

EPHEMERIDES

4 27.9

4 28.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
332593	2008 <i>SH</i> ₁₇₇		4 27.9 278°03		3°0/25.6	17	32548	2001 <i>QU</i> ₁₈		4 28.0 153°52		4°0/23.9	18
3 22	14 46.32	- 8 46.0	1.935	2.767	13.6	20.7	3 22	14 44.38	- 3 37.0	2.487	3.315	11.1	19.2
4 1	14 42.32	- 8 2.6	1.835	2.745	10.5	20.5	4 1	14 40.08	- 2 38.2	2.414	3.320	8.5	19.0
4 11	14 36.11	- 7 12.3	1.757	2.724	7.0	20.2	4 11	14 34.21	- 1 38.1	2.365	3.325	5.9	18.8
4 21	14 28.20	- 6 19.2	1.705	2.701	3.6	20.0	4 21	14 27.27	- 0 40.9	2.344	3.329	4.1	18.7
5 1	14 19.43	- 5 28.7	1.681	2.679	3.8	19.9	5 1	14 19.92	+ 0 8.5	2.352	3.333	4.7	18.8
5 11	14 10.81	- 4 46.5	1.684	2.656	7.4	20.1	5 11	14 12.86	+ 0 46.4	2.388	3.337	7.0	18.9
5 21	14 3.27	- 4 17.2	1.713	2.633	11.4	20.3	5 21	14 6.72	+ 1 10.1	2.449	3.341	9.6	19.1
5 31	13 57.60	- 4 4.0	1.763	2.610	14.9	20.4	5 31	14 1.99	+ 1 18.6	2.534	3.344	12.0	19.3
17424	1988 <i>SP</i> ₂		4 27.9 260°72		2°0/24.3	18	464154	2014 <i>YN</i> ₂₅		4 28.0 358°32		0°2/28.1	17
3 22	14 36.89	- 4 43.8	4.665	5.485	6.4	19.7	3 22	14 45.94	-16 54.6	1.598	2.427	16.2	20.9
4 1	14 33.77	- 4 7.2	4.571	5.474	4.9	19.6	4 1	14 42.36	-16 30.9	1.519	2.426	12.5	20.7
4 11	14 29.85	- 3 29.5	4.503	5.464	3.3	19.5	4 11	14 36.24	-15 53.5	1.461	2.425	8.3	20.4
4 21	14 25.38	- 2 52.9	4.465	5.453	2.1	19.4	4 21	14 28.26	-15 5.2	1.426	2.425	3.5	20.1
5 1	14 20.69	- 2 19.3	4.456	5.442	2.4	19.4	5 1	14 19.48	-14 10.7	1.418	2.425	1.5	20.0
5 11	14 16.09	- 1 50.6	4.477	5.431	3.8	19.5	5 11	14 11.10	-13 16.5	1.436	2.425	6.4	20.3
5 21	14 11.90	- 1 28.4	4.526	5.420	5.5	19.6	5 21	14 4.18	-12 29.1	1.479	2.425	10.9	20.6
5 31	14 8.38	- 1 13.6	4.600	5.409	7.0	19.7	5 31	13 59.51	-11 53.9	1.544	2.426	14.8	20.8
408498	2013 <i>JE</i> ₂₁		4 27.9 207°20		1°8/26.3	16	70423	1999 <i>SB</i> ₁₈		4 28.0 268°05		4°4/25.1	18
3 22	14 47.49	-15 47.9	1.886	2.704	14.5	21.3	3 22	14 49.25	- 5 27.7	1.610	2.457	15.5	19.0
4 1	14 43.11	-14 15.1	1.796	2.700	11.1	21.0	4 1	14 44.94	- 4 48.1	1.529	2.443	12.0	18.8
4 11	14 36.50	-12 25.9	1.730	2.695	7.2	20.8	4 11	14 37.99	- 4 4.7	1.463	2.428	8.2	18.5
4 21	14 28.30	-10 25.7	1.690	2.689	3.0	20.5	4 21	14 29.05	- 3 22.8	1.421	2.414	4.9	18.3
5 1	14 19.44	- 8 22.5	1.681	2.683	2.8	20.5	5 1	14 19.12	- 2 48.6	1.406	2.399	5.3	18.3
5 11	14 10.95	- 6 26.0	1.700	2.676	7.0	20.7	5 11	14 9.45	- 2 27.9	1.417	2.384	9.0	18.5
5 21	14 3.74	- 4 44.2	1.746	2.668	11.1	20.9	5 21	14 1.15	- 2 24.5	1.451	2.369	13.2	18.7
5 31	13 58.49	- 3 22.8	1.816	2.660	14.7	21.1	5 31	13 55.12	- 2 40.0	1.507	2.354	17.0	18.9
118901	2000 <i>UH</i> ₆₇		4 27.9 272°37		1°8/29.4	17	173077	2006 <i>UH</i> ₁₃₄		4 28.0 35°87		1°7/26.6	17
3 22	14 47.28	-19 51.6	2.350	3.144	12.7	20.1	3 22	14 44.39	-11 20.4	1.876	2.709	13.9	20.0
4 1	14 42.72	-20 5.3	2.251	3.135	10.1	19.9	4 1	14 40.58	-10 51.1	1.811	2.722	10.6	19.8
4 11	14 36.18	-20 9.3	2.175	3.126	6.9	19.7	4 11	14 34.75	-10 15.1	1.768	2.736	6.8	19.6
4 21	14 28.19	-20 4.0	2.125	3.117	3.6	19.5	4 21	14 27.54	- 9 35.9	1.751	2.750	3.0	19.4
5 1	14 19.48	-19 50.4	2.104	3.108	1.9	19.3	5 1	14 19.82	- 8 58.2	1.761	2.764	2.5	19.4
5 11	14 10.94	-19 31.4	2.111	3.099	4.7	19.5	5 11	14 12.55	- 8 26.7	1.798	2.779	6.2	19.7
5 21	14 3.38	-19 10.7	2.145	3.089	8.1	19.7	5 21	14 6.51	- 8 4.9	1.861	2.794	9.9	19.9
5 31	13 57.49	-18 52.1	2.204	3.080	11.2	19.9	5 31	14 2.30	- 7 55.4	1.946	2.810	13.0	20.2
11845	1987 <i>RZ</i>		4 27.9 245°27		0°8/27.2	18	474873	2005 <i>ST</i> ₁₄₄		4 28.0 167°37		1°2/29.1	16
3 22	14 44.29	-13 9.6	2.810	3.619	10.5	18.9	3 22	14 47.10	-18 44.9	2.719	3.509	11.3	22.3
4 1	14 40.02	-12 44.0	2.707	3.605	8.0	18.7	4 1	14 42.20	-18 51.5	2.628	3.512	8.8	22.1
4 11	14 34.21	-12 12.0	2.628	3.591	5.2	18.5	4 11	14 35.63	-18 50.0	2.562	3.514	6.0	21.9
4 21	14 27.30	-11 35.6	2.578	3.576	2.2	18.3	4 21	14 27.90	-18 40.8	2.522	3.516	2.9	21.7
5 1	14 19.87	-10 57.8	2.556	3.561	1.5	18.2	5 1	14 19.65	-18 25.7	2.512	3.517	1.4	21.6
5 11	14 12.59	-10 21.9	2.565	3.546	4.6	18.4	5 11	14 11.63	-18 7.1	2.532	3.519	4.1	21.8
5 21	14 6.08	- 9 51.1	2.601	3.530	7.6	18.6	5 21	14 4.49	-17 48.1	2.579	3.520	7.1	22.0
5 31	14 0.84	- 9 28.1	2.662	3.514	10.3	18.7	5 31	13 58.78	-17 31.7	2.652	3.521	9.8	22.2
250449	2003 <i>YY</i> ₁₂₅		4 27.9 176°78		6°4/ 3.5	18	513951	2014 <i>DS</i> ₁₄₆		4 28.0 168°97		3°9/23.6	18
3 22	14 52.50	-34 3.0	2.082	2.814	16.1	21.3	3 22	14 43.89	- 2 48.5	2.716	3.541	10.3	21.9
4 1	14 47.19	-34 23.4	1.990	2.817	13.6	21.1	4 1	14 39.59	- 1 49.8	2.640	3.544	8.0	21.7
4 11	14 39.31	-34 23.1	1.918	2.819	10.9	20.9	4 11	14 33.85	- 0 50.2	2.589	3.547	5.6	21.6
4 21	14 29.53	-33 59.5	1.869	2.820	8.2	20.8	4 21	14 27.12	+ 0 6.2	2.567	3.550	4.0	21.5
5 1	14 18.91	-33 12.2	1.846	2.820	6.5	20.7	5 1	14 20.00	+ 0 55.1	2.573	3.552	4.6	21.5
5 11	14 8.68	-32 5.4	1.851	2.820	7.1	20.7	5 11	14 13.15	+ 1 32.7	2.608	3.553	6.7	21.6
5 21	13 59.90	-30 45.6	1.881	2.819	9.5	20.8	5 21	14 7.12	+ 1 57.0	2.669	3.555	9.1	21.8
5 31	13 53.40	-29 21.5	1.937	2.818	12.3	21.0	5 31	14 2.38	+ 2 6.7	2.754	3.555	11.4	22.0
300265	2007 <i>HF</i> ₈₁		4 27.9 246°45		0°1/28.1	16	508708	2017 <i>UR</i> ₂₂		4 28.0 218°59		1°9/26.5	17
3 22	14 51.33	-16 2.9	1.616	2.436	16.4	21.9	3 22	14 47.66	-10 36.6	2.053	2.876	13.3	21.9
4 1	14 46.74	-15 50.9	1.520	2.422	12.9	21.6	4 1	14 43.09	-10 7.5	1.965	2.871	10.2	21.7
4 11	14 39.30	-15 26.7	1.445	2.407	8.6	21.3	4 11	14 36.44	- 9 32.0	1.901	2.866	6.6	21.5
4 21	14 29.64	-14 51.6	1.394	2.392	3.7	21.0	4 21	14 28.30	- 8 53.2	1.863	2.860	3.0	21.2
5 1	14 18.83	-14 9.4	1.369	2.376	1.6	20.8	5 1	14 19.48	- 8 15.5	1.853	2.854	2.7	21.2
5 11	14 8.21	-13 26.0	1.372	2.359	6.8	21.1	5 11	14 10.94	- 7 43.4	1.871	2.848	6.3	21.4
5 21	13 59.04	-12 47.6	1.399	2.342	11.7	21.3	5 21	14 3.53	- 7 20.6	1.915	2.842	10.0	21.6
5 31	13 52.30	-12 19.9	1.449	2.324	16.0	21.5	5 31	13 57.91	- 7 10.1	1.982	2.835	13.3	21.8
513000	2017 <i>UK</i> ₄₂		4 27.9 193°79		0°9/27.2	17	94640	2001 <i>WL</i> ₂₈		4 28.0 150°16		2°4/26.4	18
3 22	14 46.98	-12 3.4	2.418	3.232	11.8	21.8	3 22	14 51.50	-10 17.7	1.666	2.495	15.6	20.9
4 1	14 42.24	-11 53.5	2.330	3.231	9.1	21.6	4 1	14 46.37	- 9 44.9	1.593	2.502	12.0	20.7
4 11	14 35.72	-11 38.2	2.267	3.230	5.9	21.4	4 11	14 38.70	- 9 4.8	1.542	2.508	7.8	20.5
4 21	14 27.94	-11 19.4	2.230	3.228	2.5	21.2	4 21	14 29.26	- 8 21.7	1.517	2.514	3.6	20.2
5 1	14 19.61	-10 59.8	2.222	3.227	1.7	21.1	5 1	14 19.10	- 7 40.9	1.518	2.520	3.3	20.2
5 11	14 11.53	-10 42.7	2.243	3.225	5.1	21.3	5 11	14 9.42	- 7 7.8	1.547	2.525	7.4	20.5
5 21	14 4.41	-10 30.9	2.292	3.223	8.4	21.5	5 21	14 1.26	- 6 46.9	1.601	2.529	11.5	20.7
5 31	13 58.83	-10 26.8	2.365	3.221	11.3	21.7	5 31	13 55.36	- 6 40.7	1.677	2.533	15.2	21.0
424121	2007 <i>EB</i> ₁₃₈		4 27.9 86°40		2°8/25.9	17	358064	2006 <i>HP</i> ₇₀		4 28.0 358			

EPHEMERIDES

4 28.0

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
503856	1996 <i>TC</i> ₃₄		4 28.0 124°50	0°2/28.2	17		497137	2004 <i>RW</i>		4 28.0 240°02	1°9/26.1	18	
3 22	14 44.77	-18 10.4	2.514	3.315	11.8	21.7	3 22	14 46.46	-12 18.9	2.325	3.141	12.1	22.5
4 1	14 40.42	-17 29.8	2.434	3.326	9.1	21.6	4 1	14 42.03	-11 16.8	2.222	3.125	9.3	22.3
4 11	14 34.44	-16 38.8	2.379	3.337	6.0	21.4	4 11	14 35.71	-10 4.9	2.143	3.107	6.1	22.1
4 21	14 27.38	-15 39.7	2.350	3.348	2.6	21.2	4 21	14 28.02	-8 46.9	2.091	3.089	2.8	21.8
5 1	14 19.91	-14 36.3	2.351	3.358	1.0	21.0	5 1	14 19.68	-7 28.0	2.069	3.070	2.7	21.8
5 11	14 12.78	-13 33.3	2.382	3.368	4.4	21.3	5 11	14 11.51	-6 14.3	2.077	3.050	6.1	22.0
5 21	14 6.63	-12 35.2	2.440	3.377	7.6	21.5	5 21	14 4.30	-5 10.8	2.112	3.030	9.7	22.2
5 31	14 1.94	-11 45.8	2.524	3.387	10.4	21.7	5 31	13 58.66	-4 21.7	2.170	3.009	12.8	22.3
87121	2000 <i>LG</i> ₃₅		4 28.0 270°17	7°9/21.9	18		176057	2000 <i>TH</i> ₆₄		4 28.0 240°00	2°0/29.6	17	
3 22	14 48.99	+ 4 35.1	1.838	2.671	14.2	19.9	3 22	14 47.62	-20 38.6	2.429	3.218	12.5	20.4
4 1	14 44.41	+ 5 36.9	1.752	2.652	11.6	19.6	4 1	14 42.92	-20 51.7	2.332	3.213	9.9	20.2
4 11	14 37.49	+ 6 34.5	1.689	2.634	9.1	19.5	4 11	14 36.30	-20 54.9	2.258	3.207	6.9	20.0
4 21	14 28.81	+ 7 20.8	1.651	2.615	7.9	19.3	4 21	14 28.27	-20 48.3	2.210	3.201	3.7	19.8
5 1	14 19.28	+ 7 49.0	1.639	2.595	8.8	19.3	5 1	14 19.57	-20 33.1	2.191	3.194	2.0	19.7
5 11	14 9.99	+ 7 54.1	1.651	2.576	11.3	19.4	5 11	14 11.07	-20 12.1	2.201	3.188	4.6	19.8
5 21	14 1.91	+ 7 34.7	1.687	2.556	14.3	19.6	5 21	14 3.53	-19 49.0	2.238	3.182	7.8	20.0
5 31	13 55.82	+ 6 51.7	1.743	2.536	17.3	19.7	5 31	13 57.62	-19 27.6	2.300	3.175	10.9	20.2
401774	2014 <i>DS</i> ₁₉		4 28.0 310°81	0°1/27.9	16		192862	1999 <i>VE</i> ₂₂₃		4 28.0 127°60	2°2/25.8	17	
3 22	14 43.95	-15 47.1	2.074	2.894	13.3	20.9	3 22	14 45.85	-11 5.5	2.284	3.105	12.2	20.7
4 1	14 40.38	-15 29.5	1.977	2.879	10.3	20.6	4 1	14 41.32	-10 2.2	2.213	3.118	9.2	20.5
4 11	14 34.77	-15 2.1	1.902	2.865	6.8	20.4	4 11	14 35.07	-8 51.7	2.165	3.130	5.9	20.3
4 21	14 27.64	-14 26.8	1.853	2.851	2.9	20.1	4 21	14 27.67	-7 38.5	2.146	3.143	2.8	20.1
5 1	14 19.79	-13 46.8	1.831	2.837	1.3	20.0	5 1	14 19.86	-6 27.8	2.155	3.154	2.9	20.2
5 11	14 12.13	-13 6.9	1.837	2.824	5.4	20.2	5 11	14 12.44	-5 24.9	2.194	3.165	6.0	20.4
5 21	14 5.51	-12 31.5	1.868	2.810	9.3	20.4	5 21	14 6.07	-4 33.9	2.260	3.176	9.2	20.6
5 31	14 0.62	-12 4.9	1.924	2.797	12.7	20.6	5 31	14 1.28	-3 57.4	2.349	3.186	12.0	20.8
343586	2010 <i>GM</i> ₉		4 28.0 279°57	2°5/1.6	18		2872	Gentelec		4 28.0 82°71	0°7/28.6	18	
3 22	14 40.96	-27 9.5	4.343	5.089	8.1	20.5	3 22	14 47.11	-18 20.8	1.887	2.700	14.7	16.6
4 1	14 37.05	-27 23.0	4.238	5.084	6.6	20.4	4 1	14 42.77	-17 58.3	1.815	2.712	11.4	16.4
4 11	14 32.09	-27 28.5	4.158	5.078	4.9	20.2	4 11	14 36.24	-17 23.3	1.765	2.725	7.6	16.2
4 21	14 26.39	-27 26.0	4.104	5.073	3.4	20.1	4 21	14 28.22	-16 38.0	1.741	2.737	3.4	15.9
5 1	14 20.35	-27 16.0	4.080	5.068	2.5	20.0	5 1	14 19.63	-15 46.5	1.743	2.750	1.3	15.8
5 11	14 14.41	-26 59.9	4.084	5.062	3.2	20.1	5 11	14 11.51	-14 54.1	1.774	2.762	5.4	16.1
5 21	14 8.98	-26 39.6	4.118	5.057	4.7	20.2	5 21	14 4.70	-14 6.4	1.831	2.775	9.3	16.3
5 31	14 4.42	-26 17.5	4.179	5.052	6.4	20.3	5 31	13 59.86	-13 28.0	1.911	2.787	12.7	16.6
221863	2008 <i>GD</i> ₇₀		4 28.0 237°43	5°0/23.7	17		189132	2001 <i>YB</i> ₁₉		4 28.0 277°14	1°6/29.2	17	
3 22	14 46.21	- 4 8.9	1.852	2.691	13.8	21.2	3 22	14 48.32	-20 21.0	1.938	2.740	14.7	20.4
4 1	14 42.15	- 2 58.6	1.772	2.685	10.7	21.0	4 1	14 44.15	-20 12.2	1.824	2.713	11.7	20.2
4 11	14 35.91	- 1 44.5	1.715	2.678	7.5	20.7	4 11	14 37.52	-19 49.3	1.731	2.686	8.1	19.9
4 21	14 28.11	- 0 33.1	1.684	2.671	5.2	20.6	4 21	14 28.93	-19 12.7	1.664	2.658	4.1	19.6
5 1	14 19.62	+ 0 28.9	1.680	2.663	6.0	20.6	5 1	14 19.26	-18 24.4	1.624	2.629	1.8	19.4
5 11	14 11.45	+ 1 15.2	1.702	2.656	9.0	20.8	5 11	14 9.64	-17 29.5	1.611	2.600	5.7	19.6
5 21	14 4.48	+ 1 42.1	1.749	2.648	12.4	21.0	5 21	14 1.13	-16 34.0	1.625	2.571	10.1	19.8
5 31	13 59.41	+ 1 48.1	1.817	2.640	15.5	21.2	5 31	13 54.66	-15 44.4	1.663	2.541	14.1	19.9
259138	2002 <i>XF</i> ₇₁		4 28.0 133°08	0°4/27.7	17		160700	2000 <i>OH</i> ₁₅		4 28.0 251°94	4°2/25.1	16	
3 22	14 50.20	-14 53.5	2.062	2.872	13.7	20.9	3 22	14 49.73	- 6 33.2	1.679	2.515	15.2	20.4
4 1	14 44.89	-14 32.2	1.988	2.886	10.5	20.7	4 1	14 45.27	- 5 43.6	1.587	2.499	11.8	20.1
4 11	14 37.51	-14 1.9	1.937	2.898	6.8	20.5	4 11	14 38.22	- 4 48.2	1.517	2.482	8.0	19.8
4 21	14 28.71	-13 25.0	1.912	2.911	2.8	20.2	4 21	14 29.19	- 3 52.2	1.472	2.465	4.7	19.6
5 1	14 19.38	-12 45.1	1.917	2.922	1.4	20.1	5 1	14 19.17	- 3 2.4	1.454	2.448	5.1	19.6
5 11	14 10.49	-12 7.0	1.949	2.933	5.4	20.4	5 11	14 9.38	- 2 25.3	1.463	2.430	8.9	19.8
5 21	14 2.85	-11 34.7	2.009	2.944	9.1	20.7	5 21	14 0.90	- 2 5.4	1.495	2.411	13.1	19.9
5 31	13 57.08	-11 11.9	2.093	2.954	12.4	20.9	5 31	13 54.63	- 2 5.1	1.549	2.392	16.8	20.1
219749	2001 <i>XN</i> ₂₅₆		4 28.0 216°38	1°6/26.5	18		381477	2008 <i>SK</i> ₃₂		4 28.0 120°21	5°3/2.3	17	
3 22	14 47.15	-12 56.6	2.348	3.161	12.1	21.6	3 22	14 51.55	-30 1.7	2.198	2.948	14.8	20.6
4 1	14 42.47	-12 2.2	2.251	3.152	9.3	21.4	4 1	14 46.22	-30 37.3	2.116	2.959	12.3	20.4
4 11	14 35.95	-10 58.6	2.178	3.141	6.0	21.1	4 11	14 38.56	-30 56.7	2.055	2.969	9.5	20.3
4 21	14 28.10	- 9 49.1	2.133	3.131	2.6	20.9	4 21	14 29.24	-30 57.9	2.018	2.980	6.8	20.1
5 1	14 19.64	- 8 38.5	2.117	3.119	2.3	20.9	5 1	14 19.19	-30 40.8	2.008	2.990	5.3	20.0
5 11	14 11.42	- 7 32.3	2.131	3.107	5.8	21.1	5 11	14 9.49	-30 8.3	2.025	2.999	6.2	20.1
5 21	14 4.17	- 6 35.4	2.172	3.094	9.2	21.3	5 21	14 1.10	-29 25.4	2.070	3.008	8.7	20.3
5 31	13 58.52	- 5 51.4	2.238	3.080	12.3	21.4	5 31	13 54.75	-28 38.5	2.138	3.017	11.4	20.5
21515	Gavini		4 28.0 301°26	9°4/20.6	18		510557	2012 <i>MR</i> ₁₁		4 28.0 283°59	10°9/20.2	18	
3 22	14 46.94	+ 8 7.0	1.752	2.587	14.7	18.2	3 22	14 57.56	+15 53.2	2.012	2.802	14.7	20.7
4 1	14 42.90	+ 9 18.1	1.676	2.571	12.3	18.0	4 1	14 51.02	+16 40.9	1.915	2.770	12.9	20.5
4 11	14 36.51	+10 21.7	1.622	2.556	10.2	17.8	4 11	14 41.88	+17 15.0	1.840	2.737	11.4	20.3
4 21	14 28.40	+11 9.7	1.591	2.540	9.4	17.8	4 21	14 30.72	+17 27.5	1.789	2.703	10.9	20.2
5 1	14 19.50	+11 34.7	1.585	2.525	10.4	17.8	5 1	14 18.52	+17 11.7	1.763	2.669	11.7	20.2
5 11	14 10.90	+11 32.4	1.602	2.510	12.7	17.9	5 11	14 6.45	+16 24.2	1.763	2.634	13.6	20.2
5 21	14 3.57	+11 2.0	1.641	2.495	15.4	18.0	5 21	13 55.63	+15 6.1	1.786	2.599	16.1	20.3
5 31	13 58.26	+10 5.6	1.699	2.481	18.1	18.2	5 31	13 46.95	+13 21.4	1.830	2.563	18.6	20.4
504766	2009 <i>WQ</i> ₁₅₂		4 28.0 259°90	3°3/30.5	17		31292	1998 <i>FK</i> ₆₆		4 28.0 114°17	0°1/27.9	18	

EPHEMERIDES

4 28.0

4 28.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
505861	2015 <i>DE</i> ₃₈		4 28.0 218°44'	6°0'/22.1	17		427642	2003 <i>UT</i> ₃₇₉		4 28.0 350°01'	0°1'/28.1	15	
3 22	14 46.30	+ 1 25.3	2.268	3.097	12.0	21.9	3 22	14 47.85	-14 57.4	1.811	2.633	14.8	21.4
4 1	14 41.81	+ 2 38.4	2.188	3.089	9.5	21.7	4 1	14 43.59	-14 58.5	1.728	2.631	11.5	21.2
4 11	14 35.51	+ 3 50.6	2.132	3.081	7.2	21.5	4 11	14 36.97	-14 50.9	1.667	2.630	7.6	21.0
4 21	14 27.91	+ 4 56.0	2.103	3.072	6.0	21.4	4 21	14 28.63	-14 36.0	1.631	2.629	3.2	20.7
5 1	14 19.76	+ 5 48.7	2.102	3.063	6.8	21.5	5 1	14 19.51	-14 16.7	1.621	2.628	1.3	20.5
5 11	14 11.87	+ 6 24.1	2.127	3.053	9.1	21.6	5 11	14 10.70	-13 57.2	1.639	2.627	5.8	20.8
5 21	14 4.96	+ 6 40.1	2.177	3.043	11.7	21.7	5 21	14 3.20	-13 41.5	1.683	2.627	10.0	21.1
5 31	13 59.63	+ 6 36.2	2.249	3.032	14.2	21.9	5 31	13 57.75	-13 33.6	1.749	2.626	13.6	21.3
470424	2007 <i>VN</i> ₂₁₂		4 28.0 78°50'	0°2'/28.2	17		42382	2183 <i>P-L</i>		4 28.0 284°34'	1°1'/27.3	18	
3 22	14 44.15	-18 24.8	2.139	2.950	13.3	20.9	3 22	14 46.44	-14 42.9	1.637	2.468	15.7	20.1
4 1	14 40.27	-17 38.9	2.061	2.958	10.2	20.7	4 1	14 42.94	-14 5.4	1.538	2.447	12.2	19.8
4 11	14 34.51	-16 40.4	2.006	2.966	6.7	20.5	4 11	14 36.82	-13 14.4	1.460	2.427	8.0	19.5
4 21	14 27.48	-15 32.2	1.977	2.975	2.9	20.2	4 21	14 28.67	-12 12.9	1.407	2.406	3.4	19.2
5 1	14 19.96	-14 19.0	1.976	2.983	1.1	20.1	5 1	14 19.46	-11 6.5	1.380	2.385	2.2	19.0
5 11	14 12.83	-13 6.8	2.004	2.991	5.0	20.4	5 11	14 10.43	-10 2.5	1.379	2.364	7.1	19.3
5 21	14 6.81	-12 0.9	2.059	3.000	8.7	20.6	5 21	14 2.70	-9 7.9	1.404	2.343	11.9	19.5
5 31	14 2.47	-11 6.1	2.139	3.008	11.8	20.9	5 31	13 57.21	-8 28.7	1.449	2.322	16.2	19.7
302280	2001 <i>XC</i> ₂₂₉		4 28.0 13°05'	3°2'/30.1	18		512541	2016 <i>SK</i> ₈		4 28.0 228°48'	6°3'/4.9	17	
3 22	14 47.23	-23 2.1	1.294	2.118	19.5	19.8	3 22	14 48.11	-37 52.9	2.853	3.546	12.9	21.8
4 1	14 44.08	-23 2.8	1.220	2.119	15.6	19.5	4 1	14 43.37	-38 19.6	2.747	3.538	11.2	21.6
4 11	14 37.75	-22 42.4	1.164	2.120	11.0	19.2	4 11	14 36.64	-38 29.5	2.661	3.530	9.4	21.5
4 21	14 29.05	-22 0.9	1.130	2.122	6.1	19.0	4 21	14 28.47	-38 20.4	2.598	3.521	7.6	21.4
5 1	14 19.28	-21 1.8	1.120	2.124	3.2	18.8	5 1	14 19.59	-37 51.7	2.562	3.512	6.4	21.3
5 11	14 10.03	-19 53.0	1.134	2.126	7.0	19.0	5 11	14 10.90	-37 5.3	2.553	3.502	6.6	21.3
5 21	14 2.67	-18 44.0	1.172	2.129	11.9	19.3	5 21	14 3.22	-36 5.2	2.570	3.493	8.0	21.3
5 31	13 58.14	-17 43.8	1.230	2.133	16.4	19.6	5 31	13 57.20	-34 57.1	2.613	3.483	9.9	21.4
20929	2050 <i>T</i> ₋₁		4 28.0 121°36'	2°9'/25.0	18		156252	2001 <i>UV</i> ₂₀₁		4 28.0 268°67'	0°9'/29.4	18	
3 22	14 43.84	- 7 50.1	2.365	3.193	11.6	19.1	3 22	14 38.89	-19 45.4	4.447	5.229	7.3	20.8
4 1	14 39.78	- 6 53.4	2.291	3.199	8.8	18.9	4 1	14 35.41	-19 39.7	4.346	5.224	5.7	20.6
4 11	14 34.09	- 5 52.4	2.241	3.205	5.8	18.7	4 11	14 31.01	-19 28.3	4.270	5.219	3.9	20.5
4 21	14 27.29	- 4 51.1	2.218	3.212	3.3	18.6	4 21	14 25.98	-19 11.8	4.222	5.214	2.0	20.3
5 1	14 20.05	- 3 54.5	2.224	3.217	3.6	18.6	5 1	14 20.67	-18 51.5	4.204	5.208	0.9	20.3
5 11	14 13.13	- 3 7.1	2.259	3.223	6.3	18.8	5 11	14 15.46	-18 29.1	4.215	5.203	2.6	20.4
5 21	14 7.17	- 2 32.0	2.319	3.229	9.3	19.0	5 21	14 10.72	-18 6.5	4.256	5.198	4.5	20.5
5 31	14 2.68	- 2 11.3	2.403	3.234	12.0	19.2	5 31	14 6.76	-17 45.5	4.324	5.192	6.3	20.6
280398	2003 <i>UY</i> ₃₁₇		4 28.0 211°54'	0°4'/27.7	17		69836	1998 <i>SZ</i> ₂		4 28.0 247°34'	5°9'/22.9	18	
3 22	14 46.67	-14 52.8	2.180	2.993	12.9	21.5	3 22	14 47.39	+ 1 50.3	2.161	2.990	12.5	18.9
4 1	14 42.26	-14 29.1	2.090	2.990	10.0	21.3	4 1	14 42.77	+ 2 40.2	2.078	2.980	9.9	18.7
4 11	14 35.89	-13 56.3	2.024	2.986	6.5	21.1	4 11	14 36.22	+ 3 27.6	2.019	2.969	7.5	18.5
4 21	14 28.10	-13 16.8	1.984	2.982	2.7	20.8	4 21	14 28.27	+ 4 7.3	1.986	2.958	6.0	18.4
5 1	14 19.69	-12 34.2	1.972	2.978	1.4	20.7	5 1	14 19.69	+ 4 34.1	1.980	2.948	6.7	18.4
5 11	14 11.55	-11 52.9	1.989	2.973	5.3	21.0	5 11	14 11.38	+ 4 44.1	2.001	2.936	9.0	18.6
5 21	14 4.47	-11 17.3	2.032	2.968	9.0	21.2	5 21	14 4.10	+ 4 35.8	2.047	2.925	11.8	18.7
5 31	13 59.10	-10 50.9	2.100	2.963	12.2	21.4	5 31	13 58.49	+ 4 9.2	2.114	2.913	14.4	18.9
474011	2016 <i>FG</i> ₅₂		4 28.0 309°05'	1°2'/27.1	17		510453	2011 <i>WS</i> ₂₇		4 28.0 234°61'	1°5'/26.8	17	
3 22	14 44.03	-16 37.8	1.533	2.368	16.4	20.6	3 22	14 45.93	-10 15.4	2.451	3.269	11.5	21.1
4 1	14 41.04	-15 30.7	1.448	2.360	12.7	20.3	4 1	14 41.45	-10 1.4	2.363	3.266	8.8	20.9
4 11	14 35.48	-14 5.6	1.385	2.353	8.3	20.0	4 11	14 35.25	- 9 42.9	2.300	3.264	5.7	20.7
4 21	14 28.03	-12 27.3	1.346	2.345	3.4	19.7	4 21	14 27.83	- 9 22.5	2.264	3.261	2.5	20.5
5 1	14 19.73	-10 43.6	1.333	2.338	2.4	19.6	5 1	14 19.88	- 9 3.0	2.256	3.259	2.1	20.5
5 11	14 11.81	- 9 4.4	1.346	2.331	7.3	19.9	5 11	14 12.17	- 8 47.5	2.278	3.256	5.3	20.7
5 21	14 5.34	- 7 38.8	1.385	2.324	12.1	20.2	5 21	14 5.38	- 8 38.6	2.326	3.254	8.4	20.9
5 31	14 1.12	- 6 33.3	1.444	2.318	16.2	20.4	5 31	14 0.07	- 8 38.4	2.399	3.251	11.3	21.1
362939	2012 <i>XF</i> ₂		4 28.0 153°42'	4°7'/23.9	18		281367	2008 <i>CF</i> ₂₁₀		4 28.0 353°28'	8°0'/4.0	16	
3 22	14 46.34	- 0 30.3	2.314	3.142	11.8	20.2	3 22	14 52.38	-36 27.7	2.303	3.014	15.2	20.3
4 1	14 41.74	+ 0 8.5	2.240	3.144	9.2	20.1	4 1	14 47.24	-37 43.1	2.210	3.013	13.3	20.2
4 11	14 35.40	+ 0 45.8	2.190	3.146	6.6	19.9	4 11	14 39.53	-38 41.9	2.138	3.012	11.1	20.0
4 21	14 27.86	+ 1 17.2	2.167	3.147	4.9	19.8	4 21	14 29.80	-39 19.8	2.089	3.011	9.2	19.9
5 1	14 19.84	+ 1 38.7	2.172	3.149	5.4	19.8	5 1	14 19.01	-39 34.3	2.065	3.010	8.0	19.8
5 11	14 12.13	+ 1 47.1	2.204	3.150	7.7	20.0	5 11	14 8.34	-39 26.0	2.067	3.010	8.3	19.8
5 21	14 5.41	+ 1 40.8	2.261	3.152	10.4	20.1	5 21	13 58.93	-38 58.9	2.094	3.010	9.9	19.9
5 31	14 0.24	+ 1 19.7	2.342	3.153	12.9	20.3	5 31	13 51.68	-38 19.2	2.145	3.009	12.0	20.1
221123	2005 <i>SM</i> ₂₂₂		4 28.0 143°88'	8°3'/21.2	17		133896	2004 <i>RT</i> ₃₅		4 28.0 159°04'	2°3'/29.9	17	R
3 22	14 48.63	+ 7 2.4	1.936	2.764	13.8	20.4	3 22	14 50.78	-22 6.9	2.412	3.190	12.9	21.5
4 1	14 43.75	+ 8 14.7	1.877	2.769	11.3	20.3	4 1	14 45.27	-22 16.8	2.324	3.197	10.2	21.3
4 11	14 36.81	+ 9 19.7	1.840	2.775	9.2	20.2	4 11	14 37.79	-22 15.3	2.259	3.203	7.2	21.1
4 21	14 28.46	+10 10.3	1.829	2.780	8.3	20.1	4 21	14 28.92	-22 2.6	2.221	3.209	4.0	20.9
5 1	14 19.60	+10 40.7	1.844	2.785	9.1	20.2	5 1	14 19.44	-21 39.9	2.212	3.214	2.3	20.8
5 11	14 11.19	+10 47.3	1.883	2.789	11.2	20.3	5 11	14 10.25	-21 10.6	2.232	3.219	4.6	21.0
5 21	14 4.04	+10 29.9	1.946	2.793	13.6	20.5	5 21	14 2.16	-20 38.5	2.280	3.223	7.8	21.2
5 31	13 58.76	+ 9 50.4	2.028	2.797	15.9	20.6	5 31	13 55.80	-20 8.1	2.354	3.226	10.8	21.4
521270	2015 <i>HV</i> ₁₉₃		4 28.0 210°36'	2°7'/25.8	17		415366	2013 <i>KB</i> ₁₂		4 28.0 249°51			

EPHEMERIDES

4 28.0

4 28.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
82642	2001 <i>PX</i> ₅		4 28.0 139°79	3°8/23.9	18		224508	2005 <i>WL</i> ₃₇		4 28.0 191°59	0°9/27.4	17	
3 22	14 45.35	- 2 26.1	2.745	3.567	10.3	19.8	3 22	14 47.53	-13 50.3	1.860	2.684	14.4	20.5
4 1	14 40.66	- 1 35.8	2.676	3.578	8.0	19.7	4 1	14 43.24	-13 25.5	1.778	2.684	11.1	20.3
4 11	14 34.55	- 0 45.5	2.632	3.589	5.6	19.5	4 11	14 36.70	-12 51.2	1.718	2.683	7.2	20.0
4 21	14 27.49	+ 0 1.1	2.617	3.600	3.9	19.4	4 21	14 28.54	-12 10.5	1.684	2.683	3.0	19.8
5 1	14 20.08	+ 0 40.0	2.631	3.610	4.4	19.5	5 1	14 19.67	-11 27.5	1.677	2.682	1.9	19.7
5 11	14 12.98	+ 1 8.1	2.673	3.619	6.5	19.6	5 11	14 11.16	-10 47.5	1.697	2.681	6.1	20.0
5 21	14 6.73	+ 1 23.5	2.742	3.628	8.9	19.8	5 21	14 3.90	-10 15.3	1.743	2.681	10.1	20.2
5 31	14 1.78	+ 1 25.5	2.834	3.637	11.1	20.0	5 31	13 58.62	- 9 54.5	1.812	2.680	13.7	20.4
505401	2013 <i>QC</i> ₆₂		4 28.0 295°94	0°2/28.2	17		427615	2003 <i>SK</i> ₄₂₉		4 28.0 204°90	0°4/27.7	17	
3 22	14 47.13	-16 26.0	1.530	2.360	16.7	21.9	3 22	14 47.11	-14 40.6	2.197	3.010	12.9	22.1
4 1	14 43.76	-16 13.6	1.430	2.338	13.1	21.6	4 1	14 42.61	-14 20.1	2.108	3.008	9.9	21.9
4 11	14 37.55	-15 47.9	1.351	2.316	8.8	21.3	4 11	14 36.14	-13 51.1	2.042	3.005	6.5	21.6
4 21	14 29.07	-15 10.3	1.295	2.294	3.8	20.9	4 21	14 28.28	-13 15.6	2.003	3.001	2.7	21.4
5 1	14 19.35	-14 24.6	1.265	2.272	1.5	20.7	5 1	14 19.79	-12 37.2	1.992	2.998	1.4	21.3
5 11	14 9.74	-13 37.0	1.260	2.250	6.9	21.0	5 11	14 11.56	-12 0.0	2.010	2.994	5.3	21.5
5 21	14 1.52	-12 54.6	1.280	2.228	12.1	21.2	5 21	14 4.40	-11 28.2	2.054	2.990	8.9	21.7
5 31	13 55.74	-12 23.7	1.320	2.206	16.6	21.4	5 31	13 58.94	-11 5.3	2.123	2.986	12.1	21.9
338807	2003 <i>WM</i> ₉		4 28.0 268°12	3°9/ 1.1	16		335766	2007 <i>EC</i> ₁₄₁		4 28.0 297°08	2°0/24.4	17	
3 22	14 48.74	-26 10.4	2.197	2.970	14.2	21.6	3 22	14 37.00	- 6 11.4	4.282	5.102	6.9	21.0
4 1	14 44.27	-26 26.4	2.085	2.949	11.6	21.4	4 1	14 33.98	- 5 21.6	4.191	5.096	5.3	20.9
4 11	14 37.50	-26 27.9	1.995	2.928	8.6	21.1	4 11	14 30.09	- 4 29.9	4.127	5.089	3.5	20.7
4 21	14 28.94	-26 13.6	1.929	2.907	5.6	20.9	4 21	14 25.63	- 3 38.4	4.092	5.082	2.2	20.6
5 1	14 19.42	-25 43.8	1.890	2.885	3.9	20.7	5 1	14 20.91	- 2 49.9	4.087	5.075	2.5	20.7
5 11	14 9.98	-25 1.6	1.879	2.863	5.6	20.8	5 11	14 16.32	- 2 6.7	4.112	5.068	4.1	20.8
5 21	14 1.62	-24 12.0	1.895	2.841	8.9	21.0	5 21	14 12.17	- 1 30.7	4.165	5.062	5.9	20.9
5 31	13 55.14	-23 21.1	1.936	2.818	12.3	21.1	5 31	14 8.77	- 1 3.2	4.243	5.055	7.5	21.0
297715	2001 <i>VZ</i> ₁₂₃		4 28.0 191°80	1°0/28.9	17 R		196219	2003 <i>BF</i> ₄₆		4 28.0 210°55	1°0/27.4	18	
3 22	14 46.76	-18 37.8	2.743	3.534	11.2	21.4	3 22	14 51.45	-14 15.5	1.735	2.555	15.5	21.2
4 1	14 41.98	-18 33.2	2.649	3.533	8.7	21.3	4 1	14 46.52	-13 45.4	1.646	2.549	12.0	20.9
4 11	14 35.56	-18 19.9	2.578	3.531	5.9	21.1	4 11	14 39.01	-13 4.1	1.578	2.542	7.9	20.7
4 21	14 27.98	-17 58.9	2.534	3.529	2.8	20.9	4 21	14 29.57	-12 14.5	1.536	2.535	3.3	20.4
5 1	14 19.88	-17 32.1	2.520	3.526	1.2	20.7	5 1	14 19.23	-11 21.3	1.521	2.527	2.0	20.3
5 11	14 11.98	-17 2.6	2.536	3.523	4.1	20.9	5 11	14 9.20	-10 30.8	1.534	2.518	6.7	20.5
5 21	14 4.95	-16 33.6	2.579	3.519	7.1	21.1	5 21	14 0.57	- 9 48.8	1.573	2.508	11.2	20.8
5 31	13 59.33	-16 8.5	2.649	3.516	9.9	21.3	5 31	13 54.18	- 9 20.0	1.634	2.498	15.1	21.0
471427	2011 <i>UU</i> ₄₅		4 28.0 234°74	0°3/28.4	18		420205	2011 <i>GX</i> ₇₉		4 28.0 156°01	0°4/28.3	17	
3 22	14 45.71	-16 58.4	2.816	3.613	10.8	22.8	3 22	14 51.80	-14 56.4	2.114	2.919	13.6	21.2
4 1	14 41.19	-16 41.2	2.710	3.600	8.4	22.6	4 1	14 46.28	-15 10.0	2.029	2.923	10.5	21.0
4 11	14 35.06	-16 15.8	2.629	3.586	5.6	22.4	4 11	14 38.58	-15 16.7	1.967	2.926	7.0	20.8
4 21	14 27.78	-15 43.5	2.575	3.571	2.4	22.2	4 21	14 29.32	-15 17.1	1.933	2.930	3.0	20.6
5 1	14 19.95	-15 6.7	2.550	3.557	0.9	22.0	5 1	14 19.36	-15 13.1	1.926	2.933	1.2	20.4
5 11	14 12.26	-14 28.6	2.555	3.541	4.2	22.3	5 11	14 9.70	-15 7.5	1.949	2.936	5.2	20.7
5 21	14 5.36	-13 52.7	2.589	3.525	7.3	22.4	5 21	14 1.24	-15 3.4	1.999	2.938	8.9	20.9
5 31	13 59.79	-13 22.4	2.648	3.509	10.1	22.6	5 31	13 54.67	-15 4.1	2.073	2.940	12.2	21.2
471493	2011 <i>WN</i> ₄₈		4 28.0 239°27	3°8/ 2.2	17		204350	2004 <i>SR</i> ₂₉		4 28.1 114°17	0°8/27.5	18	
3 22	14 46.27	-29 46.8	2.825	3.569	12.0	21.7	3 22	14 50.48	-15 6.0	1.571	2.397	16.5	20.9
4 1	14 41.78	-29 44.6	2.713	3.555	9.9	21.6	4 1	14 45.74	-14 29.2	1.504	2.410	12.7	20.6
4 11	14 35.54	-29 27.8	2.624	3.541	7.6	21.4	4 11	14 38.39	-13 40.0	1.457	2.422	8.2	20.4
4 21	14 28.01	-28 55.8	2.560	3.527	5.2	21.2	4 21	14 29.24	-12 42.2	1.435	2.434	3.4	20.1
5 1	14 19.87	-28 9.4	2.524	3.512	3.8	21.1	5 1	14 19.42	-11 41.6	1.440	2.446	2.0	20.1
5 11	14 11.90	-27 11.8	2.517	3.496	4.8	21.1	5 11	14 10.18	-10 45.2	1.472	2.457	6.7	20.4
5 21	14 4.81	-26 7.4	2.538	3.480	7.1	21.3	5 21	14 2.56	- 9 59.0	1.529	2.468	11.2	20.7
5 31	13 59.21	-25 1.3	2.586	3.464	9.7	21.4	5 31	13 57.28	- 9 27.5	1.608	2.478	15.0	20.9
133087	2003 <i>MX</i> ₅		4 28.0 228°55	0°8/28.7	17		230038	2000 <i>QX</i> ₁₂₉		4 28.1 192°87	7°0/20.1	18	
3 22	14 50.15	-19 28.2	2.044	2.842	14.2	20.8	3 22	14 47.61	+ 8 27.0	2.649	3.461	11.0	21.3
4 1	14 45.27	-18 59.2	1.940	2.829	11.2	20.6	4 1	14 42.54	+ 9 40.3	2.578	3.458	9.1	21.2
4 11	14 38.08	-18 15.9	1.859	2.814	7.6	20.3	4 11	14 35.87	+10 47.9	2.533	3.455	7.6	21.1
4 21	14 29.15	-17 19.7	1.803	2.799	3.5	20.1	4 21	14 28.10	+11 44.2	2.514	3.451	7.0	21.0
5 1	14 19.38	-16 14.3	1.777	2.783	1.3	19.9	5 1	14 19.89	+12 24.3	2.522	3.447	7.8	21.1
5 11	14 9.81	-15 5.2	1.778	2.766	5.5	20.1	5 11	14 11.95	+12 45.4	2.557	3.441	9.5	21.1
5 21	14 1.42	-13 59.0	1.808	2.748	9.6	20.3	5 21	14 4.90	+12 46.3	2.617	3.435	11.4	21.3
5 31	13 54.98	-13 1.7	1.861	2.729	13.4	20.5	5 31	13 59.25	+12 27.9	2.697	3.428	13.3	21.4
184451	2005 <i>NR</i> ₅₉		4 28.0 326°84	3°1/26.2	17		151080	2001 <i>VD</i> ₆₅		4 28.1 189°26	0°1/28.1	18	
3 22	14 44.14	- 9 55.6	1.304	2.161	17.4	20.3	3 22	14 50.34	-15 8.9	2.132	2.939	13.4	20.3
4 1	14 41.66	- 9 22.1	1.220	2.144	13.5	20.0	4 1	14 45.16	-15 3.4	2.043	2.939	10.4	20.1
4 11	14 36.23	- 8 39.3	1.156	2.128	8.9	19.7	4 11	14 37.86	-14 49.5	1.978	2.938	6.8	19.8
4 21	14 28.52	- 7 52.1	1.114	2.113	4.3	19.3	4 21	14 29.02	-14 28.9	1.938	2.936	2.9	19.6
5 1	14 19.63	- 7 7.5	1.097	2.098	4.1	19.3	5 1	14 19.49	-14 4.1	1.927	2.934	1.2	19.4
5 11	14 11.02	- 6 33.1	1.103	2.085	8.9	19.5	5 11	14 10.24	-13 39.0	1.945	2.931	5.3	19.7
5 21	14 3.98	- 6 14.7	1.131	2.072	14.0	19.7	5 21	14 2.14	-13 17.5	1.990	2.928	9.1	19.9
5 31	13 59.52	- 6 16.0	1.178	2.060	18.5	20.0	5 31	13 55.87	-13 3.1	2.060	2.924	12.4	20.1
335581	2006 <i>DM</i> ₂₃		4 28.0 196°69	2°4/29.9	17		194742	2001 <i>YN</i> ₂₀		4 28.1			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
251460	2008 CV ₁₉₃		4 28.1 322°84	6°3/21.1	18		9781	Jubjubbird		4 28.1 290°31	0°1/28.1	18	
3 22	14 41.87	+ 1 24.3	2.195	3.034	12.0	20.2	3 22	14 50.58	-14 16.2	1.615	2.441	16.2	18.3
4 1	14 38.50	+ 2 55.6	2.122	3.029	9.5	20.1	4 1	14 46.30	-14 28.0	1.516	2.422	12.7	18.0
4 11	14 33.41	+ 4 26.2	2.074	3.024	7.3	19.9	4 11	14 39.18	-14 31.7	1.438	2.402	8.5	17.7
4 21	14 27.11	+ 5 49.6	2.053	3.020	6.3	19.8	4 21	14 29.80	-14 28.3	1.385	2.383	3.7	17.3
5 1	14 20.30	+ 6 59.1	2.058	3.015	7.3	19.9	5 1	14 19.16	-14 20.1	1.357	2.364	1.5	17.1
5 11	14 13.78	+ 7 49.6	2.090	3.011	9.5	20.0	5 11	14 8.62	-14 10.9	1.356	2.345	6.7	17.4
5 21	14 8.20	+ 8 18.7	2.145	3.006	12.0	20.2	5 21	13 59.44	-14 5.1	1.380	2.325	11.6	17.6
5 31	14 4.14	+ 8 26.0	2.221	3.002	14.4	20.3	5 31	13 52.65	-14 7.1	1.426	2.306	15.9	17.9
8990	Compassion		4 28.1 13°55	4°3/24.3	18		94885	2001 XK ₂₅₀		4 28.1 102°20	1°0/27.4	18	
3 22	14 43.72	- 4 4.0	2.027	2.866	12.8	17.3	3 22	14 50.01	-14 43.8	1.495	2.326	17.0	19.9
4 1	14 40.03	- 3 14.1	1.955	2.868	9.9	17.1	4 1	14 45.51	-14 6.6	1.428	2.337	13.0	19.7
4 11	14 34.44	- 2 22.5	1.907	2.870	6.8	16.9	4 11	14 38.32	-13 17.0	1.383	2.349	8.5	19.4
4 21	14 27.55	- 1 34.2	1.884	2.872	4.5	16.8	4 21	14 29.25	-12 19.0	1.362	2.361	3.5	19.2
5 1	14 20.13	- 0 54.4	1.889	2.875	5.0	16.8	5 1	14 19.48	-11 18.5	1.367	2.372	2.2	19.1
5 11	14 13.05	- 0 27.5	1.920	2.878	7.8	17.0	5 11	14 10.30	-10 22.9	1.398	2.383	7.0	19.4
5 21	14 7.05	- 0 16.2	1.976	2.882	10.9	17.2	5 21	14 2.79	- 9 38.5	1.454	2.393	11.6	19.7
5 31	14 2.72	- 0 21.4	2.054	2.885	13.7	17.4	5 31	13 57.70	- 9 9.4	1.531	2.404	15.5	20.0
276002	2001 XA ₂₄₆		4 28.1 268°77	2°9/30.2	17		468474	2004 RG ₂₀₀		4 28.1 201°22	0°3/27.8	18	
3 22	14 48.63	-23 7.8	1.890	2.685	15.3	20.4	3 22	14 46.81	-16 49.7	2.639	3.437	11.4	22.2
4 1	14 44.46	-23 13.4	1.786	2.668	12.4	20.1	4 1	14 42.05	-16 2.7	2.541	3.432	8.8	22.0
4 11	14 37.76	-23 3.9	1.703	2.650	8.9	19.9	4 11	14 35.63	-15 5.5	2.467	3.426	5.7	21.8
4 21	14 29.11	-22 38.6	1.645	2.633	5.1	19.6	4 21	14 28.05	-14 0.4	2.422	3.420	2.4	21.6
5 1	14 19.43	-21 59.0	1.613	2.615	3.0	19.4	5 1	14 19.96	-12 51.2	2.407	3.413	1.2	21.4
5 11	14 9.90	-21 9.5	1.608	2.597	5.8	19.6	5 11	14 12.11	-11 42.7	2.422	3.405	4.6	21.7
5 21	14 1.61	-20 16.1	1.629	2.578	9.8	19.8	5 21	14 5.16	-10 39.6	2.465	3.396	7.9	21.9
5 31	13 55.43	-19 25.6	1.674	2.560	13.7	19.9	5 31	13 59.65	- 9 45.8	2.535	3.387	10.8	22.0
76172	2000 ET ₃₁		4 28.1 279°34	2°3/29.6	18		396264	2014 CO ₁₅		4 28.1 264°20	4°2/ 1.7	17	
3 22	14 50.29	-19 56.1	2.078	2.873	14.1	18.5	3 22	14 47.45	-27 40.5	2.256	3.022	14.0	21.0
4 1	14 45.44	-20 25.6	1.978	2.862	11.2	18.3	4 1	14 43.12	-27 59.9	2.159	3.017	11.5	20.8
4 11	14 38.26	-20 45.6	1.900	2.850	7.9	18.0	4 11	14 36.63	-28 4.4	2.084	3.012	8.7	20.6
4 21	14 29.28	-20 55.3	1.848	2.838	4.3	17.8	4 21	14 28.56	-27 52.9	2.034	3.007	5.9	20.4
5 1	14 19.37	-20 55.2	1.823	2.826	2.4	17.6	5 1	14 19.73	-27 25.7	2.010	3.001	4.3	20.3
5 11	14 9.59	-20 47.8	1.827	2.814	5.3	17.8	5 11	14 11.12	-26 46.2	2.014	2.996	5.6	20.4
5 21	14 0.94	-20 36.7	1.857	2.803	9.1	18.0	5 21	14 3.63	-25 59.1	2.045	2.990	8.4	20.5
5 31	13 54.22	-20 26.3	1.912	2.791	12.6	18.2	5 31	13 57.96	-25 10.2	2.100	2.985	11.4	20.7
199513	2006 DU ₁₂₇		4 28.1 317°97	0°7/28.5	18		94498	2001 UM ₅₀		4 28.1 216°05	4°7/24.6	18	
3 22	14 46.13	-17 5.2	1.668	2.493	15.7	20.4	3 22	14 49.49	- 6 2.2	1.661	2.498	15.2	20.2
4 1	14 42.64	-17 2.1	1.577	2.481	12.3	20.1	4 1	14 45.00	- 4 58.1	1.580	2.493	11.8	20.0
4 11	14 36.60	-16 47.0	1.507	2.469	8.3	19.8	4 11	14 38.00	- 3 48.3	1.522	2.487	8.0	19.8
4 21	14 28.62	-16 21.4	1.460	2.458	3.7	19.5	4 21	14 29.17	- 2 39.1	1.489	2.480	5.0	19.6
5 1	14 19.67	-15 48.3	1.440	2.447	1.4	19.3	5 1	14 19.50	- 1 37.8	1.483	2.473	5.6	19.6
5 11	14 10.96	-15 12.8	1.446	2.436	6.1	19.6	5 11	14 10.20	- 0 51.5	1.503	2.465	9.1	19.8
5 21	14 3.58	-14 40.5	1.477	2.426	10.7	19.8	5 21	14 2.29	- 0 24.5	1.547	2.457	13.1	20.0
5 31	13 58.40	-14 16.6	1.530	2.416	14.7	20.1	5 31	13 56.56	- 0 18.7	1.612	2.448	16.6	20.2
248958	2006 XJ ₅₄		4 28.1 354°14	9°0/ 8.4	18		374500	2005 YH ₁₅₄		4 28.1 195°21	1°1/29.1	18	
3 22	14 46.82	-44 30.1	2.195	2.868	16.8	19.3	3 22	14 49.11	-19 31.0	2.430	3.219	12.5	22.2
4 1	14 43.08	-44 44.2	2.100	2.866	15.1	19.1	4 1	14 44.03	-19 18.9	2.334	3.217	9.8	22.0
4 11	14 36.77	-44 32.2	2.023	2.864	13.0	19.0	4 11	14 37.04	-18 55.9	2.261	3.213	6.6	21.8
4 21	14 28.62	-43 50.5	1.966	2.863	11.0	18.8	4 21	14 28.68	-18 23.2	2.216	3.209	3.2	21.6
5 1	14 19.70	-42 38.2	1.931	2.862	9.4	18.7	5 1	14 19.71	-17 43.1	2.199	3.205	1.3	21.4
5 11	14 11.26	-40 59.0	1.922	2.861	9.1	18.7	5 11	14 10.98	-16 59.5	2.212	3.199	4.6	21.6
5 21	14 4.34	-38 59.9	1.938	2.861	10.1	18.8	5 21	14 3.26	-16 16.8	2.253	3.193	8.0	21.8
5 31	13 59.70	-36 50.8	1.979	2.861	12.1	18.9	5 31	13 57.18	-15 39.2	2.319	3.186	11.1	22.0
96936	1999 TW ₁₄₀		4 28.1 65°34	1°2/28.9	18		377760	2005 YN ₅₅		4 28.1 242°69	2°2/26.4	17	
3 22	14 48.69	-18 7.9	1.841	2.652	15.0	19.1	3 22	14 48.38	-10 5.3	2.002	2.826	13.5	21.9
4 1	14 44.15	-18 11.7	1.766	2.662	11.7	18.9	4 1	14 43.83	- 9 34.9	1.908	2.815	10.4	21.7
4 11	14 37.30	-18 4.4	1.713	2.671	7.9	18.7	4 11	14 37.11	- 8 58.1	1.838	2.803	6.8	21.5
4 21	14 28.80	-17 46.9	1.685	2.681	3.7	18.4	4 21	14 28.77	- 8 18.2	1.793	2.791	3.2	21.2
5 1	14 19.63	-17 21.8	1.685	2.691	1.5	18.3	5 1	14 19.66	- 7 39.5	1.777	2.778	2.9	21.2
5 11	14 10.89	-16 53.6	1.711	2.701	5.4	18.6	5 11	14 10.77	- 7 7.0	1.788	2.765	6.6	21.4
5 21	14 3.50	-16 26.8	1.764	2.710	9.4	18.8	5 21	14 3.01	- 6 44.6	1.826	2.752	10.5	21.6
5 31	13 58.17	-16 6.0	1.840	2.720	12.9	19.1	5 31	13 57.09	- 6 35.2	1.886	2.738	13.9	21.8
468610	2007 YK ₁₃		4 28.1 191°47	3°6/24.8	17		331929	2004 SE ₂₅		4 28.1 275°12	5°4/22.9	17	
3 22	14 46.72	- 3 14.6	2.550	3.372	11.0	21.8	3 22	14 45.30	- 4 0.2	1.927	2.766	13.4	21.3
4 1	14 41.94	- 2 44.1	2.468	3.371	8.5	21.6	4 1	14 41.58	- 2 33.9	1.831	2.743	10.5	21.1
4 11	14 35.53	- 2 13.3	2.411	3.370	5.9	21.4	4 11	14 35.71	- 1 1.4	1.758	2.720	7.4	20.8
4 21	14 27.99	- 1 45.7	2.381	3.368	3.8	21.3	4 21	14 28.21	+ 0 30.4	1.712	2.696	5.4	20.7
5 1	14 19.97	- 1 24.8	2.380	3.366	4.2	21.3	5 1	14 19.89	+ 1 53.6	1.693	2.672	6.4	20.7
5 11	14 12.21	- 1 13.7	2.407	3.364	6.5	21.4	5 11	14 11.73	+ 3 1.0	1.701	2.648	9.5	20.8
5 21	14 5.34	- 1 14.0	2.461	3.362	9.2	21.6	5 21	14 4.64	+ 3 47.5	1.733	2.623	13.0	20.9
5 31	13 59.89	- 1 26.7	2.539	3.359	11.7	21.8	5 31	13 59.35	+ 4 10.6	1.786	2.598	16.2	21.1
285064	2011 KG ₃		4 28.1 265°64	3°0/25.6	17		331163	2010 XR ₅₈		4 28.1 100°78	2°3/26.0	18	
3 22	14 46.38	- 7 39.4	1.990										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
522995	2016 <i>PQ</i> ₁₂₀		4 28.1 136°54	2°3/25.6	17		374503	2005 <i>YY</i> ₁₇₀		4 28.1 168°27	5°8/3.4	17	
3 22	14 43.77	- 9 6.6	2.538	3.361	11.0	22.0	3 22	14 49.39	-33 12.4	2.080	2.822	15.8	21.1
4 1	14 39.69	- 8 16.8	2.460	3.366	8.4	21.9	4 1	14 44.81	-33 18.0	1.989	2.824	13.3	20.9
4 11	14 34.06	- 7 22.2	2.407	3.372	5.5	21.7	4 11	14 37.82	-33 2.5	1.918	2.826	10.4	20.7
4 21	14 27.38	- 6 26.4	2.382	3.377	2.8	21.5	4 21	14 29.09	-32 24.3	1.871	2.828	7.6	20.6
5 1	14 20.30	- 5 33.6	2.386	3.382	3.0	21.5	5 1	14 19.62	-31 24.0	1.849	2.829	5.9	20.5
5 11	14 13.49	- 4 48.0	2.418	3.387	5.7	21.7	5 11	14 10.54	-30 6.4	1.855	2.831	6.5	20.5
5 21	14 7.57	- 4 12.8	2.477	3.392	8.6	21.9	5 21	14 2.84	-28 38.6	1.887	2.831	9.1	20.6
5 31	14 3.03	- 3 50.1	2.560	3.396	11.2	22.1	5 31	13 57.27	-27 8.8	1.945	2.832	12.0	20.8
404184	2013 <i>CU</i> ₁₀₆		4 28.1 302°94	5°1/24.9	16		246508	2008 <i>CQ</i> ₇₃		4 28.1 86°98	5°4/23.0	18	
3 22	14 45.96	- 7 18.6	1.245	2.105	17.9	21.0	3 22	14 45.10	+ 1 11.7	2.292	3.123	11.8	20.6
4 1	14 43.27	- 6 19.8	1.159	2.084	14.0	20.7	4 1	14 40.83	+ 2 4.0	2.225	3.128	9.3	20.4
4 11	14 37.45	- 5 11.4	1.093	2.064	9.5	20.4	4 11	14 34.86	+ 2 53.9	2.182	3.134	6.9	20.3
4 21	14 29.13	- 4 0.5	1.049	2.044	5.6	20.1	4 21	14 27.75	+ 3 36.4	2.166	3.139	5.5	20.2
5 1	14 19.50	- 2 56.6	1.029	2.024	6.2	20.1	5 1	14 20.19	+ 4 6.9	2.177	3.145	6.1	20.3
5 11	14 10.08	- 2 9.2	1.032	2.005	10.8	20.3	5 11	14 12.97	+ 4 22.1	2.214	3.150	8.3	20.4
5 21	14 2.29	- 1 45.2	1.057	1.986	15.9	20.5	5 21	14 6.75	+ 4 20.6	2.277	3.156	10.8	20.6
5 31	13 57.23	- 1 47.5	1.099	1.968	20.5	20.7	5 31	14 2.04	+ 4 2.4	2.361	3.161	13.1	20.7
51385	2001 <i>CR</i> ₂₀		4 28.1 229°31	7°4/26.1	18		225976	2002 <i>CU</i> ₁₆₄		4 28.1 154°74	2°5/29.9	18	
3 22	15 5.57	+ 2 55.6	1.224	2.053	20.1	18.7	3 22	14 50.72	-21 58.4	2.124	2.911	14.1	20.9
4 1	14 58.51	+ 2 45.8	1.146	2.047	16.2	18.4	4 1	14 45.55	-22 10.6	2.039	2.916	11.2	20.7
4 11	14 47.50	+ 2 24.4	1.087	2.041	11.8	18.1	4 11	14 38.18	-22 10.5	1.975	2.921	7.9	20.5
4 21	14 33.39	+ 1 45.4	1.051	2.035	8.1	17.9	4 21	14 29.23	-21 58.0	1.938	2.926	4.4	20.3
5 1	14 17.75	+ 0 44.2	1.041	2.028	8.0	17.9	5 1	14 19.57	-21 34.5	1.928	2.930	2.5	20.1
5 11	14 2.59	- 0 39.4	1.057	2.021	11.9	18.1	5 11	14 10.23	-21 3.7	1.946	2.934	5.1	20.3
5 21	13 49.68	- 2 22.1	1.098	2.014	16.6	18.3	5 21	14 2.11	-20 30.0	1.992	2.937	8.6	20.5
5 31	13 40.26	- 4 18.8	1.158	2.006	21.0	18.6	5 31	13 55.93	-19 58.6	2.062	2.940	11.8	20.7
167697	2004 <i>RO</i> ₂₅₅		4 28.1 201°10	2°6/28.8	18		214485	Dupouy		4 28.1 291°51	0°3/28.4	18	
3 22	15 5.72	-15 21.3	1.336	2.144	19.8	20.5	3 22	14 43.67	-17 48.4	2.269	3.079	12.6	20.1
4 1	14 58.79	-16 41.7	1.250	2.143	15.8	20.2	4 1	14 40.06	-17 19.7	2.167	3.064	9.8	19.9
4 11	14 47.86	-17 58.4	1.184	2.140	10.9	19.9	4 11	14 34.58	-16 39.5	2.089	3.048	6.5	19.6
4 21	14 33.64	-19 7.6	1.143	2.137	5.5	19.6	4 21	14 27.71	-15 49.7	2.036	3.033	2.9	19.4
5 1	14 17.61	-20 5.5	1.129	2.134	3.0	19.4	5 1	14 20.18	-14 53.9	2.011	3.018	1.1	19.2
5 11	14 1.78	-20 51.4	1.143	2.130	7.9	19.7	5 11	14 12.84	-13 56.9	2.015	3.003	4.9	19.4
5 21	13 48.06	-21 27.8	1.182	2.125	13.3	20.0	5 21	14 6.45	-13 3.5	2.046	2.988	8.6	19.6
5 31	13 37.83	-22 0.0	1.243	2.120	18.0	20.2	5 31	14 1.65	-12 18.5	2.101	2.973	11.9	19.8
468260	2015 <i>BF</i> ₃₈₃		4 28.1 272°46	1°5/29.1	17		93373	2000 <i>SJ</i> ₂₇₀		4 28.1 170°02	1°7/26.6	17	
3 22	14 48.34	-19 21.7	1.804	2.614	15.4	21.9	3 22	14 47.82	-11 24.5	2.231	3.049	12.5	21.1
4 1	14 44.22	-19 21.5	1.708	2.602	12.2	21.7	4 1	14 43.05	-10 49.6	2.149	3.052	9.6	20.9
4 11	14 37.60	-19 8.4	1.633	2.590	8.3	21.4	4 11	14 36.40	-10 8.0	2.091	3.055	6.2	20.7
4 21	14 29.06	-18 42.9	1.583	2.578	4.1	21.1	4 21	14 28.43	- 9 22.9	2.059	3.057	2.8	20.5
5 1	14 19.57	-18 7.5	1.560	2.566	1.8	20.9	5 1	14 19.91	- 8 38.4	2.057	3.059	2.4	20.5
5 11	14 10.28	-17 26.7	1.564	2.554	5.8	21.2	5 11	14 11.71	- 7 59.0	2.083	3.060	5.8	20.7
5 21	14 2.28	-16 46.5	1.593	2.541	10.1	21.4	5 21	14 4.58	- 7 28.4	2.136	3.061	9.2	20.9
5 31	13 56.43	-16 12.4	1.646	2.529	14.0	21.6	5 31	13 59.11	- 7 9.4	2.213	3.062	12.2	21.1
65607	3360 <i>T</i> ₋₃		4 28.1 249°61	0°1/28.0	18		382849	2004 <i>EA</i> ₂₃		4 28.1 15°02	1°0/27.4	17	
3 22	14 45.09	-15 45.9	2.717	3.521	10.9	20.8	3 22	14 44.46	-12 44.8	1.520	2.363	16.1	20.1
4 1	14 40.80	-15 25.6	2.612	3.505	8.5	20.6	4 1	14 41.28	-12 35.2	1.454	2.370	12.4	19.9
4 11	14 34.89	-14 57.3	2.530	3.490	5.6	20.4	4 11	14 35.60	-12 17.1	1.408	2.377	8.0	19.7
4 21	14 27.79	-14 22.7	2.476	3.474	2.4	20.1	4 21	14 28.17	-11 53.6	1.386	2.386	3.3	19.4
5 1	14 20.12	-13 44.3	2.452	3.458	1.0	20.0	5 1	14 20.02	-11 29.0	1.390	2.396	2.0	19.4
5 11	14 12.59	-13 5.8	2.456	3.441	4.4	20.2	5 11	14 12.35	-11 8.4	1.419	2.406	6.6	19.7
5 21	14 5.86	-12 30.6	2.489	3.424	7.6	20.4	5 21	14 6.16	-10 56.0	1.472	2.418	11.0	19.9
5 31	14 0.47	-12 2.1	2.546	3.407	10.4	20.6	5 31	14 2.16	-10 55.0	1.547	2.431	14.7	20.2
164124	2003 <i>YD</i> ₁₀		4 28.1 77°35	3°6/30.9	17		148093	1999 <i>FZ</i> ₃₃		4 28.1 1°97	2°0/26.9	17	
3 22	14 49.45	-24 52.2	2.035	2.817	14.8	20.1	3 22	14 40.46	-10 49.8	1.244	2.108	17.6	18.3
4 1	14 44.66	-25 14.2	1.958	2.829	12.0	19.9	4 1	14 38.75	-10 39.7	1.178	2.105	13.5	18.1
4 11	14 37.61	-25 21.8	1.902	2.840	8.7	19.8	4 11	14 34.24	-10 21.8	1.131	2.105	8.8	17.8
4 21	14 28.96	-25 14.3	1.871	2.852	5.4	19.6	4 21	14 27.68	-10 0.2	1.106	2.106	3.8	17.5
5 1	14 19.65	-24 52.8	1.867	2.864	3.6	19.5	5 1	14 20.21	- 9 40.2	1.104	2.109	3.0	17.4
5 11	14 10.72	-24 21.0	1.891	2.876	5.5	19.6	5 11	14 13.22	- 9 27.6	1.126	2.114	7.8	17.7
5 21	14 3.10	-23 43.9	1.941	2.888	8.7	19.8	5 21	14 7.84	- 9 26.7	1.170	2.121	12.6	18.0
5 31	13 57.48	-23 7.0	2.015	2.900	11.8	20.0	5 31	14 4.92	- 9 40.1	1.234	2.130	16.8	18.3
396415	2014 <i>ER</i> ₂₃		4 28.1 97°92	2°4/29.9	17		371086	2005 <i>UA</i> ₄₀₀		4 28.1 277°94	1°9/27.1	17	
3 22	14 49.64	-21 32.5	2.411	3.194	12.8	21.3	3 22	14 54.29	- 8 7.0	1.745	2.569	15.2	21.1
4 1	14 44.43	-21 56.7	2.329	3.204	10.1	21.1	4 1	14 48.77	- 8 24.5	1.655	2.560	11.8	20.9
4 11	14 37.29	-22 10.8	2.270	3.214	7.1	20.9	4 11	14 40.58	- 8 40.5	1.587	2.550	7.8	20.6
4 21	14 28.80	-22 14.5	2.237	3.224	4.0	20.8	4 21	14 30.34	- 8 56.9	1.544	2.541	3.5	20.3
5 1	14 19.72	-22 8.7	2.233	3.234	2.4	20.7	5 1	14 19.08	- 9 16.0	1.529	2.532	2.7	20.2
5 11	14 10.93	-21 55.9	2.258	3.244	4.6	20.8	5 11	14 8.05	- 9 40.1	1.542	2.523	6.9	20.5
5 21	14 3.21	-21 39.5	2.310	3.254	7.7	21.0	5 21	13 58.38	-10 10.9	1.581	2.514	11.3	20.7
5 31	13 57.17	-21 23.5	2.388	3.264	10.5	21.2	5 31	13 50.99	-10 49.9	1.643	2.505	15.1	20.9
203362	2001 <i>VB</i> ₁₁₃		4 28.1 242°09	0°1/28.1	16		414076	2007 <i>TV</i> ₇₇		4 28.1 200°96			

EPHEMERIDES

4 28.1

4 28.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
458911	2011 <i>UK</i> ₂₄₀		4 28.1 295°07	0°5/28.3	16		477981	2011 <i>SN</i> ₈₉		4 28.1 254°67	2°7/30.3	17	
3 22	14 49.88	-15 35.3	1.321	2.158	18.4	21.3	3 22	14 47.98	-22 50.6	2.406	3.187	12.8	21.1
4 1	14 46.44	-15 44.7	1.226	2.137	14.6	21.0	4 1	14 43.36	-23 7.8	2.305	3.178	10.3	20.9
4 11	14 39.68	-15 42.8	1.151	2.116	9.8	20.7	4 11	14 36.75	-23 13.9	2.227	3.169	7.4	20.7
4 21	14 30.17	-15 30.2	1.097	2.096	4.4	20.3	4 21	14 28.66	-23 8.5	2.175	3.160	4.3	20.5
5 1	14 19.10	-15 9.6	1.069	2.075	1.7	20.0	5 1	14 19.84	-22 52.4	2.151	3.151	2.7	20.3
5 11	14 8.10	-14 46.3	1.064	2.055	7.6	20.3	5 11	14 11.18	-22 28.3	2.155	3.141	4.8	20.5
5 21	13 58.72	-14 26.7	1.083	2.035	13.3	20.6	5 21	14 3.49	-22 0.2	2.187	3.132	7.9	20.6
5 31	13 52.21	-14 17.0	1.121	2.015	18.3	20.8	5 31	13 57.47	-21 32.3	2.243	3.122	11.0	20.8
28214	1998 <i>YW</i>		4 28.1 175°64	0°3/28.3	18		113902	2002 <i>TK</i> ₂₇₆		4 28.1 173°80	1°8/29.7	18	
3 22	14 51.99	-17 13.1	1.854	2.661	15.1	20.3	3 22	14 47.80	-20 58.8	2.340	3.130	12.9	20.7
4 1	14 46.73	-16 50.1	1.769	2.664	11.8	20.1	4 1	14 43.13	-21 0.8	2.250	3.131	10.2	20.5
4 11	14 39.05	-16 14.8	1.707	2.666	7.8	19.8	4 11	14 36.52	-20 51.6	2.183	3.132	7.1	20.3
4 21	14 29.62	-15 29.1	1.671	2.668	3.4	19.6	4 21	14 28.53	-20 31.8	2.142	3.133	3.7	20.1
5 1	14 19.43	-14 37.0	1.662	2.669	1.3	19.4	5 1	14 19.93	-20 3.2	2.130	3.133	1.9	20.0
5 11	14 9.63	-13 44.2	1.682	2.669	5.8	19.7	5 11	14 11.58	-19 29.4	2.146	3.134	4.6	20.1
5 21	14 1.23	-12 56.5	1.728	2.668	10.1	20.0	5 21	14 4.29	-18 54.4	2.189	3.134	7.9	20.3
5 31	13 54.96	-12 18.9	1.798	2.666	13.7	20.2	5 31	13 58.66	-18 22.6	2.258	3.134	11.0	20.5
236856	2007 <i>RB</i> ₁₅₇		4 28.1 182°87	0°9/26.7	18		406403	2007 <i>TD</i> ₁₀₃		4 28.1 136°68	1°2/27.2	16	
3 22	14 40.63	-11 19.0	4.168	4.973	7.4	22.4	3 22	14 51.14	-13 18.0	1.829	2.648	14.8	22.5
4 1	14 36.76	-10 53.5	4.076	4.973	5.6	22.3	4 1	14 45.95	-12 48.1	1.756	2.659	11.4	22.2
4 11	14 31.93	-10 24.5	4.011	4.973	3.6	22.1	4 11	14 38.44	-12 9.1	1.706	2.670	7.4	22.0
4 21	14 26.47	-9 53.9	3.975	4.972	1.6	22.0	4 21	14 29.34	-11 24.3	1.682	2.680	3.1	21.8
5 1	14 20.74	-9 23.4	3.969	4.972	1.3	22.0	5 1	14 19.62	-10 38.4	1.685	2.690	2.1	21.7
5 11	14 15.15	-8 55.2	3.994	4.970	3.3	22.1	5 11	14 10.37	-9 56.7	1.717	2.699	6.3	22.0
5 21	14 10.07	-8 31.2	4.047	4.969	5.3	22.3	5 21	14 2.52	-9 23.9	1.775	2.708	10.3	22.3
5 31	14 5.80	-8 12.8	4.127	4.967	7.2	22.4	5 31	13 56.75	-9 3.4	1.856	2.716	13.7	22.5
85975	1999 <i>GD</i> ₃₃		4 28.1 336°49	1°2/27.5	18		146178	2000 <i>SZ</i> ₃₀₅		4 28.1 199°74	3°4/1.6	18	
3 22	14 52.89	-9 54.0	1.628	2.456	15.9	18.8	3 22	14 46.20	-27 39.4	2.715	3.473	12.1	20.7
4 1	14 47.81	-10 15.7	1.545	2.452	12.4	18.5	4 1	14 41.74	-27 38.9	2.617	3.470	9.9	20.5
4 11	14 39.99	-10 34.5	1.484	2.449	8.1	18.3	4 11	14 35.54	-27 24.7	2.541	3.467	7.4	20.4
4 21	14 30.10	-10 51.6	1.447	2.446	3.5	18.0	4 21	14 28.10	-26 56.5	2.490	3.464	4.8	20.2
5 1	14 19.21	-11 9.2	1.438	2.443	2.2	17.9	5 1	14 20.11	-26 15.7	2.468	3.461	3.4	20.1
5 11	14 8.64	-11 29.7	1.455	2.440	6.8	18.2	5 11	14 12.34	-25 25.5	2.474	3.457	4.6	20.2
5 21	13 59.55	-11 55.3	1.498	2.438	11.3	18.4	5 21	14 5.50	-24 30.1	2.509	3.453	7.1	20.3
5 31	13 52.84	-12 28.2	1.564	2.436	15.2	18.6	5 31	14 0.15	-23 34.6	2.569	3.449	9.7	20.5
1371	Resi		4 28.1 299°01	4°0/23.7	18		283322	1995 <i>SX</i> ₃₅		4 28.1 135°49	3°3/24.3	17	
3 22	14 41.90	-6 9.6	2.252	3.088	11.8	16.6	3 22	14 44.18	-5 30.3	2.655	3.479	10.6	21.4
4 1	14 38.58	-4 49.2	2.164	3.076	9.1	16.4	4 1	14 39.91	-4 28.1	2.584	3.489	8.1	21.2
4 11	14 33.52	-3 23.3	2.101	3.065	6.2	16.2	4 11	14 34.17	-3 23.4	2.538	3.499	5.5	21.1
4 21	14 27.24	-1 57.3	2.065	3.054	4.1	16.1	4 21	14 27.46	-2 20.3	2.520	3.508	3.5	21.0
5 1	14 20.41	-0 37.4	2.058	3.043	4.9	16.1	5 1	14 20.39	-1 23.4	2.532	3.518	4.0	21.0
5 11	14 13.81	+0 30.3	2.078	3.032	7.6	16.2	5 11	14 13.62	-0 36.5	2.572	3.526	6.3	21.2
5 21	14 8.12	+1 21.8	2.124	3.021	10.6	16.4	5 21	14 7.71	-0 2.4	2.639	3.535	8.8	21.3
5 31	14 3.92	+1 54.7	2.192	3.011	13.4	16.6	5 31	14 3.11	+0 17.5	2.729	3.543	11.2	21.5
392412	2010 <i>LG</i> ₁₂₇		4 28.1 318°96	9°0/17.2	17		350121	2011 <i>QM</i> ₅₉		4 28.1 126°20	2°2/25.8	17	
3 22	14 40.51	+4 30.8	1.871	2.719	13.3	19.7	3 22	14 44.72	-9 23.0	2.433	3.256	11.5	21.0
4 1	14 37.94	+6 54.7	1.791	2.697	11.0	19.5	4 1	14 40.49	-8 38.1	2.357	3.263	8.7	20.8
4 11	14 33.34	+9 19.5	1.736	2.675	9.3	19.4	4 11	14 34.64	-7 48.2	2.306	3.271	5.7	20.6
4 21	14 27.23	+11 34.6	1.707	2.654	9.1	19.3	4 21	14 27.69	-6 57.0	2.282	3.278	2.8	20.5
5 1	14 20.40	+13 29.6	1.705	2.633	10.6	19.3	5 1	14 20.30	-6 8.6	2.287	3.285	2.9	20.5
5 11	14 13.77	+14 56.5	1.726	2.613	13.1	19.4	5 11	14 13.23	-5 27.3	2.320	3.292	5.7	20.7
5 21	14 8.18	+15 51.4	1.768	2.593	15.8	19.6	5 21	14 7.09	-4 56.0	2.381	3.298	8.7	20.9
5 31	14 4.33	+16 14.2	1.829	2.573	18.2	19.7	5 31	14 2.41	-4 37.1	2.465	3.305	11.4	21.1
506040	2015 <i>KL</i> ₇₂		4 28.1 297°22	5°5/23.2	17		198235	2004 <i>TU</i> ₂₀₂		4 28.1 270°76	0°1/28.1	18	
3 22	14 44.73	-0 34.6	2.079	2.916	12.6	21.0	3 22	14 51.85	-13 15.7	1.899	2.714	14.5	20.0
4 1	14 40.87	+0 21.5	1.998	2.906	9.9	20.8	4 1	14 46.68	-13 34.3	1.811	2.711	11.3	19.8
4 11	14 35.08	+1 17.3	1.940	2.897	7.2	20.6	4 11	14 39.09	-13 47.1	1.745	2.707	7.4	19.5
4 21	14 27.92	+2 7.4	1.909	2.888	5.5	20.5	4 21	14 29.70	-13 55.0	1.705	2.703	3.2	19.2
5 1	14 20.14	+2 46.0	1.904	2.879	6.3	20.5	5 1	14 19.44	-13 59.8	1.693	2.699	1.3	19.1
5 11	14 12.63	+3 8.9	1.926	2.870	8.8	20.6	5 11	14 9.44	-14 4.0	1.709	2.696	5.8	19.4
5 21	14 6.15	+3 13.7	1.972	2.861	11.7	20.8	5 21	14 0.70	-14 10.8	1.751	2.692	9.9	19.6
5 31	14 1.32	+2 59.8	2.039	2.852	14.4	20.9	5 31	13 54.03	-14 23.0	1.817	2.688	13.5	19.8
216789	2006 <i>SU</i> ₁		4 28.1 196°97	4°0/24.5	17		455506	2003 <i>WG</i> ₂₃		4 28.1 202°98	1°2/26.9	18	
3 22	14 47.61	-7 7.6	1.990	2.820	13.4	21.3	3 22	14 47.08	-11 56.4	2.661	3.470	11.0	22.6
4 1	14 43.12	-5 52.0	1.909	2.818	10.3	21.1	4 1	14 42.26	-11 27.4	2.566	3.465	8.4	22.4
4 11	14 36.57	-4 30.1	1.851	2.815	6.9	20.9	4 11	14 35.81	-10 52.5	2.497	3.459	5.5	22.2
4 21	14 28.54	-3 7.6	1.820	2.811	4.2	20.7	4 21	14 28.20	-10 14.0	2.455	3.453	2.4	22.0
5 1	14 19.89	-1 51.4	1.818	2.807	4.9	20.8	5 1	14 20.08	-9 35.0	2.443	3.446	1.9	22.0
5 11	14 11.58	-0 47.8	1.843	2.802	8.0	20.9	5 11	14 12.16	-8 59.4	2.460	3.439	4.9	22.2
5 21	14 4.41	-0 1.4	1.894	2.797	11.4	21.1	5 21	14 5.10	-8 30.1	2.506	3.431	8.0	22.3
5 31	13 59.06	+0 25.5	1.967	2.791	14.5	21.3	5 31	13 59.43	-8 10.0	2.576	3.422	10.8	22.5
248990	2007 <i>FX</i> ₃		4 28.1 342°84	1°2/29.6	18		285137	1995 <i>SN</i> ₈₀		4 28.1 180°98	0°2/28.3	17	
3 22	14 42.12												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
13278	Grotecross		4 28.1 316°83	1.1/27.4	18		512485	2016 QV77		4 28.1 259°99	4.9/2.7	17	
3 22	14 44.42	-14 31.9	1.351	2.198	17.5	17.8	3 22	14 47.26	-30 58.8	2.462	3.207	13.5	21.2
4 1	14 41.93	-14 4.2	1.261	2.179	13.7	17.5	4 1	14 42.95	-31 12.6	2.353	3.193	11.3	21.0
4 11	14 36.51	-13 22.2	1.190	2.160	9.0	17.2	4 11	14 36.57	-31 10.3	2.266	3.179	8.8	20.8
4 21	14 28.77	-12 29.2	1.142	2.142	3.8	16.8	4 21	14 28.64	-30 50.3	2.203	3.164	6.4	20.6
5 1	14 19.80	-11 30.9	1.118	2.124	2.3	16.6	5 1	14 19.94	-30 13.0	2.167	3.150	4.9	20.5
5 11	14 11.04	-10 35.6	1.119	2.107	7.8	16.9	5 11	14 11.40	-29 21.1	2.159	3.135	5.7	20.5
5 21	14 3.81	-9 50.8	1.142	2.090	13.1	17.2	5 21	14 3.88	-28 19.5	2.177	3.120	8.1	20.6
5 31	13 59.15	-9 22.7	1.185	2.075	17.8	17.4	5 31	13 58.09	-27 14.5	2.221	3.104	10.9	20.8
200758	2001 WE43		4 28.1 161°80	2.3/26.7	18		15133	Sullivan		4 28.1 329°51	2.8/29.7	18	
3 22	14 52.47	-10 8.7	1.633	2.461	15.9	21.0	3 22	14 45.37	-21 37.7	1.186	2.023	20.1	17.2
4 1	14 47.32	-9 44.4	1.557	2.465	12.2	20.8	4 1	14 43.13	-21 40.1	1.105	2.013	16.1	16.9
4 11	14 39.54	-9 13.4	1.503	2.469	8.0	20.5	4 11	14 37.53	-21 21.6	1.042	2.003	11.3	16.6
4 21	14 29.87	-8 39.4	1.475	2.472	3.6	20.3	4 21	14 29.27	-20 41.9	1.000	1.994	6.0	16.3
5 1	14 19.40	-8 7.4	1.473	2.475	3.2	20.2	5 1	14 19.66	-19 44.3	0.981	1.986	2.9	16.0
5 11	14 9.39	-7 42.5	1.498	2.478	7.4	20.5	5 11	14 10.42	-18 37.0	0.984	1.978	7.4	16.3
5 21	14 0.90	-7 28.8	1.549	2.479	11.7	20.7	5 21	14 3.05	-17 30.1	1.010	1.971	12.9	16.6
5 31	13 54.74	-7 29.1	1.621	2.481	15.4	21.0	5 31	13 58.69	-16 33.3	1.056	1.965	17.9	16.8
68528	2001 VC60		4 28.1 278°78	1.1/28.9	17		246113	2007 GY69		4 28.1 309°43	0.7/26.9	18	
3 22	14 48.26	-17 36.2	2.220	3.022	13.1	19.4	3 22	14 37.94	-12 8.9	4.232	5.041	7.2	20.6
4 1	14 43.66	-17 48.8	2.123	3.014	10.3	19.2	4 1	14 34.77	-11 44.4	4.136	5.035	5.5	20.4
4 11	14 36.99	-17 52.9	2.050	3.005	7.0	19.0	4 11	14 30.70	-11 16.4	4.067	5.029	3.5	20.3
4 21	14 28.79	-17 48.9	2.002	2.997	3.3	18.7	4 21	14 26.01	-10 46.2	4.026	5.024	1.5	20.1
5 1	14 19.83	-17 38.3	1.983	2.988	1.4	18.6	5 1	14 21.05	-10 15.9	4.014	5.018	1.1	20.1
5 11	14 11.06	-17 24.2	1.992	2.980	4.9	18.8	5 11	14 16.22	-9 47.4	4.033	5.012	3.1	20.2
5 21	14 3.32	-17 9.9	2.028	2.972	8.5	19.0	5 21	14 11.84	-9 22.7	4.080	5.007	5.2	20.4
5 31	13 57.31	-16 59.2	2.088	2.963	11.8	19.2	5 31	14 8.24	-9 3.2	4.153	5.001	7.0	20.5
85280	1994 PU14		4 28.1 268°27	0.6/27.5	18		281019	2006 EB65		4 28.1 134°75	1.2/29.1	17	
3 22	14 44.94	-14 20.5	2.470	3.281	11.7	20.0	3 22	14 47.47	-19 37.3	2.031	2.835	14.1	21.1
4 1	14 40.89	-13 52.8	2.364	3.263	9.0	19.7	4 1	14 43.12	-19 25.2	1.948	2.838	11.1	20.9
4 11	14 35.07	-13 16.9	2.282	3.244	5.9	19.5	4 11	14 36.63	-19 0.6	1.886	2.842	7.5	20.7
4 21	14 27.95	-12 34.8	2.227	3.226	2.5	19.3	4 21	14 28.63	-18 24.8	1.851	2.845	3.6	20.5
5 1	14 20.18	-11 49.9	2.201	3.207	1.4	19.1	5 1	14 19.98	-17 41.0	1.842	2.848	1.5	20.3
5 11	14 12.56	-11 6.3	2.204	3.187	5.0	19.4	5 11	14 11.68	-16 53.9	1.862	2.851	5.1	20.6
5 21	14 5.79	-10 28.0	2.234	3.168	8.4	19.5	5 21	14 4.58	-16 8.6	1.909	2.854	8.9	20.8
5 31	14 0.48	-9 58.5	2.289	3.148	11.5	19.7	5 31	13 59.35	-15 30.1	1.979	2.857	12.2	21.0
79447	1997 WQ1		4 28.1 138°74	4.6/1.8	18		336068	2008 FB27		4 28.1 254°01	0.2/27.8	18	
3 22	14 51.65	-31 18.2	1.234	2.026	22.1	19.0	3 22	14 37.63	-16 9.6	4.739	5.535	6.7	20.4
4 1	14 47.74	-30 20.7	1.158	2.033	18.1	18.7	4 1	14 34.44	-15 28.5	4.637	5.527	5.1	20.3
4 11	14 40.27	-28 45.7	1.100	2.040	13.4	18.4	4 11	14 30.44	-14 42.2	4.561	5.519	3.3	20.1
4 21	14 30.25	-26 33.3	1.063	2.046	8.2	18.2	4 21	14 25.89	-13 52.1	4.514	5.511	1.4	20.0
5 1	14 19.29	-23 50.6	1.051	2.052	4.6	18.0	5 1	14 21.12	-13 0.2	4.498	5.504	0.7	19.9
5 11	14 9.19	-20 53.1	1.065	2.057	7.4	18.1	5 11	14 16.46	-12 8.8	4.512	5.496	2.7	20.1
5 21	14 1.36	-17 59.2	1.105	2.062	12.5	18.4	5 21	14 12.22	-11 20.1	4.557	5.488	4.6	20.2
5 31	13 56.70	-15 25.0	1.166	2.066	17.3	18.7	5 31	14 8.68	-10 36.0	4.628	5.480	6.3	20.3
501171	2013 TX89		4 28.1 115°69	0.4/27.7	17		48707	1996 KR1		4 28.1 187°54	0.1/28.1	18	
3 22	14 47.19	-16 23.4	2.289	3.095	12.6	22.1	3 22	14 50.72	-22 39.0	1.319	2.137	19.5	18.6
4 1	14 42.43	-15 34.8	2.217	3.113	9.7	21.9	4 1	14 46.68	-20 59.2	1.237	2.137	15.3	18.4
4 11	14 35.91	-14 36.0	2.169	3.130	6.3	21.7	4 11	14 39.46	-18 48.6	1.175	2.137	10.2	18.1
4 21	14 28.21	-13 30.1	2.149	3.147	2.6	21.5	4 21	14 29.93	-16 12.2	1.138	2.136	4.4	17.7
5 1	14 20.12	-12 21.7	2.158	3.164	1.3	21.5	5 1	14 19.46	-13 21.4	1.128	2.134	1.8	17.5
5 11	14 12.45	-11 16.1	2.196	3.180	5.0	21.7	5 11	14 9.63	-10 32.6	1.145	2.132	7.9	17.9
5 21	14 5.88	-10 18.0	2.262	3.195	8.4	22.0	5 21	14 1.73	-8 1.4	1.187	2.129	13.4	18.2
5 31	14 0.94	-9 31.1	2.353	3.210	11.3	22.2	5 31	13 56.65	-5 58.6	1.252	2.125	18.2	18.5
506966	2008 RC107		4 28.1 125°72	1.8/30.5	18		158461	2002 CS195		4 28.1 65°14	0.3/28.3	17	
3 22	14 44.25	-23 12.3	3.846	4.608	8.7	22.3	3 22	14 47.77	-16 41.2	1.772	2.591	15.2	20.5
4 1	14 39.64	-23 20.1	3.759	4.621	6.9	22.2	4 1	14 43.59	-16 27.5	1.695	2.596	11.8	20.3
4 11	14 33.88	-23 20.1	3.697	4.634	4.9	22.1	4 11	14 37.05	-16 2.5	1.640	2.602	7.8	20.1
4 21	14 27.33	-23 12.7	3.663	4.646	2.9	22.0	4 21	14 28.83	-15 28.1	1.609	2.607	3.4	19.8
5 1	14 20.47	-22 58.9	3.659	4.658	1.8	21.9	5 1	14 19.91	-14 48.1	1.606	2.613	1.3	19.7
5 11	14 13.79	-22 40.5	3.685	4.669	3.1	22.0	5 11	14 11.40	-14 7.7	1.630	2.618	5.8	20.0
5 21	14 7.74	-22 19.6	3.740	4.681	5.1	22.1	5 21	14 4.25	-13 32.2	1.679	2.624	9.9	20.3
5 31	14 2.69	-21 58.7	3.822	4.692	7.0	22.3	5 31	13 59.17	-13 6.1	1.751	2.630	13.6	20.5
332744	2009 TV14		4 28.1 306°59	0.8/27.5	17		478195	2011 UK247		4 28.1 247°30	0.9/29.0	16	
3 22	14 45.11	-15 35.8	1.628	2.460	15.8	20.2	3 22	14 43.96	-19 56.9	2.521	3.318	11.9	21.3
4 1	14 41.86	-14 55.7	1.540	2.450	12.2	19.9	4 1	14 40.07	-19 27.3	2.424	3.311	9.3	21.1
4 11	14 36.10	-14 1.7	1.474	2.440	8.0	19.6	4 11	14 34.48	-18 46.0	2.350	3.304	6.3	20.9
4 21	14 28.48	-12 57.3	1.432	2.431	3.3	19.3	4 21	14 27.69	-17 54.7	2.302	3.297	3.0	20.7
5 1	14 19.99	-11 48.1	1.416	2.422	1.9	19.2	5 1	14 20.37	-16 56.5	2.284	3.290	1.1	20.5
5 11	14 11.81	-10 41.6	1.427	2.413	6.7	19.5	5 11	14 13.27	-15 55.8	2.294	3.283	4.3	20.8
5 21	14 4.98	-9 44.6	1.462	2.405	11.3	19.7	5 21	14 7.07	-14 57.4	2.333	3.275	7.6	21.0
5 31	14 0.32	-9 2.8	1.519	2.396	15.3	20.0	5 31	14 2.32	-14 5.7	2.396	3.268	10.6	21.1
457006	2008 CO80		4 28.1 82°81	7.7/22.6	18		3430	Bradfield		4 28.1 265°71	0.2/27.9	18	
3 22	14 50.00	+ 2 17.5	1.594	2.434	15.6	21.0	3 22	14 47.79	-14 41.9	2.017	2.834	13.7	17.1
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
114869	2003 QX ₅		4 28.1 209°12	0°5/28.5	18		151066	2001 VP ₃₁		4 28.1 181°36	0°2/27.9	18	
3 22	14 47.53	-17 25.3	2.184	2.990	13.2	20.7	3 22	14 45.62	-15 12.6	2.872	3.673	10.5	21.0
4 1	14 43.05	-17 10.9	2.093	2.986	10.3	20.5	4 1	14 41.05	-14 49.5	2.781	3.674	8.1	20.8
4 11	14 36.56	-16 46.2	2.025	2.983	6.8	20.3	4 11	14 34.99	-14 19.4	2.715	3.674	5.3	20.6
4 21	14 28.61	-16 12.7	1.982	2.979	3.1	20.1	4 21	14 27.90	-13 44.0	2.676	3.674	2.2	20.4
5 1	14 20.00	-15 33.4	1.969	2.975	1.1	19.9	5 1	14 20.37	-13 5.9	2.667	3.673	1.0	20.3
5 11	14 11.65	-14 52.6	1.983	2.971	5.0	20.2	5 11	14 13.06	-12 28.6	2.688	3.672	4.1	20.5
5 21	14 4.38	-14 14.7	2.025	2.966	8.7	20.4	5 21	14 6.55	-11 55.1	2.737	3.671	7.1	20.7
5 31	13 58.85	-13 44.0	2.090	2.961	12.0	20.6	5 31	14 1.33	-11 28.3	2.812	3.669	9.7	20.9
141390	2002 AH ₈₇		4 28.1 173°68	9°2/15.3	18		466503	2013 YJ ₁₀₃		4 28.1 290°26	14°3/18.7	18	
3 22	14 45.44	+20 10.3	2.912	3.691	10.9	20.3	3 22	15 0.71	+24 19.3	1.833	2.597	16.9	20.0
4 1	14 40.83	+21 33.2	2.864	3.694	9.8	20.3	4 1	14 53.66	+25 9.8	1.758	2.575	15.5	19.8
4 11	14 34.78	+22 43.8	2.839	3.696	9.2	20.2	4 11	14 43.74	+25 38.3	1.702	2.554	14.5	19.7
4 21	14 27.76	+23 36.8	2.839	3.697	9.3	20.2	4 21	14 31.73	+25 35.1	1.667	2.532	14.3	19.6
5 1	14 20.38	+24 8.3	2.864	3.698	9.9	20.3	5 1	14 18.80	+24 53.4	1.655	2.511	15.0	19.6
5 11	14 13.29	+24 16.4	2.911	3.699	11.0	20.3	5 11	14 6.34	+23 31.6	1.665	2.489	16.5	19.7
5 21	14 7.05	+24 1.7	2.979	3.700	12.3	20.4	5 21	13 55.54	+21 33.4	1.697	2.468	18.4	19.8
5 31	14 2.11	+23 26.1	3.064	3.700	13.5	20.6	5 31	13 47.25	+19 5.8	1.747	2.446	20.5	19.9
3670	Northcott		4 28.1 321°54	3°6/25.4	18		109095	2001 QB ₃₃		4 28.1 238°39	1°0/28.9	18	
3 22	14 46.80	- 6 28.0	1.875	2.710	13.8	16.6	3 22	14 49.42	-18 33.3	1.966	2.771	14.5	20.7
4 1	14 42.65	- 5 48.3	1.798	2.709	10.6	16.4	4 1	14 44.86	-18 25.9	1.869	2.761	11.4	20.5
4 11	14 36.36	- 5 4.9	1.743	2.708	7.1	16.2	4 11	14 37.96	-18 6.5	1.793	2.750	7.7	20.2
4 21	14 28.53	- 4 22.5	1.714	2.707	4.1	16.0	4 21	14 29.30	-17 36.2	1.743	2.739	3.6	19.9
5 1	14 20.05	- 3 46.2	1.712	2.706	4.4	16.0	5 1	14 19.77	-16 57.5	1.721	2.727	1.4	19.7
5 11	14 11.92	- 3 20.9	1.737	2.705	7.6	16.2	5 11	14 10.45	-16 15.1	1.726	2.715	5.5	20.0
5 21	14 4.98	- 3 9.7	1.786	2.704	11.1	16.4	5 21	14 2.33	-15 34.3	1.759	2.703	9.6	20.2
5 31	13 59.93	- 3 14.2	1.858	2.703	14.4	16.6	5 31	13 56.19	-15 0.1	1.814	2.690	13.3	20.4
179392	2001 YQ ₁₀₈		4 28.1 144°52	0°7/28.9	18		142347	2002 RT ₂₀₈		4 28.1 307°57	1°1/28.7	17	
3 22	14 47.09	-18 12.8	3.037	3.824	10.3	21.9	3 22	14 46.85	-17 35.0	1.410	2.244	17.7	20.6
4 1	14 42.04	-18 5.2	2.953	3.835	8.0	21.7	4 1	14 43.95	-17 36.7	1.311	2.220	14.0	20.3
4 11	14 35.56	-17 50.0	2.894	3.846	5.4	21.6	4 11	14 37.98	-17 24.5	1.231	2.195	9.6	20.0
4 21	14 28.10	-17 28.1	2.862	3.857	2.5	21.4	4 21	14 29.52	-16 58.8	1.174	2.171	4.4	19.6
5 1	14 20.25	-17 1.6	2.861	3.867	1.0	21.3	5 1	14 19.63	-16 22.6	1.141	2.148	1.7	19.4
5 11	14 12.65	-16 33.1	2.890	3.876	3.7	21.5	5 11	14 9.79	-15 41.6	1.133	2.125	7.1	19.6
5 21	14 5.87	-16 5.6	2.947	3.885	6.4	21.7	5 21	14 1.42	-15 3.1	1.148	2.102	12.5	19.9
5 31	14 0.36	-15 41.9	3.031	3.894	8.9	21.9	5 31	13 55.69	-14 34.1	1.184	2.080	17.4	20.1
477462	2009 WH ₂₆₁		4 28.1 99°30	2°0/30.9	18		204515	2005 EF ₁₉		4 28.1 243°41	1°0/27.3	18	
3 22	14 42.78	-24 56.6	3.505	4.268	9.5	21.5	3 22	14 46.00	-13 26.8	2.183	3.001	12.8	20.9
4 1	14 38.62	-24 43.9	3.425	4.286	7.6	21.4	4 1	14 41.86	-12 57.1	2.092	2.995	9.8	20.7
4 11	14 33.26	-24 21.5	3.368	4.303	5.4	21.2	4 11	14 35.79	-12 19.1	2.024	2.988	6.4	20.5
4 21	14 27.11	-23 50.0	3.339	4.320	3.3	21.1	4 21	14 28.33	-11 35.5	1.982	2.981	2.7	20.2
5 1	14 20.66	-23 11.2	3.339	4.337	2.0	21.0	5 1	14 20.22	-10 50.2	1.969	2.974	1.8	20.2
5 11	14 14.46	-22 27.7	3.368	4.354	3.3	21.2	5 11	14 12.36	-10 7.7	1.984	2.967	5.5	20.4
5 21	14 8.97	-21 42.5	3.427	4.371	5.4	21.3	5 21	14 5.52	- 9 32.4	2.026	2.959	9.2	20.6
5 31	14 4.56	-20 58.9	3.512	4.387	7.5	21.5	5 31	14 0.34	- 9 7.7	2.091	2.952	12.4	20.8
334877	2003 UV ₂₃₃		4 28.1 204°11	1°5/29.5	18		423500	2005 TC ₁₅₀		4 28.1 226°68	0°3/27.9	17	
3 22	14 47.54	-20 50.6	2.454	3.242	12.4	21.9	3 22	14 50.47	-14 31.0	2.067	2.877	13.7	22.7
4 1	14 42.88	-20 38.0	2.357	3.238	9.8	21.8	4 1	14 45.50	-14 23.7	1.971	2.868	10.6	22.4
4 11	14 36.37	-20 13.9	2.283	3.233	6.7	21.5	4 11	14 38.30	-14 8.1	1.898	2.859	7.0	22.2
4 21	14 28.52	-19 39.2	2.236	3.228	3.4	21.3	4 21	14 29.44	-13 45.9	1.851	2.849	3.0	21.9
5 1	14 20.06	-18 56.1	2.218	3.223	1.6	21.2	5 1	14 19.77	-13 19.9	1.832	2.839	1.3	21.8
5 11	14 11.84	-18 8.6	2.228	3.216	4.5	21.4	5 11	14 10.31	-12 54.1	1.842	2.828	5.6	22.0
5 21	14 4.59	-17 21.2	2.267	3.210	7.8	21.6	5 21	14 1.98	-12 32.5	1.879	2.816	9.5	22.2
5 31	13 58.93	-16 38.4	2.331	3.203	10.8	21.7	5 31	13 55.52	-12 18.8	1.940	2.805	13.0	22.4
129922	1999 TD ₁₂₄		4 28.1 191°25	2°3/25.9	18		501292	2013 WY ₅₇		4 28.1 200°74	2°9/25.7	18	
3 22	14 46.49	- 9 48.9	2.308	3.129	12.1	20.6	3 22	14 50.52	- 5 43.4	2.526	3.339	11.4	22.0
4 1	14 42.03	- 9 1.3	2.222	3.127	9.2	20.4	4 1	14 44.98	- 5 19.9	2.435	3.335	8.8	21.8
4 11	14 35.77	- 8 7.6	2.161	3.126	6.0	20.2	4 11	14 37.67	- 4 54.6	2.369	3.329	5.9	21.7
4 21	14 28.25	- 7 11.5	2.128	3.124	3.0	20.0	4 21	14 29.09	- 4 30.5	2.331	3.323	3.3	21.5
5 1	14 20.19	- 6 17.7	2.123	3.121	3.0	20.0	5 1	14 19.94	- 4 10.9	2.323	3.316	3.4	21.5
5 11	14 12.41	- 5 30.8	2.147	3.118	6.1	20.2	5 11	14 11.02	- 3 58.9	2.344	3.309	6.1	21.6
5 21	14 5.63	- 4 54.5	2.197	3.115	9.3	20.4	5 21	14 3.02	- 3 56.6	2.392	3.301	9.1	21.8
5 31	14 0.40	- 4 31.6	2.271	3.111	12.3	20.6	5 31	13 56.54	- 4 5.5	2.465	3.292	11.8	22.0
202866	2008 UK ₃₀		4 28.1 317°55	1°6/27.1	17		155377	1992 SW ₉		4 28.1 150°22	2°2/29.8	17	
3 22	14 46.49	-11 34.5	1.679	2.515	15.2	20.2	3 22	14 51.00	-21 7.7	2.056	2.847	14.4	21.1
4 1	14 42.88	-11 19.7	1.590	2.502	11.7	19.9	4 1	14 45.88	-21 18.0	1.972	2.853	11.4	21.0
4 11	14 36.80	-10 57.4	1.522	2.489	7.7	19.6	4 11	14 38.50	-21 16.0	1.910	2.858	7.9	20.7
4 21	14 28.83	-10 30.4	1.478	2.477	3.3	19.3	4 21	14 29.49	-21 2.0	1.873	2.863	4.3	20.5
5 1	14 19.93	-10 3.1	1.461	2.465	2.5	19.3	5 1	14 19.78	-20 37.6	1.865	2.868	2.3	20.4
5 11	14 11.26	- 9 40.3	1.469	2.453	6.9	19.5	5 11	14 10.39	-20 6.5	1.884	2.872	5.1	20.6
5 21	14 3.88	- 9 26.6	1.503	2.442	11.3	19.7	5 21	14 2.27	-19 33.6	1.931	2.876	8.8	20.8
5 31	13 58.62	- 9 25.2	1.558	2.432	15.2	19.9	5 31	13 56.12	-19 3.6	2.002	2.880	12.1	21.0
155173	2005 US ₂₁₆		4 28.1 208°05	0°8/27.5	18		459485	2013 CS ₇₉		4 28.1 104°74	3°8/25.7	18	
3 22	14 49.29	-13 36.9	2.279										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
380186	2000 <i>ST</i> ₃₁₁		4 28.1 198°75	6°4/ 4.7	18		177089	2003 <i>FB</i> ₇₃		4 28.1 11°09	2°4/29.8	17	
3 22	14 52.77	-37 37.9	2.750	3.439	13.4	22.2	3 22	14 50.19	-20 27.4	2.240	3.029	13.4	19.7
4 1	14 47.09	-38 4.5	2.645	3.435	11.7	22.0	4 1	14 45.17	-21 0.7	2.150	3.030	10.7	19.5
4 11	14 39.26	-38 13.6	2.560	3.430	9.6	21.9	4 11	14 38.04	-21 24.7	2.083	3.030	7.5	19.3
4 21	14 29.83	-38 2.6	2.499	3.424	7.7	21.7	4 21	14 29.34	-21 38.8	2.043	3.031	4.2	19.1
5 1	14 19.64	-37 30.8	2.465	3.417	6.5	21.6	5 1	14 19.90	-21 43.3	2.030	3.032	2.5	19.0
5 11	14 9.67	-36 40.1	2.458	3.410	6.7	21.6	5 11	14 10.68	-21 40.6	2.046	3.033	4.9	19.2
5 21	14 0.82	-35 35.2	2.479	3.401	8.2	21.7	5 21	14 2.55	-21 33.7	2.089	3.034	8.3	19.4
5 31	13 53.79	-34 22.2	2.526	3.392	10.3	21.8	5 31	13 56.22	-21 26.6	2.157	3.035	11.4	19.6
358473	2007 <i>PA</i> ₅		4 28.1 301°01	5°9/24.3	17		109743	2001 <i>RV</i> ₆₅		4 28.1 95°32	7°0/ 3.2	18	
3 22	14 46.34	- 5 57.1	1.299	2.156	17.4	21.0	3 22	14 54.61	-32 16.8	1.868	2.614	17.2	19.5
4 1	14 43.68	- 4 49.3	1.202	2.125	13.7	20.6	4 1	14 49.17	-33 10.2	1.793	2.629	14.5	19.3
4 11	14 37.90	- 3 31.6	1.125	2.094	9.5	20.3	4 11	14 40.93	-33 44.0	1.738	2.644	11.5	19.1
4 21	14 29.54	- 2 11.3	1.071	2.063	6.2	20.0	4 21	14 30.62	-33 54.9	1.706	2.659	8.7	19.0
5 1	14 19.69	- 0 58.7	1.040	2.032	7.1	19.9	5 1	14 19.40	-33 41.7	1.700	2.673	7.0	18.9
5 11	14 9.84	- 0 4.1	1.033	2.001	11.6	20.1	5 11	14 8.65	-33 7.6	1.720	2.687	7.7	19.0
5 21	14 1.46	+ 0 25.0	1.048	1.970	16.7	20.3	5 21	13 59.55	-32 18.8	1.765	2.702	10.1	19.1
5 31	13 55.73	+ 0 24.9	1.079	1.940	21.4	20.4	5 31	13 52.93	-31 23.4	1.833	2.715	12.9	19.3
253637	2003 <i>UN</i> ₁₀₈		4 28.1 338°98	0°5/28.5	16		262433	2006 <i>UD</i> ₈₃		4 28.1 242°02	1°8/26.8	18	
3 22	14 44.59	-19 39.7	1.380	2.214	18.0	21.0	3 22	14 49.42	-11 33.7	1.859	2.683	14.4	21.4
4 1	14 41.90	-18 54.2	1.300	2.209	14.1	20.7	4 1	14 44.92	-11 4.1	1.766	2.672	11.1	21.2
4 11	14 36.36	-17 47.9	1.240	2.204	9.4	20.4	4 11	14 38.04	-10 26.4	1.695	2.660	7.3	20.9
4 21	14 28.71	-16 24.1	1.203	2.201	4.2	20.1	4 21	14 29.40	- 9 43.8	1.649	2.647	3.2	20.6
5 1	14 20.11	-14 49.7	1.190	2.197	1.5	19.9	5 1	14 19.88	- 9 0.7	1.632	2.635	2.6	20.5
5 11	14 11.95	-13 14.7	1.203	2.194	6.9	20.2	5 11	14 10.59	- 8 22.7	1.641	2.621	6.7	20.8
5 21	14 5.42	-11 49.0	1.240	2.192	12.0	20.5	5 21	14 2.52	- 7 54.5	1.677	2.608	10.9	21.0
5 31	14 1.39	-10 40.7	1.298	2.189	16.5	20.8	5 31	13 56.46	- 7 39.6	1.735	2.594	14.6	21.2
499879	2011 <i>FJ</i> ₄₆		4 28.1 263°24	2°8/30.2	17		37933	1998 <i>FM</i> ₁₄₀		4 28.1 66°15	0°1/28.1	18	
3 22	14 48.02	-22 57.5	1.898	2.694	15.2	21.1	3 22	14 45.98	-16 4.4	2.112	2.926	13.3	19.2
4 1	14 43.89	-23 0.7	1.807	2.690	12.2	20.9	4 1	14 41.80	-15 43.8	2.039	2.938	10.2	19.0
4 11	14 37.38	-22 49.0	1.738	2.686	8.7	20.6	4 11	14 35.70	-15 13.8	1.988	2.950	6.7	18.8
4 21	14 29.09	-22 22.3	1.693	2.681	4.9	20.4	4 21	14 28.29	-14 36.6	1.964	2.962	2.8	18.6
5 1	14 19.96	-21 42.6	1.675	2.677	2.8	20.2	5 1	14 20.37	-13 55.8	1.967	2.974	1.1	18.5
5 11	14 11.12	-20 54.4	1.683	2.673	5.5	20.4	5 11	14 12.83	-13 15.9	1.999	2.986	5.0	18.8
5 21	14 3.56	-20 3.7	1.718	2.668	9.4	20.6	5 21	14 6.41	-12 40.9	2.057	2.998	8.6	19.0
5 31	13 58.07	-19 16.7	1.777	2.664	13.0	20.8	5 31	14 1.71	-12 14.7	2.139	3.010	11.7	19.3
231510	2008 <i>RC</i> ₈₄		4 28.1 151°40	0°7/28.8	17		402976	2007 <i>UM</i> ₁₃₂		4 28.1 236°05	0°6/27.4	18	
3 22	14 47.85	-18 33.1	2.131	2.934	13.6	21.5	3 22	14 41.80	-12 52.4	3.878	4.680	8.0	21.9
4 1	14 43.30	-18 13.2	2.048	2.939	10.6	21.3	4 1	14 37.84	-12 33.3	3.773	4.667	6.1	21.7
4 11	14 36.73	-17 41.7	1.987	2.944	7.1	21.1	4 11	14 32.81	-12 9.9	3.694	4.654	3.9	21.5
4 21	14 28.73	-17 0.4	1.952	2.948	3.2	20.8	4 21	14 27.02	-11 43.7	3.643	4.641	1.7	21.4
5 1	14 20.13	-16 12.5	1.946	2.952	1.2	20.7	5 1	14 20.88	-11 16.6	3.623	4.627	1.1	21.3
5 11	14 11.87	-15 22.9	1.968	2.956	5.0	20.9	5 11	14 14.85	-10 50.8	3.633	4.614	3.4	21.5
5 21	14 4.77	-14 36.5	2.017	2.959	8.7	21.2	5 21	14 9.34	-10 28.3	3.671	4.600	5.6	21.6
5 31	13 59.44	-13 57.8	2.090	2.962	11.9	21.4	5 31	14 4.72	-10 11.0	3.737	4.585	7.7	21.7
105546	2000 <i>RM</i> ₄₄		4 28.1 153°39	4°6/24.4	18		421134	2013 <i>RL</i> ₃		4 28.1 163°67	1°5/25.4	18	
3 22	14 50.40	-14 19.2	1.201	2.046	19.4	19.4	3 22	14 37.43	- 7 42.8	4.613	5.429	6.6	21.6
4 1	14 46.44	-11 48.2	1.133	2.053	14.8	19.2	4 1	14 34.32	- 7 7.0	4.527	5.430	5.0	21.5
4 11	14 39.30	- 8 52.9	1.088	2.058	9.6	18.9	4 11	14 30.41	- 6 29.4	4.468	5.431	3.2	21.3
4 21	14 29.91	- 5 45.9	1.067	2.063	5.0	18.6	4 21	14 25.97	- 5 51.6	4.438	5.431	1.8	21.2
5 1	14 19.68	- 2 44.5	1.073	2.068	6.2	18.7	5 1	14 21.32	- 5 15.9	4.438	5.432	1.9	21.2
5 11	14 10.19	- 0 6.3	1.105	2.071	11.2	19.0	5 11	14 16.78	- 4 44.0	4.467	5.433	3.4	21.4
5 21	14 2.69	+ 1 56.9	1.161	2.074	16.1	19.3	5 21	14 12.67	- 4 17.7	4.525	5.434	5.2	21.5
5 31	13 58.01	+ 3 20.5	1.235	2.077	20.3	19.6	5 31	14 9.25	- 3 58.1	4.609	5.434	6.7	21.6
468551	2006 <i>SB</i> ₃₃₇		4 28.1 219°11	3°4/23.9	16		70902	1999 <i>VH</i> ₁₇₈		4 28.1 132°09	3°6/25.8	18	
3 22	14 44.24	- 5 2.6	2.858	3.679	10.0	23.0	3 22	14 53.19	- 5 33.0	1.868	2.692	14.4	19.8
4 1	14 40.01	- 3 56.9	2.766	3.669	7.7	22.8	4 1	14 47.45	- 5 7.7	1.800	2.704	11.0	19.6
4 11	14 34.35	- 2 48.0	2.700	3.659	5.3	22.6	4 11	14 39.45	- 4 40.7	1.754	2.716	7.4	19.4
4 21	14 27.68	- 1 39.9	2.662	3.649	3.5	22.5	4 21	14 29.90	- 4 15.9	1.735	2.727	4.2	19.3
5 1	14 20.57	- 0 37.1	2.655	3.638	4.1	22.5	5 1	14 19.76	- 3 57.8	1.744	2.738	4.2	19.3
5 11	14 13.63	+ 0 16.2	2.676	3.626	6.3	22.6	5 11	14 10.10	- 3 50.1	1.780	2.748	7.5	19.5
5 21	14 7.44	+ 0 57.1	2.724	3.614	8.8	22.8	5 21	14 1.83	- 3 54.9	1.843	2.758	11.0	19.7
5 31	14 2.47	+ 1 23.7	2.797	3.602	11.1	22.9	5 31	13 55.60	- 4 13.2	1.928	2.767	14.2	19.9
85555	1997 <i>YG</i> ₁₄		4 28.1 107°09	7°8/ 4.7	18		430134	2013 <i>TW</i> ₃₈		4 28.1 290°53	3°2/29.7	17	
3 22	14 51.14	-36 13.9	1.925	2.654	17.3	19.0	3 22	14 52.84	-20 16.5	1.714	2.517	16.4	20.4
4 1	14 46.59	-36 52.2	1.841	2.660	14.9	18.8	4 1	14 48.25	-21 0.9	1.608	2.495	13.2	20.1
4 11	14 39.28	-37 8.1	1.776	2.666	12.2	18.6	4 11	14 40.70	-21 35.6	1.522	2.473	9.4	19.8
4 21	14 29.93	-36 58.3	1.733	2.672	9.6	18.5	4 21	14 30.73	-21 58.6	1.461	2.450	5.3	19.5
5 1	14 19.65	-36 21.7	1.714	2.677	7.9	18.4	5 1	14 19.33	-22 9.1	1.426	2.428	3.2	19.3
5 11	14 9.79	-35 21.8	1.721	2.683	8.2	18.4	5 11	14 7.87	-22 9.0	1.418	2.406	6.5	19.5
5 21	14 1.51	-34 5.6	1.753	2.688	10.2	18.5	5 21	13 57.69	-22 2.3	1.435	2.383	11.0	19.7
5 31	13 55.66	-32 42.2	1.808	2.694	12.8	18.7	5 31	13 49.92	-21 54.6	1.475	2.361	15.2	19.8
210827	2001 <i>OL</i> ₂₂		4 28.1 183°17	2°4/25.3	18		499827	2011 <i>DW</i> ₂₃					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
119961	2002 <i>TQ</i> ₅₇		4 28.1 86°14'	6°9'/22.3	18		71930	2000 <i>WM</i> ₆₁		4 28.2 91°29'	0°7'/28.7	18	
3 22	14 47.57	-11 50.9	1.034	1.898	20.4	18.7	3 22	14 50.72	-18 41.5	1.580	2.396	16.9	19.1
4 1	14 44.49	-8 33.9	0.980	1.909	15.5	18.4	4 1	14 46.03	-18 16.4	1.515	2.414	13.1	18.9
4 11	14 38.09	-4 54.2	0.948	1.921	10.3	18.2	4 11	14 38.73	-17 36.4	1.471	2.431	8.7	18.7
4 21	14 29.42	-1 10.7	0.940	1.932	7.0	18.0	4 21	14 29.65	-16 44.1	1.452	2.448	3.9	18.4
5 1	14 20.00	+ 2 13.8	0.959	1.943	9.0	18.2	5 1	14 19.93	-15 44.3	1.459	2.465	1.4	18.3
5 11	14 11.47	+ 4 59.9	1.001	1.954	13.7	18.4	5 11	14 10.83	-14 44.1	1.493	2.482	6.1	18.6
5 21	14 5.07	+ 6 58.3	1.065	1.965	18.4	18.8	5 21	14 3.37	-13 50.1	1.552	2.498	10.5	18.9
5 31	14 1.55	+ 8 8.3	1.145	1.976	22.3	19.0	5 31	13 58.27	-13 7.9	1.634	2.514	14.3	19.2
290452	2005 <i>TW</i> ₁₅₂		4 28.1 164°72'	1°8'/30.1	18		15502	1999 <i>NV</i> ₂₇		4 28.2 90°43'	4°0'/4.8	18	
3 22	14 44.93	-22 55.6	2.679	3.460	11.7	20.7	3 22	14 41.49	-36 13.5	4.432	5.121	8.7	17.4
4 1	14 40.74	-22 36.3	2.588	3.462	9.3	20.6	4 1	14 37.67	-36 27.2	4.331	5.123	7.4	17.3
4 11	14 34.92	-22 4.9	2.519	3.464	6.5	20.4	4 11	14 32.73	-36 30.0	4.253	5.124	6.1	17.2
4 21	14 27.97	-21 22.5	2.478	3.466	3.5	20.2	4 21	14 27.01	-36 21.4	4.200	5.125	4.8	17.1
5 1	14 20.55	-20 31.5	2.465	3.468	1.8	20.1	5 1	14 20.96	-36 1.8	4.173	5.126	4.1	17.0
5 11	14 13.39	-19 35.8	2.481	3.470	4.0	20.2	5 11	14 15.05	-35 32.5	4.175	5.127	4.2	17.0
5 21	14 7.12	-18 39.8	2.526	3.471	7.0	20.4	5 21	14 9.70	-34 55.7	4.205	5.128	5.1	17.1
5 31	14 2.28	-17 47.7	2.596	3.472	9.7	20.6	5 31	14 5.29	-34 14.2	4.262	5.130	6.4	17.2
139878	2001 <i>RT</i> ₈₄		4 28.1 144°49'	4°2'/1.8	18	R	107059	2001 <i>AK</i> ₈		4 28.2 107°96'	3°7'/25.6	18	
3 22	14 49.02	-27 56.6	2.373	3.132	13.6	20.3	3 22	14 51.14	- 7 7.6	1.634	2.468	15.6	20.0
4 1	14 44.25	-28 19.5	2.284	3.136	11.2	20.2	4 1	14 46.16	- 6 24.1	1.571	2.482	11.9	19.8
4 11	14 37.41	-28 28.1	2.216	3.139	8.4	20.0	4 11	14 38.74	- 5 36.4	1.530	2.496	7.9	19.6
4 21	14 29.09	-28 21.2	2.173	3.143	5.7	19.8	4 21	14 29.65	- 4 49.7	1.515	2.509	4.4	19.4
5 1	14 20.09	-27 59.4	2.157	3.146	4.2	19.7	5 1	14 19.94	- 4 9.9	1.526	2.522	4.5	19.4
5 11	14 11.35	-27 25.6	2.169	3.149	5.4	19.8	5 11	14 10.80	- 3 42.4	1.564	2.534	8.1	19.7
5 21	14 3.72	-26 44.2	2.209	3.152	8.0	20.0	5 21	14 3.17	- 3 30.3	1.626	2.546	11.9	19.9
5 31	13 57.86	-26 0.6	2.273	3.155	10.7	20.2	5 31	13 57.76	- 3 35.1	1.710	2.558	15.3	20.1
146826	2001 <i>YK</i> ₁₄₅		4 28.1 213°61'	4°3'/2.4	18		217854	2001 <i>QA</i> ₈₀		4 28.2 239°38'	1°7'/29.4	18	
3 22	14 48.14	-30 1.0	2.759	3.500	12.3	20.9	3 22	14 51.41	-19 52.8	2.186	2.976	13.7	20.6
4 1	14 43.38	-30 19.8	2.657	3.495	10.3	20.7	4 1	14 46.31	-19 59.8	2.079	2.961	10.9	20.3
4 11	14 36.77	-30 24.8	2.576	3.489	7.9	20.5	4 11	14 38.94	-19 56.0	1.995	2.945	7.5	20.1
4 21	14 28.81	-30 15.0	2.521	3.483	5.6	20.4	4 21	14 29.83	-19 41.3	1.937	2.929	3.9	19.8
5 1	14 20.20	-29 50.6	2.494	3.476	4.3	20.3	5 1	14 19.82	-19 17.3	1.907	2.912	1.8	19.6
5 11	14 11.76	-29 14.0	2.495	3.470	5.1	20.3	5 11	14 9.92	-18 47.2	1.906	2.894	5.1	19.8
5 21	14 4.25	-28 29.1	2.523	3.463	7.3	20.4	5 21	14 1.09	-18 15.5	1.933	2.876	8.9	20.0
5 31	13 58.28	-27 40.7	2.578	3.455	9.8	20.6	5 31	13 54.11	-17 47.1	1.984	2.857	12.4	20.2
232291	2002 <i>RR</i> ₁₈₁		4 28.1 239°86'	1°8'/29.3	16		20340	<i>Susanruder</i>		4 28.2 55°35'	2°4'/26.7	18	
3 22	14 52.16	-20 43.4	1.625	2.431	17.0	21.9	3 22	14 48.92	-11 30.5	1.327	2.173	17.9	18.7
4 1	14 47.64	-20 33.8	1.526	2.417	13.5	21.6	4 1	14 44.98	-10 51.2	1.270	2.187	13.6	18.5
4 11	14 40.20	-20 7.6	1.447	2.402	9.4	21.3	4 11	14 38.20	-10 2.4	1.233	2.203	8.8	18.3
4 21	14 30.46	-19 24.9	1.393	2.386	4.7	21.0	4 21	14 29.47	- 9 9.4	1.220	2.218	3.9	18.0
5 1	14 19.51	-18 28.4	1.364	2.370	2.0	20.8	5 1	14 20.04	- 8 18.9	1.231	2.234	3.4	18.0
5 11	14 8.75	-17 24.6	1.363	2.353	6.4	21.0	5 11	14 11.29	- 7 38.2	1.268	2.250	8.0	18.3
5 21	13 59.47	-16 21.1	1.387	2.335	11.3	21.3	5 21	14 4.34	- 7 12.2	1.328	2.266	12.5	18.6
5 31	13 52.68	-15 25.8	1.434	2.317	15.7	21.5	5 31	13 59.91	- 7 3.8	1.408	2.283	16.4	18.9
105803	2000 <i>SH</i> ₁₃₂		4 28.1 239°01'	5°8'/9.0	18		239939	2001 <i>AZ</i> ₃₀		4 28.2 210°70'	7°7'/7.9	18	
3 22	14 45.30	-48 27.8	4.930	5.512	8.9	20.2	3 22	14 50.29	-45 4.5	3.023	3.658	13.3	20.7
4 1	14 40.73	-49 3.1	4.825	5.507	8.1	20.1	4 1	14 45.24	-45 31.7	2.918	3.652	11.9	20.6
4 11	14 34.81	-49 26.1	4.739	5.503	7.3	20.0	4 11	14 38.08	-45 39.9	2.831	3.647	10.4	20.4
4 21	14 27.92	-49 35.3	4.674	5.498	6.5	19.9	4 21	14 29.40	-45 26.2	2.766	3.640	9.0	20.3
5 1	14 20.56	-49 29.9	4.634	5.494	6.0	19.9	5 1	14 20.03	-44 49.6	2.726	3.634	7.9	20.2
5 11	14 13.29	-49 10.7	4.619	5.489	5.8	19.9	5 11	14 10.92	-43 51.5	2.711	3.627	7.8	20.2
5 21	14 6.66	-48 39.2	4.628	5.485	6.1	19.9	5 21	14 2.93	-42 36.2	2.722	3.620	8.5	20.3
5 31	14 1.12	-47 58.2	4.663	5.480	6.8	19.9	5 31	13 56.75	-41 9.4	2.758	3.613	9.9	20.3
194296	2001 <i>US</i> ₆₁		4 28.1 62°91'	1°8'/29.1	18		410233	2007 <i>TU</i> ₁₆		4 28.2 192°92'	0°2'/27.9	16	
3 22	14 52.43	-18 19.4	1.343	2.168	18.8	20.3	3 22	14 50.62	-16 34.0	2.103	2.907	13.7	22.2
4 1	14 48.04	-18 37.8	1.272	2.175	14.8	20.0	4 1	14 45.52	-15 57.7	2.011	2.905	10.6	22.0
4 11	14 40.46	-18 42.6	1.221	2.182	10.1	19.8	4 11	14 38.27	-15 9.8	1.943	2.902	7.0	21.8
4 21	14 30.52	-18 33.9	1.193	2.189	4.9	19.5	4 21	14 29.48	-14 12.7	1.901	2.899	3.0	21.5
5 1	14 19.53	-18 14.0	1.190	2.196	2.1	19.3	5 1	14 20.01	-13 10.6	1.888	2.894	1.3	21.4
5 11	14 9.09	-17 48.2	1.212	2.203	6.8	19.6	5 11	14 10.83	-12 9.1	1.904	2.889	5.5	21.6
5 21	14 0.54	-17 22.9	1.258	2.210	11.8	19.9	5 21	14 2.83	-11 13.6	1.947	2.883	9.4	21.9
5 31	13 54.81	-17 4.3	1.325	2.218	16.1	20.2	5 31	13 56.69	-10 28.9	2.015	2.875	12.8	22.1
371053	2005 <i>UX</i> ₂₁₇		4 28.1 186°89'	0°1'/28.3	17		224997	2007 <i>EO</i> ₁₃₄		4 28.2 6°23'	0°7'/27.7	17	
3 22	14 50.54	-15 53.2	2.532	3.327	11.9	22.3	3 22	14 43.96	-15 27.9	1.377	2.222	17.4	20.3
4 1	14 45.09	-15 42.0	2.438	3.326	9.2	22.2	4 1	14 41.33	-14 55.2	1.305	2.222	13.4	20.1
4 11	14 37.81	-15 22.9	2.369	3.325	6.1	22.0	4 11	14 35.95	-14 8.3	1.254	2.223	8.8	19.8
4 21	14 29.23	-14 57.3	2.327	3.323	2.6	21.7	4 21	14 28.59	-13 11.0	1.225	2.225	3.7	19.5
5 1	14 20.06	-14 27.5	2.314	3.321	1.0	21.6	5 1	14 20.37	-12 9.6	1.221	2.227	2.0	19.4
5 11	14 11.14	-13 57.0	2.332	3.317	4.6	21.8	5 11	14 12.61	-11 12.1	1.242	2.231	7.1	19.7
5 21	14 3.18	-13 29.3	2.378	3.313	7.9	22.0	5 21	14 6.44	-10 25.4	1.287	2.235	11.9	20.0
5 31	13 56.78	-13 7.8	2.450	3.308	10.9	22.2	5 31	14 2.67	- 9 54.6	1.352	2.241	16.1	20.3
292669	2006 <i>UM</i> ₇₄		4 28.1 131°42'	1°7'/29.8	18		468964	2015 <i>AO</i> ₄₆		4 28.2 91°28'	2°4		

EPHEMERIDES

4 28.2

4 28.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
472231	2014 <i>FU</i> ₇₁		4 28.2 353°67	0°0/28.7 17			98993	2001 <i>DC</i> ₃₆		4 28.2 192°79	2°4/29.9 18		
3 22	14 25.53	-16 11.8	39.244	40.036	0.9	21.6	3 22	14 48.35	-21 56.1	1.972	2.769	14.7	19.8
4 1	14 24.86	-16 8.7	39.149	40.036	0.7	21.6	4 1	14 44.04	-22 0.8	1.885	2.768	11.7	19.6
4 11	14 24.12	-16 5.1	39.080	40.035	0.4	21.6	4 11	14 37.45	-21 51.9	1.819	2.768	8.2	19.4
4 21	14 23.32	-16 1.2	39.039	40.035	0.2	21.5	4 21	14 29.20	-21 29.6	1.778	2.768	4.5	19.2
5 1	14 22.50	-15 57.1	39.028	40.035	0.1	21.5	5 1	14 20.18	-20 56.0	1.765	2.768	2.4	19.0
5 11	14 21.69	-15 52.9	39.047	40.035	0.3	21.5	5 11	14 11.46	-20 15.4	1.778	2.768	5.3	19.2
5 21	14 20.92	-15 48.9	39.094	40.034	0.5	21.6	5 21	14 3.98	-19 32.9	1.818	2.767	9.0	19.4
5 31	14 20.21	-15 45.1	39.169	40.034	0.8	21.6	5 31	13 58.48	-18 54.2	1.882	2.767	12.5	19.6
134671	1999 <i>VF</i> ₁₉₃		4 28.2 251°30	2°7/26.4 17			176585	2002 <i>CK</i> ₁₂₁		4 28.2 158°76	3°9/23.2 18		
3 22	14 50.87	- 8 45.5	1.775	2.603	14.8	20.2	3 22	14 44.49	- 0 38.3	3.219	4.037	9.1	21.4
4 1	14 46.20	- 8 20.0	1.681	2.589	11.5	20.0	4 1	14 39.97	+ 0 16.1	3.147	4.045	7.1	21.2
4 11	14 39.01	- 7 48.9	1.609	2.574	7.6	19.7	4 11	14 34.23	+ 1 9.8	3.101	4.052	5.1	21.1
4 21	14 29.91	- 7 15.9	1.563	2.559	3.7	19.5	4 21	14 27.68	+ 1 59.3	3.083	4.059	3.9	21.0
5 1	14 19.84	- 6 45.6	1.544	2.544	3.5	19.4	5 1	14 20.81	+ 2 41.2	3.095	4.065	4.4	21.1
5 11	14 9.96	- 6 23.1	1.552	2.529	7.5	19.6	5 11	14 14.17	+ 3 12.6	3.136	4.071	6.1	21.2
5 21	14 1.35	- 6 12.5	1.586	2.513	11.7	19.8	5 21	14 8.23	+ 3 32.0	3.203	4.076	8.1	21.3
5 31	13 54.86	- 6 16.3	1.641	2.496	15.5	20.0	5 31	14 3.38	+ 3 38.5	3.295	4.080	10.0	21.5
206987	2004 <i>TE</i> ₁₃₈		4 28.2 160°52	3°2/25.6 18			258254	2001 <i>TQ</i> ₁₈₁		4 28.2 237°34	1°5/29.7 18		
3 22	14 51.44	- 7 59.0	1.992	2.814	13.7	21.3	3 22	14 45.45	-21 56.8	2.446	3.234	12.4	20.6
4 1	14 46.06	- 7 7.5	1.918	2.822	10.5	21.1	4 1	14 41.38	-21 32.8	2.346	3.226	9.9	20.4
4 11	14 38.55	- 6 10.9	1.866	2.829	6.9	20.9	4 11	14 35.50	-20 55.8	2.269	3.218	6.8	20.2
4 21	14 29.57	- 5 13.6	1.842	2.836	3.8	20.7	4 21	14 28.31	-20 6.9	2.218	3.210	3.5	20.0
5 1	14 20.02	- 4 21.2	1.846	2.841	4.0	20.8	5 1	14 20.53	-19 8.9	2.196	3.201	1.6	19.8
5 11	14 10.87	- 3 39.0	1.879	2.846	7.2	21.0	5 11	14 12.97	-18 6.2	2.203	3.192	4.4	20.0
5 21	14 2.99	- 3 10.5	1.937	2.850	10.7	21.2	5 21	14 6.36	-17 3.9	2.237	3.183	7.8	20.2
5 31	13 57.00	- 2 57.8	2.019	2.853	13.8	21.4	5 31	14 1.30	-16 7.0	2.297	3.173	10.8	20.4
161756	2006 <i>SB</i> ₃₆₀		4 28.2 261°18	0°1/28.1 17			499697	2010 <i>XS</i> ₈₈		4 28.2 123°37	0°6/27.6 17		
3 22	14 48.09	-14 29.4	2.276	3.085	12.6	20.8	3 22	14 48.60	-15 43.4	1.956	2.770	14.2	21.6
4 1	14 43.48	-14 30.7	2.182	3.079	9.8	20.6	4 1	14 43.95	-15 0.0	1.883	2.783	10.9	21.4
4 11	14 36.92	-14 25.1	2.112	3.072	6.4	20.4	4 11	14 37.20	-14 5.5	1.833	2.795	7.1	21.2
4 21	14 28.93	-14 14.0	2.068	3.065	2.8	20.1	4 21	14 29.02	-13 3.1	1.808	2.807	2.9	20.9
5 1	14 20.25	-13 59.5	2.052	3.059	1.1	20.0	5 1	14 20.29	-11 58.0	1.812	2.818	1.6	20.8
5 11	14 11.77	-13 44.9	2.065	3.052	4.9	20.2	5 11	14 12.01	-10 56.2	1.845	2.829	5.7	21.1
5 21	14 4.29	-13 33.3	2.106	3.045	8.5	20.4	5 21	14 5.01	-10 2.8	1.904	2.839	9.5	21.4
5 31	13 58.46	-13 27.7	2.170	3.038	11.7	20.6	5 31	13 59.89	- 9 22.1	1.986	2.849	12.8	21.6
436864	2012 <i>SX</i> ₆₃		4 28.2 211°49	0°7/28.7 18			151096	2001 <i>VS</i> ₁₀₃		4 28.2 193°46	1°1/29.1 18		
3 22	14 50.26	-16 21.6	2.236	3.037	13.0	21.3	3 22	14 49.48	-19 13.7	2.196	2.992	13.4	21.0
4 1	14 45.20	-16 31.3	2.143	3.034	10.2	21.1	4 1	14 44.62	-19 0.1	2.103	2.990	10.5	20.8
4 11	14 38.07	-16 33.1	2.074	3.030	6.8	20.9	4 11	14 37.70	-18 34.8	2.034	2.988	7.1	20.5
4 21	14 29.43	-16 27.7	2.030	3.026	3.1	20.7	4 21	14 29.27	-17 59.0	1.990	2.985	3.4	20.3
5 1	14 20.06	-16 17.0	2.016	3.022	1.2	20.5	5 1	14 20.17	-17 15.6	1.976	2.982	1.3	20.1
5 11	14 10.91	-16 3.8	2.030	3.018	4.9	20.8	5 11	14 11.33	-16 28.9	1.989	2.978	4.9	20.4
5 21	14 2.82	-15 51.6	2.072	3.013	8.5	21.0	5 21	14 3.61	-15 43.8	2.031	2.973	8.6	20.6
5 31	13 56.49	-15 43.7	2.138	3.008	11.8	21.2	5 31	13 57.67	-15 5.0	2.097	2.968	11.9	20.8
250532	2004 <i>PM</i> ₁₀₄		4 28.2 293°19	6°9/4.4 16			354670	2005 <i>NX</i> ₇		4 28.2 239°46	2°1/30.3 16		
3 22	14 48.60	-36 12.8	2.450	3.164	14.3	20.5	3 22	14 46.00	-23 11.2	2.592	3.372	12.1	22.2
4 1	14 44.24	-36 55.6	2.350	3.157	12.4	20.3	4 1	14 41.75	-23 1.4	2.489	3.362	9.6	22.0
4 11	14 37.62	-37 21.3	2.269	3.150	10.3	20.1	4 11	14 35.73	-22 39.2	2.408	3.351	6.8	21.8
4 21	14 29.29	-37 26.9	2.212	3.142	8.3	20.0	4 21	14 28.43	-22 5.3	2.354	3.341	3.8	21.6
5 1	14 20.10	-37 11.2	2.179	3.135	7.0	19.9	5 1	14 20.51	-21 21.6	2.327	3.330	2.1	21.5
5 11	14 11.08	-36 35.9	2.173	3.128	7.3	19.9	5 11	14 12.78	-20 31.5	2.330	3.319	4.3	21.6
5 21	14 3.17	-35 45.3	2.193	3.121	8.9	20.0	5 21	14 5.93	-19 39.5	2.361	3.307	7.4	21.8
5 31	13 57.14	-34 45.8	2.237	3.113	11.1	20.1	5 31	14 0.58	-18 50.3	2.418	3.295	10.3	22.0
498741	2008 <i>TL</i> ₁₆₀		4 28.2 104°10	1°7/26.7 17			213533	2002 <i>JV</i> ₁₉		4 28.2 324°26	3°5/25.9 17		
3 22	14 46.13	-12 14.3	1.959	2.785	13.7	21.6	3 22	14 43.30	-11 0.4	1.253	2.113	17.8	20.1
4 1	14 42.13	-11 33.7	1.880	2.788	10.5	21.4	4 1	14 41.22	-10 2.4	1.171	2.097	13.8	19.8
4 11	14 36.07	-10 44.8	1.824	2.790	6.8	21.1	4 11	14 36.18	- 8 50.8	1.109	2.082	9.1	19.5
4 21	14 28.56	- 9 51.3	1.794	2.792	3.0	20.9	4 21	14 28.83	- 7 31.9	1.069	2.067	4.5	19.2
5 1	14 20.43	- 8 57.9	1.791	2.794	2.5	20.9	5 1	14 20.33	- 6 14.6	1.053	2.054	4.6	19.2
5 11	14 12.66	- 8 10.3	1.816	2.796	6.2	21.1	5 11	14 12.13	- 5 9.1	1.061	2.041	9.5	19.4
5 21	14 6.05	- 7 32.8	1.867	2.798	10.0	21.3	5 21	14 5.53	- 4 23.2	1.090	2.029	14.6	19.6
5 31	14 1.24	- 7 8.7	1.941	2.800	13.3	21.5	5 31	14 1.53	- 4 1.7	1.138	2.018	19.1	19.9
301494	2009 <i>EG</i> ₁₄		4 28.2 344°12	5°2/23.4 17			513263	2006 <i>SP</i> ₄₄		4 28.2 197°65	6°0/19.9 18		
3 22	14 43.49	- 2 51.5	1.959	2.801	13.1	21.1	3 22	14 44.54	+ 7 12.7	3.088	3.901	9.5	22.6
4 1	14 40.08	- 1 40.2	1.885	2.798	10.2	20.9	4 1	14 40.14	+ 8 30.1	3.015	3.897	7.8	22.5
4 11	14 34.72	- 0 27.0	1.834	2.795	7.2	20.7	4 11	14 34.42	+ 9 43.4	2.968	3.893	6.5	22.4
4 21	14 27.98	+ 0 42.1	1.809	2.793	5.3	20.6	4 21	14 27.79	+10 47.8	2.948	3.888	6.0	22.4
5 1	14 20.67	+ 1 40.6	1.811	2.790	6.1	20.6	5 1	14 20.78	+11 39.2	2.957	3.882	6.7	22.4
5 11	14 13.67	+ 2 23.0	1.839	2.788	8.8	20.7	5 11	14 13.97	+12 14.4	2.992	3.876	8.2	22.5
5 21	14 7.75	+ 2 46.4	1.892	2.787	11.8	20.9	5 21	14 7.87	+12 32.1	3.053	3.869	10.0	22.6
5 31	14 3.54	+ 2 49.6	1.965	2.785	14.6	21.1	5 31	14 2.91	+12 32.4	3.135	3.862	11.7	22.7
143501	2003 <i>DY</i> ₁₃		4 28.2 112°77	4°3/23.9 18			125174	2001 <i>UF</i> ₁					

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4 28.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
3647	Dermott		4 28.2 237°86	4.1/24.6	18	R	404131	2013 <i>BD</i> ₃₀		4 28.2 342°53	3.8/29.9	14	C
3 22	14 46.45	- 4 27.8	2.165	2.995	12.4	16.4	3 22	14 46.53	-20 47.5	1.066	1.911	21.3	20.9
4 1	14 42.22	- 3 37.5	2.080	2.988	9.6	16.2	4 1	14 44.51	-21 25.5	0.990	1.902	17.2	20.6
4 11	14 36.08	- 2 44.7	2.019	2.980	6.6	16.0	4 11	14 38.81	-21 46.4	0.932	1.894	12.2	20.3
4 21	14 28.58	- 1 54.1	1.984	2.972	4.3	15.8	4 21	14 30.11	-21 47.9	0.893	1.886	6.8	19.9
5 1	14 20.47	- 1 10.6	1.977	2.964	4.8	15.8	5 1	14 19.85	-21 30.9	0.876	1.880	3.9	19.7
5 11	14 12.60	- 0 39.0	1.998	2.956	7.5	16.0	5 11	14 9.91	-21 0.8	0.881	1.875	8.0	20.0
5 21	14 5.74	- 0 22.2	2.044	2.947	10.7	16.2	5 21	14 2.04	-20 26.0	0.907	1.871	13.6	20.2
5 31	14 0.52	- 0 21.5	2.112	2.938	13.6	16.3	5 31	13 57.49	-19 55.7	0.951	1.868	18.7	20.5
269345	2008 <i>TG</i> ₁₀₆		4 28.2 127°66	0.4/28.6	18		219714	2001 <i>XO</i> ₇₄		4 28.2 116°00	1.8/26.7	18	
3 22	14 42.62	-17 4.8	3.616	4.407	8.7	21.7	3 22	14 49.93	-11 0.0	2.050	2.868	13.5	21.0
4 1	14 38.51	-16 52.3	3.531	4.417	6.7	21.6	4 1	14 44.81	-10 26.9	1.982	2.885	10.3	20.8
4 11	14 33.28	-16 33.8	3.472	4.427	4.4	21.4	4 11	14 37.69	- 9 47.6	1.938	2.901	6.6	20.7
4 21	14 27.29	-16 10.5	3.440	4.436	2.0	21.3	4 21	14 29.23	- 9 5.5	1.920	2.917	3.0	20.4
5 1	14 20.99	-15 44.2	3.439	4.445	0.7	21.1	5 1	14 20.28	- 8 24.9	1.931	2.933	2.5	20.4
5 11	14 14.89	-15 17.1	3.467	4.454	3.1	21.4	5 11	14 11.78	- 7 50.3	1.970	2.947	6.0	20.7
5 21	14 9.40	-14 51.6	3.524	4.463	5.5	21.5	5 21	14 4.51	- 7 25.3	2.035	2.962	9.5	20.9
5 31	14 4.90	-14 29.8	3.608	4.471	7.6	21.7	5 31	13 59.06	- 7 12.3	2.124	2.976	12.6	21.2
266414	2007 <i>FG</i> ₃₈		4 28.2 348°22	8.1/ 3.9	17		105299	2000 <i>QU</i> ₅₄		4 28.2 186°33	0.9/27.5	18	
3 22	14 45.60	-33 8.0	1.481	2.258	19.7	19.5	3 22	14 50.15	-14 59.4	1.803	2.621	15.0	19.9
4 1	14 43.10	-33 52.3	1.397	2.251	16.8	19.3	4 1	14 45.49	-14 18.1	1.719	2.621	11.6	19.7
4 11	14 37.48	-34 12.1	1.329	2.245	13.5	19.1	4 11	14 38.43	-13 24.9	1.657	2.621	7.6	19.4
4 21	14 29.41	-34 3.3	1.282	2.240	10.3	18.9	4 21	14 29.64	-12 23.0	1.621	2.620	3.2	19.2
5 1	14 20.12	-33 24.4	1.258	2.236	8.3	18.7	5 1	14 20.10	-11 17.8	1.613	2.618	1.9	19.1
5 11	14 11.16	-32 19.6	1.257	2.233	8.9	18.7	5 11	14 10.93	-10 15.8	1.632	2.616	6.4	19.3
5 21	14 3.93	-30 57.5	1.278	2.230	11.7	18.9	5 21	14 3.10	- 9 23.1	1.678	2.613	10.6	19.6
5 31	13 59.48	-29 29.3	1.322	2.229	15.2	19.1	5 31	13 57.37	- 8 44.2	1.746	2.609	14.3	19.8
414913	2010 <i>YY</i> ₄		4 28.2 86°21	1°2/29.1	17		95817	2003 <i>FC</i> ₇₅		4 28.2 319°02	3°6/26.4	18	
3 22	14 48.86	-20 33.3	1.720	2.528	16.1	21.4	3 22	14 51.74	- 5 5.4	1.604	2.440	15.8	19.0
4 1	14 44.47	-20 2.9	1.651	2.545	12.5	21.2	4 1	14 47.09	- 5 6.7	1.518	2.429	12.3	18.8
4 11	14 37.68	-19 16.5	1.604	2.561	8.5	21.0	4 11	14 39.72	- 5 8.1	1.455	2.419	8.3	18.5
4 21	14 29.26	-18 16.6	1.582	2.577	4.0	20.7	4 21	14 30.28	- 5 13.1	1.415	2.410	4.5	18.3
5 1	14 20.25	-17 8.0	1.587	2.593	1.5	20.6	5 1	14 19.82	- 5 25.5	1.402	2.401	4.3	18.2
5 11	14 11.79	-15 57.6	1.619	2.609	5.6	20.9	5 11	14 9.63	- 5 48.2	1.416	2.392	8.1	18.4
5 21	14 4.82	-14 52.3	1.677	2.625	9.7	21.2	5 21	14 0.85	- 6 22.9	1.454	2.383	12.3	18.6
5 31	14 0.01	-13 57.9	1.759	2.640	13.4	21.4	5 31	13 54.40	- 7 10.2	1.513	2.375	16.2	18.9
352027	2006 <i>VS</i> ₅₄		4 28.2 233°67	0°6/27.6	16		299934	2006 <i>TH</i> ₃₅		4 28.2 98°05	0°6/28.8	17	
3 22	14 46.13	-13 54.5	2.684	3.490	11.0	22.5	3 22	14 45.80	-18 28.8	2.448	3.247	12.1	21.3
4 1	14 41.70	-13 33.1	2.583	3.479	8.5	22.4	4 1	14 41.46	-18 5.2	2.371	3.261	9.4	21.2
4 11	14 35.63	-13 4.9	2.506	3.467	5.5	22.1	4 11	14 35.44	-17 31.6	2.318	3.274	6.2	21.0
4 21	14 28.38	-12 31.7	2.457	3.455	2.3	21.9	4 21	14 28.27	-16 49.8	2.292	3.287	2.8	20.8
5 1	14 20.57	-11 56.3	2.437	3.443	1.3	21.8	5 1	14 20.68	-16 3.0	2.294	3.301	1.0	20.6
5 11	14 12.91	-11 22.3	2.447	3.430	4.6	22.0	5 11	14 13.42	-15 15.2	2.326	3.314	4.3	20.9
5 21	14 6.07	-10 52.8	2.484	3.417	7.7	22.2	5 21	14 7.15	-14 30.7	2.385	3.326	7.5	21.1
5 31	14 0.59	-10 30.9	2.547	3.403	10.6	22.4	5 31	14 2.40	-13 53.1	2.469	3.339	10.4	21.3
520007	2013 <i>TC</i> ₁₇₁		4 28.2 180°25	1°7/26.9	17		47964	2000 <i>SG</i> ₁₃₁		4 28.2 232°87	1°9/ 1.6	18	
3 22	14 50.64	- 9 47.7	2.248	3.062	12.6	21.6	3 22	14 38.82	-26 40.8	4.985	5.732	7.1	19.8
4 1	14 45.35	- 9 37.1	2.163	3.063	9.7	21.4	4 1	14 35.46	-26 30.9	4.877	5.725	5.7	19.7
4 11	14 38.09	- 9 22.3	2.101	3.063	6.3	21.2	4 11	14 31.25	-26 13.4	4.793	5.718	4.2	19.6
4 21	14 29.43	- 9 5.7	2.066	3.064	2.9	21.0	4 21	14 26.45	-25 48.8	4.737	5.711	2.7	19.5
5 1	14 20.16	- 8 50.2	2.061	3.063	2.3	21.0	5 1	14 21.40	-25 18.2	4.711	5.704	1.9	19.4
5 11	14 11.16	- 8 39.2	2.084	3.063	5.7	21.2	5 11	14 16.45	-24 43.0	4.714	5.697	2.6	19.4
5 21	14 3.23	- 8 35.2	2.135	3.062	9.1	21.4	5 21	14 11.93	-24 5.2	4.747	5.689	4.1	19.5
5 31	13 57.00	- 8 40.3	2.210	3.060	12.2	21.6	5 31	14 8.13	-23 27.1	4.807	5.682	5.6	19.6
331507	1999 <i>XQ</i> ₁₁₇		4 28.2 190°35	2°5/30.6	17		336722	2010 <i>CW</i> ₁₇₁		4 28.2 278°85	8°5/19.7	18	
3 22	14 48.29	-24 34.4	2.526	3.297	12.6	21.0	3 22	14 47.39	+ 6 16.7	2.003	2.833	13.3	20.6
4 1	14 43.51	-24 22.9	2.429	3.296	10.1	20.9	4 1	14 43.31	+ 7 49.6	1.910	2.803	11.1	20.4
4 11	14 36.87	-23 57.9	2.355	3.294	7.2	20.7	4 11	14 37.05	+ 9 20.1	1.840	2.774	9.2	20.3
4 21	14 28.91	-23 19.7	2.307	3.292	4.2	20.5	4 21	14 29.12	+10 40.1	1.795	2.744	8.6	20.1
5 1	14 20.37	-22 30.4	2.288	3.289	2.5	20.4	5 1	14 20.31	+11 41.7	1.776	2.713	9.7	20.1
5 11	14 12.08	-21 33.8	2.298	3.285	4.4	20.5	5 11	14 11.61	+12 18.7	1.782	2.682	12.1	20.2
5 21	14 4.78	-20 34.9	2.336	3.281	7.5	20.7	5 21	14 3.91	+12 28.4	1.810	2.650	14.8	20.3
5 31	13 59.09	-19 38.6	2.400	3.277	10.4	20.8	5 31	13 58.00	+12 11.0	1.858	2.618	17.5	20.5
498757	2008 <i>UZ</i> ₁₁		4 28.2 163°45	0°3/27.9	17		121310	1999 <i>RJ</i> ₂₀₉		4 28.2 240°66	0°9/29.2	18	
3 22	14 46.71	-16 12.6	2.114	2.926	13.3	22.2	3 22	14 44.59	-20 13.0	2.777	3.566	11.1	20.6
4 1	14 42.48	-15 36.1	2.030	2.929	10.3	22.0	4 1	14 40.52	-19 44.3	2.671	3.554	8.7	20.4
4 11	14 36.27	-14 48.7	1.970	2.931	6.7	21.8	4 11	14 34.86	-19 4.8	2.590	3.542	5.9	20.2
4 21	14 28.66	-13 53.2	1.935	2.933	2.8	21.6	4 21	14 28.07	-18 15.7	2.536	3.530	2.9	20.0
5 1	14 20.48	-12 53.9	1.929	2.935	1.3	21.4	5 1	14 20.75	-17 19.8	2.511	3.517	1.1	19.8
5 11	14 12.62	-11 56.1	1.951	2.936	5.3	21.7	5 11	14 13.61	-16 21.1	2.516	3.504	4.0	20.0
5 21	14 5.87	-11 4.8	2.000	2.938	9.0	22.0	5 21	14 7.26	-15 23.7	2.549	3.491	7.1	20.2
5 31	14 0.86	-10 24.2	2.073	2.939	12.3	22.2	5 31	14 2.25	-14 31.8	2.608	3.477	9.9	20.3
519551	2012 <i>QO</i> ₅₃		4 28.2 252°31	6°6/21.4	17		188532	2004 <i>RS</i> ₁₉₉		4 28.2 231°07			

EPHEMERIDES

4 28.2

4 28.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
36758	2000 <i>RG</i> ₇₃		4 28.2 59°09'	2.7/29.7	18		75835	2000 <i>BO</i> ₂₆		4 28.2 160°54'	2.6/25.9	18	
3 22	14 52.03	-20 25.3	1.370	2.189	18.8	18.1	3 22	14 47.56	-8 0.4	2.286	3.108	12.1	20.4
4 1	14 47.69	-20 45.8	1.302	2.200	14.9	17.9	4 1	14 42.92	-7 26.4	2.207	3.112	9.3	20.2
4 11	14 40.24	-20 50.7	1.254	2.210	10.3	17.7	4 11	14 36.47	-6 48.6	2.152	3.115	6.1	20.0
4 21	14 30.50	-20 39.6	1.229	2.221	5.5	17.4	4 21	14 28.76	-6 10.3	2.124	3.118	3.2	19.8
5 1	14 19.81	-20 14.9	1.228	2.233	2.8	17.3	5 1	14 20.54	-5 35.7	2.124	3.121	3.2	19.8
5 11	14 9.70	-19 42.0	1.253	2.244	6.6	17.5	5 11	14 12.61	-5 8.6	2.153	3.124	6.1	20.0
5 21	14 1.46	-19 7.7	1.301	2.255	11.3	17.8	5 21	14 5.70	-4 51.8	2.208	3.126	9.3	20.2
5 31	13 56.00	-18 39.0	1.371	2.267	15.5	18.1	5 31	14 0.37	-4 47.2	2.287	3.128	12.2	20.4
66935	1999 <i>WZ</i> ₁		4 28.2 188°63'	1.4/29.7	18		481852	2008 <i>XY</i> ₅		4 28.2 171°55'	1.2/30.0	18	
3 22	14 47.95	-21 45.3	2.768	3.545	11.4	20.4	3 22	14 42.39	-21 29.3	4.499	5.267	7.5	22.9
4 1	14 43.04	-21 23.8	2.670	3.544	9.0	20.2	4 1	14 38.19	-21 24.2	4.402	5.270	5.9	22.8
4 11	14 36.47	-20 51.0	2.596	3.543	6.2	20.0	4 11	14 33.03	-21 12.8	4.331	5.273	4.1	22.7
4 21	14 28.74	-20 7.8	2.550	3.540	3.2	19.8	4 21	14 27.23	-20 55.5	4.288	5.276	2.2	22.5
5 1	14 20.50	-19 16.6	2.533	3.537	1.5	19.7	5 1	14 21.14	-20 33.7	4.275	5.278	1.2	22.4
5 11	14 12.50	-18 21.3	2.545	3.533	4.0	19.8	5 11	14 15.19	-20 8.9	4.293	5.280	2.6	22.6
5 21	14 5.38	-17 26.1	2.587	3.529	7.0	20.0	5 21	14 9.73	-19 43.0	4.340	5.281	4.5	22.7
5 31	13 59.70	-16 35.2	2.655	3.524	9.8	20.2	5 31	14 5.09	-19 18.3	4.415	5.282	6.2	22.8
410697	2008 <i>YZ</i> ₈₄		4 28.2 351°19'	4.7/1.2	17		137005	1998 <i>SN</i> ₉₃		4 28.2 210°01'	0.5/27.8	17	
3 22	14 47.94	-26 11.7	1.346	2.155	19.6	20.5	3 22	14 49.84	-15 6.5	2.106	2.915	13.5	21.5
4 1	14 44.87	-26 22.1	1.267	2.153	16.1	20.2	4 1	14 45.01	-14 39.1	2.012	2.909	10.5	21.3
4 11	14 38.61	-26 9.7	1.206	2.152	11.8	20.0	4 11	14 38.03	-14 1.8	1.941	2.902	6.9	21.1
4 21	14 29.89	-25 32.8	1.166	2.150	7.4	19.7	4 21	14 29.50	-13 16.8	1.896	2.894	2.9	20.8
5 1	14 20.03	-24 33.5	1.150	2.149	4.7	19.6	5 1	14 20.24	-12 28.1	1.880	2.886	1.4	20.7
5 11	14 10.61	-23 19.0	1.158	2.149	7.2	19.7	5 11	14 11.22	-11 40.4	1.893	2.877	5.5	20.9
5 21	14 3.03	-21 59.1	1.190	2.149	11.7	20.0	5 21	14 3.32	-10 58.8	1.933	2.868	9.4	21.1
5 31	13 58.27	-20 44.2	1.243	2.149	16.0	20.2	5 31	13 57.24	-10 27.2	1.996	2.858	12.9	21.3
418294	2008 <i>FS</i> ₈		4 28.2 104°48'	0.1/28.2	16		275574	1999 <i>TN</i> ₈₄		4 28.2 103°40'	0.6/27.7	17	
3 22	14 52.02	-15 58.1	1.758	2.572	15.5	22.8	3 22	14 46.81	-16 7.2	2.045	2.859	13.6	20.4
4 1	14 46.82	-15 45.1	1.691	2.589	12.0	22.6	4 1	14 42.53	-15 20.8	1.972	2.872	10.5	20.2
4 11	14 39.21	-15 21.4	1.645	2.606	7.9	22.4	4 11	14 36.27	-14 23.2	1.922	2.885	6.8	20.0
4 21	14 29.94	-14 49.2	1.625	2.622	3.4	22.2	4 21	14 28.68	-13 17.9	1.899	2.897	2.8	19.8
5 1	14 20.06	-14 12.4	1.632	2.638	1.3	22.1	5 1	14 20.59	-12 9.8	1.903	2.909	1.5	19.7
5 11	14 10.71	-13 36.0	1.666	2.654	5.8	22.4	5 11	14 12.92	-11 4.8	1.936	2.921	5.4	20.0
5 21	14 2.85	-13 5.0	1.727	2.669	9.9	22.7	5 21	14 6.44	-10 8.2	1.996	2.932	9.1	20.2
5 31	13 57.16	-12 43.4	1.811	2.684	13.5	22.9	5 31	14 1.72	-9 23.8	2.080	2.944	12.3	20.5
308541	2005 <i>US</i> ₂₀₄		4 28.2 280°76'	1.9/26.2	16		96649	1999 <i>GL</i> ₅₉		4 28.2 352°58'	1.5/27.5	18	
3 22	14 43.45	-12 15.3	2.334	3.157	11.9	21.8	3 22	14 51.62	-11 7.5	1.329	2.171	18.1	19.4
4 1	14 39.90	-11 14.7	2.233	3.139	9.1	21.5	4 1	14 47.47	-11 11.2	1.255	2.169	14.0	19.2
4 11	14 34.59	-10 4.7	2.157	3.122	5.9	21.3	4 11	14 40.21	-11 8.3	1.200	2.168	9.2	18.9
4 21	14 28.00	-8 49.1	2.107	3.105	2.7	21.1	4 21	14 30.57	-11 1.2	1.168	2.167	4.0	18.6
5 1	14 20.79	-7 33.0	2.087	3.087	2.6	21.0	5 1	14 19.82	-10 53.8	1.161	2.166	2.5	18.5
5 11	14 13.76	-6 22.0	2.095	3.070	5.9	21.2	5 11	14 9.50	-10 50.9	1.179	2.166	7.7	18.8
5 21	14 7.61	-5 21.3	2.130	3.052	9.3	21.4	5 21	14 0.94	-10 56.3	1.220	2.165	12.8	19.1
5 31	14 2.95	-4 34.5	2.188	3.035	12.4	21.6	5 31	13 55.12	-11 13.3	1.282	2.166	17.1	19.3
145383	2005 <i>NE</i> ₁₄		4 28.2 357°71'	1.7/29.6	17		141105	2001 <i>XK</i> ₅₇		4 28.2 156°91'	4.3/24.0	18	
3 22	14 45.56	-20 42.6	2.119	2.920	13.7	20.2	3 22	14 46.92	-0 21.0	2.666	3.486	10.7	20.1
4 1	14 41.74	-20 37.4	2.031	2.919	10.8	20.0	4 1	14 42.12	+0 16.2	2.592	3.491	8.3	20.0
4 11	14 35.88	-20 19.9	1.966	2.919	7.5	19.8	4 11	14 35.80	+0 52.0	2.543	3.496	6.0	19.8
4 21	14 28.55	-19 50.9	1.926	2.918	3.8	19.6	4 21	14 28.45	+1 22.5	2.522	3.500	4.4	19.7
5 1	14 20.58	-19 12.9	1.913	2.918	1.8	19.5	5 1	14 20.69	+1 44.3	2.529	3.504	4.9	19.8
5 11	14 12.88	-18 30.3	1.928	2.918	4.8	19.7	5 11	14 13.19	+1 54.5	2.564	3.508	6.9	19.9
5 21	14 6.28	-17 47.8	1.970	2.918	8.4	19.9	5 21	14 6.57	+1 51.9	2.626	3.511	9.3	20.0
5 31	14 1.43	-17 10.2	2.035	2.919	11.7	20.1	5 31	14 1.30	+1 36.0	2.711	3.514	11.5	20.2
225923	2002 <i>AK</i> ₁₀₉		4 28.2 161°30'	1.8/29.8	18		394203	2006 <i>SB</i> ₁₀₄		4 28.2 248°13'	5.8/4.2	18	
3 22	14 50.16	-21 27.5	2.310	3.094	13.2	21.3	3 22	14 47.39	-35 4.2	2.413	3.138	14.3	20.5
4 1	14 45.04	-21 21.8	2.223	3.100	10.4	21.2	4 1	14 43.22	-35 11.2	2.311	3.130	12.2	20.3
4 11	14 37.92	-21 3.9	2.159	3.106	7.2	21.0	4 11	14 36.90	-34 58.9	2.229	3.123	9.8	20.2
4 21	14 29.39	-20 34.6	2.121	3.111	3.8	20.8	4 21	14 29.03	-34 25.5	2.170	3.116	7.5	20.0
5 1	14 20.27	-19 56.1	2.111	3.115	1.9	20.6	5 1	14 20.44	-33 31.3	2.137	3.108	6.0	19.9
5 11	14 11.45	-19 12.4	2.131	3.119	4.6	20.8	5 11	14 12.10	-32 19.7	2.131	3.100	6.3	19.9
5 21	14 3.75	-18 28.0	2.179	3.122	8.0	21.0	5 21	14 4.91	-30 56.4	2.153	3.093	8.3	20.0
5 31	13 57.79	-17 47.8	2.251	3.125	11.1	21.2	5 31	13 59.55	-29 28.6	2.199	3.085	10.9	20.1
335806	2007 <i>HA</i> ₈₄		4 28.2 299°14'	2.8/25.7	17		394783	2008 <i>HD</i> ₃		4 28.2 91°81'	6.8/2.5	14 C	
3 22	14 43.79	-12 16.0	1.728	2.566	14.7	20.3	3 22	19 16.77	-72 46.9	0.570	1.108	63.7	21.1
4 1	14 40.86	-10 59.7	1.629	2.544	11.4	20.0	4 1	17 59.32	-70 48.0	0.473	1.162	58.4	20.6
4 11	14 35.58	-9 29.2	1.554	2.522	7.4	19.7	4 11	16 24.27	-64 10.5	0.378	1.213	48.3	19.9
4 21	14 28.53	-7 49.9	1.503	2.501	3.6	19.4	4 21	15 2.81	-48 14.2	0.310	1.261	30.1	19.1
5 1	14 20.58	-6 9.7	1.480	2.479	3.8	19.4	5 1	14 11.21	-23 40.9	0.301	1.305	7.8	18.3
5 11	14 12.82	-4 37.5	1.483	2.458	7.9	19.6	5 11	13 43.14	-2 3.5	0.364	1.345	19.9	19.2
5 21	14 6.23	-3 21.0	1.511	2.437	12.3	19.8	5 21	13 29.47	+10 54.9	0.474	1.380	32.3	20.2
5 31	14 1.63	-2 25.7	1.561	2.416	16.1	20.0	5 31	13 24.65	+17 51.5	0.605	1.412	38.8	21.0
307393	2002 <i>TL</i> ₃₇		4 28.2 167°07'	0.3/28.4	17		314653	2006 <i>OG</i> ₄		4 28.2 302°59'	6.2/1.2	17	

EPHEMERIDES

4 28.2

4 28.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
6908	Kunimoto		4 28.2 189°07.0	1.7°/26.8	18		433896	2015 <i>BN</i> ₄₂₂		4 28.2 175°46	0°9/27.5	17	
3 22	14 48.42	-10 35.1	2.188	3.006	12.7	18.0	3 22	14 48.14	-14 3.2	2.032	2.848	13.6	21.5
4 1	14 43.73	-10 11.3	2.102	3.006	9.8	17.8	4 1	14 43.69	-13 31.8	1.948	2.850	10.5	21.3
4 11	14 37.10	-9 42.0	2.041	3.005	6.4	17.6	4 11	14 37.15	-12 51.1	1.888	2.851	6.8	21.1
4 21	14 29.07	-9 9.8	2.006	3.003	2.9	17.4	4 21	14 29.14	-12 4.1	1.853	2.852	2.9	20.8
5 1	14 20.43	-8 38.6	2.000	3.002	2.4	17.4	5 1	14 20.48	-11 15.0	1.847	2.852	1.8	20.7
5 11	14 12.07	-8 12.3	2.021	3.000	5.8	17.6	5 11	14 12.15	-10 28.9	1.869	2.852	5.7	21.0
5 21	14 4.77	-7 54.3	2.070	2.998	9.3	17.8	5 21	14 4.98	-9 50.4	1.917	2.852	9.5	21.2
5 31	13 59.15	-7 47.0	2.143	2.995	12.4	18.0	5 31	13 59.62	-9 23.2	1.989	2.851	12.8	21.4
466592	2014 <i>UT</i> ₁₂₁		4 28.2 122°03	4°4/ 1.8	17		371202	2005 <i>YS</i> ₂₁₃		4 28.2 154°85	0°1/28.3	17	
3 22	14 52.11	-28 18.6	1.913	2.680	16.2	21.5	3 22	14 50.25	-16 1.6	2.284	3.085	12.8	21.9
4 1	14 47.00	-28 21.7	1.836	2.694	13.2	21.3	4 1	14 45.06	-15 49.5	2.201	3.092	9.9	21.7
4 11	14 39.41	-28 5.8	1.780	2.709	9.8	21.2	4 11	14 37.93	-15 28.6	2.141	3.099	6.5	21.5
4 21	14 30.08	-27 30.0	1.747	2.722	6.4	21.0	4 21	14 29.44	-15 0.7	2.109	3.106	2.8	21.3
5 1	14 20.07	-26 36.2	1.741	2.735	4.4	20.9	5 1	14 20.38	-14 28.6	2.105	3.112	1.0	21.1
5 11	14 10.56	-25 29.9	1.763	2.748	5.9	21.0	5 11	14 11.65	-13 56.2	2.131	3.117	4.8	21.4
5 21	14 2.55	-24 18.0	1.812	2.760	9.1	21.2	5 21	14 4.00	-13 27.2	2.184	3.122	8.4	21.6
5 31	13 56.75	-23 8.1	1.885	2.771	12.4	21.4	5 31	13 58.06	-13 5.2	2.262	3.126	11.4	21.9
45141	1999 <i>XZ</i> ₁₀₀		4 28.2 189°02	3°5/ 1.3	18		114075	2002 <i>VG</i> ₃₃		4 28.2 178°79	0°4/27.9	18	
3 22	14 51.76	-26 48.4	2.222	2.985	14.3	20.1	3 22	14 51.07	-16 17.0	1.517	2.342	17.1	20.5
4 1	14 46.53	-26 47.1	2.126	2.984	11.7	19.9	4 1	14 46.69	-15 45.3	1.438	2.343	13.3	20.2
4 11	14 39.05	-26 29.7	2.051	2.983	8.6	19.7	4 11	14 39.50	-14 59.3	1.380	2.344	8.8	19.9
4 21	14 29.95	-25 55.4	2.002	2.981	5.4	19.5	4 21	14 30.24	-14 2.0	1.346	2.344	3.7	19.6
5 1	14 20.10	-25 5.9	1.981	2.978	3.5	19.4	5 1	14 20.07	-12 58.9	1.338	2.344	1.7	19.5
5 11	14 10.54	-24 5.3	1.989	2.974	5.3	19.5	5 11	14 10.34	-11 57.4	1.356	2.344	6.8	19.8
5 21	14 2.19	-22 59.6	2.024	2.969	8.5	19.7	5 21	14 2.22	-11 4.8	1.400	2.343	11.6	20.1
5 31	13 55.78	-21 55.3	2.084	2.964	11.7	19.9	5 31	13 56.56	-10 26.5	1.465	2.341	15.8	20.3
140614	2001 <i>UZ</i> ₆		4 28.2 141°59	0°6/27.6	18		262634	2006 <i>WF</i> ₃₉		4 28.2 328°62	1°3/29.4	17	
3 22	14 48.11	-12 52.7	2.902	3.703	10.4	20.7	3 22	14 43.60	-21 7.8	2.073	2.877	13.8	20.3
4 1	14 42.95	-12 42.4	2.822	3.714	7.9	20.6	4 1	14 40.31	-20 36.7	1.980	2.871	10.9	20.1
4 11	14 36.31	-12 27.2	2.766	3.726	5.2	20.4	4 11	14 35.01	-19 50.7	1.910	2.864	7.5	19.8
4 21	14 28.66	-12 8.5	2.738	3.736	2.2	20.2	4 21	14 28.25	-18 51.7	1.864	2.858	3.7	19.6
5 1	14 20.62	-11 48.8	2.741	3.746	1.2	20.1	5 1	14 20.84	-17 43.4	1.846	2.852	1.4	19.4
5 11	14 12.84	-11 30.5	2.774	3.756	4.2	20.4	5 11	14 13.69	-16 31.6	1.857	2.847	4.9	19.6
5 21	14 5.90	-11 16.2	2.835	3.765	7.0	20.6	5 21	14 7.63	-15 22.2	1.893	2.842	8.7	19.8
5 31	14 0.26	-11 7.8	2.922	3.774	9.5	20.7	5 31	14 3.31	-14 21.2	1.954	2.837	12.2	20.0
506258	2016 <i>PW</i> ₆₅		4 28.2 142°39	1°0/29.1	17		172450	2003 <i>QR</i> ₇₈		4 28.2 234°66	1°3/29.3	17	
3 22	14 48.18	-17 54.7	2.652	3.444	11.5	21.6	3 22	14 50.98	-20 17.9	2.014	2.809	14.5	20.6
4 1	14 43.26	-18 0.2	2.565	3.450	9.0	21.4	4 1	14 46.19	-19 59.6	1.909	2.794	11.5	20.3
4 11	14 36.65	-17 57.7	2.502	3.455	6.0	21.3	4 11	14 39.02	-19 27.2	1.826	2.779	7.9	20.1
4 21	14 28.86	-17 48.2	2.467	3.461	2.9	21.1	4 21	14 30.04	-18 41.3	1.768	2.762	3.9	19.8
5 1	14 20.56	-17 33.1	2.460	3.466	1.2	20.9	5 1	14 20.13	-17 44.9	1.739	2.745	1.5	19.6
5 11	14 12.50	-17 15.3	2.483	3.471	4.1	21.1	5 11	14 10.38	-16 43.2	1.738	2.727	5.4	19.8
5 21	14 5.34	-16 57.7	2.535	3.476	7.2	21.4	5 21	14 1.81	-15 42.5	1.764	2.708	9.6	20.0
5 31	13 59.64	-16 43.4	2.611	3.481	9.9	21.5	5 31	13 55.23	-14 48.8	1.815	2.688	13.4	20.2
422878	2002 <i>QP</i> ₃₀		4 28.2 223°10	0°1/28.2	17		297692	2001 <i>UN</i> ₂₂₈		4 28.2 286°36	2°5/23.9	18	
3 22	14 50.82	-15 50.0	2.051	2.857	13.9	22.4	3 22	14 37.84	-3 6.5	4.329	5.150	6.9	20.9
4 1	14 45.90	-15 32.6	1.953	2.848	10.8	22.2	4 1	14 34.78	-2 24.4	4.239	5.142	5.3	20.7
4 11	14 38.72	-15 5.1	1.877	2.837	7.2	22.0	4 11	14 30.86	-1 41.9	4.176	5.133	3.7	20.6
4 21	14 29.86	-14 29.1	1.828	2.826	3.1	21.7	4 21	14 26.35	-1 1.1	4.142	5.125	2.6	20.5
5 1	14 20.17	-13 48.0	1.807	2.814	1.2	21.5	5 1	14 21.59	-0 24.4	4.136	5.117	2.9	20.5
5 11	14 10.68	-13 6.5	1.815	2.801	5.6	21.8	5 11	14 16.94	+0 6.1	4.161	5.108	4.3	20.6
5 21	14 2.33	-12 29.4	1.850	2.788	9.6	22.0	5 21	14 12.72	+0 28.8	4.212	5.100	6.0	20.7
5 31	13 55.88	-12 1.1	1.908	2.774	13.2	22.2	5 31	14 9.23	+0 42.8	4.288	5.091	7.6	20.8
296391	2009 <i>FJ</i> ₇₀		4 28.2 36°20	5°7/24.4	17		483499	2002 <i>VM</i> ₁₄		4 28.2 331°50	1°0/28.3	18	
3 22	14 48.06	-4 16.4	1.440	2.290	16.5	20.4	3 22	15 9.86	-8 4.0	1.013	1.846	23.0	19.9
4 1	14 44.27	-3 12.9	1.374	2.292	12.8	20.1	4 1	15 3.35	-10 0.6	0.934	1.841	18.3	19.5
4 11	14 37.83	-2 6.3	1.329	2.295	8.9	19.9	4 11	14 51.86	-12 8.7	0.873	1.837	12.4	19.2
4 21	14 29.48	-1 3.9	1.308	2.297	5.9	19.8	4 21	14 36.05	-14 24.2	0.835	1.833	5.5	18.8
5 1	14 20.35	-0 13.8	1.313	2.300	6.6	19.8	5 1	14 17.70	-16 39.0	0.823	1.829	2.3	18.5
5 11	14 11.71	+0 17.6	1.341	2.303	10.1	20.0	5 11	13 59.46	-18 45.0	0.836	1.826	9.5	18.9
5 21	14 4.64	+0 26.9	1.393	2.306	14.0	20.2	5 21	13 43.87	-20 37.9	0.874	1.823	16.1	19.3
5 31	13 59.91	+0 13.6	1.464	2.310	17.5	20.5	5 31	13 32.72	-22 19.1	0.932	1.821	21.6	19.6
424166	2007 <i>HB</i> ₄₀		4 28.2 23°87	1°7/27.4	17		82752	2001 <i>QG</i> ₇		4 28.2 151°75	4°6/23.4	18	
3 22	14 52.27	-9 18.8	1.574	2.406	16.2	20.4	3 22	14 45.32	-1 45.3	2.423	3.251	11.3	19.4
4 1	14 47.43	-9 33.3	1.500	2.410	12.5	20.1	4 1	14 41.09	-0 41.4	2.352	3.256	8.8	19.2
4 11	14 39.89	-9 44.6	1.448	2.414	8.2	19.9	4 11	14 35.23	+0 22.9	2.305	3.261	6.3	19.1
4 21	14 30.37	-9 54.7	1.420	2.419	3.6	19.6	4 21	14 28.27	+1 22.5	2.285	3.265	4.7	19.0
5 1	14 19.99	-10 6.1	1.419	2.424	2.5	19.6	5 1	14 20.88	+2 12.7	2.294	3.269	5.3	19.0
5 11	14 10.03	-10 21.9	1.445	2.429	6.9	19.8	5 11	14 13.78	+2 49.4	2.331	3.273	7.6	19.2
5 21	14 1.62	-10 44.3	1.495	2.435	11.3	20.1	5 21	14 7.60	+3 10.3	2.393	3.276	10.1	19.3
5 31	13 55.57	-11 15.1	1.568	2.442	15.1	20.4	5 31	14 2.86	+3 14.6	2.477	3.280	12.5	19.5
99378	2001 <i>YY</i> ₈₀		4 28.2 254°64	4°9/25.0	16		518209	2016 <i>QC</i> ₂₆		4 28.2 67°78	2°7/30.9	17	
3 22													

EPHEMERIDES

4 28.2

4 28.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
505549	2013 <i>YF</i> ₁₃₃		4 28.2 189°18	4°6/ 2.5 17			215472	2002 <i>RX</i> ₄₀		4 28.2 304°80	0°7/28.7 17		
3 22	14 51.03	-30 16.5	2.578	3.317	13.1	22.4	3 22	14 47.75	-16 58.9	1.433	2.265	17.5	20.2
4 1	14 45.79	-30 36.5	2.480	3.316	11.0	22.3	4 1	14 44.69	-16 58.4	1.335	2.243	13.9	19.9
4 11	14 38.52	-30 41.8	2.403	3.314	8.5	22.1	4 11	14 38.61	-16 44.7	1.257	2.221	9.4	19.6
4 21	14 29.76	-30 30.9	2.351	3.312	6.0	21.9	4 21	14 30.08	-16 18.5	1.202	2.199	4.3	19.2
5 1	14 20.31	-30 3.9	2.327	3.310	4.6	21.8	5 1	14 20.17	-15 42.9	1.171	2.178	1.5	18.9
5 11	14 11.06	-29 23.4	2.331	3.306	5.4	21.9	5 11	14 10.33	-15 3.8	1.165	2.156	7.0	19.2
5 21	14 2.87	-28 34.0	2.364	3.303	7.8	22.0	5 21	14 1.95	-14 28.0	1.183	2.136	12.3	19.5
5 31	13 56.39	-27 41.1	2.421	3.298	10.3	22.2	5 31	13 56.16	-14 2.2	1.221	2.116	17.1	19.7
176649	2002 <i>NX</i> ₄₀		4 28.2 290°12	2°5/26.6 17			269935	2000 <i>QY</i> ₂₄₇		4 28.2 304°54	2°2/26.7 17		
3 22	14 47.75	-11 11.6	1.541	2.380	16.1	21.1	3 22	14 45.73	-11 50.9	1.590	2.430	15.7	21.1
4 1	14 44.32	-10 34.5	1.444	2.359	12.6	20.8	4 1	14 42.63	-11 11.8	1.496	2.410	12.2	20.8
4 11	14 38.14	-9 47.1	1.369	2.337	8.3	20.5	4 11	14 36.95	-10 21.9	1.422	2.391	8.0	20.5
4 21	14 29.79	-8 53.3	1.317	2.316	3.8	20.2	4 21	14 29.25	-9 25.3	1.373	2.371	3.6	20.2
5 1	14 20.27	-7 59.2	1.292	2.294	3.4	20.1	5 1	14 20.52	-8 27.8	1.349	2.352	3.1	20.1
5 11	14 10.88	-7 12.0	1.291	2.272	8.0	20.3	5 11	14 11.95	-7 36.7	1.351	2.333	7.6	20.3
5 21	14 2.84	-6 38.0	1.315	2.251	12.9	20.5	5 21	14 4.68	-6 58.0	1.378	2.315	12.3	20.6
5 31	13 57.12	-6 21.7	1.359	2.229	17.2	20.7	5 31	13 59.61	-6 36.4	1.425	2.297	16.4	20.8
153123	2000 <i>SW</i> ₉₈		4 28.2 179°11	2°1/29.9 18			184535	Audouze		4 28.2 218°87	4°7/ 2.4 16		
3 22	14 49.67	-21 50.0	2.118	2.907	14.1	20.4	3 22	14 49.46	-29 41.1	2.568	3.313	13.0	21.1
4 1	14 44.95	-21 48.7	2.028	2.908	11.2	20.2	4 1	14 44.64	-30 13.1	2.469	3.309	10.9	20.9
4 11	14 38.05	-21 34.3	1.961	2.909	7.8	20.0	4 11	14 37.82	-30 31.4	2.393	3.306	8.4	20.8
4 21	14 29.58	-21 7.3	1.919	2.909	4.2	19.8	4 21	14 29.50	-30 34.4	2.341	3.302	6.1	20.6
5 1	14 20.40	-20 29.7	1.905	2.909	2.2	19.7	5 1	14 20.44	-30 21.9	2.316	3.298	4.7	20.5
5 11	14 11.51	-19 45.7	1.920	2.909	5.0	19.9	5 11	14 11.55	-29 56.1	2.319	3.293	5.5	20.6
5 21	14 3.79	-19 0.5	1.961	2.908	8.6	20.1	5 21	14 3.65	-29 20.7	2.350	3.289	7.8	20.7
5 31	13 57.95	-18 19.3	2.027	2.907	11.9	20.3	5 31	13 57.43	-28 40.8	2.406	3.284	10.3	20.8
204296	2004 <i>PT</i> ₆₁		4 28.2 255°93	6°6/23.1 17			259422	2003 <i>RE</i> ₃		4 28.2 151°34	1°6/26.9 18		
3 22	14 49.97	-1 40.1	1.671	2.509	15.1	20.9	3 22	14 51.65	-12 7.0	1.976	2.791	14.0	21.7
4 1	14 45.71	-0 20.8	1.581	2.490	12.0	20.6	4 1	14 46.35	-11 32.2	1.899	2.800	10.7	21.5
4 11	14 38.87	+ 1 2.0	1.512	2.470	8.8	20.4	4 11	14 38.89	-10 49.6	1.846	2.809	7.0	21.3
4 21	14 30.04	+ 2 20.8	1.469	2.449	6.7	20.2	4 21	14 29.91	-10 2.6	1.820	2.818	3.0	21.1
5 1	14 20.19	+ 3 26.9	1.452	2.428	7.7	20.2	5 1	14 20.33	-9 15.6	1.822	2.825	2.4	21.0
5 11	14 10.53	+ 4 12.7	1.461	2.406	10.9	20.3	5 11	14 11.16	-8 33.9	1.853	2.832	6.2	21.3
5 21	14 2.14	+ 4 33.9	1.493	2.383	14.7	20.5	5 21	14 3.28	-8 1.6	1.910	2.838	9.9	21.5
5 31	13 55.93	+ 4 29.4	1.545	2.360	18.2	20.6	5 31	13 57.32	-7 41.8	1.990	2.844	13.2	21.7
58558	1997 <i>LE</i> ₄		4 28.2 253°31	2°8/ 1.4 18			500894	2013 <i>LM</i> ₉		4 28.2 291°57	1°6/27.3 17		
3 22	14 44.77	-27 32.0	2.575	3.339	12.5	18.6	3 22	14 49.42	-12 23.2	1.522	2.357	16.5	21.9
4 1	14 40.87	-26 57.6	2.472	3.332	10.2	18.4	4 1	14 45.83	-12 2.5	1.417	2.328	13.0	21.6
4 11	14 35.21	-26 6.7	2.391	3.324	7.4	18.2	4 11	14 39.31	-11 31.4	1.332	2.299	8.6	21.2
4 21	14 28.32	-24 59.9	2.337	3.317	4.6	18.0	4 21	14 30.39	-10 52.7	1.271	2.270	3.8	20.9
5 1	14 20.90	-23 40.0	2.311	3.310	2.8	17.9	5 1	14 20.05	-10 11.2	1.236	2.241	2.6	20.7
5 11	14 13.74	-22 11.8	2.314	3.302	4.4	18.0	5 11	14 9.69	-9 33.3	1.226	2.211	7.8	20.9
5 21	14 7.52	-20 41.3	2.346	3.295	7.3	18.2	5 21	14 0.64	-9 5.4	1.241	2.182	13.0	21.1
5 31	14 2.83	-19 14.5	2.405	3.287	10.2	18.3	5 31	13 54.02	-8 52.6	1.276	2.152	17.7	21.3
13061	1991 <i>FL</i> ₂		4 28.2 185°61	4°4/ 1.8 18			217579	2008 <i>BC</i> ₃₂		4 28.2 324°11	1°3/28.9 17		
3 22	14 50.85	-27 46.5	2.318	3.076	13.9	18.1	3 22	14 46.01	-18 11.9	1.367	2.202	18.0	20.2
4 1	14 45.85	-28 14.4	2.225	3.076	11.5	17.9	4 1	14 43.36	-18 12.4	1.278	2.187	14.3	19.9
4 11	14 38.66	-28 28.1	2.152	3.076	8.7	17.7	4 11	14 37.70	-17 57.8	1.209	2.173	9.7	19.6
4 21	14 29.86	-28 26.2	2.105	3.075	5.9	17.5	4 21	14 29.66	-17 29.2	1.162	2.159	4.6	19.3
5 1	14 20.29	-28 8.7	2.085	3.074	4.4	17.4	5 1	14 20.37	-16 49.7	1.139	2.146	1.7	19.1
5 11	14 10.94	-27 38.4	2.093	3.073	5.6	17.5	5 11	14 11.30	-16 5.6	1.141	2.134	6.9	19.3
5 21	14 2.72	-26 59.7	2.129	3.071	8.3	17.7	5 21	14 3.80	-15 24.4	1.166	2.122	12.1	19.6
5 31	13 56.34	-26 18.1	2.189	3.070	11.1	17.8	5 31	13 58.93	-14 52.9	1.211	2.111	16.8	19.8
341313	2007 <i>SW</i> ₁₉		4 28.2 68°04	5°1/23.3 18			177046	2003 <i>EK</i> ₅		4 28.2 91°42	6°1/22.2 17		
3 22	14 45.70	-2 43.2	2.036	2.871	12.9	20.1	3 22	14 45.25	+ 2 38.3	2.286	3.116	11.9	20.3
4 1	14 41.50	-1 20.5	1.987	2.896	9.9	19.9	4 1	14 41.09	+ 3 46.8	2.226	3.126	9.4	20.1
4 11	14 35.52	+ 0 2.4	1.962	2.920	7.0	19.8	4 11	14 35.26	+ 4 52.0	2.191	3.137	7.2	20.0
4 21	14 28.39	+ 1 19.1	1.964	2.945	5.2	19.7	4 21	14 28.31	+ 5 48.3	2.182	3.147	6.1	20.0
5 1	14 20.91	+ 2 23.5	1.993	2.969	5.9	19.8	5 1	14 20.96	+ 6 30.7	2.200	3.157	6.8	20.0
5 11	14 13.92	+ 3 11.0	2.050	2.993	8.3	20.0	5 11	14 13.96	+ 6 55.7	2.244	3.168	8.8	20.2
5 21	14 8.07	+ 3 39.3	2.131	3.017	11.1	20.2	5 21	14 7.95	+ 7 1.9	2.313	3.178	11.1	20.3
5 31	14 3.88	+ 3 48.2	2.233	3.041	13.5	20.4	5 31	14 3.45	+ 6 49.7	2.403	3.188	13.3	20.5
507804	2014 <i>CS</i> ₂₂		4 28.2 18°38	9°0/ 5.4 18			12649	Ascanios		4 28.2 277°02	1°4/30.4 18		
3 22	14 49.59	-37 34.7	1.899	2.625	17.6	20.4	3 22	14 40.00	-22 33.5	4.438	5.207	7.6	19.1
4 1	14 45.69	-38 40.0	1.819	2.630	15.4	20.2	4 1	14 36.51	-22 31.1	4.329	5.196	6.0	18.9
4 11	14 38.97	-39 23.9	1.757	2.635	12.9	20.1	4 11	14 32.05	-22 22.0	4.245	5.185	4.3	18.8
4 21	14 30.10	-39 41.8	1.716	2.641	10.6	20.0	4 21	14 26.92	-22 6.6	4.189	5.174	2.4	18.6
5 1	14 20.20	-39 31.5	1.699	2.648	9.1	19.9	5 1	14 21.48	-21 46.1	4.161	5.163	1.4	18.6
5 11	14 10.61	-38 55.4	1.705	2.655	9.2	19.9	5 11	14 16.12	-21 22.1	4.164	5.151	2.7	18.6
5 21	14 2.58	-37 59.2	1.736	2.663	10.8	20.0	5 21	14 11.23	-20 56.5	4.196	5.140	4.5	18.8
5 31	13 57.01	-36 51.5	1.789	2.671	13.1	20.2	5 31	14 7.12	-20 31.4	4.255	5.129	6.3	18.9
498659	2008 <i>SP</i> ₁₂₂		4 28.2 175°41	1°5/29.3 17			505216	2012 <i>TE</i> ₂₈₇		4 28.2 271°62	3°7/30.8 17		</

EPHEMERIDES

4 28.2

4 28.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
341776	2007 <i>WV</i> ₇		4 28.2 157°81	0°2/28.4	17		232626	2003 <i>UO</i> ₁₇₉		4 28.2 177°38	2°2/26.3	18	
3 22	14 48.41	-15 52.1	2.587	3.386	11.6	21.1	3 22	14 47.70	-9 23.1	2.291	3.110	12.2	20.8
4 1	14 43.48	-15 46.4	2.501	3.391	8.9	20.9	4 1	14 43.11	-8 50.7	2.208	3.111	9.3	20.6
4 11	14 36.85	-15 33.3	2.439	3.396	5.9	20.8	4 11	14 36.69	-8 13.4	2.149	3.112	6.1	20.4
4 21	14 29.03	-15 14.3	2.404	3.400	2.6	20.5	4 21	14 28.99	-7 34.5	2.117	3.113	3.0	20.2
5 1	14 20.69	-14 51.5	2.398	3.404	0.9	20.4	5 1	14 20.74	-6 57.8	2.113	3.113	2.8	20.2
5 11	14 12.61	-14 28.0	2.422	3.408	4.3	20.7	5 11	14 12.77	-6 27.4	2.138	3.113	5.9	20.4
5 21	14 5.45	-14 6.9	2.473	3.412	7.5	20.9	5 21	14 5.80	-6 6.5	2.190	3.113	9.2	20.6
5 31	13 59.77	-13 51.2	2.551	3.415	10.3	21.1	5 31	14 0.42	-5 57.2	2.266	3.112	12.1	20.8
98768	2000 <i>YD</i> ₇₅		4 28.2 162°61	5°9/23.3	17		156513	2002 <i>CJ</i> ₁₉₉		4 28.2 359°68	1°7/26.9	17	
3 22	14 48.98	+1 34.2	2.110	2.937	12.8	19.8	3 22	14 46.74	-12 8.4	1.676	2.510	15.3	20.2
4 1	14 44.15	+2 26.3	2.040	2.940	10.2	19.6	4 1	14 43.08	-11 37.1	1.598	2.510	11.7	19.9
4 11	14 37.38	+3 15.6	1.994	2.943	7.6	19.5	4 11	14 37.02	-10 56.8	1.542	2.509	7.7	19.7
4 21	14 29.27	+3 56.7	1.973	2.946	6.0	19.4	4 21	14 29.22	-10 11.3	1.510	2.509	3.3	19.4
5 1	14 20.62	+4 24.5	1.980	2.948	6.6	19.4	5 1	14 20.67	-9 25.9	1.505	2.509	2.6	19.4
5 11	14 12.32	+4 35.5	2.014	2.950	8.9	19.6	5 11	14 12.48	-8 46.2	1.527	2.509	6.8	19.6
5 21	14 5.14	+4 28.3	2.072	2.952	11.6	19.7	5 21	14 5.62	-8 17.3	1.573	2.510	11.0	19.9
5 31	13 59.68	+4 3.2	2.153	2.953	14.2	19.9	5 31	14 0.85	-8 2.6	1.641	2.511	14.7	20.1
189170	2002 <i>VH</i> ₆₆		4 28.2 268°58	2°0/29.5	17		476501	2008 <i>GS</i> ₈		4 28.2 166°41	4°0/1.9	18	
3 22	14 52.44	-21 11.5	1.607	2.412	17.2	21.4	3 22	14 50.59	-28 15.9	2.837	3.580	12.0	21.7
4 1	14 48.26	-21 0.9	1.493	2.383	13.8	21.1	4 1	14 45.27	-28 48.5	2.742	3.583	9.9	21.5
4 11	14 40.99	-20 32.4	1.400	2.354	9.7	20.8	4 11	14 38.11	-29 9.1	2.670	3.586	7.5	21.3
4 21	14 31.15	-19 45.4	1.330	2.323	5.0	20.5	4 21	14 29.63	-29 16.7	2.624	3.589	5.3	21.2
5 1	14 19.80	-18 42.1	1.286	2.292	2.2	20.2	5 1	14 20.52	-29 11.1	2.606	3.591	4.0	21.1
5 11	14 8.37	-17 28.7	1.269	2.259	6.7	20.4	5 11	14 11.58	-28 54.1	2.618	3.593	4.9	21.2
5 21	13 58.28	-16 13.8	1.277	2.226	12.0	20.6	5 21	14 3.56	-28 29.1	2.657	3.595	7.1	21.3
5 31	13 50.73	-15 6.7	1.307	2.192	16.8	20.8	5 31	13 57.06	-28 0.2	2.722	3.596	9.4	21.5
292599	2006 <i>TR</i> ₁₀₇		4 28.2 136°75	8°3/17.9	18		463121	2011 <i>UJ</i> ₂₈₀		4 28.2 138°45	4°6/24.9	18	
3 22	14 46.54	+16 1.5	2.833	3.626	10.8	21.0	3 22	14 51.71	-5 9.3	1.739	2.570	14.9	22.0
4 1	14 41.77	+17 15.5	2.787	3.637	9.5	21.0	4 1	14 46.60	-4 12.2	1.673	2.581	11.5	21.8
4 11	14 35.56	+18 18.8	2.765	3.649	8.5	20.9	4 11	14 39.14	-3 12.2	1.629	2.591	7.8	21.6
4 21	14 28.42	+19 6.4	2.768	3.659	8.4	20.9	4 21	14 30.07	-2 15.0	1.612	2.601	4.9	21.4
5 1	14 20.96	+19 34.3	2.797	3.670	9.0	21.0	5 1	14 20.39	-1 27.0	1.621	2.610	5.4	21.5
5 11	14 13.82	+19 40.8	2.850	3.680	10.2	21.1	5 11	14 11.20	-0 53.7	1.658	2.619	8.5	21.7
5 21	14 7.56	+19 26.2	2.925	3.689	11.6	21.2	5 21	14 3.45	-0 38.1	1.719	2.627	12.1	21.9
5 31	14 2.62	+18 52.3	3.020	3.698	12.9	21.3	5 31	13 57.79	-0 41.1	1.802	2.634	15.3	22.1
5167	Joe harms		4 28.2 313°74	5°6/30.6	18		165235	2000 <i>SC</i> ₁₁₀		4 28.2 230°20	0°2/28.4	16	
3 22	14 53.04	-24 4.7	1.627	2.421	17.5	16.1	3 22	14 50.71	-17 4.7	1.783	2.595	15.4	21.1
4 1	14 48.84	-25 19.4	1.523	2.399	14.5	15.8	4 1	14 46.22	-16 41.3	1.688	2.585	12.1	20.8
4 11	14 41.47	-26 23.9	1.440	2.378	10.9	15.6	4 11	14 39.17	-16 4.9	1.615	2.575	8.1	20.6
4 21	14 31.41	-27 13.8	1.379	2.357	7.4	15.3	4 21	14 30.21	-15 17.3	1.567	2.564	3.5	20.3
5 1	14 19.70	-27 46.0	1.344	2.337	5.6	15.1	5 1	14 20.29	-14 22.4	1.546	2.553	1.3	20.1
5 11	14 7.84	-28 0.5	1.335	2.317	7.7	15.2	5 11	14 10.62	-13 26.4	1.553	2.540	6.1	20.4
5 21	13 57.34	-28 0.7	1.351	2.298	11.6	15.4	5 21	14 2.25	-12 35.6	1.585	2.528	10.6	20.6
5 31	13 49.47	-27 53.2	1.388	2.279	15.6	15.6	5 31	13 56.05	-11 55.5	1.641	2.515	14.6	20.8
105716	2000 <i>SZ</i> ₇₅		4 28.2 112°62	0°1/28.2	18		211468	2003 <i>CS</i> ₂₁		4 28.2 354°32	7°5/20.6	18	
3 22	14 48.93	-14 24.2	2.483	3.286	11.8	19.2	3 22	14 42.03	+2 9.2	1.860	2.707	13.4	19.6
4 1	14 43.92	-14 27.7	2.402	3.295	9.1	19.0	4 1	14 39.14	+3 53.0	1.794	2.704	10.8	19.4
4 11	14 37.16	-14 25.0	2.345	3.304	6.0	18.8	4 11	14 34.26	+5 35.5	1.752	2.701	8.5	19.3
4 21	14 29.17	-14 17.4	2.315	3.312	2.6	18.6	4 21	14 28.00	+7 8.3	1.735	2.699	7.5	19.2
5 1	14 20.67	-14 6.9	2.314	3.321	1.0	18.5	5 1	14 21.17	+8 23.5	1.745	2.698	8.6	19.3
5 11	14 12.45	-13 56.2	2.343	3.329	4.5	18.8	5 11	14 14.66	+9 15.2	1.778	2.697	11.0	19.4
5 21	14 5.19	-13 48.1	2.399	3.337	7.7	19.0	5 21	14 9.26	+9 40.9	1.835	2.697	13.7	19.6
5 31	13 59.47	-13 44.9	2.480	3.345	10.6	19.2	5 31	14 5.58	+9 40.8	1.910	2.697	16.2	19.7
192677	1999 <i>RR</i> ₂₅₂		4 28.2 281°63	0°6/27.7	17		270378	2002 <i>AQ</i> ₅₃		4 28.2 94°92	4°4/24.9	17	
3 22	14 47.03	-16 16.8	2.015	2.829	13.8	20.6	3 22	14 48.51	-4 49.0	1.821	2.656	14.2	21.1
4 1	14 43.22	-15 32.8	1.900	2.800	10.8	20.3	4 1	14 44.04	-3 57.2	1.757	2.667	10.9	20.9
4 11	14 37.15	-14 34.9	1.807	2.770	7.2	20.0	4 11	14 37.42	-3 3.1	1.715	2.678	7.4	20.7
4 21	14 29.34	-13 25.7	1.741	2.739	3.1	19.7	4 21	14 29.33	-2 12.3	1.699	2.688	4.7	20.6
5 1	14 20.56	-12 9.7	1.702	2.708	1.6	19.5	5 1	14 20.68	-1 30.4	1.710	2.699	5.2	20.6
5 11	14 11.84	-10 53.4	1.692	2.676	6.0	19.8	5 11	14 12.49	-1 2.4	1.747	2.709	8.1	20.8
5 21	14 4.13	-9 43.5	1.708	2.644	10.3	19.9	5 21	14 5.59	-0 51.0	1.810	2.719	11.5	21.1
5 31	13 58.24	-8 45.9	1.747	2.612	14.2	20.1	5 31	14 0.61	-0 56.9	1.894	2.729	14.5	21.3
39461	5019 <i>T</i> ₋₃		4 28.2 166°61	4°7/22.8	18		338525	2003 <i>QX</i> ₁₀₈		4 28.2 282°22	5°4/23.8	17	
3 22	14 44.17	-0 3.2	2.704	3.529	10.4	19.3	3 22	14 46.87	-2 25.1	1.905	2.742	13.6	20.6
4 1	14 40.08	+1 2.4	2.631	3.532	8.1	19.1	4 1	14 43.00	-1 26.7	1.813	2.723	10.7	20.3
4 11	14 34.55	+2 7.4	2.583	3.535	6.0	19.0	4 11	14 36.93	-0 26.2	1.745	2.704	7.6	20.1
4 21	14 28.03	+3 7.2	2.563	3.537	4.8	18.9	4 21	14 29.22	+0 30.7	1.702	2.685	5.5	19.9
5 1	14 21.11	+3 57.3	2.572	3.539	5.4	18.9	5 1	14 20.68	+1 17.5	1.685	2.666	6.2	19.9
5 11	14 14.45	+4 34.0	2.608	3.540	7.3	19.1	5 11	14 12.33	+1 48.6	1.695	2.647	9.1	20.1
5 21	14 8.59	+4 55.5	2.670	3.542	9.6	19.2	5 21	14 5.06	+2 0.6	1.729	2.628	12.5	20.2
5 31	14 4.00	+5 1.0	2.755	3.543	11.7	19.4	5 31	13 59.64	+1 52.3	1.784	2.609	15.7	20.4
32096	Puckett		4 28.2 279°07	0°4/27.9	18		521515	2015 <i>OB</i> ₉₇		4 28.2 227°97	3°5/24.6	18	
3 22	14 47.39	-15 45.7	1										

EPHEMERIDES

4 28.2

4 28.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
100820	1998 <i>FM</i> ₁₃₉		4 28.2 12°63	3°0/29.9	18		299555	2006 <i>DX</i> ₁₄₁		4 28.3 168°64	0°4/28.5	18	
3 22	14 50.36	-20 36.9	1.348	2.171	18.9	19.3	3 22	14 53.37	-16 37.8	1.760	2.570	15.7	21.6
4 1	14 46.69	-21 4.7	1.274	2.172	15.1	19.0	4 1	14 48.15	-16 28.0	1.678	2.574	12.3	21.4
4 11	14 39.85	-21 17.3	1.218	2.174	10.6	18.8	4 11	14 40.36	-16 6.9	1.618	2.577	8.2	21.2
4 21	14 30.58	-21 13.8	1.184	2.176	5.8	18.5	4 21	14 30.69	-15 36.0	1.583	2.580	3.6	20.9
5 1	14 20.17	-20 55.6	1.175	2.179	3.1	18.4	5 1	14 20.19	-14 58.8	1.576	2.582	1.3	20.7
5 11	14 10.19	-20 27.7	1.190	2.182	6.8	18.6	5 11	14 10.08	-14 20.3	1.596	2.584	5.9	21.0
5 21	14 2.01	-19 56.8	1.229	2.186	11.6	18.9	5 21	14 1.42	-13 45.9	1.643	2.585	10.3	21.3
5 31	13 56.63	-19 30.0	1.289	2.190	15.9	19.1	5 31	13 55.00	-13 20.5	1.712	2.585	14.1	21.5
268415	2005 <i>UV</i> ₃₅₂		4 28.2 74°79	3°6/30.5	17		22200	4573 <i>P-L</i>		4 28.3 121°34	1°4/29.4	18	
3 22	14 54.23	-22 40.4	1.740	2.531	16.6	20.5	3 22	14 48.25	-19 9.3	2.497	3.288	12.1	19.2
4 1	14 48.89	-23 21.1	1.668	2.546	13.3	20.3	4 1	14 43.50	-19 17.1	2.411	3.294	9.5	19.0
4 11	14 40.87	-23 48.3	1.618	2.561	9.5	20.1	4 11	14 36.96	-19 15.9	2.349	3.300	6.5	18.8
4 21	14 30.89	-24 0.4	1.592	2.576	5.7	19.9	4 21	14 29.15	-19 6.3	2.313	3.306	3.3	18.6
5 1	14 20.09	-23 57.6	1.592	2.592	3.7	19.8	5 1	14 20.78	-18 50.0	2.306	3.311	1.5	18.5
5 11	14 9.75	-23 43.4	1.620	2.607	6.0	20.0	5 11	14 12.67	-18 29.7	2.328	3.316	4.3	18.7
5 21	14 0.99	-23 22.8	1.674	2.622	9.7	20.2	5 21	14 5.52	-18 8.9	2.378	3.322	7.4	18.9
5 31	13 54.61	-23 1.6	1.751	2.637	13.2	20.5	5 31	13 59.91	-17 50.9	2.453	3.327	10.3	19.1
348256	2004 <i>TY</i> ₁₁₃		4 28.3 212°19	0°1/28.3	18		20824	2000 <i>UX</i> ₉		4 28.3 259°50	0°1/28.2	18	
3 22	14 47.31	-17 38.7	2.290	3.093	12.7	21.2	3 22	14 50.45	-16 48.5	1.767	2.581	15.5	19.9
4 1	14 42.95	-16 58.4	2.194	3.087	9.9	21.0	4 1	14 46.20	-16 21.3	1.661	2.560	12.2	19.7
4 11	14 36.68	-16 6.1	2.122	3.080	6.6	20.8	4 11	14 39.31	-15 40.4	1.577	2.538	8.1	19.4
4 21	14 29.05	-15 4.4	2.076	3.073	2.8	20.5	4 21	14 30.35	-14 47.5	1.517	2.515	3.6	19.0
5 1	14 20.79	-13 57.2	2.060	3.066	1.1	20.4	5 1	14 20.28	-13 46.7	1.485	2.492	1.4	18.8
5 11	14 12.78	-12 49.8	2.072	3.058	5.0	20.6	5 11	14 10.30	-12 44.3	1.481	2.468	6.4	19.1
5 21	14 5.79	-11 47.5	2.112	3.050	8.6	20.8	5 21	14 1.56	-11 47.3	1.502	2.443	11.1	19.3
5 31	14 0.42	-10 55.1	2.177	3.041	11.8	21.0	5 31	13 54.99	-11 1.9	1.545	2.418	15.3	19.5
481840	2008 <i>WC</i> ₄₆		4 28.3 175°01	0°1/28.1	18		370078	2001 <i>RL</i> ₁₃₈		4 28.3 205°90	0°5/28.7	17	
3 22	14 41.72	-14 56.5	4.402	5.195	7.2	23.1	3 22	14 50.82	-17 12.0	2.207	3.006	13.3	22.1
4 1	14 37.73	-14 39.3	4.309	5.197	5.5	23.0	4 1	14 45.77	-17 2.6	2.111	3.001	10.4	21.9
4 11	14 32.81	-14 17.7	4.242	5.199	3.6	22.9	4 11	14 38.62	-16 43.4	2.039	2.995	7.0	21.6
4 21	14 27.28	-13 52.9	4.203	5.200	1.5	22.7	4 21	14 29.92	-16 15.6	1.993	2.989	3.1	21.4
5 1	14 21.48	-13 26.5	4.195	5.202	0.6	22.6	5 1	14 20.48	-15 41.7	1.975	2.982	1.1	21.2
5 11	14 15.81	-13 0.5	4.218	5.202	2.8	22.8	5 11	14 11.27	-15 5.7	1.987	2.974	5.0	21.5
5 21	14 10.62	-12 36.5	4.270	5.203	4.8	22.9	5 21	14 3.14	-14 32.1	2.025	2.966	8.8	21.7
5 31	14 6.22	-12 16.4	4.350	5.203	6.6	23.1	5 31	13 56.79	-14 5.0	2.089	2.957	12.1	21.9
202176	2004 <i>XT</i> ₄		4 28.3 259°59	1°1/27.5	18		290264	2005 <i>SD</i> ₁₂₇		4 28.3 249°66	1°6/26.6	16	
3 22	14 50.56	-11 44.5	2.019	2.836	13.7	20.5	3 22	14 44.73	-11 40.8	2.648	3.463	10.9	21.7
4 1	14 45.78	-11 41.7	1.922	2.824	10.6	20.2	4 1	14 40.72	-10 58.3	2.547	3.448	8.3	21.5
4 11	14 38.75	-11 33.2	1.849	2.811	7.0	20.0	4 11	14 35.12	-10 9.0	2.471	3.434	5.4	21.3
4 21	14 30.01	-11 20.9	1.801	2.799	3.0	19.7	4 21	14 28.37	-9 15.8	2.422	3.419	2.5	21.1
5 1	14 20.41	-11 7.6	1.781	2.786	1.8	19.6	5 1	14 21.08	-8 22.4	2.402	3.404	2.2	21.0
5 11	14 10.98	-10 56.8	1.789	2.773	5.9	19.8	5 11	14 13.94	-7 33.1	2.412	3.389	5.2	21.2
5 21	14 2.65	-10 51.8	1.824	2.760	9.9	20.1	5 21	14 7.58	-6 51.5	2.449	3.373	8.2	21.4
5 31	13 56.20	-10 55.5	1.882	2.746	13.4	20.2	5 31	14 2.56	-6 20.6	2.511	3.357	11.0	21.5
70403	1999 <i>RK</i> ₂₄₄		4 28.3 167°52	0°4/28.6	18		471906	2013 <i>CJ</i> ₅₁		4 28.3 169°82	4°6/3.3	18	
3 22	14 51.63	-17 30.8	1.984	2.787	14.4	20.7	3 22	14 48.54	-32 16.8	2.991	3.714	11.8	21.7
4 1	14 46.50	-17 11.4	1.900	2.792	11.2	20.5	4 1	14 43.64	-32 35.6	2.895	3.717	9.9	21.6
4 11	14 39.11	-16 40.4	1.838	2.796	7.5	20.3	4 11	14 37.03	-32 40.6	2.821	3.720	7.8	21.5
4 21	14 30.10	-15 59.6	1.803	2.799	3.3	20.0	4 21	14 29.18	-32 30.5	2.772	3.722	5.8	21.3
5 1	14 20.40	-15 12.5	1.796	2.802	1.1	19.9	5 1	14 20.78	-32 5.7	2.750	3.724	4.6	21.3
5 11	14 11.06	-14 24.3	1.817	2.804	5.4	20.2	5 11	14 12.58	-31 28.4	2.757	3.726	5.1	21.3
5 21	14 3.00	-13 40.2	1.865	2.806	9.4	20.4	5 21	14 5.28	-30 42.3	2.792	3.727	6.9	21.4
5 31	13 56.91	-13 4.7	1.937	2.806	12.8	20.6	5 31	13 59.45	-29 51.9	2.853	3.728	9.0	21.5
476899	2008 <i>WD</i> ₂₃		4 28.3 165°53	0°1/28.4	18		213688	2002 <i>TU</i> ₂₂₁		4 28.3 64°31	0°6/27.8	18	
3 22	14 41.75	-16 13.3	4.183	4.973	7.6	22.7	3 22	14 46.92	-24 30.9	1.020	1.858	22.6	18.9
4 1	14 37.80	-15 53.9	4.091	4.978	5.9	22.6	4 1	14 44.51	-22 12.7	0.953	1.865	17.7	18.6
4 11	14 32.88	-15 29.3	4.026	4.982	3.9	22.5	4 11	14 38.51	-19 12.6	0.905	1.871	11.7	18.3
4 21	14 27.32	-15 0.9	3.989	4.985	1.7	22.3	4 21	14 29.97	-15 39.7	0.879	1.878	4.9	17.9
5 1	14 21.48	-14 30.3	3.982	4.989	0.6	22.2	5 1	14 20.52	-11 52.9	0.879	1.885	2.4	17.8
5 11	14 15.78	-13 59.5	4.006	4.992	2.8	22.4	5 11	14 11.95	-8 16.8	0.905	1.893	9.2	18.2
5 21	14 10.60	-13 30.7	4.060	4.995	4.9	22.6	5 21	14 5.63	-5 12.3	0.954	1.900	15.4	18.5
5 31	14 6.26	-13 5.7	4.140	4.997	6.8	22.7	5 31	14 2.40	-2 50.9	1.023	1.907	20.4	18.9
500498	2012 <i>TV</i> ₂₇₀		4 28.3 9°57	0°8/27.5	17		305431	2008 <i>CB</i> ₁₅₄		4 28.3 85°73	10°0/7.1	18	
3 22	14 44.78	-15 28.8	1.997	2.817	13.7	21.4	3 22	14 58.23	-44 53.6	2.497	3.137	15.7	21.1
4 1	14 41.20	-14 40.3	1.914	2.818	10.5	21.2	4 1	14 52.22	-46 25.3	2.415	3.147	14.2	21.0
4 11	14 35.61	-13 40.4	1.854	2.818	6.9	21.0	4 11	14 43.30	-47 37.5	2.350	3.156	12.6	20.9
4 21	14 28.60	-12 32.4	1.820	2.818	2.9	20.7	4 21	14 32.08	-48 25.0	2.307	3.166	11.1	20.8
5 1	14 20.99	-11 21.6	1.814	2.819	1.7	20.7	5 1	14 19.63	-48 44.2	2.288	3.175	10.2	20.8
5 11	14 13.70	-10 14.2	1.835	2.820	5.7	20.9	5 11	14 7.32	-48 35.1	2.293	3.185	10.1	20.8
5 21	14 7.53	-9 15.6	1.883	2.821	9.5	21.2	5 21	13 56.44	-48 1.9	2.321	3.194	10.8	20.8
5 31	14 3.12	-8 30.3	1.955	2.821	12.9	21.4	5 31	13 48.01	-47 11.2	2.373	3.203	12.1	20.9
269073	2007 <i>GP</i> ₆₁		4 28.3 67°31	1°8/29.5	17		197874	2004 <i>RG</i> ₁₁		4 28.3 223°44			

EPHEMERIDES

4 28.3

4 28.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
363446	2003 <i>SF</i> ₁₄₉		4 28.3 244 ^o 12	0 ^o 3/28.5	17		230853	2004 <i>RZ</i> ₈₃		4 28.3 219 ^o 91	7 ^o 6/5.2	18	
3 22	14 51.37	-16 45.1	1.847	2.657	15.1	22.2	3 22	14 53.22	-38 54.9	2.443	3.132	14.9	21.7
4 1	14 46.73	-16 31.4	1.746	2.642	11.8	21.9	4 1	14 48.01	-39 30.7	2.336	3.123	13.1	21.5
4 11	14 39.56	-16 6.1	1.667	2.626	7.9	21.7	4 11	14 40.32	-39 47.2	2.249	3.113	11.0	21.3
4 21	14 30.43	-15 30.4	1.613	2.610	3.5	21.4	4 21	14 30.74	-39 40.8	2.185	3.103	9.0	21.2
5 1	14 20.28	-14 47.5	1.586	2.593	1.2	21.1	5 1	14 20.19	-39 9.9	2.146	3.092	7.7	21.1
5 11	14 10.28	-14 2.8	1.588	2.575	6.0	21.4	5 11	14 9.83	-38 16.3	2.133	3.080	7.8	21.0
5 21	14 1.52	-13 21.7	1.615	2.557	10.4	21.6	5 21	14 0.71	-37 5.0	2.146	3.068	9.3	21.1
5 31	13 54.86	-12 49.7	1.666	2.539	14.4	21.8	5 31	13 53.67	-35 43.5	2.185	3.055	11.5	21.2
299961	2006 <i>TU</i> ₇₈		4 28.3 213 ^o 26	1 ^o 5/29.6	18		505143	2012 <i>LX</i> ₁₁		4 28.3 295 ^o 13	6 ^o 4/23.1	17	
3 22	14 48.87	-19 38.6	2.591	3.377	11.9	20.8	3 22	14 46.10	-2 11.9	1.663	2.508	14.8	21.3
4 1	14 44.01	-19 47.7	2.493	3.372	9.4	20.6	4 1	14 42.80	-0 55.3	1.570	2.484	11.7	21.1
4 11	14 37.34	-19 47.8	2.418	3.367	6.5	20.4	4 11	14 37.03	+0 25.5	1.500	2.460	8.5	20.8
4 21	14 29.35	-19 39.4	2.371	3.362	3.3	20.2	4 21	14 29.37	+1 42.9	1.454	2.436	6.5	20.6
5 1	14 20.73	-19 23.8	2.352	3.357	1.6	20.1	5 1	14 20.71	+2 48.6	1.434	2.412	7.5	20.6
5 11	14 12.27	-19 3.6	2.363	3.351	4.3	20.3	5 11	14 12.19	+3 34.8	1.439	2.388	10.7	20.8
5 21	14 4.72	-18 42.0	2.401	3.345	7.4	20.5	5 21	14 4.88	+3 57.1	1.467	2.364	14.5	20.9
5 31	13 58.67	-18 22.7	2.466	3.338	10.3	20.6	5 31	13 59.62	+3 53.8	1.514	2.340	18.0	21.1
374383	2005 <i>UC</i> ₄₄₈		4 28.3 122 ^o 50	2 ^o 3/30.2	17		87931	2000 <i>ST</i> ₃₃₃		4 28.3 247 ^o 69	7 ^o 4/21.3	18	
3 22	14 51.41	-22 48.7	2.198	2.978	13.9	21.9	3 22	14 47.74	+4 5.4	2.066	2.895	13.0	20.0
4 1	14 46.09	-22 44.3	2.121	2.995	11.0	21.7	4 1	14 43.44	+5 25.6	1.983	2.881	10.6	19.9
4 11	14 38.70	-22 26.5	2.068	3.012	7.7	21.5	4 11	14 37.11	+6 43.4	1.925	2.866	8.4	19.7
4 21	14 29.89	-21 55.8	2.040	3.028	4.3	21.3	4 21	14 29.29	+7 51.8	1.892	2.851	7.4	19.6
5 1	14 20.55	-21 14.8	2.040	3.043	2.3	21.2	5 1	14 20.77	+8 43.8	1.885	2.835	8.3	19.6
5 11	14 11.62	-20 27.5	2.070	3.058	4.8	21.4	5 11	14 12.47	+9 14.5	1.905	2.820	10.6	19.7
5 21	14 3.92	-19 39.2	2.127	3.072	8.1	21.6	5 21	14 5.22	+9 21.8	1.947	2.803	13.3	19.9
5 31	13 58.08	-18 54.8	2.209	3.086	11.2	21.9	5 31	13 59.69	+9 5.8	2.010	2.787	15.8	20.0
418373	2008 <i>GX</i> ₁₃₈		4 28.3 311 ^o 05	0 ^o 9/26.9	17		255624	2006 <i>PA</i> ₂₈		4 28.3 239 ^o 01	6 ^o 4/23.5	17	
3 22	14 39.43	-10 32.4	4.204	5.013	7.3	21.5	3 22	14 52.11	+1 21.7	1.917	2.742	14.0	20.8
4 1	14 36.08	-10 15.6	4.109	5.008	5.5	21.4	4 1	14 47.00	+2 12.8	1.829	2.728	11.2	20.6
4 11	14 31.79	-9 56.1	4.040	5.002	3.6	21.3	4 11	14 39.56	+3 2.1	1.764	2.714	8.3	20.4
4 21	14 26.88	-9 35.3	3.999	4.997	1.6	21.1	4 21	14 30.38	+3 43.4	1.724	2.699	6.5	20.2
5 1	14 21.68	-9 14.9	3.989	4.991	1.3	21.1	5 1	14 20.35	+4 10.6	1.712	2.683	7.2	20.2
5 11	14 16.59	-8 56.9	4.008	4.986	3.2	21.2	5 11	14 10.55	+4 19.3	1.726	2.666	9.9	20.4
5 21	14 11.96	-8 42.7	4.056	4.981	5.2	21.4	5 21	14 1.93	+4 7.3	1.765	2.649	13.1	20.5
5 31	14 8.11	-8 33.9	4.129	4.975	7.1	21.5	5 31	13 55.27	+3 35.0	1.825	2.632	16.1	20.7
6150	Neukum		4 28.3 186 ^o 94	1 ^o 4/29.7	18		501061	2013 <i>SX</i> ₂₇		4 28.3 220 ^o 73	8 ^o 3/2.9	17	
3 22	14 46.48	-20 38.7	2.810	3.594	11.1	18.6	3 22	15 2.90	-35 15.3	2.264	2.963	15.7	21.8
4 1	14 41.99	-20 31.0	2.716	3.593	8.8	18.4	4 1	14 56.00	-36 51.6	2.159	2.955	13.7	21.6
4 11	14 35.90	-20 13.6	2.645	3.593	6.0	18.3	4 11	14 45.97	-38 13.7	2.075	2.947	11.5	21.4
4 21	14 28.70	-19 47.3	2.600	3.592	3.1	18.1	4 21	14 33.35	-39 15.5	2.016	2.938	9.4	21.3
5 1	14 20.99	-19 14.2	2.585	3.590	1.4	17.9	5 1	14 19.16	-39 52.2	1.984	2.928	8.4	21.2
5 11	14 13.48	-18 37.1	2.600	3.588	3.9	18.1	5 11	14 4.80	-40 2.7	1.979	2.918	8.9	21.2
5 21	14 6.80	-17 59.8	2.643	3.586	6.8	18.3	5 21	13 51.70	-39 50.3	2.001	2.907	10.7	21.3
5 31	14 1.48	-17 25.7	2.711	3.584	9.5	18.5	5 31	13 41.05	-39 21.9	2.048	2.896	13.1	21.4
62328	2000 <i>SM</i> ₁₂₄		4 28.3 266 ^o 86	1 ^o 6/27.1	18		351529	2005 <i>SJ</i> ₁₄₁		4 28.3 227 ^o 75	3 ^o 7/30.9	16	
3 22	14 47.95	-12 4.7	1.876	2.702	14.2	19.6	3 22	14 52.31	-24 55.4	2.552	3.313	12.7	21.1
4 1	14 43.89	-11 37.0	1.785	2.691	11.0	19.4	4 1	14 46.85	-25 39.6	2.453	3.309	10.4	20.9
4 11	14 37.55	-11 1.1	1.716	2.681	7.2	19.1	4 11	14 39.33	-26 13.5	2.376	3.305	7.7	20.7
4 21	14 29.52	-10 20.0	1.673	2.671	3.2	18.9	4 21	14 30.26	-26 35.7	2.326	3.301	5.1	20.5
5 1	14 20.66	-9 38.1	1.657	2.660	2.4	18.8	5 1	14 20.40	-26 45.4	2.305	3.297	3.7	20.5
5 11	14 12.04	-9 0.8	1.668	2.650	6.4	19.0	5 11	14 10.64	-26 44.3	2.312	3.292	5.1	20.5
5 21	14 4.59	-8 32.6	1.705	2.639	10.5	19.2	5 21	14 1.84	-26 35.2	2.348	3.288	7.8	20.7
5 31	13 59.07	-8 17.0	1.764	2.628	14.1	19.4	5 31	13 54.72	-26 22.2	2.409	3.283	10.5	20.9
59790	1999 <i>NR</i> ₅₆		4 28.3 271 ^o 69	3 ^o 8/1.9	18		265032	2003 <i>OU</i>		4 28.3 241 ^o 02	2 ^o 9/24.8	18	
3 22	14 46.13	-28 26.8	2.474	3.233	13.1	19.0	3 22	14 53.86	-8 56.9	2.887	3.682	10.6	22.3
4 1	14 42.18	-28 24.2	2.365	3.218	10.8	18.8	4 1	14 47.62	-7 29.1	2.764	3.655	8.2	22.1
4 11	14 36.28	-28 6.0	2.277	3.203	8.2	18.6	4 11	14 39.64	-5 52.7	2.670	3.627	5.5	21.9
4 21	14 28.94	-27 31.5	2.215	3.188	5.4	18.4	4 21	14 30.35	-4 11.6	2.607	3.597	3.2	21.7
5 1	14 20.88	-26 42.0	2.180	3.172	3.8	18.3	5 1	14 20.38	-2 31.6	2.577	3.566	3.6	21.7
5 11	14 12.99	-25 40.9	2.173	3.157	5.0	18.3	5 11	14 10.49	-0 58.5	2.579	3.533	6.3	21.8
5 21	14 6.06	-24 33.4	2.194	3.141	7.8	18.4	5 21	14 1.36	+0 22.6	2.613	3.498	9.3	21.9
5 31	14 0.76	-23 25.4	2.240	3.126	10.7	18.6	5 31	13 53.60	+1 28.2	2.672	3.462	12.0	22.1
207693	2007 <i>RC</i> ₃₄		4 28.3 219 ^o 95	0 ^o 7/28.9	18		385347	2002 <i>OA</i> ₂₉		4 28.3 190 ^o 17	4 ^o 1/2.2	18	
3 22	14 47.42	-18 28.7	2.409	3.206	12.4	20.9	3 22	14 49.39	-28 57.9	2.524	3.274	13.1	21.9
4 1	14 43.00	-18 11.3	2.311	3.199	9.7	20.7	4 1	14 44.58	-29 8.7	2.427	3.273	10.8	21.7
4 11	14 36.72	-17 43.5	2.237	3.192	6.5	20.5	4 11	14 37.79	-29 4.6	2.352	3.271	8.2	21.5
4 21	14 29.09	-17 6.6	2.189	3.184	3.0	20.2	4 21	14 29.57	-28 44.8	2.301	3.269	5.6	21.3
5 1	14 20.84	-16 23.4	2.170	3.177	1.1	20.1	5 1	14 20.69	-28 10.0	2.279	3.267	4.1	21.2
5 11	14 12.78	-15 37.9	2.180	3.168	4.5	20.3	5 11	14 12.03	-27 23.3	2.284	3.264	5.1	21.3
5 21	14 5.68	-14 54.4	2.218	3.160	8.0	20.5	5 21	14 4.41	-26 29.4	2.318	3.261	7.6	21.4
5 31	14 0.15	-14 17.2	2.280	3.151	11.1	20.7	5 31	13 58.47	-25 33.7	2.377	3.258	10.4	21.6

EPHEMERIDES

4 28.3

4 28.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
428891	2008 <i>UK</i> ₃₃₉	4 28.3 217°46'		0°1'/28.2 17			154261	2002 <i>RZ</i> ₈	4 28.3 222°92'		1°2'/27.3 18		
3 22	14 47.39	-16 29.8	2.185	2.993	13.1	21.6	3 22	14 50.18	-13 27.4	2.085	2.897	13.5	21.6
4 1	14 43.13	-16 2.9	2.092	2.988	10.2	21.4	4 1	14 45.41	-12 53.4	1.988	2.887	10.4	21.4
4 11	14 36.88	-15 25.5	2.023	2.983	6.7	21.2	4 11	14 38.47	-12 10.0	1.914	2.876	6.8	21.1
4 21	14 29.20	-14 39.9	1.980	2.978	2.9	21.0	4 21	14 29.93	-11 20.1	1.866	2.864	2.9	20.8
5 1	14 20.86	-13 49.5	1.966	2.972	1.1	20.8	5 1	14 20.61	-10 28.0	1.847	2.852	2.0	20.7
5 11	14 12.77	-12 59.2	1.980	2.966	5.1	21.1	5 11	14 11.50	-9 38.7	1.857	2.838	5.9	21.0
5 21	14 5.73	-12 13.8	2.021	2.960	8.8	21.3	5 21	14 3.49	-8 57.3	1.893	2.825	9.8	21.2
5 31	14 0.38	-11 37.4	2.086	2.954	12.1	21.5	5 31	13 57.29	-8 27.6	1.953	2.810	13.3	21.4
176514	2001 <i>YZ</i> ₆₅	4 28.3 127°41'		0°9'/27.4 18			32570	Peruindiana	4 28.3 96°52'		2°7'/30.1 18		
3 22	14 46.53	-12 58.0	2.627	3.436	11.1	20.6	3 22	14 55.22	-21 28.4	1.920	2.706	15.4	17.7
4 1	14 41.98	-12 33.9	2.549	3.446	8.5	20.4	4 1	14 49.31	-21 54.2	1.851	2.728	12.2	17.5
4 11	14 35.86	-12 3.8	2.495	3.457	5.5	20.2	4 11	14 40.98	-22 7.5	1.804	2.749	8.6	17.4
4 21	14 28.68	-11 29.9	2.469	3.467	2.3	20.0	4 21	14 30.95	-22 7.7	1.782	2.770	4.8	17.2
5 1	14 21.08	-10 55.3	2.472	3.476	1.5	20.0	5 1	14 20.27	-21 56.1	1.788	2.790	2.7	17.1
5 11	14 13.76	-10 23.3	2.504	3.486	4.6	20.2	5 11	14 10.09	-21 36.1	1.823	2.810	5.4	17.3
5 21	14 7.33	-9 57.1	2.564	3.495	7.6	20.4	5 21	14 1.37	-21 12.6	1.884	2.830	9.0	17.5
5 31	14 2.29	-9 39.0	2.648	3.503	10.3	20.6	5 31	13 54.85	-20 50.5	1.970	2.849	12.2	17.8
437545	2013 <i>YN</i> ₁₂₅	4 28.3 23°65'		9°8'/19.9 16			637	Chrysothemis	4 28.3 39°98'		0°1'/28.4 18		
3 22	14 45.73	+10 44.9	1.848	2.678	14.2	20.6	3 22	14 45.81	-16 15.2	2.053	2.868	13.6	16.1
4 1	14 41.92	+12 4.9	1.797	2.683	12.1	20.4	4 1	14 41.93	-15 58.9	1.977	2.877	10.5	15.9
4 11	14 36.06	+13 14.0	1.768	2.689	10.4	20.3	4 11	14 36.08	-15 33.0	1.924	2.885	6.9	15.7
4 21	14 28.81	+14 4.7	1.762	2.696	9.8	20.3	4 21	14 28.85	-14 59.5	1.897	2.895	3.0	15.5
5 1	14 21.05	+14 30.8	1.781	2.703	10.7	20.4	5 1	14 21.06	-14 22.0	1.897	2.904	1.1	15.4
5 11	14 13.73	+14 29.5	1.823	2.710	12.5	20.5	5 11	14 13.61	-13 44.8	1.925	2.914	5.0	15.7
5 21	14 7.65	+14 1.3	1.886	2.718	14.6	20.7	5 21	14 7.30	-13 12.1	1.980	2.924	8.7	15.9
5 31	14 3.40	+13 8.9	1.968	2.726	16.7	20.8	5 31	14 2.72	-12 47.8	2.058	2.934	11.9	16.1
173106	2007 <i>VN</i> ₇₉	4 28.3 80°09'		1°1'/27.6 18			66369	1999 <i>JA</i> ₁₀₃	4 28.3 253°07'		4°7'/25.2 17		
3 22	14 52.24	-13 22.5	1.507	2.335	17.0	20.7	3 22	14 51.00	-5 0.5	1.645	2.481	15.4	19.7
4 1	14 47.38	-13 2.8	1.447	2.354	13.0	20.5	4 1	14 46.56	-4 16.8	1.558	2.469	12.0	19.5
4 11	14 39.84	-12 33.5	1.407	2.372	8.5	20.3	4 11	14 39.51	-3 29.5	1.492	2.456	8.3	19.2
4 21	14 30.47	-11 57.9	1.392	2.391	3.6	20.1	4 21	14 30.46	-2 44.0	1.451	2.442	5.1	19.0
5 1	14 20.44	-11 21.0	1.404	2.409	2.0	20.0	5 1	14 20.43	-2 6.9	1.437	2.428	5.5	19.0
5 11	14 11.04	-10 48.4	1.441	2.427	6.7	20.3	5 11	14 10.63	-1 43.8	1.449	2.414	9.1	19.1
5 21	14 3.34	-10 25.0	1.504	2.445	11.2	20.6	5 21	14 2.18	-1 38.6	1.484	2.400	13.1	19.3
5 31	13 58.04	-10 14.2	1.589	2.463	14.9	20.9	5 31	13 55.96	-1 52.7	1.541	2.385	16.8	19.5
355199	2006 <i>XW</i> ₃₀	4 28.3 159°32'		4°0'/3.3 18			489553	2007 <i>RF</i> ₂₉₇	4 28.3 221°98'		1°3'/29.3 17		
3 22	14 48.04	-32 15.1	3.335	4.053	10.8	22.5	3 22	14 50.02	-18 31.9	2.344	3.138	12.8	22.0
4 1	14 43.04	-32 22.1	3.240	4.060	9.0	22.4	4 1	14 45.11	-18 40.7	2.247	3.132	10.1	21.8
4 11	14 36.53	-32 16.0	3.168	4.067	7.1	22.3	4 11	14 38.20	-18 40.4	2.173	3.125	6.9	21.6
4 21	14 28.97	-31 56.2	3.122	4.073	5.2	22.2	4 21	14 29.80	-18 31.5	2.125	3.118	3.4	21.3
5 1	14 20.98	-31 23.3	3.103	4.079	4.0	22.1	5 1	14 20.69	-18 15.6	2.106	3.111	1.4	21.2
5 11	14 13.21	-30 39.8	3.114	4.085	4.5	22.1	5 11	14 11.74	-17 55.5	2.116	3.104	4.6	21.4
5 21	14 6.26	-29 49.0	3.154	4.089	6.2	22.2	5 21	14 3.80	-17 34.9	2.153	3.097	8.1	21.6
5 31	14 0.62	-28 55.1	3.220	4.094	8.1	22.4	5 31	13 57.52	-17 17.5	2.215	3.089	11.3	21.8
276951	2004 <i>TB</i> ₂₈₆	4 28.3 224°67'		0°8'/28.9 17			410317	2007 <i>TH</i> ₃₃₄	4 28.3 210°13'		3°1'/25.8 16		
3 22	14 48.90	-17 45.8	1.973	2.780	14.3	21.5	3 22	14 49.88	-9 26.0	1.820	2.647	14.5	21.8
4 1	14 44.54	-17 39.9	1.884	2.778	11.2	21.3	4 1	14 45.37	-8 29.9	1.734	2.642	11.2	21.6
4 11	14 37.94	-17 23.1	1.818	2.775	7.5	21.1	4 11	14 38.52	-7 25.7	1.672	2.636	7.4	21.4
4 21	14 29.70	-16 56.6	1.776	2.772	3.5	20.8	4 21	14 29.97	-6 18.5	1.635	2.630	3.8	21.1
5 1	14 20.69	-16 23.1	1.763	2.769	1.2	20.6	5 1	14 20.63	-5 14.4	1.626	2.623	3.9	21.1
5 11	14 11.96	-15 47.1	1.777	2.766	5.3	20.9	5 11	14 11.60	-4 20.1	1.644	2.616	7.6	21.3
5 21	14 4.41	-15 13.4	1.818	2.763	9.2	21.1	5 21	14 3.83	-3 40.5	1.688	2.608	11.5	21.5
5 31	13 58.78	-14 46.5	1.882	2.760	12.8	21.3	5 31	13 58.07	-3 18.7	1.754	2.599	15.1	21.7
76210	2000 <i>ET</i> ₆₁	4 28.3 202°24'		0°2'/28.4 18			396229	2014 <i>BP</i> ₅	4 28.3 46°11'		7°5'/3.7 16		
3 22	14 47.17	-16 44.7	2.310	3.115	12.6	19.4	3 22	14 53.92	-33 2.8	1.877	2.620	17.2	20.7
4 1	14 42.84	-16 24.3	2.219	3.113	9.8	19.2	4 1	14 48.80	-34 12.8	1.811	2.642	14.6	20.5
4 11	14 36.63	-15 54.3	2.152	3.110	6.5	19.0	4 11	14 40.92	-35 3.5	1.765	2.664	11.7	20.4
4 21	14 29.08	-15 16.5	2.111	3.107	2.8	18.8	4 21	14 31.02	-35 31.1	1.742	2.686	9.1	20.3
5 1	14 20.93	-14 34.0	2.098	3.105	1.0	18.6	5 1	14 20.25	-35 34.0	1.743	2.709	7.6	20.2
5 11	14 13.02	-13 51.1	2.114	3.101	4.8	18.9	5 11	14 9.96	-35 14.8	1.770	2.732	8.0	20.3
5 21	14 6.11	-13 11.9	2.157	3.098	8.3	19.1	5 21	14 1.28	-34 39.2	1.822	2.756	10.0	20.5
5 31	14 0.80	-12 40.3	2.225	3.094	11.4	19.3	5 31	13 55.05	-33 55.0	1.898	2.779	12.5	20.7
374466	2005 <i>XD</i> ₇₁	4 28.3 65°22'		5°0'/25.4 17			467771	2009 <i>VS</i> ₆₅	4 28.3 237°06'		0°5'/28.7 17		
3 22	14 52.16	-1 38.8	1.722	2.555	15.0	20.6	3 22	14 50.75	-17 0.1	2.180	2.981	13.4	22.1
4 1	14 47.02	-1 18.7	1.657	2.563	11.7	20.4	4 1	14 45.87	-16 53.7	2.077	2.967	10.5	21.9
4 11	14 39.49	-1 0.8	1.613	2.572	8.2	20.2	4 11	14 38.82	-16 37.7	1.996	2.953	7.1	21.7
4 21	14 30.31	-0 49.7	1.595	2.582	5.4	20.0	4 21	14 30.12	-16 12.9	1.942	2.938	3.2	21.4
5 1	14 20.49	-0 49.7	1.603	2.591	5.6	20.0	5 1	14 20.58	-15 41.9	1.916	2.922	1.1	21.2
5 11	14 11.15	-1 3.9	1.638	2.600	8.6	20.2	5 11	14 11.17	-15 8.5	1.919	2.906	5.1	21.5
5 21	14 3.24	-1 33.0	1.698	2.609	12.0	20.5	5 21	14 2.80	-14 37.1	1.949	2.890	9.0	21.7
5 31	13 57.46	-2 16.7	1.779	2.619	15.1	20.7	5 31	13 56.23	-14 11.9	2.003	2.873	12.5	21.8
143407	2003 <i>BJ</i> ₄₅	4 28.3 84°49'		2°9'/25.4 17			397122	2005 <i>WA</i> ₆	4 28.3 41°27'		3°8'/2.4 17		
3 22	14 45.84	-8 5.0	2.252	3.078	12.2	20.8							

EPHEMERIDES

4 28.3

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
105433	2000 QN ₁₇₆		4 28.3 178°81	4.1/ 2.1	18		134600	1999 TO ₁₄₉		4 28.3 247°63	0.2/28.4	17	
3 22	14 48.73	-28 20.0	2.503	3.258	13.1	19.8	3 22	14 49.04	-17 49.4	1.780	2.594	15.4	20.6
4 1	14 44.11	-28 40.1	2.409	3.258	10.8	19.7	4 1	14 45.00	-17 15.2	1.683	2.581	12.1	20.3
4 11	14 37.53	-28 46.2	2.337	3.258	8.2	19.5	4 11	14 38.46	-16 26.2	1.608	2.568	8.1	20.0
4 21	14 29.52	-28 37.4	2.290	3.259	5.6	19.3	4 21	14 30.03	-15 24.6	1.557	2.554	3.5	19.7
5 1	14 20.84	-28 14.2	2.270	3.259	4.1	19.2	5 1	14 20.66	-14 15.0	1.534	2.540	1.3	19.5
5 11	14 12.38	-27 39.2	2.279	3.258	5.2	19.3	5 11	14 11.51	-13 4.1	1.538	2.526	6.1	19.8
5 21	14 4.93	-26 56.7	2.315	3.258	7.6	19.4	5 21	14 3.63	-11 59.1	1.568	2.511	10.6	20.0
5 31	13 59.15	-26 11.8	2.376	3.258	10.3	19.6	5 31	13 57.88	-11 6.2	1.621	2.496	14.6	20.3
248384	2005 SM ₁₁		4 28.3 226°58	0.2/28.0	18		65594	2396 T ₋₃		4 28.3 323°95	0.6/29.9	18	
3 22	14 46.12	-14 57.6	2.850	3.651	10.5	21.9	3 22	14 48.55	-21 2.6	1.561	2.375	17.2	19.2
4 1	14 41.72	-14 39.2	2.749	3.642	8.2	21.7	4 1	14 45.02	-21 15.3	1.474	2.368	13.7	18.9
4 11	14 35.77	-14 13.8	2.673	3.632	5.4	21.5	4 11	14 38.68	-21 13.1	1.407	2.361	9.6	18.6
4 21	14 28.72	-13 43.2	2.624	3.621	2.3	21.2	4 21	14 30.18	-20 55.6	1.363	2.354	5.2	18.4
5 1	14 21.14	-13 9.7	2.604	3.611	1.0	21.1	5 1	14 20.60	-20 24.7	1.344	2.348	2.6	18.2
5 11	14 13.72	-12 36.7	2.615	3.600	4.2	21.3	5 11	14 11.28	-19 45.4	1.351	2.342	6.2	18.4
5 21	14 7.05	-12 7.1	2.653	3.588	7.2	21.5	5 21	14 3.46	-19 4.2	1.382	2.337	10.8	18.6
5 31	14 1.67	-11 43.9	2.717	3.576	9.9	21.7	5 31	13 58.06	-18 27.9	1.436	2.332	14.9	18.9
188082	2001 XV ₉₉		4 28.3 237°28	5.8/23.5	18		83772	2001 TW ₁₇₀		4 28.3 201°17	3.8/24.1	18	
3 22	14 50.26	+ 1 5.7	2.162	2.985	12.7	20.2	3 22	14 45.48	- 3 32.5	2.668	3.490	10.6	19.9
4 1	14 45.33	+ 1 55.9	2.073	2.971	10.1	20.0	4 1	14 41.21	- 2 36.7	2.584	3.486	8.2	19.7
4 11	14 38.35	+ 2 44.6	2.008	2.957	7.5	19.8	4 11	14 35.42	- 1 39.2	2.525	3.483	5.7	19.6
4 21	14 29.89	+ 3 26.4	1.969	2.943	5.9	19.7	4 21	14 28.56	- 0 44.2	2.494	3.478	3.9	19.5
5 1	14 20.71	+ 3 56.0	1.958	2.928	6.5	19.7	5 1	14 21.24	+ 0 3.9	2.492	3.474	4.4	19.5
5 11	14 11.73	+ 4 9.3	1.974	2.912	8.9	19.8	5 11	14 14.14	+ 0 41.5	2.518	3.468	6.6	19.6
5 21	14 3.79	+ 4 4.3	2.015	2.896	11.8	19.9	5 21	14 7.84	+ 1 5.9	2.571	3.463	9.2	19.8
5 31	13 57.54	+ 3 40.9	2.078	2.879	14.6	20.1	5 31	14 2.86	+ 1 15.9	2.648	3.457	11.6	19.9
246826	2009 TX ₄₅		4 28.3 314°19	2.4/29.6	17		275682	2000 ST ₄₉		4 28.3 252°68	2.5/23.4	18	
3 22	14 53.14	-18 44.9	1.696	2.503	16.3	20.2	3 22	14 37.96	- 2 45.1	4.679	5.497	6.4	20.6
4 1	14 48.38	-19 25.7	1.606	2.497	13.0	20.0	4 1	14 34.89	- 1 51.3	4.588	5.488	4.9	20.5
4 11	14 40.83	-19 57.0	1.538	2.492	9.1	19.7	4 11	14 31.02	- 0 56.8	4.524	5.479	3.5	20.4
4 21	14 31.09	-20 17.6	1.495	2.486	4.8	19.5	4 21	14 26.61	- 0 4.0	4.490	5.470	2.6	20.3
5 1	14 20.24	-20 27.6	1.477	2.481	2.5	19.3	5 1	14 21.97	+ 0 44.8	4.486	5.461	2.9	20.3
5 11	14 9.58	-20 29.4	1.487	2.476	6.1	19.5	5 11	14 17.42	+ 1 27.3	4.511	5.452	4.2	20.4
5 21	14 0.33	-20 27.0	1.522	2.472	10.4	19.7	5 21	14 13.27	+ 2 1.9	4.564	5.443	5.8	20.5
5 31	13 53.47	-20 25.2	1.581	2.467	14.3	20.0	5 31	14 9.79	+ 2 27.5	4.642	5.433	7.2	20.6
309060	2006 UM ₂₈₆		4 28.3 270°77	0.1/28.2	18		295064	2008 EP ₁₂₀		4 28.3 235°61	1.5/27.1	18	
3 22	14 46.26	-16 29.4	2.407	3.212	12.1	22.0	3 22	14 49.57	-12 47.0	2.021	2.838	13.7	20.9
4 1	14 42.23	-16 0.6	2.295	3.189	9.5	21.7	4 1	14 45.04	-12 11.7	1.924	2.825	10.6	20.6
4 11	14 36.34	-15 21.4	2.207	3.167	6.3	21.5	4 11	14 38.30	-11 27.2	1.849	2.812	7.0	20.4
4 21	14 29.04	-14 33.9	2.146	3.143	2.7	21.2	4 21	14 29.91	-10 36.7	1.800	2.798	3.0	20.1
5 1	14 21.02	-13 41.2	2.114	3.120	1.1	21.1	5 1	14 20.71	- 9 44.4	1.780	2.784	2.2	20.0
5 11	14 13.10	-12 47.8	2.110	3.096	4.9	21.3	5 11	14 11.70	- 8 55.9	1.788	2.769	6.2	20.3
5 21	14 6.04	-11 58.3	2.134	3.072	8.5	21.5	5 21	14 3.79	- 8 16.1	1.823	2.754	10.2	20.5
5 31	14 0.50	-11 17.1	2.182	3.048	11.8	21.6	5 31	13 57.73	- 7 48.9	1.880	2.738	13.7	20.6
21688	1999 RK ₃₇		4 28.3 216°46	21.1/ 9.6	18		465766	2009 WU ₁₈₁		4 28.3 237°90	0.6/27.8	18	
3 22	15 11.15	-54 1.0	1.432	2.055	26.2	17.3	3 22	14 48.77	-15 34.4	2.278	3.083	12.7	21.9
4 1	15 7.04	-57 3.7	1.358	2.052	24.9	17.2	4 1	14 44.21	-14 57.0	2.172	3.067	9.9	21.7
4 11	14 56.39	-59 39.8	1.296	2.047	23.5	17.0	4 11	14 37.66	-14 8.8	2.090	3.051	6.5	21.4
4 21	14 39.07	-61 33.4	1.249	2.043	22.3	16.9	4 21	14 29.61	-13 12.4	2.035	3.033	2.8	21.1
5 1	14 16.93	-62 28.6	1.216	2.037	21.4	16.8	5 1	14 20.83	-12 11.6	2.009	3.015	1.4	21.0
5 11	13 54.07	-62 18.5	1.200	2.032	21.1	16.8	5 11	14 12.20	-11 11.5	2.012	2.996	5.3	21.2
5 21	13 35.04	-61 8.6	1.199	2.026	21.6	16.8	5 21	14 4.54	-10 17.3	2.043	2.977	9.1	21.4
5 31	13 22.87	-59 15.6	1.213	2.019	22.6	16.8	5 31	13 58.53	- 9 33.4	2.098	2.957	12.4	21.6
344974	2004 XX ₉₂		4 28.3 204°53	1.3/27.3	18		82649	2001 PX ₁₁		4 28.3 157°78	2.2/26.5	18	
3 22	14 50.41	-11 6.2	2.143	2.958	13.1	20.8	3 22	14 48.79	- 8 4.9	2.436	3.251	11.7	19.8
4 1	14 45.46	-10 57.0	2.055	2.955	10.1	20.6	4 1	14 43.88	- 7 47.6	2.354	3.255	8.9	19.6
4 11	14 38.44	-10 42.6	1.990	2.952	6.6	20.3	4 11	14 37.22	- 7 27.4	2.297	3.259	5.9	19.4
4 21	14 29.92	-10 25.0	1.951	2.949	2.9	20.1	4 21	14 29.35	- 7 6.8	2.267	3.262	2.9	19.2
5 1	14 20.71	-10 7.4	1.941	2.945	2.0	20.0	5 1	14 20.96	- 6 49.1	2.266	3.265	2.7	19.2
5 11	14 11.74	- 9 53.3	1.960	2.942	5.7	20.3	5 11	14 12.84	- 6 37.1	2.294	3.268	5.6	19.4
5 21	14 3.86	- 9 45.6	2.005	2.938	9.3	20.5	5 21	14 5.68	- 6 33.2	2.349	3.271	8.7	19.6
5 31	13 57.74	- 9 47.0	2.075	2.933	12.6	20.7	5 31	14 0.03	- 6 39.1	2.429	3.273	11.4	19.8
33076	1997 WM ₂₄		4 28.3 209°08	0.4/28.6	18		290020	2005 QT ₁₈		4 28.3 226°61	0.3/28.5	17	
3 22	14 53.75	-16 20.7	1.846	2.652	15.2	18.9	3 22	14 46.73	-16 20.2	2.622	3.422	11.4	21.3
4 1	14 48.51	-16 18.2	1.753	2.647	11.9	18.7	4 1	14 42.33	-16 10.0	2.525	3.416	8.8	21.1
4 11	14 40.71	-16 5.4	1.682	2.640	8.0	18.4	4 11	14 36.25	-15 52.0	2.452	3.409	5.9	20.9
4 21	14 30.98	-15 43.4	1.637	2.634	3.6	18.1	4 21	14 28.96	-15 27.5	2.406	3.403	2.6	20.6
5 1	14 20.30	-15 15.0	1.619	2.626	1.2	17.9	5 1	14 21.10	-14 58.9	2.389	3.396	0.9	20.5
5 11	14 9.85	-14 44.4	1.630	2.618	5.8	18.2	5 11	14 13.41	-14 29.4	2.401	3.388	4.3	20.7
5 21	14 0.73	-14 16.7	1.667	2.609	10.2	18.4	5 21	14 6.57	-14 2.2	2.441	3.381	7.5	20.9
5 31	13 53.78	-13 56.6	1.727	2.599	14.0	18.7	5 31	14 1.14	-13 40.7	2.506	3.373	10.4	21.1
217123	2002 CU ₂₅₁		4 28.3 187°73	0.5/28.8	18		187884	2000 RS ₄₂					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
414180	2008 <i>CO</i> ₆		4 28.3 44°81'	0°6/28.7	16		306200	2011 <i>QM</i> ₃		4 28.3 275°75'	0°1/28.4	18	
3 22	14 49.18	-17 19.1	1.383	2.214	18.1	21.3	3 22	14 38.96	-16 29.9	4.350	5.145	7.3	20.7
4 1	14 45.47	-17 9.0	1.317	2.224	14.1	21.0	4 1	14 35.76	-16 7.2	4.249	5.137	5.6	20.5
4 11	14 38.86	-16 44.7	1.271	2.234	9.4	20.8	4 11	14 31.65	-15 39.2	4.172	5.129	3.7	20.4
4 21	14 30.19	-16 8.5	1.248	2.245	4.2	20.5	4 21	14 26.92	-15 7.2	4.125	5.121	1.6	20.2
5 1	14 20.67	-15 24.8	1.250	2.257	1.4	20.3	5 1	14 21.91	-14 33.0	4.107	5.113	0.6	20.1
5 11	14 11.73	-14 40.4	1.277	2.268	6.6	20.7	5 11	14 17.01	-13 58.6	4.119	5.106	2.7	20.3
5 21	14 4.51	-14 1.9	1.328	2.280	11.4	21.0	5 21	14 12.55	-13 26.1	4.160	5.098	4.8	20.4
5 31	13 59.85	-13 34.8	1.401	2.292	15.5	21.3	5 31	14 8.86	-12 57.4	4.228	5.090	6.6	20.6
65766	1994 <i>WG</i> ₁		4 28.3 212°77'	1°9/26.7	18		330005	2005 <i>TD</i> ₁₄₇		4 28.3 233°36'	1°8/27.1	17	
3 22	14 49.58	- 9 17.6	2.418	3.231	11.8	19.5	3 22	14 49.47	-11 15.3	1.767	2.594	14.9	21.4
4 1	14 44.60	- 8 59.4	2.325	3.225	9.1	19.3	4 1	14 45.15	-10 53.6	1.685	2.593	11.5	21.2
4 11	14 37.78	- 8 37.1	2.256	3.218	6.0	19.1	4 11	14 38.45	-10 24.8	1.626	2.591	7.5	21.0
4 21	14 29.63	- 8 13.2	2.215	3.211	2.8	18.9	4 21	14 30.00	- 9 52.0	1.592	2.590	3.3	20.7
5 1	14 20.87	- 7 50.9	2.202	3.203	2.5	18.8	5 1	14 20.76	- 9 19.6	1.584	2.588	2.5	20.6
5 11	14 12.30	- 7 33.5	2.219	3.195	5.6	19.0	5 11	14 11.85	- 8 52.5	1.604	2.586	6.6	20.9
5 21	14 4.67	- 7 23.8	2.263	3.187	8.8	19.2	5 21	14 4.24	- 8 34.9	1.649	2.585	10.8	21.1
5 31	13 58.58	- 7 23.8	2.331	3.178	11.8	19.4	5 31	13 58.70	- 8 29.8	1.717	2.583	14.4	21.3
504394	2007 <i>VL</i> ₂₆₅		4 28.3 127°80'	0°3/28.5	17		508861	2002 <i>RN</i> ₃₈		4 28.3 123°99'	0°8/29.8	18	C
3 22	14 47.45	-16 43.1	2.426	3.228	12.1	22.6	3 22	14 43.19	-20 43.6	5.108	5.872	6.7	25.2
4 1	14 42.91	-16 27.2	2.345	3.237	9.4	22.4	4 1	14 38.72	-20 28.9	5.028	5.895	5.2	25.1
4 11	14 36.61	-16 2.5	2.287	3.245	6.2	22.2	4 11	14 33.44	-20 8.6	4.974	5.918	3.6	25.0
4 21	14 29.10	-15 30.9	2.256	3.253	2.7	22.0	4 21	14 27.65	-19 43.6	4.950	5.939	1.8	24.9
5 1	14 21.09	-14 55.0	2.254	3.261	0.9	21.9	5 1	14 21.67	-19 15.0	4.956	5.960	0.9	24.8
5 11	14 13.37	-14 18.8	2.281	3.269	4.5	22.2	5 11	14 15.85	-18 44.5	4.994	5.981	2.2	24.9
5 21	14 6.64	-13 45.8	2.336	3.276	7.8	22.4	5 21	14 10.51	-18 13.9	5.062	6.001	3.9	25.1
5 31	14 1.44	-13 19.5	2.415	3.283	10.7	22.6	5 31	14 5.90	-17 45.0	5.159	6.021	5.5	25.2
210686	Scottnorris		4 28.3 266°86'	4°3/23.9	18		231662	2009 <i>XO</i> ₂₁		4 28.3 11°47'	8°3/5.5	17	
3 22	14 44.59	- 3 48.8	2.300	3.131	11.8	20.5	3 22	14 48.17	-37 19.9	1.764	2.500	18.4	19.6
4 1	14 40.84	- 2 44.9	2.212	3.120	9.1	20.3	4 1	14 44.78	-37 49.3	1.679	2.501	16.0	19.4
4 11	14 35.34	- 1 38.4	2.149	3.109	6.4	20.1	4 11	14 38.51	-37 53.4	1.612	2.502	13.2	19.2
4 21	14 28.59	- 0 34.0	2.113	3.098	4.5	20.0	4 21	14 30.11	-37 28.5	1.566	2.504	10.4	19.0
5 1	14 21.26	+ 0 22.8	2.105	3.087	5.1	20.0	5 1	14 20.72	-36 33.8	1.542	2.506	8.5	18.9
5 11	14 14.13	+ 1 7.1	2.124	3.076	7.6	20.1	5 11	14 11.76	-35 13.6	1.544	2.509	8.6	18.9
5 21	14 7.91	+ 1 35.7	2.169	3.064	10.5	20.3	5 21	14 4.43	-33 36.2	1.569	2.512	10.7	19.1
5 31	14 3.17	+ 1 47.1	2.236	3.053	13.2	20.4	5 31	13 59.61	-31 52.0	1.619	2.515	13.5	19.2
18519	1996 <i>VH</i> ₄		4 28.3 33°12'	6°6/24.7	18		174029	2001 <i>YF</i> ₁₅₄		4 28.3 6°27'	12°2/21.7	17	
3 22	14 51.15	+ 1 22.9	1.564	2.404	15.9	17.2	3 22	14 49.59	+15 50.5	1.536	2.360	17.0	18.6
4 1	14 46.47	+ 1 51.4	1.503	2.411	12.6	17.0	4 1	14 45.33	+16 33.5	1.486	2.361	14.8	18.5
4 11	14 39.27	+ 2 14.9	1.463	2.419	9.2	16.9	4 11	14 38.52	+16 57.6	1.454	2.364	13.0	18.3
4 21	14 30.30	+ 2 27.5	1.448	2.427	6.8	16.7	4 21	14 29.97	+16 54.9	1.444	2.369	12.2	18.3
5 1	14 20.65	+ 2 24.0	1.457	2.436	7.2	16.8	5 1	14 20.82	+16 20.3	1.457	2.375	12.8	18.4
5 11	14 11.54	+ 2 1.7	1.492	2.446	10.0	17.0	5 11	14 12.26	+15 13.2	1.491	2.382	14.5	18.5
5 21	14 3.96	+ 1 20.5	1.551	2.455	13.4	17.2	5 21	14 5.30	+13 37.1	1.546	2.390	16.7	18.6
5 31	13 58.63	+ 0 22.0	1.630	2.466	16.5	17.4	5 31	14 0.61	+11 37.9	1.620	2.400	18.9	18.8
28844	2000 <i>JS</i> ₄₇		4 28.3 160°46'	5°5/2.1	18		111742	2002 <i>CR</i> ₈₆		4 28.3 209°03'	2°3/25.9	18	
3 22	14 53.58	-28 42.3	1.624	2.399	18.2	18.0	3 22	14 45.45	- 8 9.1	2.819	3.635	10.3	20.7
4 1	14 48.92	-29 5.0	1.541	2.403	15.1	17.8	4 1	14 41.15	- 7 31.8	2.728	3.630	7.8	20.5
4 11	14 41.23	-29 7.0	1.477	2.406	11.4	17.6	4 11	14 35.38	- 6 50.7	2.662	3.624	5.2	20.4
4 21	14 31.28	-28 45.7	1.436	2.409	7.7	17.3	4 21	14 28.58	- 6 8.9	2.624	3.618	2.7	20.2
5 1	14 20.27	-28 1.6	1.420	2.412	5.5	17.2	5 1	14 21.32	- 5 29.8	2.615	3.612	2.8	20.2
5 11	14 9.67	-26 59.8	1.430	2.414	7.1	17.3	5 11	14 14.23	- 4 56.7	2.636	3.605	5.3	20.3
5 21	14 0.79	-25 48.4	1.465	2.416	10.6	17.5	5 21	14 7.92	- 4 32.4	2.684	3.598	8.0	20.5
5 31	13 54.55	-24 36.8	1.523	2.417	14.4	17.7	5 31	14 2.85	- 4 18.7	2.757	3.591	10.5	20.6
161038	2002 <i>GJ</i> ₁₀₉		4 28.3 81°53'	7°3/27.3	17		411817	2012 <i>DF</i> ₃₃		4 28.3 157°30'	3°5/25.8	17	
3 22	15 12.27	+ 3 36.6	0.993	1.826	23.4	19.6	3 22	14 51.05	- 6 58.8	1.827	2.655	14.5	21.0
4 1	15 4.15	+ 2 56.3	0.938	1.841	18.7	19.3	4 1	14 46.16	- 6 21.0	1.753	2.660	11.1	20.8
4 11	14 51.56	+ 1 59.9	0.900	1.856	13.4	19.1	4 11	14 38.99	- 5 39.2	1.701	2.664	7.4	20.6
4 21	14 35.72	+ 0 42.9	0.885	1.871	8.5	18.9	4 21	14 30.20	- 4 58.1	1.674	2.668	4.1	20.4
5 1	14 18.68	- 0 55.6	0.894	1.887	7.7	18.9	5 1	14 20.72	- 4 22.6	1.675	2.671	4.2	20.4
5 11	14 2.85	- 2 51.4	0.929	1.901	11.8	19.2	5 11	14 11.64	- 3 57.7	1.704	2.674	7.5	20.6
5 21	13 50.08	- 4 57.9	0.988	1.916	16.8	19.5	5 21	14 3.87	- 3 46.6	1.758	2.677	11.2	20.9
5 31	13 41.41	- 7 9.2	1.066	1.931	21.3	19.8	5 31	13 58.11	- 3 50.9	1.834	2.679	14.5	21.1
128555	2004 <i>PO</i> ₇₉		4 28.3 138°26'	4°1/1.1	18		267399	2002 <i>AO</i> ₂₈		4 28.3 37°67'	9°5/21.9	18	
3 22	14 52.29	-25 48.2	1.556	2.349	18.2	20.4	3 22	14 49.70	+ 8 4.3	1.624	2.459	15.7	19.8
4 1	14 47.88	-25 55.6	1.477	2.354	14.8	20.1	4 1	14 45.26	+ 9 7.3	1.570	2.465	13.0	19.6
4 11	14 40.51	-25 42.8	1.418	2.359	10.8	19.9	4 11	14 38.42	+10 0.2	1.536	2.471	10.6	19.5
4 21	14 30.94	-25 8.9	1.381	2.364	6.6	19.7	4 21	14 29.93	+10 35.3	1.526	2.478	9.5	19.4
5 1	14 20.40	-24 15.8	1.369	2.368	4.1	19.5	5 1	14 20.84	+10 46.3	1.541	2.486	10.2	19.5
5 11	14 10.34	-23 9.8	1.384	2.373	6.5	19.7	5 11	14 12.28	+10 30.1	1.579	2.493	12.4	19.6
5 21	14 1.98	-21 59.1	1.423	2.377	10.6	19.9	5 21	14 5.19	+ 9 47.7	1.638	2.501	15.0	19.8
5 31	13 56.22	-20 52.6	1.486	2.380	14.6	20.2	5 31	14 0.23	+ 8 42.3	1.717	2.509	17.5	20.0
331491	1999 <i>NK</i> ₃₂		4 28.3 284°26'	5°3/23.9	16		439818	2015 <i>KB</i> ₃₅		4 28.3 3			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
364603	2007 RW ₂₂₃		4 28.3 210°13	1.3°/29.2	16		370042	2000 SV ₆₉		4 28.3 172°55	3°1/30.7	17	
3 22	14 52.67	-19 36.0	1.951	2.747	14.9	22.5	3 22	14 53.21	-23 47.4	2.353	3.122	13.4	21.5
4 1	14 47.61	-19 24.8	1.854	2.740	11.8	22.2	4 1	14 47.63	-24 10.5	2.261	3.125	10.8	21.3
4 11	14 40.10	-19 0.5	1.780	2.733	8.1	22.0	4 11	14 39.91	-24 21.8	2.191	3.128	7.8	21.1
4 21	14 30.75	-18 23.7	1.731	2.725	3.9	21.7	4 21	14 30.62	-24 20.5	2.148	3.130	4.8	20.9
5 1	14 20.51	-17 37.2	1.710	2.716	1.5	21.5	5 1	14 20.60	-24 7.1	2.133	3.131	3.1	20.8
5 11	14 10.50	-16 46.1	1.717	2.706	5.5	21.8	5 11	14 10.82	-23 44.3	2.147	3.132	4.9	21.0
5 21	14 1.75	-15 56.1	1.751	2.695	9.6	22.0	5 21	14 2.14	-23 16.1	2.189	3.133	8.0	21.1
5 31	13 55.07	-15 13.0	1.809	2.684	13.4	22.2	5 31	13 55.26	-22 47.3	2.257	3.132	11.0	21.3
117978	1215 T ₋₁		4 28.3 55°03	7°6/2.3	18		425700	2011 AT ₇₇		4 28.3 41°73	10°8/21.5	18	
3 22	14 57.43	-29 40.9	1.619	2.384	18.7	19.2	3 22	14 48.97	+ 8 55.2	1.409	2.252	17.1	20.1
4 1	14 52.12	-31 8.8	1.544	2.393	15.7	19.0	4 1	14 44.87	+10 17.0	1.370	2.269	14.2	20.0
4 11	14 43.52	-32 19.7	1.488	2.403	12.4	18.8	4 11	14 38.20	+11 26.0	1.352	2.286	11.9	19.9
4 21	14 32.36	-33 8.0	1.455	2.413	9.3	18.6	4 21	14 29.84	+12 12.8	1.356	2.304	10.8	19.9
5 1	14 19.91	-33 30.4	1.447	2.423	7.7	18.6	5 1	14 20.96	+12 30.5	1.383	2.323	11.7	19.9
5 11	14 7.80	-33 28.2	1.465	2.434	8.7	18.7	5 11	14 12.80	+12 16.6	1.432	2.342	13.8	20.1
5 21	13 57.49	-33 7.2	1.506	2.444	11.4	18.8	5 21	14 6.32	+11 33.0	1.502	2.361	16.3	20.3
5 31	13 50.07	-32 35.7	1.571	2.455	14.5	19.0	5 31	14 2.14	+10 24.3	1.589	2.381	18.7	20.5
310202	2011 SD ₁₃₀		4 28.3 297°96	1°5/27.2	16		370136	2001 WP ₃₅		4 28.3 189°31	1°9/26.6	17	
3 22	14 47.04	-11 9.3	2.095	2.918	13.1	21.5	3 22	14 49.90	-10 16.7	2.296	3.109	12.4	22.2
4 1	14 43.04	-10 54.3	1.999	2.904	10.1	21.3	4 1	14 44.91	- 9 44.2	2.208	3.108	9.5	22.0
4 11	14 36.98	-10 33.3	1.925	2.890	6.6	21.0	4 11	14 38.02	- 9 6.0	2.145	3.107	6.2	21.8
4 21	14 29.38	-10 9.0	1.878	2.876	2.9	20.8	4 21	14 29.78	- 8 25.2	2.108	3.105	2.9	21.6
5 1	14 21.03	- 9 44.5	1.858	2.862	2.2	20.7	5 1	14 20.94	- 7 45.6	2.101	3.102	2.6	21.5
5 11	14 12.83	- 9 24.0	1.866	2.848	5.9	20.9	5 11	14 12.36	- 7 11.4	2.122	3.098	5.8	21.8
5 21	14 5.64	- 9 11.0	1.900	2.835	9.6	21.1	5 21	14 4.80	- 6 46.2	2.171	3.094	9.2	21.9
5 31	14 0.17	- 9 8.0	1.958	2.821	13.0	21.3	5 31	13 58.86	- 6 32.4	2.244	3.089	12.2	22.1
140978	2001 VP ₁₂₂		4 28.3 250°78	2°3/25.9	18		118061	4249 T ₋₂		4 28.3 255°40	2°1/29.4	17	
3 22	14 45.60	- 9 29.3	2.489	3.309	11.3	20.5	3 22	14 54.15	-18 44.8	1.607	2.416	17.0	19.8
4 1	14 41.55	- 8 41.9	2.390	3.294	8.7	20.3	4 1	14 49.45	-19 8.8	1.511	2.403	13.6	19.6
4 11	14 35.81	- 7 48.5	2.316	3.279	5.7	20.1	4 11	14 41.74	-19 21.5	1.435	2.390	9.4	19.3
4 21	14 28.82	- 6 52.6	2.268	3.264	2.9	19.8	4 21	14 31.63	-19 22.2	1.384	2.377	4.8	19.0
5 1	14 21.25	- 5 58.4	2.250	3.248	3.0	19.8	5 1	14 20.21	-19 11.6	1.358	2.364	2.2	18.8
5 11	14 13.83	- 5 10.4	2.260	3.232	5.9	20.0	5 11	14 8.90	-18 53.5	1.360	2.350	6.4	19.0
5 21	14 7.25	- 4 32.5	2.298	3.215	9.0	20.1	5 21	13 59.05	-18 33.1	1.386	2.335	11.2	19.2
5 31	14 2.08	- 4 7.3	2.359	3.199	11.9	20.3	5 31	13 51.74	-18 16.3	1.435	2.321	15.5	19.5
479129	2013 BB ₃₀		4 28.3 184°22	0°6/28.9	17		62540	2000 SX ₂₅₉		4 28.3 181°80	3°7/23.9	18	
3 22	14 47.02	-17 43.0	2.786	3.578	11.0	22.4	3 22	14 44.11	- 5 2.2	2.615	3.441	10.7	20.2
4 1	14 42.44	-17 32.7	2.693	3.578	8.6	22.2	4 1	14 40.21	- 3 50.6	2.535	3.441	8.2	20.1
4 11	14 36.27	-17 14.2	2.624	3.578	5.7	22.0	4 11	14 34.80	- 2 35.9	2.481	3.441	5.7	19.9
4 21	14 28.99	-16 48.7	2.582	3.577	2.6	21.8	4 21	14 28.35	- 1 22.8	2.455	3.441	3.8	19.8
5 1	14 21.20	-16 18.4	2.570	3.576	0.9	21.7	5 1	14 21.48	- 0 16.1	2.458	3.441	4.4	19.8
5 11	14 13.62	-15 46.4	2.587	3.575	4.0	21.9	5 11	14 14.85	+ 0 39.7	2.489	3.440	6.7	20.0
5 21	14 6.87	-15 15.9	2.633	3.573	7.0	22.1	5 21	14 9.03	+ 1 21.4	2.547	3.439	9.3	20.1
5 31	14 1.46	-14 50.1	2.704	3.571	9.7	22.3	5 31	14 4.52	+ 1 47.5	2.628	3.438	11.6	20.3
260888	2005 QP ₁₄₅		4 28.3 51°62	3°9/30.3	17		218762	2005 VS ₁₂₀		4 28.3 177°32	6°8/3.9	18	
3 22	14 55.06	-21 36.8	1.591	2.390	17.5	19.5	3 22	14 54.66	-34 42.1	2.261	2.979	15.3	20.5
4 1	14 49.98	-22 31.6	1.515	2.398	14.1	19.3	4 1	14 49.19	-35 27.7	2.168	2.981	13.1	20.3
4 11	14 41.91	-23 14.0	1.460	2.406	10.1	19.1	4 11	14 41.18	-35 55.5	2.095	2.983	10.7	20.2
4 21	14 31.60	-23 41.7	1.429	2.414	6.0	18.9	4 21	14 31.26	-36 2.2	2.045	2.984	8.3	20.0
5 1	14 20.22	-23 54.0	1.423	2.423	3.9	18.7	5 1	14 20.39	-35 46.3	2.021	2.984	6.9	19.9
5 11	14 9.24	-23 53.5	1.445	2.432	6.5	18.9	5 11	14 9.76	-35 10.0	2.024	2.984	7.3	19.9
5 21	13 59.92	-23 44.8	1.491	2.441	10.5	19.2	5 21	14 0.44	-34 18.2	2.053	2.983	9.3	20.1
5 31	13 53.20	-23 34.2	1.560	2.450	14.3	19.4	5 31	13 53.26	-33 18.1	2.107	2.982	11.7	20.2
52767	Ophelestes		4 28.3 278°77	2°7/23.9	18		35581	1998 HD ₄₀		4 28.3 9°20	0°4/28.5	18	
3 22	14 39.18	- 0 44.0	4.467	5.285	6.7	19.2	3 22	14 50.12	-14 14.2	1.430	2.264	17.4	18.1
4 1	14 35.85	+ 0 16.0	4.385	5.283	5.2	19.1	4 1	14 46.28	-14 40.4	1.356	2.266	13.6	17.8
4 11	14 31.68	+ 0 11.1	4.328	5.281	3.7	18.9	4 11	14 39.52	-14 58.8	1.303	2.268	9.1	17.6
4 21	14 26.94	+ 0 35.4	4.301	5.279	2.8	18.9	4 21	14 30.59	-15 10.1	1.273	2.271	4.0	17.3
5 1	14 21.97	+ 0 54.8	4.302	5.277	3.1	18.9	5 1	14 20.65	-15 16.1	1.268	2.275	1.4	17.1
5 11	14 17.11	+ 1 7.7	4.333	5.275	4.4	19.0	5 11	14 11.11	-15 20.4	1.289	2.280	6.5	17.4
5 21	14 12.69	+ 1 13.0	4.391	5.273	5.9	19.1	5 21	14 3.19	-15 26.8	1.334	2.286	11.3	17.7
5 31	14 8.98	+ 1 10.2	4.473	5.272	7.4	19.2	5 31	13 57.81	-15 39.0	1.400	2.292	15.4	18.0
117071	2004 KO ₁₃		4 28.3 298°03	4°7/23.8	17		265735	2005 UY ₄₈₃		4 28.3 115°57	3°5/25.5	17	
3 22	14 44.11	- 3 36.5	2.127	2.963	12.4	19.9	3 22	14 48.45	- 7 43.8	1.868	2.699	14.1	21.1
4 1	14 40.66	- 2 31.2	2.039	2.950	9.6	19.7	4 1	14 44.07	- 6 48.5	1.799	2.708	10.8	20.9
4 11	14 35.34	- 1 23.0	1.975	2.936	6.8	19.5	4 11	14 37.57	- 5 48.0	1.753	2.717	7.1	20.7
4 21	14 28.65	- 0 17.1	1.938	2.923	4.8	19.4	4 21	14 29.60	- 4 47.7	1.733	2.726	4.0	20.5
5 1	14 21.32	+ 0 40.4	1.927	2.909	5.5	19.4	5 1	14 21.06	- 3 53.2	1.741	2.735	4.2	20.6
5 11	14 14.20	+ 1 24.2	1.944	2.896	8.2	19.5	5 11	14 12.94	- 3 10.3	1.775	2.744	7.5	20.8
5 21	14 8.03	+ 1 51.0	1.985	2.883	11.2	19.7	5 21	14 6.07	- 2 42.4	1.835	2.752	11.0	21.0
5 31	14 3.45	+ 1 59.1	2.048	2.870	14.1	19.8	5 31	14 1.09	- 2 31.4	1.917	2.760	14.1	21.2
261789	2006 BW ₁₅₈		4 28.3 321°34	2°1/25.1	18		472298	2014 WP ₃₉₃		4 28.3 41°20	13°7/16.3	16	
3 22	14 38.81	- 6 0.3											

EPHEMERIDES

4 28.3

4 28.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
392904	2012 VL ₅₅		4 28.3 92°03	1.8/27.0	17		176373	2001 TT ₁₉₅		4 28.3 153°37	4.5/23.2	18	
3 22	14 51.11	- 8 32.7	2.262	3.076	12.5	21.0	3 22	14 45.27	- 1 6.9	2.657	3.481	10.6	20.3
4 1	14 45.76	- 8 32.9	2.187	3.087	9.6	20.8	4 1	14 41.03	- 0 1.4	2.586	3.487	8.2	20.1
4 11	14 38.53	- 8 30.4	2.137	3.099	6.3	20.6	4 11	14 35.31	+ 1 4.1	2.540	3.493	6.0	20.0
4 21	14 29.99	- 8 27.5	2.114	3.110	2.9	20.4	4 21	14 28.59	+ 2 4.8	2.522	3.499	4.6	19.9
5 1	14 20.92	- 8 26.6	2.119	3.121	2.4	20.4	5 1	14 21.47	+ 2 56.4	2.533	3.504	5.2	20.0
5 11	14 12.19	- 8 30.1	2.154	3.132	5.5	20.6	5 11	14 14.62	+ 3 35.0	2.571	3.508	7.2	20.1
5 21	14 4.55	- 8 40.1	2.216	3.143	8.8	20.8	5 21	14 8.60	+ 3 58.6	2.635	3.513	9.5	20.3
5 31	13 58.58	- 8 58.0	2.302	3.154	11.7	21.0	5 31	14 3.89	+ 4 6.4	2.723	3.517	11.7	20.4
57792	2001 VQ ₉₄		4 28.3 284°29	9.2/20.3	18		503891	2001 UT ₆		4 28.3 196°56	1.6/30.1	18	
3 22	14 47.35	+ 6 1.1	1.742	2.580	14.6	18.6	3 22	14 48.33	- 21 35.6	3.205	3.974	10.2	23.2
4 1	14 43.64	+ 7 32.8	1.662	2.561	12.1	18.4	4 1	14 43.31	- 21 34.3	3.102	3.970	8.1	23.0
4 11	14 37.57	+ 9 0.6	1.604	2.542	10.0	18.2	4 11	14 36.81	- 21 24.0	3.024	3.966	5.6	22.8
4 21	14 29.71	+ 10 15.8	1.570	2.523	9.2	18.1	4 21	14 29.26	- 21 5.4	2.973	3.961	3.1	22.7
5 1	14 20.99	+ 11 9.6	1.561	2.503	10.3	18.1	5 1	14 21.21	- 20 39.6	2.952	3.955	1.6	22.5
5 11	14 12.48	+ 11 36.0	1.575	2.484	12.8	18.2	5 11	14 13.32	- 20 9.2	2.962	3.949	3.6	22.7
5 21	14 5.18	+ 11 33.0	1.611	2.465	15.7	18.4	5 21	14 6.16	- 19 37.1	3.001	3.942	6.2	22.8
5 31	13 59.88	+ 11 1.6	1.666	2.446	18.5	18.5	5 31	14 0.22	- 19 6.6	3.066	3.935	8.6	23.0
483357	2016 RQ ₁₀		4 28.3 235°34	3.1/ 1.3	18		178748	2000 UL ₈₃		4 28.3 141°81	2.1/26.1	18	
3 22	14 47.15	- 25 53.5	2.578	3.344	12.5	21.3	3 22	14 45.53	- 8 52.8	2.791	3.607	10.4	21.3
4 1	14 42.87	- 25 56.8	2.476	3.337	10.1	21.1	4 1	14 41.17	- 8 13.3	2.714	3.615	7.9	21.1
4 11	14 36.74	- 25 47.1	2.397	3.330	7.4	20.9	4 11	14 35.38	- 7 29.9	2.661	3.624	5.2	21.0
4 21	14 29.27	- 25 24.0	2.344	3.322	4.7	20.8	4 21	14 28.61	- 6 45.6	2.637	3.632	2.6	20.8
5 1	14 21.17	- 24 48.9	2.318	3.315	3.1	20.6	5 1	14 21.46	- 6 4.0	2.642	3.639	2.6	20.8
5 11	14 13.23	- 24 4.8	2.321	3.307	4.6	20.7	5 11	14 14.57	- 5 28.5	2.676	3.646	5.1	21.0
5 21	14 6.22	- 23 16.0	2.352	3.299	7.4	20.9	5 21	14 8.48	- 5 1.6	2.737	3.653	7.8	21.2
5 31	14 0.75	- 22 27.4	2.408	3.291	10.2	21.0	5 31	14 3.66	- 4 45.2	2.824	3.660	10.2	21.3
317907	2003 UU ₂₅₈		4 28.3 180°12	1.8/26.9	16		503481	2016 EU ₁₆₇		4 28.3 345°53	2.6/29.6	17	
3 22	14 51.78	- 11 13.0	2.067	2.881	13.5	21.7	3 22	14 49.10	- 19 12.6	1.325	2.155	18.8	20.7
4 1	14 46.56	- 10 41.3	1.983	2.883	10.4	21.4	4 1	14 45.94	- 19 42.3	1.245	2.149	15.0	20.5
4 11	14 39.21	- 10 2.6	1.922	2.884	6.8	21.2	4 11	14 39.59	- 19 58.5	1.184	2.144	10.4	20.2
4 21	14 30.33	- 9 20.1	1.887	2.884	3.1	21.0	4 21	14 30.75	- 20 0.5	1.145	2.139	5.5	19.9
5 1	14 20.79	- 8 38.1	1.882	2.884	2.5	20.9	5 1	14 20.63	- 19 49.5	1.130	2.135	2.7	19.7
5 11	14 11.56	- 8 1.4	1.904	2.883	6.1	21.2	5 11	14 10.82	- 19 30.1	1.139	2.131	6.9	19.9
5 21	14 3.50	- 7 33.8	1.954	2.881	9.8	21.4	5 21	14 2.72	- 19 8.3	1.171	2.129	11.9	20.2
5 31	13 57.29	- 7 18.4	2.028	2.878	13.1	21.6	5 31	13 57.41	- 18 50.8	1.224	2.127	16.4	20.5
193639	2001 DK ₁₃		4 28.3 53°45	5.7/24.3	18		496975	2002 QW ₈₂		4 28.3 267°90	0.3/28.6	17	
3 22	14 48.11	- 1 45.9	1.690	2.531	14.8	19.3	3 22	14 49.56	- 17 29.2	1.763	2.578	15.5	22.6
4 1	14 43.90	- 0 51.5	1.635	2.546	11.5	19.1	4 1	14 45.59	- 17 7.3	1.659	2.558	12.2	22.4
4 11	14 37.47	+ 0 1.9	1.602	2.562	8.2	18.9	4 11	14 39.02	- 16 31.7	1.577	2.537	8.2	22.1
4 21	14 29.55	+ 0 48.1	1.595	2.578	5.9	18.8	4 21	14 30.43	- 15 43.8	1.519	2.516	3.7	21.8
5 1	14 21.10	+ 1 21.0	1.613	2.594	6.4	18.9	5 1	14 20.75	- 14 47.4	1.488	2.495	1.3	21.5
5 11	14 13.19	+ 1 36.5	1.657	2.611	9.2	19.1	5 11	14 11.17	- 13 48.5	1.484	2.473	6.2	21.8
5 21	14 6.65	+ 1 33.0	1.724	2.627	12.3	19.3	5 21	14 2.83	- 12 54.0	1.506	2.451	10.8	22.0
5 31	14 2.11	+ 1 10.7	1.813	2.644	15.2	19.5	5 31	13 56.64	- 12 9.9	1.550	2.428	15.0	22.2
240490	2004 CE ₄₅		4 28.3 214°81	4.4/24.5	18		481015	2004 RK ₂₄₆		4 28.3 251°72	1.3/29.8	16	
3 22	14 47.65	- 2 3.5	2.279	3.105	12.0	20.8	3 22	14 47.21	- 20 34.0	3.159	3.935	10.2	23.0
4 1	14 43.17	- 1 22.8	2.199	3.102	9.4	20.6	4 1	14 42.58	- 20 30.9	3.040	3.914	8.1	22.8
4 11	14 36.88	- 0 42.3	2.142	3.099	6.6	20.4	4 11	14 36.42	- 20 19.2	2.946	3.892	5.6	22.6
4 21	14 29.30	- 0 6.1	2.112	3.096	4.6	20.3	4 21	14 29.13	- 19 59.4	2.879	3.869	2.9	22.4
5 1	14 21.17	+ 0 21.3	2.110	3.092	5.1	20.3	5 1	14 21.25	- 19 32.7	2.842	3.846	1.4	22.3
5 11	14 13.30	+ 0 36.3	2.136	3.088	7.5	20.4	5 11	14 13.44	- 19 1.8	2.835	3.822	3.7	22.4
5 21	14 6.40	+ 0 36.9	2.187	3.084	10.3	20.6	5 21	14 6.28	- 18 29.5	2.856	3.798	6.4	22.6
5 31	14 1.06	+ 0 22.5	2.261	3.080	13.0	20.8	5 31	14 0.33	- 17 59.1	2.905	3.774	9.1	22.7
425165	2009 TK ₉		4 28.3 134°50	0.2/28.4	15		430103	2013 SG ₈₄		4 28.3 170°32	2.6/25.8	17	
3 22	14 53.25	- 14 53.9	2.123	2.925	13.6	21.6	3 22	14 48.54	- 8 39.4	2.440	3.255	11.7	22.1
4 1	14 47.63	- 15 0.3	2.044	2.936	10.6	21.4	4 1	14 43.70	- 7 50.8	2.358	3.260	8.9	21.9
4 11	14 39.87	- 14 59.5	1.988	2.946	7.0	21.2	4 11	14 37.15	- 6 57.4	2.302	3.264	5.9	21.7
4 21	14 30.61	- 14 52.4	1.959	2.956	3.0	20.9	4 21	14 29.41	- 6 2.8	2.273	3.267	3.1	21.6
5 1	14 20.70	- 14 41.1	1.959	2.965	1.1	20.8	5 1	14 21.19	- 5 11.5	2.273	3.269	3.2	21.6
5 11	14 11.14	- 14 28.9	1.987	2.974	5.1	21.1	5 11	14 13.24	- 4 27.7	2.302	3.271	6.0	21.8
5 21	14 2.80	- 14 19.1	2.043	2.982	8.8	21.3	5 21	14 6.25	- 3 54.7	2.359	3.272	9.0	21.9
5 31	13 56.32	- 14 14.8	2.123	2.990	12.0	21.5	5 31	14 0.77	- 3 34.8	2.440	3.273	11.7	22.1
471870	2013 AN ₃₈		4 28.3 143°58	2.3/30.8	17		172173	2002 PW ₂₄		4 28.3 338°69	1.4/29.3	17	
3 22	14 47.22	- 24 12.0	2.799	3.567	11.5	22.4	3 22	14 46.89	- 19 56.0	1.404	2.232	18.0	20.2
4 1	14 42.63	- 24 9.9	2.710	3.575	9.2	22.2	4 1	14 43.96	- 19 41.2	1.323	2.227	14.3	20.0
4 11	14 36.42	- 23 56.4	2.645	3.582	6.6	22.1	4 11	14 38.11	- 19 8.6	1.262	2.223	9.8	19.7
4 21	14 29.08	- 23 31.8	2.606	3.589	3.9	21.9	4 21	14 30.05	- 18 19.6	1.223	2.218	4.7	19.4
5 1	14 21.26	- 22 57.8	2.596	3.596	2.3	21.8	5 1	14 20.94	- 17 18.6	1.208	2.215	1.7	19.2
5 11	14 13.69	- 22 17.5	2.615	3.602	4.0	21.9	5 11	14 12.20	- 16 13.2	1.219	2.211	6.5	19.5
5 21	14 7.01	- 21 34.6	2.662	3.608	6.7	22.1	5 21	14 5.07	- 15 11.7	1.253	2.209	11.5	19.7
5 31	14 1.73	- 20 53.2	2.736	3.614	9.3	22.3	5 31	14 0.48	- 14 21.6	1.309	2.206	16.0	20.0
368795	2005 XJ ₇₈		4 28.3 124°53	4.1/24.4	18		93926	2000 WF ₁₆₂		4 28.3 198°02	3.4/24.9		

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4 28.3

4 28.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
148926	2001 XR ₇₅	4 28.3 325°96		4.9/25.7 18			422677	1999 VW ₁₈₁	4 28.3 207°03		0.2/28.5 16		
3 22	14 47.71	- 4 40.8	1.377	2.230	16.9	18.7	3 22	14 51.26	-17 3.5	2.053	2.856	14.0	22.4
4 1	14 44.61	- 4 15.6	1.292	2.212	13.3	18.5	4 1	14 46.35	-16 42.3	1.958	2.850	10.9	22.2
4 11	14 38.60	- 3 48.5	1.227	2.195	9.1	18.2	4 11	14 39.21	-16 9.9	1.886	2.844	7.3	22.0
4 21	14 30.31	- 3 25.0	1.185	2.178	5.5	17.9	4 21	14 30.42	-15 27.9	1.840	2.837	3.2	21.7
5 1	14 20.83	- 3 11.4	1.168	2.163	5.7	17.9	5 1	14 20.85	-14 39.7	1.823	2.829	1.1	21.5
5 11	14 11.54	- 3 13.2	1.174	2.148	9.6	18.0	5 11	14 11.51	-13 50.5	1.834	2.821	5.4	21.8
5 21	14 3.75	- 3 33.4	1.203	2.134	14.2	18.3	5 21	14 3.33	-13 5.2	1.872	2.812	9.4	22.0
5 31	13 58.44	- 4 12.9	1.251	2.121	18.4	18.5	5 31	13 57.06	-12 28.8	1.934	2.803	12.9	22.2
53216	1999 CX ₈₃	4 28.3 328°40		12.9/20.0 18			182227	2000 YU ₈₄	4 28.3 162°77		1.2/29.3 18		
3 22	14 50.57	+14 15.3	1.451	2.280	17.5	17.6	3 22	14 51.90	-20 1.0	1.933	2.730	15.0	21.1
4 1	14 46.52	+15 27.5	1.387	2.268	15.3	17.4	4 1	14 46.89	-19 40.4	1.849	2.736	11.8	20.9
4 11	14 39.63	+16 23.9	1.342	2.256	13.5	17.3	4 11	14 39.56	-19 5.7	1.788	2.741	8.0	20.7
4 21	14 30.65	+16 54.3	1.318	2.245	12.9	17.2	4 21	14 30.55	-18 18.6	1.752	2.746	3.9	20.5
5 1	14 20.75	+16 50.3	1.316	2.235	13.8	17.2	5 1	14 20.83	-17 22.4	1.743	2.750	1.4	20.3
5 11	14 11.28	+16 8.7	1.335	2.225	15.9	17.3	5 11	14 11.49	-16 22.9	1.764	2.753	5.3	20.6
5 21	14 3.41	+14 51.6	1.374	2.216	18.5	17.5	5 21	14 3.47	-15 26.1	1.811	2.755	9.3	20.8
5 31	13 58.01	+13 4.4	1.430	2.208	21.1	17.6	5 31	13 57.50	-14 37.6	1.882	2.757	12.9	21.0
55432	2001 TR ₅₆	4 28.3 270°85		3.1/25.9 18			52190	4241 T-2	4 28.3 278°26		1.5/27.2 18		
3 22	14 47.94	- 5 49.6	2.251	3.075	12.2	18.5	3 22	14 47.83	-11 45.8	2.119	2.939	13.0	19.6
4 1	14 43.44	- 5 27.5	2.170	3.074	9.4	18.3	4 1	14 43.72	-11 23.3	2.016	2.919	10.1	19.4
4 11	14 37.09	- 5 3.7	2.112	3.074	6.3	18.1	4 11	14 37.52	-10 53.8	1.935	2.899	6.7	19.1
4 21	14 29.43	- 4 41.5	2.081	3.074	3.6	18.0	4 21	14 29.72	-10 19.7	1.880	2.878	2.9	18.9
5 1	14 21.20	- 4 24.4	2.078	3.073	3.6	18.0	5 1	14 21.10	- 9 44.7	1.854	2.858	2.2	18.8
5 11	14 13.23	- 4 15.6	2.103	3.073	6.4	18.1	5 11	14 12.58	- 9 13.3	1.855	2.837	5.9	19.0
5 21	14 6.27	- 4 17.5	2.155	3.072	9.5	18.3	5 21	14 5.04	- 8 49.6	1.883	2.816	9.8	19.2
5 31	14 0.89	- 4 31.1	2.230	3.072	12.4	18.5	5 31	13 59.21	- 8 36.7	1.934	2.795	13.2	19.3
214469	2005 SG ₂₁₃	4 28.3 301°58		1.0/27.3 18			227663	2006 BF ₂₀₁	4 28.3 162°63		1.9/26.7 17		
3 22	14 43.39	-16 0.7	2.146	2.964	12.9	19.7	3 22	14 48.28	-11 20.3	2.056	2.877	13.3	21.2
4 1	14 40.23	-14 56.8	2.043	2.945	10.0	19.4	4 1	14 43.88	-10 39.1	1.976	2.880	10.2	21.0
4 11	14 35.15	-13 39.4	1.963	2.927	6.6	19.2	4 11	14 37.46	- 9 50.6	1.919	2.883	6.7	20.8
4 21	14 28.65	-12 11.9	1.910	2.908	2.8	18.9	4 21	14 29.62	- 8 58.3	1.889	2.886	3.1	20.6
5 1	14 21.47	-10 39.9	1.885	2.890	1.8	18.8	5 1	14 21.17	- 8 7.1	1.886	2.888	2.6	20.6
5 11	14 14.46	- 9 10.3	1.889	2.872	5.7	19.0	5 11	14 13.05	- 7 22.0	1.912	2.890	6.1	20.8
5 21	14 8.42	- 7 49.5	1.920	2.854	9.6	19.2	5 21	14 6.06	- 6 47.2	1.964	2.892	9.7	21.0
5 31	14 3.99	- 6 42.9	1.974	2.836	13.0	19.4	5 31	14 0.82	- 6 25.6	2.039	2.893	12.9	21.2
305476	2008 DY ₅₆	4 28.3 353°80		3.9/30.8 17			186374	2002 GR ₁₅₉	4 28.3 6°81		4.6/22.9 17		
3 22	14 49.56	-23 33.4	1.952	2.741	15.1	20.2	3 22	14 42.63	- 6 57.1	2.082	2.920	12.6	19.5
4 1	14 45.36	-24 18.8	1.863	2.737	12.3	20.0	4 1	14 39.47	- 4 56.7	2.007	2.920	9.6	19.3
4 11	14 38.74	-24 52.3	1.795	2.735	9.0	19.8	4 11	14 34.52	- 2 48.7	1.958	2.921	6.6	19.1
4 21	14 30.27	-25 12.2	1.751	2.732	5.7	19.6	4 21	14 28.33	- 0 40.8	1.936	2.922	4.7	19.0
5 1	14 20.87	-25 18.2	1.734	2.731	3.9	19.4	5 1	14 21.64	+ 1 18.4	1.944	2.924	5.7	19.0
5 11	14 11.65	-25 12.5	1.744	2.729	5.8	19.5	5 11	14 15.26	+ 3 1.3	1.980	2.926	8.4	19.2
5 21	14 3.66	-24 59.0	1.780	2.729	9.1	19.7	5 21	14 9.89	+ 4 22.5	2.041	2.928	11.5	19.4
5 31	13 57.71	-24 42.9	1.839	2.729	12.5	19.9	5 31	14 6.08	+ 5 19.9	2.125	2.931	14.2	19.6
108010	2001 FF ₁₄₃	4 28.3 314°85		0.2/28.3 17			303759	2005 QG ₁₃₅	4 28.3 307°52		0.5/27.9 16		
3 22	14 47.38	-15 17.6	1.393	2.231	17.6	19.6	3 22	14 45.78	-14 40.8	2.004	2.825	13.6	21.2
4 1	14 44.50	-15 12.1	1.301	2.213	13.8	19.3	4 1	14 42.30	-14 24.0	1.900	2.803	10.6	21.0
4 11	14 38.63	-14 54.5	1.229	2.196	9.3	19.0	4 11	14 36.67	-13 57.9	1.819	2.782	7.1	20.7
4 21	14 30.36	-14 26.5	1.180	2.179	4.1	18.6	4 21	14 29.38	-13 24.4	1.763	2.761	3.0	20.4
5 1	14 20.81	-13 51.9	1.155	2.162	1.5	18.4	5 1	14 21.23	-12 47.0	1.734	2.740	1.4	20.3
5 11	14 11.40	-13 17.0	1.155	2.146	7.1	18.7	5 11	14 13.18	-12 10.2	1.733	2.720	5.6	20.5
5 21	14 3.49	-12 48.2	1.179	2.131	12.4	18.9	5 21	14 6.14	-11 38.8	1.757	2.700	9.7	20.7
5 31	13 58.16	-12 31.3	1.222	2.116	17.1	19.2	5 31	14 0.89	-11 16.9	1.805	2.680	13.4	20.9
81992	2000 QX ₁₆₃	4 28.3 211°97		4.3/23.5 18			106471	2000 WJ ₁₁	4 28.3 186°32		1.7/27.2 18		
3 22	14 44.44	- 3 46.7	2.486	3.314	11.1	19.9	3 22	14 53.17	-10 50.1	1.830	2.649	14.8	20.1
4 1	14 40.58	- 2 29.5	2.404	3.310	8.6	19.7	4 1	14 47.98	-10 34.3	1.746	2.649	11.5	19.8
4 11	14 35.13	- 1 9.4	2.348	3.306	6.0	19.5	4 11	14 40.34	-10 12.3	1.685	2.648	7.5	19.6
4 21	14 28.56	+ 0 8.3	2.319	3.302	4.4	19.4	4 21	14 30.93	- 9 46.7	1.650	2.647	3.4	19.3
5 1	14 21.52	+ 1 18.2	2.319	3.297	5.0	19.4	5 1	14 20.70	- 9 21.6	1.642	2.646	2.5	19.3
5 11	14 14.71	+ 2 15.6	2.348	3.293	7.3	19.6	5 11	14 10.79	- 9 1.3	1.663	2.644	6.5	19.5
5 21	14 8.75	+ 2 57.1	2.402	3.288	10.0	19.7	5 21	14 2.20	- 8 49.7	1.709	2.641	10.6	19.7
5 31	14 4.16	+ 3 21.2	2.479	3.283	12.4	19.9	5 31	13 55.71	- 8 49.5	1.778	2.638	14.2	20.0
383234	2006 BR ₃₉	4 28.3 149°28		11.3/ 8.6 18			27426	Brettlawrie	4 28.3 2°54		8.9/ 5.3 17		
3 22	14 56.61	-46 32.5	2.126	2.773	18.0	20.7	3 22	14 49.24	-36 48.1	1.565	2.313	19.9	18.8
4 1	14 51.55	-47 48.4	2.040	2.776	16.3	20.5	4 1	14 46.04	-37 25.5	1.483	2.313	17.3	18.6
4 11	14 43.22	-48 40.6	1.970	2.778	14.5	20.4	4 11	14 39.63	-37 35.9	1.416	2.313	14.2	18.4
4 21	14 32.32	-49 3.1	1.919	2.781	12.8	20.3	4 21	14 30.77	-37 14.6	1.370	2.313	11.2	18.2
5 1	14 20.11	-48 51.8	1.890	2.784	11.7	20.2	5 1	14 20.74	-36 20.3	1.346	2.314	9.2	18.1
5 11	14 8.19	-48 7.5	1.884	2.786	11.4	20.2	5 11	14 11.15	-34 57.5	1.346	2.314	9.3	18.1
5 21	13 58.04	-46 55.7	1.900	2.788	12.1	20.3	5 21	14 3.38	-33 15.4	1.370	2.316	11.6	18.2
5 31	13 50.74	-45 25.5	1.939	2.790	13.6	20.4	5 31	13 58.42	-31 26.2	1.416	2.317	14.7	18.4
176444	2001 WQ ₇₇	4 28.3 128°12		0.6/27.7 17			129582	1997 SC ₉	4 28.3 177°41		1.0/29.1 18		
3 22	14 46.60	-14 12.2	2.524	3.332	11.6	21.3	3 22	14 51.85					

EPHEMERIDES

4 28.3

4 28.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
197611	2004 <i>JJ</i> ₂₀		4 28.3 338°31	1°6/27.4	18		82720	2001 <i>PC</i> ₅₀		4 28.4 272°95	1°4/27.2	18	
3 22	14 46.24	-14 38.8	1.164	2.018	19.3	19.8	3 22	14 47.03	-11 54.7	2.119	2.940	13.0	19.7
4 1	14 43.88	-13 58.2	1.090	2.012	15.0	19.5	4 1	14 42.95	-11 29.9	2.034	2.938	10.0	19.5
4 11	14 38.28	-13 0.9	1.035	2.006	9.9	19.2	4 11	14 36.89	-10 58.2	1.971	2.935	6.5	19.3
4 21	14 30.21	-11 51.8	1.002	2.001	4.2	18.9	4 21	14 29.41	-10 22.6	1.934	2.932	2.9	19.1
5 1	14 20.96	-10 38.7	0.991	1.997	2.7	18.8	5 1	14 21.30	-9 46.7	1.926	2.930	2.1	19.0
5 11	14 12.13	-9 31.7	1.005	1.993	8.4	19.1	5 11	14 13.44	-9 14.9	1.945	2.927	5.7	19.2
5 21	14 5.14	-8 39.6	1.040	1.990	13.9	19.4	5 21	14 6.63	-8 51.0	1.991	2.924	9.3	19.4
5 31	14 0.97	-8 8.3	1.094	1.988	18.7	19.6	5 31	14 1.50	-8 37.8	2.060	2.922	12.5	19.6
430291	2013 <i>WH</i> ₇₁		4 28.3 216°93	1°1/27.5	17		333939	1999 <i>VZ</i> ₁₂₀		4 28.4 219°55	0°6/28.9	18	
3 22	14 49.54	-12 33.2	2.109	2.923	13.3	21.9	3 22	14 47.50	-19 42.4	2.344	3.139	12.7	21.7
4 1	14 44.92	-12 16.1	2.018	2.919	10.2	21.7	4 1	14 43.21	-19 3.3	2.244	3.131	10.0	21.5
4 11	14 38.22	-11 52.0	1.951	2.914	6.7	21.5	4 11	14 37.02	-18 11.1	2.168	3.123	6.7	21.3
4 21	14 29.99	-11 23.1	1.911	2.909	2.9	21.2	4 21	14 29.46	-17 7.7	2.119	3.114	3.1	21.0
5 1	14 21.05	-10 53.0	1.898	2.903	1.8	21.1	5 1	14 21.28	-15 56.9	2.098	3.105	1.0	20.8
5 11	14 12.35	-10 25.7	1.914	2.897	5.6	21.4	5 11	14 13.33	-14 44.0	2.107	3.095	4.7	21.1
5 21	14 4.72	-10 5.0	1.956	2.891	9.4	21.6	5 21	14 6.36	-13 34.5	2.144	3.085	8.3	21.3
5 31	13 58.87	-9 54.0	2.023	2.885	12.7	21.8	5 31	14 1.00	-12 33.5	2.205	3.075	11.5	21.5
301036	2008 <i>SG</i> ₂₈₃		4 28.3 61°08	1°9/29.3	18		303976	2006 <i>BF</i> ₄₅		4 28.4 41°89	3°7/30.6	18	
3 22	14 53.67	-18 11.4	1.314	2.139	19.2	20.5	3 22	14 51.39	-23 22.0	1.397	2.207	19.0	20.3
4 1	14 49.31	-18 33.5	1.244	2.146	15.1	20.3	4 1	14 47.56	-23 39.8	1.320	2.209	15.3	20.1
4 11	14 41.69	-18 42.3	1.194	2.154	10.3	20.0	4 11	14 40.57	-23 39.1	1.262	2.211	11.0	19.8
4 21	14 31.62	-18 37.5	1.166	2.161	5.1	19.7	4 21	14 31.17	-23 18.7	1.226	2.214	6.4	19.6
5 1	14 20.46	-18 21.4	1.163	2.169	2.1	19.6	5 1	14 20.65	-22 40.5	1.214	2.216	3.7	19.4
5 11	14 9.84	-17 59.0	1.185	2.177	6.8	19.9	5 11	14 10.57	-21 50.2	1.228	2.219	6.8	19.6
5 21	14 1.13	-17 36.6	1.231	2.185	11.8	20.2	5 21	14 2.27	-20 55.9	1.265	2.221	11.4	19.8
5 31	13 55.30	-17 20.6	1.298	2.193	16.2	20.4	5 31	13 56.75	-20 6.3	1.324	2.224	15.6	20.1
366373	2000 <i>SQ</i> ₉₂		4 28.3 228°20	1°6/26.8	18		297912	2002 <i>CD</i> ₃₁₅		4 28.4 103°04	0°1/28.5	17	
3 22	14 47.12	-14 6.5	2.116	2.932	13.2	20.8	3 22	14 46.26	-16 59.1	2.522	3.324	11.7	21.5
4 1	14 43.05	-13 0.5	2.021	2.923	10.1	20.6	4 1	14 41.95	-16 32.7	2.446	3.337	9.1	21.4
4 11	14 36.97	-11 42.8	1.950	2.914	6.6	20.4	4 11	14 36.01	-15 57.4	2.393	3.350	6.0	21.2
4 21	14 29.45	-10 17.2	1.906	2.904	2.9	20.1	4 21	14 28.97	-15 15.3	2.367	3.363	2.6	21.0
5 1	14 21.26	-8 49.7	1.891	2.894	2.4	20.1	5 1	14 21.50	-14 29.5	2.370	3.376	0.9	20.9
5 11	14 13.31	-7 27.1	1.905	2.884	6.1	20.3	5 11	14 14.34	-13 44.0	2.402	3.389	4.3	21.1
5 21	14 6.41	-6 15.2	1.946	2.873	9.9	20.5	5 21	14 8.12	-13 2.6	2.462	3.402	7.4	21.4
5 31	14 1.22	-5 18.8	2.010	2.861	13.2	20.7	5 31	14 3.35	-12 28.6	2.547	3.414	10.2	21.6
87471	2000 <i>QL</i> ₁₃₄		4 28.3 293°35	1°8/29.5	18		67052	1999 <i>XY</i> ₂₀₇		4 28.4 256°55	4°0/1.5	18	
3 22	14 49.07	-19 24.0	1.709	2.522	16.0	19.6	3 22	14 50.48	-26 39.9	2.232	2.998	14.2	19.7
4 1	14 45.36	-19 30.5	1.608	2.503	12.7	19.4	4 1	14 45.93	-26 57.5	2.122	2.981	11.7	19.5
4 11	14 38.98	-19 24.1	1.528	2.484	8.8	19.1	4 11	14 39.09	-27 0.8	2.034	2.964	8.7	19.3
4 21	14 30.49	-19 4.9	1.472	2.466	4.5	18.8	4 21	14 30.47	-26 48.2	1.971	2.946	5.7	19.1
5 1	14 20.84	-18 34.7	1.441	2.447	1.9	18.6	5 1	14 20.91	-26 20.1	1.934	2.928	4.0	18.9
5 11	14 11.28	-17 58.1	1.437	2.428	6.0	18.8	5 11	14 11.43	-25 39.3	1.926	2.910	5.5	19.0
5 21	14 2.99	-17 20.9	1.459	2.410	10.6	19.0	5 21	14 3.00	-24 50.6	1.944	2.891	8.7	19.1
5 31	13 56.94	-16 49.3	1.502	2.392	14.7	19.2	5 31	13 56.44	-24 0.3	1.988	2.872	11.9	19.3
246332	2007 <i>TJ</i> ₂₃₄		4 28.3 15°20	2°7/26.7	17		231835	2000 <i>QS</i> ₁₁		4 28.4 254°83	2°4/26.4	18	
3 22	14 50.03	-6 59.0	1.866	2.695	14.2	20.1	3 22	14 49.11	-9 49.6	2.081	2.902	13.2	21.0
4 1	14 45.44	-6 56.6	1.789	2.697	10.9	19.9	4 1	14 44.73	-9 10.7	1.980	2.884	10.2	20.7
4 11	14 38.60	-6 52.4	1.735	2.699	7.2	19.7	4 11	14 38.20	-8 24.7	1.901	2.865	6.8	20.5
4 21	14 30.16	-6 49.3	1.707	2.702	3.7	19.5	4 21	14 30.05	-7 35.4	1.849	2.845	3.3	20.2
5 1	14 21.01	-6 50.5	1.705	2.706	3.3	19.4	5 1	14 21.08	-6 47.3	1.825	2.825	3.1	20.2
5 11	14 12.19	-6 58.9	1.731	2.709	6.7	19.7	5 11	14 12.23	-6 5.6	1.829	2.804	6.7	20.4
5 21	14 4.62	-7 16.6	1.783	2.713	10.4	19.9	5 21	14 4.39	-5 34.8	1.860	2.783	10.4	20.5
5 31	13 58.99	-7 44.7	1.858	2.718	13.7	20.1	5 31	13 58.31	-5 17.9	1.913	2.762	13.9	20.7
34062	2000 <i>OD</i> ₄₈		4 28.3 223°73	1°1/29.4	18		11711	Urquiza		4 28.4 261°15	1°7/29.5	18	
3 22	14 47.76	-19 16.5	2.926	3.709	10.7	19.3	3 22	14 49.80	-20 22.3	1.657	2.467	16.5	18.0
4 1	14 43.06	-19 12.4	2.820	3.699	8.4	19.1	4 1	14 45.92	-20 13.1	1.563	2.456	13.1	17.8
4 11	14 36.77	-19 0.0	2.739	3.688	5.8	18.9	4 11	14 39.32	-19 48.3	1.490	2.445	9.1	17.5
4 21	14 29.32	-18 39.7	2.684	3.677	2.9	18.7	4 21	14 30.62	-19 8.3	1.440	2.434	4.6	17.2
5 1	14 21.30	-18 13.3	2.660	3.665	1.2	18.5	5 1	14 20.87	-18 16.4	1.417	2.422	1.8	17.0
5 11	14 13.42	-17 43.5	2.665	3.653	3.8	18.7	5 11	14 11.33	-17 18.3	1.420	2.411	6.0	17.2
5 21	14 6.28	-17 13.5	2.699	3.640	6.8	18.9	5 21	14 3.19	-16 21.2	1.448	2.399	10.7	17.5
5 31	14 0.45	-16 46.6	2.758	3.627	9.5	19.0	5 31	13 57.37	-15 32.2	1.499	2.387	14.9	17.7
3297	Hong Kong		4 28.3 173°13	0°9/27.4	18		431101	2006 <i>EP</i> ₈		4 28.4 109°26	1°1/29.2	17	
3 22	14 46.20	-12 54.3	2.862	3.667	10.4	18.2	3 22	14 49.96	-18 34.8	1.996	2.798	14.3	22.1
4 1	14 41.74	-12 28.5	2.774	3.669	8.0	18.0	4 1	14 45.33	-18 32.6	1.916	2.806	11.2	21.9
4 11	14 35.81	-11 56.8	2.711	3.671	5.2	17.8	4 11	14 38.51	-18 19.2	1.859	2.814	7.6	21.7
4 21	14 28.87	-11 21.5	2.675	3.673	2.2	17.6	4 21	14 30.13	-17 55.8	1.827	2.822	3.6	21.5
5 1	14 21.49	-10 45.4	2.670	3.674	1.4	17.6	5 1	14 21.08	-17 25.1	1.823	2.829	1.4	21.3
5 11	14 14.32	-10 11.6	2.694	3.675	4.3	17.8	5 11	14 12.38	-16 51.2	1.847	2.836	5.0	21.6
5 21	14 7.94	-9 43.2	2.746	3.676	7.2	17.9	5 21	14 4.91	-16 18.7	1.897	2.844	8.9	21.9
5 31	14 2.82	-9 22.5	2.823	3.676	9.8	18.1	5 31	13 59.36	-15 52.2	1.972	2.851	12.2	22.1
392585	2011 <i>SC</i> ₁₈₃		4 28.4 237°35	2°3/30.2	18		148528	2001 <i>QC</i> ₅		4 28.4 185°19	6°3/22.3	17	
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EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
497401	2005 VR ₁₃₅		4 28.4 60°27'	4.3/25.8	17		108113	Maza		4 28.4 264°86'	8°1/20.9	18	
3 22	14 51.68	- 4 27.4	1.606	2.443	15.7	21.0	3 22	14 49.20	+ 8 13.2	2.170	2.989	12.8	19.5
4 1	14 46.77	- 3 59.7	1.552	2.462	12.1	20.8	4 1	14 44.63	+ 9 18.1	2.086	2.971	10.7	19.3
4 11	14 39.44	- 3 31.6	1.519	2.482	8.2	20.7	4 11	14 38.04	+10 16.9	2.025	2.952	8.9	19.2
4 21	14 30.49	- 3 7.8	1.511	2.503	4.9	20.5	4 21	14 29.98	+11 2.9	1.989	2.933	8.1	19.1
5 1	14 20.99	- 2 53.1	1.530	2.523	5.0	20.6	5 1	14 21.22	+11 30.2	1.979	2.914	9.0	19.1
5 11	14 12.10	- 2 51.5	1.575	2.543	8.2	20.8	5 11	14 12.64	+11 34.9	1.995	2.895	10.9	19.2
5 21	14 4.75	- 3 4.4	1.644	2.564	11.8	21.0	5 21	14 5.06	+11 16.0	2.033	2.875	13.3	19.3
5 31	13 59.59	- 3 32.1	1.735	2.584	15.0	21.3	5 31	13 59.16	+10 34.7	2.092	2.855	15.7	19.4
75358	1999 XT ₇₁		4 28.4 146°98'	0°1/28.3	18		184975	2006 BZ ₃₀		4 28.4 261°54'	1°0/26.7	18	
3 22	14 51.45	-16 25.0	1.986	2.792	14.3	21.0	3 22	14 39.55	-10 2.3	4.361	5.169	7.0	20.5
4 1	14 46.41	-15 58.0	1.907	2.801	11.1	20.8	4 1	14 36.24	- 9 41.5	4.271	5.169	5.3	20.4
4 11	14 39.17	-15 20.0	1.851	2.810	7.3	20.6	4 11	14 32.05	- 9 18.0	4.207	5.169	3.5	20.2
4 21	14 30.41	-14 33.4	1.822	2.819	3.1	20.4	4 21	14 27.26	- 8 53.6	4.172	5.168	1.6	20.1
5 1	14 21.02	-13 42.4	1.820	2.827	1.2	20.2	5 1	14 22.21	- 8 30.0	4.167	5.168	1.4	20.1
5 11	14 12.02	-12 52.1	1.847	2.834	5.4	20.5	5 11	14 17.28	- 8 8.9	4.191	5.167	3.2	20.2
5 21	14 4.29	-12 7.6	1.901	2.841	9.3	20.8	5 21	14 12.80	- 7 52.1	4.244	5.167	5.1	20.3
5 31	13 58.50	-11 33.3	1.979	2.846	12.7	21.0	5 31	14 9.06	- 7 40.7	4.323	5.167	6.8	20.5
137709	1999 XX ₈₉		4 28.4 172°42'	1°6/29.7	17		70426	1999 TN		4 28.4 185°75'	0°6/27.9	18	
3 22	14 51.47	-21 23.4	2.133	2.920	14.1	20.7	3 22	14 50.41	-15 59.1	2.063	2.869	13.8	20.0
4 1	14 46.42	-21 5.4	2.044	2.924	11.1	20.5	4 1	14 45.62	-15 16.2	1.974	2.870	10.7	19.7
4 11	14 39.20	-20 33.6	1.978	2.927	7.7	20.3	4 11	14 38.70	-14 21.7	1.909	2.869	7.0	19.5
4 21	14 30.44	-19 49.2	1.938	2.929	3.9	20.0	4 21	14 30.25	-13 18.5	1.870	2.868	3.0	19.3
5 1	14 21.00	-18 54.9	1.926	2.931	1.7	19.9	5 1	14 21.14	-12 11.2	1.860	2.866	1.5	19.1
5 11	14 11.88	-17 55.9	1.943	2.932	4.9	20.1	5 11	14 12.34	-11 5.9	1.879	2.864	5.6	19.4
5 21	14 3.97	-16 57.7	1.988	2.932	8.6	20.3	5 21	14 4.70	-10 7.9	1.925	2.860	9.5	19.6
5 31	13 57.93	-16 5.8	2.057	2.932	12.0	20.5	5 31	13 58.91	- 9 22.0	1.995	2.856	12.9	19.8
505307	2012 XS ₄₂		4 28.4 19°48'	4°6/ 2.9	17		300947	2008 CP ₁₈₃		4 28.4 180°70'	4°5/23.8	18	
3 22	14 45.42	-30 35.3	2.019	2.783	15.5	20.4	3 22	14 46.16	- 0 42.6	2.591	3.414	10.8	20.9
4 1	14 42.05	-30 22.9	1.932	2.786	12.8	20.2	4 1	14 41.84	+ 0 4.4	2.514	3.414	8.5	20.8
4 11	14 36.45	-29 49.7	1.866	2.790	9.8	20.0	4 11	14 35.96	+ 0 50.5	2.462	3.415	6.1	20.6
4 21	14 29.27	-28 55.5	1.824	2.794	6.6	19.8	4 21	14 29.00	+ 1 31.7	2.436	3.415	4.6	20.5
5 1	14 21.43	-27 42.5	1.807	2.798	4.6	19.7	5 1	14 21.60	+ 2 3.9	2.440	3.415	5.1	20.5
5 11	14 13.96	-26 16.4	1.818	2.803	5.7	19.8	5 11	14 14.43	+ 2 23.9	2.471	3.414	7.1	20.7
5 21	14 7.76	-24 44.5	1.855	2.808	8.6	20.0	5 21	14 8.11	+ 2 29.9	2.528	3.413	9.6	20.8
5 31	14 3.49	-23 14.6	1.917	2.813	11.7	20.2	5 31	14 3.14	+ 2 21.4	2.608	3.413	11.9	21.0
386336	2008 SP ₂₄₂		4 28.4 185°82'	0°3/28.1	17		433420	2013 TS ₆₆		4 28.4 209°97'	4°1/ 1.1	17	
3 22	14 48.49	-15 28.7	2.631	3.430	11.4	22.4	3 22	14 55.36	-25 9.6	2.154	2.919	14.6	21.9
4 1	14 43.68	-15 2.0	2.539	3.430	8.8	22.2	4 1	14 49.75	-25 51.6	2.055	2.914	12.0	21.7
4 11	14 37.19	-14 27.2	2.471	3.429	5.8	22.0	4 11	14 41.65	-26 21.3	1.978	2.909	8.9	21.5
4 21	14 29.52	-13 46.2	2.430	3.427	2.5	21.8	4 21	14 31.64	-26 36.7	1.927	2.903	5.8	21.3
5 1	14 21.34	-13 2.2	2.419	3.425	1.1	21.7	5 1	14 20.63	-26 37.0	1.903	2.896	4.1	21.2
5 11	14 13.37	-12 18.8	2.438	3.423	4.4	21.9	5 11	14 9.74	-26 24.2	1.908	2.889	5.8	21.3
5 21	14 6.30	-11 39.7	2.485	3.420	7.6	22.1	5 21	14 0.03	-26 2.3	1.940	2.882	9.0	21.4
5 31	14 0.65	-11 8.4	2.558	3.416	10.5	22.3	5 31	13 52.36	-25 36.9	1.996	2.874	12.2	21.6
41601	2000 SH ₇₈		4 28.4 37°63'	0°5/28.1	18		290595	2005 UD ₁₇₇		4 28.4 239°83'	0°8/28.9	17	
3 22	14 48.37	-15 44.1	1.144	1.993	19.9	18.5	3 22	14 49.58	-18 8.3	1.939	2.745	14.6	21.8
4 1	14 45.30	-15 21.6	1.089	2.006	15.4	18.2	4 1	14 45.29	-17 56.6	1.844	2.737	11.5	21.6
4 11	14 39.01	-14 44.1	1.052	2.021	10.1	18.0	4 11	14 38.67	-17 32.8	1.772	2.729	7.7	21.4
4 21	14 30.45	-13 55.4	1.037	2.036	4.3	17.7	4 21	14 30.32	-16 58.4	1.725	2.720	3.6	21.1
5 1	14 21.04	-13 2.4	1.046	2.053	1.8	17.6	5 1	14 21.11	-16 16.3	1.705	2.712	1.2	20.9
5 11	14 12.36	-12 13.2	1.078	2.069	7.5	18.0	5 11	14 12.13	-15 31.4	1.713	2.702	5.4	21.2
5 21	14 5.67	-11 35.1	1.133	2.087	12.7	18.3	5 21	14 4.33	-14 49.1	1.747	2.693	9.5	21.4
5 31	14 1.80	-11 13.1	1.208	2.105	17.1	18.6	5 31	13 58.49	-14 14.3	1.805	2.683	13.2	21.6
375719	2009 QK ₂₁		4 28.4 280°27'	3°1/30.3	17		465079	2006 TX ₅₂		4 28.4 291°07'	2°2/27.3	17	
3 22	14 50.72	-22 35.8	1.745	2.543	16.3	21.8	3 22	14 53.06	- 9 11.4	1.569	2.400	16.3	20.9
4 1	14 46.75	-22 50.9	1.638	2.521	13.2	21.6	4 1	14 48.69	- 9 13.9	1.469	2.378	12.8	20.6
4 11	14 40.00	-22 51.2	1.552	2.499	9.5	21.3	4 11	14 41.37	- 9 12.4	1.390	2.355	8.5	20.3
4 21	14 31.01	-22 35.7	1.489	2.477	5.5	21.0	4 21	14 31.66	- 9 9.6	1.334	2.332	4.0	19.9
5 1	14 20.75	-22 5.1	1.452	2.454	3.1	20.8	5 1	14 20.59	- 9 8.9	1.305	2.309	2.9	19.8
5 11	14 10.50	-21 23.2	1.442	2.432	6.1	20.9	5 11	14 9.51	- 9 14.2	1.302	2.286	7.6	20.0
5 21	14 1.52	-20 36.3	1.457	2.409	10.5	21.1	5 21	13 59.76	- 9 29.0	1.324	2.263	12.5	20.2
5 31	13 54.84	-19 51.6	1.495	2.386	14.7	21.3	5 31	13 52.43	- 9 55.7	1.367	2.240	17.0	20.4
346498	2008 US ₇₈		4 28.4 222°54'	0°4/28.7	17		98174	2000 SM ₉₃		4 28.4 13°66'	5°2/ 1.9	18	
3 22	14 49.51	-16 36.2	2.100	2.906	13.6	21.5	3 22	14 48.02	-27 52.6	1.318	2.123	20.2	19.1
4 1	14 44.99	-16 28.1	2.008	2.901	10.6	21.3	4 1	14 45.22	-28 1.0	1.243	2.124	16.6	18.9
4 11	14 38.34	-16 10.3	1.938	2.896	7.1	21.1	4 11	14 39.16	-27 44.1	1.185	2.126	12.4	18.6
4 21	14 30.12	-15 44.2	1.894	2.891	3.2	20.8	4 21	14 30.65	-27 0.4	1.148	2.128	8.0	18.4
5 1	14 21.15	-15 12.7	1.878	2.885	1.0	20.6	5 1	14 21.01	-25 52.0	1.134	2.131	5.3	18.2
5 11	14 12.40	-14 39.7	1.891	2.879	5.1	20.9	5 11	14 11.87	-24 26.6	1.144	2.134	7.3	18.4
5 21	14 4.75	-14 9.7	1.930	2.873	9.0	21.1	5 21	14 4.61	-22 55.0	1.177	2.138	11.6	18.6
5 31	13 58.91	-13 46.7	1.993	2.866	12.4	21.3	5 31	14 0.20	-21 28.6	1.232	2.142	15.9	18.9
259344	Paré		4 28.4 2°03'	8°2/23.0	17		360068	2013 AM ₁₁₇		4 28.4 290°76'	5°1/23.7	18	
3 22	14 46.91	+ 2 8.1	1.421	2.274	16.5								

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
295652	2008 <i>TT</i>		4 28.4 264°20	5°9/22.6	18		272959	2006 <i>CP</i> ₂₉		4 28.4 144°29	0°3/28.2	17	
3 22	14 47.42	- 0 43.8	2.124	2.955	12.6	20.6	3 22	14 48.89	-15 41.6	2.071	2.881	13.6	21.6
4 1	14 43.36	+ 0 35.2	2.028	2.932	10.0	20.4	4 1	14 44.42	-15 16.0	1.990	2.887	10.5	21.4
4 11	14 37.29	+ 1 56.5	1.957	2.910	7.4	20.2	4 11	14 37.89	-14 40.6	1.932	2.892	6.9	21.2
4 21	14 29.70	+ 3 13.8	1.911	2.886	5.9	20.1	4 21	14 29.92	-13 57.8	1.900	2.897	3.0	20.9
5 1	14 21.35	+ 4 20.3	1.893	2.862	6.8	20.1	5 1	14 21.33	-13 11.3	1.896	2.902	1.2	20.8
5 11	14 13.12	+ 5 10.0	1.902	2.838	9.4	20.2	5 11	14 13.07	-12 25.9	1.920	2.906	5.2	21.1
5 21	14 5.84	+ 5 39.3	1.936	2.813	12.4	20.3	5 21	14 5.96	-11 46.3	1.971	2.910	9.0	21.3
5 31	14 0.21	+ 5 46.7	1.991	2.788	15.3	20.5	5 31	14 0.64	-11 16.4	2.046	2.914	12.3	21.5
375865	2009 <i>VP</i> ₃₅		4 28.4 155°53	0°5/28.8	17		215466	2002 <i>QD</i> ₉₈		4 28.4 306°30	2°9/26.6	17	
3 22	14 51.47	-16 48.4	2.168	2.968	13.5	22.0	3 22	14 47.49	-10 12.7	1.409	2.255	17.0	21.3
4 1	14 46.34	-16 45.1	2.084	2.974	10.5	21.8	4 1	14 44.52	- 9 38.7	1.318	2.236	13.2	21.0
4 11	14 39.13	-16 32.6	2.023	2.979	7.0	21.6	4 11	14 38.65	- 8 55.2	1.247	2.216	8.8	20.7
4 21	14 30.45	-16 12.2	1.989	2.984	3.2	21.4	4 21	14 30.48	- 8 6.7	1.199	2.197	4.3	20.4
5 1	14 21.11	-15 46.4	1.983	2.989	1.0	21.2	5 1	14 21.08	- 7 19.6	1.176	2.178	3.8	20.3
5 11	14 12.07	-15 18.8	2.005	2.993	4.9	21.5	5 11	14 11.82	- 6 41.4	1.178	2.160	8.5	20.5
5 21	14 4.17	-14 53.4	2.055	2.997	8.6	21.7	5 21	14 4.00	- 6 18.0	1.202	2.142	13.5	20.7
5 31	13 58.07	-14 34.0	2.130	3.000	11.8	21.9	5 31	13 58.66	- 6 13.5	1.247	2.124	18.0	20.9
430672	2003 <i>UJ</i> ₃₂₄		4 28.4 319°79	2°4/30.5	17		288616	2004 <i>NV</i> ₉		4 28.4 248°71	4°9/3.6	18	
3 22	14 43.82	-24 48.7	1.615	2.422	17.0	20.9	3 22	14 48.57	-33 23.6	2.937	3.655	12.1	20.9
4 1	14 41.41	-24 10.2	1.517	2.406	13.7	20.6	4 1	14 44.00	-33 38.8	2.821	3.638	10.3	20.7
4 11	14 36.40	-23 8.2	1.440	2.391	9.7	20.3	4 11	14 37.60	-33 39.2	2.726	3.621	8.2	20.5
4 21	14 29.41	-21 43.6	1.385	2.376	5.4	20.0	4 21	14 29.82	-33 23.4	2.656	3.603	6.2	20.4
5 1	14 21.45	-20 1.0	1.357	2.361	2.4	19.8	5 1	14 21.34	-32 51.2	2.614	3.586	5.0	20.3
5 11	14 13.75	-18 9.0	1.354	2.347	5.9	20.0	5 11	14 12.97	-32 4.8	2.599	3.567	5.4	20.3
5 21	14 7.41	-16 18.0	1.377	2.334	10.6	20.2	5 21	14 5.44	-31 7.9	2.613	3.549	7.3	20.4
5 31	14 3.32	-14 37.9	1.423	2.321	14.9	20.4	5 31	13 59.40	-30 5.8	2.652	3.530	9.5	20.5
336447	2008 <i>UN</i> ₃₂₄		4 28.4 231°71	1°3/29.5	17		88082	2000 <i>WJ</i> ₂₅		4 28.4 320°93	10°2/21.1	18	
3 22	14 48.19	-20 9.2	2.163	2.959	13.6	21.4	3 22	14 53.90	+16 38.4	2.134	2.925	13.9	18.9
4 1	14 43.97	-19 57.1	2.068	2.954	10.7	21.2	4 1	14 48.16	+17 14.1	2.063	2.917	12.2	18.7
4 11	14 37.67	-19 32.8	1.995	2.947	7.4	21.0	4 11	14 40.29	+17 35.2	2.015	2.908	10.8	18.6
4 21	14 29.85	-18 57.2	1.948	2.941	3.7	20.7	4 21	14 30.94	+17 35.3	1.990	2.900	10.2	18.6
5 1	14 21.31	-18 12.8	1.929	2.935	1.5	20.6	5 1	14 20.98	+17 10.1	1.990	2.892	10.8	18.6
5 11	14 12.98	-17 24.3	1.938	2.928	4.8	20.8	5 11	14 11.40	+16 18.0	2.015	2.884	12.3	18.7
5 21	14 5.73	-16 36.5	1.974	2.921	8.5	21.0	5 21	14 3.05	+15 1.0	2.063	2.876	14.2	18.8
5 31	14 0.23	-15 54.5	2.035	2.914	11.9	21.2	5 31	13 56.56	+13 22.8	2.132	2.869	16.2	18.9
425894	2011 <i>FP</i> ₅₉		4 28.4 58°17	0°3/28.6	17		349058	2006 <i>WX</i> ₁₃₃		4 28.4 132°81	1°1/29.6	17	
3 22	14 47.96	-17 19.2	1.812	2.629	15.1	21.5	3 22	14 47.91	-19 42.9	2.772	3.557	11.2	22.3
4 1	14 44.04	-16 57.9	1.732	2.632	11.7	21.3	4 1	14 43.16	-19 36.1	2.689	3.568	8.8	22.1
4 11	14 37.81	-16 24.3	1.674	2.635	7.8	21.1	4 11	14 36.82	-19 20.3	2.629	3.579	6.0	21.9
4 21	14 29.92	-15 40.7	1.641	2.638	3.5	20.8	4 21	14 29.40	-18 56.4	2.597	3.589	3.0	21.8
5 1	14 21.31	-14 51.1	1.634	2.641	1.1	20.6	5 1	14 21.53	-18 26.3	2.594	3.599	1.2	21.6
5 11	14 13.05	-14 1.1	1.655	2.644	5.6	21.0	5 11	14 13.92	-17 53.3	2.620	3.609	3.8	21.8
5 21	14 6.08	-13 16.2	1.702	2.648	9.7	21.2	5 21	14 7.18	-17 20.5	2.675	3.619	6.8	22.0
5 31	14 1.11	-12 41.4	1.771	2.651	13.4	21.4	5 31	14 1.83	-16 51.5	2.756	3.628	9.4	22.2
254606	2005 <i>GR</i> ₁₃₇		4 28.4 285°56	0°2/28.5	17		275606	1999 <i>XU</i> ₅₁		4 28.4 225°60	3°5/25.5	18	
3 22	14 47.47	-17 56.8	1.578	2.403	16.5	21.0	3 22	14 50.79	- 4 7.6	2.362	3.179	12.0	21.1
4 1	14 44.17	-17 22.3	1.488	2.392	13.0	20.7	4 1	14 45.66	- 3 42.2	2.269	3.169	9.3	20.9
4 11	14 38.20	-16 31.5	1.418	2.381	8.7	20.4	4 11	14 38.65	- 3 15.8	2.201	3.159	6.4	20.7
4 21	14 30.19	-15 26.8	1.372	2.370	3.8	20.1	4 21	14 30.26	- 2 52.0	2.159	3.148	3.9	20.5
5 1	14 21.18	-14 13.6	1.352	2.359	1.3	19.9	5 1	14 21.21	- 2 34.4	2.147	3.137	4.1	20.5
5 11	14 12.44	-12 59.5	1.358	2.348	6.5	20.2	5 11	14 12.35	- 2 26.4	2.163	3.125	6.7	20.7
5 21	14 5.10	-11 52.5	1.389	2.337	11.3	20.5	5 21	14 4.43	- 2 29.9	2.206	3.113	9.8	20.8
5 31	14 0.05	-10 59.2	1.442	2.326	15.6	20.7	5 31	13 58.08	- 2 46.2	2.273	3.101	12.6	21.0
453854	2011 <i>UR</i> ₄₇		4 28.4 98°09	0°6/28.8	18		460285	2014 <i>QU</i> ₃₅₅		4 28.4 288°00	0°4/28.6	16	
3 22	14 52.22	-18 58.9	1.587	2.399	17.0	21.9	3 22	14 50.91	-16 24.9	1.428	2.256	17.7	21.8
4 1	14 47.43	-18 25.7	1.522	2.419	13.2	21.7	4 1	14 47.10	-16 21.3	1.345	2.251	13.9	21.5
4 11	14 40.02	-17 36.9	1.479	2.438	8.8	21.5	4 11	14 40.28	-16 4.8	1.282	2.245	9.4	21.2
4 21	14 30.83	-16 35.5	1.460	2.456	4.0	21.2	4 21	14 31.15	-15 37.1	1.242	2.239	4.2	20.9
5 1	14 21.01	-15 26.8	1.468	2.475	1.2	21.1	5 1	14 20.88	-15 1.8	1.227	2.234	1.4	20.7
5 11	14 11.81	-14 18.3	1.503	2.492	6.0	21.4	5 11	14 10.91	-14 24.8	1.238	2.228	6.8	21.0
5 21	14 4.26	-13 17.1	1.563	2.510	10.4	21.7	5 21	14 2.56	-13 52.6	1.272	2.223	11.9	21.3
5 31	13 59.05	-12 28.7	1.647	2.526	14.2	22.0	5 31	13 56.80	-13 31.0	1.328	2.217	16.3	21.5
462613	2009 <i>MZ</i> ₇		4 28.4 289°83	16°0/10.1	17		127394	2002 <i>LR</i> ₁₁		4 28.4 355°08	7°3/24.4	18	
3 22	14 49.39	+23 58.1	1.649	2.442	17.3	20.2	3 22	14 44.45	- 2 36.0	1.077	1.950	19.1	18.9
4 1	14 45.60	+26 11.7	1.592	2.421	16.3	20.1	4 1	14 42.55	- 1 39.6	1.014	1.944	15.0	18.6
4 11	14 39.10	+28 5.4	1.554	2.400	16.0	20.0	4 11	14 37.45	- 0 42.1	0.970	1.939	10.7	18.3
4 21	14 30.56	+29 27.3	1.536	2.379	16.5	20.0	4 21	14 29.94	+ 0 7.4	0.947	1.936	7.6	18.2
5 1	14 21.06	+30 8.1	1.537	2.357	17.7	20.0	5 1	14 21.33	+ 0 39.3	0.945	1.934	8.3	18.2
5 11	14 11.88	+30 3.9	1.556	2.336	19.4	20.1	5 11	14 13.21	+ 0 46.4	0.965	1.934	12.1	18.4
5 21	14 4.15	+29 16.2	1.590	2.315	21.2	20.2	5 21	14 6.92	+ 0 26.0	1.005	1.935	16.5	18.6
5 31	13 58.74	+27 50.2	1.636	2.294	23.0	20.3	5 31	14 3.42	- 0 20.7	1.062	1.937	20.6	18.9
237110	2008 <i>TR</i> ₁₂₃		4 28.4 126°08	1°7/29.8	18		502196	2015 <i>BZ</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
422904	2002 RW ₁₆₃		4 28.4 209°25	1°5/29.6	17		126066	2001 YU ₈₁		4 28.4 125°54	0°1/28.4	17	
3 22	14 52.26	-20 5.6	2.190	2.978	13.7	22.4	3 22	14 49.78	-15 53.0	1.865	2.679	14.8	20.3
4 1	14 47.12	-20 0.3	2.090	2.971	10.9	22.1	4 1	14 45.38	-15 40.6	1.784	2.683	11.5	20.1
4 11	14 39.78	-19 43.1	2.014	2.964	7.5	21.9	4 11	14 38.69	-15 18.1	1.725	2.686	7.6	19.9
4 21	14 30.80	-19 14.7	1.963	2.955	3.8	21.7	4 21	14 30.33	-14 47.3	1.692	2.689	3.3	19.6
5 1	14 21.02	-18 37.0	1.941	2.946	1.6	21.5	5 1	14 21.23	-14 11.8	1.686	2.692	1.2	19.5
5 11	14 11.43	-17 54.3	1.948	2.937	4.9	21.7	5 11	14 12.48	-13 36.3	1.707	2.696	5.6	19.8
5 21	14 2.94	-17 11.3	1.982	2.926	8.7	21.9	5 21	14 5.00	-13 5.5	1.755	2.698	9.6	20.0
5 31	13 56.29	-16 33.1	2.042	2.915	12.1	22.1	5 31	13 59.51	-12 43.7	1.825	2.701	13.2	20.2
397675	2008 AK ₉₆		4 28.4 233°35	6°1/22.3	18		67925	2000 WA ₁₁₆		4 28.4 284°67	2°8/29.9	18	
3 22	14 46.75	+ 4 12.0	2.445	3.267	11.4	20.9	3 22	14 51.41	-21 0.5	1.537	2.347	17.6	18.9
4 1	14 42.43	+ 5 7.2	2.368	3.262	9.2	20.8	4 1	14 47.67	-21 20.0	1.435	2.327	14.2	18.6
4 11	14 36.44	+ 5 58.5	2.315	3.256	7.2	20.6	4 11	14 40.85	-21 25.1	1.354	2.307	10.1	18.3
4 21	14 29.27	+ 6 41.1	2.288	3.250	6.2	20.5	4 21	14 31.52	-21 14.6	1.295	2.286	5.5	18.0
5 1	14 21.58	+ 7 10.2	2.289	3.243	6.8	20.6	5 1	14 20.75	-20 49.3	1.262	2.266	2.9	17.8
5 11	14 14.13	+ 7 22.7	2.317	3.237	8.7	20.7	5 11	14 9.99	-20 13.5	1.254	2.245	6.6	17.9
5 21	14 7.58	+ 7 17.2	2.369	3.230	11.0	20.8	5 21	14 0.66	-19 33.7	1.271	2.224	11.6	18.2
5 31	14 2.46	+ 6 54.0	2.442	3.224	13.2	21.0	5 31	13 53.91	-18 57.4	1.309	2.204	16.1	18.4
55701	Ukalegon		4 28.4 259°80	0°7/29.7	18		140925	2001 VR ₆₈		4 28.4 114°73	4°6/2.7	18	
3 22	14 39.20	-20 30.6	4.632	5.409	7.1	19.9	3 22	14 52.66	-30 20.6	2.713	3.444	12.7	19.7
4 1	14 36.00	-20 2.5	4.525	5.400	5.6	19.8	4 1	14 47.04	-30 55.3	2.631	3.461	10.6	19.6
4 11	14 31.92	-19 27.8	4.443	5.390	3.8	19.7	4 11	14 39.51	-31 16.4	2.571	3.477	8.2	19.4
4 21	14 27.24	-18 47.5	4.389	5.381	1.9	19.5	4 21	14 30.62	-31 22.4	2.537	3.493	5.9	19.3
5 1	14 22.31	-18 3.4	4.366	5.371	0.8	19.4	5 1	14 21.14	-31 13.1	2.531	3.509	4.7	19.2
5 11	14 17.48	-17 17.5	4.373	5.361	2.4	19.5	5 11	14 11.94	-30 50.9	2.553	3.524	5.3	19.3
5 21	14 13.08	-16 32.0	4.409	5.351	4.4	19.7	5 21	14 3.78	-30 19.3	2.603	3.539	7.3	19.5
5 31	14 9.41	-15 49.2	4.473	5.342	6.1	19.8	5 31	13 57.28	-29 43.2	2.679	3.553	9.6	19.6
32791	1989 TQ ₂		4 28.4 142°64	1°2/27.4	18		462138	2007 SL ₂₀		4 28.4 225°46	1°6/27.1	16	
3 22	14 50.21	-10 12.9	2.743	3.547	10.8	18.7	3 22	14 50.54	-13 38.3	1.857	2.675	14.7	22.6
4 1	14 44.87	-10 11.3	2.661	3.555	8.3	18.6	4 1	14 46.08	-12 50.6	1.763	2.665	11.4	22.4
4 11	14 37.93	-10 6.4	2.603	3.563	5.4	18.4	4 11	14 39.24	-11 51.3	1.691	2.654	7.5	22.1
4 21	14 29.89	-9 59.9	2.574	3.571	2.4	18.2	4 21	14 30.62	-10 44.1	1.645	2.643	3.3	21.8
5 1	14 21.38	-9 53.8	2.574	3.578	1.7	18.1	5 1	14 21.13	-9 34.4	1.627	2.631	2.4	21.7
5 11	14 13.11	-9 50.4	2.604	3.585	4.6	18.3	5 11	14 11.87	-8 29.1	1.637	2.618	6.6	22.0
5 21	14 5.71	-9 51.7	2.663	3.591	7.5	18.5	5 21	14 3.84	-7 34.2	1.673	2.605	10.9	22.2
5 31	13 59.70	-9 59.4	2.747	3.597	10.1	18.7	5 31	13 57.82	-6 54.4	1.732	2.591	14.6	22.4
419577	2010 RB ₆₅		4 28.4 194°25	0°7/29.0	16		57514	2001 SU ₂₈₁		4 28.4 201°47	1°2/29.5	18	
3 22	14 51.22	-19 25.6	2.185	2.977	13.6	22.6	3 22	14 48.67	-21 56.9	2.101	2.892	14.1	19.6
4 1	14 46.22	-18 53.3	2.090	2.975	10.7	22.3	4 1	14 44.37	-21 13.1	2.006	2.889	11.2	19.4
4 11	14 39.11	-18 7.8	2.018	2.972	7.2	22.1	4 11	14 37.94	-20 12.9	1.934	2.885	7.7	19.2
4 21	14 30.48	-17 10.9	1.973	2.968	3.4	21.9	4 21	14 29.99	-18 58.4	1.888	2.881	3.8	18.9
5 1	14 21.16	-16 6.2	1.956	2.963	1.1	21.7	5 1	14 21.37	-17 33.6	1.871	2.877	1.3	18.7
5 11	14 12.11	-14 59.1	1.969	2.957	5.0	21.9	5 11	14 13.05	-16 5.1	1.882	2.872	5.0	19.0
5 21	14 4.18	-13 55.4	2.010	2.950	8.8	22.2	5 21	14 5.89	-14 39.8	1.922	2.867	8.8	19.2
5 31	13 58.06	-13 0.3	2.075	2.943	12.2	22.4	5 31	14 0.55	-13 24.1	1.986	2.861	12.3	19.4
515448	2013 VK ₂₄		4 28.4 248°89	2°3/2.6	18		506589	2005 WP ₁₅₈		4 28.4 215°73	8°3/7.7	17	
3 22	14 40.03	-29 0.8	4.835	5.569	7.5	21.1	3 22	14 55.88	-44 56.2	2.673	3.310	14.8	22.0
4 1	14 36.65	-28 57.0	4.728	5.563	6.1	21.0	4 1	14 50.13	-45 17.4	2.562	3.300	13.3	21.8
4 11	14 32.36	-28 44.8	4.644	5.557	4.7	20.9	4 11	14 41.87	-45 16.8	2.468	3.289	11.6	21.7
4 21	14 27.45	-28 24.6	4.587	5.551	3.2	20.7	4 21	14 31.74	-44 50.6	2.395	3.278	9.8	21.5
5 1	14 22.25	-27 57.2	4.559	5.545	2.4	20.7	5 1	14 20.74	-43 56.8	2.347	3.265	8.6	21.4
5 11	14 17.15	-27 24.0	4.560	5.539	2.9	20.7	5 11	14 10.04	-42 37.5	2.326	3.252	8.4	21.4
5 21	14 12.50	-26 47.1	4.591	5.533	4.2	20.8	5 21	14 0.68	-40 58.0	2.331	3.238	9.4	21.4
5 31	14 8.61	-26 8.9	4.649	5.527	5.7	20.9	5 31	13 53.48	-39 6.2	2.362	3.223	11.1	21.5
302837	2003 FM ₅₄		4 28.4 338°93	1°8/29.2	17		474882	2005 SQ ₁₅₃		4 28.4 175°23	3°2/1.2	16	
3 22	14 52.68	-16 42.2	1.257	2.090	19.4	19.7	3 22	14 48.89	-25 12.5	2.575	3.341	12.5	21.9
4 1	14 48.96	-17 18.8	1.178	2.085	15.4	19.4	4 1	14 44.25	-25 30.3	2.481	3.342	10.1	21.7
4 11	14 41.81	-17 45.1	1.118	2.080	10.5	19.1	4 11	14 37.75	-25 36.4	2.410	3.342	7.4	21.6
4 21	14 31.92	-18 0.4	1.080	2.076	5.2	18.8	4 21	14 29.89	-25 30.1	2.365	3.343	4.7	21.4
5 1	14 20.62	-18 5.4	1.066	2.072	2.1	18.6	5 1	14 21.40	-25 12.2	2.347	3.343	3.2	21.3
5 11	14 9.61	-18 3.8	1.076	2.069	7.2	18.9	5 11	14 13.11	-24 45.3	2.359	3.343	4.6	21.4
5 21	14 0.44	-18 0.9	1.109	2.066	12.6	19.1	5 21	14 5.76	-24 13.1	2.398	3.343	7.3	21.6
5 31	13 54.27	-18 2.4	1.163	2.064	17.3	19.4	5 31	13 59.97	-23 40.1	2.462	3.343	10.0	21.7
275942	2001 UA ₁₃₁		4 28.4 357°93	0°5/28.1	17		179846	2002 TC ₂₄₆		4 28.4 184°97	2°7/26.2	17	
3 22	14 55.12	-11 33.9	1.680	2.499	15.9	20.4	3 22	14 49.84	- 9 38.9	2.002	2.824	13.6	21.1
4 1	14 49.84	-12 0.5	1.597	2.499	12.4	20.1	4 1	14 45.21	- 8 50.1	1.920	2.824	10.5	20.9
4 11	14 41.83	-12 22.9	1.536	2.498	8.2	19.9	4 11	14 38.47	- 7 54.5	1.861	2.824	6.9	20.7
4 21	14 31.76	-12 41.9	1.500	2.498	3.5	19.6	4 21	14 30.21	- 6 56.4	1.828	2.823	3.5	20.5
5 1	14 20.70	-12 59.1	1.492	2.498	1.5	19.5	5 1	14 21.30	- 6 1.1	1.823	2.822	3.4	20.5
5 11	14 9.94	-13 16.8	1.511	2.498	6.3	19.8	5 11	14 12.70	- 5 14.0	1.847	2.820	6.8	20.7
5 21	14 0.62	-13 37.5	1.556	2.499	10.7	20.0	5 21	14 5.26	- 4 39.4	1.897	2.818	10.4	20.9
5 31	13 53.64	-14 3.8	1.624	2.499	14.6	20.3	5 31	13 59.64	- 4 19.9	1.969	2.815	13.6	21.1
227295	2005 SP ₂₁₉		4 28.4 150°34	2°7/25.9	16		292211	2006 SX ₄₁		4 28.4 172°82	2°7/26.5	17	
3 22	14 50.69	- 6 50.4	2.507	3.319									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
491690	2012 <i>UB</i> ₆₅		4 28.4 126°58	0°3/28.7	17		476464	2008 <i>EU</i> ₁₄₉		4 28.4 292°38	1°9/26.4	16	
3 22	14 46.42	-18 7.1	2.401	3.201	12.3	22.0	3 22	14 44.22	-11 14.9	2.375	3.196	11.7	21.5
4 1	14 42.25	-17 32.6	2.319	3.209	9.5	21.8	4 1	14 40.61	-10 26.1	2.288	3.193	9.0	21.3
4 11	14 36.34	-16 47.3	2.260	3.217	6.3	21.6	4 11	14 35.32	-9 30.3	2.225	3.189	5.9	21.1
4 21	14 29.24	-15 53.7	2.228	3.224	2.8	21.4	4 21	14 28.83	-8 31.0	2.189	3.185	2.8	20.9
5 1	14 21.66	-14 55.2	2.224	3.231	0.9	21.2	5 1	14 21.82	-7 32.8	2.181	3.182	2.5	20.9
5 11	14 14.38	-13 56.6	2.250	3.238	4.5	21.5	5 11	14 15.04	-6 40.3	2.202	3.178	5.6	21.1
5 21	14 8.07	-13 2.5	2.304	3.245	7.8	21.7	5 21	14 9.15	-5 57.5	2.250	3.175	8.8	21.3
5 31	14 3.29	-12 16.8	2.382	3.251	10.8	21.9	5 31	14 4.70	-5 27.3	2.321	3.171	11.7	21.4
8622	Mayimbialik		4 28.4 249°95	1°0/29.4	18		246008	2006 <i>TL</i> ₁₅		4 28.4 216°38	0°5/27.9	18	
3 22	14 46.46	-19 31.6	2.607	3.398	11.7	18.7	3 22	14 45.87	-15 34.2	2.631	3.435	11.2	21.0
4 1	14 42.33	-19 14.6	2.502	3.385	9.2	18.6	4 1	14 41.75	-14 55.2	2.534	3.428	8.7	20.8
4 11	14 36.47	-18 47.2	2.420	3.372	6.3	18.3	4 11	14 36.01	-14 7.2	2.462	3.422	5.7	20.6
4 21	14 29.34	-18 10.6	2.364	3.358	3.1	18.1	4 21	14 29.13	-13 12.7	2.417	3.415	2.4	20.4
5 1	14 21.60	-17 27.0	2.338	3.344	1.1	17.9	5 1	14 21.72	-12 15.2	2.402	3.408	1.2	20.2
5 11	14 14.00	-16 40.3	2.340	3.330	4.2	18.1	5 11	14 14.50	-11 18.9	2.416	3.400	4.5	20.5
5 21	14 7.23	-15 54.4	2.371	3.315	7.5	18.3	5 21	14 8.12	-10 28.1	2.458	3.392	7.7	20.7
5 31	14 1.89	-15 13.6	2.427	3.300	10.4	18.5	5 31	14 3.11	-9 46.1	2.525	3.384	10.6	20.8
389290	2009 <i>JO</i> ₅		4 28.4 31°99	3°1/26.6	17		65044	2002 <i>AH</i> ₁₃₉		4 28.4 109°16	3°0/25.6	18	
3 22	14 52.00	-4 52.4	1.869	2.696	14.2	19.9	3 22	14 46.90	-5 53.4	2.534	3.354	11.1	19.9
4 1	14 46.89	-4 59.6	1.801	2.706	11.0	19.7	4 1	14 42.40	-5 17.9	2.463	3.366	8.5	19.8
4 11	14 39.56	-5 7.3	1.755	2.717	7.4	19.5	4 11	14 36.34	-4 40.5	2.418	3.378	5.7	19.6
4 21	14 30.67	-5 18.2	1.735	2.729	4.0	19.3	4 21	14 29.22	-4 4.6	2.399	3.390	3.3	19.5
5 1	14 21.16	-5 35.0	1.742	2.740	3.6	19.3	5 1	14 21.70	-3 33.9	2.410	3.402	3.5	19.5
5 11	14 12.07	-5 59.7	1.778	2.753	6.8	19.6	5 11	14 14.48	-3 11.5	2.449	3.413	5.9	19.7
5 21	14 4.28	-6 33.3	1.839	2.766	10.4	19.8	5 21	14 8.16	-2 59.6	2.514	3.425	8.6	19.9
5 31	13 58.46	-7 16.2	1.923	2.779	13.5	20.0	5 31	14 3.24	-2 59.6	2.604	3.436	11.1	20.0
458935	2011 <i>UX</i> ₃₁₈		4 28.4 58°34	0°2/28.3	16		470108	2006 <i>TU</i> ₈₂		4 28.4 170°60	1°1/29.7	18	
3 22	14 48.71	-17 29.0	1.365	2.198	18.2	21.6	3 22	14 46.56	-20 45.2	2.942	3.722	10.7	22.3
4 1	14 45.22	-16 48.6	1.299	2.207	14.1	21.4	4 1	14 42.09	-20 22.1	2.849	3.726	8.4	22.1
4 11	14 38.86	-15 51.5	1.252	2.217	9.3	21.1	4 11	14 36.13	-19 49.0	2.780	3.728	5.8	21.9
4 21	14 30.46	-14 41.6	1.229	2.227	4.0	20.9	4 21	14 29.15	-19 7.2	2.739	3.731	2.9	21.7
5 1	14 21.25	-13 25.7	1.231	2.238	1.5	20.7	5 1	14 21.72	-18 19.0	2.728	3.733	1.2	21.6
5 11	14 12.61	-12 12.6	1.258	2.248	6.9	21.1	5 11	14 14.52	-17 28.0	2.746	3.735	3.7	21.8
5 21	14 5.71	-11 10.3	1.310	2.259	11.8	21.4	5 21	14 8.12	-16 37.8	2.793	3.736	6.5	22.0
5 31	14 1.31	-10 24.7	1.382	2.269	15.9	21.6	5 31	14 3.00	-15 52.1	2.867	3.737	9.1	22.2
215997	2005 <i>SH</i> ₁₉₉		4 28.4 222°67	0°4/28.8	18		375904	2009 <i>VJ</i> ₁₀₅		4 28.4 230°63	3°6/1.3	17	R
3 22	14 46.73	-17 12.7	2.585	3.384	11.6	21.4	3 22	14 51.39	-26 2.1	2.199	2.967	14.3	21.3
4 1	14 42.47	-16 58.7	2.489	3.379	9.0	21.2	4 1	14 46.64	-26 10.8	2.094	2.955	11.7	21.1
4 11	14 36.52	-16 36.0	2.417	3.373	6.0	21.0	4 11	14 39.59	-26 4.6	2.011	2.944	8.6	20.9
4 21	14 29.35	-16 6.2	2.372	3.368	2.7	20.8	4 21	14 30.80	-25 42.4	1.953	2.931	5.5	20.6
5 1	14 21.62	-15 31.5	2.355	3.362	0.9	20.6	5 1	14 21.12	-25 5.0	1.922	2.918	3.6	20.5
5 11	14 14.07	-14 55.5	2.368	3.356	4.2	20.9	5 11	14 11.59	-24 16.1	1.919	2.905	5.3	20.6
5 21	14 7.37	-14 21.9	2.408	3.350	7.5	21.1	5 21	14 3.16	-23 21.0	1.944	2.891	8.6	20.7
5 31	14 2.10	-13 54.0	2.474	3.343	10.4	21.3	5 31	13 56.64	-22 25.8	1.993	2.876	11.9	20.9
118111	2633 <i>T</i> ₋₃		4 28.4 223°89	0°9/27.7	18		232248	2002 <i>PB</i> ₂₀		4 28.4 338°54	9°8/5.3	17	
3 22	14 47.77	-15 47.4	1.850	2.669	14.7	20.3	3 22	14 47.29	-36 57.4	1.614	2.361	19.4	19.8
4 1	14 43.89	-14 57.7	1.763	2.665	11.4	20.1	4 1	14 44.73	-38 1.0	1.522	2.350	17.1	19.6
4 11	14 37.75	-13 55.0	1.698	2.661	7.5	19.8	4 11	14 39.02	-38 41.1	1.448	2.339	14.4	19.4
4 21	14 29.95	-12 42.7	1.658	2.656	3.2	19.5	4 21	14 30.76	-38 52.1	1.393	2.328	11.7	19.2
5 1	14 21.41	-11 26.4	1.646	2.652	1.8	19.4	5 1	14 21.11	-38 30.6	1.360	2.319	10.0	19.0
5 11	14 13.18	-10 13.1	1.662	2.647	6.1	19.7	5 11	14 11.64	-37 38.5	1.350	2.310	10.2	19.0
5 21	14 6.17	-9 9.2	1.704	2.642	10.3	19.9	5 21	14 3.80	-36 22.9	1.363	2.303	12.2	19.1
5 31	14 1.11	-8 19.7	1.769	2.636	13.9	20.1	5 31	13 58.75	-34 54.2	1.397	2.296	15.0	19.3
124532	2001 <i>RB</i> ₉₁		4 28.4 156°79	0°5/28.1	18		330011	2005 <i>UF</i> ₄₂		4 28.4 198°14	1°2/29.4	17	
3 22	14 54.03	-14 58.2	1.785	2.596	15.5	21.0	3 22	14 51.34	-19 5.7	2.169	2.963	13.7	21.8
4 1	14 48.71	-14 36.8	1.707	2.604	12.0	20.8	4 1	14 46.40	-19 2.6	2.075	2.960	10.8	21.6
4 11	14 40.90	-14 5.1	1.650	2.611	7.9	20.5	4 11	14 39.31	-18 48.5	2.004	2.957	7.4	21.4
4 21	14 31.30	-13 25.3	1.620	2.617	3.4	20.3	4 21	14 30.63	-18 24.2	1.959	2.953	3.6	21.2
5 1	14 20.95	-12 41.8	1.617	2.623	1.5	20.1	5 1	14 21.20	-17 52.0	1.943	2.949	1.4	21.0
5 11	14 11.01	-11 59.8	1.642	2.628	6.0	20.4	5 11	14 12.00	-17 15.7	1.955	2.944	4.9	21.2
5 21	14 2.51	-11 24.7	1.693	2.632	10.3	20.7	5 21	14 3.91	-16 39.9	1.994	2.939	8.6	21.4
5 31	13 56.19	-11 0.5	1.768	2.635	14.0	20.9	5 31	13 57.64	-16 9.2	2.058	2.933	12.0	21.6
72230	2001 <i>AN</i> ₁₅		4 28.4 88°00	3°5/26.0	18		211143	2002 <i>GV</i> ₁₀₀		4 28.4 333°43	1°0/28.9	17	
3 22	14 51.69	-8 45.6	1.561	2.396	16.2	19.3	3 22	14 49.27	-17 3.2	1.324	2.159	18.5	20.2
4 1	14 46.91	-7 52.8	1.505	2.416	12.4	19.1	4 1	14 46.10	-17 10.2	1.243	2.152	14.6	20.0
4 11	14 39.64	-6 53.9	1.470	2.436	8.1	18.9	4 11	14 39.79	-17 4.1	1.182	2.145	9.9	19.7
4 21	14 30.70	-5 54.8	1.461	2.456	4.3	18.8	4 21	14 31.04	-16 45.6	1.142	2.139	4.6	19.3
5 1	14 21.19	-5 1.9	1.477	2.475	4.2	18.8	5 1	14 21.05	-16 17.9	1.127	2.134	1.5	19.1
5 11	14 12.31	-4 21.5	1.521	2.494	7.9	19.1	5 11	14 11.37	-15 46.8	1.136	2.129	6.9	19.4
5 21	14 5.01	-3 57.2	1.589	2.513	11.8	19.3	5 21	14 3.37	-15 18.9	1.169	2.124	12.2	19.7
5 31	13 59.96	-3 50.9	1.678	2.531	15.3	19.6	5 31	13 58.10	-15 0.3	1.222	2.121	16.8	20.0
67407	2000 <i>QG</i> ₄		4 28.4 276°27	7°1/22.5	17		171828	2001 <i>FD</i> ₁₀₃		4 28.4 168°46	1°6/29.7	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
205316	2000 <i>TW</i> ₄₈		4 28.4 323°05	7°3/23.7	17		120427	1155 <i>T</i> ₋₃		4 28.4 205°41	3°2/1.9	18	
3 22	14 43.88	- 4 0.4	1.147	2.017	18.4	19.3	3 22	14 48.67	-27 43.4	3.260	4.001	10.6	21.2
4 1	14 42.20	- 2 42.4	1.067	1.996	14.5	19.0	4 1	14 43.75	-27 54.3	3.153	3.995	8.7	21.1
4 11	14 37.38	- 1 17.0	1.007	1.976	10.4	18.7	4 11	14 37.29	-27 54.2	3.069	3.989	6.5	20.9
4 21	14 30.05	+ 0 6.0	0.968	1.957	7.5	18.4	4 21	14 29.70	-27 42.6	3.012	3.981	4.4	20.8
5 1	14 21.39	+ 1 15.1	0.952	1.939	8.5	18.4	5 1	14 21.58	-27 20.0	2.984	3.974	3.2	20.7
5 11	14 12.95	+ 1 59.5	0.957	1.922	12.7	18.6	5 11	14 13.58	-26 48.6	2.986	3.966	4.1	20.7
5 21	14 6.15	+ 2 13.2	0.982	1.906	17.4	18.8	5 21	14 6.32	-26 11.3	3.016	3.957	6.2	20.9
5 31	14 2.09	+ 1 54.9	1.024	1.891	21.8	19.0	5 31	14 0.32	-25 32.0	3.074	3.948	8.4	21.0
265777	2005 <i>WM</i> ₇₄		4 28.4 147°45	6°4/22.3	17		222559	2001 <i>VS</i> ₄₀		4 28.4 175°27	1°4/29.7	17	
3 22	14 47.90	+ 0 47.3	2.068	2.899	12.9	20.5	3 22	14 50.68	-20 47.4	2.330	3.115	13.1	21.7
4 1	14 43.53	+ 2 14.8	2.004	2.906	10.2	20.4	4 1	14 45.70	-20 33.8	2.239	3.117	10.3	21.5
4 11	14 37.26	+ 3 41.1	1.963	2.912	7.7	20.2	4 11	14 38.73	-20 8.1	2.171	3.120	7.1	21.3
4 21	14 29.67	+ 4 59.6	1.949	2.918	6.4	20.2	4 21	14 30.36	-19 31.4	2.130	3.121	3.6	21.1
5 1	14 21.58	+ 6 3.6	1.962	2.924	7.2	20.2	5 1	14 21.36	-18 46.1	2.117	3.122	1.5	20.9
5 11	14 13.85	+ 6 48.2	2.002	2.929	9.5	20.4	5 11	14 12.63	-17 56.5	2.133	3.122	4.5	21.1
5 21	14 7.23	+ 7 11.1	2.066	2.934	12.1	20.5	5 21	14 4.97	-17 7.3	2.178	3.122	8.0	21.3
5 31	14 2.29	+ 7 12.3	2.151	2.939	14.6	20.7	5 31	13 59.01	-16 23.4	2.248	3.121	11.1	21.5
120593	1995 <i>SR</i> ₆₂		4 28.4 358°60	0°5/28.1	17		299365	2005 <i>TE</i> ₉₉		4 28.4 175°72	0°3/28.0	18	
3 22	14 48.69	-14 34.5	1.758	2.581	15.2	20.5	3 22	14 45.24	-16 1.3	2.975	3.773	10.2	21.5
4 1	14 44.73	-14 21.4	1.676	2.580	11.8	20.3	4 1	14 41.04	-15 22.0	2.884	3.775	7.9	21.3
4 11	14 38.37	-13 58.7	1.617	2.580	7.8	20.1	4 11	14 35.43	-14 34.6	2.818	3.776	5.2	21.2
4 21	14 30.26	-13 28.7	1.582	2.580	3.3	19.8	4 21	14 28.86	-13 41.5	2.780	3.777	2.2	21.0
5 1	14 21.36	-12 55.2	1.573	2.580	1.4	19.6	5 1	14 21.89	-12 45.7	2.772	3.778	1.0	20.9
5 11	14 12.77	-12 23.1	1.592	2.580	5.9	19.9	5 11	14 15.13	-11 51.0	2.794	3.779	4.0	21.1
5 21	14 5.48	-11 57.2	1.636	2.580	10.2	20.2	5 21	14 9.12	-11 0.9	2.845	3.779	6.8	21.3
5 31	14 0.25	-11 41.4	1.703	2.581	13.9	20.4	5 31	14 4.32	-10 18.6	2.921	3.778	9.4	21.4
82090	2001 <i>DT</i> ₇₈		4 28.4 168°08	1°2/27.5	18		106038	2000 <i>SG</i> ₃₀₅		4 28.4 131°78	2°3/30.8	18	
3 22	14 51.81	-13 16.6	1.969	2.782	14.1	20.7	3 22	14 48.14	-23 51.1	2.813	3.581	11.5	20.4
4 1	14 46.79	-12 46.9	1.887	2.786	10.9	20.5	4 1	14 43.40	-23 50.7	2.728	3.593	9.2	20.3
4 11	14 39.54	-12 8.4	1.828	2.790	7.1	20.3	4 11	14 37.05	-23 39.2	2.666	3.604	6.6	20.1
4 21	14 30.72	-11 24.1	1.796	2.794	3.1	20.0	4 21	14 29.58	-23 17.1	2.631	3.614	3.9	19.9
5 1	14 21.21	-10 38.3	1.791	2.796	1.9	19.9	5 1	14 21.64	-22 45.8	2.624	3.624	2.3	19.8
5 11	14 12.04	-9 56.2	1.815	2.798	5.9	20.2	5 11	14 13.97	-22 8.5	2.647	3.634	3.9	20.0
5 21	14 4.11	-9 22.1	1.866	2.799	9.8	20.4	5 21	14 7.18	-21 28.7	2.698	3.644	6.6	20.2
5 31	13 58.11	- 8 59.7	1.940	2.800	13.2	20.6	5 31	14 1.80	-20 50.3	2.776	3.653	9.2	20.3
415965	2001 <i>XA</i> ₂₀₆		4 28.4 65°57	8°2/23.5	18		463217	2012 <i>DQ</i> ₃₄		4 28.4 112°15	3°5/30.8	17	
3 22	14 52.99	+ 5 23.8	1.623	2.454	15.8	20.5	3 22	14 53.00	-23 56.7	1.693	2.484	17.0	21.2
4 1	14 47.70	+ 6 14.9	1.579	2.476	12.7	20.3	4 1	14 48.28	-24 13.7	1.615	2.493	13.7	21.0
4 11	14 40.04	+ 6 57.3	1.556	2.498	9.9	20.2	4 11	14 40.82	-24 14.5	1.558	2.501	9.9	20.8
4 21	14 30.85	+ 7 24.4	1.557	2.520	8.3	20.1	4 21	14 31.36	-23 58.0	1.525	2.510	5.9	20.6
5 1	14 21.20	+ 7 30.7	1.583	2.542	8.8	20.2	5 1	14 21.02	-23 25.9	1.517	2.518	3.5	20.4
5 11	14 12.23	+ 7 13.9	1.635	2.564	11.1	20.4	5 11	14 11.09	-22 42.9	1.537	2.525	6.0	20.6
5 21	14 4.83	+ 6 35.0	1.709	2.586	13.8	20.6	5 21	14 2.72	-21 55.4	1.582	2.533	9.9	20.9
5 31	13 59.61	+ 5 36.8	1.804	2.608	16.4	20.8	5 31	13 56.75	-21 10.5	1.650	2.540	13.6	21.1
341818	2007 <i>YX</i> ₁₆		4 28.4 65°39	2°2/26.7	17		376693	2013 <i>QH</i> ₇₉		4 28.4 262°07	0°3/28.6	17	
3 22	14 47.97	- 9 7.7	2.100	2.924	13.0	20.4	3 22	14 50.30	-16 57.4	1.853	2.664	15.0	21.5
4 1	14 43.60	- 8 44.7	2.029	2.934	9.9	20.2	4 1	14 46.11	-16 41.6	1.750	2.646	11.8	21.2
4 11	14 37.32	- 8 17.5	1.981	2.945	6.5	20.0	4 11	14 39.44	-16 13.8	1.668	2.628	7.9	21.0
4 21	14 29.71	- 7 49.3	1.959	2.955	3.1	19.8	4 21	14 30.82	-15 35.3	1.612	2.609	3.6	20.7
5 1	14 21.57	- 7 23.7	1.965	2.966	2.8	19.8	5 1	14 21.18	-14 49.5	1.583	2.589	1.2	20.4
5 11	14 13.79	- 7 4.7	1.999	2.976	6.0	20.0	5 11	14 11.64	-14 1.6	1.581	2.570	5.9	20.7
5 21	14 7.10	- 6 54.8	2.059	2.987	9.3	20.3	5 21	14 3.28	-13 17.5	1.605	2.549	10.3	20.9
5 31	14 2.11	- 6 56.2	2.142	2.998	12.3	20.5	5 31	13 56.98	-12 42.6	1.652	2.529	14.3	21.1
109585	2001 <i>QO</i> ₂₇₆		4 28.4 201°49	0°7/27.9	18		501349	2013 <i>YE</i> ₁₅		4 28.4 225°20	1°7/26.9	18	
3 22	14 51.61	-13 38.3	2.065	2.875	13.7	20.6	3 22	14 50.09	-10 45.3	2.384	3.194	12.1	22.4
4 1	14 46.64	-13 25.7	1.975	2.872	10.6	20.3	4 1	14 45.21	-10 15.4	2.284	3.182	9.3	22.2
4 11	14 39.49	-13 5.2	1.908	2.868	7.0	20.1	4 11	14 38.44	- 9 39.5	2.208	3.169	6.1	22.0
4 21	14 30.72	-12 39.0	1.866	2.864	3.0	19.8	4 21	14 30.27	- 9 0.2	2.159	3.156	2.8	21.8
5 1	14 21.20	-12 10.2	1.854	2.859	1.5	19.7	5 1	14 21.41	- 8 21.2	2.140	3.142	2.3	21.7
5 11	14 11.92	-11 43.0	1.869	2.854	5.5	20.0	5 11	14 12.71	- 7 46.6	2.150	3.127	5.6	21.9
5 21	14 3.78	-11 21.1	1.912	2.849	9.4	20.2	5 21	14 4.93	- 7 20.1	2.187	3.112	9.0	22.1
5 31	13 57.49	-11 8.2	1.978	2.843	12.8	20.4	5 31	13 58.71	- 7 4.3	2.249	3.096	12.1	22.2
394350	2007 <i>BF</i> ₁₀		4 28.4 234°74	1°8/26.7	17		11399	1999 <i>AR</i> ₃		4 28.4 304°15	1°8/27.5	18	
3 22	14 46.10	- 9 40.5	2.551	3.368	11.2	21.4	3 22	14 49.67	-11 50.0	1.313	2.158	18.1	17.6
4 1	14 41.95	- 9 15.0	2.462	3.364	8.6	21.2	4 1	14 46.53	-11 38.0	1.224	2.140	14.2	17.3
4 11	14 36.16	- 8 45.2	2.398	3.360	5.6	21.0	4 11	14 40.20	-11 16.6	1.154	2.123	9.4	17.0
4 21	14 29.21	- 8 13.6	2.360	3.356	2.7	20.8	4 21	14 31.31	-10 48.9	1.107	2.106	4.2	16.6
5 1	14 21.75	- 7 43.6	2.351	3.352	2.4	20.7	5 1	14 21.00	-10 19.8	1.084	2.089	2.7	16.5
5 11	14 14.48	- 7 18.6	2.372	3.348	5.2	20.9	5 11	14 10.84	- 9 55.8	1.085	2.072	8.1	16.7
5 21	14 8.05	- 7 1.3	2.419	3.344	8.3	21.1	5 21	14 2.25	- 9 42.7	1.109	2.056	13.5	17.0
5 31	14 3.01	- 6 53.9	2.490	3.340	11.0	21.3	5 31	13 56.39	- 9 44.9	1.152	2.041	18.3	17.2
424081	2007 <i>DS</i> ₃₉		4 2										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
153894	2001 <i>XT</i> ₁₉₈		4 28.4 102°12	1.7°/27.0	18		86429	2000 <i>BJ</i> ₂₉		4 28.4 218°18	6°1/4.9	18	
3 22	14 50.24	-11 45.3	1.943	2.763	14.1	20.9	3 22	14 50.18	-37 3.3	2.919	3.613	12.7	19.4
4 1	14 45.45	-11 9.8	1.877	2.780	10.7	20.8	4 1	14 45.36	-37 35.5	2.814	3.607	11.0	19.2
4 11	14 38.57	-10 27.0	1.833	2.797	7.0	20.6	4 11	14 38.59	-37 52.1	2.730	3.600	9.1	19.1
4 21	14 30.27	-9 40.7	1.815	2.813	3.1	20.4	4 21	14 30.37	-37 50.9	2.670	3.593	7.3	18.9
5 1	14 21.45	-8 55.5	1.826	2.829	2.4	20.3	5 1	14 21.42	-37 31.1	2.635	3.586	6.2	18.9
5 11	14 13.08	-8 16.3	1.864	2.845	6.1	20.6	5 11	14 12.62	-36 54.4	2.628	3.579	6.4	18.9
5 21	14 5.98	-7 47.0	1.929	2.860	9.7	20.8	5 21	14 4.75	-36 4.3	2.648	3.571	7.7	18.9
5 31	14 0.75	-7 30.3	2.017	2.875	12.9	21.1	5 31	13 58.48	-35 6.2	2.693	3.563	9.6	19.0
359616	2011 <i>JA</i> ₁₁		4 28.4 215°94	2°3/2.6	18		368786	2005 <i>WK</i> ₁₉₆		4 28.4 55°11	8°7/21.7	17	
3 22	14 40.13	-29 10.9	4.884	5.616	7.4	20.8	3 22	14 48.19	+ 5 53.3	1.699	2.536	15.0	20.2
4 1	14 36.73	-28 58.7	4.778	5.612	6.1	20.7	4 1	14 44.11	+ 7 13.0	1.647	2.546	12.2	20.0
4 11	14 32.44	-28 38.0	4.695	5.609	4.6	20.6	4 11	14 37.80	+ 8 25.4	1.617	2.557	9.8	19.9
4 21	14 27.54	-28 9.1	4.640	5.605	3.2	20.5	4 21	14 29.98	+ 9 22.6	1.611	2.567	8.7	19.9
5 1	14 22.39	-27 32.9	4.614	5.601	2.3	20.4	5 1	14 21.61	+ 9 57.7	1.631	2.578	9.6	19.9
5 11	14 17.34	-26 51.3	4.617	5.597	2.8	20.5	5 11	14 13.73	+10 7.0	1.674	2.589	11.8	20.1
5 21	14 12.76	-26 6.3	4.650	5.593	4.1	20.5	5 21	14 7.22	+ 9 50.2	1.739	2.600	14.3	20.3
5 31	14 8.92	-25 20.3	4.710	5.589	5.7	20.7	5 31	14 2.68	+ 9 9.8	1.823	2.612	16.8	20.5
269717	1998 <i>QO</i>		4 28.4 280°28	8°7/3.6	18		61406	2000 <i>QZ</i> ₉		4 28.4 235°58	1°6/29.5	18	
3 22	14 54.69	-35 7.3	1.852	2.584	17.8	20.7	3 22	14 51.56	-19 53.7	1.584	2.395	17.1	19.5
4 1	14 50.42	-36 6.9	1.733	2.555	15.5	20.5	4 1	14 47.44	-19 49.0	1.495	2.389	13.6	19.2
4 11	14 42.90	-36 48.0	1.632	2.524	12.9	20.2	4 11	14 40.47	-19 29.1	1.427	2.383	9.4	19.0
4 21	14 32.59	-37 4.5	1.553	2.493	10.4	20.0	4 21	14 31.32	-18 54.4	1.383	2.377	4.7	18.7
5 1	14 20.52	-36 52.0	1.498	2.461	8.8	19.8	5 1	14 21.10	-18 7.9	1.364	2.370	1.8	18.5
5 11	14 8.19	-36 10.5	1.468	2.429	9.4	19.8	5 11	14 11.15	-17 15.7	1.372	2.364	6.2	18.7
5 21	13 57.18	-35 5.2	1.462	2.397	11.9	19.8	5 21	14 2.71	-16 24.7	1.405	2.356	10.9	19.0
5 31	13 48.81	-33 45.6	1.479	2.364	15.2	20.0	5 31	13 56.70	-15 41.9	1.461	2.349	15.1	19.2
303290	2004 <i>RO</i> ₃₄₅		4 28.4 198°80	1°3/27.5	16		138731	2000 <i>SE</i> ₁₉₁		4 28.4 159°62	0°7/29.0	18	
3 22	14 53.34	-12 50.6	1.822	2.637	15.0	22.0	3 22	14 49.44	-16 58.7	2.736	3.526	11.2	20.8
4 1	14 48.27	-12 27.0	1.734	2.634	11.6	21.8	4 1	14 44.43	-17 2.6	2.647	3.531	8.7	20.6
4 11	14 40.71	-11 54.7	1.668	2.631	7.7	21.6	4 11	14 37.78	-16 59.3	2.582	3.535	5.9	20.5
4 21	14 31.32	-11 16.3	1.629	2.626	3.3	21.3	4 21	14 29.95	-16 49.7	2.544	3.539	2.7	20.3
5 1	14 21.06	-10 36.2	1.617	2.621	2.1	21.2	5 1	14 21.60	-16 35.4	2.536	3.542	0.9	20.1
5 11	14 11.08	-9 59.5	1.632	2.616	6.4	21.4	5 11	14 13.46	-16 19.1	2.558	3.546	4.0	20.4
5 21	14 2.42	-9 31.0	1.674	2.609	10.6	21.7	5 21	14 6.19	-16 3.5	2.608	3.549	7.0	20.6
5 31	13 55.88	-9 14.6	1.739	2.602	14.4	21.9	5 31	14 0.31	-15 51.4	2.683	3.551	9.7	20.7
207781	2007 <i>TC</i> ₁₀₃		4 28.4 216°84	0°9/27.6	18		426579	2013 <i>SX</i> ₂₃		4 28.4 104°92	4°7/24.9	17	
3 22	14 47.87	-13 7.5	2.303	3.116	12.4	20.9	3 22	14 49.53	- 3 55.3	1.852	2.685	14.1	21.5
4 1	14 43.53	-12 46.4	2.213	3.112	9.5	20.7	4 1	14 45.03	- 3 4.8	1.786	2.694	10.9	21.3
4 11	14 37.33	-12 18.2	2.146	3.108	6.3	20.5	4 11	14 38.37	- 2 12.9	1.742	2.703	7.5	21.1
4 21	14 29.78	-11 45.2	2.106	3.104	2.7	20.3	4 21	14 30.24	- 1 24.9	1.724	2.712	5.0	21.0
5 1	14 21.61	-11 10.8	2.095	3.100	1.6	20.2	5 1	14 21.52	- 0 46.6	1.734	2.721	5.4	21.0
5 11	14 13.66	-10 38.8	2.112	3.095	5.1	20.4	5 11	14 13.22	- 0 22.4	1.769	2.729	8.2	21.2
5 21	14 6.68	-10 12.8	2.156	3.091	8.6	20.6	5 21	14 6.18	- 0 15.0	1.830	2.738	11.5	21.4
5 31	14 1.27	-9 55.9	2.224	3.086	11.7	20.8	5 31	14 1.04	- 0 24.9	1.913	2.746	14.5	21.6
498596	2008 <i>RM</i> ₉		4 28.4 142°67	0°7/27.7	17		341872	2008 <i>GW</i> ₄₄		4 28.4 288°16	0°3/29.0	18	
3 22	14 48.28	-14 47.5	2.457	3.261	11.9	22.4	3 22	14 39.29	-18 43.7	4.353	5.139	7.4	21.2
4 1	14 43.60	-14 6.7	2.378	3.272	9.2	22.3	4 1	14 36.16	-18 8.4	4.247	5.129	5.8	21.1
4 11	14 37.22	-13 17.4	2.323	3.283	6.0	22.1	4 11	14 32.11	-17 26.5	4.167	5.120	3.9	20.9
4 21	14 29.67	-12 22.5	2.295	3.293	2.5	21.9	4 21	14 27.43	-16 39.5	4.116	5.111	1.8	20.7
5 1	14 21.68	-11 25.7	2.297	3.302	1.4	21.8	5 1	14 22.49	-15 49.1	4.095	5.101	0.5	20.6
5 11	14 14.00	-10 31.8	2.328	3.311	4.8	22.0	5 11	14 17.65	-14 58.0	4.104	5.092	2.6	20.8
5 21	14 7.30	-9 44.6	2.387	3.319	8.0	22.3	5 21	14 13.27	-14 8.4	4.143	5.082	4.7	20.9
5 31	14 2.10	-9 7.4	2.471	3.327	10.9	22.5	5 31	14 9.65	-13 22.8	4.209	5.073	6.6	21.0
379279	2009 <i>UQ</i> ₁₃₈		4 28.4 172°09	0°4/28.1	17		297693	2001 <i>UR</i> ₂₃₀		4 28.4 272°82	3°5/25.3	16	
3 22	14 49.60	-15 46.2	2.311	3.114	12.6	22.5	3 22	14 46.73	- 6 5.7	2.251	3.077	12.2	21.6
4 1	14 44.80	-15 14.6	2.225	3.117	9.8	22.3	4 1	14 42.76	- 5 22.0	2.154	3.060	9.4	21.4
4 11	14 38.12	-14 33.5	2.161	3.120	6.4	22.1	4 11	14 36.90	- 4 34.5	2.081	3.043	6.4	21.2
4 21	14 30.11	-13 45.2	2.125	3.123	2.8	21.9	4 21	14 29.65	- 3 47.3	2.035	3.026	3.8	21.0
5 1	14 21.52	-12 53.4	2.118	3.124	1.2	21.8	5 1	14 21.71	- 3 5.1	2.017	3.009	4.1	21.0
5 11	14 13.22	-12 2.8	2.140	3.125	4.9	22.0	5 11	14 13.92	- 2 32.4	2.026	2.992	6.9	21.1
5 21	14 5.95	-11 17.7	2.190	3.126	8.4	22.3	5 21	14 7.03	- 2 12.6	2.062	2.974	10.2	21.3
5 31	14 0.32	-10 42.0	2.264	3.126	11.5	22.5	5 31	14 1.69	- 2 7.5	2.120	2.956	13.2	21.5
70833	1999 <i>VP</i> ₉₀		4 28.4 91°55	0°7/27.9	18		504032	2005 <i>UL</i> ₁₅₄		4 28.4 247°53	0°2/28.6	17	
3 22	14 50.45	-16 11.1	1.621	2.442	16.3	19.2	3 22	14 49.81	-17 4.9	2.055	2.860	13.9	22.6
4 1	14 46.04	-15 25.8	1.556	2.459	12.6	19.0	4 1	14 45.45	-16 43.4	1.952	2.845	10.9	22.4
4 11	14 39.16	-14 27.2	1.512	2.475	8.2	18.7	4 11	14 38.85	-16 10.4	1.871	2.829	7.3	22.2
4 21	14 30.58	-13 19.4	1.494	2.492	3.5	18.5	4 21	14 30.55	-15 27.5	1.816	2.813	3.3	21.9
5 1	14 21.38	-12 8.5	1.502	2.508	1.7	18.4	5 1	14 21.39	-14 38.1	1.789	2.796	1.1	21.7
5 11	14 12.75	-11 1.7	1.537	2.524	6.3	18.7	5 11	14 12.36	-13 47.1	1.791	2.779	5.4	21.9
5 21	14 5.64	-10 5.5	1.598	2.540	10.6	19.0	5 21	14 4.41	-13 0.0	1.819	2.761	9.5	22.1
5 31	14 0.75	-9 24.3	1.682	2.555	14.3	19.3	5 31	13 58.30	-12 21.6	1.872	2.743	13.1	22.3
417860	2007 <i>JK</i> ₁₆		4 28.4 337°11	11°8/19.5	17		214609	2006 <i>RE</i> ₃₃		4 28.4 283°84	0°7/27.9		

EPHEMERIDES

4 28.4

4 28.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
56365	2000 DG ₅₄		4 28.4 299°38	1.8°/27.3	17		213225	2000 WD ₂₂		4 28.4 198°39	2.8°/25.4	18	
3 22	14 47.64	-13 36.7	1.287	2.133	18.3	19.1	3 22	14 47.08	-4 54.2	3.084	3.895	9.6	21.6
4 1	14 45.02	-12 59.9	1.196	2.114	14.3	18.8	4 1	14 42.40	-4 24.1	2.994	3.892	7.4	21.5
4 11	14 39.25	-12 8.2	1.125	2.095	9.5	18.5	4 11	14 36.35	-3 52.8	2.930	3.887	5.0	21.3
4 21	14 30.94	-11 5.5	1.076	2.076	4.2	18.1	4 21	14 29.33	-3 23.0	2.894	3.883	3.0	21.2
5 1	14 21.24	-9 58.7	1.052	2.057	2.9	18.0	5 1	14 21.90	-2 57.5	2.888	3.878	3.2	21.2
5 11	14 11.69	-8 56.7	1.051	2.038	8.4	18.2	5 11	14 14.63	-2 39.1	2.911	3.872	5.3	21.3
5 21	14 3.71	-8 8.2	1.073	2.020	14.0	18.5	5 21	14 8.05	-2 29.8	2.962	3.866	7.7	21.4
5 31	13 58.45	-7 39.3	1.114	2.002	18.9	18.7	5 31	14 2.64	-2 30.5	3.038	3.859	10.0	21.6
41536	2000 RJ ₁₅		4 28.4 256°55	0.3°/28.6	18		220326	2003 FS ₆₆		4 28.4 80°39	6.2°/22.9	18	
3 22	14 50.63	-18 10.3	1.730	2.542	15.8	19.4	3 22	14 47.47	-2 42.1	1.706	2.547	14.7	20.3
4 1	14 46.58	-17 37.7	1.627	2.523	12.5	19.1	4 1	14 43.54	-1 2.8	1.650	2.562	11.4	20.1
4 11	14 39.88	-16 49.4	1.544	2.504	8.5	18.8	4 11	14 37.42	+0 38.2	1.618	2.577	8.2	20.0
4 21	14 31.10	-15 47.1	1.487	2.483	3.8	18.5	4 21	14 29.84	+2 12.4	1.612	2.591	6.3	19.9
5 1	14 21.21	-14 35.1	1.456	2.463	1.2	18.2	5 1	14 21.74	+3 31.7	1.632	2.606	7.2	20.0
5 11	14 11.44	-13 20.6	1.452	2.441	6.3	18.5	5 11	14 14.14	+4 29.6	1.678	2.621	9.9	20.2
5 21	14 2.95	-12 11.2	1.475	2.419	11.1	18.8	5 21	14 7.88	+5 3.3	1.747	2.635	13.0	20.4
5 31	13 56.66	-11 13.8	1.520	2.397	15.3	19.0	5 31	14 3.55	+5 12.5	1.837	2.649	15.8	20.6
26961	1997 OY ₁		4 28.4 159°94	2.9°/25.7	18		213061	1999 RB ₆₄		4 28.4 305°73	6.6°/21.9	17	
3 22	14 49.40	-9 2.4	2.171	2.990	12.8	19.1	3 22	14 44.18	+1 14.1	2.060	2.898	12.7	19.7
4 1	14 44.67	-8 2.0	2.094	2.997	9.8	18.9	4 1	14 40.96	+2 34.6	1.973	2.879	10.2	19.5
4 11	14 38.04	-6 55.4	2.041	3.003	6.5	18.7	4 11	14 35.81	+3 55.3	1.909	2.859	7.8	19.3
4 21	14 30.09	-5 47.4	2.015	3.009	3.5	18.5	4 21	14 29.22	+5 9.6	1.871	2.840	6.6	19.2
5 1	14 21.61	-4 43.1	2.018	3.014	3.6	18.6	5 1	14 21.93	+6 10.5	1.859	2.821	7.5	19.2
5 11	14 13.46	-3 48.2	2.050	3.018	6.6	18.8	5 11	14 14.81	+6 52.4	1.873	2.802	9.9	19.3
5 21	14 6.40	-3 6.3	2.108	3.022	9.9	19.0	5 21	14 8.64	+7 12.4	1.911	2.784	12.7	19.5
5 31	14 1.01	-2 40.1	2.189	3.025	12.8	19.2	5 31	14 4.08	+7 9.7	1.968	2.766	15.4	19.6
506857	2007 VY ₁₁₁		4 28.4 187°51	0.6°/27.9	17		124153	2001 NT ₇		4 28.4 297°82	1.3°/27.8	16	
3 22	14 48.01	-13 59.4	2.461	3.268	11.8	22.2	3 22	14 50.74	-12 35.7	1.281	2.124	18.5	19.9
4 1	14 43.52	-13 40.0	2.372	3.267	9.1	22.1	4 1	14 47.52	-12 29.1	1.191	2.106	14.6	19.6
4 11	14 37.27	-13 13.4	2.306	3.267	6.0	21.9	4 11	14 41.00	-12 12.5	1.119	2.088	9.7	19.3
4 21	14 29.77	-12 41.8	2.268	3.266	2.6	21.6	4 21	14 31.76	-11 48.5	1.071	2.069	4.3	18.9
5 1	14 21.71	-12 8.0	2.258	3.264	1.3	21.5	5 1	14 21.01	-11 21.6	1.046	2.051	2.4	18.7
5 11	14 13.88	-11 35.8	2.278	3.263	4.7	21.8	5 11	14 10.34	-10 58.3	1.045	2.034	8.1	19.0
5 21	14 6.96	-11 8.6	2.325	3.261	8.0	22.0	5 21	14 1.30	-10 44.4	1.067	2.016	13.7	19.3
5 31	14 1.54	-10 49.3	2.397	3.259	11.0	22.1	5 31	13 55.09	-10 45.1	1.108	1.999	18.7	19.5
213227	2000 WD ₄₃		4 28.4 132°14	2.6°/26.6	18		4511	Rembrandt		4 28.4 307°61	14.2°/1.3	18 R	
3 22	14 52.80	-9 39.6	1.745	2.569	15.2	20.8	3 22	15 1.99	-36 55.6	1.504	2.235	21.3	15.9
4 1	14 47.72	-9 4.5	1.675	2.580	11.7	20.6	4 1	14 57.82	-39 38.3	1.397	2.207	19.2	15.6
4 11	14 40.25	-8 23.3	1.627	2.591	7.7	20.4	4 11	14 49.13	-42 10.9	1.308	2.178	16.9	15.4
4 21	14 31.09	-7 39.9	1.605	2.601	3.7	20.2	4 21	14 35.97	-44 21.7	1.240	2.150	15.0	15.2
5 1	14 21.27	-6 59.7	1.610	2.610	3.3	20.1	5 1	14 19.33	-45 57.3	1.194	2.121	14.2	15.0
5 11	14 11.91	-6 27.7	1.642	2.619	7.1	20.4	5 11	14 1.37	-46 49.6	1.170	2.094	15.0	15.0
5 21	14 3.97	-6 8.0	1.701	2.628	11.0	20.6	5 21	13 44.79	-46 58.9	1.168	2.067	17.2	15.0
5 31	13 58.16	-6 2.9	1.781	2.636	14.5	20.9	5 31	13 32.02	-46 35.2	1.184	2.040	20.1	15.1
219682	2001 WA ₂₆		4 28.4 223°54	0.6°/28.9	18		200250	1999 VV ₁₄₈		4 28.4 156°27	0.3°/28.2	17	
3 22	14 48.71	-19 33.0	2.065	2.865	14.0	20.6	3 22	14 48.30	-15 55.1	2.178	2.986	13.1	21.6
4 1	14 44.51	-18 54.3	1.968	2.858	11.0	20.3	4 1	14 43.95	-15 26.4	2.094	2.990	10.2	21.4
4 11	14 38.16	-18 1.2	1.894	2.849	7.4	20.1	4 11	14 37.65	-14 47.8	2.034	2.994	6.7	21.2
4 21	14 30.22	-16 55.6	1.845	2.841	3.4	19.8	4 21	14 29.97	-14 1.7	2.000	2.997	2.9	21.0
5 1	14 21.55	-15 41.8	1.825	2.832	1.1	19.6	5 1	14 21.70	-13 12.0	1.994	3.000	1.2	20.9
5 11	14 13.12	-14 25.7	1.834	2.823	5.2	19.9	5 11	14 13.72	-12 23.4	2.016	3.003	5.0	21.1
5 21	14 5.82	-13 13.8	1.869	2.813	9.2	20.1	5 21	14 6.82	-11 40.4	2.066	3.005	8.7	21.4
5 31	14 0.34	-12 12.0	1.929	2.802	12.7	20.3	5 31	14 1.60	-11 6.8	2.140	3.007	11.9	21.6
212782	2007 TT ₁₈₆		4 28.4 173°20	0.7°/28.0	16		219525	2001 QG ₉₇		4 28.4 240°01	4.7°/1.9	18	
3 22	14 53.84	-13 30.7	1.742	2.558	15.6	20.9	3 22	14 53.51	-27 52.4	2.132	2.890	15.0	21.0
4 1	14 48.75	-13 23.6	1.661	2.561	12.1	20.7	4 1	14 48.54	-28 21.7	2.024	2.876	12.4	20.8
4 11	14 41.09	-13 8.2	1.601	2.562	8.0	20.4	4 11	14 41.06	-28 36.1	1.938	2.862	9.5	20.5
4 21	14 31.53	-12 46.5	1.566	2.564	3.4	20.2	4 21	14 31.61	-28 33.3	1.876	2.846	6.5	20.3
5 1	14 21.10	-12 21.9	1.558	2.565	1.6	20.0	5 1	14 21.09	-28 12.7	1.841	2.831	4.8	20.2
5 11	14 11.02	-11 58.9	1.579	2.565	6.2	20.3	5 11	14 10.63	-27 36.9	1.834	2.814	6.1	20.2
5 21	14 2.35	-11 42.0	1.625	2.565	10.5	20.6	5 21	14 1.33	-26 50.8	1.853	2.798	9.2	20.4
5 31	13 55.89	-11 34.8	1.694	2.564	14.3	20.8	5 31	13 54.07	-26 1.0	1.897	2.780	12.5	20.6
217887	2001 RV ₉₂		4 28.4 255°29	5.7°/1.6	17		226573	2003 XO ₁₃		4 28.4 227°98	5.9°/21.7	18	
3 22	14 55.76	-27 17.6	1.878	2.644	16.5	20.5	3 22	14 45.87	+7 37.0	2.995	3.805	9.8	20.3
4 1	14 50.68	-28 17.9	1.779	2.634	13.7	20.2	4 1	14 41.50	+8 21.4	2.919	3.800	8.1	20.2
4 11	14 42.70	-29 4.6	1.700	2.624	10.6	20.0	4 11	14 35.76	+9 0.3	2.868	3.795	6.6	20.1
4 21	14 32.39	-29 34.0	1.645	2.614	7.4	19.8	4 21	14 29.09	+9 29.8	2.844	3.790	5.9	20.0
5 1	14 20.76	-29 43.9	1.617	2.603	5.7	19.7	5 1	14 22.01	+9 46.5	2.847	3.784	6.5	20.1
5 11	14 9.18	-29 35.4	1.615	2.593	7.1	19.7	5 11	14 15.12	+9 48.1	2.877	3.779	7.9	20.1
5 21	13 58.92	-29 13.1	1.640	2.582	10.3	19.9	5 21	14 8.97	+9 34.0	2.933	3.773	9.7	20.3
5 31	13 51.05	-28 43.8	1.688	2.571	13.7	20.1	5 31	14 3.98	+9 4.6	3.010	3.767	11.5	20.4
230104	2000 YR ₁₃₅		4 28.4 129°08	0.9°/29.3	17		292883	2006 VS ₂₄		4 28.4 269°83	1.2°/27.4	17	
3 22	14 51.76	-18 53.6	2.596	3.379	12.0	22.2							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
267320	2001 TV ₂₆₀		4 28.4 185°05	2.1/26.7	17	R	105954	2000 SS ₂₄₈		4 28.5 266°12	1.7/26.9	18	
3 22	14 50.16	-10 30.5	2.148	2.964	13.0	21.6	3 22	14 46.45	-11 7.3	2.338	3.157	12.0	20.1
4 1	14 45.39	-9 53.9	2.063	2.964	10.0	21.4	4 1	14 42.48	-10 37.0	2.243	3.146	9.3	19.9
4 11	14 38.61	-9 10.9	2.001	2.964	6.6	21.2	4 11	14 36.69	-10 0.4	2.172	3.135	6.1	19.6
4 21	14 30.40	-8 24.9	1.967	2.963	3.1	20.9	4 21	14 29.59	-9 20.4	2.127	3.124	2.8	19.4
5 1	14 21.55	-7 40.2	1.960	2.962	2.7	20.9	5 1	14 21.85	-8 40.7	2.111	3.114	2.3	19.3
5 11	14 12.98	-7 1.6	1.983	2.960	6.1	21.1	5 11	14 14.29	-8 5.5	2.123	3.103	5.5	19.5
5 21	14 5.49	-6 32.7	2.032	2.957	9.6	21.3	5 21	14 7.62	-7 38.4	2.162	3.091	8.9	19.7
5 31	13 59.72	-6 16.4	2.105	2.954	12.7	21.5	5 31	14 2.47	-7 22.1	2.225	3.080	11.9	19.9
247290	2001 SS ₂₈₄		4 28.4 251°47	2.9/25.4	18		74944	1999 TN ₁₇₈		4 28.5 120°37	2.0/26.9	18	
3 22	14 45.17	-9 3.0	2.262	3.088	12.1	21.5	3 22	14 51.74	-11 27.9	1.792	2.614	15.0	20.2
4 1	14 41.49	-7 57.6	2.173	3.080	9.3	21.3	4 1	14 46.84	-10 49.6	1.723	2.627	11.5	20.0
4 11	14 36.01	-6 45.4	2.109	3.073	6.2	21.1	4 11	14 39.65	-10 3.5	1.677	2.640	7.5	19.8
4 21	14 29.27	-5 31.0	2.072	3.066	3.4	20.9	4 21	14 30.86	-9 13.5	1.656	2.653	3.4	19.5
5 1	14 21.94	-4 19.7	2.063	3.058	3.6	20.9	5 1	14 21.45	-8 25.0	1.663	2.665	2.7	19.5
5 11	14 14.83	-3 17.3	2.082	3.050	6.6	21.1	5 11	14 12.51	-7 43.4	1.697	2.677	6.6	19.8
5 21	14 8.66	-2 27.9	2.128	3.042	9.8	21.3	5 21	14 4.95	-7 13.1	1.757	2.688	10.5	20.0
5 31	14 4.00	-1 54.5	2.197	3.034	12.7	21.5	5 31	13 59.44	-6 56.9	1.840	2.699	13.9	20.3
479718	2014 DM ₁₃₀		4 28.4 185°68	5.1/22.7	17		34093	2000 PP ₁₁		4 28.5 166°37	5.3/23.7	18	
3 22	14 45.27	-0 14.1	2.502	3.328	11.1	21.5	3 22	14 50.33	+0 39.7	2.315	3.135	12.1	19.0
4 1	14 41.30	+0 59.2	2.427	3.328	8.7	21.3	4 1	14 45.26	+1 31.3	2.243	3.139	9.5	18.9
4 11	14 35.75	+2 12.3	2.377	3.328	6.4	21.2	4 11	14 38.39	+2 21.0	2.195	3.144	7.0	18.7
4 21	14 29.11	+3 20.1	2.354	3.327	5.2	21.1	4 21	14 30.27	+3 4.0	2.173	3.147	5.4	18.6
5 1	14 22.00	+4 17.4	2.360	3.326	5.8	21.1	5 1	14 21.65	+3 35.6	2.180	3.151	5.9	18.7
5 11	14 15.14	+5 0.0	2.393	3.325	7.9	21.3	5 11	14 13.34	+3 52.4	2.215	3.153	8.1	18.8
5 21	14 9.14	+5 25.7	2.451	3.324	10.3	21.4	5 21	14 6.04	+3 52.6	2.275	3.155	10.7	19.0
5 31	14 4.49	+5 33.6	2.531	3.322	12.6	21.6	5 31	14 0.33	+3 36.3	2.358	3.157	13.1	19.1
427481	2001 XE ₁₁₄		4 28.4 156°41	1°1/29.5	17		374324	2005 TT ₅₄		4 28.5 183°83	2°7/25.8	17	
3 22	14 51.77	-19 39.5	2.611	3.391	12.0	22.9	3 22	14 48.43	-10 20.7	2.222	3.040	12.6	22.1
4 1	14 46.27	-19 27.6	2.525	3.401	9.4	22.7	4 1	14 43.97	-9 12.1	2.137	3.041	9.6	21.9
4 11	14 39.01	-19 5.7	2.462	3.411	6.4	22.5	4 11	14 37.63	-7 55.6	2.078	3.040	6.3	21.7
4 21	14 30.52	-18 34.8	2.427	3.419	3.1	22.3	4 21	14 29.98	-6 35.8	2.045	3.040	3.3	21.5
5 1	14 21.53	-17 57.2	2.422	3.427	1.2	22.2	5 1	14 21.76	-5 18.6	2.042	3.039	3.4	21.5
5 11	14 12.82	-17 16.5	2.446	3.434	4.1	22.4	5 11	14 13.83	-4 9.7	2.067	3.037	6.5	21.7
5 21	14 5.09	-16 36.5	2.499	3.441	7.3	22.6	5 21	14 6.93	-3 13.9	2.120	3.034	9.8	21.9
5 31	13 58.91	-16 1.2	2.579	3.446	10.1	22.8	5 31	14 1.64	-2 34.1	2.196	3.031	12.8	22.1
166	Rhodope		4 28.4 179°91	5°3/23.3	18		204086	2003 WT ₆₃		4 28.5 221°77	2°3/30.3	17	
3 22	14 48.80	+0 26.9	2.430	3.250	11.6	15.1	3 22	14 49.15	-22 24.5	2.168	2.955	13.9	20.8
4 1	14 44.03	+1 28.4	2.354	3.252	9.1	14.9	4 1	14 44.83	-22 24.1	2.073	2.951	11.1	20.6
4 11	14 37.56	+2 29.0	2.304	3.253	6.7	14.8	4 11	14 38.39	-22 10.7	2.001	2.947	7.8	20.4
4 21	14 29.90	+3 23.4	2.280	3.253	5.3	14.7	4 21	14 30.38	-21 44.4	1.954	2.942	4.4	20.2
5 1	14 21.74	+4 6.8	2.285	3.253	5.9	14.7	5 1	14 21.63	-21 7.2	1.935	2.938	2.3	20.0
5 11	14 13.86	+4 35.5	2.318	3.252	8.0	14.8	5 11	14 13.09	-20 23.0	1.944	2.933	4.8	20.2
5 21	14 6.91	+4 47.4	2.376	3.250	10.5	15.0	5 21	14 5.64	-19 36.8	1.980	2.929	8.4	20.4
5 31	14 1.44	+4 42.3	2.456	3.248	12.9	15.2	5 31	13 59.99	-18 53.9	2.040	2.924	11.7	20.6
330994	2009 UH ₂₈		4 28.4 316°43	1°2/28.9	17		367763	2010 WH ₆		4 28.5 228°54	1°4/27.6	17	
3 22	14 54.37	-14 34.2	1.509	2.331	17.3	19.4	3 22	14 51.32	-12 20.1	1.744	2.567	15.3	21.5
4 1	14 49.99	-15 22.2	1.413	2.314	13.7	19.2	4 1	14 46.87	-12 1.9	1.658	2.562	11.8	21.3
4 11	14 42.48	-16 5.4	1.338	2.298	9.4	18.9	4 11	14 39.92	-11 35.5	1.594	2.557	7.8	21.0
4 21	14 32.39	-16 43.0	1.286	2.282	4.4	18.5	4 21	14 31.10	-11 3.7	1.554	2.552	3.4	20.7
5 1	14 20.81	-17 14.6	1.260	2.267	1.7	18.3	5 1	14 21.39	-10 30.7	1.542	2.547	2.1	20.6
5 11	14 9.23	-17 41.8	1.261	2.252	6.7	18.6	5 11	14 11.95	-10 1.6	1.557	2.541	6.5	20.9
5 21	13 59.09	-18 7.1	1.287	2.238	11.7	18.8	5 21	14 3.82	-9 40.9	1.597	2.535	10.8	21.1
5 31	13 51.56	-18 34.3	1.334	2.224	16.2	19.0	5 31	13 57.82	-9 32.0	1.660	2.529	14.6	21.3
346877	2009 FG ₆₄		4 28.4 116°07	0°2/28.6	17		282198	2001 UM ₁₆₆		4 28.5 328°86	1°0/30.1	18	
3 22	14 48.96	-16 5.0	2.561	3.359	11.7	21.6	3 22	14 39.91	-21 12.0	4.321	5.096	7.6	19.9
4 1	14 44.09	-15 54.7	2.484	3.373	9.0	21.4	4 1	14 36.68	-20 58.8	4.222	5.094	6.0	19.7
4 11	14 37.56	-15 36.9	2.431	3.388	6.0	21.2	4 11	14 32.51	-20 38.9	4.148	5.092	4.2	19.6
4 21	14 29.88	-15 13.0	2.405	3.402	2.6	21.0	4 21	14 27.69	-20 13.3	4.101	5.090	2.2	19.5
5 1	14 21.76	-14 45.6	2.409	3.415	0.8	20.9	5 1	14 22.58	-19 43.2	4.084	5.088	1.1	19.3
5 11	14 13.93	-14 17.8	2.441	3.429	4.2	21.2	5 11	14 17.59	-19 10.6	4.097	5.086	2.6	19.5
5 21	14 7.05	-13 52.9	2.502	3.442	7.4	21.4	5 21	14 13.06	-18 37.7	4.139	5.085	4.5	19.6
5 31	14 1.64	-13 33.8	2.588	3.454	10.1	21.6	5 31	14 9.33	-18 6.5	4.208	5.083	6.4	19.7
479055	2013 AG ₅₆		4 28.5 156°53	4°2/ 2.6	17		402556	2006 PX ₂₇		4 28.5 242°65	0°1/28.4	16	
3 22	14 49.14	-29 39.4	2.672	3.415	12.6	22.3	3 22	14 42.62	-15 54.7	3.967	4.759	8.0	22.7
4 1	14 44.48	-29 56.8	2.579	3.419	10.5	22.2	4 1	14 38.83	-15 31.4	3.856	4.743	6.2	22.6
4 11	14 37.97	-30 0.1	2.508	3.422	8.0	22.0	4 11	14 33.97	-15 2.5	3.771	4.727	4.1	22.4
4 21	14 30.12	-29 48.5	2.462	3.425	5.7	21.9	4 21	14 28.35	-14 29.2	3.714	4.711	1.8	22.2
5 1	14 21.66	-29 22.5	2.444	3.428	4.2	21.8	5 1	14 22.37	-13 53.3	3.688	4.695	0.6	22.1
5 11	14 13.42	-28 44.7	2.454	3.431	5.0	21.8	5 11	14 16.48	-13 17.4	3.692	4.678	3.0	22.3
5 21	14 6.14	-27 59.2	2.491	3.434	7.2	22.0	5 21	14 11.08	-12 43.5	3.725	4.661	5.3	22.4
5 31	14 0.44	-27 10.9	2.554	3.436	9.7	22.2	5 31	14 6.55	-12 14.0	3.785	4.643	7.4	22.6
494323	2016 TQ ₃		4 28.5 23°61	3°7/ 1.7	17		379786	2011 HB ₆₈		4 28.5 307°82	2°2/26.8	17	
3 22	14 49.03	-26 22.5	2.457	3.221	13.1	21.2	3 22	14 47.64	-10 53.3				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
68167	2001 <i>BV</i> ₂₈		4 28.5 156°09	3°5/25.5	18		310130	2011 <i>GH</i> ₅₉		4 28.5 342°70	1°9/27.3	17	
3 22	14 47.87	- 7 4.9	2.028	2.857	13.2	19.6	3 22	14 48.70	-10 27.5	1.636	2.470	15.6	20.8
4 1	14 43.71	- 6 14.6	1.951	2.859	10.2	19.4	4 1	14 45.00	-10 16.1	1.554	2.465	12.0	20.5
4 11	14 37.55	- 5 19.8	1.898	2.861	6.8	19.2	4 11	14 38.77	- 9 58.6	1.494	2.460	7.9	20.3
4 21	14 29.99	- 4 25.3	1.870	2.863	3.9	19.0	4 21	14 30.66	- 9 38.1	1.458	2.456	3.6	20.0
5 1	14 21.83	- 3 36.4	1.871	2.864	4.1	19.0	5 1	14 21.66	- 9 18.7	1.448	2.452	2.6	19.9
5 11	14 13.99	- 2 58.0	1.898	2.866	7.1	19.2	5 11	14 12.93	- 9 5.1	1.465	2.449	6.9	20.2
5 21	14 7.24	- 2 33.5	1.952	2.867	10.5	19.4	5 21	14 5.55	- 9 0.9	1.506	2.446	11.2	20.4
5 31	14 2.22	- 2 24.9	2.028	2.868	13.5	19.6	5 31	14 0.31	- 9 8.9	1.568	2.444	15.0	20.7
26223	Enari		4 28.5 263°18	3°2/1.6	18		30940	1994 <i>CL</i> ₂		4 28.5 102°36	2°4/26.6	18	
3 22	14 47.15	-26 52.0	2.251	3.022	13.9	18.7	3 22	14 50.65	- 9 54.5	1.897	2.720	14.2	19.2
4 1	14 43.32	-26 37.9	2.149	3.012	11.4	18.5	4 1	14 45.87	- 9 16.7	1.831	2.736	10.9	19.0
4 11	14 37.41	-26 7.0	2.068	3.002	8.4	18.2	4 11	14 38.97	- 8 33.0	1.788	2.752	7.1	18.8
4 21	14 29.98	-25 19.2	2.012	2.992	5.2	18.0	4 21	14 30.61	- 7 47.4	1.771	2.767	3.4	18.6
5 1	14 21.83	-24 16.6	1.983	2.981	3.2	17.9	5 1	14 21.71	- 7 4.9	1.782	2.782	3.1	18.6
5 11	14 13.88	-23 3.7	1.982	2.971	4.9	18.0	5 11	14 13.26	- 6 30.2	1.820	2.797	6.5	18.8
5 21	14 6.98	-21 46.8	2.009	2.960	8.2	18.1	5 21	14 6.09	- 6 7.0	1.884	2.811	10.1	19.1
5 31	14 1.83	-20 32.3	2.061	2.949	11.4	18.3	5 31	14 0.83	- 5 57.5	1.971	2.825	13.3	19.3
313678	2003 <i>SA</i> ₂₆₆		4 28.5 149°13	1°1/27.6	18		229100	2004 <i>RC</i> ₂₆		4 28.5 213°80	5°3/23.6	18	
3 22	14 52.27	-13 53.0	1.990	2.800	14.1	21.5	3 22	14 50.17	+ 0 44.2	2.375	3.193	11.8	21.0
4 1	14 47.13	-13 18.0	1.913	2.810	10.9	21.3	4 1	14 45.24	+ 1 35.8	2.290	3.186	9.4	20.8
4 11	14 39.81	-12 33.8	1.859	2.820	7.1	21.1	4 11	14 38.49	+ 2 26.1	2.229	3.177	7.0	20.7
4 21	14 30.97	-11 43.5	1.831	2.828	3.1	20.9	4 21	14 30.43	+ 3 10.3	2.195	3.168	5.4	20.6
5 1	14 21.52	-10 51.5	1.832	2.837	1.8	20.8	5 1	14 21.76	+ 3 43.5	2.189	3.159	6.0	20.6
5 11	14 12.47	-10 3.2	1.861	2.844	5.8	21.1	5 11	14 13.31	+ 4 2.1	2.211	3.149	8.2	20.7
5 21	14 4.66	- 9 23.2	1.917	2.851	9.6	21.3	5 21	14 5.79	+ 4 4.0	2.259	3.138	10.8	20.8
5 31	13 58.77	- 8 55.2	1.997	2.856	12.9	21.5	5 31	13 59.81	+ 3 49.1	2.329	3.126	13.3	21.0
270220	2001 <i>TZ</i> ₁₆₈		4 28.5 161°98	2°5/30.8	17		154338	2002 <i>VJ</i> ₁₂₆		4 28.5 22°61	0°4/28.3	18	
3 22	14 53.75	-23 44.2	2.655	3.415	12.3	22.4	3 22	14 53.79	-13 26.0	1.237	2.077	19.3	19.5
4 1	14 47.90	-23 53.1	2.564	3.424	9.9	22.3	4 1	14 49.74	-13 38.3	1.166	2.078	15.1	19.3
4 11	14 40.18	-23 50.8	2.497	3.432	7.1	22.1	4 11	14 42.32	-13 41.5	1.114	2.080	10.0	19.0
4 21	14 31.13	-23 36.8	2.456	3.438	4.2	21.9	4 21	14 32.32	-13 37.3	1.084	2.082	4.4	18.7
5 1	14 21.49	-23 12.3	2.445	3.444	2.5	21.8	5 1	14 21.11	-13 28.8	1.078	2.085	1.6	18.5
5 11	14 12.10	-22 40.3	2.464	3.449	4.3	21.9	5 11	14 10.35	-13 21.0	1.097	2.088	7.5	18.8
5 21	14 3.71	-22 4.5	2.511	3.454	7.2	22.1	5 21	14 1.51	-13 18.9	1.139	2.091	12.8	19.1
5 31	13 56.92	-21 29.3	2.585	3.457	9.9	22.3	5 31	13 55.61	-13 26.7	1.201	2.094	17.4	19.4
300873	2008 <i>AD</i> ₃₂		4 28.5 130°18	1°9/26.6	17		519993	2013 <i>TF</i> ₁₆₉		4 28.5 251°39	1°2/27.4	17	
3 22	14 47.15	- 9 43.1	2.576	3.391	11.2	21.8	3 22	14 47.04	-16 2.7	1.872	2.691	14.5	21.6
4 1	14 42.70	- 9 8.2	2.500	3.401	8.5	21.6	4 1	14 43.42	-14 57.3	1.780	2.683	11.3	21.4
4 11	14 36.67	- 8 28.9	2.449	3.411	5.6	21.5	4 11	14 37.58	-13 37.3	1.711	2.675	7.4	21.1
4 21	14 29.57	- 7 48.2	2.424	3.420	2.7	21.3	4 21	14 30.10	-12 6.6	1.668	2.666	3.2	20.9
5 1	14 22.04	- 7 9.5	2.429	3.429	2.5	21.3	5 1	14 21.87	-10 31.7	1.653	2.658	2.0	20.8
5 11	14 14.79	- 6 36.4	2.463	3.438	5.2	21.5	5 11	14 13.91	- 9 0.5	1.666	2.649	6.3	21.0
5 21	14 8.42	- 6 11.9	2.524	3.447	8.1	21.7	5 21	14 7.13	- 7 40.2	1.705	2.640	10.5	21.2
5 31	14 3.44	- 5 57.9	2.610	3.455	10.7	21.9	5 31	14 2.25	- 6 36.3	1.767	2.631	14.1	21.4
363263	2002 <i>EN</i> ₄		4 28.5 0°53	4°4/25.7	16		83768	2001 <i>TR</i> ₁₆₁		4 28.5 136°22	3°2/1.1	18	
3 22	14 42.46	- 9 51.5	1.057	1.929	19.4	20.3	3 22	14 50.41	-24 28.0	2.346	3.118	13.4	20.1
4 1	14 41.17	- 8 45.8	0.994	1.926	15.0	20.0	4 1	14 45.67	-24 48.8	2.257	3.121	10.8	19.9
4 11	14 36.70	- 7 27.8	0.950	1.924	9.9	19.8	4 11	14 38.90	-24 57.3	2.190	3.125	7.9	19.7
4 21	14 29.85	- 6 5.7	0.926	1.924	5.3	19.5	4 21	14 30.64	-24 52.9	2.148	3.128	4.9	19.6
5 1	14 21.93	- 4 50.5	0.925	1.925	5.5	19.5	5 1	14 21.69	-24 36.5	2.134	3.132	3.2	19.4
5 11	14 14.53	- 3 52.8	0.946	1.927	10.3	19.8	5 11	14 12.97	-24 10.7	2.149	3.135	4.8	19.6
5 21	14 8.95	- 3 19.4	0.987	1.931	15.3	20.0	5 21	14 5.30	-23 39.7	2.191	3.138	7.8	19.7
5 31	14 6.12	- 3 13.1	1.047	1.936	19.7	20.3	5 31	13 59.36	-23 8.1	2.258	3.141	10.7	19.9
355159	2006 <i>VN</i> ₇₈		4 28.5 157°76	2°0/26.5	17		181498	2006 <i>UK</i> ₁₁		4 28.5 121°22	0°6/27.9	17	
3 22	14 47.51	- 8 27.4	2.887	3.697	10.2	22.4	3 22	14 47.14	-14 9.2	2.538	3.344	11.5	21.3
4 1	14 42.82	- 8 1.5	2.805	3.703	7.8	22.2	4 1	14 42.77	-13 43.7	2.458	3.354	8.9	21.1
4 11	14 36.69	- 7 32.6	2.748	3.709	5.1	22.1	4 11	14 36.76	-13 11.1	2.404	3.364	5.8	20.9
4 21	14 29.57	- 7 3.1	2.719	3.714	2.6	21.9	4 21	14 29.63	-12 33.7	2.376	3.373	2.5	20.7
5 1	14 22.04	- 6 36.0	2.720	3.719	2.4	21.9	5 1	14 22.05	-11 54.7	2.377	3.383	1.3	20.6
5 11	14 14.73	- 6 14.0	2.751	3.724	4.9	22.1	5 11	14 14.75	-11 17.8	2.407	3.392	4.5	20.9
5 21	14 8.20	- 5 59.5	2.809	3.728	7.5	22.2	5 21	14 8.35	-10 46.2	2.465	3.400	7.7	21.1
5 31	14 2.92	- 5 54.0	2.893	3.731	9.9	22.4	5 31	14 3.38	-10 23.0	2.548	3.409	10.4	21.3
382964	2004 <i>XH</i> ₅₈		4 28.5 165°01	0°9/29.2	18		491700	2012 <i>UV</i> ₉₈		4 28.5 74°92	0°1/28.6	17	
3 22	14 50.58	-18 18.0	2.378	3.170	12.6	21.5	3 22	14 47.61	-16 51.5	2.157	2.965	13.3	21.7
4 1	14 45.62	-18 12.8	2.290	3.175	9.9	21.4	4 1	14 43.39	-16 27.3	2.086	2.980	10.2	21.5
4 11	14 38.76	-17 58.0	2.226	3.178	6.7	21.2	4 11	14 37.28	-15 53.2	2.037	2.996	6.8	21.3
4 21	14 30.54	-17 34.7	2.188	3.182	3.2	20.9	4 21	14 29.87	-15 11.5	2.015	3.011	3.0	21.1
5 1	14 21.71	-17 5.2	2.178	3.185	1.1	20.8	5 1	14 21.98	-14 25.7	2.020	3.027	1.0	21.0
5 11	14 13.13	-16 33.0	2.198	3.187	4.4	21.0	5 11	14 14.45	-13 40.5	2.054	3.042	4.8	21.3
5 21	14 5.58	-16 1.9	2.246	3.189	7.9	21.2	5 21	14 8.03	-13 0.2	2.115	3.058	8.3	21.5
5 31	13 59.65	-15 35.7	2.319	3.191	10.9	21.4	5 31	14 3.29	-12 28.5	2.200	3.073	11.4	21.8
292962	2006 <i>VX</i> ₁₂₀		4 28.5 147°27	0°6/27.9	17		422538	2014 <i>TU</i> ₂₃		4 28.5 190°60	0°1/28.4		

EPHEMERIDES

4 28.5

4 28.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
508717	2017 <i>UK</i> ₂₆		4 28.5 227°96	1°8/27.0	17		239643	2008 <i>WQ</i> ₄₆		4 28.5 117°71	0°1/28.5	18	
3 22	14 48.98	-11 41.4	2.064	2.882	13.4	22.1	3 22	14 48.94	-15 50.8	2.049	2.860	13.8	20.8
4 1	14 44.69	-11 6.2	1.972	2.875	10.3	21.9	4 1	14 44.65	-15 38.5	1.966	2.862	10.7	20.6
4 11	14 38.32	-10 23.3	1.905	2.868	6.8	21.7	4 11	14 38.28	-15 17.0	1.905	2.865	7.1	20.4
4 21	14 30.41	-9 35.9	1.863	2.860	3.1	21.4	4 21	14 30.39	-14 47.9	1.870	2.867	3.1	20.2
5 1	14 21.78	-8 48.4	1.849	2.852	2.4	21.4	5 1	14 21.84	-14 14.5	1.863	2.870	1.0	20.0
5 11	14 13.37	-8 5.9	1.863	2.844	6.1	21.6	5 11	14 13.57	-13 41.1	1.884	2.872	5.1	20.3
5 21	14 6.03	-7 32.7	1.904	2.835	9.8	21.8	5 21	14 6.43	-13 11.9	1.931	2.874	8.9	20.5
5 31	14 0.44	-7 12.0	1.968	2.826	13.2	22.0	5 31	14 1.08	-12 50.6	2.002	2.876	12.3	20.7
1606	Jekhovsky		4 28.5 278°61	1°9/26.8	18		508484	2016 <i>PD</i> ₆₆		4 28.5 257°69	7°8/21.1	17	
3 22	14 48.22	-12 21.3	2.101	2.919	13.2	16.9	3 22	14 47.67	+ 8 18.7	2.240	3.060	12.4	21.3
4 1	14 44.29	-11 31.6	1.986	2.889	10.3	16.6	4 1	14 43.39	+ 9 22.4	2.172	3.057	10.3	21.2
4 11	14 38.20	-10 31.4	1.895	2.858	6.8	16.3	4 11	14 37.29	+10 19.1	2.127	3.054	8.6	21.1
4 21	14 30.43	-9 23.9	1.830	2.827	3.1	16.1	4 21	14 29.92	+11 2.8	2.107	3.051	7.8	21.0
5 1	14 21.74	-8 14.2	1.793	2.796	2.7	16.0	5 1	14 22.01	+11 28.3	2.114	3.048	8.5	21.0
5 11	14 13.07	-7 8.5	1.785	2.764	6.5	16.1	5 11	14 14.39	+11 32.5	2.145	3.045	10.3	21.1
5 21	14 5.33	-6 12.4	1.803	2.731	10.5	16.3	5 21	14 7.77	+11 14.9	2.200	3.041	12.5	21.3
5 31	13 59.30	-5 30.8	1.845	2.698	14.1	16.5	5 31	14 2.72	+10 36.7	2.275	3.038	14.6	21.4
351478	2005 <i>QG</i> ₁₈		4 28.5 261°27	1°3/27.3	16		3217	Seidemann		4 28.5 265°89	3°3/30.6	18	
3 22	14 46.28	-12 23.2	2.486	3.299	11.5	21.7	3 22	14 53.37	-23 24.3	1.872	2.657	15.8	18.9
4 1	14 42.31	-11 51.2	2.385	3.284	8.9	21.5	4 1	14 48.85	-23 41.5	1.759	2.633	12.9	18.7
4 11	14 36.61	-11 12.2	2.308	3.270	5.8	21.3	4 11	14 41.57	-23 44.5	1.666	2.609	9.4	18.4
4 21	14 29.63	-10 28.7	2.258	3.255	2.6	21.0	4 21	14 32.05	-23 31.6	1.598	2.583	5.6	18.1
5 1	14 22.04	-9 44.3	2.236	3.240	1.9	20.9	5 1	14 21.23	-23 3.2	1.557	2.558	3.3	17.9
5 11	14 14.59	-9 3.1	2.244	3.225	5.1	21.1	5 11	14 10.34	-22 22.6	1.543	2.531	6.0	18.0
5 21	14 7.97	-8 28.8	2.279	3.210	8.4	21.3	5 21	14 0.64	-21 35.6	1.555	2.504	10.2	18.2
5 31	14 2.76	-8 4.5	2.338	3.194	11.4	21.5	5 31	13 53.14	-20 49.1	1.590	2.477	14.3	18.4
392812	2012 <i>TX</i> ₂₄₅		4 28.5 130°29	0°6/27.9	17		347702	2001 <i>WE</i> ₃₆		4 28.5 161°67	4°4/23.6	18	
3 22	14 47.67	-14 30.9	2.639	3.441	11.3	22.4	3 22	14 48.65	+ 2 28.8	3.143	3.951	9.5	22.3
4 1	14 43.08	-14 1.9	2.560	3.454	8.6	22.2	4 1	14 43.53	+ 3 5.3	3.070	3.958	7.5	22.2
4 11	14 36.92	-13 25.7	2.506	3.466	5.6	22.0	4 11	14 37.09	+ 3 38.8	3.022	3.965	5.6	22.0
4 21	14 29.70	-12 44.6	2.480	3.477	2.4	21.8	4 21	14 29.76	+ 4 6.2	3.003	3.970	4.5	22.0
5 1	14 22.05	-12 1.8	2.483	3.489	1.2	21.8	5 1	14 22.08	+ 4 24.5	3.013	3.976	4.9	22.0
5 11	14 14.68	-11 21.0	2.515	3.500	4.4	22.0	5 11	14 14.63	+ 4 31.4	3.051	3.981	6.5	22.1
5 21	14 8.21	-10 45.5	2.576	3.510	7.4	22.2	5 21	14 7.91	+ 4 26.0	3.117	3.985	8.5	22.3
5 31	14 3.13	-10 18.2	2.662	3.520	10.1	22.4	5 31	14 2.37	+ 4 8.2	3.206	3.988	10.4	22.4
426469	2013 <i>QO</i> ₈₄		4 28.5 167°97	4°3/23.9	17		289626	2005 <i>GZ</i> ₅₂		4 28.5 253°57	0°2/28.3	17	
3 22	14 48.71	- 3 18.7	2.491	3.310	11.3	22.0	3 22	14 47.26	-15 53.0	2.242	3.051	12.8	21.2
4 1	14 43.94	- 2 8.4	2.415	3.315	8.8	21.8	4 1	14 43.26	-15 29.5	2.147	3.043	9.9	21.0
4 11	14 37.52	- 0 56.3	2.365	3.320	6.2	21.7	4 11	14 37.33	-14 56.3	2.075	3.035	6.6	20.8
4 21	14 29.97	+ 0 12.7	2.342	3.324	4.4	21.5	4 21	14 29.99	-14 15.7	2.029	3.027	2.9	20.5
5 1	14 21.96	+ 1 13.5	2.349	3.328	4.9	21.6	5 1	14 21.98	-13 30.9	2.012	3.018	1.1	20.4
5 11	14 14.23	+ 2 1.7	2.385	3.330	7.2	21.7	5 11	14 14.16	-12 46.4	2.022	3.010	4.9	20.6
5 21	14 7.42	+ 2 34.4	2.446	3.332	9.8	21.9	5 21	14 7.31	-12 6.5	2.060	3.001	8.6	20.8
5 31	14 2.05	+ 2 50.6	2.531	3.333	12.3	22.1	5 31	14 2.08	-11 35.3	2.122	2.992	11.9	21.0
383897	2008 <i>ST</i> ₄₄		4 28.5 216°89	0°5/28.9	17		206452	2003 <i>SA</i> ₃₀₉		4 28.5 264°26	6°5/3.6	18	
3 22	14 49.64	-17 15.8	2.098	2.902	13.7	21.7	3 22	14 53.14	-34 4.7	2.370	3.091	14.6	20.0
4 1	14 45.23	-17 6.5	2.007	2.898	10.7	21.5	4 1	14 48.33	-34 40.9	2.250	3.066	12.6	19.8
4 11	14 38.69	-16 47.1	1.938	2.895	7.2	21.3	4 11	14 41.05	-35 0.5	2.149	3.041	10.3	19.6
4 21	14 30.58	-16 18.8	1.895	2.890	3.3	21.0	4 21	14 31.77	-35 0.3	2.072	3.015	8.0	19.4
5 1	14 21.74	-15 44.5	1.879	2.886	1.0	20.8	5 1	14 21.35	-34 38.3	2.021	2.989	6.5	19.3
5 11	14 13.12	-15 8.3	1.893	2.882	5.0	21.1	5 11	14 10.88	-33 56.1	1.997	2.962	7.1	19.3
5 21	14 5.60	-14 34.7	1.932	2.877	8.8	21.3	5 21	14 1.46	-32 58.1	2.000	2.935	9.2	19.4
5 31	13 59.88	-14 8.0	1.996	2.872	12.3	21.5	5 31	13 53.99	-31 51.1	2.028	2.907	12.0	19.5
332097	2005 <i>UW</i> ₁₅₅		4 28.5 165°39	3°1/25.9	17		365591	2010 <i>TE</i> ₁₅₀		4 28.5 289°68	2°1/27.3	17	
3 22	14 50.00	- 7 29.9	2.187	3.006	12.7	21.4	3 22	14 50.15	-11 35.4	1.499	2.335	16.7	21.5
4 1	14 45.20	- 6 45.5	2.108	3.011	9.8	21.2	4 1	14 46.65	-11 11.5	1.401	2.313	13.1	21.2
4 11	14 38.49	- 5 57.1	2.053	3.015	6.5	21.1	4 11	14 40.25	-10 38.0	1.323	2.290	8.7	20.9
4 21	14 30.43	- 5 8.5	2.026	3.019	3.6	20.9	4 21	14 31.50	- 9 58.1	1.269	2.267	4.0	20.6
5 1	14 21.81	- 4 24.4	2.027	3.022	3.7	20.9	5 1	14 21.44	- 9 17.0	1.241	2.245	2.9	20.4
5 11	14 13.50	- 3 49.4	2.056	3.024	6.6	21.1	5 11	14 11.42	- 8 41.2	1.237	2.222	7.8	20.7
5 21	14 6.25	- 3 26.5	2.111	3.026	9.8	21.3	5 21	14 2.75	- 8 16.9	1.258	2.199	12.9	20.9
5 31	14 0.66	- 3 17.7	2.190	3.028	12.7	21.5	5 31	13 56.51	- 8 8.4	1.299	2.176	17.4	21.1
122215	2000 <i>NE</i> ₁₀		4 28.5 237°16	1°0/29.1	18		134724	2000 <i>AE</i> ₄₀		4 28.5 202°35	1°9/30.0	17	
3 22	14 55.12	-16 26.2	2.133	2.927	13.8	20.1	3 22	14 52.97	-21 17.9	2.134	2.918	14.1	20.3
4 1	14 49.59	-16 47.8	2.030	2.915	10.9	19.8	4 1	14 47.87	-21 17.0	2.037	2.914	11.3	20.1
4 11	14 41.70	-17 2.2	1.949	2.903	7.4	19.6	4 11	14 40.49	-21 3.4	1.962	2.909	7.9	19.8
4 21	14 31.97	-17 9.3	1.895	2.890	3.5	19.3	4 21	14 31.41	-20 37.4	1.913	2.903	4.2	19.6
5 1	14 21.26	-17 10.1	1.870	2.876	1.3	19.1	5 1	14 21.51	-20 0.9	1.892	2.897	2.0	19.4
5 11	14 10.63	-17 7.1	1.874	2.862	5.1	19.4	5 11	14 11.82	-19 17.8	1.900	2.889	5.0	19.6
5 21	14 1.07	-17 3.3	1.905	2.848	9.1	19.6	5 21	14 3.27	-18 33.3	1.935	2.881	8.7	19.8
5 31	13 53.41	-17 2.5	1.962	2.833	12.6	19.8	5 31	13 56.63	-17 52.6	1.996	2.873	12.2	20.0
497199	2004 <i>TS</i> ₂₁₇		4 28.5 221°06	0°8/27.8	17		30925						

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
334733	2003 OY ₁₃		4 28.5 220°31	1.7/26.6	18		134416	1998 HP ₃₇		4 28.5 8°27	1.8/29.5	18	
3 22	14 47.95	-11 46.9	2.650	3.458	11.1	21.8	3 22	14 46.83	-19 11.1	1.170	2.012	20.0	19.2
4 1	14 43.44	-10 54.8	2.549	3.447	8.5	21.6	4 1	14 44.54	-19 16.4	1.101	2.013	15.8	18.9
4 11	14 37.28	-9 55.2	2.474	3.435	5.6	21.4	4 11	14 38.98	-19 4.2	1.051	2.015	10.9	18.6
4 21	14 29.93	-8 51.3	2.426	3.422	2.6	21.2	4 21	14 30.93	-18 35.7	1.022	2.017	5.4	18.3
5 1	14 22.03	-7 47.2	2.408	3.409	2.3	21.1	5 1	14 21.72	-17 54.6	1.015	2.021	2.0	18.1
5 11	14 14.28	-6 47.6	2.420	3.395	5.3	21.3	5 11	14 13.00	-17 8.4	1.032	2.026	7.0	18.4
5 21	14 7.35	-5 56.5	2.460	3.381	8.4	21.5	5 21	14 6.16	-16 25.2	1.071	2.032	12.3	18.7
5 31	14 1.78	-5 17.1	2.525	3.366	11.2	21.6	5 31	14 2.17	-15 52.3	1.130	2.039	17.0	19.0
379664	2011 EX ₆₈		4 28.5 164°99	4.2/25.0	17		462336	2008 KS ₃₉		4 28.5 264°64	4.6/24.6	17	
3 22	14 48.87	-5 0.6	2.020	2.848	13.3	21.2	3 22	14 47.03	-6 37.1	1.772	2.610	14.4	21.4
4 1	14 44.51	-4 7.5	1.944	2.851	10.3	21.0	4 1	14 43.48	-5 20.0	1.690	2.603	11.1	21.2
4 11	14 38.12	-3 11.5	1.892	2.853	7.0	20.8	4 11	14 37.67	-3 56.1	1.631	2.595	7.6	21.0
4 21	14 30.32	-2 17.8	1.866	2.855	4.5	20.6	4 21	14 30.21	-2 31.8	1.598	2.588	4.9	20.8
5 1	14 21.91	-1 31.7	1.868	2.857	4.8	20.6	5 1	14 21.99	-1 14.9	1.591	2.580	5.5	20.8
5 11	14 13.82	-0 58.1	1.897	2.858	7.7	20.8	5 11	14 14.05	-0 12.5	1.611	2.572	8.7	21.0
5 21	14 6.85	-0 40.0	1.952	2.859	10.9	21.0	5 21	14 7.31	+0 30.4	1.655	2.565	12.4	21.2
5 31	14 1.62	-0 38.7	2.028	2.860	13.8	21.2	5 31	14 2.49	+0 51.5	1.721	2.557	15.7	21.4
211131	2002 GH ₆₃		4 28.5 343°22	1.8/27.6	17		208929	2002 UJ ₇₄		4 28.5 148°38	1.4/27.2	17	
3 22	14 48.30	-11 44.1	1.233	2.085	18.6	19.6	3 22	14 47.94	-11 51.2	2.344	3.157	12.1	21.7
4 1	14 45.53	-11 32.6	1.158	2.077	14.5	19.3	4 1	14 43.57	-11 21.9	2.262	3.162	9.3	21.5
4 11	14 39.59	-11 11.8	1.101	2.071	9.6	19.0	4 11	14 37.41	-10 46.3	2.204	3.166	6.1	21.3
4 21	14 31.20	-10 45.3	1.066	2.065	4.2	18.7	4 21	14 30.01	-10 7.2	2.173	3.171	2.7	21.1
5 1	14 21.59	-10 18.3	1.055	2.060	2.7	18.6	5 1	14 22.08	-9 28.2	2.171	3.174	2.0	21.0
5 11	14 12.33	-9 57.4	1.068	2.056	8.0	18.9	5 11	14 14.42	-8 53.4	2.197	3.178	5.2	21.3
5 21	14 4.79	-9 47.9	1.103	2.053	13.3	19.1	5 21	14 7.72	-8 26.1	2.251	3.182	8.5	21.5
5 31	13 59.99	-9 53.5	1.157	2.051	17.9	19.4	5 31	14 2.56	-8 9.0	2.329	3.185	11.4	21.7
295856	2008 VR ₆₉		4 28.5 12°81	2°1/27.5	18		302046	2000 SA ₃₄₈		4 28.5 246°27	5°6/22.1	18	
3 22	14 52.39	-10 17.4	1.232	2.078	18.9	21.0	3 22	14 47.31	+4 25.9	2.871	3.685	10.2	21.4
4 1	14 48.60	-10 13.9	1.162	2.079	14.7	20.7	4 1	14 42.83	+5 21.9	2.778	3.666	8.2	21.2
4 11	14 41.54	-10 3.8	1.112	2.081	9.7	20.5	4 11	14 36.84	+6 15.1	2.711	3.647	6.5	21.1
4 21	14 32.01	-9 50.5	1.084	2.082	4.4	20.2	4 21	14 29.76	+7 1.2	2.670	3.628	5.6	21.0
5 1	14 21.34	-9 38.6	1.080	2.085	3.0	20.1	5 1	14 22.15	+7 35.8	2.658	3.607	6.2	21.0
5 11	14 11.14	-9 33.5	1.101	2.087	8.1	20.4	5 11	14 14.67	+7 55.8	2.673	3.587	8.0	21.1
5 21	14 2.79	-9 39.3	1.144	2.091	13.3	20.7	5 21	14 7.89	+7 59.5	2.714	3.566	10.1	21.2
5 31	13 57.30	-9 58.6	1.207	2.094	17.7	20.9	5 31	14 2.33	+7 46.7	2.777	3.544	12.1	21.3
19113	1981 EB ₃₃		4 28.5 292°20	7°7/3.3	18		159465	2000 QJ ₂		4 28.5 190°51	9°3/7.7	18	
3 22	14 52.17	-32 50.1	1.847	2.596	17.3	18.7	3 22	14 59.37	-44 34.9	2.338	2.984	16.5	20.0
4 1	14 48.27	-33 47.7	1.740	2.575	14.9	18.5	4 1	14 53.33	-45 10.7	2.238	2.983	14.8	19.8
4 11	14 41.40	-34 27.5	1.651	2.555	12.1	18.3	4 11	14 44.37	-45 23.1	2.155	2.981	12.9	19.7
4 21	14 32.06	-34 45.0	1.585	2.535	9.4	18.0	4 21	14 33.21	-45 7.2	2.093	2.978	10.9	19.6
5 1	14 21.27	-34 37.0	1.543	2.514	7.8	17.9	5 1	14 21.01	-44 20.4	2.054	2.974	9.6	19.5
5 11	14 10.43	-34 4.7	1.526	2.494	8.5	17.9	5 11	14 9.17	-43 4.8	2.042	2.969	9.4	19.4
5 21	14 0.90	-33 13.2	1.534	2.474	11.0	18.0	5 21	13 58.93	-41 26.6	2.055	2.962	10.4	19.5
5 31	13 53.84	-32 11.0	1.564	2.454	14.2	18.1	5 31	13 51.21	-39 34.9	2.093	2.955	12.3	19.6
168671	2000 EH ₁₇₆		4 28.5 301°03	0°1/28.6	17		275329	2010 VG ₆₃		4 28.5 164°92	2°0/30.2	16	
3 22	14 47.34	-16 38.0	1.991	2.804	14.0	20.8	3 22	14 53.00	-22 4.2	2.117	2.899	14.3	22.3
4 1	14 43.58	-16 19.5	1.901	2.798	10.9	20.6	4 1	14 47.81	-21 57.6	2.030	2.905	11.4	22.2
4 11	14 37.68	-15 50.1	1.833	2.792	7.3	20.4	4 11	14 40.39	-21 37.4	1.965	2.910	8.0	21.9
4 21	14 30.19	-15 12.0	1.790	2.787	3.2	20.1	4 21	14 31.37	-21 4.2	1.925	2.914	4.3	21.7
5 1	14 21.96	-14 28.4	1.774	2.781	1.0	19.9	5 1	14 21.64	-20 20.1	1.914	2.918	2.1	21.6
5 11	14 13.96	-13 44.4	1.787	2.776	5.3	20.2	5 11	14 12.23	-19 29.9	1.932	2.921	4.9	21.8
5 21	14 7.06	-13 4.9	1.825	2.770	9.2	20.4	5 21	14 4.04	-18 38.7	1.977	2.924	8.5	22.0
5 31	14 1.98	-12 34.2	1.887	2.765	12.7	20.6	5 31	13 57.77	-17 52.1	2.047	2.925	11.9	22.2
36433	2000 PR ₁₇		4 28.5 218°75	0°6/29.1	18		254319	2004 RR ₃₄₀		4 28.5 284°27	0°3/28.3	18	
3 22	14 47.83	-18 2.9	2.929	3.716	10.6	20.6	3 22	14 54.42	-12 4.2	2.493	3.290	12.0	20.1
4 1	14 43.26	-17 49.6	2.825	3.707	8.3	20.4	4 1	14 48.80	-12 28.0	2.375	3.264	9.4	19.9
4 11	14 37.13	-17 28.0	2.745	3.697	5.6	20.2	4 11	14 41.10	-12 48.7	2.281	3.238	6.3	19.6
4 21	14 29.87	-16 59.3	2.692	3.687	2.6	20.0	4 21	14 31.75	-13 7.0	2.215	3.212	2.8	19.4
5 1	14 22.07	-16 25.5	2.670	3.676	0.8	19.8	5 1	14 21.47	-13 23.8	2.179	3.185	1.1	19.2
5 11	14 14.41	-15 49.6	2.677	3.665	3.8	20.0	5 11	14 11.13	-13 40.7	2.173	3.159	4.8	19.4
5 21	14 7.49	-15 14.9	2.712	3.653	6.8	20.2	5 21	14 1.60	-13 59.5	2.196	3.132	8.4	19.6
5 31	14 1.84	-14 44.7	2.774	3.641	9.5	20.3	5 31	13 53.61	-14 22.2	2.245	3.105	11.7	19.7
389279	2009 HY ₄₅		4 28.5 346°60	0°2/28.7	17		201560	2003 SB ₈		4 28.5 281°52	1°8/29.8	17	
3 22	14 43.94	-17 18.2	1.762	2.587	15.0	20.4	3 22	14 49.55	-20 6.9	1.969	2.769	14.6	20.7
4 1	14 41.24	-16 53.6	1.675	2.579	11.7	20.2	4 1	14 45.57	-20 9.8	1.863	2.750	11.7	20.5
4 11	14 36.26	-16 16.0	1.610	2.572	7.9	19.9	4 11	14 39.20	-20 0.3	1.778	2.730	8.1	20.2
4 21	14 29.61	-15 27.7	1.569	2.566	3.5	19.7	4 21	14 30.97	-19 38.8	1.719	2.711	4.2	19.9
5 1	14 22.16	-14 33.2	1.554	2.561	1.1	19.5	5 1	14 21.74	-19 6.9	1.686	2.692	1.8	19.7
5 11	14 14.97	-13 38.3	1.565	2.556	5.6	19.8	5 11	14 12.57	-18 28.6	1.681	2.672	5.3	19.9
5 21	14 8.96	-12 49.0	1.602	2.552	9.9	20.0	5 21	14 4.50	-17 49.2	1.703	2.652	9.4	20.1
5 31	14 4.90	-12 10.5	1.661	2.549	13.7	20.2	5 31	13 58.37	-17 14.2	1.747	2.633	13.2	20.3
520226	2014 DA ₁₅₃		4 28.5 150°77	4°2/23.7	17		31344	Agathon		4 28.5 228°90	0°3/29.1	18	R
3 22	14 45.35	-3 34.4	2.557	3.382	10.9	21.8	3 22</						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
129841	1999 <i>RG</i> ₂₅		4 28.5 170°83	3°1/ 1.3 17			34489	2000 <i>SE</i> ₁₃₆		4 28.5 358°67	4°8/ 2.4 18		
3 22	14 51.94	-25 19.7	2.498	3.259	12.9	20.3	3 22	14 49.26	-28 25.1	2.150	2.913	14.7	18.9
4 1	14 46.76	-25 31.4	2.405	3.263	10.5	20.1	4 1	14 45.16	-28 55.0	2.059	2.912	12.2	18.7
4 11	14 39.60	-25 30.4	2.335	3.266	7.7	20.0	4 11	14 38.79	-29 9.6	1.989	2.912	9.3	18.5
4 21	14 31.01	-25 16.2	2.290	3.269	4.8	19.8	4 21	14 30.74	-29 7.3	1.943	2.912	6.5	18.4
5 1	14 21.76	-24 49.8	2.274	3.271	3.1	19.7	5 1	14 21.87	-28 48.2	1.924	2.912	4.8	18.3
5 11	14 12.74	-24 14.2	2.287	3.272	4.7	19.8	5 11	14 13.21	-28 15.2	1.931	2.912	5.8	18.3
5 21	14 4.75	-23 33.6	2.328	3.273	7.5	20.0	5 21	14 5.70	-27 33.0	1.965	2.912	8.5	18.5
5 31	13 58.42	-22 52.7	2.395	3.274	10.4	20.1	5 31	14 0.10	-26 47.7	2.023	2.913	11.5	18.7
490757	2010 <i>TN</i> ₁₆₆		4 28.5 222°55	9°3/30.9 18			60119	1999 <i>TU</i> ₂₂₃		4 28.5 324°83	7°5/21.9 18		
3 22	15 9.67	-27 25.0	1.362	2.129	21.5	21.4	3 22	14 41.90	-3 0.3	1.418	2.280	16.0	18.4
4 1	15 3.34	-29 33.8	1.269	2.122	18.3	21.1	4 1	14 40.19	-1 11.9	1.333	2.256	12.7	18.1
4 11	14 52.40	-31 32.9	1.196	2.114	14.5	20.8	4 11	14 35.89	+0 44.6	1.269	2.233	9.4	17.9
4 21	14 37.31	-33 11.9	1.145	2.105	10.9	20.6	4 21	14 29.59	+2 39.4	1.229	2.210	7.5	17.7
5 1	14 19.51	-34 20.8	1.119	2.096	9.3	20.5	5 1	14 22.25	+4 20.6	1.213	2.188	8.9	17.7
5 11	14 1.33	-34 55.3	1.119	2.086	11.0	20.5	5 11	14 15.08	+5 37.5	1.221	2.168	12.4	17.9
5 21	13 45.19	-34 59.3	1.143	2.075	14.8	20.7	5 21	14 9.20	+6 23.8	1.249	2.148	16.3	18.0
5 31	13 32.99	-34 44.1	1.189	2.063	18.9	20.9	5 31	14 5.53	+6 37.2	1.295	2.129	20.0	18.2
240027	2001 <i>UB</i> ₆₃		4 28.5 222°54	0°5/28.8 16			143119	2002 <i>XL</i> ₂₈		4 28.5 173°91	0°5/29.0 18		
3 22	14 54.33	-17 13.9	1.892	2.694	15.1	21.8	3 22	14 47.83	-18 6.2	2.472	3.267	12.1	20.7
4 1	14 49.25	-17 1.8	1.792	2.683	11.9	21.5	4 1	14 43.49	-17 46.0	2.382	3.269	9.5	20.5
4 11	14 41.61	-16 37.9	1.715	2.671	8.0	21.3	4 11	14 37.39	-17 15.9	2.316	3.270	6.3	20.3
4 21	14 32.01	-16 3.5	1.662	2.658	3.7	21.0	4 21	14 30.04	-16 37.6	2.276	3.271	2.9	20.1
5 1	14 21.40	-15 21.5	1.638	2.645	1.1	20.7	5 1	14 22.14	-15 53.8	2.266	3.272	0.9	19.9
5 11	14 10.95	-14 36.9	1.642	2.630	5.7	21.0	5 11	14 14.47	-15 8.7	2.284	3.273	4.3	20.2
5 21	14 1.74	-13 55.4	1.673	2.615	10.1	21.3	5 21	14 7.74	-14 26.1	2.330	3.273	7.6	20.4
5 31	13 54.64	-13 22.1	1.727	2.599	14.0	21.5	5 31	14 2.51	-13 50.1	2.401	3.273	10.6	20.5
41479	2000 <i>QQ</i> ₂₇		4 28.5 139°63	2°2/26.8 18			341177	2007 <i>RQ</i> ₁₀		4 28.5 250°77	7°8/19.0 18		
3 22	14 53.03	-11 17.6	1.912	2.728	14.4	19.9	3 22	14 46.02	+5 4.9	2.226	3.054	12.2	20.8
4 1	14 47.76	-10 32.1	1.841	2.742	11.0	19.7	4 1	14 42.27	+7 5.1	2.148	3.041	10.1	20.6
4 11	14 40.29	-9 38.9	1.792	2.755	7.2	19.5	4 11	14 36.69	+9 3.9	2.095	3.027	8.4	20.5
4 21	14 31.28	-8 42.0	1.770	2.767	3.4	19.3	4 21	14 29.77	+10 53.3	2.069	3.014	7.9	20.4
5 1	14 21.69	-7 46.9	1.777	2.778	2.8	19.3	5 1	14 22.22	+12 25.4	2.070	3.000	9.0	20.5
5 11	14 12.55	-6 58.9	1.811	2.789	6.5	19.5	5 11	14 14.86	+13 34.2	2.097	2.985	11.0	20.6
5 21	14 4.72	-6 22.6	1.872	2.799	10.2	19.8	5 21	14 8.42	+14 17.0	2.148	2.971	13.4	20.7
5 31	13 58.85	-6 0.6	1.957	2.808	13.5	20.0	5 31	14 3.51	+14 33.7	2.217	2.956	15.6	20.8
457566	2008 <i>YB</i> ₁₂₀		4 28.5 115°26	3°4/26.4 18			351994	2006 <i>US</i> ₁₉₀		4 28.5 152°71	4°0/ 2.9 18		
3 22	14 53.91	-7 54.5	1.554	2.385	16.4	21.9	3 22	14 51.28	-30 37.2	3.152	3.875	11.3	22.7
4 1	14 48.92	-7 19.8	1.488	2.397	12.6	21.7	4 1	14 45.91	-30 59.8	3.059	3.884	9.4	22.6
4 11	14 41.28	-6 40.3	1.444	2.408	8.4	21.5	4 11	14 38.88	-31 10.1	2.989	3.893	7.3	22.5
4 21	14 31.77	-6 0.7	1.425	2.419	4.4	21.3	4 21	14 30.67	-31 7.0	2.945	3.901	5.3	22.3
5 1	14 21.53	-5 26.8	1.432	2.430	4.2	21.3	5 1	14 21.94	-30 50.7	2.930	3.908	4.1	22.3
5 11	14 11.82	-5 3.9	1.465	2.440	8.0	21.5	5 11	14 13.40	-30 23.3	2.944	3.915	4.6	22.3
5 21	14 3.69	-4 55.5	1.523	2.450	12.1	21.8	5 21	14 5.71	-29 47.9	2.986	3.922	6.5	22.4
5 31	13 57.90	-5 3.1	1.603	2.460	15.7	22.0	5 31	13 59.41	-29 8.7	3.055	3.928	8.5	22.6
344318	2001 <i>US</i> ₂₀₅		4 28.5 144°51	0°8/29.2 17			86360	1999 <i>XR</i> ₁₆₂		4 28.5 282°44	5°9/ 4.9 18		
3 22	14 49.72	-17 32.6	2.606	3.397	11.7	21.1	3 22	14 48.12	-36 40.3	2.493	3.204	14.2	18.9
4 1	14 44.82	-17 33.8	2.520	3.404	9.1	21.0	4 1	14 44.19	-36 32.5	2.374	3.183	12.2	18.7
4 11	14 38.19	-17 27.1	2.458	3.410	6.2	20.8	4 11	14 38.11	-36 3.8	2.276	3.163	10.0	18.5
4 21	14 30.36	-17 13.4	2.422	3.417	2.9	20.6	4 21	14 30.45	-35 12.1	2.200	3.142	7.7	18.3
5 1	14 21.99	-16 54.5	2.416	3.423	1.0	20.4	5 1	14 22.00	-33 57.6	2.151	3.121	6.1	18.2
5 11	14 13.86	-16 33.3	2.440	3.429	4.1	20.7	5 11	14 13.74	-32 24.0	2.130	3.100	6.3	18.2
5 21	14 6.63	-16 12.9	2.491	3.434	7.2	20.9	5 21	14 6.55	-30 37.4	2.137	3.079	8.2	18.3
5 31	14 0.88	-15 56.3	2.569	3.439	10.0	21.1	5 31	14 1.15	-28 45.7	2.169	3.058	10.9	18.4
280340	2003 <i>SX</i> ₁₅₉		4 28.5 169°10	1°9/26.8 18			171639	2000 <i>EC</i> ₁₁₅		4 28.5 134°97	0°2/28.7 18		
3 22	14 48.29	-10 51.1	2.240	3.058	12.5	20.9	3 22	14 48.22	-16 58.4	2.134	2.941	13.4	20.6
4 1	14 43.92	-10 11.9	2.158	3.060	9.6	20.7	4 1	14 44.05	-16 38.8	2.050	2.944	10.4	20.4
4 11	14 37.70	-9 26.2	2.099	3.062	6.3	20.5	4 11	14 37.89	-16 8.9	1.989	2.947	7.0	20.2
4 21	14 30.16	-8 37.5	2.067	3.064	3.0	20.3	4 21	14 30.29	-15 30.6	1.953	2.949	3.1	19.9
5 1	14 22.06	-7 50.1	2.064	3.065	2.5	20.3	5 1	14 22.07	-14 47.4	1.945	2.952	1.0	19.7
5 11	14 14.23	-7 8.5	2.089	3.067	5.8	20.5	5 11	14 14.13	-14 3.7	1.966	2.955	4.9	20.0
5 21	14 7.41	-6 36.4	2.141	3.067	9.1	20.7	5 21	14 7.27	-13 24.1	2.013	2.957	8.6	20.3
5 31	14 2.19	-6 16.5	2.217	3.068	12.1	20.9	5 31	14 2.12	-12 52.6	2.085	2.959	11.9	20.5
178768	2000 <i>WK</i> ₅₂		4 28.5 271°63	0°7/29.2 18			360279	2000 <i>TJ</i> ₃₁		4 28.5 267°13	2°4/27.1 17		
3 22	14 46.44	-18 35.3	2.409	3.208	12.3	20.5	3 22	14 51.50	-10 34.8	1.490	2.325	16.8	21.1
4 1	14 42.59	-18 16.7	2.306	3.194	9.7	20.3	4 1	14 47.47	-10 10.0	1.409	2.321	13.0	20.8
4 11	14 36.90	-17 47.4	2.226	3.181	6.6	20.0	4 11	14 40.62	-9 37.2	1.349	2.316	8.6	20.6
4 21	14 29.86	-17 8.8	2.173	3.168	3.1	19.8	4 21	14 31.63	-9 0.4	1.313	2.311	4.0	20.3
5 1	14 22.14	-16 23.8	2.148	3.154	1.0	19.6	5 1	14 21.61	-8 24.9	1.303	2.306	3.2	20.2
5 11	14 14.58	-15 36.3	2.151	3.141	4.5	19.8	5 11	14 11.91	-7 56.8	1.318	2.301	7.7	20.5
5 21	14 7.89	-14 50.7	2.182	3.127	8.0	20.0	5 21	14 3.72	-7 40.9	1.357	2.296	12.3	20.7
5 31	14 2.72	-14 11.3	2.238	3.113	11.1	20.2	5 31	13 57.94	-7 40.4	1.418	2.291	16.5	20.9
374342	2005 <i>UY</i> ₆₁		4 28.5 305°36	1°0/29.4 17			406364	2007 <i>RU</i> ₂₁₀		4 28.5 187°71	2°0/29.9		

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4 28.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
241892	2001 <i>WR</i> ₁₀		4 28.5 269°16	3°6/ 2.2 17			79035	2247 <i>T</i> -2		4 28.5 230°66	0°6/29.0 18		
3 22	14 49.17	-31 10.6	1.824	2.587	17.0	20.4	3 22	14 48.49	-17 46.0	2.236	3.037	13.1	19.6
4 1	14 45.34	-30 3.2	1.726	2.583	14.0	20.1	4 1	14 44.27	-17 32.3	2.142	3.032	10.2	19.4
4 11	14 38.98	-28 26.9	1.648	2.579	10.4	19.9	4 11	14 38.07	-17 8.4	2.070	3.026	6.9	19.2
4 21	14 30.82	-26 22.4	1.595	2.574	6.4	19.7	4 21	14 30.41	-16 35.7	2.025	3.021	3.2	19.0
5 1	14 21.92	-23 54.8	1.570	2.570	3.6	19.5	5 1	14 22.07	-15 56.8	2.008	3.015	1.0	18.8
5 11	14 13.46	-21 14.4	1.574	2.565	5.6	19.6	5 11	14 13.93	-15 16.1	2.019	3.009	4.7	19.0
5 21	14 6.48	-18 33.4	1.607	2.561	9.6	19.8	5 21	14 6.79	-14 37.8	2.058	3.002	8.4	19.2
5 31	14 1.68	-16 3.9	1.665	2.556	13.5	20.0	5 31	14 1.31	-14 6.1	2.121	2.996	11.7	19.4
503649	2016 <i>GX</i> ₁₉₁		4 28.5 304°64	6°5/23.5 17			470168	2006 <i>UO</i> ₁₉₄		4 28.5 89°04	0°3/28.8 17		
3 22	14 47.16	- 1 22.1	1.662	2.506	14.9	20.6	3 22	14 49.57	-15 35.5	2.284	3.087	12.7	21.4
4 1	14 43.77	- 0 12.5	1.582	2.494	11.8	20.4	4 1	14 44.96	-15 38.4	2.200	3.092	9.9	21.2
4 11	14 38.00	+ 0 58.5	1.524	2.483	8.6	20.2	4 11	14 38.44	-15 33.9	2.140	3.097	6.6	21.0
4 21	14 30.44	+ 2 3.8	1.491	2.471	6.6	20.0	4 21	14 30.55	-15 23.1	2.106	3.102	3.0	20.8
5 1	14 22.02	+ 2 55.7	1.482	2.460	7.4	20.0	5 1	14 22.04	-15 8.2	2.100	3.107	0.9	20.6
5 11	14 13.86	+ 3 27.7	1.499	2.449	10.3	20.2	5 11	14 13.79	-14 52.3	2.123	3.111	4.6	20.9
5 21	14 6.95	+ 3 36.7	1.539	2.438	13.8	20.4	5 21	14 6.55	-14 38.6	2.173	3.116	8.1	21.1
5 31	14 2.06	+ 3 22.1	1.599	2.428	17.0	20.5	5 31	14 0.95	-14 30.2	2.248	3.121	11.2	21.3
156412	2002 <i>AQ</i> ₅₇		4 28.5 358°32	17°5/ 8.4 17			432393	2009 <i>XW</i> ₄		4 28.5 210°68	1°2/29.6 17		
3 22	14 46.31	+27 4.3	1.528	2.321	18.5	18.6	3 22	14 50.08	-20 23.1	2.298	3.087	13.1	22.3
4 1	14 43.37	+29 31.6	1.500	2.319	17.7	18.5	4 1	14 45.47	-20 2.5	2.199	3.080	10.4	22.1
4 11	14 37.76	+31 31.0	1.490	2.317	17.5	18.5	4 11	14 38.85	-19 29.4	2.123	3.073	7.1	21.9
4 21	14 30.29	+32 51.6	1.498	2.316	18.0	18.5	4 21	14 30.76	-18 45.0	2.073	3.066	3.6	21.7
5 1	14 22.10	+33 26.4	1.523	2.316	19.0	18.6	5 1	14 21.96	-17 52.0	2.052	3.058	1.3	21.5
5 11	14 14.46	+33 13.9	1.563	2.316	20.4	18.7	5 11	14 13.37	-16 55.0	2.060	3.049	4.6	21.7
5 21	14 8.40	+32 17.9	1.617	2.318	21.7	18.8	5 21	14 5.80	-15 59.1	2.095	3.040	8.2	21.9
5 31	14 4.64	+30 44.8	1.682	2.320	23.0	19.0	5 31	13 59.91	-15 9.4	2.156	3.030	11.5	22.1
287487	2003 <i>BZ</i> ₁₄		4 28.5 19°07	10°6/18.8 17			499266	2009 <i>VZ</i> ₄₁		4 28.5 143°67	0°2/28.7 17		
3 22	14 45.55	+12 15.5	1.830	2.658	14.4	19.4	3 22	14 49.94	-17 45.6	2.301	3.098	12.9	22.3
4 1	14 42.12	+13 48.9	1.782	2.663	12.4	19.3	4 1	14 45.15	-17 13.8	2.220	3.108	10.0	22.1
4 11	14 36.63	+15 10.2	1.755	2.668	11.0	19.2	4 11	14 38.49	-16 31.2	2.162	3.118	6.7	21.9
4 21	14 29.72	+16 11.5	1.752	2.675	10.6	19.2	4 21	14 30.54	-15 40.0	2.132	3.128	3.0	21.7
5 1	14 22.29	+16 46.1	1.773	2.681	11.5	19.3	5 1	14 22.06	-14 44.0	2.130	3.137	0.9	21.6
5 11	14 15.27	+16 51.1	1.816	2.689	13.2	19.4	5 11	14 13.91	-13 47.9	2.157	3.145	4.6	21.9
5 21	14 9.46	+16 27.0	1.879	2.697	15.2	19.6	5 21	14 6.83	-12 56.4	2.212	3.153	8.1	22.1
5 31	14 5.46	+15 36.9	1.960	2.705	17.2	19.7	5 31	14 1.39	-12 13.5	2.293	3.160	11.2	22.3
53191	1999 <i>CU</i> ₄₉		4 28.5 284°13	8°1/22.8 18			310135	2011 <i>HV</i> ₃₂		4 28.5 332°11	4°4/25.4 18		
3 22	14 51.32	+ 4 29.6	1.747	2.577	14.9	18.5	3 22	14 49.60	- 3 53.7	1.867	2.699	14.0	20.0
4 1	14 46.98	+ 5 25.7	1.660	2.558	12.2	18.3	4 1	14 45.32	- 3 19.9	1.790	2.698	10.9	19.8
4 11	14 40.14	+ 6 17.3	1.595	2.538	9.6	18.1	4 11	14 38.83	- 2 45.2	1.735	2.696	7.5	19.6
4 21	14 31.40	+ 6 57.1	1.554	2.519	8.1	17.9	4 21	14 30.76	- 2 14.1	1.706	2.695	4.8	19.4
5 1	14 21.69	+ 7 18.1	1.538	2.499	8.9	17.9	5 1	14 21.97	- 1 51.6	1.704	2.694	5.0	19.4
5 11	14 12.15	+ 7 15.3	1.548	2.479	11.5	18.0	5 11	14 13.50	- 1 41.8	1.728	2.692	8.0	19.6
5 21	14 3.84	+ 6 47.4	1.580	2.459	14.6	18.2	5 21	14 6.21	- 1 47.0	1.777	2.691	11.4	19.8
5 31	13 57.59	+ 5 55.6	1.632	2.439	17.7	18.3	5 31	14 0.81	- 2 8.0	1.848	2.690	14.5	20.0
245119	2004 <i>QS</i> ₂₀		4 28.5 285°70	7°0/ 5.5 18			379299	2009 <i>VF</i> ₇₁		4 28.5 279°55	3°3/ 1.2 17		
3 22	14 48.79	-37 58.6	2.482	3.184	14.4	19.8	3 22	14 48.54	-25 21.8	1.841	2.629	15.9	20.8
4 1	14 44.82	-38 24.8	2.372	3.169	12.6	19.6	4 1	14 44.95	-25 15.8	1.744	2.619	13.0	20.6
4 11	14 38.62	-38 32.0	2.282	3.154	10.5	19.5	4 11	14 38.86	-24 51.5	1.667	2.608	9.4	20.3
4 21	14 30.71	-38 17.6	2.214	3.139	8.5	19.3	4 21	14 30.87	-24 8.6	1.613	2.598	5.7	20.1
5 1	14 21.92	-37 40.4	2.171	3.125	7.2	19.2	5 1	14 21.93	-23 9.3	1.586	2.587	3.3	19.9
5 11	14 13.28	-36 42.6	2.154	3.110	7.3	19.2	5 11	14 13.20	-21 58.8	1.586	2.576	5.6	20.0
5 21	14 5.71	-35 29.0	2.163	3.095	8.8	19.2	5 21	14 5.74	-20 44.4	1.611	2.565	9.5	20.2
5 31	14 0.00	-34 6.4	2.198	3.080	11.0	19.3	5 31	14 0.39	-19 33.9	1.661	2.555	13.3	20.4
224226	2005 <i>SA</i> ₆₁		4 28.5 73°75	1°3/27.6 18			465868	2010 <i>SX</i> ₂₆		4 28.5 260°01	1°9/29.7 17		
3 22	14 50.63	-14 10.2	1.701	2.523	15.6	20.8	3 22	14 53.72	-19 44.7	1.813	2.612	15.7	21.7
4 1	14 46.08	-13 27.0	1.643	2.547	11.9	20.6	4 1	14 49.13	-19 54.0	1.705	2.591	12.6	21.5
4 11	14 39.23	-12 33.6	1.608	2.571	7.7	20.4	4 11	14 41.80	-19 51.1	1.618	2.570	8.8	21.2
4 21	14 30.84	-11 34.2	1.598	2.596	3.3	20.2	4 21	14 32.26	-19 35.4	1.556	2.548	4.6	20.9
5 1	14 21.95	-10 34.5	1.615	2.619	2.0	20.2	5 1	14 21.46	-19 8.3	1.521	2.526	2.0	20.7
5 11	14 13.65	- 9 40.7	1.659	2.643	6.2	20.5	5 11	14 10.65	-18 33.8	1.513	2.503	5.8	20.9
5 21	14 6.80	- 8 57.7	1.729	2.667	10.2	20.8	5 21	14 1.05	-17 57.3	1.531	2.480	10.4	21.1
5 31	14 2.02	- 8 29.1	1.822	2.690	13.6	21.0	5 31	13 53.67	-17 25.0	1.573	2.456	14.6	21.3
117944	6257 <i>P</i> -L		4 28.5 148°04	1°2/29.6 18			233840	2008 <i>UZ</i> ₂₉₁		4 28.5 219°81	1°0/29.4 17		
3 22	14 52.07	-19 55.7	2.249	3.036	13.4	21.4	3 22	14 49.58	-18 47.5	2.161	2.959	13.6	21.2
4 1	14 46.89	-19 44.2	2.166	3.047	10.6	21.3	4 1	14 45.21	-18 38.5	2.067	2.954	10.7	21.0
4 11	14 39.69	-19 21.2	2.106	3.056	7.2	21.1	4 11	14 38.74	-18 18.5	1.996	2.950	7.3	20.8
4 21	14 31.07	-18 47.8	2.073	3.065	3.6	20.9	4 21	14 30.74	-17 48.5	1.950	2.944	3.5	20.5
5 1	14 21.85	-18 6.5	2.068	3.074	1.4	20.7	5 1	14 22.00	-17 11.1	1.933	2.939	1.2	20.3
5 11	14 12.97	-17 21.8	2.092	3.082	4.6	20.9	5 11	14 13.47	-16 30.4	1.943	2.933	4.8	20.6
5 21	14 5.21	-16 38.1	2.144	3.089	8.1	21.2	5 21	14 6.00	-15 51.1	1.981	2.927	8.6	20.8
5 31	13 59.22	-16 0.0	2.221	3.095	11.3	21.4	5 31	14 0.28	-15 17.8	2.043	2.921	11.9	21.0
35296	1996 <i>VY</i> ₁		4 28.5 60°37	5°3/ 3.1 18			481073	2005 <i>RK</i>		4 28			

EPHEMERIDES

4 28.5

4 28.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
300870	2008 <i>AS</i> ₂₄		4 28.5 64°67'	1°9/30.2	17		140950	2001 <i>VP</i> ₉₉		4 28.6 134°08'	6°1/22.1	18	
3 22	14 48.51	-21 10.2	2.255	3.045	13.3	20.9	3 22	14 48.43	+ 6 45.1	2.784	3.594	10.5	20.1
4 1	14 44.25	-21 15.4	2.171	3.051	10.6	20.7	4 1	14 43.56	+ 7 37.7	2.724	3.606	8.6	20.0
4 11	14 38.02	-21 9.3	2.109	3.057	7.4	20.5	4 11	14 37.24	+ 8 24.8	2.689	3.618	6.9	19.9
4 21	14 30.39	-20 52.4	2.074	3.063	4.0	20.3	4 21	14 29.97	+ 9 1.9	2.681	3.630	6.1	19.8
5 1	14 22.13	-20 26.5	2.065	3.069	2.0	20.1	5 1	14 22.35	+ 9 25.4	2.701	3.641	6.6	19.9
5 11	14 14.14	-19 55.1	2.085	3.076	4.5	20.3	5 11	14 15.02	+ 9 32.9	2.747	3.651	8.2	20.0
5 21	14 7.20	-19 22.3	2.133	3.082	7.9	20.5	5 21	14 8.54	+ 9 24.0	2.819	3.662	10.0	20.1
5 31	14 1.94	-18 52.6	2.205	3.088	10.9	20.7	5 31	14 3.36	+ 8 59.2	2.913	3.671	11.8	20.3
222619	2001 <i>XH</i> ₈₀		4 28.5 244°10'	0°8/27.8	18		482965	2014 <i>KK</i> ₆₇		4 28.6 263°36'	0°6/27.9	17	
3 22	14 48.90	-15 52.3	2.116	2.924	13.4	20.7	3 22	14 44.34	-15 7.8	2.725	3.531	10.8	21.9
4 1	14 44.74	-15 0.9	2.012	2.909	10.5	20.5	4 1	14 40.70	-14 29.7	2.627	3.523	8.4	21.7
4 11	14 38.48	-13 56.8	1.932	2.893	6.9	20.3	4 11	14 35.54	-13 43.3	2.555	3.515	5.5	21.5
4 21	14 30.65	-12 43.0	1.879	2.876	3.0	20.0	4 21	14 29.30	-12 51.0	2.509	3.507	2.4	21.3
5 1	14 22.03	-11 24.3	1.854	2.859	1.6	19.8	5 1	14 22.55	-11 56.2	2.493	3.498	1.2	21.2
5 11	14 13.57	-10 7.2	1.857	2.841	5.7	20.1	5 11	14 15.97	-11 2.9	2.505	3.490	4.4	21.4
5 21	14 6.14	-8 57.8	1.888	2.823	9.6	20.3	5 21	14 10.16	-10 14.9	2.546	3.482	7.4	21.6
5 31	14 0.45	-8 1.3	1.943	2.804	13.2	20.4	5 31	14 5.62	-9 35.6	2.612	3.473	10.2	21.7
131220	2001 <i>DN</i> ₇₈		4 28.5 43°40'	0°4/28.2	18		317998	2004 <i>BK</i> ₁₄₈		4 28.6 82°53'	4°2/25.8	18	
3 22	14 48.81	-14 52.9	1.937	2.753	14.2	20.2	3 22	14 50.98	- 6 16.2	1.586	2.423	15.8	20.6
4 1	14 44.74	-14 35.6	1.854	2.754	11.0	20.0	4 1	14 46.67	- 5 32.5	1.520	2.431	12.2	20.4
4 11	14 38.48	-14 8.9	1.793	2.755	7.3	19.8	4 11	14 39.85	- 4 45.1	1.475	2.440	8.3	20.2
4 21	14 30.63	-13 35.2	1.758	2.756	3.2	19.5	4 21	14 31.25	- 3 59.5	1.455	2.448	4.8	20.0
5 1	14 22.07	-12 58.1	1.750	2.756	1.3	19.4	5 1	14 21.94	- 3 22.0	1.461	2.456	4.9	20.0
5 11	14 13.79	-12 22.3	1.770	2.757	5.5	19.7	5 11	14 13.09	- 2 57.7	1.494	2.464	8.4	20.2
5 21	14 6.69	-11 52.2	1.815	2.758	9.4	19.9	5 21	14 5.70	- 2 50.1	1.550	2.472	12.2	20.5
5 31	14 1.45	-11 31.7	1.885	2.759	12.9	20.1	5 31	14 0.51	- 3 0.1	1.627	2.480	15.7	20.7
292106	2006 <i>RP</i> ₅₄		4 28.5 280°13'	0°3/28.3	17		152168	2005 <i>OL</i> ₄		4 28.6 183°62'	2°1/26.9	17	
3 22	14 47.78	-15 0.6	2.197	3.008	12.9	21.2	3 22	14 51.68	- 9 51.7	2.226	3.038	12.8	20.9
4 1	14 43.77	-14 47.2	2.103	3.000	10.1	20.9	4 1	14 46.61	- 9 22.6	2.140	3.039	9.8	20.7
4 11	14 37.77	-14 25.4	2.031	2.991	6.7	20.7	4 11	14 39.56	- 8 48.2	2.078	3.039	6.5	20.5
4 21	14 30.32	-13 57.1	1.985	2.983	2.9	20.5	4 21	14 31.09	- 8 11.6	2.042	3.038	3.1	20.3
5 1	14 22.16	-13 25.2	1.968	2.974	1.1	20.3	5 1	14 21.99	- 7 36.5	2.036	3.037	2.6	20.2
5 11	14 14.18	-12 53.7	1.978	2.966	5.0	20.6	5 11	14 13.14	- 7 7.2	2.058	3.035	5.9	20.4
5 21	14 7.18	-12 26.5	2.016	2.957	8.7	20.8	5 21	14 5.34	- 6 46.9	2.108	3.032	9.3	20.6
5 31	14 1.82	-12 7.2	2.077	2.949	12.0	21.0	5 31	13 59.23	- 6 38.1	2.181	3.029	12.4	20.8
346113	2007 <i>VX</i> ₉₇		4 28.5 272°64'	1°8/30.1	17		471889	2013 <i>AC</i> ₁₂₆		4 28.6 162°94'	4°1/3.4	18	
3 22	14 47.66	-21 32.5	2.148	2.941	13.8	21.1	3 22	14 48.64	-31 56.7	2.964	3.689	11.9	21.6
4 1	14 43.79	-21 22.5	2.053	2.936	11.0	20.9	4 1	14 44.00	-31 52.4	2.868	3.694	9.9	21.5
4 11	14 37.84	-20 59.3	1.981	2.930	7.7	20.7	4 11	14 37.70	-31 33.2	2.794	3.698	7.7	21.3
4 21	14 30.36	-20 23.7	1.934	2.924	4.1	20.4	4 21	14 30.23	-30 58.5	2.745	3.702	5.5	21.2
5 1	14 22.16	-19 38.2	1.914	2.919	1.8	20.3	5 1	14 22.27	-30 9.6	2.725	3.706	4.1	21.1
5 11	14 14.17	-18 47.1	1.922	2.913	4.7	20.4	5 11	14 14.56	-29 9.4	2.733	3.709	4.7	21.1
5 21	14 7.24	-17 55.7	1.957	2.907	8.4	20.7	5 21	14 7.76	-28 2.4	2.770	3.712	6.6	21.3
5 31	14 2.05	-17 9.3	2.017	2.902	11.7	20.9	5 31	14 2.38	-26 53.5	2.834	3.715	8.9	21.4
419655	2010 <i>TC</i> ₇₃		4 28.5 151°77'	1°0/29.3	16		289499	2005 <i>EC</i> ₁₃₁		4 28.6 242°59'	1°8/30.1	17	
3 22	14 53.46	-18 33.3	2.004	2.800	14.5	22.7	3 22	14 49.11	-21 9.1	2.148	2.940	13.8	21.3
4 1	14 48.24	-18 27.2	1.922	2.808	11.4	22.5	4 1	14 44.93	-21 5.1	2.053	2.934	11.0	21.1
4 11	14 40.74	-18 9.7	1.863	2.816	7.7	22.3	4 11	14 38.63	-20 48.7	1.979	2.928	7.7	20.9
4 21	14 31.61	-17 41.9	1.829	2.823	3.7	22.0	4 21	14 30.74	-20 20.2	1.930	2.921	4.1	20.6
5 1	14 21.76	-17 6.6	1.823	2.830	1.2	21.8	5 1	14 22.09	-19 41.9	1.910	2.914	1.9	20.5
5 11	14 12.27	-16 28.1	1.846	2.835	5.1	22.1	5 11	14 13.64	-18 57.9	1.917	2.907	4.8	20.6
5 21	14 4.03	-15 51.4	1.896	2.841	9.0	22.4	5 21	14 6.25	-18 13.1	1.951	2.900	8.5	20.8
5 31	13 57.78	-15 21.0	1.970	2.845	12.4	22.6	5 31	14 0.64	-17 32.6	2.010	2.893	11.9	21.0
98506	2000 <i>VR</i> ₁₆		4 28.5 330°89'	6°0/25.3	18		231684	1996 <i>BV</i> ₇		4 28.6 299°22'	4°7/2.1	18	
3 22	14 51.83	- 0 7.5	1.601	2.438	15.7	18.4	3 22	14 48.87	-27 54.5	1.897	2.672	16.0	20.4
4 1	14 47.50	+ 0 14.1	1.522	2.430	12.5	18.2	4 1	14 45.28	-28 12.2	1.798	2.660	13.3	20.2
4 11	14 40.54	+ 0 32.2	1.465	2.422	9.0	18.0	4 11	14 39.15	-28 12.3	1.719	2.649	10.1	19.9
4 21	14 31.61	+ 0 41.5	1.431	2.415	6.3	17.8	4 21	14 31.07	-27 53.0	1.663	2.637	6.8	19.7
5 1	14 21.76	+ 0 36.8	1.424	2.408	6.6	17.8	5 1	14 21.97	-27 14.9	1.633	2.626	4.8	19.6
5 11	14 12.20	+ 0 14.6	1.441	2.402	9.6	17.9	5 11	14 13.03	-26 21.7	1.629	2.615	6.1	19.6
5 21	14 4.02	- 0 26.0	1.483	2.396	13.3	18.1	5 21	14 5.35	-25 19.6	1.651	2.604	9.5	19.8
5 31	13 58.09	- 1 23.9	1.545	2.391	16.7	18.3	5 31	13 59.78	-24 16.3	1.697	2.593	13.0	20.0
290330	2005 <i>SR</i> ₂₂₅		4 28.5 296°98'	0°3/28.3	16		256713	2008 <i>AZ</i> ₄₃		4 28.6 175°88'	1°3/27.6	17	
3 22	14 44.90	-16 55.1	2.239	3.050	12.7	20.1	3 22	14 51.42	-13 3.3	1.816	2.634	14.9	21.2
4 1	14 41.53	-16 14.3	2.140	3.037	9.9	19.9	4 1	14 46.87	-12 34.1	1.734	2.636	11.5	21.0
4 11	14 36.29	-15 21.8	2.064	3.024	6.6	19.7	4 11	14 39.96	-11 55.7	1.674	2.637	7.6	20.8
4 21	14 29.67	-14 20.3	2.014	3.011	2.9	19.4	4 21	14 31.33	-11 11.4	1.640	2.638	3.3	20.5
5 1	14 22.39	-13 13.7	1.992	2.999	1.1	19.2	5 1	14 21.92	-10 25.6	1.634	2.638	2.1	20.4
5 11	14 15.29	-12 7.5	1.999	2.986	5.0	19.5	5 11	14 12.84	- 9 44.0	1.654	2.638	6.3	20.7
5 21	14 9.13	-11 6.9	2.033	2.974	8.7	19.7	5 21	14 5.05	- 9 11.3	1.701	2.638	10.4	20.9
5 31	14 4.52	-10 16.7	2.090	2.962	12.0	19.9	5 31	13 59.29	- 8 51.2	1.771	2.637	14.0	21.1
267398	2002 <i>AV</i> ₂₃		4 28.5 126°31'	0°5/28.9	17		457627	2009 <i>BS</i> ₁₁₈		4 28.6 145°96			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
143726	2003 <i>UG</i> ₂₀₁	4 28.6 100°00' 1.3°/27.6 17					499795	2011 <i>CT</i> ₇₂	4 28.6 58°62' 7.9°/ 5.1 17 R				
3 22	14 50.40	-13 57.1	1.567	2.395	16.4	20.5	3 22	14 51.51	-35 50.6	1.738	2.478	18.5	20.6
4 1	14 46.39	-13 21.4	1.494	2.401	12.7	20.2	4 1	14 47.60	-36 23.7	1.660	2.487	15.9	20.4
4 11	14 39.78	-12 34.3	1.441	2.406	8.3	20.0	4 11	14 40.77	-36 32.3	1.600	2.496	12.9	20.3
4 21	14 31.27	-11 39.6	1.413	2.411	3.6	19.7	4 21	14 31.78	-36 13.2	1.561	2.505	10.0	20.1
5 1	14 21.96	-10 43.1	1.411	2.416	2.2	19.6	5 1	14 21.83	-35 25.8	1.546	2.514	8.1	20.0
5 11	14 13.07	-9 51.4	1.436	2.421	6.8	19.9	5 11	14 12.34	-34 14.5	1.555	2.524	8.3	20.0
5 21	14 5.68	-9 10.5	1.485	2.426	11.2	20.2	5 21	14 4.52	-32 47.4	1.590	2.533	10.5	20.2
5 31	14 0.55	-8 44.6	1.556	2.431	15.1	20.4	5 31	13 59.25	-31 14.6	1.647	2.543	13.3	20.4
257652	1999 <i>UZ</i> ₂₈	4 28.6 278°33' 2.0°/29.9 16					15467	Aflorsch	4 28.6 124°82' 1.1°/27.6 18				
3 22	14 51.34	-19 41.9	2.403	3.188	12.7	20.9	3 22	14 47.94	-13 7.4	2.250	3.064	12.6	18.5
4 1	14 46.47	-20 9.8	2.303	3.181	10.1	20.7	4 1	14 43.71	-12 37.9	2.170	3.070	9.7	18.4
4 11	14 39.58	-20 29.5	2.226	3.173	7.1	20.5	4 11	14 37.63	-12 0.9	2.114	3.075	6.3	18.2
4 21	14 31.17	-20 40.4	2.176	3.165	3.9	20.2	4 21	14 30.26	-11 19.3	2.083	3.081	2.8	17.9
5 1	14 21.97	-20 43.3	2.154	3.157	2.0	20.1	5 1	14 22.34	-10 36.8	2.082	3.086	1.7	17.9
5 11	14 12.87	-20 40.0	2.161	3.150	4.5	20.3	5 11	14 14.71	-9 57.7	2.108	3.092	5.2	18.1
5 21	14 4.70	-20 33.5	2.196	3.142	7.8	20.5	5 21	14 8.09	-9 25.8	2.162	3.097	8.6	18.3
5 31	13 58.17	-20 27.3	2.256	3.134	10.9	20.6	5 31	14 3.06	-9 4.1	2.240	3.102	11.6	18.5
92737	2000 <i>QR</i> ₁₀₂	4 28.6 259°55' 2.8°/30.3 18					65284	2002 <i>HE</i> ₁	4 28.6 222°72' 1.7°/27.2 18				
3 22	14 54.06	-21 17.5	2.010	2.796	14.8	19.9	3 22	14 48.17	-12 33.3	1.919	2.742	14.1	19.5
4 1	14 49.14	-21 48.1	1.904	2.780	12.0	19.6	4 1	14 44.26	-11 54.5	1.835	2.740	10.9	19.3
4 11	14 41.68	-22 8.1	1.820	2.765	8.6	19.4	4 11	14 38.20	-11 6.8	1.775	2.739	7.1	19.1
4 21	14 32.21	-22 16.3	1.762	2.749	4.9	19.1	4 21	14 30.57	-10 13.8	1.740	2.738	3.2	18.8
5 1	14 21.61	-22 12.8	1.730	2.732	2.8	19.0	5 1	14 22.23	-9 20.4	1.732	2.736	2.3	18.7
5 11	14 11.03	-21 59.8	1.727	2.715	5.5	19.1	5 11	14 14.19	-8 32.1	1.752	2.735	6.2	19.0
5 21	14 1.57	-21 41.5	1.751	2.698	9.4	19.3	5 21	14 7.30	-7 53.8	1.798	2.733	10.0	19.2
5 31	13 54.15	-21 23.0	1.798	2.681	13.0	19.5	5 31	14 2.25	-7 28.9	1.867	2.731	13.5	19.4
477196	2009 <i>HD</i> ₂₄	4 28.6 316°49' 4.5°/24.4 17					326697	2003 <i>AY</i> ₅₂	4 28.6 92°44' 7.6°/23.5 18				
3 22	14 44.56	-4 48.0	2.058	2.894	12.8	20.9	3 22	14 52.65	+3 53.4	1.741	2.570	15.0	20.5
4 1	14 41.33	-3 43.1	1.973	2.883	9.9	20.7	4 1	14 47.61	+4 49.7	1.687	2.584	12.1	20.3
4 11	14 36.19	-2 34.4	1.911	2.873	6.9	20.5	4 11	14 40.28	+5 40.0	1.654	2.599	9.3	20.2
4 21	14 29.66	-1 27.3	1.876	2.863	4.7	20.4	4 21	14 31.41	+6 17.6	1.646	2.612	7.6	20.1
5 1	14 22.48	-0 27.8	1.868	2.853	5.2	20.4	5 1	14 21.99	+6 36.7	1.664	2.626	8.2	20.2
5 11	14 15.51	+0 18.6	1.886	2.844	7.9	20.5	5 11	14 13.10	+6 34.0	1.707	2.640	10.5	20.3
5 21	14 9.52	+0 48.2	1.930	2.835	11.1	20.7	5 21	14 5.62	+6 9.5	1.774	2.653	13.3	20.5
5 31	14 5.13	+0 59.2	1.995	2.826	14.0	20.9	5 31	14 0.18	+5 24.8	1.862	2.666	15.9	20.7
197616	2004 <i>JG</i> ₃₂	4 28.6 307°47' 0.4°/28.7 16					13293	Mechelen	4 28.6 76°84' 2.2°/27.2 18				
3 22	14 51.19	-14 48.9	1.205	2.048	19.5	20.5	3 22	14 51.82	-10 19.4	1.606	2.436	16.0	18.2
4 1	14 48.35	-15 6.6	1.113	2.027	15.5	20.2	4 1	14 47.44	-10 1.0	1.531	2.439	12.4	18.0
4 11	14 41.98	-15 14.4	1.040	2.006	10.6	19.9	4 11	14 40.48	-9 36.2	1.478	2.443	8.2	17.8
4 21	14 32.60	-15 12.7	0.988	1.986	4.8	19.5	4 21	14 31.61	-9 8.4	1.449	2.447	3.8	17.5
5 1	14 21.45	-15 3.9	0.959	1.966	1.5	19.2	5 1	14 21.91	-8 42.3	1.447	2.450	2.9	17.4
5 11	14 10.25	-14 52.9	0.954	1.946	7.8	19.5	5 11	14 12.59	-8 22.8	1.471	2.454	7.0	17.7
5 21	14 0.72	-14 45.6	0.970	1.928	13.8	19.8	5 21	14 4.72	-8 13.8	1.521	2.458	11.3	18.0
5 31	13 54.24	-14 47.8	1.006	1.910	19.1	20.0	5 31	13 59.11	-8 17.9	1.591	2.462	15.1	18.2
353550	2011 <i>SB</i> ₁₉₁	4 28.6 214°52' 5.7°/23.4 17					141152	2001 <i>XX</i> ₁₁₁	4 28.6 104°77' 2.1°/30.9 18				
3 22	14 52.05	+6 12.3	2.806	3.608	10.7	21.3	3 22	14 46.84	-24 48.7	2.386	3.162	13.1	19.9
4 1	14 46.44	+6 38.3	2.722	3.602	8.7	21.1	4 1	14 42.86	-24 16.5	2.300	3.170	10.4	19.7
4 11	14 39.23	+6 58.6	2.663	3.595	6.8	21.0	4 11	14 37.06	-23 29.1	2.236	3.177	7.4	19.5
4 21	14 30.91	+7 7.7	2.631	3.588	5.7	20.9	4 21	14 30.01	-22 27.9	2.198	3.184	4.2	19.3
5 1	14 22.09	+7 8.1	2.628	3.581	6.2	20.9	5 1	14 22.45	-21 16.0	2.189	3.192	2.1	19.2
5 11	14 13.48	+6 52.0	2.654	3.573	7.8	21.0	5 11	14 15.20	-19 58.6	2.209	3.199	4.3	19.3
5 21	14 5.70	+6 21.0	2.706	3.565	9.9	21.2	5 21	14 8.99	-18 41.4	2.256	3.206	7.5	19.5
5 31	13 59.28	+5 35.8	2.781	3.556	11.9	21.3	5 31	14 4.35	-17 29.9	2.329	3.213	10.4	19.7
333121	2011 <i>WN</i> ₁₀	4 28.6 298°41' 1.6°/27.3 16					66312	1999 <i>JJ</i> ₄₃	4 28.6 320°33' 0.1°/28.6 18				
3 22	14 47.70	-10 44.3	2.213	3.032	12.6	21.0	3 22	14 50.26	-13 19.7	1.213	2.059	19.1	18.1
4 1	14 43.70	-10 29.4	2.117	3.019	9.7	20.8	4 1	14 47.58	-13 42.9	1.121	2.038	15.2	17.7
4 11	14 37.76	-10 9.3	2.044	3.007	6.4	20.5	4 11	14 41.44	-13 58.9	1.049	2.016	10.3	17.4
4 21	14 30.36	-9 46.3	1.998	2.995	2.9	20.3	4 21	14 32.39	-14 8.3	0.998	1.996	4.6	17.0
5 1	14 22.25	-9 23.7	1.979	2.983	2.1	20.2	5 1	14 21.60	-14 13.6	0.970	1.977	1.5	16.7
5 11	14 14.29	-9 5.2	1.989	2.971	5.6	20.4	5 11	14 10.77	-14 18.6	0.965	1.958	7.8	17.0
5 21	14 7.26	-8 53.9	2.025	2.959	9.1	20.6	5 21	14 1.58	-14 28.1	0.983	1.940	13.6	17.3
5 31	14 1.83	-8 52.3	2.085	2.948	12.3	20.8	5 31	13 55.35	-14 46.5	1.020	1.924	18.9	17.5
339465	2005 <i>EY</i> ₂₃₉	4 28.6 283°59' 0.1°/28.5 17					143519	2003 <i>EV</i> ₁₁	4 28.6 51°89' 4.9°/ 2.7 18				
3 22	14 48.65	-15 36.0	2.045	2.856	13.7	20.8	3 22	14 50.19	-29 9.4	2.136	2.895	14.9	19.9
4 1	14 44.59	-15 24.4	1.955	2.852	10.7	20.6	4 1	14 45.87	-29 39.8	2.055	2.904	12.4	19.7
4 11	14 38.40	-15 3.6	1.889	2.849	7.1	20.4	4 11	14 39.29	-29 54.2	1.995	2.914	9.5	19.5
4 21	14 30.66	-14 35.3	1.848	2.845	3.1	20.1	4 21	14 31.07	-29 51.0	1.959	2.924	6.7	19.4
5 1	14 22.18	-14 2.8	1.835	2.841	1.0	19.9	5 1	14 22.11	-29 30.6	1.949	2.935	5.0	19.3
5 11	14 13.93	-13 30.2	1.849	2.838	5.2	20.2	5 11	14 13.45	-28 55.9	1.966	2.945	5.9	19.4
5 21	14 6.77	-13 1.9	1.890	2.834	9.0	20.5	5 21	14 6.02	-28 12.1	2.009	2.956	8.4	19.6
5 31	14 1.39	-12 41.5	1.955	2.830	12.5	20.7	5 31	14 0.52	-27 25.2	2.077	2.966	11.2	19.7
18046	1999 <i>RN</i> ₁₁₆	4 28.6 263°64' 5.5°/17.0 18					477993	2011 <i>SB</i> ₁₂₇	4 28.6 225°87' 0.3°/28.8 18				
3 22	14 39.42	+14 8.9	4.475	5.270	7.1	17.8	3 22	14 48.42	-16 37.5	2.837	3.628	10.8	22.8
4 1	14 36.34	+15 18.4	4.412	5.265	6.2	17.7	4 1	14 43.85	-16 26.4	2.732			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
312154	2007 <i>UU</i> ₆		4 28.6 148°93	0°1/28.6	18		9364	Clusius		4 28.6 338°96	0°8/29.1	18	A
3 22	14 53.16	-16 43.4	1.881	2.687	15.0	21.8	3 22	14 48.67	-17 24.4	1.789	2.604	15.3	17.3
4 1	14 48.12	-16 19.0	1.803	2.696	11.7	21.5	4 1	14 44.96	-17 21.9	1.702	2.600	12.0	17.1
4 11	14 40.73	-15 43.0	1.746	2.704	7.8	21.3	4 11	14 38.85	-17 8.0	1.638	2.596	8.1	16.8
4 21	14 31.68	-14 57.8	1.715	2.712	3.4	21.1	4 21	14 30.94	-16 44.3	1.597	2.593	3.8	16.5
5 1	14 21.92	-14 7.3	1.713	2.719	1.1	20.9	5 1	14 22.17	-16 13.4	1.583	2.590	1.2	16.3
5 11	14 12.56	-13 17.1	1.738	2.726	5.5	21.2	5 11	14 13.66	-15 40.2	1.596	2.587	5.5	16.6
5 21	14 4.53	-12 32.5	1.790	2.732	9.6	21.5	5 21	14 6.39	-15 9.5	1.635	2.585	9.7	16.9
5 31	13 58.55	-11 58.0	1.866	2.737	13.2	21.7	5 31	14 1.16	-14 46.3	1.696	2.583	13.5	17.1
230889	2004 <i>SG</i> ₂₆		4 28.6 58°22	11°9/12.0	18		119018	2001 <i>AQ</i> ₂₇		4 28.6 198°75	19°0/17.5	18	
3 22	14 54.32	-49 57.1	1.885	2.523	20.2	19.2	3 22	15 3.89	+26 0.7	1.300	2.081	21.7	19.7
4 1	14 50.21	-50 33.6	1.807	2.534	18.4	19.1	4 1	14 57.46	+27 43.8	1.256	2.079	20.2	19.6
4 11	14 42.67	-50 39.0	1.742	2.545	16.4	18.9	4 11	14 47.37	+28 57.4	1.228	2.077	19.2	19.5
4 21	14 32.65	-50 7.3	1.695	2.556	14.3	18.8	4 21	14 34.68	+29 27.8	1.218	2.074	19.1	19.5
5 1	14 21.63	-48 56.0	1.669	2.567	12.7	18.7	5 1	14 21.03	+29 5.8	1.226	2.071	19.9	19.5
5 11	14 11.35	-47 8.3	1.665	2.578	11.9	18.7	5 11	14 8.26	+27 50.5	1.253	2.067	21.4	19.6
5 21	14 3.19	-44 53.0	1.684	2.590	12.4	18.7	5 21	13 57.82	+25 48.3	1.295	2.063	23.3	19.7
5 31	13 58.04	-42 22.4	1.727	2.602	13.9	18.9	5 31	13 50.63	+23 9.7	1.352	2.058	25.2	19.9
322985	2002 <i>NS</i> ₇₀		4 28.6 147°63	19°0/13.5	18		506894	2008 <i>BA</i> ₅₃		4 28.6 12°92	5°7/3.2	17	
3 22	14 57.54	+24 46.9	1.283	2.080	21.1	20.8	3 22	14 50.00	-30 48.5	2.122	2.874	15.2	20.8
4 1	14 52.38	+27 22.5	1.256	2.088	19.7	20.7	4 1	14 45.90	-31 27.8	2.034	2.875	12.8	20.6
4 11	14 43.89	+29 27.9	1.247	2.095	19.0	20.7	4 11	14 39.44	-31 50.5	1.965	2.877	10.1	20.4
4 21	14 33.09	+30 49.5	1.256	2.101	19.3	20.7	4 21	14 31.20	-31 54.5	1.921	2.879	7.4	20.2
5 1	14 21.52	+31 18.2	1.282	2.107	20.3	20.8	5 1	14 22.10	-31 39.2	1.901	2.881	5.8	20.2
5 11	14 10.82	+30 53.4	1.325	2.112	21.8	20.9	5 11	14 13.23	-31 7.3	1.909	2.883	6.5	20.2
5 21	14 2.28	+29 40.7	1.381	2.116	23.5	21.0	5 21	14 5.56	-30 23.6	1.942	2.886	8.8	20.3
5 31	13 56.69	+27 49.5	1.450	2.120	25.1	21.2	5 31	13 59.87	-29 34.5	1.999	2.889	11.6	20.5
505188	2012 <i>TJ</i> ₁₂₆		4 28.6 225°87	1°0/27.7	17		471482	2011 <i>UG</i> ₃₉₆		4 28.6 190°77	4°2/24.0	18	
3 22	14 48.73	-13 25.1	2.444	3.250	11.9	22.5	3 22	14 48.49	+1 10.9	3.075	3.885	9.6	22.1
4 1	14 44.30	-12 55.1	2.345	3.241	9.2	22.3	4 1	14 43.60	+1 44.2	2.992	3.883	7.6	22.0
4 11	14 38.06	-12 17.4	2.270	3.230	6.1	22.1	4 11	14 37.33	+2 15.4	2.935	3.881	5.6	21.8
4 21	14 30.50	-11 34.5	2.222	3.219	2.6	21.9	4 21	14 30.11	+2 41.3	2.906	3.879	4.3	21.7
5 1	14 22.31	-10 49.7	2.203	3.208	1.6	21.8	5 1	14 22.48	+2 58.7	2.906	3.876	4.7	21.8
5 11	14 14.27	-10 7.3	2.214	3.197	5.0	22.0	5 11	14 15.03	+3 5.4	2.935	3.872	6.4	21.9
5 21	14 7.11	-9 31.0	2.252	3.184	8.4	22.2	5 21	14 8.30	+3 0.2	2.990	3.868	8.5	22.0
5 31	14 1.45	-9 4.3	2.314	3.172	11.5	22.3	5 31	14 2.74	+2 42.7	3.070	3.864	10.5	22.1
286844	2002 <i>NT</i> ₅₉		4 28.6 249°74	1°2/29.5	17		423713	2006 <i>BB</i> ₆₄		4 28.6 91°54	6°2/2.9	17	
3 22	14 51.86	-19 27.2	1.895	2.695	15.1	21.9	3 22	14 56.13	-30 36.1	1.975	2.722	16.4	20.7
4 1	14 47.49	-19 16.5	1.791	2.679	12.0	21.6	4 1	14 50.73	-31 30.5	1.898	2.736	13.7	20.6
4 11	14 40.60	-18 52.3	1.708	2.662	8.3	21.4	4 11	14 42.66	-32 7.7	1.842	2.751	10.7	20.4
4 21	14 31.76	-18 15.3	1.651	2.645	4.1	21.1	4 21	14 32.62	-32 24.7	1.809	2.765	7.9	20.3
5 1	14 21.88	-17 28.1	1.620	2.626	1.4	20.8	5 1	14 21.67	-32 20.5	1.802	2.779	6.3	20.2
5 11	14 12.09	-16 35.8	1.617	2.608	5.5	21.1	5 11	14 11.06	-31 57.4	1.822	2.793	7.0	20.3
5 21	14 3.49	-15 44.4	1.641	2.589	9.9	21.3	5 21	14 1.93	-31 20.8	1.868	2.807	9.4	20.4
5 31	13 56.93	-14 59.9	1.688	2.569	13.9	21.5	5 31	13 55.10	-30 37.8	1.938	2.821	12.2	20.6
407290	2010 <i>HH</i> ₇₁		4 28.6 279°94	4°8/25.4	17		428907	2008 <i>VV</i> ₂₆		4 28.6 318°26	1°8/29.9	17	
3 22	14 50.48	- 6 2.1	1.530	2.371	16.2	21.0	3 22	14 49.87	-20 8.2	1.930	2.730	14.9	21.3
4 1	14 46.82	- 5 10.5	1.437	2.351	12.7	20.7	4 1	14 45.75	-20 13.2	1.842	2.729	11.8	21.1
4 11	14 40.37	- 4 12.7	1.366	2.330	8.7	20.4	4 11	14 39.30	-20 5.9	1.775	2.727	8.2	20.9
4 21	14 31.72	- 3 14.7	1.318	2.309	5.4	20.2	4 21	14 31.13	-19 46.9	1.734	2.726	4.3	20.7
5 1	14 21.89	- 2 23.9	1.296	2.289	5.7	20.1	5 1	14 22.14	-19 18.1	1.719	2.724	1.9	20.5
5 11	14 12.16	- 1 47.6	1.299	2.268	9.5	20.3	5 11	14 13.39	-18 43.8	1.732	2.723	5.1	20.7
5 21	14 3.77	- 1 30.9	1.325	2.246	13.9	20.5	5 21	14 5.85	-18 8.9	1.771	2.721	9.1	20.9
5 31	13 57.69	- 1 36.1	1.371	2.225	18.0	20.7	5 31	14 0.27	-17 38.4	1.833	2.720	12.6	21.1
663	Gerlinde		4 28.6 24°93	2°4/30.9	18		42344	2002 <i>AT</i> ₉₀		4 28.6 11°50	18°4/8.9	18	
3 22	14 44.98	-26 4.4	1.865	2.656	15.7	13.5	3 22	14 39.97	+16 7.9	1.029	1.894	20.4	17.1
4 1	14 41.94	-25 15.1	1.785	2.663	12.6	13.3	4 1	14 39.28	+20 1.0	1.005	1.896	18.9	17.0
4 11	14 36.70	-24 4.7	1.725	2.670	8.9	13.1	4 11	14 35.50	+23 27.9	1.001	1.901	18.5	16.9
4 21	14 29.91	-22 35.4	1.690	2.677	5.0	12.9	4 21	14 29.52	+26 9.4	1.016	1.906	19.3	17.0
5 1	14 22.52	-20 52.3	1.682	2.686	2.4	12.7	5 1	14 22.69	+27 52.5	1.049	1.913	21.1	17.1
5 11	14 15.55	-19 3.2	1.702	2.694	5.0	12.9	5 11	14 16.52	+28 33.9	1.096	1.922	23.1	17.3
5 21	14 9.85	-17 16.9	1.749	2.703	8.9	13.2	5 21	14 12.15	+28 18.5	1.156	1.932	25.1	17.5
5 31	14 6.06	-15 41.0	1.820	2.713	12.4	13.4	5 31	14 10.34	+27 15.4	1.226	1.943	26.9	17.7
120595	1995 <i>TK</i> ₆		4 28.6 66°98	1°6/29.6	17		371093	2005 <i>UZ</i> ₄₆₁		4 28.6 158°99	1°4/27.4	17	
3 22	14 52.68	-18 24.3	1.823	2.626	15.5	20.2	3 22	14 50.35	-12 44.5	2.045	2.859	13.6	22.6
4 1	14 47.95	-18 44.2	1.745	2.634	12.2	20.0	4 1	14 45.77	-12 10.9	1.964	2.864	10.5	22.4
4 11	14 40.75	-18 53.8	1.688	2.642	8.4	19.8	4 11	14 39.12	-11 29.3	1.906	2.868	6.9	22.2
4 21	14 31.74	-18 53.0	1.657	2.650	4.2	19.6	4 21	14 30.98	-10 42.7	1.874	2.872	3.0	22.0
5 1	14 21.93	-18 43.6	1.653	2.658	1.7	19.4	5 1	14 22.21	- 9 55.4	1.871	2.875	2.0	21.9
5 11	14 12.45	-18 28.9	1.676	2.666	5.3	19.7	5 11	14 13.75	- 9 12.4	1.896	2.878	5.8	22.1
5 21	14 4.32	-18 13.2	1.725	2.675	9.4	19.9	5 21	14 6.44	- 8 38.1	1.947	2.881	9.5	22.4
5 31	13 58.32	-18 1.1	1.798	2.683	12.9	20.2	5 31	14 0.91	- 8 15.6	2.023	2.883	12.7	22.6
22065	Colgrove		4 28.6 290°44	4°7/25.7	18		408099	2013 <i>AM</i> ₄₅		4 28.6 27°71	3°9/26.4	18	

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
27405	Danielfeeny		4 28.6 179°03	0°2/28.5	18		380615	2004 TQ ₁₆₁		4 28.6 189°43	0°1/28.7	17	
3 22	14 51.88	-15 43.6	2.036	2.841	14.0	19.2	3 22	14 50.54	-16 20.7	2.305	3.104	12.8	22.2
4 1	14 47.06	-15 26.3	1.949	2.843	10.9	19.0	4 1	14 45.80	-16 5.6	2.214	3.104	10.0	22.0
4 11	14 40.04	-14 59.3	1.885	2.844	7.3	18.8	4 11	14 39.10	-15 41.4	2.146	3.102	6.6	21.8
4 21	14 31.42	-14 24.5	1.847	2.844	3.2	18.5	4 21	14 31.00	-15 9.7	2.104	3.101	3.0	21.6
5 1	14 22.07	-13 45.3	1.837	2.844	1.1	18.4	5 1	14 22.24	-14 33.5	2.091	3.098	0.9	21.4
5 11	14 13.00	-13 6.3	1.856	2.844	5.3	18.6	5 11	14 13.71	-13 56.6	2.108	3.096	4.7	21.7
5 21	14 5.10	-12 32.0	1.902	2.843	9.2	18.9	5 21	14 6.18	-13 23.1	2.151	3.092	8.3	21.9
5 31	13 59.08	-12 6.4	1.971	2.841	12.6	19.1	5 31	14 0.29	-12 56.7	2.220	3.089	11.5	22.1
155452	1998 HN ₁₅₀		4 28.6 8°35	2°6/26.9	18		419652	2010 TG ₆₂		4 28.6 343°98	2°8/30.4	17	
3 22	14 47.57	-10 8.0	1.477	2.321	16.5	19.2	3 22	14 48.77	-22 32.0	1.411	2.228	18.5	20.8
4 1	14 44.38	-9 40.2	1.406	2.322	12.7	18.9	4 1	14 45.78	-22 32.1	1.330	2.224	14.9	20.6
4 11	14 38.57	-9 5.0	1.355	2.323	8.4	18.7	4 11	14 39.79	-22 13.3	1.267	2.221	10.6	20.3
4 21	14 30.84	-8 27.0	1.328	2.326	4.0	18.4	4 21	14 31.49	-21 35.4	1.227	2.218	5.8	20.0
5 1	14 22.26	-7 51.7	1.326	2.329	3.3	18.4	5 1	14 22.07	-20 41.5	1.211	2.215	2.8	19.8
5 11	14 14.07	-7 25.0	1.350	2.332	7.5	18.6	5 11	14 13.00	-19 38.2	1.220	2.213	6.4	20.0
5 21	14 7.34	-7 11.2	1.397	2.337	11.9	18.9	5 21	14 5.55	-18 34.2	1.253	2.212	11.2	20.3
5 31	14 2.86	-7 13.0	1.464	2.342	15.8	19.1	5 31	14 0.70	-17 37.7	1.308	2.211	15.6	20.6
375856	2009 VZ ₁₆		4 28.6 182°73	0°2/28.4	17		394732	2008 EP ₁₅₂		4 28.6 358°38	3°0/26.0	17	
3 22	14 50.99	-15 23.3	2.262	3.064	12.9	22.4	3 22	14 46.42	-6 59.1	2.177	3.005	12.5	21.1
4 1	14 46.15	-15 5.4	2.173	3.064	10.0	22.2	4 1	14 42.64	-6 26.9	2.097	3.004	9.6	20.9
4 11	14 39.33	-14 38.9	2.107	3.065	6.6	22.0	4 11	14 37.01	-5 51.5	2.040	3.003	6.4	20.7
4 21	14 31.08	-14 5.6	2.067	3.064	2.9	21.7	4 21	14 30.07	-5 16.6	2.010	3.003	3.6	20.5
5 1	14 22.19	-13 28.6	2.057	3.063	1.0	21.6	5 1	14 22.55	-4 46.3	2.007	3.003	3.6	20.5
5 11	14 13.53	-12 52.0	2.075	3.062	4.9	21.8	5 11	14 15.28	-4 24.6	2.031	3.003	6.4	20.7
5 21	14 5.91	-12 19.8	2.121	3.060	8.5	22.0	5 21	14 8.98	-4 14.2	2.082	3.003	9.6	20.9
5 31	13 59.97	-11 55.5	2.192	3.058	11.7	22.2	5 31	14 4.25	-4 16.7	2.155	3.004	12.5	21.1
474962	2005 TW ₄₇		4 28.6 234°83	2°0/30.3	17		65414	2002 TE ₃₀		4 28.6 177°75	0°5/29.1	18	
3 22	14 50.63	-21 0.7	2.667	3.443	11.8	21.5	3 22	14 48.61	-17 45.8	2.340	3.138	12.6	20.4
4 1	14 45.76	-21 19.3	2.564	3.435	9.5	21.3	4 1	14 44.29	-17 29.9	2.251	3.139	9.9	20.2
4 11	14 39.05	-21 29.1	2.484	3.427	6.7	21.2	4 11	14 38.08	-17 4.1	2.185	3.140	6.6	20.0
4 21	14 30.98	-21 29.8	2.431	3.418	3.7	20.9	4 21	14 30.54	-16 29.9	2.145	3.140	3.1	19.8
5 1	14 22.21	-21 22.2	2.406	3.409	2.0	20.8	5 1	14 22.40	-15 50.2	2.134	3.140	0.9	19.6
5 11	14 13.54	-21 8.4	2.412	3.400	4.2	20.9	5 11	14 14.48	-15 9.0	2.151	3.140	4.5	19.8
5 21	14 5.71	-20 51.6	2.445	3.390	7.2	21.1	5 21	14 7.55	-14 30.5	2.196	3.140	8.0	20.1
5 31	13 59.35	-20 35.2	2.504	3.381	10.0	21.3	5 31	14 2.20	-13 58.5	2.266	3.139	11.1	20.2
142175	2002 RB ₄₀		4 28.6 205°28	1°5/27.4	17		141160	2001 XS ₁₂₄		4 28.6 261°71	1°4/27.3	17	
3 22	14 51.71	-12 29.1	2.144	2.954	13.3	21.3	3 22	14 46.60	-12 36.0	2.268	3.084	12.4	20.3
4 1	14 46.83	-11 55.3	2.051	2.948	10.3	21.1	4 1	14 42.79	-11 59.7	2.176	3.078	9.6	20.1
4 11	14 39.86	-11 13.5	1.981	2.942	6.8	20.8	4 11	14 37.13	-11 15.7	2.108	3.071	6.3	19.8
4 21	14 31.34	-10 26.4	1.938	2.935	3.0	20.6	4 21	14 30.14	-10 26.9	2.067	3.065	2.8	19.6
5 1	14 22.10	-9 38.3	1.924	2.928	2.1	20.5	5 1	14 22.52	-9 37.3	2.054	3.058	2.0	19.5
5 11	14 13.08	-8 54.1	1.939	2.920	5.8	20.7	5 11	14 15.11	-8 51.7	2.069	3.051	5.4	19.7
5 21	14 5.12	-8 18.0	1.980	2.911	9.5	20.9	5 21	14 8.64	-8 14.2	2.111	3.044	8.9	19.9
5 31	13 58.91	-7 53.7	2.046	2.901	12.8	21.1	5 31	14 3.70	-7 47.8	2.177	3.037	12.0	20.1
438223	2005 UK ₃₉₆		4 28.6 249°88	4°5/24.1	18		232665	2003 WA ₁₆₁		4 28.6 0°67	0°3/28.8	17	
3 22	14 49.03	+ 0 54.1	2.816	3.629	10.3	21.5	3 22	14 45.98	-17 15.7	1.655	2.480	15.8	20.3
4 1	14 44.27	+ 1 28.5	2.718	3.611	8.2	21.3	4 1	14 43.01	-16 54.6	1.575	2.479	12.4	20.1
4 11	14 37.93	+ 2 1.2	2.646	3.593	6.1	21.2	4 11	14 37.62	-16 20.3	1.516	2.478	8.3	19.8
4 21	14 30.44	+ 2 28.7	2.600	3.574	4.6	21.0	4 21	14 30.43	-15 35.2	1.481	2.478	3.7	19.6
5 1	14 22.40	+ 2 47.2	2.584	3.555	5.0	21.0	5 1	14 22.44	-14 43.7	1.472	2.478	1.1	19.4
5 11	14 14.46	+ 2 54.0	2.596	3.536	7.0	21.1	5 11	14 14.76	-13 52.0	1.489	2.480	5.8	19.7
5 21	14 7.25	+ 2 47.5	2.634	3.516	9.4	21.3	5 21	14 8.40	-13 6.2	1.530	2.481	10.2	20.0
5 31	14 1.30	+ 2 27.3	2.697	3.496	11.7	21.4	5 31	14 4.11	-12 31.3	1.595	2.484	14.1	20.2
297675	2001 UJ ₁₁₉		4 28.6 163°05	0°4/28.3	18		280406	2003 WZ ₂₂		4 28.6 249°22	0°5/29.0	17	
3 22	14 54.86	-15 20.5	1.885	2.690	15.0	22.0	3 22	14 47.94	-18 52.8	2.247	3.046	13.1	20.9
4 1	14 49.47	-15 0.6	1.804	2.697	11.6	21.7	4 1	14 43.96	-18 18.9	2.144	3.033	10.3	20.7
4 11	14 41.68	-14 30.4	1.744	2.703	7.7	21.5	4 11	14 37.99	-17 32.3	2.064	3.019	7.0	20.5
4 21	14 32.15	-13 52.2	1.711	2.708	3.4	21.3	4 21	14 30.56	-16 34.7	2.010	3.005	3.2	20.2
5 1	14 21.86	-13 9.8	1.706	2.713	1.3	21.1	5 1	14 22.39	-15 29.8	1.984	2.991	0.9	20.0
5 11	14 11.94	-12 28.2	1.730	2.716	5.7	21.4	5 11	14 14.40	-14 22.8	1.988	2.977	4.8	20.3
5 21	14 3.36	-11 52.5	1.780	2.719	9.8	21.7	5 21	14 7.37	-13 19.2	2.018	2.962	8.6	20.5
5 31	13 56.86	-11 26.9	1.854	2.721	13.4	21.9	5 31	14 1.99	-12 24.2	2.074	2.947	12.0	20.7
42937	1999 TU ₂₈		4 28.6 76°75	0°7/29.1	18		455879	2005 UN ₁₀₇		4 28.6 148°18	1°2/27.8	18	
3 22	14 49.89	-17 47.1	1.871	2.680	14.9	19.4	3 22	14 54.75	-13 51.1	1.711	2.525	15.9	22.4
4 1	14 45.67	-17 37.4	1.793	2.688	11.7	19.2	4 1	14 49.54	-13 18.8	1.636	2.536	12.3	22.2
4 11	14 39.18	-17 16.3	1.738	2.695	7.8	19.0	4 11	14 41.78	-12 36.2	1.583	2.545	8.1	22.0
4 21	14 31.05	-16 45.3	1.707	2.703	3.6	18.8	4 21	14 32.22	-11 46.6	1.556	2.554	3.5	21.7
5 1	14 22.22	-16 7.8	1.704	2.711	1.1	18.6	5 1	14 21.89	-10 55.1	1.556	2.561	2.0	21.6
5 11	14 13.74	-15 28.5	1.728	2.718	5.2	18.9	5 11	14 12.02	-10 7.5	1.584	2.569	6.4	21.9
5 21	14 6.54	-14 52.4	1.778	2.726	9.2	19.1	5 21	14 3.62	-9 29.4	1.638	2.575	10.7	22.2
5 31	14 1.31	-14 24.1	1.852	2.734	12.8	19.4	5 31	13 57.46	-9 4.6	1.715	2.580	14.4	22.4
196635	2003 SO ₃		4 28.6 212°77	2°8/30.8	18		198933	2005 UY ₂₄₉		4 28.6 259°63	1°3/29.3	16	
3 22	14 50.39	-23 26.9	2.149	2.931	14.								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
246806	2009 <i>FX</i> ₂₅		4 28.6 239°94	7°0/22.4	18		310531	2001 <i>BC</i> ₁₁		4 28.6 88°59	1°5/29.8	18	
3 22	14 49.38	+ 6 45.1	2.318	3.135	12.2	20.2	3 22	14 51.21	-21 50.2	1.570	2.376	17.4	20.7
4 1	14 44.76	+ 7 33.7	2.245	3.131	10.0	20.1	4 1	14 47.05	-21 16.5	1.501	2.392	13.7	20.5
4 11	14 38.33	+ 8 16.2	2.194	3.127	8.0	19.9	4 11	14 40.23	-20 24.2	1.453	2.407	9.4	20.2
4 21	14 30.64	+ 8 47.2	2.170	3.123	7.0	19.9	4 21	14 31.55	-19 15.6	1.428	2.422	4.7	20.0
5 1	14 22.39	+ 9 2.3	2.172	3.118	7.6	19.9	5 1	14 22.17	-17 56.0	1.430	2.436	1.6	19.8
5 11	14 14.40	+ 8 58.5	2.200	3.114	9.4	20.0	5 11	14 13.34	-16 33.4	1.459	2.451	5.8	20.1
5 21	14 7.39	+ 8 35.3	2.253	3.109	11.7	20.1	5 21	14 6.13	-15 16.1	1.514	2.465	10.2	20.4
5 31	14 1.92	+ 7 53.8	2.327	3.104	13.9	20.3	5 31	14 1.25	-14 11.1	1.591	2.480	14.1	20.7
61263	2000 <i>OR</i> ₂₈		4 28.6 295°18	1°8/27.2	18		283468	2001 <i>QJ</i> ₁₄₅		4 28.6 179°66	0°1/28.5	18	
3 22	14 46.90	-13 49.9	1.667	2.498	15.5	18.9	3 22	14 47.96	-16 8.5	2.636	3.434	11.4	21.6
4 1	14 43.87	-12 59.6	1.568	2.478	12.1	18.7	4 1	14 43.55	-15 45.0	2.545	3.435	8.8	21.4
4 11	14 38.32	-11 55.8	1.491	2.457	8.0	18.4	4 11	14 37.49	-15 13.3	2.478	3.435	5.9	21.2
4 21	14 30.83	-10 42.1	1.438	2.436	3.6	18.1	4 21	14 30.28	-14 35.2	2.439	3.436	2.6	21.0
5 1	14 22.30	- 9 25.0	1.412	2.416	2.6	17.9	5 1	14 22.55	-13 53.5	2.429	3.435	0.9	20.8
5 11	14 13.90	- 8 12.2	1.412	2.396	7.1	18.2	5 11	14 15.03	-13 12.0	2.448	3.435	4.2	21.1
5 21	14 6.71	- 7 11.1	1.437	2.375	11.8	18.4	5 21	14 8.37	-12 34.3	2.495	3.434	7.4	21.3
5 31	14 1.61	- 6 27.2	1.483	2.355	15.9	18.6	5 31	14 3.09	-12 3.6	2.568	3.433	10.2	21.5
375337	2008 <i>SM</i> ₃		4 28.6 146°65	4°2/24.3	18		369717	2012 <i>DE</i> ₆₀		4 28.6 295°02	3°9/30.9	17	
3 22	14 48.05	- 4 31.2	2.307	3.130	12.0	21.1	3 22	14 51.48	-23 23.9	1.583	2.383	17.6	20.7
4 1	14 43.67	- 3 20.0	2.235	3.138	9.3	20.9	4 1	14 47.86	-23 52.9	1.486	2.369	14.3	20.4
4 11	14 37.57	- 2 6.2	2.188	3.146	6.4	20.8	4 11	14 41.26	-24 6.5	1.409	2.354	10.5	20.2
4 21	14 30.28	- 0 55.0	2.169	3.154	4.4	20.7	4 21	14 32.24	-24 3.0	1.355	2.340	6.4	19.9
5 1	14 22.52	+ 0 8.2	2.178	3.161	4.9	20.7	5 1	14 21.89	-23 42.4	1.325	2.326	3.9	19.7
5 11	14 15.07	+ 0 58.5	2.215	3.167	7.3	20.9	5 11	14 11.62	-23 8.4	1.322	2.312	6.5	19.8
5 21	14 8.59	+ 1 33.0	2.278	3.173	10.1	21.0	5 21	14 2.77	-22 27.2	1.343	2.298	10.9	20.0
5 31	14 3.63	+ 1 50.4	2.364	3.179	12.7	21.2	5 31	13 56.44	-21 46.6	1.386	2.284	15.1	20.2
497167	2004 <i>RG</i> ₃₄₆		4 28.6 192°86	0°5/28.2	17		234795	2002 <i>QR</i> ₆₁		4 28.6 257°43	0°7/29.2	17	R
3 22	14 50.72	-14 35.7	2.632	3.428	11.5	23.1	3 22	14 48.78	-17 55.3	2.106	2.909	13.7	21.0
4 1	14 45.68	-14 14.0	2.537	3.426	8.9	22.9	4 1	14 44.73	-17 43.7	2.012	2.903	10.7	20.8
4 11	14 38.90	-13 44.9	2.466	3.423	5.9	22.7	4 11	14 38.57	-17 21.3	1.940	2.896	7.3	20.6
4 21	14 30.89	-13 10.2	2.422	3.419	2.5	22.5	4 21	14 30.85	-16 49.5	1.894	2.889	3.4	20.3
5 1	14 22.31	-12 32.8	2.408	3.415	1.1	22.3	5 1	14 22.37	-16 11.0	1.875	2.882	1.0	20.1
5 11	14 13.92	-11 56.4	2.425	3.409	4.5	22.6	5 11	14 14.09	-15 30.1	1.885	2.875	4.9	20.4
5 21	14 6.40	-11 24.2	2.469	3.403	7.7	22.8	5 21	14 6.86	-14 51.7	1.921	2.868	8.8	20.6
5 31	14 0.32	-10 59.4	2.539	3.397	10.6	22.9	5 31	14 1.39	-14 20.1	1.982	2.861	12.2	20.8
240633	2005 <i>AY</i> ₂₀		4 28.6 94°14	4°9/ 2.9	18		474878	2005 <i>SJ</i> ₁₄₉		4 28.6 250°89	0°1/28.6	16	
3 22	14 49.99	-29 58.4	2.044	2.802	15.5	20.2	3 22	14 49.11	-14 50.5	2.515	3.316	11.8	21.6
4 1	14 45.86	-30 9.6	1.957	2.807	12.9	20.1	4 1	14 44.61	-14 50.0	2.417	3.308	9.2	21.4
4 11	14 39.38	-30 2.4	1.891	2.811	9.9	19.9	4 11	14 38.32	-14 42.9	2.342	3.300	6.1	21.2
4 21	14 31.19	-29 35.4	1.849	2.816	6.9	19.7	4 21	14 30.70	-14 30.6	2.295	3.291	2.7	21.0
5 1	14 22.23	-28 49.7	1.832	2.820	5.0	19.6	5 1	14 22.43	-14 14.9	2.276	3.283	0.9	20.8
5 11	14 13.58	-27 49.5	1.843	2.825	5.9	19.6	5 11	14 14.29	-13 58.8	2.286	3.274	4.4	21.1
5 21	14 6.22	-26 41.1	1.879	2.829	8.7	19.8	5 21	14 7.01	-13 45.2	2.324	3.265	7.8	21.3
5 31	14 0.87	-25 31.7	1.941	2.834	11.8	20.0	5 31	14 1.20	-13 37.0	2.387	3.256	10.8	21.4
143430	2003 <i>BF</i> ₆₀		4 28.6 82°34	3°0/26.6	18		275976	2001 <i>XV</i> ₁₀		4 28.6 253°48	1°7/29.7	18	
3 22	14 54.31	- 8 1.4	1.770	2.592	15.1	19.2	3 22	15 2.41	-19 25.2	2.399	3.162	13.4	21.4
4 1	14 48.79	- 7 29.2	1.717	2.621	11.5	19.1	4 1	14 55.45	-19 41.9	2.265	3.130	10.8	21.1
4 11	14 41.02	- 6 53.3	1.687	2.649	7.6	18.9	4 11	14 45.92	-19 49.7	2.154	3.096	7.6	20.9
4 21	14 31.79	- 6 17.9	1.682	2.677	3.9	18.7	4 21	14 34.25	-19 47.5	2.071	3.060	4.0	20.6
5 1	14 22.09	- 5 47.7	1.706	2.704	3.6	18.8	5 1	14 21.25	-19 35.4	2.018	3.023	1.8	20.3
5 11	14 13.01	- 5 27.0	1.757	2.732	6.9	19.0	5 11	14 8.01	-19 15.5	1.998	2.984	5.1	20.5
5 21	14 5.40	- 5 18.5	1.834	2.758	10.5	19.3	5 21	13 55.63	-18 51.5	2.007	2.943	9.1	20.7
5 31	13 59.85	- 5 23.4	1.933	2.784	13.6	19.5	5 31	13 45.08	-18 28.3	2.044	2.901	12.8	20.8
507673	2013 <i>RR</i> ₁₀₀		4 28.6 301°47	1°2/29.3	17		439820	2015 <i>KX</i> ₅₉		4 28.6 139°47	7°6/20.9	18	
3 22	14 51.79	-16 56.7	1.660	2.476	16.2	20.5	3 22	14 48.33	+10 4.3	2.488	3.298	11.6	20.8
4 1	14 47.77	-17 15.4	1.566	2.463	12.9	20.3	4 1	14 43.78	+11 5.2	2.427	3.303	9.8	20.7
4 11	14 41.00	-17 24.4	1.493	2.451	8.8	20.0	4 11	14 37.60	+11 58.2	2.390	3.307	8.2	20.6
4 21	14 32.05	-17 23.9	1.443	2.439	4.3	19.7	4 21	14 30.32	+12 37.9	2.379	3.312	7.6	20.5
5 1	14 21.93	-17 15.4	1.420	2.427	1.5	19.5	5 1	14 22.60	+13 0.0	2.394	3.316	8.3	20.6
5 11	14 11.93	-17 2.5	1.423	2.415	6.0	19.8	5 11	14 15.17	+13 1.9	2.434	3.320	9.8	20.7
5 21	14 3.25	-16 49.7	1.452	2.403	10.6	20.0	5 21	14 8.68	+12 43.5	2.498	3.324	11.6	20.8
5 31	13 56.86	-16 42.0	1.503	2.392	14.8	20.2	5 31	14 3.62	+12 6.2	2.583	3.328	13.5	21.0
286611	2002 <i>DV</i> ₈		4 28.6 100°23	8°1/ 6.4	17		66251	1999 <i>GJ</i> ₂		4 28.6 255°75	5°9/24.8	18	
3 22	14 58.99	-41 27.3	2.714	3.368	14.3	20.8	3 22	14 52.25	-14 16.1	0.860	1.725	23.4	18.9
4 1	14 52.66	-42 40.9	2.634	3.387	12.6	20.7	4 1	14 50.35	-12 6.1	0.776	1.706	18.4	18.5
4 11	14 43.86	-43 36.7	2.575	3.405	10.9	20.6	4 11	14 44.02	- 9 17.3	0.710	1.684	12.4	18.0
4 21	14 33.19	-44 11.0	2.538	3.423	9.3	20.5	4 21	14 33.85	- 5 58.4	0.664	1.662	6.7	17.6
5 1	14 21.60	-44 21.3	2.527	3.440	8.3	20.5	5 1	14 21.36	- 2 29.4	0.641	1.638	7.9	17.6
5 11	14 10.22	-44 8.6	2.542	3.458	8.2	20.5	5 11	14 8.87	+ 0 42.2	0.638	1.613	14.9	17.8
5 21	14 0.10	-43 36.7	2.582	3.475	9.1	20.6	5 21	13 58.60	+ 3 13.2	0.655	1.588	22.2	18.1
5 31	13 52.04	-42 51.6	2.647	3.492	10.6	20.7	5 31	13 52.19	+ 4 51.7	0.685	1.561	28.6	18.3
182330	2001 <i>PD</i> ₁₈		4 28.6 285°52	0°5/28.4	18		397742	2008 <i>FP</i> ₁₄					

EPHEMERIDES

4 28.6

4 28.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
310312	2011 <i>UZ</i> ₁₂₁		4 28.6 260°26	1°1/27.7	16		136570	1981 <i>EB</i> ₃		4 28.6 42°31	0°8/29.4	18	
3 22	14 48.26	-12 12.6	2.474	3.283	11.7	21.4	3 22	14 46.08	-20 3.8	1.953	2.760	14.5	19.9
4 1	14 44.00	-11 56.3	2.372	3.270	9.1	21.2	4 1	14 42.62	-19 29.2	1.880	2.773	11.3	19.7
4 11	14 37.94	-11 34.0	2.295	3.256	6.0	20.9	4 11	14 37.11	-18 40.5	1.830	2.786	7.6	19.5
4 21	14 30.55	-11 7.9	2.245	3.242	2.6	20.7	4 21	14 30.18	-17 40.4	1.804	2.799	3.6	19.3
5 1	14 22.51	-10 40.9	2.223	3.228	1.6	20.6	5 1	14 22.69	-16 33.2	1.806	2.813	1.1	19.1
5 11	14 14.57	-10 16.2	2.230	3.213	4.9	20.8	5 11	14 15.59	-15 24.9	1.835	2.827	4.9	19.4
5 21	14 7.48	-9 57.2	2.264	3.199	8.3	21.0	5 21	14 9.67	-14 21.5	1.891	2.841	8.7	19.6
5 31	14 1.84	-9 46.5	2.324	3.184	11.3	21.1	5 31	14 5.55	-13 28.1	1.971	2.855	12.0	19.9
278768	2008 <i>SY</i> ₁₄₉		4 28.6 164°69	0°8/27.9	18		242433	2004 <i>NF</i> ₂₈		4 28.6 314°76	2°6/30.1	17	
3 22	14 48.16	-15 11.2	2.006	2.821	13.9	20.8	3 22	14 47.10	-21 8.6	1.193	2.029	20.1	20.8
4 1	14 44.21	-14 32.2	1.922	2.822	10.7	20.5	4 1	14 45.25	-21 14.6	1.103	2.009	16.2	20.5
4 11	14 38.18	-13 42.5	1.861	2.823	7.1	20.3	4 11	14 39.98	-21 0.7	1.030	1.990	11.5	20.2
4 21	14 30.66	-12 45.2	1.826	2.824	3.0	20.1	4 21	14 31.85	-20 26.2	0.978	1.971	6.2	19.8
5 1	14 22.49	-11 45.0	1.819	2.825	1.5	20.0	5 1	14 22.09	-19 33.5	0.948	1.953	2.7	19.5
5 11	14 14.61	-10 47.5	1.840	2.826	5.5	20.2	5 11	14 12.41	-18 29.7	0.941	1.936	7.4	19.7
5 21	14 7.85	-9 57.8	1.887	2.826	9.4	20.5	5 21	14 4.43	-17 24.8	0.956	1.920	13.1	20.0
5 31	14 2.87	-9 20.1	1.958	2.827	12.8	20.7	5 31	13 59.46	-16 28.9	0.990	1.904	18.4	20.2
425564	2010 <i>RO</i> ₁₆₇		4 28.6 179°76	1°3/27.5	16		22955	1999 <i>TH</i> ₂₅₁		4 28.6 205°41	9°8/ 8.3	18	
3 22	14 52.27	-13 0.3	2.126	2.934	13.4	22.8	3 22	14 56.27	-45 50.7	2.451	3.089	16.0	18.3
4 1	14 47.24	-12 25.6	2.040	2.936	10.4	22.5	4 1	14 51.14	-46 49.0	2.353	3.086	14.5	18.1
4 11	14 40.12	-11 42.5	1.977	2.937	6.8	22.3	4 11	14 43.19	-47 26.2	2.273	3.082	12.8	18.0
4 21	14 31.51	-10 54.1	1.941	2.938	3.0	22.1	4 21	14 33.05	-47 37.3	2.212	3.078	11.2	17.9
5 1	14 22.22	-10 4.4	1.933	2.937	2.0	22.0	5 1	14 21.76	-47 19.3	2.174	3.073	10.1	17.8
5 11	14 13.22	-9 18.6	1.955	2.936	5.7	22.2	5 11	14 10.66	-46 33.1	2.161	3.069	9.9	17.7
5 21	14 5.34	-8 40.8	2.003	2.935	9.4	22.5	5 21	14 0.98	-45 23.1	2.172	3.063	10.6	17.8
5 31	13 59.24	-8 14.7	2.076	2.932	12.6	22.7	5 31	13 53.68	-43 57.0	2.206	3.058	12.1	17.9
377674	2005 <i>UD</i> ₃₆₉		4 28.6 335°38	3°1/26.7	17		423948	2006 <i>UX</i> ₁₅		4 28.6 214°25	1°6/27.4	17	
3 22	14 49.83	-8 16.2	1.606	2.442	15.7	21.0	3 22	14 51.83	-12 9.0	2.051	2.864	13.7	22.4
4 1	14 46.03	-7 51.3	1.526	2.438	12.2	20.8	4 1	14 47.08	-11 38.6	1.958	2.857	10.6	22.2
4 11	14 39.67	-7 21.5	1.468	2.434	8.1	20.5	4 11	14 40.14	-11 0.3	1.888	2.849	7.0	22.0
4 21	14 31.41	-6 50.9	1.435	2.430	4.2	20.3	4 21	14 31.59	-10 17.0	1.844	2.841	3.1	21.7
5 1	14 22.25	-6 24.5	1.427	2.427	3.8	20.2	5 1	14 22.24	-9 32.9	1.828	2.832	2.2	21.6
5 11	14 13.39	-6 7.5	1.445	2.424	7.6	20.5	5 11	14 13.10	-8 52.8	1.841	2.822	6.0	21.8
5 21	14 5.88	-6 3.5	1.487	2.421	11.8	20.7	5 21	14 5.05	-8 21.2	1.880	2.812	9.9	22.1
5 31	14 0.56	-6 14.6	1.551	2.419	15.6	20.9	5 31	13 58.83	-8 1.4	1.943	2.802	13.3	22.3
280362	2003 <i>SL</i> ₃₈₈		4 28.6 324°03	2°6/26.7	17		405464	2004 <i>TE</i> ₃₃₈		4 28.6 171°40	1°0/27.8	16	
3 22	14 48.48	-9 23.6	1.859	2.688	14.2	20.8	3 22	14 52.67	-14 45.8	1.795	2.608	15.3	22.2
4 1	14 44.62	-8 51.4	1.777	2.685	11.0	20.6	4 1	14 47.94	-14 6.4	1.713	2.612	11.8	22.0
4 11	14 38.54	-8 13.4	1.718	2.682	7.3	20.3	4 11	14 40.78	-13 15.5	1.653	2.615	7.8	21.7
4 21	14 30.86	-7 33.3	1.684	2.680	3.6	20.1	4 21	14 31.86	-12 16.4	1.619	2.617	3.4	21.5
5 1	14 22.43	-6 56.0	1.676	2.677	3.2	20.1	5 1	14 22.17	-11 14.3	1.613	2.619	1.8	21.4
5 11	14 14.27	-6 26.4	1.696	2.675	6.8	20.3	5 11	14 12.84	-10 15.6	1.635	2.620	6.2	21.6
5 21	14 7.27	-6 8.3	1.741	2.672	10.6	20.5	5 21	14 4.85	-9 26.1	1.683	2.620	10.4	21.9
5 31	14 2.16	-6 4.1	1.809	2.670	14.0	20.7	5 31	13 58.95	-8 50.3	1.753	2.620	14.1	22.1
150795	2001 <i>RR</i> ₅₂		4 28.6 186°43	1°3/27.6	17		202055	2004 <i>RS</i> ₁₉₆		4 28.6 66°99	8°2/ 4.7	18	
3 22	14 51.41	-12 38.2	2.260	3.067	12.7	21.4	3 22	14 58.44	-35 3.6	1.823	2.551	18.2	19.8
4 1	14 46.47	-12 9.0	2.171	3.067	9.8	21.2	4 1	14 52.84	-36 14.0	1.759	2.576	15.5	19.6
4 11	14 39.57	-11 32.4	2.106	3.066	6.5	20.9	4 11	14 44.24	-37 3.2	1.714	2.602	12.7	19.5
4 21	14 31.26	-10 51.1	2.067	3.064	2.9	20.7	4 21	14 33.43	-37 26.6	1.692	2.627	10.0	19.4
5 1	14 22.31	-10 8.9	2.058	3.062	1.9	20.6	5 1	14 21.68	-37 22.3	1.693	2.653	8.3	19.3
5 11	14 13.60	-9 30.0	2.078	3.060	5.4	20.9	5 11	14 10.46	-36 53.2	1.721	2.678	8.6	19.4
5 21	14 5.91	-8 58.3	2.125	3.056	8.9	21.1	5 21	14 1.02	-36 6.0	1.773	2.703	10.5	19.6
5 31	13 59.89	-8 37.1	2.196	3.052	12.1	21.3	5 31	13 54.23	-35 9.2	1.848	2.728	12.9	19.8
67884	2000 <i>WR</i> ₅₀		4 28.6 192°67	1°6/29.9	16		139458	2001 <i>OT</i> ₇₄		4 28.6 290°56	6°3/ 3.9	18	
3 22	14 53.16	-21 38.2	2.107	2.891	14.3	20.4	3 22	14 49.42	-33 30.8	2.166	2.904	15.4	18.3
4 1	14 48.12	-21 20.3	2.012	2.889	11.4	20.2	4 1	14 45.68	-33 56.7	2.056	2.885	13.2	18.1
4 11	14 40.82	-20 48.1	1.939	2.887	7.9	20.0	4 11	14 39.50	-34 4.1	1.965	2.866	10.6	17.9
4 21	14 31.86	-20 2.5	1.892	2.883	4.1	19.8	4 21	14 31.41	-33 50.1	1.896	2.846	8.1	17.7
5 1	14 22.12	-19 6.2	1.874	2.879	1.7	19.6	5 1	14 22.28	-33 13.8	1.853	2.827	6.4	17.6
5 11	14 12.63	-18 4.3	1.884	2.874	4.9	19.8	5 11	14 13.22	-32 17.7	1.836	2.808	6.9	17.6
5 21	14 4.33	-17 2.7	1.922	2.868	8.8	20.0	5 21	14 5.29	-31 7.2	1.846	2.789	9.2	17.7
5 31	13 57.93	-16 7.3	1.985	2.861	12.3	20.2	5 31	13 59.36	-29 49.9	1.879	2.770	12.2	17.8
4356	Marathon		4 28.6 326°08	3°4/30.6	18		468754	2011 <i>FT</i> ₂₁		4 28.6 279°00	5°6/24.5	17	
3 22	14 49.25	-21 43.7	1.638	2.446	16.8	16.9	3 22	14 49.54	-1 46.1	1.809	2.643	14.3	20.9
4 1	14 46.00	-22 18.7	1.541	2.429	13.6	16.6	4 1	14 45.44	-0 54.1	1.733	2.640	11.2	20.7
4 11	14 39.96	-22 41.1	1.464	2.413	9.8	16.4	4 11	14 39.09	-0 1.9	1.680	2.637	8.1	20.5
4 21	14 31.68	-22 49.4	1.410	2.398	5.8	16.1	4 21	14 31.12	+0 44.6	1.652	2.634	5.8	20.4
5 1	14 22.14	-22 43.7	1.381	2.383	3.4	15.9	5 1	14 22.41	+1 19.4	1.650	2.632	6.3	20.4
5 11	14 12.65	-22 26.9	1.378	2.369	6.2	16.1	5 11	14 14.01	+1 37.6	1.675	2.629	9.1	20.5
5 21	14 4.47	-22 4.0	1.399	2.355	10.5	16.3	5 21	14 6.82	+1 36.9	1.723	2.626	12.4	20.7
5 31	13 58.62	-21 41.3	1.443	2.343	14.6	16.5	5 31	14 1.55	+1 17.0	1.793	2.623	15.4	20.9
395577	2011 <i>UH</i> ₂₅₅		4 28.6 30°53	1°1/29.4	17		281546	2008 <i>UD</i> ₃₁		4 28.6 303°97	1°4/27.7	17	

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
427950	2005 <i>WH</i> ₁₇₆		4 28.6 144°16'	0°3'/28.4 17			464858	2005 <i>GS</i> ₄₉		4 28.6 353°96'	0°3'/28.5 17		
3 22	14 51.77	-15 1.1	2.273	3.074	12.9	22.6	3 22	14 47.72	-14 43.8	1.212	2.060	19.0	21.0
4 1	14 46.68	-14 42.5	2.193	3.085	10.0	22.4	4 1	14 45.29	-14 43.5	1.138	2.055	14.9	20.7
4 11	14 39.66	-14 15.8	2.137	3.095	6.6	22.2	4 11	14 39.67	-14 31.2	1.083	2.051	10.0	20.4
4 21	14 31.30	-13 42.9	2.107	3.104	2.9	22.0	4 21	14 31.59	-14 9.1	1.050	2.048	4.4	20.1
5 1	14 22.37	-13 6.9	2.106	3.113	1.1	21.8	5 1	14 22.29	-13 41.7	1.040	2.047	1.5	19.8
5 11	14 13.75	-12 32.0	2.135	3.121	4.8	22.1	5 11	14 13.35	-13 15.2	1.053	2.046	7.3	20.2
5 21	14 6.21	-12 1.8	2.191	3.129	8.3	22.4	5 21	14 6.15	-12 55.9	1.089	2.046	12.7	20.5
5 31	14 0.35	-11 39.7	2.272	3.136	11.4	22.6	5 31	14 1.71	-12 49.0	1.144	2.047	17.3	20.8
455644	2004 <i>XH</i> ₁₂₆		4 28.6 93°88'	2°8'/26.8 18			212544	2006 <i>SA</i> ₈		4 28.6 180°61'	4°0'/2.0 18		
3 22	14 56.31	-9 5.1	1.632	2.454	16.2	21.9	3 22	14 50.24	-27 14.1	2.319	3.080	13.8	20.7
4 1	14 50.57	-8 32.7	1.577	2.481	12.4	21.7	4 1	14 45.83	-27 35.7	2.226	3.081	11.4	20.5
4 11	14 42.34	-7 55.2	1.545	2.507	8.1	21.5	4 11	14 39.31	-27 43.3	2.155	3.081	8.5	20.3
4 21	14 32.46	-7 16.9	1.537	2.533	4.0	21.3	4 21	14 31.24	-27 35.7	2.108	3.081	5.7	20.1
5 1	14 22.04	-6 43.0	1.557	2.558	3.5	21.3	5 1	14 22.42	-27 13.5	2.089	3.081	4.0	20.0
5 11	14 12.29	-6 18.3	1.605	2.582	7.2	21.6	5 11	14 13.80	-26 39.6	2.097	3.081	5.2	20.1
5 21	14 4.16	-6 6.2	1.678	2.606	11.1	21.9	5 21	14 6.23	-25 58.4	2.133	3.080	8.0	20.2
5 31	13 58.30	-6 8.2	1.773	2.629	14.5	22.2	5 31	14 0.43	-25 15.2	2.193	3.080	10.8	20.4
383938	2008 <i>SU</i> ₂₂₈		4 28.6 171°87'	2°0'/30.4 17			103085	1999 <i>XB</i> ₁₆₁		4 28.6 165°56'	0°1'/28.7 18		
3 22	14 50.51	-22 15.8	2.280	3.061	13.4	22.0	3 22	14 51.78	-15 19.7	2.606	3.398	11.7	20.9
4 1	14 45.90	-22 9.3	2.189	3.064	10.7	21.8	4 1	14 46.51	-15 13.1	2.517	3.403	9.0	20.8
4 11	14 39.27	-21 50.2	2.121	3.066	7.5	21.6	4 11	14 39.50	-14 59.4	2.453	3.408	6.0	20.6
4 21	14 31.18	-21 18.8	2.079	3.068	4.1	21.4	4 21	14 31.24	-14 40.1	2.417	3.413	2.7	20.4
5 1	14 22.42	-20 37.5	2.065	3.069	2.0	21.2	5 1	14 22.44	-14 17.4	2.410	3.416	0.8	20.2
5 11	14 13.92	-19 50.1	2.080	3.070	4.5	21.4	5 11	14 13.86	-13 54.2	2.433	3.420	4.3	20.5
5 21	14 6.48	-19 1.5	2.122	3.070	8.0	21.6	5 21	14 6.19	-13 33.7	2.484	3.422	7.5	20.7
5 31	14 0.76	-18 16.8	2.189	3.070	11.1	21.8	5 31	14 0.01	-13 18.7	2.561	3.424	10.3	20.9
143511	2003 <i>EZ</i> ₅		4 28.6 336°90'	5°9'/22.9 18			60160	1999 <i>UQ</i> ₂₅		4 28.6 179°66'	0°8'/29.4 18		
3 22	14 46.18	+0 58.8	2.187	3.018	12.3	20.1	3 22	14 49.54	-19 9.2	2.354	3.146	12.8	18.9
4 1	14 42.44	+2 5.8	2.114	3.017	9.8	20.0	4 1	14 45.04	-18 47.6	2.263	3.147	10.0	18.7
4 11	14 36.90	+3 11.4	2.066	3.016	7.3	19.8	4 11	14 38.65	-18 14.9	2.195	3.148	6.8	18.5
4 21	14 30.11	+4 9.8	2.043	3.015	6.0	19.7	4 21	14 30.90	-17 32.6	2.154	3.148	3.2	18.3
5 1	14 22.76	+4 55.6	2.048	3.014	6.6	19.8	5 1	14 22.54	-16 43.5	2.141	3.148	1.0	18.1
5 11	14 15.69	+5 24.3	2.078	3.013	8.8	19.9	5 11	14 14.43	-15 52.1	2.158	3.147	4.4	18.4
5 21	14 9.57	+5 34.2	2.134	3.012	11.4	20.0	5 21	14 7.31	-15 3.0	2.202	3.146	7.9	18.6
5 31	14 5.00	+5 24.8	2.210	3.011	13.8	20.2	5 31	14 1.79	-14 20.4	2.271	3.145	11.0	18.8
409810	2006 <i>HQ</i> ₉₁		4 28.6 288°28'	4°9'/25.7 17			432852	2011 <i>HG</i> ₆₄		4 28.6 316°43'	2°6'/26.9 17		
3 22	14 51.44	-5 12.8	1.468	2.310	16.7	20.5	3 22	14 48.85	-9 10.5	1.728	2.561	14.9	21.2
4 1	14 47.73	-4 34.5	1.378	2.292	13.1	20.3	4 1	14 45.21	-8 49.3	1.640	2.550	11.6	20.9
4 11	14 41.12	-3 52.2	1.309	2.274	9.1	20.0	4 11	14 39.15	-8 22.6	1.574	2.539	7.7	20.7
4 21	14 32.21	-3 11.7	1.264	2.255	5.5	19.7	4 21	14 31.25	-7 53.9	1.532	2.528	3.8	20.4
5 1	14 22.07	-2 39.8	1.243	2.237	5.7	19.7	5 1	14 22.43	-7 27.9	1.516	2.518	3.2	20.3
5 11	14 12.05	-2 22.9	1.248	2.219	9.6	19.8	5 11	14 13.81	-7 9.3	1.527	2.508	7.1	20.5
5 21	14 3.44	-2 25.1	1.275	2.201	14.0	20.0	5 21	14 6.40	-7 2.0	1.563	2.498	11.2	20.8
5 31	13 57.25	-2 47.9	1.323	2.183	18.2	20.2	5 31	14 1.01	-7 8.4	1.620	2.489	15.0	21.0
502688	2015 <i>CD</i> ₆₂		4 28.6 53°52'	6°3'/2.7 17			428885	2008 <i>UR</i> ₃₀₆		4 28.6 151°90'	3°6'/25.1 17		
3 22	14 55.01	-29 20.2	1.802	2.563	17.2	20.1	3 22	14 48.39	-6 1.7	2.295	3.117	12.1	21.8
4 1	14 50.14	-30 21.5	1.728	2.577	14.3	20.0	4 1	14 44.03	-5 3.0	2.220	3.123	9.3	21.6
4 11	14 42.47	-31 5.7	1.674	2.591	11.2	19.8	4 11	14 37.89	-4 1.0	2.169	3.129	6.3	21.4
4 21	14 32.70	-31 29.5	1.643	2.605	8.1	19.6	4 21	14 30.54	-3 0.1	2.146	3.135	3.9	21.3
5 1	14 21.95	-31 31.5	1.638	2.619	6.3	19.5	5 1	14 22.69	-2 5.5	2.151	3.140	4.2	21.3
5 11	14 11.55	-31 14.3	1.659	2.634	7.2	19.6	5 11	14 15.13	-1 21.7	2.184	3.145	6.8	21.5
5 21	14 2.70	-30 43.3	1.705	2.649	9.9	19.8	5 21	14 8.54	-0 51.7	2.243	3.149	9.7	21.7
5 31	13 56.28	-30 5.8	1.774	2.663	12.9	20.0	5 31	14 3.49	-0 37.3	2.326	3.153	12.4	21.9
380840	2006 <i>AK</i> ₆₇		4 28.6 281°09'	7°8'/4.9 18			188134	2002 <i>CE</i> ₂₃₀		4 28.6 327°64'	0°9'/27.9 18		
3 22	14 50.94	-36 12.7	1.925	2.654	17.3	20.3	3 22	14 45.88	-13 40.9	2.076	2.897	13.2	20.3
4 1	14 47.23	-36 45.2	1.823	2.642	15.0	20.0	4 1	14 42.51	-13 16.9	1.985	2.888	10.3	20.0
4 11	14 40.72	-36 55.5	1.740	2.630	12.3	19.8	4 11	14 37.14	-12 44.4	1.916	2.879	6.8	19.8
4 21	14 32.01	-36 39.8	1.677	2.617	9.7	19.6	4 21	14 30.30	-12 6.1	1.873	2.871	2.9	19.6
5 1	14 22.13	-35 56.3	1.639	2.605	8.0	19.5	5 1	14 22.76	-11 25.8	1.857	2.862	1.6	19.4
5 11	14 12.43	-34 48.0	1.627	2.593	8.2	19.5	5 11	14 15.40	-10 47.9	1.868	2.855	5.4	19.7
5 21	14 4.13	-33 21.5	1.639	2.580	10.4	19.6	5 21	14 9.04	-10 16.8	1.906	2.847	9.2	19.9
5 31	13 58.19	-31 46.3	1.675	2.568	13.3	19.7	5 31	14 4.34	-9 56.0	1.967	2.840	12.5	20.1
470195	2006 <i>VB</i> ₄₄		4 28.6 147°46'	0°4'/29.1 18			342531	2008 <i>UB</i> ₂₁₅		4 28.6 274°33'	3°4'/30.7 17		
3 22	14 47.00	-18 44.4	2.812	3.601	11.0	21.8	3 22	14 53.89	-22 44.3	2.024	2.805	14.9	21.1
4 1	14 42.70	-18 12.1	2.725	3.608	8.6	21.7	4 1	14 49.20	-23 19.1	1.913	2.785	12.2	20.9
4 11	14 36.90	-17 30.3	2.663	3.616	5.7	21.5	4 11	14 41.93	-23 42.9	1.824	2.764	8.9	20.6
4 21	14 30.06	-16 40.8	2.628	3.623	2.7	21.3	4 21	14 32.58	-23 53.9	1.759	2.743	5.4	20.4
5 1	14 22.79	-15 46.5	2.623	3.630	0.7	21.1	5 1	14 22.03	-23 51.6	1.722	2.722	3.4	20.2
5 11	14 15.77	-14 51.4	2.648	3.636	3.8	21.4	5 11	14 11.42	-23 38.3	1.713	2.700	5.7	20.3
5 21	14 9.57	-13 59.3	2.701	3.642	6.8	21.6	5 21	14 1.88	-23 17.7	1.730	2.679	9.4	20.5
5 31	14 4.67	-13 13.7	2.780	3.648	9.4	21.8	5 31	13 54.37	-22 55.4	1.772	2.657	13.1	20.6
498655	2008 <i>SM</i> ₁₀₁		4 28.6 188°29'	2°4'/26.4 18									

EPHEMERIDES

4 28.6

4 28.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
93567	2000 <i>UD</i> ₃₉		4 28.6 175°61	0°9/27.9	17		345183	2005 <i>TB</i> ₉₉		4 28.7 163°26	3°0/30.6	17	
3 22	14 50.77	-13 24.6	2.093	2.904	13.5	20.6	3 22	14 53.22	-23 23.1	1.444	2.249	18.8	20.8
4 1	14 46.17	-13 4.1	2.008	2.906	10.4	20.4	4 1	14 49.22	-23 20.6	1.364	2.251	15.1	20.6
4 11	14 39.50	-12 35.9	1.946	2.907	6.9	20.2	4 11	14 42.12	-22 58.3	1.303	2.252	10.8	20.3
4 21	14 31.33	-12 2.3	1.910	2.907	3.0	19.9	4 21	14 32.66	-22 16.0	1.265	2.254	6.0	20.0
5 1	14 22.48	-11 26.8	1.902	2.908	1.6	19.8	5 1	14 22.10	-21 16.6	1.252	2.255	3.0	19.9
5 11	14 13.89	-10 53.8	1.923	2.908	5.4	20.1	5 11	14 11.95	-20 7.2	1.264	2.256	6.4	20.1
5 21	14 6.40	-10 27.3	1.970	2.908	9.1	20.3	5 21	14 3.52	-18 56.6	1.301	2.257	11.1	20.3
5 31	14 0.67	-10 10.5	2.042	2.907	12.4	20.5	5 31	13 57.78	-17 53.6	1.360	2.258	15.5	20.6
394040	2005 <i>WD</i> ₁₀₀		4 28.6 264°99	3°0/26.0	18		375693	2009 <i>NG</i> ₂		4 28.7 278°79	2°2/27.1	17	
3 22	14 48.36	-5 21.2	2.482	3.300	11.4	20.6	3 22	14 50.27	-11 21.6	1.733	2.560	15.2	21.7
4 1	14 44.00	-4 59.2	2.392	3.293	8.8	20.4	4 1	14 46.50	-10 46.7	1.630	2.537	11.8	21.4
4 11	14 37.92	-4 35.6	2.326	3.286	6.0	20.2	4 11	14 40.17	-10 2.4	1.550	2.514	7.9	21.1
4 21	14 30.60	-4 13.8	2.287	3.278	3.5	20.0	4 21	14 31.81	-9 12.2	1.494	2.491	3.7	20.8
5 1	14 22.70	-3 56.8	2.277	3.271	3.5	20.0	5 1	14 22.33	-8 21.2	1.465	2.467	3.0	20.7
5 11	14 14.97	-3 47.9	2.295	3.263	6.0	20.1	5 11	14 12.91	-7 35.8	1.462	2.443	7.2	20.9
5 21	14 8.09	-3 49.0	2.340	3.256	9.0	20.3	5 21	14 4.65	-7 1.7	1.484	2.419	11.7	21.1
5 31	14 2.63	-4 1.4	2.409	3.248	11.7	20.5	5 31	13 58.47	-6 43.0	1.529	2.395	15.8	21.3
212420	2006 <i>KD</i> ₁₁₆		4 28.6 226°96	1°8/27.4	17		67937	2000 <i>WT</i> ₁₃₇		4 28.7 160°71	0°3/28.9	18	
3 22	14 51.79	-12 22.2	1.674	2.499	15.7	21.1	3 22	14 54.38	-16 55.3	1.978	2.777	14.6	20.4
4 1	14 47.56	-11 49.5	1.588	2.493	12.2	20.8	4 1	14 49.10	-16 42.5	1.895	2.784	11.4	20.2
4 11	14 40.74	-11 7.1	1.523	2.487	8.1	20.6	4 11	14 41.50	-16 19.0	1.834	2.790	7.6	20.0
4 21	14 31.98	-10 18.5	1.482	2.480	3.6	20.3	4 21	14 32.24	-15 46.5	1.800	2.795	3.5	19.7
5 1	14 22.26	-9 29.0	1.469	2.473	2.5	20.2	5 1	14 22.25	-15 8.1	1.793	2.800	1.0	19.6
5 11	14 12.81	-8 44.7	1.482	2.466	6.9	20.4	5 11	14 12.58	-14 28.5	1.816	2.804	5.2	19.9
5 21	14 4.70	-8 11.0	1.521	2.458	11.3	20.7	5 21	14 4.18	-13 52.4	1.865	2.808	9.2	20.1
5 31	13 58.77	-7 52.0	1.582	2.450	15.3	20.9	5 31	13 57.78	-13 24.4	1.939	2.810	12.7	20.3
42610	1998 <i>DD</i> ₃₅		4 28.6 49°95	2°4/27.2	18		409086	2003 <i>SY</i> ₃₂₉		4 28.7 347°61	3°9/30.8	17	
3 22	14 50.80	-11 35.6	1.285	2.130	18.4	18.7	3 22	14 49.91	-22 35.9	1.283	2.105	19.8	20.7
4 1	14 47.14	-11 0.2	1.227	2.143	14.1	18.5	4 1	14 47.12	-23 5.0	1.204	2.100	16.0	20.5
4 11	14 40.53	-10 15.1	1.190	2.158	9.3	18.3	4 11	14 41.02	-23 16.4	1.143	2.096	11.6	20.2
4 21	14 31.84	-9 25.5	1.174	2.172	4.2	18.0	4 21	14 32.29	-23 8.4	1.103	2.092	6.8	19.9
5 1	14 22.34	-8 38.1	1.184	2.188	3.2	18.0	5 1	14 22.22	-22 42.1	1.087	2.089	3.9	19.7
5 11	14 13.48	-8 0.1	1.218	2.203	7.9	18.3	5 11	14 12.43	-22 2.6	1.094	2.087	7.0	19.9
5 21	14 6.40	-7 36.4	1.276	2.219	12.5	18.6	5 21	14 4.43	-21 17.8	1.124	2.086	11.9	20.2
5 31	14 1.90	-7 30.2	1.354	2.235	16.6	18.9	5 31	13 59.31	-20 36.4	1.175	2.085	16.4	20.4
74590	1999 <i>OG</i> ₂		4 28.6 279°35	11°0/18.3	18 R		2773	Brooks		4 28.7 177°16	2°0/27.2	18	
3 22	14 46.43	-3 21.0	1.100	1.969	19.1	17.3	3 22	14 53.22	-11 17.7	1.838	2.656	14.8	17.4
4 1	14 44.48	+0 12.6	1.028	1.954	15.2	17.1	4 1	14 48.34	-10 44.9	1.756	2.658	11.4	17.1
4 11	14 39.25	+4 5.0	0.980	1.940	11.9	16.8	4 11	14 41.08	-10 4.4	1.697	2.659	7.5	16.9
4 21	14 31.47	+7 55.9	0.955	1.925	11.1	16.7	4 21	14 32.09	-9 19.6	1.663	2.660	3.5	16.7
5 1	14 22.41	+11 21.5	0.955	1.910	13.6	16.8	5 1	14 22.32	-8 35.5	1.658	2.660	2.7	16.6
5 11	14 13.68	+14 2.5	0.978	1.896	17.8	17.0	5 11	14 12.87	-7 57.3	1.680	2.660	6.6	16.8
5 21	14 6.69	+15 49.4	1.019	1.881	22.1	17.2	5 21	14 4.71	-7 29.5	1.728	2.659	10.6	17.1
5 31	14 2.50	+16 42.4	1.074	1.867	25.8	17.4	5 31	13 58.58	-7 15.3	1.799	2.658	14.1	17.3
456798	2007 <i>TL</i> ₂₄₄		4 28.6 199°70	4°5/1.8	17		269247	2008 <i>QN</i> ₂₀		4 28.7 294°53	7°9/2.8	18	
3 22	14 54.27	-26 54.9	1.783	2.557	16.9	21.2	3 22	14 54.88	-31 45.5	1.845	2.595	17.3	19.7
4 1	14 49.64	-27 13.0	1.692	2.555	13.9	21.0	4 1	14 50.76	-32 56.1	1.729	2.566	14.9	19.5
4 11	14 42.23	-27 13.2	1.621	2.553	10.4	20.7	4 11	14 43.50	-33 52.0	1.632	2.537	12.1	19.2
4 21	14 32.67	-26 53.7	1.573	2.549	6.8	20.5	4 21	14 33.52	-34 27.7	1.557	2.508	9.5	19.0
5 1	14 22.05	-26 15.1	1.551	2.546	4.5	20.4	5 1	14 21.79	-34 39.0	1.507	2.478	7.9	18.8
5 11	14 11.69	-25 21.5	1.555	2.542	6.3	20.5	5 11	14 9.74	-34 25.4	1.482	2.449	8.7	18.8
5 21	14 2.77	-24 20.0	1.586	2.537	9.9	20.7	5 21	13 58.87	-33 51.0	1.481	2.419	11.5	18.9
5 31	13 56.22	-23 18.5	1.641	2.532	13.6	20.9	5 31	13 50.48	-33 3.5	1.503	2.390	14.9	19.0
343153	2009 <i>HY</i> ₁₅		4 28.7 82°80	2°0/27.1	18		188785	2005 <i>VB</i> ₄₁		4 28.7 250°49	0°6/28.1	17	
3 22	14 50.11	-8 49.8	2.208	3.025	12.7	20.3	3 22	14 49.97	-15 37.3	2.055	2.864	13.8	21.2
4 1	14 45.46	-8 36.7	2.132	3.033	9.7	20.1	4 1	14 45.81	-15 1.5	1.951	2.847	10.8	21.0
4 11	14 38.92	-8 20.2	2.079	3.041	6.4	19.9	4 11	14 39.45	-14 14.2	1.870	2.830	7.2	20.7
4 21	14 31.04	-8 2.9	2.053	3.049	3.1	19.7	4 21	14 31.42	-13 17.8	1.815	2.812	3.1	20.5
5 1	14 22.61	-7 47.9	2.056	3.057	2.5	19.7	5 1	14 22.52	-12 16.5	1.788	2.794	1.4	20.3
5 11	14 14.47	-7 38.5	2.087	3.065	5.6	19.9	5 11	14 13.75	-11 15.9	1.790	2.776	5.6	20.5
5 21	14 7.37	-7 37.1	2.144	3.073	9.0	20.1	5 21	14 6.01	-10 21.7	1.818	2.757	9.7	20.7
5 31	14 1.91	-7 45.3	2.225	3.081	11.9	20.3	5 31	14 0.07	-9 38.8	1.870	2.737	13.3	20.9
193354	2000 <i>UX</i> ₃₄		4 28.7 172°69	0°6/29.5	18		94001	2000 <i>XP</i> ₂₁		4 28.7 193°10	4°6/2.9	17	
3 22	14 43.65	-18 50.3	4.017	4.796	8.1	21.3	3 22	14 52.80	-30 38.9	2.490	3.226	13.6	20.9
4 1	14 39.76	-18 33.0	3.921	4.798	6.3	21.2	4 1	14 47.76	-30 53.1	2.390	3.224	11.4	20.7
4 11	14 34.82	-18 9.4	3.851	4.800	4.3	21.0	4 11	14 40.60	-30 51.7	2.311	3.221	8.8	20.6
4 21	14 29.16	-17 40.4	3.809	4.802	2.1	20.9	4 21	14 31.88	-30 33.0	2.257	3.218	6.3	20.4
5 1	14 23.19	-17 7.8	3.797	4.803	0.7	20.7	5 1	14 22.40	-29 57.5	2.230	3.214	4.7	20.3
5 11	14 17.35	-16 33.7	3.816	4.805	2.7	20.9	5 11	14 13.12	-29 7.9	2.232	3.210	5.5	20.3
5 21	14 12.04	-16 0.5	3.864	4.806	4.9	21.1	5 21	14 4.90	-28 9.3	2.262	3.205	7.8	20.5
5 31	14 7.61	-15 30.2	3.939	4.806	6.9	21.2	5 31	13 58.44	-27 7.5	2.317	3.199	10.5	20.6
138851	2000 <i>WW</i> ₇		4 28.7 200°11	3°3/24.9	18		271892	2004 <i>VU</i> ₂₈		4 28.7 190°31	1°0/27.8	17	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
229964	1999 TA ₁₅₈		4 28.7 180°58	2°0/30.4	17		464016	2014 WQ ₁₂₁		4 28.7 204°38	0°4/28.4	17	
3 22	14 50.87	-21 54.3	2.288	3.070	13.4	21.0	3 22	14 54.67	-14 4.6	1.825	2.636	15.2	21.8
4 1	14 46.23	-21 50.6	2.196	3.071	10.7	20.8	4 1	14 49.65	-14 0.6	1.736	2.632	11.9	21.5
4 11	14 39.55	-21 34.5	2.127	3.071	7.5	20.6	4 11	14 42.09	-13 48.3	1.669	2.629	7.9	21.3
4 21	14 31.40	-21 6.6	2.083	3.072	4.1	20.4	4 21	14 32.63	-13 29.3	1.627	2.624	3.5	21.0
5 1	14 22.56	-20 28.9	2.067	3.071	2.0	20.2	5 1	14 22.22	-13 6.5	1.613	2.619	1.3	20.8
5 11	14 13.96	-19 45.2	2.081	3.071	4.5	20.4	5 11	14 12.03	-12 44.3	1.626	2.614	5.9	21.1
5 21	14 6.40	-19 0.3	2.121	3.069	8.0	20.6	5 21	14 3.14	-12 27.0	1.666	2.608	10.2	21.3
5 31	14 0.55	-18 18.9	2.187	3.068	11.1	20.8	5 31	13 56.38	-12 18.2	1.730	2.602	14.0	21.6
292457	2006 SW ₃₆₅		4 28.7 166°04	0°4/28.3	17		37027	2000 UO ₆		4 28.7 125°26	0°1/28.7	18	
3 22	14 47.68	-15 5.7	2.709	3.509	11.1	22.2	3 22	14 47.89	-16 14.1	2.725	3.520	11.1	20.3
4 1	14 43.33	-14 41.0	2.621	3.512	8.6	22.0	4 1	14 43.45	-15 53.3	2.644	3.532	8.6	20.3
4 11	14 37.41	-14 8.9	2.558	3.515	5.6	21.8	4 11	14 37.47	-15 24.7	2.587	3.543	5.7	20.0
4 21	14 30.39	-13 31.5	2.521	3.518	2.5	21.6	4 21	14 30.42	-14 50.4	2.558	3.554	2.5	19.8
5 1	14 22.88	-12 51.5	2.514	3.521	1.0	21.5	5 1	14 22.94	-14 12.8	2.558	3.565	0.8	19.6
5 11	14 15.59	-12 12.6	2.537	3.523	4.2	21.7	5 11	14 15.70	-13 35.4	2.588	3.576	4.0	19.9
5 21	14 9.12	-11 38.0	2.587	3.524	7.3	21.9	5 21	14 9.32	-13 1.6	2.646	3.586	7.0	20.1
5 31	14 3.99	-11 10.7	2.663	3.526	10.0	22.1	5 31	14 4.28	-12 34.2	2.729	3.596	9.6	20.3
233695	2008 SB ₃₀		4 28.7 132°55	1°4/29.8	17		184287	2005 CW ₁₇		4 28.7 333°40	2°4/24.8	18	
3 22	14 50.67	-19 55.0	2.110	2.904	14.0	20.9	3 22	14 40.28	-3 7.7	4.407	5.222	6.9	20.1
4 1	14 46.16	-19 49.6	2.026	2.910	11.0	20.7	4 1	14 37.10	-2 38.0	4.323	5.221	5.3	20.0
4 11	14 39.53	-19 32.5	1.965	2.916	7.6	20.5	4 11	14 33.05	-2 8.1	4.265	5.220	3.7	19.9
4 21	14 31.39	-19 4.6	1.930	2.922	3.8	20.3	4 21	14 28.43	-1 40.2	4.235	5.220	2.5	19.8
5 1	14 22.58	-18 28.4	1.922	2.927	1.5	20.1	5 1	14 23.55	-1 16.2	4.236	5.219	2.7	19.8
5 11	14 14.06	-17 48.2	1.942	2.933	4.7	20.4	5 11	14 18.78	-0 57.9	4.265	5.218	4.1	19.9
5 21	14 6.68	-17 8.5	1.990	2.938	8.4	20.6	5 21	14 14.43	-0 46.6	4.322	5.218	5.7	20.0
5 31	14 1.10	-16 34.2	2.062	2.943	11.7	20.8	5 31	14 10.80	-0 43.0	4.404	5.217	7.2	20.1
297564	2001 RJ ₂₉		4 28.7 256°97	3°0/30.3	16		80716	2000 CQ ₂₁		4 28.7 150°46	2°7/26.2	16	
3 22	14 54.69	-21 29.5	1.537	2.341	17.9	21.2	3 22	14 52.12	-9 8.4	2.233	3.045	12.7	21.1
4 1	14 50.48	-21 52.0	1.442	2.328	14.5	20.9	4 1	14 46.94	-8 15.7	2.158	3.056	9.8	20.9
4 11	14 43.14	-22 0.0	1.366	2.315	10.3	20.7	4 11	14 39.88	-7 17.4	2.107	3.067	6.5	20.7
4 21	14 33.26	-21 52.0	1.312	2.302	5.8	20.4	4 21	14 31.51	-6 17.8	2.084	3.077	3.4	20.6
5 1	14 21.95	-21 28.6	1.284	2.288	3.1	20.2	5 1	14 22.62	-5 21.6	2.089	3.087	3.3	20.6
5 11	14 10.73	-20 54.1	1.283	2.274	6.5	20.3	5 11	14 14.08	-4 33.8	2.124	3.095	6.2	20.8
5 21	14 1.01	-20 14.8	1.306	2.259	11.3	20.5	5 21	14 6.63	-3 58.0	2.186	3.102	9.5	21.0
5 31	13 53.92	-19 38.4	1.351	2.245	15.8	20.8	5 31	14 0.84	-3 36.3	2.272	3.109	12.4	21.2
59861	1999 RY ₉₅		4 28.7 243°06	1°8/26.9	18		217507	2006 TS ₆₂		4 28.7 332°22	5°0/2.6	17	
3 22	14 47.21	-9 48.8	2.657	3.469	10.9	19.3	3 22	14 50.85	-29 2.2	2.164	2.920	14.8	20.1
4 1	14 43.06	-9 19.8	2.560	3.459	8.4	19.1	4 1	14 46.60	-29 36.6	2.070	2.918	12.3	19.9
4 11	14 37.30	-8 46.1	2.487	3.448	5.5	18.9	4 11	14 40.04	-29 55.8	1.998	2.916	9.5	19.8
4 21	14 30.37	-8 10.5	2.442	3.437	2.7	18.7	4 21	14 31.72	-29 57.8	1.950	2.915	6.8	19.6
5 1	14 22.88	-7 36.0	2.425	3.426	2.3	18.7	5 1	14 22.52	-29 42.3	1.927	2.913	5.1	19.5
5 11	14 15.53	-7 6.3	2.438	3.415	5.1	18.8	5 11	14 13.50	-29 11.9	1.932	2.911	6.0	19.5
5 21	14 8.95	-6 44.2	2.478	3.403	8.1	19.0	5 21	14 5.63	-28 31.3	1.963	2.910	8.6	19.7
5 31	14 3.69	-6 32.0	2.543	3.391	10.8	19.2	5 31	13 59.68	-27 46.5	2.019	2.908	11.5	19.9
370104	2001 TT ₁₁₀		4 28.7 213°15	1°9/30.2	17		61610	2000 QK ₉₅		4 28.7 197°52	1°9/1.9	18 R	
3 22	14 53.42	-21 15.7	2.360	3.137	13.2	22.0	3 22	14 41.99	-26 11.0	5.012	5.755	7.1	20.1
4 1	14 48.24	-21 19.9	2.257	3.129	10.5	21.8	4 1	14 38.39	-26 16.1	4.909	5.754	5.8	20.0
4 11	14 40.94	-21 12.9	2.176	3.120	7.4	21.6	4 11	14 33.91	-26 14.3	4.830	5.752	4.3	19.9
4 21	14 32.06	-20 54.7	2.122	3.110	4.0	21.4	4 21	14 28.82	-26 5.9	4.779	5.750	2.8	19.8
5 1	14 22.37	-20 26.7	2.096	3.100	1.9	21.2	5 1	14 23.44	-25 51.6	4.756	5.748	1.9	19.7
5 11	14 12.81	-19 52.3	2.100	3.089	4.6	21.4	5 11	14 18.14	-25 32.6	4.764	5.747	2.6	19.8
5 21	14 4.24	-19 15.5	2.132	3.077	8.1	21.6	5 21	14 13.25	-25 10.5	4.801	5.745	4.0	19.9
5 31	13 57.39	-18 41.2	2.189	3.065	11.3	21.7	5 31	14 9.07	-24 47.4	4.865	5.742	5.5	20.0
465861	2010 RQ ₁₁₁		4 28.7 191°07	2°1/30.2	16		22236	3535 T ₋₃		4 28.7 144°83	0°3/28.9	18	
3 22	14 55.03	-20 56.7	2.022	2.807	14.8	22.3	3 22	14 54.21	-17 4.1	1.954	2.754	14.7	19.2
4 1	14 49.78	-21 7.3	1.929	2.806	11.8	22.1	4 1	14 48.97	-16 50.1	1.876	2.765	11.5	19.0
4 11	14 42.10	-21 5.8	1.858	2.804	8.3	21.9	4 11	14 41.43	-16 25.2	1.819	2.775	7.7	18.8
4 21	14 32.60	-20 52.0	1.812	2.802	4.5	21.6	4 21	14 32.26	-15 51.1	1.788	2.784	3.5	18.5
5 1	14 22.21	-20 27.4	1.795	2.799	2.2	21.5	5 1	14 22.40	-15 11.3	1.786	2.793	1.0	18.3
5 11	14 12.03	-19 55.5	1.805	2.795	5.1	21.6	5 11	14 12.90	-14 30.4	1.812	2.801	5.2	18.7
5 21	14 3.07	-19 21.2	1.843	2.791	9.0	21.9	5 21	14 4.70	-13 53.3	1.865	2.808	9.2	18.9
5 31	13 56.14	-18 49.9	1.906	2.786	12.5	22.1	5 31	13 58.50	-13 24.5	1.942	2.815	12.7	19.1
95255	2002 CU ₅₆		4 28.7 24°30	2°7/30.9	17		99398	2002 AP ₂₉		4 28.7 204°73	4°3/24.5	18	
3 22	14 48.56	-22 52.9	2.154	2.941	14.0	19.0	3 22	14 48.06	-1 22.2	2.609	3.428	10.9	19.7
4 1	14 44.59	-23 6.4	2.069	2.945	11.2	18.8	4 1	14 43.66	-0 40.6	2.526	3.424	8.5	19.6
4 11	14 38.54	-23 7.5	2.006	2.949	8.0	18.6	4 11	14 37.66	+0 0.6	2.468	3.421	6.1	19.4
4 21	14 30.98	-22 56.0	1.968	2.953	4.7	18.4	4 21	14 30.54	+0 37.4	2.437	3.417	4.4	19.3
5 1	14 22.72	-22 33.4	1.957	2.958	2.7	18.3	5 1	14 22.92	+1 6.1	2.435	3.413	4.8	19.3
5 11	14 14.71	-22 3.1	1.973	2.963	4.8	18.4	5 11	14 15.50	+1 23.3	2.460	3.409	6.9	19.4
5 21	14 7.78	-21 29.5	2.016	2.968	8.1	18.7	5 21	14 8.90	+1 27.3	2.512	3.405	9.4	19.6
5 31	14 2.61	-20 57.3	2.084	2.974	11.2	18.9	5 31	14 3.63	+1 17.3	2.588	3.400	11.7	19.7
387741	2003 HU ₅		4 28.7 322°21	5°2/30.2	16		213408	2001 WJ ₂₆		4 28.7 63°04	5°6/25.4	18	
3 22	14 58.58	-21 48.3	1.804	2.588	16.4	19.8	3 22						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
497621	2006 QY ₄₉		4 28.7 261°72	1°0/29.4	17		183302	2002 UB ₂₆		4 28.7 146°90	2°3/27.3	17	
3 22	14 52.29	-18 37.7	1.804	2.609	15.6	22.3	3 22	14 56.63	-8 6.2	1.963	2.774	14.2	20.4
4 1	14 48.11	-18 28.1	1.698	2.589	12.4	22.1	4 1	14 50.79	-8 3.2	1.885	2.782	11.0	20.2
4 11	14 41.30	-18 5.3	1.614	2.569	8.5	21.8	4 11	14 42.64	-7 57.5	1.830	2.789	7.3	20.0
4 21	14 32.39	-17 29.9	1.554	2.548	4.1	21.5	4 21	14 32.83	-7 51.6	1.801	2.796	3.6	19.8
5 1	14 22.33	-16 44.6	1.520	2.527	1.3	21.2	5 1	14 22.30	-7 48.4	1.801	2.803	2.8	19.7
5 11	14 12.30	-15 54.7	1.514	2.505	5.8	21.5	5 11	14 12.12	-7 50.9	1.830	2.809	6.3	19.9
5 21	14 3.47	-15 6.2	1.535	2.483	10.4	21.7	5 21	14 3.21	-8 1.5	1.886	2.814	10.0	20.2
5 31	13 56.77	-14 25.4	1.578	2.460	14.6	21.9	5 31	13 56.29	-8 21.6	1.965	2.819	13.3	20.4
329585	2002 XW ₁₀₇		4 28.7 85°03	9°3/23.3	16		357004	1999 FU ₁₂		4 28.7 302°70	2°1/29.7	17	
3 22	14 56.68	+9 26.6	1.721	2.536	15.8	21.4	3 22	14 53.20	-18 13.4	1.394	2.216	18.4	20.6
4 1	14 50.76	+10 15.9	1.674	2.556	13.0	21.2	4 1	14 49.57	-18 42.7	1.303	2.203	14.8	20.3
4 11	14 42.47	+10 53.3	1.649	2.576	10.6	21.1	4 11	14 42.69	-19 0.6	1.233	2.190	10.3	20.0
4 21	14 32.64	+11 12.2	1.648	2.595	9.3	21.1	4 21	14 33.16	-19 6.1	1.184	2.178	5.3	19.7
5 1	14 22.33	+11 7.5	1.673	2.614	9.8	21.1	5 1	14 22.14	-19 0.2	1.160	2.166	2.2	19.5
5 11	14 12.67	+10 37.6	1.722	2.633	11.7	21.3	5 11	14 11.21	-18 46.5	1.161	2.154	6.7	19.7
5 21	14 4.56	+9 44.3	1.795	2.652	14.2	21.5	5 21	14 1.86	-18 30.6	1.186	2.143	11.9	19.9
5 31	13 58.62	+8 31.2	1.888	2.670	16.5	21.7	5 31	13 55.26	-18 18.9	1.232	2.132	16.6	20.2
35434	1998 BF ₁₃		4 28.7 152°57	1°2/27.7	18		519315	2011 EN ₈₉		4 28.7 314°96	0°1/28.8	17	
3 22	14 51.75	-12 44.8	2.271	3.076	12.7	20.1	3 22	14 48.26	-16 47.0	1.675	2.497	15.8	21.7
4 1	14 46.72	-12 16.5	2.190	3.085	9.8	19.9	4 1	14 44.97	-16 28.2	1.586	2.488	12.4	21.4
4 11	14 39.77	-11 41.2	2.134	3.094	6.4	19.7	4 11	14 39.15	-15 56.6	1.518	2.480	8.4	21.2
4 21	14 31.50	-11 1.5	2.104	3.101	2.8	19.5	4 21	14 31.41	-15 14.4	1.474	2.471	3.8	20.9
5 1	14 22.65	-10 21.0	2.104	3.108	1.8	19.4	5 1	14 22.73	-14 25.5	1.456	2.463	1.1	20.6
5 11	14 14.12	-9 44.0	2.132	3.115	5.2	19.6	5 11	14 14.26	-13 36.0	1.465	2.456	5.9	20.9
5 21	14 6.63	-9 14.1	2.188	3.120	8.7	19.9	5 21	14 7.08	-12 52.0	1.498	2.448	10.5	21.2
5 31	14 0.81	-8 54.2	2.269	3.126	11.7	20.1	5 31	14 2.02	-12 18.7	1.554	2.441	14.5	21.4
113695	2002 TF ₁₂₁		4 28.7 189°84	3°2/30.9	18		2637	Bobrovnikoff		4 28.7 263°29	2°5/30.2	18	
3 22	14 55.73	-23 59.8	1.694	2.480	17.2	20.5	3 22	14 54.71	-20 58.6	1.701	2.499	16.7	17.0
4 1	14 50.85	-24 4.1	1.605	2.479	13.9	20.3	4 1	14 50.35	-21 11.1	1.593	2.477	13.5	16.8
4 11	14 43.10	-23 51.1	1.536	2.478	10.0	20.0	4 11	14 43.03	-21 9.8	1.505	2.454	9.6	16.5
4 21	14 33.15	-23 19.9	1.490	2.476	5.8	19.8	4 21	14 33.29	-20 53.7	1.441	2.431	5.2	16.2
5 1	14 22.14	-22 32.1	1.472	2.473	3.2	19.6	5 1	14 22.12	-20 23.7	1.403	2.407	2.5	15.9
5 11	14 11.41	-21 33.3	1.480	2.470	6.0	19.8	5 11	14 10.89	-19 43.8	1.392	2.383	6.1	16.1
5 21	14 2.21	-20 30.6	1.514	2.466	10.2	20.0	5 21	14 0.93	-19 0.3	1.406	2.357	10.9	16.3
5 31	13 55.46	-19 32.1	1.572	2.461	14.2	20.2	5 31	13 53.36	-18 20.3	1.444	2.332	15.3	16.5
248521	2005 WL ₅₄		4 28.7 234°77	9°4/5.9	18		62957	2000 VR ₃₇		4 28.7 137°36	1°8/27.3	18	
3 22	14 55.57	-38 57.2	1.357	2.098	22.7	20.4	3 22	14 54.05	-11 37.8	1.923	2.736	14.4	19.8
4 1	14 52.11	-39 3.4	1.262	2.089	19.9	20.1	4 1	14 48.78	-11 2.8	1.851	2.749	11.1	19.6
4 11	14 44.69	-38 33.5	1.182	2.078	16.4	19.8	4 11	14 41.28	-10 20.4	1.801	2.762	7.3	19.4
4 21	14 34.08	-37 20.3	1.120	2.067	12.7	19.6	4 21	14 32.22	-9 34.1	1.778	2.774	3.3	19.2
5 1	14 21.84	-35 21.0	1.081	2.055	9.9	19.4	5 1	14 22.55	-8 48.6	1.783	2.786	2.5	19.2
5 11	14 10.03	-32 42.4	1.065	2.043	9.9	19.3	5 11	14 13.29	-8 9.0	1.816	2.797	6.2	19.4
5 21	14 0.45	-29 40.1	1.074	2.030	13.0	19.5	5 21	14 5.33	-7 39.4	1.876	2.807	10.0	19.7
5 31	13 54.34	-26 34.0	1.107	2.016	17.3	19.7	5 31	13 59.33	-7 22.6	1.960	2.816	13.3	19.9
429210	2009 WC ₂₀₇		4 28.7 113°98	0°1/28.8	15		507347	2011 UG ₃₂₅		4 28.7 172°88	0°2/28.5	17	
3 22	14 52.00	-16 8.9	2.056	2.860	14.0	22.4	3 22	14 46.47	-16 39.5	2.635	3.434	11.3	22.3
4 1	14 47.11	-15 56.3	1.982	2.873	10.8	22.3	4 1	14 42.50	-16 0.9	2.545	3.436	8.8	22.1
4 11	14 40.13	-15 34.3	1.929	2.887	7.2	22.1	4 11	14 36.95	-15 13.0	2.480	3.437	5.8	21.9
4 21	14 31.68	-15 4.8	1.903	2.900	3.2	21.8	4 21	14 30.28	-14 18.1	2.441	3.438	2.6	21.7
5 1	14 22.62	-14 30.9	1.905	2.912	0.9	21.7	5 1	14 23.12	-13 19.8	2.432	3.439	0.9	21.6
5 11	14 13.92	-13 56.8	1.936	2.925	5.0	22.0	5 11	14 16.18	-12 22.3	2.453	3.439	4.2	21.8
5 21	14 6.43	-13 26.9	1.993	2.937	8.7	22.2	5 21	14 10.08	-11 29.7	2.501	3.440	7.4	22.0
5 31	14 0.77	-13 4.7	2.075	2.948	12.0	22.5	5 31	14 5.33	-10 45.6	2.575	3.440	10.2	22.2
385578	2004 VL ₇₆		4 28.7 189°27	0°1/28.6	18		362984	2013 CQ ₆₂		4 28.7 38°24	1°2/27.9	18	
3 22	14 53.82	-14 22.0	2.380	3.175	12.5	21.6	3 22	14 50.57	-14 22.3	1.226	2.070	19.2	20.9
4 1	14 48.38	-14 25.9	2.286	3.174	9.8	21.4	4 1	14 47.36	-13 54.5	1.161	2.075	14.9	20.6
4 11	14 40.95	-14 23.4	2.217	3.173	6.5	21.2	4 11	14 40.98	-13 13.4	1.114	2.082	9.8	20.4
4 21	14 32.07	-14 15.6	2.175	3.171	2.9	21.0	4 21	14 32.26	-12 22.7	1.090	2.088	4.3	20.1
5 1	14 22.48	-14 4.5	2.162	3.168	0.9	20.8	5 1	14 22.53	-11 29.1	1.090	2.095	2.1	19.9
5 11	14 13.08	-13 52.8	2.178	3.165	4.7	21.1	5 11	14 13.33	-10 40.7	1.114	2.103	7.6	20.3
5 21	14 4.67	-13 43.6	2.223	3.162	8.2	21.3	5 21	14 5.97	-10 4.3	1.160	2.111	12.8	20.6
5 31	13 57.90	-13 39.7	2.293	3.158	11.3	21.5	5 31	14 1.34	-9 44.7	1.227	2.119	17.2	20.9
295792	2008 UP ₂₅₈		4 28.7 251°96	0°7/29.2	16		388771	2007 YY ₃₀		4 28.7 150°72	1°4/27.4	17	
3 22	14 52.13	-18 23.0	1.497	2.316	17.6	21.4	3 22	14 48.90	-11 13.6	2.516	3.325	11.5	22.1
4 1	14 48.36	-18 7.2	1.407	2.306	13.9	21.2	4 1	14 44.38	-10 48.6	2.433	3.331	8.9	21.9
4 11	14 41.62	-17 35.9	1.337	2.296	9.5	20.9	4 11	14 38.19	-10 18.3	2.375	3.336	5.8	21.8
4 21	14 32.57	-16 50.2	1.290	2.286	4.5	20.5	4 21	14 30.83	-9 45.2	2.344	3.341	2.7	21.6
5 1	14 22.31	-15 54.2	1.269	2.276	1.3	20.3	5 1	14 22.96	-9 12.7	2.342	3.346	1.9	21.5
5 11	14 12.27	-14 54.8	1.274	2.265	6.5	20.6	5 11	14 15.33	-8 44.1	2.370	3.350	4.9	21.7
5 21	14 3.74	-13 59.6	1.303	2.254	11.6	20.8	5 21	14 8.60	-8 22.4	2.424	3.354	8.0	21.9
5 31	13 57.72	-13 15.7	1.354	2.243	16.1	21.1	5 31	14 3.29	-8 9.9	2.504	3.358	10.8	22.1
259762	2004 BX ₂		4 28.7 46°51	0°4/28.9	17		120736	1997 TA ₁₇		4 28.7 205°44	2°9/1.0	18	
3 22	14 51.07	-16 48.8	1.419	2.247									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
144861	2004 LA ₁₂		4 28.7 300°39	13°5/	5.9 18		198106	2004 SH ₅₁		4 28.7 154°55	1°1/27.9 18		
3 22	15 0.46	+24 59.6	2.343	3.086	14.2	20.5	3 22	14 53.48	-11 25.7	2.311	3.114	12.6	20.6
4 1	14 54.49	+27 47.7	2.236	3.022	13.6	20.3	4 1	14 48.08	-11 22.0	2.227	3.121	9.7	20.4
4 11	14 45.76	+30 28.3	2.152	2.956	13.6	20.2	4 11	14 40.74	-11 13.5	2.168	3.127	6.4	20.2
4 21	14 34.59	+32 49.4	2.094	2.888	14.4	20.1	4 21	14 32.01	-11 2.0	2.136	3.132	2.9	20.0
5 1	14 21.73	+34 39.8	2.060	2.818	15.9	20.1	5 1	14 22.67	-10 50.0	2.132	3.137	1.6	19.9
5 11	14 8.29	+35 51.9	2.047	2.745	17.7	20.1	5 11	14 13.58	-10 40.5	2.159	3.142	5.1	20.2
5 21	13 55.49	+36 22.9	2.052	2.670	19.7	20.1	5 21	14 5.53	-10 36.1	2.212	3.146	8.5	20.4
5 31	13 44.49	+36 14.3	2.070	2.593	21.6	20.1	5 31	13 59.14	-10 39.1	2.291	3.150	11.5	20.6
67973	2000 XV ₅		4 28.7 149°52	3°6/	1.1 18		48	Doris		4 28.7 134°29	1°6/27.1 18		
3 22	14 55.51	-24 7.5	1.758	2.542	16.8	20.0	3 22	14 46.90	-11 50.0	2.446	3.260	11.7	12.1
4 1	14 50.54	-24 28.0	1.676	2.548	13.6	19.8	4 1	14 42.91	-11 8.1	2.365	3.265	9.0	11.9
4 11	14 42.82	-24 32.9	1.614	2.553	9.8	19.6	4 11	14 37.26	-10 19.7	2.308	3.270	5.9	11.8
4 21	14 33.04	-24 20.9	1.575	2.558	6.0	19.4	4 21	14 30.44	-9 27.8	2.278	3.274	2.7	11.5
5 1	14 22.30	-23 53.1	1.564	2.563	3.6	19.3	5 1	14 23.14	-8 36.5	2.276	3.279	2.1	11.5
5 11	14 11.89	-23 13.6	1.579	2.568	5.9	19.4	5 11	14 16.08	-7 50.2	2.304	3.283	5.1	11.7
5 21	14 2.97	-22 28.7	1.620	2.571	9.7	19.6	5 21	14 9.92	-7 12.3	2.358	3.287	8.3	11.9
5 31	13 56.40	-21 45.2	1.685	2.575	13.4	19.9	5 31	14 5.18	-6 45.5	2.437	3.291	11.1	12.1
497678	2006 SF ₁₁		4 28.7 203°71	0°1/28.6 17			122921	2000 SM ₁₇₄		4 28.7 325°47	6°3/3.7 18		
3 22	14 52.49	-16 26.8	2.105	2.905	13.8	22.6	3 22	14 49.47	-31 51.7	1.729	2.492	17.7	19.5
4 1	14 47.66	-16 2.9	2.010	2.901	10.8	22.4	4 1	14 46.20	-32 10.0	1.638	2.487	15.0	19.3
4 11	14 40.65	-15 28.4	1.939	2.895	7.2	22.2	4 11	14 40.13	-32 5.9	1.565	2.482	11.8	19.1
4 21	14 32.02	-14 45.2	1.893	2.889	3.2	21.9	4 21	14 31.93	-31 36.9	1.514	2.477	8.5	18.9
5 1	14 22.61	-13 56.7	1.876	2.882	1.0	21.7	5 1	14 22.67	-30 43.1	1.488	2.473	6.4	18.7
5 11	14 13.41	-13 7.8	1.887	2.875	5.2	22.0	5 11	14 13.68	-29 29.0	1.487	2.468	7.1	18.7
5 21	14 5.32	-12 23.5	1.926	2.867	9.1	22.2	5 21	14 6.15	-28 2.8	1.511	2.464	10.1	18.9
5 31	13 59.04	-11 48.2	1.989	2.858	12.6	22.4	5 31	14 1.00	-26 33.9	1.558	2.461	13.6	19.1
60621	2000 FE ₈		4 28.7 33°09	0°1/29.9 15			381632	2008 YQ ₂₉		4 28.7 211°48	16°7/20.5 17		
3 22	14 27.60	-18 16.8	40.602	41.381	0.9	23.2	3 22	15 5.93	+20 53.7	1.313	2.105	20.9	20.6
4 1	14 26.95	-18 14.4	40.514	41.390	0.7	23.1	4 1	14 59.24	+22 17.0	1.256	2.101	18.9	20.5
4 11	14 26.21	-18 11.5	40.452	41.400	0.5	23.1	4 11	14 48.86	+23 16.2	1.216	2.096	17.3	20.3
4 21	14 25.43	-18 8.2	40.418	41.409	0.2	23.1	4 21	14 35.78	+23 38.0	1.196	2.090	16.7	20.3
5 1	14 24.62	-18 4.5	40.414	41.419	0.1	23.1	5 1	14 21.56	+23 12.7	1.197	2.083	17.5	20.3
5 11	14 23.82	-18 0.8	40.439	41.429	0.3	23.1	5 11	14 8.05	+21 58.2	1.218	2.076	19.3	20.4
5 21	14 23.05	-17 57.0	40.492	41.438	0.5	23.1	5 21	13 56.76	+20 0.2	1.258	2.068	21.7	20.5
5 31	14 22.35	-17 53.4	40.573	41.448	0.7	23.2	5 31	13 48.69	+17 28.4	1.314	2.059	24.1	20.7
129880	1999 SX ₄		4 28.7 167°28	1°7/27.1 18			165365	2000 WA ₁₀₂		4 28.7 242°82	4°7/24.9 17		
3 22	14 49.88	-11 17.0	2.452	3.260	11.8	20.7	3 22	14 51.89	-5 42.7	1.891	2.716	14.1	20.6
4 1	14 45.19	-10 40.8	2.368	3.264	9.1	20.6	4 1	14 47.47	-4 34.1	1.794	2.699	11.1	20.3
4 11	14 38.75	-9 58.5	2.308	3.268	6.0	20.4	4 11	14 40.70	-3 19.2	1.721	2.681	7.7	20.1
4 21	14 31.10	-9 13.2	2.276	3.272	2.8	20.2	4 21	14 32.13	-2 3.8	1.674	2.662	5.0	19.9
5 1	14 22.92	-8 28.5	2.272	3.275	2.2	20.1	5 1	14 22.63	-0 54.9	1.654	2.642	5.4	19.8
5 11	14 14.99	-7 48.6	2.299	3.277	5.2	20.3	5 11	14 13.25	+0 0.6	1.662	2.621	8.7	20.0
5 21	14 7.98	-7 16.8	2.352	3.279	8.4	20.5	5 21	14 4.98	+0 37.9	1.695	2.600	12.4	20.2
5 31	14 2.47	-6 55.7	2.430	3.280	11.2	20.7	5 31	13 58.62	+0 54.3	1.749	2.578	15.8	20.3
394320	2006 WN ₉₇		4 28.7 44°05	1°1/29.7 17			413878	2006 UL ₂₈₃		4 28.7 64°87	0°4/28.9 18		
3 22	14 47.08	-19 42.1	2.119	2.920	13.7	20.9	3 22	14 54.66	-16 3.2	1.516	2.334	17.4	21.3
4 1	14 43.38	-19 24.3	2.040	2.929	10.7	20.8	4 1	14 49.80	-16 5.8	1.457	2.357	13.5	21.1
4 11	14 37.72	-18 54.4	1.984	2.937	7.3	20.6	4 11	14 42.20	-15 57.4	1.419	2.379	9.0	20.8
4 21	14 30.68	-18 14.2	1.953	2.947	3.6	20.3	4 21	14 32.71	-15 39.7	1.405	2.401	4.1	20.6
5 1	14 23.05	-17 26.7	1.949	2.956	1.2	20.2	5 1	14 22.51	-15 16.2	1.417	2.424	1.1	20.4
5 11	14 15.73	-16 36.9	1.974	2.965	4.6	20.4	5 11	14 12.93	-14 51.7	1.455	2.446	5.9	20.8
5 21	14 9.49	-15 49.4	2.025	2.975	8.2	20.7	5 21	14 5.02	-14 31.3	1.519	2.469	10.4	21.1
5 31	14 4.94	-15 8.9	2.101	2.985	11.4	20.9	5 31	13 59.55	-14 19.2	1.605	2.491	14.2	21.4
419673	2010 TC ₁₇₀		4 28.7 183°19	1°0/27.9 17			178155	Kenzaarraki		4 28.7 177°94	4°9/23.8 18		
3 22	14 52.87	-13 40.6	2.062	2.869	13.8	22.2	3 22	14 47.09	-0 48.5	2.414	3.238	11.5	20.6
4 1	14 47.91	-13 14.9	1.975	2.870	10.7	21.9	4 1	14 43.05	+0 9.3	2.338	3.239	9.0	20.4
4 11	14 40.78	-12 40.7	1.910	2.870	7.1	21.7	4 11	14 37.36	+1 6.7	2.287	3.239	6.6	20.2
4 21	14 32.06	-12 0.5	1.872	2.869	3.1	21.5	4 21	14 30.50	+1 59.1	2.263	3.239	5.0	20.1
5 1	14 22.62	-11 18.1	1.863	2.868	1.6	21.3	5 1	14 23.15	+2 41.5	2.266	3.240	5.5	20.2
5 11	14 13.45	-10 38.2	1.882	2.867	5.6	21.6	5 11	14 16.03	+3 10.2	2.297	3.239	7.6	20.3
5 21	14 5.41	-10 5.3	1.928	2.864	9.4	21.8	5 21	14 9.80	+3 23.2	2.353	3.239	10.2	20.5
5 31	13 59.22	-9 42.8	1.998	2.861	12.8	22.0	5 31	14 4.97	+3 19.6	2.432	3.239	12.6	20.6
161279	2003 FB ₁₃₁		4 28.7 197°83	0°5/29.0 18			234360	2001 MV ₂₅		4 28.7 278°37	6°5/24.4 17		
3 22	14 56.09	-15 21.9	2.255	3.046	13.3	20.5	3 22	14 52.81	-3 6.8	1.503	2.342	16.5	20.5
4 1	14 50.34	-15 37.8	2.159	3.043	10.4	20.3	4 1	14 48.99	-2 1.2	1.403	2.313	13.1	20.2
4 11	14 42.40	-15 47.0	2.086	3.040	7.0	20.0	4 11	14 42.21	-0 50.3	1.324	2.284	9.5	19.9
4 21	14 32.81	-15 50.1	2.041	3.036	3.2	19.8	4 21	14 32.99	+0 18.7	1.268	2.254	6.7	19.7
5 1	14 22.41	-15 48.3	2.024	3.031	0.9	19.6	5 1	14 22.35	+1 16.8	1.239	2.223	7.4	19.6
5 11	14 12.15	-15 44.1	2.038	3.026	4.8	19.9	5 11	14 11.64	+1 55.7	1.234	2.192	11.1	19.8
5 21	14 2.96	-15 40.6	2.079	3.020	8.5	20.1	5 21	14 2.22	+2 9.9	1.251	2.160	15.6	19.9
5 31	13 55.55	-15 40.7	2.146	3.014	11.8	20.3	5 31	13 55.18	+1 57.3	1.288	2.128	19.7	20.1
439339	2012 XB ₉		4 28.7 46°70	3°0/	1.6 17		436839	2012 SW ₁₂		4 28.7 226°91	1°9/30.2 17		
3 22	14 47.51	-26 8.1	2.151	2.927	14.3	20.5							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
293402	2007 <i>EC</i> ₇₄		4 28.7 320°96	1.7°/29.7	17		365096	2009 <i>BY</i> ₁₄₃		4 28.7 175°91	1.0°/29.4	16	
3 22	14 46.89	-19 3.5	1.447	2.275	17.6	20.5	3 22	14 54.32	-18 44.9	1.764	2.566	16.0	22.0
4 1	14 44.63	-19 11.1	1.345	2.249	14.1	20.2	4 1	14 49.51	-18 34.4	1.679	2.568	12.6	21.8
4 11	14 39.44	-19 4.3	1.262	2.222	9.9	19.9	4 11	14 42.11	-18 10.6	1.615	2.570	8.6	21.6
4 21	14 31.80	-18 43.1	1.202	2.197	5.0	19.5	4 21	14 32.77	-17 34.8	1.577	2.571	4.1	21.3
5 1	14 22.71	-18 9.6	1.165	2.172	1.9	19.2	5 1	14 22.53	-16 50.1	1.565	2.572	1.2	21.1
5 11	14 13.58	-17 28.9	1.154	2.148	6.5	19.5	5 11	14 12.61	-16 1.9	1.581	2.572	5.6	21.4
5 21	14 5.78	-16 48.1	1.165	2.124	11.8	19.7	5 21	14 4.09	-15 16.3	1.623	2.571	10.0	21.6
5 31	14 0.46	-16 14.3	1.197	2.102	16.6	19.9	5 31	13 57.77	-14 38.9	1.689	2.570	13.8	21.9
49313	1998 <i>VM</i> ₁₈		4 28.7 335°61	3°8'/1.9	18		475476	2006 <i>SM</i> ₁₆₃		4 28.7 252°55	1°8'/26.9	17	
3 22	14 47.02	-27 53.5	1.507	2.303	18.5	17.3	3 22	14 46.38	-12 21.0	2.355	3.170	12.0	22.3
4 1	14 44.46	-27 26.1	1.419	2.297	15.2	17.0	4 1	14 42.70	-11 25.9	2.260	3.161	9.3	22.1
4 11	14 39.04	-26 32.7	1.351	2.292	11.2	16.7	4 11	14 37.25	-10 22.2	2.190	3.152	6.1	21.9
4 21	14 31.46	-25 13.0	1.304	2.287	6.9	16.5	4 21	14 30.53	-9 13.4	2.146	3.143	2.8	21.6
5 1	14 22.88	-23 31.1	1.282	2.283	3.9	16.3	5 1	14 23.21	-8 4.4	2.131	3.133	2.4	21.6
5 11	14 14.65	-21 35.7	1.286	2.279	6.2	16.4	5 11	14 16.06	-7 0.5	2.145	3.123	5.6	21.8
5 21	14 7.99	-19 38.2	1.315	2.276	10.6	16.7	5 21	14 9.80	-6 6.2	2.186	3.113	8.9	22.0
5 31	14 3.77	-17 49.8	1.367	2.273	14.9	16.9	5 31	14 5.00	-5 25.0	2.251	3.103	11.9	22.1
283510	2001 <i>SD</i> ₃₅₅		4 28.7 255°84	0°7'/29.9	18		354528	2004 <i>RZ</i> ₁₅₇		4 28.7 314°17	6°8'/4.3	16	
3 22	14 40.59	-20 37.6	4.557	5.331	7.3	20.4	3 22	14 51.33	-34 38.7	2.341	3.063	14.7	20.6
4 1	14 37.42	-20 9.6	4.452	5.325	5.7	20.2	4 1	14 47.10	-35 29.0	2.241	3.056	12.7	20.4
4 11	14 33.36	-19 34.9	4.372	5.318	3.9	20.1	4 11	14 40.52	-36 3.0	2.162	3.049	10.4	20.3
4 21	14 28.68	-18 54.7	4.321	5.312	2.0	19.9	4 21	14 32.10	-36 17.5	2.105	3.042	8.3	20.1
5 1	14 23.74	-18 10.4	4.300	5.305	0.7	19.8	5 1	14 22.72	-36 11.0	2.074	3.035	6.9	20.0
5 11	14 18.89	-17 24.4	4.309	5.299	2.4	20.0	5 11	14 13.42	-35 45.1	2.069	3.029	7.2	20.0
5 21	14 14.48	-16 38.8	4.348	5.292	4.3	20.1	5 21	14 5.20	-35 3.6	2.090	3.022	9.0	20.1
5 31	14 10.81	-15 56.0	4.414	5.286	6.1	20.2	5 31	13 58.91	-34 12.9	2.135	3.016	11.3	20.2
348410	2005 <i>JU</i> ₁₂₈		4 28.7 292°28	2°3'/26.8	17		474089	2016 <i>KE</i> ₂		4 28.7 329°99	1°0'/29.5	17	
3 22	14 47.95	-9 52.6	2.074	2.898	13.1	21.3	3 22	14 44.03	-22 13.9	1.447	2.271	17.8	20.6
4 1	14 44.14	-9 19.8	1.986	2.891	10.1	21.0	4 1	14 42.16	-21 17.2	1.357	2.258	14.2	20.3
4 11	14 38.31	-8 41.0	1.921	2.885	6.7	20.8	4 11	14 37.55	-19 55.9	1.286	2.245	9.8	20.0
4 21	14 31.02	-7 59.7	1.882	2.878	3.3	20.6	4 21	14 30.84	-18 12.5	1.238	2.233	4.7	19.7
5 1	14 23.03	-7 20.3	1.871	2.872	2.8	20.5	5 1	14 23.10	-16 14.0	1.215	2.222	1.3	19.4
5 11	14 15.25	-6 47.4	1.887	2.866	6.2	20.7	5 11	14 15.65	-14 11.1	1.218	2.212	6.4	19.7
5 21	14 8.48	-6 24.6	1.930	2.860	9.8	20.9	5 21	14 9.63	-12 15.7	1.246	2.202	11.5	20.0
5 31	14 3.39	-6 14.6	1.995	2.854	13.0	21.1	5 31	14 5.94	-10 37.6	1.296	2.193	16.1	20.2
469107	2015 <i>DW</i> ₂₄		4 28.7 245°88	3°4'/1.2	18		94083	2000 <i>YZ</i> ₅₁		4 28.7 17°43	0°8'/28.1	18	
3 22	14 53.67	-24 31.3	2.167	2.938	14.4	21.3	3 22	14 47.18	-13 29.7	2.187	3.002	12.8	19.0
4 1	14 48.87	-24 52.5	2.059	2.922	11.8	21.1	4 1	14 43.41	-13 11.4	2.104	3.004	9.9	18.8
4 11	14 41.69	-25 0.7	1.972	2.907	8.7	20.9	4 11	14 37.76	-12 45.8	2.045	3.007	6.5	18.6
4 21	14 32.63	-24 54.7	1.910	2.891	5.4	20.7	4 21	14 30.76	-12 15.3	2.012	3.009	2.9	18.4
5 1	14 22.54	-24 34.6	1.876	2.874	3.4	20.5	5 1	14 23.15	-11 43.2	2.006	3.012	1.4	18.3
5 11	14 12.49	-24 3.1	1.870	2.857	5.3	20.6	5 11	14 15.79	-11 13.5	2.029	3.015	5.0	18.6
5 21	14 3.49	-23 24.9	1.891	2.839	8.8	20.7	5 21	14 9.43	-10 49.8	2.078	3.019	8.6	18.8
5 31	13 56.41	-22 45.7	1.937	2.821	12.2	20.9	5 31	14 4.65	-10 35.0	2.151	3.022	11.7	19.0
176687	2002 <i>PY</i> ₁₂₉		4 28.7 270°76	3°1'/26.7	18		281538	2008 <i>TN</i> ₁₈₂		4 28.7 190°69	2°4'/26.6	17	
3 22	14 52.60	-8 23.2	1.737	2.564	15.2	20.8	3 22	14 49.48	-9 22.2	2.255	3.072	12.5	21.2
4 1	14 48.36	-7 54.9	1.637	2.543	11.9	20.5	4 1	14 45.09	-8 44.0	2.170	3.071	9.6	21.0
4 11	14 41.51	-7 20.7	1.559	2.522	8.0	20.2	4 11	14 38.83	-8 0.4	2.108	3.070	6.4	20.8
4 21	14 32.60	-6 44.6	1.505	2.500	4.2	20.0	4 21	14 31.23	-7 15.0	2.073	3.068	3.2	20.6
5 1	14 22.55	-6 11.4	1.479	2.478	3.8	19.9	5 1	14 23.01	-6 31.9	2.067	3.066	2.9	20.6
5 11	14 12.54	-5 46.8	1.479	2.456	7.7	20.0	5 11	14 15.03	-5 55.6	2.089	3.064	6.0	20.8
5 21	14 3.71	-5 35.0	1.504	2.433	12.0	20.2	5 21	14 8.02	-5 29.5	2.138	3.062	9.3	21.0
5 31	13 56.99	-5 38.9	1.551	2.410	16.0	20.4	5 31	14 2.60	-5 15.9	2.210	3.059	12.3	21.2
380634	2004 <i>VD</i> ₁₁₂		4 28.7 191°31	4°7'/24.7	17		119601	2001 <i>WA</i> ₁₄		4 28.7 141°24	2°2'/26.8	17	
3 22	14 51.93	+0 31.4	2.402	3.216	11.9	21.2	3 22	14 51.35	-10 6.8	2.266	3.077	12.6	20.8
4 1	14 46.80	+0 7.0	2.320	3.215	9.3	21.0	4 1	14 46.40	-9 26.6	2.191	3.089	9.7	20.6
4 11	14 39.87	+0 44.1	2.262	3.213	6.8	20.8	4 11	14 39.61	-8 40.7	2.140	3.100	6.3	20.4
4 21	14 31.66	+1 15.8	2.232	3.210	4.9	20.7	4 21	14 31.53	-7 52.8	2.116	3.111	3.1	20.2
5 1	14 22.87	+1 38.1	2.230	3.207	5.2	20.7	5 1	14 22.94	-7 7.1	2.121	3.121	2.7	20.2
5 11	14 14.31	+1 47.5	2.256	3.204	7.5	20.8	5 11	14 14.67	-6 27.9	2.155	3.131	5.7	20.4
5 21	14 6.69	+1 42.5	2.309	3.200	10.1	21.0	5 21	14 7.46	-5 58.6	2.216	3.140	9.0	20.6
5 31	14 0.61	+1 22.9	2.384	3.195	12.7	21.2	5 31	14 1.87	-5 41.6	2.302	3.148	11.9	20.8
150854	2001 <i>SG</i> ₁₁₀		4 28.7 124°42	3°4'/1.2	18	R	463720	2014 <i>QK</i> ₂₃₅		4 28.7 100°11	3°1'/26.6	16	
3 22	14 55.72	-24 17.9	2.094	2.864	14.8	19.3	3 22	14 52.19	-10 2.2	1.536	2.369	16.5	21.8
4 1	14 50.21	-24 42.9	2.015	2.878	12.0	19.1	4 1	14 47.89	-9 13.7	1.470	2.380	12.7	21.6
4 11	14 42.37	-24 54.6	1.956	2.891	8.7	19.0	4 11	14 40.98	-8 17.4	1.426	2.391	8.4	21.3
4 21	14 32.82	-24 51.9	1.923	2.904	5.4	18.8	4 21	14 32.23	-7 18.4	1.406	2.402	4.2	21.1
5 1	14 22.52	-24 35.6	1.918	2.916	3.4	18.7	5 1	14 22.74	-6 23.5	1.412	2.412	3.8	21.1
5 11	14 12.56	-24 8.8	1.941	2.928	5.2	18.8	5 11	14 13.74	-5 39.1	1.445	2.423	7.7	21.4
5 21	14 3.88	-23 36.2	1.992	2.939	8.4	19.0	5 21	14 6.27	-5 10.2	1.501	2.433	11.9	21.6
5 31	13 57.22	-23 3.4	2.067	2.950	11.6	19.2	5 31	14 1.08	-4 59.0	1.580	2.443	15.6	21.9
371133	2005 <i>WZ</i> ₉₇		4 28.7 134°62	1°3'/29.9	17								

EPHEMERIDES

4 28.7

4 28.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
105443	2000 QY ₁₈₀		4 28.7 92°82	0°6/29.1	18		118076	5100 T-2		4 28.7 268°91	4°6/ 2.8	18	
3 22	14 56.52	-16 57.7	1.635	2.443	16.8	19.7	3 22	14 49.78	-29 35.3	2.370	3.120	13.9	19.9
4 1	14 51.08	-16 54.2	1.573	2.466	13.1	19.5	4 1	14 45.66	-29 55.8	2.269	3.112	11.6	19.8
4 11	14 42.99	-16 39.2	1.532	2.489	8.7	19.3	4 11	14 39.42	-30 1.1	2.188	3.104	8.9	19.6
4 21	14 33.09	-16 14.3	1.516	2.511	4.0	19.1	4 21	14 31.58	-29 49.8	2.132	3.096	6.3	19.4
5 1	14 22.50	-15 42.8	1.526	2.533	1.1	18.9	5 1	14 22.93	-29 22.0	2.102	3.088	4.7	19.3
5 11	14 12.51	-15 10.0	1.564	2.555	5.7	19.3	5 11	14 14.41	-28 40.5	2.100	3.080	5.5	19.3
5 21	14 4.15	-14 41.0	1.628	2.575	10.0	19.6	5 21	14 6.91	-27 49.8	2.125	3.072	8.0	19.4
5 31	13 58.14	-14 20.3	1.715	2.596	13.7	19.8	5 31	14 1.14	-26 55.7	2.175	3.064	10.8	19.6
432512	2010 FH ₁₇		4 28.7 215°53	2°8/30.9	17		438440	2006 WS ₁₄₁		4 28.7 225°79	0°1/28.6	17	
3 22	14 52.78	-22 56.2	2.303	3.077	13.5	21.6	3 22	14 46.73	-17 16.9	2.523	3.322	11.8	21.6
4 1	14 47.90	-23 16.4	2.204	3.072	10.9	21.4	4 1	14 42.88	-16 37.2	2.427	3.317	9.2	21.4
4 11	14 40.86	-23 25.1	2.128	3.066	7.9	21.2	4 11	14 37.33	-15 47.1	2.354	3.311	6.1	21.2
4 21	14 32.21	-23 21.9	2.077	3.061	4.7	21.0	4 21	14 30.56	-14 48.9	2.309	3.305	2.7	21.0
5 1	14 22.72	-23 7.3	2.055	3.055	2.8	20.9	5 1	14 23.25	-13 46.2	2.293	3.299	0.9	20.8
5 11	14 13.37	-22 44.0	2.060	3.048	4.8	21.0	5 11	14 16.11	-12 43.6	2.305	3.293	4.4	21.1
5 21	14 5.04	-22 15.9	2.094	3.042	8.1	21.2	5 21	14 9.84	-11 45.8	2.346	3.287	7.7	21.3
5 31	13 58.47	-21 47.8	2.153	3.035	11.2	21.4	5 31	14 4.98	-10 56.7	2.412	3.280	10.7	21.5
312008	2007 QB ₇		4 28.7 210°46	2°6/30.5	16		56247	1999 JZ ₇₂		4 28.7 34°45	3°6/26.7	18	
3 22	14 55.76	-21 55.3	1.857	2.643	15.9	21.6	3 22	14 50.12	- 8 5.3	1.288	2.138	18.0	18.8
4 1	14 50.73	-22 8.0	1.761	2.638	12.8	21.4	4 1	14 46.62	- 7 35.8	1.236	2.155	13.9	18.6
4 11	14 43.03	-22 7.2	1.687	2.631	9.1	21.1	4 11	14 40.26	- 7 1.4	1.204	2.172	9.2	18.4
4 21	14 33.25	-21 52.0	1.637	2.624	5.1	20.9	4 21	14 31.93	- 6 27.7	1.195	2.190	4.8	18.2
5 1	14 22.41	-21 23.7	1.614	2.617	2.6	20.7	5 1	14 22.87	- 6 0.7	1.210	2.210	4.3	18.2
5 11	14 11.74	-20 46.1	1.619	2.608	5.6	20.9	5 11	14 14.45	- 5 45.8	1.249	2.230	8.3	18.5
5 21	14 2.38	-20 5.0	1.650	2.600	9.7	21.1	5 21	14 7.77	- 5 46.3	1.311	2.250	12.6	18.8
5 31	13 55.24	-19 26.5	1.705	2.590	13.5	21.3	5 31	14 3.57	- 6 3.2	1.394	2.272	16.4	19.1
290842	2005 WJ ₂₅		4 28.7 290°95	0°3/28.5	17		408817	2000 WU ₆₃		4 28.7 178°58	0°2/28.6	14 C	
3 22	14 51.11	-14 25.9	1.725	2.545	15.5	20.8	3 22	14 54.96	-15 24.6	1.974	2.776	14.5	23.2
4 1	14 47.19	-14 22.1	1.632	2.534	12.2	20.5	4 1	14 49.69	-15 10.7	1.887	2.778	11.3	23.0
4 11	14 40.70	-14 9.2	1.561	2.523	8.2	20.2	4 11	14 42.08	-14 47.3	1.822	2.779	7.6	22.8
4 21	14 32.22	-13 48.9	1.514	2.511	3.6	19.9	4 21	14 32.74	-14 16.2	1.784	2.780	3.4	22.5
5 1	14 22.71	-13 24.4	1.494	2.500	1.3	19.7	5 1	14 22.61	-13 40.5	1.773	2.780	1.1	22.3
5 11	14 13.36	-13 0.3	1.500	2.489	6.0	20.0	5 11	14 12.75	-13 4.8	1.792	2.779	5.4	22.6
5 21	14 5.25	-12 41.2	1.532	2.478	10.5	20.3	5 21	14 4.13	-12 33.8	1.837	2.778	9.5	22.9
5 31	13 59.27	-12 31.3	1.586	2.468	14.5	20.5	5 31	13 57.49	-12 11.5	1.907	2.776	13.0	23.1
361998	2008 TS ₉₁		4 28.7 134°81	1°9/27.3	18		200878	2001 YQ ₁₁₆		4 28.7 198°53	4°2/25.6	17	
3 22	14 54.21	-13 1.3	1.714	2.531	15.7	21.8	3 22	14 54.03	- 5 45.2	1.887	2.708	14.3	20.9
4 1	14 49.20	-12 11.8	1.644	2.545	12.1	21.6	4 1	14 49.00	- 4 53.8	1.803	2.705	11.2	20.6
4 11	14 41.73	-11 12.0	1.596	2.558	7.9	21.4	4 11	14 41.64	- 3 58.4	1.742	2.701	7.7	20.4
4 21	14 32.54	-10 6.4	1.573	2.570	3.6	21.2	4 21	14 32.55	- 3 4.1	1.707	2.696	4.7	20.2
5 1	14 22.67	- 9 0.8	1.578	2.582	2.6	21.1	5 1	14 22.67	- 2 16.6	1.699	2.691	4.9	20.2
5 11	14 13.28	- 8 2.1	1.611	2.592	6.7	21.4	5 11	14 13.05	- 1 41.4	1.720	2.684	8.0	20.4
5 21	14 5.34	- 7 15.8	1.670	2.602	10.8	21.7	5 21	14 4.65	- 1 22.3	1.766	2.677	11.6	20.6
5 31	13 59.57	- 6 45.3	1.751	2.612	14.4	21.9	5 31	13 58.21	- 1 20.9	1.834	2.669	14.9	20.8
335106	2004 TL ₁₅₈		4 28.7 292°14	1°5/29.7	17		17989	2006 QX ₄₆		4 28.7 316°89	5°7/25.3	17	
3 22	14 51.33	-18 38.7	1.811	2.618	15.5	21.0	3 22	14 50.50	- 3 46.7	1.408	2.255	17.0	19.6
4 1	14 47.33	-18 50.9	1.715	2.606	12.3	20.8	4 1	14 47.05	- 3 0.8	1.331	2.246	13.3	19.4
4 11	14 40.79	-18 52.1	1.640	2.595	8.5	20.5	4 11	14 40.75	- 2 12.6	1.274	2.238	9.4	19.1
4 21	14 32.27	-18 42.5	1.590	2.583	4.3	20.3	4 21	14 32.28	- 1 28.6	1.241	2.230	6.2	18.9
5 1	14 22.70	-18 23.7	1.566	2.572	1.7	20.0	5 1	14 22.75	- 0 56.4	1.232	2.222	6.5	18.9
5 11	14 13.25	-17 59.5	1.569	2.560	5.5	20.3	5 11	14 13.51	- 0 42.1	1.247	2.215	10.0	19.1
5 21	14 5.01	-17 34.7	1.598	2.549	9.8	20.5	5 21	14 5.76	- 0 48.8	1.285	2.208	14.2	19.3
5 31	13 58.86	-17 14.3	1.650	2.538	13.7	20.7	5 31	14 0.43	- 1 17.3	1.343	2.201	18.1	19.5
465857	2010 RW ₇₇		4 28.7 204°31	1°5/27.5	17		506842	2007 TD ₃₃₉		4 28.7 197°35	0°1/28.7	18	
3 22	14 52.72	-12 28.6	2.096	2.905	13.5	22.2	3 22	14 49.33	-16 10.0	2.728	3.521	11.2	22.6
4 1	14 47.83	-11 54.6	2.003	2.900	10.5	22.0	4 1	14 44.73	-15 51.0	2.631	3.518	8.7	22.4
4 11	14 40.79	-11 12.2	1.933	2.894	6.9	21.8	4 11	14 38.50	-15 24.2	2.559	3.514	5.8	22.2
4 21	14 32.16	-10 24.6	1.890	2.887	3.1	21.5	4 21	14 31.08	-14 51.0	2.514	3.510	2.6	22.0
5 1	14 22.76	- 9 35.9	1.876	2.880	2.1	21.4	5 1	14 23.12	-14 14.0	2.499	3.505	0.8	21.8
5 11	14 13.57	- 8 51.1	1.890	2.872	5.9	21.6	5 11	14 15.32	-13 36.7	2.513	3.500	4.1	22.1
5 21	14 5.47	- 8 14.8	1.931	2.863	9.7	21.8	5 21	14 8.33	-13 2.5	2.555	3.495	7.2	22.3
5 31	13 59.16	- 7 50.5	1.997	2.853	13.0	22.0	5 31	14 2.70	-12 34.5	2.624	3.489	10.0	22.5
123629	2000 YR ₄₆		4 28.7 273°83	9°3/ 8.9	18		86849	2000 GY ₁₇₉		4 28.7 268°77	3°4/26.5	17	
3 22	14 52.99	-47 0.1	2.663	3.289	15.0	19.5	3 22	14 51.52	- 9 50.5	1.542	2.376	16.4	19.5
4 1	14 48.57	-47 39.0	2.548	3.271	13.7	19.4	4 1	14 47.84	- 9 1.3	1.446	2.357	12.8	19.2
4 11	14 41.58	-47 56.9	2.450	3.253	12.2	19.2	4 11	14 41.34	- 8 2.0	1.372	2.337	8.6	18.9
4 21	14 32.61	-47 49.7	2.373	3.234	10.7	19.1	4 21	14 32.60	- 6 57.4	1.321	2.317	4.5	18.6
5 1	14 22.60	-47 14.6	2.318	3.215	9.6	19.0	5 1	14 22.64	- 5 54.4	1.296	2.296	4.2	18.5
5 11	14 12.73	-46 12.5	2.287	3.196	9.3	18.9	5 11	14 12.76	- 5 1.0	1.298	2.275	8.5	18.7
5 21	14 4.09	-44 47.4	2.281	3.177	10.0	18.9	5 21	14 4.22	- 4 23.5	1.323	2.254	13.2	18.9
5 31	13 57.56	-43 6.5	2.300	3.158	11.5	19.0	5 31	13 57.99	- 4 6.2	1.369	2.232	17.5	19.1
386568	2009 DO ₁₁₇		4 28.7 20°41	4°8/ 2.6	17		55885	1997 WV ₁₈		4 28.7 39°87	2°4/27.3	18	
3 22	14 50.75	-28 2											

EPHEMERIDES

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4 28.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
30862	1992 <i>DF</i> ₁₀		4 28.7 184°76	0°2/28.6	18		77167	2001 <i>EB</i> ₂₀		4 28.8 304°84	0°9/29.3	18	
3 22	14 53.04	-17 2.9	1.827	2.634	15.3	18.5	3 22	14 50.06	-17 11.9	1.815	2.628	15.2	19.4
4 1	14 48.40	-16 26.7	1.741	2.634	12.0	18.2	4 1	14 46.35	-17 17.3	1.718	2.613	12.0	19.2
4 11	14 41.31	-15 37.1	1.676	2.634	8.0	18.0	4 11	14 40.17	-17 12.4	1.641	2.599	8.2	18.9
4 21	14 32.43	-14 36.9	1.637	2.633	3.6	17.7	4 21	14 32.05	-16 58.0	1.589	2.585	3.9	18.6
5 1	14 22.73	-13 30.6	1.625	2.632	1.2	17.5	5 1	14 22.90	-16 36.2	1.564	2.571	1.2	18.4
5 11	14 13.34	-12 24.9	1.642	2.630	5.8	17.8	5 11	14 13.85	-16 11.1	1.566	2.557	5.5	18.7
5 21	14 5.26	-11 26.0	1.685	2.627	10.1	18.1	5 21	14 5.96	-15 47.3	1.593	2.544	9.9	18.9
5 31	13 59.25	-10 39.4	1.751	2.624	13.9	18.3	5 31	14 0.10	-15 29.6	1.643	2.531	13.8	19.1
54755	2001 <i>KZ</i> ₅₆		4 28.7 48°14	6°2/23.3	17		177849	2005 <i>OG</i> ₂₄		4 28.8 149°68	4°1/24.3	18	
3 22	14 47.39	- 0 39.3	1.852	2.689	13.9	18.7	3 22	14 46.45	- 3 40.2	2.496	3.320	11.2	20.7
4 1	14 43.76	+ 0 37.2	1.788	2.695	10.9	18.5	4 1	14 42.54	- 2 36.5	2.421	3.323	8.7	20.5
4 11	14 38.06	+ 1 53.4	1.746	2.701	8.1	18.3	4 11	14 37.05	- 1 31.1	2.370	3.327	6.1	20.4
4 21	14 30.92	+ 3 2.3	1.731	2.707	6.3	18.2	4 21	14 30.46	- 0 28.6	2.347	3.330	4.3	20.2
5 1	14 23.19	+ 3 57.2	1.741	2.713	7.0	18.3	5 1	14 23.41	+ 0 26.3	2.352	3.333	4.7	20.3
5 11	14 15.81	+ 4 33.0	1.777	2.719	9.5	18.4	5 11	14 16.59	+ 1 9.3	2.385	3.336	6.9	20.4
5 21	14 9.60	+ 4 47.2	1.837	2.726	12.4	18.6	5 21	14 10.62	+ 1 37.8	2.445	3.339	9.5	20.6
5 31	14 5.18	+ 4 40.0	1.918	2.733	15.1	18.8	5 31	14 6.01	+ 1 50.6	2.527	3.342	11.9	20.8
381852	2009 <i>WG</i> ₂₄₉		4 28.7 239°84	4°4/25.5	17		264508	2001 <i>QV</i> ₁₇₆		4 28.8 159°10	0°8/28.1	17	
3 22	14 53.52	- 2 35.6	2.157	2.973	13.0	22.0	3 22	14 51.54	-14 33.5	2.070	2.878	13.7	22.0
4 1	14 48.42	- 2 5.7	2.061	2.959	10.2	21.8	4 1	14 46.89	-14 2.8	1.988	2.883	10.6	21.8
4 11	14 41.19	- 1 35.6	1.990	2.945	7.2	21.6	4 11	14 40.14	-13 22.8	1.929	2.888	7.0	21.5
4 21	14 32.37	- 1 9.5	1.944	2.930	4.8	21.4	4 21	14 31.89	-12 36.1	1.896	2.893	3.1	21.3
5 1	14 22.74	- 0 51.7	1.928	2.914	5.0	21.4	5 1	14 23.00	-11 46.9	1.891	2.897	1.4	21.2
5 11	14 13.24	- 0 45.9	1.939	2.898	7.6	21.5	5 11	14 14.41	-11 0.2	1.915	2.900	5.4	21.5
5 21	14 4.75	- 0 54.3	1.976	2.881	10.9	21.7	5 21	14 6.95	-10 20.4	1.965	2.903	9.1	21.7
5 31	13 57.97	- 1 17.8	2.036	2.864	13.9	21.8	5 31	14 1.29	- 9 51.4	2.040	2.906	12.4	21.9
113456	2002 <i>SV</i> ₄₈		4 28.7 248°99	1°2/27.8	18		91517	1999 <i>RO</i> ₁₇₅		4 28.8 169°89	2°3/30.7	17	
3 22	14 49.19	-12 34.3	2.187	3.000	12.9	20.1	3 22	14 51.98	-22 30.2	2.214	2.994	13.8	20.0
4 1	14 45.05	-12 12.1	2.094	2.993	10.0	19.9	4 1	14 47.28	-22 35.2	2.124	2.996	11.1	19.8
4 11	14 38.93	-11 42.7	2.025	2.986	6.6	19.7	4 11	14 40.45	-22 27.6	2.056	2.998	7.9	19.6
4 21	14 31.35	-11 8.7	1.981	2.978	2.9	19.5	4 21	14 32.06	-22 7.6	2.013	3.000	4.5	19.4
5 1	14 23.05	-10 33.6	1.966	2.971	1.8	19.4	5 1	14 22.94	-21 36.8	1.999	3.001	2.3	19.3
5 11	14 14.94	-10 1.5	1.979	2.963	5.4	19.6	5 11	14 14.06	-20 58.8	2.013	3.003	4.7	19.4
5 21	14 7.80	- 9 36.2	2.018	2.955	9.0	19.8	5 21	14 6.26	-20 18.2	2.054	3.003	8.1	19.6
5 31	14 2.30	- 9 20.9	2.082	2.947	12.3	20.0	5 31	14 0.26	-19 40.1	2.120	3.004	11.3	19.8
342878	2008 <i>YP</i> ₅₄		4 28.7 51°35	1°7/30.0	17		463984	2014 <i>WZ</i> ₄₆		4 28.8 325°02	3°7/26.9	17	
3 22	14 50.16	-20 2.9	1.926	2.726	14.9	20.8	3 22	14 51.42	- 7 14.5	1.359	2.204	17.6	20.5
4 1	14 46.02	-20 7.6	1.851	2.738	11.8	20.6	4 1	14 48.00	- 6 59.0	1.278	2.193	13.7	20.2
4 11	14 39.64	-20 0.3	1.798	2.749	8.1	20.4	4 11	14 41.56	- 6 39.6	1.217	2.183	9.3	19.9
4 21	14 31.66	-19 41.5	1.770	2.761	4.2	20.2	4 21	14 32.75	- 6 20.8	1.178	2.174	4.9	19.7
5 1	14 22.99	-19 13.8	1.768	2.774	1.8	20.1	5 1	14 22.73	- 6 8.0	1.165	2.165	4.3	19.6
5 11	14 14.68	-18 41.3	1.794	2.786	4.9	20.3	5 11	14 12.94	- 6 6.6	1.175	2.157	8.6	19.8
5 21	14 7.61	-18 8.7	1.847	2.799	8.7	20.6	5 21	14 4.70	- 6 19.8	1.209	2.149	13.4	20.0
5 31	14 2.47	-17 40.7	1.923	2.811	12.1	20.8	5 31	13 59.01	- 6 49.3	1.263	2.142	17.7	20.3
107897	2001 <i>FC</i> ₉₅		4 28.7 83°24	2°3/27.4	18		11346	1997 <i>AP</i> ₁₄		4 28.8 182°60	0°4/28.4	18	
3 22	14 54.35	- 9 55.6	1.547	2.375	16.6	19.7	3 22	14 50.72	-15 7.2	2.320	3.121	12.6	19.8
4 1	14 49.60	- 9 40.5	1.480	2.387	12.8	19.5	4 1	14 46.08	-14 42.3	2.230	3.122	9.8	19.7
4 11	14 42.16	- 9 19.7	1.435	2.399	8.5	19.3	4 11	14 39.54	-14 8.9	2.164	3.122	6.5	19.4
4 21	14 32.81	- 8 56.6	1.414	2.411	4.0	19.0	4 21	14 31.63	-13 28.9	2.125	3.122	2.9	19.2
5 1	14 22.67	- 8 35.6	1.420	2.423	2.9	19.0	5 1	14 23.09	-12 45.7	2.115	3.121	1.1	19.1
5 11	14 13.01	- 8 21.6	1.452	2.435	7.1	19.3	5 11	14 14.78	-12 3.6	2.133	3.120	4.8	19.3
5 21	14 4.92	- 8 18.0	1.508	2.446	11.4	19.5	5 21	14 7.45	-11 26.6	2.179	3.118	8.3	19.5
5 31	13 59.18	- 8 27.1	1.587	2.458	15.1	19.8	5 31	14 1.73	-10 58.3	2.250	3.116	11.5	19.7
369745	2012 <i>FB</i> ₃₀		4 28.7 99°72	3°1/26.4	18		222747	2002 <i>BE</i> ₂₉		4 28.8 162°75	7°3/21.9	17	
3 22	14 49.95	- 9 39.7	1.718	2.549	15.1	20.5	3 22	14 52.86	+ 8 21.0	2.428	3.233	12.0	21.2
4 1	14 45.97	- 8 47.7	1.646	2.555	11.6	20.3	4 1	14 47.45	+ 9 21.0	2.364	3.240	10.0	21.1
4 11	14 39.65	- 7 48.3	1.597	2.561	7.7	20.1	4 11	14 40.27	+10 14.0	2.324	3.246	8.2	21.0
4 21	14 31.67	- 6 46.6	1.572	2.567	4.0	19.9	4 21	14 31.89	+10 54.6	2.310	3.251	7.4	20.9
5 1	14 22.99	- 5 48.9	1.575	2.574	3.7	19.9	5 1	14 23.03	+11 18.2	2.323	3.256	7.9	21.0
5 11	14 14.70	- 5 1.3	1.604	2.580	7.3	20.1	5 11	14 14.50	+11 22.0	2.363	3.260	9.6	21.1
5 21	14 7.72	- 4 28.5	1.658	2.585	11.2	20.4	5 21	14 6.97	+11 5.7	2.427	3.264	11.6	21.2
5 31	14 2.75	- 4 12.8	1.734	2.591	14.7	20.6	5 31	14 0.98	+10 30.6	2.513	3.266	13.6	21.4
504272	2006 <i>WR</i> ₃₀		4 28.7 117°59	1°7/27.4	18		74939	1999 <i>TO</i> ₁₇₄		4 28.8 289°58	2°5/30.2	18	
3 22	14 50.16	- 9 38.7	2.434	3.245	11.8	21.4	3 22	14 52.19	-20 29.0	1.542	2.352	17.5	19.4
4 1	14 45.46	- 9 28.1	2.353	3.251	9.1	21.2	4 1	14 48.58	-20 45.7	1.447	2.339	14.1	19.1
4 11	14 39.01	- 9 13.9	2.296	3.256	6.0	21.0	4 11	14 41.98	-20 48.3	1.372	2.325	10.0	18.9
4 21	14 31.33	- 8 58.3	2.266	3.262	2.8	20.8	4 21	14 32.99	-20 36.2	1.320	2.311	5.4	18.6
5 1	14 23.11	- 8 44.1	2.265	3.268	2.1	20.8	5 1	14 22.67	-20 10.7	1.293	2.298	2.5	18.3
5 11	14 15.12	- 8 34.2	2.293	3.273	5.1	21.0	5 11	14 12.44	-19 36.1	1.292	2.285	6.2	18.5
5 21	14 8.07	- 8 30.8	2.348	3.279	8.2	21.2	5 21	14 3.64	-18 58.9	1.316	2.271	11.1	18.8
5 31	14 2.50	- 8 35.8	2.428	3.284	11.0	21.4	5 31	13 57.34	-18 26.0	1.361	2.258	15.5	19.0
239620	2008 <i>UR</i> ₂₇₀		4 28.8 102°95	0°5/28.3	17		384430	2009 <i>XM</i> ₂₂					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
257707	1999 <i>XF</i> ₈₀		4 28.8 182°33	1.2/29.7	17		12485	Jenniferharris		4 28.8 204°14	1.1/29.6	18	
3 22	14 52.91	-20 13.8	2.077	2.867	14.3	21.9	3 22	14 53.17	-19 22.3	2.095	2.886	14.2	19.1
4 1	14 48.08	-19 53.6	1.987	2.868	11.3	21.7	4 1	14 48.34	-19 9.6	1.999	2.882	11.2	18.9
4 11	14 41.02	-19 20.0	1.918	2.869	7.8	21.5	4 11	14 41.26	-18 44.7	1.925	2.876	7.7	18.7
4 21	14 32.34	-18 34.4	1.876	2.868	3.9	21.2	4 21	14 32.49	-18 8.6	1.877	2.870	3.8	18.4
5 1	14 22.91	-17 39.8	1.861	2.867	1.3	21.0	5 1	14 22.90	-17 24.0	1.857	2.864	1.2	18.2
5 11	14 13.74	-16 41.3	1.875	2.866	4.9	21.3	5 11	14 13.50	-16 35.4	1.866	2.856	4.9	18.5
5 21	14 5.75	-15 44.6	1.917	2.863	8.8	21.5	5 21	14 5.23	-15 48.1	1.902	2.849	8.9	18.7
5 31	13 59.64	-14 55.1	1.983	2.860	12.3	21.7	5 31	13 58.83	-15 7.2	1.963	2.840	12.4	18.9
219001	2008 <i>JX</i> ₂₀		4 28.8 291°61	1°6/27.5	18		470312	2007 <i>LL</i> ₃₁		4 28.8 324°18	13°6/17.1	16	
3 22	14 48.20	-14 19.5	1.714	2.540	15.4	19.4	3 22	14 47.22	+14 5.5	1.462	2.297	17.1	20.8
4 1	14 45.08	-13 31.7	1.609	2.515	12.0	19.2	4 1	14 44.57	+15 50.7	1.391	2.273	15.2	20.6
4 11	14 39.43	-12 29.9	1.525	2.489	8.0	18.9	4 11	14 39.19	+17 23.6	1.339	2.250	13.8	20.5
4 21	14 31.79	-11 17.5	1.465	2.463	3.6	18.5	4 21	14 31.69	+18 32.4	1.308	2.227	13.7	20.4
5 1	14 23.04	-10 0.4	1.433	2.438	2.3	18.4	5 1	14 23.11	+19 6.8	1.298	2.205	14.9	20.4
5 11	14 14.33	-8 46.1	1.427	2.412	6.9	18.6	5 11	14 14.74	+19 0.8	1.308	2.184	17.1	20.5
5 21	14 6.76	-7 42.2	1.446	2.386	11.6	18.8	5 21	14 7.74	+18 14.4	1.336	2.164	19.7	20.6
5 31	14 1.25	-6 54.6	1.487	2.360	15.8	19.0	5 31	14 3.03	+16 51.4	1.379	2.145	22.3	20.7
475271	2005 <i>WB</i> ₁₂₅		4 28.8 222°29	0°1/28.8	16		214499	2005 <i>WG</i> ₅₂		4 28.8 276°88	3°2/26.0	18	
3 22	14 47.49	-16 13.3	2.783	3.578	10.9	22.3	3 22	14 49.86	-4 51.5	2.503	3.318	11.4	20.5
4 1	14 43.34	-15 52.8	2.684	3.572	8.5	22.1	4 1	14 45.40	-4 28.9	2.398	3.296	8.9	20.3
4 11	14 37.63	-15 24.4	2.609	3.565	5.7	21.9	4 11	14 39.14	-4 4.7	2.316	3.274	6.1	20.1
4 21	14 30.77	-14 49.8	2.561	3.557	2.5	21.7	4 21	14 31.52	-3 42.3	2.262	3.252	3.7	19.9
5 1	14 23.38	-14 11.5	2.543	3.550	0.7	21.5	5 1	14 23.18	-3 24.9	2.236	3.229	3.7	19.8
5 11	14 16.13	-13 32.9	2.554	3.542	4.0	21.7	5 11	14 14.90	-3 16.0	2.239	3.206	6.3	20.0
5 21	14 9.63	-12 57.4	2.593	3.534	7.1	21.9	5 21	14 7.39	-3 17.6	2.269	3.183	9.3	20.1
5 31	14 4.43	-12 28.1	2.658	3.525	9.8	22.1	5 31	14 1.30	-3 31.2	2.323	3.159	12.1	20.3
142350	2002 <i>RA</i> ₂₁₃		4 28.8 242°02	2°6/27.1	18		182883	2002 <i>CL</i> ₂₅₉		4 28.8 57°91	2°8/1.3	18	
3 22	14 53.43	-9 5.8	1.834	2.654	14.7	20.5	3 22	14 48.37	-24 40.7	2.232	3.010	13.8	20.1
4 1	14 48.80	-8 43.2	1.741	2.643	11.5	20.2	4 1	14 44.43	-24 38.2	2.152	3.021	11.1	20.0
4 11	14 41.71	-8 15.1	1.670	2.632	7.7	20.0	4 11	14 38.51	-24 21.5	2.093	3.031	8.0	19.8
4 21	14 32.74	-7 44.9	1.624	2.620	3.8	19.7	4 21	14 31.20	-23 51.1	2.059	3.042	4.8	19.6
5 1	14 22.79	-7 17.1	1.606	2.607	3.2	19.6	5 1	14 23.30	-23 9.1	2.053	3.053	2.8	19.5
5 11	14 13.01	-6 56.2	1.615	2.594	6.9	19.8	5 11	14 15.69	-22 19.4	2.074	3.064	4.6	19.6
5 21	14 4.41	-6 46.2	1.650	2.581	11.1	20.0	5 21	14 9.17	-21 27.2	2.123	3.075	7.7	19.8
5 31	13 57.83	-6 49.5	1.708	2.567	14.8	20.2	5 31	14 4.34	-20 37.7	2.196	3.086	10.7	20.0
512939	2017 <i>BM</i> ₁₆		4 28.8 111°35	4°6/6.8	18		406372	2007 <i>RQ</i> ₂₆₇		4 28.8 134°77	2°9/26.4	18	
3 22	14 44.83	-40 19.7	4.605	5.258	8.8	20.9	3 22	14 53.40	-9 42.2	1.903	2.721	14.4	21.5
4 1	14 40.92	-40 39.4	4.504	5.260	7.7	20.8	4 1	14 48.33	-8 45.5	1.834	2.736	11.0	21.3
4 11	14 35.84	-40 47.8	4.425	5.262	6.5	20.7	4 11	14 41.08	-7 41.9	1.788	2.750	7.3	21.1
4 21	14 29.92	-40 44.0	4.369	5.264	5.5	20.7	4 21	14 32.33	-6 36.5	1.769	2.763	3.8	20.9
5 1	14 23.63	-40 27.8	4.339	5.266	4.7	20.6	5 1	14 22.99	-5 35.0	1.778	2.776	3.6	20.9
5 11	14 17.44	-40 0.5	4.336	5.268	4.7	20.6	5 11	14 14.08	-4 43.2	1.814	2.787	6.9	21.1
5 21	14 11.82	-39 24.1	4.361	5.271	5.3	20.6	5 21	14 6.46	-4 5.4	1.877	2.798	10.5	21.4
5 31	14 7.15	-38 41.3	4.412	5.273	6.4	20.7	5 31	14 0.77	-3 43.9	1.963	2.809	13.7	21.6
428123	2006 <i>SD</i> ₁₀		4 28.8 200°69	1°8/30.3	17		275723	2001 <i>AE</i> ₂₂		4 28.8 132°01	6°0/23.5	17	
3 22	14 53.18	-22 12.8	2.196	2.975	14.0	22.4	3 22	14 52.86	+4 1.2	2.400	3.210	12.0	21.7
4 1	14 48.26	-21 56.6	2.098	2.971	11.2	22.2	4 1	14 47.40	+4 50.1	2.339	3.225	9.6	21.5
4 11	14 41.15	-21 26.3	2.021	2.966	7.8	21.9	4 11	14 40.22	+5 34.4	2.302	3.240	7.4	21.4
4 21	14 32.42	-20 42.6	1.971	2.960	4.2	21.7	4 21	14 31.89	+6 9.2	2.292	3.254	6.1	21.3
5 1	14 22.90	-19 47.9	1.949	2.953	1.8	21.5	5 1	14 23.13	+6 30.4	2.310	3.268	6.6	21.4
5 11	14 13.59	-18 47.0	1.956	2.946	4.7	21.7	5 11	14 14.73	+6 35.3	2.356	3.281	8.4	21.5
5 21	14 5.39	-17 45.5	1.990	2.938	8.5	21.9	5 21	14 7.36	+6 23.3	2.427	3.293	10.6	21.7
5 31	13 59.01	-16 49.2	2.050	2.929	11.9	22.1	5 31	14 1.54	+5 55.1	2.521	3.305	12.8	21.9
461397	2001 <i>SD</i> ₁₇₀		4 28.8 136°48	3°6/24.9	18		19125	1987 <i>CH</i>		4 28.8 67°86	4°4/26.0	18	
3 22	14 55.37	-7 15.6	2.459	3.261	12.0	23.2	3 22	14 51.57	-8 26.1	1.280	2.127	18.3	17.5
4 1	14 49.21	-5 44.9	2.392	3.285	9.2	23.1	4 1	14 47.95	-7 25.7	1.218	2.135	14.1	17.3
4 11	14 41.34	-4 9.4	2.351	3.307	6.2	22.9	4 11	14 41.34	-6 17.4	1.176	2.143	9.5	17.0
4 21	14 32.34	-2 34.7	2.340	3.327	3.9	22.8	4 21	14 32.58	-5 8.4	1.157	2.152	5.3	16.8
5 1	14 22.97	-1 6.8	2.360	3.346	4.2	22.9	5 1	14 22.93	-4 7.2	1.163	2.160	5.2	16.8
5 11	14 14.01	+0 8.8	2.411	3.364	6.7	23.1	5 11	14 13.83	-3 21.8	1.193	2.169	9.3	17.1
5 21	14 6.13	+1 8.6	2.491	3.381	9.5	23.3	5 21	14 6.48	-2 57.3	1.246	2.178	13.8	17.4
5 31	13 59.84	+1 50.5	2.594	3.396	12.0	23.4	5 31	14 1.72	-2 55.3	1.319	2.186	17.8	17.6
100534	1997 <i>CM</i> ₂₂		4 28.8 223°61	0°2/28.6	17		509265	2006 <i>US</i> ₁₇₆		4 28.8 189°07	1°6/27.0	18	
3 22	14 52.79	-15 59.6	1.924	2.730	14.7	20.6	3 22	14 48.53	-9 49.6	3.030	3.834	9.9	23.1
4 1	14 48.24	-15 37.4	1.828	2.721	11.5	20.4	4 1	14 43.92	-9 21.9	2.938	3.833	7.6	22.9
4 11	14 41.30	-15 4.1	1.754	2.712	7.7	20.1	4 11	14 37.90	-8 50.3	2.872	3.831	5.0	22.7
4 21	14 32.54	-14 21.7	1.705	2.702	3.4	19.9	4 21	14 30.88	-8 17.1	2.833	3.829	2.4	22.5
5 1	14 22.87	-13 33.8	1.684	2.691	1.1	19.6	5 1	14 23.41	-7 45.0	2.825	3.826	2.0	22.5
5 11	14 13.37	-12 45.7	1.692	2.680	5.6	19.9	5 11	14 16.09	-7 17.1	2.846	3.822	4.5	22.7
5 21	14 5.05	-12 2.8	1.726	2.668	9.9	20.2	5 21	14 9.49	-6 55.7	2.896	3.819	7.2	22.8
5 31	13 58.69	-11 29.9	1.783	2.656	13.6	20.4	5 31	14 4.06	-6 42.8	2.971	3.814	9.6	23.0
35915	1999 <i>JV</i> ₉₇		4 28.8 210°94	6°9/21.7	18		61133	2000 <i>NL</i> ₂		4 28.8 264°84	1°5/29.8	17	
3 22	14 50.11	+4 50.8											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
483400	1997 LY ₁₃		4 28.8 293°06	4.2/22.6	18		79166	1993 FU ₂₉		4 28.8 250°43	0.8/27.9	18	
3 22	14 44.74	+ 7 45.3	4.302	5.101	7.3	20.2	3 22	14 47.08	-15 1.2	2.540	3.344	11.6	20.0
4 1	14 40.58	+ 8 5.4	4.223	5.097	6.0	20.1	4 1	14 43.23	-14 15.1	2.436	3.330	9.0	19.8
4 11	14 35.49	+ 8 21.1	4.169	5.092	4.8	20.0	4 11	14 37.68	-13 19.4	2.357	3.316	5.9	19.5
4 21	14 29.77	+ 8 30.1	4.143	5.088	4.2	20.0	4 21	14 30.88	-12 16.7	2.305	3.302	2.6	19.3
5 1	14 23.77	+ 8 30.5	4.145	5.084	4.6	20.0	5 1	14 23.47	-11 11.1	2.282	3.287	1.4	19.2
5 11	14 17.89	+ 8 21.0	4.176	5.080	5.6	20.1	5 11	14 16.19	-10 7.2	2.288	3.272	4.8	19.4
5 21	14 12.49	+ 8 1.2	4.234	5.076	6.9	20.2	5 21	14 9.73	-9 9.7	2.322	3.256	8.1	19.6
5 31	14 7.87	+ 7 31.4	4.315	5.072	8.3	20.3	5 31	14 4.64	-8 22.3	2.381	3.241	11.1	19.7
470508	2008 CE ₉₉		4 28.8	4.35 11°0	8.5 18		253025	2002 RO ₂₄₅		4 28.8 290°87	5°0	1.8 17	
3 22	14 55.93	-45 48.5	2.239	2.886	17.1	20.4	3 22	14 53.89	-26 4.5	1.620	2.405	17.9	20.4
4 1	14 51.47	-47 15.3	2.150	2.886	15.6	20.2	4 1	14 49.83	-26 41.8	1.533	2.403	14.7	20.2
4 11	14 43.93	-48 20.9	2.079	2.886	13.9	20.1	4 11	14 42.77	-27 2.2	1.465	2.400	11.1	19.9
4 21	14 33.91	-48 59.7	2.028	2.887	12.4	20.0	4 21	14 33.36	-27 3.1	1.420	2.397	7.3	19.7
5 1	14 22.52	-49 7.6	1.998	2.888	11.3	19.9	5 1	14 22.74	-26 44.3	1.400	2.394	5.0	19.5
5 11	14 11.21	-48 44.5	1.991	2.889	11.1	19.9	5 11	14 12.33	-26 9.1	1.405	2.392	6.7	19.6
5 21	14 1.39	-47 54.8	2.006	2.890	11.8	19.9	5 21	14 3.45	-25 24.0	1.435	2.389	10.5	19.8
5 31	13 54.14	-46 46.0	2.044	2.892	13.1	20.0	5 31	13 57.10	-24 37.1	1.488	2.387	14.3	20.1
32477	2000 SV ₂₃₈		4 28.8 237°66	2.7/26.6	18		1451	Granö		4 28.8 349°97	3°6	26.5 18	A
3 22	14 50.80	- 6 7.6	2.516	3.328	11.5	18.8	3 22	14 46.12	-11 33.8	1.100	1.963	19.6	15.8
4 1	14 46.02	- 5 54.0	2.423	3.321	8.9	18.6	4 1	14 44.37	-10 33.6	1.031	1.957	15.2	15.5
4 11	14 39.48	- 5 39.0	2.355	3.313	6.0	18.4	4 11	14 39.37	- 9 18.7	0.981	1.953	10.1	15.2
4 21	14 31.66	- 5 25.0	2.313	3.306	3.3	18.2	4 21	14 31.88	- 7 56.4	0.952	1.950	5.0	14.9
5 1	14 23.23	- 5 15.1	2.301	3.297	3.1	18.2	5 1	14 23.19	- 6 36.7	0.945	1.947	4.6	14.8
5 11	14 14.94	- 5 12.1	2.317	3.289	5.7	18.4	5 11	14 14.91	- 5 30.5	0.961	1.945	9.6	15.1
5 21	14 7.50	- 5 17.7	2.361	3.281	8.7	18.5	5 21	14 8.44	- 4 46.1	0.999	1.945	14.8	15.4
5 31	14 1.49	- 5 33.4	2.429	3.272	11.5	18.7	5 31	14 4.75	- 4 27.5	1.054	1.945	19.5	15.6
281422	2008 RG ₁₃₂		4 28.8 145°25	0°4	29.2 18		134098	2004 XN ₁₂₄		4 28.8 176°21	0°8	28.2 18	
3 22	14 49.70	-19 15.8	2.292	3.085	13.0	20.8	3 22	14 55.51	-11 24.4	2.305	3.105	12.8	20.1
4 1	14 45.30	-18 34.2	2.208	3.093	10.2	20.6	4 1	14 49.82	-11 34.7	2.216	3.106	9.9	19.9
4 11	14 39.02	-17 40.2	2.148	3.101	6.9	20.4	4 11	14 42.09	-11 41.0	2.150	3.107	6.6	19.7
4 21	14 31.43	-16 36.2	2.114	3.108	3.2	20.2	4 21	14 32.86	-11 44.5	2.112	3.108	2.9	19.5
5 1	14 23.31	-15 26.1	2.109	3.115	0.8	20.0	5 1	14 22.92	-11 47.0	2.103	3.109	1.4	19.4
5 11	14 15.49	-14 15.4	2.133	3.122	4.5	20.3	5 11	14 13.18	-11 50.9	2.124	3.109	5.0	19.6
5 21	14 8.72	-13 9.4	2.185	3.128	8.0	20.5	5 21	14 4.46	-11 58.4	2.173	3.109	8.5	19.8
5 31	14 3.56	-12 12.7	2.262	3.134	11.2	20.7	5 31	13 57.45	-12 11.7	2.247	3.108	11.6	20.0
387357	2012 XR ₂₄		4 28.8 196°55	0°7	28.2 17		66777	1999 TD ₂₂₁		4 28.8 204°80	2°3	30.7 17	
3 22	14 49.33	-13 49.4	2.351	3.158	12.3	21.6	3 22	14 51.62	-22 24.7	2.181	2.963	14.0	20.2
4 1	14 45.03	-13 31.4	2.262	3.157	9.6	21.4	4 1	14 47.12	-22 29.4	2.087	2.960	11.2	20.0
4 11	14 38.88	-13 6.3	2.196	3.155	6.3	21.2	4 11	14 40.46	-22 21.5	2.014	2.957	8.0	19.8
4 21	14 31.40	-12 36.0	2.157	3.154	2.8	21.0	4 21	14 32.18	-22 0.9	1.967	2.954	4.5	19.6
5 1	14 23.31	-12 3.7	2.146	3.152	1.2	20.8	5 1	14 23.11	-21 29.4	1.948	2.950	2.3	19.5
5 11	14 15.41	-11 33.0	2.164	3.150	4.8	21.1	5 11	14 14.24	-20 50.4	1.956	2.947	4.8	19.6
5 21	14 8.45	-11 7.5	2.209	3.148	8.2	21.3	5 21	14 6.44	-20 8.9	1.992	2.943	8.3	19.8
5 31	14 3.02	-10 50.2	2.279	3.146	11.3	21.5	5 31	14 0.43	-19 29.8	2.053	2.938	11.6	20.0
305797	2009 DU ₈₄		4 28.8 296°31	1°9	27.3 16		38331	1999 RT ₁₃₀		4 28.8 263°88	4°9	24.1 18	
3 22	14 48.63	-10 16.2	2.101	2.922	13.1	20.9	3 22	14 48.26	- 4 25.2	2.034	2.863	13.1	19.6
4 1	14 44.84	- 9 55.0	2.001	2.904	10.2	20.7	4 1	14 44.55	- 3 8.7	1.940	2.846	10.3	19.4
4 11	14 38.97	- 9 28.1	1.924	2.887	6.8	20.4	4 11	14 38.77	- 1 47.2	1.870	2.829	7.3	19.1
4 21	14 31.52	- 8 58.3	1.873	2.869	3.2	20.2	4 21	14 31.44	- 0 26.5	1.826	2.811	5.1	19.0
5 1	14 23.26	- 8 29.3	1.849	2.852	2.5	20.1	5 1	14 23.33	+ 0 46.4	1.810	2.793	5.7	19.0
5 11	14 15.09	- 8 5.3	1.853	2.834	6.0	20.3	5 11	14 15.35	+ 1 45.0	1.821	2.774	8.6	19.1
5 21	14 7.86	- 7 49.9	1.883	2.817	9.7	20.5	5 21	14 8.35	+ 2 25.1	1.857	2.756	11.8	19.3
5 31	14 2.30	- 7 45.9	1.936	2.800	13.1	20.6	5 31	14 3.04	+ 2 44.4	1.915	2.737	14.9	19.4
457542	2008 XA ₁₅		4 28.8 134°99	1°7	27.6 18		13695	1998 FO ₅₂		4 28.8 309°29	4°4	1.0 18	
3 22	14 55.47	-12 12.5	1.690	2.507	15.9	22.1	3 22	14 53.26	-23 11.4	1.686	2.480	16.9	17.8
4 1	14 50.32	-11 43.1	1.618	2.519	12.3	21.9	4 1	14 49.40	-24 2.0	1.585	2.462	13.9	17.6
4 11	14 42.62	-11 5.2	1.569	2.530	8.1	21.7	4 11	14 42.60	-24 40.8	1.504	2.445	10.3	17.3
4 21	14 33.11	-10 22.3	1.544	2.541	3.7	21.4	4 21	14 33.38	-25 5.1	1.446	2.429	6.5	17.0
5 1	14 22.84	- 9 39.3	1.547	2.551	2.4	21.3	5 1	14 22.74	-25 13.5	1.414	2.412	4.4	16.9
5 11	14 13.03	- 9 1.9	1.578	2.561	6.6	21.6	5 11	14 12.05	-25 7.8	1.408	2.396	6.6	16.9
5 21	14 4.69	- 8 34.6	1.634	2.570	10.8	21.9	5 21	14 2.64	-24 52.2	1.427	2.380	10.6	17.1
5 31	13 58.58	- 8 20.7	1.713	2.578	14.4	22.1	5 31	13 55.62	-24 33.2	1.468	2.365	14.6	17.3
266511	2008 EO ₆₄		4 28.8 283°48	3°0	1.4 16		199001	2005 WM ₅₁		4 28.8 204°85	1°1	28.2 18	
3 22	14 48.98	-24 39.8	2.408	3.180	13.1	21.2	3 22	14 53.91	-13 23.8	1.416	2.246	17.8	20.9
4 1	14 44.92	-24 49.9	2.311	3.176	10.6	21.0	4 1	14 49.82	-13 9.3	1.338	2.245	13.9	20.7
4 11	14 38.91	-24 47.3	2.237	3.172	7.7	20.8	4 11	14 42.71	-12 44.4	1.281	2.245	9.3	20.4
4 21	14 31.45	-24 32.0	2.188	3.168	4.8	20.6	4 21	14 33.31	-12 12.0	1.246	2.244	4.1	20.1
5 1	14 23.29	-24 4.9	2.166	3.164	3.0	20.5	5 1	14 22.81	-11 36.8	1.237	2.243	1.9	19.9
5 11	14 15.30	-23 29.1	2.173	3.161	4.6	20.6	5 11	14 12.65	-11 4.9	1.253	2.242	7.1	20.3
5 21	14 8.25	-22 48.8	2.206	3.157	7.6	20.8	5 21	14 4.11	-10 41.9	1.294	2.241	12.1	20.5
5 31	14 2.81	-22 8.9	2.265	3.153	10.5	20.9	5 31	13 58.14	-10 32.3	1.356	2.239	16.4	20.8
488739	2004 RQ ₁₈₃		4 28.8 203°56	12°0	4.3 18		38832	2000 RH ₁₀₅		4 28.8 240°99	4°7	2.8 18	
3 22	15 5.45	-37 0.7	1.471	2.198									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
158299	2001 UC ₁₂₆		4 28.8 299°12	8°2/23.9	17		259238	2003 BX ₅₃		4 28.8 131°77	2°3/26.9	18	
3 22	14 51.67	- 0 34.3	1.300	2.151	17.9	20.2	3 22	14 52.26	-10 12.7	2.070	2.884	13.5	21.8
4 1	14 48.69	+ 0 31.8	1.203	2.118	14.5	19.8	4 1	14 47.35	- 9 29.6	1.998	2.898	10.4	21.6
4 11	14 42.45	+ 1 40.9	1.126	2.085	10.9	19.5	4 11	14 40.43	- 8 40.4	1.949	2.911	6.8	21.4
4 21	14 33.43	+ 2 44.2	1.071	2.052	8.4	19.3	4 21	14 32.11	- 7 48.9	1.928	2.923	3.4	21.2
5 1	14 22.72	+ 3 31.1	1.038	2.019	9.2	19.2	5 1	14 23.24	- 7 0.0	1.934	2.935	2.9	21.2
5 11	14 11.84	+ 3 52.2	1.029	1.985	13.0	19.3	5 11	14 14.74	- 6 18.4	1.970	2.946	6.1	21.4
5 21	14 2.33	+ 3 42.4	1.040	1.952	17.7	19.5	5 21	14 7.40	- 5 47.8	2.031	2.957	9.6	21.6
5 31	13 55.49	+ 3 0.9	1.069	1.920	22.2	19.6	5 31	14 1.82	- 5 30.8	2.117	2.967	12.7	21.8
131768	2002 AB ₁₄		4 28.8 31°29	2°1/27.7	18		497763	2006 SV ₃₀₉		4 28.8 111°50	3°8/2.2	17	
3 22	14 51.46	-11 20.7	1.200	2.049	19.2	18.9	3 22	14 53.81	-27 13.9	2.671	3.416	12.6	22.0
4 1	14 48.15	-11 5.2	1.139	2.056	14.9	18.7	4 1	14 48.38	-27 44.1	2.589	3.432	10.3	21.9
4 11	14 41.66	-10 41.0	1.096	2.065	9.8	18.4	4 11	14 41.07	-28 2.2	2.529	3.448	7.8	21.8
4 21	14 32.82	-10 12.1	1.076	2.074	4.5	18.1	4 21	14 32.41	-28 7.0	2.495	3.464	5.3	21.6
5 1	14 22.98	- 9 44.3	1.079	2.084	2.9	18.1	5 1	14 23.15	-27 58.8	2.490	3.479	3.8	21.5
5 11	14 13.70	- 9 23.8	1.107	2.095	7.9	18.4	5 11	14 14.14	-27 39.9	2.514	3.494	4.7	21.6
5 21	14 6.27	- 9 15.5	1.157	2.106	12.9	18.7	5 21	14 6.12	-27 13.6	2.566	3.509	7.0	21.8
5 31	14 1.59	- 9 22.3	1.226	2.118	17.2	19.0	5 31	13 59.70	-26 44.4	2.644	3.523	9.5	22.0
19196	1992 DQ ₇		4 28.8 248°42	0°6/28.3	18		501035	2013 RY ₇₀		4 28.8 175°75	0°5/29.3	17	
3 22	14 48.58	-14 6.6	2.521	3.325	11.7	19.3	3 22	14 50.73	-19 31.7	2.490	3.275	12.3	22.1
4 1	14 44.41	-13 48.6	2.421	3.314	9.1	19.1	4 1	14 46.01	-18 51.4	2.398	3.278	9.7	21.9
4 11	14 38.49	-13 23.5	2.345	3.303	6.0	18.9	4 11	14 39.49	-17 59.2	2.329	3.281	6.5	21.7
4 21	14 31.27	-12 53.1	2.295	3.292	2.7	18.7	4 21	14 31.70	-16 57.0	2.288	3.282	3.1	21.5
5 1	14 23.41	-12 20.3	2.274	3.281	1.1	18.5	5 1	14 23.36	-15 48.4	2.276	3.283	0.8	21.3
5 11	14 15.67	-11 48.5	2.283	3.269	4.6	18.8	5 11	14 15.28	-14 38.5	2.294	3.283	4.3	21.6
5 21	14 8.76	-11 21.3	2.318	3.257	7.9	18.9	5 21	14 8.15	-13 32.1	2.341	3.283	7.7	21.8
5 31	14 3.27	-11 1.6	2.379	3.245	10.9	19.1	5 31	14 2.56	-12 33.9	2.414	3.282	10.7	22.0
223642	2004 LZ ₁₈		4 28.8 274°82	2°3/27.2	17		406916	2009 FC ₁₂		4 28.8 169°83	4°1/25.8	18	
3 22	14 50.72	-10 33.1	1.784	2.610	14.9	20.9	3 22	14 52.16	- 7 33.4	1.698	2.528	15.3	21.7
4 1	14 46.85	-10 2.7	1.688	2.594	11.6	20.6	4 1	14 47.81	- 6 32.3	1.623	2.531	11.8	21.5
4 11	14 40.53	- 9 24.6	1.614	2.578	7.7	20.3	4 11	14 41.03	- 5 25.0	1.570	2.533	8.0	21.3
4 21	14 32.31	- 8 42.4	1.565	2.562	3.7	20.1	4 21	14 32.48	- 4 17.1	1.543	2.535	4.7	21.1
5 1	14 23.10	- 8 0.9	1.543	2.545	3.0	20.0	5 1	14 23.15	- 3 15.7	1.542	2.536	4.8	21.1
5 11	14 14.00	- 7 25.7	1.548	2.529	6.9	20.2	5 11	14 14.18	- 2 27.3	1.568	2.537	8.2	21.3
5 21	14 6.06	- 7 1.5	1.577	2.512	11.2	20.4	5 21	14 6.55	- 1 56.3	1.619	2.538	12.0	21.5
5 31	14 0.13	- 6 51.8	1.630	2.496	15.0	20.6	5 31	14 1.00	- 1 44.9	1.691	2.538	15.5	21.7
140635	2001 UY ₁₉		4 28.8 163°56	2°5/26.2	18		348829	2006 RX ₆₂		4 28.8 157°74	5°0/3.8	18	
3 22	14 48.63	- 7 21.7	2.699	3.511	10.8	20.8	3 22	14 54.72	-33 5.5	3.046	3.751	12.0	21.8
4 1	14 44.15	- 6 45.5	2.618	3.516	8.3	20.6	4 1	14 49.05	-33 43.0	2.951	3.758	10.1	21.7
4 11	14 38.13	- 6 6.3	2.561	3.520	5.5	20.4	4 11	14 41.53	-34 7.4	2.878	3.765	8.1	21.5
4 21	14 31.04	- 5 27.2	2.531	3.524	3.1	20.3	4 21	14 32.65	-34 16.8	2.831	3.771	6.2	21.4
5 1	14 23.49	- 4 51.7	2.531	3.527	3.0	20.3	5 1	14 23.10	-34 10.5	2.811	3.777	5.0	21.4
5 11	14 16.15	- 4 23.0	2.560	3.530	5.4	20.4	5 11	14 13.70	-33 50.2	2.821	3.783	5.4	21.4
5 21	14 9.63	- 4 3.8	2.617	3.532	8.1	20.6	5 21	14 5.19	-33 19.0	2.858	3.787	7.0	21.5
5 31	14 4.41	- 3 55.6	2.698	3.534	10.6	20.8	5 31	13 58.19	-32 41.3	2.922	3.792	9.0	21.6
304566	2006 VF ₉		4 28.8 186°21	0°4/28.4	17		35379	1997 WS ₂₀		4 28.8 246°03	2°7/27.1	18	
3 22	14 48.04	-15 3.5	2.857	3.653	10.6	22.7	3 22	14 53.92	- 9 48.2	1.673	2.497	15.7	19.8
4 1	14 43.70	-14 36.4	2.764	3.653	8.2	22.5	4 1	14 49.50	- 9 20.3	1.580	2.484	12.3	19.5
4 11	14 37.85	-14 2.1	2.695	3.652	5.4	22.3	4 11	14 42.41	- 8 45.2	1.508	2.471	8.2	19.2
4 21	14 30.93	-13 22.5	2.654	3.651	2.4	22.1	4 21	14 33.22	- 8 6.7	1.462	2.458	4.1	18.9
5 1	14 23.53	-12 40.4	2.643	3.649	0.9	22.0	5 1	14 22.93	- 7 29.8	1.442	2.444	3.3	18.9
5 11	14 16.30	-11 59.3	2.661	3.647	4.0	22.2	5 11	14 12.79	- 7 0.3	1.449	2.429	7.4	19.1
5 21	14 9.84	-11 22.5	2.708	3.645	7.0	22.4	5 21	14 3.94	- 6 42.8	1.481	2.415	11.9	19.3
5 31	14 4.63	-10 52.7	2.780	3.642	9.6	22.6	5 31	13 57.30	- 6 40.4	1.535	2.399	15.9	19.5
41965	2000 XP ₃₇		4 28.8 158°21	1°2/29.8	18		245426	2005 JA ₈₄		4 28.8 253°73	0°3/29.1	18	
3 22	14 55.21	-18 29.3	2.559	3.337	12.2	19.6	3 22	14 47.40	-18 54.3	2.178	2.980	13.3	20.4
4 1	14 49.43	-18 41.6	2.470	3.345	9.7	19.4	4 1	14 43.77	-18 14.3	2.086	2.976	10.5	20.2
4 11	14 41.75	-18 45.7	2.405	3.352	6.6	19.2	4 11	14 38.18	-17 21.4	2.017	2.973	7.1	20.0
4 21	14 32.71	-18 41.8	2.367	3.359	3.3	19.0	4 21	14 31.18	-16 17.8	1.974	2.970	3.3	19.8
5 1	14 23.04	-18 31.3	2.359	3.365	1.3	18.9	5 1	14 23.54	-15 7.7	1.959	2.966	0.8	19.6
5 11	14 13.59	-18 16.7	2.381	3.370	4.1	19.1	5 11	14 16.13	-13 56.6	1.973	2.963	4.7	19.8
5 21	14 5.11	-18 1.0	2.432	3.375	7.4	19.3	5 21	14 9.73	-12 50.2	2.014	2.960	8.5	20.1
5 31	13 58.22	-17 47.6	2.509	3.379	10.3	19.5	5 31	14 4.97	-11 53.5	2.079	2.956	11.8	20.3
172574	2003 UA ₂₀₇		4 28.8 156°03	0°8/29.4	18		107458	2001 DN ₂₆		4 28.8 182°01	1°7/27.5	18	
3 22	14 54.87	-17 53.3	1.892	2.691	15.2	20.9	3 22	14 53.56	-11 54.6	1.963	2.775	14.2	20.5
4 1	14 49.80	-17 50.0	1.810	2.697	11.9	20.7	4 1	14 48.65	-11 23.4	1.878	2.776	11.0	20.3
4 11	14 42.30	-17 35.5	1.749	2.703	8.1	20.4	4 11	14 41.49	-10 44.3	1.816	2.777	7.3	20.0
4 21	14 33.03	-17 10.9	1.714	2.708	3.9	20.2	4 21	14 32.69	-10 0.7	1.780	2.777	3.3	19.8
5 1	14 22.95	-16 38.9	1.706	2.713	1.1	20.0	5 1	14 23.12	- 9 16.8	1.772	2.776	2.3	19.7
5 11	14 13.18	-16 3.9	1.726	2.717	5.2	20.3	5 11	14 13.83	- 8 37.8	1.793	2.774	6.1	20.0
5 21	14 4.72	-15 30.9	1.774	2.720	9.3	20.5	5 21	14 5.73	- 8 7.9	1.839	2.772	10.0	20.2
5 31	13 58.34	-15 4.7	1.845	2.723	13.0	20.8	5 31	13 59.53	- 7 50.3	1.910	2.770	13.4	20.4
391297	2006 SA ₃₁₇		4 28.8 204°46	1°0/27.9	17		104111	2000 EE ₄₇		4 28.8 303°06	4°0/1.5	17	
3 22	14 48.63	-12 48.3	2.475										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
11766	Fredseares 4 28.8 226°33 1°6/30.4 18						67447	2000 QJ ₁₅₁ 4 28.8 277°58 3°1/30.8 18					
3 22	14 49.16	-21 20.0	2.764	3.541	11.5	18.8	3 22	14 52.29	-23 2.3	1.571	2.372	17.7	18.6
4 1	14 44.79	-21 18.3	2.661	3.533	9.1	18.6	4 1	14 48.81	-23 9.6	1.469	2.353	14.4	18.3
4 11	14 38.72	-21 6.8	2.581	3.524	6.4	18.4	4 11	14 42.31	-22 59.7	1.385	2.333	10.4	18.0
4 21	14 31.41	-20 45.8	2.527	3.516	3.5	18.2	4 21	14 33.34	-22 31.1	1.325	2.313	6.0	17.7
5 1	14 23.49	-20 16.8	2.503	3.507	1.6	18.0	5 1	14 22.96	-21 45.2	1.289	2.293	3.1	17.5
5 11	14 15.68	-19 42.9	2.507	3.497	3.9	18.2	5 11	14 12.58	-20 47.0	1.280	2.272	6.3	17.6
5 21	14 8.66	-19 7.5	2.540	3.488	6.9	18.3	5 21	14 3.59	-19 44.2	1.295	2.252	11.1	17.8
5 31	14 3.00	-18 34.3	2.599	3.478	9.6	18.5	5 31	13 57.10	-18 45.5	1.332	2.231	15.7	18.0
59848	1999 RT ₇₃ 4 28.8 324°03 3°4/26.2 18						121653	1999 XV 4 28.8 207°43 13°2/23.7 18					
3 22	14 45.73	-10 13.3	1.555	2.398	15.8	19.1	3 22	15 6.94	+14 5.7	1.336	2.142	20.0	19.4
4 1	14 43.25	-9 12.0	1.468	2.384	12.2	18.9	4 1	15 0.08	+14 55.6	1.269	2.138	17.2	19.2
4 11	14 38.26	-8 0.0	1.403	2.371	8.2	18.6	4 11	14 49.63	+15 27.2	1.222	2.134	14.7	19.0
4 21	14 31.36	-6 43.0	1.362	2.358	4.3	18.3	4 21	14 36.49	+15 29.5	1.195	2.130	13.3	18.9
5 1	14 23.50	-5 28.5	1.346	2.345	4.2	18.3	5 1	14 22.15	+14 54.2	1.192	2.125	13.8	18.9
5 11	14 15.84	-4 24.7	1.356	2.334	8.2	18.5	5 11	14 8.38	+13 39.5	1.212	2.119	16.0	19.0
5 21	14 9.44	-3 38.0	1.390	2.322	12.6	18.7	5 21	13 56.72	+11 49.8	1.255	2.113	19.0	19.2
5 31	14 5.15	-3 12.3	1.444	2.312	16.5	18.9	5 31	13 48.18	+9 33.4	1.316	2.106	22.0	19.4
270008	2001 DO ₃₄ 4 28.8 37°55 10°9/19.9 17						414878	2010 VM ₁₉₄ 4 28.8 95°24 4°7/25.3 18					
3 22	14 47.95	+9 33.5	1.585	2.422	15.9	19.6	3 22	14 51.67	-4 13.3	1.841	2.669	14.4	21.1
4 1	14 44.53	+11 19.0	1.542	2.433	13.4	19.4	4 1	14 47.09	-3 18.8	1.780	2.685	11.1	20.9
4 11	14 38.79	+12 53.4	1.520	2.445	11.5	19.4	4 11	14 40.35	-2 22.7	1.742	2.700	7.7	20.7
4 21	14 31.45	+14 7.0	1.521	2.457	10.9	19.3	4 21	14 32.14	-1 30.7	1.729	2.716	5.0	20.6
5 1	14 23.52	+14 52.0	1.545	2.470	11.8	19.4	5 1	14 23.38	-0 48.5	1.744	2.731	5.3	20.6
5 11	14 16.11	+15 4.9	1.592	2.483	13.7	19.6	5 11	14 15.07	-0 20.7	1.785	2.746	8.1	20.8
5 21	14 10.08	+14 46.3	1.658	2.496	16.0	19.8	5 21	14 8.02	-0 9.8	1.852	2.761	11.3	21.0
5 31	14 6.06	+13 59.7	1.743	2.510	18.2	19.9	5 31	14 2.87	-0 16.4	1.940	2.775	14.2	21.3
203425	2001 XZ ₂₄₂ 4 28.8 123°26 1°6/29.9 18						426439	2013 QV ₃₉ 4 28.8 110°25 7°5/5.3 17					
3 22	14 53.86	-21 16.8	1.616	2.418	17.2	20.5	3 22	14 57.38	-36 33.9	2.091	2.801	16.6	20.9
4 1	14 49.38	-20 55.2	1.542	2.429	13.6	20.3	4 1	14 51.99	-37 18.7	2.014	2.818	14.3	20.8
4 11	14 42.19	-20 16.5	1.488	2.440	9.4	20.0	4 11	14 43.90	-37 42.9	1.956	2.835	11.7	20.6
4 21	14 33.04	-19 22.1	1.457	2.450	4.8	19.8	4 21	14 33.84	-37 43.0	1.920	2.851	9.3	20.5
5 1	14 23.07	-18 16.3	1.454	2.460	1.7	19.6	5 1	14 22.89	-37 17.9	1.909	2.867	7.7	20.4
5 11	14 13.56	-17 6.2	1.477	2.469	5.7	19.9	5 11	14 12.35	-36 30.6	1.924	2.882	7.8	20.5
5 21	14 5.62	-15 59.3	1.526	2.478	10.1	20.1	5 21	14 3.31	-35 27.0	1.966	2.897	9.5	20.6
5 31	14 0.04	-15 2.5	1.598	2.487	14.1	20.4	5 31	13 56.59	-34 15.4	2.031	2.911	11.9	20.8
132283	2002 FP ₁₃ 4 28.8 336°19 3°6/26.9 17						27835	1994 PZ ₁₃ 4 28.8 346°22 7°6/5.0 18					
3 22	14 45.99	-9 26.8	1.122	1.986	19.2	19.6	3 22	14 52.48	-36 10.6	2.202	2.918	15.7	18.4
4 1	14 44.43	-8 58.2	1.043	1.970	15.0	19.3	4 1	14 48.28	-37 5.9	2.108	2.916	13.6	18.2
4 11	14 39.61	-8 20.4	0.983	1.955	10.1	19.0	4 11	14 41.55	-37 43.2	2.035	2.914	11.3	18.1
4 21	14 32.15	-7 39.0	0.944	1.942	5.1	18.6	4 21	14 32.86	-37 58.8	1.983	2.912	9.1	17.9
5 1	14 23.28	-7 1.4	0.927	1.929	4.4	18.6	5 1	14 23.14	-37 50.8	1.956	2.910	7.7	17.8
5 11	14 14.61	-6 35.8	0.932	1.918	9.4	18.8	5 11	14 13.55	-37 20.9	1.954	2.909	7.9	17.8
5 21	14 7.62	-6 28.0	0.958	1.909	14.8	19.0	5 21	14 5.18	-36 33.7	1.978	2.908	9.5	17.9
5 31	14 3.44	-6 41.4	1.002	1.901	19.6	19.3	5 31	13 58.91	-35 35.8	2.025	2.907	11.8	18.1
308093	2004 VT ₁₃ 4 28.8 86°85 13°1/23.5 18						430120	2013 TF ₂₅ 4 28.8 89°54 1°2/29.7 17					
3 22	15 6.64	+19 29.6	1.600	2.379	18.3	20.1	3 22	14 53.94	-18 27.0	2.034	2.828	14.4	21.2
4 1	14 58.56	+20 17.6	1.567	2.407	16.0	20.1	4 1	14 48.81	-18 33.6	1.964	2.848	11.3	21.0
4 11	14 47.77	+20 43.1	1.554	2.434	14.1	20.0	4 11	14 41.51	-18 30.0	1.915	2.867	7.7	20.8
4 21	14 35.30	+20 38.2	1.563	2.461	13.2	20.0	4 21	14 32.68	-18 16.9	1.893	2.886	3.8	20.6
5 1	14 22.52	+19 58.8	1.595	2.488	13.5	20.1	5 1	14 23.23	-17 56.5	1.898	2.904	1.3	20.5
5 11	14 10.76	+18 46.0	1.652	2.514	14.8	20.2	5 11	14 14.18	-17 32.4	1.932	2.923	4.7	20.8
5 21	14 1.04	+17 5.3	1.731	2.539	16.7	20.4	5 21	14 6.38	-17 8.9	1.993	2.941	8.4	21.0
5 31	13 53.97	+15 3.8	1.829	2.564	18.6	20.6	5 31	14 0.49	-16 49.9	2.078	2.959	11.6	21.3
471188	2010 NT ₁₃ 4 28.8 280°67 5°2/2.9 18						411699	2011 YM ₅₇ 4 28.8 38°69 1°3/28.1 17					
3 22	14 52.03	-30 30.0	2.503	3.240	13.5	21.4	3 22	14 51.78	-13 11.0	1.388	2.223	17.8	21.1
4 1	14 47.58	-31 9.7	2.388	3.221	11.4	21.2	4 1	14 48.12	-12 54.6	1.319	2.229	13.8	20.8
4 11	14 40.93	-31 36.1	2.295	3.202	9.0	21.0	4 11	14 41.56	-12 28.1	1.269	2.235	9.2	20.6
4 21	14 32.55	-31 46.8	2.226	3.182	6.7	20.9	4 21	14 32.85	-11 54.8	1.243	2.241	4.1	20.3
5 1	14 23.18	-31 40.6	2.184	3.162	5.3	20.7	5 1	14 23.18	-11 19.7	1.242	2.248	2.0	20.2
5 11	14 13.78	-31 19.1	2.170	3.143	6.0	20.7	5 11	14 13.96	-10 48.9	1.266	2.255	7.0	20.5
5 21	14 5.27	-30 45.6	2.182	3.123	8.2	20.8	5 21	14 6.38	-10 27.8	1.314	2.262	11.8	20.8
5 31	13 58.46	-30 5.4	2.220	3.103	10.9	21.0	5 31	14 1.29	-10 20.1	1.383	2.270	15.9	21.1
354819	2005 WL ₈₉ 4 28.8 82°36 3°6/27.0 18						470751	2008 UB ₁₄₀ 4 28.8 198°62 0°3/29.1 17					
3 22	14 58.02	-7 11.5	1.353	2.187	18.3	20.5	3 22	14 50.01	-18 8.4	2.595	3.384	11.8	21.9
4 1	14 52.71	-6 53.4	1.297	2.206	14.1	20.3	4 1	14 45.47	-17 37.8	2.497	3.380	9.2	21.7
4 11	14 44.41	-6 32.1	1.261	2.225	9.4	20.1	4 11	14 39.18	-16 56.9	2.423	3.376	6.2	21.5
4 21	14 34.01	-6 12.1	1.249	2.244	4.9	19.9	4 21	14 31.64	-16 7.6	2.376	3.371	2.9	21.3
5 1	14 22.84	-5 58.5	1.263	2.263	4.2	19.9	5 1	14 23.53	-15 12.8	2.358	3.365	0.7	21.1
5 11	14 12.35	-5 55.8	1.302	2.281	8.2	20.1	5 11	14 15.59	-14 16.8	2.370	3.359	4.2	21.4
5 21	14 3.74	-6 6.6	1.366	2.300	12.6	20.4	5 21	14 8.52	-13 23.9	2.411	3.352	7.5	21.6
5 31	13 57.78	-6 31.8	1.450	2.318	16.4	20.7	5 31	14 2.89	-12 38.1	2.477	3.345	10.4	21.8
369963	1995 OE ₃ 4 28.8 170°01 4°5/3.0 17						414249	2008 GC ₃₂ 4 28.8 321°42 2°3/25.4 18					
3 22	14 52.59	-30 18.3	2.322	3.065	14.3	21.1	3 22	14 42.87	-2 47.0	4.301	5.111	7.1	20.9
4 1	14 47.85	-30 22.5	2.229	3.068	11.9	20.9	4 1	14 39.25	-2 30.1	4.214	5.109	5.5	20.8
4 11	14 40.94	-30 9.6	2.156	3.071	9.1	20.7	4 11	14 34.71	-2 13.6	4.154	5.1		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
397835	2008 <i>ST</i> ₁₈₂		4 28.8 293°27	1°5/27.9	17		376121	2011 <i>AP</i> ₁₃		4 28.9 246°54	4°6/2.0	17	
3 22	14 50.69	-13 54.7	1.299	2.139	18.5	21.3	3 22	14 55.32	-27 17.7	2.051	2.811	15.4	21.1
4 1	14 47.98	-13 28.3	1.202	2.115	14.6	20.9	4 1	14 50.56	-27 44.2	1.941	2.794	12.8	20.8
4 11	14 42.01	-12 47.8	1.124	2.091	9.9	20.6	4 11	14 43.18	-27 55.5	1.852	2.777	9.7	20.6
4 21	14 33.31	-11 56.0	1.069	2.067	4.5	20.2	4 21	14 33.70	-27 49.5	1.787	2.759	6.6	20.4
5 1	14 23.00	-10 58.6	1.037	2.043	2.4	20.0	5 1	14 23.02	-27 25.5	1.748	2.740	4.6	20.2
5 11	14 12.64	-10 4.0	1.030	2.019	8.1	20.3	5 11	14 12.35	-26 46.1	1.737	2.721	6.0	20.2
5 21	14 3.77	-9 20.3	1.045	1.995	13.9	20.5	5 21	14 2.81	-25 56.5	1.753	2.701	9.3	20.4
5 31	13 57.64	-8 54.5	1.080	1.971	19.0	20.7	5 31	13 55.36	-25 3.7	1.793	2.681	12.8	20.6
129200	2005 <i>NC</i> ₉		4 28.8 202°16	1°3/27.6	17		171299	2006 <i>HK</i> ₆		4 28.9 301°24	4°8/30.7	17	
3 22	14 47.84	-12 30.3	2.314	3.127	12.3	20.5	3 22	14 55.32	-22 4.3	1.395	2.203	19.2	19.7
4 1	14 43.93	-11 58.7	2.227	3.126	9.5	20.3	4 1	14 51.91	-23 5.8	1.290	2.176	15.8	19.4
4 11	14 38.23	-11 20.1	2.165	3.126	6.2	20.1	4 11	14 44.94	-23 56.8	1.203	2.150	11.7	19.1
4 21	14 31.23	-10 37.3	2.128	3.125	2.8	19.9	4 21	14 34.82	-24 33.5	1.139	2.124	7.4	18.8
5 1	14 23.65	-9 54.0	2.120	3.125	1.8	19.8	5 1	14 22.65	-24 52.7	1.098	2.098	4.9	18.5
5 11	14 16.28	-9 14.4	2.141	3.124	5.1	20.1	5 11	14 10.10	-24 55.2	1.083	2.072	7.8	18.6
5 21	14 9.83	-8 42.4	2.188	3.123	8.5	20.3	5 21	13 58.95	-24 45.4	1.090	2.047	12.7	18.8
5 31	14 4.90	-8 20.7	2.260	3.122	11.5	20.4	5 31	13 50.74	-24 30.9	1.118	2.022	17.6	19.0
280036	2001 <i>XV</i> ₂₅₂		4 28.8 20°16	9°0/23.1	17		141301	2001 <i>YL</i> ₁₀₄		4 28.9 181°96	3°9/24.8	18	
3 22	14 50.63	+ 5 17.8	1.518	2.358	16.3	19.9	3 22	14 48.33	- 2 24.3	2.702	3.518	10.6	20.5
4 1	14 46.81	+ 6 20.8	1.460	2.362	13.3	19.8	4 1	14 43.98	- 1 40.7	2.621	3.519	8.3	20.3
4 11	14 40.45	+ 7 16.3	1.423	2.366	10.6	19.6	4 11	14 38.11	- 0 56.9	2.566	3.519	5.9	20.1
4 21	14 32.28	+ 7 56.3	1.408	2.371	9.0	19.5	4 21	14 31.18	- 0 16.5	2.537	3.519	4.1	20.0
5 1	14 23.37	+ 8 13.6	1.418	2.376	9.7	19.6	5 1	14 23.77	+ 0 16.6	2.537	3.518	4.4	20.0
5 11	14 14.91	+ 8 4.6	1.451	2.382	12.1	19.7	5 11	14 16.56	+ 0 39.2	2.566	3.518	6.5	20.2
5 21	14 7.92	+ 7 29.2	1.506	2.388	15.0	19.9	5 21	14 10.14	+ 0 49.3	2.621	3.516	8.9	20.3
5 31	14 3.13	+ 6 30.1	1.580	2.395	17.8	20.1	5 31	14 4.99	+ 0 46.1	2.700	3.515	11.2	20.5
92527	2000 <i>OJ</i> ₇		4 28.8 176°42	0°4/29.1	18		208340	2001 <i>QN</i> ₂₂₉		4 28.9 194°24	3°3/2.1	18	
3 22	14 53.49	-18 30.9	1.837	2.638	15.5	20.6	3 22	14 50.28	-26 55.3	2.516	3.274	13.0	20.5
4 1	14 48.85	-17 58.9	1.751	2.641	12.1	20.4	4 1	14 45.91	-26 58.8	2.419	3.272	10.6	20.4
4 11	14 41.76	-17 12.7	1.687	2.642	8.2	20.1	4 11	14 39.62	-26 48.4	2.344	3.271	7.9	20.2
4 21	14 32.88	-16 14.6	1.648	2.644	3.8	19.8	4 21	14 31.92	-26 23.7	2.294	3.269	5.1	20.0
5 1	14 23.19	-15 8.9	1.637	2.644	1.0	19.6	5 1	14 23.56	-25 45.8	2.272	3.266	3.4	19.9
5 11	14 13.82	-14 1.9	1.654	2.644	5.5	20.0	5 11	14 15.38	-24 58.2	2.278	3.264	4.6	20.0
5 21	14 5.76	-13 0.2	1.698	2.643	9.8	20.2	5 21	14 8.15	-24 5.2	2.312	3.261	7.3	20.1
5 31	13 59.78	-12 9.4	1.765	2.642	13.6	20.4	5 31	14 2.51	-23 12.0	2.372	3.258	10.2	20.3
46364	2001 <i>UM</i> ₃₅		4 28.8 198°63	4°4/24.9	18		239833	1999 <i>BD</i> ₃₀		4 28.9 289°10	3°9/26.5	17	
3 22	14 49.52	- 1 29.9	2.412	3.231	11.7	19.2	3 22	14 51.35	- 8 27.0	1.394	2.236	17.3	20.5
4 1	14 45.08	- 0 51.9	2.332	3.230	9.1	19.0	4 1	14 48.10	- 7 46.6	1.304	2.219	13.6	20.2
4 11	14 38.92	- 0 14.5	2.275	3.228	6.5	18.8	4 11	14 41.84	- 6 58.2	1.235	2.201	9.2	19.9
4 21	14 31.52	+ 0 18.3	2.246	3.227	4.6	18.7	4 21	14 33.17	- 6 6.8	1.188	2.183	5.0	19.6
5 1	14 23.58	+ 0 42.4	2.244	3.225	4.9	18.7	5 1	14 23.18	- 5 19.7	1.166	2.165	4.7	19.5
5 11	14 15.85	+ 0 54.5	2.270	3.223	7.1	18.8	5 11	14 13.30	- 4 44.3	1.169	2.148	9.0	19.7
5 21	14 9.02	+ 0 52.8	2.323	3.220	9.8	19.0	5 21	14 4.85	- 4 26.3	1.195	2.130	13.9	19.9
5 31	14 3.63	+ 0 36.9	2.398	3.218	12.3	19.2	5 31	13 58.92	- 4 29.0	1.240	2.113	18.4	20.1
97001	1999 <i>TW</i> ₂₃₈		4 28.8 120°36	2°1/27.2	18		215223	2000 <i>WM</i> ₁₂₇		4 28.9 161°64	0°8/29.7	17	
3 22	14 51.68	- 9 43.0	2.138	2.952	13.1	20.0	3 22	14 47.57	-19 53.9	2.612	3.400	11.8	20.8
4 1	14 46.92	- 9 16.9	2.064	2.963	10.1	19.8	4 1	14 43.58	-19 27.7	2.522	3.402	9.2	20.6
4 11	14 40.20	- 8 46.0	2.013	2.974	6.7	19.6	4 11	14 37.94	-18 50.8	2.454	3.405	6.3	20.4
4 21	14 32.10	- 8 13.5	1.989	2.985	3.2	19.4	4 21	14 31.12	-18 4.7	2.414	3.407	3.1	20.2
5 1	14 23.43	- 7 43.0	1.993	2.995	2.6	19.4	5 1	14 23.79	-17 12.4	2.402	3.409	0.9	20.0
5 11	14 15.09	- 7 18.7	2.026	3.005	5.8	19.6	5 11	14 16.68	-16 17.8	2.420	3.410	3.9	20.2
5 21	14 7.84	- 7 3.4	2.085	3.014	9.2	19.8	5 21	14 10.42	-15 25.1	2.465	3.412	7.1	20.4
5 31	14 2.29	- 6 59.4	2.168	3.024	12.2	20.0	5 31	14 5.55	-14 38.4	2.537	3.413	9.9	20.6
222743	2002 <i>BT</i> ₆		4 28.8 127°23	0°5/28.4	16		35641	1998 <i>KT</i> ₅₁		4 28.9 1°45	5°4/24.3	18	
3 22	14 54.13	-14 7.4	2.250	3.048	13.1	21.5	3 22	14 46.45	- 5 31.0	1.623	2.468	15.2	18.2
4 1	14 48.71	-13 54.1	2.175	3.065	10.1	21.4	4 1	14 43.54	- 4 6.7	1.552	2.467	11.8	17.9
4 11	14 41.33	-13 33.6	2.124	3.081	6.7	21.2	4 11	14 38.31	- 2 36.7	1.503	2.467	8.2	17.7
4 21	14 32.60	-13 7.7	2.100	3.096	2.9	21.0	4 21	14 31.39	- 1 8.5	1.479	2.467	5.6	17.6
5 1	14 23.32	-12 39.5	2.105	3.111	1.1	20.8	5 1	14 23.72	+ 0 9.2	1.481	2.467	6.2	17.6
5 11	14 14.38	-12 12.6	2.139	3.125	4.8	21.1	5 11	14 16.39	+ 1 9.1	1.509	2.468	9.4	17.8
5 21	14 6.56	-11 50.5	2.201	3.139	8.3	21.4	5 21	14 10.32	+ 1 46.8	1.560	2.470	13.0	18.0
5 31	14 0.45	-11 36.1	2.288	3.152	11.3	21.6	5 31	14 6.22	+ 2 0.5	1.631	2.471	16.2	18.2
41974	2000 <i>YW</i> ₁₁		4 28.8 194°57	0°9/29.8	18		32434	2000 <i>RW</i> ₉₆		4 28.9 232°74	2°8/4.2	18	
3 22	14 50.39	-20 41.4	2.536	3.317	12.2	19.7	3 22	14 42.34	-32 46.5	5.045	5.750	7.5	19.8
4 1	14 45.82	-20 7.3	2.438	3.314	9.7	19.5	4 1	14 38.90	-32 38.3	4.933	5.743	6.3	19.6
4 11	14 39.44	-19 20.9	2.363	3.311	6.6	19.3	4 11	14 34.53	-32 20.9	4.844	5.736	5.0	19.5
4 21	14 31.78	-18 23.7	2.315	3.307	3.3	19.0	4 21	14 29.52	-31 54.4	4.782	5.728	3.7	19.4
5 1	14 23.53	-17 18.8	2.297	3.303	1.0	18.9	5 1	14 24.24	-31 19.3	4.747	5.721	2.8	19.4
5 11	14 15.48	-16 10.9	2.308	3.298	4.1	19.1	5 11	14 19.04	-30 37.4	4.742	5.714	3.1	19.4
5 21	14 8.35	-15 5.0	2.348	3.292	7.5	19.3	5 21	14 14.30	-29 50.6	4.767	5.706	4.1	19.4
5 31	14 2.73	-14 5.9	2.414	3.286	10.5	19.5	5 31	14 10.30	-29 1.4	4.819	5.698	5.5	19.5
228367	2000 <i>VS</i> ₆₄		4 28.9 199°34	0°6/28.3	18		31716	Mattoonder		4 28.9 333°18	1°8/27.5		

EPHEMERIDES

4 28.9

4 28.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
248404	2005 SQ ₁₀₂	4 28.9 241°00	1°7/30.6	18			219679	2001 VA ₁₂₁	4 28.9 114°45	0°8/28.2	18		
3 22	14 48.88	-22 3.3	2.751	3.526	11.6	21.6	3 22	14 54.42	-13 27.7	2.210	3.010	13.2	21.0
4 1	14 44.66	-21 56.7	2.643	3.514	9.2	21.5	4 1	14 48.92	-13 9.8	2.141	3.032	10.2	20.8
4 11	14 38.72	-21 39.4	2.559	3.501	6.5	21.3	4 11	14 41.48	-12 44.8	2.095	3.053	6.7	20.6
4 21	14 31.52	-21 11.9	2.501	3.488	3.6	21.0	4 21	14 32.70	-12 15.2	2.077	3.073	2.9	20.4
5 1	14 23.69	-20 35.8	2.472	3.475	1.7	20.9	5 1	14 23.42	-11 44.1	2.087	3.093	1.3	20.3
5 11	14 15.95	-19 54.2	2.472	3.462	3.9	21.0	5 11	14 14.54	-11 15.3	2.127	3.112	5.0	20.6
5 21	14 8.99	-19 11.0	2.500	3.448	6.9	21.2	5 21	14 6.80	-10 52.4	2.194	3.130	8.4	20.9
5 31	14 3.40	-18 30.1	2.554	3.434	9.8	21.4	5 31	14 0.81	-10 38.1	2.286	3.148	11.4	21.1
2282	Andrés Bello	4 28.9 123°06	0°7/28.4	18 R			261988	2006 QU ₃₁	4 28.9 274°21	3°1/26.5	17		
3 22	14 52.96	-16 30.5	1.463	2.286	17.7	16.7	3 22	14 51.24	-10 37.7	1.742	2.568	15.1	21.5
4 1	14 48.92	-15 47.6	1.390	2.293	13.8	16.5	4 1	14 47.52	-9 41.6	1.635	2.541	11.9	21.2
4 11	14 42.04	-14 49.5	1.339	2.301	9.2	16.3	4 11	14 41.22	-8 34.2	1.550	2.514	8.0	20.9
4 21	14 33.10	-13 39.9	1.311	2.308	4.0	16.0	4 21	14 32.86	-7 20.0	1.490	2.486	4.1	20.6
5 1	14 23.28	-12 25.3	1.309	2.315	1.6	15.8	5 1	14 23.33	-6 5.6	1.457	2.457	3.8	20.5
5 11	14 13.92	-11 14.0	1.333	2.322	6.7	16.2	5 11	14 13.78	-4 58.6	1.451	2.428	7.9	20.7
5 21	14 6.19	-10 13.5	1.382	2.328	11.5	16.4	5 21	14 5.34	-4 5.9	1.470	2.398	12.4	20.9
5 31	14 0.90	-9 29.4	1.453	2.334	15.6	16.7	5 31	13 58.95	-3 32.2	1.511	2.368	16.5	21.1
182017	1999 YO ₇	4 28.9 96°02	1°2/27.9	18			201218	2002 QW ₅₆	4 28.9 180°15	0°6/28.4	17		
3 22	14 53.28	-13 53.2	1.672	2.491	16.0	21.0	3 22	14 50.35	-14 15.8	2.262	3.067	12.8	20.7
4 1	14 48.67	-13 19.4	1.607	2.508	12.3	20.8	4 1	14 45.97	-13 57.9	2.174	3.068	9.9	20.5
4 11	14 41.60	-12 35.6	1.563	2.525	8.1	20.5	4 11	14 39.66	-13 32.3	2.110	3.068	6.6	20.3
4 21	14 32.81	-11 45.4	1.544	2.541	3.6	20.3	4 21	14 31.97	-13 1.1	2.072	3.068	2.9	20.0
5 1	14 23.37	-10 53.9	1.552	2.557	1.9	20.2	5 1	14 23.62	-12 27.3	2.062	3.068	1.2	19.9
5 11	14 14.41	-10 7.1	1.587	2.573	6.2	20.5	5 11	14 15.49	-11 54.9	2.081	3.068	4.9	20.1
5 21	14 6.91	-9 30.3	1.648	2.589	10.4	20.8	5 21	14 8.35	-11 27.7	2.127	3.067	8.4	20.4
5 31	14 1.57	-9 6.9	1.731	2.604	14.0	21.1	5 31	14 2.81	-11 8.8	2.198	3.066	11.6	20.6
497289	2005 SW ₇₆	4 28.9 180°59	0°5/28.4	17			497014	2003 ED ₁₉	4 28.9 20°91	3°0/30.7	17		
3 22	14 52.18	-15 1.3	2.432	3.228	12.3	23.9	3 22	14 50.05	-22 2.2	1.425	2.240	18.5	20.5
4 1	14 47.22	-14 32.8	2.341	3.229	9.5	23.7	4 1	14 46.96	-22 17.5	1.352	2.245	14.8	20.2
4 11	14 40.40	-13 55.9	2.274	3.230	6.3	23.5	4 11	14 40.93	-22 15.9	1.299	2.251	10.5	20.0
4 21	14 32.26	-13 12.6	2.234	3.230	2.8	23.3	4 21	14 32.69	-21 57.2	1.268	2.258	5.9	19.8
5 1	14 23.51	-12 26.4	2.224	3.230	1.1	23.1	5 1	14 23.42	-21 23.6	1.261	2.265	3.0	19.6
5 11	14 14.99	-11 41.4	2.243	3.229	4.7	23.4	5 11	14 14.55	-20 40.9	1.280	2.273	6.1	19.8
5 21	14 7.41	-11 1.6	2.290	3.227	8.1	23.6	5 21	14 7.31	-19 56.0	1.322	2.282	10.6	20.1
5 31	14 1.39	-10 30.4	2.363	3.224	11.1	23.8	5 31	14 2.59	-19 16.2	1.386	2.291	14.7	20.3
123189	2000 UP ₁₃	4 28.9 214°26	0°1/28.9	18			268310	2005 QZ ₁₃₆	4 28.9 85°26	12°8/9.3	18		
3 22	14 52.14	-16 17.7	2.419	3.212	12.4	21.3	3 22	15 14.75	-48 4.5	2.059	2.669	19.3	21.2
4 1	14 47.32	-16 2.9	2.318	3.204	9.7	21.1	4 1	15 6.93	-50 16.8	1.998	2.699	17.6	21.1
4 11	14 40.57	-15 39.3	2.241	3.195	6.5	20.9	4 11	14 54.83	-52 4.7	1.954	2.729	15.8	21.0
4 21	14 32.38	-15 8.4	2.191	3.186	3.0	20.6	4 21	14 39.19	-53 19.2	1.930	2.757	14.2	20.9
5 1	14 23.47	-14 32.8	2.169	3.176	0.8	20.4	5 1	14 21.60	-53 53.6	1.929	2.786	13.1	20.9
5 11	14 14.70	-13 56.2	2.177	3.166	4.5	20.7	5 11	14 4.29	-53 47.7	1.950	2.814	12.8	21.0
5 21	14 6.84	-13 22.5	2.213	3.154	8.1	20.9	5 21	13 49.31	-53 7.6	1.994	2.841	13.4	21.0
5 31	14 0.55	-12 55.5	2.275	3.143	11.2	21.1	5 31	13 38.07	-52 4.0	2.059	2.867	14.5	21.2
386487	2009 AA ₃₆	4 28.9 131°01	3°3/25.7	17			128597	2004 QA ₁₁	4 28.9 198°42	6°3/22.9	18		
3 22	14 50.78	-4 43.5	2.622	3.433	11.1	22.1	3 22	14 50.79	+ 2 39.7	2.292	3.110	12.2	21.3
4 1	14 45.81	-4 6.4	2.552	3.448	8.5	21.9	4 1	14 46.19	+ 3 46.3	2.215	3.107	9.8	21.1
4 11	14 39.28	-3 28.1	2.506	3.462	5.8	21.8	4 11	14 39.74	+ 4 50.5	2.162	3.103	7.6	21.0
4 21	14 31.69	-2 52.2	2.489	3.476	3.6	21.6	4 21	14 31.98	+ 5 46.8	2.135	3.099	6.3	20.9
5 1	14 23.68	-2 22.0	2.500	3.490	3.7	21.7	5 1	14 23.63	+ 6 29.6	2.136	3.095	6.9	20.9
5 11	14 15.96	-2 0.9	2.541	3.502	5.9	21.8	5 11	14 15.50	+ 6 54.8	2.164	3.090	9.0	21.0
5 21	14 9.13	-1 50.6	2.609	3.515	8.5	22.0	5 21	14 8.33	+ 7 0.8	2.217	3.084	11.5	21.2
5 31	14 3.67	-1 52.2	2.701	3.526	10.9	22.2	5 31	14 2.71	+ 6 47.5	2.291	3.078	13.8	21.3
178315	1994 TC ₁₆	4 28.9 195°70	2°0/30.6	18			435279	2007 TO ₃₁₇	4 28.9 218°92	0°6/28.4	17		
3 22	14 51.57	-21 17.1	2.615	3.390	12.1	21.0	3 22	14 52.16	-12 55.1	2.386	3.187	12.3	21.9
4 1	14 46.78	-21 34.3	2.519	3.389	9.7	20.8	4 1	14 47.33	-12 53.9	2.290	3.182	9.6	21.7
4 11	14 40.15	-21 42.1	2.446	3.387	6.8	20.6	4 11	14 40.57	-12 47.0	2.219	3.177	6.4	21.5
4 21	14 32.18	-21 40.6	2.399	3.385	3.9	20.4	4 21	14 32.39	-12 36.1	2.174	3.171	2.8	21.3
5 1	14 23.53	-21 30.5	2.381	3.383	2.0	20.3	5 1	14 23.51	-12 23.4	2.159	3.165	1.2	21.1
5 11	14 15.02	-21 14.3	2.392	3.381	4.1	20.4	5 11	14 14.77	-12 11.7	2.172	3.159	4.7	21.4
5 21	14 7.38	-20 55.1	2.431	3.379	7.1	20.6	5 21	14 6.95	-12 3.9	2.213	3.152	8.2	21.6
5 31	14 1.23	-20 36.4	2.497	3.377	10.0	20.8	5 31	14 0.69	-12 2.6	2.279	3.145	11.3	21.8
433432	2013 TJ ₉₇	4 28.9 119°65	0°8/28.1	17			409278	2004 RF ₁₅₉	4 28.9 244°10	1°0/29.6	14 C		
3 22	14 50.56	-15 6.8	2.259	3.063	12.9	22.4	3 22	14 53.43	-19 35.4	1.694	2.498	16.4	22.3
4 1	14 45.96	-14 24.2	2.185	3.078	9.9	22.2	4 1	14 49.32	-19 16.7	1.594	2.484	13.1	22.1
4 11	14 39.53	-13 32.5	2.135	3.094	6.5	22.0	4 11	14 42.46	-18 42.4	1.516	2.470	9.1	21.8
4 21	14 31.83	-12 34.6	2.112	3.109	2.8	21.8	4 21	14 33.42	-17 53.3	1.461	2.455	4.4	21.5
5 1	14 23.65	-11 34.8	2.117	3.123	1.4	21.7	5 1	14 23.21	-16 52.8	1.433	2.440	1.3	21.2
5 11	14 15.81	-10 38.1	2.152	3.137	4.9	22.0	5 11	14 13.13	-15 47.3	1.432	2.423	5.9	21.5
5 21	14 9.03	-9 48.9	2.214	3.150	8.3	22.2	5 21	14 4.36	-14 44.1	1.457	2.407	10.7	21.7
5 31	14 3.87	-9 10.7	2.301	3.163	11.3	22.4	5 31	13 57.87	-13 50.4	1.504	2.390	15.0	21.9
41335	1999 XL ₂₄₄	4 28.9 280°17	6°9/23.5	18			150814	2001 RB ₁₁₄	4 28.9 205°26	1°4/29.9	18		
3 22	14 50.89	-1 25.9	1.648	2.486	15.3								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
513651	2011 <i>SS</i> ₆₆		4 28.9 171°89	3°2/ 2.5 18			280375	2003 <i>UB</i> ₂₇		4 28.9 209°56	1°2/27.8 18		
3 22	14 50.21	-28 5.3	3.110	3.850	11.1	22.8	3 22	14 50.66	-12 22.4	2.542	3.344	11.6	21.7
4 1	14 45.46	-28 9.0	3.013	3.853	9.1	22.6	4 1	14 46.03	-11 55.8	2.445	3.338	9.0	21.5
4 11	14 39.14	-28 0.7	2.938	3.856	6.9	22.5	4 11	14 39.63	-11 22.8	2.372	3.331	6.0	21.3
4 21	14 31.69	-27 40.1	2.889	3.858	4.6	22.3	4 21	14 31.96	-10 45.6	2.327	3.324	2.7	21.0
5 1	14 23.72	-27 8.1	2.870	3.860	3.2	22.2	5 1	14 23.67	-10 7.6	2.311	3.316	1.7	20.9
5 11	14 15.93	-26 27.3	2.879	3.861	4.0	22.3	5 11	14 15.53	-9 32.5	2.325	3.307	4.9	21.1
5 21	14 8.92	-25 41.2	2.917	3.862	6.2	22.4	5 21	14 8.24	-9 3.6	2.366	3.298	8.1	21.3
5 31	14 3.22	-24 53.8	2.982	3.863	8.5	22.6	5 31	14 2.38	-8 43.7	2.432	3.288	11.0	21.5
228874	2003 <i>HD</i> ₅₂		4 28.9 260°44	4°8/25.8 17			26447	Akrishnan		4 28.9 317°67	0°3/28.8 18 R		
3 22	14 53.28	-2 34.2	1.884	2.709	14.2	20.5	3 22	14 49.71	-14 47.7	1.406	2.241	17.6	18.5
4 1	14 48.63	-2 7.3	1.798	2.700	11.2	20.3	4 1	14 46.93	-14 47.0	1.314	2.223	13.9	18.2
4 11	14 41.65	-1 40.6	1.735	2.692	7.9	20.1	4 11	14 41.15	-14 35.3	1.241	2.206	9.4	17.9
4 21	14 32.94	-1 18.8	1.697	2.684	5.2	19.9	4 21	14 32.94	-14 14.5	1.191	2.189	4.3	17.6
5 1	14 23.37	-1 6.6	1.687	2.675	5.3	19.9	5 1	14 23.37	-13 47.9	1.165	2.172	1.3	17.3
5 11	14 14.01	-1 7.8	1.703	2.666	8.2	20.1	5 11	14 13.86	-13 21.2	1.165	2.157	6.8	17.6
5 21	14 5.81	-1 24.3	1.744	2.658	11.6	20.2	5 21	14 5.78	-13 0.2	1.187	2.142	12.1	17.9
5 31	13 59.53	-1 56.6	1.808	2.649	14.9	20.4	5 31	14 0.21	-12 50.2	1.230	2.127	16.8	18.1
423810	2006 <i>JQ</i> ₃₀		4 28.9 279°68	1°0/29.6 17			274538	2008 <i>SR</i> ₂₃₆		4 28.9 226°27	0°7/29.5 17		
3 22	14 51.74	-17 49.0	1.970	2.772	14.5	21.3	3 22	14 50.30	-18 47.8	2.122	2.920	13.8	21.0
4 1	14 47.47	-17 54.9	1.881	2.770	11.5	21.1	4 1	14 46.19	-18 29.1	2.027	2.914	10.9	20.7
4 11	14 40.90	-17 50.8	1.814	2.768	7.8	20.9	4 11	14 39.97	-17 58.4	1.955	2.908	7.4	20.5
4 21	14 32.60	-17 37.4	1.772	2.766	3.8	20.6	4 21	14 32.18	-17 17.3	1.908	2.902	3.6	20.3
5 1	14 23.47	-17 16.8	1.757	2.763	1.2	20.4	5 1	14 23.63	-16 28.8	1.889	2.896	1.0	20.0
5 11	14 14.53	-16 52.6	1.770	2.761	5.0	20.7	5 11	14 15.26	-15 37.7	1.898	2.889	4.8	20.3
5 21	14 6.74	-16 29.2	1.809	2.759	9.0	20.9	5 21	14 7.95	-14 48.9	1.935	2.882	8.6	20.5
5 31	14 0.86	-16 10.9	1.873	2.757	12.5	21.1	5 31	14 2.38	-14 7.5	1.995	2.875	12.1	20.7
372478	2009 <i>SC</i> ₂₀₄		4 28.9 182°40	1°4/27.5 17			422507	2014 <i>TD</i> ₄		4 28.9 136°16	1°9/27.4 17		
3 22	14 50.41	-13 55.6	2.275	3.081	12.7	22.6	3 22	14 51.53	-13 8.7	1.696	2.519	15.6	21.2
4 1	14 45.96	-13 0.2	2.187	3.082	9.8	22.4	4 1	14 47.42	-12 17.2	1.621	2.525	12.1	21.0
4 11	14 39.63	-11 55.2	2.123	3.082	6.5	22.2	4 11	14 40.88	-11 14.8	1.567	2.531	8.0	20.8
4 21	14 31.95	-10 43.9	2.085	3.082	2.9	21.9	4 21	14 32.59	-10 5.9	1.539	2.536	3.6	20.5
5 1	14 23.67	-9 31.2	2.077	3.081	2.0	21.9	5 1	14 23.54	-8 56.8	1.538	2.541	2.6	20.4
5 11	14 15.64	-8 22.8	2.099	3.080	5.4	22.1	5 11	14 14.88	-7 54.5	1.564	2.546	6.7	20.7
5 21	14 8.60	-7 23.6	2.147	3.078	8.9	22.3	5 21	14 7.57	-7 4.7	1.615	2.551	10.9	21.0
5 31	14 3.16	-6 37.4	2.221	3.075	12.0	22.5	5 31	14 2.34	-6 31.5	1.689	2.555	14.6	21.2
418137	2008 <i>AY</i> ₃₅		4 28.9 144°52	3°3/ 1.3 17			479333	2013 <i>WU</i>		4 28.9 241°19	11°6/25.4 18		
3 22	14 54.39	-24 46.5	1.834	2.614	16.3	21.7	3 22	15 8.48	+9 43.9	1.208	2.026	20.9	20.5
4 1	14 49.72	-24 51.7	1.751	2.620	13.2	21.5	4 1	15 1.93	+10 10.5	1.133	2.018	17.7	20.2
4 11	14 42.47	-24 40.3	1.688	2.627	9.6	21.3	4 11	14 51.36	+10 20.9	1.075	2.008	14.3	20.0
4 21	14 33.32	-24 11.7	1.650	2.633	5.8	21.0	4 21	14 37.58	+10 4.6	1.039	1.999	11.9	19.8
5 1	14 23.29	-23 27.9	1.638	2.639	3.3	20.9	5 1	14 22.17	+9 13.4	1.027	1.988	12.1	19.8
5 11	14 13.60	-22 33.6	1.654	2.644	5.5	21.1	5 11	14 7.13	+7 45.3	1.039	1.978	14.9	19.9
5 21	14 5.32	-21 35.4	1.696	2.649	9.3	21.3	5 21	13 54.27	+5 45.1	1.073	1.967	18.8	20.1
5 31	13 59.24	-20 40.3	1.762	2.653	12.8	21.5	5 31	13 44.84	+3 21.0	1.126	1.955	22.7	20.3
334319	2001 <i>WU</i> ₅₇		4 28.9 269°77	0°4/29.5 18			383873	2008 <i>RZ</i> ₅₀		4 28.9 225°62	2°5/ 1.0 17		
3 22	14 42.49	-17 12.2	4.492	5.275	7.3	20.6	3 22	14 51.59	-23 34.3	2.181	2.958	14.1	21.7
4 1	14 39.04	-17 7.3	4.390	5.270	5.7	20.5	4 1	14 47.26	-23 32.0	2.081	2.951	11.4	21.5
4 11	14 34.66	-16 57.7	4.314	5.264	3.8	20.3	4 11	14 40.73	-23 15.7	2.003	2.943	8.2	21.3
4 21	14 29.63	-16 44.2	4.265	5.259	1.8	20.2	4 21	14 32.55	-22 45.4	1.950	2.935	4.7	21.1
5 1	14 24.30	-16 28.1	4.247	5.254	0.5	20.0	5 1	14 23.54	-22 2.8	1.925	2.927	2.5	20.9
5 11	14 19.04	-16 10.9	4.258	5.248	2.4	20.2	5 11	14 14.69	-21 11.9	1.928	2.918	4.8	21.1
5 21	14 14.21	-15 54.3	4.299	5.243	4.4	20.4	5 21	14 6.90	-20 18.0	1.958	2.909	8.3	21.3
5 31	14 10.12	-15 40.0	4.367	5.237	6.2	20.5	5 31	14 0.91	-19 26.8	2.013	2.899	11.7	21.4
512374	2016 <i>NN</i> ₆₀		4 28.9 205°17	4°0/24.3 18			1807	Slovakia		4 28.9 208°85	0°7/29.4 18 A		
3 22	14 47.25	-3 35.8	2.663	3.482	10.7	22.8	3 22	14 54.37	-18 54.1	1.806	2.606	15.7	16.6
4 1	14 43.24	-2 29.9	2.578	3.478	8.3	22.6	4 1	14 49.77	-18 30.0	1.712	2.601	12.5	16.4
4 11	14 37.69	-1 21.8	2.518	3.473	5.9	22.5	4 11	14 42.58	-17 51.5	1.640	2.594	8.5	16.1
4 21	14 31.05	-0 15.9	2.486	3.468	4.2	22.4	4 21	14 33.44	-17 0.1	1.593	2.587	4.0	15.8
5 1	14 23.92	+0 43.0	2.483	3.463	4.6	22.4	5 1	14 23.32	-15 59.4	1.573	2.580	1.0	15.6
5 11	14 16.96	+1 30.7	2.508	3.457	6.7	22.5	5 11	14 13.42	-14 55.7	1.580	2.571	5.6	15.9
5 21	14 10.77	+2 4.4	2.560	3.451	9.3	22.6	5 21	14 4.82	-13 55.7	1.615	2.562	10.1	16.1
5 31	14 5.87	+2 22.7	2.635	3.445	11.6	22.8	5 31	13 58.36	-13 5.5	1.673	2.552	14.0	16.4
470399	2007 <i>UG</i> ₂₄		4 28.9 71°40	2°5/27.5 18			502335	2015 <i>BR</i> ₁₈₄		4 28.9 295°90	3°6/30.9 17		
3 22	14 56.26	-9 5.1	1.443	2.273	17.5	21.0	3 22	14 53.73	-22 27.2	1.737	2.530	16.5	21.3
4 1	14 51.33	-8 55.8	1.382	2.290	13.5	20.8	4 1	14 49.65	-23 4.5	1.640	2.519	13.5	21.1
4 11	14 43.56	-8 41.9	1.343	2.306	9.0	20.6	4 11	14 42.76	-23 29.3	1.564	2.507	9.8	20.8
4 21	14 33.77	-8 26.7	1.327	2.323	4.3	20.3	4 21	14 33.63	-23 40.0	1.511	2.495	5.9	20.5
5 1	14 23.20	-8 14.7	1.337	2.340	3.1	20.3	5 1	14 23.24	-23 36.2	1.484	2.484	3.6	20.4
5 11	14 13.20	-8 10.2	1.373	2.356	7.3	20.6	5 11	14 12.90	-23 20.4	1.483	2.473	6.0	20.5
5 21	14 4.90	-8 16.2	1.433	2.373	11.7	20.9	5 21	14 3.85	-22 57.6	1.508	2.462	10.1	20.7
5 31	13 59.10	-8 34.5	1.516	2.389	15.5	21.1	5 31	13 57.09	-22 33.8	1.556	2.451	14.0	20.9
388833	2008 <i>DG</i> ₁₂		4 28.9 80°45	0°9/28.1 17			10668	Plansos		4 28.9 21°73	9°2/21.9 18		
3 22	14 48.65	-13 13.7	2.2										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
43717	2023 <i>T</i> ₃		4 28.9 278°49	0°4/28.6	18		522732	2016 <i>LJ</i> ₆₃		4 28.9 215°20	3°6/25.2	17	
3 22	14 50.69	-17 7.2	1.673	2.490	16.1	20.4	3 22	14 47.47	-5 31.9	2.503	3.323	11.3	22.3
4 1	14 47.30	-16 29.6	1.566	2.465	12.7	20.1	4 1	14 43.54	-4 35.7	2.417	3.319	8.7	22.1
4 11	14 41.20	-15 36.0	1.480	2.440	8.6	19.8	4 11	14 37.98	-3 36.3	2.356	3.314	6.0	21.9
4 21	14 32.93	-14 28.5	1.418	2.415	3.9	19.4	4 21	14 31.25	-2 37.9	2.321	3.309	3.8	21.8
5 1	14 23.43	-13 12.1	1.382	2.389	1.3	19.2	5 1	14 23.98	-1 45.2	2.316	3.304	4.1	21.8
5 11	14 13.94	-11 54.1	1.373	2.363	6.5	19.4	5 11	14 16.89	-1 2.3	2.339	3.299	6.5	21.9
5 21	14 5.65	-10 42.8	1.390	2.336	11.4	19.7	5 21	14 10.63	-0 32.4	2.388	3.293	9.3	22.1
5 31	13 59.54	-9 45.2	1.428	2.309	15.9	19.9	5 31	14 5.72	-0 17.1	2.461	3.287	11.8	22.3
15892	1997 <i>GB</i> ₁₄		4 28.9 151°95	0°6/29.3	18		297491	2000 <i>UT</i> ₉₃		4 28.9 212°01	1°9/30.7	18	
3 22	14 54.82	-18 47.0	1.631	2.438	16.9	19.0	3 22	14 50.62	-21 47.7	2.867	3.637	11.2	20.9
4 1	14 50.20	-18 19.9	1.553	2.445	13.3	18.8	4 1	14 45.94	-21 54.1	2.764	3.631	9.0	20.7
4 11	14 42.85	-17 37.6	1.495	2.451	9.0	18.5	4 11	14 39.58	-21 51.2	2.684	3.624	6.4	20.5
4 21	14 33.53	-16 42.1	1.462	2.457	4.2	18.3	4 21	14 31.98	-21 39.0	2.632	3.618	3.6	20.3
5 1	14 23.32	-15 38.1	1.456	2.463	1.0	18.0	5 1	14 23.78	-21 18.8	2.608	3.610	1.9	20.2
5 11	14 13.53	-14 32.5	1.477	2.468	5.9	18.4	5 11	14 15.67	-20 52.9	2.614	3.603	3.8	20.3
5 21	14 5.25	-13 32.5	1.523	2.472	10.5	18.6	5 21	14 8.34	-20 24.6	2.648	3.595	6.6	20.5
5 31	13 59.30	-12 44.2	1.593	2.475	14.5	18.9	5 31	14 2.35	-19 57.3	2.709	3.587	9.3	20.7
306796	2001 <i>OX</i> ₇₄		4 28.9 253°65	3°9/1.5	16		507071	2008 <i>XC</i> ₂₆		4 28.9 224°57	1°2/28.0	17	
3 22	14 54.97	-25 33.1	1.692	2.474	17.4	21.7	3 22	14 53.92	-11 7.7	2.393	3.194	12.3	22.3
4 1	14 50.83	-25 41.1	1.585	2.455	14.3	21.5	4 1	14 48.74	-11 4.4	2.293	3.185	9.6	22.0
4 11	14 43.69	-25 30.5	1.498	2.436	10.6	21.2	4 11	14 41.57	-10 56.6	2.217	3.175	6.4	21.8
4 21	14 34.11	-24 59.5	1.434	2.416	6.6	20.9	4 21	14 32.93	-10 46.0	2.168	3.164	2.9	21.6
5 1	14 23.12	-24 8.5	1.395	2.395	3.9	20.7	5 1	14 23.53	-10 35.1	2.149	3.154	1.6	21.5
5 11	14 12.14	-23 2.2	1.383	2.373	6.3	20.8	5 11	14 14.23	-10 26.6	2.158	3.142	5.0	21.7
5 21	14 2.51	-21 48.4	1.397	2.351	10.7	21.0	5 21	14 5.84	-10 23.2	2.196	3.130	8.5	21.9
5 31	13 55.34	-20 36.3	1.434	2.329	15.0	21.2	5 31	13 59.03	-10 27.3	2.259	3.118	11.7	22.1
7815	Dolon		4 28.9 210°45	4°0/21.2	18		10486	1985 <i>CS</i> ₂		4 28.9 348°71	3°6/1.0	18	
3 22	14 40.43	+6 51.4	4.743	5.550	6.5	17.8	3 22	14 50.03	-23 11.7	1.276	2.096	19.9	17.3
4 1	14 37.38	+7 38.4	4.669	5.548	5.4	17.7	4 1	14 47.48	-23 25.4	1.198	2.092	16.2	17.1
4 11	14 33.53	+8 22.2	4.622	5.546	4.4	17.6	4 11	14 41.64	-23 19.2	1.137	2.089	11.7	16.8
4 21	14 29.14	+9 0.5	4.602	5.544	4.0	17.6	4 21	14 33.20	-22 52.1	1.097	2.086	6.8	16.5
5 1	14 24.52	+9 31.0	4.610	5.542	4.4	17.6	5 1	14 23.44	-22 6.0	1.081	2.084	3.6	16.3
5 11	14 19.99	+9 52.0	4.646	5.540	5.3	17.7	5 11	14 13.99	-21 7.7	1.088	2.082	6.8	16.5
5 21	14 15.85	+10 2.8	4.708	5.538	6.5	17.8	5 21	14 6.30	-20 6.0	1.119	2.082	11.7	16.8
5 31	14 12.37	+10 2.9	4.793	5.535	7.7	17.9	5 31	14 1.45	-19 10.4	1.170	2.081	16.4	17.0
182914	2002 <i>EL</i> ₁₀₉		4 28.9 333°07	2°6/26.6	17		312060	2007 <i>SU</i> ₁₅		4 28.9 172°87	0°7/29.4	16	
3 22	14 46.51	-9 11.2	2.137	2.963	12.7	20.6	3 22	14 55.36	-18 21.4	1.968	2.762	14.8	22.3
4 1	14 43.14	-8 31.0	2.051	2.957	9.8	20.4	4 1	14 50.22	-18 7.6	1.881	2.766	11.7	22.1
4 11	14 37.87	-7 45.3	1.988	2.951	6.5	20.1	4 11	14 42.71	-17 42.0	1.816	2.769	8.0	21.9
4 21	14 31.24	-6 57.7	1.951	2.946	3.4	19.9	4 21	14 33.46	-17 5.7	1.777	2.771	3.8	21.6
5 1	14 23.96	-6 12.8	1.942	2.941	3.1	19.9	5 1	14 23.40	-16 21.8	1.766	2.773	1.0	21.4
5 11	14 16.87	-5 35.4	1.960	2.936	6.2	20.1	5 11	14 13.62	-15 35.2	1.783	2.773	5.1	21.7
5 21	14 10.73	-5 9.1	2.004	2.932	9.6	20.3	5 21	14 5.09	-14 51.3	1.828	2.773	9.2	21.9
5 31	14 6.16	-4 56.3	2.071	2.928	12.6	20.5	5 31	13 58.57	-14 14.9	1.897	2.773	12.8	22.2
353556	2011 <i>SP</i> ₂₁₇		4 28.9 152°52	2°7/25.8	18		228373	2000 <i>WG</i> ₆₂		4 28.9 221°87	6°1/23.5	18	
3 22	14 47.16	-7 44.1	2.719	3.534	10.6	21.5	3 22	14 52.71	+3 0.8	2.349	3.162	12.1	20.8
4 1	14 43.10	-6 47.7	2.640	3.540	8.2	21.3	4 1	14 47.72	+3 52.3	2.263	3.152	9.8	20.6
4 11	14 37.57	-5 47.3	2.586	3.545	5.5	21.2	4 11	14 40.84	+4 40.9	2.200	3.141	7.5	20.4
4 21	14 31.01	-4 46.7	2.559	3.551	3.2	21.0	4 21	14 32.57	+5 21.6	2.164	3.130	6.2	20.3
5 1	14 24.03	-3 50.0	2.562	3.556	3.2	21.0	5 1	14 23.65	+5 49.3	2.156	3.118	6.7	20.3
5 11	14 17.26	-3 1.3	2.594	3.560	5.6	21.2	5 11	14 14.89	+6 0.5	2.175	3.105	8.7	20.4
5 21	14 11.28	-2 23.5	2.654	3.564	8.2	21.4	5 21	14 7.06	+5 53.7	2.220	3.092	11.3	20.6
5 31	14 6.56	-1 58.5	2.737	3.568	10.7	21.5	5 31	14 0.78	+5 28.8	2.287	3.078	13.7	20.7
404348	2013 <i>GK</i> ₄		4 28.9 16°30	3°2/27.1	16		46347	2001 <i>SV</i> ₁₂₃		4 28.9 94°82	4°5/2.6	18	
3 22	14 51.82	-9 48.2	1.302	2.147	18.2	20.9	3 22	14 51.75	-28 18.9	2.219	2.976	14.5	18.9
4 1	14 48.40	-9 13.8	1.232	2.148	14.1	20.6	4 1	14 47.41	-28 43.8	2.130	2.979	12.0	18.7
4 11	14 41.95	-8 31.3	1.182	2.149	9.4	20.3	4 11	14 40.84	-28 53.5	2.062	2.982	9.1	18.6
4 21	14 33.22	-7 45.7	1.154	2.151	4.7	20.1	4 21	14 32.63	-28 46.7	2.018	2.986	6.3	18.4
5 1	14 23.43	-7 3.7	1.151	2.152	3.9	20.0	5 1	14 23.63	-28 23.8	2.000	2.989	4.5	18.3
5 11	14 14.06	-6 32.5	1.172	2.155	8.4	20.3	5 11	14 14.83	-27 47.8	2.010	2.993	5.5	18.3
5 21	14 6.36	-6 16.9	1.216	2.157	13.2	20.6	5 21	14 7.16	-27 3.3	2.047	2.996	8.2	18.5
5 31	14 1.26	-6 19.9	1.280	2.160	17.4	20.8	5 31	14 1.34	-26 16.2	2.109	2.999	11.1	18.7
378735	2008 <i>RH</i> ₄		4 28.9 300°59	0°2/29.0	17		297789	2001 <i>YR</i> ₁₄		4 28.9 219°41	0°2/28.7	18	
3 22	14 49.15	-17 7.2	1.750	2.566	15.5	21.6	3 22	14 48.92	-15 36.8	2.734	3.529	11.1	21.9
4 1	14 45.82	-16 48.3	1.656	2.554	12.2	21.4	4 1	14 44.63	-15 14.6	2.634	3.522	8.6	21.7
4 11	14 40.02	-16 16.8	1.583	2.543	8.3	21.1	4 11	14 38.70	-14 44.6	2.558	3.513	5.8	21.5
4 21	14 32.33	-15 34.4	1.535	2.531	3.8	20.8	4 21	14 31.59	-14 8.7	2.509	3.505	2.6	21.3
5 1	14 23.65	-14 44.9	1.512	2.519	1.0	20.6	5 1	14 23.91	-13 29.4	2.489	3.496	0.8	21.1
5 11	14 15.14	-13 54.1	1.517	2.508	5.7	20.9	5 11	14 16.36	-12 50.2	2.499	3.486	4.1	21.4
5 21	14 7.82	-13 8.0	1.547	2.497	10.2	21.1	5 21	14 9.57	-12 14.6	2.537	3.476	7.3	21.6
5 31	14 2.55	-12 32.1	1.599	2.486	14.2	21.3	5 31	14 4.11	-11 45.7	2.601	3.466	10.1	21.7
393305	2013 <i>YQ</i> ₁₀₅		4 28.9 197°76	2°5/26.7	17		57704	2001 <i>UV</i> ₁₁₄		4 28.9 58°24	0°5/28.5	18	
3 22	14 50.06	-											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
507613	2013 <i>CQ</i> ₁₅₃		4 28.9 191°59	4°6/ 3.9	18		498292	2007 <i>VC</i> ₈₀		4 28.9 145°72	0°1/28.8	17	
3 22	14 52.28	-32 44.3	3.183	3.892	11.4	22.2	3 22	14 49.92	-15 53.8	2.762	3.554	11.1	23.3
4 1	14 47.22	-33 10.6	3.079	3.890	9.7	22.0	4 1	14 45.26	-15 32.3	2.678	3.564	8.6	23.2
4 11	14 40.44	-33 24.1	2.997	3.888	7.7	21.9	4 11	14 39.04	-15 3.2	2.618	3.573	5.7	23.0
4 21	14 32.39	-33 23.5	2.941	3.885	5.8	21.8	4 21	14 31.73	-14 28.5	2.586	3.582	2.6	22.8
5 1	14 23.70	-33 8.4	2.912	3.882	4.7	21.7	5 1	14 23.96	-13 50.7	2.584	3.591	0.7	22.7
5 11	14 15.11	-32 40.5	2.912	3.878	5.0	21.7	5 11	14 16.42	-13 13.3	2.611	3.599	4.0	22.9
5 21	14 7.32	-32 2.9	2.940	3.874	6.6	21.8	5 21	14 9.71	-12 39.4	2.667	3.606	7.0	23.1
5 31	14 0.90	-31 19.8	2.995	3.870	8.6	21.9	5 31	14 4.33	-12 12.1	2.748	3.613	9.6	23.3
184374	2005 <i>KT</i> ₄		4 28.9 251°98	4°9/25.3	17		2571	Geisei		4 28.9 242°29	1°0/28.3	18	R
3 22	14 52.73	- 3 53.6	1.901	2.726	14.1	21.3	3 22	14 54.94	-14 0.2	1.718	2.532	15.8	17.1
4 1	14 48.32	- 3 4.1	1.806	2.709	11.1	21.0	4 1	14 50.45	-13 40.5	1.620	2.518	12.5	16.8
4 11	14 41.57	- 2 11.6	1.734	2.692	7.8	20.8	4 11	14 43.24	-13 10.4	1.542	2.502	8.4	16.5
4 21	14 33.02	- 1 21.4	1.687	2.674	5.2	20.6	4 21	14 33.88	-12 32.2	1.490	2.487	3.8	16.2
5 1	14 23.52	- 0 39.5	1.668	2.655	5.5	20.6	5 1	14 23.36	-11 49.9	1.464	2.470	1.7	16.0
5 11	14 14.14	- 0 11.3	1.676	2.637	8.5	20.7	5 11	14 12.92	-11 9.2	1.466	2.453	6.4	16.3
5 21	14 5.84	- 0 0.4	1.709	2.617	12.1	20.9	5 21	14 3.74	-10 35.6	1.493	2.435	11.1	16.5
5 31	13 59.43	- 0 8.3	1.763	2.597	15.5	21.1	5 31	13 56.77	-10 14.0	1.544	2.417	15.3	16.7
347209	2011 <i>HN</i> ₃₄		4 28.9 176°06	0°9/29.6	17		439809	2015 <i>KZ</i> ₇		4 28.9 175°99	5°4/23.9	17	
3 22	14 52.59	-17 39.0	1.965	2.766	14.6	21.0	3 22	14 48.35	- 0 0.1	2.243	3.068	12.2	21.0
4 1	14 48.13	-17 43.1	1.878	2.767	11.5	20.8	4 1	14 44.38	+ 0 54.2	2.168	3.068	9.7	20.8
4 11	14 41.37	-17 37.1	1.813	2.767	7.9	20.6	4 11	14 38.62	+ 1 47.3	2.118	3.068	7.1	20.7
4 21	14 32.89	-17 21.9	1.773	2.767	3.8	20.3	4 21	14 31.59	+ 2 34.3	2.093	3.068	5.5	20.6
5 1	14 23.58	-16 59.6	1.761	2.768	1.1	20.1	5 1	14 24.00	+ 3 10.1	2.096	3.068	5.9	20.6
5 11	14 14.50	-16 34.2	1.776	2.768	5.0	20.4	5 11	14 16.66	+ 3 30.9	2.125	3.068	8.1	20.7
5 21	14 6.58	-16 9.8	1.818	2.767	9.0	20.6	5 21	14 10.25	+ 3 34.8	2.180	3.068	10.8	20.9
5 31	14 0.60	-15 50.8	1.884	2.767	12.5	20.8	5 31	14 5.36	+ 3 21.6	2.256	3.068	13.2	21.1
22800	1999 <i>NY</i> ₂₂		4 28.9 266°59	3°2/26.6	18		144865	2004 <i>LD</i> ₁₅		4 28.9 258°61	6°5/22.7	18	
3 22	14 52.78	- 9 15.4	1.771	2.595	15.0	19.0	3 22	14 50.26	+ 6 22.9	2.531	3.342	11.4	19.6
4 1	14 48.70	- 8 30.0	1.666	2.571	11.8	18.8	4 1	14 45.71	+ 7 7.6	2.447	3.330	9.4	19.5
4 11	14 42.03	- 7 36.0	1.583	2.546	8.0	18.5	4 11	14 39.46	+ 7 47.0	2.387	3.319	7.5	19.3
4 21	14 33.32	- 6 37.8	1.526	2.520	4.2	18.2	4 21	14 31.97	+ 8 16.4	2.353	3.306	6.5	19.3
5 1	14 23.44	- 5 41.3	1.495	2.494	3.9	18.1	5 1	14 23.90	+ 8 31.5	2.347	3.294	7.1	19.3
5 11	14 13.56	- 4 53.1	1.492	2.468	7.8	18.3	5 11	14 15.99	+ 8 29.4	2.367	3.282	8.8	19.3
5 21	14 4.79	- 4 18.9	1.513	2.440	12.1	18.5	5 21	14 8.92	+ 8 9.3	2.412	3.269	11.0	19.5
5 31	13 58.07	- 4 2.4	1.557	2.412	16.1	18.6	5 31	14 3.25	+ 7 31.9	2.479	3.256	13.1	19.6
138618	2000 <i>QZ</i> ₂₀₉		4 28.9 295°86	0°1/28.8	18	R	122754	2000 <i>SM</i> ₆₂		4 28.9 76°35	4°0/ 1.6	18	
3 22	14 48.47	-16 20.4	2.119	2.927	13.4	20.5	3 22	14 57.81	-24 29.4	1.823	2.598	16.5	19.4
4 1	14 44.98	-15 58.1	2.005	2.899	10.6	20.3	4 1	14 52.30	-25 8.7	1.756	2.621	13.4	19.2
4 11	14 39.35	-15 25.0	1.913	2.872	7.2	20.0	4 11	14 44.16	-25 33.4	1.711	2.645	9.8	19.0
4 21	14 32.04	-14 42.6	1.847	2.844	3.3	19.7	4 21	14 34.15	-25 41.8	1.689	2.668	6.2	18.8
5 1	14 23.79	-13 54.3	1.809	2.816	0.9	19.5	5 1	14 23.35	-25 34.3	1.694	2.691	4.0	18.8
5 11	14 15.54	-13 4.7	1.799	2.788	5.2	19.7	5 11	14 13.02	-25 14.3	1.727	2.714	5.7	18.9
5 21	14 8.19	-12 19.1	1.815	2.760	9.3	19.9	5 21	14 4.21	-24 47.0	1.786	2.736	9.1	19.2
5 31	14 2.52	-11 42.3	1.855	2.732	13.0	20.1	5 31	13 57.70	-24 18.3	1.870	2.758	12.3	19.4
41828	2000 <i>WM</i> ₅₀		4 28.9 217°41	4°5/24.7	17		338489	2003 <i>JZ</i> ₄		4 28.9 44°89	0°6/29.2	17	
3 22	14 48.34	- 6 0.5	1.951	2.782	13.6	19.5	3 22	15 2.44	-12 45.3	1.812	2.609	15.8	19.2
4 1	14 44.68	- 4 41.7	1.872	2.779	10.5	19.2	4 1	14 55.62	-13 44.8	1.750	2.637	12.3	19.1
4 11	14 38.96	- 3 17.3	1.816	2.777	7.3	19.0	4 11	14 46.23	-14 40.1	1.711	2.665	8.2	18.9
4 21	14 31.76	- 1 53.7	1.787	2.775	4.8	18.9	4 21	14 35.03	-15 30.0	1.698	2.693	3.8	18.7
5 1	14 23.90	- 0 37.7	1.785	2.772	5.3	18.9	5 1	14 23.13	-16 14.2	1.715	2.722	1.0	18.5
5 11	14 16.30	+ 0 24.1	1.811	2.769	8.1	19.1	5 11	14 11.74	-16 53.5	1.761	2.751	5.3	18.9
5 21	14 9.77	+ 1 7.6	1.861	2.766	11.4	19.3	5 21	14 1.92	-17 29.5	1.835	2.780	9.2	19.2
5 31	14 4.97	+ 1 30.6	1.933	2.763	14.5	19.5	5 31	13 54.40	-18 4.8	1.934	2.809	12.6	19.4
214170	2005 <i>CS</i> ₅₀		4 28.9 44°53	0°9/28.4	17		342579	2008 <i>UR</i> ₂₆₇		4 28.9 297°41	1°0/28.4	12	C
3 22	14 51.07	-14 59.0	1.317	2.154	18.5	20.3	3 22	14 55.08	-11 45.6	1.781	2.597	15.3	21.1
4 1	14 47.73	-14 32.4	1.254	2.164	14.4	20.1	4 1	14 50.76	-11 55.1	1.663	2.562	12.1	20.8
4 11	14 41.42	-13 52.6	1.210	2.175	9.5	19.8	4 11	14 43.66	-11 59.6	1.567	2.528	8.3	20.5
4 21	14 32.96	-13 3.5	1.188	2.186	4.2	19.5	4 21	14 34.21	-12 0.4	1.496	2.493	3.8	20.1
5 1	14 23.60	-12 11.1	1.191	2.198	1.7	19.4	5 1	14 23.26	-11 59.7	1.451	2.457	1.6	19.9
5 11	14 14.77	-11 22.7	1.220	2.210	6.9	19.8	5 11	14 12.05	-12 0.9	1.434	2.422	6.5	20.1
5 21	14 7.66	-10 45.0	1.271	2.222	11.8	20.1	5 21	14 1.84	-12 7.5	1.443	2.386	11.3	20.3
5 31	14 3.09	-10 22.4	1.344	2.235	16.0	20.4	5 31	13 53.73	-12 22.9	1.474	2.351	15.7	20.5
118826	2000 <i>SV</i> ₁₅₄		4 28.9 122°94	0°3/28.6	18		68498	2001 <i>UV</i> ₃₄		4 28.9 254°48	4°5/24.9	18	
3 22	14 49.15	-14 55.2	2.756	3.552	11.0	20.3	3 22	14 49.33	- 2 3.6	2.297	3.119	12.1	19.5
4 1	14 44.65	-14 35.3	2.676	3.565	8.5	20.2	4 1	14 45.17	- 1 21.7	2.211	3.111	9.5	19.3
4 11	14 38.61	-14 8.7	2.621	3.578	5.6	20.0	4 11	14 39.19	- 0 39.7	2.150	3.104	6.8	19.1
4 21	14 31.52	-13 37.2	2.594	3.590	2.5	19.8	4 21	14 31.88	- 0 1.9	2.115	3.097	4.8	19.0
5 1	14 23.99	-13 3.5	2.596	3.602	0.9	19.7	5 1	14 23.95	+ 0 27.3	2.107	3.089	5.1	19.0
5 11	14 16.70	-12 30.8	2.627	3.614	4.0	20.0	5 11	14 16.19	+ 0 44.0	2.128	3.082	7.4	19.1
5 21	14 10.24	-12 2.2	2.686	3.625	6.9	20.2	5 21	14 9.35	+ 0 46.2	2.173	3.074	10.2	19.3
5 31	14 5.10	-11 40.1	2.772	3.636	9.6	20.3	5 31	14 4.00	+ 0 33.1	2.242	3.067	12.9	19.4
285404	1999 <i>TU</i> ₃₂₁		4 28.9 233°43	0°7/29.4	17		294490	2007 <i>WP</i> ₂₀		4 28.9 138°50	0°2/2		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
405330	2003 <i>UP</i> ₂₆₆		4 28.9 175°16'	0°1'/28.9 16			499339	2009 <i>WA</i> ₂₁₃		4 28.9 117°60'	4°7'/3.4 18		
3 22	14 55.03	-15 57.4	2.091	2.888	14.0	22.6	3 22	14 52.72	-31 6.1	2.132	2.877	15.4	21.0
4 1	14 49.82	-15 41.3	2.004	2.891	10.9	22.4	4 1	14 48.17	-31 4.4	2.050	2.889	12.8	20.8
4 11	14 42.40	-15 15.4	1.939	2.894	7.3	22.2	4 11	14 41.33	-30 43.3	1.987	2.901	9.8	20.6
4 21	14 33.36	-14 41.7	1.900	2.896	3.3	21.9	4 21	14 32.88	-30 2.2	1.949	2.913	6.8	20.5
5 1	14 23.57	-14 3.3	1.890	2.897	0.9	21.7	5 1	14 23.74	-29 2.4	1.937	2.924	4.8	20.4
5 11	14 14.04	-13 24.6	1.909	2.897	5.1	22.0	5 11	14 14.98	-27 48.8	1.953	2.935	5.6	20.4
5 21	14 5.66	-12 50.1	1.955	2.896	9.0	22.3	5 21	14 7.51	-26 28.0	1.996	2.946	8.3	20.6
5 31	13 59.13	-12 23.8	2.026	2.895	12.4	22.5	5 31	14 2.00	-25 7.3	2.064	2.956	11.2	20.8
508596	2017 <i>QS</i> ₃		4 28.9 226°44'	2°9'/26.6 18			89931	2002 <i>EF</i> ₈₄		4 28.9 252°87'	4°9'/23.4 18		
3 22	14 51.26	-9 54.1	1.937	2.758	14.0	21.5	3 22	14 46.70	-0 33.1	2.629	3.451	10.8	19.9
4 1	14 47.09	-9 2.6	1.847	2.750	10.9	21.3	4 1	14 42.95	+0 32.7	2.540	3.438	8.5	19.7
4 11	14 40.69	-8 3.2	1.779	2.741	7.3	21.1	4 11	14 37.63	+1 38.9	2.476	3.426	6.3	19.5
4 21	14 32.63	-7 0.3	1.738	2.732	3.8	20.8	4 21	14 31.18	+2 41.0	2.439	3.413	4.9	19.4
5 1	14 23.75	-5 59.4	1.724	2.723	3.5	20.8	5 1	14 24.19	+3 34.0	2.430	3.400	5.5	19.4
5 11	14 15.07	-5 6.8	1.737	2.713	6.9	21.0	5 11	14 17.33	+4 13.8	2.449	3.387	7.5	19.5
5 21	14 7.50	-4 27.1	1.777	2.702	10.7	21.2	5 21	14 11.21	+4 38.0	2.494	3.373	9.9	19.7
5 31	14 1.76	-4 3.6	1.839	2.691	14.2	21.4	5 31	14 6.36	+4 45.4	2.561	3.360	12.2	19.8
39847	1998 <i>BU</i> ₄₂		4 28.9 149°97'	0°3'/28.7 18			474741	2005 <i>NB</i> ₇₈		4 28.9 237°25'	1°7'/27.2 18		
3 22	14 52.45	-15 52.1	2.217	3.016	13.2	20.3	3 22	14 48.61	-10 34.1	2.813	3.618	10.6	22.6
4 1	14 47.62	-15 26.7	2.135	3.024	10.3	20.1	4 1	14 44.37	-10 1.5	2.709	3.604	8.2	22.4
4 11	14 40.81	-14 52.0	2.076	3.032	6.8	19.9	4 11	14 38.56	-9 23.7	2.631	3.590	5.4	22.2
4 21	14 32.60	-14 10.1	2.044	3.040	3.1	19.7	4 21	14 31.60	-8 43.2	2.580	3.575	2.6	22.0
5 1	14 23.78	-13 24.5	2.040	3.047	1.0	19.5	5 1	14 24.08	-8 3.2	2.558	3.560	2.1	21.9
5 11	14 15.25	-12 39.7	2.066	3.054	4.8	19.8	5 11	14 16.65	-7 27.1	2.566	3.544	4.8	22.1
5 21	14 7.79	-12 0.0	2.119	3.059	8.4	20.0	5 21	14 9.93	-6 58.1	2.602	3.528	7.7	22.3
5 31	14 2.03	-11 29.1	2.197	3.065	11.6	20.2	5 31	14 4.45	-6 38.5	2.663	3.512	10.4	22.4
487506	2014 <i>SL</i> ₃₄₉		4 28.9 254°69'	4°8'/21.2 17			486022	2012 <i>SR</i> ₅₂		4 28.9 197°93'	5°6'/8.4 18		
3 22	14 44.35	+11 18.7	4.464	5.255	7.2	21.6	3 22	14 49.56	-45 56.8	4.856	5.453	8.9	21.5
4 1	14 40.42	+11 46.5	4.390	5.251	6.0	21.5	4 1	14 44.85	-46 38.3	4.752	5.452	8.0	21.4
4 11	14 35.58	+12 8.8	4.341	5.247	5.1	21.4	4 11	14 38.77	-47 8.3	4.669	5.451	7.1	21.4
4 21	14 30.14	+12 23.4	4.319	5.243	4.8	21.4	4 21	14 31.68	-47 25.0	4.608	5.450	6.3	21.3
5 1	14 24.43	+12 28.2	4.325	5.238	5.1	21.4	5 1	14 24.05	-47 27.8	4.572	5.449	5.7	21.2
5 11	14 18.85	+12 21.9	4.358	5.234	6.0	21.5	5 11	14 16.47	-47 17.1	4.561	5.448	5.6	21.2
5 21	14 13.71	+12 4.3	4.417	5.230	7.2	21.5	5 21	14 9.44	-46 54.5	4.577	5.447	5.9	21.3
5 31	14 9.33	+11 35.6	4.498	5.226	8.4	21.6	5 31	14 3.46	-46 22.5	4.618	5.445	6.7	21.3
502771	2015 <i>DN</i> ₈₂		4 28.9 181°35'	1°7'/27.6 17			403217	2008 <i>UX</i> ₇₁		4 28.9 200°87'	2°7'/30.7 16		
3 22	14 51.31	-11 44.6	2.085	2.898	13.4	21.9	3 22	14 56.99	-22 12.1	1.750	2.537	16.7	22.4
4 1	14 46.91	-11 14.9	2.000	2.899	10.4	21.7	4 1	14 52.07	-22 23.3	1.658	2.534	13.4	22.2
4 11	14 40.44	-10 38.1	1.938	2.899	6.9	21.5	4 11	14 44.32	-22 19.9	1.586	2.530	9.6	21.9
4 21	14 32.47	-9 57.3	1.903	2.899	3.2	21.2	4 21	14 34.39	-22 1.0	1.538	2.526	5.4	21.7
5 1	14 23.81	-9 16.5	1.895	2.899	2.2	21.1	5 1	14 23.33	-21 28.0	1.518	2.521	2.7	21.5
5 11	14 15.39	-8 40.4	1.916	2.898	5.7	21.4	5 11	14 12.47	-20 45.2	1.524	2.515	5.7	21.7
5 21	14 8.04	-8 12.8	1.963	2.897	9.4	21.6	5 21	14 3.02	-19 58.9	1.557	2.508	10.0	21.9
5 31	14 2.42	-7 56.8	2.034	2.896	12.6	21.8	5 31	13 55.91	-19 16.0	1.613	2.501	14.0	22.1
131081	2000 <i>YG</i> ₁₁₉		4 28.9 135°07'	2°8'/1.3 17			368781	2005 <i>WG</i> ₁₅₇		4 28.9 167°29'	3°5'/2.6 17		
3 22	14 54.84	-23 57.9	2.408	3.171	13.3	21.6	3 22	14 53.38	-28 54.3	2.610	3.350	13.0	22.0
4 1	14 49.44	-24 11.4	2.325	3.185	10.7	21.4	4 1	14 48.25	-28 45.3	2.516	3.356	10.7	21.8
4 11	14 42.01	-24 12.7	2.264	3.198	7.7	21.3	4 11	14 41.20	-28 20.8	2.443	3.361	8.0	21.6
4 21	14 33.14	-24 1.6	2.229	3.210	4.7	21.1	4 21	14 32.79	-27 40.7	2.396	3.366	5.3	21.5
5 1	14 23.64	-23 39.1	2.223	3.222	2.8	21.0	5 1	14 23.78	-26 46.3	2.377	3.369	3.5	21.4
5 11	14 14.41	-23 8.3	2.245	3.233	4.5	21.1	5 11	14 15.04	-25 41.4	2.388	3.372	4.6	21.4
5 21	14 6.25	-22 33.3	2.296	3.244	7.5	21.3	5 21	14 7.31	-24 31.3	2.427	3.375	7.1	21.6
5 31	13 59.82	-21 58.8	2.373	3.254	10.4	21.5	5 31	14 1.21	-23 21.5	2.494	3.376	9.9	21.8
160548	1998 <i>OW</i> ₃		4 28.9 275°41'	0°1'/28.9 17			309210	2007 <i>HS</i> ₂₈		4 28.9 217°33'	1°3'/27.9 17		
3 22	14 49.83	-16 48.0	2.047	2.854	13.9	21.1	3 22	14 49.72	-14 10.0	1.856	2.675	14.6	20.4
4 1	14 46.07	-16 24.7	1.941	2.834	11.0	20.9	4 1	14 45.98	-13 26.8	1.772	2.674	11.4	20.2
4 11	14 40.10	-15 50.0	1.857	2.814	7.4	20.6	4 11	14 39.98	-12 32.7	1.710	2.672	7.5	19.9
4 21	14 32.41	-15 5.5	1.798	2.794	3.4	20.3	4 21	14 32.32	-11 31.2	1.673	2.670	3.4	19.7
5 1	14 23.80	-14 14.8	1.767	2.774	0.9	20.1	5 1	14 23.91	-10 27.6	1.664	2.669	2.0	19.6
5 11	14 15.26	-13 22.7	1.764	2.753	5.2	20.4	5 11	14 15.75	-9 28.1	1.682	2.667	6.0	19.8
5 21	14 7.70	-12 34.7	1.787	2.733	9.4	20.6	5 21	14 8.78	-8 38.3	1.725	2.665	10.1	20.1
5 31	14 1.92	-11 55.7	1.834	2.712	13.1	20.7	5 31	14 3.69	-8 2.4	1.792	2.663	13.7	20.3
440434	2005 <i>SL</i> ₂₂		4 28.9 246°09'	1°0'/27.9 18			62877	2000 <i>UQ</i> ₉₀		4 28.9 162°64'	0°6'/28.4 18		
3 22	14 48.86	-12 38.1	2.764	3.565	10.8	22.2	3 22	14 50.59	-12 59.1	2.679	3.478	11.2	18.8
4 1	14 44.62	-12 14.1	2.658	3.550	8.4	22.1	4 1	14 45.89	-12 53.7	2.590	3.481	8.7	18.7
4 11	14 38.75	-11 44.0	2.576	3.534	5.6	21.8	4 11	14 39.56	-12 43.0	2.526	3.483	5.7	18.5
4 21	14 31.69	-11 9.8	2.522	3.518	2.5	21.6	4 21	14 32.05	-12 28.7	2.490	3.486	2.6	18.3
5 1	14 24.02	-10 34.4	2.497	3.501	1.5	21.5	5 1	14 23.99	-12 12.9	2.482	3.488	1.1	18.1
5 11	14 16.44	-10 1.1	2.501	3.484	4.5	21.7	5 11	14 16.12	-11 58.3	2.504	3.490	4.2	18.4
5 21	14 9.57	-9 33.2	2.534	3.467	7.6	21.9	5 21	14 9.07	-11 47.6	2.554	3.492	7.3	18.6
5 31	14 3.98	-9 13.2	2.592	3.449	10.4	22.0	5 31	14 3.38	-11 42.8	2.630	3.494	10.1	18.8
199427	2006 <i>DC</i> ₁₂		4 28.9 36°56'	1°8'/27.5 17			5060						

EPHEMERIDES

4 28.9

4 28.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
371703	2007 <i>EW</i> ₂₀	4 28.9 190°83		5°3/ 2.9 17			168479	1999 <i>RQ</i> ₆₂	4 28.9 249°05		1°3/29.8 17		
3 22	14 57.87	-29 59.5	2.340	3.074	14.5	21.9	3 22	14 54.11	-19 22.5	1.842	2.640	15.6	20.6
4 1	14 52.25	-30 42.8	2.241	3.072	12.1	21.7	4 1	14 49.77	-19 18.0	1.738	2.624	12.4	20.3
4 11	14 44.20	-31 11.9	2.164	3.070	9.5	21.5	4 11	14 42.80	-19 0.5	1.656	2.608	8.6	20.1
4 21	14 34.29	-31 24.1	2.111	3.068	6.9	21.4	4 21	14 33.75	-18 30.2	1.598	2.591	4.4	19.8
5 1	14 23.39	-31 18.2	2.085	3.065	5.3	21.3	5 1	14 23.57	-17 49.5	1.567	2.573	1.4	19.5
5 11	14 12.59	-30 56.0	2.088	3.061	6.1	21.3	5 11	14 13.44	-17 3.2	1.563	2.555	5.5	19.8
5 21	14 2.91	-30 21.6	2.118	3.057	8.5	21.4	5 21	14 4.49	-16 17.1	1.586	2.536	10.0	20.0
5 31	13 55.18	-29 40.9	2.173	3.052	11.3	21.6	5 31	13 57.65	-15 37.3	1.633	2.517	14.0	20.2
99499	2002 <i>CK</i> ₂₄₇	4 28.9 45°62		1°9/27.8 18			475194	2005 <i>UR</i> ₅₁₈	4 28.9 278°78		4°7/23.4 16		
3 22	14 51.46	-13 5.5	1.243	2.086	19.0	20.0	3 22	14 45.68	-4 5.1	2.360	3.187	11.6	21.3
4 1	14 48.14	-12 32.1	1.184	2.099	14.7	19.8	4 1	14 42.34	-2 32.1	2.274	3.179	9.1	21.1
4 11	14 41.76	-11 47.0	1.145	2.112	9.7	19.6	4 11	14 37.32	-0 54.8	2.214	3.170	6.5	20.9
4 21	14 33.19	-10 55.1	1.127	2.125	4.3	19.3	4 21	14 31.09	+0 40.9	2.181	3.162	4.8	20.8
5 1	14 23.73	-10 3.1	1.134	2.140	2.6	19.2	5 1	14 24.30	+2 8.6	2.177	3.153	5.5	20.8
5 11	14 14.86	-9 18.7	1.166	2.154	7.6	19.5	5 11	14 17.68	+3 22.2	2.201	3.145	7.8	21.0
5 21	14 7.79	-8 48.0	1.221	2.169	12.5	19.9	5 21	14 11.90	+4 18.0	2.251	3.136	10.6	21.1
5 31	14 3.36	-8 34.6	1.296	2.184	16.7	20.1	5 31	14 7.50	+4 53.9	2.322	3.128	13.1	21.3
111131	2001 <i>VT</i> ₉₂	4 28.9 154°65		6°3/23.4 18			336406	2008 <i>UA</i> ₁₆₁	4 28.9 238°00		7°2/ 4.9 18		
3 22	14 53.12	+3 28.2	2.313	3.125	12.3	19.7	3 22	14 55.12	-36 29.1	2.320	3.025	15.3	21.2
4 1	14 47.93	+4 26.3	2.246	3.134	9.9	19.6	4 1	14 50.41	-37 11.0	2.213	3.014	13.3	21.0
4 11	14 40.92	+5 20.6	2.204	3.142	7.6	19.4	4 11	14 43.16	-37 34.8	2.125	3.002	11.0	20.8
4 21	14 32.65	+6 5.9	2.187	3.150	6.3	19.4	4 21	14 33.90	-37 37.1	2.060	2.990	8.8	20.6
5 1	14 23.88	+6 37.1	2.199	3.157	6.8	19.4	5 1	14 23.54	-37 15.8	2.020	2.977	7.4	20.5
5 11	14 15.42	+6 51.1	2.238	3.163	8.7	19.5	5 11	14 13.24	-36 32.5	2.007	2.964	7.6	20.5
5 21	14 7.98	+6 46.7	2.302	3.168	11.1	19.7	5 21	14 4.08	-35 32.0	2.019	2.950	9.3	20.6
5 31	14 2.13	+6 24.4	2.388	3.173	13.4	19.9	5 31	13 56.98	-34 21.3	2.056	2.936	11.8	20.7
212642	2006 <i>UJ</i> ₃₃	4 28.9 17°16		0°7/28.4 17			177058	2003 <i>EG</i> ₅₂	4 28.9 303°48		3°8/ 1.3 17		
3 22	14 48.55	-14 9.4	1.989	2.806	13.9	20.4	3 22	14 54.28	-23 31.3	2.162	2.935	14.3	19.5
4 1	14 44.91	-13 52.9	1.909	2.809	10.8	20.2	4 1	14 49.67	-24 20.7	2.055	2.920	11.8	19.3
4 11	14 39.19	-13 28.1	1.851	2.812	7.1	20.0	4 11	14 42.64	-25 0.3	1.971	2.905	8.7	19.1
4 21	14 31.96	-12 57.4	1.818	2.815	3.2	19.8	4 21	14 33.67	-25 28.1	1.911	2.890	5.6	18.9
5 1	14 24.05	-12 24.3	1.812	2.818	1.3	19.6	5 1	14 23.60	-25 43.0	1.879	2.875	3.8	18.7
5 11	14 16.39	-11 53.1	1.834	2.822	5.2	19.9	5 11	14 13.48	-25 46.3	1.875	2.861	5.5	18.8
5 21	14 9.82	-11 27.9	1.882	2.826	9.0	20.1	5 21	14 4.34	-25 40.9	1.898	2.846	8.7	19.0
5 31	14 4.99	-11 12.1	1.953	2.831	12.4	20.4	5 31	13 57.08	-25 31.4	1.945	2.832	12.0	19.1
121321	1999 <i>SH</i>	4 28.9 246°18		0°8/29.6 18			430262	2013 <i>WA</i> ₃₈	4 28.9 122°89		2°3/27.3 15		
3 22	14 52.67	-18 9.3	2.419	3.206	12.6	20.7	3 22	14 55.11	-7 49.4	2.236	3.043	12.9	21.4
4 1	14 47.96	-18 2.4	2.307	3.187	10.0	20.5	4 1	14 49.57	-7 41.5	2.161	3.056	9.9	21.2
4 11	14 41.22	-17 45.8	2.217	3.168	6.9	20.2	4 11	14 42.08	-7 31.1	2.111	3.069	6.6	21.1
4 21	14 32.92	-17 20.4	2.154	3.148	3.3	20.0	4 21	14 33.21	-7 20.7	2.087	3.081	3.3	20.9
5 1	14 23.78	-16 48.1	2.120	3.127	0.9	19.8	5 1	14 23.77	-7 13.3	2.093	3.093	2.7	20.8
5 11	14 14.66	-16 12.4	2.116	3.106	4.5	20.0	5 11	14 14.65	-7 11.5	2.127	3.105	5.7	21.1
5 21	14 6.41	-15 37.3	2.139	3.084	8.1	20.2	5 21	14 6.62	-7 17.5	2.189	3.116	8.9	21.3
5 31	13 59.72	-15 7.0	2.188	3.061	11.4	20.3	5 31	14 0.28	-7 32.6	2.276	3.127	11.9	21.5
162114	1998 <i>SP</i> ₉	4 28.9 280°16		2°5/26.9 18			10818	1993 <i>FK</i> ₈₁	4 28.9 26°56		3°5/25.6 18		
3 22	14 49.77	-9 48.2	2.017	2.838	13.5	20.7	3 22	14 47.01	-7 16.2	2.133	2.961	12.7	18.0
4 1	14 46.00	-9 12.4	1.915	2.819	10.5	20.4	4 1	14 43.50	-6 14.7	2.056	2.962	9.8	17.8
4 11	14 40.05	-8 29.6	1.836	2.799	7.1	20.2	4 11	14 38.14	-5 8.4	2.002	2.963	6.6	17.6
4 21	14 32.42	-7 43.6	1.783	2.779	3.6	19.9	4 21	14 31.47	-4 2.0	1.974	2.965	4.0	17.4
5 1	14 23.91	-6 58.8	1.758	2.758	3.1	19.8	5 1	14 24.22	-3 1.2	1.974	2.966	4.1	17.4
5 11	14 15.47	-6 20.6	1.759	2.738	6.6	20.0	5 11	14 17.22	-2 11.1	2.002	2.968	6.9	17.6
5 21	14 8.00	-5 53.2	1.787	2.717	10.4	20.2	5 21	14 11.19	-1 35.4	2.055	2.970	10.1	17.8
5 31	14 2.26	-5 39.8	1.838	2.697	13.9	20.4	5 31	14 6.72	-1 16.3	2.131	2.972	12.9	18.0
192663	1999 <i>RS</i> ₁₆₉	4 28.9 241°56		0°8/29.6 18			514778	2007 <i>GL</i> ₅	4 28.9 312°61		3°2/ 2.9 18		
3 22	14 51.27	-18 58.6	2.299	3.090	13.1	21.0	3 22	14 47.77	-29 16.0	4.076	4.800	8.9	20.8
4 1	14 46.94	-18 41.1	2.193	3.075	10.4	20.8	4 1	14 43.43	-29 48.2	3.965	4.791	7.4	20.6
4 11	14 40.55	-18 12.2	2.109	3.060	7.1	20.6	4 11	14 37.83	-30 12.0	3.878	4.781	5.8	20.5
4 21	14 32.62	-17 33.1	2.051	3.045	3.5	20.3	4 21	14 31.29	-30 26.7	3.817	4.772	4.2	20.4
5 1	14 23.87	-16 46.4	2.022	3.029	1.0	20.1	5 1	14 24.26	-30 32.1	3.785	4.763	3.3	20.3
5 11	14 15.22	-15 56.2	2.022	3.012	4.6	20.3	5 11	14 17.24	-30 29.2	3.782	4.754	3.7	20.3
5 21	14 7.50	-15 7.4	2.049	2.995	8.3	20.5	5 21	14 10.72	-30 19.8	3.808	4.745	5.2	20.4
5 31	14 1.42	-14 24.9	2.101	2.978	11.7	20.7	5 31	14 5.15	-30 6.1	3.861	4.736	6.9	20.5
246732	2009 <i>BS</i> ₆₁	4 28.9 182°77		3°3/26.5 16			500230	2012 <i>JR</i> ₂	4 28.9 22°39		3°1/26.9 17		
3 22	14 53.27	-9 16.5	1.731	2.555	15.3	21.3	3 22	14 50.92	-9 5.4	1.587	2.421	16.0	21.5
4 1	14 48.83	-8 21.9	1.651	2.556	11.9	21.0	4 1	14 47.21	-8 29.6	1.513	2.423	12.4	21.3
4 11	14 41.94	-7 19.5	1.594	2.556	7.9	20.8	4 11	14 40.96	-7 47.5	1.460	2.425	8.3	21.0
4 21	14 33.24	-6 14.6	1.562	2.556	4.2	20.6	4 21	14 32.84	-7 3.6	1.431	2.427	4.3	20.8
5 1	14 23.73	-5 13.6	1.557	2.555	4.0	20.6	5 1	14 23.86	-6 23.6	1.429	2.429	3.7	20.8
5 11	14 14.52	-4 22.9	1.579	2.554	7.6	20.8	5 11	14 15.22	-5 53.4	1.452	2.432	7.5	21.0
5 21	14 6.63	-3 47.5	1.627	2.552	11.6	21.0	5 21	14 7.95	-5 37.1	1.500	2.434	11.7	21.2
5 31	14 0.81	-3 30.2	1.697	2.549	15.1	21.2	5 31	14 2.85	-5 37.0	1.569	2.437	15.4	21.5
159817	2003 <i>SE</i> ₂₃₄	4 28.9 236°77		2°0/27.3 18			312923	2011 <i>WA</i> ₃₂	4 28.9 247°48		2°9/ 1.6 17		
3 22	14 50.59	-10 30.8	2.161	2.976	13.0	20.5	3 22						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
313105	2000 WQ ₈₉		4 28.9 162°00	1.1/28.1	18		280419	2003 XE ₃₁		4 28.9 288°09	3.3/26.7	18	
3 22	14 55.91	-12 57.8	1.981	2.786	14.4	21.7	3 22	14 52.13	-6 41.4	1.965	2.787	13.8	20.5
4 1	14 50.57	-12 37.7	1.899	2.793	11.2	21.5	4 1	14 47.97	-6 19.3	1.860	2.762	10.9	20.2
4 11	14 42.95	-12 9.9	1.840	2.799	7.4	21.3	4 11	14 41.48	-5 54.0	1.777	2.738	7.4	20.0
4 21	14 33.67	-11 36.8	1.808	2.804	3.3	21.1	4 21	14 33.16	-5 28.8	1.720	2.712	4.1	19.7
5 1	14 23.65	-11 2.1	1.803	2.809	1.7	20.9	5 1	14 23.81	-5 8.2	1.690	2.687	3.8	19.6
5 11	14 13.94	-10 30.4	1.828	2.813	5.7	21.2	5 11	14 14.46	-4 56.4	1.687	2.662	7.1	19.8
5 21	14 5.46	-10 5.6	1.879	2.816	9.6	21.4	5 21	14 6.08	-4 56.7	1.710	2.636	11.0	20.0
5 31	13 58.92	-9 51.2	1.954	2.818	13.0	21.7	5 31	13 59.52	-5 11.1	1.756	2.611	14.6	20.1
508091	2015 DY ₁₁₆		4 28.9 234°08	8.2/21.8	18		244744	2003 SG ₄₀		4 28.9 68°12	4.8/3.7	18	
3 22	14 52.36	+7 14.0	2.071	2.887	13.4	21.2	3 22	14 53.63	-31 46.0	1.977	2.723	16.4	19.8
4 1	14 47.77	+8 24.4	1.993	2.877	11.2	21.0	4 1	14 48.84	-31 33.8	1.915	2.755	13.5	19.7
4 11	14 41.07	+9 29.1	1.938	2.866	9.2	20.8	4 11	14 41.72	-31 0.2	1.872	2.786	10.3	19.5
4 21	14 32.84	+10 21.2	1.908	2.855	8.2	20.8	4 21	14 33.06	-30 5.4	1.853	2.818	7.1	19.4
5 1	14 23.88	+10 54.3	1.904	2.844	9.0	20.8	5 1	14 23.91	-28 52.1	1.861	2.849	4.9	19.3
5 11	14 15.13	+11 4.4	1.926	2.832	11.0	20.9	5 11	14 15.35	-27 26.4	1.896	2.879	5.6	19.4
5 21	14 7.43	+10 50.4	1.971	2.820	13.4	21.0	5 21	14 8.27	-25 55.9	1.958	2.910	8.3	19.7
5 31	14 1.47	+10 13.5	2.036	2.807	15.8	21.1	5 31	14 3.26	-24 28.4	2.046	2.940	11.2	19.9
136195	2003 UU ₂₇₆		4 28.9 121°94	3.3/1.2	18		37160	2000 WR ₅		4 28.9 251°43	1.6/30.3	18	
3 22	14 53.83	-24 10.7	1.665	2.455	17.3	20.0	3 22	14 51.84	-19 36.9	2.525	3.307	12.3	18.5
4 1	14 49.63	-24 15.2	1.585	2.461	14.0	19.8	4 1	14 47.21	-19 52.7	2.423	3.298	9.8	18.4
4 11	14 42.66	-24 2.1	1.524	2.467	10.1	19.5	4 11	14 40.67	-20 0.0	2.343	3.289	6.8	18.1
4 21	14 33.65	-23 31.2	1.487	2.472	5.9	19.3	4 21	14 32.69	-19 58.9	2.290	3.279	3.7	17.9
5 1	14 23.68	-22 44.4	1.476	2.478	3.3	19.3	5 1	14 23.96	-19 50.2	2.265	3.269	1.6	17.8
5 11	14 14.06	-21 47.2	1.491	2.483	5.7	19.1	5 11	14 15.31	-19 36.4	2.269	3.260	4.2	17.9
5 21	14 5.94	-20 46.9	1.532	2.488	9.8	19.5	5 21	14 7.50	-19 20.5	2.302	3.250	7.4	18.1
5 31	14 0.17	-19 51.0	1.597	2.493	13.7	19.8	5 31	14 1.20	-19 6.1	2.360	3.240	10.4	18.3
515446	2013 UG ₅		4 28.9 64°16	1.2/28.9	18		9168	Sarav		4 28.9 218°87	0.5/29.4	18	
3 22	15 53.73	+0 51.0	0.529	1.359	38.0	21.1	3 22	14 51.88	-19 26.6	1.969	2.766	14.7	18.2
4 1	15 39.31	-3 21.3	0.498	1.400	29.8	20.8	4 1	14 47.69	-18 49.6	1.872	2.759	11.6	18.0
4 11	15 17.04	-8 2.5	0.482	1.442	19.9	20.5	4 11	14 41.19	-17 57.7	1.798	2.752	7.9	17.7
4 21	14 49.06	-12 47.6	0.487	1.483	8.8	20.2	4 21	14 32.97	-16 53.0	1.749	2.743	3.8	17.5
5 1	14 19.94	-17 0.6	0.517	1.524	2.5	20.1	5 1	14 23.90	-15 39.5	1.728	2.735	0.9	17.2
5 11	13 54.78	-20 19.2	0.573	1.564	11.8	20.8	5 11	14 15.03	-14 23.5	1.735	2.725	5.2	17.5
5 21	13 36.57	-22 45.3	0.650	1.603	19.3	21.4	5 21	14 7.32	-13 11.9	1.769	2.715	9.4	17.7
5 31	13 25.96	-24 35.0	0.745	1.641	24.8	21.9	5 31	14 1.52	-12 10.5	1.827	2.705	13.1	17.9
474605	2004 RD ₂₃₇		4 28.9 304°29	6.9/4.1	17		428249	2007 BE ₁		4 28.9 103°65	1.7/30.3	18	
3 22	14 53.30	-33 58.5	2.330	3.052	14.8	21.1	3 22	14 55.00	-20 49.9	1.936	2.724	15.3	21.6
4 1	14 48.98	-34 57.2	2.225	3.040	12.8	20.9	4 1	14 49.90	-20 45.0	1.865	2.744	12.1	21.4
4 11	14 42.22	-35 40.9	2.140	3.028	10.5	20.7	4 11	14 42.49	-20 26.9	1.816	2.764	8.3	21.2
4 21	14 33.51	-36 6.0	2.078	3.015	8.3	20.6	4 21	14 33.47	-19 56.6	1.792	2.783	4.4	21.0
5 1	14 23.69	-36 10.4	2.042	3.004	7.0	20.5	5 1	14 23.80	-19 16.7	1.796	2.802	1.7	20.8
5 11	14 13.85	-35 54.9	2.032	2.992	7.3	20.5	5 11	14 14.57	-18 32.1	1.829	2.820	4.9	21.1
5 21	14 5.03	-35 23.0	2.048	2.980	9.2	20.5	5 21	14 6.68	-17 48.1	1.888	2.838	8.7	21.3
5 31	13 58.15	-34 40.8	2.088	2.969	11.6	20.7	5 31	14 0.82	-17 9.8	1.971	2.855	12.0	21.6
222317	2000 TE ₁		4 28.9 46°58	10.3/2.7	18		289659	2005 GN ₁₂₀		4 28.9 146°85	0.3/28.7	17	
3 22	15 22.05	-30 34.1	1.465	2.192	21.9	18.8	3 22	14 49.91	-15 40.0	2.176	2.981	13.2	21.2
4 1	15 12.62	-33 32.0	1.415	2.233	18.6	18.7	4 1	14 45.80	-15 15.6	2.091	2.984	10.3	21.0
4 11	14 58.65	-36 11.0	1.387	2.275	15.0	18.5	4 11	14 39.73	-14 41.8	2.029	2.987	6.9	20.8
4 21	14 41.07	-38 18.4	1.383	2.317	11.9	18.4	4 21	14 32.24	-14 0.9	1.993	2.990	3.1	20.6
5 1	14 21.77	-39 44.5	1.406	2.359	10.3	18.5	5 1	14 24.11	-13 16.4	1.985	2.992	1.0	20.4
5 11	14 3.17	-40 28.7	1.457	2.401	11.0	18.6	5 11	14 16.22	-12 32.9	2.006	2.995	4.8	20.7
5 21	13 47.38	-40 38.6	1.534	2.443	13.2	18.8	5 21	14 9.35	-11 54.6	2.054	2.997	8.5	20.9
5 31	13 35.69	-40 26.8	1.633	2.485	15.7	19.1	5 31	14 4.14	-11 25.2	2.126	2.999	11.7	21.1
168011	2005 HF ₁		4 28.9 175°75	0.4/28.7	18		121232	Zerin		4 28.9 58°55	6.9/4.7	17	
3 22	14 50.46	-14 53.4	2.332	3.135	12.5	21.1	3 22	14 52.70	-34 0.1	1.831	2.574	17.6	19.3
4 1	14 46.10	-14 37.1	2.244	3.136	9.8	20.9	4 1	14 48.77	-34 30.2	1.753	2.584	15.0	19.1
4 11	14 39.86	-14 13.0	2.179	3.136	6.5	20.7	4 11	14 42.10	-34 38.3	1.693	2.594	12.0	18.9
4 21	14 32.27	-13 43.0	2.141	3.137	2.9	20.4	4 21	14 33.41	-34 21.8	1.655	2.605	9.1	18.8
5 1	14 24.05	-13 9.9	2.131	3.137	1.0	20.3	5 1	14 23.80	-33 40.3	1.642	2.616	7.1	18.7
5 11	14 16.04	-12 37.5	2.150	3.138	4.6	20.5	5 11	14 14.57	-32 38.0	1.654	2.627	7.4	18.7
5 21	14 8.97	-12 9.6	2.196	3.138	8.1	20.8	5 21	14 6.86	-31 22.2	1.691	2.638	9.7	18.9
5 31	14 3.47	-11 49.3	2.267	3.137	11.2	21.0	5 31	14 1.48	-30 1.6	1.752	2.649	12.6	19.1
17885	Brianbeyt		4 28.9 8°53	1.3/29.9	18		323383	2003 YX ₅₈		4 28.9 136°28	1.0/28.3	16	
3 22	14 46.59	-21 0.1	1.387	2.213	18.3	17.9	3 22	14 54.72	-13 57.6	1.926	2.733	14.6	22.0
4 1	14 44.37	-20 30.0	1.312	2.214	14.5	17.6	4 1	14 49.67	-13 31.4	1.850	2.745	11.3	21.8
4 11	14 39.33	-19 40.0	1.257	2.216	10.0	17.4	4 11	14 42.34	-12 56.2	1.798	2.757	7.5	21.6
4 21	14 32.18	-18 32.3	1.224	2.219	5.0	17.1	4 21	14 33.42	-12 14.9	1.771	2.768	3.3	21.4
5 1	14 24.08	-17 12.5	1.215	2.222	1.4	16.8	5 1	14 23.82	-11 31.5	1.772	2.778	1.5	21.3
5 11	14 16.36	-15 49.5	1.232	2.226	6.1	17.2	5 11	14 14.59	-10 51.1	1.802	2.788	5.6	21.6
5 21	14 10.19	-14 32.3	1.272	2.231	11.0	17.5	5 21	14 6.63	-10 18.2	1.859	2.797	9.5	21.8
5 31	14 6.41	-13 28.9	1.334	2.237	15.3	17.7	5 31	14 0.63	-9 56.2	1.939	2.806	12.9	22.0
287702	2003 QE ₄₆		4 28.9 195°81	0.5/28.6	16		329352	2001 SN ₁₆₀		4 28.9 217°74	0.9/28.1	17	
3 22	14 54.66	-15 25.5	2.178	2.974	13.5	22.2							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
60620	2000 <i>FD</i> ₈		4 28.9 328°29	0°3/25.3	16		203977	2003 <i>SC</i> ₂₁₂		4 28.9 264°46	3°7/26.3	17	
3 22	14 28.73	- 3 44.0	35.572	36.384	0.9	22.3	3 22	14 52.80	- 5 4.8	2.087	2.905	13.3	20.9
4 1	14 28.05	- 3 38.0	35.482	36.379	0.7	22.3	4 1	14 48.25	- 4 39.7	1.989	2.889	10.4	20.7
4 11	14 27.29	- 3 32.1	35.419	36.375	0.5	22.2	4 11	14 41.53	- 4 12.6	1.913	2.872	7.2	20.4
4 21	14 26.46	- 3 26.4	35.384	36.370	0.3	22.2	4 21	14 33.16	- 3 47.3	1.864	2.854	4.3	20.2
5 1	14 25.62	- 3 21.1	35.379	36.366	0.3	22.2	5 1	14 23.91	- 3 28.1	1.843	2.837	4.2	20.2
5 11	14 24.77	- 3 16.4	35.403	36.361	0.5	22.2	5 11	14 14.74	- 3 18.8	1.850	2.819	7.1	20.3
5 21	14 23.97	- 3 12.4	35.454	36.357	0.7	22.3	5 21	14 6.55	- 3 22.2	1.882	2.801	10.6	20.5
5 31	14 23.23	- 3 9.2	35.532	36.352	1.0	22.3	5 31	14 0.09	- 3 39.5	1.938	2.782	13.9	20.7
126724	2002 <i>CB</i> ₂₆₃		4 28.9 343°71	4°0/27.0	18		303894	2005 <i>TB</i> ₁₀₂		4 28.9 201°19	0°9/29.9	17	
3 22	14 54.18	- 4 23.6	1.560	2.393	16.3	18.9	3 22	14 48.23	- 19 28.6	2.513	3.303	12.1	21.2
4 1	14 49.93	- 4 23.2	1.480	2.387	12.8	18.7	4 1	14 44.33	- 19 11.7	2.421	3.302	9.5	21.0
4 11	14 42.92	- 4 23.5	1.420	2.382	8.8	18.4	4 11	14 38.67	- 18 44.5	2.351	3.301	6.5	20.8
4 21	14 33.83	- 4 28.4	1.385	2.377	5.0	18.2	4 21	14 31.77	- 18 8.3	2.308	3.300	3.2	20.6
5 1	14 23.70	- 4 41.7	1.376	2.373	4.5	18.2	5 1	14 24.28	- 17 25.6	2.293	3.299	1.0	20.4
5 11	14 13.81	- 5 6.5	1.392	2.370	8.0	18.4	5 11	14 16.97	- 16 40.1	2.307	3.298	4.0	20.7
5 21	14 5.32	- 5 43.9	1.433	2.367	12.2	18.6	5 21	14 10.53	- 15 56.1	2.349	3.297	7.3	20.9
5 31	13 59.12	- 6 34.3	1.496	2.364	16.0	18.8	5 31	14 5.53	- 15 17.4	2.416	3.295	10.2	21.1
264202	2010 <i>NS</i> ₂₀		4 28.9 289°08	1°9/30.1	17		138576	2000 <i>QU</i> ₁₁₄		4 28.9 188°03	3°5/25.0	18	
3 22	14 56.09	- 18 28.9	2.369	3.149	13.0	20.4	3 22	14 47.64	- 4 42.9	2.713	3.529	10.6	20.6
4 1	14 50.87	- 19 8.4	2.250	3.124	10.5	20.2	4 1	14 43.60	- 3 46.9	2.630	3.529	8.2	20.4
4 11	14 43.38	- 19 41.8	2.154	3.099	7.4	20.0	4 11	14 38.05	- 2 48.6	2.572	3.528	5.7	20.2
4 21	14 34.06	- 20 8.0	2.085	3.074	4.0	19.7	4 21	14 31.45	- 1 52.0	2.541	3.526	3.8	20.1
5 1	14 23.63	- 20 26.9	2.045	3.049	1.9	19.5	5 1	14 24.37	- 1 1.2	2.539	3.525	4.0	20.1
5 11	14 13.06	- 20 39.5	2.034	3.023	4.7	19.6	5 11	14 17.48	- 0 20.2	2.567	3.523	6.2	20.3
5 21	14 3.31	- 20 48.0	2.052	2.998	8.3	19.8	5 21	14 11.34	+ 0 8.5	2.620	3.521	8.7	20.4
5 31	13 55.21	- 20 55.7	2.095	2.973	11.7	20.0	5 31	14 6.46	+ 0 23.3	2.698	3.518	11.1	20.6
269294	2008 <i>SJ</i> ₃₇		4 28.9 114°65	0°1/28.9	18		466585	2014 <i>UH</i> ₉₉		4 28.9 189°08	1°5/27.8	17	
3 22	14 46.03	- 15 42.8	3.383	4.174	9.2	21.4	3 22	14 54.55	- 12 2.9	2.005	2.814	14.1	22.1
4 1	14 42.08	- 15 27.2	3.298	4.183	7.2	21.2	4 1	14 49.59	- 11 37.6	1.918	2.813	10.9	21.8
4 11	14 36.90	- 15 5.8	3.239	4.193	4.8	21.1	4 11	14 42.38	- 11 5.0	1.853	2.812	7.3	21.6
4 21	14 30.88	- 14 40.0	3.207	4.203	2.1	20.9	4 21	14 33.51	- 10 27.7	1.814	2.810	3.3	21.4
5 1	14 24.50	- 14 12.0	3.205	4.212	0.6	20.8	5 1	14 23.84	- 9 49.8	1.803	2.808	2.1	21.3
5 11	14 18.29	- 13 44.0	3.233	4.221	3.2	21.0	5 11	14 14.40	- 9 15.9	1.821	2.804	5.9	21.5
5 21	14 12.70	- 13 18.5	3.289	4.230	5.7	21.2	5 21	14 6.12	- 8 50.1	1.866	2.800	9.7	21.7
5 31	14 8.14	- 12 57.8	3.372	4.239	8.0	21.3	5 31	13 59.70	- 8 35.6	1.934	2.796	13.2	21.9
38769	2000 <i>RS</i> ₇		4 28.9 136°17	2°5/26.4	18		150863	2001 <i>SY</i> ₁₄₀		4 28.9 273°06	0°5/28.6	17	
3 22	14 50.92	- 9 47.6	2.401	3.211	12.0	19.4	3 22	14 50.85	- 15 44.8	1.788	2.604	15.3	20.9
4 1	14 46.21	- 8 48.5	2.328	3.225	9.2	19.2	4 1	14 47.21	- 15 17.8	1.689	2.587	12.0	20.6
4 11	14 39.80	- 7 43.7	2.279	3.239	6.1	19.0	4 11	14 41.10	- 14 38.5	1.611	2.571	8.1	20.4
4 21	14 32.21	- 6 37.3	2.258	3.252	3.2	18.8	4 21	14 33.04	- 13 49.3	1.557	2.554	3.6	20.0
5 1	14 24.17	- 5 34.0	2.267	3.264	3.0	18.9	5 1	14 23.95	- 12 54.4	1.531	2.537	1.3	19.8
5 11	14 16.43	- 4 38.6	2.305	3.276	5.8	19.0	5 11	14 14.95	- 11 59.7	1.531	2.520	6.0	20.1
5 21	14 9.67	- 3 54.7	2.370	3.287	8.8	19.3	5 21	14 7.10	- 11 11.5	1.557	2.503	10.5	20.3
5 31	14 4.40	- 3 24.6	2.459	3.298	11.5	19.5	5 31	14 1.28	- 10 35.1	1.606	2.486	14.5	20.5
306826	2001 <i>RZ</i> ₁₇		4 28.9 142°13	10°0/10.6	18		1347	<i>Patria</i>		4 28.9 142°76	1°2/30.0	18	
3 22	15 8.26	- 51 20.1	2.886	3.447	15.0	21.6	3 22	14 50.68	- 21 47.2	1.907	2.702	15.2	15.7
4 1	15 0.70	- 52 31.6	2.803	3.464	13.8	21.5	4 1	14 46.74	- 21 6.2	1.823	2.706	12.1	15.5
4 11	14 50.07	- 53 22.4	2.736	3.480	12.5	21.4	4 11	14 40.51	- 20 8.3	1.760	2.711	8.3	15.3
4 21	14 37.07	- 53 47.2	2.690	3.495	11.3	21.4	4 21	14 32.65	- 18 55.7	1.722	2.715	4.2	15.0
5 1	14 22.89	- 53 42.6	2.666	3.510	10.3	21.3	5 1	14 24.08	- 17 33.0	1.712	2.719	1.2	14.8
5 11	14 8.99	- 53 8.9	2.667	3.523	10.0	21.3	5 11	14 15.84	- 16 7.1	1.730	2.722	5.0	15.1
5 21	13 56.70	- 52 10.4	2.691	3.536	10.4	21.4	5 21	14 8.84	- 14 45.2	1.775	2.726	9.1	15.3
5 31	13 47.02	- 50 54.1	2.739	3.547	11.3	21.4	5 31	14 3.78	- 13 33.8	1.844	2.729	12.7	15.6
343750	2011 <i>FA</i> ₄₈		4 28.9 299°96	0°5/29.2	16		20143	1996 <i>RQ</i> ₁₆		4 28.9 248°52	2°8/26.8	18	
3 22	14 54.86	- 14 36.6	1.800	2.610	15.4	20.7	3 22	14 52.25	- 10 56.0	1.797	2.619	14.9	18.8
4 1	14 50.52	- 15 3.5	1.693	2.587	12.2	20.4	4 1	14 48.22	- 10 0.6	1.699	2.602	11.7	18.5
4 11	14 43.47	- 15 24.6	1.607	2.564	8.4	20.2	4 11	14 41.72	- 8 54.8	1.623	2.585	7.8	18.3
4 21	14 34.20	- 15 40.1	1.545	2.541	4.0	19.8	4 21	14 33.31	- 7 43.1	1.573	2.568	3.9	18.0
5 1	14 23.60	- 15 50.7	1.511	2.518	1.0	19.6	5 1	14 23.88	- 6 31.7	1.550	2.550	3.5	17.9
5 11	14 12.89	- 15 59.0	1.504	2.496	5.7	19.8	5 11	14 14.57	- 5 27.8	1.554	2.531	7.4	18.1
5 21	14 3.27	- 16 7.8	1.524	2.473	10.4	20.0	5 21	14 6.40	- 4 37.6	1.584	2.512	11.6	18.3
5 31	13 55.77	- 16 20.9	1.566	2.451	14.5	20.2	5 31	14 0.24	- 4 5.3	1.636	2.492	15.5	18.5
380418	2003 <i>BN</i> ₇		4 28.9 74°83	7°4/21.8	18		161289	2003 <i>HK</i> ₂₃		4 28.9 290°86	0°9/29.4	17	
3 22	14 51.20	+ 6 21.0	2.247	3.062	12.5	20.6	3 22	14 53.43	- 16 50.4	1.411	2.235	18.2	20.8
4 1	14 46.30	+ 7 47.4	2.214	3.098	10.2	20.5	4 1	14 50.14	- 16 58.7	1.312	2.213	14.5	20.5
4 11	14 39.74	+ 9 6.5	2.205	3.133	8.3	20.5	4 11	14 43.63	- 16 55.1	1.232	2.191	10.0	20.2
4 21	14 32.12	+ 10 12.1	2.222	3.167	7.4	20.5	4 21	14 34.41	- 16 39.6	1.174	2.169	4.9	19.8
5 1	14 24.22	+ 10 59.2	2.266	3.201	8.0	20.6	5 1	14 23.57	- 16 14.6	1.140	2.147	1.3	19.5
5 11	14 16.78	+ 11 25.1	2.336	3.234	9.6	20.7	5 11	14 12.64	- 15 45.0	1.132	2.125	6.8	19.8
5 21	14 10.45	+ 11 29.5	2.429	3.267	11.6	20.9	5 21	14 3.12	- 15 17.3	1.148	2.103	12.3	20.1
5 31	14 5.67	+ 11 14.0	2.544	3.300	13.4	21.1	5 31	13 56.25	- 14 58.1	1.184	2.082	17.3	20.3
231838	2000 <i>QA</i> ₁₆₁		4 28.9										

EPHEMERIDES

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4 28.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
213209	2000 <i>UH</i> ₂₈		4 28.9 192°78	0°1/29.0	18		488616	2002 <i>TZ</i> ₂₆		4 28.9 231°34	0°6/28.4	15	
3 22	14 47.97	-17 26.8	2.609	3.404	11.6	20.8	3 22	14 49.81	-15 5.1	2.795	3.588	10.9	22.3
4 1	14 44.02	-16 53.1	2.516	3.403	9.0	20.6	4 1	14 45.39	-14 30.1	2.686	3.573	8.5	22.1
4 11	14 38.42	-16 9.7	2.447	3.401	6.1	20.4	4 11	14 39.35	-13 46.9	2.602	3.558	5.7	21.9
4 21	14 31.65	-15 18.7	2.404	3.400	2.8	20.2	4 21	14 32.10	-12 57.3	2.546	3.542	2.5	21.7
5 1	14 24.34	-14 23.2	2.391	3.398	0.7	20.0	5 1	14 24.25	-12 4.7	2.519	3.525	1.1	21.5
5 11	14 17.22	-13 27.6	2.407	3.396	4.1	20.2	5 11	14 16.49	-11 12.8	2.522	3.508	4.3	21.7
5 21	14 10.93	-12 35.9	2.451	3.394	7.3	20.4	5 21	14 9.46	-10 25.5	2.554	3.490	7.4	21.9
5 31	14 6.00	-11 51.9	2.521	3.391	10.2	20.6	5 31	14 3.72	-9 46.3	2.612	3.471	10.3	22.0
230251	2001 <i>VT</i> ₃₁		4 28.9 102°88	2°6/25.8	18		476677	2008 <i>TV</i> ₅₅		4 28.9 137°58	0°2/29.3	18	
3 22	14 47.35	-3 30.5	3.611	4.416	8.4	21.0	3 22	14 45.61	-16 41.9	3.968	4.750	8.1	23.1
4 1	14 42.89	-3 9.4	3.543	4.435	6.5	20.9	4 1	14 41.58	-16 28.1	3.881	4.761	6.3	23.0
4 11	14 37.34	-2 48.4	3.501	4.454	4.5	20.8	4 11	14 36.50	-16 9.0	3.820	4.772	4.2	22.9
4 21	14 31.06	-2 29.8	3.487	4.473	2.9	20.7	4 21	14 30.71	-15 45.7	3.787	4.782	2.0	22.7
5 1	14 24.51	-2 15.7	3.503	4.491	2.9	20.7	5 1	14 24.62	-15 19.8	3.784	4.791	0.5	22.6
5 11	14 18.14	-2 7.9	3.549	4.509	4.5	20.8	5 11	14 18.66	-14 53.4	3.812	4.801	2.7	22.8
5 21	14 12.39	-2 7.7	3.624	4.527	6.5	21.0	5 21	14 13.24	-14 28.6	3.869	4.810	4.9	23.0
5 31	14 7.60	-2 15.6	3.723	4.544	8.3	21.1	5 31	14 8.70	-14 7.2	3.953	4.819	6.9	23.1
232492	2003 <i>OJ</i> ₂₇		4 28.9 250°57	6°3/23.1	17		431075	2006 <i>CY</i> ₄₆		4 28.9 188°03	1°0/28.2	17	
3 22	14 49.59	+0 45.9	2.078	2.904	13.0	20.9	3 22	14 51.91	-13 20.6	2.117	2.925	13.4	21.5
4 1	14 45.67	+1 58.8	1.994	2.893	10.4	20.7	4 1	14 47.45	-12 58.9	2.030	2.925	10.4	21.3
4 11	14 39.73	+3 11.5	1.934	2.882	7.9	20.5	4 11	14 40.91	-12 29.5	1.965	2.924	6.9	21.1
4 21	14 32.31	+4 17.8	1.900	2.870	6.4	20.4	4 21	14 32.86	-11 54.8	1.927	2.923	3.1	20.9
5 1	14 24.17	+5 11.1	1.892	2.858	7.1	20.4	5 1	14 24.09	-11 18.3	1.916	2.922	1.5	20.7
5 11	14 16.21	+5 46.4	1.911	2.846	9.4	20.5	5 11	14 15.53	-10 44.3	1.935	2.920	5.3	21.0
5 21	14 9.23	+6 0.9	1.955	2.834	12.2	20.7	5 21	14 8.03	-10 16.8	1.979	2.918	9.0	21.2
5 31	14 3.90	+5 54.1	2.019	2.821	14.9	20.8	5 31	14 2.25	-9 59.1	2.049	2.916	12.3	21.4
518692	2008 <i>WT</i> ₁₄₃		4 28.9 180°79	1°5/27.7	17		205051	1999 <i>CO</i> ₅₈		4 28.9 45°09	7°3/25.1	18	
3 22	14 50.58	-12 1.9	2.289	3.098	12.5	22.4	3 22	14 53.16	-1 19.6	1.227	2.079	18.7	19.2
4 1	14 46.21	-11 30.8	2.202	3.099	9.7	22.2	4 1	14 49.44	-0 22.9	1.174	2.089	14.7	19.0
4 11	14 39.97	-10 52.9	2.139	3.099	6.4	22.0	4 11	14 42.67	+0 32.3	1.139	2.100	10.6	18.8
4 21	14 32.38	-10 11.1	2.103	3.099	3.0	21.8	4 21	14 33.72	+1 17.6	1.127	2.111	7.6	18.6
5 1	14 24.16	-9 29.0	2.095	3.099	2.0	21.7	5 1	14 23.90	+1 44.9	1.138	2.122	8.0	18.7
5 11	14 16.16	-8 51.1	2.116	3.098	5.3	21.9	5 11	14 14.68	+1 48.9	1.173	2.134	11.2	18.9
5 21	14 9.12	-8 20.9	2.164	3.097	8.7	22.1	5 21	14 7.28	+1 28.2	1.229	2.147	15.1	19.1
5 31	14 3.65	-8 1.3	2.236	3.096	11.7	22.3	5 31	14 2.50	+0 44.6	1.304	2.160	18.7	19.4
19491	1998 <i>HG</i> ₁₅₃		4 28.9 174°86	6°7/21.9	18		75110	1999 <i>VH</i> ₅₆		4 28.9 301°35	1°0/28.5	18	
3 22	14 50.20	+3 26.8	2.323	3.141	12.1	18.4	3 22	14 54.12	-12 20.9	1.487	2.315	17.2	19.0
4 1	14 45.79	+4 52.5	2.254	3.144	9.8	18.3	4 1	14 50.24	-12 26.0	1.399	2.304	13.5	18.7
4 11	14 39.61	+6 15.7	2.209	3.146	7.7	18.2	4 11	14 43.40	-12 23.9	1.331	2.294	9.1	18.4
4 21	14 32.18	+7 30.1	2.190	3.148	6.7	18.1	4 21	14 34.20	-12 16.7	1.286	2.284	4.1	18.1
5 1	14 24.22	+8 29.7	2.200	3.149	7.4	18.1	5 1	14 23.73	-12 7.3	1.267	2.274	1.7	17.9
5 11	14 16.51	+9 10.2	2.236	3.149	9.3	18.3	5 11	14 13.39	-12 0.2	1.274	2.264	6.8	18.2
5 21	14 9.75	+9 29.6	2.296	3.149	11.6	18.4	5 21	14 4.48	-11 59.5	1.305	2.254	11.8	18.5
5 31	14 4.48	+9 28.2	2.378	3.148	13.8	18.6	5 31	13 58.04	-12 8.9	1.358	2.245	16.2	18.7
262042	2006 <i>QS</i> ₁₅₇		4 28.9 290°23	0°1/28.9	17		110979	2001 <i>UL</i> ₁₈₇		4 28.9 40°31	1°7/27.8	18	
3 22	14 51.01	-16 22.1	1.528	2.352	17.0	21.7	3 22	14 49.32	-13 57.5	1.443	2.278	17.2	19.6
4 1	14 47.84	-16 4.8	1.431	2.334	13.5	21.4	4 1	14 46.17	-13 12.1	1.379	2.289	13.3	19.4
4 11	14 41.81	-15 33.8	1.354	2.316	9.2	21.1	4 11	14 40.36	-12 14.6	1.335	2.301	8.8	19.1
4 21	14 33.47	-14 51.0	1.301	2.298	4.2	20.8	4 21	14 32.65	-11 9.7	1.315	2.313	3.9	18.9
5 1	14 23.85	-14 0.5	1.273	2.280	1.1	20.5	5 1	14 24.17	-10 4.2	1.320	2.325	2.4	18.8
5 11	14 14.30	-13 8.8	1.270	2.262	6.5	20.8	5 11	14 16.16	-9 5.8	1.351	2.338	6.9	19.1
5 21	14 6.07	-12 22.9	1.292	2.244	11.6	21.0	5 21	14 9.68	-8 20.5	1.407	2.352	11.4	19.4
5 31	14 0.21	-11 49.1	1.336	2.226	16.2	21.2	5 31	14 5.47	-7 52.4	1.483	2.366	15.3	19.7
467232	2016 <i>EA</i> ₁₆₅		4 28.9 302°49	4°1/1.5	17		242022	2002 <i>QH</i> ₁₆		4 28.9 275°41	4°0/2.3	17	
3 22	14 51.59	-24 38.3	1.516	2.316	18.3	21.0	3 22	14 50.99	-27 1.4	2.068	2.837	15.0	20.4
4 1	14 48.46	-24 56.7	1.424	2.305	15.0	20.7	4 1	14 47.09	-27 12.3	1.975	2.834	12.4	20.2
4 11	14 42.30	-24 57.1	1.351	2.294	11.0	20.4	4 11	14 40.86	-27 7.1	1.902	2.831	9.3	20.0
4 21	14 33.71	-24 37.6	1.299	2.283	6.8	20.2	4 21	14 32.91	-26 44.9	1.853	2.829	6.1	19.8
5 1	14 23.79	-23 59.1	1.272	2.272	4.1	20.0	5 1	14 24.09	-26 6.7	1.831	2.826	4.0	19.6
5 11	14 14.01	-23 6.3	1.270	2.262	6.5	20.1	5 11	14 15.46	-25 16.3	1.836	2.823	5.4	19.7
5 21	14 5.70	-22 6.7	1.293	2.252	10.9	20.3	5 21	14 7.98	-24 19.2	1.867	2.820	8.5	19.9
5 31	13 59.94	-21 9.2	1.337	2.242	15.2	20.5	5 31	14 2.42	-23 22.1	1.923	2.817	11.8	20.1
270374	2002 <i>AB</i> ₁₂		4 28.9 151°06	2°8/1.3	18		156341	2001 <i>XA</i> ₁₅₃		4 28.9 69°20	0°1/29.1	18	
3 22	14 53.77	-24 6.2	2.194	2.965	14.2	21.1	3 22	14 51.91	-17 29.0	1.682	2.495	16.2	20.2
4 1	14 48.92	-24 9.2	2.107	2.972	11.5	20.9	4 1	14 47.79	-17 1.6	1.617	2.513	12.6	20.0
4 11	14 41.89	-23 58.5	2.042	2.979	8.3	20.7	4 11	14 41.24	-16 21.4	1.573	2.532	8.4	19.8
4 21	14 33.28	-23 33.8	2.002	2.985	4.9	20.5	4 21	14 33.00	-15 31.0	1.554	2.550	3.8	19.5
5 1	14 23.94	-22 56.8	1.991	2.991	2.8	20.4	5 1	14 24.11	-14 35.3	1.562	2.569	0.9	19.4
5 11	14 14.88	-22 11.4	2.007	2.997	4.7	20.5	5 11	14 15.69	-13 40.5	1.597	2.588	5.5	19.7
5 21	14 6.95	-21 22.8	2.051	3.002	8.0	20.7	5 21	14 8.71	-12 52.4	1.657	2.606	9.7	20.0
5 31	14 0.86	-20 36.2	2.120	3.006	11.2	20.9	5 31	14 3.83	-12 15.8	1.741	2.625	13.3	20.3
55531	2001 <i>VL</i> ₁₂₁		4 28.9 222°60	4°2/25.3	18		372616	2009 <i>VE</i> ₃₇		4 28.9 162°88	0°1/29.1	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
470080	2006 <i>SU</i> ₃₅₄		4 28.9 279°49	0°3/28.8	17		281529	2008 <i>TM</i> ₁₁₃		4 28.9 103°20	1°1/28.2	17	
3 22	14 51.76	-13 45.0	2.259	3.063	12.9	21.1	3 22	14 52.44	-12 12.8	1.963	2.776	14.2	20.6
4 1	14 47.25	-13 48.1	2.169	3.062	10.0	20.9	4 1	14 48.02	-12 4.7	1.880	2.778	11.0	20.4
4 11	14 40.75	-13 45.1	2.103	3.061	6.7	20.6	4 11	14 41.39	-11 50.2	1.820	2.780	7.3	20.2
4 21	14 32.80	-13 37.3	2.063	3.060	3.0	20.4	4 21	14 33.12	-11 31.6	1.785	2.782	3.3	19.9
5 1	14 24.14	-13 26.9	2.052	3.059	0.9	20.2	5 1	14 24.10	-11 12.0	1.778	2.784	1.6	19.8
5 11	14 15.66	-13 16.9	2.069	3.058	4.7	20.5	5 11	14 15.32	-10 55.2	1.799	2.786	5.5	20.0
5 21	14 8.14	-13 10.1	2.113	3.057	8.3	20.7	5 21	14 7.67	-10 44.6	1.846	2.787	9.4	20.3
5 31	14 2.25	-13 9.3	2.182	3.056	11.4	20.9	5 31	14 1.88	-10 43.1	1.917	2.789	12.8	20.5
199936	2007 <i>GO</i> ₄₉		4 28.9 294°87	4°3/25.1	18		135198	2001 <i>RX</i> ₄₂		4 29.0 193°11	4°2/ 2.9	18	
3 22	14 47.27	- 8 34.9	1.757	2.593	14.6	19.7	3 22	14 51.19	-29 12.4	2.410	3.158	13.7	20.2
4 1	14 44.30	- 7 8.3	1.669	2.580	11.3	19.5	4 1	14 46.92	-29 22.8	2.314	3.157	11.4	20.0
4 11	14 39.05	- 5 31.6	1.604	2.568	7.7	19.2	4 11	14 40.60	-29 17.9	2.239	3.156	8.7	19.8
4 21	14 32.10	- 3 51.5	1.565	2.556	4.7	19.0	4 21	14 32.76	-28 56.6	2.188	3.155	6.0	19.7
5 1	14 24.32	- 2 16.3	1.552	2.544	5.1	19.0	5 1	14 24.19	-28 19.7	2.165	3.153	4.3	19.6
5 11	14 16.72	- 0 54.3	1.567	2.532	8.5	19.2	5 11	14 15.80	-27 30.3	2.169	3.152	5.1	19.6
5 21	14 10.26	+ 0 8.1	1.605	2.521	12.3	19.4	5 21	14 8.42	-26 33.4	2.201	3.150	7.7	19.8
5 31	14 5.67	+ 0 47.4	1.665	2.509	15.8	19.6	5 31	14 2.74	-25 34.6	2.258	3.148	10.5	19.9
218971	2008 <i>FG</i> ₄₂		4 28.9 261°39	1°1/29.7	18		471871	2013 <i>AP</i> ₄₁		4 29.0 170°29	4°1/24.8	17	
3 22	14 53.29	-18 52.4	1.904	2.702	15.1	20.7	3 22	14 48.37	- 2 10.7	2.676	3.492	10.7	21.7
4 1	14 49.12	-18 45.2	1.796	2.683	12.1	20.4	4 1	14 44.19	- 1 23.6	2.597	3.495	8.4	21.6
4 11	14 42.42	-18 25.5	1.710	2.663	8.4	20.2	4 11	14 38.48	- 0 36.3	2.544	3.496	6.0	21.4
4 21	14 33.72	-17 53.7	1.649	2.642	4.2	19.9	4 21	14 31.71	+ 0 7.2	2.517	3.498	4.2	21.3
5 1	14 23.89	-17 12.4	1.614	2.621	1.2	19.6	5 1	14 24.47	+ 0 43.1	2.519	3.499	4.5	21.3
5 11	14 14.07	-16 26.1	1.608	2.599	5.4	19.8	5 11	14 17.43	+ 1 8.1	2.550	3.500	6.6	21.5
5 21	14 5.34	-15 40.5	1.627	2.577	9.8	20.1	5 21	14 11.17	+ 1 20.1	2.606	3.501	9.0	21.6
5 31	13 58.63	-15 1.5	1.671	2.555	13.8	20.2	5 31	14 6.19	+ 1 18.3	2.687	3.501	11.3	21.8
359034	2008 <i>WM</i> ₆₉		4 28.9 111°94	1°7/28.0	18		430012	2013 <i>QZ</i> ₉₂		4 29.0 174°82	4°4/25.0	17	
3 22	14 57.01	-11 33.7	1.519	2.342	17.2	21.3	3 22	14 50.85	- 5 27.3	2.065	2.888	13.2	22.3
4 1	14 52.06	-11 20.4	1.451	2.353	13.3	21.0	4 1	14 46.57	- 4 16.6	1.987	2.890	10.3	22.2
4 11	14 44.28	-10 59.6	1.402	2.364	8.8	20.8	4 11	14 40.29	- 3 1.8	1.934	2.892	7.1	22.0
4 21	14 34.46	-10 34.5	1.379	2.375	4.0	20.5	4 21	14 32.59	- 1 48.3	1.907	2.893	4.7	21.8
5 1	14 23.75	-10 9.3	1.381	2.386	2.3	20.4	5 1	14 24.26	- 0 42.6	1.907	2.894	5.0	21.8
5 11	14 13.50	- 9 49.1	1.410	2.396	6.8	20.8	5 11	14 16.20	+ 0 9.9	1.936	2.894	7.7	22.0
5 21	14 4.87	- 9 38.2	1.464	2.406	11.3	21.0	5 21	14 9.20	+ 0 45.4	1.990	2.894	10.9	22.2
5 31	13 58.67	- 9 39.5	1.540	2.416	15.3	21.3	5 31	14 3.89	+ 1 2.3	2.067	2.893	13.8	22.4
429133	2009 <i>SO</i> ₃₆₁		4 28.9 128°14	3°1/ 1.9	17		344256	2001 <i>SR</i> ₂₇₄		4 29.0 137°60	0°1/28.9	18	
3 22	14 52.82	-26 18.8	2.271	3.033	14.1	21.8	3 22	14 49.95	-15 58.7	2.595	3.390	11.6	21.8
4 1	14 48.08	-26 12.1	2.188	3.046	11.4	21.6	4 1	14 45.50	-15 37.7	2.512	3.399	9.0	21.7
4 11	14 41.27	-25 50.0	2.127	3.058	8.4	21.4	4 11	14 39.40	-15 8.8	2.453	3.408	6.0	21.5
4 21	14 33.00	-25 12.6	2.091	3.070	5.2	21.3	4 21	14 32.14	-14 33.8	2.420	3.416	2.7	21.3
5 1	14 24.12	-24 22.1	2.083	3.082	3.1	21.2	5 1	14 24.38	-13 55.6	2.417	3.424	0.7	21.1
5 11	14 15.56	-23 22.6	2.104	3.093	4.6	21.3	5 11	14 16.84	-13 17.7	2.443	3.432	4.1	21.4
5 21	14 8.13	-22 19.7	2.152	3.103	7.7	21.5	5 21	14 10.19	-12 43.6	2.497	3.439	7.3	21.6
5 31	14 2.48	-21 19.2	2.226	3.113	10.7	21.7	5 31	14 4.93	-12 16.4	2.577	3.446	10.1	21.8
228013	2008 <i>DK</i> ₁₇		4 28.9 269°73	3°6/26.3	17		31247	1998 <i>DD</i> ₁₃		4 29.0 15°88	2°1/30.2	18	
3 22	14 50.33	- 9 5.9	1.684	2.516	15.3	20.4	3 22	14 53.21	-18 37.7	1.831	2.633	15.5	17.8
4 1	14 46.82	- 8 9.7	1.596	2.505	11.9	20.1	4 1	14 48.94	-19 15.0	1.750	2.637	12.3	17.6
4 11	14 40.83	- 7 5.1	1.529	2.493	8.0	19.9	4 11	14 42.18	-19 43.1	1.691	2.641	8.6	17.3
4 21	14 32.95	- 5 57.2	1.488	2.482	4.4	19.6	4 21	14 33.55	-20 1.5	1.656	2.646	4.6	17.1
5 1	14 24.12	- 4 52.7	1.473	2.471	4.2	19.6	5 1	14 24.01	-20 10.5	1.647	2.652	2.1	16.9
5 11	14 15.47	- 3 58.9	1.484	2.459	7.9	19.8	5 11	14 14.69	-20 12.7	1.666	2.658	5.2	17.2
5 21	14 8.05	- 3 21.1	1.520	2.447	12.1	20.0	5 21	14 6.63	-20 11.4	1.711	2.665	9.1	17.4
5 31	14 2.67	- 3 2.7	1.577	2.436	15.8	20.2	5 31	14 0.64	-20 11.0	1.780	2.672	12.7	17.6
26226	1998 <i>GJ</i> ₁		4 28.9 218°85	3°3/26.7	17		369542	2011 <i>AT</i> ₁₄		4 29.0 141°56	4°3/25.7	17	
3 22	14 52.62	- 9 5.2	1.695	2.522	15.4	18.4	3 22	14 54.11	- 3 38.9	2.065	2.882	13.4	22.1
4 1	14 48.52	- 8 19.8	1.612	2.518	12.0	18.2	4 1	14 49.01	- 2 57.9	1.994	2.892	10.5	21.9
4 11	14 41.90	- 7 27.2	1.551	2.514	8.1	17.9	4 11	14 41.86	- 2 16.1	1.946	2.902	7.3	21.7
4 21	14 33.41	- 6 32.1	1.514	2.509	4.3	17.7	4 21	14 33.28	- 1 38.1	1.925	2.911	4.7	21.5
5 1	14 24.02	- 5 40.5	1.505	2.504	3.9	17.6	5 1	14 24.10	- 1 8.4	1.932	2.919	4.8	21.6
5 11	14 14.87	- 4 58.8	1.522	2.499	7.6	17.8	5 11	14 15.27	- 0 51.0	1.966	2.927	7.4	21.7
5 21	14 7.01	- 4 31.6	1.564	2.493	11.7	18.1	5 21	14 7.57	- 0 48.1	2.027	2.935	10.5	21.9
5 31	14 1.25	- 4 21.7	1.628	2.487	15.4	18.3	5 31	14 1.63	- 1 0.4	2.111	2.942	13.4	22.1
46453	4013 <i>P-L</i>		4 28.9 260°82	0°8/28.2	18		115029	2003 <i>QZ</i> ₁₀₂		4 29.0 159°33	2°6/ 1.4	18	
3 22	14 49.67	-15 6.1	2.316	3.120	12.6	19.6	3 22	14 51.49	-24 31.0	2.242	3.015	13.9	20.0
4 1	14 45.72	-14 26.8	2.207	3.100	9.8	19.4	4 1	14 47.15	-24 24.5	2.153	3.018	11.2	19.9
4 11	14 39.81	-13 37.1	2.121	3.079	6.6	19.2	4 11	14 40.74	-24 3.6	2.084	3.022	8.1	19.7
4 21	14 32.43	-12 39.6	2.062	3.058	2.9	18.9	4 21	14 32.82	-23 28.6	2.042	3.025	4.8	19.5
5 1	14 24.26	-11 38.0	2.031	3.037	1.4	18.7	5 1	14 24.21	-22 41.4	2.026	3.028	2.6	19.3
5 11	14 16.16	-10 37.5	2.029	3.015	5.1	19.0	5 11	14 15.84	-21 46.4	2.040	3.030	4.6	19.5
5 21	14 8.92	- 9 43.1	2.055	2.992	8.8	19.1	5 21	14 8.54	-20 48.7	2.080	3.032	7.9	19.7
5 31	14 3.22	- 8 59.1	2.105	2.970	12.1	19.3	5 31	14 2.98	-19 53.9	2.146	3.034	11.0	19.9
165188	2000 <i>QD</i> ₂₁₈		4 28.9 187°17	0°4/29.7	18		387572	2001 <i>SP</i> ₃₄₄		4 29			