7 10	21 30.89	-20 13.2	2.121	3.038	9.9	20.4
7 20	21 18.39	- 6 14.0	2.317	3.270	7.3	21.4	7 20	21 22.84	-20 28.6	2.067	3.043	6.5	20.2
7 30	21 11.40	- 6 26.6	2.275	3.268	4.5	21.3	7 30	21 13.33	-20 44.2	2.039	3.047	2.9	20.0
8 9	21 3.84	- 6 47.8	2.261	3.266	3.0	21.1	8 9	21 3.18	-20 56.2	2.040	3.051	2.0	19.9
8 19	20 56.41	- 7 15.3	2.275	3.263	4.7	21.3	8 19	20 53.33	-21 1.9	2.070	3.054	5.4	20.1
8 29	20 49.81	- 7 46.0	2.317	3.260	7.5	21.4	8 29	20 44.71	-20 59.5	2.127	3.056	8.9	20.4
9 8	20 44.65	- 8 16.5	2.383	3.258	10.3	21.6	9 8	20 38.00	-20 49.0	2.209	3.058	12.0	20.6
251835	1999 TB ₂₁₄		8 6.3 295°00	7.9/30.9	18		321804	2010 PM ₇₂		8 6.3 269°23	8.5/27.8	18	
6 30	21 35.18	-38 52.3	2.202	3.044	12.6	20.1	6 30	21 33.19	-40 25.7	2.391	3.230	11.9	20.2
7 10	21 30.12	-39 55.2	2.135	3.037	10.5	19.9	7 10	21 28.74	-42 10.1	2.322	3.216	10.1	20.0
7 20	21 22.60	-40 50.8	2.090	3.031	8.8	19.8	7 20	21 21.86	-43 48.6	2.275	3.202	8.8	19.9
7 30	21 13.28	-41 31.8	2.070	3.024	7.9	19.7	7 30	21 13.06	-45 13.2	2.254	3.188	8.5	19.9
8 9	21 3.15	-41 52.6	2.074	3.018	8.5	19.8	8 9	21 3.23	-46 17.0	2.259	3.174	9.3	19.9
8 19	20 53.34	-41 50.1	2.104	3.011	10.2	19.9	8 19	20 53.44	-46 55.6	2.288	3.160	11.0	20.0
8 29	20 44.99	-41 24.5	2.157	3.005	12.4	20.0	8 29	20 44.87	-47 8.1	2.339	3.145	12.9	20.1
9 8	20 38.91	-40 38.9	2.230	2.999	14.5	20.1	9 8	20 38.44	-46 56.7	2.409	3.131	14.7	20.2
387601	2001 YB ₁₀₆		8 6.3 220°57	1.3/ 5.3	17		222659	2001 XD ₂₁₁		8 6.3 148°76	5.2/10.3	18	
6 30	21 32.10	-17 9.1	2.110	2.950	13.2	21.9	6 30	21 32.70	- 0 13.4	2.242	3.013	14.6	20.4
7 10	21 27.52	-17 54.0	2.021	2.942	10.2	21.7	7 10	21 27.59	+ 0 10.3	2.162	3.023	12.2	20.2
7 20	21 20.83	-18 47.8	1.955	2.932	6.7	21.5	7 20	21 20.65	+ 0 18.5	2.104	3.032	9.4	20.0
7 30	21 12.54	-19 45.9	1.915	2.923	2.9	21.2	7 30	21 12.39	+ 0 10.6	2.069	3.041	6.7	19.9
8 9	21 3.41	-20 43.1	1.902	2.913	2.0	21.2	8 9	21 3.53	- 0 12.1	2.061	3.049	5.2	19.8
8 19	20 54.37	-21 34.3	1.918	2.902	5.7	21.4	8 19	20 54.87	- 0 47.0	2.081	3.056	6.2	19.9
8 29	20 46.38	-22 15.6	1.960	2.891	9.5	21.6	8 29	20 47.22	- 1 30.2	2.128	3.063	8.6	20.1
9 8	20 40.23	-22 44.8	2.027	2.879	12.8	21.8	9 8	20 41.24	- 2 17.0	2.199	3.069	11.2	20.2
373218	2012 FK ₄₀		8 6.3 105°20	2.6/ 8.0	17		319097	2005 WK ₁₆₀		8 6.3 299°26	0.3/ 6.1	18	
6 30	21 32.98	- 7 45.3	1.600	2.428	17.2	21.9	6 30	21 29.71	-16 29.1	2.089	2.932	13.2	21.0
7 10	21 28.44	- 7 57.6	1.535	2.441	13.6	21.7	7 10	21 25.69	-16 39.7	1.995	2.916	10.2	20.8
7 20	21 21.49	- 8 26.7	1.489	2.455	9.5	21.4	7 20	21 19.64	-16 57.5	1.923	2.900	6.8	20.5
7 30	21 12.79	- 9 10.4	1.467	2.468	5.2	21.2	7 30	21 12.04	-17 19.6	1.876	2.884	2.9	20.3
8 9	21 3.35	-10 4.0	1.471	2.481	2.7	21.1	8 9	21 3.64	-17 42.5	1.856	2.868	1.2	20.1
8 19	20 54.27	-11 1.6	1.501	2.493	5.9	21.3	8 19	20 55.32	-18 2.7	1.863	2.852	5.3	20.4
8 29	20 46.66	-11 57.4	1.557	2.506	10.0	21.6	8 29	20 48.02	-18 17.1	1.896	2.837	9.1	20.6
9 8	20 41.32	-12 46.7	1.635	2.517	13.8	21.9	9 8	20 42.51	-18 24.0	1.954	2.821	12.5	20.8
337170	1999 VV ₃₄		8 6.3 282°50	8.1/11.2	18		311549	2006 AQ ₁₃		8 6.3 115°21	0.7/ 6.8	18	
6 30	21 30.11	+ 4 8.3	1.974	2.737	16.6	20.6	6 30	21 29.49	-13 35.1	2.489	3.316	11.8	21.2
7 10	21 26.21	+ 5 0.7	1.868	2.713	14.4	20.3	7 10	21 25.00	-13 38.8	2.410	3.320	9.2	21.0
7 20	21 20.13	+ 5 35.5	1.780	2.689	11.9	20.1	7 20	21 18.88	-13 49.6	2.353	3.325	6.1	20.8
7 30	21 12.31	+ 5 49.2	1.714	2.665	9.5	19.9	7 30	21 11.61	-14 5.6	2.323	3.329	2.8	20.6
8 9	21 3.47	+ 5 40.6	1.672	2.641	8.2	19.8	8 9	21 3.83	-14 24.2	2.321	3.334	1.0	20.5
8 19	20 54.51	+ 5 10.5	1.656	2.616	8.8	19.8	8 19	20 56.24	-14 42.8	2.347	3.338	4.2	20.7
8 29	20 46.46	+ 4 22.6	1.664	2.592	11.0	19.9	8 29	20 49.56	-14 58.9	2.401	3.342	7.4	21.0
9 8	20 40.22	+ 3 22.9	1.694	2.567	13.9	20.0	9 8	20 44.36	-15 10.7	2.480	3.346	10.2	21.2
74676	1999 RR ₁₁₀		8 6.3 320°77	2.2/ 7.2	18		303950	2005 YK ₁₈		8 6.3 8°60	4.8/ 8.2	17	
6 30	21 32.26	-12 58.4	1.282	2.142	18.8	19.2	6 30	21 23.97	- 9 34.5	0.779	1.677	24.0	19.2
7 10	21 28.80	-12 28.2	1.201	2.129	14.9	18.9	7 10	21 23.32	- 8 45.0	0.731	1.678	19.3	18.9
7 20	21 22.28	-12 9.4	1.139	2.116	10.3	18.6	7 20	21 19.03	- 8 17.5	0.698	1.681	13.7	18.6
7 30	21 13.33	-12 0.8	1.098	2.103	5.2	18.2	7 30	21 11.97	- 8 12.7	0.681	1.685	7.9	18.4
8 9	21 3.10	-11 59.8	1.080	2.092	2.4	18.0	8 9	21 3.71	- 8 27.4	0.683	1.693	4.8	18.2
8 19	20 53.06	-12 2.9	1.086	2.081	7.2	18.3	8 19	20 56.05	- 8 55.4	0.703	1.702	8.7	18.5
8 29	20 44.70	-12 6.3	1.115	2.070	12.4	18.6	8 29	20 50.72	- 9 28.4	0.742	1.713	14.2	18.8
9 8	20 39.17	-12 6.9	1.165	2.061	17.1	18.8	9 8	20 48.83	- 9 58.4	0.798	1.726	19.3	19.2
50659	2000 EW ₉₄		8 6.3 61°79	4.1/ 9.0	18		273499	2007 AR ₂₂		8 6.3 149°91	0.9/ 6.9	17	
6 30	21 30.37	- 5 17.4	1.876	2.688	15.7	18.6	6 30	21 33.36	-12 7.6	1.894	2.724	14.8	21.6
7 10	21 26.13	- 4 56.9	1.804	2.696	12.7	18.4	7 10	21 28.48	-12 23.6	1.819	2.731	11.6	21.4
7 20	21 19.83	- 4 51.3	1.752	2.705	9.3	18.2	7 20	21 21.43	-12 50.9	1.766	2.737	7.8	21.2
7 30	21 12.06	- 5 0.2	1.723	2.714	5.9	18.0	7 30	21 12.78	-13 26.6	1.738	2.743	3.6	20.9
8 9	21 3.63	- 5 21.5	1.720	2.723	4.1	17.9	8 9	21 3.41	-14 6.6	1.736	2.749	1.3	20.8
8 19	20 55.48	- 5 51.9	1.744	2.731	5.8	18.1	8 19	20 54.31	-14 46.4	1.763	2.754	5.3	21.1
8 29	20 48.51	- 6 27.3	1.794	2.740	9.1	18.3	8 29	20 46.45	-15 22.0	1.816	2.759	9.3	21.3
9 8	20 43.43	- 7 3.1	1.867	2.750	12.3	18.5	9 8	20 40.61	-15 50.4	1.892	2.763	12.7	21.5
6956	Holbach		8 6.3 223°26	3.3/ 8.4	18 R		3783	Morris		8 6.3 352°70	6.6/ 2.8	18	
6 30	21 32.14	- 7 7.3	1.816	2.634									

EPHEMERIDES

8 6.3

8 6.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
37151	2000 VF ₅₅	8 6.3	0°59	4.8/ 9.2	18		30127	2000 FY ₄₁	8 6.3	91°91	5°0/ 3.7	18	
6 30	21 27.19	- 5 16.6	1.617	2.446	17.0	18.0	6 30	21 36.81	-24 31.5	1.306	2.178	17.9	18.1
7 10	21 24.09	- 4 41.6	1.542	2.444	13.9	17.8	7 10	21 32.21	-25 30.0	1.250	2.186	13.8	17.9
7 20	21 18.72	- 4 22.6	1.486	2.443	10.3	17.6	7 20	21 24.39	-26 32.6	1.214	2.195	9.4	17.6
7 30	21 11.67	- 4 20.2	1.452	2.443	6.8	17.4	7 30	21 14.18	-27 30.3	1.200	2.203	5.6	17.5
8 9	21 3.82	- 4 32.9	1.442	2.443	4.8	17.2	8 9	21 2.97	-28 13.8	1.211	2.211	5.8	17.5
8 19	20 56.19	- 4 57.6	1.457	2.445	6.6	17.4	8 19	20 52.35	-28 37.4	1.246	2.220	9.5	17.7
8 29	20 49.83	- 5 29.7	1.496	2.448	10.1	17.6	8 29	20 43.79	-28 39.2	1.304	2.228	13.7	18.0
9 8	20 45.55	- 6 4.1	1.558	2.451	13.7	17.8	9 8	20 38.30	-28 21.2	1.381	2.236	17.5	18.3
34511	2000 SK ₁₇₅	8 6.3	22°10	0°7/ 6.6	18 R		290530	2005 UX ₅₁	8 6.3	21°33	3°9/ 9.1	18	
6 30	21 33.63	-16 35.6	1.002	1.885	21.2	17.3	6 30	21 28.96	- 4 55.7	2.120	2.925	14.3	20.2
7 10	21 30.14	-16 3.0	0.951	1.892	16.5	17.1	7 10	21 24.90	- 4 36.1	2.038	2.926	11.6	20.0
7 20	21 23.15	-15 40.4	0.916	1.901	10.9	16.8	7 20	21 19.00	- 4 29.9	1.977	2.928	8.6	19.8
7 30	21 13.63	-15 25.0	0.901	1.911	4.8	16.5	7 30	21 11.74	- 4 36.9	1.941	2.929	5.5	19.6
8 9	21 3.13	-15 12.9	0.909	1.922	1.7	16.3	8 9	21 3.86	- 4 55.5	1.930	2.931	3.9	19.5
8 19	20 53.38	-15 0.8	0.938	1.934	7.7	16.7	8 19	20 56.15	- 5 23.0	1.947	2.933	5.5	19.6
8 29	20 45.96	-14 45.9	0.989	1.947	13.2	17.1	8 29	20 49.43	- 5 55.6	1.989	2.935	8.4	19.8
9 8	20 41.83	-14 26.6	1.059	1.962	17.9	17.4	9 8	20 44.38	- 6 29.5	2.057	2.937	11.5	20.0
444378	2005 YU ₈₇	8 6.3	251°98	0°7/ 6.9	18		329435	2002 OM ₁₁	8 6.3	317°88	16°8/22.6	17	
6 30	21 28.74	-12 54.6	2.490	3.316	11.8	22.2	6 30	21 20.81	+23 53.2	1.010	1.740	31.0	19.7
7 10	21 24.55	-13 6.5	2.397	3.307	9.2	22.0	7 10	21 20.76	+23 59.3	0.924	1.722	28.9	19.4
7 20	21 18.69	-13 26.6	2.326	3.297	6.2	21.8	7 20	21 17.54	+23 5.1	0.847	1.704	26.2	19.1
7 30	21 11.58	-13 53.0	2.281	3.287	2.9	21.6	7 30	21 11.54	+20 53.5	0.780	1.688	22.9	18.8
8 9	21 3.85	-14 22.7	2.264	3.276	1.0	21.4	8 9	21 3.83	+17 13.0	0.729	1.672	19.4	18.5
8 19	20 56.20	-14 52.7	2.275	3.266	4.3	21.6	8 19	20 55.94	+12 4.6	0.697	1.658	17.0	18.3
8 29	20 49.39	-15 20.0	2.314	3.255	7.6	21.8	8 29	20 49.73	+ 5 50.4	0.687	1.644	17.5	18.3
9 8	20 44.04	-15 42.2	2.378	3.245	10.6	22.0	9 8	20 46.77	- 0 48.8	0.702	1.632	20.9	18.4
311504	2005 WB ₁₁₂	8 6.3	306°96	5°7/10.7	18		389065	2008 WT ₄₉	8 6.3	248°35	0°8/ 6.9	18	
6 30	21 27.79	+ 0 38.4	2.225	3.002	14.6	21.1	6 30	21 30.49	-12 7.5	2.026	2.857	14.0	21.7
7 10	21 23.97	+ 1 6.6	2.136	2.998	12.2	21.0	7 10	21 26.35	-12 30.7	1.933	2.846	11.0	21.5
7 20	21 18.38	+ 1 19.0	2.067	2.994	9.6	20.8	7 20	21 20.13	-13 5.6	1.861	2.834	7.4	21.2
7 30	21 11.46	+ 1 14.6	2.021	2.989	7.1	20.6	7 30	21 12.31	-13 49.6	1.815	2.821	3.4	21.0
8 9	21 3.90	+ 0 54.0	2.001	2.985	5.7	20.5	8 9	21 3.64	-14 38.5	1.796	2.808	1.2	20.8
8 19	20 56.43	+ 0 19.6	2.007	2.981	6.5	20.6	8 19	20 55.03	-15 27.6	1.804	2.795	5.2	21.0
8 29	20 49.86	- 0 24.8	2.040	2.977	8.7	20.7	8 29	20 47.44	-16 12.6	1.839	2.782	9.2	21.3
9 8	20 44.85	- 1 14.4	2.097	2.974	11.4	20.9	9 8	20 41.68	-16 49.9	1.898	2.769	12.7	21.5
84575	2002 VD ₁₆	8 6.3	265°75	1°0/ 5.4	18		294302	2007 VL ₁₀	8 6.3	61°05	2°0/ 5.0	18	
6 30	21 27.89	-18 21.1	2.687	3.525	10.7	20.5	6 30	21 31.96	-20 21.7	1.915	2.766	13.9	20.6
7 10	21 23.81	-18 46.0	2.597	3.516	8.2	20.3	7 10	21 27.50	-20 48.8	1.842	2.768	10.6	20.4
7 20	21 18.15	-19 15.8	2.530	3.507	5.4	20.1	7 20	21 20.83	-21 21.2	1.790	2.770	7.0	20.2
7 30	21 11.33	-19 47.8	2.490	3.498	2.3	19.9	7 30	21 12.56	-21 54.2	1.764	2.772	3.2	20.0
8 9	21 3.95	-20 18.6	2.478	3.489	1.5	19.8	8 9	21 3.57	-22 23.0	1.765	2.774	2.6	19.9
8 19	20 56.68	-20 45.3	2.495	3.480	4.5	20.0	8 19	20 54.86	-22 43.7	1.792	2.776	6.2	20.2
8 29	20 50.19	-21 5.5	2.539	3.470	7.5	20.2	8 29	20 47.42	-22 53.8	1.846	2.778	9.9	20.4
9 8	20 45.09	-21 17.7	2.608	3.461	10.2	20.3	9 8	20 42.01	-22 52.6	1.922	2.780	13.1	20.6
80265	1999 XV ₂₁	8 6.3	264°28	0°9/ 5.6	18		108953	Pieraerts	8 6.3	6°44	5°0/ 9.3	18	
6 30	21 31.11	-14 15.5	1.733	2.579	15.3	19.3	6 30	21 27.42	- 4 32.4	1.303	2.144	19.7	19.2
7 10	21 27.37	-15 16.2	1.636	2.559	12.0	19.0	7 10	21 24.79	- 4 17.1	1.234	2.144	16.0	19.0
7 20	21 21.12	-16 32.5	1.560	2.539	7.9	18.7	7 20	21 19.46	- 4 23.8	1.183	2.145	11.8	18.7
7 30	21 12.83	-17 59.7	1.509	2.518	3.4	18.4	7 30	21 12.08	- 4 52.5	1.152	2.147	7.5	18.5
8 9	21 3.35	-19 30.5	1.485	2.497	1.9	18.3	8 9	21 3.73	- 5 40.0	1.144	2.149	5.0	18.4
8 19	20 53.79	-20 56.9	1.488	2.475	6.7	18.5	8 19	20 55.66	- 6 40.2	1.160	2.152	7.2	18.5
8 29	20 45.36	-22 11.7	1.516	2.453	11.3	18.7	8 29	20 49.14	- 7 45.5	1.199	2.156	11.5	18.8
9 8	20 39.12	-23 10.7	1.568	2.430	15.3	18.9	9 8	20 45.13	- 8 48.3	1.258	2.161	15.6	19.0
149050	2002 BN ₂₄	8 6.3	40°32	3°1/ 3.6	18		116347	2003 YQ ₈₆	8 6.3	276°37	7°0/10.6	18	
6 30	21 28.64	-21 41.9	2.087	2.942	12.7	19.6	6 30	21 30.50	+ 1 41.0	2.030	2.803	15.9	19.5
7 10	21 24.86	-22 50.3	2.015	2.944	9.7	19.4	7 10	21 26.39	+ 2 28.8	1.929	2.785	13.6	19.3
7 20	21 19.06	-24 4.5	1.967	2.947	6.4	19.2	7 20	21 20.20	+ 3 0.4	1.847	2.767	10.9	19.1
7 30	21 11.78	-25 18.5	1.945	2.949	3.6	19.0	7 30	21 12.37	+ 3 13.4	1.788	2.749	8.4	18.9
8 9	21 3.79	-26 26.2	1.950	2.952	3.7	19.1	8 9	21 3.62	+ 3 7.2	1.753	2.731	7.0	18.8
8 19	20 55.99	-27 22.3	1.982	2.954	6.7	19.2	8 19	20 54.83	+ 2 43.1	1.744	2.712	7.8	18.8
8 29	20 49.29	-28 3.4	2.040	2.957	9.9	19.4	8 29	20 46.98	+ 2 4.7	1.761	2.694	10.2	18.9
9 8	20 44.41	-28 28.4	2.121	2.960	12.8	19.6	9 8	20 40.89	+ 1 17.2	1.801	2.675	13.1	19.1
446665	2015 NM ₁₇	8 6.3	336°59	1°4/ 5.7	16		239387	2007 SG ₁₄	8 6.3	332°71	5°4/10.0	18	
6 30	21 31.91	-20 32.7	1.631	2.492	15.4	20.4	6 30	21 26.11	- 2 2.6	1.614	2.431	17.6	20.2
7 10	21 27.93	-20 23.0	1.548	2.479	12.0	20.1	7 10	21 23.39	- 1 52.2	1.529	2.421	14.5	20.0
7 20	21 21.37	-20 16.9	1.484	2.466	7.9	19.9	7 20	21 18.39	- 2 2.6	1.462	2.412	11.0	19.7
7 30	21 12.86	-20 10.9	1.445	2.454	3.5	19.6	7 30	21 11.61	- 2 34.5	1.417	2.403	7.5	19.5
8 9	21 3.40	-20 1.3	1.431	2.442	2.1	19.5	8 9	21 3.91	- 3 25.5	1.396	2.395	5.4	19.4
8 19	20 54.17	-19 45.2	1.442	2.432	6.5	19.7	8 19	20 56.30	- 4 31.0	1.400	2.388	6.9	19.4
8 29	20 46.39	-19 21.4	1.479	2.422	10.9	20.0	8 29	20 49.89	- 5 44.3	1.428	2.381	10.4	19.6
9 8	20 40.97	-18 49.6	1.537	2.413	14.8	20.2	9 8	20 45.54	- 6 57.9	1.478	2.374	14.1	19.8
218288	2003 MD ₅	8 6.3	1°15	13°2/ 9.8	18		112695	2002 PY ₁₀₁	8 6.3	37°54	4°8/ 9.9	18	
6 30	21 34.53	+ 4 17.7	1.430	2.21									

EPHEMERIDES

8 6.3

8 6.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
289379	2005 CG ₂₁	8 6.3 134°60	1°3/ 5.5 17				85382	1996 LJ ₂	8 6.3 322°51	10°5/12.8 18			
6 30	21 35.51	-17 8.7	1.711	2.556	15.5	21.4	6 30	21 24.49	+ 5 50.8	1.380	2.176	21.0	19.3
7 10	21 30.39	-17 49.2	1.645	2.568	11.9	21.1	7 10	21 22.67	+ 6 43.8	1.290	2.155	18.5	19.1
7 20	21 22.80	-18 38.7	1.600	2.579	7.8	20.9	7 20	21 18.26	+ 7 10.0	1.215	2.134	15.5	18.8
7 30	21 13.43	-19 32.0	1.581	2.589	3.3	20.7	7 30	21 11.70	+ 7 4.0	1.158	2.114	12.6	18.6
8 9	21 3.29	-20 23.0	1.588	2.599	2.1	20.6	8 9	21 3.90	+ 6 23.6	1.122	2.095	10.7	18.4
8 19	20 53.51	-21 6.0	1.622	2.608	6.4	20.9	8 19	20 56.01	+ 5 11.0	1.107	2.076	11.0	18.4
8 29	20 45.22	-21 37.6	1.682	2.617	10.5	21.2	8 29	20 49.38	+ 3 33.2	1.113	2.059	13.5	18.5
9 8	20 39.24	-21 56.2	1.765	2.625	14.0	21.4	9 8	20 45.15	+ 1 41.7	1.140	2.042	16.9	18.6
237576	2001 DN ₅₂	8 6.3 208°40	1°7/ 5.1 18				254955	2005 ST ₂₀₃	8 6.3 320°90	1°0/ 7.0 15			
6 30	21 33.81	-20 5.5	2.379	3.215	12.0	21.6	6 30	21 26.91	-11 47.6	1.841	2.684	14.7	21.0
7 10	21 28.58	-20 34.0	2.290	3.208	9.2	21.4	7 10	21 23.81	-12 6.8	1.751	2.670	11.5	20.8
7 20	21 21.42	-21 7.1	2.225	3.201	6.1	21.2	7 20	21 18.58	-12 38.7	1.681	2.656	7.8	20.5
7 30	21 12.81	-21 40.9	2.187	3.194	2.8	21.0	7 30	21 11.69	-13 21.1	1.636	2.642	3.7	20.2
8 9	21 3.51	-22 11.5	2.177	3.185	2.2	21.0	8 9	21 3.95	-14 9.6	1.616	2.629	1.3	20.0
8 19	20 54.33	-22 35.1	2.195	3.176	5.4	21.2	8 19	20 56.27	-14 59.3	1.623	2.616	5.4	20.3
8 29	20 46.17	-22 49.7	2.242	3.167	8.7	21.4	8 29	20 49.67	-15 45.3	1.655	2.604	9.6	20.5
9 8	20 39.70	-22 54.1	2.312	3.157	11.7	21.5	9 8	20 44.97	-16 23.7	1.711	2.592	13.3	20.7
4740	Veniamina	8 6.3 252°10	2°9/ 8.7 18				301188	2008 YH ₁₅₂	8 6.3 100°85	1°2/ 7.2 17			
6 30	21 29.45	- 5 50.2	2.235	3.040	13.7	18.3	6 30	21 30.93	-11 53.5	1.952	2.784	14.4	20.9
7 10	21 25.38	- 6 1.2	2.132	3.023	11.1	18.1	7 10	21 26.60	-11 59.0	1.875	2.788	11.3	20.7
7 20	21 19.42	- 6 26.5	2.051	3.006	8.0	17.9	7 20	21 20.21	-12 15.1	1.820	2.791	7.6	20.5
7 30	21 12.00	- 7 5.2	1.994	2.989	4.8	17.7	7 30	21 12.32	-12 39.6	1.790	2.795	3.7	20.2
8 9	21 3.78	- 7 54.6	1.965	2.971	2.9	17.5	8 9	21 3.75	-13 9.1	1.786	2.798	1.5	20.1
8 19	20 55.56	- 8 51.0	1.963	2.953	5.0	17.6	8 19	20 55.41	-13 39.8	1.809	2.801	5.1	20.3
8 29	20 48.19	- 9 49.5	1.989	2.935	8.4	17.8	8 29	20 48.23	-14 7.9	1.859	2.805	8.9	20.6
9 8	20 42.41	-10 45.8	2.040	2.916	11.7	18.0	9 8	20 42.93	-14 30.7	1.933	2.808	12.3	20.8
511098	2013 TV ₁₄₀	8 6.3 255°55	0°0/ 6.1 17				93027	2000 RA ₉₇	8 6.3 354°95	10°7/ 9.2 18			
6 30	21 33.06	-14 49.6	1.756	2.599	15.3	22.7	6 30	21 30.97	- 2 33.7	1.125	1.965	22.2	18.5
7 10	21 28.73	-15 8.9	1.664	2.585	11.9	22.5	7 10	21 27.99	- 0 14.8	1.057	1.957	18.9	18.2
7 20	21 21.92	-15 39.1	1.593	2.570	8.0	22.2	7 20	21 21.87	+ 1 49.2	1.005	1.951	15.3	18.0
7 30	21 13.17	-16 16.7	1.547	2.555	3.5	21.9	7 30	21 13.25	+ 3 30.6	0.973	1.946	12.1	17.8
8 9	21 3.36	-16 56.8	1.526	2.539	1.3	21.7	8 9	21 3.38	+ 4 43.5	0.962	1.943	10.7	17.7
8 19	20 53.61	-17 34.5	1.533	2.523	6.1	22.0	8 19	20 53.77	+ 5 25.3	0.972	1.942	12.0	17.8
8 29	20 45.10	-18 5.4	1.565	2.507	10.5	22.2	8 29	20 45.96	+ 5 38.7	1.002	1.943	15.1	18.0
9 8	20 38.78	-18 26.7	1.620	2.490	14.5	22.4	9 8	20 41.13	+ 5 30.6	1.050	1.946	18.6	18.2
79903	1999 BX ₁₁	8 6.3 135°39	0°3/ 6.1 18				339459	2005 EZ ₂₀₉	8 6.3 241°83	1°0/ 7.1 18			
6 30	21 31.30	-15 41.9	2.398	3.229	12.1	20.4	6 30	21 30.69	-11 56.2	2.132	2.960	13.5	21.6
7 10	21 26.46	-16 5.7	2.325	3.239	9.3	20.2	7 10	21 26.40	-12 12.0	2.039	2.949	10.6	21.4
7 20	21 19.90	-16 36.3	2.274	3.249	6.1	20.0	7 20	21 20.12	-12 38.5	1.967	2.938	7.2	21.1
7 30	21 12.11	-17 10.6	2.251	3.259	2.6	19.8	7 30	21 12.32	-13 13.4	1.921	2.927	3.4	20.9
8 9	21 3.80	-17 45.2	2.255	3.268	1.1	19.7	8 9	21 3.74	-13 53.2	1.903	2.915	1.3	20.7
8 19	20 55.71	-18 16.6	2.289	3.277	4.6	20.0	8 19	20 55.23	-14 33.7	1.912	2.903	4.9	20.9
8 29	20 48.62	-18 42.1	2.350	3.285	7.8	20.2	8 29	20 47.70	-15 11.3	1.948	2.891	8.7	21.1
9 8	20 43.12	-19 0.0	2.435	3.293	10.7	20.4	9 8	20 41.91	-15 42.6	2.008	2.878	12.1	21.3
505735	2015 BX ₁₉	8 6.3 215°55	1°1/ 5.5 17				259771	2004 BK ₂₁	8 6.3 65°24	3°5/ 4.0 18			
6 30	21 33.70	-16 23.1	1.915	2.755	14.3	21.8	6 30	21 32.06	-20 24.5	1.437	2.305	16.7	20.0
7 10	21 29.00	-17 7.5	1.827	2.747	11.1	21.6	7 10	21 28.30	-21 34.3	1.376	2.312	12.8	19.8
7 20	21 21.97	-18 2.1	1.762	2.739	7.3	21.3	7 20	21 21.74	-22 53.2	1.335	2.318	8.4	19.5
7 30	21 13.15	-19 2.3	1.722	2.731	3.1	21.1	7 30	21 13.08	-24 13.1	1.318	2.325	4.4	19.3
8 9	21 3.40	-20 2.3	1.710	2.721	1.9	21.0	8 9	21 3.48	-25 25.1	1.326	2.332	4.3	19.3
8 19	20 53.74	-20 56.3	1.725	2.711	6.1	21.2	8 19	20 54.25	-26 21.6	1.360	2.338	8.3	19.6
8 29	20 45.26	-21 39.8	1.767	2.700	10.2	21.4	8 29	20 46.70	-26 58.6	1.417	2.345	12.5	19.9
9 8	20 38.83	-22 10.5	1.832	2.689	13.7	21.7	9 8	20 41.77	-27 15.4	1.494	2.352	16.2	20.1
146761	2001 XH ₁₈₀	8 6.3 210°06	1°5/ 7.7 18				482114	2010 NZ ₃₂	8 6.3 312°68	3°7/ 3.9 17			
6 30	21 29.23	- 9 41.3	2.756	3.565	11.3	21.3	6 30	21 31.06	-24 56.7	1.900	2.760	13.6	21.2
7 10	21 24.76	- 9 51.1	2.661	3.558	8.9	21.1	7 10	21 27.12	-25 29.3	1.812	2.741	10.6	21.0
7 20	21 18.76	-10 10.1	2.589	3.552	6.2	20.9	7 20	21 20.81	-26 4.5	1.745	2.723	7.2	20.7
7 30	21 11.64	-10 36.7	2.544	3.545	3.2	20.7	7 30	21 12.67	-26 36.8	1.703	2.705	4.3	20.5
8 9	21 3.97	-11 8.6	2.527	3.537	1.6	20.6	8 9	21 3.61	-27 0.7	1.687	2.688	4.3	20.5
8 19	20 56.38	-11 43.0	2.539	3.529	4.0	20.7	8 19	20 54.67	-27 11.9	1.697	2.671	7.4	20.6
8 29	20 49.53	-12 17.0	2.579	3.521	7.0	20.9	8 29	20 46.96	-27 8.4	1.732	2.654	11.0	20.8
9 8	20 44.00	-12 47.9	2.646	3.512	9.7	21.1	9 8	20 41.38	-26 50.2	1.789	2.637	14.4	21.0
288074	2003 UU ₄₀₇	8 6.3 327°78	6°3/ 2.6 18				185723	1998 SB ₉₉	8 6.3 335°88	1°6/ 7.1 17			
6 30	21 29.56	-25 2.8	1.184	2.073	18.1	20.3	6 30	21 26.13	-12 16.6	1.154	2.030	19.4	19.5
7 10	21 27.24	-26 20.1	1.116	2.061	14.2	20.0	7 10	21 24.36	-12 13.5	1.077	2.014	15.4	19.2
7 20	21 21.57	-27 45.0	1.066	2.049	9.9	19.7	7 20	21 19.56	-12 26.7	1.017	1.999	10.6	18.9
7 30	21 13.18	-29 7.1	1.037	2.038	6.6	19.5	7 30	21 12.30	-12 54.5	0.978	1.985	5.1	18.6
8 9	21 3.37	-30 14.5	1.031	2.028	7.3	19.5	8 9	21 3.72	-13 31.8	0.960	1.973	2.0	18.3
8 19	20 53.80	-30 58.3	1.047	2.019	11.2	19.7	8 19	20 55.28	-14 12.1	0.965	1.962	7.3	18.6
8 29	20 46.19	-31 14.2	1.085	2.010	15.7	20.0	8 29	20 48.54	-14 48.9	0.991	1.952	12.9	18.9
9 8	20 41.77	-31 3.4	1.139	2.002	19.8	20.2	9 8	20 44.66	-15 16.8	1.037	1.943	17.8	19.1
200230	1999 UE ₃₇	8 6.3 190°71	0°4/ 6.6 17				112031	2002 HH ₇	8 6.3 113°02	5°2/ 2.3 18			
6 30	21 30.85	-13 18.8	1.940										

EPHEMERIDES

8 6.3

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
438324	2006 <i>KE</i> ₃₁		8 6.3 353°11	8°0/ 1.3 18			383940	2008 <i>SO</i> ₂₄₀		8 6.4 172°44	2°2/ 4.7 18		
6 30	21 29.53	-31 10.6	1.358	2.241	16.6	20.1	6 30	21 31.74	-19 31.4	1.893	2.745	14.0	21.4
7 10	21 26.84	-32 27.0	1.298	2.235	13.3	19.9	7 10	21 27.45	-20 19.9	1.819	2.746	10.7	21.2
7 20	21 21.04	-33 41.9	1.257	2.230	10.0	19.7	7 20	21 20.91	-21 15.6	1.767	2.746	7.0	20.9
7 30	21 12.85	-34 45.0	1.238	2.226	8.1	19.6	7 30	21 12.71	-22 13.2	1.740	2.747	3.3	20.7
8 9	21 3.57	-35 26.9	1.243	2.223	8.9	19.6	8 9	21 3.72	-23 6.7	1.740	2.748	2.9	20.7
8 19	20 54.69	-35 41.8	1.269	2.221	11.7	19.8	8 19	20 54.94	-23 50.9	1.767	2.748	6.5	20.9
8 29	20 47.70	-35 28.5	1.317	2.221	15.1	20.0	8 29	20 47.42	-24 22.3	1.819	2.748	10.2	21.1
9 8	20 43.63	-34 50.5	1.383	2.221	18.4	20.2	9 8	20 41.93	-24 39.6	1.895	2.748	13.5	21.4
316812	1999 <i>VY</i> ₁₂₉		8 6.3 259°09	4°3/ 9.9 18			394875	2008 <i>UU</i> ₉		8 6.4 212°71	2°1/ 7.9 17		
6 30	21 27.74	- 2 0.4	2.423	3.208	13.3	21.2	6 30	21 31.63	- 8 36.9	2.336	3.145	13.1	22.4
7 10	21 23.84	- 1 47.5	2.328	3.200	11.0	21.0	7 10	21 26.92	- 8 44.8	2.241	3.137	10.4	22.2
7 20	21 18.29	- 1 48.4	2.254	3.192	8.4	20.9	7 20	21 20.38	- 9 4.1	2.169	3.130	7.3	22.0
7 30	21 11.49	- 2 3.4	2.205	3.184	5.8	20.7	7 30	21 12.44	- 9 33.4	2.122	3.121	4.0	21.8
8 9	21 4.07	- 2 31.2	2.182	3.176	4.3	20.6	8 9	21 3.81	-10 10.0	2.102	3.112	2.1	21.6
8 19	20 56.72	- 3 9.1	2.186	3.168	5.4	20.6	8 19	20 55.25	-10 50.4	2.112	3.102	4.7	21.8
8 29	20 50.18	- 3 53.5	2.218	3.159	7.9	20.8	8 29	20 47.58	-11 30.9	2.149	3.092	8.1	22.0
9 8	20 45.07	- 4 40.4	2.274	3.151	10.6	20.9	9 8	20 41.50	-12 8.3	2.211	3.081	11.2	22.2
142308	2002 <i>RJ</i> ₁₆₂		8 6.4 167°12	1°3/ 7.2 17			148388	2000 <i>TU</i> ₃₃		8 6.4 1°65	0°0/ 6.3 18		
6 30	21 33.14	-10 59.7	1.765	2.596	15.7	20.6	6 30	21 27.69	-15 2.3	1.659	2.515	15.4	19.5
7 10	21 28.55	-11 16.2	1.688	2.599	12.3	20.3	7 10	21 24.53	-15 20.6	1.586	2.514	11.9	19.3
7 20	21 21.64	-11 45.9	1.631	2.602	8.4	20.1	7 20	21 19.09	-15 49.4	1.534	2.514	7.9	19.1
7 30	21 13.00	-12 26.2	1.599	2.604	4.1	19.9	7 30	21 11.95	-16 25.3	1.505	2.514	3.4	18.8
8 9	21 3.54	-13 12.6	1.594	2.606	1.6	19.7	8 9	21 4.01	-17 3.2	1.502	2.515	1.3	18.7
8 19	20 54.31	-13 59.9	1.615	2.607	5.6	20.0	8 19	20 56.33	-17 38.3	1.524	2.517	5.8	19.0
8 29	20 46.37	-14 43.5	1.663	2.608	9.8	20.2	8 29	20 49.96	-18 6.5	1.572	2.519	10.1	19.2
9 8	20 40.56	-15 19.6	1.734	2.609	13.5	20.5	9 8	20 45.69	-18 25.2	1.641	2.522	13.8	19.5
433501	2013 <i>WN</i> ₄₁		8 6.4 177°37	7°1/31.6 18			417935	2007 <i>RG</i> ₃₁₅		8 6.4 330°02	6°2/ 3.3 17		
6 30	21 35.82	-33 4.0	1.968	2.820	13.5	21.2	6 30	21 29.44	-25 27.8	1.046	1.942	19.4	20.4
7 10	21 30.81	-34 30.9	1.904	2.821	10.9	21.0	7 10	21 27.59	-26 21.5	0.976	1.926	15.2	20.1
7 20	21 23.23	-35 55.2	1.864	2.822	8.4	20.9	7 20	21 22.07	-27 21.1	0.924	1.910	10.6	19.8
7 30	21 13.71	-37 8.2	1.848	2.823	7.1	20.8	7 30	21 13.53	-28 16.8	0.892	1.895	6.8	19.5
8 9	21 3.28	-38 2.4	1.859	2.823	7.9	20.9	8 9	21 3.40	-28 57.1	0.880	1.881	7.2	19.5
8 19	20 53.12	-38 33.3	1.895	2.823	10.0	21.0	8 19	20 53.52	-29 13.7	0.890	1.869	11.5	19.7
8 29	20 44.44	-38 39.9	1.955	2.822	12.6	21.2	8 29	20 45.81	-29 3.2	0.920	1.857	16.5	19.9
9 8	20 38.12	-38 24.5	2.035	2.821	15.1	21.3	9 8	20 41.63	-28 27.7	0.966	1.848	21.0	20.2
298228	2002 <i>UY</i> ₄₆		8 6.4 272°82	3°8/ 3.2 18			259711	2003 <i>YL</i> ₅₄		8 6.4 302°99	5°2/ 3.2 18		
6 30	21 31.20	-24 0.4	2.086	2.940	12.8	21.1	6 30	21 31.64	-23 51.4	1.348	2.225	17.1	20.3
7 10	21 27.10	-25 1.6	1.993	2.920	9.9	20.9	7 10	21 28.54	-24 59.9	1.272	2.211	13.3	20.0
7 20	21 20.77	-26 7.8	1.923	2.901	6.8	20.6	7 20	21 22.30	-26 16.3	1.215	2.198	9.1	19.7
7 30	21 12.68	-27 13.3	1.879	2.880	4.2	20.4	7 30	21 13.53	-27 31.7	1.181	2.184	5.6	19.5
8 9	21 3.64	-28 11.5	1.862	2.860	4.5	20.4	8 9	21 3.41	-28 36.1	1.171	2.171	6.1	19.5
8 19	20 54.60	-28 57.0	1.872	2.840	7.4	20.6	8 19	20 53.43	-29 21.1	1.185	2.158	10.0	19.7
8 29	20 46.62	-29 26.3	1.908	2.819	10.8	20.7	8 29	20 45.18	-29 42.4	1.221	2.145	14.4	19.9
9 8	20 40.58	-29 38.7	1.966	2.798	13.9	20.9	9 8	20 39.85	-29 40.1	1.276	2.133	18.4	20.1
27167	1999 <i>AH</i> ₂₁		8 6.4 31°65	2°0/ 7.7 18			283133	2008 <i>XH</i> ₃₉		8 6.4 354°48	4°2/ 3.9 18		
6 30	21 29.43	-10 12.2	1.756	2.593	15.6	17.8	6 30	21 28.91	-23 3.4	1.360	2.240	16.8	19.8
7 10	21 25.64	-10 14.1	1.685	2.598	12.3	17.6	7 10	21 26.14	-23 52.2	1.294	2.236	13.0	19.6
7 20	21 19.68	-10 29.1	1.634	2.604	8.4	17.4	7 20	21 20.49	-24 46.9	1.248	2.232	8.7	19.3
7 30	21 12.13	-10 55.0	1.606	2.610	4.4	17.2	7 30	21 12.65	-25 40.3	1.224	2.229	4.9	19.1
8 9	21 3.88	-11 28.4	1.605	2.616	2.1	17.1	8 9	21 3.79	-26 24.1	1.224	2.227	4.9	19.1
8 19	20 55.89	-12 4.9	1.629	2.623	5.4	17.3	8 19	20 55.26	-26 52.1	1.247	2.227	8.8	19.3
8 29	20 49.16	-12 40.1	1.680	2.629	9.4	17.5	8 29	20 48.43	-27 1.2	1.293	2.227	13.1	19.6
9 8	20 44.44	-13 10.3	1.753	2.637	12.9	17.8	9 8	20 44.29	-26 51.5	1.359	2.228	16.9	19.8
1108	Demeter		8 6.4 3°83	24°9/ 3.6 18			42835	1999 <i>NS</i> ₅₆		8 6.4 325°37	9°9/ 11.9 18		
6 30	21 22.04	+27 13.9	1.116	1.806	30.5	14.7	6 30	21 28.93	+ 4 53.0	1.602	2.382	19.2	17.7
7 10	21 21.41	+30 38.7	1.072	1.804	29.4	14.6	7 10	21 25.69	+ 6 7.4	1.517	2.371	16.8	17.5
7 20	21 17.73	+33 21.9	1.039	1.803	28.3	14.5	7 20	21 20.03	+ 7 0.8	1.449	2.360	14.0	17.3
7 30	21 11.56	+35 11.5	1.014	1.806	27.2	14.4	7 30	21 12.46	+ 7 28.7	1.402	2.350	11.5	17.1
8 9	21 4.04	+35 59.2	1.000	1.810	26.2	14.4	8 9	21 3.85	+ 7 28.8	1.376	2.340	10.0	17.0
8 19	20 56.64	+35 41.8	0.996	1.817	25.4	14.4	8 19	20 55.29	+ 7 2.1	1.373	2.331	10.4	17.0
8 29	20 51.01	+34 23.2	1.003	1.826	24.9	14.4	8 29	20 47.94	+ 6 13.3	1.392	2.323	12.5	17.1
9 8	20 48.40	+32 14.5	1.022	1.837	24.9	14.4	9 8	20 42.75	+ 5 9.9	1.433	2.315	15.4	17.3
198366	2004 <i>VZ</i> ₁₆		8 6.4 356°33	10°9/ 13.0 16			330952	2009 <i>SD</i> ₃₀₆		8 6.4 359°31	2°7/ 5.1 15		
6 30	21 27.32	+ 6 28.4	1.444	2.227	20.8	19.8	6 30	21 26.63	-19 59.8	1.028	1.925	19.6	20.4
7 10	21 24.57	+ 7 43.5	1.371	2.224	18.2	19.6	7 10	21 25.01	-20 22.2	0.969	1.920	15.2	20.1
7 20	21 19.30	+ 8 33.6	1.314	2.222	15.4	19.4	7 20	21 20.06	-20 54.2	0.928	1.917	10.0	19.8
7 30	21 12.09	+ 8 53.5	1.275	2.220	12.7	19.2	7 30	21 12.54	-21 29.0	0.906	1.916	4.6	19.5
8 9	21 3.89	+ 8 41.2	1.257	2.219	11.0	19.1	8 9	21 3.85	-21 58.7	0.906	1.916	3.6	19.4
8 19	20 55.85	+ 7 58.8	1.261	2.219	11.2	19.1	8 19	20 55.63	-22 16.6	0.927	1.918	8.8	19.7
8 29	20 49.18	+ 6 52.4	1.287	2.220	13.2	19.2	8 29	20 49.47	-22 18.8	0.969	1.922	14.0	20.0
9 8	20 44.82	+ 5 31.3	1.334	2.222	15.9	19.4	9 8	20 46.44	-22 4.7	1.028	1.927	18.6	20.3
185942	2000 <i>YO</i> ₈₂		8 6.4 251°92	2°9/ 3.7 18			218423	2004 <i>RZ</i> ₁₅₃					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
259781	2004 <i>BY</i> ₃₆		8 6.4 68°38'	1.0°/ 5.8	17		103466	2000 <i>AC</i> ₂₀₉		8 6.4 205°79'	1.0°/ 5.5	18	
6 30	21 33.78	-16 49.0	1.447	2.305	17.2	20.5	6 30	21 29.79	-15 45.0	2.042	2.885	13.5	19.8
7 10	21 29.47	-17 13.1	1.385	2.315	13.2	20.3	7 10	21 25.82	-16 38.1	1.961	2.883	10.4	19.6
7 20	21 22.44	-17 47.4	1.343	2.324	8.6	20.1	7 20	21 19.83	-17 41.5	1.903	2.881	6.8	19.4
7 30	21 13.43	-18 26.6	1.325	2.334	3.7	19.8	7 30	21 12.30	-18 50.7	1.870	2.879	2.9	19.2
8 9	21 3.57	-19 4.8	1.331	2.343	1.9	19.7	8 9	21 4.01	-19 59.8	1.865	2.877	1.8	19.1
8 19	20 54.16	-19 36.3	1.363	2.353	6.7	20.0	8 19	20 55.86	-21 3.3	1.888	2.874	5.6	19.3
8 29	20 46.44	-19 57.5	1.419	2.363	11.3	20.3	8 29	20 48.77	-21 56.7	1.937	2.871	9.3	19.5
9 8	20 41.27	-20 6.7	1.497	2.373	15.2	20.6	9 8	20 43.49	-22 37.3	2.010	2.869	12.6	19.8
61210	2000 <i>OU</i> ₉		8 6.4 357°87'	3°0/ 4.5	18		448677	2010 <i>VR</i> ₂₀₈		8 6.4 132°97'	3°9/ 9.8	18	
6 30	21 16.82	-15 54.5	0.795	1.712	21.6	17.6	6 30	21 28.56	-2 47.1	2.494	3.279	13.0	20.9
7 10	21 18.01	-17 10.9	0.742	1.705	16.7	17.3	7 10	21 24.37	-2 35.4	2.411	3.284	10.6	20.8
7 20	21 15.78	-18 50.7	0.705	1.699	10.9	17.0	7 20	21 18.59	-2 36.7	2.349	3.289	8.0	20.6
7 30	21 10.80	-20 44.0	0.685	1.696	4.8	16.6	7 30	21 11.68	-2 50.9	2.312	3.294	5.4	20.4
8 9	21 4.47	-22 35.7	0.685	1.696	4.3	16.6	8 9	21 4.25	-3 16.4	2.303	3.298	3.9	20.4
8 19	20 58.53	-24 10.7	0.705	1.698	10.2	16.9	8 19	20 56.97	-3 50.7	2.320	3.303	5.0	20.4
8 29	20 54.74	-25 18.2	0.742	1.702	16.0	17.3	8 29	20 50.52	-4 30.2	2.366	3.307	7.5	20.6
9 8	20 54.29	-25 54.2	0.796	1.709	21.0	17.6	9 8	20 45.48	-5 11.4	2.436	3.311	10.1	20.8
261499	2005 <i>WU</i> ₂₁		8 6.4 63°13'	3°8/ 9.2	18		508083	2015 <i>DC</i> ₆₄		8 6.4 271°03'	1°1/ 5.7	17	
6 30	21 29.23	-4 48.7	2.266	3.065	13.7	20.7	6 30	21 33.28	-16 22.9	1.581	2.434	16.2	22.5
7 10	21 25.04	-4 29.6	2.183	3.067	11.1	20.5	7 10	21 29.37	-16 57.1	1.486	2.413	12.7	22.2
7 20	21 19.10	-4 23.0	2.121	3.069	8.2	20.3	7 20	21 22.68	-17 43.5	1.412	2.392	8.4	21.9
7 30	21 11.90	-4 29.0	2.084	3.071	5.3	20.2	7 30	21 13.73	-18 37.7	1.362	2.370	3.6	21.6
8 9	21 4.11	-4 45.8	2.073	3.074	3.8	20.1	8 9	21 3.46	-19 33.2	1.336	2.348	2.1	21.4
8 19	20 56.47	-5 11.1	2.090	3.076	5.2	20.2	8 19	20 53.14	-20 23.1	1.337	2.326	7.0	21.7
8 29	20 49.77	-5 41.4	2.134	3.078	8.0	20.4	8 29	20 44.14	-21 2.1	1.363	2.303	11.9	21.9
9 8	20 44.63	-6 13.1	2.202	3.080	10.9	20.5	9 8	20 37.60	-21 27.1	1.410	2.280	16.3	22.1
363042	1999 <i>TE</i> ₁₉₁		8 6.4 241°90'	6°6/12.3	18		191069	2002 <i>CA</i> ₁₅₁		8 6.4 235°93'	0°2/ 6.2	18	
6 30	21 28.35	+ 6 36.7	2.790	3.515	13.1	21.1	6 30	21 32.11	-14 55.6	2.000	2.838	13.9	21.1
7 10	21 24.18	+ 7 10.9	2.687	3.502	11.4	21.0	7 10	21 27.71	-15 23.8	1.910	2.827	10.8	20.8
7 20	21 18.48	+ 7 29.8	2.603	3.489	9.5	20.8	7 20	21 21.14	-16 1.9	1.841	2.817	7.2	20.6
7 30	21 11.64	+ 7 32.0	2.542	3.475	7.7	20.7	7 30	21 12.91	-16 46.5	1.798	2.806	3.1	20.3
8 9	21 4.19	+ 7 17.0	2.507	3.461	6.7	20.6	8 9	21 3.81	-17 32.9	1.782	2.794	1.2	20.2
8 19	20 56.75	+ 6 46.2	2.499	3.447	6.9	20.6	8 19	20 54.80	-18 16.4	1.793	2.782	5.5	20.4
8 29	20 49.97	+ 6 2.4	2.517	3.433	8.3	20.7	8 29	20 46.86	-18 53.0	1.831	2.770	9.5	20.7
9 8	20 44.44	+ 5 9.7	2.560	3.418	10.2	20.8	9 8	20 40.83	-19 19.9	1.893	2.758	13.0	20.9
32573	2001 <i>QD</i> ₇₅		8 6.4 332°26'	1°1/ 5.7	18		27429	2000 <i>FL</i> ₈		8 6.4 254°36'	3°3/ 4.3	18	
6 30	21 29.65	-17 39.8	1.821	2.674	14.4	18.4	6 30	21 33.66	-22 8.3	1.667	2.527	15.2	18.5
7 10	21 25.94	-18 2.5	1.740	2.668	11.1	18.2	7 10	21 29.39	-22 54.9	1.589	2.519	11.8	18.2
7 20	21 20.00	-18 33.0	1.682	2.662	7.3	18.0	7 20	21 22.48	-23 47.5	1.532	2.512	7.9	18.0
7 30	21 12.37	-19 7.5	1.647	2.656	3.1	17.7	7 30	21 13.55	-24 39.9	1.500	2.505	4.2	17.7
8 9	21 3.93	-19 41.2	1.639	2.651	1.8	17.6	8 9	21 3.60	-25 25.1	1.493	2.497	4.0	17.7
8 19	20 55.68	-20 9.5	1.657	2.646	6.0	17.9	8 19	20 53.85	-25 57.5	1.512	2.490	7.7	17.9
8 29	20 48.65	-20 29.0	1.701	2.641	10.0	18.1	8 29	20 45.55	-26 13.8	1.556	2.482	11.7	18.1
9 8	20 43.65	-20 38.1	1.767	2.637	13.5	18.3	9 8	20 39.66	-26 13.6	1.621	2.474	15.4	18.4
29369	1996 <i>FK</i> ₂		8 6.4 235°37'	2°7/ 8.0	18		187652	2007 <i>EP</i> ₁₉		8 6.4 252°46'	0°2/ 6.6	18	
6 30	21 33.03	-8 8.0	1.565	2.396	17.4	19.0	6 30	21 28.62	-13 36.9	2.320	3.152	12.4	21.0
7 10	21 28.94	-8 14.3	1.479	2.387	14.0	18.7	7 10	21 24.67	-14 1.9	2.232	3.146	9.6	20.8
7 20	21 22.22	-8 37.8	1.412	2.378	9.8	18.5	7 20	21 18.95	-14 36.1	2.166	3.140	6.4	20.6
7 30	21 13.43	-9 17.1	1.368	2.369	5.4	18.2	7 30	21 11.90	-15 16.7	2.126	3.133	2.8	20.3
8 9	21 3.54	-10 8.1	1.349	2.359	2.8	18.0	8 9	21 4.21	-16 0.0	2.114	3.127	0.9	20.1
8 19	20 53.73	-11 5.2	1.356	2.349	6.3	18.2	8 19	20 56.62	-16 42.1	2.130	3.121	4.6	20.4
8 29	20 45.27	-12 2.0	1.389	2.339	10.9	18.4	8 29	20 49.92	-17 19.6	2.173	3.114	8.1	20.6
9 8	20 39.17	-12 53.1	1.443	2.328	15.1	18.7	9 8	20 44.79	-17 49.8	2.241	3.108	11.2	20.8
512058	2015 <i>MJ</i> ₁₀₃		8 6.4 83°57'	2°9/ 3.9	18		177465	2004 <i>DQ</i> ₅₀		8 6.4 32°09'	0°3/ 6.2	18	
6 30	21 29.96	-21 6.2	2.011	2.865	13.2	20.9	6 30	21 30.42	-14 20.7	1.317	2.182	18.1	19.5
7 10	21 25.96	-22 10.4	1.943	2.871	10.1	20.7	7 10	21 27.17	-14 54.0	1.255	2.187	14.0	19.3
7 20	21 19.89	-23 20.5	1.897	2.877	6.6	20.5	7 20	21 21.11	-15 41.8	1.212	2.194	9.3	19.0
7 30	21 12.28	-24 30.8	1.878	2.883	3.5	20.3	7 30	21 12.94	-16 38.9	1.192	2.201	4.0	18.8
8 9	21 3.98	-25 34.9	1.885	2.889	3.5	20.3	8 9	21 3.84	-17 38.1	1.195	2.208	1.6	18.6
8 19	20 55.90	-26 27.7	1.920	2.895	6.6	20.5	8 19	20 55.14	-18 32.1	1.223	2.216	6.9	19.0
8 29	20 48.99	-27 5.9	1.980	2.900	10.0	20.7	8 29	20 48.13	-19 15.2	1.275	2.224	11.8	19.3
9 8	20 43.98	-27 28.4	2.064	2.906	12.9	21.0	9 8	20 43.74	-19 44.3	1.347	2.233	15.9	19.6
60301	1999 <i>XL</i> ₁₇₈		8 6.4 135°57'	3°4/ 4.1	18		284577	2007 <i>TQ</i> ₉₄		8 6.4 275°59'	3°4/ 3.9	18	
6 30	21 33.92	-21 26.6	1.647	2.505	15.4	19.2	6 30	21 31.77	-23 8.3	1.933	2.789	13.6	20.8
7 10	21 29.46	-22 26.6	1.580	2.510	11.8	19.0	7 10	21 27.64	-23 55.5	1.848	2.776	10.5	20.6
7 20	21 22.42	-23 33.4	1.535	2.515	7.8	18.8	7 20	21 21.19	-24 47.5	1.785	2.764	7.1	20.4
7 30	21 13.44	-24 39.8	1.515	2.520	4.1	18.6	7 30	21 12.96	-25 38.7	1.748	2.751	4.0	20.2
8 9	21 3.58	-25 38.5	1.521	2.525	4.1	18.6	8 9	21 3.82	-26 22.8	1.737	2.739	4.0	20.2
8 19	20 54.03	-26 23.4	1.552	2.529	7.7	18.8	8 19	20 54.79	-26 55.0	1.752	2.726	7.2	20.3
8 29	20 46.01	-26 51.1	1.609	2.533	11.6	19.1	8 29	20 46.97	-27 12.3	1.793	2.714	10.8	20.5
9 8	20 40.39	-27 1.3	1.687	2.537	15.0	19.3	9 8	20 41.21	-27 14.1	1.856	2.701	14.1	20.7
23352	7585 <i>P-L</i>		8 6.4 9°26'	2°0/ 5.4	18		373643	2002 <i>PR</i> ₃₄		8 6.4 28°12'	3°0/ 8.2	17	

EPHEMERIDES

8 6.4

8 6.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
95092	2002 AC ₁₀₀		8 6.4 269°94	3°0/ 4.3 18			254292	2004 RC ₂₅₇		8 6.4 253°33	0°0/ 6.2 18		
6 30	21 31.35	-20 25.7	1.724	2.583	14.8	19.8	6 30	21 28.85	-14 32.8	2.522	3.352	11.6	21.2
7 10	21 27.53	-21 24.1	1.644	2.575	11.4	19.5	7 10	21 24.75	-14 55.8	2.426	3.340	9.0	21.0
7 20	21 21.24	-22 30.9	1.585	2.566	7.6	19.3	7 20	21 18.96	-15 26.7	2.354	3.327	6.0	20.8
7 30	21 13.02	-23 39.9	1.551	2.558	3.8	19.0	7 30	21 11.92	-16 2.9	2.308	3.315	2.6	20.6
8 9	21 3.80	-24 43.8	1.544	2.549	3.7	19.0	8 9	21 4.23	-16 41.0	2.289	3.302	0.9	20.4
8 19	20 54.72	-25 36.1	1.562	2.541	7.4	19.2	8 19	20 56.60	-17 17.6	2.300	3.289	4.4	20.7
8 29	20 46.95	-26 12.5	1.605	2.532	11.4	19.4	8 29	20 49.78	-17 49.7	2.338	3.276	7.7	20.9
9 8	20 41.43	-26 31.8	1.670	2.524	15.0	19.7	9 8	20 44.40	-18 14.9	2.401	3.263	10.7	21.0
357230	2002 JO ₁₂₃		8 6.4 108°58	9°7/26.8 18			109542	2001 QS ₂₅₄		8 6.4 31°23	3°7/ 4.7 17		
6 30	21 39.97	-49 16.4	2.649	3.451	11.9	21.2	6 30	21 34.45	-23 17.5	1.208	2.087	18.5	19.6
7 10	21 33.86	-50 52.0	2.618	3.468	10.6	21.2	7 10	21 30.48	-23 39.7	1.157	2.097	14.3	19.3
7 20	21 25.18	-52 14.3	2.609	3.485	9.8	21.1	7 20	21 23.31	-24 5.6	1.125	2.109	9.5	19.1
7 30	21 14.62	-53 16.2	2.625	3.501	9.7	21.2	7 30	21 13.87	-24 28.0	1.115	2.121	4.9	18.9
8 9	21 3.27	-53 52.8	2.664	3.517	10.2	21.2	8 9	21 3.58	-24 40.3	1.128	2.135	4.4	18.9
8 19	20 52.34	-54 2.6	2.725	3.533	11.3	21.3	8 19	20 53.99	-24 38.2	1.164	2.148	8.6	19.2
8 29	20 43.00	-53 46.9	2.807	3.549	12.5	21.4	8 29	20 46.52	-24 20.5	1.223	2.163	13.1	19.5
9 8	20 36.10	-53 9.7	2.908	3.564	13.6	21.6	9 8	20 42.05	-23 49.0	1.302	2.178	17.0	19.8
514951	2008 YD ₁₂₈		8 6.4 261°62	1°4/ 5.3 18			433137	2012 TS ₂₁₇		8 6.4 19°08	0°5/ 6.7 16		
6 30	21 31.29	-17 6.5	2.163	3.003	12.9	22.2	6 30	21 24.11	-11 29.7	1.071	1.952	20.2	20.2
7 10	21 27.08	-17 55.8	2.061	2.981	10.0	22.0	7 10	21 22.66	-12 11.6	1.023	1.963	15.7	20.0
7 20	21 20.77	-18 54.7	1.981	2.958	6.6	21.7	7 20	21 18.27	-13 14.0	0.992	1.976	10.4	19.7
7 30	21 12.80	-19 59.2	1.927	2.935	2.9	21.5	7 30	21 11.74	-14 31.0	0.981	1.990	4.6	19.5
8 9	21 3.87	-21 3.6	1.901	2.912	2.1	21.4	8 9	21 4.32	-15 53.2	0.993	2.007	1.4	19.3
8 19	20 54.88	-22 2.7	1.904	2.887	5.8	21.6	8 19	20 57.41	-17 10.9	1.028	2.024	7.1	19.7
8 29	20 46.81	-22 51.8	1.933	2.863	9.6	21.7	8 29	20 52.34	-18 15.9	1.084	2.043	12.2	20.1
9 8	20 40.50	-23 28.3	1.986	2.838	13.0	21.9	9 8	20 50.00	-19 3.7	1.161	2.063	16.6	20.4
341073	2007 HJ ₅₆		8 6.4 4°41	4°9/ 3.7 16			329943	2005 QP ₁₅		8 6.4 37°79	2°9/ 8.2 15		
6 30	21 27.73	-23 42.4	1.188	2.078	18.0	20.4	6 30	21 29.39	- 7 53.0	1.264	2.116	19.6	20.7
7 10	21 25.56	-24 37.0	1.130	2.077	13.9	20.1	7 10	21 26.32	- 8 3.6	1.207	2.128	15.5	20.5
7 20	21 20.28	-25 37.4	1.092	2.078	9.4	19.9	7 20	21 20.50	- 8 34.6	1.169	2.140	10.8	20.3
7 30	21 12.64	-26 34.9	1.074	2.079	5.5	19.7	7 30	21 12.68	- 9 23.5	1.152	2.154	5.8	20.0
8 9	21 3.96	-27 20.3	1.080	2.083	5.7	19.7	8 9	21 4.00	-10 24.2	1.158	2.168	2.9	19.9
8 19	20 55.73	-27 47.0	1.108	2.087	9.6	20.0	8 19	20 55.78	-11 29.4	1.188	2.183	6.5	20.2
8 29	20 49.42	-27 51.8	1.157	2.093	14.0	20.2	8 29	20 49.26	-12 31.6	1.241	2.198	11.2	20.5
9 8	20 46.02	-27 35.9	1.225	2.100	17.9	20.5	9 8	20 45.32	-13 24.9	1.316	2.214	15.4	20.8
390136	2012 VY ₇₂		8 6.4 271°88	2°8/ 4.3 18			391603	2007 UR ₇₇		8 6.4 162°06	2°2/ 8.0 18		
6 30	21 31.24	-21 13.7	1.893	2.748	13.9	21.0	6 30	21 30.79	- 8 53.3	2.081	2.899	14.1	21.6
7 10	21 27.24	-22 2.8	1.809	2.738	10.7	20.7	7 10	21 26.45	- 8 55.1	2.000	2.901	11.2	21.4
7 20	21 20.94	-22 58.5	1.747	2.727	7.1	20.5	7 20	21 20.17	- 9 9.0	1.940	2.903	7.8	21.2
7 30	21 12.86	-23 55.2	1.711	2.716	3.7	20.3	7 30	21 12.46	- 9 33.4	1.905	2.905	4.3	21.0
8 9	21 3.86	-24 46.7	1.700	2.706	3.5	20.3	8 9	21 4.09	-10 5.4	1.897	2.906	2.3	20.9
8 19	20 54.99	-25 27.7	1.717	2.695	6.9	20.4	8 19	20 55.89	-10 41.5	1.916	2.907	4.9	21.0
8 29	20 47.31	-25 54.6	1.759	2.684	10.7	20.6	8 29	20 48.74	-11 17.7	1.962	2.908	8.5	21.3
9 8	20 41.69	-26 6.3	1.823	2.673	14.1	20.8	9 8	20 43.34	-11 50.6	2.033	2.909	11.7	21.5
441989	2010 NA ₈₁		8 6.4 313°50	7°3/ 1.8 18			293388	2007 EV ₄₄		8 6.4 185°02	0°5/ 5.9 18		
6 30	21 37.32	-36 14.2	2.011	2.857	13.5	20.1	6 30	21 29.74	-16 29.0	2.615	3.447	11.2	21.6
7 10	21 31.98	-36 53.7	1.935	2.846	11.0	19.9	7 10	21 25.30	-16 53.6	2.531	3.446	8.6	21.4
7 20	21 24.03	-37 26.4	1.882	2.835	8.7	19.7	7 20	21 19.24	-17 24.3	2.471	3.446	5.6	21.2
7 30	21 14.15	-37 45.5	1.853	2.825	7.3	19.6	7 30	21 12.02	-17 58.3	2.438	3.445	2.4	21.0
8 9	21 3.43	-37 45.0	1.849	2.814	7.8	19.6	8 9	21 4.25	-18 32.2	2.432	3.445	1.1	20.9
8 19	20 53.08	-37 22.4	1.870	2.804	9.8	19.7	8 19	20 56.62	-19 2.9	2.456	3.443	4.4	21.1
8 29	20 44.29	-36 38.2	1.916	2.794	12.4	19.9	8 29	20 49.83	-19 27.9	2.507	3.442	7.5	21.3
9 8	20 37.92	-35 35.8	1.983	2.785	14.9	20.0	9 8	20 44.48	-19 45.4	2.584	3.440	10.2	21.5
361907	2008 GK ₄₂		8 6.4 139°97	3°7/ 9.8 18			41078	1999 VB ₄₄		8 6.4 341°02	3°0/ 8.7 18		
6 30	21 27.65	- 2 30.7	2.441	3.229	13.1	21.1	6 30	21 27.99	- 6 41.6	2.111	2.926	14.1	19.2
7 10	21 23.74	- 2 38.1	2.358	3.233	10.7	20.9	7 10	21 24.30	- 6 37.0	2.027	2.923	11.3	19.0
7 20	21 18.23	- 2 59.9	2.295	3.237	8.0	20.7	7 20	21 18.77	- 6 45.5	1.963	2.921	8.1	18.8
7 30	21 11.56	- 3 35.7	2.257	3.242	5.3	20.6	7 30	21 11.86	- 7 6.4	1.923	2.919	4.9	18.6
8 9	21 4.35	- 4 22.9	2.247	3.246	3.7	20.5	8 9	21 4.29	- 7 37.1	1.910	2.916	3.0	18.4
8 19	20 57.28	- 5 18.1	2.264	3.249	4.9	20.5	8 19	20 56.87	- 8 14.4	1.924	2.914	5.1	18.6
8 29	20 51.04	- 6 17.2	2.309	3.253	7.5	20.7	8 29	20 50.40	- 8 54.3	1.965	2.913	8.3	18.8
9 8	20 46.22	- 7 15.7	2.379	3.256	10.2	20.9	9 8	20 45.58	- 9 32.9	2.029	2.911	11.5	19.0
302255	2001 XG ₉₃		8 6.4 282°09	3°0/ 4.1 18			399007	2013 GV ₁₀		8 6.4 359°42	5°1/ 2.8 18		
6 30	21 30.53	-22 33.2	2.077	2.930	12.9	20.8	6 30	21 31.60	-29 20.0	2.015	2.874	13.0	19.8
7 10	21 26.46	-23 18.4	1.997	2.924	9.9	20.6	7 10	21 27.36	-30 4.2	1.947	2.872	10.2	19.6
7 20	21 20.28	-24 8.1	1.939	2.917	6.6	20.4	7 20	21 20.88	-30 47.1	1.900	2.872	7.3	19.4
7 30	21 12.53	-24 57.1	1.906	2.911	3.6	20.2	7 30	21 12.79	-31 22.8	1.879	2.871	5.3	19.3
8 9	21 4.01	-25 40.1	1.901	2.904	3.5	20.1	8 9	21 3.98	-31 45.8	1.884	2.871	5.6	19.3
8 19	20 55.65	-26 12.5	1.922	2.898	6.6	20.3	8 19	20 55.48	-31 52.7	1.914	2.872	8.0	19.5
8 29	20 48.40	-26 31.8	1.970	2.891	9.9	20.5	8 29	20 48.28	-31 42.7	1.970	2.873	10.9	19.6
9 8	20 43.04	-26 37.1	2.040	2.885	13.0	20.7	9 8	20 43.14	-31 16.8	2.047	2.874	13.6	19.8
92362	2000 HY ₂₉		8 6.4 98°41	6°2/ 3.4 17			337315	2001 BN ₄		8 6.4 201°72	4°7/ 3.5 18		
6 30	21 40.06	-28 4.1											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
445753	2011 WW ₆₉		8 6.4 190°94	1°6/ 7.8 18			506502	2003 YZ ₄₁		8 6.4 275°45	2°5/ 4.7 18		
6 30	21 29.71	-9 38.4	2.766	3.573	11.3	22.4	6 30	21 32.54	-18 31.3	1.595	2.453	15.9	21.6
7 10	21 25.16	-9 45.4	2.676	3.572	8.9	22.2	7 10	21 28.88	-19 28.3	1.501	2.431	12.3	21.3
7 20	21 19.11	-10 1.4	2.608	3.570	6.2	22.0	7 20	21 22.45	-20 37.6	1.427	2.408	8.2	21.1
7 30	21 11.96	-10 24.8	2.567	3.567	3.3	21.8	7 30	21 13.73	-21 53.4	1.377	2.385	3.9	20.7
8 9	21 4.29	-10 53.4	2.554	3.565	1.6	21.7	8 9	21 3.65	-23 7.5	1.353	2.361	3.4	20.7
8 19	20 56.73	-11 24.5	2.571	3.561	3.9	21.9	8 19	20 53.48	-24 12.0	1.355	2.338	7.8	20.9
8 29	20 49.92	-11 55.4	2.616	3.558	6.8	22.1	8 29	20 44.61	-25 0.8	1.381	2.314	12.5	21.1
9 8	20 44.43	-12 23.5	2.687	3.554	9.5	22.2	9 8	20 38.19	-25 31.2	1.429	2.289	16.7	21.3
444248	2005 UM ₁₇₁		8 6.4 339°57	5°0/10.1 18			175480	2006 RE ₂₃		8 6.4 289°29	3°3/ 4.3 18		
6 30	21 27.95	-1 44.8	2.068	2.862	15.0	21.0	6 30	21 33.36	-24 16.0	1.955	2.808	13.5	20.3
7 10	21 24.32	-1 22.4	1.982	2.859	12.4	20.8	7 10	21 28.83	-24 42.9	1.869	2.796	10.5	20.1
7 20	21 18.81	-1 15.9	1.916	2.856	9.5	20.6	7 20	21 21.98	-25 12.2	1.806	2.783	7.1	19.8
7 30	21 11.91	-1 25.7	1.874	2.853	6.7	20.4	7 30	21 13.35	-25 38.8	1.767	2.771	4.0	19.6
8 9	21 4.31	-1 50.5	1.857	2.850	5.0	20.3	8 9	21 3.85	-25 57.6	1.755	2.758	3.8	19.6
8 19	20 56.83	-2 27.6	1.866	2.848	6.1	20.4	8 19	20 54.52	-26 5.0	1.770	2.746	7.0	19.8
8 29	20 50.33	-3 12.7	1.901	2.846	8.8	20.6	8 29	20 46.44	-25 58.9	1.810	2.734	10.6	19.9
9 8	20 45.48	-4 0.9	1.961	2.844	11.8	20.7	9 8	20 40.46	-25 39.6	1.873	2.722	13.8	20.1
378830	2008 SM ₂₇₈		8 6.4 107°42	0°7/ 6.9 17			6343	1993 VK		8 6.4 317°32	1°7/ 5.3 18		
6 30	21 32.85	-12 44.9	1.814	2.649	15.2	21.4	6 30	21 31.56	-21 2.7	2.143	2.990	12.7	17.1
7 10	21 28.24	-13 1.9	1.745	2.660	11.8	21.3	7 10	21 27.13	-21 14.3	2.059	2.982	9.8	16.9
7 20	21 21.43	-13 30.1	1.698	2.671	7.9	21.0	7 20	21 20.67	-21 29.3	1.997	2.975	6.5	16.7
7 30	21 13.03	-14 6.3	1.675	2.681	3.6	20.8	7 30	21 12.73	-21 44.3	1.961	2.968	3.0	16.4
8 9	21 3.94	-14 46.1	1.679	2.692	1.2	20.6	8 9	21 4.09	-21 55.5	1.952	2.961	2.3	16.4
8 19	20 55.16	-15 24.9	1.710	2.702	5.4	21.0	8 19	20 55.64	-22 0.0	1.971	2.955	5.6	16.6
8 29	20 47.68	-15 58.7	1.767	2.712	9.4	21.2	8 29	20 48.29	-21 56.0	2.016	2.948	9.1	16.8
9 8	20 42.26	-16 24.7	1.848	2.721	12.9	21.5	9 8	20 42.76	-21 42.9	2.084	2.942	12.3	17.0
398218	2010 OZ ₃₂		8 6.4 337°77	5°2/ 9.9 18			224161	2005 QT ₈₄		8 6.4 7°81	1°5/ 7.1 17		
6 30	21 26.99	-2 52.6	1.817	2.628	16.1	20.8	6 30	21 28.60	-13 11.2	1.117	1.993	19.9	19.7
7 10	21 23.89	-2 25.5	1.730	2.618	13.3	20.6	7 10	21 26.19	-12 59.9	1.057	1.994	15.6	19.5
7 20	21 18.70	-2 15.0	1.662	2.609	10.2	20.3	7 20	21 20.70	-13 3.3	1.014	1.996	10.6	19.2
7 30	21 11.91	-2 21.8	1.617	2.601	7.0	20.1	7 30	21 12.89	-13 18.9	0.992	1.999	5.0	18.9
8 9	21 4.30	-2 45.0	1.596	2.593	5.2	20.0	8 9	21 4.04	-13 41.8	0.991	2.004	1.8	18.7
8 19	20 56.79	-3 21.3	1.601	2.586	6.6	20.1	8 19	20 55.62	-14 6.4	1.013	2.010	7.1	19.1
8 29	20 50.35	-4 6.2	1.630	2.579	9.7	20.3	8 29	20 49.09	-14 27.3	1.057	2.017	12.4	19.4
9 8	20 45.77	-4 54.2	1.683	2.573	13.0	20.4	9 8	20 45.44	-14 40.7	1.121	2.025	16.9	19.7
294003	2007 TN ₈₉		8 6.4 24°66	1°5/ 7.5 18			227743	2006 HS ₁₁		8 6.4 266°69	4°8/ 11.1 18		
6 30	21 29.10	-10 8.9	1.850	2.684	15.0	20.6	6 30	21 26.69	+1 44.4	2.679	3.440	12.7	21.0
7 10	21 25.42	-10 29.0	1.773	2.685	11.8	20.4	7 10	21 23.04	+1 45.3	2.570	3.422	10.7	20.8
7 20	21 19.64	-11 2.7	1.716	2.686	8.1	20.2	7 20	21 17.85	+1 30.7	2.483	3.404	8.5	20.6
7 30	21 12.29	-11 47.5	1.684	2.688	4.0	19.9	7 30	21 11.50	+1 0.3	2.419	3.385	6.2	20.4
8 9	21 4.20	-12 39.2	1.677	2.689	1.6	19.8	8 9	21 4.51	+0 15.1	2.382	3.367	4.9	20.3
8 19	20 56.30	-13 32.6	1.698	2.691	5.2	20.0	8 19	20 57.52	-0 42.3	2.372	3.348	5.5	20.3
8 29	20 49.55	-14 22.9	1.745	2.693	9.2	20.3	8 29	20 51.18	-1 47.8	2.391	3.329	7.6	20.4
9 8	20 44.70	-15 6.1	1.815	2.695	12.7	20.5	9 8	20 46.10	-2 57.0	2.434	3.309	10.1	20.6
473353	2015 TQ ₂₃₃		8 6.4 336°91	1°2/ 7.2 18			71514	2000 CG ₅₅		8 6.4 229°16	2°4/ 4.3 18		
6 30	21 30.24	-13 14.5	2.037	2.872	13.8	20.6	6 30	21 30.19	-22 59.3	2.607	3.450	10.9	19.6
7 10	21 26.13	-13 3.2	1.952	2.866	10.8	20.4	7 10	21 25.75	-23 32.7	2.523	3.445	8.3	19.4
7 20	21 20.02	-13 0.2	1.889	2.861	7.3	20.2	7 20	21 19.62	-24 8.7	2.464	3.440	5.6	19.2
7 30	21 12.44	-13 3.7	1.850	2.855	3.5	20.0	7 30	21 12.24	-24 43.5	2.431	3.435	3.0	19.0
8 9	21 4.15	-13 11.4	1.838	2.851	1.4	19.8	8 9	21 4.28	-25 13.2	2.426	3.429	2.9	19.0
8 19	20 56.03	-13 20.5	1.854	2.846	5.0	20.0	8 19	20 56.45	-25 34.8	2.449	3.424	5.4	19.2
8 29	20 48.99	-13 28.3	1.895	2.842	8.7	20.3	8 29	20 49.52	-25 46.3	2.500	3.418	8.2	19.3
9 8	20 43.73	-13 32.8	1.961	2.838	12.1	20.5	9 8	20 44.09	-25 47.2	2.574	3.412	10.8	19.5
285693	2000 SN ₁₉₂		8 6.4 248°04	4°7/10.6 18			179673	2002 QU ₅₀		8 6.4 289°95	1°9/ 5.4 18		
6 30	21 27.48	+0 5.1	2.344	3.121	13.9	20.9	6 30	21 33.58	-19 0.7	1.486	2.347	16.6	20.7
7 10	21 23.79	+0 5.8	2.249	3.114	11.6	20.7	7 10	21 29.59	-19 27.3	1.409	2.341	12.9	20.4
7 20	21 18.39	-0 10.1	2.175	3.107	8.9	20.6	7 20	21 22.78	-20 2.3	1.352	2.334	8.5	20.2
7 30	21 11.72	-0 42.5	2.124	3.099	6.3	20.4	7 30	21 13.79	-20 40.7	1.318	2.327	3.8	19.9
8 9	21 4.40	-1 29.9	2.100	3.091	4.8	20.3	8 9	21 3.72	-21 15.9	1.310	2.320	2.7	19.8
8 19	20 57.13	-2 28.9	2.103	3.084	5.6	20.3	8 19	20 53.87	-21 42.4	1.326	2.314	7.3	20.1
8 29	20 50.68	-3 35.0	2.133	3.076	8.1	20.5	8 29	20 45.61	-21 56.5	1.367	2.307	11.9	20.3
9 8	20 45.70	-4 43.0	2.188	3.068	10.9	20.6	9 8	20 39.93	-21 57.0	1.429	2.301	16.0	20.6
288190	2003 XA ₁₃		8 6.4 287°46	1°3/ 6.9 18			216478	1999 TP ₂₀₇		8 6.4 258°51	2°1/ 7.8 18		
6 30	21 35.13	-13 51.9	1.487	2.334	17.3	21.2	6 30	21 32.44	-10 38.7	2.363	3.177	12.8	20.2
7 10	21 31.00	-13 35.7	1.388	2.309	13.8	20.9	7 10	21 27.53	-10 14.0	2.271	3.170	10.1	20.0
7 20	21 23.92	-13 29.5	1.309	2.284	9.5	20.6	7 20	21 20.82	-9 57.2	2.202	3.164	7.1	19.8
7 30	21 14.39	-13 31.7	1.252	2.259	4.5	20.3	7 30	21 12.78	-9 47.5	2.158	3.157	3.9	19.6
8 9	21 3.41	-13 39.0	1.221	2.233	1.7	20.0	8 9	21 4.09	-9 43.6	2.142	3.151	2.2	19.5
8 19	20 52.34	-13 47.5	1.214	2.207	6.8	20.3	8 19	20 55.53	-9 43.6	2.154	3.144	4.7	19.7
8 29	20 42.65	-13 53.6	1.232	2.182	12.0	20.5	8 29	20 47.91	-9 45.5	2.194	3.137	7.9	19.8
9 8	20 35.57	-13 54.6	1.271	2.156	16.7	20.7	9 8	20 41.87	-9 47.1	2.260	3.130	10.9	20.0
125914	2001 XY ₂₂₅		8 6.4 64°74	3°2/ 4.7 18			394021	2005 VZ ₁₂₅		8 6.4 356°26	3°2/ 8.6 16		
6 30	21 35.83	-20 8.0	1.201	2.074	19.0	18.8	6 30	21					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
7790	Miselli		8 6.4 185°08	2.4/ 4.1	18	R	329211	2012 DO ₅₉		8 6.4 106°33	4.3/ 4.3	17	
6 30	21 29.92	-22 22.6	2.578	3.421	11.0	18.9	6 30	21 38.20	-25 3.9	1.481	2.343	16.6	21.0
7 10	21 25.55	-23 7.8	2.499	3.421	8.4	18.7	7 10	21 33.09	-25 36.8	1.417	2.347	12.9	20.8
7 20	21 19.49	-23 56.3	2.444	3.421	5.6	18.6	7 20	21 25.01	-26 11.7	1.373	2.351	8.8	20.5
7 30	21 12.19	-24 44.1	2.416	3.420	3.0	18.4	7 30	21 14.73	-26 41.5	1.353	2.356	5.1	20.3
8 9	21 4.31	-25 26.8	2.416	3.419	2.9	18.4	8 9	21 3.52	-26 59.5	1.358	2.360	4.9	20.3
8 19	20 56.57	-26 1.0	2.445	3.418	5.5	18.6	8 19	20 52.81	-27 1.3	1.388	2.364	8.5	20.6
8 29	20 49.73	-26 24.4	2.500	3.417	8.3	18.7	8 29	20 43.97	-26 45.9	1.443	2.368	12.5	20.8
9 8	20 44.39	-26 36.1	2.580	3.415	10.9	18.9	9 8	20 37.93	-26 15.1	1.518	2.372	16.2	21.1
511187	2013 YA ₁₀₉		8 6.4 277°16	1.7/ 7.5	18		149346	2002 VF ₁₂₁		8 6.4 309°21	3.1/ 4.6	18	
6 30	21 31.22	-10 53.1	1.730	2.566	15.8	21.7	6 30	21 32.61	-23 7.3	1.766	2.625	14.5	19.4
7 10	21 27.39	-10 58.9	1.639	2.553	12.5	21.5	7 10	21 28.53	-23 31.3	1.680	2.610	11.3	19.2
7 20	21 21.17	-11 18.0	1.568	2.539	8.6	21.2	7 20	21 21.96	-23 59.0	1.615	2.595	7.6	19.0
7 30	21 13.08	-11 48.5	1.521	2.525	4.3	20.9	7 30	21 13.45	-24 25.2	1.575	2.580	4.0	18.7
8 9	21 3.99	-12 26.6	1.500	2.512	1.8	20.7	8 9	21 3.95	-24 44.4	1.560	2.566	3.7	18.7
8 19	20 54.95	-13 7.7	1.505	2.498	5.8	20.9	8 19	20 54.62	-24 52.4	1.571	2.552	7.2	18.8
8 29	20 47.10	-13 47.0	1.535	2.484	10.2	21.2	8 29	20 46.61	-24 47.0	1.607	2.538	11.2	19.0
9 8	20 41.37	-14 20.3	1.588	2.470	14.1	21.4	9 8	20 40.87	-24 28.2	1.666	2.524	14.8	19.2
164488	2006 FP ₄₀		8 6.4 358°01	2.2/ 7.8	18		121369	1999 TJ ₇₀		8 6.4 200°75	0.3/ 6.1	18	
6 30	21 26.32	- 8 23.6	1.084	1.953	20.9	19.5	6 30	21 29.66	-15 59.8	2.692	3.521	11.0	21.0
7 10	21 24.61	- 8 51.6	1.019	1.950	16.6	19.2	7 10	21 25.25	-16 21.9	2.605	3.518	8.5	20.8
7 20	21 19.81	- 9 44.7	0.970	1.948	11.5	18.9	7 20	21 19.26	-16 50.2	2.541	3.515	5.6	20.6
7 30	21 12.59	-10 59.7	0.941	1.947	5.9	18.6	7 30	21 12.12	-17 22.1	2.504	3.512	2.4	20.4
8 9	21 4.16	-12 28.7	0.935	1.947	2.3	18.4	8 9	21 4.44	-17 54.4	2.496	3.508	1.0	20.3
8 19	20 56.00	-14 1.2	0.950	1.948	7.3	18.7	8 19	20 56.87	-18 24.1	2.516	3.504	4.2	20.5
8 29	20 49.65	-15 26.8	0.988	1.949	12.8	19.0	8 29	20 50.11	-18 48.6	2.564	3.500	7.3	20.7
9 8	20 46.20	-16 37.4	1.045	1.952	17.7	19.3	9 8	20 44.72	-19 6.4	2.638	3.495	10.0	20.9
136912	1998 HP ₉₆		8 6.4 31°48	2.9/ 4.9	17		206567	2003 UA ₂₇₅		8 6.4 313°96	2.3/ 4.9	18	
6 30	21 30.20	-18 58.3	1.036	1.925	20.1	19.1	6 30	21 29.64	-19 18.5	1.641	2.503	15.3	20.3
7 10	21 27.55	-19 48.5	0.993	1.939	15.4	18.9	7 10	21 26.39	-20 2.7	1.558	2.490	11.8	20.1
7 20	21 21.58	-20 49.8	0.968	1.955	10.0	18.6	7 20	21 20.63	-20 56.1	1.496	2.478	7.8	19.8
7 30	21 13.24	-21 53.5	0.963	1.972	4.6	18.4	7 30	21 12.90	-21 53.2	1.457	2.465	3.7	19.5
8 9	21 4.00	-22 49.8	0.981	1.990	3.8	18.4	8 9	21 4.14	-22 47.3	1.445	2.453	3.1	19.5
8 19	20 55.46	-23 31.1	1.021	2.009	8.7	18.8	8 19	20 55.49	-23 32.1	1.457	2.442	7.2	19.7
8 29	20 49.10	-23 53.3	1.082	2.029	13.6	19.1	8 29	20 48.17	-24 3.1	1.494	2.430	11.4	19.9
9 8	20 45.83	-23 56.3	1.162	2.050	17.8	19.4	9 8	20 43.11	-24 18.5	1.553	2.419	15.2	20.1
510593	2012 SU ₅₂		8 6.4 278°83	0.5/ 6.7	18		37079	2000 UM ₅₈		8 6.4 78°60	2.8/ 5.1	18	
6 30	21 32.81	-14 13.8	1.869	2.707	14.7	21.8	6 30	21 38.42	-21 39.5	1.354	2.218	17.8	18.3
7 10	21 28.58	-14 20.5	1.766	2.683	11.6	21.6	7 10	21 33.28	-22 1.9	1.299	2.231	13.7	18.1
7 20	21 21.97	-14 37.0	1.685	2.660	7.8	21.3	7 20	21 25.11	-22 29.3	1.263	2.244	9.0	17.9
7 30	21 13.45	-15 0.8	1.629	2.636	3.6	21.0	7 30	21 14.75	-22 55.3	1.250	2.257	4.4	17.6
8 9	21 3.86	-15 28.3	1.598	2.611	1.2	20.8	8 9	21 3.57	-23 13.4	1.261	2.270	3.5	17.6
8 19	20 54.21	-15 55.2	1.595	2.587	5.7	21.0	8 19	20 53.02	-23 19.3	1.298	2.283	7.8	17.9
8 29	20 45.66	-16 17.7	1.618	2.562	10.1	21.2	8 29	20 44.47	-23 11.4	1.359	2.296	12.3	18.2
9 8	20 39.14	-16 33.1	1.664	2.537	14.1	21.4	9 8	20 38.82	-22 50.6	1.441	2.309	16.1	18.5
6359	Dubinín		8 6.4 184°00	2.9/ 3.5	18		307236	2002 JK ₂		8 6.4 73°04	10.3/ 26.7	18	
6 30	21 29.53	-23 55.7	2.703	3.547	10.5	17.0	6 30	21 37.36	-45 32.2	2.213	3.039	13.1	20.2
7 10	21 25.22	-24 49.2	2.626	3.548	8.1	16.8	7 10	21 32.26	-47 34.2	2.185	3.059	11.5	20.1
7 20	21 19.26	-25 45.4	2.572	3.547	5.4	16.6	7 20	21 24.40	-49 23.2	2.179	3.078	10.5	20.1
7 30	21 12.11	-26 39.8	2.546	3.547	3.2	16.5	7 30	21 14.48	-50 50.3	2.197	3.097	10.3	20.1
8 9	21 4.38	-27 28.0	2.548	3.546	3.4	16.5	8 9	21 3.63	-51 49.3	2.239	3.116	11.0	20.2
8 19	20 56.78	-28 6.7	2.579	3.545	5.7	16.7	8 19	20 53.17	-52 17.9	2.304	3.135	12.3	20.3
8 29	20 50.04	-28 33.4	2.636	3.544	8.3	16.8	8 29	20 44.38	-52 17.3	2.388	3.154	13.8	20.5
9 8	20 44.74	-28 47.6	2.718	3.543	10.7	17.0	9 8	20 38.18	-51 51.9	2.491	3.173	15.1	20.6
482182	2010 UJ ₃₆		8 6.4 226°17	9.3/ 25.7	18		94816	2001 XD ₁₇₆		8 6.4 240°35	0.9/ 7.0	18	
6 30	21 39.16	-50 7.2	2.913	3.708	11.1	21.7	6 30	21 31.41	-12 11.0	1.763	2.602	15.4	20.3
7 10	21 33.32	-51 33.6	2.856	3.699	10.0	21.6	7 10	21 27.41	-12 29.9	1.682	2.598	12.1	20.0
7 20	21 24.97	-52 48.8	2.821	3.690	9.4	21.5	7 20	21 21.10	-13 1.5	1.622	2.595	8.2	19.8
7 30	21 14.70	-53 45.9	2.810	3.680	9.3	21.5	7 30	21 13.05	-13 42.9	1.585	2.591	3.8	19.5
8 9	21 3.48	-54 20.1	2.823	3.670	9.9	21.5	8 9	21 4.12	-14 29.4	1.575	2.588	1.3	19.3
8 19	20 52.45	-54 28.8	2.858	3.660	11.0	21.6	8 19	20 55.36	-15 15.9	1.591	2.584	5.6	19.6
8 29	20 42.79	-54 12.8	2.914	3.649	12.2	21.7	8 29	20 47.83	-15 57.7	1.633	2.580	9.8	19.9
9 8	20 35.38	-53 35.0	2.988	3.638	13.4	21.8	9 8	20 42.38	-16 31.2	1.699	2.576	13.6	20.1
65254	2002 FY ₂₆		8 6.4 88°59	3.0/ 3.7	18		331177	2011 AR ₃₁		8 6.4 336°84	3.2/ 4.5	17	
6 30	21 29.55	-22 16.3	2.220	3.071	12.2	19.1	6 30	21 30.65	-20 3.6	1.353	2.227	17.2	20.4
7 10	21 25.54	-23 19.7	2.150	3.076	9.3	18.9	7 10	21 27.61	-20 57.8	1.283	2.221	13.3	20.1
7 20	21 19.62	-24 27.6	2.104	3.082	6.2	18.7	7 20	21 21.64	-22 2.1	1.232	2.216	8.8	19.9
7 30	21 12.31	-25 34.6	2.084	3.087	3.5	18.6	7 30	21 13.39	-23 9.5	1.204	2.212	4.4	19.6
8 9	21 4.34	-26 35.2	2.092	3.093	3.6	18.6	8 9	21 4.00	-24 11.0	1.200	2.208	4.0	19.6
8 19	20 56.57	-27 24.6	2.127	3.098	6.4	18.8	8 19	20 54.87	-24 59.2	1.221	2.204	8.4	19.8
8 29	20 49.85	-28 0.1	2.189	3.104	9.4	19.0	8 29	20 47.41	-25 29.2	1.264	2.201	13.0	20.1
9 8	20 44.85	-28 20.7	2.273	3.109	12.1	19.2	9 8	20 42.67	-25 39.9	1.327	2.198	17.1	20.3
51485	2001 FB ₇₃		8 6.4 0°40	6.6/ 2.6	18		139287	2001 JT ₈		8 6.4 83°26	0.6/ 6.7	17	
6 30	21 29.98	-26 3.4	1.172	2.061	18.2								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
92017	1999 <i>VV</i> ₁₆₀		8 6.4 229°75	2°1/ 8.3	18		14496	1995 <i>BK</i> ₄		8 6.5 243°59	0°0/ 6.3	18	
6 30	21 28.93	- 8 21.4	2.556	3.364	12.1	20.2	6 30	21 28.00	-13 13.7	2.672	3.497	11.2	19.0
7 10	21 24.76	- 8 22.8	2.463	3.358	9.6	20.0	7 10	21 24.10	-13 57.9	2.574	3.485	8.7	18.9
7 20	21 18.99	- 8 34.4	2.393	3.352	6.8	19.8	7 20	21 18.61	-14 51.6	2.500	3.472	5.7	18.7
7 30	21 12.04	- 8 55.1	2.348	3.345	3.8	19.6	7 30	21 11.93	-15 51.9	2.453	3.460	2.5	18.4
8 9	21 4.50	- 9 22.8	2.330	3.339	2.1	19.5	8 9	21 4.61	-16 54.8	2.434	3.447	0.9	18.3
8 19	20 57.04	- 9 54.5	2.341	3.332	4.3	19.6	8 19	20 57.31	-17 56.4	2.445	3.434	4.2	18.5
8 29	20 50.38	-10 27.3	2.380	3.325	7.3	19.8	8 29	20 50.74	-18 52.6	2.483	3.420	7.4	18.7
9 8	20 45.10	-10 58.2	2.445	3.318	10.1	20.0	9 8	20 45.49	-19 40.7	2.548	3.406	10.3	18.8
27716	Nobuyuki		8 6.5 194°32	0°4/ 6.0	18		142581	2002 <i>TH</i> ₉₀		8 6.5 285°11	1°4/ 7.4	18	
6 30	21 30.56	-15 30.9	2.724	3.549	11.0	19.6	6 30	21 30.72	-11 41.9	1.943	2.776	14.4	20.1
7 10	21 25.94	-16 5.9	2.635	3.547	8.4	19.4	7 10	21 26.70	-11 44.3	1.856	2.768	11.4	19.9
7 20	21 19.73	-16 48.0	2.570	3.544	5.5	19.2	7 20	21 20.56	-11 57.5	1.790	2.761	7.8	19.6
7 30	21 12.36	-17 34.1	2.532	3.540	2.4	19.0	7 30	21 12.83	-12 19.7	1.749	2.753	3.8	19.4
8 9	21 4.40	-18 20.7	2.523	3.536	1.1	18.9	8 9	21 4.30	-12 47.6	1.734	2.746	1.6	19.2
8 19	20 56.54	-19 4.3	2.544	3.531	4.3	19.1	8 19	20 55.90	-13 17.5	1.746	2.738	5.2	19.4
8 29	20 49.47	-19 41.8	2.593	3.525	7.3	19.3	8 29	20 48.58	-13 45.5	1.784	2.731	9.1	19.6
9 8	20 43.77	-20 11.4	2.667	3.519	10.1	19.5	9 8	20 43.14	-14 8.6	1.846	2.724	12.6	19.9
231891	2000 <i>WJ</i> ₄₂		8 6.5 280°54	2°3/ 4.9	18		298203	2002 <i>TC</i> ₂₉₆		8 6.5 324°04	12°1/ 10.2	17	
6 30	21 32.02	-19 41.7	1.775	2.630	14.6	20.7	6 30	21 28.47	+ 4 31.9	1.481	2.270	20.1	19.2
7 10	21 28.15	-20 23.7	1.683	2.611	11.4	20.4	7 10	21 25.99	+ 6 22.0	1.372	2.231	17.9	19.0
7 20	21 21.79	-21 14.0	1.612	2.592	7.5	20.1	7 20	21 20.80	+ 7 57.0	1.281	2.192	15.5	18.7
7 30	21 13.44	-22 7.7	1.565	2.572	3.6	19.9	7 30	21 13.23	+ 9 9.9	1.209	2.154	13.2	18.4
8 9	21 4.00	-22 58.3	1.545	2.553	3.0	19.8	8 9	21 4.08	+ 9 54.6	1.158	2.117	12.1	18.3
8 19	20 54.57	-23 39.9	1.551	2.534	7.0	20.0	8 19	20 54.48	+10 7.7	1.128	2.080	12.9	18.2
8 29	20 46.35	-24 8.3	1.582	2.514	11.2	20.2	8 29	20 45.89	+ 9 50.2	1.119	2.045	15.3	18.2
9 8	20 40.33	-24 21.9	1.635	2.494	15.0	20.4	9 8	20 39.62	+ 9 8.0	1.129	2.011	18.6	18.3
92286	2000 <i>EP</i> ₇		8 6.5 45°36	1°1/ 7.1	17		3763	Qianxuesen		8 6.5 105°75	5°0/ 3.8	18	
6 30	21 32.11	-11 45.8	1.117	1.984	20.5	19.9	6 30	21 39.05	-25 49.7	1.443	2.306	17.0	16.0
7 10	21 28.86	-12 3.0	1.062	1.994	16.1	19.7	7 10	21 33.80	-26 40.5	1.387	2.317	13.1	15.8
7 20	21 22.45	-12 38.7	1.025	2.005	10.8	19.4	7 20	21 25.50	-27 33.2	1.351	2.328	9.0	15.6
7 30	21 13.70	-13 28.5	1.009	2.016	5.0	19.2	7 30	21 15.00	-28 19.4	1.339	2.339	5.6	15.4
8 9	21 3.96	-14 25.2	1.015	2.028	1.6	19.0	8 9	21 3.60	-28 51.2	1.351	2.350	5.7	15.5
8 19	20 54.74	-15 20.6	1.045	2.040	7.2	19.4	8 19	20 52.79	-29 3.9	1.389	2.360	9.1	15.7
8 29	20 47.52	-16 7.9	1.097	2.053	12.4	19.7	8 29	20 43.95	-28 56.5	1.451	2.370	12.9	15.9
9 8	20 43.27	-16 42.8	1.169	2.066	17.0	20.0	9 8	20 37.99	-28 31.3	1.533	2.380	16.4	16.2
386694	2009 <i>WZ</i> ₃₄		8 6.5 230°63	4°8/ 8.9	17		148474	2001 <i>ED</i> ₉		8 6.5 107°91	1°1/ 5.7	17	
6 30	21 34.93	- 5 16.6	1.869	2.673	16.0	20.8	6 30	21 36.45	-16 40.9	1.692	2.535	15.8	20.6
7 10	21 29.95	- 4 29.1	1.783	2.669	13.1	20.6	7 10	21 31.17	-17 18.9	1.633	2.555	12.1	20.4
7 20	21 22.71	- 3 54.4	1.717	2.665	9.8	20.3	7 20	21 23.46	-18 5.9	1.596	2.574	7.9	20.2
7 30	21 13.76	- 3 33.3	1.674	2.661	6.5	20.1	7 30	21 14.04	-18 56.6	1.584	2.592	3.4	20.0
8 9	21 3.95	- 3 25.6	1.658	2.656	4.8	20.0	8 9	21 3.93	-19 45.2	1.598	2.610	1.9	19.9
8 19	20 54.28	- 3 29.6	1.669	2.652	6.6	20.1	8 19	20 54.27	-20 26.3	1.640	2.627	6.2	20.3
8 29	20 45.80	- 3 42.2	1.705	2.647	9.8	20.3	8 29	20 46.15	-20 56.4	1.708	2.644	10.2	20.5
9 8	20 39.34	- 3 59.3	1.765	2.642	13.2	20.5	9 8	20 40.33	-21 14.3	1.798	2.660	13.7	20.8
236354	2006 <i>BJ</i> ₁₆₆		8 6.5 344°56	0°3/ 6.3	18		165588	2001 <i>FG</i> ₁₈		8 6.5 73°97	3°4/ 4.5	18	
6 30	21 29.42	-15 31.9	1.414	2.278	17.1	19.8	6 30	21 35.41	-24 25.7	1.816	2.670	14.4	20.0
7 10	21 26.44	-15 46.4	1.339	2.272	13.3	19.6	7 10	21 30.41	-24 51.6	1.750	2.676	11.1	19.8
7 20	21 20.76	-16 12.6	1.284	2.265	8.9	19.3	7 20	21 23.00	-25 19.3	1.705	2.682	7.5	19.6
7 30	21 12.99	-16 46.7	1.251	2.260	3.8	19.0	7 30	21 13.85	-25 43.2	1.685	2.688	4.1	19.5
8 9	21 4.21	-17 22.9	1.242	2.255	1.5	18.8	8 9	21 3.99	-25 58.4	1.691	2.694	3.9	19.5
8 19	20 55.65	-17 55.7	1.258	2.251	6.6	19.2	8 19	20 54.52	-26 1.4	1.724	2.700	7.1	19.7
8 29	20 48.61	-18 20.5	1.298	2.248	11.5	19.4	8 29	20 46.52	-25 50.9	1.782	2.706	10.6	19.9
9 8	20 44.07	-18 34.3	1.358	2.246	15.7	19.7	9 8	20 40.78	-25 27.9	1.863	2.713	13.8	20.1
321855	2010 <i>RZ</i> ₁₂₉		8 6.5 338°02	5°4/ 2.9	18		163310	2002 <i>JH</i> ₆₀		8 6.5 349°69	11°5/ 30.3	18	
6 30	21 23.72	-20 24.8	1.016	1.917	19.4	18.9	6 30	21 16.15	-32 42.7	0.897	1.819	19.3	17.7
7 10	21 23.16	-22 1.7	0.948	1.903	15.0	18.6	7 10	21 17.87	-34 20.2	0.838	1.796	15.9	17.5
7 20	21 19.25	-23 56.1	0.899	1.889	10.1	18.3	7 20	21 16.01	-35 56.3	0.795	1.776	12.9	17.2
7 30	21 12.55	-25 57.0	0.870	1.876	5.9	18.0	7 30	21 11.19	-37 16.2	0.770	1.758	11.5	17.1
8 9	21 4.32	-27 49.5	0.862	1.865	6.6	18.0	8 9	21 4.85	-38 5.5	0.764	1.744	12.8	17.1
8 19	20 56.22	-29 19.9	0.876	1.856	11.4	18.3	8 19	20 58.83	-38 14.8	0.774	1.733	16.0	17.2
8 29	20 50.07	-30 19.6	0.909	1.847	16.6	18.5	8 29	20 55.07	-37 41.9	0.802	1.726	19.9	17.4
9 8	20 47.20	-30 46.5	0.959	1.841	21.1	18.8	9 8	20 54.84	-36 31.6	0.843	1.722	23.6	17.6
313036	2000 <i>PL</i>		8 6.5 345°08	1°9/ 7.1	18		412503	2014 <i>KT</i> ₅₈		8 6.5 343°23	2°5/ 4.3	18	
6 30	21 27.84	-14 41.0	0.946	1.837	21.4	19.5	6 30	21 27.27	-18 54.3	1.901	2.759	13.7	20.2
7 10	21 26.34	-14 1.7	0.879	1.824	17.0	19.2	7 10	21 24.19	-20 4.3	1.824	2.755	10.5	20.0
7 20	21 21.30	-13 34.0	0.827	1.812	11.6	18.9	7 20	21 18.99	-21 23.7	1.769	2.750	6.9	19.7
7 30	21 13.41	-13 16.8	0.794	1.802	5.6	18.5	7 30	21 12.18	-22 46.5	1.739	2.746	3.4	19.5
8 9	21 4.06	-13 7.1	0.781	1.794	2.3	18.3	8 9	21 4.54	-24 5.9	1.736	2.742	3.2	19.5
8 19	20 54.99	-13 1.1	0.789	1.787	8.0	18.6	8 19	20 57.03	-25 15.4	1.759	2.739	6.7	19.7
8 29	20 48.01	-12 54.7	0.817	1.783	14.1	18.9	8 29	20 50.63	-26 10.3	1.809	2.736	10.3	19.9
9 8	20 44.40	-12 44.7	0.862	1.780	19.3	19.2	9 8	20 46.13	-26 48.4	1.880	2.734	13.6	20.1
294918	2008 <i>DR</i> ₃₅		8 6.5 104°29	1°7/ 7.5	17		278254	2007 <i>EN</i> ₁₉₁		8 6.5 309°83	0°0/ 6		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
14228	1999 <i>XQ</i> ₈₈		8 6.5 88°27'	1.4°/ 5.4	18		454593	2014 <i>PC</i> ₄₄		8 6.5 220°06'	5.3°/31.4	18	
6 30	21 31.41	-17 38.0	1.875	2.724	14.2	18.4	6 30	21 29.67	-32 53.9	2.791	3.636	10.2	20.9
7 10	21 27.23	-18 18.7	1.806	2.731	10.9	18.2	7 10	21 25.51	-34 9.3	2.721	3.635	8.1	20.7
7 20	21 20.88	-19 7.6	1.759	2.738	7.1	18.0	7 20	21 19.61	-35 22.5	2.677	3.633	6.3	20.6
7 30	21 12.95	-19 59.9	1.737	2.745	3.1	17.8	7 30	21 12.41	-36 28.1	2.659	3.632	5.4	20.6
8 9	21 4.30	-20 50.0	1.742	2.752	2.1	17.7	8 9	21 4.58	-37 21.3	2.669	3.630	5.9	20.6
8 19	20 55.93	-21 33.0	1.773	2.759	5.9	18.0	8 19	20 56.86	-37 58.6	2.705	3.629	7.6	20.7
8 29	20 48.79	-22 5.3	1.831	2.766	9.7	18.3	8 29	20 50.04	-38 18.6	2.767	3.627	9.6	20.8
9 8	20 43.66	-22 25.3	1.912	2.773	13.0	18.5	9 8	20 44.75	-38 21.9	2.851	3.625	11.5	21.0
40451	1999 <i>RD</i> ₃₈		8 6.5 281°35'	6°6'/11.7	18		206460	2003 <i>TY</i> ₆		8 6.5 325°23'	12°0'/28.3	18	
6 30	21 27.94	+ 3 5.1	1.868	2.646	16.9	19.0	6 30	21 31.16	-38 24.8	1.357	2.233	17.0	19.1
7 10	21 24.68	+ 3 11.7	1.776	2.636	14.4	18.8	7 10	21 29.00	-40 16.2	1.283	2.206	14.6	18.9
7 20	21 19.32	+ 2 55.9	1.702	2.626	11.5	18.6	7 20	21 23.24	-42 3.2	1.229	2.180	12.6	18.7
7 30	21 12.34	+ 2 16.4	1.649	2.616	8.5	18.4	7 30	21 14.41	-43 32.4	1.196	2.154	12.0	18.6
8 9	21 4.49	+ 1 14.5	1.621	2.606	6.7	18.2	8 9	21 3.84	-44 30.9	1.184	2.130	13.2	18.6
8 19	20 56.67	- 0 5.5	1.618	2.596	7.3	18.2	8 19	20 53.33	-44 50.6	1.193	2.106	15.8	18.7
8 29	20 49.86	- 1 37.0	1.642	2.586	9.9	18.4	8 29	20 44.86	-44 30.1	1.220	2.083	18.9	18.8
9 8	20 44.89	- 3 12.2	1.689	2.577	13.1	18.6	9 8	20 39.86	-43 34.2	1.262	2.062	21.9	18.9
472734	2015 <i>FW</i> ₇₇		8 6.5 97°21'	2°0'/ 5.2	18		94207	2001 <i>BH</i> ₂₇		8 6.5 279°34'	0°5'/ 5.9	18	
6 30	21 33.02	-19 18.9	1.737	2.590	15.0	20.7	6 30	21 27.91	-14 46.8	2.279	3.116	12.4	19.8
7 10	21 28.69	-19 55.5	1.667	2.594	11.5	20.5	7 10	21 24.31	-15 32.9	2.191	3.109	9.6	19.6
7 20	21 21.96	-20 39.3	1.619	2.598	7.5	20.3	7 20	21 18.91	-16 28.8	2.125	3.101	6.3	19.4
7 30	21 13.46	-21 25.0	1.595	2.603	3.5	20.0	7 30	21 12.14	-17 30.9	2.086	3.094	2.7	19.1
8 9	21 4.17	-22 6.9	1.597	2.607	2.7	20.0	8 9	21 4.68	-18 34.5	2.074	3.086	1.3	19.0
8 19	20 55.16	-22 39.9	1.626	2.611	6.5	20.2	8 19	20 57.29	-19 34.7	2.090	3.079	4.9	19.3
8 29	20 47.55	-23 0.8	1.681	2.615	10.5	20.5	8 29	20 50.79	-20 27.4	2.134	3.071	8.4	19.5
9 8	20 42.14	-23 8.6	1.757	2.619	14.0	20.7	9 8	20 45.86	-21 9.8	2.202	3.064	11.5	19.7
510677	2012 <i>UO</i> ₄₃		8 6.5 285°87'	4°2'/ 3.5	18		72675	2001 <i>FP</i> ₅₄		8 6.5 113°68'	6°4'/ 2.2	18	
6 30	21 32.15	-24 3.5	1.809	2.668	14.2	21.5	6 30	21 37.42	-32 36.2	1.956	2.805	13.7	19.1
7 10	21 28.32	-25 1.5	1.719	2.649	11.1	21.3	7 10	21 32.00	-33 28.7	1.895	2.812	10.9	18.9
7 20	21 21.96	-26 5.1	1.651	2.629	7.6	21.0	7 20	21 24.08	-34 17.2	1.857	2.819	8.2	18.8
7 30	21 13.58	-27 7.8	1.607	2.609	4.6	20.8	7 30	21 14.39	-34 54.6	1.843	2.825	6.5	18.7
8 9	21 4.09	-28 2.2	1.590	2.589	4.9	20.8	8 9	21 3.96	-35 14.8	1.856	2.831	6.9	18.7
8 19	20 54.62	-28 42.3	1.599	2.569	8.1	20.9	8 19	20 53.96	-35 14.9	1.894	2.838	9.1	18.9
8 29	20 46.39	-29 4.5	1.632	2.549	11.9	21.1	8 29	20 45.52	-34 54.9	1.957	2.844	11.8	19.0
9 8	20 40.39	-29 8.2	1.687	2.529	15.4	21.3	9 8	20 39.42	-34 17.3	2.041	2.849	14.3	19.2
362573	2010 <i>VL</i> ₁₀₂		8 6.5 20°09'	7°0'/12.1	18		449438	2013 <i>HZ</i> ₁₂₂		8 6.5 291°98'	0°9'/ 5.8	18	
6 30	21 28.08	+ 4 5.8	2.165	2.925	15.4	20.3	6 30	21 29.23	-16 56.8	2.173	3.016	12.7	21.7
7 10	21 24.38	+ 4 46.1	2.084	2.927	13.2	20.1	7 10	21 25.47	-17 25.6	2.079	3.000	9.9	21.5
7 20	21 18.89	+ 5 8.6	2.022	2.930	10.8	19.9	7 20	21 19.76	-18 2.3	2.007	2.984	6.5	21.3
7 30	21 12.08	+ 5 11.4	1.982	2.933	8.5	19.8	7 30	21 12.55	-18 43.5	1.960	2.968	2.8	21.0
8 9	21 4.64	+ 4 54.9	1.967	2.936	7.1	19.7	8 9	21 4.54	-19 24.8	1.941	2.953	1.5	20.9
8 19	20 57.33	+ 4 21.0	1.977	2.940	7.5	19.8	8 19	20 56.58	-20 2.2	1.949	2.937	5.3	21.1
8 29	20 50.96	+ 3 33.9	2.013	2.943	9.3	19.9	8 29	20 49.56	-20 32.0	1.984	2.921	9.0	21.3
9 8	20 46.18	+ 2 38.7	2.072	2.947	11.6	20.0	9 8	20 44.24	-20 52.1	2.042	2.905	12.2	21.5
237054	2008 <i>SE</i> ₁₅₀		8 6.5 227°91'	6°6'/11.7	18		117311	2004 <i>VD</i> ₂₃		8 6.5 273°08'	1°0'/ 5.6	18	
6 30	21 29.82	+ 3 26.3	2.081	2.845	15.9	20.3	6 30	21 29.47	-17 47.8	2.496	3.333	11.5	20.3
7 10	21 25.89	+ 3 44.6	1.989	2.838	13.5	20.1	7 10	21 25.41	-18 15.5	2.397	3.316	8.9	20.1
7 20	21 20.01	+ 3 43.4	1.915	2.831	10.8	20.0	7 20	21 19.59	-18 49.5	2.322	3.298	5.8	19.9
7 30	21 12.63	+ 3 21.3	1.864	2.824	8.2	19.8	7 30	21 12.44	-19 26.7	2.273	3.281	2.6	19.6
8 9	21 4.46	+ 2 39.1	1.837	2.816	6.6	19.7	8 9	21 4.58	-20 3.3	2.251	3.263	1.6	19.5
8 19	20 56.34	+ 1 39.7	1.837	2.808	7.2	19.7	8 19	20 56.76	-20 35.7	2.259	3.245	4.8	19.7
8 29	20 49.17	+ 0 28.5	1.863	2.800	9.4	19.8	8 29	20 49.75	-21 1.1	2.293	3.226	8.1	19.9
9 8	20 43.68	- 0 48.3	1.913	2.792	12.3	20.0	9 8	20 44.23	-21 17.8	2.352	3.208	11.1	20.1
191015	2002 <i>AQ</i> ₅₁		8 6.5 230°94'	0°3'/ 6.7	18		85096	1044 <i>T</i> ₋₃		8 6.5 300°59'	5°6'/ 9.4	18	
6 30	21 32.78	-13 48.4	1.951	2.786	14.3	21.2	6 30	21 31.09	- 4 15.3	1.452	2.277	18.8	19.6
7 10	21 28.34	-14 6.6	1.863	2.778	11.2	21.0	7 10	21 27.77	- 3 39.3	1.365	2.264	15.5	19.7
7 20	21 21.71	-14 35.0	1.796	2.770	7.5	20.7	7 20	21 21.74	- 3 21.5	1.296	2.251	11.7	19.0
7 30	21 13.39	-15 10.8	1.754	2.761	3.4	20.5	7 30	21 13.56	- 3 23.5	1.249	2.238	7.8	18.8
8 9	21 4.21	-15 49.7	1.739	2.752	1.1	20.3	8 9	21 4.19	- 3 44.2	1.224	2.225	5.7	18.6
8 19	20 55.14	-16 27.3	1.751	2.743	5.4	20.5	8 19	20 54.85	- 4 20.3	1.224	2.212	7.6	18.7
8 29	20 47.19	-16 59.7	1.790	2.733	9.4	20.8	8 29	20 46.87	- 5 6.2	1.248	2.200	11.6	18.9
9 8	20 41.17	-17 24.1	1.853	2.723	13.0	21.0	9 8	20 41.31	- 5 55.0	1.293	2.188	15.8	19.1
28078	Mauricehilleman		8 6.5 247°72'	0°3'/ 6.6	18		4674	Pauling		8 6.5 208°67'	18°4'/16.8	18	
6 30	21 34.35	-13 39.2	1.457	2.307	17.5	18.8	6 30	21 35.46	+17 41.4	1.268	1.985	26.3	17.1
7 10	21 30.33	-13 58.6	1.374	2.298	13.8	18.5	7 10	21 31.69	+19 55.0	1.200	1.982	24.3	16.9
7 20	21 23.44	-14 32.1	1.311	2.288	9.2	18.2	7 20	21 24.67	+21 36.6	1.143	1.979	22.2	16.7
7 30	21 14.28	-15 16.0	1.270	2.278	4.1	17.9	7 30	21 14.96	+22 35.4	1.101	1.975	20.2	16.6
8 9	21 3.91	-16 4.3	1.255	2.268	1.3	17.7	8 9	21 3.70	+22 43.7	1.076	1.971	18.8	16.5
8 19	20 53.65	-16 50.9	1.265	2.258	6.7	18.0	8 19	20 52.40	+21 59.6	1.067	1.967	18.4	16.5
8 29	20 44.89	-17 30.0	1.299	2.247	11.7	18.2	8 29	20 42.77	+20 28.5	1.077	1.962	19.3	16.5
9 8	20 38.74	-17 58.0	1.355	2.236	16.1	18.5	9 8	20 36.13	+18 23.5	1.104	1.957	21.1	16.6
71948	2000 <i>WR</i> ₈₈		8 6.5 191°39'	3°5'/ 4.3	18		7187	Isobe		8 6.5 279°49'	0°6'/ 6.4	18	
6													

EPHEMERIDES

8 6.5

8 6.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
85808	1998 <i>WF</i> ₁₂		8 6.5 286°49	4.3/ 8.9	18		163900	2003 <i>SD</i> ₂₂₂		8 6.5 19°09	1.1/ 7.2	18	
6 30	21 31.07	- 5 47.8	1.588	2.413	17.5	19.3	6 30	21 30.56	-11 53.5	1.734	2.574	15.6	20.2
7 10	21 27.54	- 5 30.8	1.497	2.399	14.3	19.1	7 10	21 26.77	-12 5.7	1.659	2.576	12.2	20.0
7 20	21 21.48	- 5 30.8	1.426	2.385	10.5	18.8	7 20	21 20.72	-12 30.4	1.604	2.577	8.3	19.8
7 30	21 13.42	- 5 48.2	1.377	2.371	6.5	18.6	7 30	21 12.99	-13 4.9	1.573	2.579	4.0	19.5
8 9	21 4.25	- 6 20.9	1.352	2.357	4.3	18.4	8 9	21 4.46	-13 44.9	1.568	2.581	1.4	19.3
8 19	20 55.10	- 7 4.6	1.352	2.343	6.6	18.5	8 19	20 56.16	-14 25.6	1.589	2.583	5.5	19.6
8 29	20 47.20	- 7 53.9	1.377	2.329	10.8	18.7	8 29	20 49.11	-15 2.5	1.636	2.585	9.6	19.9
9 8	20 41.53	- 8 42.7	1.424	2.316	14.9	18.9	9 8	20 44.13	-15 32.2	1.706	2.587	13.3	20.1
127855	2003 <i>FQ</i> ₁₁₄		8 6.5 115°11	3.8/ 3.7	18		453672	2010 <i>VA</i> ₂₄		8 6.5 289°70	6.6/31.6	18	
6 30	21 34.19	-23 3.9	1.816	2.670	14.4	20.4	6 30	21 32.43	-33 39.7	2.229	3.080	12.2	21.3
7 10	21 29.54	-24 9.1	1.754	2.681	11.0	20.2	7 10	21 28.22	-34 51.3	2.148	3.063	9.9	21.1
7 20	21 22.51	-25 18.9	1.714	2.692	7.4	20.1	7 20	21 21.73	-36 0.7	2.089	3.047	7.8	21.0
7 30	21 13.73	-26 26.2	1.700	2.702	4.3	19.9	7 30	21 13.47	-37 0.9	2.056	3.030	6.6	20.9
8 9	21 4.20	-27 24.2	1.712	2.712	4.4	19.9	8 9	21 4.29	-37 45.5	2.049	3.013	7.3	20.9
8 19	20 54.99	-28 7.6	1.751	2.722	7.5	20.1	8 19	20 55.20	-38 10.2	2.067	2.996	9.3	21.0
8 29	20 47.19	-28 33.6	1.816	2.732	11.0	20.4	8 29	20 47.27	-38 13.3	2.110	2.979	11.8	21.1
9 8	20 41.60	-28 42.4	1.902	2.741	14.0	20.6	9 8	20 41.35	-37 56.3	2.173	2.962	14.2	21.2
65308	2002 <i>JC</i> ₆₅		8 6.5 70°14	0.4/ 6.2	18		37778	1997 <i>HE</i> ₂		8 6.5 77°60	1.8/ 5.1	18	
6 30	21 32.93	-13 59.9	1.356	2.214	18.1	19.1	6 30	21 30.98	-19 50.4	2.192	3.038	12.6	19.2
7 10	21 29.08	-14 43.2	1.298	2.226	14.0	18.9	7 10	21 26.59	-20 23.8	2.126	3.049	9.6	19.0
7 20	21 22.44	-15 41.4	1.260	2.239	9.2	18.7	7 20	21 20.33	-21 2.2	2.083	3.061	6.3	18.8
7 30	21 13.76	-16 48.4	1.244	2.253	3.9	18.4	7 30	21 12.74	-21 41.2	2.065	3.072	2.9	18.6
8 9	21 4.20	-17 56.6	1.253	2.266	1.6	18.3	8 9	21 4.59	-22 16.7	2.075	3.084	2.3	18.6
8 19	20 55.07	-18 58.4	1.287	2.279	6.8	18.6	8 19	20 56.71	-22 44.9	2.113	3.096	5.4	18.8
8 29	20 47.67	-19 48.1	1.346	2.292	11.5	19.0	8 29	20 49.93	-23 3.5	2.177	3.107	8.7	19.0
9 8	20 42.88	-20 22.7	1.426	2.306	15.5	19.2	9 8	20 44.88	-23 11.5	2.265	3.119	11.6	19.3
48048	2001 <i>DG</i> ₈₈		8 6.5 52°30	4.5/ 4.5	18		474648	2004 <i>XW</i> ₆₆		8 6.5 227°77	1.8/ 5.2	18	
6 30	21 40.80	-27 59.3	1.573	2.429	16.1	17.9	6 30	21 32.41	-18 51.1	1.995	2.841	13.6	22.2
7 10	21 34.65	-28 9.5	1.525	2.450	12.5	17.7	7 10	21 28.07	-19 30.9	1.912	2.835	10.5	21.9
7 20	21 25.76	-28 16.9	1.497	2.472	8.6	17.5	7 20	21 21.54	-20 18.1	1.851	2.829	6.9	21.7
7 30	21 15.05	-28 15.7	1.494	2.493	5.2	17.4	7 30	21 13.36	-21 8.1	1.815	2.822	3.2	21.5
8 9	21 3.82	-28 1.3	1.516	2.515	5.0	17.4	8 9	21 4.35	-21 55.5	1.806	2.816	2.4	21.4
8 19	20 53.37	-27 32.0	1.564	2.537	8.0	17.7	8 19	20 55.47	-22 35.4	1.825	2.809	6.0	21.6
8 29	20 44.89	-26 49.1	1.637	2.560	11.5	17.9	8 29	20 47.73	-23 4.3	1.870	2.801	9.8	21.8
9 8	20 39.11	-25 55.3	1.733	2.582	14.7	18.2	9 8	20 41.92	-23 20.8	1.938	2.794	13.1	22.0
186279	2002 <i>AV</i> ₁₀₃		8 6.5 116°37	0.9/ 5.7	18		454316	2014 <i>KS</i> ₁₈		8 6.5 13°36	5.3/10.4	18	
6 30	21 31.85	-18 4.0	2.615	3.446	11.2	21.1	6 30	21 27.28	- 1 32.8	1.815	2.619	16.4	21.0
7 10	21 26.88	-18 28.7	2.547	3.462	8.6	20.9	7 10	21 24.10	- 1 15.9	1.739	2.621	13.6	20.8
7 20	21 20.33	-18 58.1	2.503	3.478	5.6	20.7	7 20	21 18.90	- 1 17.4	1.682	2.625	10.3	20.6
7 30	21 12.68	-19 29.0	2.487	3.494	2.4	20.6	7 30	21 12.18	- 1 37.8	1.647	2.628	7.2	20.4
8 9	21 4.58	-19 58.2	2.498	3.510	1.4	20.5	8 9	21 4.76	- 2 15.0	1.637	2.633	5.3	20.3
8 19	20 56.72	-20 22.9	2.539	3.525	4.4	20.7	8 19	20 57.52	- 3 5.2	1.653	2.637	6.4	20.4
8 29	20 49.80	-20 40.8	2.608	3.539	7.4	21.0	8 29	20 51.39	- 4 3.1	1.694	2.643	9.4	20.6
9 8	20 44.36	-20 50.9	2.702	3.553	10.0	21.2	9 8	20 47.09	- 5 2.6	1.758	2.648	12.5	20.8
478842	2012 <i>VZ</i> ₄₅		8 6.5 246°25	3.8/ 9.3	18		221848	2008 <i>FB</i> ₁₀₅		8 6.5 6°98	0.2/ 6.3	18	
6 30	21 31.74	- 4 17.8	2.308	3.099	13.7	22.3	6 30	21 27.72	-14 48.9	1.866	2.716	14.3	19.7
7 10	21 27.25	- 4 3.9	2.204	3.083	11.2	22.1	7 10	21 24.46	-15 15.7	1.792	2.716	11.0	19.5
7 20	21 20.87	- 4 2.9	2.121	3.066	8.4	21.8	7 20	21 19.13	-15 52.6	1.740	2.718	7.3	19.3
7 30	21 13.04	- 4 15.0	2.062	3.049	5.5	21.6	7 30	21 12.28	-16 36.0	1.712	2.720	3.2	19.1
8 9	21 4.41	- 4 38.8	2.031	3.031	3.9	21.5	8 9	21 4.73	-17 21.2	1.709	2.722	1.2	18.9
8 19	20 55.77	- 5 11.7	2.027	3.012	5.4	21.6	8 19	20 57.39	-18 3.5	1.734	2.725	5.4	19.2
8 29	20 47.95	- 5 50.3	2.051	2.993	8.4	21.7	8 29	20 51.18	-18 38.7	1.784	2.729	9.3	19.5
9 8	20 41.71	- 6 30.3	2.100	2.974	11.5	21.9	9 8	20 46.85	-19 4.3	1.857	2.733	12.7	19.7
362577	2010 <i>VH</i> ₁₁₆		8 6.5 278°24	1.8/ 7.8	18		192283	1981 <i>EE</i> ₃		8 6.5 230°13	0.6/ 6.9	18	R
6 30	21 29.74	-10 22.4	2.319	3.138	12.8	21.4	6 30	21 34.93	-14 19.1	2.126	2.952	13.6	21.0
7 10	21 25.62	-10 18.4	2.226	3.129	10.1	21.2	7 10	21 29.84	-14 18.7	2.032	2.942	10.6	20.8
7 20	21 19.73	-10 23.9	2.155	3.120	7.0	21.0	7 20	21 22.64	-14 26.1	1.960	2.931	7.2	20.5
7 30	21 12.51	-10 37.8	2.110	3.111	3.7	20.7	7 30	21 13.83	-14 39.1	1.914	2.920	3.3	20.3
8 9	21 4.61	-10 57.7	2.091	3.102	1.8	20.6	8 9	21 4.21	-14 54.6	1.895	2.908	1.1	20.1
8 19	20 56.81	-11 20.9	2.101	3.093	4.5	20.8	8 19	20 54.68	-15 9.5	1.905	2.896	5.0	20.3
8 29	20 49.89	-11 44.2	2.138	3.084	7.9	21.0	8 29	20 46.20	-15 21.1	1.942	2.883	8.9	20.5
9 8	20 44.51	-12 5.0	2.200	3.075	11.0	21.1	9 8	20 39.56	-15 27.5	2.003	2.870	12.3	20.7
173564	2001 <i>AD</i> ₂₂		8 6.5 181°14	2.6/ 4.8	18		503948	2003 <i>UW</i> ₂₄₇		8 6.5 298°37	5.3/ 9.1	18	
6 30	21 36.25	-20 29.5	1.751	2.600	15.1	20.8	6 30	21 30.70	- 5 15.8	1.391	2.224	19.1	21.2
7 10	21 31.28	-21 13.8	1.677	2.602	11.6	20.6	7 10	21 27.78	- 4 46.1	1.294	2.199	15.8	20.9
7 20	21 23.77	-22 4.9	1.624	2.602	7.7	20.4	7 20	21 22.00	- 4 34.7	1.214	2.174	11.8	20.6
7 30	21 14.34	-22 56.9	1.596	2.602	3.7	20.1	7 30	21 13.81	- 4 43.3	1.155	2.148	7.7	20.3
8 9	21 4.00	-23 43.2	1.595	2.602	3.2	20.1	8 9	21 4.15	- 5 10.9	1.119	2.123	5.3	20.1
8 19	20 53.91	-24 18.6	1.620	2.601	7.0	20.3	8 19	20 54.30	- 5 53.9	1.107	2.098	7.7	20.2
8 29	20 45.24	-24 39.8	1.671	2.599	11.0	20.6	8 29	20 45.74	- 6 46.2	1.118	2.073	12.4	20.4
9 8	20 38.90	-24 46.3	1.745	2.597	14.5	20.8	9 8	20 39.72	- 7 40.4	1.149	2.048	17.0	20.6
168548	1999 <i>VH</i> ₁₉₄		8 6.5 206°89	14.7/12.3	18		355528	2008 <i>AN</i> ₈₄		8 6.5 66°02			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
430992	2005 <i>XS</i> ₂₄		8 6.5 95°84	4.8/ 9.2	18		346531	2008 <i>UM</i> ₂₂₅		8 6.5 349°43	1.8/ 5.6	18	
6 30	21 35.62	- 4 53.9	1.817	2.620	16.4	20.3	6 30	21 29.67	-19 37.9	1.266	2.145	17.9	20.0
7 10	21 30.39	- 4 10.8	1.747	2.633	13.4	20.1	7 10	21 27.03	-19 46.4	1.195	2.136	13.9	19.7
7 20	21 22.95	- 3 41.8	1.698	2.645	9.9	19.9	7 20	21 21.39	-20 2.5	1.143	2.129	9.2	19.4
7 30	21 13.92	- 3 27.8	1.672	2.658	6.6	19.7	7 30	21 13.45	-20 21.2	1.113	2.122	4.1	19.1
8 9	21 4.21	- 3 27.6	1.671	2.670	4.8	19.7	8 9	21 4.39	-20 36.7	1.106	2.117	2.6	19.0
8 19	20 54.82	- 3 38.9	1.698	2.682	6.4	19.8	8 19	20 55.64	-20 44.0	1.122	2.113	7.6	19.3
8 29	20 46.74	- 3 58.0	1.751	2.694	9.6	20.0	8 29	20 48.63	-20 39.9	1.161	2.111	12.6	19.6
9 8	20 40.73	- 4 20.7	1.827	2.705	12.8	20.2	9 8	20 44.40	-20 23.7	1.219	2.109	16.9	19.8
260269	2004 <i>SB</i> ₅₀		8 6.5 330°98	1.9/ 5.3	18		27744	1990 <i>VO</i> ₆		8 6.5 303°66	0.9/ 7.1	18	
6 30	21 28.84	-19 47.8	1.765	2.625	14.4	20.5	6 30	21 29.07	-10 49.0	1.507	2.356	17.1	18.9
7 10	21 25.65	-20 10.3	1.678	2.609	11.2	20.3	7 10	21 26.16	-11 22.7	1.423	2.344	13.5	18.6
7 20	21 20.13	-20 39.4	1.612	2.593	7.4	20.0	7 20	21 20.68	-12 14.3	1.357	2.333	9.2	18.3
7 30	21 12.81	-21 10.8	1.570	2.578	3.4	19.8	7 30	21 13.14	-13 20.5	1.314	2.321	4.3	18.0
8 9	21 4.56	-21 39.5	1.554	2.564	2.5	19.7	8 9	21 4.50	-14 35.2	1.297	2.310	1.4	17.8
8 19	20 56.42	-22 0.8	1.564	2.550	6.5	19.9	8 19	20 55.90	-15 50.8	1.304	2.298	6.3	18.1
8 29	20 49.49	-22 11.6	1.598	2.537	10.6	20.1	8 29	20 48.61	-17 0.1	1.336	2.288	11.1	18.3
9 8	20 44.65	-22 10.5	1.654	2.525	14.2	20.3	9 8	20 43.66	-17 57.5	1.390	2.277	15.4	18.6
252839	2002 <i>GQ</i> ₁₂₁		8 6.5 113°96	2.3/ 4.6	18		286829	2002 <i>MB</i> ₆		8 6.5 19°91	0.5/ 6.3	18	
6 30	21 31.43	-22 1.5	2.390	3.233	11.7	20.7	6 30	21 34.14	-18 13.5	1.497	2.356	16.7	19.4
7 10	21 26.84	-22 35.7	2.319	3.241	9.0	20.5	7 10	21 29.82	-18 1.8	1.432	2.361	12.9	19.2
7 20	21 20.46	-23 13.0	2.272	3.249	5.9	20.3	7 20	21 22.85	-17 56.4	1.387	2.367	8.5	19.0
7 30	21 12.80	-23 49.4	2.251	3.256	3.0	20.1	7 30	21 13.96	-17 53.9	1.365	2.373	3.7	18.7
8 9	21 4.59	-24 20.8	2.258	3.264	2.8	20.1	8 9	21 4.28	-17 50.6	1.367	2.380	1.5	18.6
8 19	20 56.62	-24 43.8	2.293	3.271	5.5	20.3	8 19	20 55.03	-17 43.5	1.396	2.388	6.3	18.9
8 29	20 49.66	-24 56.6	2.355	3.278	8.5	20.5	8 29	20 47.42	-17 30.6	1.449	2.396	10.8	19.2
9 8	20 44.34	-24 58.7	2.441	3.285	11.2	20.7	9 8	20 42.28	-17 11.3	1.524	2.405	14.6	19.4
271071	2003 <i>JN</i> ₈		8 6.5 60°91	8.9/30.7	17		38246	Palupin		8 6.5 29°66	2.0/ 7.5	18	
6 30	21 34.89	-34 19.5	1.620	2.484	15.3	19.9	6 30	21 34.42	-12 20.4	1.608	2.448	16.6	18.6
7 10	21 30.81	-36 8.8	1.568	2.490	12.5	19.7	7 10	21 29.88	-11 55.6	1.536	2.451	13.1	18.3
7 20	21 23.74	-37 53.9	1.538	2.495	10.0	19.6	7 20	21 22.84	-11 41.0	1.483	2.454	9.0	18.1
7 30	21 14.42	-39 24.0	1.532	2.501	8.9	19.5	7 30	21 13.97	-11 35.5	1.454	2.458	4.6	17.9
8 9	21 4.04	-40 29.6	1.549	2.506	9.8	19.6	8 9	21 4.28	-11 36.4	1.451	2.462	2.1	17.7
8 19	20 54.03	-41 5.4	1.591	2.512	12.0	19.7	8 19	20 54.91	-11 40.8	1.474	2.467	5.9	18.0
8 29	20 45.82	-41 10.9	1.654	2.518	14.7	19.9	8 29	20 47.00	-11 45.6	1.522	2.472	10.1	18.2
9 8	20 40.39	-40 49.8	1.736	2.524	17.2	20.1	9 8	20 41.39	-11 48.2	1.592	2.476	14.0	18.5
240659	2005 <i>ET</i> ₂₂		8 6.5 123°46	1.0/ 7.3	17		130844	2000 <i>UL</i> ₆₁		8 6.5 233°68	6.5/ 2.1	18	
6 30	21 32.25	-11 24.2	2.243	3.062	13.2	22.2	6 30	21 38.60	-32 50.2	2.001	2.848	13.5	20.3
7 10	21 27.45	-11 42.1	2.171	3.076	10.3	22.0	7 10	21 33.12	-33 44.3	1.924	2.839	10.9	20.1
7 20	21 20.85	-12 10.0	2.122	3.090	6.9	21.8	7 20	21 25.03	-34 35.3	1.869	2.830	8.3	19.9
7 30	21 12.97	-12 45.4	2.099	3.103	3.3	21.6	7 30	21 14.96	-35 15.6	1.839	2.820	6.6	19.8
8 9	21 4.54	-13 24.8	2.103	3.116	1.2	21.5	8 9	21 3.95	-35 38.8	1.836	2.810	7.1	19.8
8 19	20 56.35	-14 4.5	2.136	3.128	4.5	21.7	8 19	20 53.18	-35 41.1	1.858	2.800	9.3	19.9
8 29	20 49.20	-14 40.9	2.197	3.140	7.9	22.0	8 29	20 43.88	-35 21.8	1.905	2.789	12.2	20.1
9 8	20 43.71	-15 11.5	2.283	3.151	10.9	22.2	9 8	20 36.96	-34 43.6	1.973	2.778	14.9	20.2
282726	2006 <i>DU</i> ₅₇		8 6.5 326°53	6.7/11.3	18		261847	2006 <i>DZ</i> ₁₅₈		8 6.5 122°99	0.5/ 6.2	17	
6 30	21 24.76	+ 1 3.4	1.460	2.273	19.3	20.0	6 30	21 36.21	-15 22.7	1.455	2.306	17.5	21.5
7 10	21 22.87	+ 1 9.7	1.370	2.256	16.3	19.7	7 10	21 31.55	-15 48.0	1.389	2.314	13.5	21.3
7 20	21 18.52	+ 0 49.8	1.297	2.240	12.8	19.5	7 20	21 24.09	-16 25.0	1.344	2.322	8.9	21.1
7 30	21 12.20	+ 0 1.6	1.244	2.224	9.2	19.2	7 30	21 14.56	-17 8.9	1.321	2.330	3.9	20.8
8 9	21 4.76	- 1 13.2	1.214	2.209	6.8	19.1	8 9	21 4.10	-17 53.3	1.324	2.337	1.5	20.7
8 19	20 57.31	- 2 48.9	1.207	2.195	7.8	19.1	8 19	20 54.03	-18 32.5	1.353	2.344	6.6	21.0
8 29	20 51.06	- 4 36.4	1.225	2.182	11.3	19.2	8 29	20 45.65	-19 1.9	1.407	2.351	11.3	21.3
9 8	20 47.05	- 6 25.3	1.264	2.169	15.3	19.4	9 8	20 39.86	-19 19.3	1.482	2.358	15.3	21.6
483632	2004 <i>TB</i> ₂₇₁		8 6.5 279°81	8.0/29.9	17		38353	1999 <i>RL</i> ₁₅₁		8 6.5 9°76	0.3/ 6.3	18	
6 30	21 35.65	-40 12.4	2.402	3.238	11.9	21.5	6 30	21 28.46	-13 51.4	1.442	2.303	17.1	18.5
7 10	21 30.73	-41 23.8	2.325	3.220	10.1	21.3	7 10	21 25.64	-14 30.2	1.374	2.304	13.2	18.3
7 20	21 23.40	-42 28.7	2.270	3.201	8.6	21.2	7 20	21 20.24	-15 23.6	1.325	2.306	8.8	18.0
7 30	21 14.22	-43 19.7	2.239	3.183	8.0	21.1	7 30	21 12.90	-16 26.9	1.300	2.308	3.8	17.7
8 9	21 4.11	-43 50.9	2.234	3.165	8.7	21.1	8 9	21 4.64	-17 33.0	1.299	2.312	1.4	17.6
8 19	20 54.14	-43 58.9	2.254	3.146	10.3	21.2	8 19	20 56.64	-18 34.8	1.323	2.315	6.5	17.9
8 29	20 45.43	-43 43.0	2.297	3.128	12.3	21.3	8 29	20 50.10	-19 26.3	1.371	2.320	11.1	18.2
9 8	20 38.87	-43 5.9	2.360	3.109	14.3	21.4	9 8	20 45.94	-20 3.9	1.440	2.325	15.1	18.5
358887	2008 <i>GB</i> ₂₈		8 6.5 331°64	3.8/ 9.7	18		504280	2006 <i>WZ</i> ₉₃		8 6.5 253°36	1.8/ 7.7	17	
6 30	21 26.86	- 3 16.4	2.063	2.867	14.7	20.8	6 30	21 32.40	-10 4.5	1.669	2.503	16.4	22.3
7 10	21 23.62	- 3 26.7	1.975	2.862	12.0	20.6	7 10	21 28.46	-10 14.5	1.581	2.493	13.0	22.0
7 20	21 18.53	- 3 53.9	1.908	2.858	8.9	20.4	7 20	21 22.06	-10 39.4	1.514	2.483	9.0	21.8
7 30	21 12.04	- 4 37.4	1.865	2.854	5.7	20.2	7 30	21 13.72	-11 17.1	1.470	2.473	4.6	21.5
8 9	21 4.85	- 5 34.3	1.848	2.850	3.8	20.1	8 9	21 4.35	-12 3.4	1.451	2.463	2.0	21.3
8 19	20 57.76	- 6 40.1	1.857	2.847	5.3	20.2	8 19	20 55.05	-12 53.2	1.459	2.452	5.9	21.5
8 29	20 51.60	- 7 49.6	1.893	2.843	8.5	20.3	8 29	20 47.01	-13 40.8	1.492	2.442	10.3	21.8
9 8	20 47.08	- 8 57.3	1.954	2.840	11.7	20.5	9 8	20 41.16	-14 21.9	1.548	2.431	14.4	22.0
284619	2007 <i>UX</i> ₁₂₃		8 6.5 334°43	0.1/ 6.6	18		194839	2002 <i>AB</i> ₄		8 6.5 191°79</			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
280886	2005 <i>WW</i> ₉₂		8 6.5 95°23	3°7/ 9.5	18		151725	2003 <i>BF</i> ₇₃		8 6.5 221°75	1°5/ 5.5	18	
6 30	21 29.34	-4 20.2	2.333	3.128	13.5	20.3	6 30	21 34.61	-18 16.0	1.927	2.769	14.2	20.8
7 10	21 25.24	-4 6.2	2.250	3.131	10.9	20.1	7 10	21 29.90	-18 48.4	1.841	2.762	11.0	20.6
7 20	21 19.44	-4 5.0	2.189	3.135	8.1	19.9	7 20	21 22.86	-19 28.5	1.777	2.754	7.2	20.4
7 30	21 12.42	-4 16.5	2.152	3.138	5.3	19.8	7 30	21 14.05	-20 11.9	1.738	2.745	3.2	20.1
8 9	21 4.82	-4 38.9	2.142	3.142	3.7	19.7	8 9	21 4.33	-20 53.4	1.726	2.737	2.1	20.0
8 19	20 57.37	-5 9.4	2.159	3.145	5.0	19.8	8 19	20 54.74	-21 28.0	1.742	2.727	6.1	20.3
8 29	20 50.82	-5 44.8	2.204	3.148	7.8	20.0	8 29	20 46.33	-21 52.4	1.784	2.717	10.0	20.5
9 8	20 45.76	-6 21.2	2.273	3.152	10.6	20.1	9 8	20 39.98	-22 5.0	1.849	2.707	13.6	20.7
260087	2004 <i>KS</i> ₆		8 6.5 103°70	0°0/ 6.3	17		180118	2003 <i>FN</i> ₄₈		8 6.5 71°12	1°8/ 7.9	18	
6 30	21 34.15	-14 2.1	1.688	2.530	15.9	21.0	6 30	21 29.52	-9 38.4	2.131	2.953	13.7	20.5
7 10	21 29.53	-14 32.4	1.625	2.544	12.3	20.8	7 10	21 25.54	-9 48.1	2.054	2.959	10.8	20.3
7 20	21 22.54	-15 14.3	1.581	2.557	8.1	20.6	7 20	21 19.73	-10 9.4	1.999	2.965	7.5	20.1
7 30	21 13.83	-16 3.3	1.563	2.570	3.5	20.4	7 30	21 12.59	-10 40.4	1.969	2.971	3.9	19.9
8 9	21 4.39	-16 53.9	1.571	2.583	1.2	20.2	8 9	21 4.84	-11 17.9	1.966	2.977	1.8	19.8
8 19	20 55.31	-17 40.6	1.605	2.596	5.8	20.6	8 19	20 57.28	-11 58.1	1.990	2.983	4.6	20.0
8 29	20 47.65	-18 19.1	1.666	2.609	9.9	20.8	8 29	20 50.73	-12 37.1	2.041	2.989	8.1	20.2
9 8	20 42.20	-18 46.9	1.749	2.621	13.5	21.1	9 8	20 45.83	-13 11.6	2.117	2.995	11.3	20.4
165142	2000 <i>OM</i> ₄₀		8 6.5 328°18	5°2/ 9.6	18		394694	2008 <i>CA</i> ₁₈₆		8 6.5 287°49	4°9/ 9.6	18	
6 30	21 25.39	-3 46.5	1.142	1.994	21.2	19.4	6 30	21 30.84	-3 16.6	2.050	2.846	15.0	21.0
7 10	21 23.99	-3 43.6	1.063	1.980	17.5	19.1	7 10	21 26.93	-2 48.6	1.941	2.821	12.5	20.7
7 20	21 19.63	-4 7.7	1.000	1.966	13.0	18.8	7 20	21 20.92	-2 34.7	1.852	2.795	9.5	20.5
7 30	21 12.83	-5 0.2	0.956	1.952	8.2	18.5	7 30	21 13.24	-2 35.9	1.787	2.770	6.6	20.3
8 9	21 4.66	-6 17.2	0.934	1.940	5.2	18.3	8 9	21 4.58	-2 51.6	1.747	2.744	4.9	20.1
8 19	20 56.52	-7 50.7	0.933	1.929	7.8	18.4	8 19	20 55.82	-3 19.7	1.734	2.717	6.3	20.2
8 29	20 49.95	-9 29.8	0.954	1.919	12.8	18.7	8 29	20 47.93	-3 56.5	1.747	2.691	9.5	20.3
9 8	20 46.17	-11 3.5	0.995	1.909	17.7	18.9	9 8	20 41.76	-4 37.4	1.784	2.665	12.9	20.4
253832	2003 <i>YZ</i> ₈₁		8 6.5 211°97	1°7/ 5.3	17		316102	2009 <i>OE</i> ₁₄		8 6.5 292°40	0°0/ 6.4	18	
6 30	21 35.23	-18 22.7	1.873	2.717	14.5	21.4	6 30	21 27.58	-12 50.0	2.265	3.098	12.6	20.5
7 10	21 30.44	-19 3.4	1.789	2.711	11.2	21.2	7 10	21 24.10	-13 35.3	2.177	3.091	9.8	20.3
7 20	21 23.26	-19 52.5	1.727	2.704	7.4	21.0	7 20	21 18.84	-14 31.8	2.111	3.085	6.5	20.1
7 30	21 14.22	-20 45.0	1.689	2.697	3.3	20.7	7 30	21 12.24	-15 36.2	2.072	3.079	2.9	19.8
8 9	21 4.24	-21 35.0	1.679	2.689	2.4	20.6	8 9	21 4.95	-16 43.8	2.060	3.073	0.9	19.7
8 19	20 54.39	-22 17.3	1.697	2.681	6.3	20.9	8 19	20 57.73	-17 49.7	2.076	3.067	4.7	19.9
8 29	20 45.77	-22 47.8	1.740	2.672	10.4	21.1	8 29	20 51.39	-18 49.2	2.120	3.061	8.3	20.1
9 8	20 39.29	-23 5.1	1.807	2.662	13.9	21.3	9 8	20 46.59	-19 39.2	2.188	3.055	11.4	20.3
85376	1996 <i>GU</i> ₁₄		8 6.5 341°88	5°5/ 2.9	18		266217	2006 <i>WS</i> ₁₈₄		8 6.5 224°42	1°4/ 7.3	18	
6 30	21 27.24	-23 2.7	1.236	2.124	17.6	18.8	6 30	21 34.27	-12 9.7	1.736	2.570	15.8	20.7
7 10	21 25.43	-24 27.2	1.168	2.113	13.6	18.5	7 10	21 29.75	-12 8.9	1.653	2.566	12.5	20.5
7 20	21 20.55	-26 1.7	1.119	2.104	9.3	18.3	7 20	21 22.82	-12 19.5	1.590	2.561	8.5	20.2
7 30	21 13.20	-27 36.4	1.092	2.095	5.9	18.1	7 30	21 14.05	-12 39.4	1.552	2.557	4.2	20.0
8 9	21 4.57	-28 59.7	1.088	2.088	6.5	18.1	8 9	21 4.36	-13 5.0	1.539	2.552	1.6	19.8
8 19	20 56.13	-30 2.0	1.108	2.081	10.4	18.3	8 19	20 54.83	-13 32.1	1.554	2.547	5.7	20.0
8 29	20 49.44	-30 37.9	1.148	2.076	14.8	18.5	8 29	20 46.60	-13 56.9	1.594	2.541	10.0	20.3
9 8	20 45.65	-30 47.2	1.207	2.072	18.8	18.8	9 8	20 40.53	-14 16.1	1.657	2.536	13.8	20.5
86133	1999 <i>RA</i> ₁₇₁		8 6.5 302°26	0°0/ 6.3	18		20096	<i>Shiraishikihiko</i>		8 6.5 216°31	2°9/ 9.2	18	
6 30	21 28.90	-14 34.5	2.064	2.905	13.4	19.6	6 30	21 28.01	-4 50.0	2.424	3.222	12.9	18.2
7 10	21 25.36	-14 56.0	1.969	2.888	10.5	19.3	7 10	21 24.24	-5 3.7	2.333	3.219	10.5	18.0
7 20	21 19.81	-15 27.1	1.896	2.871	7.0	19.1	7 20	21 18.83	-5 31.1	2.265	3.216	7.6	17.9
7 30	21 12.69	-16 5.1	1.847	2.855	3.1	18.8	7 30	21 12.20	-6 11.2	2.221	3.213	4.7	17.7
8 9	21 4.75	-16 45.8	1.825	2.838	1.0	18.6	8 9	21 4.97	-7 1.3	2.205	3.210	2.9	17.6
8 19	20 56.85	-17 24.9	1.831	2.822	5.1	18.9	8 19	20 57.83	-7 57.7	2.217	3.207	4.6	17.7
8 29	20 49.90	-17 58.6	1.863	2.806	9.0	19.1	8 29	20 51.50	-8 56.1	2.256	3.203	7.5	17.8
9 8	20 44.70	-18 24.0	1.918	2.790	12.5	19.3	9 8	20 46.58	-9 52.5	2.321	3.200	10.4	18.0
325457	2009 <i>QZ</i> ₂₉		8 6.5 278°75	1°3/ 7.6	18		243516	<i>Marklarsen</i>		8 6.5 124°50	3°5/ 3.6	18	
6 30	21 29.22	-11 15.4	2.405	3.227	12.3	21.1	6 30	21 33.43	-23 54.7	2.136	2.984	12.7	20.7
7 10	21 25.25	-11 20.2	2.307	3.212	9.7	20.9	7 10	21 28.67	-24 55.0	2.072	2.995	9.8	20.5
7 20	21 19.55	-11 34.3	2.231	3.198	6.7	20.7	7 20	21 21.84	-25 58.3	2.031	3.006	6.6	20.3
7 30	21 12.53	-11 56.1	2.181	3.184	3.4	20.4	7 30	21 13.53	-26 58.8	2.016	3.017	4.0	20.2
8 9	21 4.83	-12 23.0	2.158	3.169	1.4	20.3	8 9	21 4.56	-27 50.7	2.028	3.027	4.1	20.2
8 19	20 57.17	-12 52.1	2.163	3.155	4.4	20.5	8 19	20 55.85	-28 29.7	2.069	3.037	6.8	20.4
8 29	20 50.33	-13 20.1	2.195	3.140	7.8	20.6	8 29	20 48.33	-28 53.5	2.135	3.046	9.8	20.6
9 8	20 44.96	-13 44.5	2.253	3.126	10.9	20.8	9 8	20 42.71	-29 2.1	2.224	3.055	12.6	20.8
220719	2004 <i>SV</i> ₃₈		8 6.5 310°71	2°5/ 4.7	18		516676	2008 <i>SD</i> ₃₁₂		8 6.5 266°09	0°3/ 6.8	18	
6 30	21 30.52	-21 59.4	2.099	2.951	12.8	20.0	6 30	21 31.53	-13 2.2	1.943	2.778	14.3	22.0
7 10	21 26.58	-22 30.1	2.014	2.940	9.9	19.8	7 10	21 27.58	-13 30.1	1.845	2.760	11.3	21.7
7 20	21 20.58	-23 4.9	1.951	2.930	6.6	19.6	7 20	21 21.41	-14 10.2	1.767	2.741	7.6	21.5
7 30	21 13.01	-23 39.6	1.913	2.919	3.4	19.4	7 30	21 13.47	-14 59.6	1.714	2.721	3.4	21.2
8 9	21 4.68	-24 9.3	1.903	2.909	3.0	19.3	8 9	21 4.54	-15 53.5	1.688	2.701	1.1	21.0
8 19	20 56.47	-24 30.2	1.919	2.899	6.2	19.5	8 19	20 55.57	-16 46.9	1.690	2.681	5.5	21.2
8 29	20 49.34	-24 39.9	1.961	2.889	9.6	19.7	8 29	20 47.62	-17 34.8	1.718	2.661	9.7	21.4
9 8	20 44.04	-24 37.5	2.026	2.879	12.7	19.9	9 8	20 41.57	-18 13.5	1.769	2.640	13.4	21.6
99559	2002 <i>FL</i> ₁		8 6.5 58°62	18°2/ 2.9	18		442471	2011 <i>UM</i> ₃₀₀		8 6.5 164°28	4°9/ 2.2	18	
6 30	22												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
25450	1999 <i>XQ</i> ₇		8 6.5 299°87	4.4/ 4.2	18		363917	2005 <i>SN</i> ₂₃₃		8 6.5 163°78	2.4/ 4.2	18	
6 30	21 34.59	-23 54.3	1.402	2.273	16.9	17.6	6 30	21 31.63	-23 42.2	2.972	3.807	9.9	22.2
7 10	21 31.09	-24 32.0	1.311	2.246	13.3	17.3	7 10	21 26.73	-24 18.8	2.896	3.813	7.6	22.1
7 20	21 24.38	-25 15.6	1.239	2.220	9.2	17.0	7 20	21 20.32	-24 57.0	2.844	3.817	5.1	21.9
7 30	21 14.99	-25 58.0	1.190	2.194	5.2	16.7	7 30	21 12.83	-25 33.4	2.820	3.822	2.8	21.8
8 9	21 4.02	-26 30.9	1.164	2.168	5.1	16.6	8 9	21 4.86	-26 4.4	2.825	3.826	2.8	21.8
8 19	20 53.00	-26 47.4	1.163	2.142	9.3	16.8	8 19	20 57.06	-26 27.4	2.858	3.829	5.0	21.9
8 29	20 43.57	-26 43.9	1.184	2.116	14.1	17.0	8 29	20 50.06	-26 40.9	2.920	3.832	7.4	22.1
9 8	20 37.07	-26 20.7	1.225	2.091	18.5	17.2	9 8	20 44.41	-26 44.3	3.007	3.835	9.7	22.2
337164	1999 <i>UN</i> ₂₈		8 6.5 264°30	1.8/ 5.3	18		306474	1999 <i>RR</i> ₂₁₀		8 6.6 312°46	3.6/ 5.1	18	
6 30	21 32.64	-19 15.5	1.886	2.735	14.1	21.5	6 30	21 37.26	-24 55.2	1.510	2.372	16.4	20.3
7 10	21 28.46	-19 48.5	1.800	2.725	10.9	21.2	7 10	21 32.97	-24 56.5	1.410	2.341	12.9	20.0
7 20	21 21.97	-20 28.7	1.735	2.714	7.2	21.0	7 20	21 25.54	-24 58.4	1.331	2.310	8.9	19.6
7 30	21 13.69	-21 11.6	1.696	2.703	3.3	20.7	7 30	21 15.49	-24 55.1	1.274	2.279	4.8	19.3
8 9	21 4.50	-21 51.7	1.683	2.693	2.5	20.7	8 9	21 3.94	-24 40.8	1.242	2.248	4.2	19.2
8 19	20 55.42	-22 24.1	1.697	2.682	6.3	20.9	8 19	20 52.34	-24 11.7	1.235	2.218	8.3	19.4
8 29	20 47.53	-22 45.6	1.737	2.671	10.2	21.1	8 29	20 42.31	-23 26.8	1.252	2.189	13.1	19.6
9 8	20 41.69	-22 54.5	1.799	2.659	13.8	21.3	9 8	20 35.09	-22 28.1	1.290	2.160	17.5	19.7
275702	2000 <i>UM</i> ₅₅		8 6.5 324°18	4.9/ 3.2	18		54221	2000 <i>HN</i> ₁₀₀		8 6.6 277°62	4.5/ 3.5	18	
6 30	21 27.37	-22 25.4	1.334	2.217	16.9	19.2	6 30	21 33.19	-23 37.7	1.621	2.485	15.4	18.8
7 10	21 25.49	-23 40.0	1.252	2.195	13.1	18.9	7 10	21 29.45	-24 43.1	1.539	2.471	12.0	18.5
7 20	21 20.63	-25 5.9	1.189	2.173	9.0	18.6	7 20	21 22.96	-25 55.4	1.477	2.457	8.2	18.3
7 30	21 13.31	-26 34.5	1.148	2.153	5.4	18.3	7 30	21 14.26	-27 7.1	1.440	2.442	5.0	18.1
8 9	21 4.59	-27 55.3	1.131	2.133	5.8	18.3	8 9	21 4.37	-28 9.6	1.429	2.428	5.2	18.0
8 19	20 55.85	-28 58.8	1.138	2.114	9.9	18.4	8 19	20 54.56	-28 55.9	1.442	2.414	8.7	18.2
8 29	20 48.65	-29 38.6	1.166	2.095	14.5	18.7	8 29	20 46.16	-29 22.1	1.480	2.399	12.7	18.4
9 8	20 44.23	-29 53.1	1.213	2.078	18.7	18.9	9 8	20 40.24	-29 27.6	1.538	2.385	16.4	18.6
260050	2004 <i>GF</i> ₈₈		8 6.5 143°72	1.7/ 7.6	17		396019	2013 <i>BP</i> ₈₀		8 6.6 82°03	5.5/ 1.5	18	
6 30	21 35.74	-11 2.2	1.882	2.705	15.2	20.6	6 30	21 31.82	-28 57.7	2.138	2.993	12.5	20.4
7 10	21 30.55	-11 2.0	1.808	2.713	12.0	20.4	7 10	21 27.59	-30 25.0	2.081	3.004	9.8	20.2
7 20	21 23.15	-11 13.1	1.755	2.722	8.2	20.2	7 20	21 21.24	-31 52.3	2.047	3.015	7.2	20.1
7 30	21 14.13	-11 33.4	1.727	2.730	4.1	19.9	7 30	21 13.33	-33 12.3	2.039	3.026	5.5	20.0
8 9	21 4.39	-11 59.5	1.725	2.737	1.8	19.8	8 9	21 4.71	-34 18.4	2.058	3.036	6.1	20.1
8 19	20 54.92	-12 27.7	1.752	2.744	5.2	20.0	8 19	20 56.34	-35 6.1	2.104	3.047	8.3	20.2
8 29	20 46.73	-12 54.3	1.805	2.750	9.2	20.3	8 29	20 49.16	-35 33.5	2.175	3.058	10.9	20.4
9 8	20 40.58	-13 16.3	1.882	2.756	12.6	20.5	9 8	20 43.92	-35 41.4	2.267	3.069	13.3	20.6
169875	2002 <i>RF</i> ₁₁₈		8 6.5 317°63	1.9/ 7.7	18		75575	2000 <i>AQ</i> ₉		8 6.6 197°35	2.3/ 4.9	18	
6 30	21 29.91	-10 52.5	1.728	2.567	15.7	19.6	6 30	21 36.21	-20 29.3	1.901	2.746	14.2	20.3
7 10	21 26.46	-10 50.0	1.641	2.556	12.4	19.4	7 10	21 31.16	-21 7.3	1.821	2.743	11.0	20.1
7 20	21 20.69	-11 0.1	1.574	2.545	8.6	19.1	7 20	21 23.72	-21 51.4	1.763	2.740	7.3	19.9
7 30	21 13.15	-11 21.2	1.530	2.534	4.4	18.8	7 30	21 14.47	-22 36.3	1.730	2.737	3.5	19.6
8 9	21 4.68	-11 50.0	1.512	2.524	2.0	18.6	8 9	21 4.34	-23 16.3	1.725	2.733	2.9	19.6
8 19	20 56.31	-12 22.4	1.520	2.514	5.6	18.9	8 19	20 54.40	-23 46.7	1.747	2.728	6.5	19.8
8 29	20 49.11	-12 53.9	1.553	2.504	9.9	19.1	8 29	20 45.74	-24 4.6	1.795	2.723	10.4	20.0
9 8	20 43.97	-13 20.8	1.608	2.495	13.7	19.3	9 8	20 39.24	-24 9.2	1.866	2.717	13.8	20.2
330689	2008 <i>JP</i> ₁		8 6.5 38°36	1.2/ 5.9	15		307365	2002 <i>RX</i> ₂₅₃		8 6.6 95°32	0.5/ 6.3	17	
6 30	21 33.30	-17 23.1	1.211	2.083	18.9	21.3	6 30	21 36.74	-16 26.9	1.544	2.392	16.8	20.4
7 10	21 29.62	-17 41.5	1.161	2.098	14.6	21.1	7 10	21 31.76	-16 39.9	1.482	2.405	13.0	20.2
7 20	21 22.94	-18 10.3	1.130	2.113	9.5	20.8	7 20	21 24.14	-17 2.0	1.440	2.417	8.5	20.0
7 30	21 14.10	-18 43.9	1.120	2.129	4.1	20.6	7 30	21 14.62	-17 28.9	1.421	2.430	3.7	19.7
8 9	21 4.44	-19 15.6	1.134	2.146	2.1	20.5	8 9	21 4.32	-17 55.5	1.429	2.442	1.5	19.6
8 19	20 55.39	-19 39.7	1.172	2.164	7.2	20.8	8 19	20 54.47	-18 17.3	1.463	2.454	6.2	20.0
8 29	20 48.31	-19 52.8	1.233	2.182	12.0	21.2	8 29	20 46.26	-18 31.0	1.522	2.466	10.7	20.2
9 8	20 44.05	-19 53.5	1.314	2.201	16.2	21.5	9 8	20 40.53	-18 35.2	1.603	2.477	14.5	20.5
113561	2002 <i>TY</i> ₃₃		8 6.5 318°07	0.0/ 6.4	18		178864	2001 <i>KV</i> ₆₈		8 6.6 354°26	2.6/ 8.1	18	
6 30	21 29.60	-14 7.9	1.780	2.627	15.0	19.9	6 30	21 27.74	- 8 12.9	1.270	2.125	19.3	19.2
7 10	21 26.16	-14 33.3	1.697	2.619	11.7	19.7	7 10	21 25.45	- 8 27.8	1.199	2.122	15.4	19.0
7 20	21 20.46	-15 10.1	1.635	2.612	7.8	19.4	7 20	21 20.37	- 9 3.9	1.146	2.119	10.8	18.7
7 30	21 13.04	-15 55.0	1.597	2.604	3.4	19.1	7 30	21 13.11	- 9 59.0	1.113	2.117	5.8	18.4
8 9	21 4.74	-16 43.0	1.584	2.598	1.1	18.9	8 9	21 4.77	-11 7.3	1.104	2.116	2.6	18.2
8 19	20 56.57	-17 28.9	1.599	2.591	5.6	19.2	8 19	20 56.64	-12 21.0	1.119	2.115	6.6	18.5
8 29	20 49.57	-18 8.1	1.639	2.585	9.9	19.5	8 29	20 50.07	-13 31.7	1.156	2.115	11.6	18.8
9 8	20 44.59	-18 37.4	1.701	2.579	13.6	19.7	9 8	20 46.08	-14 32.7	1.215	2.116	16.1	19.0
14814	<i>Gurij</i>		8 6.5 319°44	4.0/ 8.1	18		99754	2002 <i>JV</i> ₈₈		8 6.6 171°43	1.4/ 7.5	18	
6 30	21 32.43	- 9 56.8	1.492	2.333	17.6	17.6	6 30	21 32.06	-11 0.4	1.902	2.731	14.8	20.4
7 10	21 28.94	- 9 3.5	1.395	2.308	14.3	17.3	7 10	21 27.80	-11 9.6	1.823	2.732	11.7	20.2
7 20	21 22.69	- 8 19.9	1.316	2.283	10.4	17.1	7 20	21 21.41	-11 30.9	1.764	2.733	8.0	20.0
7 30	21 14.17	- 7 47.1	1.260	2.258	6.2	16.8	7 30	21 13.43	-12 1.9	1.730	2.733	4.0	19.7
8 9	21 4.34	- 7 24.7	1.228	2.235	4.0	16.6	8 9	21 4.69	-12 38.9	1.722	2.734	1.6	19.6
8 19	20 54.42	- 7 11.6	1.220	2.212	7.1	16.7	8 19	20 56.12	-13 17.6	1.741	2.734	5.2	19.8
8 29	20 45.81	- 7 5.3	1.236	2.189	11.7	16.9	8 29	20 48.71	-13 53.9	1.787	2.734	9.1	20.1
9 8	20 39.63	- 7 2.4	1.274	2.168	16.1	17.1	9 8	20 43.22	-14 24.5	1.857	2.735	12.6	20.3
241313	2007 <i>VV</i> ₂₀		8 6.5 326°96	4.5/ 3.7	18		107602	2001 <i>EN</i> ₁		8 6.6 76°98	4.7/		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
515219	2012 <i>BN</i> ₂₃		8 6.6 231°67	5°5/ 1.5 18			266963	2010 <i>VO</i> ₄₈		8 6.6 237°07	1°4/ 5.6 18		
6 30	21 35.57	-34 15.5	2.713	3.548	10.7	22.8	6 30	21 34.52	-17 19.6	1.756	2.602	15.2	21.6
7 10	21 30.18	-35 4.4	2.631	3.537	8.7	22.6	7 10	21 30.13	-17 58.3	1.668	2.591	11.8	21.4
7 20	21 22.82	-35 49.6	2.573	3.526	6.7	22.5	7 20	21 23.23	-18 47.1	1.602	2.580	7.8	21.1
7 30	21 14.01	-36 25.9	2.541	3.514	5.6	22.4	7 30	21 14.35	-19 41.0	1.561	2.569	3.4	20.8
8 9	21 4.50	-36 48.6	2.537	3.501	6.0	22.4	8 9	21 4.41	-20 34.1	1.546	2.557	2.2	20.7
8 19	20 55.14	-36 55.1	2.559	3.489	7.7	22.5	8 19	20 54.54	-21 20.4	1.558	2.544	6.5	21.0
8 29	20 46.82	-36 44.3	2.608	3.476	9.8	22.6	8 29	20 45.93	-21 55.3	1.595	2.531	10.8	21.2
9 8	20 40.22	-36 17.9	2.679	3.462	12.0	22.8	9 8	20 39.55	-22 16.8	1.655	2.518	14.6	21.4
335033	2004 <i>QA</i> ₂₉		8 6.6 338°31	7°4/ 1.9 18			442862	2013 <i>AN</i> ₁₆₂		8 6.6 239°74	5°5/ 10.6 18		
6 30	21 27.58	-27 39.9	1.194	2.087	17.7	19.7	6 30	21 30.24	-0 27.8	2.108	2.890	15.1	21.1
7 10	21 26.00	-28 58.4	1.125	2.070	14.0	19.4	7 10	21 26.21	+0 1.1	2.022	2.889	12.6	20.9
7 20	21 21.13	-30 21.5	1.074	2.055	10.2	19.2	7 20	21 20.28	+0 14.0	1.957	2.888	9.8	20.7
7 30	21 13.57	-31 38.5	1.044	2.041	7.6	19.0	7 30	21 12.93	+0 10.1	1.914	2.887	7.1	20.5
8 9	21 4.61	-32 37.6	1.037	2.028	8.4	19.0	8 9	21 4.89	-0 9.7	1.898	2.886	5.5	20.4
8 19	20 55.84	-33 10.5	1.051	2.017	11.9	19.2	8 19	20 56.97	-0 43.1	1.907	2.885	6.4	20.5
8 29	20 48.96	-33 13.6	1.085	2.007	16.1	19.4	8 29	20 50.01	-1 25.8	1.943	2.884	8.9	20.6
9 8	20 45.21	-32 48.7	1.137	1.998	20.0	19.6	9 8	20 44.71	-2 13.1	2.003	2.883	11.7	20.8
261100	2005 <i>SO</i> ₂₆₇		8 6.6 179°50	3°3/ 9.5 18			28135	1998 <i>ST</i> ₁₃₁		8 6.6 110°97	1°5/ 7.3 18		
6 30	21 28.35	-4 12.4	2.270	3.069	13.7	21.5	6 30	21 38.37	-12 18.2	1.428	2.269	18.3	17.8
7 10	21 24.61	-4 21.4	2.185	3.069	11.1	21.3	7 10	21 33.18	-12 13.9	1.365	2.282	14.3	17.6
7 20	21 19.15	-4 45.2	2.120	3.069	8.1	21.1	7 20	21 25.18	-12 22.5	1.322	2.294	9.7	17.3
7 30	21 12.40	-5 22.6	2.080	3.069	5.1	21.0	7 30	21 15.12	-12 41.5	1.301	2.307	4.7	17.1
8 9	21 5.03	-6 11.2	2.066	3.069	3.3	20.8	8 9	21 4.21	-13 6.2	1.306	2.318	1.7	16.9
8 19	20 57.78	-7 7.1	2.080	3.069	4.9	20.9	8 19	20 53.76	-13 31.9	1.337	2.330	6.3	17.3
8 29	20 51.40	-8 5.8	2.122	3.069	7.8	21.1	8 29	20 45.06	-13 54.4	1.392	2.341	11.0	17.6
9 8	20 46.54	-9 2.8	2.188	3.069	10.8	21.3	9 8	20 39.01	-14 10.7	1.469	2.352	15.0	17.8
105470	2000 <i>QE</i> ₂₀₉		8 6.6 174°33	0°1/ 6.6 17			74339	1998 <i>VW</i> ₁₆		8 6.6 269°10	1°9/ 7.9 18		
6 30	21 36.41	-14 41.7	1.568	2.412	16.8	20.0	6 30	21 30.54	-9 2.5	2.127	2.945	13.9	20.5
7 10	21 31.64	-14 54.4	1.494	2.414	13.1	19.7	7 10	21 26.63	-9 17.4	2.022	2.924	11.1	20.2
7 20	21 24.20	-15 18.2	1.439	2.415	8.7	19.5	7 20	21 20.71	-9 45.5	1.939	2.903	7.8	20.0
7 30	21 14.72	-15 49.3	1.408	2.416	3.9	19.2	7 30	21 13.20	-10 25.1	1.880	2.882	4.1	19.7
8 9	21 4.28	-16 22.8	1.404	2.417	1.2	19.0	8 9	21 4.79	-11 13.2	1.849	2.860	1.9	19.5
8 19	20 54.11	-16 53.4	1.425	2.417	6.2	19.4	8 19	20 56.32	-12 5.5	1.845	2.838	5.0	19.7
8 29	20 45.47	-17 17.2	1.471	2.417	10.8	19.6	8 29	20 48.74	-12 57.3	1.869	2.815	8.8	19.9
9 8	20 39.28	-17 31.8	1.540	2.416	14.8	19.9	9 8	20 42.83	-13 44.4	1.916	2.793	12.3	20.1
132188	2002 <i>EW</i> ₃₀		8 6.6 61°59	1°0/ 5.9 18			62699	2000 <i>TQ</i> ₂₈		8 6.6 328°19	11°6/ 30.5 18		
6 30	21 34.01	-15 14.7	1.257	2.121	18.9	19.6	6 30	21 36.49	-39 27.9	1.364	2.232	17.5	18.6
7 10	21 30.11	-15 57.8	1.206	2.138	14.5	19.4	7 10	21 33.03	-40 52.0	1.299	2.216	14.9	18.4
7 20	21 23.25	-16 54.7	1.175	2.156	9.5	19.1	7 20	21 25.83	-42 7.3	1.254	2.202	12.6	18.3
7 30	21 14.28	-17 58.8	1.165	2.174	4.1	18.9	7 30	21 15.65	-43 1.1	1.229	2.188	11.6	18.2
8 9	21 4.46	-19 1.8	1.180	2.192	2.0	18.8	8 9	21 4.00	-43 22.9	1.226	2.175	12.5	18.2
8 19	20 55.20	-19 56.3	1.219	2.211	7.1	19.2	8 19	20 52.78	-43 7.3	1.243	2.163	14.8	18.3
8 29	20 47.83	-20 37.1	1.282	2.229	11.9	19.5	8 29	20 43.85	-42 15.5	1.280	2.152	17.7	18.4
9 8	20 43.23	-21 2.0	1.366	2.247	16.0	19.8	9 8	20 38.43	-40 54.1	1.335	2.141	20.6	18.6
517938	2015 <i>TM</i> ₂₅₉		8 6.6 302°13	11°3/ 28.5 18			111764	2002 <i>CO</i> ₁₃₄		8 6.6 2°99	5°4/ 4.2 18		
6 30	21 46.93	-51 19.3	2.258	3.053	13.9	20.9	6 30	21 39.28	-29 11.6	1.530	2.391	16.3	19.0
7 10	21 39.97	-52 19.8	2.195	3.041	12.6	20.8	7 10	21 34.06	-29 27.4	1.464	2.391	12.8	18.8
7 20	21 29.74	-53 4.9	2.153	3.028	11.6	20.7	7 20	21 25.84	-29 40.1	1.417	2.391	9.1	18.6
7 30	21 17.11	-53 25.8	2.133	3.016	11.3	20.6	7 30	21 15.43	-29 42.9	1.394	2.391	5.9	18.4
8 9	21 3.54	-53 16.6	2.135	3.003	11.9	20.7	8 9	21 4.12	-29 30.2	1.395	2.392	5.9	18.4
8 19	20 50.63	-52 35.4	2.159	2.991	13.0	20.7	8 19	20 53.34	-28 59.2	1.422	2.393	8.9	18.6
8 29	20 39.89	-51 24.7	2.205	2.979	14.5	20.8	8 29	20 44.47	-28 10.9	1.473	2.395	12.6	18.8
9 8	20 32.26	-49 50.2	2.270	2.968	16.1	20.9	9 8	20 38.41	-27 8.7	1.545	2.397	16.1	19.0
312783	2010 <i>VX</i> ₅₂		8 6.6 3°95	0°3/ 6.3 18			178709	2000 <i>SO</i> ₂₀₁		8 6.6 237°57	3°9/ 3.6 18		
6 30	21 27.69	-15 4.8	1.746	2.600	14.9	20.3	6 30	21 34.14	-27 14.8	2.340	3.185	11.9	20.6
7 10	21 24.66	-15 31.6	1.673	2.600	11.5	20.1	7 10	21 29.20	-27 50.0	2.258	3.178	9.3	20.4
7 20	21 19.43	-16 8.8	1.621	2.600	7.6	19.9	7 20	21 22.25	-28 25.2	2.200	3.171	6.5	20.2
7 30	21 12.59	-16 52.9	1.593	2.601	3.3	19.6	7 30	21 13.80	-28 55.7	2.167	3.164	4.2	20.1
8 9	21 4.99	-17 38.6	1.590	2.603	1.3	19.5	8 9	21 4.64	-29 16.8	2.163	3.157	4.4	20.1
8 19	20 57.60	-18 21.0	1.614	2.606	5.6	19.8	8 19	20 55.66	-29 25.3	2.185	3.149	6.7	20.2
8 29	20 51.43	-18 55.7	1.663	2.609	9.7	20.0	8 29	20 47.77	-29 20.0	2.234	3.141	9.6	20.4
9 8	20 47.23	-19 20.0	1.734	2.613	13.3	20.3	9 8	20 41.69	-29 1.3	2.306	3.134	12.3	20.5
357728	2005 <i>QB</i> ₁₃₉		8 6.6 227°96	2°2/ 8.5 18			340508	2006 <i>JJ</i> ₇		8 6.6 210°40	5°7/ 11.2 18		
6 30	21 28.52	-7 0.4	2.402	3.209	12.8	21.4	6 30	21 30.91	+1 56.9	2.276	3.038	14.7	21.0
7 10	21 24.70	-7 22.0	2.310	3.203	10.2	21.2	7 10	21 26.64	+2 12.9	2.181	3.033	12.4	20.8
7 20	21 19.20	-7 56.7	2.239	3.198	7.2	21.0	7 20	21 20.55	+2 11.8	2.107	3.027	9.8	20.7
7 30	21 12.44	-8 42.8	2.194	3.192	4.1	20.8	7 30	21 13.07	+1 52.6	2.056	3.020	7.3	20.5
8 9	21 5.04	-9 37.3	2.177	3.186	2.2	20.7	8 9	21 4.87	+1 16.4	2.031	3.014	5.8	20.4
8 19	20 57.70	-10 36.0	2.188	3.179	4.4	20.8	8 19	20 56.71	+0 26.0	2.033	3.006	6.4	20.4
8 29	20 51.17	-11 34.8	2.226	3.173	7.6	21.0	8 29	20 49.43	-0 34.3	2.062	2.999	8.7	20.5
9 8	20 46.09	-12 29.7	2.290	3.166	10.6	21.2	9 8	20 43.71	-1 39.2	2.115	2.990	11.4	20.7
343462	2010 <i>EB</i> ₄₅		8 6.6 117°87	2°1/ 4.9 17			253699	2003 <i>UE</i> ₂₇₅		8 6.6 266°54	2°5		

EPHEMERIDES

8 6.6

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
139789	2001 <i>RK</i> ₅		8 6.6	2°82	3°1/ 8.7	18	25431	1999 <i>VW</i> ₁₉₄		8 6.6	209°18	0°1/ 6.6	18
6 30	21 29.28	- 7 3.5	1.834	2.656	15.6	19.7	6 30	21 33.68	-13 41.5	1.651	2.494	16.1	19.9
7 10	21 25.74	- 6 59.7	1.754	2.656	12.5	19.5	7 10	21 29.49	-14 8.4	1.572	2.491	12.6	19.7
7 20	21 20.10	- 7 10.7	1.695	2.656	8.9	19.3	7 20	21 22.79	-14 47.9	1.513	2.489	8.4	19.5
7 30	21 12.90	- 7 35.4	1.660	2.656	5.3	19.1	7 30	21 14.16	-15 36.4	1.478	2.486	3.7	19.2
8 9	21 4.94	- 8 11.1	1.649	2.657	3.1	18.9	8 9	21 4.56	-16 28.2	1.469	2.482	1.2	19.0
8 19	20 57.14	- 8 53.5	1.666	2.658	5.4	19.1	8 19	20 55.13	-17 17.5	1.487	2.479	6.0	19.3
8 29	20 50.48	- 9 38.0	1.708	2.659	9.1	19.3	8 29	20 47.05	-17 59.2	1.530	2.475	10.5	19.6
9 8	20 45.69	-10 20.0	1.773	2.660	12.6	19.5	9 8	20 41.23	-18 30.3	1.595	2.471	14.4	19.8
37091	2000 <i>UK</i> ₇₂		8 6.6	327°87	4°6/ 9.7	18	385000	2012 <i>TW</i> ₂₂₇		8 6.6	8°16	0°0/ 6.3	16
6 30	21 29.06	- 3 45.9	1.977	2.781	15.2	18.6	6 30	21 26.76	-13 26.4	1.258	2.130	18.4	20.4
7 10	21 25.47	- 3 20.9	1.889	2.774	12.5	18.4	7 10	21 24.69	-13 59.7	1.195	2.131	14.3	20.1
7 20	21 19.90	- 3 10.6	1.821	2.767	9.4	18.2	7 20	21 19.84	-14 49.3	1.151	2.133	9.5	19.9
7 30	21 12.81	- 3 15.5	1.776	2.761	6.4	18.0	7 30	21 12.90	-15 50.4	1.128	2.137	4.2	19.6
8 9	21 4.96	- 3 34.5	1.756	2.755	4.6	17.9	8 9	21 4.98	-16 55.6	1.128	2.141	1.4	19.4
8 19	20 57.21	- 4 4.6	1.763	2.749	6.0	18.0	8 19	20 57.37	-17 57.0	1.153	2.147	6.8	19.8
8 29	20 50.45	- 4 42.0	1.796	2.743	9.0	18.2	8 29	20 51.38	-18 47.9	1.200	2.154	11.8	20.1
9 8	20 45.44	- 5 21.8	1.852	2.738	12.2	18.4	9 8	20 47.95	-19 24.2	1.267	2.162	16.1	20.4
145588	Sudongpo		8 6.6	12°80	2°6/ 8.2	17	448553	2010 <i>RJ</i> ₁₀₀		8 6.6	225°34	0°6/ 6.1	18
6 30	21 27.93	- 7 35.4	1.197	2.054	20.1	19.9	6 30	21 31.37	-17 15.0	2.460	3.293	11.8	22.0
7 10	21 25.69	- 7 58.3	1.133	2.056	16.0	19.6	7 10	21 26.87	-17 30.8	2.373	3.288	9.1	21.8
7 20	21 20.57	- 8 44.5	1.085	2.059	11.2	19.3	7 20	21 20.63	-17 52.2	2.308	3.283	6.0	21.6
7 30	21 13.24	- 9 51.2	1.058	2.062	6.0	19.1	7 30	21 13.10	-18 16.5	2.270	3.278	2.6	21.3
8 9	21 4.83	-11 11.7	1.054	2.066	2.7	18.9	8 9	21 4.94	-18 40.5	2.260	3.272	1.2	21.2
8 19	20 56.71	-12 36.8	1.074	2.071	6.7	19.1	8 19	20 56.92	-19 1.0	2.278	3.266	4.6	21.5
8 29	20 50.26	-13 57.2	1.116	2.076	11.8	19.4	8 29	20 49.79	-19 15.7	2.324	3.260	7.9	21.7
9 8	20 46.49	-15 5.7	1.179	2.082	16.4	19.7	9 8	20 44.19	-19 23.2	2.395	3.254	10.8	21.8
495320	2014 <i>HP</i> ₁₈₁		8 6.6	338°41	2°4/ 8.6	18	190706	2001 <i>FK</i> ₁₅₈		8 6.6	286°86	0°2/ 6.7	18
6 30	21 26.41	- 6 40.2	1.855	2.681	15.3	20.4	6 30	21 33.76	-14 27.2	1.907	2.742	14.6	19.5
7 10	21 23.59	- 7 8.2	1.770	2.675	12.2	20.2	7 10	21 29.58	-14 38.6	1.793	2.709	11.5	19.2
7 20	21 18.74	- 7 53.6	1.704	2.668	8.7	20.0	7 20	21 22.97	-15 0.1	1.701	2.675	7.8	18.9
7 30	21 12.33	- 8 54.5	1.663	2.662	4.8	19.7	7 30	21 14.35	-15 29.3	1.634	2.641	3.6	18.6
8 9	21 5.12	-10 6.6	1.647	2.657	2.4	19.6	8 9	21 4.49	-16 2.2	1.593	2.606	1.1	18.4
8 19	20 58.00	-11 24.0	1.657	2.652	5.2	19.7	8 19	20 54.43	-16 34.4	1.579	2.571	5.8	18.6
8 29	20 51.91	-12 40.3	1.694	2.647	9.1	20.0	8 29	20 45.34	-17 1.6	1.592	2.535	10.3	18.8
9 8	20 47.62	-13 49.9	1.755	2.643	12.7	20.2	9 8	20 38.23	-17 20.9	1.628	2.499	14.4	19.0
476135	2007 <i>TY</i> ₂₄₅		8 6.6	311°84	6°3/ 2.9	17	285791	2000 <i>WN</i> ₁₄₁		8 6.6	161°81	4°3/ 10.6	18
6 30	21 34.57	-29 12.4	1.565	2.432	15.6	20.7	6 30	21 32.68	+ 0 32.2	3.319	4.060	10.9	21.1
7 10	21 30.92	-29 58.1	1.472	2.402	12.5	20.4	7 10	21 27.29	+ 1 6.4	3.229	4.067	9.1	21.0
7 20	21 24.20	-30 44.7	1.399	2.372	9.2	20.1	7 20	21 20.62	+ 1 30.2	3.161	4.073	7.2	20.9
7 30	21 14.94	-31 24.0	1.348	2.343	6.6	19.9	7 30	21 13.02	+ 1 43.1	3.120	4.079	5.4	20.8
8 9	21 4.24	-31 47.8	1.323	2.314	7.0	19.8	8 9	21 5.00	+ 1 45.3	3.108	4.085	4.4	20.7
8 19	20 53.51	-31 50.0	1.321	2.285	10.2	20.0	8 19	20 57.08	+ 1 38.0	3.124	4.089	4.9	20.7
8 29	20 44.32	-31 28.4	1.342	2.256	14.1	20.1	8 29	20 49.80	+ 1 23.0	3.170	4.094	6.5	20.9
9 8	20 37.90	-30 44.9	1.383	2.229	17.9	20.3	9 8	20 43.65	+ 1 3.0	3.242	4.097	8.4	21.0
370283	2002 <i>QC</i> ₉₄		8 6.6	9°04	1°5/ 5.8	17	264981	2003 <i>BE</i> ₈₀		8 6.6	202°31	5°3/ 10.9	17
6 30	21 24.77	-16 26.7	0.930	1.829	20.9	20.3	6 30	21 32.38	+ 3 48.8	1.272	2.072	22.3	20.2
7 10	21 23.91	-16 58.3	0.879	1.831	16.2	20.0	7 10	21 29.23	+ 2 33.6	1.190	2.070	18.6	19.9
7 20	21 19.68	-17 45.7	0.845	1.835	10.6	19.7	7 20	21 23.07	+ 0 36.7	1.123	2.068	14.1	19.6
7 30	21 12.89	-18 42.0	0.830	1.840	4.6	19.4	7 30	21 14.46	- 2 1.6	1.078	2.066	9.1	19.3
8 9	21 4.96	-19 37.9	0.835	1.847	2.5	19.3	8 9	21 4.47	- 5 12.6	1.058	2.063	5.4	19.1
8 19	20 57.54	-20 24.4	0.861	1.856	8.4	19.7	8 19	20 54.50	- 8 40.6	1.065	2.059	7.4	19.2
8 29	20 52.21	-20 55.0	0.908	1.867	13.9	20.0	8 29	20 46.07	-12 6.3	1.098	2.055	12.3	19.5
9 8	20 50.01	-21 7.3	0.972	1.880	18.6	20.4	9 8	20 40.40	-15 13.1	1.156	2.051	17.2	19.8
132660	2002 <i>LY</i> ₅₇		8 6.6	1°68	7°2/ 12.2	17	38430	1999 <i>RG</i> ₂₃₂		8 6.6	343°07	4°1/ 3.4	18
6 30	21 23.81	+ 2 47.5	1.375	2.187	20.3	18.9	6 30	21 28.06	-23 12.9	1.737	2.605	14.3	17.9
7 10	21 22.16	+ 2 51.1	1.302	2.185	17.2	18.7	7 10	21 25.21	-24 21.2	1.662	2.597	11.0	17.7
7 20	21 18.07	+ 2 25.5	1.246	2.184	13.6	18.5	7 20	21 19.99	-25 35.7	1.609	2.589	7.5	17.4
7 30	21 12.11	+ 1 29.2	1.209	2.185	9.9	18.3	7 30	21 12.95	-26 49.5	1.580	2.583	4.5	17.3
8 9	21 5.20	+ 0 5.2	1.194	2.186	7.4	18.1	8 9	21 4.99	-27 55.1	1.577	2.577	4.8	17.3
8 19	20 58.47	- 1 39.5	1.203	2.189	8.1	18.2	8 19	20 57.18	-28 46.2	1.600	2.571	8.0	17.4
8 29	20 53.08	- 3 34.9	1.235	2.193	11.2	18.4	8 29	20 50.63	-29 18.9	1.646	2.567	11.6	17.6
9 8	20 49.93	- 5 29.8	1.289	2.197	14.9	18.6	9 8	20 46.22	-29 32.5	1.714	2.563	14.9	17.8
103052	1999 <i>XT</i> ₁₃₁		8 6.6	155°92	4°5/ 2.8	18	469692	2005 <i>AY</i> ₄₄		8 6.6	277°01	1°9/ 5.2	18
6 30	21 34.64	-27 40.4	2.230	3.077	12.3	20.1	6 30	21 33.08	-18 38.1	1.987	2.831	13.7	21.5
7 10	21 29.66	-28 40.8	2.162	3.082	9.6	19.9	7 10	21 28.97	-19 22.1	1.881	2.803	10.7	21.3
7 20	21 22.58	-29 41.6	2.118	3.087	6.8	19.8	7 20	21 22.50	-20 15.4	1.797	2.774	7.1	21.0
7 30	21 13.96	-30 36.8	2.099	3.092	4.8	19.7	7 30	21 14.12	-21 13.3	1.738	2.745	3.3	20.7
8 9	21 4.64	-31 20.6	2.108	3.097	5.1	19.7	8 9	21 4.60	-22 10.2	1.706	2.715	2.6	20.6
8 19	20 55.55	-31 49.3	2.145	3.100	7.4	19.9	8 19	20 54.93	-23 0.1	1.702	2.685	6.4	20.8
8 29	20 47.65	-32 1.2	2.207	3.104	10.2	20.0	8 29	20 46.24	-23 38.6	1.723	2.654	10.5	21.0
9 8	20 41.66	-31 57.0	2.292	3.107	12.7	20.2	9 8	20 39.51	-24 3.2	1.768	2.623	14.2	21.1
359840	2011 <i>UW</i> ₃₄₀		8 6.6	252°99	0°7/ 7.1	18 R	479688	2014 <i>DT</i> ₉₁		8 6.6			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
26176	1996 <i>GD</i> ₂		8 6.6 295°42	3°3/ 9.1 18			232207	2002 <i>GO</i> ₁₁₁		8 6.6 47°70	3°6/ 9.4 17		
6 30	21 29.47	- 5 34.2	1.902	2.716	15.4	18.8	6 30	21 29.14	- 4 13.9	1.711	2.527	16.7	20.3
7 10	21 25.87	- 5 39.1	1.817	2.713	12.4	18.6	7 10	21 25.78	- 4 32.2	1.636	2.532	13.5	20.1
7 20	21 20.22	- 6 0.1	1.753	2.709	9.0	18.4	7 20	21 20.23	- 5 10.2	1.580	2.537	9.8	19.9
7 30	21 13.01	- 6 36.3	1.712	2.706	5.5	18.2	7 30	21 13.03	- 6 6.4	1.547	2.541	6.0	19.6
8 9	21 5.00	- 7 24.6	1.697	2.703	3.3	18.0	8 9	21 5.04	- 7 16.6	1.540	2.546	3.6	19.5
8 19	20 57.11	- 8 20.5	1.708	2.699	5.4	18.2	8 19	20 57.24	- 8 34.6	1.559	2.552	5.7	19.7
8 29	20 50.28	- 9 18.8	1.746	2.696	9.0	18.4	8 29	20 50.64	- 9 53.5	1.604	2.557	9.5	19.9
9 8	20 45.26	-10 14.3	1.807	2.693	12.5	18.6	9 8	20 46.02	-11 7.1	1.672	2.562	13.1	20.1
63780	2001 <i>RW</i> ₄		8 6.6 281°40	2°8/ 8.2 18			306304	2011 <i>SY</i> ₆₄		8 6.6 337°99	1°5/ 7.6 18		
6 30	21 32.21	- 8 50.5	1.633	2.464	16.8	19.9	6 30	21 29.40	-11 5.3	1.707	2.548	15.7	21.3
7 10	21 28.44	- 8 41.8	1.545	2.453	13.5	19.7	7 10	21 26.09	-11 13.3	1.626	2.543	12.4	21.0
7 20	21 22.18	- 8 47.7	1.476	2.442	9.5	19.4	7 20	21 20.51	-11 34.6	1.565	2.537	8.5	20.8
7 30	21 13.96	- 9 7.3	1.430	2.430	5.3	19.1	7 30	21 13.18	-12 7.1	1.528	2.532	4.3	20.5
8 9	21 4.68	- 9 37.7	1.409	2.419	2.9	19.0	8 9	21 4.99	-12 46.6	1.516	2.528	1.6	20.3
8 19	20 55.47	-10 14.6	1.414	2.407	6.0	19.1	8 19	20 56.95	-13 28.4	1.529	2.524	5.5	20.6
8 29	20 47.51	-10 52.9	1.444	2.396	10.4	19.4	8 29	20 50.10	-14 7.8	1.569	2.520	9.8	20.8
9 8	20 41.75	-11 28.0	1.496	2.384	14.5	19.6	9 8	20 45.31	-14 40.7	1.630	2.517	13.6	21.0
481478	2007 <i>BV</i> ₁₀₀		8 6.6 265°93	0°3/ 6.8 16			509952	2009 <i>SJ</i> ₅₀		8 6.6 260°75	0°9/ 6.0 18		
6 30	21 34.30	-16 1.0	2.298	3.125	12.6	21.5	6 30	21 34.04	-16 45.2	1.730	2.576	15.3	22.2
7 10	21 29.27	-15 48.9	2.203	3.115	9.9	21.3	7 10	21 29.84	-17 10.4	1.639	2.562	11.9	21.9
7 20	21 22.29	-15 42.0	2.132	3.104	6.6	21.1	7 20	21 23.12	-17 45.3	1.570	2.548	7.9	21.7
7 30	21 13.87	-15 38.3	2.086	3.093	3.0	20.9	7 30	21 14.40	-18 25.9	1.525	2.533	3.5	21.4
8 9	21 4.73	-15 35.7	2.069	3.082	0.9	20.7	8 9	21 4.59	-19 6.8	1.506	2.519	1.7	21.2
8 19	20 55.71	-15 31.8	2.080	3.071	4.7	20.9	8 19	20 54.84	-19 42.6	1.514	2.503	6.3	21.5
8 29	20 47.68	-15 25.1	2.118	3.059	8.3	21.1	8 29	20 46.34	-20 9.3	1.547	2.488	10.7	21.7
9 8	20 41.34	-15 14.3	2.182	3.048	11.5	21.3	9 8	20 40.06	-20 24.4	1.603	2.472	14.7	21.9
221866	2008 <i>GB</i> ₈₁		8 6.6 25°77	1°2/ 7.3 17			145627	2006 <i>RY</i> ₁₀₂		8 6.6 258°88	1°9/ 2.6 16		
6 30	21 30.78	-11 4.4	1.438	2.288	17.7	20.4	6 30	21 21.44	-28 24.4	6.319	7.154	4.9	19.8
7 10	21 27.48	-11 26.3	1.369	2.291	13.9	20.2	7 10	21 18.37	-28 56.9	6.225	7.139	3.8	19.7
7 20	21 21.55	-12 4.7	1.319	2.294	9.4	19.9	7 20	21 14.62	-29 29.0	6.157	7.124	2.7	19.6
7 30	21 13.65	-12 56.0	1.291	2.297	4.5	19.7	7 30	21 10.39	-29 59.2	6.118	7.108	1.9	19.5
8 9	21 4.80	-13 54.4	1.288	2.301	1.5	19.5	8 9	21 5.91	-30 25.9	6.108	7.093	2.1	19.5
8 19	20 56.23	-14 53.2	1.310	2.305	6.1	19.8	8 19	21 1.46	-30 48.0	6.127	7.078	3.0	19.6
8 29	20 49.14	-15 46.2	1.357	2.309	10.9	20.1	8 29	20 57.30	-31 4.6	6.175	7.062	4.2	19.7
9 8	20 44.46	-16 28.8	1.425	2.314	15.0	20.3	9 8	20 53.69	-31 15.3	6.248	7.046	5.3	19.8
375673	2009 <i>FP</i> ₇₃		8 6.6 22°55	0°5/ 6.3 17			339114	2004 <i>RK</i> ₂₃₀		8 6.6 20°90	2°9/ 5.0 16		
6 30	21 25.48	-12 57.0	0.932	1.824	21.6	19.8	6 30	21 34.13	-21 50.4	1.495	2.360	16.4	20.2
7 10	21 24.31	-13 49.5	0.888	1.835	16.7	19.6	7 10	21 30.06	-22 16.0	1.430	2.363	12.6	20.0
7 20	21 19.84	-15 3.0	0.861	1.849	11.0	19.3	7 20	21 23.24	-22 46.6	1.385	2.366	8.4	19.8
7 30	21 12.95	-16 29.9	0.854	1.864	4.7	19.0	7 30	21 14.39	-23 16.5	1.363	2.370	4.2	19.5
8 9	21 5.06	-17 58.8	0.867	1.880	1.8	18.9	8 9	21 4.65	-23 39.4	1.366	2.374	3.5	19.5
8 19	20 57.76	-19 18.4	0.903	1.899	7.9	19.3	8 19	20 55.30	-23 50.9	1.394	2.379	7.4	19.7
8 29	20 52.54	-20 20.6	0.959	1.918	13.4	19.7	8 29	20 47.59	-23 48.7	1.447	2.384	11.7	20.0
9 8	20 50.34	-21 1.4	1.034	1.939	18.0	20.0	9 8	20 42.44	-23 33.0	1.520	2.389	15.4	20.2
315972	2009 <i>BA</i> ₁₁₃		8 6.6 127°88	2°6/ 5.1 17			329743	2004 <i>BU</i> ₂₄		8 6.6 244°07	0°1/ 6.7 18		
6 30	21 37.54	-20 17.0	1.541	2.396	16.5	21.5	6 30	21 33.90	-13 44.4	1.741	2.580	15.6	21.3
7 10	21 32.57	-20 56.9	1.477	2.405	12.7	21.3	7 10	21 29.69	-14 10.6	1.651	2.568	12.2	21.1
7 20	21 24.83	-21 43.8	1.434	2.413	8.4	21.1	7 20	21 23.00	-14 49.2	1.581	2.556	8.2	20.8
7 30	21 15.05	-22 31.3	1.415	2.421	4.0	20.8	7 30	21 14.35	-15 36.8	1.536	2.543	3.7	20.5
8 9	21 4.38	-23 12.7	1.421	2.429	3.3	20.8	8 9	21 4.63	-16 28.2	1.516	2.530	1.1	20.3
8 19	20 54.12	-23 42.4	1.454	2.437	7.3	21.1	8 19	20 54.95	-17 17.7	1.524	2.516	5.9	20.6
8 29	20 45.53	-23 57.5	1.511	2.444	11.5	21.3	8 29	20 46.48	-18 0.2	1.558	2.502	10.4	20.8
9 8	20 39.52	-23 57.7	1.590	2.451	15.2	21.6	9 8	20 40.18	-18 32.5	1.614	2.487	14.4	21.0
509155	2006 <i>CU</i> ₄₆		8 6.6 276°86	1°0/ 5.9 18			509843	2008 <i>YK</i> ₅₅		8 6.6 330°46	1°9/ 5.2 18		
6 30	21 31.54	-16 5.3	1.738	2.588	15.1	21.9	6 30	21 30.23	-17 52.1	1.775	2.629	14.7	21.0
7 10	21 27.87	-16 43.4	1.650	2.575	11.8	21.7	7 10	21 26.73	-18 43.2	1.698	2.626	11.3	20.7
7 20	21 21.78	-17 32.9	1.583	2.562	7.8	21.4	7 20	21 20.93	-19 44.0	1.643	2.623	7.4	20.5
7 30	21 13.78	-18 29.2	1.540	2.549	3.4	21.1	7 30	21 13.38	-20 49.2	1.612	2.620	3.4	20.3
8 9	21 4.75	-19 26.5	1.524	2.536	1.8	21.0	8 9	21 4.96	-21 52.4	1.608	2.617	2.5	20.2
8 19	20 55.77	-20 18.7	1.534	2.523	6.3	21.2	8 19	20 56.69	-22 47.3	1.630	2.615	6.4	20.4
8 29	20 48.00	-21 0.8	1.569	2.509	10.6	21.4	8 29	20 49.65	-23 29.6	1.677	2.612	10.4	20.7
9 8	20 42.37	-21 30.0	1.626	2.496	14.5	21.7	9 8	20 44.68	-23 57.1	1.747	2.610	14.0	20.9
215192	2000 <i>QV</i> ₁₅₅		8 6.6 313°33	5°4/10.5 18			443129	2014 <i>BS</i> ₈		8 6.6 308°58	2°9/ 6.2 17		
6 30	21 27.80	- 1 2.8	1.930	2.726	15.8	19.9	6 30	21 48.88	-25 47.3	0.923	1.801	22.9	20.4
7 10	21 24.64	- 0 44.3	1.835	2.713	13.2	19.7	7 10	21 43.49	-24 55.2	0.852	1.790	18.2	20.1
7 20	21 19.46	- 0 43.4	1.760	2.699	10.2	19.4	7 20	21 33.28	-23 56.2	0.796	1.779	12.5	19.7
7 30	21 12.71	- 1 1.1	1.708	2.687	7.2	19.2	7 30	21 19.16	-22 43.6	0.761	1.769	6.0	19.3
8 9	21 5.11	- 1 36.2	1.680	2.674	5.5	19.1	8 9	21 3.12	-21 13.4	0.747	1.758	3.6	19.1
8 19	20 57.53	- 2 25.5	1.678	2.662	6.5	19.1	8 19	20 47.71	-19 27.5	0.756	1.749	9.8	19.4
8 29	20 50.91	- 3 24.1	1.702	2.650	9.4	19.3	8 29	20 35.39	-17 32.6	0.787	1.740	16.4	19.8
9 8	20 46.04	- 4 26.0	1.749	2.638	12.7	19.5	9 8	20 27.63	-15 36.5	0.835	1.731	22.1	20.1
181250	2005 <i>UU</i> ₁₇₇		8 6.6 10°52	0°5/ 6.3 18			445390	2010 <i>RM</i> ₁₇₆		8 6			

EPHEMERIDES

8 6.6

8 6.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
514105	2015 <i>BT</i> ₉₂		8 6.6 10°82	13°3/10.2	18		453483	2009 <i>SP</i> ₂₅₈		8 6.6 298°70	0°2/	6.5	18
6 30	21 35.20	- 1 52.8	0.687	1.561	29.1	20.5	6 30	21 28.66	-14 54.8	2.332	3.168	12.2	21.5
7 10	21 32.94	+ 0 35.2	0.639	1.561	24.8	20.2	7 10	21 24.95	-15 21.2	2.245	3.161	9.5	21.3
7 20	21 26.29	+ 2 38.3	0.603	1.561	20.0	20.0	7 20	21 19.48	-15 55.8	2.180	3.155	6.3	21.1
7 30	21 16.09	+ 4 5.1	0.582	1.563	15.6	19.7	7 30	21 12.70	-16 35.9	2.141	3.148	2.8	20.8
8 9	21 4.10	+ 4 47.9	0.576	1.566	13.3	19.7	8 9	21 5.27	-17 17.6	2.129	3.142	1.0	20.7
8 19	20 52.60	+ 4 46.4	0.587	1.569	14.7	19.7	8 19	20 57.93	-17 57.2	2.145	3.136	4.6	20.9
8 29	20 43.88	+ 4 9.0	0.615	1.573	18.6	20.0	8 29	20 51.47	-18 31.2	2.188	3.129	8.0	21.1
9 8	20 39.40	+ 3 10.4	0.656	1.578	23.1	20.3	9 8	20 46.53	-18 57.3	2.256	3.123	11.1	21.3
196285	2003 <i>ET</i> ₄₁		8 6.6 27°61	1°2/	7.3	17	164242	2004 <i>TV</i> ₅₁		8 6.6 95°24	0°1/	6.7	17
6 30	21 27.05	-10 6.5	1.098	1.970	20.5	18.9	6 30	21 36.72	-14 17.6	1.402	2.252	18.1	20.3
7 10	21 25.01	-10 44.6	1.054	1.988	16.0	18.7	7 10	21 32.05	-14 33.6	1.341	2.264	14.0	20.1
7 20	21 20.05	-11 43.8	1.027	2.007	10.7	18.4	7 20	21 24.55	-15 2.1	1.300	2.277	9.3	19.9
7 30	21 13.00	-12 58.6	1.021	2.028	5.1	18.2	7 30	21 14.99	-15 38.9	1.282	2.289	4.1	19.6
8 9	21 5.14	-14 20.0	1.037	2.050	1.5	18.0	8 9	21 4.56	-16 17.8	1.289	2.302	1.2	19.4
8 19	20 57.83	-15 38.5	1.077	2.073	6.7	18.4	8 19	20 54.60	-16 53.4	1.321	2.314	6.4	19.8
8 29	20 52.36	-16 46.1	1.139	2.098	11.7	18.8	8 29	20 46.37	-17 21.1	1.378	2.326	11.2	20.1
9 8	20 49.58	-17 37.9	1.221	2.123	16.0	19.1	9 8	20 40.79	-17 38.5	1.456	2.337	15.2	20.4
24593	3041 <i>T</i> -3		8 6.6 213°63	2°4/	4.7	18	314425	2005 <i>US</i> ₄₂₉		8 6.6 239°24	3°6/	9.6	18
6 30	21 33.38	-21 0.2	2.090	2.936	13.1	19.4	6 30	21 29.64	- 4 7.3	2.463	3.254	13.0	21.5
7 10	21 28.84	-21 42.9	2.009	2.931	10.1	19.2	7 10	21 25.56	- 3 55.3	2.369	3.247	10.6	21.3
7 20	21 22.17	-22 30.9	1.949	2.927	6.7	19.0	7 20	21 19.82	- 3 55.7	2.296	3.241	7.9	21.1
7 30	21 13.90	-23 19.5	1.916	2.922	3.4	18.8	7 30	21 12.84	- 4 8.4	2.248	3.234	5.2	20.9
8 9	21 4.83	-24 3.4	1.910	2.916	3.0	18.7	8 9	21 5.23	- 4 31.8	2.227	3.227	3.6	20.8
8 19	20 55.90	-24 38.1	1.931	2.910	6.2	18.9	8 19	20 57.68	- 5 3.6	2.234	3.219	4.9	20.9
8 29	20 48.08	-25 0.5	1.979	2.904	9.7	19.1	8 29	20 50.94	- 5 40.3	2.268	3.212	7.6	21.1
9 8	20 42.15	-25 9.9	2.050	2.898	12.8	19.3	9 8	20 45.60	- 6 18.2	2.327	3.205	10.4	21.2
185904	2000 <i>SP</i> ₇₁		8 6.6 305°75	5°1/	2.9	18	432670	2011 <i>AT</i> ₅₁		8 6.6 220°61	0°6/	6.2	17
6 30	21 32.39	-27 31.7	1.910	2.769	13.6	20.3	6 30	21 34.97	-16 0.8	1.857	2.696	14.7	22.8
7 10	21 28.63	-28 23.7	1.815	2.742	10.7	20.1	7 10	21 30.33	-16 25.2	1.771	2.689	11.5	22.6
7 20	21 22.37	-29 18.1	1.742	2.716	7.7	19.8	7 20	21 23.31	-16 59.0	1.706	2.682	7.6	22.3
7 30	21 14.12	-30 8.2	1.693	2.689	5.3	19.6	7 30	21 14.48	-17 38.4	1.667	2.674	3.3	22.1
8 9	21 4.75	-30 47.2	1.671	2.663	5.7	19.6	8 9	21 4.71	-18 18.4	1.654	2.666	1.4	21.9
8 19	20 55.37	-31 9.9	1.674	2.636	8.5	19.7	8 19	20 55.06	-18 54.2	1.668	2.657	5.8	22.2
8 29	20 47.16	-31 13.4	1.701	2.610	12.0	19.9	8 29	20 46.61	-19 21.9	1.708	2.648	10.0	22.4
9 8	20 41.13	-30 58.2	1.750	2.585	15.3	20.0	9 8	20 40.26	-19 39.5	1.772	2.638	13.7	22.6
98524	2000 <i>VT</i> ₃₀		8 6.6 253°37	2°7/	4.8	18	41152	1999 <i>VW</i> ₁₄₈		8 6.6 113°94	0°0/	6.5	18
6 30	21 33.77	-18 59.4	1.537	2.396	16.3	19.3	6 30	21 29.94	-14 22.3	2.474	3.302	11.8	19.6
7 10	21 29.98	-19 57.1	1.456	2.386	12.6	19.1	7 10	21 25.71	-14 46.8	2.399	3.311	9.1	19.4
7 20	21 23.40	-21 5.9	1.396	2.377	8.4	18.8	7 20	21 19.85	-15 18.9	2.347	3.319	6.0	19.2
7 30	21 14.60	-22 19.3	1.360	2.367	4.0	18.5	7 30	21 12.82	-15 55.9	2.320	3.327	2.7	19.0
8 9	21 4.61	-23 28.9	1.349	2.357	3.5	18.4	8 9	21 5.27	-16 34.3	2.322	3.335	0.8	18.9
8 19	20 54.70	-24 27.3	1.364	2.347	7.7	18.7	8 19	20 57.89	-17 10.7	2.353	3.343	4.3	19.2
8 29	20 46.25	-25 9.0	1.403	2.336	12.2	18.9	8 29	20 51.41	-17 42.2	2.411	3.351	7.4	19.4
9 8	20 40.31	-25 32.3	1.463	2.325	16.2	19.1	9 8	20 46.39	-18 6.7	2.494	3.359	10.3	19.6
386621	2009 <i>RL</i> ₅₉		8 6.6 329°39	0°6/	6.3	18	389112	2008 <i>YG</i> ₆₃		8 6.6 181°89	1°0/	7.4	17
6 30	21 24.32	-15 53.4	1.063	1.954	19.6	20.2	6 30	21 31.67	-11 14.5	2.320	3.139	12.8	22.3
7 10	21 23.76	-16 3.3	0.973	1.921	15.5	19.8	7 10	21 27.21	-11 34.5	2.235	3.139	10.1	22.1
7 20	21 19.97	-16 28.3	0.901	1.888	10.5	19.4	7 20	21 20.94	-12 4.8	2.172	3.140	6.8	21.9
7 30	21 13.34	-17 5.4	0.847	1.857	4.7	19.0	7 30	21 13.34	-12 43.1	2.136	3.139	3.3	21.7
8 9	21 4.95	-17 48.0	0.815	1.828	1.8	18.7	8 9	21 5.10	-13 25.9	2.126	3.139	1.2	21.5
8 19	20 56.34	-18 28.2	0.803	1.800	8.3	19.0	8 19	20 56.98	-14 9.5	2.146	3.138	4.4	21.7
8 29	20 49.35	-18 58.4	0.812	1.774	14.6	19.2	8 29	20 49.78	-14 50.1	2.193	3.136	7.9	21.9
9 8	20 45.52	-19 13.6	0.837	1.751	20.2	19.4	9 8	20 44.16	-15 24.8	2.265	3.135	11.0	22.1
217669	1998 <i>UH</i> ₆		8 6.6 300°84	0°9/	6.0	18	111058	2001 <i>VN</i> ₄₀		8 6.6 276°09	1°3/	5.7	18
6 30	21 30.78	-15 37.3	1.448	2.309	17.0	20.7	6 30	21 31.15	-18 13.7	2.124	2.967	13.0	20.0
7 10	21 27.94	-16 10.9	1.353	2.283	13.4	20.4	7 10	21 27.11	-18 41.5	2.036	2.957	10.0	19.7
7 20	21 22.27	-16 58.9	1.277	2.258	9.0	20.1	7 20	21 21.04	-19 16.2	1.970	2.947	6.6	19.5
7 30	21 14.20	-17 57.1	1.224	2.233	3.9	19.7	7 30	21 13.44	-19 54.0	1.929	2.937	2.9	19.3
8 9	21 4.72	-18 58.7	1.195	2.208	1.9	19.5	8 9	21 5.06	-20 30.5	1.916	2.927	1.8	19.2
8 19	20 55.09	-19 56.1	1.191	2.183	7.2	19.8	8 19	20 56.78	-21 1.5	1.930	2.917	5.5	19.4
8 29	20 46.79	-20 42.7	1.211	2.158	12.5	20.0	8 29	20 49.51	-21 23.9	1.971	2.907	9.1	19.6
9 8	20 41.03	-21 14.4	1.251	2.134	17.1	20.2	9 8	20 44.01	-21 36.2	2.036	2.897	12.4	19.8
485131	2010 <i>MH</i> ₉₇		8 6.6 283°34	6°1/11.8	17		91026	1998 <i>DS</i> ₃₄		8 6.6 61°17	5°7/	3.7	18
6 30	21 28.09	+ 3 37.3	2.343	3.100	14.5	22.1	6 30	21 39.41	-29 34.4	1.598	2.456	15.8	18.5
7 10	21 24.62	+ 3 49.9	2.231	3.076	12.4	21.9	7 10	21 33.98	-30 8.1	1.543	2.468	12.4	18.3
7 20	21 19.36	+ 3 44.7	2.139	3.052	10.0	21.7	7 20	21 25.72	-30 39.0	1.508	2.480	8.9	18.2
7 30	21 12.70	+ 3 20.1	2.069	3.028	7.7	21.5	7 30	21 15.47	-30 59.8	1.497	2.491	6.1	18.0
8 9	21 5.23	+ 2 36.5	2.025	3.003	6.2	21.4	8 9	21 4.47	-31 4.6	1.512	2.503	6.2	18.1
8 19	20 57.68	+ 1 36.5	2.008	2.979	6.7	21.4	8 19	20 54.08	-30 50.4	1.551	2.516	8.9	18.3
8 29	20 50.85	+ 0 24.4	2.016	2.954	8.8	21.5	8 29	20 45.56	-30 17.8	1.615	2.528	12.3	18.5
9 8	20 45.46	- 0 54.1	2.050	2.929	11.5	21.6	9 8	20 39.73	-29 29.8	1.700	2.540	15.4	18.7
145377	2005 <i>NJ</i> ₆		8 6.6 359°22	2°1/	7.9	18	96576	1998 <i>UH</i> ₃₅		8 6.6 232°21			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
472624	2015 DC ₁₈₈		8 6.6	20°07'	4.3°/ 3.6	16	427968	2005 YQ ₁₀₅		8 6.6	38°74'	5.7°/ 9.2	18
6 30	21 25.94	-19 14.2	1.120	2.011	18.8	19.8	6 30	21 35.84	-5 50.2	1.445	2.268	19.0	20.1
7 10	21 24.43	-20 53.9	1.073	2.021	14.3	19.6	7 10	21 31.21	-4 43.2	1.382	2.279	15.5	19.9
7 20	21 19.88	-22 46.5	1.045	2.033	9.4	19.4	7 20	21 23.94	-3 51.6	1.338	2.291	11.5	19.7
7 30	21 13.05	-24 40.9	1.039	2.046	5.1	19.2	7 30	21 14.75	-3 17.2	1.316	2.304	7.7	19.6
8 9	21 5.22	-26 24.4	1.055	2.060	5.3	19.2	8 9	21 4.74	-2 59.8	1.318	2.316	5.7	19.5
8 19	20 57.85	-27 46.7	1.095	2.076	9.5	19.5	8 19	20 55.16	-2 57.5	1.345	2.330	7.5	19.6
8 29	20 52.35	-28 42.0	1.156	2.092	14.0	19.8	8 29	20 47.19	-3 6.4	1.396	2.344	11.1	19.9
9 8	20 49.66	-29 10.0	1.236	2.110	17.9	20.1	9 8	20 41.69	-3 21.3	1.469	2.358	14.6	20.1
218445	2004 RS ₂₁₂		8 6.6	226°46'	2°0/ 8.2	17 R	277495	2005 WC ₁₁₀		8 6.6	312°13'	1°9/ 5.4	18
6 30	21 32.50	-9 33.7	2.806	3.606	11.3	20.5	6 30	21 32.83	-18 20.0	1.650	2.505	15.5	20.4
7 10	21 27.54	-9 16.7	2.707	3.597	9.0	20.3	7 10	21 28.91	-19 1.7	1.577	2.505	12.0	20.2
7 20	21 21.03	-9 7.2	2.631	3.588	6.4	20.2	7 20	21 22.49	-19 52.6	1.524	2.504	7.9	20.0
7 30	21 13.37	-9 4.5	2.581	3.578	3.6	20.0	7 30	21 14.16	-20 47.3	1.496	2.503	3.6	19.7
8 9	21 5.13	-9 7.3	2.560	3.568	2.1	19.8	8 9	21 4.91	-21 39.2	1.493	2.503	2.6	19.6
8 19	20 56.96	-9 13.9	2.568	3.558	4.1	20.0	8 19	20 55.88	-22 22.5	1.516	2.502	6.7	19.9
8 29	20 49.53	-9 22.2	2.605	3.547	6.9	20.1	8 29	20 48.24	-22 53.0	1.565	2.502	10.9	20.1
9 8	20 43.41	-9 30.3	2.668	3.536	9.6	20.3	9 8	20 42.87	-23 9.1	1.635	2.501	14.6	20.4
104873	2000 HG ₉₇		8 6.6	38°51'	3.2°/ 4.5	17	335029	2004 QU		8 6.6	315°40'	8°0/ 5.9	12 CR
6 30	21 31.39	-19 27.9	1.367	2.238	17.2	19.2	6 30	21 57.08	-34 47.4	0.975	1.841	22.9	19.7
7 10	21 28.18	-20 35.4	1.310	2.246	13.2	19.0	7 10	21 50.07	-34 17.0	0.903	1.829	18.8	19.3
7 20	21 22.15	-21 53.2	1.272	2.255	8.7	18.8	7 20	21 37.72	-33 29.5	0.846	1.817	13.9	19.0
7 30	21 14.02	-23 13.2	1.257	2.264	4.3	18.6	7 30	21 21.15	-32 12.4	0.810	1.806	9.4	18.7
8 9	21 4.93	-24 26.2	1.267	2.274	4.0	18.6	8 9	21 2.76	-30 17.9	0.796	1.795	8.3	18.7
8 19	20 56.23	-25 24.6	1.301	2.284	8.1	18.8	8 19	20 45.49	-27 48.9	0.806	1.786	12.2	18.8
8 29	20 49.22	-26 3.7	1.359	2.294	12.4	19.1	8 29	20 31.91	-24 57.9	0.838	1.776	17.6	19.1
9 8	20 44.82	-26 22.8	1.438	2.305	16.2	19.4	9 8	20 23.39	-22 0.3	0.890	1.768	22.7	19.4
501760	2014 UE ₁₇₁		8 6.6	310°59'	0°2/ 6.8	17	508895	2003 UB ₁₀₇		8 6.6	333°51'	1°0/ 6.9	18
6 30	21 32.77	-12 57.8	1.350	2.206	18.3	21.0	6 30	21 33.99	-16 30.1	1.368	2.230	17.8	20.2
7 10	21 29.34	-13 27.0	1.277	2.204	14.3	20.8	7 10	21 30.39	-15 49.5	1.283	2.213	14.1	19.9
7 20	21 23.03	-14 12.3	1.224	2.202	9.6	20.5	7 20	21 23.81	-15 14.5	1.218	2.196	9.6	19.6
7 30	21 14.47	-15 9.5	1.193	2.200	4.3	20.2	7 30	21 14.86	-14 43.6	1.174	2.181	4.5	19.2
8 9	21 4.78	-16 11.7	1.186	2.199	1.3	20.0	8 9	21 4.68	-14 14.7	1.154	2.167	1.5	19.0
8 19	20 55.31	-17 11.3	1.203	2.197	6.7	20.3	8 19	20 54.65	-13 46.1	1.159	2.154	6.7	19.3
8 29	20 47.45	-18 2.0	1.245	2.196	11.8	20.6	8 29	20 46.21	-13 16.3	1.187	2.142	11.9	19.5
9 8	20 42.23	-18 39.4	1.308	2.194	16.2	20.9	9 8	20 40.49	-12 44.3	1.237	2.131	16.4	19.8
426968	2013 YW ₁₀₃		8 6.6	317°26'	2°1/ 5.4	18	358364	2006 WL ₂₀₀		8 6.6	151°18'	0°7/ 5.9	18
6 30	21 28.72	-17 42.0	1.262	2.139	18.0	20.3	6 30	21 31.10	-17 2.8	2.817	3.643	10.6	23.0
7 10	21 26.74	-18 20.8	1.174	2.114	14.1	20.0	7 10	21 26.43	-17 33.8	2.740	3.652	8.1	22.9
7 20	21 21.68	-19 13.8	1.105	2.090	9.4	19.6	7 20	21 20.26	-18 10.2	2.686	3.660	5.3	22.7
7 30	21 14.04	-20 15.5	1.057	2.066	4.3	19.3	7 30	21 13.03	-18 49.1	2.660	3.668	2.3	22.5
8 9	21 4.87	-21 17.8	1.032	2.043	3.0	19.1	8 9	21 5.30	-19 27.1	2.663	3.675	1.2	22.4
8 19	20 55.60	-22 12.0	1.030	2.020	8.3	19.4	8 19	20 57.73	-20 1.1	2.695	3.681	4.1	22.7
8 29	20 47.86	-22 51.0	1.050	1.999	13.7	19.6	8 29	20 50.96	-20 28.9	2.756	3.687	7.0	22.9
9 8	20 42.96	-23 11.4	1.089	1.978	18.6	19.8	9 8	20 45.53	-20 49.0	2.842	3.693	9.5	23.0
123710	2000 YQ ₁₂₀		8 6.6	161°15'	5°0/ 2.4	18	103753	2000 CA ₁₁₈		8 6.6	354°22'	1°0/ 5.8	18
6 30	21 36.18	-33 21.9	2.752	3.586	10.6	19.6	6 30	21 27.74	-13 49.2	1.600	2.456	15.9	19.2
7 10	21 30.51	-33 59.4	2.683	3.590	8.5	19.5	7 10	21 25.06	-14 57.9	1.525	2.453	12.3	19.0
7 20	21 23.01	-34 32.8	2.638	3.594	6.4	19.4	7 20	21 20.00	-16 22.4	1.471	2.451	8.1	18.8
7 30	21 14.22	-34 57.5	2.619	3.597	5.1	19.3	7 30	21 13.10	-17 57.1	1.441	2.450	3.5	18.5
8 9	21 4.90	-35 9.6	2.629	3.600	5.4	19.3	8 9	21 5.26	-19 33.7	1.436	2.448	1.9	18.4
8 19	20 55.85	-35 7.0	2.666	3.603	7.0	19.4	8 19	20 57.55	-21 4.0	1.458	2.448	6.5	18.7
8 29	20 47.88	-34 49.4	2.729	3.606	9.2	19.6	8 29	20 51.11	-22 20.8	1.505	2.448	10.8	18.9
9 8	20 41.60	-34 18.3	2.815	3.608	11.2	19.7	9 8	20 46.83	-23 20.2	1.574	2.448	14.7	19.2
245366	2005 GS		8 6.6	141°98'	5°5/ 2.6	17	344761	2003 WO ₄₄		8 6.6	257°64'	7°5/ 1.5	18
6 30	21 36.25	-30 21.4	2.063	2.912	13.1	20.8	6 30	21 38.74	-35 31.3	1.951	2.797	13.8	20.5
7 10	21 31.15	-31 16.0	1.997	2.916	10.3	20.6	7 10	21 33.47	-36 28.4	1.879	2.790	11.3	20.3
7 20	21 23.73	-32 8.8	1.955	2.921	7.6	20.4	7 20	21 25.49	-37 20.0	1.830	2.783	9.0	20.1
7 30	21 14.62	-32 53.2	1.938	2.925	5.7	20.3	7 30	21 15.48	-37 58.4	1.805	2.776	7.6	20.0
8 9	21 4.77	-33 23.3	1.947	2.929	6.0	20.4	8 9	21 4.53	-38 16.9	1.805	2.769	8.1	20.1
8 19	20 55.24	-33 35.6	1.983	2.933	8.3	20.5	8 19	20 53.90	-38 12.0	1.830	2.761	10.1	20.2
8 29	20 47.06	-33 29.2	2.044	2.937	11.1	20.7	8 29	20 44.84	-37 43.6	1.879	2.754	12.8	20.3
9 8	20 41.03	-33 6.0	2.126	2.940	13.6	20.9	9 8	20 38.26	-36 55.2	1.949	2.746	15.3	20.5
490370	2009 HV ₇₄		8 6.6	23°14'	21°0/ 25.2	17	250303	2003 QS ₄₄		8 6.6	342°79'	0°6/ 6.9	18
6 30	21 27.30	+23 22.8	1.050	1.769	30.6	20.7	6 30	21 30.00	-14 49.6	1.088	1.967	20.1	20.0
7 10	21 25.84	+25 22.6	0.997	1.771	28.7	20.5	7 10	21 27.83	-14 41.8	1.018	1.957	15.8	19.7
7 20	21 21.11	+26 37.9	0.953	1.775	26.6	20.3	7 20	21 22.37	-14 47.4	0.965	1.949	10.7	19.3
7 30	21 13.75	+26 56.9	0.919	1.779	24.4	20.2	7 30	21 14.30	-15 3.5	0.932	1.941	4.9	19.0
8 9	21 4.99	+26 12.2	0.897	1.783	22.4	20.1	8 9	21 4.87	-15 24.8	0.921	1.934	1.4	18.7
8 19	20 56.43	+24 23.5	0.889	1.789	21.2	20.0	8 19	20 55.69	-15 45.4	0.932	1.929	7.5	19.1
8 29	20 49.73	+21 39.5	0.897	1.794	21.1	20.1	8 29	20 48.39	-16 0.2	0.964	1.925	13.2	19.4
9 8	20 46.18	+18 18.5	0.922	1.801	22.0	20.2	9 8	20 44.17	-16 5.6	1.015	1.921	18.1	19.7
217545	2007 DM ₁		8 6.6	15°11'	2°4/ 8.5	18	85475	1997 LH ₁₇		8 6.6	63°83'	0°4/ 6.8	17
6 30	21 25.95	-7 2.3	1.713	2.54									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
477080	2009 <i>BD</i> ₈₉		8 6.6 247°65	0°2/ 6.8 18			312736	2010 <i>SU</i> ₃₆		8 6.6 317°22	3°3/ 9.4 18		
6 30	21 30.26	-12 51.2	1.952	2.788	14.2	21.6	6 30	21 27.16	-4 29.2	2.004	2.814	14.8	20.7
7 10	21 26.52	-13 27.4	1.870	2.786	11.1	21.4	7 10	21 24.11	-4 43.9	1.912	2.804	12.1	20.5
7 20	21 20.72	-14 15.6	1.810	2.784	7.4	21.1	7 20	21 19.14	-5 15.6	1.840	2.795	8.8	20.3
7 30	21 13.35	-15 12.4	1.775	2.782	3.3	20.9	7 30	21 12.69	-6 3.5	1.792	2.785	5.4	20.0
8 9	21 5.20	-16 12.8	1.767	2.780	1.0	20.7	8 9	21 5.45	-7 4.4	1.770	2.776	3.3	19.9
8 19	20 57.18	-17 11.4	1.786	2.778	5.2	21.0	8 19	20 58.26	-8 13.6	1.775	2.767	5.2	20.0
8 29	20 50.22	-18 3.4	1.832	2.776	9.1	21.2	8 29	20 52.00	-9 25.3	1.806	2.758	8.7	20.2
9 8	20 45.11	-18 45.4	1.901	2.774	12.6	21.5	9 8	20 47.42	-10 34.1	1.862	2.750	12.1	20.4
199424	2006 <i>DA</i> ₇		8 6.6 186°10	3°7/ 4.2 18			405117	2002 <i>FG</i> ₂₂		8 6.6 141°44	13°5/ 29.7 17		
6 30	21 38.63	-26 30.0	2.197	3.037	12.7	20.8	6 30	21 57.54	-51 14.3	1.781	2.579	16.9	21.2
7 10	21 32.79	-26 59.0	2.120	3.037	9.9	20.6	7 10	21 48.96	-52 43.0	1.743	2.590	15.2	21.1
7 20	21 24.74	-27 28.1	2.065	3.036	6.8	20.4	7 20	21 36.11	-53 52.0	1.724	2.600	13.9	21.1
7 30	21 15.07	-27 52.1	2.036	3.035	4.2	20.2	7 30	21 20.18	-54 29.4	1.726	2.610	13.5	21.0
8 9	21 4.68	-28 6.4	2.036	3.033	4.2	20.2	8 9	21 3.22	-54 27.5	1.750	2.619	14.0	21.1
8 19	20 54.56	-28 8.0	2.063	3.031	6.8	20.4	8 19	20 47.50	-53 45.3	1.795	2.628	15.2	21.2
8 29	20 45.70	-27 55.8	2.117	3.029	9.8	20.6	8 29	20 34.93	-52 28.1	1.861	2.635	16.8	21.3
9 8	20 38.84	-27 30.9	2.195	3.025	12.7	20.8	9 8	20 26.53	-50 45.1	1.944	2.642	18.4	21.5
220747	2004 <i>TL</i> ₆₅		8 6.6 292°67	5°1/ 2.1 18			318436	2005 <i>CU</i> ₂₂		8 6.6 213°72	2°6/ 4.9 17		
6 30	21 31.31	-28 30.2	2.233	3.086	12.1	20.3	6 30	21 37.70	-20 37.9	1.853	2.696	14.6	21.0
7 10	21 27.46	-29 37.6	2.142	3.065	9.5	20.1	7 10	21 32.57	-21 20.5	1.767	2.689	11.3	20.8
7 20	21 21.45	-30 46.9	2.073	3.043	7.0	19.9	7 20	21 24.92	-22 9.7	1.704	2.681	7.5	20.5
7 30	21 13.74	-31 51.8	2.030	3.021	5.2	19.8	7 30	21 15.30	-23 0.2	1.666	2.672	3.7	20.3
8 9	21 5.09	-32 46.0	2.015	2.999	5.7	19.8	8 9	21 4.65	-23 45.5	1.655	2.662	3.2	20.2
8 19	20 56.43	-33 24.6	2.025	2.976	8.1	19.9	8 19	20 54.11	-24 20.4	1.671	2.652	6.9	20.4
8 29	20 48.77	-33 44.7	2.061	2.954	11.0	20.0	8 29	20 44.87	-24 41.5	1.714	2.640	10.8	20.7
9 8	20 42.95	-33 46.5	2.119	2.932	13.7	20.2	9 8	20 37.87	-24 48.0	1.779	2.628	14.4	20.9
283678	2002 <i>QA</i> ₅₇		8 6.6 349°39	1°1/ 5.9 18			179438	2002 <i>AV</i> ₈₆		8 6.6 349°35	1°6/ 8.0 18		
6 30	21 26.60	-15 41.6	1.382	2.253	17.1	20.3	6 30	21 28.22	-8 45.8	2.077	2.900	14.0	19.8
7 10	21 24.56	-16 21.0	1.308	2.245	13.3	20.0	7 10	21 24.81	-9 15.9	1.993	2.899	11.0	19.6
7 20	21 19.86	-17 14.2	1.254	2.237	8.8	19.7	7 20	21 19.52	-10 0.1	1.932	2.898	7.6	19.4
7 30	21 13.10	-18 16.2	1.222	2.231	3.8	19.4	7 30	21 12.82	-10 55.9	1.895	2.897	4.0	19.2
8 9	21 5.30	-19 19.7	1.214	2.226	2.0	19.3	8 9	21 5.43	-11 59.1	1.885	2.896	1.6	19.0
8 19	20 57.67	-20 17.2	1.231	2.223	6.9	19.6	8 19	20 58.15	-13 4.8	1.902	2.896	4.7	19.2
8 29	20 51.49	-21 2.6	1.270	2.220	11.7	19.9	8 29	20 51.83	-14 7.8	1.946	2.895	8.4	19.4
9 8	20 47.75	-21 32.6	1.330	2.218	15.9	20.1	9 8	20 47.16	-15 3.9	2.015	2.895	11.7	19.6
294341	2007 <i>VO</i> ₈₆		8 6.6 332°63	1°4/ 5.8 18			513744	2012 <i>UQ</i> ₈₈		8 6.6 320°27	3°4/ 8.5 18		
6 30	21 33.48	-19 10.8	1.805	2.655	14.6	20.4	6 30	21 28.73	-8 31.4	1.460	2.305	17.7	21.5
7 10	21 29.19	-19 24.9	1.727	2.652	11.3	20.2	7 10	21 26.20	-8 14.1	1.367	2.282	14.4	21.2
7 20	21 22.56	-19 45.0	1.671	2.649	7.5	20.0	7 20	21 21.03	-8 12.5	1.291	2.260	10.4	20.9
7 30	21 14.19	-20 7.0	1.639	2.647	3.3	19.7	7 30	21 13.71	-8 26.6	1.238	2.238	6.0	20.6
8 9	21 4.98	-20 26.5	1.633	2.644	2.0	19.6	8 9	21 5.14	-8 54.1	1.208	2.217	3.4	20.4
8 19	20 56.01	-20 39.6	1.654	2.642	6.0	19.9	8 19	20 56.50	-9 30.6	1.202	2.197	6.6	20.5
8 29	20 48.33	-20 43.8	1.700	2.640	10.0	20.1	8 29	20 49.12	-10 10.7	1.220	2.177	11.3	20.7
9 8	20 42.77	-20 38.1	1.770	2.638	13.6	20.3	9 8	20 44.09	-10 48.7	1.258	2.158	15.8	20.9
306540	1999 <i>YB</i> ₆		8 6.6 309°75	3°4/ 5.8 17			399430	2001 <i>XB</i> ₂₂₆		8 6.7 229°14	13°7/ 12.2 16		
6 30	21 49.85	-26 49.2	1.597	2.436	16.8	18.5	6 30	21 38.62	+8 14.0	1.368	2.126	22.9	21.2
7 10	21 43.15	-26 20.1	1.475	2.391	13.5	18.2	7 10	21 34.06	+10 15.6	1.289	2.120	20.4	21.0
7 20	21 32.73	-25 44.9	1.373	2.345	9.5	17.9	7 20	21 26.38	+11 54.7	1.226	2.114	17.7	20.8
7 30	21 19.07	-24 57.0	1.296	2.299	5.1	17.5	7 30	21 16.13	+13 2.7	1.181	2.106	15.2	20.6
8 9	21 3.37	-23 50.8	1.246	2.253	3.8	17.3	8 9	21 4.39	+13 33.8	1.156	2.099	13.8	20.5
8 19	20 47.33	-22 24.4	1.224	2.207	8.4	17.4	8 19	20 52.59	+13 26.3	1.153	2.091	14.1	20.5
8 29	20 32.89	-20 40.4	1.229	2.161	13.7	17.6	8 29	20 42.31	+12 44.4	1.171	2.082	16.1	20.6
9 8	20 21.61	-18 44.9	1.258	2.115	18.7	17.8	9 8	20 34.81	+11 37.8	1.209	2.073	18.8	20.8
205835	2002 <i>EN</i> ₉		8 6.6 31°38	3°6/ 8.7 17			252751	2002 <i>EB</i> ₂₉		8 6.7 115°98	1°8/ 7.9 17		
6 30	21 30.11	-6 49.2	1.178	2.030	20.6	19.7	6 30	21 33.94	-8 43.8	1.539	2.371	17.6	21.3
7 10	21 27.40	-6 52.5	1.119	2.038	16.5	19.5	7 10	21 29.77	-9 13.6	1.471	2.382	13.9	21.1
7 20	21 21.77	-7 18.6	1.077	2.046	11.8	19.2	7 20	21 23.05	-10 1.4	1.423	2.392	9.6	20.9
7 30	21 13.92	-8 5.4	1.055	2.055	6.7	19.0	7 30	21 14.45	-11 3.7	1.399	2.402	4.9	20.6
8 9	21 5.07	-9 7.4	1.055	2.065	3.6	18.8	8 9	21 4.97	-12 14.5	1.399	2.411	1.9	20.5
8 19	20 56.61	-10 16.8	1.079	2.075	6.9	19.1	8 19	20 55.79	-13 26.9	1.427	2.421	5.9	20.8
8 29	20 49.90	-11 25.0	1.126	2.086	11.7	19.4	8 29	20 48.07	-14 34.1	1.479	2.430	10.3	21.0
9 8	20 45.91	-12 25.0	1.193	2.097	16.1	19.7	9 8	20 42.69	-15 31.1	1.555	2.438	14.3	21.3
264207	2010 <i>OO</i> ₁₁₈		8 6.6 209°73	8°5/ 16.4 18			452176	2015 <i>RH</i> ₈₈		8 6.7 259°18	3°1/ 5.7 16		
6 30	21 29.23	+17 14.9	3.169	3.801	13.2	21.2	6 30	21 47.94	-23 23.6	1.266	2.120	19.4	21.5
7 10	21 24.99	+17 59.2	3.070	3.795	12.0	21.1	7 10	21 42.05	-23 17.4	1.174	2.099	15.4	21.2
7 20	21 19.36	+18 26.2	2.990	3.788	10.7	20.9	7 20	21 32.15	-23 12.7	1.100	2.078	10.5	20.9
7 30	21 12.69	+18 33.6	2.929	3.781	9.5	20.8	7 30	21 18.83	-23 2.9	1.049	2.055	5.2	20.5
8 9	21 5.46	+18 20.3	2.892	3.773	8.7	20.8	8 9	21 3.55	-22 41.2	1.022	2.032	3.7	20.3
8 19	20 58.24	+17 46.9	2.879	3.765	8.5	20.8	8 19	20 48.26	-22 3.3	1.021	2.008	9.0	20.6
8 29	20 51.62	+16 55.6	2.891	3.756	9.1	20.8	8 29	20 35.08	-21 9.6	1.044	1.983	14.8	20.8
9 8	20 46.14	+15 50.7	2.927	3.747	10.1	20.9	9 8	20 25.56	-20 3.5	1.086	1.957	20.0	21.0
476630	2008 <i>SA</i> ₂₀₀		8 6.6 349°22	2°6/ 5.3 17			198528	2004 <i>XJ</i> ₁₀₅		8 6.7 32			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
367028	2006 <i>BF</i> ₂₇₆		8 6.7 110°37	1.7/ 7.7	17		397727	2008 <i>EG</i> ₃₃		8 6.7 38°56	1.3/ 7.6	15	
6 30	21 34.63	-9 35.1	1.436	2.275	18.3	21.7	6 30	21 29.15	-10 21.8	1.724	2.562	15.7	21.1
7 10	21 30.46	-9 59.3	1.370	2.285	14.4	21.5	7 10	21 25.69	-10 47.5	1.668	2.583	12.3	20.9
7 20	21 23.60	-10 41.4	1.324	2.295	9.9	21.3	7 20	21 20.13	-11 27.0	1.632	2.604	8.3	20.7
7 30	21 14.71	-11 37.8	1.300	2.304	4.9	21.0	7 30	21 13.10	-12 17.0	1.621	2.626	4.1	20.5
8 9	21 4.90	-12 42.5	1.302	2.314	1.8	20.8	8 9	21 5.48	-13 12.4	1.635	2.648	1.4	20.4
8 19	20 55.43	-13 48.2	1.329	2.323	6.1	21.1	8 19	20 58.21	-14 7.8	1.676	2.671	5.1	20.7
8 29	20 47.53	-14 48.4	1.381	2.332	10.8	21.4	8 29	20 52.21	-14 58.2	1.743	2.694	9.0	21.0
9 8	20 42.14	-15 38.3	1.455	2.340	14.9	21.7	9 8	20 48.16	-15 40.1	1.833	2.717	12.4	21.2
345962	2007 <i>TM</i> ₂₄		8 6.7 216°27	0.9/ 5.9	18		28134	1998 <i>SB</i> ₁₃₁		8 6.7 309°45	0.5/ 6.9	18	
6 30	21 33.60	-17 43.4	2.117	2.955	13.2	21.2	6 30	21 31.77	-13 49.1	1.820	2.661	14.9	18.2
7 10	21 28.98	-18 2.9	2.033	2.951	10.2	20.9	7 10	21 27.87	-13 59.4	1.738	2.656	11.7	17.9
7 20	21 22.29	-18 28.8	1.971	2.946	6.8	20.7	7 20	21 21.73	-14 20.0	1.677	2.651	7.9	17.7
7 30	21 14.07	-18 57.8	1.934	2.942	3.0	20.5	7 30	21 13.89	-14 48.2	1.640	2.646	3.6	17.4
8 9	21 5.10	-19 25.8	1.925	2.937	1.5	20.4	8 9	21 5.21	-15 20.0	1.629	2.642	1.0	17.2
8 19	20 56.28	-19 49.0	1.944	2.932	5.3	20.6	8 19	20 56.68	-15 50.9	1.645	2.638	5.4	17.5
8 29	20 48.53	-20 4.6	1.990	2.927	9.0	20.8	8 29	20 49.32	-16 17.3	1.686	2.633	9.5	17.8
9 8	20 42.60	-20 11.4	2.059	2.921	12.2	21.0	9 8	20 43.97	-16 36.2	1.751	2.629	13.2	18.0
269749	1998 <i>XT</i> ₅		8 6.7 213°16	3.7/ 2.9	18		290532	2005 <i>UA</i> ₅₈		8 6.7 18°60	6.7/11.3	17	
6 30	21 31.11	-27 8.4	2.762	3.605	10.3	21.0	6 30	21 27.24	+0 2.4	1.563	2.371	18.4	19.7
7 10	21 26.71	-28 1.6	2.681	3.600	8.0	20.8	7 10	21 24.49	+0 37.0	1.499	2.381	15.4	19.5
7 20	21 20.62	-28 55.7	2.625	3.595	5.7	20.6	7 20	21 19.51	+0 50.2	1.452	2.391	12.0	19.3
7 30	21 13.29	-29 46.0	2.596	3.590	3.9	20.5	7 30	21 12.89	+0 40.6	1.427	2.402	8.7	19.2
8 9	21 5.35	-30 28.1	2.595	3.585	4.1	20.5	8 9	21 5.53	+0 9.9	1.424	2.414	6.7	19.1
8 19	20 57.50	-30 58.9	2.622	3.579	6.2	20.6	8 19	20 58.45	-0 37.8	1.446	2.428	7.5	19.2
8 29	20 50.50	-31 16.3	2.676	3.573	8.6	20.8	8 29	20 52.65	-1 36.5	1.492	2.442	10.3	19.4
9 8	20 44.97	-31 20.3	2.754	3.567	10.9	20.9	9 8	20 48.89	-2 38.9	1.559	2.457	13.4	19.6
206691	2003 <i>YP</i> ₁₅₆		8 6.7 184°04	1.9/ 8.1	18		429443	2010 <i>VP</i> ₈₃		8 6.7 211°34	4.4/ 3.4	17	
6 30	21 31.45	-9 13.7	2.073	2.892	14.1	21.1	6 30	21 37.96	-25 47.9	2.042	2.886	13.4	22.7
7 10	21 27.28	-9 21.8	1.990	2.892	11.2	20.9	7 10	21 32.66	-26 47.9	1.959	2.879	10.5	22.5
7 20	21 21.16	-9 42.2	1.928	2.892	7.8	20.7	7 20	21 24.94	-27 50.9	1.899	2.871	7.3	22.3
7 30	21 13.57	-10 13.1	1.891	2.892	4.2	20.5	7 30	21 15.34	-28 50.2	1.865	2.862	4.7	22.1
8 9	21 5.26	-10 51.4	1.881	2.891	2.0	20.3	8 9	21 4.77	-29 39.2	1.858	2.852	4.9	22.1
8 19	20 57.10	-11 33.1	1.898	2.891	4.8	20.5	8 19	20 54.30	-30 12.9	1.879	2.842	7.7	22.3
8 29	20 49.96	-12 14.1	1.942	2.890	8.4	20.7	8 29	20 45.07	-30 28.7	1.925	2.830	11.0	22.5
9 8	20 44.54	-12 50.7	2.011	2.889	11.8	20.9	9 8	20 37.98	-30 27.0	1.994	2.818	14.1	22.6
36728	2000 <i>RD</i> ₄₇		8 6.7 242°24	4.1/ 3.5	18		440426	2005 <i>RC</i> ₄₅		8 6.7 343°45	1.4/ 5.9	18	
6 30	21 35.03	-28 12.9	2.389	3.232	11.7	19.1	6 30	21 28.37	-18 46.5	1.475	2.345	16.3	20.3
7 10	21 29.98	-28 46.7	2.306	3.224	9.2	18.9	7 10	21 25.85	-18 56.6	1.394	2.330	12.6	20.0
7 20	21 22.91	-29 19.9	2.246	3.215	6.5	18.7	7 20	21 20.72	-19 14.5	1.334	2.317	8.4	19.7
7 30	21 14.34	-29 47.7	2.212	3.206	4.4	18.5	7 30	21 13.54	-19 36.0	1.295	2.304	3.8	19.4
8 9	21 5.05	-30 5.4	2.206	3.197	4.5	18.5	8 9	21 5.31	-19 56.1	1.281	2.293	2.1	19.3
8 19	20 55.94	-30 10.2	2.227	3.188	6.8	18.7	8 19	20 57.24	-20 10.0	1.291	2.283	6.8	19.6
8 29	20 47.90	-30 0.7	2.275	3.179	9.6	18.8	8 29	20 50.59	-20 14.1	1.325	2.274	11.4	19.8
9 8	20 41.67	-29 37.8	2.345	3.169	12.2	19.0	9 8	20 46.32	-20 7.1	1.380	2.267	15.5	20.0
55657	4905 <i>P-L</i>		8 6.7 199°44	0.8/ 6.1	18		126506	2002 <i>CC</i> ₆₄		8 6.7 196°66	5.3/ 2.8	18	
6 30	21 35.64	-16 40.3	1.941	2.777	14.3	20.7	6 30	21 34.99	-27 16.0	1.831	2.688	14.2	20.1
7 10	21 30.75	-17 5.3	1.857	2.774	11.1	20.5	7 10	21 30.56	-28 24.2	1.761	2.687	11.1	19.9
7 20	21 23.58	-17 38.5	1.796	2.771	7.3	20.2	7 20	21 23.61	-29 34.2	1.714	2.686	7.9	19.7
7 30	21 14.69	-18 16.2	1.760	2.767	3.2	20.0	7 30	21 14.75	-30 38.6	1.691	2.685	5.5	19.5
8 9	21 4.94	-18 53.5	1.751	2.763	1.5	19.8	8 9	21 4.96	-31 30.0	1.694	2.684	5.9	19.6
8 19	20 55.34	-19 26.0	1.769	2.758	5.6	20.1	8 19	20 55.39	-32 3.2	1.723	2.682	8.6	19.7
8 29	20 46.94	-19 50.3	1.815	2.753	9.6	20.3	8 29	20 47.23	-32 16.0	1.777	2.680	11.9	19.9
9 8	20 40.56	-20 4.5	1.884	2.747	13.1	20.5	9 8	20 41.35	-32 9.4	1.852	2.679	14.9	20.1
113115	2002 <i>RQ</i> ₇₉		8 6.7 47°76	0.3/ 6.8	18		442033	2010 <i>PV</i> ₂₇		8 6.7 331°04	11.1/30.7	18	
6 30	21 34.47	-14 36.6	1.357	2.214	18.2	19.7	6 30	21 44.15	-46 28.3	1.920	2.743	15.0	20.3
7 10	21 30.49	-14 43.5	1.295	2.222	14.2	19.5	7 10	21 38.10	-47 22.9	1.857	2.733	13.2	20.2
7 20	21 23.68	-15 2.4	1.251	2.230	9.4	19.3	7 20	21 28.77	-48 3.2	1.813	2.723	11.7	20.1
7 30	21 14.77	-15 29.7	1.230	2.238	4.2	19.0	7 30	21 17.02	-48 20.1	1.792	2.714	11.1	20.0
8 9	21 4.95	-15 59.8	1.234	2.247	1.2	18.8	8 9	21 4.31	-48 6.9	1.793	2.705	11.6	20.0
8 19	20 55.53	-16 27.4	1.262	2.256	6.5	19.2	8 19	20 52.25	-47 21.6	1.818	2.697	13.0	20.1
8 29	20 47.84	-16 48.4	1.314	2.265	11.3	19.5	8 29	20 42.33	-46 6.7	1.864	2.689	15.0	20.2
9 8	20 42.77	-17 0.0	1.387	2.275	15.4	19.7	9 8	20 35.52	-44 28.5	1.929	2.681	17.0	20.4
508193	2015 <i>FN</i> ₃₄₄		8 6.7 83°85	7.3/ 2.6	17		342281	2008 <i>TV</i> ₁₉		8 6.7 340°25	8.1/11.4	18	
6 30	21 41.25	-34 2.4	1.727	2.577	15.2	20.9	6 30	21 24.65	+0 20.3	1.276	2.104	20.7	20.5
7 10	21 35.39	-34 52.3	1.674	2.590	12.2	20.7	7 10	21 23.24	+1 6.1	1.195	2.089	17.6	20.2
7 20	21 26.70	-35 35.9	1.643	2.602	9.3	20.6	7 20	21 19.17	+1 27.6	1.130	2.074	14.1	19.9
7 30	21 16.01	-36 5.3	1.636	2.615	7.4	20.5	7 30	21 12.93	+1 21.2	1.083	2.061	10.5	19.7
8 9	21 4.60	-36 14.2	1.654	2.628	7.8	20.5	8 9	21 5.50	+0 46.5	1.058	2.049	8.2	19.6
8 19	20 53.81	-36 0.0	1.697	2.640	10.0	20.7	8 19	20 58.09	-0 12.8	1.054	2.039	9.1	19.6
8 29	20 44.90	-35 23.8	1.764	2.652	12.8	20.9	8 29	20 52.06	-1 29.0	1.072	2.030	12.5	19.7
9 8	20 38.70	-34 29.7	1.852	2.665	15.4	21.1	9 8	20 48.49	-2 52.2	1.110	2.022	16.4	19.9
158077	2000 <i>UJ</i> ₈₁		8 6.7 325°71	2.6/ 8.2	18		56091	1999 <i>BJ</i>		8 6.7 205°62	1.2/ 5.9	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
491919	2013 <i>CL</i> ₇₀		8 6.7 261°85	0°3/ 6.9 18			66359	1999 <i>JP</i> ₈₈		8 6.7 340°65	6°3/ 2.7 18		
6 30	21 33.94	-15 6.5	2.127	2.957	13.4	21.6	6 30	21 25.22	-22 52.8	1.003	1.906	19.5	18.0
7 10	21 29.29	-15 4.7	2.032	2.945	10.5	21.4	7 10	21 24.67	-24 22.7	0.938	1.892	15.2	17.7
7 20	21 22.56	-15 10.0	1.960	2.932	7.1	21.1	7 20	21 20.64	-26 5.7	0.890	1.879	10.5	17.4
7 30	21 14.26	-15 20.2	1.913	2.919	3.2	20.9	7 30	21 13.75	-27 50.2	0.863	1.867	6.7	17.1
8 9	21 5.13	-15 32.3	1.893	2.906	0.9	20.6	8 9	21 5.29	-29 22.0	0.857	1.857	7.4	17.1
8 19	20 56.08	-15 43.4	1.901	2.893	4.9	20.9	8 19	20 57.00	-30 29.0	0.871	1.849	11.8	17.4
8 29	20 48.05	-15 51.0	1.936	2.879	8.8	21.1	8 29	20 50.72	-31 4.4	0.904	1.842	16.8	17.6
9 8	20 41.81	-15 53.2	1.995	2.865	12.2	21.3	9 8	20 47.79	-31 8.1	0.955	1.836	21.2	17.9
132604	2002 <i>KS</i> ₈		8 6.7 61°45	0°5/ 6.2 18			330490	2007 <i>GZ</i> ₇₂		8 6.7 41°44	7°6/ 14.7 18		
6 30	21 28.35	-14 6.5	2.309	3.143	12.4	19.7	6 30	21 27.00	+ 9 59.4	2.407	3.123	15.1	20.5
7 10	21 24.76	-14 58.8	2.230	3.146	9.6	19.6	7 10	21 23.63	+10 15.0	2.321	3.125	13.3	20.4
7 20	21 19.43	-16 1.0	2.174	3.149	6.3	19.4	7 20	21 18.65	+10 9.9	2.253	3.128	11.2	20.2
7 30	21 12.82	-17 9.4	2.144	3.152	2.7	19.1	7 30	21 12.48	+ 9 42.4	2.207	3.130	9.2	20.1
8 9	21 5.58	-18 19.1	2.142	3.155	1.1	19.0	8 9	21 5.72	+ 8 53.2	2.184	3.133	7.8	20.0
8 19	20 58.46	-19 25.1	2.169	3.158	4.7	19.3	8 19	20 59.06	+ 7 44.9	2.187	3.136	7.7	20.0
8 29	20 52.23	-20 23.3	2.223	3.161	8.1	19.5	8 29	20 53.21	+ 6 22.1	2.216	3.139	8.9	20.1
9 8	20 47.53	-21 10.8	2.301	3.164	11.1	19.7	9 8	20 48.76	+ 4 51.2	2.270	3.141	10.9	20.2
322034	2010 <i>VC</i> ₃₀		8 6.7 268°16	4°4/ 10.0 18			141746	2002 <i>LO</i> ₄₄		8 6.7 6°65	0°8/ 7.0 17		
6 30	21 30.31	- 2 27.3	2.479	3.259	13.2	21.0	6 30	21 29.70	-14 33.1	1.031	1.913	20.7	19.5
7 10	21 26.20	- 2 3.3	2.374	3.243	10.9	20.8	7 10	21 27.61	-14 23.4	0.972	1.913	16.2	19.2
7 20	21 20.38	- 1 51.7	2.291	3.227	8.4	20.6	7 20	21 22.21	-14 27.9	0.930	1.914	10.9	18.9
7 30	21 13.26	- 1 53.2	2.233	3.211	5.8	20.4	7 30	21 14.28	-14 43.4	0.908	1.917	5.0	18.6
8 9	21 5.43	- 2 7.0	2.201	3.194	4.4	20.3	8 9	21 5.19	-15 4.3	0.908	1.921	1.5	18.4
8 19	20 57.60	- 2 31.2	2.197	3.178	5.4	20.4	8 19	20 56.55	-15 24.9	0.929	1.926	7.4	18.8
8 29	20 50.51	- 3 2.9	2.220	3.161	7.9	20.5	8 29	20 49.91	-15 39.9	0.972	1.933	12.9	19.1
9 8	20 44.82	- 3 38.2	2.268	3.144	10.7	20.6	9 8	20 46.34	-15 45.9	1.033	1.941	17.7	19.4
264813	2002 <i>PS</i> ₁₁₄		8 6.7 335°17	1°4/ 7.5 18			433762	2015 <i>BV</i> ₂₄		8 6.7 21°67	2°5/ 8.3 17		
6 30	21 22.07	-10 12.7	1.042	1.925	20.5	19.3	6 30	21 29.36	- 8 2.4	1.358	2.205	18.7	20.2
7 10	21 21.88	-10 36.4	0.963	1.903	16.4	19.0	7 10	21 26.58	- 8 19.4	1.291	2.209	14.9	20.0
7 20	21 18.64	-11 24.7	0.900	1.883	11.4	18.6	7 20	21 21.16	- 8 56.5	1.243	2.213	10.4	19.8
7 30	21 12.83	-12 35.6	0.856	1.863	5.6	18.3	7 30	21 13.73	- 9 51.0	1.216	2.219	5.6	19.5
8 9	21 5.53	-14 1.8	0.832	1.846	1.7	17.9	8 9	21 5.36	-10 57.2	1.213	2.224	2.5	19.3
8 19	20 58.19	-15 33.1	0.831	1.830	7.6	18.3	8 19	20 57.25	-12 7.9	1.235	2.231	6.2	19.6
8 29	20 52.48	-16 57.9	0.849	1.815	13.6	18.5	8 29	20 50.66	-13 15.3	1.281	2.238	10.9	19.9
9 8	20 49.74	-18 7.1	0.886	1.803	19.0	18.8	9 8	20 46.49	-14 13.6	1.348	2.246	15.1	20.1
194043	2001 <i>SJ</i> ₉₈		8 6.7 359°89	1°1/ 7.2 15			320969	2008 <i>HW</i> ₄₅		8 6.7 335°36	4°5/ 2.7 18		
6 30	21 27.87	-13 35.8	1.097	1.976	20.0	20.1	6 30	21 30.45	-26 18.2	2.112	2.968	12.6	20.3
7 10	21 26.04	-13 28.1	1.034	1.972	15.7	19.8	7 10	21 26.75	-27 25.9	2.038	2.965	9.8	20.1
7 20	21 21.11	-13 35.3	0.988	1.970	10.7	19.5	7 20	21 20.95	-28 36.1	1.988	2.961	6.9	20.0
7 30	21 13.78	-13 54.6	0.961	1.969	5.0	19.2	7 30	21 13.57	-29 42.5	1.963	2.959	4.7	19.8
8 9	21 5.30	-14 20.8	0.957	1.970	1.6	19.0	8 9	21 5.42	-30 38.8	1.965	2.956	5.1	19.8
8 19	20 57.16	-14 48.0	0.975	1.972	7.1	19.3	8 19	20 57.40	-31 20.4	1.993	2.953	7.6	20.0
8 29	20 50.84	-15 10.5	1.014	1.976	12.5	19.7	8 29	20 50.49	-31 44.6	2.047	2.951	10.5	20.2
9 8	20 47.41	-15 24.3	1.073	1.981	17.2	19.9	9 8	20 45.44	-31 51.3	2.123	2.949	13.2	20.4
43518	2001 <i>DQ</i> ₁₅		8 6.7 108°20	2°0/ 4.8 18			207031	2004 <i>VG</i> ₈₁		8 6.7 69°56	7°8/ 2.7 17		
6 30	21 30.25	-20 6.4	2.437	3.279	11.6	20.1	6 30	21 42.70	-29 48.6	1.247	2.116	18.7	19.8
7 10	21 26.12	-20 53.6	2.365	3.286	8.9	20.0	7 10	21 37.09	-31 16.5	1.217	2.147	14.6	19.6
7 20	21 20.26	-21 45.8	2.317	3.294	5.8	19.8	7 20	21 28.05	-32 40.7	1.206	2.177	10.7	19.5
7 30	21 13.17	-22 38.7	2.295	3.301	2.8	19.6	7 30	21 16.66	-33 49.3	1.218	2.207	8.0	19.4
8 9	21 5.51	-23 27.8	2.302	3.309	2.4	19.6	8 9	21 4.56	-34 33.0	1.254	2.237	8.4	19.5
8 19	20 58.02	-24 9.4	2.336	3.316	5.2	19.8	8 19	20 53.46	-34 47.9	1.313	2.267	11.2	19.8
8 29	20 51.45	-24 40.6	2.398	3.323	8.2	20.0	8 29	20 44.81	-34 35.3	1.394	2.296	14.6	20.0
9 8	20 46.43	-25 0.4	2.484	3.330	10.9	20.2	9 8	20 39.44	-34 0.4	1.495	2.325	17.6	20.3
149355	2002 <i>XO</i> ₂₄		8 6.7 289°67	0°6/ 7.0 18			131642	2001 <i>XO</i> ₈₅		8 6.7 335°97	3°0/ 8.2 18		
6 30	21 33.10	-13 42.0	1.543	2.391	16.8	20.8	6 30	21 29.31	- 9 0.5	1.142	2.004	20.5	18.4
7 10	21 29.53	-13 48.8	1.450	2.372	13.3	20.6	7 10	21 27.19	- 8 54.5	1.069	1.995	16.5	18.1
7 20	21 23.24	-14 8.0	1.376	2.352	9.0	20.3	7 20	21 21.96	- 9 8.8	1.012	1.987	11.7	17.8
7 30	21 14.74	-14 37.0	1.326	2.333	4.2	19.9	7 30	21 14.24	- 9 42.3	0.976	1.979	6.4	17.5
8 9	21 4.98	-15 11.1	1.300	2.313	1.2	19.7	8 9	21 5.20	-10 30.5	0.962	1.973	3.1	17.3
8 19	20 55.18	-15 45.2	1.300	2.294	6.3	20.0	8 19	20 56.30	-11 26.4	0.970	1.967	7.2	17.5
8 29	20 46.69	-16 14.3	1.324	2.275	11.3	20.2	8 29	20 49.11	-12 21.8	1.000	1.962	12.6	17.8
9 8	20 40.60	-16 34.9	1.370	2.255	15.7	20.4	9 8	20 44.80	-13 9.9	1.049	1.958	17.5	18.1
34240	Charleyhutch		8 6.7 335°58	5°1/ 3.3 18			380309	2002 <i>ED</i> ₁₀₄		8 6.7 109°10	0°5/ 6.2 17		
6 30	21 34.27	-28 49.1	1.880	2.737	13.8	18.6	6 30	21 34.77	-14 51.3	2.156	2.983	13.4	21.6
7 10	21 29.93	-29 28.6	1.807	2.732	10.9	18.3	7 10	21 29.63	-15 37.4	2.095	3.007	10.3	21.5
7 20	21 23.14	-30 7.2	1.755	2.727	7.8	18.2	7 20	21 22.58	-16 32.2	2.057	3.030	6.7	21.3
7 30	21 14.54	-30 38.8	1.728	2.722	5.4	18.0	7 30	21 14.20	-17 31.3	2.046	3.053	2.9	21.1
8 9	21 5.09	-30 57.4	1.727	2.718	5.7	18.0	8 9	21 5.27	-18 29.9	2.062	3.075	1.2	21.0
8 19	20 55.92	-30 59.4	1.751	2.714	8.2	18.2	8 19	20 56.65	-19 23.2	2.108	3.096	4.9	21.3
8 29	20 48.13	-30 43.8	1.800	2.710	11.4	18.3	8 29	20 49.17	-20 7.6	2.181	3.117	8.4	21.5
9 8	20 42.56	-30 12.1	1.871	2.707	14.4	18.5	9 8	20 43.46	-20 41.3	2.279	3.137	11.4	21.8
497217	2004 <i>XK</i> ₉₈		8 6.7 248°36										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
253552	2003 <i>SN</i> ₂₅₁		8 6.7 263°34	3°9/ 4.3 18			141869	2002 <i>PK</i> ₃₂		8 6.7 286°91	1°6/ 7.6 18		
6 30	21 37.30	-23 13.8	1.670	2.524	15.4	20.6	6 30	21 32.72	-11 7.2	1.545	2.387	17.1	20.5
7 10	21 32.80	-23 59.4	1.577	2.504	12.1	20.3	7 10	21 29.32	-11 13.4	1.446	2.363	13.7	20.3
7 20	21 25.45	-24 51.1	1.506	2.483	8.3	20.0	7 20	21 23.19	-11 34.6	1.367	2.339	9.5	20.0
7 30	21 15.76	-25 42.4	1.458	2.462	4.7	19.8	7 30	21 14.80	-12 9.2	1.310	2.315	4.8	19.6
8 9	21 4.74	-26 25.5	1.437	2.440	4.5	19.7	8 9	21 5.05	-12 52.9	1.278	2.290	1.8	19.4
8 19	20 53.69	-26 54.5	1.442	2.418	8.2	19.9	8 19	20 55.16	-13 40.4	1.271	2.266	6.3	19.6
8 29	20 44.02	-27 5.6	1.471	2.395	12.5	20.1	8 29	20 46.49	-14 25.6	1.289	2.241	11.4	19.8
9 8	20 36.87	-26 58.7	1.522	2.372	16.3	20.3	9 8	20 40.17	-15 3.6	1.328	2.216	15.9	20.0
90649	1041 <i>T</i> ₋₃		8 6.7 321°30	1°7/ 5.9 18			309023	2006 <i>UH</i> ₁₃₀		8 6.7 19°83	0°4/ 6.9 16		
6 30	21 33.53	-20 11.4	1.494	2.357	16.5	19.2	6 30	21 30.50	-14 8.6	1.655	2.505	15.8	20.9
7 10	21 29.97	-20 11.9	1.406	2.338	12.9	18.9	7 10	21 27.01	-14 19.0	1.587	2.510	12.3	20.7
7 20	21 23.56	-20 17.9	1.338	2.319	8.6	18.6	7 20	21 21.21	-14 40.2	1.539	2.515	8.2	20.5
7 30	21 14.90	-20 25.1	1.293	2.301	3.9	18.3	7 30	21 13.71	-15 9.0	1.514	2.521	3.7	20.3
8 9	21 5.01	-20 28.7	1.273	2.284	2.4	18.2	8 9	21 5.44	-15 40.9	1.515	2.528	1.0	20.1
8 19	20 55.23	-20 24.6	1.277	2.267	7.0	18.4	8 19	20 57.46	-16 11.4	1.542	2.535	5.6	20.4
8 29	20 46.93	-20 10.5	1.306	2.252	11.8	18.7	8 29	20 50.80	-16 36.4	1.593	2.543	9.8	20.7
9 8	20 41.18	-19 45.9	1.355	2.237	16.1	18.9	9 8	20 46.24	-16 53.4	1.668	2.552	13.5	20.9
141994	2002 <i>PP</i> ₁₅₁		8 6.7 312°61	0°4/ 6.5 18			222197	2000 <i>DA</i> ₈₂		8 6.7 195°77	0°8/ 5.7 18		
6 30	21 34.80	-17 14.3	1.349	2.211	17.9	19.8	6 30	21 28.87	-15 31.5	2.817	3.644	10.6	20.4
7 10	21 31.15	-17 9.2	1.268	2.198	14.1	19.5	7 10	21 24.91	-16 30.4	2.729	3.642	8.1	20.3
7 20	21 24.45	-17 12.7	1.205	2.186	9.5	19.2	7 20	21 19.45	-17 37.3	2.666	3.640	5.3	20.1
7 30	21 15.32	-17 21.4	1.165	2.174	4.2	18.9	7 30	21 12.86	-18 48.7	2.630	3.637	2.3	19.9
8 9	21 4.91	-17 30.5	1.149	2.162	1.5	18.7	8 9	21 5.70	-20 0.1	2.624	3.635	1.3	19.8
8 19	20 54.64	-17 35.5	1.157	2.151	7.0	19.0	8 19	20 58.59	-21 7.5	2.647	3.632	4.3	20.0
8 29	20 46.03	-17 33.1	1.189	2.140	12.2	19.3	8 29	20 52.18	-22 7.1	2.698	3.628	7.2	20.2
9 8	20 40.20	-17 21.9	1.241	2.130	16.8	19.5	9 8	20 47.04	-22 56.6	2.776	3.625	9.8	20.4
400741	2009 <i>UP</i> ₆₁		8 6.7 308°24	0°4/ 6.3 18			444671	2007 <i>DT</i> ₂₆		8 6.7 12°02	3°6/ 4.3 18		
6 30	21 29.06	-15 37.6	2.372	3.207	12.1	21.2	6 30	21 33.31	-25 38.3	2.030	2.882	13.1	20.2
7 10	21 25.29	-16 7.0	2.288	3.205	9.3	21.0	7 10	21 28.88	-26 5.3	1.959	2.884	10.2	20.0
7 20	21 19.80	-16 44.2	2.227	3.202	6.1	20.8	7 20	21 22.30	-26 33.1	1.910	2.886	7.0	19.8
7 30	21 13.02	-17 26.0	2.192	3.199	2.7	20.6	7 30	21 14.16	-26 56.8	1.887	2.888	4.2	19.7
8 9	21 5.63	-18 8.7	2.184	3.197	1.1	20.5	8 9	21 5.33	-27 11.8	1.890	2.890	4.0	19.7
8 19	20 58.35	-18 48.3	2.205	3.194	4.6	20.7	8 19	20 56.78	-27 14.9	1.920	2.893	6.8	19.8
8 29	20 51.95	-19 21.8	2.252	3.192	7.9	20.9	8 29	20 49.48	-27 4.9	1.975	2.896	10.0	20.0
9 8	20 47.05	-19 46.9	2.324	3.189	10.9	21.1	9 8	20 44.16	-26 42.3	2.053	2.899	12.9	20.2
511016	2013 <i>QJ</i> ₁		8 6.7 344°06	12°5/ 5.5 18			298064	2002 <i>QQ</i> ₈₇		8 6.7 223°92	1°5/ 8.0 18		
6 30	21 42.86	- 9 14.9	0.937	1.795	24.3	19.2	6 30	21 30.68	- 8 50.5	2.326	3.138	13.0	21.6
7 10	21 38.67	- 5 27.3	0.859	1.774	20.6	18.8	7 10	21 26.61	- 9 20.3	2.231	3.130	10.3	21.4
7 20	21 30.24	- 1 30.2	0.798	1.756	16.6	18.5	7 20	21 20.74	-10 3.0	2.158	3.121	7.2	21.2
7 30	21 18.18	+ 2 23.5	0.759	1.739	13.3	18.3	7 30	21 13.49	-10 56.4	2.110	3.112	3.7	20.9
8 9	21 3.99	+ 5 56.4	0.743	1.725	12.7	18.2	8 9	21 5.51	-11 56.9	2.091	3.102	1.5	20.8
8 19	20 49.77	+ 8 52.0	0.749	1.714	15.5	18.3	8 19	20 57.55	-13 0.0	2.100	3.092	4.4	21.0
8 29	20 37.81	+11 1.6	0.774	1.705	19.7	18.5	8 29	20 50.44	-14 1.0	2.136	3.082	7.9	21.2
9 8	20 29.80	+12 28.0	0.816	1.698	23.9	18.7	9 8	20 44.85	-14 56.1	2.198	3.071	11.1	21.3
24621	1979 <i>MS</i> ₄		8 6.7 37°14	0°5/ 7.0 18			362533	2010 <i>UY</i> ₁₇		8 6.7 312°82	3°7/ 9.7 18		
6 30	21 31.01	-12 15.4	1.215	2.080	19.4	18.8	6 30	21 28.87	- 4 4.2	2.228	3.026	13.9	21.0
7 10	21 28.05	-12 44.2	1.161	2.092	15.1	18.6	7 10	21 25.22	- 3 58.5	2.140	3.023	11.4	20.9
7 20	21 22.19	-13 30.2	1.125	2.105	10.1	18.3	7 20	21 19.80	- 4 7.0	2.073	3.020	8.4	20.7
7 30	21 14.20	-14 28.5	1.111	2.118	4.6	18.1	7 30	21 13.05	- 4 29.2	2.030	3.017	5.5	20.5
8 9	21 5.29	-15 31.7	1.120	2.133	1.3	17.9	8 9	21 5.65	- 5 3.3	2.013	3.014	3.7	20.4
8 19	20 56.85	-16 31.8	1.152	2.148	6.7	18.3	8 19	20 58.34	- 5 45.9	2.024	3.011	5.1	20.5
8 29	20 50.19	-17 22.4	1.208	2.163	11.7	18.6	8 29	20 51.91	- 6 33.1	2.061	3.009	8.0	20.6
9 8	20 46.22	-17 59.4	1.285	2.180	15.9	18.9	9 8	20 47.02	- 7 20.5	2.123	3.006	11.0	20.8
2168	<i>Swope</i>		8 6.7 350°28	0°0/ 6.5 18			479766	2014 <i>EW</i> ₂₆		8 6.7 9°98	3°5/ 4.3 18		
6 30	21 32.03	-16 32.1	1.226	2.098	18.8	15.6	6 30	21 33.59	-23 47.7	1.872	2.727	14.0	21.3
7 10	21 29.10	-16 20.5	1.156	2.091	14.7	15.3	7 10	21 29.32	-24 29.8	1.800	2.727	10.8	21.1
7 20	21 23.08	-16 18.6	1.104	2.086	9.9	15.1	7 20	21 22.73	-25 15.3	1.750	2.727	7.3	20.9
7 30	21 14.68	-16 23.2	1.073	2.081	4.4	14.7	7 30	21 14.40	-25 58.4	1.725	2.728	4.2	20.7
8 9	21 5.12	-16 29.8	1.064	2.078	1.3	14.5	8 9	21 5.26	-26 33.4	1.726	2.728	4.1	20.7
8 19	20 55.86	-16 33.9	1.080	2.075	7.0	14.9	8 19	20 56.38	-26 55.9	1.754	2.729	7.1	20.9
8 29	20 48.37	-16 32.2	1.118	2.074	12.3	15.2	8 29	20 48.79	-27 3.6	1.806	2.729	10.6	21.1
9 8	20 43.72	-16 22.6	1.176	2.074	16.8	15.4	9 8	20 43.32	-26 56.6	1.881	2.730	13.8	21.3
235823	2004 <i>XH</i> ₁₁₁		8 6.7 300°18	1°1/ 6.1 18			195418	2002 <i>GU</i> ₄₂		8 6.7 101°57	1°6/ 5.6 18		
6 30	21 33.07	-17 50.5	1.635	2.490	15.7	20.0	6 30	21 34.10	-18 30.9	1.817	2.665	14.7	20.4
7 10	21 29.38	-18 5.2	1.545	2.471	12.3	19.7	7 10	21 29.63	-19 4.4	1.749	2.673	11.3	20.2
7 20	21 23.06	-18 28.3	1.474	2.453	8.2	19.5	7 20	21 22.88	-19 45.2	1.703	2.681	7.4	20.0
7 30	21 14.66	-18 56.1	1.427	2.436	3.6	19.2	7 30	21 14.45	-20 28.5	1.681	2.689	3.3	19.8
8 9	21 5.11	-19 23.2	1.406	2.418	1.8	19.0	8 9	21 5.28	-21 8.9	1.686	2.696	2.2	19.7
8 19	20 55.60	-19 44.9	1.410	2.400	6.5	19.2	8 19	20 56.40	-21 41.6	1.718	2.704	6.0	20.0
8 29	20 47.39	-19 57.4	1.439	2.383	11.1	19.5	8 29	20 48.83	-22 3.6	1.775	2.711	9.9	20.3
9 8	20 41.50	-19 58.9	1.490	2.366	15.2	19.7	9 8	20 43.36	-22 13.7	1.856	2.719	13.3	20.5
130716	2000 <i>SL</i> ₂₀₆		8 6.7 355°56	4°1/ 4.7 17			380251	2001 <i>WW</i> ₄₅		8 6.7 341°43	2°6/		

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8 6.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
450043	2015 <i>RG</i> ₂₄		8 6.7 343°06	4°0/10.1	18		99014	2001 <i>DG</i> ₆₅		8 6.7 274°78	2°4/ 5.4	18	
6 30	21 27.90	- 2 51.7	2.040	2.841	15.0	21.2	6 30	21 37.37	-22 28.5	1.827	2.675	14.6	19.3
7 10	21 24.65	- 2 56.0	1.954	2.838	12.3	21.1	7 10	21 32.30	-22 36.5	1.746	2.669	11.3	19.0
7 20	21 19.53	- 3 17.4	1.889	2.835	9.2	20.9	7 20	21 24.76	-22 47.2	1.687	2.664	7.6	18.8
7 30	21 12.98	- 3 55.2	1.846	2.833	6.0	20.7	7 30	21 15.35	-22 56.1	1.653	2.658	3.7	18.6
8 9	21 5.73	- 4 47.0	1.830	2.831	4.0	20.5	8 9	21 5.07	-22 58.8	1.645	2.653	2.9	18.5
8 19	20 58.57	- 5 48.5	1.840	2.829	5.4	20.6	8 19	20 55.03	-22 52.2	1.664	2.647	6.5	18.7
8 29	20 52.35	- 6 54.5	1.877	2.827	8.5	20.8	8 29	20 46.39	-22 35.0	1.709	2.642	10.4	18.9
9 8	20 47.78	- 7 59.5	1.938	2.826	11.7	21.0	9 8	20 39.99	-22 7.4	1.776	2.636	13.9	19.1
114077	2002 <i>VM</i> ₃₃		8 6.7 261°08	2°7/ 8.4	18		357195	2002 <i>FM</i> ₃₂		8 6.7 161°47	0°7/ 5.9	18	
6 30	21 33.17	- 8 25.5	1.711	2.536	16.4	20.5	6 30	21 29.80	-15 10.3	2.582	3.410	11.4	21.1
7 10	21 29.24	- 8 22.9	1.619	2.524	13.2	20.2	7 10	21 25.74	-16 5.2	2.500	3.414	8.8	21.0
7 20	21 22.88	- 8 35.2	1.547	2.511	9.4	20.0	7 20	21 20.06	-17 8.5	2.443	3.417	5.7	20.8
7 30	21 14.58	- 9 1.4	1.498	2.498	5.3	19.7	7 30	21 13.18	-18 16.6	2.413	3.420	2.5	20.6
8 9	21 5.23	- 9 38.4	1.475	2.484	2.8	19.5	8 9	21 5.72	-19 24.8	2.411	3.423	1.3	20.5
8 19	20 55.89	-10 21.7	1.477	2.471	5.8	19.7	8 19	20 58.36	-20 28.7	2.439	3.426	4.5	20.7
8 29	20 47.72	-11 6.2	1.506	2.457	10.1	19.9	8 29	20 51.80	-21 24.7	2.495	3.428	7.6	20.9
9 8	20 41.67	-11 47.1	1.557	2.443	14.1	20.1	9 8	20 46.63	-22 10.3	2.576	3.430	10.3	21.1
245316	2005 <i>EY</i> ₆₅		8 6.7 194°37	1°3/ 5.7	18		446954	2003 <i>SM</i> ₄		8 6.7 303°34	1°6/ 8.3	17	
6 30	21 34.39	-18 52.4	2.215	3.052	12.8	21.4	6 30	21 28.86	- 6 25.6	2.298	3.105	13.3	20.3
7 10	21 29.54	-19 16.5	2.133	3.050	9.9	21.2	7 10	21 25.53	- 7 22.8	2.171	3.066	10.7	20.1
7 20	21 22.69	-19 46.1	2.073	3.048	6.5	21.0	7 20	21 20.29	- 8 38.8	2.065	3.026	7.6	19.8
7 30	21 14.37	-20 17.6	2.039	3.046	2.9	20.8	7 30	21 13.45	-10 12.0	1.986	2.987	4.1	19.5
8 9	21 5.33	-20 46.8	2.032	3.043	1.8	20.7	8 9	21 5.60	-11 57.8	1.935	2.947	1.6	19.3
8 19	20 56.45	-21 10.1	2.054	3.040	5.3	20.9	8 19	20 57.47	-13 50.3	1.913	2.906	4.7	19.4
8 29	20 48.62	-21 25.0	2.103	3.036	8.8	21.1	8 29	20 49.96	-15 42.1	1.921	2.866	8.7	19.6
9 8	20 42.56	-21 30.3	2.177	3.032	11.9	21.3	9 8	20 43.92	-17 26.6	1.954	2.826	12.3	19.7
318658	2005 <i>NF</i> ₁₂		8 6.7 104°18	2°6/ 8.2	17		66156	1998 <i>UV</i> ₂₅		8 6.7 312°37	6°4/ 2.0	18	
6 30	21 35.56	- 9 34.0	1.602	2.431	17.1	21.2	6 30	21 32.60	-28 58.4	1.703	2.569	14.7	18.5
7 10	21 30.97	- 9 22.0	1.532	2.439	13.6	20.9	7 10	21 29.12	-30 13.4	1.628	2.557	11.6	18.3
7 20	21 23.88	- 9 23.8	1.481	2.447	9.5	20.7	7 20	21 22.94	-31 30.1	1.574	2.545	8.5	18.1
7 30	21 14.94	- 9 38.0	1.454	2.454	5.2	20.5	7 30	21 14.66	-32 40.1	1.543	2.534	6.5	18.0
8 9	21 5.16	-10 1.4	1.452	2.462	2.6	20.3	8 9	21 5.27	-33 35.1	1.538	2.522	7.1	18.0
8 19	20 55.69	-10 29.7	1.476	2.469	5.8	20.6	8 19	20 56.01	-34 9.0	1.558	2.512	9.8	18.1
8 29	20 47.67	-10 58.5	1.526	2.476	10.1	20.8	8 29	20 48.17	-34 19.3	1.601	2.501	13.1	18.3
9 8	20 41.92	-11 24.0	1.598	2.483	13.9	21.1	9 8	20 42.77	-34 7.1	1.664	2.491	16.2	18.5
342533	2008 <i>UU</i> ₂₁₇		8 6.7 96°33	0°7/ 7.2	18		238019	2002 <i>UV</i> ₂₉		8 6.7 41°80	1°0/ 7.4	17	
6 30	21 33.88	-13 24.4	1.827	2.662	15.1	21.2	6 30	21 31.39	-12 9.0	1.603	2.448	16.4	20.3
7 10	21 29.41	-13 31.0	1.755	2.669	11.8	21.0	7 10	21 27.69	-12 21.7	1.543	2.462	12.8	20.1
7 20	21 22.71	-13 47.8	1.703	2.676	7.9	20.8	7 20	21 21.65	-12 47.2	1.502	2.476	8.6	19.8
7 30	21 14.39	-14 12.0	1.676	2.682	3.7	20.5	7 30	21 13.94	-13 22.3	1.484	2.490	4.1	19.6
8 9	21 5.34	-14 39.7	1.676	2.689	1.1	20.3	8 9	21 5.52	-14 2.4	1.492	2.505	1.3	19.4
8 19	20 56.55	-15 6.9	1.703	2.696	5.2	20.6	8 19	20 57.45	-14 42.3	1.526	2.520	5.5	19.8
8 29	20 49.02	-15 30.1	1.755	2.702	9.3	20.9	8 29	20 50.78	-15 17.4	1.585	2.536	9.7	20.1
9 8	20 43.51	-15 46.7	1.832	2.709	12.8	21.1	9 8	20 46.26	-15 44.7	1.666	2.552	13.4	20.3
39082	2000 <i>VB</i> ₃₂		8 6.7 230°21	1°2/ 5.9	18		49646	1999 <i>JX</i> ₃₄		8 6.7 196°58	5°5/ 1.5	18	
6 30	21 32.93	-16 57.6	1.887	2.731	14.3	19.2	6 30	21 35.98	-33 19.0	2.626	3.462	11.0	19.5
7 10	21 28.81	-17 33.4	1.805	2.726	11.1	19.0	7 10	21 30.70	-34 18.3	2.552	3.460	8.8	19.3
7 20	21 22.42	-18 18.3	1.744	2.721	7.3	18.7	7 20	21 23.44	-35 14.7	2.502	3.456	6.8	19.2
7 30	21 14.32	-19 8.0	1.709	2.716	3.2	18.5	7 30	21 14.71	-36 2.4	2.478	3.453	5.6	19.1
8 9	21 5.34	-19 57.1	1.700	2.711	1.8	18.3	8 9	21 5.28	-36 36.5	2.482	3.448	6.0	19.1
8 19	20 56.50	-20 40.4	1.718	2.706	5.8	18.6	8 19	20 56.01	-36 53.9	2.513	3.444	7.8	19.2
8 29	20 48.82	-21 13.9	1.763	2.701	9.8	18.8	8 29	20 47.79	-36 53.7	2.570	3.439	9.9	19.4
9 8	20 43.13	-21 35.6	1.830	2.695	13.4	19.0	9 8	20 41.33	-36 37.0	2.649	3.433	12.1	19.5
367913	2012 <i>BV</i> ₁₀₈		8 6.7 135°36	1°9/ 5.4	17		463400	2013 <i>GP</i> ₁₀₉		8 6.7 14°86	7°8/ 2.1	17	
6 30	21 35.62	-17 18.3	1.603	2.452	16.2	21.2	6 30	21 21.80	-23 32.7	0.763	1.686	21.7	19.4
7 10	21 31.16	-18 15.0	1.536	2.461	12.5	21.0	7 10	21 22.45	-25 29.3	0.729	1.692	16.7	19.1
7 20	21 24.10	-19 22.5	1.490	2.469	8.2	20.8	7 20	21 19.25	-27 34.5	0.710	1.702	11.6	18.9
7 30	21 15.07	-20 34.4	1.468	2.476	3.7	20.6	7 30	21 13.12	-29 32.3	0.710	1.713	8.0	18.8
8 9	21 5.13	-21 43.2	1.473	2.483	2.6	20.5	8 9	21 5.76	-31 5.8	0.729	1.727	9.0	18.9
8 19	20 55.48	-22 42.1	1.505	2.490	6.8	20.8	8 19	20 59.09	-32 4.2	0.766	1.743	13.1	19.2
8 29	20 47.31	-23 26.3	1.561	2.496	11.1	21.0	8 29	20 54.85	-32 24.4	0.821	1.761	17.6	19.5
9 8	20 41.54	-23 54.2	1.640	2.502	14.8	21.3	9 8	20 54.08	-32 10.3	0.892	1.781	21.6	19.9
25651	2000 <i>AG</i> ₈₁		8 6.7 186°95	1°1/ 7.8	18		60569	2000 <i>EH</i> ₁₁₂		8 6.7 319°22	0°4/ 6.5	18	
6 30	21 29.18	-10 23.0	2.759	3.569	11.2	19.5	6 30	21 30.92	-16 18.5	1.254	2.125	18.5	19.0
7 10	21 25.11	-10 43.2	2.670	3.569	8.8	19.3	7 10	21 28.49	-16 23.2	1.168	2.104	14.6	18.7
7 20	21 19.57	-11 12.5	2.604	3.568	6.0	19.1	7 20	21 22.94	-16 39.6	1.100	2.082	9.8	18.3
7 30	21 12.94	-11 49.2	2.565	3.567	3.1	18.9	7 30	21 14.81	-17 4.3	1.053	2.062	4.4	18.0
8 9	21 5.78	-12 30.4	2.554	3.566	1.2	18.8	8 9	21 5.20	-17 31.4	1.029	2.042	1.5	17.7
8 19	20 58.71	-13 13.1	2.572	3.565	3.8	19.0	8 19	20 55.56	-17 55.2	1.028	2.023	7.4	18.0
8 29	20 52.36	-13 53.9	2.619	3.563	6.7	19.2	8 29	20 47.51	-18 10.3	1.050	2.005	13.0	18.3
9 8	20 47.29	-14 30.4	2.691	3.561	9.4	19.3	9 8	20 42.31	-18 13.9	1.091	1.988	17.9	18.5
103940	2000 <i>DM</i> ₆₉		8 6.7 13°37	2°1/ 8.2	18		256575	2007 <i>TP</i> ₁₂₈		8 6.7 86°			

EPHEMERIDES

8 6.7

8 6.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
476645	2008 <i>SD</i> ₂₆₆		8 6.7 294°84	1.6°/ 7.7	16		298247	2002 <i>VL</i> ₅₁		8 6.7 245°40	6.3°/ 1.4	18	
6 30	21 30.87	-10 36.1	1.697	2.534	16.0	22.2	6 30	21 34.67	-31 45.3	2.133	2.983	12.7	20.5
7 10	21 27.61	-10 47.8	1.597	2.511	12.8	22.0	7 10	21 30.21	-32 59.8	2.058	2.975	10.2	20.3
7 20	21 21.92	-11 14.3	1.517	2.488	8.9	21.7	7 20	21 23.41	-34 13.0	2.006	2.967	7.8	20.1
7 30	21 14.24	-11 53.8	1.460	2.464	4.5	21.4	7 30	21 14.81	-35 17.9	1.979	2.958	6.3	20.0
8 9	21 5.39	-12 42.2	1.429	2.441	1.7	21.1	8 9	21 5.29	-36 7.6	1.978	2.950	6.9	20.0
8 19	20 56.44	-13 34.4	1.424	2.418	5.8	21.3	8 19	20 55.90	-36 37.7	2.004	2.941	9.0	20.2
8 29	20 48.58	-14 24.5	1.444	2.395	10.4	21.6	8 29	20 47.72	-36 46.3	2.054	2.932	11.7	20.3
9 8	20 42.82	-15 7.8	1.486	2.373	14.6	21.8	9 8	20 41.62	-36 34.8	2.125	2.923	14.2	20.5
28076	1998 <i>QS</i> ₄₈		8 6.7 293°54	1.3°/ 6.1	18		488365	2016 <i>WU</i> ₃₀		8 6.7 293°68	2.5°/ 4.5	18	
6 30	21 37.41	-18 34.8	1.269	2.133	18.7	18.7	6 30	21 29.83	-19 26.7	2.001	2.853	13.4	20.6
7 10	21 33.36	-18 39.4	1.194	2.126	14.6	18.4	7 10	21 26.43	-20 31.2	1.914	2.841	10.3	20.3
7 20	21 26.02	-18 52.4	1.138	2.119	9.8	18.2	7 20	21 20.90	-21 44.5	1.850	2.829	6.8	20.1
7 30	21 16.10	-19 9.2	1.104	2.112	4.4	17.8	7 30	21 13.71	-23 1.2	1.811	2.818	3.4	19.9
8 9	21 4.86	-19 23.7	1.093	2.106	2.1	17.7	8 9	21 5.62	-24 14.8	1.800	2.806	3.1	19.8
8 19	20 53.87	-19 30.9	1.107	2.099	7.6	18.0	8 19	20 57.56	-25 19.1	1.815	2.795	6.5	20.0
8 29	20 44.75	-19 27.5	1.144	2.093	12.9	18.3	8 29	20 50.53	-26 9.7	1.857	2.783	10.1	20.2
9 8	20 38.64	-19 12.9	1.201	2.086	17.5	18.5	9 8	20 45.34	-26 44.2	1.921	2.772	13.4	20.4
83650	2001 <i>TR</i> ₃		8 6.7 128°84	0.7°/ 6.2	18 R		454901	2015 <i>TF</i> ₁₀₃		8 6.7 321°65	0.4°/ 6.3	18	
6 30	21 32.08	-16 44.2	2.105	2.944	13.3	20.0	6 30	21 27.77	-14 39.3	2.384	3.219	12.0	20.8
7 10	21 27.83	-17 6.6	2.027	2.946	10.2	19.8	7 10	21 24.37	-15 20.3	2.298	3.214	9.3	20.6
7 20	21 21.60	-17 36.3	1.971	2.947	6.8	19.6	7 20	21 19.26	-16 10.3	2.234	3.209	6.1	20.4
7 30	21 13.91	-18 9.9	1.941	2.949	3.0	19.4	7 30	21 12.89	-17 6.2	2.197	3.204	2.7	20.1
8 9	21 5.54	-18 43.2	1.938	2.950	1.3	19.3	8 9	21 5.88	-18 3.6	2.187	3.200	1.0	20.0
8 19	20 57.36	-19 12.5	1.963	2.952	5.1	19.5	8 19	20 58.95	-18 58.2	2.206	3.196	4.6	20.2
8 29	20 50.24	-19 34.7	2.014	2.953	8.7	19.8	8 29	20 52.85	-19 46.2	2.251	3.191	7.9	20.4
9 8	20 44.88	-19 48.0	2.089	2.955	11.9	20.0	9 8	20 48.21	-20 24.9	2.322	3.187	10.9	20.6
15105	2000 <i>BJ</i> ₄		8 6.7 151°38	6.8°/31.4	18 R		77999	2002 <i>JD</i> ₄₈		8 6.7 333°20	4.9°/ 8.8	18	
6 30	21 35.32	-37 22.1	2.525	3.361	11.4	17.6	6 30	21 30.56	-7 52.2	1.177	2.032	20.5	18.5
7 10	21 30.32	-38 26.7	2.463	3.364	9.4	17.5	7 10	21 28.15	-7 6.8	1.100	2.019	16.7	18.2
7 20	21 23.23	-39 25.5	2.424	3.367	7.6	17.4	7 20	21 22.66	-6 38.2	1.039	2.007	12.3	17.9
7 30	21 14.62	-40 12.3	2.412	3.369	6.8	17.4	7 30	21 14.67	-6 27.8	0.998	1.996	7.6	17.6
8 9	21 5.34	-40 42.3	2.425	3.371	7.3	17.4	8 9	21 5.33	-6 34.5	0.979	1.986	4.9	17.5
8 19	20 56.31	-40 52.6	2.464	3.373	8.8	17.5	8 19	20 56.07	-6 54.8	0.983	1.977	7.8	17.6
8 29	20 48.46	-40 43.0	2.527	3.375	10.8	17.6	8 29	20 48.46	-7 23.0	1.008	1.969	12.7	17.8
9 8	20 42.50	-40 15.4	2.612	3.377	12.7	17.8	9 8	20 43.69	-7 52.7	1.053	1.962	17.4	18.1
481118	2005 <i>TM</i> ₁₄₁		8 6.7 300°76	7.9°/31.4	18		191767	2004 <i>TH</i> ₅₁		8 6.7 316°55	0.8°/ 6.3	18	
6 30	21 36.16	-37 28.6	2.093	2.938	13.1	21.6	6 30	21 31.37	-16 51.5	1.476	2.338	16.7	20.1
7 10	21 31.49	-38 36.1	2.024	2.931	10.9	21.4	7 10	21 28.34	-17 6.2	1.389	2.320	13.1	19.8
7 20	21 24.29	-39 37.7	1.978	2.923	8.9	21.3	7 20	21 22.57	-17 31.2	1.321	2.302	8.8	19.5
7 30	21 15.18	-40 25.5	1.955	2.915	7.9	21.2	7 30	21 14.57	-18 2.7	1.276	2.285	3.9	19.2
8 9	21 5.17	-40 53.2	1.958	2.908	8.5	21.3	8 9	21 5.36	-18 35.2	1.256	2.268	1.7	19.0
8 19	20 55.40	-40 57.3	1.986	2.901	10.3	21.4	8 19	20 56.19	-19 3.1	1.260	2.252	6.8	19.3
8 29	20 47.06	-40 37.6	2.036	2.894	12.6	21.5	8 29	20 48.41	-19 21.9	1.288	2.237	11.7	19.5
9 8	20 41.02	-39 56.8	2.107	2.887	14.9	21.6	9 8	20 43.09	-19 29.2	1.337	2.222	16.0	19.7
156980	2003 <i>JE</i> ₁₅		8 6.7 32°12	2.1°/ 5.4	18		172128	2002 <i>HO</i> ₁₄		8 6.7 0°32	3.2°/ 4.7	18	
6 30	21 33.21	-19 1.8	1.531	2.391	16.3	20.1	6 30	21 28.23	-17 41.7	1.124	2.009	19.2	19.2
7 10	21 29.43	-19 38.2	1.464	2.395	12.6	19.9	7 10	21 26.48	-18 55.2	1.062	2.007	14.8	19.0
7 20	21 23.01	-20 23.1	1.418	2.399	8.3	19.6	7 20	21 21.57	-20 24.8	1.019	2.005	9.7	18.7
7 30	21 14.63	-21 10.8	1.395	2.403	3.8	19.4	7 30	21 14.16	-22 1.8	0.996	2.005	4.7	18.4
8 9	21 5.34	-21 54.6	1.397	2.407	2.8	19.3	8 9	21 5.50	-23 34.3	0.997	2.006	4.1	18.4
8 19	20 56.35	-22 29.0	1.425	2.412	6.9	19.6	8 19	20 57.12	-24 51.8	1.020	2.007	9.0	18.7
8 29	20 48.88	-22 50.3	1.477	2.416	11.2	19.9	8 29	20 50.57	-25 47.0	1.065	2.010	14.0	19.0
9 8	20 43.83	-22 57.2	1.550	2.421	15.0	20.1	9 8	20 46.98	-26 17.5	1.129	2.013	18.4	19.2
423829	2006 <i>ME</i> ₁₀		8 6.7 358°42	6.8°/ 8.1	17		443505	2014 <i>JU</i> ₃₉		8 6.7 8°13	6.0°/ 1.9	18	
6 30	21 24.04	-12 17.3	0.739	1.646	24.0	19.5	6 30	21 31.62	-29 17.2	1.874	2.736	13.7	20.0
7 10	21 24.11	-10 12.0	0.685	1.636	19.5	19.2	7 10	21 28.00	-30 33.0	1.810	2.737	10.8	19.9
7 20	21 20.40	-8 15.5	0.646	1.629	14.4	18.9	7 20	21 21.99	-31 49.0	1.768	2.738	7.9	19.7
7 30	21 13.71	-6 34.2	0.624	1.626	9.2	18.6	7 30	21 14.20	-32 57.5	1.751	2.740	6.1	19.6
8 9	21 5.61	-5 12.8	0.619	1.626	6.8	18.5	8 9	21 5.55	-33 51.4	1.760	2.741	6.6	19.6
8 19	20 57.97	-4 14.2	0.632	1.629	10.0	18.7	8 19	20 57.14	-34 25.8	1.794	2.744	9.0	19.8
8 29	20 52.65	-3 36.4	0.663	1.635	15.1	19.0	8 29	20 50.06	-34 38.7	1.851	2.746	11.9	20.0
9 8	20 50.86	-3 13.9	0.710	1.645	20.0	19.3	9 8	20 45.13	-34 31.3	1.930	2.749	14.6	20.1
256488	2007 <i>EQ</i> ₁₃		8 6.7 47°41	0.3°/ 6.5	18		193586	2001 <i>BT</i> ₃₇		8 6.7 293°22	0.2°/ 6.9	18	
6 30	21 31.08	-15 51.6	2.093	2.932	13.3	20.9	6 30	21 32.39	-14 15.7	1.718	2.562	15.5	20.1
7 10	21 27.00	-16 7.6	2.022	2.940	10.3	20.7	7 10	21 28.82	-14 28.8	1.619	2.539	12.2	19.8
7 20	21 21.01	-16 31.0	1.972	2.948	6.8	20.5	7 20	21 22.76	-14 53.2	1.540	2.515	8.3	19.5
7 30	21 13.64	-16 58.9	1.948	2.956	3.0	20.3	7 30	21 14.66	-15 26.2	1.484	2.492	3.8	19.2
8 9	21 5.66	-17 27.5	1.951	2.964	1.0	20.2	8 9	21 5.39	-16 3.4	1.455	2.468	1.1	18.9
8 19	20 57.91	-17 53.1	1.981	2.972	4.9	20.5	8 19	20 56.04	-16 39.8	1.451	2.444	5.9	19.2
8 29	20 51.24	-18 12.9	2.038	2.981	8.4	20.7	8 29	20 47.81	-17 10.7	1.473	2.421	10.6	19.4
9 8	20 46.31	-18 25.1	2.119	2.990	11.6	20.9	9 8	20 41.72	-17 32.7	1.517	2.397	14.8	19.6
343841	2011 <i>HW</i> ₃₂		8 6.7 16°26	0.3°/ 6.9	16		472935	2015 <i>GZ</i> ₂₃					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
180771	2004 <i>PZ</i> ₇₃		8 6.7 113°02	1.4/ 5.7	18		81406	2000 <i>GL</i> ₈₆		8 6.7 277°53	1.2/ 5.8	18	
6 30	21 37.68	-21 20.8	2.651	3.476	11.2	20.0	6 30	21 31.98	-14 45.2	1.639	2.488	15.9	18.7
7 10	21 31.53	-21 24.7	2.584	3.494	8.6	19.9	7 10	21 28.70	-15 45.2	1.542	2.467	12.5	18.4
7 20	21 23.73	-21 30.3	2.541	3.513	5.7	19.7	7 20	21 22.82	-17 1.4	1.467	2.445	8.3	18.1
7 30	21 14.80	-21 34.9	2.525	3.531	2.6	19.5	7 30	21 14.77	-18 28.8	1.415	2.423	3.7	17.8
8 9	21 5.45	-21 35.6	2.539	3.549	1.8	19.5	8 9	21 5.43	-19 59.7	1.390	2.401	2.0	17.7
8 19	20 56.43	-21 30.8	2.583	3.566	4.5	19.7	8 19	20 55.94	-21 25.7	1.391	2.379	6.8	17.9
8 29	20 48.45	-21 19.5	2.655	3.582	7.4	19.9	8 29	20 47.60	-22 39.4	1.417	2.357	11.6	18.1
9 8	20 42.06	-21 1.7	2.753	3.599	10.0	20.1	9 8	20 41.52	-23 36.0	1.465	2.334	15.8	18.3
509380	2007 <i>BR</i> ₈₅		8 6.7 67°46	0°6/ 6.3	18		139987	2001 <i>SJ</i> ₃₂		8 6.7 249°75	0°7/ 6.2	18	
6 30	21 31.41	-16 22.8	2.143	2.981	13.1	21.6	6 30	21 31.98	-16 39.2	2.278	3.113	12.5	20.7
7 10	21 27.20	-16 47.4	2.076	2.994	10.1	21.4	7 10	21 27.76	-17 5.0	2.186	3.102	9.7	20.5
7 20	21 21.12	-17 19.1	2.032	3.007	6.6	21.2	7 20	21 21.63	-17 38.2	2.115	3.090	6.4	20.3
7 30	21 13.72	-17 54.6	2.013	3.020	2.9	21.0	7 30	21 14.04	-18 15.5	2.071	3.078	2.8	20.0
8 9	21 5.75	-18 29.8	2.021	3.034	1.2	20.9	8 9	21 5.68	-18 53.1	2.054	3.067	1.3	19.9
8 19	20 58.04	-19 0.9	2.057	3.047	4.9	21.2	8 19	20 57.39	-19 26.9	2.066	3.054	4.9	20.1
8 29	20 51.39	-19 25.1	2.120	3.060	8.3	21.4	8 29	20 50.00	-19 53.9	2.104	3.042	8.5	20.3
9 8	20 46.45	-19 40.7	2.207	3.073	11.3	21.7	9 8	20 44.25	-20 12.1	2.167	3.029	11.7	20.5
73636	5727 <i>T</i> - ₃		8 6.7 115°46	6°9/ 1.2	18		226950	2004 <i>UJ</i> ₄		8 6.7 276°39	0°2/ 6.8	18	
6 30	21 36.86	-32 37.5	1.975	2.825	13.6	18.9	6 30	21 38.38	-16 58.6	1.774	2.611	15.4	19.6
7 10	21 31.94	-34 2.9	1.920	2.836	10.9	18.8	7 10	21 33.20	-16 37.6	1.685	2.601	12.1	19.3
7 20	21 24.55	-35 25.2	1.888	2.847	8.4	18.6	7 20	21 25.48	-16 21.8	1.617	2.591	8.1	19.1
7 30	21 15.32	-36 36.2	1.882	2.858	6.9	18.6	7 30	21 15.82	-16 9.1	1.573	2.580	3.7	18.8
8 9	21 5.28	-37 28.7	1.902	2.868	7.5	18.6	8 9	21 5.17	-15 56.6	1.557	2.570	1.0	18.6
8 19	20 55.58	-37 58.7	1.947	2.878	9.6	18.8	8 19	20 54.68	-15 42.2	1.568	2.560	5.7	18.9
8 29	20 47.32	-38 5.4	2.016	2.888	12.1	19.0	8 29	20 45.53	-15 24.1	1.605	2.549	10.1	19.1
9 8	20 41.36	-37 51.0	2.106	2.898	14.5	19.1	9 8	20 38.63	-15 1.6	1.665	2.539	14.0	19.3
469456	2002 <i>QZ</i> ₃₈		8 6.7 303°21	0°3/ 6.5	18		402337	2005 <i>UN</i> ₃₂₃		8 6.7 347°94	8°2/ 12.6	15	
6 30	21 31.47	-15 25.5	1.830	2.675	14.7	21.5	6 30	21 29.37	+ 5 12.9	1.982	2.740	16.7	20.9
7 10	21 27.78	-15 47.1	1.746	2.667	11.4	21.2	7 10	21 25.91	+ 6 8.6	1.897	2.736	14.5	20.7
7 20	21 21.84	-16 18.5	1.682	2.659	7.6	21.0	7 20	21 20.48	+ 6 45.4	1.831	2.732	12.0	20.5
7 30	21 14.17	-16 56.3	1.643	2.651	3.4	20.7	7 30	21 13.55	+ 7 0.4	1.786	2.729	9.7	20.4
8 9	21 5.60	-17 35.8	1.630	2.643	1.2	20.5	8 9	21 5.83	+ 6 52.9	1.764	2.727	8.3	20.3
8 19	20 57.15	-18 12.3	1.643	2.635	5.6	20.8	8 19	20 58.19	+ 6 24.3	1.767	2.725	8.6	20.3
8 29	20 49.84	-18 41.8	1.682	2.627	9.7	21.1	8 29	20 51.52	+ 5 38.8	1.795	2.723	10.3	20.4
9 8	20 44.53	-19 1.6	1.744	2.620	13.4	21.3	9 8	20 46.57	+ 4 42.2	1.845	2.722	12.7	20.6
320734	2008 <i>EB</i> ₂₂		8 6.7 83°92	0°8/ 6.1	18		218524	2004 <i>TT</i> ₂₇₄		8 6.8 277°36	2°0/ 8.4	18	
6 30	21 32.58	-17 21.9	2.238	3.074	12.7	21.1	6 30	21 29.63	- 8 45.2	2.426	3.237	12.6	20.6
7 10	21 27.99	-17 45.0	2.173	3.090	9.7	21.0	7 10	21 25.81	- 8 47.9	2.325	3.222	10.0	20.4
7 20	21 21.59	-18 14.2	2.131	3.106	6.4	20.8	7 20	21 20.27	- 9 1.2	2.246	3.206	7.1	20.2
7 30	21 13.92	-18 45.9	2.115	3.122	2.8	20.6	7 30	21 13.42	- 9 24.2	2.193	3.191	4.0	20.0
8 9	21 5.71	-19 16.4	2.126	3.138	1.4	20.5	8 9	21 5.87	- 9 54.5	2.166	3.176	2.1	19.8
8 19	20 57.78	-19 42.3	2.165	3.154	4.8	20.8	8 19	20 58.33	-10 29.1	2.168	3.160	4.4	20.0
8 29	20 50.92	-20 1.1	2.232	3.169	8.1	21.0	8 29	20 51.56	-11 4.6	2.197	3.145	7.6	20.1
9 8	20 45.72	-20 11.5	2.323	3.185	11.0	21.2	9 8	20 46.23	-11 37.7	2.251	3.129	10.7	20.3
149697	2004 <i>HR</i> ₂₅		8 6.7 132°19	0°3/ 6.9	17		510165	2011 <i>AO</i> ₁₅		8 6.8 263°74	1°4/ 7.5	18	
6 30	21 34.61	-12 55.4	1.795	2.629	15.4	20.9	6 30	21 36.29	-11 59.7	1.771	2.600	15.8	22.6
7 10	21 30.07	-13 25.4	1.724	2.638	12.0	20.7	7 10	21 31.80	-11 58.6	1.668	2.577	12.6	22.3
7 20	21 23.25	-14 7.5	1.674	2.647	8.0	20.5	7 20	21 24.75	-12 9.1	1.585	2.554	8.7	22.0
7 30	21 14.74	-14 57.9	1.649	2.655	3.6	20.3	7 30	21 15.60	-12 29.5	1.526	2.530	4.4	21.7
8 9	21 5.46	-15 51.3	1.650	2.663	1.0	20.1	8 9	21 5.21	-12 56.4	1.493	2.505	1.6	21.5
8 19	20 56.43	-16 42.4	1.679	2.671	5.4	20.4	8 19	20 54.69	-13 25.5	1.487	2.480	5.8	21.7
8 29	20 48.68	-17 26.6	1.734	2.678	9.5	20.7	8 29	20 45.28	-13 52.8	1.507	2.455	10.4	21.9
9 8	20 43.00	-18 0.8	1.812	2.685	13.1	20.9	9 8	20 38.03	-14 14.6	1.551	2.428	14.6	22.1
137665	1999 <i>XR</i> ₂₄		8 6.7 285°39	1°7/ 5.7	18		369050	2008 <i>CQ</i> ₁₅₀		8 6.8 246°38	0°5/ 7.0	18	
6 30	21 33.73	-17 22.3	1.537	2.393	16.4	20.6	6 30	21 36.01	-14 15.0	1.632	2.473	16.4	21.2
7 10	21 30.30	-18 1.4	1.440	2.368	12.9	20.3	7 10	21 31.60	-14 19.3	1.547	2.465	12.9	21.0
7 20	21 24.02	-18 53.0	1.363	2.343	8.6	20.0	7 20	21 24.56	-14 34.3	1.481	2.456	8.7	20.7
7 30	21 15.34	-19 52.2	1.308	2.317	3.9	19.7	7 30	21 15.46	-14 57.2	1.440	2.446	4.0	20.4
8 9	21 5.23	-20 51.9	1.279	2.291	2.5	19.5	8 9	21 5.27	-15 23.6	1.424	2.437	1.1	20.2
8 19	20 54.94	-21 44.7	1.276	2.264	7.4	19.7	8 19	20 55.19	-15 49.0	1.434	2.427	6.0	20.5
8 29	20 45.93	-22 24.8	1.297	2.238	12.3	20.0	8 29	20 46.47	-16 9.3	1.470	2.417	10.6	20.7
9 8	20 39.41	-22 48.9	1.338	2.211	16.8	20.2	9 8	20 40.08	-16 21.9	1.528	2.407	14.7	21.0
102655	1999 <i>VV</i> ₅₄		8 6.7 301°07	2°6/ 5.3	18		221380	2005 <i>XV</i> ₈₄		8 6.8 141°61	1°7/ 7.9	18	
6 30	21 33.11	-19 32.7	1.371	2.239	17.4	19.9	6 30	21 33.19	-11 13.7	2.566	3.376	12.0	19.9
7 10	21 30.14	-20 7.2	1.279	2.214	13.6	19.6	7 10	21 28.27	-10 57.0	2.482	3.379	9.5	19.7
7 20	21 24.08	-20 52.4	1.207	2.190	9.2	19.3	7 20	21 21.72	-10 47.8	2.421	3.383	6.6	19.6
7 30	21 15.42	-21 42.7	1.158	2.165	4.4	19.0	7 30	21 13.99	-10 44.8	2.387	3.387	3.5	19.4
8 9	21 5.22	-22 30.2	1.132	2.141	3.4	18.9	8 9	21 5.73	-10 46.6	2.380	3.390	1.7	19.2
8 19	20 54.90	-23 7.4	1.130	2.117	8.2	19.1	8 19	20 57.64	-10 51.1	2.403	3.394	4.1	19.4
8 29	20 46.07	-23 29.1	1.151	2.094	13.4	19.3	8 29	20 50.42	-10 56.4	2.453	3.397	7.1	19.6
9 8	20 40.03	-23 33.1	1.192	2.071	18.0	19.5	9 8	20 44.64	-11 0.4	2.529	3.400	9.9	19.8
476234	2007 <i>VJ</i> ₃₄		8 6.7 250°03	2°5/ 4.8	18		429513	2011 <i>BO</i> ₂₆		8 6.8 180			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
195222	2002 <i>DL</i> ₁₄		8 6.8 282°81	1°2/ 5.9	18	R	304407	2006 <i>TU</i> ₄₀		8 6.8 220°19	0°7/ 6.2	18	
6 30	21 32.87	-17 7.6	1.712	2.563	15.3	20.7	6 30	21 32.12	-16 51.3	2.210	3.046	12.8	21.3
7 10	21 29.13	-17 37.5	1.625	2.549	11.9	20.4	7 10	21 27.86	-17 14.3	2.126	3.043	9.9	21.1
7 20	21 22.91	-18 17.3	1.558	2.536	7.9	20.1	7 20	21 21.67	-17 44.5	2.065	3.040	6.5	20.9
7 30	21 14.73	-19 2.6	1.515	2.523	3.5	19.8	7 30	21 14.06	-18 18.4	2.030	3.038	2.9	20.6
8 9	21 5.49	-19 47.7	1.498	2.510	1.9	19.7	8 9	21 5.75	-18 52.0	2.022	3.035	1.3	20.5
8 19	20 56.30	-20 27.3	1.507	2.496	6.3	20.0	8 19	20 57.57	-19 21.7	2.042	3.031	5.0	20.8
8 29	20 48.35	-20 56.7	1.542	2.483	10.7	20.2	8 29	20 50.38	-19 44.5	2.089	3.028	8.5	21.0
9 8	20 42.59	-21 13.8	1.598	2.470	14.6	20.4	9 8	20 44.88	-19 58.6	2.161	3.025	11.6	21.2
285245	1998 <i>BH</i> ₂₁		8 6.8 284°28	1°5/ 7.5	18		416657	2004 <i>TU</i> ₂₀₈		8 6.8 312°06	2°6/ 5.6	17	
6 30	21 35.56	-13 7.4	1.699	2.535	16.0	21.5	6 30	21 33.10	-20 1.0	1.145	2.025	19.2	20.8
7 10	21 31.23	-12 49.2	1.604	2.518	12.7	21.3	7 10	21 30.66	-20 18.6	1.061	2.003	15.1	20.5
7 20	21 24.33	-12 40.4	1.529	2.500	8.8	21.0	7 20	21 24.72	-20 45.9	0.995	1.980	10.2	20.1
7 30	21 15.38	-12 39.4	1.478	2.483	4.4	20.7	7 30	21 15.82	-21 17.1	0.949	1.958	4.8	19.8
8 9	21 5.30	-12 43.7	1.453	2.465	1.7	20.5	8 9	21 5.18	-21 44.3	0.926	1.937	3.4	19.6
8 19	20 55.23	-12 50.0	1.454	2.447	5.8	20.7	8 19	20 54.48	-22 0.4	0.925	1.916	8.8	19.8
8 29	20 46.39	-12 55.4	1.480	2.430	10.4	20.9	8 29	20 45.59	-22 0.8	0.945	1.896	14.6	20.1
9 8	20 39.78	-12 57.3	1.529	2.412	14.5	21.2	9 8	20 39.94	-21 44.4	0.983	1.877	19.7	20.3
357819	2005 <i>UY</i> ₂₃		8 6.8 130°19	0°8/ 6.0	18		281759	2009 <i>BC</i> ₁₃₃		8 6.8 32°12	0°8/ 7.5	18	
6 30	21 31.97	-17 33.5	2.566	3.396	11.4	21.6	6 30	21 28.54	-12 52.2	2.656	3.479	11.3	20.0
7 10	21 27.36	-17 58.5	2.492	3.406	8.8	21.4	7 10	21 24.66	-12 53.3	2.580	3.487	8.8	19.9
7 20	21 21.13	-18 28.7	2.441	3.415	5.7	21.3	7 20	21 19.32	-13 1.4	2.527	3.496	5.9	19.7
7 30	21 13.73	-19 1.3	2.417	3.424	2.5	21.1	7 30	21 12.94	-13 14.9	2.500	3.504	2.9	19.5
8 9	21 5.82	-19 32.7	2.421	3.433	1.3	21.0	8 9	21 6.10	-13 31.4	2.501	3.514	1.0	19.4
8 19	20 58.10	-19 59.9	2.454	3.441	4.4	21.2	8 19	20 59.43	-13 48.7	2.530	3.523	3.8	19.6
8 29	20 51.26	-20 20.6	2.515	3.449	7.5	21.4	8 29	20 53.56	-14 4.4	2.587	3.533	6.7	19.8
9 8	20 45.90	-20 33.3	2.601	3.457	10.2	21.6	9 8	20 49.00	-14 16.7	2.669	3.542	9.4	20.0
371546	2006 <i>UL</i> ₃₃₁		8 6.8 284°75	3°6/ 4.9	18		358851	2008 <i>FR</i> ₇₃		8 6.8 351°17	2°2/ 8.6	18	
6 30	21 37.40	-23 29.5	1.505	2.365	16.5	20.7	6 30	21 27.66	- 7 7.9	1.971	2.792	14.7	20.7
7 10	21 33.08	-23 55.4	1.423	2.352	12.9	20.5	7 10	21 24.61	- 7 32.9	1.887	2.790	11.7	20.5
7 20	21 25.76	-24 25.4	1.360	2.339	8.8	20.2	7 20	21 19.63	- 8 13.6	1.825	2.787	8.3	20.3
7 30	21 16.06	-24 53.3	1.321	2.326	4.8	19.9	7 30	21 13.19	- 9 8.1	1.786	2.785	4.6	20.1
8 9	21 5.11	-25 12.3	1.307	2.313	4.2	19.9	8 9	21 6.01	-10 12.3	1.774	2.784	2.2	19.9
8 19	20 54.32	-25 17.3	1.319	2.300	8.1	20.1	8 19	20 58.93	-11 21.1	1.788	2.783	4.9	20.1
8 29	20 45.15	-25 6.0	1.354	2.287	12.6	20.3	8 29	20 52.83	-12 28.8	1.830	2.782	8.5	20.3
9 8	20 38.70	-24 39.3	1.410	2.274	16.6	20.5	9 8	20 48.44	-13 30.5	1.895	2.781	12.0	20.5
475511	2006 <i>SV</i> ₃₄₂		8 6.8 338°07	5°7/10.7	18		195526	2002 <i>JF</i> ₂₄		8 6.8 99°55	1°2/ 5.8	17	
6 30	21 29.21	- 1 6.2	1.822	2.620	16.6	21.0	6 30	21 34.07	-17 8.0	1.875	2.718	14.5	20.7
7 10	21 25.97	- 0 38.7	1.737	2.614	13.8	20.8	7 10	21 29.56	-17 47.4	1.811	2.732	11.1	20.5
7 20	21 20.61	- 0 29.1	1.671	2.609	10.7	20.6	7 20	21 22.87	-18 35.0	1.768	2.745	7.3	20.3
7 30	21 13.64	- 0 38.6	1.627	2.604	7.6	20.4	7 30	21 14.59	-19 26.2	1.751	2.758	3.2	20.0
8 9	21 5.83	- 1 6.0	1.607	2.600	5.8	20.3	8 9	21 5.63	-20 15.4	1.760	2.771	1.8	20.0
8 19	20 58.10	- 1 48.3	1.613	2.596	6.8	20.3	8 19	20 56.96	-20 57.8	1.797	2.784	5.7	20.3
8 29	20 51.44	- 2 40.4	1.644	2.592	9.7	20.5	8 29	20 49.57	-21 29.9	1.859	2.797	9.5	20.5
9 8	20 46.63	- 3 36.4	1.698	2.589	12.9	20.7	9 8	20 44.18	-21 50.0	1.946	2.809	12.8	20.7
72002	2000 <i>WP</i> ₁₉₁		8 6.8 70°15	0°7/ 6.3	18		512171	2015 <i>RS</i> ₉₉		8 6.8 2°90	1°0/ 7.5	18	
6 30	21 32.99	-13 38.0	1.356	2.213	18.2	18.7	6 30	21 29.18	-11 49.0	1.876	2.713	14.7	20.7
7 10	21 29.53	-14 32.2	1.293	2.221	14.1	18.5	7 10	21 25.87	-12 2.6	1.798	2.713	11.5	20.4
7 20	21 23.27	-15 42.8	1.250	2.230	9.3	18.2	7 20	21 20.49	-12 28.0	1.741	2.713	7.8	20.2
7 30	21 14.87	-17 3.6	1.230	2.238	4.1	18.0	7 30	21 13.58	-13 2.7	1.708	2.713	3.8	20.0
8 9	21 5.49	-18 25.9	1.234	2.247	1.6	17.8	8 9	21 5.92	-13 42.8	1.702	2.714	1.2	19.8
8 19	20 56.42	-19 41.4	1.264	2.256	6.8	18.2	8 19	20 58.43	-14 23.7	1.722	2.716	5.0	20.1
8 29	20 49.00	-20 43.1	1.318	2.265	11.7	18.5	8 29	20 52.04	-15 1.3	1.767	2.718	8.9	20.3
9 8	20 44.16	-21 27.6	1.393	2.274	15.8	18.8	9 8	20 47.48	-15 32.2	1.836	2.720	12.4	20.5
176147	2001 <i>FG</i> ₁₄₂		8 6.8 177°40	1°1/ 7.5	18		278557	2008 <i>GM</i> ₂₇		8 6.8 4°25	4°8/10.6	18	
6 30	21 35.79	-11 22.4	1.909	2.731	15.0	21.2	6 30	21 27.32	- 1 35.7	1.836	2.639	16.3	20.1
7 10	21 30.93	-11 39.9	1.828	2.734	11.8	21.0	7 10	21 24.46	- 1 35.0	1.756	2.639	13.4	19.9
7 20	21 23.83	-12 9.6	1.767	2.735	8.1	20.8	7 20	21 19.58	- 1 53.7	1.695	2.640	10.2	19.7
7 30	21 15.05	-12 48.8	1.732	2.736	3.9	20.5	7 30	21 13.19	- 2 31.6	1.657	2.640	6.9	19.5
8 9	21 5.44	-13 33.3	1.724	2.737	1.3	20.3	8 9	21 6.05	- 3 26.0	1.643	2.642	4.8	19.4
8 19	20 55.98	-14 18.3	1.743	2.736	5.2	20.6	8 19	20 59.04	- 4 32.5	1.656	2.644	6.0	19.5
8 29	20 47.70	-14 59.4	1.790	2.735	9.2	20.9	8 29	20 53.07	- 5 44.8	1.694	2.647	9.1	19.7
9 8	20 41.41	-15 33.4	1.860	2.733	12.8	21.1	9 8	20 48.89	- 6 56.6	1.756	2.650	12.4	19.9
439247	2012 <i>TD</i> ₂₅₂		8 6.8 224°56	11°2/16.6	16		368282	2002 <i>NH</i> ₇		8 6.8 343°51	7°9/10.6	17	
6 30	21 30.72	+15 44.2	2.094	2.774	18.0	21.6	6 30	21 16.00	- 4 4.5	0.861	1.748	23.3	19.5
7 10	21 26.98	+16 44.3	2.007	2.770	16.4	21.4	7 10	21 17.55	- 3 5.5	0.787	1.722	19.7	19.2
7 20	21 21.22	+17 20.6	1.936	2.767	14.5	21.3	7 20	21 16.05	- 2 31.4	0.727	1.699	15.3	18.8
7 30	21 13.91	+17 28.7	1.884	2.763	12.8	21.1	7 30	21 11.96	- 2 27.8	0.683	1.678	10.8	18.5
8 9	21 5.76	+17 6.5	1.853	2.759	11.6	21.1	8 9	21 6.36	- 2 55.9	0.656	1.660	8.0	18.2
8 19	20 57.64	+16 15.0	1.845	2.755	11.3	21.0	8 19	21 0.73	- 3 51.8	0.648	1.645	9.7	18.3
8 29	20 50.46	+14 58.4	1.860	2.751	12.1	21.1	8 29	20 56.83	- 5 6.0	0.656	1.633	14.3	18.5
9 8	20 45.01	+13 24.0	1.897	2.746	13.6	21.2	9 8	20 56.06	- 6 25.3	0.681	1.624	19.5	18.7
519620	2012 <i>UO</i> ₁₈₁		8 6.8 279°23	0°0/ 6.6	18		506069	2015 <i>PE</i> ₂₁₀		8			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
404495	2013 <i>HA</i> ₂₈		8 6.8 150°94	6°4/31.5	18		280094	2002 <i>ED</i> ₆₄		8 6.8 241°24	5°4/11.3	17	
6 30	21 33.76	-34 56.9	2.463	3.306	11.4	21.3	6 30	21 30.71	+ 1 22.1	2.029	2.804	15.9	21.2
7 10	21 29.23	-36 11.0	2.399	3.308	9.3	21.1	7 10	21 27.02	+ 1 18.4	1.932	2.793	13.3	21.0
7 20	21 22.63	-37 21.2	2.359	3.309	7.4	21.0	7 20	21 21.32	+ 0 54.3	1.854	2.783	10.4	20.8
7 30	21 14.52	-38 21.1	2.345	3.311	6.4	20.9	7 30	21 14.03	+ 0 9.3	1.799	2.772	7.4	20.6
8 9	21 5.68	-39 5.3	2.358	3.313	7.0	21.0	8 9	21 5.88	- 0 54.8	1.769	2.760	5.5	20.5
8 19	20 57.04	-39 30.4	2.396	3.314	8.7	21.1	8 19	20 57.72	- 2 13.8	1.766	2.748	6.3	20.5
8 29	20 49.50	-39 35.5	2.459	3.316	10.7	21.2	8 29	20 50.46	- 3 41.4	1.790	2.736	9.1	20.7
9 8	20 43.80	-39 22.1	2.543	3.317	12.7	21.4	9 8	20 44.92	- 5 10.7	1.838	2.724	12.3	20.8
481106	2005 <i>TK</i> ₉₅		8 6.8 207°06	8°6/16.9	18		302422	2002 <i>CU</i> ₂₄₈		8 6.8 138°05	2°2/ 9.1	18	
6 30	21 29.28	+17 1.6	2.996	3.635	13.8	22.3	6 30	21 30.02	- 6 5.9	2.784	3.576	11.6	21.5
7 10	21 25.24	+17 33.4	2.898	3.630	12.5	22.2	7 10	21 25.74	- 6 23.5	2.704	3.587	9.3	21.4
7 20	21 19.76	+17 46.5	2.817	3.624	11.1	22.0	7 20	21 20.04	- 6 52.2	2.646	3.597	6.6	21.2
7 30	21 13.20	+17 38.4	2.756	3.618	9.8	21.9	7 30	21 13.32	- 7 30.7	2.614	3.608	3.9	21.0
8 9	21 6.07	+17 8.4	2.719	3.611	8.8	21.9	8 9	21 6.12	- 8 16.4	2.611	3.617	2.2	20.9
8 19	20 58.96	+16 17.4	2.706	3.604	8.6	21.8	8 19	20 59.05	- 9 6.1	2.636	3.627	3.8	21.1
8 29	20 52.48	+15 8.5	2.718	3.596	9.2	21.9	8 29	20 52.73	- 9 56.3	2.691	3.636	6.5	21.2
9 8	20 47.20	+13 46.5	2.755	3.588	10.3	21.9	9 8	20 47.66	-10 43.9	2.771	3.644	9.1	21.4
159621	2002 <i>AN</i> ₁₂₈		8 6.8 93°50	3°0/ 3.9	18		380312	2002 <i>FZ</i> ₂₅		8 6.8 117°71	4°5/ 2.9	17	
6 30	21 33.00	-15 52.0	1.750	2.595	15.2	19.3	6 30	21 36.09	-25 35.9	2.070	2.916	13.2	21.5
7 10	21 29.15	-18 4.3	1.680	2.604	11.6	19.1	7 10	21 31.10	-26 57.1	2.012	2.934	10.2	21.3
7 20	21 22.88	-20 32.0	1.634	2.613	7.6	18.9	7 20	21 23.90	-28 20.4	1.979	2.950	7.1	21.2
7 30	21 14.74	-23 6.0	1.616	2.622	3.8	18.7	7 30	21 15.11	-29 38.8	1.971	2.966	4.8	21.0
8 9	21 5.62	-25 34.5	1.627	2.631	3.8	18.7	8 9	21 5.61	-30 45.5	1.992	2.982	5.1	21.1
8 19	20 56.59	-27 47.2	1.666	2.640	7.6	19.0	8 19	20 56.39	-31 35.5	2.039	2.997	7.6	21.3
8 29	20 48.80	-29 36.6	1.732	2.648	11.4	19.2	8 29	20 48.43	-32 6.7	2.113	3.012	10.5	21.5
9 8	20 43.15	-31 0.0	1.822	2.657	14.7	19.4	9 8	20 42.49	-32 19.6	2.209	3.026	13.1	21.7
261067	2005 <i>SL</i> ₂₀₀		8 6.8 328°36	4°3/10.3	18		390038	2012 <i>UM</i> ₅₆		8 6.8 104°15	2°1/ 8.2	17	
6 30	21 28.20	- 2 13.9	2.026	2.823	15.1	20.8	6 30	21 32.80	- 9 27.7	1.915	2.736	15.0	21.0
7 10	21 25.00	- 2 14.9	1.937	2.818	12.5	20.6	7 10	21 28.58	- 9 27.9	1.838	2.741	11.9	20.8
7 20	21 19.90	- 2 33.2	1.869	2.813	9.4	20.4	7 20	21 22.26	- 9 40.5	1.782	2.746	8.3	20.6
7 30	21 13.35	- 3 8.8	1.824	2.808	6.3	20.2	7 30	21 14.40	-10 4.0	1.751	2.751	4.5	20.4
8 9	21 6.05	- 3 59.2	1.805	2.804	4.4	20.1	8 9	21 5.82	-10 35.1	1.746	2.756	2.1	20.3
8 19	20 58.83	- 5 0.5	1.812	2.800	5.6	20.2	8 19	20 57.43	-11 10.0	1.767	2.761	5.0	20.5
8 29	20 52.54	- 6 7.2	1.845	2.796	8.6	20.4	8 29	20 50.17	-11 44.6	1.816	2.765	8.8	20.7
9 8	20 47.90	- 7 13.7	1.903	2.792	11.8	20.5	9 8	20 44.79	-12 15.3	1.888	2.770	12.2	20.9
349884	2009 <i>DM</i> ₁₀₉		8 6.8 155°46	3°5/ 9.8	16		7947	<i>Toland</i>		8 6.8 221°56	3°3/ 8.8	18	
6 30	21 31.78	- 3 45.6	2.371	3.158	13.5	21.9	6 30	21 34.08	- 6 41.4	1.550	2.375	17.8	19.2
7 10	21 27.37	- 3 43.7	2.288	3.164	11.0	21.7	7 10	21 30.20	- 6 45.3	1.468	2.370	14.4	18.9
7 20	21 21.25	- 3 55.5	2.226	3.169	8.2	21.5	7 20	21 23.72	- 7 7.7	1.404	2.366	10.4	18.7
7 30	21 13.88	- 4 20.3	2.189	3.174	5.3	21.3	7 30	21 15.18	- 7 47.4	1.363	2.361	6.0	18.4
8 9	21 5.92	- 4 56.1	2.178	3.179	3.6	21.2	8 9	21 5.57	- 8 40.7	1.347	2.355	3.3	18.2
8 19	20 58.08	- 5 39.7	2.196	3.183	4.9	21.3	8 19	20 56.04	- 9 41.8	1.356	2.350	6.2	18.4
8 29	20 51.12	- 6 27.1	2.242	3.187	7.6	21.5	8 29	20 47.85	-10 44.0	1.391	2.344	10.6	18.6
9 8	20 45.65	- 7 14.4	2.313	3.191	10.5	21.7	9 8	20 41.97	-11 41.3	1.448	2.338	14.8	18.9
402697	2006 <i>VB</i> ₆₅		8 6.8 284°73	1°5/ 7.6	17		161060	2002 <i>JZ</i> ₈₅		8 6.8 6°61	3°2/ 8.5	18	
6 30	21 33.17	-11 21.9	1.550	2.391	17.1	21.9	6 30	21 30.49	- 9 1.7	1.414	2.259	18.2	19.3
7 10	21 29.69	-11 26.7	1.455	2.372	13.6	21.7	7 10	21 27.49	- 8 41.4	1.344	2.260	14.6	19.0
7 20	21 23.52	-11 45.8	1.380	2.352	9.4	21.4	7 20	21 21.90	- 8 36.6	1.293	2.261	10.3	18.8
7 30	21 15.15	-12 17.6	1.328	2.332	4.7	21.1	7 30	21 14.33	- 8 46.7	1.263	2.263	5.9	18.5
8 9	21 5.51	-12 57.8	1.300	2.313	1.7	20.8	8 9	21 5.83	- 9 8.4	1.257	2.266	3.2	18.4
8 19	20 55.78	-13 41.2	1.298	2.293	6.2	21.0	8 19	20 57.59	- 9 37.6	1.317	2.270	6.2	18.6
8 29	20 47.32	-14 22.1	1.321	2.273	11.1	21.3	8 29	20 50.80	-10 8.9	1.317	2.275	10.6	18.9
9 8	20 41.20	-14 55.9	1.365	2.254	15.6	21.5	9 8	20 46.38	-10 37.6	1.381	2.280	14.7	19.1
449325	2013 <i>FS</i> ₁₄		8 6.8 128°37	9°4/29.1	18		439766	2015 <i>FP</i> ₃₄₄		8 6.8 108°97	0°7/ 6.3	17	
6 30	21 41.46	-46 43.8	2.465	3.276	12.4	21.2	6 30	21 34.10	-15 4.7	1.883	2.720	14.6	21.5
7 10	21 35.46	-47 56.9	2.417	3.281	10.9	21.1	7 10	21 29.60	-15 46.9	1.817	2.734	11.3	21.3
7 20	21 26.88	-48 58.1	2.391	3.287	9.8	21.0	7 20	21 22.93	-16 39.3	1.773	2.748	7.4	21.1
7 30	21 16.43	-49 40.1	2.388	3.293	9.4	21.0	7 30	21 14.69	-17 37.3	1.754	2.762	3.2	20.8
8 9	21 5.21	-49 57.8	2.409	3.298	9.9	21.0	8 9	21 5.75	-18 35.1	1.763	2.775	1.3	20.7
8 19	20 54.42	-49 49.4	2.454	3.303	11.1	21.1	8 19	20 57.09	-19 27.7	1.798	2.788	5.4	21.0
8 29	20 45.24	-49 16.1	2.521	3.308	12.6	21.3	8 29	20 49.67	-20 10.7	1.861	2.801	9.3	21.3
9 8	20 38.49	-48 21.9	2.607	3.313	14.1	21.4	9 8	20 44.23	-20 42.0	1.947	2.813	12.6	21.5
148266	2000 <i>FQ</i> ₃₉		8 6.8 152°11	1°6/ 5.7	17		315392	2007 <i>VN</i> ₁₁₁		8 6.8 86°17	2°4/ 5.4	17	
6 30	21 35.91	-18 0.7	1.876	2.717	14.5	20.8	6 30	21 37.59	-19 7.7	1.426	2.283	17.4	21.5
7 10	21 31.10	-18 41.3	1.804	2.723	11.2	20.6	7 10	21 32.91	-19 52.6	1.372	2.300	13.4	21.3
7 20	21 23.99	-19 29.8	1.753	2.730	7.4	20.3	7 20	21 25.40	-20 46.0	1.337	2.317	8.8	21.1
7 30	21 15.18	-20 21.4	1.728	2.735	3.3	20.1	7 30	21 15.83	-21 41.1	1.327	2.334	4.1	20.8
8 9	21 5.56	-21 10.3	1.730	2.741	2.2	20.0	8 9	21 5.44	-22 30.4	1.341	2.351	3.1	20.8
8 19	20 56.18	-21 51.5	1.760	2.745	6.0	20.3	8 19	20 55.54	-23 7.8	1.381	2.367	7.3	21.1
8 29	20 48.08	-22 21.4	1.815	2.749	9.9	20.5	8 29	20 47.43	-23 30.1	1.446	2.383	11.6	21.4
9 8	20 42.05	-22 38.7	1.894	2.753	13.2	20.8	9 8	20 41.97	-23 36.8	1.531	2.399	15.4	21.7
185392	2006 <i>WP</i> ₅₅		8 6.8										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
164266	2004 <i>VK</i> ₅		8 6.8 334°96	4.2/ 5.2	18		44954	1999 <i>VN</i> ₇₂		8 6.8 15°40	5.3/ 9.7	18	R
6 30	21 30.75	-23 8.5	0.971	1.868	20.4	19.9	6 30	21 30.99	-5 1.8	1.224	2.066	20.6	18.1
7 10	21 29.26	-23 23.4	0.900	1.851	16.1	19.6	7 10	21 28.23	-4 30.9	1.159	2.069	16.9	17.9
7 20	21 23.98	-23 43.9	0.846	1.834	11.0	19.2	7 20	21 22.58	-4 21.4	1.111	2.072	12.5	17.7
7 30	21 15.57	-24 2.7	0.811	1.818	5.8	18.9	7 30	21 14.72	-4 34.0	1.083	2.076	8.0	17.4
8 9	21 5.45	-24 11.2	0.796	1.805	4.9	18.8	8 9	21 5.79	-5 6.0	1.077	2.081	5.4	17.3
8 19	20 55.53	-24 2.8	0.802	1.792	9.9	19.0	8 19	20 57.16	-5 52.2	1.094	2.087	7.5	17.4
8 29	20 47.79	-23 34.8	0.827	1.781	15.6	19.3	8 29	20 50.17	-6 45.3	1.134	2.093	11.8	17.7
9 8	20 43.62	-22 48.7	0.869	1.772	20.7	19.6	9 8	20 45.84	-7 37.8	1.194	2.100	16.0	18.0
215394	2002 <i>CH</i> ₁₉₉		8 6.8 10°58	0°8/ 7.5	18		470806	2008 <i>VZ</i> ₂		8 6.8 301°64	6°4/ 10.2	18	
6 30	21 27.84	-10 20.9	1.889	2.724	14.7	19.7	6 30	21 32.22	-2 0.3	1.696	2.498	17.5	20.6
7 10	21 24.87	-11 4.0	1.812	2.726	11.5	19.5	7 10	21 28.64	-1 10.9	1.602	2.482	14.7	20.3
7 20	21 19.88	-12 1.8	1.756	2.728	7.8	19.3	7 20	21 22.66	-0 37.6	1.527	2.467	11.4	20.1
7 30	21 13.38	-13 10.9	1.725	2.730	3.7	19.0	7 30	21 14.75	-0 22.8	1.473	2.451	8.3	19.9
8 9	21 6.14	-14 26.0	1.720	2.733	1.0	18.8	8 9	21 5.76	-0 26.8	1.444	2.436	6.4	19.7
8 19	20 59.03	-15 40.9	1.742	2.736	5.0	19.1	8 19	20 56.73	-0 47.8	1.439	2.420	7.6	19.8
8 29	20 52.98	-16 49.8	1.790	2.739	8.9	19.4	8 29	20 48.80	-1 21.6	1.459	2.405	10.8	19.9
9 8	20 48.70	-17 48.5	1.862	2.743	12.4	19.6	9 8	20 42.94	-2 2.6	1.501	2.391	14.4	20.1
398277	2010 <i>TD</i> ₁₈₆		8 6.8 359°89	4°1/ 10.2	18		476081	2007 <i>TS</i> ₄₃		8 6.8 300°62	6°2/ 10.4	17	
6 30	21 27.94	-2 52.2	1.966	2.769	15.4	21.2	6 30	21 30.90	-1 9.0	1.814	2.609	16.7	21.4
7 10	21 24.84	-2 56.3	1.883	2.768	12.6	21.0	7 10	21 27.63	-0 33.4	1.703	2.579	14.2	21.1
7 20	21 19.81	-3 17.9	1.820	2.767	9.4	20.8	7 20	21 22.04	-0 14.5	1.611	2.548	11.1	20.9
7 30	21 13.34	-3 56.6	1.780	2.767	6.2	20.6	7 30	21 14.53	-0 14.6	1.541	2.518	8.1	20.6
8 9	21 6.15	-4 49.6	1.766	2.767	4.1	20.5	8 9	21 5.82	-0 33.8	1.496	2.487	6.3	20.4
8 19	20 59.07	-5 52.5	1.778	2.768	5.5	20.6	8 19	20 56.89	-1 10.4	1.475	2.457	7.4	20.4
8 29	20 52.97	-6 59.8	1.817	2.769	8.6	20.8	8 29	20 48.86	-1 59.9	1.479	2.426	10.6	20.5
9 8	20 48.55	-8 5.8	1.879	2.770	11.8	21.0	9 8	20 42.73	-2 56.2	1.507	2.396	14.3	20.7
90680	1981 <i>DE</i> ₃		8 6.8 124°34	0°7/ 6.4	18		520517	2014 <i>LG</i> ₃₂		8 6.8 127°01	4°0/ 10.5	18	
6 30	21 38.53	-18 4.2	1.955	2.789	14.3	19.4	6 30	21 29.78	-1 52.2	2.384	3.165	13.6	21.9
7 10	21 32.91	-18 4.6	1.884	2.799	11.1	19.2	7 10	21 25.86	-1 50.9	2.301	3.171	11.2	21.7
7 20	21 25.06	-18 10.3	1.835	2.809	7.3	19.0	7 20	21 20.29	-2 4.5	2.239	3.177	8.4	21.5
7 30	21 15.63	-18 18.1	1.811	2.818	3.2	18.8	7 30	21 13.52	-2 32.5	2.202	3.182	5.7	21.4
8 9	21 5.53	-18 24.4	1.815	2.828	1.3	18.6	8 9	21 6.18	-3 12.9	2.191	3.187	4.1	21.3
8 19	20 55.76	-18 26.5	1.847	2.837	5.3	18.9	8 19	20 58.95	-4 2.5	2.208	3.192	5.0	21.4
8 29	20 47.31	-18 22.5	1.906	2.845	9.1	19.2	8 29	20 52.57	-4 57.1	2.252	3.197	7.6	21.5
9 8	20 40.93	-18 11.6	1.989	2.853	12.5	19.4	9 8	20 47.63	-5 52.4	2.321	3.202	10.3	21.7
272386	2005 <i>SN</i> ₂₅₄		8 6.8 298°71	1°8/ 5.7	18		176306	2001 <i>SZ</i> ₁₅₄		8 6.8 288°92	0°3/ 6.6	18	
6 30	21 32.94	-18 12.7	1.491	2.352	16.6	20.8	6 30	21 31.88	-15 48.6	2.010	2.850	13.8	20.4
7 10	21 29.73	-18 43.4	1.400	2.331	13.0	20.5	7 10	21 28.02	-16 5.7	1.918	2.836	10.7	20.2
7 20	21 23.68	-19 24.9	1.329	2.310	8.7	20.2	7 20	21 22.03	-16 31.3	1.847	2.823	7.2	19.9
7 30	21 15.29	-20 12.1	1.280	2.289	4.0	19.9	7 30	21 14.40	-17 2.3	1.802	2.809	3.2	19.6
8 9	21 5.56	-20 58.5	1.257	2.268	2.5	19.7	8 9	21 5.91	-17 34.8	1.783	2.796	1.1	19.4
8 19	20 55.77	-21 37.3	1.258	2.247	7.3	20.0	8 19	20 57.46	-18 4.6	1.791	2.782	5.2	19.7
8 29	20 47.34	-22 3.4	1.283	2.226	12.2	20.2	8 29	20 50.04	-18 28.2	1.825	2.769	9.2	19.9
9 8	20 41.44	-22 14.6	1.328	2.206	16.6	20.4	9 8	20 44.44	-18 43.4	1.883	2.755	12.7	20.1
219534	2001 <i>QH</i> ₁₈₈		8 6.8 271°65	0°0/ 6.6	18		324957	2007 <i>YG</i> ₅₇		8 6.8 277°85	2°6/ 8.0	18	
6 30	21 37.80	-16 11.3	1.843	2.677	15.0	20.0	6 30	21 36.18	-10 49.1	1.449	2.288	18.1	20.8
7 10	21 32.95	-16 8.0	1.738	2.653	11.9	19.7	7 10	21 32.04	-10 25.6	1.367	2.281	14.5	20.6
7 20	21 25.54	-16 12.0	1.655	2.628	8.0	19.5	7 20	21 25.08	-10 15.1	1.305	2.274	10.2	20.3
7 30	21 16.05	-16 20.6	1.596	2.603	3.7	19.1	7 30	21 15.88	-10 16.6	1.264	2.266	5.5	20.0
8 9	21 5.36	-16 30.4	1.564	2.577	1.1	18.9	8 9	21 5.50	-10 27.4	1.248	2.259	2.7	19.8
8 19	20 54.57	-16 37.7	1.559	2.551	5.8	19.2	8 19	20 55.26	-10 43.8	1.258	2.252	6.4	20.1
8 29	20 44.91	-16 39.6	1.581	2.524	10.4	19.4	8 29	20 46.52	-11 1.6	1.291	2.245	11.2	20.3
9 8	20 37.40	-16 34.6	1.626	2.497	14.4	19.6	9 8	20 40.32	-11 16.7	1.347	2.238	15.6	20.5
373199	2012 <i>DU</i> ₈₁		8 6.8 134°55	2°2/ 5.6	17		443697	2015 <i>KL</i> ₁₀₈		8 6.8 92°28	0°1/ 6.9	18	
6 30	21 39.21	-20 22.0	1.587	2.437	16.3	21.7	6 30	21 32.28	-13 1.8	1.872	2.708	14.8	21.2
7 10	21 34.04	-20 43.5	1.519	2.443	12.6	21.5	7 10	21 28.25	-13 38.2	1.803	2.718	11.5	21.0
7 20	21 26.14	-21 11.0	1.472	2.450	8.4	21.3	7 20	21 22.10	-14 26.3	1.755	2.728	7.6	20.7
7 30	21 16.20	-21 38.9	1.449	2.456	3.9	21.0	7 30	21 14.39	-15 22.3	1.732	2.738	3.4	20.5
8 9	21 5.36	-22 1.6	1.452	2.461	2.7	21.0	8 9	21 5.96	-16 20.9	1.735	2.748	0.9	20.3
8 19	20 54.91	-22 14.7	1.481	2.467	6.9	21.2	8 19	20 57.77	-17 16.8	1.766	2.758	5.2	20.7
8 29	20 46.08	-22 15.8	1.535	2.472	11.1	21.5	8 29	20 50.76	-18 5.4	1.823	2.768	9.1	20.9
9 8	20 39.78	-22 4.9	1.612	2.477	14.9	21.7	9 8	20 45.67	-18 43.5	1.904	2.778	12.5	21.2
184884	2005 <i>UF</i> ₂₁₄		8 6.8 353°49	1°2/ 5.8	18		489589	2007 <i>TW</i> ₁₂₉		8 6.8 256°12	4°6/ 3.1	18	
6 30	21 24.51	-13 52.9	1.477	2.343	16.4	19.5	6 30	21 35.66	-27 44.7	2.229	3.074	12.4	22.4
7 10	21 22.94	-15 2.7	1.402	2.336	12.7	19.2	7 10	21 30.95	-28 37.4	2.138	3.057	9.8	22.2
7 20	21 18.96	-16 29.8	1.347	2.330	8.4	19.0	7 20	21 24.00	-29 31.4	2.070	3.039	7.0	22.0
7 30	21 13.08	-18 8.3	1.316	2.325	3.7	18.7	7 30	21 15.32	-30 21.0	2.028	3.021	4.9	21.8
8 9	21 6.23	-19 49.5	1.309	2.321	2.0	18.6	8 9	21 5.69	-31 0.1	2.013	3.002	5.1	21.8
8 19	20 59.48	-21 24.2	1.328	2.319	6.7	18.8	8 19	20 56.09	-31 24.4	2.025	2.983	7.6	21.9
8 29	20 54.01	-22 44.5	1.370	2.317	11.3	19.1	8 29	20 47.55	-31 31.7	2.063	2.964	10.6	22.1
9 8	20 50.73	-23 45.8	1.434	2.317	15.3	19.4	9 8	20 40.93	-31 22.4	2.123	2.944	13.4	22.3
146030	2000 <i>DM</i> ₆₆		8 6.8 268°02	1°1/ 6.1	18		376920	2002 <i>AR</i> ₁					

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
19166	1991 <i>EY</i> ₁		8 6.8 92°54	0°2/ 6.7	18		145342	2005 <i>MS</i> ₉		8 6.8 118°83	3°5/ 8.9	18	
6 30	21 39.20	-16 2.9	1.477	2.323	17.5	18.3	6 30	21 34.80	-7 4.6	1.642	2.462	17.2	20.1
7 10	21 34.02	-16 9.6	1.418	2.339	13.6	18.1	7 10	21 30.50	-6 51.4	1.567	2.467	13.8	19.9
7 20	21 26.10	-16 25.9	1.378	2.354	9.0	17.9	7 20	21 23.77	-6 53.9	1.513	2.472	10.0	19.7
7 30	21 16.20	-16 47.6	1.362	2.369	4.0	17.6	7 30	21 15.23	-7 11.4	1.481	2.477	5.9	19.5
8 9	21 5.49	-17 9.7	1.371	2.384	1.2	17.4	8 9	21 5.81	-7 40.8	1.474	2.481	3.5	19.4
8 19	20 55.27	-17 27.7	1.407	2.399	6.2	17.8	8 19	20 56.61	-8 18.1	1.494	2.486	5.9	19.5
8 29	20 46.79	-17 38.4	1.467	2.413	10.8	18.1	8 29	20 48.76	-8 58.1	1.539	2.490	9.9	19.8
9 8	20 40.88	-17 40.4	1.550	2.428	14.7	18.4	9 8	20 43.09	-9 36.1	1.607	2.495	13.7	20.0
190056	2004 <i>RQ</i> ₂₄₉		8 6.8 229°63	2°2/ 8.5	18		394893	2008 <i>UP</i> ₂₀₁		8 6.8 260°78	3°0/ 4.5	18	
6 30	21 32.25	-7 54.7	1.920	2.737	15.2	20.5	6 30	21 35.84	-22 41.7	2.174	3.015	12.8	22.2
7 10	21 28.33	-8 11.2	1.830	2.731	12.1	20.3	7 10	21 31.17	-23 26.8	2.072	2.991	10.0	22.0
7 20	21 22.26	-8 43.0	1.762	2.724	8.6	20.1	7 20	21 24.23	-24 17.0	1.992	2.967	6.8	21.8
7 30	21 14.53	-9 28.1	1.717	2.717	4.7	19.8	7 30	21 15.49	-25 7.4	1.939	2.942	3.8	21.5
8 9	21 5.93	-10 22.9	1.699	2.709	2.2	19.7	8 9	21 5.71	-25 52.2	1.913	2.916	3.6	21.5
8 19	20 57.37	-11 22.4	1.708	2.702	5.1	19.8	8 19	20 55.84	-26 26.5	1.915	2.890	6.6	21.6
8 29	20 49.86	-12 21.2	1.744	2.694	9.1	20.1	8 29	20 46.95	-26 47.1	1.944	2.863	10.2	21.8
9 8	20 44.20	-13 14.6	1.804	2.686	12.7	20.3	9 8	20 39.92	-26 53.1	1.996	2.835	13.4	21.9
466289	2013 <i>PX</i> ₄₇		8 6.8 29°69	1°5/ 7.6	16		259895	2004 <i>DT</i> ₅₆		8 6.8 267°66	0°6/ 7.2	18	
6 30	21 31.22	-11 42.7	1.052	1.925	21.1	21.3	6 30	21 35.74	-13 44.1	1.669	2.508	16.2	20.8
7 10	21 28.67	-11 47.4	1.003	1.937	16.6	21.0	7 10	21 31.57	-13 50.1	1.573	2.489	12.8	20.5
7 20	21 22.94	-12 10.4	0.971	1.951	11.3	20.8	7 20	21 24.76	-14 7.5	1.496	2.469	8.7	20.2
7 30	21 14.88	-12 48.0	0.959	1.966	5.5	20.5	7 30	21 15.81	-14 33.8	1.443	2.450	4.1	19.9
8 9	21 5.86	-13 33.6	0.969	1.982	1.7	20.3	8 9	21 5.62	-15 4.6	1.416	2.430	1.1	19.6
8 19	20 57.41	-14 19.6	1.002	1.999	6.9	20.7	8 19	20 55.37	-15 35.2	1.416	2.409	6.0	19.9
8 29	20 50.94	-14 59.4	1.056	2.017	12.2	21.1	8 29	20 46.33	-16 1.2	1.441	2.388	10.8	20.2
9 8	20 47.40	-15 28.5	1.130	2.036	16.7	21.4	9 8	20 39.57	-16 19.4	1.488	2.367	15.0	20.4
100413	1996 <i>AF</i> ₁₈		8 6.8 288°50	1°3/ 7.6	18		474516	2003 <i>UW</i> ₁₈₀		8 6.8 299°63	7°1/ 10.9	18	
6 30	21 32.13	-11 39.3	1.825	2.659	15.2	20.3	6 30	21 31.19	+0 34.4	1.778	2.566	17.3	21.0
7 10	21 28.50	-11 46.1	1.726	2.638	12.1	20.0	7 10	21 27.81	+1 22.1	1.679	2.546	14.7	20.8
7 20	21 22.54	-12 5.1	1.647	2.618	8.3	19.8	7 20	21 22.13	+1 52.4	1.598	2.526	11.8	20.5
7 30	21 14.73	-12 34.6	1.593	2.597	4.2	19.5	7 30	21 14.59	+2 2.5	1.539	2.507	8.9	20.3
8 9	21 5.86	-13 10.8	1.564	2.576	1.4	19.2	8 9	21 5.96	+1 51.8	1.503	2.487	7.2	20.2
8 19	20 56.93	-13 49.5	1.562	2.556	5.4	19.4	8 19	20 57.24	+1 21.7	1.492	2.468	8.0	20.2
8 29	20 49.04	-14 25.9	1.585	2.535	9.8	19.7	8 29	20 49.51	+0 36.6	1.506	2.449	10.8	20.3
9 8	20 43.13	-14 56.3	1.632	2.515	13.8	19.9	9 8	20 43.73	-0 17.3	1.542	2.430	14.1	20.5
508824	2001 <i>RW</i> ₁₅₅		8 6.8 329°45	2°9/ 4.8	18		61465	2000 <i>QY</i> ₃₂		8 6.8 309°32	6°4/ 2.8	18	
6 30	21 25.98	-16 39.3	1.232	2.113	18.1	19.9	6 30	21 37.31	-30 0.5	1.656	2.516	15.3	19.1
7 10	21 24.79	-17 56.4	1.151	2.094	14.1	19.6	7 10	21 32.84	-31 0.0	1.589	2.514	12.1	18.9
7 20	21 20.66	-19 32.8	1.089	2.075	9.4	19.3	7 20	21 25.53	-31 58.6	1.543	2.512	8.9	18.7
7 30	21 14.07	-21 21.3	1.049	2.058	4.4	19.0	7 30	21 16.07	-32 48.0	1.520	2.510	6.7	18.6
8 9	21 6.05	-23 10.5	1.033	2.042	3.8	18.9	8 9	21 5.59	-33 20.6	1.523	2.508	7.0	18.6
8 19	20 57.99	-24 48.8	1.040	2.027	8.8	19.1	8 19	20 55.42	-33 31.6	1.551	2.506	9.7	18.8
8 29	20 51.43	-26 6.5	1.068	2.013	14.0	19.4	8 29	20 46.90	-33 19.9	1.602	2.505	13.0	19.0
9 8	20 47.63	-26 58.8	1.116	2.000	18.6	19.6	9 8	20 40.97	-32 48.0	1.673	2.503	16.0	19.2
58397	1995 <i>VA</i> ₄		8 6.8 243°03	4°6/ 2.6	18		206090	2002 <i>RX</i> ₁₃₈		8 6.8 354°81	6°9/ 2.1	18	
6 30	21 33.43	-28 21.8	2.419	3.264	11.5	19.6	6 30	21 31.16	-28 46.9	1.462	2.338	16.0	19.3
7 10	21 29.01	-29 21.4	2.336	3.254	9.1	19.4	7 10	21 28.41	-30 5.8	1.399	2.334	12.7	19.1
7 20	21 22.59	-30 21.8	2.276	3.244	6.5	19.2	7 20	21 22.76	-31 26.0	1.357	2.331	9.3	18.9
7 30	21 14.66	-31 17.4	2.243	3.233	4.7	19.1	7 30	21 14.88	-32 38.2	1.337	2.329	7.1	18.8
8 9	21 5.94	-32 2.7	2.237	3.223	5.1	19.1	8 9	21 5.91	-33 33.1	1.341	2.327	7.7	18.8
8 19	20 57.29	-32 33.7	2.259	3.212	7.3	19.2	8 19	20 57.22	-34 4.4	1.369	2.326	10.5	19.0
8 29	20 49.62	-32 48.4	2.306	3.200	9.9	19.4	8 29	20 50.18	-34 9.8	1.418	2.326	14.0	19.2
9 8	20 43.67	-32 47.0	2.376	3.189	12.4	19.5	9 8	20 45.78	-33 51.4	1.487	2.327	17.2	19.4
213770	<i>Fignon</i>		8 6.8 71°06	2°4/ 4.8	17		500847	2013 <i>HC</i> ₆₂		8 6.8 56°86	6°7/ 10.8	17	
6 30	21 32.41	-20 12.0	1.993	2.841	13.5	20.4	6 30	21 34.16	-1 17.7	1.165	1.992	22.4	20.7
7 10	21 28.25	-21 7.0	1.934	2.858	10.3	20.3	7 10	21 30.60	-0 51.9	1.115	2.011	18.4	20.5
7 20	21 22.04	-22 7.6	1.897	2.874	6.8	20.1	7 20	21 24.07	-0 53.0	1.080	2.030	14.0	20.3
7 30	21 14.35	-23 8.6	1.886	2.891	3.4	19.9	7 30	21 15.39	-1 21.6	1.065	2.050	9.5	20.1
8 9	21 6.05	-24 4.1	1.901	2.908	3.0	19.9	8 9	21 5.81	-2 14.1	1.071	2.070	6.7	20.0
8 19	20 58.03	-24 49.5	1.945	2.925	6.1	20.1	8 19	20 56.75	-3 23.2	1.101	2.090	8.1	20.2
8 29	20 51.20	-25 21.7	2.014	2.941	9.4	20.4	8 29	20 49.54	-4 39.8	1.154	2.111	11.9	20.5
9 8	20 46.24	-25 39.8	2.107	2.958	12.4	20.6	9 8	20 45.10	-5 54.7	1.228	2.131	15.8	20.8
259020	2002 <i>TN</i> ₁₇₇		8 6.8 347°95	2°03/ 16.4	17		170721	2004 <i>BS</i> ₅₀		8 6.8 217°00	0°0/ 6.9	18	
6 30	21 34.12	+14 54.5	1.035	1.797	28.6	19.6	6 30	21 31.98	-13 22.6	2.426	3.248	12.2	21.0
7 10	21 31.49	+17 49.4	0.977	1.794	26.4	19.4	7 10	21 27.71	-13 57.2	2.333	3.240	9.5	20.8
7 20	21 25.35	+20 12.3	0.931	1.792	24.1	19.2	7 20	21 21.65	-14 41.3	2.262	3.232	6.4	20.6
7 30	21 16.25	+21 49.6	0.898	1.790	22.0	19.1	7 30	21 14.24	-15 32.2	2.218	3.224	2.9	20.4
8 9	21 5.44	+22 31.7	0.880	1.788	20.7	19.0	8 9	21 6.12	-16 25.7	2.202	3.215	0.8	20.2
8 19	20 54.63	+22 15.0	0.877	1.788	20.4	19.0	8 19	20 58.03	-17 17.8	2.215	3.206	4.4	20.4
8 29	20 45.69	+21 4.8	0.891	1.787	21.2	19.0	8 29	20 50.77	-18 4.5	2.256	3.196	7.9	20.6
9 8	20 40.06	+19 15.2	0.919	1.787	23.0	19.2	9 8	20 45.01	-18 43.2	2.322	3.186	10.9	20.8
378687	2008 <i>JM</i> ₃₀		8 6.8 21°69	5°6/ 3									

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
203277	2001 <i>RQ</i> ₅₅		8 6.8 324°00	3°0/ 4.8 18			461872	2006 <i>HY</i> ₁₅₂		8 6.8 44°82	2°5/ 8.3 17		
6 30	21 34.64	-23 21.8	1.948	2.798	13.7	20.1	6 30	21 33.30	-9 11.5	1.221	2.072	20.1	21.6
7 10	21 30.20	-23 49.9	1.871	2.796	10.6	19.9	7 10	21 30.04	-9 14.4	1.161	2.081	16.0	21.4
7 20	21 23.49	-24 20.9	1.817	2.794	7.2	19.7	7 20	21 23.82	-9 36.6	1.118	2.090	11.1	21.1
7 30	21 15.10	-24 50.0	1.788	2.792	3.9	19.5	7 30	21 15.36	-10 15.7	1.096	2.100	5.9	20.9
8 9	21 5.91	-25 12.1	1.785	2.790	3.5	19.4	8 9	21 5.89	-11 6.0	1.098	2.109	2.6	20.7
8 19	20 56.94	-25 23.5	1.809	2.788	6.6	19.6	8 19	20 56.81	-12 0.7	1.123	2.120	6.6	21.0
8 29	20 49.22	-25 22.2	1.859	2.786	10.1	19.8	8 29	20 49.48	-12 52.5	1.172	2.130	11.6	21.3
9 8	20 43.53	-25 8.4	1.931	2.785	13.3	20.0	9 8	20 44.89	-13 36.0	1.241	2.141	16.0	21.6
485215	2010 <i>UH</i> ₈₈		8 6.8 265°85	5°4/ 11.2 17			77549	2001 <i>JZ</i> ₄		8 6.8 70°21	0°6/ 7.2 18		
6 30	21 31.35	+ 1 51.1	2.731	3.480	12.8	22.0	6 30	21 32.85	-11 11.2	1.451	2.297	17.8	19.1
7 10	21 27.09	+ 2 20.3	2.615	3.456	10.9	21.9	7 10	21 29.31	-11 52.4	1.388	2.307	13.9	18.9
7 20	21 21.22	+ 2 36.4	2.519	3.431	8.8	21.7	7 20	21 23.14	-12 50.6	1.343	2.318	9.4	18.7
7 30	21 14.07	+ 2 38.1	2.448	3.406	6.7	21.5	7 30	21 15.02	-14 1.3	1.322	2.328	4.4	18.4
8 9	21 6.20	+ 2 25.3	2.403	3.380	5.4	21.4	8 9	21 5.99	-15 17.2	1.326	2.339	1.1	18.2
8 19	20 58.22	+ 1 59.4	2.386	3.354	6.0	21.4	8 19	20 57.27	-16 30.7	1.355	2.349	6.0	18.6
8 29	20 50.86	+ 1 23.0	2.397	3.328	7.9	21.5	8 29	20 50.05	-17 35.1	1.409	2.360	10.7	18.9
9 8	20 44.75	+ 0 40.0	2.432	3.301	10.3	21.6	9 8	20 45.21	-18 26.0	1.486	2.371	14.7	19.2
424175	2007 <i>HD</i> ₇₄		8 6.8 47°93	4°7/ 10.1 17			504489	2008 <i>GE</i> ₁₆		8 6.8 350°92	3°9/ 4.1 18		
6 30	21 31.21	- 3 15.1	1.572	2.388	18.0	21.4	6 30	21 32.78	-25 17.2	1.931	2.787	13.6	20.7
7 10	21 27.79	- 3 8.0	1.504	2.396	14.7	21.2	7 10	21 28.83	-25 55.9	1.858	2.784	10.5	20.5
7 20	21 22.00	- 3 21.0	1.454	2.405	11.0	21.0	7 20	21 22.63	-26 36.7	1.806	2.782	7.3	20.3
7 30	21 14.47	- 3 53.8	1.426	2.415	7.1	20.8	7 30	21 14.75	-27 13.9	1.779	2.780	4.4	20.2
8 9	21 6.11	- 4 43.3	1.422	2.424	4.7	20.7	8 9	21 6.07	-27 42.1	1.779	2.778	4.4	20.2
8 19	20 58.00	- 5 44.0	1.444	2.434	6.4	20.8	8 19	20 57.61	-27 57.3	1.805	2.777	7.2	20.3
8 29	20 51.21	- 6 49.4	1.490	2.444	9.9	21.1	8 29	20 50.39	-27 57.6	1.855	2.776	10.5	20.5
9 8	20 46.56	- 7 53.0	1.559	2.454	13.6	21.3	9 8	20 45.21	-27 43.4	1.928	2.776	13.5	20.7
99052	2001 <i>ET</i> ₁₅		8 6.8 70°58	4°2/ 3.7 18			445252	2009 <i>QU</i> ₅₉		8 6.8 358°24	6°7/ 11.4 18		
6 30	21 33.36	-23 41.6	1.791	2.648	14.4	19.6	6 30	21 29.23	+ 0 41.0	1.880	2.667	16.5	19.9
7 10	21 29.39	-24 51.4	1.729	2.657	11.1	19.4	7 10	21 25.98	+ 1 28.9	1.798	2.664	14.0	19.7
7 20	21 23.04	-26 5.7	1.689	2.665	7.6	19.2	7 20	21 20.70	+ 1 59.5	1.736	2.663	11.1	19.5
7 30	21 14.92	-27 17.4	1.673	2.674	4.6	19.1	7 30	21 13.89	+ 2 10.7	1.695	2.662	8.4	19.4
8 9	21 5.99	-28 19.1	1.685	2.683	4.8	19.1	8 9	21 6.31	+ 2 2.8	1.679	2.661	6.8	19.3
8 19	20 57.33	-29 5.3	1.722	2.692	7.7	19.3	8 19	20 58.84	+ 1 37.7	1.687	2.662	7.4	19.3
8 29	20 50.02	-29 33.2	1.784	2.701	11.1	19.5	8 29	20 52.40	+ 0 59.5	1.721	2.663	9.8	19.4
9 8	20 44.87	-29 42.7	1.868	2.710	14.2	19.7	9 8	20 47.73	+ 0 13.9	1.777	2.664	12.6	19.6
255212	2005 <i>UL</i> ₃₅₃		8 6.8 329°67	4°5/ 9.6 18			248607	2006 <i>DU</i> ₇₃		8 6.8 37°13	1°4/ 7.6 17		
6 30	21 30.82	- 5 7.3	1.884	2.694	15.7	19.7	6 30	21 30.57	- 9 44.0	0.972	1.846	22.3	19.2
7 10	21 27.27	- 4 31.6	1.794	2.684	12.9	19.5	7 10	21 28.33	-10 20.1	0.930	1.865	17.5	19.0
7 20	21 21.60	- 4 9.4	1.724	2.674	9.6	19.3	7 20	21 22.81	-11 19.7	0.905	1.885	11.8	18.8
7 30	21 14.30	- 4 1.5	1.677	2.664	6.4	19.0	7 30	21 14.91	-12 37.0	0.899	1.906	5.7	18.5
8 9	21 6.14	- 4 7.1	1.655	2.655	4.6	18.9	8 9	21 6.07	-14 2.0	0.914	1.928	1.6	18.3
8 19	20 58.04	- 4 23.9	1.659	2.647	6.1	19.0	8 19	20 57.87	-15 24.1	0.953	1.950	7.1	18.8
8 29	20 50.97	- 4 48.3	1.689	2.639	9.3	19.2	8 29	20 51.76	-16 34.2	1.012	1.974	12.5	19.1
9 8	20 45.73	- 5 16.0	1.742	2.631	12.7	19.4	9 8	20 48.66	-17 27.0	1.092	1.998	17.1	19.5
209610	2005 <i>AL</i> ₂		8 6.8 174°91	4°8/ 2.5 18			188563	2004 <i>TZ</i> ₁₁₈		8 6.8 280°33	2°7/ 9.3 18		
6 30	21 34.15	-26 3.2	2.092	2.942	12.9	20.3	6 30	21 28.57	- 5 23.1	2.308	3.111	13.4	20.4
7 10	21 29.83	-27 28.3	2.021	2.943	10.0	20.1	7 10	21 25.15	- 5 41.2	2.215	3.103	10.8	20.2
7 20	21 23.29	-28 56.7	1.973	2.945	7.1	19.9	7 20	21 20.01	- 6 13.8	2.142	3.095	7.8	20.0
7 30	21 15.05	-30 21.1	1.952	2.946	5.0	19.8	7 30	21 13.55	- 6 59.6	2.094	3.088	4.7	19.8
8 9	21 5.95	-31 34.4	1.958	2.946	5.4	19.8	8 9	21 6.41	- 7 55.8	2.073	3.080	2.7	19.6
8 19	20 56.97	-32 31.1	1.991	2.946	7.9	20.0	8 19	20 59.31	- 8 58.2	2.080	3.072	4.5	19.7
8 29	20 49.13	-33 8.3	2.050	2.946	10.9	20.2	8 29	20 53.01	-10 2.2	2.114	3.064	7.7	19.9
9 8	20 43.25	-33 25.9	2.131	2.946	13.6	20.4	9 8	20 48.17	-11 3.2	2.174	3.057	10.8	20.1
8454	Micheleferrero		8 6.8 53°52	2°3/ 5.4 18			331596	2001 <i>UT</i> ₂₂₁		8 6.9 299°98	0°3/ 6.6 17		
6 30	21 34.70	-20 4.8	1.644	2.499	15.6	17.4	6 30	21 32.46	-15 6.6	1.549	2.402	16.5	20.7
7 10	21 30.52	-20 36.1	1.578	2.505	12.0	17.2	7 10	21 29.17	-15 28.6	1.463	2.388	13.0	20.5
7 20	21 23.83	-21 13.8	1.532	2.511	8.0	17.0	7 20	21 23.23	-16 2.7	1.396	2.374	8.7	20.2
7 30	21 15.28	-21 52.8	1.511	2.518	3.8	16.8	7 30	21 15.17	-16 45.4	1.352	2.360	3.9	19.9
8 9	21 5.90	-22 27.1	1.515	2.524	2.8	16.7	8 9	21 5.96	-17 30.9	1.334	2.347	1.3	19.7
8 19	20 56.83	-22 51.9	1.545	2.531	6.7	17.0	8 19	20 56.78	-18 13.3	1.341	2.334	6.3	20.0
8 29	20 49.22	-23 4.2	1.600	2.537	10.7	17.2	8 29	20 48.91	-18 47.5	1.372	2.321	11.1	20.2
9 8	20 43.91	-23 3.6	1.677	2.544	14.3	17.5	9 8	20 43.40	-19 10.2	1.425	2.308	15.4	20.4
281514	2008 <i>TS</i> ₃₈		8 6.8 292°83	0°8/ 7.3 18			437940	2002 <i>QV</i> ₁₂₉		8 6.9 347°15	0°5/ 6.5 16		
6 30	21 32.93	-13 13.0	1.703	2.544	15.8	20.9	6 30	21 26.92	-14 21.8	1.368	2.236	17.4	21.0
7 10	21 29.28	-13 17.6	1.610	2.528	12.5	20.7	7 10	21 25.08	-14 55.9	1.292	2.226	13.6	20.8
7 20	21 23.16	-13 33.7	1.538	2.511	8.5	20.4	7 20	21 20.58	-15 45.1	1.236	2.218	9.1	20.5
7 30	21 15.08	-13 58.8	1.489	2.495	4.1	20.1	7 30	21 14.00	-16 45.1	1.201	2.210	4.0	20.2
8 9	21 5.93	-14 29.1	1.466	2.479	1.2	19.9	8 9	21 6.32	-17 48.9	1.190	2.203	1.4	20.0
8 19	20 56.77	-15 0.0	1.469	2.463	5.7	20.1	8 19	20 58.77	-18 49.1	1.204	2.198	6.6	20.3
8 29	20 48.79	-15 27.2	1.497	2.447	10.3	20.4	8 29	20 52.63	-19 38.9	1.240	2.194	11.5	20.6
9 8	20 42.96	-15 47.3	1.548	2.432	14.3	20.6	9 8	20 48.91	-20 14.4	1.297	2.191	15.9	20.8
267691	2002 <i>VQ</i> ₉₇		8 6.8 280°28	2°3/ 5.5 18			136465	2005 <i>EA</i> ₂₆₆		8 6.9 104°21			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
79938	1999 <i>CB</i> ₈₀		8 6.9 278°54	4°5/10.4	18		288272	2003 <i>YN</i> ₁₆₃		8 6.9 219°38	0°4/ 6.6	17	
6 30	21 30.16	- 1 33.4	2.126	2.913	14.9	19.6	6 30	21 36.45	-15 38.9	1.718	2.558	15.7	21.9
7 10	21 26.68	- 1 33.9	2.017	2.891	12.4	19.4	7 10	21 31.94	-16 0.0	1.634	2.552	12.3	21.6
7 20	21 21.23	- 1 51.8	1.929	2.868	9.5	19.1	7 20	21 24.90	-16 31.3	1.571	2.546	8.2	21.4
7 30	21 14.21	- 2 27.4	1.864	2.845	6.5	18.9	7 30	21 15.89	-17 9.0	1.533	2.540	3.7	21.1
8 9	21 6.27	- 3 19.2	1.825	2.822	4.6	18.8	8 9	21 5.86	-17 47.9	1.520	2.533	1.3	20.9
8 19	20 58.23	- 4 23.4	1.812	2.799	5.7	18.8	8 19	20 55.94	-18 22.8	1.535	2.526	5.9	21.2
8 29	20 50.98	- 5 35.0	1.827	2.775	8.8	18.9	8 29	20 47.33	-18 49.7	1.575	2.519	10.4	21.5
9 8	20 45.34	- 6 48.0	1.866	2.752	12.2	19.1	9 8	20 40.96	-19 6.3	1.638	2.511	14.3	21.7
309724	2008 <i>HC</i> ₁₈		8 6.9 146°77	3°4/ 3.5	18		522848	2016 <i>NW</i> ₈₅		8 6.9 293°12	6°6/ 2.4	18	
6 30	21 32.54	-24 59.3	2.642	3.482	10.8	21.4	6 30	21 36.29	-30 17.1	1.721	2.580	14.8	21.7
7 10	21 28.03	-26 0.4	2.571	3.489	8.4	21.2	7 10	21 32.27	-31 19.0	1.635	2.560	11.9	21.4
7 20	21 21.81	-27 3.6	2.525	3.497	5.7	21.1	7 20	21 25.39	-32 21.4	1.571	2.539	8.9	21.2
7 30	21 14.34	-28 4.0	2.506	3.503	3.7	21.0	7 30	21 16.21	-33 16.0	1.530	2.519	6.8	21.0
8 9	21 6.28	-28 56.8	2.515	3.510	3.8	21.0	8 9	21 5.75	-33 54.6	1.515	2.498	7.3	21.0
8 19	20 58.35	-29 38.3	2.553	3.516	6.0	21.1	8 19	20 55.34	-34 11.4	1.524	2.478	10.0	21.1
8 29	20 51.32	-30 6.5	2.618	3.522	8.5	21.3	8 29	20 46.36	-34 4.3	1.557	2.457	13.4	21.3
9 8	20 45.79	-30 20.9	2.707	3.527	10.9	21.5	9 8	20 39.93	-33 35.0	1.610	2.437	16.7	21.5
520292	2014 <i>FA</i> ₁₉		8 6.9 210°69	2°1/ 8.4	17		335200	2005 <i>EE</i> ₉₃		8 6.9 224°72	2°5/ 4.5	18	
6 30	21 33.76	- 8 54.3	2.246	3.054	13.5	22.8	6 30	21 33.40	-20 4.7	2.328	3.166	12.2	21.4
7 10	21 29.20	- 8 58.0	2.153	3.048	10.8	22.6	7 10	21 29.06	-21 12.2	2.237	3.155	9.4	21.2
7 20	21 22.73	- 9 13.2	2.082	3.042	7.6	22.4	7 20	21 22.73	-22 27.1	2.169	3.145	6.3	21.0
7 30	21 14.81	- 9 38.4	2.036	3.035	4.2	22.1	7 30	21 14.86	-23 44.2	2.129	3.133	3.3	20.7
8 9	21 6.14	-10 11.0	2.018	3.028	2.1	22.0	8 9	21 6.14	-24 57.7	2.117	3.121	3.0	20.7
8 19	20 57.52	-10 47.5	2.028	3.020	4.6	22.1	8 19	20 57.40	-26 2.2	2.133	3.109	6.0	20.9
8 29	20 49.81	-11 24.3	2.065	3.012	8.1	22.3	8 29	20 49.55	-26 53.5	2.177	3.096	9.3	21.1
9 8	20 43.73	-11 57.9	2.128	3.003	11.3	22.5	9 8	20 43.36	-27 29.9	2.245	3.083	12.2	21.2
353618	2011 <i>UD</i> ₃₆		8 6.9 158°97	4°5/10.6	18		6372	Walker		8 6.9 42°59	7°6/31.5	18	
6 30	21 30.58	- 1 37.6	2.254	3.036	14.3	20.8	6 30	21 34.06	-35 4.4	1.960	2.815	13.5	15.8
7 10	21 26.67	- 1 24.1	2.168	3.038	11.8	20.6	7 10	21 29.98	-36 30.6	1.913	2.827	11.0	15.7
7 20	21 20.99	- 1 25.8	2.103	3.039	9.0	20.4	7 20	21 23.45	-37 51.4	1.887	2.840	8.8	15.5
7 30	21 14.00	- 1 42.8	2.062	3.040	6.2	20.3	7 30	21 15.16	-38 58.8	1.886	2.853	7.7	15.5
8 9	21 6.36	- 2 13.5	2.046	3.040	4.6	20.2	8 9	21 6.09	-39 46.2	1.910	2.866	8.3	15.6
8 19	20 58.83	- 2 55.0	2.058	3.041	5.5	20.2	8 19	20 57.38	-40 9.8	1.959	2.880	10.1	15.7
8 29	20 52.17	- 3 43.2	2.097	3.042	8.1	20.4	8 29	20 50.11	-40 9.4	2.031	2.894	12.4	15.9
9 8	20 47.03	- 4 33.6	2.160	3.043	10.9	20.6	9 8	20 45.07	-39 47.6	2.122	2.908	14.6	16.1
173516	2000 <i>UE</i> ₈₄		8 6.9 276°67	0°9/ 6.4	18		511973	2015 <i>KO</i> ₄₇		8 6.9 6°76	3°1/ 4.6	18	
6 30	21 35.06	-16 4.4	1.487	2.340	17.1	21.0	6 30	21 32.71	-20 53.3	1.790	2.645	14.5	20.6
7 10	21 31.45	-16 30.1	1.396	2.321	13.4	20.7	7 10	21 28.96	-21 52.4	1.717	2.645	11.2	20.4
7 20	21 24.94	-17 8.2	1.324	2.302	9.0	20.4	7 20	21 22.84	-22 58.6	1.666	2.645	7.5	20.2
7 30	21 16.04	-17 54.5	1.275	2.283	4.0	20.1	7 30	21 14.93	-24 5.9	1.640	2.645	3.9	19.9
8 9	21 5.77	-18 42.7	1.251	2.264	1.7	19.9	8 9	21 6.14	-25 7.3	1.640	2.645	3.6	19.9
8 19	20 55.42	-19 26.1	1.253	2.244	6.9	20.2	8 19	20 57.51	-25 56.9	1.667	2.646	7.0	20.1
8 29	20 46.44	-19 59.2	1.278	2.225	12.0	20.4	8 29	20 50.15	-26 30.9	1.719	2.646	10.8	20.4
9 8	20 40.01	-20 19.1	1.325	2.205	16.5	20.6	9 8	20 44.90	-26 48.1	1.792	2.646	14.1	20.6
114119	2002 <i>VH</i> ₄₉		8 6.9 354°11	4°8/ 3.7	18		477901	2011 <i>KL</i> ₂₃		8 6.9 123°18	3°3/ 9.5	17	
6 30	21 30.75	-22 5.2	1.264	2.145	17.8	18.7	6 30	21 33.41	- 4 36.4	2.032	2.830	15.1	22.1
7 10	21 28.39	-23 22.6	1.200	2.141	13.8	18.4	7 10	21 28.96	- 4 47.0	1.959	2.843	12.2	22.0
7 20	21 22.97	-24 50.0	1.155	2.139	9.3	18.2	7 20	21 22.55	- 5 13.6	1.906	2.856	8.9	21.8
7 30	21 15.12	-26 17.8	1.132	2.137	5.5	18.0	7 30	21 14.72	- 5 54.6	1.878	2.869	5.4	21.6
8 9	21 6.05	-27 35.3	1.133	2.135	5.6	18.0	8 9	21 6.23	- 6 46.8	1.876	2.881	3.3	21.5
8 19	20 57.22	-28 33.6	1.157	2.135	9.6	18.2	8 19	20 57.95	- 7 45.6	1.902	2.892	5.1	21.6
8 29	20 50.13	-29 7.9	1.203	2.135	14.0	18.4	8 29	20 50.74	- 8 46.1	1.955	2.904	8.3	21.8
9 8	20 45.87	-29 17.6	1.269	2.136	17.9	18.7	9 8	20 45.28	- 9 43.3	2.033	2.914	11.5	22.1
65631	5143 <i>T</i> ₋₃		8 6.9 252°07	3°3/ 9.9	18		304308	2006 <i>SG</i> ₁₄₄		8 6.9 291°12	0°1/ 6.8	18	
6 30	21 29.60	- 3 7.1	2.272	3.063	13.9	20.2	6 30	21 32.12	-15 8.1	1.994	2.831	13.9	21.5
7 10	21 26.03	- 3 30.8	2.172	3.052	11.4	20.0	7 10	21 28.23	-15 24.3	1.907	2.824	10.9	21.2
7 20	21 20.66	- 4 11.2	2.094	3.040	8.4	19.8	7 20	21 22.23	-15 49.4	1.842	2.816	7.3	21.0
7 30	21 13.91	- 5 7.5	2.040	3.029	5.3	19.6	7 30	21 14.64	-16 20.4	1.802	2.809	3.3	20.7
8 9	21 6.39	- 6 16.7	2.013	3.017	3.3	19.4	8 9	21 6.24	-16 53.4	1.788	2.802	0.9	20.5
8 19	20 58.87	- 7 34.2	2.015	3.005	4.8	19.5	8 19	20 57.93	-17 24.1	1.802	2.794	5.1	20.8
8 29	20 52.15	- 8 54.5	2.044	2.993	8.0	19.7	8 29	20 50.67	-17 49.2	1.842	2.787	9.0	21.1
9 8	20 46.92	-10 12.3	2.098	2.981	11.1	19.9	9 8	20 45.23	-18 6.2	1.906	2.780	12.5	21.3
69544	1997 <i>JV</i> ₉		8 6.9 289°15	1°6/ 8.1	18		150619	2000 <i>YM</i> ₆₉		8 6.9 333°62	2°5/ 8.3	18	
6 30	21 29.89	- 8 35.3	1.840	2.667	15.3	19.4	6 30	21 28.22	- 9 55.9	1.599	2.443	16.5	18.6
7 10	21 26.69	- 9 10.2	1.750	2.658	12.2	19.2	7 10	21 25.77	- 9 43.3	1.508	2.424	13.3	18.4
7 20	21 21.32	-10 1.9	1.682	2.648	8.5	18.9	7 20	21 20.92	- 9 44.3	1.435	2.405	9.4	18.1
7 30	21 14.27	-11 7.9	1.637	2.639	4.4	18.7	7 30	21 14.17	- 9 58.3	1.385	2.387	5.2	17.8
8 9	21 6.29	-12 23.2	1.618	2.630	1.6	18.5	8 9	21 6.36	-10 22.4	1.359	2.370	2.6	17.6
8 19	20 58.34	-13 41.6	1.626	2.621	5.2	18.7	8 19	20 58.54	-10 52.7	1.358	2.354	5.8	17.8
8 29	20 51.42	-14 56.6	1.661	2.612	9.3	18.9	8 29	20 51.88	-11 24.5	1.381	2.339	10.2	18.0
9 8	20 46.37	-16 2.9	1.719	2.603	13.1	19.1	9 8	20 47.31	-11 53.1	1.426	2.325	14.4	18.2
423987	2006 <i>VW</i> ₆₅		8 6.9 33°30	4°9/ 9.6	18		247171	2001 <i>BD</i> ₁₅		8 6.9 201°41	1°2/ 5.8	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
11870	Sverige		8 6.9 211°03	1.7/ 8.5	18		346768	2009 BQ ₇₉		8 6.9 201°56	2.7/ 4.7	18	
6 30	21 30.16	- 8 19.5	2.788	3.588	11.4	19.2	6 30	21 33.26	-21 5.4	2.045	2.892	13.3	20.8
7 10	21 26.07	- 8 38.7	2.691	3.582	9.1	19.0	7 10	21 29.12	-21 58.8	1.967	2.890	10.2	20.6
7 20	21 20.48	- 9 8.2	2.618	3.576	6.4	18.8	7 20	21 22.84	-22 58.3	1.912	2.888	6.8	20.4
7 30	21 13.78	- 9 46.6	2.571	3.569	3.5	18.6	7 30	21 14.94	-23 58.5	1.882	2.887	3.6	20.2
8 9	21 6.50	-10 31.2	2.552	3.562	1.7	18.5	8 9	21 6.24	-24 53.4	1.880	2.885	3.3	20.2
8 19	20 59.26	-11 18.8	2.562	3.554	3.8	18.7	8 19	20 57.66	-25 38.2	1.905	2.883	6.4	20.4
8 29	20 52.69	-12 6.2	2.601	3.546	6.7	18.8	8 29	20 50.19	-26 9.3	1.956	2.880	9.8	20.6
9 8	20 47.37	-12 50.1	2.665	3.538	9.4	19.0	9 8	20 44.59	-26 25.9	2.030	2.878	12.9	20.8
149135	2002 EX ₇₀		8 6.9 29°31	3.5/ 4.6	18		36126	1999 RH ₁₄₈		8 6.9 21°13	1.8/ 6.1	18	
6 30	21 35.33	-25 45.5	2.039	2.888	13.2	18.9	6 30	21 37.96	-21 10.4	1.461	2.319	17.0	18.0
7 10	21 30.60	-26 6.8	1.970	2.892	10.3	18.7	7 10	21 33.34	-21 2.2	1.395	2.323	13.2	17.7
7 20	21 23.70	-26 28.4	1.922	2.897	7.0	18.5	7 20	21 25.87	-20 57.7	1.349	2.328	8.8	17.5
7 30	21 15.24	-26 45.7	1.901	2.901	4.2	18.4	7 30	21 16.33	-20 52.6	1.326	2.334	4.1	17.2
8 9	21 6.12	-26 54.2	1.905	2.906	3.9	18.4	8 9	21 5.89	-20 42.7	1.329	2.340	2.3	17.1
8 19	20 57.30	-26 51.2	1.937	2.912	6.6	18.6	8 19	20 55.91	-20 25.3	1.356	2.346	6.7	17.4
8 29	20 49.75	-26 35.6	1.995	2.917	9.8	18.8	8 29	20 47.67	-19 59.1	1.409	2.354	11.2	17.7
9 8	20 44.18	-26 8.3	2.076	2.923	12.7	19.0	9 8	20 42.05	-19 24.9	1.483	2.361	15.1	18.0
467925	2011 YL ₅₆		8 6.9 52°28	3.4/ 4.9	17		345494	2006 JK ₁₁		8 6.9 316°45	2.7/ 8.6	17	
6 30	21 34.64	-19 3.9	1.171	2.046	19.3	20.6	6 30	21 32.45	- 8 26.4	1.801	2.624	15.8	21.2
7 10	21 31.24	-20 14.2	1.126	2.064	14.7	20.4	7 10	21 28.64	- 8 18.4	1.718	2.621	12.7	21.0
7 20	21 24.67	-21 35.5	1.099	2.083	9.7	20.1	7 20	21 22.60	- 8 24.1	1.656	2.618	9.0	20.8
7 30	21 15.79	-22 58.4	1.094	2.102	4.8	19.9	7 30	21 14.86	- 8 42.4	1.616	2.615	5.1	20.6
8 9	21 5.98	-24 12.4	1.113	2.121	4.1	19.9	8 9	21 6.27	- 9 10.5	1.603	2.612	2.8	20.4
8 19	20 56.75	-25 9.4	1.156	2.141	8.5	20.3	8 19	20 57.80	- 9 44.6	1.616	2.609	5.4	20.6
8 29	20 49.53	-25 45.1	1.221	2.161	13.1	20.6	8 29	20 50.47	-10 20.3	1.655	2.607	9.3	20.8
9 8	20 45.24	-25 59.3	1.306	2.181	17.0	20.9	9 8	20 45.10	-10 53.4	1.717	2.604	12.9	21.0
66138	1998 SE ₁₃₇		8 6.9 3°07	1.6/ 5.6	18		53961	2000 GB ₆₃		8 6.9 342°90	1.9/ 5.9	18	
6 30	21 28.38	-17 21.6	1.791	2.647	14.5	17.9	6 30	21 30.32	-18 47.7	1.196	2.076	18.6	18.1
7 10	21 25.54	-18 7.5	1.718	2.647	11.1	17.7	7 10	21 28.19	-19 5.4	1.124	2.064	14.5	17.8
7 20	21 20.54	-19 2.8	1.667	2.647	7.3	17.5	7 20	21 22.94	-19 33.3	1.069	2.054	9.7	17.5
7 30	21 13.90	-20 2.8	1.640	2.648	3.3	17.2	7 30	21 15.20	-20 5.9	1.036	2.045	4.5	17.2
8 9	21 6.48	-21 1.5	1.638	2.649	2.2	17.1	8 9	21 6.16	-20 36.4	1.026	2.037	2.6	17.1
8 19	20 59.22	-21 53.1	1.664	2.652	6.0	17.4	8 19	20 57.32	-20 58.3	1.038	2.031	7.8	17.4
8 29	20 53.12	-22 33.4	1.714	2.655	9.9	17.6	8 29	20 50.22	-21 7.2	1.072	2.025	13.0	17.6
9 8	20 48.95	-23 0.1	1.787	2.658	13.3	17.9	9 8	20 45.99	-21 1.5	1.126	2.021	17.6	17.9
134590	1999 TO ₉₆		8 6.9 304°33	6.5/ 2.9	18		126405	2002 BO ₁₅		8 6.9 97°79	0.6/ 7.4	18	
6 30	21 34.81	-26 52.9	1.354	2.229	17.2	19.4	6 30	21 29.86	-11 22.9	2.235	3.059	13.1	20.2
7 10	21 31.70	-28 2.2	1.278	2.214	13.6	19.1	7 10	21 26.19	-11 59.7	2.155	3.063	10.2	20.1
7 20	21 25.33	-29 16.3	1.221	2.199	9.8	18.9	7 20	21 20.73	-12 48.0	2.097	3.066	6.9	19.9
7 30	21 16.29	-30 25.6	1.187	2.184	6.8	18.7	7 30	21 13.95	-13 44.8	2.064	3.069	3.3	19.6
8 9	21 5.80	-31 19.7	1.176	2.170	7.2	18.7	8 9	21 6.53	-14 45.8	2.060	3.073	0.8	19.4
8 19	20 55.40	-31 50.7	1.189	2.156	10.7	18.8	8 19	20 59.22	-15 46.3	2.083	3.076	4.4	19.7
8 29	20 46.74	-31 55.4	1.223	2.142	14.9	19.0	8 29	20 52.81	-16 41.9	2.134	3.079	7.9	19.9
9 8	20 41.07	-31 35.1	1.276	2.129	18.7	19.2	9 8	20 47.96	-17 29.3	2.209	3.082	11.0	20.2
450930	2008 EW ₁₄₈		8 6.9 213°09	13°0/17.4	15		409768	2006 DV ₁₆₀		8 6.9 185°58	2°3/ 8.3	17	
6 30	21 33.04	+15 53.5	1.454	2.170	23.5	22.0	6 30	21 33.93	- 8 7.7	1.432	2.268	18.5	21.3
7 10	21 29.81	+16 25.5	1.371	2.166	21.2	21.8	7 10	21 30.35	- 8 28.6	1.357	2.268	14.8	21.1
7 20	21 23.81	+16 21.6	1.300	2.161	18.6	21.6	7 20	21 24.05	- 9 9.2	1.300	2.268	10.4	20.8
7 30	21 15.55	+15 34.9	1.246	2.156	15.8	21.4	7 30	21 15.61	-10 7.1	1.265	2.267	5.5	20.5
8 9	21 6.02	+14 3.0	1.211	2.150	13.6	21.3	8 9	21 6.06	-11 16.6	1.255	2.267	2.3	20.3
8 19	20 56.47	+11 49.3	1.199	2.144	13.0	21.2	8 19	20 56.67	-12 30.4	1.271	2.266	6.2	20.6
8 29	20 48.27	+ 9 4.0	1.209	2.137	14.3	21.3	8 29	20 48.74	-13 40.9	1.311	2.266	11.0	20.8
9 8	20 42.54	+ 6 2.6	1.242	2.130	16.9	21.4	9 8	20 43.27	-14 41.9	1.373	2.265	15.3	21.1
434153	2002 RF ₂₈₁		8 6.9 12°54	1.7/ 7.9	16		440466	2005 SH ₂₀₈		8 6.9 339°41	6.7/ 3.0	18	
6 30	21 30.32	-11 34.4	1.401	2.255	17.9	20.6	6 30	21 38.94	-33 51.1	1.889	2.737	14.1	20.8
7 10	21 27.46	-11 30.0	1.335	2.258	14.1	20.4	7 10	21 33.85	-34 24.4	1.817	2.732	11.4	20.6
7 20	21 22.01	-11 39.7	1.288	2.263	9.7	20.2	7 20	21 26.11	-34 52.3	1.767	2.727	8.7	20.4
7 30	21 14.62	-12 1.5	1.263	2.268	4.9	19.9	7 30	21 16.42	-35 8.0	1.742	2.723	6.9	20.3
8 9	21 6.32	-12 31.1	1.262	2.274	1.8	19.7	8 9	21 5.88	-35 5.8	1.741	2.719	7.1	20.3
8 19	20 58.32	-13 3.4	1.285	2.282	5.9	20.0	8 19	20 55.72	-34 43.0	1.767	2.715	9.3	20.4
8 29	20 51.80	-13 33.3	1.332	2.290	10.6	20.3	8 29	20 47.12	-33 59.9	1.816	2.712	12.1	20.6
9 8	20 47.64	-13 57.0	1.401	2.299	14.6	20.6	9 8	20 40.96	-33 0.0	1.887	2.709	14.8	20.8
521772	2015 ST ₂₅		8 6.9 352°32	4.4/ 3.8	18		437865	2000 UH ₉₇		8 6.9 289°69	8.7/11.9	18	
6 30	21 34.07	-27 26.0	2.027	2.880	13.2	21.0	6 30	21 32.19	+ 4 3.7	1.781	2.549	18.0	21.1
7 10	21 29.78	-28 2.1	1.954	2.878	10.3	20.8	7 10	21 28.69	+ 5 3.7	1.681	2.529	15.6	20.9
7 20	21 23.26	-28 38.1	1.904	2.876	7.2	20.6	7 20	21 22.84	+ 5 44.8	1.599	2.509	13.0	20.7
7 30	21 15.11	-29 8.7	1.878	2.875	4.8	20.5	7 30	21 15.09	+ 6 3.2	1.538	2.489	10.4	20.5
8 9	21 6.20	-29 28.7	1.879	2.874	4.8	20.5	8 9	21 6.20	+ 5 57.0	1.500	2.469	8.8	20.3
8 19	20 57.52	-29 34.7	1.906	2.873	7.3	20.6	8 19	20 57.17	+ 5 27.0	1.486	2.449	9.3	20.3
8 29	20 50.09	-29 25.3	1.958	2.872	10.4	20.8	8 29	20 49.12	+ 4 37.4	1.496	2.429	11.6	20.4
9 8	20 44.66	-29 1.4	2.033	2.872	13.3	21.0	9 8	20 43.02	+ 3 34.8	1.528	2.410	14.6	20.5
93204	2000 SQ ₁₁₈		8 6.9 329°86	2.4/ 5.5	18		247191	2001 LY ₈		8 6.9 4°33	9.1/13.1	18	
6 30	21 30.14	-19 2.4	1.344	2.217	17.3								

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
126389	2002 BX ₁		8 6.9 142°23	2.7/ 9.3	18		294037	2007 TH ₁₃₁		8 6.9 310°78	3.2/ 9.2	18	
6 30	21 32.07	- 4 28.2	2.035	2.835	15.0	19.8	6 30	21 31.16	- 6 21.0	1.880	2.694	15.5	20.8
7 10	21 28.03	- 5 5.0	1.955	2.842	12.1	19.7	7 10	21 27.58	- 6 18.2	1.795	2.690	12.6	20.6
7 20	21 22.04	- 5 59.6	1.896	2.850	8.7	19.5	7 20	21 21.89	- 6 30.6	1.730	2.687	9.1	20.3
7 30	21 14.58	- 7 9.8	1.862	2.856	5.1	19.3	7 30	21 14.59	- 6 57.4	1.688	2.683	5.5	20.1
8 9	21 6.40	- 8 31.0	1.855	2.863	2.7	19.1	8 9	21 6.46	- 7 35.8	1.673	2.679	3.2	20.0
8 19	20 58.35	- 9 57.4	1.876	2.869	4.9	19.3	8 19	20 58.43	- 8 21.7	1.683	2.676	5.4	20.1
8 29	20 51.31	-11 22.8	1.925	2.874	8.4	19.5	8 29	20 51.45	- 9 10.3	1.720	2.672	9.0	20.3
9 8	20 45.99	-12 41.6	1.998	2.880	11.7	19.7	9 8	20 46.30	- 9 56.7	1.781	2.669	12.5	20.5
82865	2001 QU ₆₂		8 6.9 305°87	0.1/ 6.8	18		241264	2007 TZ ₃₇₈		8 6.9 3°93	3.8/ 4.4	18	
6 30	21 30.74	-14 15.0	1.888	2.730	14.4	19.1	6 30	21 34.16	-23 44.3	1.715	2.574	14.9	20.2
7 10	21 27.34	-14 42.1	1.800	2.719	11.3	18.8	7 10	21 30.23	-24 28.1	1.645	2.574	11.5	19.9
7 20	21 21.78	-15 20.2	1.734	2.709	7.6	18.6	7 20	21 23.79	-25 15.9	1.596	2.574	7.8	19.7
7 30	21 14.53	-16 6.1	1.692	2.699	3.4	18.3	7 30	21 15.47	-26 1.4	1.571	2.574	4.5	19.5
8 9	21 6.40	-16 55.1	1.676	2.689	1.0	18.1	8 9	21 6.25	-26 38.1	1.572	2.575	4.3	19.5
8 19	20 58.32	-17 42.0	1.687	2.679	5.3	18.4	8 19	20 57.28	-27 1.4	1.599	2.575	7.5	19.7
8 29	20 51.30	-18 22.4	1.723	2.670	9.4	18.6	8 29	20 49.71	-27 8.5	1.650	2.577	11.2	19.9
9 8	20 46.16	-18 53.1	1.783	2.660	13.1	18.8	9 8	20 44.40	-26 59.9	1.723	2.578	14.5	20.2
4878	Gilhutton		8 6.9 337°42	6.5/10.2	18		136173	2003 UU ₁₂₉		8 6.9 189°20	1.7/ 7.9	18	
6 30	21 28.78	- 3 49.1	1.160	2.006	21.3	17.7	6 30	21 38.08	-11 30.7	1.805	2.627	15.8	20.1
7 10	21 26.96	- 3 7.2	1.085	1.995	17.7	17.4	7 10	21 33.02	-11 24.6	1.722	2.627	12.5	19.9
7 20	21 22.14	- 2 47.6	1.025	1.984	13.5	17.1	7 20	21 25.55	-11 29.6	1.660	2.626	8.7	19.7
7 30	21 14.89	- 2 52.8	0.984	1.974	9.2	16.9	7 30	21 16.26	-11 43.8	1.622	2.624	4.4	19.4
8 9	21 6.30	- 3 21.9	0.964	1.966	6.5	16.7	8 9	21 6.04	-12 4.2	1.610	2.622	1.7	19.2
8 19	20 57.75	- 4 10.3	0.966	1.958	8.3	16.8	8 19	20 55.98	-12 26.9	1.626	2.620	5.4	19.5
8 29	20 50.78	- 5 10.3	0.990	1.952	12.7	17.0	8 29	20 47.19	-12 48.4	1.669	2.617	9.6	19.7
9 8	20 46.57	- 6 12.9	1.033	1.947	17.2	17.2	9 8	20 40.52	-13 5.6	1.735	2.613	13.3	20.0
32033	Arjunkturpoor		8 6.9 43°93	0.4/ 6.7	18		298261	2002 VA ₁₄₃		8 6.9 306°67	5.2/ 2.8	18	
6 30	21 36.40	-16 4.2	1.109	1.980	20.4	17.7	6 30	21 32.10	-26 4.8	1.783	2.645	14.2	20.6
7 10	21 32.74	-16 11.0	1.057	1.991	15.9	17.5	7 10	21 28.81	-27 19.1	1.701	2.631	11.2	20.3
7 20	21 25.78	-16 30.2	1.022	2.004	10.6	17.2	7 20	21 23.01	-28 38.0	1.642	2.617	7.9	20.1
7 30	21 16.37	-16 56.9	1.008	2.017	4.7	16.9	7 30	21 15.20	-29 54.0	1.607	2.603	5.5	20.0
8 9	21 5.96	-17 24.5	1.017	2.030	1.4	16.8	8 9	21 6.30	-30 59.0	1.597	2.589	5.9	20.0
8 19	20 56.13	-17 47.0	1.049	2.044	7.2	17.2	8 19	20 57.44	-31 46.6	1.614	2.576	8.8	20.1
8 29	20 48.39	-18 0.1	1.104	2.058	12.5	17.5	8 29	20 49.83	-32 13.0	1.654	2.563	12.3	20.3
9 8	20 43.72	-18 2.1	1.178	2.073	17.0	17.8	9 8	20 44.43	-32 18.2	1.715	2.550	15.5	20.5
130112	1999 XF ₇₀		8 6.9 276°24	4.7/ 3.2	18		384776	2012 PY ₁		8 6.9 249°42	0.2/ 7.1	18	
6 30	21 33.41	-25 6.4	1.845	2.702	14.1	19.8	6 30	21 34.94	-14 20.5	1.993	2.823	14.2	21.9
7 10	21 29.63	-26 18.4	1.769	2.696	11.0	19.6	7 10	21 30.53	-14 31.8	1.898	2.810	11.2	21.6
7 20	21 23.41	-27 34.8	1.715	2.690	7.6	19.4	7 20	21 23.89	-14 52.5	1.825	2.797	7.6	21.4
7 30	21 15.30	-28 48.6	1.685	2.683	5.0	19.2	7 30	21 15.53	-15 19.9	1.777	2.783	3.5	21.1
8 9	21 6.21	-29 52.2	1.683	2.677	5.3	19.2	8 9	21 6.23	-15 50.2	1.755	2.768	0.9	20.9
8 19	20 57.23	-30 39.5	1.706	2.671	8.2	19.4	8 19	20 56.94	-16 19.2	1.762	2.754	5.2	21.2
8 29	20 49.49	-31 7.3	1.754	2.664	11.6	19.6	8 29	20 48.70	-16 43.5	1.795	2.739	9.2	21.4
9 8	20 43.91	-31 15.4	1.823	2.658	14.7	19.8	9 8	20 42.34	-17 0.5	1.851	2.724	12.9	21.6
119151	2001 PW ₆₁		8 6.9 271°97	3.0/ 5.4	18		286250	2001 UQ ₂₁₆		8 6.9 19°04	4.8/ 3.4	18	
6 30	21 40.48	-23 21.0	1.786	2.631	15.0	20.0	6 30	21 34.37	-27 23.5	1.931	2.786	13.6	20.0
7 10	21 35.32	-23 34.8	1.687	2.608	11.8	19.7	7 10	21 30.17	-28 16.4	1.863	2.787	10.7	19.8
7 20	21 27.37	-23 51.5	1.610	2.585	8.0	19.5	7 20	21 23.64	-29 10.1	1.816	2.788	7.5	19.7
7 30	21 17.17	-24 5.9	1.557	2.561	4.2	19.2	7 30	21 15.37	-29 58.2	1.795	2.790	5.2	19.5
8 9	21 5.71	-24 12.5	1.531	2.537	3.5	19.1	8 9	21 6.29	-30 34.6	1.799	2.791	5.4	19.5
8 19	20 54.24	-24 7.3	1.531	2.513	7.2	19.3	8 19	20 57.45	-30 55.0	1.830	2.793	7.9	19.7
8 29	20 44.09	-23 48.4	1.558	2.488	11.4	19.4	8 29	20 49.91	-30 57.7	1.885	2.795	11.0	19.9
9 8	20 36.35	-23 16.5	1.607	2.463	15.3	19.6	9 8	20 44.47	-30 43.6	1.963	2.797	13.9	20.1
12006	Hruschka		8 6.9 64°59	3.6/10.7	18		513745	2012 UM ₁₀₅		8 6.9 293°23	0.2/ 6.8	18	
6 30	21 27.26	- 1 39.3	3.076	3.846	11.1	18.2	6 30	21 34.27	-15 59.8	1.733	2.578	15.4	21.3
7 10	21 23.65	- 1 30.2	2.992	3.853	9.1	18.0	7 10	21 30.43	-16 6.0	1.637	2.558	12.1	21.0
7 20	21 18.78	- 1 32.4	2.929	3.860	7.0	17.9	7 20	21 24.07	-16 21.1	1.562	2.537	8.2	20.8
7 30	21 13.03	- 1 45.6	2.892	3.867	4.9	17.8	7 30	21 15.70	-16 42.2	1.510	2.517	3.7	20.4
8 9	21 6.86	- 2 8.7	2.882	3.874	3.6	17.7	8 9	21 6.18	-17 5.0	1.484	2.497	1.1	20.2
8 19	21 0.79	- 2 39.5	2.900	3.881	4.3	17.7	8 19	20 56.63	-17 25.3	1.484	2.477	5.9	20.5
8 29	20 55.33	- 3 15.5	2.946	3.888	6.2	17.9	8 29	20 48.26	-17 39.4	1.509	2.456	10.4	20.7
9 8	20 50.95	- 3 53.5	3.017	3.895	8.3	18.0	9 8	20 42.04	-17 44.9	1.557	2.437	14.5	20.9
166651	2002 TK ₁₆		8 6.9 241°59	2.8/ 4.8	18		304583	2006 VY ₄₇		8 6.9 10°77	0.8/ 6.3	18	
6 30	21 33.75	-21 50.5	2.011	2.859	13.4	20.0	6 30	21 33.14	-17 16.6	1.996	2.837	13.8	21.1
7 10	21 29.57	-22 33.3	1.932	2.856	10.4	19.8	7 10	21 29.00	-17 35.1	1.918	2.837	10.7	20.9
7 20	21 23.19	-23 21.1	1.875	2.852	7.0	19.6	7 20	21 22.75	-18 0.9	1.861	2.837	7.1	20.6
7 30	21 15.16	-24 8.8	1.844	2.848	3.7	19.3	7 30	21 14.96	-18 30.2	1.830	2.838	3.2	20.4
8 9	21 6.30	-24 50.9	1.839	2.844	3.3	19.3	8 9	21 6.42	-18 59.0	1.826	2.838	1.4	20.3
8 19	20 57.59	-25 22.8	1.861	2.840	6.4	19.5	8 19	20 58.05	-19 23.4	1.849	2.839	5.3	20.5
8 29	20 50.01	-25 41.7	1.910	2.836	9.9	19.7	8 29	20 50.80	-19 40.3	1.898	2.839	9.0	20.8
9 8	20 44.36	-25 46.8	1.981	2.832	13.1	19.9	9 8	20 45.42	-19 48.2	1.970	2.840	12.4	21.0
385815	2006 EP ₁₆		8 6.9 227°65	0.6/ 7.3	17		388366	2006 UT ₄₆		8 6.9 30°32	2.1/ 4.8	18	
6 30	21 32.70	-12 17.7	1.910	2.741	14.7	22.1							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
437034	2012 <i>TM</i> ₃₀₇		8 6.9 326°61	6°7/ 3.6	18		201808	2003 <i>XX</i> ₁₉		8 6.9 265°83	0°8/ 7.4	18	
6 30	21 39.53	-31 27.5	1.563	2.423	16.0	20.7	6 30	21 36.04	-14 14.2	2.034	2.860	14.1	20.6
7 10	21 34.87	-32 1.0	1.490	2.414	12.9	20.4	7 10	21 31.31	-14 2.5	1.938	2.847	11.1	20.4
7 20	21 27.14	-32 30.8	1.438	2.406	9.5	20.2	7 20	21 24.38	-13 58.1	1.864	2.834	7.6	20.2
7 30	21 17.06	-32 49.2	1.408	2.398	7.0	20.1	7 30	21 15.76	-13 59.4	1.815	2.820	3.7	19.9
8 9	21 5.87	-32 48.9	1.403	2.390	7.2	20.1	8 9	21 6.25	-14 3.6	1.793	2.806	1.1	19.7
8 19	20 55.05	-32 26.5	1.422	2.383	9.9	20.2	8 19	20 56.78	-14 8.2	1.799	2.792	5.0	19.9
8 29	20 46.03	-31 42.1	1.465	2.377	13.4	20.4	8 29	20 48.37	-14 10.7	1.832	2.778	9.0	20.1
9 8	20 39.82	-30 39.6	1.528	2.371	16.7	20.6	9 8	20 41.82	-14 9.1	1.889	2.764	12.6	20.3
105831	2000 <i>SD</i> ₁₄₈		8 6.9 197°47	4°4/ 3.5	18		32057	Ethannovek		8 6.9 357°10	0°9/ 7.4	18	
6 30	21 35.63	-28 39.9	2.344	3.187	11.9	19.7	6 30	21 31.98	-13 20.5	1.315	2.175	18.5	19.0
7 10	21 30.74	-29 20.6	2.269	3.186	9.4	19.5	7 10	21 29.09	-13 20.7	1.244	2.172	14.5	18.8
7 20	21 23.83	-30 0.6	2.217	3.184	6.7	19.3	7 20	21 23.34	-13 34.5	1.192	2.170	9.9	18.5
7 30	21 15.42	-30 34.6	2.191	3.183	4.7	19.2	7 30	21 15.39	-13 59.1	1.162	2.169	4.7	18.2
8 9	21 6.33	-30 58.0	2.192	3.181	4.8	19.2	8 9	21 6.36	-14 29.6	1.155	2.168	1.3	18.0
8 19	20 57.43	-31 7.6	2.221	3.180	7.0	19.4	8 19	20 57.55	-15 0.4	1.172	2.169	6.4	18.3
8 29	20 49.63	-31 2.1	2.275	3.178	9.7	19.5	8 29	20 50.34	-15 26.5	1.213	2.170	11.4	18.6
9 8	20 43.65	-30 42.5	2.353	3.176	12.2	19.7	9 8	20 45.72	-15 44.2	1.274	2.171	15.8	18.9
330567	2008 <i>CP</i> ₄₀		8 6.9 99°43	2°7/ 8.7	17		128809	2004 <i>RP</i> ₂₅₅		8 6.9 298°78	0°2/ 7.1	18	
6 30	21 35.19	-7 37.5	1.606	2.429	17.4	21.6	6 30	21 28.65	-11 33.4	2.196	3.025	13.1	19.9
7 10	21 30.88	-7 45.3	1.540	2.442	13.9	21.4	7 10	21 25.47	-12 26.7	2.102	3.014	10.3	19.7
7 20	21 24.14	-8 9.9	1.493	2.455	9.8	21.2	7 20	21 20.44	-13 33.5	2.031	3.002	6.9	19.4
7 30	21 15.61	-8 49.2	1.469	2.468	5.5	20.9	7 30	21 13.97	-14 50.3	1.985	2.992	3.2	19.2
8 9	21 6.28	-9 38.8	1.471	2.481	2.7	20.8	8 9	21 6.73	-16 11.9	1.967	2.981	0.8	19.0
8 19	20 57.25	-10 33.2	1.499	2.493	5.6	21.0	8 19	20 59.47	-17 32.8	1.978	2.970	4.7	19.2
8 29	20 49.61	-11 26.6	1.553	2.506	9.8	21.3	8 29	20 53.06	-18 47.3	2.015	2.959	8.4	19.5
9 8	20 44.19	-12 14.2	1.630	2.517	13.5	21.5	9 8	20 48.20	-19 51.3	2.078	2.949	11.7	19.7
203906	2003 <i>HQ</i> ₄₁		8 6.9 50°32	3°0/ 8.2	17		53163	1999 <i>CK</i> ₈		8 6.9 146°70	1°2/ 5.9	18	
6 30	21 38.17	-10 57.2	1.122	1.977	21.3	19.5	6 30	21 33.54	-18 0.4	2.345	3.178	12.3	19.7
7 10	21 33.94	-10 25.1	1.071	1.993	16.9	19.2	7 10	21 28.97	-18 32.7	2.269	3.184	9.4	19.5
7 20	21 26.49	-10 9.0	1.038	2.010	11.7	19.0	7 20	21 22.58	-19 11.0	2.216	3.190	6.2	19.3
7 30	21 16.71	-10 7.7	1.025	2.028	6.3	18.8	7 30	21 14.86	-19 51.7	2.189	3.196	2.8	19.1
8 9	21 6.02	-10 17.5	1.036	2.046	3.0	18.6	8 9	21 6.52	-20 30.7	2.191	3.202	1.6	19.0
8 19	20 55.97	-10 33.5	1.069	2.065	7.0	18.9	8 19	20 58.35	-21 4.2	2.221	3.207	4.9	19.3
8 29	20 48.00	-10 50.9	1.126	2.084	11.9	19.3	8 29	20 51.15	-21 29.5	2.278	3.212	8.1	19.5
9 8	20 43.03	-11 5.1	1.203	2.103	16.3	19.6	9 8	20 45.56	-21 45.2	2.360	3.216	11.0	19.7
249061	Anthonyberger		8 6.9 335°01	2°0/ 8.2	18		354132	2002 <i>CX</i> ₃₄		8 6.9 104°94	3°5/ 4.5	18	
6 30	21 31.80	-10 27.4	1.753	2.586	15.7	20.4	6 30	21 38.72	-27 26.3	2.396	3.231	12.0	20.5
7 10	21 28.25	-10 23.8	1.671	2.581	12.5	20.2	7 10	21 32.85	-27 44.7	2.331	3.245	9.3	20.3
7 20	21 22.44	-10 32.8	1.609	2.577	8.7	20.0	7 20	21 25.05	-28 1.6	2.289	3.258	6.4	20.2
7 30	21 14.89	-10 53.0	1.570	2.572	4.6	19.7	7 30	21 15.92	-28 13.0	2.274	3.271	4.0	20.0
8 9	21 6.46	-11 20.9	1.557	2.568	2.0	19.5	8 9	21 6.27	-28 15.1	2.287	3.284	3.9	20.0
8 19	20 58.16	-11 52.7	1.570	2.565	5.3	19.8	8 19	20 56.98	-28 6.0	2.329	3.297	6.1	20.2
8 29	20 51.02	-12 24.0	1.608	2.561	9.4	20.0	8 29	20 48.88	-27 45.2	2.397	3.309	8.8	20.4
9 8	20 45.87	-12 50.9	1.670	2.558	13.2	20.2	9 8	20 42.60	-27 13.9	2.490	3.321	11.3	20.6
468680	2009 <i>MP</i> ₆		8 6.9 344°22	0°7/ 6.5	16		58376	1995 <i>SF</i> ₂₅		8 6.9 208°24	0°5/ 6.5	18	
6 30	21 24.87	-14 38.4	1.041	1.930	20.0	20.3	6 30	21 31.76	-15 41.6	2.387	3.217	12.2	20.5
7 10	21 24.32	-15 8.6	0.971	1.916	15.7	20.0	7 10	21 27.63	-16 11.5	2.301	3.214	9.4	20.3
7 20	21 20.61	-15 57.3	0.917	1.903	10.6	19.7	7 20	21 21.73	-16 49.2	2.238	3.211	6.3	20.1
7 30	21 14.30	-16 59.8	0.882	1.892	4.7	19.3	7 30	21 14.51	-17 31.5	2.201	3.208	2.8	19.8
8 9	21 6.59	-18 7.5	0.869	1.882	1.7	19.1	8 9	21 6.61	-18 14.4	2.192	3.204	1.0	19.7
8 19	20 58.99	-19 10.8	0.878	1.874	7.8	19.4	8 19	20 58.81	-18 54.2	2.211	3.201	4.6	19.9
8 29	20 53.13	-20 1.2	0.907	1.868	13.6	19.7	8 29	20 51.87	-19 27.6	2.258	3.197	7.9	20.2
9 8	20 50.24	-20 33.4	0.954	1.864	18.6	20.0	9 8	20 46.46	-19 52.5	2.329	3.192	10.9	20.3
374273	2005 <i>NL</i> ₂₂		8 6.9 161°29	2°5/ 8.4	18		127298	2002 <i>JG</i> ₈₁		8 6.9 163°56	0°9/ 7.6	18	
6 30	21 36.18	-9 17.9	1.750	2.571	16.3	21.0	6 30	21 34.49	-11 56.5	2.116	2.937	13.8	20.9
7 10	21 31.58	-9 9.4	1.672	2.574	13.0	20.8	7 10	21 29.88	-12 12.7	2.036	2.941	10.9	20.7
7 20	21 24.60	-9 14.1	1.614	2.576	9.1	20.6	7 20	21 23.29	-12 39.5	1.977	2.945	7.4	20.5
7 30	21 15.85	-9 30.7	1.579	2.579	5.0	20.4	7 30	21 15.22	-13 14.3	1.944	2.948	3.6	20.2
8 9	21 6.22	-9 56.1	1.571	2.581	2.5	20.2	8 9	21 6.43	-13 53.2	1.938	2.951	1.1	20.0
8 19	20 56.79	-10 26.4	1.589	2.583	5.5	20.4	8 19	20 57.80	-14 32.4	1.960	2.953	4.7	20.3
8 29	20 48.62	-10 57.2	1.634	2.584	9.5	20.7	8 29	20 50.21	-15 8.1	2.010	2.955	8.4	20.5
9 8	20 42.56	-11 24.9	1.702	2.585	13.3	20.9	9 8	20 44.36	-15 37.3	2.084	2.957	11.6	20.8
49572	1999 <i>CE</i> ₁₁₄		8 6.9 234°60	1°5/ 8.3	18		249766	2000 <i>UF</i> ₉₇		8 6.9 305°72	4°6/ 10.0	18	
6 30	21 31.99	-9 6.5	2.529	3.334	12.3	20.7	6 30	21 31.00	-3 35.3	2.057	2.854	15.0	20.1
7 10	21 27.76	-9 26.5	2.426	3.320	9.8	20.5	7 10	21 27.35	-3 7.0	1.962	2.842	12.4	19.9
7 20	21 21.82	-9 57.7	2.346	3.306	6.8	20.3	7 20	21 21.73	-2 52.6	1.887	2.830	9.4	19.7
7 30	21 14.55	-10 38.4	2.291	3.291	3.6	20.0	7 30	21 14.57	-2 53.0	1.835	2.818	6.4	19.5
8 9	21 6.56	-11 25.8	2.265	3.276	1.5	19.9	8 9	21 6.59	-3 7.2	1.809	2.806	4.6	19.3
8 19	20 58.55	-12 16.1	2.267	3.260	4.2	20.0	8 19	20 58.62	-3 32.8	1.809	2.795	5.9	19.4
8 29	20 51.27	-13 5.5	2.298	3.244	7.4	20.2	8 29	20 51.56	-4 6.3	1.836	2.783	8.9	19.5
9 8	20 45.39	-13 50.7	2.355	3.227	10.5	20.4	9 8	20 46.17	-4 43.0	1.886	2.772	12.0	19.7
62284	2000 <i>SD</i> ₁₀₈		8 6.9 280°65	0°6/ 6.5	18		112709	2002 <i>PW</i> ₁₀₉		8 6.9 59°04	5°2/ 10.1	17	
6 30	21 32.												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
50349	2000 <i>CC</i> ₇₀		8 6.9 287°18	4.3/ 9.2	18		51160	2000 <i>HR</i> ₅₇		8 6.9 181°16	3.1/ 4.7	18	R
6 30	21 33.86	- 6 26.7	1.584	2.407	17.6	18.1	6 30	21 36.44	-21 40.2	1.822	2.671	14.6	19.1
7 10	21 30.35	- 6 1.5	1.485	2.385	14.5	17.9	7 10	21 31.90	-22 32.2	1.748	2.671	11.3	18.8
7 20	21 24.20	- 5 52.0	1.405	2.363	10.7	17.6	7 20	21 24.91	-23 30.1	1.695	2.672	7.6	18.6
7 30	21 15.87	- 5 58.8	1.347	2.341	6.7	17.3	7 30	21 16.06	-24 28.1	1.668	2.672	4.1	18.4
8 9	21 6.24	- 6 20.5	1.313	2.318	4.3	17.1	8 9	21 6.29	-25 19.3	1.667	2.671	3.7	18.4
8 19	20 56.45	- 6 53.6	1.304	2.296	6.7	17.2	8 19	20 56.70	-25 58.4	1.693	2.671	7.0	18.6
8 29	20 47.81	- 7 33.3	1.320	2.274	11.0	17.4	8 29	20 48.42	-26 22.2	1.744	2.670	10.7	18.8
9 8	20 41.42	- 8 13.8	1.358	2.252	15.3	17.6	9 8	20 42.32	-26 30.1	1.818	2.668	14.1	19.0
281103	2006 <i>WT</i> ₈₂		8 6.9 356°06	3.5/ 3.4	18		431735	2008 <i>FB</i> ₈₂		8 6.9 235°17	0.1/ 7.0	17	
6 30	21 28.20	-25 23.5	2.575	3.425	10.8	20.0	6 30	21 35.61	-13 36.9	1.784	2.618	15.5	22.6
7 10	21 24.88	-26 20.1	2.500	3.423	8.3	19.8	7 10	21 31.35	-14 1.6	1.693	2.607	12.2	22.4
7 20	21 19.90	-27 18.8	2.448	3.422	5.8	19.7	7 20	21 24.64	-14 38.5	1.624	2.596	8.2	22.1
7 30	21 13.68	-28 15.1	2.423	3.420	3.8	19.5	7 30	21 15.99	-15 24.3	1.579	2.585	3.8	21.8
8 9	21 6.87	-29 4.2	2.425	3.419	3.9	19.6	8 9	21 6.29	-16 13.9	1.560	2.573	0.9	21.6
8 19	21 0.15	-29 42.5	2.454	3.419	6.1	19.7	8 19	20 56.59	-17 1.9	1.568	2.561	5.7	21.9
8 29	20 54.27	-30 7.7	2.510	3.418	8.6	19.9	8 29	20 48.07	-17 43.2	1.603	2.548	10.1	22.1
9 8	20 49.83	-30 19.1	2.589	3.418	11.0	20.0	9 8	20 41.65	-18 14.7	1.660	2.535	14.0	22.3
106019	2000 <i>SN</i> ₂₉₄		8 6.9 232°52	0.2/ 7.1	18		141843	2002 <i>OE</i> ₂₂		8 6.9 340°10	2.7/ 8.4	18	
6 30	21 34.00	-15 21.4	2.347	3.173	12.5	19.9	6 30	21 28.62	- 9 21.0	1.175	2.037	20.0	19.8
7 10	21 29.37	-15 21.9	2.259	3.168	9.7	19.7	7 10	21 26.87	- 9 17.1	1.100	2.027	16.1	19.5
7 20	21 22.89	-15 28.7	2.193	3.163	6.5	19.5	7 20	21 22.14	- 9 33.0	1.042	2.017	11.4	19.2
7 30	21 15.05	-15 39.8	2.152	3.158	3.0	19.3	7 30	21 14.99	-10 7.4	1.004	2.008	6.2	18.9
8 9	21 6.53	-15 52.3	2.140	3.153	0.7	19.1	8 9	21 6.54	-10 55.6	0.989	2.000	2.8	18.7
8 19	20 58.12	-16 3.6	2.156	3.148	4.4	19.3	8 19	20 58.18	-11 51.0	0.995	1.993	6.9	18.9
8 29	20 50.64	-16 11.4	2.199	3.142	7.9	19.6	8 29	20 51.41	-12 45.5	1.024	1.988	12.2	19.2
9 8	20 44.76	-16 14.0	2.268	3.137	11.0	19.7	9 8	20 47.39	-13 32.5	1.073	1.983	17.0	19.4
520332	2014 <i>GW</i> ₆₀		8 6.9 111°99	7.1/13.2	16		210097	2006 <i>QA</i> ₉₇		8 6.9 300°54	0.7/ 6.4	18	
6 30	21 31.01	+ 5 55.8	2.187	2.929	15.8	21.1	6 30	21 32.68	-16 42.9	1.922	2.765	14.2	20.5
7 10	21 27.12	+ 6 22.6	2.107	2.936	13.6	20.9	7 10	21 28.84	-17 3.4	1.837	2.757	11.0	20.3
7 20	21 21.43	+ 6 29.9	2.045	2.943	11.1	20.8	7 20	21 22.80	-17 32.2	1.774	2.750	7.3	20.1
7 30	21 14.39	+ 6 16.0	2.006	2.950	8.8	20.7	7 30	21 15.10	-18 5.7	1.735	2.743	3.3	19.8
8 9	21 6.70	+ 5 41.6	1.991	2.957	7.3	20.6	8 9	21 6.55	-18 39.5	1.723	2.736	1.3	19.7
8 19	20 59.14	+ 4 49.3	2.002	2.964	7.4	20.6	8 19	20 58.09	-19 9.3	1.738	2.729	5.4	19.9
8 29	20 52.49	+ 3 44.0	2.039	2.970	9.1	20.7	8 29	20 50.74	-19 31.4	1.779	2.722	9.4	20.1
9 8	20 47.41	+ 2 31.5	2.100	2.976	11.4	20.9	9 8	20 45.30	-19 44.0	1.843	2.716	12.9	20.4
54810	Molleigh		8 6.9 66°88	1.6/ 8.1	18		339374	2005 <i>AJ</i> ₆₄		8 6.9 270°16	0.8/ 7.5	18	
6 30	21 33.90	- 8 6.5	1.423	2.259	18.6	18.6	6 30	21 33.57	-12 57.4	1.875	2.708	14.9	21.8
7 10	21 30.08	- 8 53.8	1.370	2.282	14.6	18.4	7 10	21 29.59	-13 5.5	1.785	2.698	11.7	21.5
7 20	21 23.69	-10 0.9	1.336	2.305	10.0	18.2	7 20	21 23.35	-13 24.3	1.717	2.688	8.0	21.3
7 30	21 15.45	-11 23.0	1.325	2.329	5.0	18.0	7 30	21 15.37	-13 51.5	1.672	2.678	3.8	21.0
8 9	21 6.45	-12 52.5	1.339	2.352	1.6	17.8	8 9	21 6.47	-14 23.3	1.654	2.667	1.1	20.8
8 19	20 57.87	-14 20.8	1.380	2.375	5.8	18.1	8 19	20 57.62	-14 55.6	1.663	2.657	5.2	21.1
8 29	20 50.86	-15 40.4	1.445	2.398	10.3	18.5	8 29	20 49.87	-15 24.2	1.698	2.647	9.4	21.3
9 8	20 46.22	-16 46.4	1.533	2.421	14.2	18.8	9 8	20 44.06	-15 46.2	1.757	2.636	13.1	21.5
523550	2017 <i>VC</i> ₂₇		8 6.9 167°03	0.9/ 7.6	17		485312	2011 <i>BP</i> ₂		8 6.9 313°50	0.6/ 6.6	17	
6 30	21 35.77	-12 8.1	1.957	2.781	14.7	22.4	6 30	21 33.46	-18 2.0	1.974	2.817	13.9	21.6
7 10	21 31.05	-12 20.8	1.878	2.784	11.5	22.2	7 10	21 29.51	-17 59.7	1.874	2.794	10.9	21.4
7 20	21 24.17	-12 44.5	1.819	2.787	7.9	22.0	7 20	21 23.33	-18 2.9	1.795	2.771	7.3	21.1
7 30	21 15.67	-13 16.5	1.786	2.790	3.8	21.7	7 30	21 15.39	-18 8.8	1.741	2.748	3.3	20.8
8 9	21 6.38	-13 53.0	1.779	2.792	1.1	21.5	8 9	21 6.47	-18 14.1	1.713	2.725	1.2	20.6
8 19	20 57.26	-14 29.8	1.801	2.794	5.0	21.8	8 19	20 57.53	-18 15.7	1.712	2.703	5.4	20.9
8 29	20 49.28	-15 2.9	1.849	2.795	8.9	22.1	8 29	20 49.63	-18 11.3	1.737	2.681	9.5	21.1
9 8	20 43.21	-15 29.4	1.921	2.796	12.4	22.3	9 8	20 43.63	-17 59.6	1.785	2.660	13.2	21.3
402766	2007 <i>BL</i> ₄₁		8 6.9 281°47	0.5/ 6.5	18		50353	2000 <i>CW</i> ₇₀		8 6.9 126°18	1.5/ 7.9	18	
6 30	21 29.91	-14 10.0	2.179	3.014	13.0	21.2	6 30	21 37.42	-11 2.7	1.855	2.675	15.5	18.8
7 10	21 26.48	-14 57.8	2.088	3.004	10.1	21.0	7 10	21 32.32	-11 6.5	1.784	2.688	12.2	18.6
7 20	21 21.13	-15 56.8	2.020	2.994	6.7	20.8	7 20	21 24.99	-11 22.0	1.735	2.701	8.4	18.4
7 30	21 14.32	-17 3.1	1.977	2.984	3.0	20.6	7 30	21 16.03	-11 46.9	1.711	2.713	4.3	18.2
8 9	21 6.72	-18 11.9	1.961	2.974	1.1	20.4	8 9	21 6.35	-12 17.5	1.713	2.725	1.6	18.1
8 19	20 59.13	-19 17.7	1.974	2.964	5.0	20.7	8 19	20 56.95	-12 49.6	1.743	2.736	5.1	18.3
8 29	20 52.42	-20 15.8	2.013	2.954	8.6	20.9	8 29	20 48.83	-13 19.5	1.799	2.747	9.0	18.6
9 8	20 47.33	-21 3.0	2.077	2.944	11.9	21.1	9 8	20 42.74	-13 44.0	1.880	2.757	12.5	18.8
318275	2004 <i>TT</i> ₁₄		8 6.9 7°53	10.9/12.4	18		106260	2000 <i>UC</i> ₆₀		8 6.9 186°89	1.5/ 5.6	18	
6 30	21 37.17	+ 6 56.6	1.743	2.486	19.2	19.5	6 30	21 33.75	-20 10.9	2.566	3.399	11.3	20.1
7 10	21 32.47	+ 8 44.4	1.664	2.487	16.9	19.3	7 10	21 29.04	-20 34.6	2.483	3.398	8.7	19.9
7 20	21 25.33	+10 13.3	1.603	2.487	14.4	19.1	7 20	21 22.62	-21 2.3	2.424	3.398	5.8	19.7
7 30	21 16.28	+11 17.6	1.563	2.487	12.2	19.0	7 30	21 14.93	-21 30.5	2.391	3.397	2.8	19.5
8 9	21 6.21	+11 53.8	1.546	2.488	11.0	18.9	8 9	21 6.63	-21 55.9	2.386	3.395	1.9	19.5
8 19	20 56.20	+12 1.4	1.553	2.489	11.2	18.9	8 19	20 58.47	-22 15.3	2.410	3.394	4.8	19.7
8 29	20 47.39	+11 43.4	1.582	2.490	12.8	19.0	8 29	20 51.19	-22 26.7	2.462	3.392	7.8	19.9
9 8	20 40.72	+11 6.3	1.633	2.491	15.1	19.2	9 8	20 45.41	-22 29.3	2.539	3.390	10.5	20.0
7855	Tagore		8 6.9 130°93	4.8/11.2	18		261640	2005 <i>YU</i> ₆₅		8 6.9 342°36	7.1/30.7	18	

EPHEMERIDES

8 6.9

8 6.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
19165	Nariyuki		8 6.9 211 ^o 93	3 ^o 3/	5.2 18		467724	2009 FA ₆₃		8 6.9 105 ^o 57	2 ^o 8/	8.7 16	
6 30	21 40.39	-22 57.5	1.598	2.449	16.2	17.6	6 30	21 36.65	-7 58.2	1.537	2.362	18.0	21.9
7 10	21 35.33	-23 23.4	1.521	2.446	12.6	17.4	7 10	21 32.16	-8 0.9	1.472	2.375	14.3	21.7
7 20	21 27.39	-23 53.3	1.466	2.442	8.5	17.2	7 20	21 25.11	-8 20.5	1.426	2.388	10.1	21.5
7 30	21 17.25	-24 21.2	1.434	2.439	4.5	16.9	7 30	21 16.17	-8 54.9	1.402	2.401	5.6	21.3
8 9	21 6.03	-24 40.9	1.428	2.434	3.8	16.9	8 9	21 6.37	-9 39.9	1.404	2.414	2.8	21.1
8 19	20 55.06	-24 47.7	1.448	2.430	7.5	17.1	8 19	20 56.91	-10 29.8	1.432	2.426	5.8	21.4
8 29	20 45.70	-24 39.6	1.494	2.425	11.7	17.3	8 29	20 48.92	-11 19.0	1.485	2.438	10.1	21.6
9 8	20 38.94	-24 17.4	1.561	2.420	15.5	17.5	9 8	20 43.27	-12 2.6	1.561	2.449	14.0	21.9
39028	2000 UX ₇₀		8 6.9 54 ^o 83	0 ^o 0/	6.8 18		370566	2003 UM ₁₈₆		8 6.9 249 ^o 62	2 ^o 5/	8.4 18	
6 30	21 34.88	-15 0.3	1.635	2.479	16.2	19.5	6 30	21 36.25	-8 56.6	1.797	2.614	16.0	21.8
7 10	21 30.74	-15 9.9	1.565	2.485	12.6	19.3	7 10	21 31.90	-8 55.1	1.697	2.597	12.9	21.6
7 20	21 24.14	-15 29.5	1.516	2.491	8.4	19.1	7 20	21 25.09	-9 7.6	1.617	2.579	9.2	21.3
7 30	21 15.71	-15 55.7	1.490	2.497	3.8	18.8	7 30	21 16.28	-9 33.0	1.561	2.561	5.1	21.0
8 9	21 6.44	-16 24.0	1.491	2.504	1.0	18.6	8 9	21 6.31	-10 8.4	1.532	2.542	2.5	20.8
8 19	20 57.46	-16 49.8	1.517	2.510	5.7	19.0	8 19	20 56.25	-10 49.4	1.529	2.522	5.7	21.0
8 29	20 49.87	-17 9.4	1.569	2.517	10.0	19.2	8 29	20 47.26	-11 31.2	1.552	2.502	10.0	21.2
9 8	20 44.50	-17 20.7	1.643	2.524	13.8	19.5	9 8	20 40.34	-12 9.2	1.599	2.481	14.0	21.4
203029	2000 BR		8 6.9 132 ^o 97	1 ^o 4/	7.9 18		302383	2002 CG ₆₄		8 6.9 164 ^o 35	3 ^o 6/	3.6 18	
6 30	21 35.15	-11 22.6	2.243	3.057	13.4	21.1	6 30	21 35.34	-27 51.7	2.783	3.618	10.5	21.3
7 10	21 30.22	-11 23.5	2.167	3.067	10.5	20.9	7 10	21 30.19	-28 31.3	2.709	3.622	8.2	21.1
7 20	21 23.42	-11 33.8	2.114	3.078	7.2	20.7	7 20	21 23.34	-29 10.4	2.660	3.627	5.8	21.0
7 30	21 15.29	-11 51.5	2.085	3.087	3.7	20.5	7 30	21 15.26	-29 44.7	2.637	3.630	3.9	20.9
8 9	21 6.56	-12 13.9	2.085	3.097	1.4	20.3	8 9	21 6.62	-30 10.3	2.643	3.634	4.0	20.9
8 19	20 58.03	-12 37.9	2.113	3.106	4.4	20.6	8 19	20 58.16	-30 24.6	2.678	3.637	5.9	21.0
8 29	20 50.52	-13 0.5	2.168	3.114	7.8	20.8	8 29	20 50.61	-30 26.4	2.739	3.639	8.3	21.2
9 8	20 44.66	-13 19.2	2.249	3.122	10.9	21.0	9 8	20 44.58	-30 16.0	2.825	3.641	10.6	21.3
132397	2002 GO ₉₈		8 6.9 130 ^o 83	4 ^o 1/	10.1 17		95909	2003 HN ₃₂		8 6.9 20 ^o 57	4 ^o 0/	9.8 18	
6 30	21 33.82	-3 4.4	2.068	2.857	15.2	20.6	6 30	21 28.27	-5 11.5	1.563	2.392	17.5	19.3
7 10	21 29.35	-2 58.6	1.991	2.867	12.4	20.4	7 10	21 25.61	-5 4.6	1.500	2.403	14.2	19.1
7 20	21 22.94	-3 8.7	1.935	2.877	9.3	20.2	7 20	21 20.71	-5 16.3	1.457	2.415	10.3	18.9
7 30	21 15.11	-3 34.1	1.903	2.887	6.1	20.1	7 30	21 14.17	-5 45.5	1.435	2.428	6.4	18.7
8 9	21 6.60	-4 12.6	1.897	2.896	4.1	20.0	8 9	21 6.90	-6 28.9	1.437	2.442	4.0	18.6
8 19	20 58.28	-5 0.4	1.918	2.905	5.4	20.1	8 19	20 59.90	-7 21.3	1.464	2.457	5.8	18.7
8 29	20 50.98	-5 52.8	1.966	2.914	8.4	20.3	8 29	20 54.18	-8 16.6	1.516	2.474	9.5	19.0
9 8	20 45.41	-6 45.1	2.039	2.922	11.4	20.5	9 8	20 50.48	-9 9.1	1.590	2.491	13.0	19.3
188240	2002 VX ₅₀		8 6.9 263 ^o 18	2 ^o 7/	5.1 18		72302	2001 BD ₃₁		8 6.9 226 ^o 26	0 ^o 2/	7.1 18	
6 30	21 35.55	-20 0.0	1.710	2.561	15.3	21.1	6 30	21 36.92	-14 7.2	1.709	2.544	16.0	20.7
7 10	21 31.59	-20 48.3	1.619	2.544	11.9	20.9	7 10	21 32.44	-14 20.7	1.623	2.537	12.6	20.4
7 20	21 24.98	-21 45.6	1.549	2.527	8.0	20.6	7 20	21 25.41	-14 45.4	1.557	2.530	8.5	20.2
7 30	21 16.24	-22 46.2	1.504	2.510	4.0	20.4	7 30	21 16.39	-15 18.1	1.515	2.522	3.9	19.9
8 9	21 6.28	-23 43.0	1.485	2.493	3.3	20.3	8 9	21 6.31	-15 54.1	1.500	2.513	1.0	19.6
8 19	20 56.29	-24 29.6	1.492	2.475	7.2	20.5	8 19	20 56.31	-16 28.4	1.511	2.504	5.8	19.9
8 29	20 47.53	-25 1.2	1.525	2.457	11.5	20.7	8 29	20 47.58	-16 56.8	1.548	2.495	10.3	20.2
9 8	20 41.07	-25 16.2	1.579	2.438	15.4	20.9	9 8	20 41.07	-17 16.4	1.608	2.485	14.3	20.4
467538	2007 RX ₂₉₈		8 6.9 320 ^o 54	0 ^o 4/	6.7 18		138239	2000 FU ₃₂		8 6.9 197 ^o 40	0 ^o 6/	6.5 18	
6 30	21 28.09	-13 22.0	1.110	1.987	19.9	20.4	6 30	21 35.52	-15 4.0	1.918	2.751	14.6	20.6
7 10	21 26.86	-13 58.8	1.028	1.967	15.8	20.1	7 10	21 31.05	-15 40.1	1.834	2.749	11.3	20.4
7 20	21 22.43	-14 56.7	0.964	1.948	10.7	19.7	7 20	21 24.31	-16 26.9	1.773	2.746	7.6	20.2
7 30	21 15.28	-16 11.5	0.920	1.929	4.9	19.4	7 30	21 15.84	-17 20.2	1.736	2.743	3.4	19.9
8 9	21 6.51	-17 34.7	0.898	1.911	1.5	19.1	8 9	21 6.46	-18 14.7	1.726	2.739	1.2	19.7
8 19	20 57.64	-18 55.7	0.898	1.895	7.9	19.4	8 19	20 57.19	-19 5.1	1.745	2.735	5.5	20.0
8 29	20 50.38	-20 4.6	0.920	1.879	13.8	19.7	8 29	20 49.05	-19 46.9	1.789	2.730	9.5	20.3
9 8	20 46.12	-20 54.8	0.960	1.864	19.1	19.9	9 8	20 42.88	-20 17.5	1.858	2.725	13.1	20.5
361495	2007 EV ₂₈		8 6.9 131 ^o 26	2 ^o 9/	9.9 18		117877	2593 P-L		8 6.9 351 ^o 91	0 ^o 2/	6.8 17	
6 30	21 29.80	-3 51.1	2.666	3.450	12.3	21.4	6 30	21 22.64	-15 47.5	0.867	1.773	21.5	18.6
7 10	21 25.85	-4 7.8	2.584	3.459	9.9	21.2	7 10	21 23.04	-15 47.0	0.805	1.760	16.9	18.3
7 20	21 20.43	-4 37.3	2.524	3.468	7.3	21.0	7 20	21 20.00	-16 1.9	0.759	1.749	11.4	17.9
7 30	21 13.93	-5 18.8	2.489	3.477	4.6	20.9	7 30	21 14.17	-16 28.5	0.730	1.741	5.2	17.6
8 9	21 6.93	-6 9.4	2.482	3.485	2.9	20.8	8 9	21 6.88	-16 59.8	0.721	1.735	1.5	17.3
8 19	21 0.04	-7 6.0	2.503	3.493	4.1	20.9	8 19	20 59.82	-17 28.2	0.731	1.731	8.0	17.7
8 29	20 53.89	-8 4.5	2.553	3.501	6.7	21.1	8 29	20 54.77	-17 46.7	0.760	1.730	14.1	18.0
9 8	20 49.03	-9 1.2	2.629	3.508	9.3	21.2	9 8	20 52.97	-17 51.3	0.806	1.731	19.4	18.3
442568	2012 BO ₂₁		8 6.9 280 ^o 87	1 ^o 2/	7.8 18		514472	2016 UC ₁₄₈		8 6.9 340 ^o 95	0 ^o 8/	6.4 18	
6 30	21 33.22	-12 37.2	2.273	3.094	13.0	21.0	6 30	21 31.82	-16 15.9	1.778	2.626	14.9	21.6
7 10	21 28.87	-12 27.7	2.181	3.086	10.3	20.8	7 10	21 28.33	-16 42.8	1.699	2.622	11.6	21.4
7 20	21 22.64	-12 26.1	2.111	3.077	7.1	20.6	7 20	21 22.56	-17 19.3	1.641	2.618	7.7	21.1
7 30	21 15.00	-12 30.9	2.066	3.069	3.6	20.4	7 30	21 15.05	-18 1.5	1.608	2.615	3.4	20.9
8 9	21 6.65	-12 39.9	2.048	3.061	1.3	20.2	8 9	21 6.67	-18 44.2	1.600	2.613	1.4	20.7
8 19	20 58.37	-12 50.6	2.059	3.052	4.4	20.4	8 19	20 58.44	-19 22.4	1.619	2.610	5.7	21.0
8 29	20 51.01	-13 0.4	2.097	3.044	8.0	20.6	8 29	20 51.39	-19 52.1	1.663	2.608	9.8	21.2
9 8	20 45.25	-13 7.3	2.159	3.036	11.1	20.8	9 8	20 46.36	-20 10.9	1.730	2.606	13.5	21.4
291370	2006 BV ₂₇₄		8 6.9 158 ^o 90	0 ^o 4/	6.6 17								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
77934	2002 <i>GN</i> ₂₂		8 6.9 36°00	1.3/ 7.5	17		250976	2006 <i>HV</i> ₁₀₁		8 6.9 6°77	0°0/ 6.8	17	
6 30	21 35.68	-13 27.2	1.170	2.032	20.1	19.2	6 30	21 26.64	-12 59.4	0.961	1.850	21.4	20.0
7 10	21 32.11	-13 14.8	1.114	2.042	15.8	18.9	7 10	21 25.77	-13 28.2	0.905	1.850	16.8	19.7
7 20	21 25.41	-13 16.2	1.075	2.053	10.7	18.7	7 20	21 21.59	-14 17.5	0.866	1.851	11.3	19.4
7 30	21 16.39	-13 28.6	1.058	2.064	5.2	18.4	7 30	21 14.83	-15 22.2	0.845	1.854	5.1	19.1
8 9	21 6.37	-13 47.0	1.063	2.076	1.5	18.2	8 9	21 6.81	-16 33.1	0.845	1.858	1.3	18.9
8 19	20 56.85	-14 6.5	1.092	2.089	6.7	18.6	8 19	20 59.14	-17 40.1	0.866	1.865	7.6	19.3
8 29	20 49.26	-14 22.2	1.144	2.102	11.8	18.9	8 29	20 53.42	-18 34.6	0.908	1.872	13.3	19.6
9 8	20 44.55	-14 31.1	1.216	2.116	16.3	19.2	9 8	20 50.75	-19 11.4	0.969	1.881	18.2	19.9
168785	2000 <i>SS</i> ₇		8 6.9 233°72	3°5/ 8.9	18		315341	2007 <i>TU</i> ₄₄₅		8 6.9 111°52	5°2/ 10.2	16	
6 30	21 36.24	- 7 16.7	1.629	2.448	17.4	20.5	6 30	21 36.84	- 2 56.1	1.588	2.390	18.4	21.5
7 10	21 32.00	- 7 2.0	1.541	2.440	14.1	20.3	7 10	21 32.24	- 2 34.5	1.520	2.404	15.1	21.4
7 20	21 25.19	- 7 2.8	1.473	2.432	10.2	20.0	7 20	21 25.16	- 2 32.4	1.471	2.416	11.3	21.2
7 30	21 16.33	- 7 18.8	1.427	2.423	6.1	19.8	7 30	21 16.24	- 2 49.7	1.444	2.429	7.5	21.0
8 9	21 6.35	- 7 47.5	1.407	2.414	3.5	19.6	8 9	21 6.47	- 3 24.2	1.442	2.441	5.2	20.9
8 19	20 56.42	- 8 24.7	1.413	2.405	6.1	19.7	8 19	20 56.99	- 4 11.4	1.465	2.453	6.7	21.0
8 29	20 47.74	- 9 5.3	1.444	2.396	10.4	20.0	8 29	20 48.92	- 5 5.3	1.514	2.464	10.2	21.2
9 8	20 41.32	- 9 44.2	1.498	2.386	14.4	20.2	9 8	20 43.11	- 5 59.5	1.586	2.475	13.7	21.5
398258	2010 <i>SL</i> ₂₅		8 6.9 330°70	3°7/ 10.1	18		41515	2000 <i>QL</i> ₁₈₁		8 6.9 314°33	0°2/ 7.1	18	R
6 30	21 29.06	- 3 28.2	2.086	2.885	14.7	21.2	6 30	21 34.32	-15 44.9	1.244	2.109	19.0	18.7
7 10	21 25.82	- 3 36.2	1.998	2.882	12.0	21.0	7 10	21 31.43	-15 36.5	1.160	2.092	15.0	18.4
7 20	21 20.70	- 4 0.9	1.931	2.878	8.9	20.8	7 20	21 25.33	-15 39.1	1.095	2.075	10.2	18.0
7 30	21 14.18	- 4 41.3	1.887	2.875	5.7	20.6	7 30	21 16.58	-15 49.6	1.051	2.058	4.8	17.7
8 9	21 6.93	- 5 34.8	1.870	2.872	3.7	20.5	8 9	21 6.34	-16 3.5	1.029	2.042	1.2	17.4
8 19	20 59.75	- 6 37.2	1.879	2.869	5.1	20.6	8 19	20 56.10	-16 15.5	1.031	2.027	7.1	17.7
8 29	20 53.47	- 7 43.3	1.915	2.867	8.3	20.8	8 29	20 47.51	-16 21.4	1.056	2.012	12.7	18.0
9 8	20 48.78	- 8 47.9	1.975	2.864	11.4	21.0	9 8	20 41.81	-16 18.6	1.100	1.999	17.7	18.2
288289	2004 <i>AM</i> ₂₀		8 6.9 249°97	0°1/ 6.9	18		224944	2007 <i>DY</i> ₉₈		8 6.9 255°32	0°0/ 6.8	18	
6 30	21 34.00	-15 33.5	2.012	2.846	13.9	21.6	6 30	21 34.50	-13 39.8	1.804	2.639	15.3	21.0
7 10	21 29.74	-15 45.8	1.927	2.842	10.9	21.4	7 10	21 30.55	-14 7.9	1.710	2.625	12.0	20.8
7 20	21 23.37	-16 6.3	1.864	2.838	7.3	21.1	7 20	21 24.19	-14 48.6	1.636	2.610	8.1	20.5
7 30	21 15.40	-16 31.9	1.826	2.833	3.3	20.9	7 30	21 15.91	-15 38.4	1.587	2.594	3.7	20.2
8 9	21 6.63	-16 59.0	1.815	2.828	0.9	20.7	8 9	21 6.54	-16 32.3	1.565	2.578	0.9	20.0
8 19	20 57.98	-17 23.6	1.832	2.824	5.1	21.0	8 19	20 57.12	-17 24.6	1.569	2.562	5.6	20.3
8 29	20 50.41	-17 42.6	1.875	2.819	8.9	21.2	8 29	20 48.81	-18 10.1	1.600	2.545	10.1	20.5
9 8	20 44.68	-17 53.9	1.942	2.814	12.4	21.4	9 8	20 42.55	-18 45.3	1.653	2.529	14.0	20.7
338544	2003 <i>SV</i> ₂₈		8 6.9 333°22	0°4/ 7.2	18		211007	2001 <i>XD</i> ₁₈₂		8 6.9 249°50	3°5/ 8.9	17	
6 30	21 36.02	-15 20.1	1.778	2.616	15.3	20.6	6 30	21 36.35	- 7 31.6	1.567	2.390	17.8	20.7
7 10	21 31.52	-15 13.0	1.698	2.614	12.0	20.4	7 10	21 32.28	- 7 16.8	1.477	2.378	14.4	20.4
7 20	21 24.65	-15 13.9	1.640	2.613	8.1	20.1	7 20	21 25.52	- 7 17.8	1.405	2.365	10.5	20.2
7 30	21 16.00	-15 20.3	1.605	2.611	3.8	19.9	7 30	21 16.57	- 7 34.5	1.356	2.353	6.2	19.9
8 9	21 6.49	-15 28.8	1.597	2.610	0.9	19.6	8 9	21 6.40	- 8 4.2	1.331	2.339	3.5	19.7
8 19	20 57.18	-15 36.2	1.616	2.609	5.4	20.0	8 19	20 56.19	- 8 42.8	1.333	2.326	6.3	19.8
8 29	20 49.14	-15 39.8	1.660	2.608	9.6	20.2	8 29	20 47.26	- 9 24.8	1.359	2.312	10.8	20.1
9 8	20 43.22	-15 37.8	1.728	2.607	13.3	20.4	9 8	20 40.66	-10 4.8	1.408	2.298	15.1	20.3
386340	2008 <i>SG</i> ₂₅₉		8 6.9 288°38	1°3/ 6.2	18		398955	2013 <i>DW</i> ₁₅		8 6.9 67°65	4°0/ 10.3	18	
6 30	21 35.15	-18 14.1	1.742	2.589	15.2	21.4	6 30	21 30.57	- 3 6.9	2.157	2.950	14.5	20.9
7 10	21 31.22	-18 31.4	1.645	2.568	11.9	21.2	7 10	21 26.87	- 3 1.5	2.075	2.953	11.9	20.8
7 20	21 24.74	-18 56.7	1.569	2.546	8.0	20.9	7 20	21 21.35	- 3 11.4	2.013	2.956	8.9	20.6
7 30	21 16.17	-19 26.1	1.516	2.524	3.7	20.6	7 30	21 14.49	- 3 36.2	1.975	2.960	5.9	20.4
8 9	21 6.42	-19 54.4	1.490	2.502	1.9	20.4	8 9	21 6.96	- 4 13.9	1.963	2.963	4.0	20.3
8 19	20 56.61	-20 17.0	1.490	2.479	6.3	20.6	8 19	20 59.55	- 5 0.8	1.979	2.966	5.2	20.4
8 29	20 47.97	-20 30.1	1.515	2.457	10.8	20.8	8 29	20 53.05	- 5 52.7	2.020	2.970	8.1	20.6
9 8	20 41.53	-20 31.9	1.562	2.435	14.8	21.0	9 8	20 48.13	- 6 44.8	2.087	2.973	11.0	20.8
288782	2004 <i>RF</i> ₁₀₈		8 6.9 300°57	1°9/ 8.2	18		506614	2006 <i>DU</i> ₆₈		8 6.9 152°34	12°2/ 29.8	18	
6 30	21 32.52	-10 51.5	2.167	2.986	13.6	20.5	6 30	22 3.69	-55 37.3	2.305	3.062	14.7	21.7
7 10	21 28.45	-10 38.1	2.074	2.976	10.8	20.3	7 10	21 53.48	-56 42.8	2.263	3.070	13.5	21.6
7 20	21 22.46	-10 34.0	2.001	2.965	7.6	20.1	7 20	21 39.38	-57 29.2	2.240	3.078	12.6	21.5
7 30	21 14.99	-10 38.2	1.954	2.955	4.1	19.9	7 30	21 22.58	-57 46.6	2.238	3.085	12.2	21.5
8 9	21 6.75	-10 48.5	1.934	2.945	1.9	19.7	8 9	21 4.98	-57 29.1	2.260	3.091	12.6	21.6
8 19	20 58.57	-11 2.4	1.941	2.934	4.7	19.9	8 19	20 48.63	-56 36.3	2.303	3.097	13.5	21.6
8 29	20 51.31	-11 17.0	1.975	2.924	8.2	20.1	8 29	20 35.24	-55 12.6	2.368	3.102	14.7	21.8
9 8	20 45.70	-11 29.7	2.034	2.915	11.5	20.3	9 8	20 25.71	-53 25.9	2.452	3.107	15.9	21.9
476102	2007 <i>TX</i> ₁₂₉		8 6.9 319°00	3°1/ 4.9	18		38444	1999 <i>SY</i> ₉		8 6.9 6°00	6°2/ 3.5	17	
6 30	21 33.39	-22 5.1	1.754	2.611	14.7	21.2	6 30	21 35.00	-28 0.0	1.424	2.295	16.6	18.6
7 10	21 29.72	-22 45.5	1.675	2.603	11.4	21.0	7 10	21 31.54	-28 54.6	1.362	2.296	13.1	18.3
7 20	21 23.59	-23 31.4	1.618	2.596	7.7	20.8	7 20	21 25.07	-29 49.9	1.321	2.296	9.4	18.1
7 30	21 15.58	-24 17.4	1.585	2.589	4.1	20.5	7 30	21 16.32	-30 37.3	1.302	2.298	6.5	18.0
8 9	21 6.61	-24 57.1	1.577	2.583	3.7	20.5	8 9	21 6.52	-31 8.8	1.307	2.300	6.7	18.0
8 19	20 57.78	-25 25.4	1.596	2.576	7.1	20.7	8 19	20 57.09	-31 19.2	1.335	2.302	9.8	18.2
8 29	20 50.23	-25 39.3	1.639	2.570	10.9	20.9	8 29	20 49.43	-31 7.0	1.386	2.306	13.4	18.4
9 8	20 44.85	-25 38.0	1.704	2.565	14.4	21.1	9 8	20 44.52	-30 34.6	1.458	2.310	16.8	18.6
332330	2007 <i>AC</i> ₂₁		8 6.9 277°61	0°1/ 7.1	18		393890	2005 <i>TF</i> ₁₀₂					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
187269	2005 <i>TN</i> ₃₃		8 6.9 188°52	1.8°/ 5.4	18		169892	2002 <i>RL</i> ₁₇₃		8 6.9 336°91	4.1°/ 3.9	18	
6 30	21 32.80	-20 15.8	2.525	3.360	11.4	21.4	6 30	21 30.23	-21 45.8	1.591	2.458	15.4	19.2
7 10	21 28.43	-20 52.5	2.443	3.359	8.8	21.3	7 10	21 27.59	-23 0.3	1.516	2.450	11.9	19.0
7 20	21 22.31	-21 33.7	2.384	3.358	5.8	21.1	7 20	21 22.38	-24 23.6	1.461	2.442	8.1	18.7
7 30	21 14.91	-22 15.8	2.352	3.357	2.9	20.9	7 30	21 15.15	-25 48.4	1.431	2.435	4.7	18.5
8 9	21 6.88	-22 54.6	2.348	3.356	2.2	20.8	8 9	21 6.84	-27 5.9	1.426	2.428	4.8	18.5
8 19	20 58.96	-23 26.7	2.373	3.354	5.0	21.0	8 19	20 58.61	-28 8.5	1.446	2.422	8.2	18.7
8 29	20 51.91	-23 49.6	2.425	3.352	8.0	21.2	8 29	20 51.71	-28 51.4	1.490	2.416	12.2	18.9
9 8	20 46.35	-24 2.0	2.501	3.350	10.8	21.4	9 8	20 47.10	-29 13.1	1.555	2.412	15.7	19.1
391973	2008 <i>XX</i> ₁₆		8 6.9 164°64	1.2°/ 7.9	16		515238	2012 <i>BP</i> ₁₅₆		8 6.9 225°49	1.7°/ 8.6	18	
6 30	21 33.13	-11 9.3	1.921	2.747	14.8	22.1	6 30	21 29.36	- 8 7.6	2.462	3.271	12.5	21.9
7 10	21 29.13	-11 22.8	1.840	2.748	11.7	21.9	7 10	21 25.78	- 8 33.6	2.374	3.269	9.9	21.7
7 20	21 23.01	-11 48.4	1.781	2.749	8.0	21.7	7 20	21 20.57	- 9 11.8	2.307	3.267	7.0	21.5
7 30	21 15.29	-12 23.7	1.746	2.750	4.0	21.5	7 30	21 14.15	-10 0.3	2.266	3.265	3.8	21.3
8 9	21 6.78	-13 4.8	1.738	2.750	1.3	21.3	8 9	21 7.11	-10 55.8	2.252	3.263	1.7	21.1
8 19	20 58.41	-13 47.3	1.756	2.751	4.9	21.5	8 19	21 0.13	-11 54.3	2.267	3.261	4.0	21.3
8 29	20 51.14	-14 26.8	1.802	2.751	8.9	21.8	8 29	20 53.92	-12 51.7	2.309	3.258	7.2	21.5
9 8	20 45.72	-14 59.9	1.871	2.751	12.4	22.0	9 8	20 49.09	-13 44.2	2.378	3.256	10.2	21.7
41395	2000 <i>AY</i> ₁₆₉		8 6.9 344°34	6.7°/ 11.9	18		474634	2004 <i>UY</i>		8 6.9 268°80	14.1°/ 18.7	16	
6 30	21 25.29	+ 1 2.0	1.624	2.429	18.0	17.9	6 30	21 34.38	+26 26.2	2.452	3.017	17.9	22.5
7 10	21 23.51	+ 1 24.8	1.537	2.415	15.3	17.7	7 10	21 30.23	+27 44.5	2.336	2.986	17.0	22.3
7 20	21 19.53	+ 1 25.5	1.466	2.402	12.1	17.5	7 20	21 23.94	+28 40.2	2.234	2.954	16.1	22.2
7 30	21 13.81	+ 1 2.1	1.417	2.391	8.9	17.3	7 30	21 15.87	+29 7.3	2.148	2.922	15.1	22.0
8 9	21 7.15	+ 0 15.5	1.390	2.380	6.9	17.1	8 9	21 6.63	+29 1.1	2.080	2.888	14.4	21.9
8 19	21 0.50	+ 0 50.3	1.387	2.371	7.5	17.1	8 19	20 57.07	+28 19.2	2.032	2.854	14.1	21.8
8 29	20 54.91	- 2 8.8	1.408	2.363	10.3	17.3	8 29	20 48.18	+27 2.9	2.005	2.819	14.4	21.8
9 8	20 51.25	- 3 31.8	1.451	2.356	13.8	17.5	9 8	20 40.87	+25 17.5	1.998	2.783	15.4	21.8
13335	Tobiaswolf		8 6.9 297°16	4°/ 4.8	18		188370	2004 <i>BJ</i> ₁₀₀		8 6.9 120°87	1°4' / 7.9	17	
6 30	21 38.38	-26 3.3	1.793	2.644	14.7	17.7	6 30	21 37.04	-10 37.0	1.810	2.631	15.8	21.4
7 10	21 33.65	-26 21.8	1.707	2.630	11.5	17.5	7 10	21 32.14	-10 52.9	1.742	2.646	12.4	21.3
7 20	21 26.28	-26 40.9	1.642	2.616	8.0	17.2	7 20	21 24.97	-11 21.6	1.695	2.661	8.5	21.1
7 30	21 16.86	-26 55.1	1.601	2.602	4.8	17.0	7 30	21 16.16	-12 0.5	1.672	2.675	4.3	20.8
8 9	21 6.40	-26 58.9	1.587	2.589	4.4	17.0	8 9	21 6.62	-12 45.1	1.677	2.689	1.5	20.7
8 19	20 56.09	-26 48.8	1.599	2.575	7.5	17.1	8 19	20 57.37	-13 30.6	1.708	2.702	5.1	20.9
8 29	20 47.18	-26 23.4	1.636	2.562	11.3	17.3	8 29	20 49.40	-14 12.3	1.766	2.715	9.1	21.2
9 8	20 40.61	-25 44.3	1.695	2.549	14.8	17.5	9 8	20 43.49	-14 47.0	1.849	2.727	12.6	21.5
511167	2013 <i>YC</i> ₅₆		8 6.9 239°97	3°8' / 3.7	17		437684	2014 <i>DT</i> ₇		8 6.9 36°12	2°4' / 5.8	17	
6 30	21 33.39	-21 19.8	1.895	2.746	14.0	21.2	6 30	21 38.64	-22 29.4	1.647	2.499	15.7	20.6
7 10	21 29.67	-22 48.8	1.814	2.739	10.8	21.0	7 10	21 33.71	-22 32.0	1.580	2.505	12.2	20.4
7 20	21 23.60	-24 26.8	1.755	2.732	7.3	20.7	7 20	21 26.17	-22 37.1	1.534	2.511	8.2	20.2
7 30	21 15.66	-26 6.5	1.723	2.725	4.3	20.5	7 30	21 16.73	-22 40.3	1.512	2.518	4.0	20.0
8 9	21 6.69	-27 39.7	1.718	2.717	4.5	20.5	8 9	21 6.49	-22 37.1	1.516	2.525	2.9	19.9
8 19	20 57.73	-28 58.9	1.740	2.710	7.6	20.7	8 19	20 56.65	-22 24.8	1.546	2.532	6.6	20.2
8 29	20 49.88	-29 59.1	1.787	2.702	11.2	20.9	8 29	20 48.39	-22 2.2	1.601	2.540	10.6	20.4
9 8	20 44.06	-30 38.7	1.857	2.694	14.4	21.1	9 8	20 42.53	-21 30.0	1.679	2.547	14.2	20.7
89672	2001 <i>YG</i> ₂₆		8 6.9 49°67	5°4' / 2.6	18		426112	2012 <i>FN</i> ₅₈		8 6.9 110°80	0°5' / 7.3	17	
6 30	21 33.84	-28 31.5	1.978	2.833	13.3	19.1	6 30	21 38.02	-13 15.8	1.653	2.486	16.5	21.9
7 10	21 29.83	-29 41.6	1.915	2.838	10.5	18.9	7 10	21 33.10	-13 32.0	1.588	2.501	12.9	21.7
7 20	21 23.54	-30 52.0	1.874	2.843	7.6	18.8	7 20	21 25.71	-14 0.0	1.544	2.516	8.7	21.4
7 30	21 15.54	-31 55.7	1.859	2.849	5.6	18.7	7 30	21 16.52	-14 36.0	1.524	2.530	4.0	21.2
8 9	21 6.75	-32 46.1	1.870	2.854	6.0	18.7	8 9	21 6.54	-15 15.1	1.530	2.544	1.0	21.0
8 19	20 58.19	-33 18.8	1.906	2.860	8.3	18.9	8 19	20 56.91	-15 52.3	1.564	2.557	5.5	21.4
8 29	20 50.89	-33 31.8	1.968	2.866	11.2	19.0	8 29	20 48.73	-16 23.5	1.623	2.570	9.8	21.6
9 8	20 45.64	-33 26.1	2.051	2.872	13.8	19.2	9 8	20 42.83	-16 46.0	1.705	2.583	13.5	21.9
338506	2003 <i>QO</i> ₅		8 6.9 316°44	2°1' / 6.1	18		175908	2000 <i>AK</i> ₄₃		8 7.0 247°59	8°1' / 8.6	16	
6 30	21 37.50	-21 46.7	1.522	2.379	16.5	20.0	6 30	21 48.16	- 6 53.8	1.194	2.015	22.3	19.4
7 10	21 33.41	-21 39.4	1.432	2.360	13.0	19.7	7 10	21 42.27	- 4 52.0	1.114	2.009	18.6	19.1
7 20	21 26.39	-21 34.9	1.362	2.341	8.8	19.4	7 20	21 32.66	- 2 58.7	1.052	2.002	14.3	18.8
7 30	21 17.01	-21 29.2	1.315	2.322	4.2	19.1	7 30	21 19.99	- 1 19.8	1.012	1.996	10.1	18.6
8 9	21 6.35	-21 17.5	1.293	2.304	2.6	18.9	8 9	21 5.63	- 0 0.1	0.995	1.989	8.1	18.5
8 19	20 55.78	-20 56.6	1.296	2.286	7.0	19.2	8 19	20 51.38	+ 0 56.9	1.003	1.982	10.4	18.6
8 29	20 46.70	-20 25.2	1.324	2.269	11.8	19.4	8 29	20 39.12	+ 1 31.7	1.034	1.975	14.7	18.8
9 8	20 40.23	-19 43.9	1.373	2.253	16.1	19.6	9 8	20 30.24	+ 1 49.1	1.085	1.968	19.1	19.0
434765	2006 <i>JZ</i> ₈		8 6.9 19°84	8°1' / 2.5	16		60898	2000 <i>JQ</i> ₂₅		8 7.0 266°00	0°3' / 6.8	17	
6 30	21 34.26	-31 34.7	1.306	2.185	17.4	20.0	6 30	21 38.41	-16 13.9	1.335	2.190	18.5	19.4
7 10	21 31.17	-32 43.8	1.259	2.193	13.9	19.8	7 10	21 34.19	-16 17.3	1.264	2.189	14.5	19.1
7 20	21 24.87	-33 49.2	1.232	2.203	10.5	19.6	7 20	21 26.90	-16 31.2	1.211	2.189	9.8	18.9
7 30	21 16.22	-34 40.8	1.226	2.213	8.3	19.5	7 30	21 17.21	-16 51.6	1.181	2.189	4.4	18.6
8 9	21 6.60	-35 10.0	1.243	2.225	8.7	19.6	8 9	21 6.35	-17 13.2	1.175	2.188	1.3	18.3
8 19	20 57.56	-35 12.4	1.283	2.238	11.3	19.8	8 19	20 55.77	-17 30.6	1.194	2.188	6.8	18.7
8 29	20 50.52	-34 48.2	1.344	2.252	14.6	20.0	8 29	20 46.93	-17 40.3	1.237	2.188	11.9	19.0
9 8	20 46.42	-34 1.5	1.424	2.267	17.7	20.3	9 8	20 40.90	-17 40.1	1.300	2.187	16.3	19.2
387481	2013 <i>YK</i> ₁₆		8 6.9 35°25	4°9' / 9.2	18		123071	2000 <i>ST</i> ₃₁₀		8			