

EPHEMERIDES

5 10.9

5 11.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
179772	2002 SO ₃₁		5 10.9 205°18	1°8/ 9.9 17			146256	2000 YE ₈₁		5 10.9 164°86	1°0/10.1 18		
4 1	15 42.07	-13 51.4	1.934	2.731	15.1	20.6	4 1	15 36.21	-15 52.3	2.991	3.772	10.6	21.3
4 11	15 37.70	-13 40.1	1.842	2.728	12.0	20.3	4 11	15 32.05	-15 31.0	2.899	3.776	8.4	21.2
4 21	15 30.84	-13 24.4	1.771	2.724	8.4	20.1	4 21	15 26.35	-15 5.1	2.831	3.780	5.8	21.0
5 1	15 22.02	-13 6.2	1.725	2.719	4.4	19.8	5 1	15 19.54	-14 36.3	2.790	3.784	2.9	20.8
5 11	15 12.14	-12 48.2	1.707	2.714	1.9	19.7	5 11	15 12.17	-14 6.6	2.779	3.787	1.0	20.7
5 21	15 2.22	-12 33.6	1.716	2.709	5.2	19.9	5 21	15 4.84	-13 38.4	2.797	3.790	3.4	20.9
5 31	14 53.31	-12 25.5	1.752	2.703	9.3	20.1	5 31	14 58.15	-13 14.2	2.844	3.793	6.2	21.0
6 10	14 46.25	-12 26.5	1.812	2.697	12.9	20.3	6 10	14 52.61	-12 56.0	2.917	3.795	8.8	21.2
404214	2013 CX ₁₇₀		5 10.9 310°78	1°0/10.5 16			300952	2008 CS ₁₉₄		5 10.9 145°83	1°1/10.0 17		
4 1	15 38.40	-18 23.2	1.321	2.145	19.3	21.4	4 1	15 36.13	-16 14.3	2.805	3.589	11.2	21.8
4 11	15 36.01	-17 58.7	1.238	2.139	15.5	21.2	4 11	15 32.07	-15 45.3	2.718	3.597	8.8	21.6
4 21	15 30.33	-17 22.0	1.174	2.134	10.8	20.9	4 21	15 26.41	-15 11.0	2.654	3.605	6.1	21.5
5 1	15 21.98	-16 35.0	1.132	2.128	5.5	20.6	5 1	15 19.58	-14 33.3	2.618	3.612	3.1	21.3
5 11	15 12.14	-15 42.4	1.113	2.123	1.0	20.2	5 11	15 12.18	-13 54.7	2.610	3.618	1.1	21.1
5 21	15 2.26	-14 50.5	1.119	2.118	6.2	20.6	5 21	15 4.86	-13 18.0	2.632	3.625	3.6	21.3
5 31	14 53.82	-14 6.4	1.149	2.113	11.5	20.8	5 31	14 58.24	-12 46.1	2.682	3.631	6.6	21.5
6 10	14 47.94	-13 36.0	1.199	2.108	16.3	21.1	6 10	14 52.84	-12 21.3	2.759	3.637	9.2	21.7
474908	2005 SU ₂₁₀		5 10.9 222°18	5°4/14.9 18			15727	Ianmorison		5 10.9 186°64	1°5/11.9 18		
4 1	15 42.69	-36 21.2	2.982	3.680	12.4	22.0	4 1	15 42.85	-23 34.8	1.815	2.597	16.5	19.3
4 11	15 37.77	-37 7.3	2.871	3.671	10.7	21.9	4 11	15 38.63	-23 26.8	1.724	2.597	13.4	19.0
4 21	15 30.71	-37 42.2	2.781	3.662	8.7	21.7	4 21	15 31.65	-23 6.2	1.653	2.596	9.6	18.8
5 1	15 21.93	-38 3.1	2.716	3.652	6.8	21.6	5 1	15 22.49	-22 32.9	1.605	2.595	5.3	18.5
5 11	15 12.15	-38 8.1	2.678	3.642	5.5	21.5	5 11	15 12.18	-21 48.7	1.585	2.593	1.5	18.3
5 21	15 2.19	-37 57.5	2.667	3.631	5.7	21.5	5 21	15 1.88	-20 57.7	1.592	2.591	4.5	18.5
5 31	14 52.94	-37 33.4	2.685	3.620	7.2	21.6	5 31	14 52.78	-20 5.5	1.626	2.588	8.9	18.7
6 10	14 45.18	-37 0.0	2.728	3.609	9.2	21.7	6 10	14 45.80	-19 18.3	1.684	2.585	12.9	19.0
502955	2015 EY ₆₂		5 10.9 69°00	2°8/ 9.0 17			335119	2004 TR ₂₅₈		5 10.9 248°38	0°6/11.4 17		
4 1	15 37.64	-13 47.1	1.823	2.633	15.3	21.4	4 1	15 39.98	-21 7.2	2.228	3.008	13.9	22.1
4 11	15 34.00	-12 54.1	1.757	2.651	12.1	21.2	4 11	15 35.94	-20 59.1	2.117	2.991	11.2	21.9
4 21	15 28.06	-11 54.9	1.713	2.669	8.3	21.0	4 21	15 29.60	-20 42.0	2.028	2.973	8.0	21.7
5 1	15 20.47	-10 53.6	1.694	2.687	4.5	20.8	5 1	15 21.42	-20 16.1	1.964	2.956	4.2	21.4
5 11	15 12.15	-9 55.5	1.702	2.706	3.0	20.7	5 11	15 12.18	-19 43.1	1.928	2.937	0.6	21.1
5 21	15 4.08	-9 5.6	1.737	2.724	5.9	20.9	5 21	15 2.79	-19 6.0	1.920	2.918	4.0	21.3
5 31	14 57.14	-8 28.0	1.798	2.742	9.5	21.2	5 31	14 54.21	-18 28.6	1.940	2.899	7.9	21.5
6 10	14 52.03	-8 5.1	1.882	2.760	12.8	21.4	6 10	14 47.26	-17 55.5	1.985	2.879	11.5	21.7
198535	2004 XB ₁₀₉		5 10.9 219°83	4°2/14.3 18			355735	2008 GQ ₁₂₀		5 10.9 340°76	3°0/ 9.0 18		
4 1	15 39.95	-32 27.6	2.167	2.911	15.2	20.1	4 1	15 34.76	-10 55.0	2.060	2.871	13.8	20.4
4 11	15 36.08	-32 24.8	2.066	2.907	12.8	19.9	4 11	15 31.72	-10 27.9	1.972	2.866	10.9	20.1
4 21	15 29.72	-32 5.5	1.985	2.901	9.9	19.7	4 21	15 26.57	-9 57.9	1.905	2.860	7.7	19.9
5 1	15 21.44	-31 28.0	1.927	2.896	6.7	19.5	5 1	15 19.81	-9 28.1	1.863	2.855	4.4	19.7
5 11	15 12.15	-30 32.8	1.896	2.890	4.4	19.4	5 11	15 12.19	-9 2.1	1.848	2.850	3.1	19.6
5 21	15 2.88	-29 23.0	1.893	2.884	5.0	19.4	5 21	15 4.57	-8 43.2	1.860	2.846	5.7	19.8
5 31	14 54.67	-28 4.4	1.917	2.878	7.9	19.6	5 31	14 57.80	-8 34.4	1.898	2.842	9.1	20.0
6 10	14 48.34	-26 44.1	1.966	2.871	11.1	19.7	6 10	14 52.59	-8 37.5	1.959	2.839	12.3	20.2
250746	2005 SO ₁₆₃		5 10.9 283°97	0°6/11.3 18			387350	2012 WD ₃₂		5 10.9 243°03	0°8/10.4 17		
4 1	15 39.07	-19 9.3	2.328	3.111	13.3	20.1	4 1	15 37.18	-17 2.2	2.247	3.040	13.4	21.3
4 11	15 35.11	-19 25.4	2.219	3.094	10.7	19.9	4 11	15 33.49	-16 45.8	2.152	3.036	10.6	21.1
4 21	15 28.97	-19 36.1	2.131	3.078	7.5	19.6	4 21	15 27.73	-16 23.0	2.079	3.031	7.4	20.9
5 1	15 21.08	-19 41.4	2.069	3.061	4.0	19.4	5 1	15 20.39	-15 55.4	2.032	3.026	3.7	20.7
5 11	15 12.16	-19 42.0	2.035	3.044	0.6	19.1	5 11	15 12.19	-15 25.3	2.012	3.021	0.8	20.5
5 21	15 3.05	-19 39.4	2.029	3.027	3.8	19.3	5 21	15 3.98	-14 56.0	2.020	3.016	4.2	20.7
5 31	14 54.67	-19 36.0	2.051	3.010	7.5	19.5	5 31	14 56.60	-14 30.7	2.056	3.011	7.8	20.9
6 10	14 47.81	-19 34.6	2.098	2.994	10.9	19.7	6 10	14 50.75	-14 12.6	2.116	3.006	11.1	21.1
178708	2000 SD ₁₉₅		5 10.9 195°71	3°2/13.3 17			99648	2002 HR		5 10.9 341°37	7°2/ 8.1 17		
4 1	15 39.52	-28 37.8	2.621	3.369	12.8	21.0	4 1	15 32.72	-5 59.2	1.081	1.940	20.4	18.7
4 11	15 35.22	-28 59.3	2.521	3.367	10.6	20.8	4 11	15 32.01	-5 18.5	1.006	1.925	16.6	18.4
4 21	15 28.87	-29 10.6	2.443	3.365	8.0	20.6	4 21	15 27.87	-4 38.2	0.948	1.911	12.3	18.1
5 1	15 20.95	-29 10.4	2.390	3.363	5.3	20.5	5 1	15 20.87	-4 5.7	0.910	1.899	8.4	17.9
5 11	15 12.16	-28 58.6	2.364	3.361	3.3	20.3	5 11	15 12.19	-3 49.3	0.892	1.888	7.5	17.8
5 21	15 3.33	-28 36.7	2.367	3.358	4.1	20.4	5 21	15 3.37	-3 55.1	0.896	1.879	10.7	17.9
5 31	14 55.29	-28 7.6	2.398	3.356	6.7	20.5	5 31	14 55.99	-4 25.9	0.919	1.871	15.3	18.1
6 10	14 48.74	-27 35.5	2.455	3.353	9.5	20.7	6 10	14 51.31	-5 21.1	0.961	1.865	19.8	18.4
131018	2000 XA ₂₇		5 10.9 165°03	1°6/11.9 18			31037	Mydon		5 11.0 9°41	1°3/ 9.4 18		
4 1	15 43.14	-22 30.4	2.371	3.136	13.5	20.9	4 11	15 26.21	-13 6.2	3.686	4.569	6.6	18.6
4 11	15 38.13	-22 50.3	2.278	3.141	10.9	20.8	4 21	15 22.20	-12 36.2	3.619	4.571	4.5	18.5
4 21	15 30.91	-23 2.7	2.207	3.145	7.8	20.6	5 1	15 17.40	-12 5.0	3.580	4.573	2.4	18.3
5 1	15 21.99	-23 6.9	2.162	3.149	4.4	20.4	5 11	15 12.21	-11 34.7	3.569	4.575	1.4	18.3
5 11	15 12.16	-23 3.2	2.145	3.152	1.7	20.2	5 21	15 7.05	-11 7.0	3.588	4.577	3.1	18.4
5 21	15 2.32	-22 53.1	2.158	3.155	3.8	20.3	5 31	15 2.33	-10 43.9	3.636	4.579	5.2	18.5
5 31	14 53.38	-22 39.6	2.198	3.157	7.2	20.5	6 10	14 58.41	-10 26.8	3.709	4.582	7.2	18.7
6 10	14 46.08	-22 26.0	2.265	3.159	10.3	20.7	6 20	14 55.56	-10 16.5	3.806	4.584	9.0	18.8
437487	2013 YB ₅₇		5 10.9 223°25	0°4/11.2 17			437205	2012 WB ₁₀		5 11.0 306°60	1°1/11.7 17		
4 1	15 40.08	-19 13.5	2.127	2.913	14.2	21.8							

EPHEMERIDES

5 11.0

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
512991	2017 <i>UK</i> ₃₆		5 11.0 152°80	1°5/ 9.8 18			353619	2011 <i>UK</i> ₃₇		5 11.0 292°30	6°0/ 6.8 18		
4 11	15 33.48	-12 55.0	2.879	3.757	8.4	21.7	4 11	15 33.02	-1 39.7	2.049	2.933	11.0	20.6
4 21	15 27.34	-12 42.2	2.816	3.764	5.8	21.5	4 21	15 27.49	-0 55.3	1.975	2.916	8.5	20.4
5 1	15 20.06	-12 28.4	2.779	3.772	3.1	21.3	5 1	15 20.33	-0 17.6	1.926	2.898	6.4	20.2
5 11	15 12.22	-12 15.4	2.772	3.779	1.5	21.2	5 11	15 12.26	+0 8.7	1.904	2.881	6.2	20.2
5 21	15 4.42	-12 5.0	2.795	3.785	3.7	21.4	5 21	15 4.09	+0 19.9	1.907	2.864	8.1	20.3
5 31	14 57.29	-11 59.1	2.846	3.791	6.4	21.6	5 31	14 56.70	+0 13.7	1.936	2.846	10.9	20.4
6 10	14 51.32	-11 59.2	2.924	3.797	8.9	21.7	6 10	14 50.80	-0 10.2	1.988	2.829	13.8	20.5
6 20	14 46.86	-12 6.1	3.025	3.802	11.1	21.9	6 20	14 46.88	-0 50.3	2.058	2.812	16.3	20.7
164844	1999 <i>TV</i> ₁₄₃		5 11.0 193°90	2°1/13.5 18			295395	2008 <i>JO</i> ₇		5 11.0 269°25	3°3/ 6.1 18		
4 11	15 30.02	-28 54.0	4.083	4.920	7.1	21.2	4 11	15 25.25	-1 47.5	4.342	5.218	5.9	20.2
4 21	15 24.83	-28 51.2	3.999	4.917	5.3	21.1	4 21	15 21.46	-1 3.3	4.281	5.216	4.5	20.1
5 1	15 18.76	-28 41.0	3.943	4.914	3.5	21.0	5 1	15 17.02	-0 22.4	4.247	5.213	3.5	20.1
5 11	15 12.22	-28 23.7	3.915	4.911	2.2	20.9	5 11	15 12.26	+0 12.9	4.242	5.211	3.4	20.1
5 21	15 5.67	-28 0.6	3.917	4.908	2.7	20.9	5 21	15 7.51	+0 40.9	4.265	5.209	4.4	20.1
5 31	14 59.58	-27 33.3	3.948	4.904	4.4	21.0	5 31	15 3.12	+1 0.2	4.316	5.207	5.9	20.2
6 10	14 54.35	-27 4.3	4.007	4.900	6.2	21.1	6 10	14 59.39	+1 10.3	4.392	5.204	7.3	20.3
6 20	14 50.28	-26 35.8	4.091	4.896	7.9	21.3	6 20	14 56.53	+1 11.2	4.489	5.202	8.6	20.4
149002	2001 <i>YM</i> ₁₃₉		5 11.0 120°50	3°9/ 7.7 18			499223	2009 <i>UO</i> ₈₆		5 11.0 196°63	0°9/10.2 17		
4 11	15 32.41	-5 15.7	2.649	3.529	9.0	20.9	4 11	15 34.95	-17 59.9	2.194	3.073	10.6	22.1
4 21	15 26.59	-4 34.9	2.600	3.544	6.5	20.7	4 21	15 28.69	-17 3.2	2.120	3.070	7.4	21.9
5 1	15 19.66	-3 57.8	2.579	3.559	4.4	20.6	5 1	15 20.87	-15 59.1	2.073	3.067	3.7	21.7
5 11	15 12.22	-3 27.6	2.586	3.573	4.0	20.6	5 11	15 12.26	-14 51.3	2.054	3.063	1.0	21.4
5 21	15 4.90	-3 6.9	2.621	3.587	5.7	20.7	5 21	15 3.69	-13 44.4	2.064	3.058	4.3	21.7
5 31	14 58.31	-2 57.4	2.684	3.600	8.0	20.9	5 31	14 56.01	-12 43.3	2.103	3.053	8.0	21.9
6 10	14 52.94	-2 59.8	2.771	3.613	10.3	21.1	6 10	14 49.88	-11 52.4	2.167	3.048	11.3	22.1
6 20	14 49.12	-3 13.7	2.879	3.626	12.3	21.2	6 20	14 45.73	-11 14.0	2.252	3.041	14.0	22.3
480987	2004 <i>BJ</i> ₄₁		5 11.0 37°66	23°2/ 6.0 18			297674	2001 <i>UD</i> ₁₁₄		5 11.0 289°61	1°1/11.6 18		
4 11	15 46.40	+27 24.0	0.991	1.803	25.4	20.2	4 11	15 36.66	-20 15.5	2.052	2.927	11.4	20.3
4 21	15 37.63	+28 19.9	0.966	1.806	24.1	20.1	4 21	15 30.20	-20 37.9	1.969	2.914	8.1	20.1
5 1	15 25.63	+28 22.6	0.954	1.810	23.3	20.1	5 1	15 21.80	-20 54.5	1.910	2.901	4.4	19.8
5 11	15 12.22	+27 22.3	0.956	1.815	23.3	20.1	5 11	15 12.26	-21 5.3	1.879	2.888	1.1	19.5
5 21	14 59.43	+25 18.9	0.974	1.820	24.1	20.2	5 21	15 2.52	-21 11.3	1.876	2.875	4.1	19.7
5 31	14 49.03	+22 20.9	1.007	1.825	25.5	20.3	5 31	14 53.59	-21 14.9	1.901	2.862	7.9	19.9
6 10	14 42.08	+18 43.7	1.056	1.831	27.3	20.5	6 10	14 46.34	-21 19.0	1.950	2.849	11.5	20.1
6 20	14 38.92	+14 43.3	1.117	1.837	29.0	20.6	6 20	14 41.34	-21 26.4	2.021	2.836	14.6	20.3
347567	2000 <i>WQ</i> ₂₈		5 11.0 95°07	3°4/ 9.9 16			416003	2002 <i>BA</i> ₁₉		5 11.0 54°03	7°7/ 7.9 15		
4 11	15 47.03	-7 23.5	1.717	2.591	13.4	20.9	4 11	15 37.95	+0 46.6	1.477	2.364	14.4	20.2
4 21	15 36.98	-7 42.5	1.680	2.624	9.4	20.7	4 21	15 30.93	+1 12.3	1.446	2.385	11.0	20.1
5 1	15 25.00	-8 5.8	1.668	2.656	5.4	20.6	5 1	15 22.00	+1 24.1	1.437	2.408	8.4	20.0
5 11	15 12.23	-8 34.8	1.686	2.688	3.5	20.5	5 11	15 12.27	+1 17.7	1.453	2.430	7.8	20.0
5 21	14 59.90	-9 9.8	1.733	2.718	6.1	20.7	5 21	15 2.90	+0 51.1	1.494	2.453	9.7	20.2
5 31	14 49.11	-9 51.3	1.808	2.748	9.8	21.0	5 31	14 54.94	+0 5.0	1.559	2.476	12.7	20.4
6 10	14 40.62	-10 39.0	1.909	2.776	13.1	21.3	6 10	14 49.16	-0 57.7	1.645	2.499	15.6	20.6
6 20	14 34.79	-11 32.5	2.030	2.804	15.9	21.5	6 20	14 45.88	-2 13.5	1.749	2.522	18.1	20.9
63936	2001 <i>SA</i> ₅₄		5 11.0 200°01	0°6/11.4 18			98742	2000 <i>YM</i> ₄₅		5 11.0 120°58	3°0/ 9.3 18		
4 11	15 35.40	-19 57.3	2.342	3.214	10.3	18.7	4 11	15 36.65	-12 42.7	1.528	2.423	13.4	19.6
4 21	15 29.01	-20 3.2	2.268	3.213	7.3	18.5	4 21	15 30.27	-11 58.1	1.472	2.429	9.3	19.4
5 1	15 21.05	-20 3.1	2.219	3.211	3.9	18.3	5 1	15 21.79	-11 10.9	1.441	2.434	5.1	19.1
5 11	15 12.23	-19 58.1	2.199	3.209	0.7	18.1	5 11	15 12.27	-10 26.2	1.435	2.440	3.1	19.0
5 21	15 3.37	-19 49.8	2.208	3.206	3.6	18.3	5 21	15 2.88	-9 49.1	1.455	2.445	6.4	19.2
5 31	14 55.31	-19 40.7	2.245	3.204	7.0	18.5	5 31	14 54.75	-9 24.0	1.501	2.450	10.7	19.5
6 10	14 48.73	-19 33.7	2.307	3.201	10.2	18.7	6 10	14 48.74	-9 13.7	1.568	2.455	14.5	19.7
6 20	14 44.08	-19 31.2	2.392	3.198	12.8	18.9	6 20	14 45.31	-9 18.8	1.655	2.459	17.7	20.0
56246	1999 <i>JK</i> ₇₂		5 11.0 66°93	4°1/ 8.8 18			271308	2003 <i>UB</i> ₃₅₄		5 11.0 321°07	1°8/10.2 16		
4 11	15 36.93	-9 17.8	1.522	2.417	13.5	19.3	4 11	15 33.97	-14 19.0	1.427	2.328	13.8	20.5
4 21	15 30.19	-8 34.8	1.488	2.443	9.4	19.1	4 21	15 28.94	-14 8.7	1.341	2.301	9.7	20.2
5 1	15 21.61	-7 54.3	1.478	2.468	5.6	19.0	5 1	15 21.40	-13 55.0	1.279	2.275	5.1	19.8
5 11	15 12.25	-7 21.3	1.494	2.494	4.2	18.9	5 11	15 12.28	-13 41.0	1.240	2.249	1.9	19.6
5 21	15 3.25	-6 59.8	1.536	2.519	7.0	19.2	5 21	15 2.76	-13 30.4	1.227	2.224	6.1	19.8
5 31	14 55.64	-6 52.6	1.603	2.544	10.7	19.4	5 31	14 54.22	-13 27.3	1.237	2.199	11.2	20.0
6 10	14 50.14	-7 0.5	1.692	2.569	14.1	19.7	6 10	14 47.84	-13 35.2	1.269	2.176	15.8	20.2
6 20	14 47.08	-7 22.6	1.800	2.594	16.9	19.9	6 20	14 44.33	-13 56.0	1.319	2.153	19.8	20.4
64522	2001 <i>VJ</i> ₉₈		5 11.0 224°96	5°0/ 6.9 18			285333	1999 <i>FZ</i> ₇₄		5 11.0 95°71	7°4/ 5.5 18		
4 11	15 33.97	-6 22.5	2.044	2.932	10.9	18.7	4 11	15 34.67	-0 58.4	1.755	2.642	12.5	20.8
4 21	15 28.08	-5 4.8	1.975	2.923	8.0	18.5	4 21	15 28.50	+0 39.9	1.721	2.660	9.6	20.6
5 1	15 20.59	-3 48.5	1.932	2.914	5.5	18.3	5 1	15 20.73	+2 8.8	1.712	2.678	7.7	20.6
5 11	15 12.26	-2 39.5	1.917	2.904	5.2	18.3	5 11	15 12.28	+3 20.8	1.729	2.696	7.8	20.6
5 21	15 3.91	-1 43.1	1.930	2.894	7.5	18.4	5 21	15 4.09	+4 11.0	1.772	2.713	9.8	20.7
5 31	14 56.42	-1 3.4	1.969	2.883	10.5	18.5	5 31	14 57.03	+4 36.8	1.839	2.730	12.4	20.9
6 10	14 50.47	-0 42.2	2.030	2.872	13.5	18.7	6 10	14 51.77	+4 39.0	1.927	2.747	15.0	21.2
6 20	14 46.52	-0 39.4	2.111	2.861	16.0	18.9	6 20	14 48.64	+4 20.2	2.032	2.763	17.1	21.4
130449	2000 <i>QY</i> ₄₈		5 11.0 200°12	0°5/10.7 16									

EPHEMERIDES

5 11.0

5 11.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
161836	2006 <i>XX</i> ₅₇		5 11.0 177°49	2.7/ 8.7	18		356575	2011 <i>SL</i> ₂₄₅		5 11.0 263°60	1.9/12.2	18	
4 11	15 32.63	- 8 13.8	2.971	3.849	8.2	21.2	4 11	15 35.60	-23 45.4	2.338	3.202	10.6	20.9
4 21	15 26.75	- 7 49.9	2.905	3.851	5.8	21.0	4 21	15 29.32	-23 57.4	2.250	3.187	7.7	20.7
5 1	15 19.79	- 7 27.6	2.866	3.852	3.5	20.9	5 1	15 21.32	-24 0.9	2.187	3.173	4.5	20.5
5 11	15 12.28	- 7 9.1	2.856	3.853	2.8	20.8	5 11	15 12.31	-23 56.3	2.151	3.157	1.9	20.3
5 21	15 4.80	- 6 56.5	2.876	3.854	4.5	20.9	5 21	15 3.13	-23 44.8	2.144	3.142	3.8	20.4
5 31	14 57.93	- 6 51.5	2.924	3.854	6.9	21.1	5 31	14 54.68	-23 29.1	2.166	3.126	7.1	20.6
6 10	14 52.15	- 6 55.1	2.998	3.853	9.2	21.2	6 10	14 47.73	-23 12.7	2.213	3.111	10.4	20.8
6 20	14 47.80	- 7 7.6	3.095	3.852	11.3	21.4	6 20	14 42.80	-22 59.1	2.282	3.095	13.2	20.9
338658	2003 <i>SM</i> ₃₄₂		5 11.0 242°30	0.6/11.4	17		143059	2002 <i>WQ</i> ₁₀		5 11.0 52°83	4.4/ 8.9	18	
4 11	15 34.95	-21 2.5	2.020	2.897	11.5	21.6	4 11	15 36.31	- 8 57.4	1.364	2.265	14.3	19.1
4 21	15 28.92	-20 44.3	1.943	2.890	8.1	21.4	4 21	15 30.04	- 8 19.9	1.325	2.282	10.1	18.9
5 1	15 21.10	-20 17.3	1.890	2.882	4.3	21.2	5 1	15 21.66	- 7 45.5	1.309	2.300	6.0	18.7
5 11	15 12.29	-19 43.4	1.865	2.874	0.7	20.9	5 11	15 12.32	- 7 19.3	1.317	2.318	4.6	18.6
5 21	15 3.43	-19 5.8	1.867	2.866	4.0	21.1	5 21	15 3.28	- 7 5.5	1.351	2.336	7.5	18.8
5 31	14 55.47	-18 28.6	1.897	2.858	8.0	21.3	5 31	14 55.68	- 7 6.8	1.408	2.354	11.5	19.1
6 10	14 49.21	-17 56.3	1.951	2.849	11.5	21.5	6 10	14 50.34	- 7 24.0	1.487	2.373	15.2	19.4
6 20	14 45.12	-17 32.1	2.027	2.841	14.6	21.7	6 20	14 47.64	- 7 55.7	1.584	2.391	18.2	19.6
118943	2000 <i>WF</i> ₆₇		5 11.0 281°51	17.2/ 8.1	17		398892	2013 <i>CV</i> ₁₀₃		5 11.0 123°46	3.0/13.3	16	
4 11	15 48.88	+16 52.8	1.051	1.898	21.9	19.4	4 11	15 34.51	-28 17.3	2.501	3.350	10.5	21.7
4 21	15 39.54	+17 16.0	1.004	1.895	19.4	19.2	4 21	15 28.39	-28 25.7	2.430	3.355	7.9	21.5
5 1	15 26.80	+16 58.5	0.974	1.892	17.6	19.0	5 1	15 20.75	-28 22.9	2.385	3.360	5.1	21.3
5 11	15 12.30	+15 50.7	0.964	1.889	17.3	19.0	5 11	15 12.32	-28 9.3	2.367	3.365	3.1	21.2
5 21	14 57.98	+13 51.4	0.974	1.886	18.6	19.1	5 21	15 3.91	-27 46.4	2.377	3.370	4.0	21.3
5 31	14 45.75	+11 7.8	1.004	1.883	21.2	19.2	5 31	14 56.31	-27 17.3	2.415	3.375	6.6	21.5
6 10	14 36.88	+ 7 53.5	1.052	1.880	24.1	19.4	6 10	14 50.20	-26 46.0	2.480	3.379	9.3	21.6
6 20	14 31.91	+ 4 22.4	1.117	1.877	26.9	19.6	6 20	14 45.97	-26 16.3	2.566	3.384	11.8	21.8
87975	2000 <i>TR</i> ₄₂		5 11.0 331°92	5°3/ 7.4	18		344537	2002 <i>TZ</i> ₃₇₄		5 11.0 187°05	4.4/ 7.8	18	
4 11	15 32.72	- 3 17.5	2.047	2.934	10.9	19.1	4 11	15 33.84	- 4 23.6	2.405	3.286	9.8	21.1
4 21	15 27.19	- 2 38.2	1.987	2.931	8.2	18.9	4 21	15 27.79	- 3 48.5	2.342	3.285	7.2	21.0
5 1	15 20.14	- 2 4.9	1.951	2.929	5.9	18.8	5 1	15 20.40	- 3 17.8	2.306	3.285	5.0	20.8
5 11	15 12.29	- 1 41.8	1.942	2.926	5.5	18.7	5 11	15 12.33	- 2 55.0	2.297	3.283	4.6	20.8
5 21	15 4.47	- 1 32.3	1.960	2.923	7.4	18.8	5 21	15 4.29	- 2 42.8	2.317	3.282	6.3	20.9
5 31	14 57.49	- 1 38.1	2.003	2.921	10.2	19.0	5 31	14 57.00	- 2 43.1	2.363	3.280	8.9	21.0
6 10	14 52.03	- 1 59.6	2.069	2.919	13.0	19.2	6 10	14 51.05	- 2 56.2	2.434	3.278	11.5	21.2
6 20	14 48.49	- 2 35.4	2.154	2.917	15.4	19.3	6 20	14 46.83	- 3 21.8	2.525	3.275	13.7	21.4
334915	2003 <i>YW</i> ₃₂		5 11.0 193°30	1°4/ 9.8	18		269927	2000 <i>OM</i> ₂₂		5 11.0 273°33	6°5/14.6	18	
4 11	15 33.45	-15 40.2	2.357	3.239	9.9	21.1	4 11	15 41.54	-36 25.9	2.156	2.969	13.3	21.0
4 21	15 27.57	-14 52.7	2.286	3.237	6.8	20.9	4 21	15 34.07	-37 0.3	2.045	2.936	10.9	20.8
5 1	15 20.29	-14 0.6	2.241	3.235	3.5	20.6	5 1	15 24.06	-37 17.2	1.957	2.902	8.4	20.6
5 11	15 12.29	-13 7.1	2.225	3.232	1.5	20.5	5 11	15 12.34	-37 13.3	1.895	2.868	6.7	20.4
5 21	15 4.33	-12 16.2	2.238	3.229	4.3	20.7	5 21	15 0.07	-36 47.5	1.860	2.832	7.1	20.3
5 31	14 57.15	-11 31.7	2.278	3.226	7.6	20.9	5 31	14 48.60	-36 2.8	1.852	2.796	9.3	20.4
6 10	14 51.38	-10 56.8	2.345	3.222	10.7	21.1	6 10	14 39.10	-35 5.3	1.869	2.759	12.4	20.5
6 20	14 47.41	-10 33.1	2.432	3.218	13.2	21.2	6 20	14 32.35	-34 2.9	1.908	2.721	15.4	20.6
245177	2004 <i>TD</i> ₁₃₈		5 11.0 195°04	0°6/11.4	18		87918	2000 <i>SQ</i> ₃₁₆		5 11.0 303°67	5°0/14.7	18	
4 11	15 37.89	-19 46.8	2.326	3.195	10.5	20.8	4 11	15 35.61	-33 33.0	1.677	2.525	14.9	18.8
4 21	15 30.78	-19 55.9	2.249	3.193	7.4	20.6	4 21	15 29.81	-33 8.7	1.598	2.518	11.6	18.5
5 1	15 22.00	-19 59.1	2.199	3.190	3.9	20.4	5 1	15 21.70	-32 21.3	1.542	2.511	8.1	18.3
5 11	15 12.30	-19 57.1	2.177	3.186	0.7	20.1	5 11	15 12.34	-31 11.1	1.510	2.504	5.3	18.1
5 21	15 2.53	-19 51.6	2.184	3.182	3.7	20.4	5 21	15 2.99	-29 42.3	1.505	2.497	5.9	18.1
5 31	14 53.58	-19 44.8	2.221	3.178	7.2	20.6	5 31	14 54.93	-28 2.9	1.525	2.491	9.1	18.3
6 10	14 46.19	-19 39.8	2.283	3.173	10.4	20.8	6 10	14 49.12	-26 22.3	1.569	2.484	12.8	18.5
6 20	14 40.81	-19 39.0	2.367	3.167	13.1	20.9	6 20	14 46.07	-24 49.0	1.635	2.478	16.2	18.7
145363	2005 <i>MH</i> ₃₁		5 11.0 148°92	3°8/14.3	18		278694	2008 <i>RO</i> ₁₃₀		5 11.0 267°07	4°0/ 8.8	18	
4 11	15 34.86	-32 5.5	2.528	3.362	10.9	20.6	4 11	15 38.64	- 6 11.7	2.130	3.008	10.9	20.9
4 21	15 28.61	-32 0.1	2.456	3.368	8.4	20.5	4 21	15 31.53	- 5 59.3	2.037	2.981	8.0	20.7
5 1	15 20.83	-31 40.6	2.408	3.373	5.8	20.3	5 1	15 22.52	- 5 51.0	1.969	2.954	5.1	20.4
5 11	15 12.30	-31 7.4	2.387	3.378	3.9	20.2	5 11	15 12.35	- 5 49.6	1.930	2.926	4.1	20.3
5 21	15 3.82	-30 22.7	2.394	3.383	4.4	20.2	5 21	15 1.91	- 5 57.9	1.920	2.897	6.4	20.4
5 31	14 56.22	-29 30.2	2.430	3.387	6.7	20.4	5 31	14 52.15	- 6 17.5	1.937	2.867	9.8	20.6
6 10	14 50.16	-28 35.0	2.492	3.391	9.3	20.6	6 10	14 43.94	- 6 49.3	1.979	2.837	13.1	20.7
6 20	14 46.04	-27 41.6	2.576	3.395	11.7	20.7	6 20	14 37.85	- 7 33.0	2.041	2.807	16.1	20.9
6598	Modugno		5 11.0 150°76	4°4/14.4	18		175910	2000 <i>AQ</i> ₁₅₄		5 11.0 206°51	0°9/11.6	17	
4 11	15 38.53	-33 7.8	2.433	3.259	11.6	18.5	4 11	15 39.72	-20 58.9	2.155	3.022	11.3	21.2
4 21	15 31.21	-33 17.5	2.363	3.269	9.0	18.3	4 21	15 32.22	-21 0.7	2.073	3.015	8.0	20.9
5 1	15 22.20	-33 12.1	2.318	3.278	6.4	18.2	5 1	15 22.82	-20 54.7	2.018	3.008	4.3	20.7
5 11	15 12.31	-32 51.3	2.300	3.287	4.6	18.1	5 11	15 12.36	-20 41.8	1.990	2.999	1.0	20.4
5 21	15 2.48	-32 16.6	2.311	3.294	5.0	18.1	5 21	15 1.78	-20 23.9	1.992	2.990	3.9	20.6
5 31	14 53.64	-31 32.0	2.350	3.302	7.2	18.3	5 31	14 52.10	-20 4.3	2.023	2.980	7.8	20.9
6 10	14 46.51	-30 42.7	2.414	3.308	9.8	18.4	6 10	14 44.14	-19 46.8	2.079	2.969	11.3	21.0
6 20	14 41.55	-29 53.7	2.502	3.315	12.2	18.6	6 20	14 38.42	-19 34.6	2.157	2.958	14.2	21.2
485843	2012 <i>DF</i> ₈₆		5 11.0 174°11	14°8/13.9	18		127315	2002 <i>JL</i>					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
305521	2008 <i>FV</i> ₁₉		5 11.0 174°57	0°2/11.2	18		225826	2001 <i>XV</i> ₂₆		5 11.0 80°75	4°5/13.9	18	
4 11	15 33.01	-19 44.4	2.780	3.651	8.9	22.0	4 11	15 38.97	-30 37.9	1.759	2.610	14.2	20.0
4 21	15 27.15	-19 26.5	2.708	3.653	6.2	21.9	4 21	15 31.84	-30 46.8	1.707	2.631	10.7	19.8
5 1	15 20.06	-19 3.0	2.663	3.655	3.2	21.7	5 1	15 22.62	-30 38.1	1.679	2.651	7.2	19.7
5 11	15 12.35	-18 35.5	2.646	3.656	0.2	21.4	5 11	15 12.39	-30 12.1	1.675	2.671	4.6	19.6
5 21	15 4.66	-18 6.3	2.659	3.657	3.1	21.7	5 21	15 2.39	-29 31.7	1.699	2.691	5.4	19.6
5 31	14 57.65	-17 38.1	2.701	3.658	6.1	21.9	5 31	14 53.77	-28 42.4	1.749	2.710	8.5	19.9
6 10	14 51.86	-17 13.8	2.769	3.658	8.8	22.0	6 10	14 47.37	-27 51.1	1.823	2.730	11.8	20.1
6 20	14 47.66	-16 55.5	2.860	3.658	11.2	22.2	6 20	14 43.61	-27 3.5	1.918	2.749	14.7	20.3
304758	2007 <i>AC</i> ₁₉		5 11.0 190°15	4°1/ 7.4	18		512414	2016 <i>PY</i> ₈₁		5 11.0 220°43	7°6/ 3.2	18	
4 11	15 32.48	- 2 37.8	3.043	3.916	8.2	21.5	4 11	15 33.12	+12 51.3	3.135	3.960	9.3	22.5
4 21	15 26.65	- 2 8.0	2.978	3.915	6.1	21.3	4 21	15 27.10	+13 33.5	3.076	3.950	8.2	22.4
5 1	15 19.77	- 1 42.8	2.940	3.913	4.5	21.2	5 1	15 20.02	+14 3.0	3.043	3.939	7.6	22.3
5 11	15 12.35	- 1 24.9	2.931	3.910	4.2	21.2	5 11	15 12.39	+14 16.3	3.035	3.928	7.9	22.3
5 21	15 4.96	- 1 16.3	2.951	3.907	5.6	21.3	5 21	15 4.78	+14 11.8	3.054	3.916	8.8	22.4
5 31	14 58.14	- 1 18.4	2.999	3.904	7.6	21.4	5 31	14 57.75	+13 48.8	3.097	3.904	10.1	22.5
6 10	14 52.38	- 1 31.5	3.071	3.900	9.7	21.5	6 10	14 51.77	+13 8.7	3.161	3.891	11.5	22.6
6 20	14 47.99	- 1 55.2	3.165	3.896	11.5	21.7	6 20	14 47.18	+12 13.6	3.244	3.878	12.9	22.7
248383	2005 <i>SG</i> ₁₀		5 11.0 283°72	6°6/ 7.6	17		309179	2007 <i>CZ</i> ₆		5 11.0 159°76	0°8/10.3	18	
4 11	15 37.68	+ 3 27.1	2.239	3.102	11.1	19.6	4 11	15 32.13	-16 19.7	2.897	3.773	8.4	22.2
4 21	15 30.61	+ 3 32.5	2.167	3.089	8.8	19.4	4 21	15 26.48	-15 50.8	2.830	3.779	5.8	22.0
5 1	15 21.93	+ 3 26.0	2.119	3.077	7.1	19.3	5 1	15 19.71	-15 18.4	2.790	3.784	2.9	21.8
5 11	15 12.36	+ 3 4.3	2.099	3.064	6.8	19.2	5 11	15 12.39	-14 44.6	2.780	3.789	0.8	21.7
5 21	15 2.73	+ 2 26.1	2.107	3.051	8.2	19.3	5 21	15 5.13	-14 12.0	2.799	3.793	3.3	21.9
5 31	14 53.90	+ 1 31.2	2.141	3.038	10.6	19.4	5 31	14 58.51	-13 43.1	2.847	3.797	6.2	22.0
6 10	14 46.57	+ 0 21.4	2.200	3.025	13.1	19.6	6 10	14 53.04	-13 20.2	2.922	3.801	8.7	22.2
6 20	14 41.19	- 1 0.6	2.279	3.013	15.4	19.7	6 20	14 49.04	-13 4.9	3.019	3.804	10.9	22.4
475773	2006 <i>WC</i> ₁₉₅		5 11.0 104°51	0°4/11.4	18		42874	1999 <i>RM</i> ₁₂₈		5 11.0 113°50	3°2/ 9.1	18	
4 11	15 32.89	-21 58.0	2.569	3.438	9.6	21.3	4 11	15 36.13	-13 0.2	1.524	2.420	13.4	18.1
4 21	15 27.03	-21 10.2	2.512	3.456	6.7	21.1	4 21	15 29.92	-11 59.6	1.470	2.427	9.3	17.9
5 1	15 19.95	-20 14.5	2.482	3.473	3.5	20.9	5 1	15 21.66	-10 55.6	1.440	2.434	5.1	17.6
5 11	15 12.35	-19 13.6	2.480	3.490	0.4	20.7	5 11	15 12.40	- 9 54.1	1.436	2.440	3.3	17.5
5 21	15 4.92	-18 11.4	2.509	3.507	3.2	20.9	5 21	15 3.30	- 9 1.2	1.458	2.447	6.6	17.8
5 31	14 58.31	-17 11.8	2.566	3.523	6.4	21.2	5 31	14 55.46	- 8 22.1	1.506	2.453	10.8	18.0
6 10	14 53.07	-16 18.5	2.649	3.540	9.1	21.4	6 10	14 49.73	- 7 59.9	1.575	2.459	14.6	18.3
6 20	14 49.49	-15 34.3	2.756	3.555	11.5	21.6	6 20	14 46.54	- 7 55.1	1.663	2.465	17.7	18.5
274961	2009 <i>SV</i> ₃₂₆		5 11.0 130°56	4°2/ 7.5	17		123147	2000 <i>TL</i> ₂₅		5 11.0 115°12	3°7/13.3	17	
4 11	15 34.67	- 7 16.5	2.270	3.154	10.2	21.2	4 11	15 40.32	-28 58.1	2.161	3.006	12.1	20.6
4 21	15 28.30	- 6 5.0	2.223	3.170	7.3	21.1	4 21	15 32.54	-29 21.7	2.103	3.025	9.1	20.4
5 1	15 20.63	- 4 55.7	2.203	3.186	4.8	20.9	5 1	15 22.94	-29 31.9	2.070	3.043	6.0	20.3
5 11	15 12.37	- 3 53.6	2.212	3.201	4.4	20.9	5 11	15 12.41	-29 28.4	2.065	3.061	3.8	20.2
5 21	15 4.28	- 3 2.7	2.249	3.216	6.4	21.1	5 21	15 2.00	-29 12.6	2.088	3.078	4.7	20.2
5 31	14 57.10	- 2 26.1	2.313	3.229	9.1	21.3	5 31	14 52.69	-28 48.1	2.138	3.095	7.5	20.4
6 10	14 51.38	- 2 5.2	2.401	3.243	11.7	21.5	6 10	14 45.28	-28 19.8	2.215	3.111	10.4	20.7
6 20	14 47.45	- 1 59.6	2.509	3.255	13.9	21.7	6 20	14 40.20	-27 52.4	2.313	3.126	13.0	20.9
147885	2006 <i>RJ</i> ₁₈		5 11.0 296°31	1°3/10.4	18		25006	1998 <i>OD</i> ₁₃		5 11.0 249°97	0°2/11.1	18	
4 11	15 35.62	-16 49.7	1.421	2.318	14.1	20.3	4 11	15 37.56	-19 40.3	1.859	2.737	12.3	19.7
4 21	15 30.10	-16 19.1	1.337	2.295	10.0	20.0	4 21	15 31.00	-19 22.6	1.772	2.720	8.7	19.4
5 1	15 22.03	-15 40.1	1.277	2.273	5.2	19.6	5 1	15 22.33	-18 56.2	1.710	2.703	4.5	19.1
5 11	15 12.37	-14 56.4	1.241	2.250	1.3	19.3	5 11	15 12.41	-18 23.1	1.675	2.685	0.2	18.7
5 21	15 2.39	-14 13.1	1.230	2.228	6.0	19.6	5 21	15 2.30	-17 46.7	1.668	2.667	4.5	19.0
5 31	14 53.50	-13 36.5	1.244	2.205	11.2	19.8	5 31	14 53.12	-17 11.4	1.688	2.647	8.9	19.3
6 10	14 46.84	-13 11.8	1.279	2.183	15.9	20.0	6 10	14 45.79	-16 42.1	1.732	2.628	12.9	19.4
6 20	14 43.13	-13 2.4	1.332	2.161	19.9	20.2	6 20	14 40.91	-16 22.2	1.797	2.608	16.3	19.6
73677	1988 <i>SA</i> ₃		5 11.0 175°29	3°0/15.1	18		295242	2008 <i>GL</i> ₂₅		5 11.0 53°04	1°6/ 9.9	17	
4 11	15 28.95	-35 16.1	4.767	5.570	6.7	19.6	4 11	15 32.86	-13 59.1	2.116	3.004	10.6	20.5
4 21	15 24.11	-35 28.8	4.685	5.571	5.3	19.5	4 21	15 27.26	-13 36.4	2.060	3.014	7.3	20.3
5 1	15 18.45	-35 33.3	4.629	5.571	4.0	19.4	5 1	15 20.19	-13 11.4	2.030	3.024	3.8	20.1
5 11	15 12.36	-35 29.5	4.601	5.572	3.1	19.4	5 11	15 12.41	-12 47.1	2.027	3.034	1.7	20.0
5 21	15 6.25	-35 18.0	4.601	5.572	3.2	19.4	5 21	15 4.71	-12 26.3	2.052	3.044	4.5	20.2
5 31	15 0.53	-35 0.1	4.630	5.572	4.2	19.4	5 31	14 57.91	-12 11.8	2.103	3.055	7.9	20.4
6 10	14 55.59	-34 37.9	4.687	5.572	5.6	19.5	6 10	14 52.63	-12 5.9	2.180	3.066	11.0	20.6
6 20	14 51.69	-34 13.4	4.767	5.572	6.9	19.6	6 20	14 49.25	-12 9.4	2.277	3.076	13.6	20.8
343539	2010 <i>FW</i> ₂		5 11.0 259°23	1°1/10.4	17		378206	2006 <i>YQ</i> ₅₅		5 11.0 276°68	9°0/15.8	18	
4 11	15 34.89	-15 46.7	1.927	2.814	11.5	21.0	4 11	15 40.94	-40 39.8	1.825	2.629	15.7	19.9
4 21	15 28.88	-15 30.7	1.859	2.812	8.0	20.8	4 21	15 34.01	-41 30.6	1.734	2.610	13.3	19.7
5 1	15 21.09	-15 10.6	1.816	2.811	4.1	20.5	5 1	15 24.16	-41 59.0	1.663	2.591	10.9	19.5
5 11	15 12.37	-14 48.9	1.800	2.809	1.1	20.3	5 11	15 12.42	-42 0.1	1.616	2.572	9.2	19.3
5 21	15 3.64	-14 28.6	1.811	2.807	4.6	20.5	5 21	15 0.24	-41 32.6	1.594	2.552	9.3	19.3
5 31	14 55.85	-14 13.2	1.850	2.806	8.5	20.8	5 31	14 49.21	-40 39.8	1.596	2.532	11.1	19.3
6 10	14 49.78	-14 5.5	1.912	2.804	12.0	21.0	6 10	14 40.70	-39 30.1	1.620	2.512	13.8	19.4
6 20	14 45.89	-14 7.1	1.995	2.803	15.0	21.2	6 20	14 35.48	-38 12.9	1.665	2.492	16.7	19.6
231251	2005 <i>YN</i> ₁												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
507737	2013 <i>WQ</i> ₁₁₀		5 11.0 122°87'	3°7/14.1	17		381446	2008 <i>QL</i> ₄₄		5 11.1 211°20'	5°0/14.4	18	
4 11	15 36.52	-31 24.4	2.176	3.018	12.2	21.1	4 11	15 38.87	-33 47.1	2.334	3.159	12.0	22.0
4 21	15 29.88	-31 4.8	2.111	3.030	9.3	20.9	4 21	15 31.73	-34 6.3	2.249	3.152	9.5	21.8
5 1	15 21.55	-30 28.9	2.071	3.041	6.2	20.8	5 1	15 22.65	-34 9.9	2.188	3.145	6.9	21.6
5 11	15 12.41	-29 38.0	2.057	3.053	3.9	20.6	5 11	15 12.46	-33 56.6	2.155	3.138	5.1	21.5
5 21	15 3.44	-28 35.4	2.072	3.064	4.5	20.7	5 21	15 2.15	-33 27.6	2.148	3.129	5.5	21.5
5 31	14 55.55	-27 26.3	2.114	3.075	7.3	20.9	5 31	14 52.76	-32 46.1	2.170	3.121	7.8	21.6
6 10	14 49.46	-26 16.9	2.182	3.085	10.3	21.1	6 10	14 45.13	-31 57.8	2.217	3.111	10.5	21.8
6 20	14 45.56	-25 12.6	2.273	3.095	12.9	21.3	6 20	14 39.81	-31 8.3	2.287	3.102	13.1	21.9
149847	2005 <i>QO</i> ₁		5 11.0 158°70'	0°8/11.6	17		132584	2002 <i>JF</i> ₁₂₀		5 11.1 281°51'	8°0/5.2	18	
4 11	15 36.64	-22 14.0	1.900	2.775	12.2	20.6	4 11	15 33.49	+ 2 0.8	1.846	2.727	12.2	19.6
4 21	15 30.11	-21 44.9	1.834	2.780	8.7	20.4	4 21	15 27.97	+ 3 12.1	1.782	2.713	9.8	19.5
5 1	15 21.73	-21 5.0	1.793	2.784	4.6	20.2	5 1	15 20.69	+ 4 13.5	1.742	2.700	8.2	19.3
5 11	15 12.42	-20 17.1	1.778	2.788	0.9	19.9	5 11	15 12.45	+ 4 58.5	1.727	2.686	8.4	19.3
5 21	15 3.19	-19 25.0	1.792	2.791	4.1	20.2	5 21	15 4.17	+ 5 22.2	1.737	2.673	10.3	19.4
5 31	14 55.05	-18 34.0	1.833	2.794	8.2	20.4	5 31	14 56.77	+ 5 22.3	1.771	2.659	12.9	19.5
6 10	14 48.77	-17 49.0	1.898	2.797	11.8	20.6	6 10	14 51.03	+ 4 59.0	1.825	2.646	15.6	19.7
6 20	14 44.79	-17 13.8	1.985	2.799	14.8	20.9	6 20	14 47.42	+ 4 14.9	1.897	2.632	18.1	19.8
497660	2006 <i>RC</i> ₇₄		5 11.0 262°69'	1°0/11.6	17		62601	2000 <i>SH</i> ₃₁₈		5 11.1 114°83'	3°6/9.4	18	
4 11	15 38.18	-21 29.3	1.727	2.605	13.1	22.4	4 11	15 38.39	- 7 53.9	1.843	2.728	12.0	18.9
4 21	15 31.63	-21 21.3	1.638	2.585	9.4	22.2	4 21	15 31.26	- 7 49.1	1.786	2.736	8.5	18.7
5 1	15 22.75	-21 3.0	1.573	2.565	5.1	21.9	5 1	15 22.32	- 7 47.9	1.755	2.744	5.1	18.5
5 11	15 12.43	-20 35.5	1.535	2.544	1.1	21.5	5 11	15 12.46	- 7 52.9	1.751	2.751	3.7	18.5
5 21	15 1.83	-20 1.8	1.524	2.523	4.7	21.7	5 21	15 2.69	- 8 6.2	1.775	2.759	6.1	18.6
5 31	14 52.20	-19 26.6	1.539	2.501	9.3	21.9	5 31	14 54.00	- 8 29.1	1.825	2.766	9.6	18.8
6 10	14 44.59	-18 55.4	1.578	2.479	13.6	22.1	6 10	14 47.15	- 9 2.1	1.899	2.773	12.9	19.1
6 20	14 39.65	-18 32.5	1.637	2.457	17.2	22.3	6 20	14 42.59	- 9 44.7	1.994	2.780	15.7	19.3
34898	2622 <i>P-L</i>		5 11.0 86°88'	0°7/10.5	18		196988	2003 <i>UC</i> ₈₂		5 11.1 217°37'	1°0/10.4	18	
4 11	15 33.12	-17 2.9	2.308	3.189	10.1	19.0	4 11	15 36.19	-15 8.9	2.461	3.337	9.7	20.5
4 21	15 27.34	-16 37.3	2.252	3.203	7.0	18.8	4 21	15 29.57	-15 1.0	2.380	3.328	6.8	20.3
5 1	15 20.21	-16 7.3	2.223	3.217	3.5	18.6	5 1	15 21.44	-14 50.2	2.325	3.319	3.5	20.1
5 11	15 12.43	-15 35.4	2.221	3.230	0.7	18.4	5 11	15 12.48	-14 38.2	2.300	3.309	1.0	19.9
5 21	15 4.76	-15 4.5	2.248	3.244	3.8	18.7	5 21	15 3.43	-14 27.2	2.304	3.299	3.9	20.1
5 31	14 57.96	-14 37.7	2.303	3.257	7.1	18.9	5 31	14 55.10	-14 19.5	2.337	3.288	7.3	20.3
6 10	14 52.59	-14 17.9	2.382	3.271	10.1	19.1	6 10	14 48.15	-14 17.3	2.396	3.276	10.3	20.4
6 20	14 49.02	-14 6.5	2.484	3.284	12.6	19.3	6 20	14 43.02	-14 22.1	2.476	3.264	13.0	20.6
231895	2000 <i>WU</i> ₁₁₃		5 11.0 179°19'	0°2/11.2	18		468196	2015 <i>AC</i> ₂₆₂		5 11.1 267°01'	14°9/24.8	18	
4 11	15 37.26	-19 2.4	2.339	3.210	10.4	21.1	4 11	15 33.86	+22 19.8	1.843	2.647	15.6	20.6
4 21	15 30.32	-19 0.4	2.267	3.212	7.3	20.9	4 21	15 28.26	+24 25.8	1.811	2.638	15.0	20.5
5 1	15 21.80	-18 52.7	2.221	3.213	3.8	20.7	5 1	15 20.84	+26 4.2	1.799	2.630	15.1	20.5
5 11	15 12.44	-18 40.5	2.204	3.214	0.3	20.4	5 11	15 12.47	+27 7.3	1.807	2.621	15.8	20.5
5 21	15 3.07	-18 26.0	2.216	3.213	3.6	20.7	5 21	15 4.15	+27 31.3	1.834	2.612	17.0	20.6
5 31	14 54.53	-18 11.8	2.256	3.213	7.2	20.9	5 31	14 56.84	+27 16.3	1.878	2.603	18.5	20.7
6 10	14 47.52	-18 0.9	2.323	3.212	10.3	21.1	6 10	14 51.33	+26 26.5	1.935	2.593	19.9	20.8
6 20	14 42.48	-17 55.6	2.411	3.210	13.0	21.3	6 20	14 48.08	+25 7.9	2.004	2.584	21.1	20.9
211161	2002 <i>GA</i> ₁₈₂		5 11.0 20°35'	2°6/9.4	18		297245	1994 <i>UP</i> ₆		5 11.1 113°75'	2°3/12.2	18	
4 11	15 35.04	-15 23.0	1.386	2.286	14.2	19.8	4 11	15 40.52	-23 59.4	1.478	2.354	15.0	21.0
4 21	15 29.40	-14 14.8	1.327	2.287	9.9	19.6	4 21	15 33.22	-24 1.2	1.421	2.366	10.8	20.8
5 1	15 21.49	-12 59.2	1.292	2.287	5.2	19.3	5 1	15 23.48	-23 49.5	1.388	2.376	6.2	20.6
5 11	15 12.44	-11 42.9	1.282	2.288	2.7	19.1	5 11	15 12.50	-23 25.2	1.380	2.387	2.3	20.4
5 21	15 3.48	-10 33.3	1.297	2.289	6.6	19.4	5 21	15 1.65	-22 51.9	1.398	2.397	5.0	20.5
5 31	14 55.84	- 9 37.3	1.337	2.290	11.3	19.6	5 31	14 52.29	-22 15.2	1.442	2.407	9.5	20.8
6 10	14 50.46	- 8 59.6	1.398	2.292	15.5	19.9	6 10	14 45.40	-21 41.4	1.509	2.417	13.6	21.1
6 20	14 47.79	- 8 41.6	1.477	2.293	18.9	20.1	6 20	14 41.47	-21 15.4	1.595	2.426	17.1	21.3
349	<i>Dembowska</i>		5 11.0 219°70'	1°3/11.9	18 R		424070	2007 <i>DB</i> ₂		5 11.1 35°30'	2°4/9.7	15	
4 11	15 35.70	-22 8.4	2.283	3.152	10.7	10.7	4 11	15 33.74	-15 21.6	1.235	2.142	15.1	19.9
4 21	15 29.35	-22 13.2	2.206	3.147	7.6	10.5	4 21	15 28.47	-14 26.8	1.196	2.159	10.4	19.7
5 1	15 21.35	-22 10.2	2.154	3.143	4.2	10.4	5 1	15 20.98	-13 26.7	1.180	2.177	5.3	19.5
5 11	15 12.44	-22 0.3	2.130	3.138	1.3	10.2	5 11	15 12.48	-12 27.9	1.188	2.196	2.5	19.4
5 21	15 3.46	-21 45.2	2.134	3.132	3.7	10.3	5 21	15 4.30	-11 36.9	1.220	2.215	6.5	19.7
5 31	14 55.28	-21 27.7	2.166	3.127	7.1	10.5	5 31	14 57.64	-10 59.5	1.276	2.236	11.1	20.0
6 10	14 48.65	-21 11.5	2.224	3.121	10.3	10.6	6 10	14 53.34	-10 39.0	1.353	2.257	15.2	20.3
6 20	14 44.02	-20 59.4	2.304	3.115	13.1	10.8	6 20	14 51.76	-10 35.8	1.447	2.278	18.5	20.5
335036	2004 <i>RJ</i> ₂		5 11.1 188°70'	10°7/18.2	18		230809	2004 <i>GF</i> ₇₉		5 11.1 34°33'	3°8/13.0	18	
4 11	15 45.28	-44 23.3	1.351	2.154	20.2	20.5	4 11	15 37.11	-27 40.2	1.092	1.981	18.1	19.5
4 21	15 37.42	-44 30.9	1.280	2.154	17.2	20.3	4 21	15 31.46	-27 25.7	1.039	1.986	13.4	19.3
5 1	15 25.92	-44 1.0	1.227	2.154	14.0	20.1	5 1	15 22.76	-26 48.3	1.006	1.993	8.2	19.0
5 11	15 12.47	-42 48.6	1.194	2.153	11.4	20.0	5 11	15 12.49	-25 50.0	0.994	2.000	4.0	18.8
5 21	14 59.18	-40 56.1	1.185	2.151	10.9	19.9	5 21	15 2.39	-24 37.1	1.006	2.007	6.1	18.9
5 31	14 48.12	-38 33.9	1.199	2.149	12.7	20.0	5 31	14 54.14	-23 19.7	1.041	2.015	11.2	19.2
6 10	14 40.64	-35 58.8	1.236	2.146	15.9	20.2	6 10	14 48.90	-22 8.3	1.096	2.023	16.0	19.5
6 20	14 37.22	-33 26.6	1.293	2.142	19.3	20.4	6 20	14 47.15	-21 10.4	1.169	2.032	20.1	19.8
53264	1999 <i>FL</i> ₈		5 11.1 40°67'	9°4/4.4	18		185378	2006 <i>VS</i> ₁₃₈					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
170933	2005 <i>AF</i> ₂₀		5 11.1 124°31'	1.4°/10.3	18		334748	2003 <i>QV</i> ₄₇		5 11.1 234°16'	2.5°/12.9	18	
4 11	15 38.73	-16 14.8	1.680	2.565	13.0	20.9	4 11	15 35.72	-27 21.3	2.174	3.031	11.6	20.7
4 21	15 31.59	-15 38.5	1.627	2.580	9.0	20.7	4 21	15 29.52	-27 3.3	2.090	3.021	8.6	20.5
5 1	15 22.50	-14 56.6	1.600	2.594	4.6	20.5	5 1	15 21.52	-26 31.8	2.030	3.011	5.3	20.3
5 11	15 12.50	-14 13.1	1.599	2.608	1.4	20.3	5 11	15 12.55	-25 47.8	1.997	3.001	2.7	20.1
5 21	15 2.71	-13 32.3	1.626	2.621	5.2	20.6	5 21	15 3.51	-24 54.3	1.993	2.990	4.1	20.1
5 31	14 54.19	-12 59.0	1.679	2.633	9.4	20.8	5 31	14 55.37	-23 55.9	2.016	2.978	7.4	20.3
6 10	14 47.74	-12 36.6	1.756	2.645	13.1	21.1	6 10	14 48.90	-22 58.2	2.065	2.967	10.8	20.5
6 20	14 43.77	-12 26.9	1.853	2.656	16.1	21.3	6 20	14 44.60	-22 6.1	2.136	2.955	13.7	20.7
474862	2005 <i>SR</i> ₁₃₁		5 11.1 202°86'	1.2°/ 9.9	16		286016	2001 <i>SJ</i> ₁₄₂		5 11.1 212°08'	1.8°/ 9.4	17	
4 11	15 31.82	-15 31.4	2.805	3.684	8.6	22.1	4 11	15 32.66	-13 41.3	2.607	3.488	9.1	21.6
4 21	15 26.36	-14 53.7	2.730	3.680	5.9	21.9	4 21	15 27.02	-12 55.1	2.531	3.482	6.3	21.4
5 1	15 19.73	-14 12.3	2.682	3.676	3.1	21.7	5 1	15 20.11	-12 6.0	2.483	3.475	3.4	21.2
5 11	15 12.49	-13 30.0	2.664	3.671	1.2	21.5	5 11	15 12.54	-11 17.0	2.463	3.468	1.9	21.1
5 21	15 5.27	-12 49.4	2.674	3.667	3.7	21.7	5 21	15 4.97	-10 31.6	2.473	3.461	4.3	21.2
5 31	14 58.68	-12 13.7	2.714	3.661	6.6	21.9	5 31	14 58.07	-9 53.1	2.510	3.453	7.3	21.4
6 10	14 53.24	-11 45.3	2.779	3.656	9.2	22.0	6 10	14 52.41	-9 23.9	2.574	3.444	10.1	21.6
6 20	14 49.30	-11 25.8	2.867	3.650	11.5	22.2	6 20	14 48.36	-9 5.5	2.659	3.435	12.5	21.7
502635	2015 <i>CY</i> ₃₂		5 11.1 136°93'	5.9°/14.8	17		27317	2000 <i>BU</i> ₃		5 11.1 77°30'	1.5°/10.4	18	
4 11	15 41.09	-35 18.8	2.134	2.953	13.2	21.8	4 11	15 39.12	-15 19.3	1.283	2.181	15.3	18.3
4 21	15 33.36	-35 54.9	2.067	2.963	10.5	21.6	4 21	15 32.50	-15 6.4	1.225	2.183	10.7	18.0
5 1	15 23.51	-36 13.5	2.024	2.973	7.9	21.5	5 1	15 23.25	-14 48.7	1.189	2.185	5.5	17.7
5 11	15 12.52	-36 12.5	2.007	2.982	6.1	21.4	5 11	15 12.57	-14 29.5	1.178	2.187	1.6	17.5
5 21	15 1.51	-35 52.8	2.017	2.991	6.4	21.4	5 21	15 1.92	-14 13.0	1.191	2.189	6.1	17.8
5 31	14 51.65	-35 18.3	2.054	3.000	8.4	21.5	5 31	14 52.75	-14 3.5	1.229	2.191	11.2	18.0
6 10	14 43.85	-34 34.9	2.116	3.007	11.0	21.7	6 10	14 46.14	-14 4.8	1.288	2.193	15.8	18.3
6 20	14 38.61	-33 49.1	2.199	3.015	13.5	21.9	6 20	14 42.63	-14 18.4	1.365	2.195	19.5	18.6
179681	2002 <i>QO</i> ₈₆		5 11.1 116°17'	3.9°/13.3	17		183562	2003 <i>LP</i> ₄		5 11.1 354°94'	0.5°/10.8	17	
4 11	15 38.50	-28 42.9	1.596	2.459	14.8	20.7	4 11	15 33.82	-16 37.6	1.923	2.811	11.5	20.2
4 21	15 31.85	-28 45.2	1.531	2.464	11.1	20.5	4 21	15 28.23	-16 35.1	1.856	2.809	8.0	19.9
5 1	15 22.81	-28 30.0	1.489	2.469	7.1	20.3	5 1	15 20.87	-16 28.5	1.812	2.807	4.1	19.7
5 11	15 12.52	-27 57.6	1.472	2.473	4.1	20.1	5 11	15 12.56	-16 19.6	1.796	2.805	0.6	19.4
5 21	15 2.27	-27 11.2	1.482	2.478	5.4	20.2	5 21	15 4.23	-16 10.8	1.807	2.805	4.3	19.7
5 31	14 53.39	-26 16.9	1.516	2.482	9.2	20.4	5 31	14 56.80	-16 5.0	1.844	2.804	8.2	19.9
6 10	14 46.84	-25 22.1	1.575	2.486	13.0	20.6	6 10	14 51.06	-16 4.9	1.905	2.804	11.7	20.2
6 20	14 43.15	-24 33.1	1.653	2.490	16.4	20.9	6 20	14 47.48	-16 12.3	1.987	2.804	14.7	20.4
206921	2004 <i>PU</i> ₁₀₀		5 11.1 280°16'	1.7°/10.1	18		225907	2002 <i>AX</i> ₃₉		5 11.1 196°27'	0.7°/11.6	17	
4 11	15 37.74	-16 19.3	1.461	2.354	14.1	20.2	4 11	15 36.26	-21 41.7	2.234	3.103	10.9	21.2
4 21	15 31.67	-15 36.5	1.370	2.326	10.0	19.9	4 21	15 29.75	-21 16.8	2.157	3.100	7.7	21.0
5 1	15 22.95	-14 44.4	1.302	2.297	5.2	19.5	5 1	15 21.60	-20 42.9	2.106	3.097	4.1	20.7
5 11	15 12.52	-13 47.1	1.259	2.268	1.8	19.2	5 11	15 12.58	-20 2.1	2.084	3.093	0.7	20.5
5 21	15 1.67	-12 50.5	1.242	2.238	6.3	19.4	5 21	15 3.56	-19 17.4	2.090	3.089	3.7	20.7
5 31	14 51.81	-12 1.4	1.251	2.207	11.6	19.6	5 31	14 55.42	-18 33.0	2.125	3.084	7.4	20.9
6 10	14 44.18	-11 26.1	1.281	2.177	16.4	19.8	6 10	14 48.86	-17 53.3	2.185	3.078	10.7	21.1
6 20	14 39.53	-11 8.2	1.328	2.146	20.6	20.0	6 20	14 44.33	-17 21.5	2.267	3.072	13.5	21.3
164527	2006 <i>HT</i> ₆₅		5 11.1 290°75'	1.1°/10.3	18		162487	2000 <i>PF</i> ₁₅		5 11.1 246°57'	5.0°/13.7	17	
4 11	15 33.71	-16 50.6	1.862	2.750	11.7	19.9	4 11	15 40.10	-30 41.6	1.594	2.449	15.2	20.4
4 21	15 28.15	-16 12.5	1.793	2.747	8.2	19.6	4 21	15 33.28	-30 54.9	1.513	2.438	11.7	20.1
5 1	15 20.81	-15 28.3	1.748	2.743	4.2	19.4	5 1	15 23.75	-30 49.3	1.453	2.426	8.0	19.9
5 11	15 12.53	-14 41.3	1.731	2.740	1.2	19.2	5 11	15 12.60	-30 23.1	1.419	2.415	5.2	19.7
5 21	15 4.26	-13 56.1	1.741	2.737	4.8	19.4	5 21	15 1.23	-29 38.3	1.410	2.402	6.2	19.7
5 31	14 56.94	-13 17.1	1.777	2.733	8.8	19.6	5 31	14 51.11	-28 40.6	1.426	2.389	9.9	19.9
6 10	14 51.37	-12 48.1	1.837	2.730	12.4	19.8	6 10	14 43.43	-27 38.3	1.466	2.376	13.9	20.1
6 20	14 47.98	-12 31.4	1.918	2.727	15.4	20.0	6 20	14 38.86	-26 39.5	1.526	2.363	17.5	20.3
430252	2013 <i>WL</i> ₂₀		5 11.1 84°68'	0.9°/10.6	17		88745	2001 <i>SP</i> ₅₀		5 11.1 234°35'	1.4°/10.4	18	
4 11	15 35.27	-16 34.6	1.857	2.744	11.9	21.5	4 11	15 39.71	-15 23.8	1.569	2.457	13.6	19.5
4 21	15 29.20	-16 16.4	1.795	2.748	8.2	21.2	4 21	15 32.74	-15 9.2	1.494	2.447	9.5	19.2
5 1	15 21.33	-15 53.3	1.758	2.752	4.2	21.0	5 1	15 23.37	-14 49.8	1.443	2.437	4.9	18.9
5 11	15 12.54	-15 28.0	1.747	2.756	0.9	20.8	5 11	15 12.60	-14 28.3	1.417	2.426	1.4	18.7
5 21	15 3.79	-15 3.6	1.764	2.760	4.6	21.0	5 21	15 1.66	-14 8.5	1.419	2.415	5.6	18.9
5 31	14 56.07	-14 43.9	1.807	2.765	8.5	21.3	5 31	14 51.86	-13 54.3	1.446	2.403	10.3	19.2
6 10	14 50.13	-14 31.9	1.874	2.769	12.1	21.5	6 10	14 44.24	-13 49.6	1.496	2.390	14.6	19.4
6 20	14 46.43	-14 29.6	1.962	2.773	15.1	21.7	6 20	14 39.41	-13 56.5	1.566	2.377	18.2	19.6
379661	2011 <i>EN</i> ₅₃		5 11.1 169°16'	0.3°/10.9	17		219765	2001 <i>YO</i> ₉₁		5 11.1 148°87'	5.9°/ 7.1	17	
4 11	15 38.15	-16 54.7	2.130	3.007	11.0	21.3	4 11	15 36.43	- 0 12.4	2.237	3.110	10.7	20.4
4 21	15 31.07	-16 57.9	2.062	3.010	7.7	21.1	4 21	15 29.65	+ 0 29.5	2.187	3.120	8.2	20.2
5 1	15 22.26	-16 57.0	2.020	3.013	3.9	20.9	5 1	15 21.46	+ 1 3.2	2.163	3.129	6.3	20.1
5 11	15 12.55	-16 53.3	2.005	3.015	0.3	20.6	5 11	15 12.60	+ 1 24.8	2.167	3.138	6.1	20.1
5 21	15 2.83	-16 48.6	2.020	3.017	4.0	20.9	5 21	15 3.86	+ 1 31.5	2.198	3.146	7.7	20.2
5 31	14 54.02	-16 45.5	2.063	3.019	7.8	21.1	5 31	14 56.02	+ 1 22.1	2.255	3.153	10.1	20.4
6 10	14 46.88	-16 46.6	2.131	3.020	11.1	21.3	6 10	14 49.69	+ 0 57.1	2.335	3.160	12.5	20.6
6 20	14 41.87	-16 53.7	2.220	3.020	13.9	21.5	6 20	14 45.22	+ 0 18.3	2.436	3.167	14.6	20.8
311379	2005 <i>SR</i> ₂₃₂		5 11.1 264°07'	0.4°/11.4	16								

EPHEMERIDES

5 11.1

5 11.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
130591	2000 <i>RM</i> ₈₇		5 11.1 323°76	1°3/10.5	17		332340	2007 <i>CM</i> ₃₆		5 11.1 59°56	7°3/7.1	17	
4 11	15 32.78	-17 28.3	1.069	1.982	16.4	19.6	4 11	15 35.41	-1 51.3	1.502	2.395	13.8	20.4
4 21	15 28.73	-16 56.7	0.994	1.959	11.6	19.3	4 21	15 29.37	-0 49.6	1.464	2.409	10.4	20.2
5 1	15 21.63	-16 13.8	0.938	1.936	6.0	18.9	5 1	15 21.44	+0 2.2	1.449	2.423	7.9	20.1
5 11	15 12.61	-15 24.3	0.905	1.914	1.3	18.5	5 11	15 12.64	+0 37.4	1.459	2.438	7.6	20.1
5 21	15 3.17	-14 34.8	0.894	1.894	6.8	18.8	5 21	15 4.09	+0 52.0	1.493	2.453	9.7	20.3
5 31	14 55.05	-13 53.5	0.904	1.874	12.9	19.0	5 31	14 56.81	+0 44.4	1.551	2.467	12.8	20.5
6 10	14 49.66	-13 27.6	0.933	1.856	18.4	19.2	6 10	14 51.57	+0 15.6	1.630	2.482	15.8	20.7
6 20	14 47.78	-13 20.7	0.977	1.839	23.1	19.5	6 20	14 48.74	-0 31.1	1.726	2.497	18.3	20.9
390285	2013 <i>AL</i> ₁₃		5 11.1 215°47	4°4/7.6	18		63446	2001 <i>NV</i> ₉		5 11.1 111°62	0°9/11.6	18	
4 11	15 33.04	-4 3.9	2.530	3.410	9.4	21.5	4 11	15 39.06	-21 55.6	1.358	2.245	15.4	19.5
4 21	15 27.31	-3 26.5	2.463	3.404	6.9	21.3	4 21	15 32.35	-21 29.0	1.302	2.253	10.9	19.2
5 1	15 20.29	-2 53.4	2.421	3.399	4.9	21.2	5 1	15 23.14	-20 49.2	1.268	2.261	5.8	18.9
5 11	15 12.61	-2 27.9	2.408	3.393	4.5	21.2	5 11	15 12.66	-19 59.2	1.259	2.268	0.9	18.6
5 21	15 4.93	-2 12.9	2.423	3.386	6.2	21.3	5 21	15 2.33	-19 4.7	1.275	2.276	5.2	18.9
5 31	14 57.92	-2 10.2	2.465	3.380	8.7	21.4	5 31	14 53.53	-18 12.4	1.317	2.283	10.2	19.2
6 10	14 52.15	-2 20.4	2.531	3.373	11.2	21.5	6 10	14 47.26	-17 29.1	1.381	2.290	14.6	19.5
6 20	14 48.01	-2 43.1	2.618	3.366	13.3	21.7	6 20	14 43.98	-16 58.9	1.463	2.296	18.3	19.8
131602	2001 <i>XS</i> ₁₆		5 11.1 79°06	4°3/12.8	18		171513	1998 <i>RJ</i> ₆₃		5 11.1 267°20	0°8/10.2	18	
4 11	15 43.73	-26 29.3	1.356	2.227	16.4	19.9	4 11	15 29.86	-15 14.5	3.426	4.303	7.2	20.8
4 21	15 35.72	-27 14.2	1.308	2.245	12.1	19.7	4 21	15 24.97	-14 55.6	3.336	4.284	5.0	20.6
5 1	15 24.90	-27 43.4	1.281	2.263	7.6	19.5	5 1	15 19.07	-14 34.2	3.272	4.266	2.6	20.4
5 11	15 12.65	-27 54.8	1.280	2.281	4.4	19.3	5 11	15 12.63	-14 12.1	3.239	4.247	0.9	20.2
5 21	15 0.57	-27 49.8	1.303	2.299	6.1	19.5	5 21	15 6.13	-13 51.0	3.235	4.228	3.0	20.4
5 31	14 50.22	-27 33.5	1.352	2.316	10.2	19.7	5 31	15 0.06	-13 32.8	3.260	4.209	5.5	20.5
6 10	14 42.72	-27 13.1	1.424	2.334	14.2	20.0	6 10	14 54.89	-13 19.4	3.311	4.190	7.8	20.7
6 20	14 38.55	-26 54.7	1.514	2.351	17.6	20.3	6 20	14 50.94	-13 12.0	3.386	4.170	9.9	20.8
40249	1998 <i>XM</i> ₁₁		5 11.1 109°40	2°9/9.7	18		418394	2008 <i>HO</i> ₆₉		5 11.1 278°10	1°0/9.8	18	
4 11	15 40.69	-11 46.5	1.484	2.375	14.0	18.5	4 11	15 27.02	-12 57.1	4.331	5.209	5.8	20.9
4 21	15 33.13	-11 24.6	1.437	2.391	9.8	18.3	4 21	15 22.82	-12 44.9	4.255	5.204	4.0	20.8
5 1	15 23.39	-11 2.1	1.414	2.407	5.3	18.1	5 1	15 17.90	-12 32.0	4.206	5.199	2.1	20.6
5 11	15 12.64	-10 43.0	1.417	2.422	3.0	18.0	5 11	15 12.62	-12 19.7	4.187	5.194	1.1	20.5
5 21	15 2.12	-10 30.9	1.446	2.437	6.3	18.2	5 21	15 7.34	-12 9.3	4.198	5.188	2.6	20.7
5 31	14 53.05	-10 28.9	1.501	2.452	10.6	18.5	5 31	15 2.40	-12 2.0	4.238	5.183	4.5	20.8
6 10	14 46.28	-10 38.8	1.579	2.465	14.4	18.8	6 10	14 58.15	-11 58.8	4.305	5.178	6.3	20.9
6 20	14 42.23	-11 0.8	1.676	2.479	17.6	19.0	6 20	14 54.82	-12 0.4	4.396	5.173	7.9	21.0
266283	2007 <i>BK</i> ₁₁		5 11.1 163°75	1°4/10.3	17		253127	2002 <i>VA</i> ₁₄		5 11.1 283°64	1°4/12.1	18	R
4 11	15 36.28	-15 41.8	1.693	2.582	12.7	20.9	4 11	15 37.52	-28 46.0	1.037	1.926	18.9	19.5
4 21	15 30.07	-15 14.9	1.629	2.583	8.8	20.6	4 21	15 31.97	-26 44.6	0.967	1.917	13.8	19.1
5 1	15 21.87	-14 43.0	1.589	2.584	4.5	20.4	5 1	15 23.18	-24 5.1	0.917	1.909	7.7	18.8
5 11	15 12.63	-14 9.6	1.576	2.585	1.4	20.1	5 11	15 12.67	-20 55.5	0.891	1.900	1.6	18.4
5 21	15 3.41	-13 38.6	1.590	2.586	5.2	20.4	5 21	15 2.27	-17 32.5	0.890	1.892	6.4	18.6
5 31	14 55.30	-13 14.4	1.630	2.586	9.4	20.6	5 31	14 53.77	-14 17.8	0.913	1.883	12.9	18.9
6 10	14 49.14	-13 0.2	1.693	2.587	13.2	20.9	6 10	14 48.39	-11 29.7	0.958	1.875	18.7	19.2
6 20	14 45.42	-12 57.9	1.776	2.587	16.4	21.1	6 20	14 46.62	-9 18.0	1.020	1.867	23.5	19.5
136873	1998 <i>FY</i> ₆₈		5 11.1 52°45	0°4/10.8	17		472237	2014 <i>HE</i> ₄₃		5 11.1 114°96	1°7/12.6	17	
4 11	15 33.39	-18 52.8	1.899	2.784	11.7	19.8	4 11	15 33.18	-25 47.9	2.509	3.368	10.2	21.0
4 21	15 27.79	-18 18.2	1.848	2.800	8.1	19.6	4 21	15 27.46	-25 22.4	2.442	3.377	7.4	20.8
5 1	15 20.58	-17 36.7	1.822	2.816	4.1	19.4	5 1	15 20.38	-24 46.4	2.401	3.385	4.3	20.6
5 11	15 12.62	-16 51.6	1.823	2.832	0.4	19.1	5 11	15 12.65	-24 1.8	2.388	3.394	1.8	20.5
5 21	15 4.83	-16 6.9	1.851	2.849	4.2	19.5	5 21	15 5.01	-23 11.4	2.403	3.402	3.3	20.6
5 31	14 58.09	-15 27.0	1.906	2.866	8.0	19.8	5 31	14 58.18	-22 19.2	2.447	3.410	6.3	20.8
6 10	14 53.06	-14 55.6	1.985	2.882	11.4	20.0	6 10	14 52.77	-21 29.4	2.518	3.417	9.2	21.0
6 20	14 50.13	-14 34.9	2.085	2.899	14.2	20.2	6 20	14 49.13	-20 45.5	2.611	3.425	11.7	21.2
460189	2014 <i>QS</i> ₁₂₈		5 11.1 195°43	7°0/6.7	16		235182	2003 <i>SV</i> ₈₂		5 11.1 139°56	3°1/8.7	17	
4 11	15 36.06	-4 33.2	1.461	2.357	13.9	21.7	4 11	15 33.94	-10 36.5	2.170	3.057	10.4	21.1
4 21	15 30.03	-3 6.7	1.407	2.356	10.4	21.5	4 21	15 28.03	-9 41.7	2.113	3.064	7.3	20.9
5 1	15 21.88	-1 45.1	1.376	2.356	7.5	21.3	5 1	15 20.69	-8 46.3	2.082	3.072	4.3	20.7
5 11	15 12.63	-0 36.9	1.371	2.355	7.3	21.3	5 11	15 12.66	-7 54.8	2.079	3.079	3.3	20.7
5 21	15 3.47	+0 11.2	1.390	2.353	9.9	21.4	5 21	15 4.74	-7 11.1	2.105	3.086	5.6	20.8
5 31	14 55.53	+0 35.1	1.433	2.352	13.4	21.6	5 31	14 57.69	-6 38.6	2.157	3.093	8.7	21.0
6 10	14 49.71	+0 34.0	1.497	2.350	16.9	21.8	6 10	14 52.14	-6 19.4	2.234	3.099	11.6	21.2
6 20	14 46.47	+0 10.2	1.577	2.348	19.8	22.0	6 20	14 48.45	-6 13.8	2.331	3.105	14.1	21.4
96352	1997 <i>VH</i> ₂		5 11.1 243°21	1°4/11.8	17		264569	2001 <i>TZ</i> ₆₅		5 11.1 129°09	0°9/10.4	17	
4 11	15 39.97	-21 56.5	1.694	2.569	13.4	19.8	4 11	15 36.69	-17 22.1	2.222	3.098	10.6	21.7
4 21	15 32.97	-21 55.9	1.610	2.555	9.7	19.5	4 21	15 29.87	-16 41.1	2.168	3.116	7.3	21.5
5 1	15 23.54	-21 44.9	1.549	2.540	5.4	19.2	5 1	15 21.60	-15 54.7	2.140	3.133	3.7	21.3
5 11	15 12.65	-21 24.2	1.515	2.524	1.4	18.9	5 11	15 12.67	-15 6.0	2.140	3.150	0.9	21.1
5 21	15 1.50	-20 56.4	1.508	2.507	4.7	19.1	5 21	15 3.93	-14 18.9	2.170	3.165	4.1	21.4
5 31	14 51.41	-20 25.9	1.528	2.491	9.4	19.3	5 31	14 56.15	-13 37.2	2.229	3.180	7.5	21.6
6 10	14 43.43	-19 58.4	1.571	2.473	13.6	19.5	6 10	14 49.98	-13 4.1	2.312	3.194	10.6	21.8
6 20	14 38.23	-19 38.3	1.635	2.455	17.2	19.7	6 20	14 45.75	-12 41.5	2.418	3.208	13.2	22.0
341919	2008 <i>KD</i> ₁₈		5 11.1 316°36	3°6/5.6	18		305981	2009 <i>HC</i> ₁₀₃		5 11.1 311°55			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
326935	2004 <i>CH</i> ₁₁		5 11.1 32°64	9°8/ 5.1	17		505082	2011 <i>UD</i> ₁₅₈		5 11.1 157°66	5°0/ 5.7	18	
4 11	15 33.62	+ 1 17.6	1.323	2.220	15.0	20.3	4 11	15 31.12	- 1 2.6	2.912	3.787	8.5	22.7
4 21	15 28.37	+ 2 55.8	1.286	2.227	12.0	20.1	4 21	15 25.83	+ 0 7.3	2.860	3.793	6.5	22.6
5 1	15 21.03	+ 4 19.8	1.271	2.234	10.0	20.0	5 1	15 19.52	+ 1 11.8	2.835	3.799	5.2	22.5
5 11	15 12.69	+ 5 20.5	1.278	2.242	10.2	20.0	5 11	15 12.72	+ 2 7.0	2.839	3.804	5.2	22.5
5 21	15 4.55	+ 5 51.9	1.309	2.251	12.4	20.2	5 21	15 5.99	+ 2 49.9	2.871	3.809	6.6	22.6
5 31	14 57.75	+ 5 52.1	1.360	2.260	15.4	20.4	5 31	14 59.87	+ 3 18.4	2.930	3.814	8.5	22.7
6 10	14 53.11	+ 5 23.2	1.430	2.269	18.3	20.6	6 10	14 54.82	+ 3 31.8	3.012	3.818	10.4	22.9
6 20	14 51.04	+ 4 30.2	1.516	2.279	20.8	20.8	6 20	14 51.15	+ 3 30.9	3.114	3.821	12.1	23.0
303720	2005 <i>QA</i> ₁₅		5 11.1 320°70	5°2/14.5	17		118367	1999 <i>GC</i> ₄		5 11.1 51°13	4°5/ 8.1	18	
4 11	15 35.98	-33 21.6	2.113	2.949	12.7	20.4	4 11	15 34.23	-11 35.1	1.374	2.278	14.1	18.9
4 21	15 29.91	-33 43.4	2.035	2.945	10.0	20.2	4 21	15 28.65	- 9 58.1	1.339	2.298	9.8	18.7
5 1	15 21.87	-33 49.1	1.981	2.941	7.3	20.1	5 1	15 21.11	- 8 20.2	1.326	2.318	5.8	18.5
5 11	15 12.71	-33 37.6	1.952	2.937	5.4	19.9	5 11	15 12.73	- 6 50.2	1.340	2.339	4.7	18.5
5 21	15 3.45	-33 10.1	1.950	2.933	5.7	19.9	5 21	15 4.70	- 5 35.7	1.379	2.360	7.8	18.7
5 31	14 55.16	-32 30.2	1.974	2.929	8.1	20.1	5 31	14 58.07	- 4 42.1	1.441	2.382	11.7	19.0
6 10	14 48.71	-31 43.7	2.023	2.926	10.9	20.2	6 10	14 53.59	- 4 11.7	1.525	2.403	15.3	19.3
6 20	14 44.61	-30 56.3	2.093	2.922	13.6	20.4	6 20	14 51.58	- 4 3.3	1.627	2.425	18.2	19.5
117223	2004 <i>RP</i> ₃₁₁		5 11.1 310°43	3°6/ 9.5	17		112635	2002 <i>PZ</i> ₇₈		5 11.1 324°72	5°3/ 8.8	18	
4 11	15 36.61	- 9 29.5	1.511	2.407	13.5	19.3	4 11	15 36.31	- 7 11.7	1.334	2.236	14.6	19.1
4 21	15 30.72	- 9 20.8	1.432	2.388	9.6	19.0	4 21	15 30.55	- 6 40.8	1.271	2.227	10.6	18.8
5 1	15 22.44	- 9 14.5	1.377	2.369	5.6	18.7	5 1	15 22.34	- 6 14.3	1.230	2.219	6.7	18.6
5 11	15 12.72	- 9 14.1	1.347	2.351	3.7	18.6	5 11	15 12.75	- 5 57.6	1.213	2.211	5.4	18.5
5 21	15 2.72	- 9 22.9	1.343	2.332	6.9	18.7	5 21	15 3.07	- 5 55.4	1.221	2.204	8.4	18.6
5 31	14 53.72	- 9 43.4	1.363	2.315	11.3	18.9	5 31	14 54.63	- 6 10.4	1.252	2.197	12.7	18.8
6 10	14 46.80	-10 16.9	1.406	2.298	15.5	19.1	6 10	14 48.48	- 6 43.3	1.303	2.191	16.8	19.1
6 20	14 42.62	-11 3.0	1.466	2.281	19.1	19.3	6 20	14 45.21	- 7 32.5	1.372	2.185	20.3	19.3
507581	2013 <i>AJ</i> ₁₅₈		5 11.1 136°57	3°3/ 8.1	17		463549	2013 <i>RM</i> ₄₉		5 11.1 329°21	10°5/15.0	17	
4 11	15 31.97	- 8 16.8	2.643	3.527	8.9	22.5	4 11	15 36.86	-37 5.7	1.218	2.071	19.1	20.4
4 21	15 26.48	- 7 24.5	2.588	3.536	6.3	22.4	4 21	15 32.06	-38 22.0	1.140	2.051	15.9	20.1
5 1	15 19.86	- 6 33.6	2.559	3.545	4.0	22.3	5 1	15 23.65	-39 14.2	1.080	2.032	12.8	19.9
5 11	15 12.69	- 5 47.5	2.560	3.554	3.4	22.2	5 11	15 12.77	-39 34.9	1.040	2.013	10.7	19.7
5 21	15 5.62	- 5 9.4	2.589	3.562	5.2	22.4	5 21	15 1.20	-39 21.2	1.022	1.996	11.0	19.6
5 31	14 59.24	- 4 41.8	2.645	3.570	7.8	22.5	5 31	14 51.10	-38 37.0	1.024	1.980	13.6	19.7
6 10	14 54.07	- 4 26.2	2.726	3.578	10.2	22.7	6 10	14 44.22	-37 32.6	1.046	1.966	17.3	19.9
6 20	14 50.42	- 4 22.7	2.829	3.585	12.2	22.9	6 20	14 41.50	-36 20.2	1.085	1.952	21.0	20.1
125355	2001 <i>VR</i> ₆₂		5 11.1 354°29	1°9/11.8	17		209528	2004 <i>TF</i> ₆₈		5 11.1 250°46	1°3/10.5	17	
4 11	15 39.36	-20 58.2	1.199	2.093	16.4	19.1	4 11	15 40.22	-15 14.0	1.572	2.459	13.6	20.4
4 21	15 33.06	-21 25.4	1.137	2.091	11.8	18.8	4 21	15 33.23	-15 8.2	1.492	2.445	9.6	20.1
5 1	15 23.77	-21 42.6	1.097	2.089	6.5	18.5	5 1	15 23.76	-14 58.5	1.436	2.430	5.0	19.8
5 11	15 12.74	-21 49.6	1.079	2.088	1.9	18.2	5 11	15 12.78	-14 46.9	1.406	2.415	1.3	19.5
5 21	15 1.56	-21 48.3	1.086	2.087	5.7	18.4	5 21	15 1.53	-14 36.6	1.402	2.399	5.5	19.8
5 31	14 51.92	-21 43.0	1.117	2.087	11.1	18.7	5 31	14 51.35	-14 31.1	1.425	2.383	10.4	20.0
6 10	14 45.10	-21 39.3	1.169	2.088	15.9	19.0	6 10	14 43.35	-14 34.0	1.471	2.366	14.8	20.2
6 20	14 41.73	-21 41.8	1.238	2.088	19.9	19.3	6 20	14 38.19	-14 47.5	1.536	2.349	18.5	20.4
317248	2002 <i>CS</i> ₂₇₄		5 11.1 9°42	2°7/ 9.4	17		376715	1996 <i>RC</i> ₁₉		5 11.1 31°00	5°6/13.9	17	
4 11	15 34.80	-12 29.9	1.718	2.612	12.3	20.6	4 11	15 39.36	-31 6.7	1.617	2.471	15.1	20.8
4 21	15 29.02	-11 51.1	1.656	2.612	8.6	20.4	4 21	15 32.68	-31 46.9	1.551	2.474	11.7	20.6
5 1	15 21.35	-11 10.3	1.619	2.612	4.7	20.1	5 1	15 23.45	-32 9.6	1.508	2.476	8.2	20.4
5 11	15 12.71	-10 31.6	1.607	2.612	2.8	20.0	5 11	15 12.77	-32 12.7	1.488	2.480	5.8	20.3
5 21	15 4.11	- 9 59.5	1.623	2.612	5.9	20.2	5 21	15 2.00	-31 57.0	1.495	2.483	6.5	20.3
5 31	14 56.55	- 9 37.9	1.664	2.613	9.8	20.4	5 31	14 52.55	-31 27.0	1.526	2.486	9.6	20.5
6 10	14 50.84	- 9 29.4	1.728	2.613	13.4	20.7	6 10	14 45.50	-30 49.8	1.581	2.490	13.1	20.7
6 20	14 47.45	- 9 34.6	1.811	2.614	16.5	20.9	6 20	14 41.43	-30 12.2	1.656	2.494	16.3	21.0
301532	2009 <i>FN</i> ₄₀		5 11.1 222°92	0°0/11.1	17		35828	1999 <i>JZ</i> ₅₃		5 11.1 1°96	2°4/10.1	18	
4 11	15 36.12	-17 46.4	2.164	3.042	10.8	20.0	4 11	15 34.61	-14 13.1	1.056	1.969	16.5	18.1
4 21	15 29.75	-17 52.8	2.091	3.040	7.6	19.8	4 21	15 29.74	-13 54.2	1.002	1.967	11.5	17.8
5 1	15 21.70	-17 54.8	2.044	3.038	3.9	19.5	5 1	15 22.03	-13 31.3	0.969	1.966	6.0	17.5
5 11	15 12.72	-17 53.4	2.025	3.035	0.0	19.2	5 11	15 12.76	-13 9.3	0.958	1.966	2.4	17.2
5 21	15 3.69	-17 50.4	2.035	3.033	3.9	19.5	5 21	15 3.48	-12 53.3	0.970	1.968	7.0	17.5
5 31	14 55.49	-17 48.2	2.072	3.031	7.5	19.7	5 31	14 55.78	-12 48.2	1.003	1.970	12.4	17.8
6 10	14 48.88	-17 49.5	2.135	3.029	10.9	19.9	6 10	14 50.82	-12 57.2	1.056	1.974	17.3	18.1
6 20	14 44.31	-17 56.1	2.219	3.026	13.7	20.1	6 20	14 49.14	-13 21.1	1.125	1.978	21.3	18.4
118250	1998 <i>BY</i> ₁		5 11.1 113°47	4°1/ 8.5	18		427966	2005 <i>YX</i> ₈₃		5 11.1 164°32	5°8/ 6.9	17	
4 11	15 36.77	- 7 33.0	1.984	2.869	11.3	20.2	4 11	15 35.93	- 0 17.3	2.363	3.234	10.3	21.9
4 21	15 30.01	- 6 51.7	1.939	2.887	8.1	20.0	4 21	15 29.33	+ 0 28.1	2.309	3.241	7.9	21.7
5 1	15 21.72	- 6 13.4	1.919	2.905	5.1	19.9	5 1	15 21.37	+ 1 5.9	2.281	3.246	6.1	21.6
5 11	15 12.73	- 5 42.1	1.927	2.922	4.2	19.8	5 11	15 12.76	+ 1 32.3	2.281	3.251	5.9	21.6
5 21	15 3.94	- 5 21.1	1.962	2.938	6.4	20.0	5 21	15 4.23	+ 1 44.4	2.309	3.255	7.5	21.7
5 31	14 56.19	- 5 12.9	2.024	2.954	9.5	20.2	5 31	14 56.52	+ 1 40.8	2.363	3.259	9.8	21.9
6 10	14 50.12	- 5 18.3	2.110	2.970	12.4	20.4	6 10	14 50.22	+ 1 21.6	2.440	3.262	12.1	22.0
6 20	14 46.11	- 5 36.6	2.216	2.985	14.8	20.6	6 20	14 45.70	+ 0 48.5	2.538	3.264	14.2	22.2
436280	2010 <i>CS</i> ₁₇₁		5 11.1 255°89	2°7/ 9.4	17								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
300084	2006 <i>UF</i> ₂₂₃		5 11.1 82°41	0°1/11.2	17		28166	1998 <i>VP</i> ₂₅		5 11.1 265°67	0°5/10.9	17	
4 11	15 34.01	-21 10.2	2.334	3.206	10.3	20.2	4 11	15 39.55	-17 42.4	1.469	2.357	14.3	19.6
4 21	15 27.97	-20 21.7	2.286	3.231	7.2	20.1	4 21	15 32.98	-17 29.3	1.385	2.338	10.1	19.3
5 1	15 20.64	-19 25.5	2.264	3.256	3.7	19.9	5 1	15 23.74	-17 8.3	1.324	2.319	5.3	19.0
5 11	15 12.76	-18 24.8	2.271	3.281	0.2	19.6	5 11	15 12.83	-16 41.9	1.289	2.299	0.5	18.6
5 21	15 5.11	-17 23.6	2.307	3.305	3.5	19.9	5 21	15 1.57	-16 13.6	1.280	2.279	5.5	18.9
5 31	14 58.40	-16 26.2	2.371	3.329	6.8	20.2	5 31	14 51.40	-15 48.8	1.296	2.258	10.8	19.1
6 10	14 53.17	-15 36.5	2.461	3.353	9.7	20.4	6 10	14 43.53	-15 32.4	1.334	2.236	15.5	19.3
6 20	14 49.73	-14 56.7	2.574	3.376	12.2	20.6	6 20	14 38.69	-15 27.9	1.391	2.215	19.5	19.5
376480	2012 <i>JE</i> ₅₄		5 11.1 336°78	2°4/ 9.7	17		7832	1993 <i>FA</i> ₂₇		5 11.1 281°63	1°1/10.5	18	
4 11	15 35.12	-14 12.5	1.576	2.471	13.1	21.6	4 11	15 36.89	-18 29.8	1.415	2.309	14.4	17.3
4 21	15 29.40	-13 26.0	1.513	2.470	9.1	21.4	4 21	15 31.16	-17 40.2	1.329	2.285	10.2	17.0
5 1	15 21.63	-12 35.1	1.475	2.469	4.8	21.1	5 1	15 22.81	-16 38.2	1.266	2.261	5.3	16.6
5 11	15 12.78	-11 44.5	1.462	2.468	2.5	21.0	5 11	15 12.82	-15 27.9	1.228	2.237	1.1	16.3
5 21	15 3.96	-10 59.5	1.475	2.467	6.0	21.2	5 21	15 2.51	-14 15.9	1.215	2.212	6.0	16.5
5 31	14 56.28	-10 25.2	1.514	2.467	10.3	21.4	5 31	14 53.29	-13 10.4	1.227	2.188	11.3	16.7
6 10	14 50.61	-10 5.1	1.574	2.466	14.2	21.6	6 10	14 46.37	-12 18.4	1.261	2.163	16.2	17.0
6 20	14 47.43	-10 0.5	1.654	2.465	17.4	21.9	6 20	14 42.44	-11 44.4	1.313	2.138	20.4	17.2
289247	2004 <i>XM</i> ₈₃		5 11.1 163°27	0°8/10.7	18		415322	2013 <i>HF</i> ₁₇		5 11.1 356°76	2°2/12.0	17	
4 11	15 39.48	-16 57.2	1.725	2.607	12.9	21.3	4 11	15 32.54	-22 37.2	0.968	1.878	17.9	20.1
4 21	15 32.31	-16 38.3	1.661	2.612	9.0	21.1	4 21	15 28.66	-22 41.7	0.912	1.873	12.9	19.8
5 1	15 23.09	-16 13.4	1.623	2.617	4.6	20.8	5 1	15 21.64	-22 30.6	0.874	1.868	7.3	19.5
5 11	15 12.80	-15 45.3	1.611	2.621	0.8	20.6	5 11	15 12.80	-22 5.4	0.857	1.866	2.3	19.2
5 21	15 2.56	-15 17.6	1.627	2.624	4.9	20.9	5 21	15 3.86	-21 30.8	0.861	1.865	6.1	19.4
5 31	14 53.49	-14 54.3	1.670	2.627	9.2	21.1	5 31	14 56.60	-20 54.4	0.887	1.865	11.9	19.7
6 10	14 46.46	-14 39.3	1.736	2.629	13.0	21.4	6 10	14 52.33	-20 24.2	0.931	1.867	17.1	20.0
6 20	14 41.95	-14 34.7	1.823	2.630	16.2	21.6	6 20	14 51.66	-20 5.5	0.992	1.871	21.5	20.3
377865	2006 <i>BK</i> ₂₅₉		5 11.1 77°07	2°3/ 9.7	17		341867	2008 <i>FL</i> ₁₃₄		5 11.1 255°35	1°7/ 8.5	18	
4 11	15 35.23	-13 16.5	1.772	2.663	12.1	21.1	4 11	15 25.96	-10 37.0	4.477	5.358	5.6	21.2
4 21	15 29.25	-12 44.3	1.715	2.670	8.4	20.9	4 21	15 22.10	-9 51.1	4.403	5.352	3.9	21.0
5 1	15 21.47	-12 9.8	1.682	2.676	4.5	20.7	5 1	15 17.59	-9 4.8	4.358	5.347	2.3	20.9
5 11	15 12.78	-11 36.8	1.676	2.683	2.4	20.5	5 11	15 12.76	-8 20.1	4.342	5.341	1.8	20.8
5 21	15 4.19	-11 9.0	1.697	2.689	5.4	20.7	5 21	15 7.94	-7 39.0	4.357	5.335	3.1	20.9
5 31	14 56.66	-10 50.2	1.744	2.696	9.3	21.0	5 31	15 3.46	-7 3.0	4.401	5.330	4.8	21.1
6 10	14 50.95	-10 42.9	1.815	2.702	12.8	21.2	6 10	14 59.63	-6 33.7	4.471	5.324	6.5	21.2
6 20	14 47.50	-10 47.8	1.905	2.709	15.7	21.4	6 20	14 56.67	-6 11.8	4.564	5.319	7.9	21.3
111713	2002 <i>CX</i> ₃₃		5 11.1 160°97	2°8/ 9.1	18		335739	2007 <i>DD</i> ₁₁₆		5 11.1 16°92	0°4/11.6	18	
4 11	15 33.64	- 9 1.1	2.490	3.372	9.4	20.0	4 11	15 27.42	-20 34.4	4.066	4.933	6.4	20.7
4 21	15 27.77	- 8 40.5	2.426	3.375	6.6	19.9	4 21	15 23.18	-20 21.8	3.991	4.934	4.5	20.6
5 1	15 20.61	- 8 21.4	2.388	3.377	3.9	19.7	5 1	15 18.17	-20 5.3	3.944	4.935	2.4	20.4
5 11	15 12.78	- 8 6.4	2.379	3.379	2.9	19.6	5 11	15 12.77	-19 45.9	3.927	4.936	0.4	20.2
5 21	15 4.98	- 7 57.6	2.399	3.381	4.9	19.8	5 21	15 7.37	-19 25.0	3.939	4.937	2.1	20.4
5 31	14 57.90	- 7 57.1	2.446	3.383	7.7	19.9	5 31	15 2.39	-19 4.2	3.980	4.938	4.3	20.5
6 10	14 52.11	- 8 5.8	2.518	3.384	10.4	20.1	6 10	14 58.16	-18 45.5	4.048	4.940	6.2	20.7
6 20	14 47.99	- 8 24.1	2.611	3.385	12.7	20.3	6 20	14 54.96	-18 30.0	4.140	4.941	7.9	20.8
330703	2008 <i>LR</i> ₁₀		5 11.1 8°12	3°0/ 9.8	17		106326	2000 <i>UN</i> ₁₀₁		5 11.1 267°00	2°4/12.9	17	
4 11	15 35.87	-11 51.2	1.377	2.278	14.2	19.9	4 11	15 33.98	-26 38.5	2.313	3.172	10.9	19.8
4 21	15 30.13	-11 32.6	1.320	2.278	10.0	19.6	4 21	15 28.31	-26 27.7	2.229	3.162	8.1	19.6
5 1	15 22.08	-11 13.5	1.285	2.279	5.5	19.4	5 1	15 21.01	-26 5.2	2.170	3.152	4.9	19.4
5 11	15 12.79	-10 58.0	1.275	2.281	3.1	19.2	5 11	15 12.80	-25 32.0	2.139	3.143	2.5	19.2
5 21	15 3.53	-10 49.9	1.290	2.283	6.5	19.4	5 21	15 4.54	-24 50.4	2.135	3.133	3.8	19.3
5 31	14 55.56	-10 52.5	1.329	2.286	11.1	19.7	5 31	14 57.06	-24 4.5	2.160	3.123	7.0	19.5
6 10	14 49.84	-11 7.9	1.390	2.289	15.2	20.0	6 10	14 51.11	-23 18.8	2.210	3.113	10.1	19.6
6 20	14 46.88	-11 36.1	1.469	2.293	18.6	20.2	6 20	14 47.14	-22 37.6	2.282	3.103	12.9	19.8
256725	2008 <i>AQ</i> ₉₃		5 11.1 233°75	3°7/ 9.1	17		263581	2008 <i>FN</i> ₉₀		5 11.1 169°03	2°9/ 9.3	17	
4 11	15 38.10	- 9 29.2	1.729	2.617	12.5	20.7	4 11	15 36.98	-12 7.3	1.765	2.654	12.3	21.5
4 21	15 31.44	- 8 58.9	1.656	2.608	8.9	20.5	4 21	15 30.50	-11 23.9	1.703	2.657	8.6	21.3
5 1	15 22.71	- 8 29.4	1.608	2.598	5.3	20.2	5 1	15 22.14	-10 38.6	1.667	2.659	4.8	21.0
5 11	15 12.81	- 8 4.9	1.587	2.588	3.8	20.1	5 11	15 12.82	- 9 55.7	1.657	2.661	3.0	20.9
5 21	15 2.81	- 7 49.1	1.593	2.577	6.6	20.3	5 21	15 3.56	- 9 19.8	1.675	2.663	6.0	21.1
5 31	14 53.81	- 7 45.3	1.624	2.566	10.6	20.5	5 31	14 55.38	- 8 54.8	1.718	2.664	9.8	21.3
6 10	14 46.73	- 7 55.3	1.679	2.554	14.3	20.7	6 10	14 49.08	- 8 43.4	1.786	2.664	13.4	21.6
6 20	14 42.09	- 8 19.3	1.753	2.542	17.4	20.9	6 20	14 45.09	- 8 46.1	1.872	2.665	16.4	21.8
124913	2001 <i>TF</i> ₆₃		5 11.1 175°04	0°9/11.6	17		80363	1999 <i>XE</i> ₁₃₄		5 11.1 154°54	1°5/12.1	18	
4 11	15 38.43	-20 58.3	2.168	3.036	11.2	21.4	4 11	15 39.89	-23 22.3	2.195	3.055	11.4	20.9
4 21	15 31.36	-20 57.2	2.097	3.039	7.9	21.2	4 21	15 32.31	-23 18.1	2.129	3.066	8.2	20.7
5 1	15 22.55	-20 48.5	2.051	3.041	4.3	21.0	5 1	15 23.01	-23 4.3	2.089	3.076	4.6	20.5
5 11	15 12.81	-20 33.3	2.034	3.043	0.9	20.7	5 11	15 12.84	-22 41.8	2.077	3.085	1.6	20.3
5 21	15 3.06	-20 13.8	2.045	3.044	3.8	20.9	5 21	15 2.74	-22 13.1	2.094	3.093	3.8	20.5
5 31	14 54.23	-19 53.2	2.085	3.044	7.5	21.2	5 31	14 53.65	-21 41.9	2.141	3.100	7.3	20.7
6 10	14 47.09	-19 35.2	2.150	3.044	10.8	21.4	6 10	14 46.30	-21 12.5	2.212	3.106	10.5	21.0
6 20	14 42.08	-19 22.7	2.237	3.043	13.6	21.6	6 20	14 41.14	-20 48.3	2.307	3.112	13.3	21.2
384114	2008 <i>WK</i> ₁₂₉		5 11.1 61°22	1°7/12.3	15		168217	2006 <i>JH</i> ₅					

EPHEMERIDES

5 11.1

5 11.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
497282	2005 QN ₁₆₁		5 11.1 200°68	1°2/11.9 18			522589	2016 EY ₂₄₆		5 11.1 39°28	1°3/10.5 17		
4 11	15 38.77	-22 2.2	2.224	3.089	11.1	22.2	4 11	15 36.90	-16 16.2	1.379	2.276	14.5	21.5
4 21	15 31.65	-22 3.3	2.145	3.085	7.9	22.0	4 21	15 30.87	-15 54.9	1.324	2.281	10.1	21.2
5 1	15 22.75	-21 56.2	2.091	3.080	4.4	21.7	5 1	15 22.49	-15 27.7	1.290	2.286	5.2	21.0
5 11	15 12.85	-21 41.7	2.066	3.074	1.3	21.5	5 11	15 12.88	-14 58.2	1.282	2.291	1.3	20.7
5 21	15 2.87	-21 21.6	2.070	3.068	3.8	21.7	5 21	15 3.36	-14 30.9	1.299	2.297	5.6	21.0
5 31	14 53.76	-20 59.2	2.102	3.061	7.4	21.9	5 31	14 55.19	-14 10.6	1.340	2.303	10.4	21.3
6 10	14 46.29	-20 38.4	2.160	3.054	10.8	22.1	6 10	14 49.35	-14 1.1	1.404	2.309	14.7	21.6
6 20	14 40.96	-20 22.5	2.240	3.045	13.6	22.3	6 20	14 46.33	-14 4.2	1.486	2.315	18.2	21.8
475107	2005 UB ₂₃₇		5 11.1 196°09	1°8/ 9.5 16			291407	2006 DY ₂		5 11.1 266°25	7°2/15.3 17		
4 11	15 31.65	-13 50.7	2.707	3.589	8.8	22.1	4 11	15 40.95	-38 12.4	2.118	2.925	13.7	21.0
4 21	15 26.36	-13 3.3	2.636	3.587	6.1	22.0	4 21	15 33.81	-38 49.6	2.018	2.901	11.4	20.8
5 1	15 19.88	-12 13.1	2.592	3.585	3.2	21.8	5 1	15 24.17	-39 8.0	1.940	2.877	9.0	20.6
5 11	15 12.81	-11 23.2	2.577	3.582	1.8	21.7	5 11	15 12.93	-39 4.2	1.887	2.853	7.4	20.5
5 21	15 5.77	-10 36.9	2.591	3.580	4.1	21.8	5 21	15 1.26	-38 37.5	1.861	2.827	7.5	20.4
5 31	14 59.37	-9 57.3	2.634	3.577	7.0	22.0	5 31	14 50.50	-37 50.9	1.861	2.802	9.5	20.5
6 10	14 54.15	-9 26.8	2.702	3.574	9.6	22.2	6 10	14 41.80	-36 51.0	1.885	2.776	12.2	20.6
6 20	14 50.45	-9 6.8	2.792	3.570	11.9	22.3	6 20	14 35.89	-35 45.6	1.931	2.749	15.0	20.8
379394	2009 YV ₁₂		5 11.1 131°74	2°2/12.7 17			315344	2007 UO ₄		5 11.1 159°19	2°7/12.6 17		
4 11	15 36.14	-25 58.3	1.945	2.810	12.4	20.6	4 11	15 40.40	-25 41.0	1.733	2.597	13.7	21.4
4 21	15 29.91	-25 38.6	1.878	2.815	9.0	20.4	4 21	15 33.12	-25 43.4	1.666	2.603	10.0	21.1
5 1	15 21.84	-25 5.7	1.835	2.820	5.3	20.2	5 1	15 23.62	-25 32.3	1.623	2.608	6.0	20.9
5 11	15 12.84	-24 21.3	1.819	2.825	2.3	20.0	5 11	15 12.92	-25 8.0	1.607	2.612	2.8	20.7
5 21	15 3.90	-23 28.9	1.831	2.830	4.1	20.1	5 21	15 2.24	-24 33.5	1.618	2.616	4.7	20.8
5 31	14 56.04	-22 33.8	1.870	2.834	7.8	20.4	5 31	14 52.81	-23 53.6	1.655	2.619	8.7	21.1
6 10	14 50.02	-21 41.4	1.933	2.838	11.3	20.6	6 10	14 45.56	-23 14.5	1.717	2.622	12.5	21.3
6 20	14 46.29	-20 56.5	2.019	2.842	14.3	20.8	6 20	14 41.00	-22 41.2	1.800	2.624	15.7	21.5
62694	2000 TV ₂₄		5 11.1 148°74	4°3/ 7.4 18			227583	2006 AU ₂		5 11.1 68°73	3°6/ 9.6 18		
4 11	15 34.07	-10 50.0	1.856	2.748	11.6	19.3	4 11	15 38.72	-8 19.4	1.675	2.563	12.8	19.8
4 21	15 28.35	-9 0.4	1.798	2.751	8.2	19.1	4 21	15 31.77	-8 18.7	1.621	2.572	9.1	19.6
5 1	15 20.98	-7 8.1	1.766	2.754	5.1	19.0	5 1	15 22.84	-8 21.7	1.591	2.581	5.3	19.4
5 11	15 12.83	-5 20.6	1.762	2.756	4.6	18.9	5 11	15 12.91	-8 31.1	1.588	2.589	3.6	19.3
5 21	15 4.79	-3 45.4	1.786	2.759	7.2	19.1	5 21	15 3.08	-8 48.8	1.611	2.598	6.3	19.5
5 31	14 57.76	-2 28.5	1.837	2.761	10.6	19.3	5 31	14 54.41	-9 16.1	1.661	2.607	10.1	19.7
6 10	14 52.43	-1 32.9	1.910	2.763	13.8	19.5	6 10	14 47.74	-9 53.4	1.734	2.616	13.6	20.0
6 20	14 49.19	-0 59.2	2.003	2.765	16.4	19.7	6 20	14 43.52	-10 40.0	1.827	2.625	16.5	20.2
184227	2004 RW ₈₉		5 11.1 303°95	5°2/ 6.4 18			347320	2011 RS ₁₅		5 11.1 56°84	0°1/11.1 18		
4 11	15 30.92	-4 43.4	2.209	3.097	10.2	19.6	4 11	15 33.26	-20 11.8	1.998	2.879	11.4	20.5
4 21	15 26.04	-3 24.2	2.146	3.091	7.6	19.5	4 21	15 27.81	-19 27.1	1.934	2.884	8.0	20.3
5 1	15 19.78	-2 8.1	2.109	3.085	5.6	19.3	5 1	15 20.74	-18 33.7	1.896	2.889	4.1	20.1
5 11	15 12.81	-1 0.5	2.099	3.080	5.5	19.3	5 11	15 12.88	-17 35.1	1.885	2.895	0.1	19.7
5 21	15 5.86	+ 0 6.3	2.117	3.074	7.4	19.4	5 21	15 5.11	-16 35.8	1.901	2.900	4.0	20.1
5 31	14 59.66	+ 0 31.2	2.160	3.068	10.0	19.6	5 31	14 58.30	-15 40.6	1.945	2.905	7.9	20.3
6 10	14 54.80	+ 0 50.6	2.226	3.063	12.6	19.7	6 10	14 53.13	-14 54.1	2.014	2.911	11.3	20.5
6 20	14 51.69	+ 0 52.2	2.311	3.057	14.9	19.9	6 20	14 50.00	-14 18.9	2.103	2.916	14.1	20.7
374391	2005 UU ₅₂₉		5 11.1 221°98	3°3/ 9.1 17			97082	1999 VW ₃₉		5 11.1 262°89	2°2/12.3 18		
4 11	15 36.96	-9 28.0	1.992	2.876	11.3	21.7	4 11	15 39.05	-23 42.9	2.041	2.906	12.0	19.7
4 21	15 30.43	-9 0.6	1.919	2.869	8.0	21.5	4 21	15 32.19	-24 5.7	1.950	2.888	8.8	19.4
5 1	15 22.13	-8 34.1	1.872	2.861	4.7	21.3	5 1	15 23.22	-24 19.6	1.884	2.869	5.2	19.2
5 11	15 12.85	-8 11.9	1.852	2.853	3.4	21.1	5 11	15 12.93	-24 24.2	1.845	2.850	2.3	19.0
5 21	15 3.51	-7 57.4	1.860	2.844	5.9	21.3	5 21	15 2.34	-24 20.3	1.834	2.831	4.3	19.1
5 31	14 55.05	-7 53.1	1.895	2.835	9.4	21.5	5 31	14 52.56	-24 10.6	1.850	2.812	8.1	19.2
6 10	14 48.24	-8 0.8	1.954	2.825	12.8	21.7	6 10	14 44.53	-23 59.1	1.892	2.792	11.8	19.4
6 20	14 43.58	-8 20.8	2.033	2.815	15.6	21.8	6 20	14 38.89	-23 49.8	1.956	2.772	14.9	19.6
67970	2000 WW ₁₉₅		5 11.1 162°83	4°1/ 8.6 18			304716	2006 XH ₅		5 11.1 169°07	2°1/ 9.6 18		
4 11	15 37.30	-9 40.6	1.650	2.542	12.8	20.0	4 11	15 33.52	-11 24.0	2.579	3.461	9.2	20.6
4 21	15 30.79	-8 45.3	1.593	2.546	9.1	19.7	4 21	15 27.71	-11 4.2	2.513	3.463	6.4	20.4
5 1	15 22.33	-7 50.2	1.560	2.549	5.5	19.5	5 1	15 20.63	-10 44.2	2.473	3.464	3.5	20.2
5 11	15 12.87	-7 0.8	1.553	2.552	4.3	19.5	5 11	15 12.89	-10 26.2	2.462	3.466	2.2	20.1
5 21	15 3.50	-6 22.2	1.573	2.554	7.1	19.6	5 21	15 5.18	-10 12.6	2.480	3.467	4.3	20.3
5 31	14 55.28	-5 58.5	1.618	2.556	10.9	19.9	5 31	14 58.16	-10 5.5	2.526	3.469	7.2	20.4
6 10	14 49.03	-5 51.7	1.686	2.558	14.4	20.1	6 10	14 52.39	-10 6.4	2.597	3.469	9.9	20.6
6 20	14 45.21	-6 1.4	1.773	2.559	17.4	20.3	6 20	14 48.25	-10 15.9	2.690	3.470	12.2	20.8
408818	2000 WY ₁₃₈		5 11.1 185°56	1°2/10.4 16			442914	2013 CA ₃₃		5 11.1 304°04	3°9/13.9 17		
4 11	15 39.47	-15 27.8	2.068	2.945	11.3	22.2	4 11	15 35.15	-30 47.1	2.368	3.209	11.3	20.7
4 21	15 32.11	-15 7.1	1.997	2.945	7.9	22.0	4 21	15 29.16	-30 59.8	2.291	3.209	8.7	20.5
5 1	15 22.97	-14 42.3	1.952	2.945	4.1	21.8	5 1	15 21.49	-30 59.4	2.240	3.208	6.0	20.4
5 11	15 12.88	-14 15.9	1.935	2.943	1.2	21.6	5 11	15 12.91	-30 45.5	2.214	3.207	4.0	20.2
5 21	15 2.79	-13 50.8	1.947	2.941	4.5	21.8	5 21	15 4.28	-30 19.7	2.217	3.206	4.6	20.3
5 31	14 53.64	-13 30.5	1.987	2.938	8.4	22.0	5 31	14 56.49	-29 45.1	2.247	3.205	7.1	20.4
6 10	14 46.22	-13 18.0	2.052	2.934	11.8	22.2	6 10	14 50.28	-29 6.6	2.302	3.204	9.8	20.6
6 20	14 40.99	-13 15.0	2.139	2.929	14.7	22.4	6 20	14 46.12	-28 28.5	2.380	3.204	12.4	20.7
176478	2001 XY ₁₇₃		5 11.1 130°98	4°3/ 7.9 18			262564	2006 VG ₃₀		5 11.1 65°03	1°3/12.2 17		
4 11	15 33.30	-4 37.8	2.421	3.3									

EPHEMERIDES

5 11.1

5 11.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
111920	2002 GX ₁₁		5 11.1 44°44'	1.7°/10.2	18		122854	2000 SP ₁₃₁		5 11.2 290°23'	8°3'/16.6	18	
4 11	15 35.86	-14 26.6	1.590	2.484	13.1	19.1	4 11	15 38.50	-40 13.7	1.743	2.556	16.0	19.5
4 21	15 29.87	-14 8.3	1.536	2.492	9.1	18.9	4 21	15 32.33	-40 32.2	1.656	2.541	13.3	19.3
5 1	15 21.89	-13 46.8	1.507	2.502	4.7	18.7	5 1	15 23.45	-40 25.2	1.589	2.526	10.6	19.1
5 11	15 12.92	-13 25.6	1.503	2.511	1.8	18.5	5 11	15 12.95	-39 49.6	1.546	2.511	8.6	18.9
5 21	15 4.05	-13 8.1	1.525	2.521	5.3	18.8	5 21	15 2.25	-38 46.0	1.527	2.496	8.5	18.9
5 31	14 56.37	-12 57.9	1.573	2.531	9.6	19.0	5 31	14 52.85	-37 20.1	1.532	2.481	10.5	19.0
6 10	14 50.72	-12 57.6	1.644	2.541	13.3	19.3	6 10	14 45.92	-35 41.5	1.561	2.467	13.4	19.1
6 20	14 47.52	-13 8.3	1.734	2.552	16.5	19.5	6 20	14 42.11	-34 0.3	1.611	2.452	16.5	19.3
137826	2000 AX ₂₁		5 11.1 255°04'	0°3'/11.3	18		74872	1999 TC ₉₈		5 11.2 242°48'	4°5'/8.5	18	
4 11	15 39.49	-19 18.2	1.846	2.722	12.4	19.9	4 11	15 37.17	-8 13.3	1.699	2.589	12.6	19.8
4 21	15 32.60	-19 12.8	1.754	2.702	8.9	19.7	4 21	15 30.85	-7 26.4	1.627	2.579	9.1	19.5
5 1	15 23.46	-18 59.9	1.688	2.680	4.7	19.4	5 1	15 22.47	-6 40.7	1.580	2.567	5.7	19.3
5 11	15 12.94	-18 40.6	1.648	2.658	0.3	19.0	5 11	15 12.95	-6 1.4	1.559	2.556	4.7	19.2
5 21	15 2.12	-18 17.7	1.637	2.635	4.5	19.3	5 21	15 3.32	-5 33.3	1.564	2.543	7.4	19.3
5 31	14 52.17	-17 54.8	1.652	2.612	9.0	19.5	5 31	14 54.69	-5 20.1	1.595	2.531	11.1	19.5
6 10	14 44.10	-17 36.6	1.692	2.588	13.1	19.7	6 10	14 47.96	-5 23.7	1.648	2.518	14.8	19.7
6 20	14 38.56	-17 26.4	1.753	2.563	16.6	19.9	6 20	14 43.66	-5 43.9	1.721	2.505	17.9	19.9
470484	2008 BM ₁₉		5 11.1 204°93'	4°5'/14.8	17		45145	1999 XN ₁₀₅		5 11.2 194°38'	0°6'/11.5	18	
4 11	15 36.08	-33 50.1	2.427	3.254	11.6	21.5	4 11	15 39.45	-20 16.4	1.934	2.807	12.1	18.9
4 21	15 29.80	-33 53.4	2.346	3.251	9.1	21.3	4 21	15 32.31	-20 13.3	1.860	2.805	8.6	18.7
5 1	15 21.82	-33 41.1	2.290	3.248	6.6	21.2	5 1	15 23.19	-20 2.2	1.812	2.803	4.6	18.4
5 11	15 12.92	-33 13.1	2.260	3.245	4.7	21.0	5 11	15 12.96	-19 44.6	1.790	2.800	0.7	18.1
5 21	15 3.99	-32 30.9	2.258	3.242	5.0	21.0	5 21	15 2.68	-19 22.9	1.797	2.796	4.2	18.4
5 31	14 55.95	-31 38.4	2.283	3.238	7.2	21.2	5 31	14 53.40	-19 0.7	1.832	2.792	8.3	18.6
6 10	14 49.53	-30 41.1	2.334	3.234	9.8	21.3	6 10	14 45.98	-18 42.3	1.891	2.787	11.9	18.8
6 20	14 45.20	-29 44.0	2.408	3.230	12.3	21.5	6 20	14 40.94	-18 30.7	1.972	2.781	15.1	19.0
518333	2017 BT ₁₂₁		5 11.1 319°34'	5°7'/19.1	18		432322	2009 US ₃₈		5 11.2 220°36'	0°2'/11.3	17	
4 11	15 33.06	-48 51.6	4.462	5.171	8.5	20.5	4 11	15 39.75	-18 13.2	2.113	2.985	11.3	21.8
4 21	15 27.34	-49 17.5	4.380	5.171	7.5	20.4	4 21	15 32.47	-18 25.6	2.032	2.977	8.0	21.6
5 1	15 20.44	-49 30.1	4.319	5.171	6.5	20.3	5 1	15 23.27	-18 33.1	1.976	2.968	4.2	21.3
5 11	15 12.90	-49 28.6	4.283	5.170	5.9	20.3	5 11	15 12.97	-18 36.4	1.949	2.958	0.3	21.0
5 21	15 5.31	-49 13.1	4.272	5.170	5.7	20.3	5 21	15 2.50	-18 36.9	1.950	2.948	4.0	21.3
5 31	14 58.27	-48 45.0	4.288	5.170	6.1	20.3	5 31	14 52.88	-18 37.1	1.980	2.938	7.9	21.5
6 10	14 52.32	-48 7.1	4.328	5.170	6.9	20.4	6 10	14 44.94	-18 39.8	2.036	2.927	11.4	21.7
6 20	14 47.82	-47 22.5	4.391	5.170	7.9	20.4	6 20	14 39.24	-18 47.3	2.113	2.915	14.4	21.9
341017	2007 FZ ₄₈		5 11.1 227°17'	0°5'/11.9	18		452315	1999 VQ ₁₁₆		5 11.2 247°24'	0°6'/10.4	15	
4 11	15 27.13	-21 26.7	4.877	5.738	5.5	21.1	4 11	15 29.48	-16 19.3	3.802	4.675	6.7	22.7
4 21	15 22.93	-21 21.6	4.794	5.733	3.9	21.0	4 21	15 24.70	-15 54.7	3.711	4.658	4.6	22.5
5 1	15 18.08	-21 13.0	4.739	5.728	2.1	20.8	5 1	15 19.04	-15 27.0	3.648	4.642	2.4	22.3
5 11	15 12.87	-21 1.6	4.714	5.723	0.6	20.7	5 11	15 12.91	-14 58.1	3.615	4.624	0.6	22.1
5 21	15 7.65	-20 48.3	4.719	5.718	1.8	20.8	5 21	15 6.73	-14 29.6	3.613	4.607	2.7	22.3
5 31	15 2.75	-20 34.5	4.754	5.713	3.6	20.9	5 31	15 0.95	-14 3.5	3.639	4.589	5.0	22.4
6 10	14 58.48	-20 21.5	4.816	5.707	5.3	21.0	6 10	14 55.98	-13 41.7	3.693	4.571	7.1	22.6
6 20	14 55.08	-20 10.6	4.903	5.702	6.8	21.1	6 20	14 52.11	-13 25.4	3.770	4.553	9.0	22.7
364712	2007 VG ₄₄		5 11.1 320°17'	5°5'/13.4	17		34995	Dainihonshi		5 11.2 50°59'	0°0'/11.2	18	
4 11	15 35.59	-28 36.7	1.143	2.028	17.7	20.4	4 11	15 35.26	-19 10.3	1.771	2.657	12.4	18.9
4 21	15 31.03	-29 5.2	1.061	2.005	13.7	20.0	4 21	15 29.24	-18 53.4	1.726	2.678	8.6	18.7
5 1	15 23.11	-29 14.0	1.000	1.982	9.1	19.7	5 1	15 21.49	-18 29.4	1.705	2.699	4.4	18.5
5 11	15 12.94	-29 0.2	0.959	1.960	5.7	19.4	5 11	15 12.94	-18 1.0	1.711	2.721	0.1	18.2
5 21	15 2.19	-28 24.9	0.941	1.939	7.2	19.4	5 21	15 4.60	-17 31.7	1.744	2.743	4.2	18.6
5 31	14 52.78	-27 34.1	0.945	1.919	12.0	19.6	5 31	14 57.43	-17 5.4	1.803	2.765	8.2	18.9
6 10	14 46.33	-26 38.0	0.968	1.900	17.1	19.8	6 10	14 52.12	-16 45.9	1.886	2.788	11.7	19.1
6 20	14 43.74	-25 46.4	1.008	1.882	21.7	20.0	6 20	14 49.06	-16 35.2	1.990	2.810	14.6	19.4
192301	1992 SQ ₁₀		5 11.1 321°09'	0°8'/11.4	16		23086	1999 XB ₁₁₈		5 11.2 49°80'	1°6'/12.1	18	
4 11	15 36.82	-19 38.6	1.075	1.980	17.0	20.8	4 11	15 36.20	-22 57.1	1.773	2.650	12.9	18.7
4 21	15 31.70	-19 45.4	1.005	1.965	12.2	20.5	4 21	15 30.13	-22 54.5	1.709	2.654	9.2	18.5
5 1	15 23.35	-19 42.0	0.955	1.950	6.5	20.1	5 1	15 22.06	-22 41.4	1.669	2.659	5.2	18.3
5 11	15 12.95	-19 29.7	0.927	1.936	0.9	19.7	5 11	15 12.95	-22 19.1	1.656	2.664	1.7	18.0
5 21	15 2.17	-19 11.9	0.921	1.923	6.1	20.0	5 21	15 3.87	-21 50.5	1.669	2.669	4.3	18.2
5 31	14 52.85	-18 54.4	0.938	1.911	12.2	20.3	5 31	14 55.89	-21 19.9	1.709	2.674	8.3	18.5
6 10	14 46.43	-18 43.6	0.974	1.900	17.6	20.6	6 10	14 49.87	-20 52.2	1.772	2.679	12.0	18.7
6 20	14 43.71	-18 44.1	1.026	1.889	22.2	20.8	6 20	14 46.26	-20 31.1	1.856	2.685	15.2	18.9
379841	2011 UV ₁₇₃		5 11.1 239°77'	4°6'/8.5	17		311186	2004 XV ₉		5 11.2 167°82'	1°1'/10.6	16	
4 11	15 39.31	-8 4.7	1.739	2.625	12.6	21.7	4 11	15 39.66	-16 15.1	1.703	2.587	12.9	21.3
4 21	15 32.38	-7 17.0	1.659	2.609	9.1	21.5	4 21	15 32.52	-15 56.1	1.639	2.590	9.0	21.0
5 1	15 23.30	-6 30.0	1.604	2.591	5.7	21.3	5 1	15 23.30	-15 31.8	1.600	2.594	4.6	20.8
5 11	15 12.95	-5 49.0	1.576	2.572	4.7	21.1	5 11	15 12.97	-15 5.0	1.587	2.597	1.1	20.5
5 21	15 2.41	-5 18.8	1.575	2.553	7.5	21.3	5 21	15 2.69	-14 39.3	1.602	2.599	5.0	20.8
5 31	14 52.82	-5 3.4	1.600	2.533	11.3	21.4	5 31	14 53.57	-14 18.8	1.644	2.600	9.3	21.1
6 10	14 45.13	-5 5.1	1.648	2.512	15.1	21.6	6 10	14 46.50	-14 7.0	1.710	2.601	13.2	21.3
6 20	14 39.93	-5 23.7	1.714	2.490	18.3	21.8	6 20	14 41.97	-14 5.8	1.795	2.602	16.4	21.5
505057	2011 SC ₈₃		5 11.1 85°99'	2°4'/9.2	17		405111	2002 CG ₂₆₀		5 11.2 155°50'	3°1'/12.9	16	
4 11	15 32.93	-12 58.6	2.19										

EPHEMERIDES

5 11.2

5 11.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
361600	2007 <i>RU</i> ₃₁₆		5 11.2 300°79	5°8/13.8	17		285210	1997 <i>BK</i> ₆		5 11.2 345°00	3°1/ 9.7	15	
4 11	15 38.54	-30 31.8	1.321	2.190	16.9	20.8	4 11	15 33.28	-14 17.4	0.975	1.894	17.0	20.2
4 21	15 32.75	-30 56.5	1.243	2.175	13.1	20.5	4 21	15 29.10	-13 33.1	0.918	1.885	11.9	19.9
5 1	15 23.85	-31 0.5	1.185	2.161	9.0	20.2	5 1	15 21.92	-12 42.2	0.880	1.877	6.4	19.6
5 11	15 13.00	-30 41.5	1.150	2.147	6.0	20.0	5 11	15 13.00	-11 51.7	0.863	1.870	3.2	19.4
5 21	15 1.79	-30 0.8	1.139	2.133	7.0	20.0	5 21	15 3.97	-11 9.5	0.868	1.865	7.9	19.6
5 31	14 51.95	-29 4.5	1.151	2.119	11.1	20.2	5 31	14 56.51	-10 42.9	0.893	1.860	13.6	19.9
6 10	14 44.91	-28 2.6	1.185	2.106	15.5	20.4	6 10	14 51.89	-10 36.3	0.937	1.857	18.7	20.2
6 20	14 41.39	-27 4.0	1.237	2.093	19.6	20.7	6 20	14 50.72	-10 50.5	0.996	1.856	23.0	20.4
181591	2006 <i>VS</i> ₁₄₅		5 11.2 155°85	4°6/14.5	18		287974	2003 <i>UQ</i> ₁₄₈		5 11.2 191°71	0°0/11.1	18	
4 11	15 36.66	-33 7.9	2.386	3.216	11.6	20.3	4 11	15 34.53	-20 32.3	2.319	3.192	10.4	20.8
4 21	15 30.24	-33 26.5	2.311	3.218	9.1	20.2	4 21	15 28.59	-19 45.5	2.245	3.191	7.3	20.6
5 1	15 22.08	-33 30.4	2.261	3.220	6.6	20.0	5 1	15 21.17	-18 50.2	2.197	3.189	3.8	20.4
5 11	15 12.97	-33 19.1	2.237	3.222	4.8	19.9	5 11	15 13.00	-17 49.3	2.177	3.187	0.1	20.0
5 21	15 3.82	-32 53.6	2.241	3.223	5.2	19.9	5 21	15 4.86	-16 47.0	2.187	3.184	3.7	20.4
5 31	14 55.57	-32 17.5	2.271	3.225	7.3	20.1	5 31	14 57.56	-15 47.6	2.225	3.182	7.2	20.6
6 10	14 48.96	-31 35.5	2.328	3.227	9.9	20.2	6 10	14 51.72	-14 55.6	2.288	3.178	10.4	20.8
6 20	14 44.49	-30 52.6	2.407	3.228	12.3	20.4	6 20	14 47.76	-14 13.8	2.374	3.175	13.1	21.0
232734	2004 <i>EQ</i> ₇₃		5 11.2 49°77	2°3/ 9.8	18		380494	2004 <i>CX</i> ₄₉		5 11.2 192°01	18°1/27.9	18	
4 11	15 35.17	-12 10.5	1.816	2.707	11.9	19.8	4 11	15 39.97	+18 7.6	1.228	2.071	19.5	20.5
4 21	15 29.18	-11 54.1	1.766	2.720	8.2	19.6	4 21	15 33.17	+20 42.6	1.200	2.071	18.3	20.4
5 1	15 21.48	-11 37.1	1.740	2.733	4.5	19.4	5 1	15 23.76	+22 42.8	1.192	2.070	18.1	20.4
5 11	15 12.96	-11 22.6	1.741	2.747	2.4	19.3	5 11	15 13.04	+23 55.9	1.202	2.068	19.0	20.4
5 21	15 4.57	-11 13.4	1.769	2.761	5.3	19.5	5 21	15 2.49	+24 16.7	1.230	2.065	20.7	20.5
5 31	14 57.24	-11 12.1	1.824	2.775	8.9	19.7	5 31	14 53.55	+23 46.3	1.273	2.062	22.7	20.7
6 10	14 51.68	-11 20.3	1.901	2.790	12.3	20.0	6 10	14 47.23	+22 32.4	1.330	2.059	24.7	20.8
6 20	14 48.29	-11 38.6	2.000	2.804	15.1	20.2	6 20	14 44.00	+20 44.5	1.396	2.054	26.4	21.0
128431	2004 <i>NO</i> ₁		5 11.2 306°01	5°0/ 8.4	17		443776	2015 <i>MC</i> ₆₇		5 11.2 326°79	1°9/10.2	16	
4 11	15 34.79	- 7 45.4	1.526	2.424	13.3	19.6	4 11	15 34.21	-13 15.8	1.710	2.604	12.3	20.2
4 21	15 29.40	- 6 59.2	1.453	2.408	9.6	19.4	4 21	15 28.90	-13 8.1	1.632	2.588	8.6	19.9
5 1	15 21.83	- 6 14.7	1.404	2.392	6.2	19.1	5 1	15 21.55	-12 58.9	1.578	2.573	4.6	19.6
5 11	15 12.97	- 5 38.0	1.379	2.376	5.2	19.0	5 11	15 13.01	-12 50.8	1.550	2.558	2.0	19.4
5 21	15 3.96	- 5 14.1	1.380	2.360	8.0	19.1	5 21	15 4.28	-12 46.7	1.549	2.544	5.4	19.6
5 31	14 55.95	- 5 7.1	1.405	2.345	12.0	19.3	5 31	14 56.46	-12 49.6	1.573	2.530	9.6	19.8
6 10	14 49.94	- 5 18.7	1.451	2.330	15.9	19.5	6 10	14 50.45	-13 1.7	1.619	2.517	13.5	20.0
6 20	14 46.50	- 5 48.3	1.514	2.316	19.2	19.7	6 20	14 46.83	-13 24.3	1.686	2.505	16.8	20.2
115253	2003 <i>SN</i> ₁₅₇		5 11.2 134°97	1°4/10.2	18		354103	2001 <i>YK</i> ₂₆		5 11.2 229°37	1°0/10.5	18	
4 11	15 34.71	-15 47.5	2.042	2.927	11.0	19.5	4 11	15 35.35	-14 55.2	2.645	3.520	9.2	21.6
4 21	15 28.80	-15 10.5	1.980	2.932	7.6	19.3	4 21	15 29.09	-14 48.9	2.562	3.509	6.4	21.4
5 1	15 21.28	-14 29.0	1.943	2.937	3.9	19.0	5 1	15 21.44	-14 40.3	2.505	3.498	3.3	21.1
5 11	15 12.97	-13 46.3	1.934	2.942	1.4	18.9	5 11	15 13.01	-14 30.8	2.478	3.486	1.0	20.9
5 21	15 4.73	-13 6.2	1.952	2.946	4.5	19.1	5 21	15 4.49	-14 22.3	2.480	3.474	3.7	21.1
5 31	14 57.41	-12 32.6	1.998	2.951	8.2	19.3	5 31	14 56.60	-14 16.9	2.510	3.462	6.8	21.3
6 10	14 51.71	-12 8.6	2.068	2.955	11.5	19.5	6 10	14 49.95	-14 16.7	2.567	3.449	9.7	21.5
6 20	14 48.02	-11 55.8	2.159	2.959	14.3	19.7	6 20	14 44.99	-14 23.0	2.647	3.435	12.2	21.6
304667	2006 <i>WY</i> ₇₂		5 11.2 284°61	0°4/11.4	16		123553	2000 <i>XN</i> ₃₉		5 11.2 96°24	6°8/15.8	18	R
4 11	15 33.80	-20 16.8	2.137	3.015	10.9	20.8	4 11	15 40.60	-37 30.2	1.952	2.767	14.4	19.2
4 21	15 28.28	-19 58.4	2.057	3.005	7.7	20.6	4 21	15 33.31	-38 0.0	1.891	2.782	11.7	19.0
5 1	15 21.09	-19 32.3	2.002	2.994	4.1	20.4	5 1	15 23.77	-38 8.9	1.853	2.795	9.0	18.9
5 11	15 12.97	-19 0.4	1.974	2.984	0.4	20.0	5 11	15 13.07	-37 55.2	1.839	2.809	7.1	18.8
5 21	15 4.77	-18 25.8	1.974	2.973	3.8	20.3	5 21	15 2.45	-37 20.4	1.851	2.823	7.1	18.8
5 31	14 57.38	-17 52.1	2.001	2.963	7.6	20.5	5 31	14 53.14	-36 29.2	1.890	2.836	9.0	19.0
6 10	14 51.53	-17 23.4	2.054	2.953	11.0	20.7	6 10	14 46.07	-35 29.0	1.952	2.849	11.6	19.1
6 20	14 47.69	-17 2.5	2.127	2.942	13.9	20.9	6 20	14 41.72	-34 27.0	2.036	2.862	14.1	19.3
508698	2017 <i>US</i> ₁₉		5 11.2 276°55	3°9/ 8.7	17		35224	1995 <i>BN</i> ₁		5 11.2 78°04	0°9/10.8	18	
4 11	15 35.27	-10 48.5	1.598	2.494	12.9	21.1	4 11	15 39.38	-17 5.7	1.343	2.237	15.0	18.7
4 21	15 29.63	- 9 50.3	1.527	2.482	9.2	20.8	4 21	15 32.58	-16 46.8	1.295	2.251	10.4	18.5
5 1	15 21.90	- 8 50.0	1.479	2.470	5.4	20.6	5 1	15 23.40	-16 21.1	1.270	2.265	5.3	18.2
5 11	15 12.98	- 7 53.4	1.457	2.458	4.1	20.4	5 11	15 13.06	-15 52.2	1.269	2.279	0.9	18.0
5 21	15 3.97	- 7 6.2	1.461	2.446	7.1	20.6	5 21	15 2.94	-15 24.4	1.295	2.293	5.5	18.3
5 31	14 56.00	- 6 33.7	1.490	2.433	11.2	20.8	5 31	14 54.34	-15 2.7	1.345	2.307	10.4	18.6
6 10	14 49.97	- 6 18.8	1.541	2.421	15.1	21.0	6 10	14 48.20	-14 51.1	1.417	2.321	14.6	18.9
6 20	14 46.42	- 6 22.2	1.611	2.409	18.4	21.2	6 20	14 44.97	-14 51.5	1.507	2.335	18.1	19.2
258889	2002 <i>QL</i> ₆₃		5 11.2 202°94	0°7/11.6	17		921	Jovita		5 11.2 327°69	3°9/ 7.8	18	
4 11	15 38.59	-21 3.2	2.023	2.894	11.8	21.9	4 11	15 30.52	-11 27.4	1.858	2.756	11.3	14.2
4 21	15 31.67	-20 49.2	1.946	2.890	8.3	21.6	4 21	15 26.10	- 9 56.2	1.785	2.742	8.0	14.0
5 1	15 22.87	-20 26.3	1.894	2.885	4.5	21.4	5 1	15 20.00	- 8 20.8	1.737	2.728	4.8	13.8
5 11	15 13.01	-19 56.3	1.869	2.879	0.7	21.1	5 11	15 13.01	- 6 47.9	1.716	2.715	4.1	13.7
5 21	15 3.10	-19 22.1	1.874	2.873	4.0	21.3	5 21	15 5.97	- 5 24.3	1.723	2.702	6.8	13.8
5 31	14 54.14	-18 47.7	1.906	2.865	8.0	21.5	5 31	14 59.79	- 4 16.0	1.755	2.689	10.4	14.0
6 10	14 46.94	-18 17.5	1.963	2.858	11.6	21.8	6 10	14 55.18	- 3 26.8	1.809	2.678	13.7	14.2
6 20	14 42.03	-17 55.0	2.041	2.849	14.7	21.9	6 20	14 52.61	- 2 57.9	1.883	2.667	16.6	14.4
360732	2004 <i>TH</i> ₂₈₅		5 11.2 39°26	3°4/ 9.2	16		62729	2000 <i>TY</i>					

EPHEMERIDES

5 11.2

5 11.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
221318	2005 VF ₅₃		5 11.2 179°49	1°9/ 9.9 18			342885	2008 YK ₇₄		5 11.2 174°08	0°1/11.1 17		
4 11	15 35.88	-14 24.7	2.016	2.901	11.2	20.1	4 11	15 35.32	-18 35.5	2.132	3.010	10.9	21.0
4 21	15 29.67	-13 43.8	1.950	2.902	7.8	19.9	4 21	15 29.27	-18 18.6	2.063	3.011	7.6	20.8
5 1	15 21.79	-12 59.1	1.909	2.903	4.1	19.7	5 1	15 21.60	-17 55.7	2.019	3.012	3.9	20.6
5 11	15 13.05	-12 14.3	1.896	2.903	2.0	19.5	5 11	15 13.07	-17 28.7	2.003	3.013	0.1	20.2
5 21	15 4.35	-11 33.4	1.911	2.903	4.9	19.7	5 21	15 4.55	-17 0.6	2.015	3.013	3.9	20.6
5 31	14 56.57	-11 0.3	1.953	2.902	8.6	20.0	5 31	14 56.90	-16 34.9	2.054	3.013	7.6	20.8
6 10	14 50.44	-10 37.9	2.020	2.901	11.9	20.2	6 10	14 50.83	-16 14.8	2.119	3.013	10.9	21.0
6 20	14 46.39	-10 27.9	2.107	2.900	14.8	20.4	6 20	14 46.78	-16 2.7	2.205	3.013	13.7	21.2
241309	2007 VL ₂		5 11.2 162°96	0°4/11.5 18			275122	2009 VN ₆₀		5 11.2 187°03	7°5/ 4.7 18		
4 11	15 34.84	-20 32.9	2.186	3.061	10.8	21.2	4 11	15 34.64	+ 2 31.4	2.169	3.040	11.1	20.9
4 21	15 28.91	-20 14.3	2.116	3.062	7.6	21.0	4 21	15 28.67	+ 3 58.1	2.116	3.040	8.9	20.7
5 1	15 21.39	-19 48.1	2.072	3.064	4.0	20.8	5 1	15 21.23	+ 5 15.5	2.089	3.039	7.6	20.7
5 11	15 13.05	-19 16.3	2.056	3.066	0.5	20.5	5 11	15 13.06	+ 6 17.6	2.088	3.038	7.8	20.7
5 21	15 4.72	-18 41.9	2.068	3.067	3.7	20.8	5 21	15 4.95	+ 7 0.0	2.114	3.036	9.5	20.8
5 31	14 57.26	-18 8.5	2.107	3.068	7.3	21.0	5 31	14 57.67	+ 7 20.3	2.164	3.034	11.7	20.9
6 10	14 51.36	-17 39.9	2.172	3.069	10.6	21.2	6 10	14 51.85	+ 7 18.9	2.236	3.031	13.9	21.1
6 20	14 47.43	-17 18.7	2.259	3.070	13.3	21.4	6 20	14 47.89	+ 6 57.7	2.326	3.027	15.9	21.2
215835	2005 CZ ₁₅		5 11.2 246°08	2°9/13.1 17			211384	2002 UL ₄		5 11.2 246°93	14°3/ 8.2 18		
4 11	15 36.18	-27 15.9	1.997	2.857	12.4	20.4	4 11	15 48.99	+12 8.8	1.139	1.995	19.9	19.3
4 21	15 30.11	-27 11.8	1.920	2.852	9.2	20.2	4 21	15 39.84	+12 27.6	1.083	1.989	17.0	19.1
5 1	15 22.12	-26 54.4	1.867	2.847	5.7	20.0	5 1	15 27.42	+12 13.8	1.047	1.983	14.9	18.9
5 11	15 13.06	-26 24.1	1.840	2.843	3.0	19.8	5 11	15 13.18	+11 18.7	1.033	1.977	14.4	18.9
5 21	15 3.95	-25 43.6	1.841	2.838	4.4	19.9	5 21	14 58.92	+ 9 40.4	1.040	1.970	16.1	18.9
5 31	14 55.81	-24 57.3	1.868	2.833	7.8	20.1	5 31	14 46.47	+ 7 24.0	1.070	1.963	19.0	19.1
6 10	14 49.48	-24 10.7	1.921	2.828	11.3	20.3	6 10	14 37.14	+ 4 39.8	1.119	1.956	22.4	19.3
6 20	14 45.45	-23 28.9	1.995	2.822	14.3	20.5	6 20	14 31.52	+ 1 39.2	1.184	1.949	25.4	19.5
501225	2013 UY ₁₃		5 11.2 164°97	5°5/15.6 17			398500	2011 UN ₁₈₇		5 11.2 216°62	0°6/10.7 18		
4 11	15 39.80	-36 56.5	2.437	3.244	12.1	22.2	4 11	15 32.66	-19 4.1	2.481	3.358	9.7	21.1
4 21	15 32.43	-37 5.6	2.362	3.249	9.8	22.1	4 21	15 27.24	-18 8.4	2.405	3.354	6.7	20.9
5 1	15 23.24	-36 57.1	2.311	3.255	7.4	21.9	5 1	15 20.48	-17 5.5	2.356	3.349	3.4	20.7
5 11	15 13.09	-36 30.1	2.286	3.259	5.7	21.8	5 11	15 13.05	-15 58.5	2.335	3.345	0.6	20.5
5 21	15 2.97	-35 46.2	2.289	3.263	5.8	21.8	5 21	15 5.65	-14 51.6	2.344	3.340	3.7	20.7
5 31	14 53.88	-34 49.4	2.320	3.266	7.6	21.9	5 31	14 58.98	-13 49.1	2.382	3.335	7.0	20.9
6 10	14 46.59	-33 45.6	2.376	3.269	10.0	22.1	6 10	14 53.63	-12 54.9	2.445	3.330	10.0	21.1
6 20	14 41.57	-32 40.9	2.456	3.271	12.3	22.3	6 20	14 49.99	-12 11.6	2.530	3.325	12.5	21.3
214620	2006 RG ₆₆		5 11.2 281°59	5°5/ 8.4 17			309154	2007 AF ₄		5 11.2 197°94	0°0/11.2 17		
4 11	15 37.01	- 6 20.0	1.507	2.402	13.6	20.2	4 11	15 33.54	-19 10.4	2.811	3.681	8.9	21.8
4 21	15 30.99	- 5 38.3	1.437	2.389	10.0	19.9	4 21	15 27.76	-18 50.0	2.733	3.678	6.2	21.6
5 1	15 22.69	- 5 0.6	1.391	2.376	6.6	19.7	5 1	15 20.74	-18 24.3	2.683	3.675	3.2	21.4
5 11	15 13.08	- 4 32.4	1.369	2.363	5.7	19.6	5 11	15 13.07	-17 54.9	2.661	3.671	0.1	21.1
5 21	15 3.33	- 4 18.8	1.373	2.350	8.4	19.7	5 21	15 5.38	-17 24.1	2.669	3.667	3.1	21.4
5 31	14 54.66	- 4 22.9	1.401	2.337	12.3	19.9	5 31	14 58.33	-16 54.8	2.706	3.662	6.1	21.6
6 10	14 48.06	- 4 45.8	1.450	2.325	16.1	20.1	6 10	14 52.48	-16 29.7	2.769	3.657	8.9	21.7
6 20	14 44.12	- 5 26.3	1.517	2.312	19.5	20.3	6 20	14 48.19	-16 10.8	2.855	3.651	11.2	21.9
205682	2001 YR ₁₉		5 11.2 236°82	3°3/13.1 17			28314	1999 CG ₁₀₀		5 11.2 305°27	1°6/10.1 18		
4 11	15 39.37	-27 36.5	1.594	2.459	14.7	20.5	4 11	15 33.91	-14 40.2	1.963	2.852	11.2	18.1
4 21	15 32.77	-27 25.8	1.515	2.450	10.9	20.2	4 21	15 28.42	-14 13.1	1.891	2.845	7.8	17.9
5 1	15 23.66	-26 57.5	1.459	2.441	6.8	20.0	5 1	15 21.21	-13 42.4	1.845	2.839	4.1	17.7
5 11	15 13.10	-26 12.3	1.428	2.432	3.5	19.7	5 11	15 13.07	-13 11.2	1.825	2.832	1.7	17.5
5 21	15 2.41	-25 13.5	1.423	2.421	5.2	19.8	5 21	15 4.89	-12 43.0	1.832	2.826	4.8	17.7
5 31	14 52.95	-24 7.8	1.445	2.411	9.4	20.0	5 31	14 57.57	-12 21.4	1.866	2.820	8.6	17.9
6 10	14 45.81	-23 3.3	1.490	2.400	13.6	20.3	6 10	14 51.87	-12 9.3	1.924	2.814	12.0	18.1
6 20	14 41.59	-22 6.6	1.555	2.389	17.3	20.5	6 20	14 48.26	-12 8.1	2.003	2.809	15.0	18.3
68733	2002 EF ₂₅		5 11.2 15°45	5°4/ 6.7 18			51661	2001 JO ₆		5 11.2 303°74	4°2/13.4 18		
4 11	15 30.61	- 6 46.1	1.828	2.725	11.5	18.5	4 11	15 36.68	-28 31.9	1.441	2.313	15.6	18.6
4 21	15 26.04	- 5 12.7	1.777	2.729	8.4	18.3	4 21	15 31.24	-28 35.8	1.357	2.294	11.8	18.3
5 1	15 19.92	- 3 41.8	1.751	2.734	5.9	18.2	5 1	15 23.03	-28 20.9	1.294	2.275	7.7	18.0
5 11	15 13.04	- 2 20.1	1.752	2.739	5.7	18.2	5 11	15 13.11	-27 46.6	1.254	2.256	4.4	17.7
5 21	15 6.26	- 1 13.8	1.779	2.744	7.9	18.3	5 21	15 2.85	-26 55.4	1.240	2.237	5.9	17.8
5 31	15 0.41	- 0 27.1	1.831	2.750	10.9	18.5	5 31	14 53.78	-25 53.7	1.249	2.219	10.2	18.0
6 10	14 56.14	- 0 1.5	1.905	2.757	13.8	18.7	6 10	14 47.15	-24 50.2	1.281	2.201	14.7	18.2
6 20	14 53.84	+ 0 3.8	1.997	2.764	16.3	18.9	6 20	14 43.68	-23 52.9	1.332	2.184	18.7	18.4
446798	1999 TE ₈₂		5 11.2 218°49	0°3/11.5 18			188952	2007 EA ₇₃		5 11.2 41°34	2°5/ 7.7 18		
4 11	15 30.03	-20 7.8	3.921	4.785	6.7	22.8	4 11	15 26.30	- 6 20.4	4.200	5.080	5.9	20.1
4 21	15 25.09	-19 55.0	3.835	4.777	4.7	22.6	4 21	15 22.43	- 5 42.5	4.137	5.081	4.3	20.0
5 1	15 19.29	-19 37.9	3.778	4.768	2.5	22.4	5 1	15 17.90	- 5 6.2	4.102	5.083	2.9	19.9
5 11	15 13.03	-19 17.9	3.750	4.760	0.3	22.2	5 11	15 13.03	- 4 33.8	4.096	5.084	2.6	19.9
5 21	15 6.74	-18 56.2	3.752	4.750	2.3	22.4	5 21	15 8.17	- 4 6.8	4.119	5.085	3.8	20.0
5 31	15 0.87	-18 34.6	3.784	4.741	4.5	22.6	5 31	15 3.69	- 3 46.8	4.170	5.087	5.4	20.1
6 10	14 55.81	-18 15.1	3.843	4.731	6.6	22.7	6 10	14 59.89	- 3 34.6	4.247	5.088	7.0	20.2
6 20	14 51.85	-17 59.2	3.927	4.721	8.4	22.8	6 20	14 57.00	- 3 30.6	4.346	5.090	8.4	20.3
416178	2002 SM ₁₄		5 11.2 192°31	1°8/12.2 17			92310	2000 FX ₄₃		5 11.2 345°49	1°2/11.6 17		
4 11	15 39.6												

EPHEMERIDES

5 11.2

5 11.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
497241	2005 <i>EN</i> ₂₀₄		5 11.2 339°86	2°9/ 9.5 17			43712	5054 <i>T</i> ₋₂		5 11.2 236°89	2°7/12.9 18		
4 11	15 34.40	-14 42.0	1.313	2.217	14.6	21.0	4 11	15 37.01	-27 3.0	1.771	2.636	13.4	18.9
4 21	15 29.32	-13 38.8	1.252	2.212	10.2	20.8	4 21	15 30.86	-26 42.0	1.695	2.631	9.9	18.7
5 1	15 21.86	-12 28.8	1.212	2.208	5.4	20.5	5 1	15 22.59	-26 5.2	1.642	2.626	6.0	18.4
5 11	15 13.12	-11 18.5	1.198	2.204	3.0	20.3	5 11	15 13.14	-25 14.0	1.615	2.620	2.8	18.2
5 21	15 4.37	-10 15.3	1.207	2.200	6.9	20.5	5 21	15 3.67	-24 12.1	1.615	2.614	4.6	18.3
5 31	14 56.92	-9 26.3	1.241	2.197	11.7	20.8	5 31	14 55.30	-23 5.9	1.642	2.608	8.5	18.5
6 10	14 51.76	-8 56.1	1.295	2.195	16.1	21.0	6 10	14 48.97	-22 2.1	1.694	2.602	12.4	18.8
6 20	14 49.40	-8 45.8	1.367	2.193	19.7	21.3	6 20	14 45.18	-21 6.4	1.766	2.596	15.7	19.0
302047	2000 <i>SR</i> ₃₅₀		5 11.2 239°76	2°9/ 8.9 18			204584	2005 <i>GE</i> ₄₆		5 11.2 223°72	0°3/11.4 17		
4 11	15 34.44	-8 4.0	2.747	3.625	8.8	21.5	4 11	15 35.05	-20 17.6	2.183	3.059	10.8	21.1
4 21	15 28.43	-7 42.3	2.664	3.610	6.3	21.3	4 21	15 29.13	-19 57.4	2.107	3.054	7.6	20.9
5 1	15 21.13	-7 22.2	2.608	3.594	3.9	21.1	5 1	15 21.57	-19 29.7	2.056	3.048	4.0	20.7
5 11	15 13.11	-7 7 6.1	2.581	3.578	3.0	21.0	5 11	15 13.13	-18 56.3	2.033	3.043	0.4	20.3
5 21	15 5.00	-6 56.4	2.583	3.561	4.9	21.1	5 21	15 4.65	-18 20.2	2.038	3.037	3.7	20.6
5 31	14 57.46	-6 54.9	2.613	3.544	7.6	21.3	5 31	14 57.00	-17 45.3	2.071	3.032	7.4	20.8
6 10	14 51.08	-7 2 7	2.668	3.526	10.2	21.4	6 10	14 50.90	-17 15.4	2.129	3.025	10.8	21.0
6 20	14 46.26	-7 20.3	2.746	3.508	12.4	21.6	6 20	14 46.80	-16 53.2	2.209	3.019	13.6	21.2
416154	2002 <i>RY</i> ₁₀₉		5 11.2 203°07	4°4/14.1 17			217101	2001 <i>XM</i> ₂₉		5 11.2 202°34	0°1/11.3 18		
4 11	15 40.50	-31 40.4	2.139	2.974	12.6	21.5	4 11	15 36.67	-20 10.6	2.497	3.365	9.9	20.7
4 21	15 33.15	-31 50.0	2.056	2.969	9.8	21.3	4 21	15 30.08	-19 40.0	2.416	3.359	7.0	20.5
5 1	15 23.74	-31 43.7	1.998	2.964	6.7	21.1	5 1	15 22.01	-19 1.9	2.361	3.353	3.7	20.2
5 11	15 13.16	-31 20.8	1.966	2.957	4.6	20.9	5 11	15 13.14	-18 18.5	2.336	3.346	0.1	19.9
5 21	15 2.47	-30 42.8	1.962	2.950	5.2	20.9	5 21	15 4.26	-17 32.7	2.340	3.338	3.5	20.2
5 31	14 52.79	-29 53.9	1.986	2.943	8.0	21.1	5 31	14 56.12	-16 48.5	2.373	3.329	6.9	20.4
6 10	14 45.01	-29 0.3	2.035	2.934	11.1	21.3	6 10	14 49.40	-16 9.4	2.433	3.319	10.0	20.6
6 20	14 39.67	-28 7.9	2.107	2.925	14.0	21.4	6 20	14 44.52	-15 38.3	2.515	3.309	12.6	20.7
325209	2008 <i>GS</i> ₄		5 11.2 357°27	0°9/11.6 17			374326	2005 <i>TN</i> ₆₄		5 11.2 258°87	0°3/11.3 17		
4 11	15 34.63	-20 42.3	1.212	2.113	15.8	20.5	4 11	15 37.39	-19 47.0	1.834	2.714	12.4	22.1
4 21	15 29.75	-20 35.0	1.152	2.109	11.2	20.2	4 21	15 31.13	-19 32.2	1.750	2.698	8.8	21.9
5 1	15 22.19	-20 16.1	1.112	2.106	6.0	19.9	5 1	15 22.76	-19 9.0	1.690	2.682	4.6	21.6
5 11	15 13.13	-19 48.1	1.095	2.105	0.9	19.6	5 11	15 13.16	-18 39.3	1.656	2.666	0.3	21.2
5 21	15 4.01	-19 15.3	1.102	2.104	5.4	19.9	5 21	15 3.37	-18 6.1	1.650	2.650	4.4	21.5
5 31	14 56.31	-18 43.9	1.133	2.105	10.7	20.2	5 31	14 54.49	-17 33.9	1.671	2.633	8.8	21.7
6 10	14 51.16	-18 20.0	1.184	2.106	15.4	20.4	6 10	14 47.47	-17 7.3	1.716	2.616	12.8	21.9
6 20	14 49.12	-18 7.5	1.253	2.109	19.4	20.7	6 20	14 42.88	-16 49.7	1.782	2.598	16.2	22.1
373032	2011 <i>EM</i> ₂₃		5 11.2 86°36	8°6/ 5.5 18			134697	1999 <i>XG</i> ₁₀₅		5 11.2 253°30	1°8/12.1 18		
4 11	15 36.50	+ 4 3.4	1.810	2.683	12.8	20.9	4 11	15 39.99	-22 43.1	1.720	2.592	13.4	20.4
4 21	15 29.94	+ 5 20.7	1.785	2.708	10.4	20.8	4 21	15 33.16	-22 51.2	1.634	2.577	9.7	20.2
5 1	15 21.84	+ 6 23.4	1.784	2.732	8.8	20.7	5 1	15 23.92	-22 49.0	1.573	2.561	5.5	19.9
5 11	15 13.12	+ 7 5.6	1.808	2.757	8.9	20.8	5 11	15 13.20	-22 36.5	1.537	2.545	1.9	19.6
5 21	15 4.70	+ 7 24.2	1.857	2.781	10.5	20.9	5 21	15 2.19	-22 15.9	1.529	2.528	4.7	19.7
5 31	14 57.44	+ 7 18.5	1.930	2.804	12.7	21.1	5 31	14 52.17	-21 51.2	1.547	2.511	9.2	20.0
6 10	14 51.96	+ 6 50.8	2.023	2.827	14.9	21.3	6 10	14 44.24	-21 27.6	1.589	2.494	13.3	20.2
6 20	14 48.57	+ 6 4.6	2.134	2.850	16.8	21.5	6 20	14 39.05	-21 9.8	1.652	2.476	16.9	20.4
317824	2003 <i>SF</i> ₂₈₄		5 11.2 147°16	0°6/10.7 16			351969	2006 <i>UR</i> ₁₄		5 11.2 111°91	0°9/10.7 17		
4 11	15 38.60	-18 26.7	1.966	2.842	11.8	21.7	4 11	15 35.46	-15 23.4	2.225	3.106	10.4	20.9
4 21	15 31.54	-17 44.2	1.906	2.854	8.2	21.4	4 21	15 29.34	-15 21.9	2.157	3.107	7.3	20.7
5 1	15 22.75	-16 54.4	1.871	2.865	4.2	21.2	5 1	15 21.66	-15 17.5	2.116	3.109	3.7	20.4
5 11	15 13.14	-16 0.8	1.865	2.875	0.7	21.0	5 11	15 13.16	-15 12.1	2.102	3.111	0.9	20.2
5 21	15 3.67	-15 7.5	1.888	2.884	4.4	21.3	5 21	15 4.65	-15 7.5	2.117	3.113	4.0	20.5
5 31	14 55.30	-14 19.6	1.938	2.893	8.3	21.5	5 31	14 56.95	-15 6.1	2.159	3.115	7.5	20.7
6 10	14 48.73	-13 41.0	2.014	2.901	11.7	21.7	6 10	14 50.75	-15 10.0	2.226	3.116	10.6	20.9
6 20	14 44.37	-13 14.2	2.110	2.908	14.6	22.0	6 20	14 46.48	-15 20.6	2.316	3.118	13.3	21.1
212691	2006 <i>XJ</i> ₂₅		5 11.2 127°30	2°5/13.3 18			501280	2013 <i>WO</i> ₄₃		5 11.2 218°12	0°2/11.1 17		
4 11	15 35.33	-27 37.4	2.710	3.557	9.9	21.2	4 11	15 37.16	-18 17.1	2.188	3.063	10.8	22.3
4 21	15 29.06	-27 39.3	2.644	3.569	7.3	21.0	4 21	15 30.63	-18 5.8	2.109	3.056	7.6	22.1
5 1	15 21.43	-27 31.0	2.603	3.580	4.6	20.8	5 1	15 22.38	-17 48.7	2.055	3.048	3.9	21.8
5 11	15 13.12	-27 13.1	2.591	3.591	2.6	20.7	5 11	15 13.18	-17 27.5	2.029	3.039	0.2	21.5
5 21	15 4.85	-26 47.4	2.607	3.602	3.5	20.8	5 21	15 3.88	-17 4.8	2.032	3.030	3.9	21.8
5 31	14 57.37	-26 16.7	2.652	3.612	6.1	21.0	5 31	14 55.40	-16 43.7	2.063	3.020	7.7	22.0
6 10	14 51.25	-25 44.7	2.724	3.622	8.6	21.2	6 10	14 48.50	-16 27.7	2.119	3.010	11.1	22.2
6 20	14 46.88	-25 14.7	2.818	3.631	10.9	21.3	6 20	14 43.64	-16 19.0	2.197	3.000	13.9	22.4
343669	2010 <i>OP</i> ₅₃		5 11.2 98°07	6°2/14.6 18			356821	2011 <i>UZ</i> ₃₈₉		5 11.2 216°52	3°2/13.6 18		
4 11	15 41.34	-34 43.3	2.088	2.911	13.3	21.2	4 11	15 36.22	-29 32.3	2.719	3.558	10.1	21.9
4 21	15 33.86	-35 38.0	2.021	2.919	10.7	21.0	4 21	15 29.85	-29 45.9	2.634	3.551	7.7	21.7
5 1	15 24.16	-36 16.2	1.977	2.926	8.1	20.9	5 1	15 21.94	-29 48.6	2.574	3.544	5.2	21.5
5 11	15 13.17	-36 35.2	1.959	2.933	6.3	20.8	5 11	15 13.17	-29 40.0	2.542	3.537	3.3	21.4
5 21	15 2.07	-36 35.0	1.968	2.940	6.7	20.8	5 21	15 4.30	-29 21.3	2.539	3.530	4.0	21.4
5 31	14 52.04	-36 18.4	2.003	2.948	8.7	20.9	5 31	14 56.13	-28 55.0	2.565	3.522	6.4	21.6
6 10	14 44.06	-35 51.1	2.063	2.955	11.3	21.1	6 10	14 49.34	-28 25.0	2.617	3.513	9.0	21.7
6 20	14 38.70	-35 19.3	2.144	2.962	13.8	21.3	6 20	14 44.37	-27 55.0	2.692	3.505	11.4	21.9
185137	2006 <i>SG</i> ₁₂₁		5 11.2 146°22	4°6/ 6.9 18			250742	2005 <i>ST</i> ₁₂					

EPHEMERIDES

5 11.2

5 11.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
441835	2009 <i>UH</i> ₅₃		5 11.2 268°53	1.6/12.4	18		356986	1997 <i>SA</i> ₄		5 11.2 281°14	5.3/13.0	17	
4 11	15 33.92	-23 38.1	2.696	3.557	9.5	21.3	4 11	15 42.88	-28 24.5	1.479	2.341	15.8	20.5
4 21	15 28.20	-23 46.5	2.613	3.550	6.9	21.1	4 21	15 35.93	-29 15.1	1.386	2.316	12.2	20.2
5 1	15 21.07	-23 47.6	2.557	3.543	4.0	21.0	5 1	15 25.73	-29 51.9	1.314	2.290	8.3	19.9
5 11	15 13.15	-23 41.8	2.529	3.536	1.7	20.8	5 11	15 13.29	-30 10.9	1.267	2.264	5.5	19.6
5 21	15 5.16	-23 30.5	2.530	3.528	3.2	20.9	5 21	15 0.09	-30 10.6	1.246	2.238	6.9	19.6
5 31	14 57.80	-23 16.0	2.559	3.521	6.1	21.1	5 31	14 47.89	-29 54.0	1.250	2.211	11.1	19.8
6 10	14 51.71	-23 1.2	2.615	3.514	8.9	21.2	6 10	14 38.26	-29 28.0	1.275	2.185	15.6	20.0
6 20	14 47.31	-22 48.9	2.693	3.506	11.4	21.4	6 20	14 32.16	-29 0.8	1.320	2.158	19.6	20.2
337011	1993 <i>VW</i> ₅		5 11.2 313°26	11.0/11.9	18		153461	2001 <i>RF</i> ₁		5 11.2 187°24	0.2/11.3	17	
4 11	15 53.13	-30 52.1	1.038	1.902	20.8	20.1	4 11	15 37.50	-19 58.6	2.258	3.129	10.7	21.6
4 21	15 44.62	-33 46.1	0.971	1.894	16.8	19.8	4 21	15 30.78	-19 35.5	2.184	3.128	7.5	21.4
5 1	15 30.96	-36 28.3	0.925	1.887	13.0	19.6	5 1	15 22.44	-19 4.9	2.136	3.127	4.0	21.2
5 11	15 13.38	-38 42.6	0.901	1.880	11.0	19.4	5 11	15 13.24	-18 28.9	2.116	3.126	0.2	20.9
5 21	14 54.31	-40 16.4	0.901	1.873	12.5	19.5	5 21	15 4.03	-17 50.6	2.125	3.123	3.7	21.2
5 31	14 36.88	-41 7.7	0.923	1.867	16.2	19.7	5 31	14 55.69	-17 13.7	2.162	3.120	7.4	21.4
6 10	14 23.75	-41 26.6	0.964	1.861	20.5	19.9	6 10	14 48.92	-16 42.0	2.226	3.116	10.6	21.6
6 20	14 16.26	-41 27.4	1.020	1.856	24.3	20.1	6 20	14 44.15	-16 18.3	2.311	3.111	13.4	21.8
36633	2000 <i>QG</i> ₁₇₁		5 11.2 261°02	0.1/11.3	18		263645	2008 <i>GD</i> ₈₃		5 11.2 132°14	3.6/8.8	18	
4 11	15 36.27	-20 10.2	1.912	2.790	12.0	19.3	4 11	15 37.01	-10 10.5	1.888	2.775	11.7	21.4
4 21	15 30.28	-19 41.4	1.826	2.774	8.5	19.0	4 21	15 30.45	-9 14.9	1.836	2.787	8.2	21.2
5 1	15 22.31	-19 3.1	1.764	2.757	4.5	18.7	5 1	15 22.24	-8 19.3	1.810	2.799	4.9	21.0
5 11	15 13.20	-18 17.9	1.730	2.740	0.2	18.3	5 11	15 13.23	-7 28.8	1.811	2.810	3.7	21.0
5 21	15 3.93	-17 29.4	1.723	2.722	4.3	18.6	5 21	15 4.39	-6 47.6	1.840	2.821	6.2	21.2
5 31	14 55.54	-16 42.8	1.743	2.704	8.6	18.9	5 31	14 56.60	-6 19.4	1.895	2.831	9.6	21.4
6 10	14 48.91	-16 2.8	1.788	2.686	12.4	19.0	6 10	14 50.56	-6 6.0	1.974	2.841	12.8	21.6
6 20	14 44.58	-15 33.1	1.853	2.667	15.7	19.2	6 20	14 46.66	-6 7.6	2.072	2.850	15.5	21.8
260946	2005 <i>SZ</i> ₁₇		5 11.2 183°50	2.2/9.2	18		103016	1999 <i>XH</i> ₁₀₅		5 11.2 218°92	2.1/12.4	18 R	
4 11	15 32.28	-12 24.4	2.566	3.449	9.1	21.0	4 11	15 38.78	-23 59.4	2.219	3.079	11.3	20.4
4 21	15 26.94	-11 37.1	2.498	3.449	6.4	20.9	4 21	15 31.86	-24 15.6	2.137	3.072	8.2	20.2
5 1	15 20.36	-10 48.0	2.458	3.449	3.5	20.7	5 1	15 23.10	-24 22.9	2.080	3.065	4.9	19.9
5 11	15 13.16	-10 0.4	2.446	3.449	2.3	20.6	5 11	15 13.26	-24 21.2	2.051	3.057	2.1	19.7
5 21	15 5.99	-9 17.7	2.462	3.448	4.5	20.7	5 21	15 3.27	-24 11.7	2.051	3.049	3.9	19.8
5 31	14 59.50	-8 42.9	2.507	3.447	7.4	20.9	5 31	14 54.11	-23 57.3	2.080	3.040	7.4	20.0
6 10	14 54.25	-8 18.3	2.577	3.446	10.1	21.1	6 10	14 46.60	-23 41.8	2.133	3.031	10.7	20.2
6 20	14 50.58	-8 4.9	2.668	3.445	12.4	21.3	6 20	14 41.25	-23 28.7	2.209	3.022	13.6	20.4
62155	2000 <i>SD</i> ₂₃		5 11.2 147°48	1.0/10.6	18		392640	2011 <i>UY</i> ₁₂₂		5 11.2 167°53	1.0/10.2	17	
4 11	15 38.81	-17 24.6	1.760	2.642	12.7	19.5	4 11	15 32.63	-16 6.3	2.826	3.702	8.6	21.9
4 21	15 31.88	-16 43.9	1.700	2.651	8.8	19.3	4 21	15 27.10	-15 27.0	2.757	3.706	5.9	21.7
5 1	15 23.02	-15 56.3	1.666	2.660	4.5	19.0	5 1	15 20.44	-14 43.8	2.716	3.709	3.1	21.5
5 11	15 13.21	-15 5.4	1.659	2.668	1.1	18.8	5 11	15 13.20	-13 59.5	2.704	3.712	1.1	21.4
5 21	15 3.53	-14 16.1	1.679	2.675	4.9	19.1	5 21	15 6.01	-13 16.8	2.721	3.715	3.5	21.6
5 31	14 55.03	-13 33.3	1.727	2.682	9.0	19.3	5 31	14 59.47	-12 38.8	2.767	3.717	6.4	21.7
6 10	14 48.50	-13 1.1	1.798	2.688	12.8	19.6	6 10	14 54.09	-12 7.9	2.840	3.718	9.0	21.9
6 20	14 44.37	-12 41.8	1.890	2.693	15.8	19.8	6 20	14 50.20	-11 45.9	2.935	3.720	11.2	22.1
423493	2005 <i>TG</i> ₁₁₁		5 11.2 265°72	0.7/11.6	17		461883	2006 <i>KP</i> ₃		5 11.2 340°96	0.2/11.2	17	
4 11	15 36.58	-21 22.9	1.703	2.584	13.1	21.8	4 11	15 34.39	-15 27.5	0.913	1.832	17.8	20.0
4 21	15 30.62	-21 1.3	1.627	2.575	9.3	21.5	4 21	15 30.47	-16 11.0	0.845	1.812	12.7	19.7
5 1	15 22.52	-20 29.0	1.574	2.566	5.0	21.3	5 1	15 23.04	-16 54.7	0.796	1.794	6.7	19.3
5 11	15 13.21	-19 48.1	1.547	2.557	0.8	20.9	5 11	15 13.26	-17 38.8	0.767	1.777	0.2	18.7
5 21	15 3.79	-19 2.5	1.547	2.547	4.5	21.2	5 21	15 2.89	-18 23.3	0.760	1.763	6.7	19.1
5 31	14 55.41	-18 17.7	1.573	2.538	9.0	21.4	5 31	14 53.94	-19 9.6	0.772	1.750	13.2	19.4
6 10	14 49.03	-17 39.1	1.623	2.528	13.0	21.6	6 10	14 48.12	-19 59.9	0.803	1.740	19.0	19.7
6 20	14 45.17	-17 10.6	1.693	2.518	16.5	21.8	6 20	14 46.36	-20 55.8	0.848	1.733	23.8	20.0
286331	2001 <i>XE</i> ₁₀		5 11.2 168°27	4.6/15.8	18		181859	1998 <i>XM</i> ₁₀		5 11.2 193°97	2.5/9.6	17	
4 11	15 36.39	-36 58.4	2.905	3.708	10.5	21.0	4 11	15 38.06	-11 24.1	2.115	2.995	10.9	20.2
4 21	15 29.86	-36 54.2	2.826	3.712	8.4	20.9	4 21	15 31.21	-10 58.5	2.044	2.993	7.7	20.0
5 1	15 21.89	-36 34.6	2.772	3.715	6.3	20.8	5 1	15 22.69	-10 32.1	1.999	2.990	4.3	19.8
5 11	15 13.20	-35 59.7	2.745	3.718	4.8	20.7	5 11	15 13.26	-10 8.0	1.983	2.987	2.6	19.6
5 21	15 4.56	-35 11.1	2.746	3.721	4.9	20.7	5 21	15 3.81	-9 49.3	1.995	2.983	5.2	19.8
5 31	14 56.74	-34 12.2	2.776	3.723	6.4	20.8	5 31	14 55.23	-9 38.8	2.035	2.978	8.7	20.0
6 10	14 50.37	-33 7.9	2.832	3.725	8.5	20.9	6 10	14 48.26	-9 38.3	2.099	2.972	11.9	20.2
6 20	14 45.83	-32 3.0	2.912	3.726	10.6	21.0	6 20	14 43.35	-9 48.8	2.185	2.966	14.7	20.4
272607	2005 <i>WH</i> ₁₅		5 11.2 158°36	0.7/10.8	15		47002	Harlingen		5 11.2 235°33	1.0/11.8	18	
4 11	15 37.72	-16 49.1	2.194	3.069	10.8	22.4	4 11	15 38.57	-21 54.8	1.973	2.843	12.0	19.8
4 21	15 30.89	-16 33.8	2.129	3.076	7.5	22.2	4 21	15 31.88	-21 43.2	1.887	2.830	8.6	19.5
5 1	15 22.46	-16 13.9	2.090	3.083	3.8	22.0	5 1	15 23.17	-21 21.8	1.826	2.816	4.7	19.3
5 11	15 13.21	-15 51.5	2.079	3.088	0.7	21.8	5 11	15 13.28	-20 52.0	1.793	2.802	1.1	19.0
5 21	15 4.01	-15 29.3	2.097	3.094	4.0	22.0	5 21	15 3.22	-20 16.5	1.788	2.787	4.1	19.2
5 31	14 55.72	-15 10.4	2.144	3.098	7.6	22.3	5 31	14 54.06	-19 39.7	1.810	2.771	8.2	19.4
6 10	14 49.02	-14 57.6	2.215	3.102	10.8	22.5	6 10	14 46.70	-19 6.3	1.857	2.755	12.0	19.6
6 20	14 44.34	-14 52.8	2.309	3.106	13.5	22.7	6 20	14 41.68	-18 40.3	1.925	2.739	15.3	19.8
9592	Clairaut		5 11.2 188°64	0.0/11.2	18		58241	1993 <i>HH</i> ₄		5 11.2 315°64	7.9/13		

EPHEMERIDES

5 11.2

5 11.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
508407	2016 <i>GL</i> ₂₅₇		5 11.2 357°68	0°7/10.9	17		499818	2011 <i>DX</i> ₉		5 11.2 87°62	14°1/20.8	17	
4 11	15 36.22	-16 9.5	1.288	2.189	15.0	19.7	4 11	15 56.66	-55 22.6	1.944	2.634	18.5	21.4
4 21	15 30.77	-16 17.3	1.227	2.186	10.5	19.4	4 21	15 46.25	-57 19.6	1.894	2.653	16.9	21.3
5 1	15 22.75	-16 20.6	1.187	2.183	5.5	19.1	5 1	15 31.34	-58 45.1	1.863	2.672	15.5	21.2
5 11	15 13.28	-16 21.6	1.172	2.182	0.7	18.8	5 11	15 13.52	-59 30.6	1.851	2.691	14.4	21.2
5 21	15 3.71	-16 22.9	1.181	2.182	5.5	19.1	5 21	14 55.18	-59 33.2	1.860	2.709	14.1	21.2
5 31	14 55.47	-16 28.0	1.214	2.182	10.7	19.4	5 31	14 39.01	-58 56.8	1.890	2.728	14.5	21.3
6 10	14 49.65	-16 40.3	1.269	2.183	15.2	19.7	6 10	14 26.91	-57 51.8	1.940	2.746	15.4	21.4
6 20	14 46.84	-17 1.6	1.341	2.186	19.0	19.9	6 20	14 19.70	-56 30.4	2.008	2.763	16.6	21.5
224198	2005 <i>RD</i> ₂₃		5 11.2 170°58	1°3/10.1	18		242878	2006 <i>HF</i> ₁₀₈		5 11.2 296°37	2°7/ 9.6	17	
4 11	15 35.93	-17 0.4	2.141	3.021	10.8	20.1	4 11	15 34.85	-12 11.9	1.803	2.695	11.9	20.6
4 21	15 29.67	-16 0.9	2.074	3.024	7.5	19.9	4 21	15 29.35	-11 41.2	1.723	2.677	8.4	20.3
5 1	15 21.85	-14 55.0	2.034	3.028	3.9	19.7	5 1	15 21.90	-11 8.6	1.667	2.660	4.7	20.0
5 11	15 13.26	-13 46.7	2.022	3.030	1.4	19.5	5 11	15 13.31	-10 37.6	1.637	2.642	2.8	19.9
5 21	15 4.76	-12 40.7	2.039	3.032	4.5	19.7	5 21	15 4.54	-10 12.3	1.634	2.624	5.8	20.0
5 31	14 57.17	-11 42.0	2.084	3.033	8.1	20.0	5 31	14 56.63	-9 56.4	1.657	2.607	9.8	20.2
6 10	14 51.16	-10 54.4	2.154	3.034	11.3	20.2	6 10	14 50.45	-9 52.8	1.703	2.589	13.5	20.4
6 20	14 47.13	-10 20.1	2.245	3.034	14.1	20.4	6 20	14 46.55	-10 2.5	1.768	2.572	16.7	20.6
143544	2003 <i>EX</i> ₃₀		5 11.2 155°13	3°9/ 7.9	18		500336	2012 <i>SD</i> ₄₁		5 11.2 177°97	0°8/10.6	18	
4 11	15 32.81	-6 45.6	2.408	3.292	9.6	20.2	4 11	15 34.72	-17 6.3	2.424	3.301	9.8	21.7
4 21	15 27.35	-5 54.5	2.349	3.295	6.9	20.1	4 21	15 28.75	-16 30.5	2.354	3.302	6.8	21.5
5 1	15 20.61	-5 5.9	2.316	3.298	4.6	19.9	5 1	15 21.38	-15 49.6	2.310	3.304	3.5	21.3
5 11	15 13.24	-4 23.6	2.311	3.301	4.1	19.9	5 11	15 13.30	-15 6.4	2.295	3.304	0.8	21.0
5 21	15 5.91	-3 51.0	2.334	3.304	6.0	20.0	5 21	15 5.25	-14 24.0	2.309	3.304	3.8	21.3
5 31	14 59.32	-3 30.6	2.384	3.307	8.6	20.2	5 31	14 57.97	-13 46.1	2.351	3.304	7.1	21.5
6 10	14 54.03	-3 23.5	2.458	3.309	11.1	20.3	6 10	14 52.07	-13 15.6	2.419	3.304	10.1	21.7
6 20	14 50.39	-3 29.8	2.552	3.311	13.4	20.5	6 20	14 47.94	-12 54.5	2.509	3.302	12.7	21.8
438366	2006 <i>SL</i> ₃₂₁		5 11.2 193°85	0°9/10.6	17		276885	2004 <i>RS</i> ₃₀₆		5 11.2 233°61	0°7/10.8	18	
4 11	15 34.66	-16 0.6	2.251	3.132	10.3	21.6	4 11	15 38.78	-15 47.9	2.318	3.191	10.4	20.9
4 21	15 28.81	-15 45.2	2.181	3.131	7.2	21.4	4 21	15 31.79	-15 48.9	2.230	3.177	7.3	20.7
5 1	15 21.44	-15 26.1	2.137	3.131	3.7	21.2	5 1	15 23.08	-15 46.7	2.169	3.162	3.8	20.4
5 11	15 13.26	-15 5.4	2.121	3.130	0.9	21.0	5 11	15 13.34	-15 42.8	2.137	3.146	0.7	20.2
5 21	15 5.07	-14 45.8	2.133	3.129	4.0	21.2	5 21	15 3.44	-15 38.7	2.134	3.130	4.0	20.4
5 31	14 57.67	-14 30.0	2.173	3.128	7.5	21.4	5 31	14 54.24	-15 36.9	2.160	3.114	7.6	20.6
6 10	14 51.74	-14 20.6	2.238	3.127	10.6	21.6	6 10	14 46.53	-15 39.7	2.212	3.096	10.9	20.8
6 20	14 47.69	-14 19.3	2.324	3.126	13.3	21.8	6 20	14 40.80	-15 48.9	2.286	3.078	13.8	20.9
125920	2001 <i>XE</i> ₂₃₁		5 11.2 30°66	1°1/11.8	17		479694	2014 <i>DW</i> ₁₀₄		5 11.2 155°73	3°9/13.9	17	
4 11	15 36.49	-21 3.0	1.375	2.267	14.9	19.0	4 11	15 37.07	-30 31.6	2.271	3.113	11.7	22.0
4 21	15 30.75	-21 1.1	1.323	2.276	10.6	18.8	4 21	15 30.66	-30 46.9	2.197	3.115	9.0	21.8
5 1	15 22.64	-20 48.7	1.292	2.285	5.7	18.5	5 1	15 22.48	-30 48.7	2.148	3.117	6.1	21.6
5 11	15 13.31	-20 27.8	1.286	2.295	1.1	18.2	5 11	15 13.33	-30 36.5	2.126	3.119	4.1	21.5
5 21	15 4.08	-20 2.1	1.305	2.306	4.9	18.5	5 21	15 4.13	-30 11.9	2.131	3.121	4.7	21.5
5 31	14 56.25	-19 36.6	1.348	2.318	9.7	18.8	5 31	14 55.84	-29 38.2	2.164	3.122	7.3	21.7
6 10	14 50.77	-19 16.6	1.414	2.330	13.9	19.1	6 10	14 49.24	-29 0.4	2.222	3.124	10.1	21.9
6 20	14 48.13	-19 5.6	1.499	2.342	17.4	19.3	6 20	14 44.79	-28 23.2	2.302	3.125	12.8	22.0
86221	1999 <i>TY</i> ₆₅		5 11.2 294°43	0°0/11.2	18		393685	2004 <i>RC</i> ₃₅₇		5 11.2 283°57	0°8/11.7	18	
4 11	15 33.08	-19 53.7	2.180	3.059	10.7	19.9	4 11	15 36.92	-20 7.8	2.445	3.313	10.1	21.5
4 21	15 27.88	-19 23.5	2.093	3.041	7.5	19.7	4 21	15 30.57	-20 20.7	2.343	3.285	7.2	21.3
5 1	15 21.05	-18 45.2	2.030	3.023	4.0	19.4	5 1	15 22.50	-20 28.4	2.267	3.257	3.9	21.0
5 11	15 13.28	-18 1.3	1.995	3.005	0.1	19.0	5 11	15 13.34	-20 31.1	2.219	3.228	0.8	20.7
5 21	15 5.38	-17 15.1	1.989	2.988	3.8	19.3	5 21	15 3.88	-20 29.9	2.201	3.199	3.5	20.9
5 31	14 58.23	-16 30.8	2.009	2.970	7.6	19.5	5 31	14 54.99	-20 27.0	2.211	3.170	7.1	21.1
6 10	14 52.55	-15 52.6	2.054	2.952	11.1	19.7	6 10	14 47.45	-20 25.0	2.247	3.141	10.4	21.2
6 20	14 48.83	-15 23.6	2.121	2.934	14.0	19.9	6 20	14 41.82	-20 26.6	2.305	3.111	13.3	21.4
10600	1996 <i>TK</i> ₄₈		5 11.2 283°31	1°6/10.2	18		463172	2012 <i>BA</i> ₇₁		5 11.2 146°24	1°0/10.6	16	
4 11	15 36.23	-15 26.6	1.759	2.647	12.3	18.3	4 11	15 39.23	-16 43.6	1.763	2.645	12.6	22.8
4 21	15 30.45	-14 54.1	1.669	2.623	8.7	18.0	4 21	15 32.23	-16 15.6	1.703	2.654	8.8	22.6
5 1	15 22.53	-14 15.6	1.605	2.599	4.6	17.7	5 1	15 23.28	-15 41.7	1.669	2.663	4.5	22.3
5 11	15 13.31	-13 34.7	1.566	2.574	1.7	17.4	5 11	15 13.35	-15 5.3	1.661	2.670	1.1	22.1
5 21	15 3.82	-12 55.6	1.555	2.550	5.4	17.6	5 21	15 3.52	-14 30.2	1.681	2.677	4.8	22.4
5 31	14 55.18	-12 23.1	1.569	2.525	9.8	17.8	5 31	14 54.85	-14 0.8	1.728	2.684	9.0	22.6
6 10	14 48.36	-12 1.5	1.607	2.500	13.9	18.0	6 10	14 48.15	-13 40.6	1.799	2.690	12.7	22.9
6 20	14 43.98	-11 53.1	1.665	2.474	17.4	18.2	6 20	14 43.87	-13 31.7	1.890	2.695	15.8	23.1
260186	2004 <i>RM</i> ₁₄₂		5 11.2 352°61	18°3/15.4	16		267005	1992 <i>RN</i> ₅		5 11.2 282°11	1°7/12.1	17	
4 11	15 43.97	-52 13.7	1.414	2.171	21.6	18.9	4 11	15 38.49	-22 48.4	1.796	2.669	12.9	20.3
4 21	15 38.53	-55 13.5	1.350	2.157	20.2	18.7	4 21	15 32.19	-22 52.2	1.699	2.642	9.4	20.0
5 1	15 28.04	-57 44.3	1.302	2.145	19.0	18.6	5 1	15 23.54	-22 45.7	1.627	2.615	5.4	19.7
5 11	15 13.45	-59 33.2	1.273	2.136	18.3	18.5	5 11	15 13.37	-22 29.1	1.580	2.588	1.8	19.4
5 21	14 57.02	-60 31.9	1.261	2.128	18.4	18.5	5 21	15 2.79	-22 4.5	1.560	2.560	4.6	19.5
5 31	14 42.05	-60 40.0	1.267	2.122	19.1	18.5	5 31	14 53.04	-21 35.7	1.568	2.532	9.0	19.7
6 10	14 31.54	-60 7.0	1.288	2.118	20.4	18.6	6 10	14 45.21	-21 8.2	1.599	2.504	13.2	19.9
6 20	14 27.04	-59 6.3	1.323	2.117	21.9	18.7	6 20	14 39.99	-20 46.5	1.650	2.475	16.9	20.1
393028	2012 <i>YO</i> ₈		5 11.2 149°08	5°3/ 7.1	18		370932	200					

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5 11.2

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
212640	2006 <i>UD</i> ₂₅		5 11.2 295°09	0°7/11.7	18		424745	2008 <i>SX</i> ₃₀₀		5 11.2 185°28	4°1/13.9	18	
4 11	15 34.41	-21 13.9	2.061	2.937	11.3	21.1	4 11	15 38.24	-30 46.5	2.152	2.993	12.3	21.4
4 21	15 28.86	-20 59.6	1.983	2.929	8.0	20.9	4 21	15 31.58	-30 55.7	2.076	2.993	9.4	21.2
5 1	15 21.58	-20 36.7	1.930	2.921	4.3	20.6	5 1	15 23.01	-30 50.2	2.024	2.993	6.4	21.0
5 11	15 13.33	-20 7.1	1.903	2.913	0.8	20.4	5 11	15 13.39	-30 29.5	1.999	2.993	4.2	20.9
5 21	15 5.00	-19 33.7	1.905	2.905	3.8	20.6	5 21	15 3.72	-29 55.4	2.001	2.992	4.9	20.9
5 31	14 57.52	-19 0.3	1.933	2.897	7.7	20.8	5 31	14 55.03	-29 12.0	2.031	2.990	7.6	21.1
6 10	14 51.64	-18 31.1	1.987	2.889	11.1	21.0	6 10	14 48.14	-28 24.9	2.086	2.989	10.7	21.2
6 20	14 47.86	-18 9.3	2.061	2.881	14.1	21.2	6 20	14 43.55	-27 39.2	2.163	2.987	13.5	21.4
413230	2003 <i>SB</i> ₇₆		5 11.2 194°27	0°5/10.9	16		190574	2000 <i>SR</i> ₂₂₇		5 11.2 237°64	5°3/6.9	18	
4 11	15 39.07	-17 56.1	1.955	2.831	11.8	22.1	4 11	15 34.69	-4 59.5	2.093	2.978	10.8	20.5
4 21	15 32.10	-17 31.4	1.881	2.829	8.3	21.9	4 21	15 28.94	-3 44.5	2.021	2.966	8.1	20.3
5 1	15 23.25	-16 59.8	1.833	2.827	4.3	21.7	5 1	15 21.58	-2 32.0	1.976	2.953	5.8	20.1
5 11	15 13.37	-16 24.1	1.813	2.823	0.5	21.3	5 11	15 13.36	-1 27.6	1.957	2.940	5.6	20.0
5 21	15 3.46	-15 47.7	1.822	2.819	4.4	21.6	5 21	15 5.07	-0 36.6	1.966	2.927	7.7	20.1
5 31	14 54.53	-15 14.9	1.857	2.814	8.5	21.9	5 31	14 57.58	-0 2.5	2.002	2.913	10.6	20.3
6 10	14 47.40	-14 49.4	1.918	2.808	12.1	22.1	6 10	14 51.57	+0 12.9	2.059	2.898	13.4	20.5
6 20	14 42.56	-14 34.0	2.000	2.801	15.2	22.3	6 20	14 47.50	+0 10.0	2.136	2.884	16.0	20.6
470107	2006 <i>TG</i> ₈₁		5 11.2 237°56	2°3/12.9	18		437107	2012 <i>UD</i> ₁₁₃		5 11.2 200°71	0°6/10.8	17	
4 11	15 35.84	-26 16.2	2.525	3.378	10.3	22.1	4 11	15 35.31	-17 7.8	2.301	3.179	10.3	22.2
4 21	15 29.70	-26 17.7	2.437	3.367	7.6	21.9	4 21	15 29.29	-16 49.3	2.228	3.176	7.2	22.0
5 1	15 21.97	-26 9.1	2.375	3.356	4.7	21.7	5 1	15 21.74	-16 26.1	2.180	3.173	3.7	21.7
5 11	15 13.35	-25 50.8	2.341	3.344	2.4	21.5	5 11	15 13.37	-16 0.2	2.161	3.170	0.6	21.5
5 21	15 4.61	-25 24.6	2.335	3.332	3.6	21.6	5 21	15 4.98	-15 34.4	2.170	3.167	3.8	21.7
5 31	14 56.57	-24 53.3	2.358	3.319	6.6	21.8	5 31	14 57.37	-15 11.8	2.208	3.164	7.3	22.0
6 10	14 49.95	-24 21.0	2.407	3.307	9.6	21.9	6 10	14 51.21	-14 55.2	2.270	3.160	10.5	22.1
6 20	14 45.21	-23 51.2	2.479	3.293	12.2	22.1	6 20	14 46.92	-14 46.7	2.355	3.156	13.2	22.3
430763	2004 <i>RF</i> ₁₄₆		5 11.2 286°70	8°4/4.9	18		47154	1999 <i>RE</i> ₁₄₁		5 11.2 249°52	1°8/12.3	18	R
4 11	15 33.84	+0 41.1	1.704	2.590	12.8	20.5	4 11	15 36.95	-23 50.5	1.972	2.841	12.1	19.8
4 21	15 28.61	+2 14.5	1.641	2.577	10.2	20.3	4 21	15 30.78	-23 45.5	1.891	2.831	8.8	19.5
5 1	15 21.49	+3 39.5	1.602	2.563	8.5	20.2	5 1	15 22.65	-23 29.6	1.835	2.822	5.1	19.3
5 11	15 13.34	+4 48.1	1.588	2.550	8.8	20.1	5 11	15 13.40	-23 3.9	1.805	2.812	1.9	19.1
5 21	15 5.12	+5 34.1	1.598	2.536	10.9	20.2	5 21	15 4.03	-22 30.9	1.803	2.802	4.1	19.2
5 31	14 57.83	+5 53.9	1.632	2.522	13.7	20.4	5 31	14 55.57	-21 54.8	1.828	2.792	8.0	19.4
6 10	14 52.29	+5 47.2	1.686	2.509	16.6	20.5	6 10	14 48.89	-21 20.3	1.878	2.782	11.6	19.6
6 20	14 49.00	+5 16.6	1.756	2.496	19.2	20.7	6 20	14 44.52	-20 51.8	1.949	2.772	14.8	19.8
178887	2001 <i>OU</i> ₂₇		5 11.2 291°17	2°0/10.4	18		326949	2004 <i>FR</i> ₂		5 11.2 344°39	18°6/12.5	18	
4 11	15 38.54	-13 4.8	1.550	2.442	13.5	19.8	4 11	15 54.16	-42 5.1	0.936	1.770	24.9	20.3
4 21	15 32.24	-13 3.3	1.473	2.428	9.5	19.5	4 21	15 46.73	-45 48.4	0.881	1.765	22.1	20.1
5 1	15 23.54	-13 0.6	1.420	2.414	5.1	19.2	5 1	15 32.86	-49 5.4	0.844	1.761	19.7	19.9
5 11	15 13.39	-12 59.3	1.392	2.400	2.1	19.0	5 11	15 13.68	-51 33.7	0.825	1.757	18.6	19.9
5 21	15 2.99	-13 2.0	1.390	2.386	5.8	19.2	5 21	14 52.24	-52 57.9	0.825	1.754	19.2	19.9
5 31	14 53.63	-13 11.6	1.414	2.372	10.4	19.4	5 31	14 32.96	-53 18.0	0.842	1.752	21.2	20.0
6 10	14 46.36	-13 30.5	1.460	2.358	14.7	19.6	6 10	14 19.51	-52 50.3	0.875	1.751	23.9	20.1
6 20	14 41.84	-13 59.7	1.526	2.344	18.3	19.8	6 20	14 13.43	-51 56.2	0.919	1.750	26.7	20.3
188933	2007 <i>CC</i> ₃₁		5 11.2 291°49	5°5/7.9	17		428009	2006 <i>BL</i> ₁₀₈		5 11.2 315°94	2°0/12.4	17	
4 11	15 35.23	-6 22.3	1.605	2.500	12.9	20.5	4 11	15 36.74	-23 59.6	1.743	2.617	13.2	21.3
4 21	15 29.68	-5 25.1	1.538	2.489	9.5	20.2	4 21	15 30.76	-23 57.1	1.671	2.614	9.6	21.0
5 1	15 22.09	-4 31.0	1.495	2.479	6.4	20.0	5 1	15 22.67	-23 42.8	1.623	2.611	5.5	20.8
5 11	15 13.36	-3 46.0	1.477	2.469	5.7	20.0	5 11	15 13.40	-23 17.8	1.602	2.609	2.1	20.5
5 21	15 4.55	-3 15.5	1.485	2.459	8.3	20.1	5 21	15 4.07	-22 44.9	1.606	2.606	4.4	20.7
5 31	14 56.76	-3 3.3	1.517	2.448	11.9	20.3	5 31	14 55.82	-22 8.7	1.637	2.604	8.5	20.9
6 10	14 50.87	-3 10.8	1.570	2.438	15.5	20.5	6 10	14 49.55	-21 34.8	1.692	2.602	12.4	21.2
6 20	14 47.41	-3 37.0	1.642	2.429	18.5	20.7	6 20	14 45.80	-21 7.4	1.768	2.599	15.7	21.4
236539	2006 <i>HU</i> ₃₈		5 11.2 326°21	2°5/9.8	18		107212	2001 <i>BE</i> ₄₁		5 11.2 171°53	2°1/12.6	18	
4 11	15 35.13	-12 23.5	1.775	2.666	12.1	20.2	4 11	15 39.57	-25 17.6	1.842	2.706	13.1	20.7
4 21	15 29.46	-11 57.9	1.708	2.662	8.5	20.0	4 21	15 32.58	-24 59.8	1.772	2.709	9.5	20.4
5 1	15 21.92	-11 30.8	1.665	2.658	4.6	19.7	5 1	15 23.54	-24 28.5	1.727	2.712	5.5	20.2
5 11	15 13.35	-11 5.8	1.649	2.655	2.6	19.6	5 11	15 13.43	-23 45.3	1.708	2.714	2.2	20.0
5 21	15 4.75	-10 46.4	1.660	2.651	5.6	19.8	5 21	15 3.34	-22 53.6	1.717	2.716	4.3	20.1
5 31	14 57.12	-10 35.9	1.696	2.648	9.5	20.0	5 31	14 54.41	-21 59.1	1.753	2.717	8.3	20.4
6 10	14 51.27	-10 36.7	1.756	2.644	13.1	20.2	6 10	14 47.48	-21 7.7	1.814	2.717	12.0	20.6
6 20	14 47.68	-10 49.6	1.835	2.642	16.1	20.4	6 20	14 43.05	-20 24.2	1.897	2.717	15.2	20.8
371008	2005 <i>TY</i> ₁₆₅		5 11.2 336°51	1°6/12.1	17		426841	2013 <i>VV</i> ₉		5 11.2 150°36	8°9/3.3	17	
4 11	15 37.35	-22 40.6	1.608	2.488	13.8	21.1	4 11	15 34.07	+5 43.2	2.036	2.903	11.9	20.5
4 21	15 31.29	-22 39.2	1.539	2.486	9.9	20.9	4 21	15 28.40	+7 26.2	1.994	2.908	10.0	20.4
5 1	15 22.96	-22 26.6	1.494	2.484	5.6	20.6	5 1	15 21.25	+8 56.4	1.977	2.912	9.0	20.3
5 11	15 13.38	-22 4.1	1.474	2.483	1.7	20.3	5 11	15 13.37	+10 6.8	1.986	2.917	9.4	20.3
5 21	15 3.74	-21 34.6	1.481	2.481	4.6	20.5	5 21	15 5.59	+10 52.9	2.020	2.920	10.9	20.4
5 31	14 55.26	-21 3.0	1.513	2.480	9.0	20.8	5 31	14 58.70	+11 13.0	2.076	2.924	13.0	20.6
6 10	14 48.91	-20 34.7	1.569	2.479	13.1	21.0	6 10	14 53.35	+11 7.9	2.153	2.927	15.0	20.7
6 20	14 45.24	-20 13.8	1.644	2.478	16.5	21.2	6 20	14 49.90	+10 40.9	2.246	2.930	16.8	20.9
41313	1999 <i>XD</i> ₁₆₈		5 11.2 284°46	2°1/10.2	18	R	325910	2010 <i>UL</i> ₇₄ </					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
117395	2004 YL ₃₅		5 11.2 276°21	1°9/ 8.9 18			391032	2005 TQ ₁₀		5 11.3 228°64	5°6/14.4 18		
4 11	15 27.72	- 8 34.5	4.255	5.133	5.9	19.8	4 11	15 42.38	-35 32.2	2.662	3.466	11.3	20.8
4 21	15 23.51	- 8 18.5	4.184	5.130	4.2	19.6	4 21	15 34.53	-36 32.8	2.574	3.459	9.2	20.7
5 1	15 18.59	- 8 3.6	4.141	5.127	2.5	19.5	5 1	15 24.66	-37 20.3	2.511	3.451	7.1	20.5
5 11	15 13.31	- 7 51.2	4.127	5.125	2.0	19.5	5 11	15 13.52	-37 51.7	2.476	3.443	5.8	20.4
5 21	15 8.03	- 7 42.8	4.143	5.122	3.2	19.6	5 21	15 2.04	-38 6.2	2.470	3.434	6.0	20.4
5 31	15 3.10	- 7 39.4	4.187	5.119	4.9	19.7	5 31	14 51.27	-38 5.2	2.491	3.425	7.7	20.5
6 10	14 58.86	- 7 41.7	4.258	5.117	6.7	19.8	6 10	14 42.10	-37 52.6	2.539	3.416	9.9	20.6
6 20	14 55.54	- 7 50.3	4.352	5.114	8.2	19.9	6 20	14 35.14	-37 33.5	2.609	3.407	12.1	20.8
287381	2002 VG ₁₆		5 11.2 176°79	0°6/11.5 18			362134	2009 DW ₆₃		5 11.3 133°88	4°0/ 9.0 18		
4 11	15 42.44	-19 58.2	1.605	2.483	13.9	21.6	4 11	15 39.56	- 9 10.9	1.689	2.576	12.8	20.7
4 21	15 34.81	-19 56.2	1.538	2.485	9.9	21.4	4 21	15 32.45	- 8 29.2	1.638	2.588	9.1	20.5
5 1	15 24.80	-19 45.5	1.495	2.487	5.3	21.1	5 1	15 23.43	- 7 48.9	1.611	2.600	5.5	20.4
5 11	15 13.47	-19 27.2	1.478	2.488	0.7	20.7	5 11	15 13.48	- 7 14.8	1.612	2.611	4.1	20.3
5 21	15 2.11	-19 4.5	1.489	2.488	4.8	21.1	5 21	15 3.69	- 6 51.0	1.639	2.621	6.7	20.5
5 31	14 52.02	-18 41.8	1.526	2.488	9.4	21.3	5 31	14 55.11	- 6 40.5	1.692	2.631	10.4	20.7
6 10	14 44.20	-18 23.9	1.587	2.487	13.6	21.6	6 10	14 48.51	- 6 44.8	1.769	2.640	13.8	20.9
6 20	14 39.21	-18 14.3	1.668	2.485	17.1	21.8	6 20	14 44.33	- 7 3.4	1.864	2.649	16.7	21.2
423943	2006 TZ ₁₂₉		5 11.2 213°26	3°1/ 9.2 17			471429	2011 UL ₅₉		5 11.3 243°99	0°2/11.4 18		
4 11	15 37.14	-11 13.1	1.959	2.844	11.4	21.6	4 11	15 33.85	-21 8.2	2.707	3.575	9.3	21.6
4 21	15 30.75	-10 25.9	1.887	2.838	8.1	21.4	4 21	15 28.18	-20 25.8	2.615	3.558	6.5	21.4
5 1	15 22.57	- 9 37.1	1.840	2.831	4.6	21.2	5 1	15 21.17	-19 35.1	2.550	3.541	3.5	21.2
5 11	15 13.42	- 8 50.9	1.821	2.823	3.2	21.1	5 11	15 13.43	-18 38.5	2.514	3.524	0.2	20.9
5 21	15 4.23	- 8 11.7	1.830	2.814	5.9	21.2	5 21	15 5.62	-17 39.2	2.508	3.506	3.2	21.1
5 31	14 55.94	- 7 43.4	1.865	2.805	9.5	21.4	5 31	14 58.44	-16 41.1	2.531	3.488	6.4	21.3
6 10	14 49.33	- 7 28.6	1.924	2.796	12.9	21.6	6 10	14 52.50	-15 48.1	2.580	3.469	9.4	21.5
6 20	14 44.87	- 7 28.1	2.004	2.786	15.8	21.8	6 20	14 48.20	-15 3.3	2.653	3.450	12.0	21.6
39909	1998 FM ₃₆		5 11.3 24°48	1°9/12.1 18 R			224352	2005 UB ₁₁₁		5 11.3 227°21	0°8/11.8 18 R		
4 11	15 38.85	-22 16.0	1.312	2.200	15.7	18.1	4 11	15 38.51	-21 4.0	2.117	2.986	11.4	21.9
4 21	15 32.67	-22 26.8	1.252	2.203	11.3	17.8	4 21	15 31.78	-20 59.1	2.033	2.975	8.1	21.7
5 1	15 23.80	-22 25.8	1.214	2.206	6.3	17.5	5 1	15 23.17	-20 46.1	1.974	2.964	4.4	21.4
5 11	15 13.45	-22 13.5	1.201	2.209	2.0	17.3	5 11	15 13.48	-20 26.1	1.943	2.952	0.9	21.1
5 21	15 3.07	-21 53.2	1.212	2.213	5.2	17.5	5 21	15 3.65	-20 1.5	1.940	2.940	3.9	21.3
5 31	14 54.15	-21 29.8	1.247	2.217	10.2	17.8	5 31	14 54.65	-19 35.8	1.966	2.926	7.8	21.6
6 10	14 47.81	-21 9.6	1.304	2.222	14.7	18.0	6 10	14 47.31	-19 13.0	2.017	2.913	11.3	21.7
6 20	14 44.60	-20 56.9	1.380	2.226	18.5	18.3	6 20	14 42.17	-18 56.4	2.089	2.899	14.3	21.9
144851	2004 KK ₇		5 11.3 287°17	1°3/10.0 18			366573	2002 TQ ₂₅		5 11.3 242°99	0°8/11.8 17		
4 11	15 30.57	-13 59.8	3.120	3.999	7.8	20.3	4 11	15 38.68	-21 30.0	1.917	2.790	12.2	21.9
4 21	15 25.76	-13 37.1	3.029	3.979	5.4	20.1	4 21	15 32.08	-21 14.1	1.830	2.774	8.8	21.6
5 1	15 19.87	-13 12.2	2.966	3.959	2.9	19.9	5 1	15 23.40	-20 48.4	1.768	2.758	4.8	21.3
5 11	15 13.36	-12 47.2	2.932	3.939	1.3	19.8	5 11	15 13.49	-20 14.3	1.732	2.742	0.9	21.0
5 21	15 6.77	-12 24.2	2.927	3.919	3.4	19.9	5 21	15 3.39	-19 34.9	1.725	2.725	4.2	21.2
5 31	15 0.64	-12 5.3	2.950	3.898	6.1	20.1	5 31	14 54.18	-18 54.8	1.745	2.707	8.5	21.5
6 10	14 55.49	-11 52.6	2.999	3.878	8.6	20.2	6 10	14 46.80	-18 18.9	1.790	2.688	12.4	21.6
6 20	14 51.65	-11 47.1	3.072	3.857	10.7	20.3	6 20	14 41.83	-17 51.4	1.855	2.669	15.7	21.8
331266	2011 CH ₆₁		5 11.3 305°72	3°2/ 9.4 17			473073	2015 HV ₉₉		5 11.3 75°83	2°3/ 9.9 17		
4 11	15 34.73	-12 29.6	1.521	2.420	13.3	20.5	4 11	15 35.56	-12 11.2	1.976	2.864	11.2	20.9
4 21	15 29.54	-11 41.9	1.446	2.403	9.4	20.2	4 21	15 29.60	-11 51.7	1.913	2.865	7.9	20.7
5 1	15 22.13	-10 50.5	1.394	2.387	5.3	19.9	5 1	15 21.97	-11 31.3	1.875	2.867	4.3	20.4
5 11	15 13.42	-10 0.6	1.367	2.371	3.3	19.8	5 11	15 13.45	-11 13.1	1.863	2.869	2.3	20.3
5 21	15 4.54	- 9 17.9	1.365	2.355	6.7	19.9	5 21	15 4.95	-10 59.7	1.880	2.871	5.1	20.5
5 31	14 56.67	- 8 47.8	1.388	2.340	11.1	20.1	5 31	14 57.35	-10 54.1	1.923	2.872	8.7	20.7
6 10	14 50.81	- 8 33.8	1.433	2.325	15.3	20.4	6 10	14 51.39	-10 58.0	1.990	2.874	12.0	20.9
6 20	14 47.54	- 8 37.1	1.495	2.310	18.8	20.6	6 20	14 47.51	-11 12.2	2.077	2.876	14.8	21.1
439656	2014 HO ₃₇		5 11.3 125°25	2°5/ 9.5 17			388031	2005 SG ₉₈		5 11.3 301°89	3°8/13.6 18		
4 11	15 34.36	-10 5.3	2.429	3.311	9.6	20.9	4 11	15 35.65	-29 5.3	2.044	2.898	12.4	20.3
4 21	15 28.50	- 9 51.2	2.365	3.315	6.8	20.7	4 21	15 30.04	-29 15.7	1.950	2.876	9.4	20.1
5 1	15 21.30	- 9 38.0	2.328	3.318	3.9	20.5	5 1	15 22.38	-29 12.2	1.878	2.853	6.3	19.8
5 11	15 13.40	- 9 28.2	2.318	3.321	2.5	20.4	5 11	15 13.47	-28 54.5	1.833	2.831	3.9	19.6
5 21	15 5.52	- 9 23.7	2.337	3.324	4.7	20.6	5 21	15 4.28	-28 23.8	1.815	2.809	4.9	19.6
5 31	14 58.37	- 9 26.4	2.384	3.327	7.6	20.7	5 31	14 55.90	-27 43.8	1.823	2.787	8.0	19.8
6 10	14 52.55	- 9 37.5	2.456	3.330	10.4	20.9	6 10	14 49.25	-27 0.1	1.856	2.765	11.5	20.0
6 20	14 48.43	- 9 57.3	2.550	3.332	12.8	21.1	6 20	14 44.95	-26 18.0	1.910	2.743	14.6	20.1
510014	2009 YN ₇		5 11.3 121°50	0°1/11.4 18			429121	2009 SM ₂₇₈		5 11.3 222°94	1°2/10.5 17		
4 11	15 30.62	-19 40.9	3.473	4.341	7.4	22.3	4 11	15 37.23	-16 1.9	1.867	2.751	12.0	22.0
4 21	15 25.62	-19 19.4	3.409	4.353	5.1	22.2	4 21	15 30.94	-15 38.0	1.794	2.746	8.4	21.7
5 1	15 19.71	-18 53.6	3.372	4.364	2.7	22.0	5 1	15 22.74	-15 9.2	1.746	2.740	4.3	21.5
5 11	15 13.36	-18 24.8	3.365	4.374	0.1	21.8	5 11	15 13.48	-14 38.1	1.725	2.734	1.2	21.2
5 21	15 7.07	-17 55.2	3.387	4.385	2.5	22.0	5 21	15 4.15	-14 8.5	1.731	2.727	4.7	21.5
5 31	15 1.30	-17 26.7	3.438	4.396	4.9	22.2	5 31	14 55.77	-13 44.2	1.764	2.720	8.8	21.7
6 10	14 56.47	-17 1.6	3.517	4.406	7.1	22.4	6 10	14 49.18	-13 28.6	1.821	2.713	12.5	21.9
6 20	14 52.86	-16 41.4	3.619	4.416	9.1	22.5	6 20	14 44.88	-13 23.8	1.899	2.706	15.7	22.1
442604	2012 GR ₁₁		5 11.3 290°99	22°6/27.8 17			123141	2000 TK ₁₈		5 11.3 184°59	0°3/11.5 17		
4 11	15 42.37												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
35083	1990 <i>SP</i> ₆		5 11.3 250°87	3°8/ 8.9 18			112299	2002 <i>LK</i> ₃₉		5 11.3 276°57	5°7/ 7.4 18		
4 11	15 38.08	-11 0.7	1.639	2.529	12.9	19.1	4 11	15 34.99	-3 45.6	1.928	2.814	11.5	20.1
4 21	15 31.79	-10 4.1	1.560	2.513	9.2	18.9	4 21	15 29.34	-2 53.8	1.853	2.797	8.7	19.9
5 1	15 23.29	-9 4.7	1.506	2.496	5.4	18.6	5 1	15 21.92	-2 6.7	1.803	2.780	6.3	19.7
5 11	15 13.50	-8 8.0	1.477	2.479	4.0	18.5	5 11	15 13.49	-1 29.5	1.779	2.763	5.9	19.6
5 21	15 3.52	-7 19.7	1.476	2.461	7.1	18.6	5 21	15 4.94	-1 6.7	1.782	2.746	8.0	19.7
5 31	14 54.53	-6 45.3	1.500	2.442	11.3	18.8	5 31	14 57.19	-1 1.3	1.810	2.728	11.1	19.9
6 10	14 47.51	-6 28.2	1.547	2.423	15.2	19.0	6 10	14 51.04	-1 14.1	1.860	2.711	14.2	20.0
6 20	14 43.04	-6 29.1	1.612	2.403	18.6	19.2	6 20	14 46.98	-1 44.0	1.930	2.694	16.9	20.2
419931	2011 <i>BP</i> ₅₁		5 11.3 143°47	4°9/14.7 17			375605	2008 <i>WY</i> ₁₂		5 11.3 187°95	1°3/10.5 17		
4 11	15 41.25	-33 23.4	2.162	2.989	12.8	22.3	4 11	15 37.15	-14 25.8	2.254	3.132	10.4	21.1
4 21	15 33.65	-33 36.0	2.096	3.001	10.0	22.1	4 21	15 30.61	-14 17.2	2.182	3.131	7.3	20.9
5 1	15 24.09	-33 31.7	2.053	3.012	7.1	22.0	5 1	15 22.49	-14 6.2	2.137	3.130	3.8	20.7
5 11	15 13.52	-33 9.9	2.037	3.023	5.1	21.9	5 11	15 13.51	-13 54.8	2.121	3.129	1.3	20.5
5 21	15 3.02	-32 32.3	2.048	3.032	5.4	21.9	5 21	15 4.50	-13 45.3	2.133	3.127	4.2	20.7
5 31	14 53.64	-31 43.5	2.087	3.042	7.8	22.1	5 31	14 56.31	-13 39.9	2.173	3.125	7.7	20.9
6 10	14 46.22	-30 49.5	2.152	3.050	10.6	22.3	6 10	14 49.61	-13 41.0	2.239	3.123	10.8	21.1
6 20	14 41.21	-29 56.2	2.239	3.058	13.2	22.4	6 20	14 44.85	-13 49.8	2.326	3.120	13.5	21.3
111702	2002 <i>CE</i> ₂₂		5 11.3 218°76	1°7/ 9.9 17			38315	1999 <i>RS</i> ₁₁₂		5 11.3 231°32	3°5/ 7.9 18		
4 11	15 33.41	-13 33.1	2.453	3.336	9.5	20.1	4 11	15 32.47	-6 52.4	2.813	3.692	8.5	20.1
4 21	15 27.90	-13 4.6	2.381	3.332	6.6	19.9	4 21	15 27.12	-6 1.9	2.736	3.681	6.2	19.9
5 1	15 21.03	-12 34.0	2.336	3.329	3.5	19.7	5 1	15 20.61	-5 12.8	2.687	3.669	4.1	19.7
5 11	15 13.45	-12 3.9	2.318	3.325	1.8	19.6	5 11	15 13.46	-4 28.5	2.666	3.656	3.7	19.7
5 21	15 5.84	-11 37.1	2.330	3.321	4.2	19.7	5 21	15 6.28	-3 52.1	2.674	3.643	5.4	19.8
5 31	14 58.94	-11 16.4	2.369	3.317	7.3	19.9	5 31	14 59.66	-3 26.2	2.710	3.629	7.8	19.9
6 10	14 53.34	-11 3.9	2.433	3.313	10.2	20.1	6 10	14 54.13	-3 12.2	2.770	3.616	10.2	20.1
6 20	14 49.42	-11 1.0	2.519	3.308	12.7	20.3	6 20	14 50.06	-3 10.6	2.852	3.601	12.3	20.2
111483	2001 <i>YZ</i> ₃₈		5 11.3 280°65	2°1/10.4 17			123510	2000 <i>WV</i> ₁₈₄		5 11.3 222°51	5°0/ 7.9 18		
4 11	15 39.79	-14 0.5	1.404	2.297	14.5	20.2	4 11	15 37.07	-3 23.2	2.246	3.122	10.5	20.1
4 21	15 33.46	-13 47.5	1.320	2.276	10.3	19.8	4 21	15 30.55	-2 46.8	2.173	3.112	7.9	19.9
5 1	15 24.38	-13 31.0	1.259	2.254	5.5	19.5	5 1	15 22.47	-2 15.5	2.126	3.101	5.6	19.7
5 11	15 13.54	-13 14.2	1.223	2.231	2.1	19.2	5 11	15 13.51	-1 53.3	2.107	3.090	5.2	19.7
5 21	15 5.26	-13 0.9	1.213	2.209	6.3	19.4	5 21	15 4.49	-1 43.2	2.115	3.078	7.0	19.8
5 31	14 52.04	-12 55.4	1.227	2.186	11.5	19.6	5 31	14 56.23	-1 47.3	2.151	3.066	9.8	19.9
6 10	14 44.12	-13 1.4	1.263	2.163	16.3	19.9	6 10	14 49.41	-2 6.0	2.210	3.053	12.5	20.1
6 20	14 39.29	-13 20.8	1.316	2.140	20.4	20.1	6 20	14 44.49	-2 38.5	2.290	3.039	15.0	20.2
370180	2002 <i>CR</i> ₃₄		5 11.3 194°74	0°4/11.6 18			475695	2006 <i>VO</i> ₁₁₂		5 11.3 187°16	2°0/13.3 18		
4 11	15 37.94	-20 23.6	2.538	3.402	9.9	22.0	4 11	15 34.81	-27 28.6	3.234	4.076	8.6	23.2
4 21	15 31.07	-20 12.0	2.458	3.399	7.0	21.8	4 21	15 28.69	-27 18.3	3.152	4.075	6.4	23.0
5 1	15 22.69	-19 53.6	2.405	3.395	3.7	21.6	5 1	15 21.39	-26 58.9	3.097	4.073	4.0	22.9
5 11	15 13.49	-19 30.0	2.381	3.391	0.5	21.3	5 11	15 13.49	-26 31.2	3.070	4.072	2.1	22.7
5 21	15 4.25	-19 3.2	2.387	3.385	3.3	21.6	5 21	15 5.57	-25 56.9	3.074	4.069	3.0	22.8
5 31	14 55.76	-18 36.3	2.422	3.379	6.7	21.8	5 31	14 58.27	-25 18.5	3.107	4.066	5.3	22.9
6 10	14 48.67	-18 12.6	2.483	3.372	9.7	22.0	6 10	14 52.09	-24 39.4	3.167	4.062	7.7	23.1
6 20	14 43.42	-17 54.6	2.568	3.364	12.3	22.1	6 20	14 47.41	-24 2.5	3.252	4.058	9.8	23.2
141962	2002 <i>PC</i> ₁₂₀		5 11.3 306°49	3°3/ 9.3 17			250323	2003 <i>SV</i> ₁₂		5 11.3 228°52	1°0/10.7 17		
4 11	15 35.01	-13 32.3	1.396	2.297	14.1	20.3	4 11	15 38.54	-17 23.7	1.802	2.684	12.4	21.3
4 21	15 29.84	-12 30.3	1.327	2.286	9.9	20.1	4 21	15 31.98	-16 48.7	1.723	2.674	8.7	21.0
5 1	15 22.33	-11 22.6	1.280	2.274	5.5	19.8	5 1	15 23.35	-16 6.3	1.669	2.663	4.5	20.7
5 11	15 13.49	-10 15.3	1.258	2.263	3.4	19.6	5 11	15 13.54	-15 19.7	1.641	2.651	1.0	20.4
5 21	15 4.53	-9 15.6	1.262	2.253	7.0	19.8	5 21	15 3.61	-14 33.1	1.642	2.638	4.9	20.7
5 31	14 56.74	-8 30.1	1.289	2.242	11.7	20.0	5 31	14 54.67	-13 51.7	1.669	2.625	9.2	20.9
6 10	14 51.12	-8 3.0	1.338	2.232	16.0	20.2	6 10	14 47.61	-13 19.9	1.720	2.612	13.2	21.1
6 20	14 48.80	-7 55.9	1.404	2.222	19.6	20.5	6 20	14 42.98	-13 0.5	1.792	2.598	16.5	21.3
389993	2012 <i>TP</i> ₂₉₁		5 11.3 94°52	0°2/11.1 17			399216	2014 <i>GT</i> ₃₆		5 11.3 31°85	0°7/10.9 17		
4 11	15 35.40	-18 41.1	2.358	3.233	10.2	21.7	4 11	15 38.43	-14 28.7	2.179	3.056	10.8	20.3
4 21	15 29.19	-18 17.1	2.307	3.254	7.1	21.5	4 21	15 31.57	-14 53.3	2.110	3.058	7.5	20.1
5 1	15 21.64	-17 47.6	2.283	3.275	3.6	21.3	5 1	15 23.02	-15 16.8	2.067	3.060	3.9	19.9
5 11	15 13.47	-17 14.9	2.286	3.296	0.2	21.0	5 11	15 13.54	-15 39.7	2.053	3.062	0.7	19.6
5 21	15 5.46	-16 42.0	2.319	3.317	3.5	21.4	5 21	15 3.99	-16 2.8	2.067	3.064	4.0	19.9
5 31	14 58.33	-16 12.0	2.380	3.337	6.8	21.6	5 31	14 55.28	-16 27.3	2.110	3.067	7.6	20.1
6 10	14 52.66	-15 47.8	2.466	3.357	9.7	21.8	6 10	14 48.15	-16 54.7	2.179	3.069	10.8	20.3
6 20	14 48.80	-15 31.4	2.575	3.377	12.2	22.0	6 20	14 43.06	-17 26.1	2.269	3.071	13.6	20.5
103462	2000 <i>AQ</i> ₂₀₆		5 11.3 242°40	1°5/12.3 18			423512	2005 <i>UM</i> ₄₂		5 11.3 179°61	1°2/10.3 17		
4 11	15 35.96	-23 44.6	2.059	2.927	11.7	20.1	4 11	15 36.32	-16 51.9	2.078	2.959	11.1	21.7
4 21	15 30.01	-23 28.1	1.979	2.920	8.4	19.9	4 21	15 30.09	-16 2.4	2.010	2.960	7.7	21.5
5 1	15 22.26	-23 0.7	1.925	2.913	4.8	19.7	5 1	15 22.22	-15 6.7	1.967	2.961	4.0	21.3
5 11	15 13.50	-22 24.0	1.897	2.905	1.6	19.4	5 11	15 13.51	-14 8.6	1.953	2.961	1.3	21.1
5 21	15 4.67	-21 41.0	1.898	2.897	3.9	19.6	5 21	15 4.85	-13 12.3	1.967	2.961	4.5	21.3
5 31	14 56.73	-20 56.1	1.925	2.890	7.6	19.8	5 31	14 57.11	-12 22.7	2.008	2.960	8.2	21.5
6 10	14 50.47	-20 14.1	1.978	2.881	11.1	20.0	6 10	14 50.98	-11 43.3	2.075	2.959	11.6	21.7
6 20	14 46.38	-19 39.1	2.053	2.873	14.2	20.2	6 20	14 46.90	-11 16.4	2.162	2.957	14.4	21.9
61784	2000 <i>QL</i> ₁₇₈		5 11.3 129°56	0°7/10.8 18			54557	2000 <i>QG</i> ₁₁₉		5 11.3 206°02			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
59953	1999 <i>RB</i> ₂₂₆		5 11.3 10°87' 11.1"/20.3 18				365813	2011 <i>SP</i> ₅₁		5 11.3 186°65' 2.6"/12.6 16			
4 11	15 39.87	-49 43.5	1.961	2.708	16.7	18.4	4 11	15 42.23	-25 7.8	1.739	2.602	13.7	21.6
4 21	15 33.50	-50 30.6	1.892	2.710	14.8	18.3	4 21	15 34.70	-25 16.5	1.666	2.602	10.1	21.3
5 1	15 24.33	-50 49.8	1.841	2.713	13.0	18.2	5 1	15 24.82	-25 12.4	1.617	2.602	6.0	21.1
5 11	15 13.57	-50 37.0	1.811	2.716	11.6	18.1	5 11	15 13.62	-24 55.6	1.595	2.600	2.7	20.9
5 21	15 2.76	-49 51.8	1.803	2.719	11.1	18.0	5 21	15 2.32	-24 28.2	1.600	2.598	4.7	21.0
5 31	14 53.47	-48 38.7	1.818	2.723	11.8	18.1	5 31	14 52.21	-23 54.8	1.633	2.596	8.8	21.2
6 10	14 46.84	-47 6.1	1.855	2.728	13.2	18.2	6 10	14 44.30	-23 21.3	1.689	2.592	12.7	21.5
6 20	14 43.44	-45 23.8	1.912	2.733	15.1	18.3	6 20	14 39.14	-22 52.9	1.766	2.588	16.1	21.7
472168	2014 <i>DF</i> ₃₈		5 11.3 148°41' 4.0"/14.0 17				474173	1999 <i>TT</i> ₂₆₂		5 11.3 245°56' 1.8"/9.5 17			
4 11	15 37.04	-30 39.6	2.289	3.130	11.7	21.2	4 11	15 32.65	-13 48.1	2.890	3.768	8.4	22.6
4 21	15 30.71	-30 56.1	2.215	3.132	9.0	21.0	4 21	15 27.28	-12 55.7	2.801	3.750	5.9	22.4
5 1	15 22.61	-30 59.1	2.166	3.134	6.2	20.8	5 1	15 20.72	-11 59.8	2.740	3.732	3.2	22.2
5 11	15 13.54	-30 48.3	2.143	3.136	4.1	20.7	5 11	15 13.51	-11 3.5	2.709	3.714	1.9	22.0
5 21	15 4.42	-30 25.0	2.148	3.137	4.7	20.7	5 21	15 6.24	-10 10.1	2.707	3.695	4.0	22.2
5 31	14 56.19	-29 52.5	2.180	3.139	7.2	20.9	5 31	14 59.52	-9 22.9	2.735	3.676	6.8	22.3
6 10	14 49.63	-29 15.7	2.238	3.140	10.1	21.1	6 10	14 53.88	-8 44.7	2.788	3.656	9.5	22.5
6 20	14 45.20	-28 39.2	2.318	3.142	12.7	21.3	6 20	14 49.69	-8 17.1	2.864	3.635	11.8	22.6
16009	1999 <i>CM</i> ₈		5 11.3 241°24' 2.3"/12.3 18 R				506063	2015 <i>MW</i> ₁₀		5 11.3 84°65' 7.4"/4.9 17			
4 11	15 41.86	-23 0.3	1.942	2.806	12.5	16.3	4 11	15 32.52	+ 3 2.8	2.203	3.076	10.8	20.8
4 21	15 34.42	-23 34.4	1.857	2.794	9.1	16.1	4 21	15 27.30	+ 4 18.5	2.158	3.082	8.8	20.7
5 1	15 24.71	-24 0.5	1.797	2.782	5.4	15.8	5 1	15 20.73	+ 5 24.0	2.138	3.088	7.5	20.6
5 11	15 13.60	-24 17.4	1.764	2.770	2.3	15.6	5 11	15 13.52	+ 6 13.9	2.145	3.094	7.7	20.7
5 21	15 2.19	-24 25.4	1.760	2.757	4.5	15.7	5 21	15 6.39	+ 6 44.6	2.177	3.100	9.1	20.8
5 31	14 51.67	-24 27.0	1.783	2.744	8.4	15.9	5 31	15 0.07	+ 6 54.4	2.233	3.106	11.2	20.9
6 10	14 43.04	-24 25.9	1.832	2.730	12.1	16.1	6 10	14 55.12	+ 6 43.9	2.310	3.112	13.3	21.1
6 20	14 36.97	-24 26.2	1.901	2.717	15.3	16.3	6 20	14 51.91	+ 6 15.2	2.406	3.118	15.2	21.2
98267	2000 <i>SN</i> ₁₉₃		5 11.3 164°03' 2.0"/10.2 18				74600	1999 <i>RH</i> ₃		5 11.3 253°16' 1.0"/11.9 18			
4 11	15 39.83	-13 57.8	1.688	2.574	12.9	19.8	4 11	15 39.54	-21 58.4	1.818	2.690	12.8	20.6
4 21	15 32.81	-13 32.6	1.626	2.578	9.0	19.6	4 21	15 32.87	-21 43.1	1.726	2.670	9.2	20.3
5 1	15 23.73	-13 4.1	1.589	2.582	4.8	19.4	5 1	15 23.94	-21 16.9	1.659	2.650	5.1	20.0
5 11	15 13.57	-12 35.9	1.578	2.585	2.1	19.2	5 11	15 13.62	-20 41.0	1.619	2.628	1.1	19.7
5 21	15 3.45	-12 11.7	1.595	2.588	5.5	19.4	5 21	15 3.02	-19 58.6	1.607	2.606	4.4	19.9
5 31	14 54.49	-11 55.3	1.638	2.591	9.7	19.7	5 31	14 53.33	-19 14.7	1.621	2.584	8.9	20.1
6 10	14 47.55	-11 49.5	1.704	2.592	13.5	19.9	6 10	14 45.58	-18 34.9	1.660	2.560	13.1	20.3
6 20	14 43.11	-11 55.7	1.791	2.594	16.6	20.1	6 20	14 40.38	-18 3.8	1.720	2.537	16.6	20.5
86061	1999 <i>RT</i> ₁₉		5 11.3 143°93' 6.7"/16.5 18				177055	2003 <i>EV</i> ₃₉		5 11.3 20°10' 2.2"/10.2 17			
4 11	15 39.65	-41 3.5	2.637	3.418	12.0	18.3	4 11	15 37.09	-11 0.5	1.943	2.829	11.5	19.7
4 21	15 32.57	-41 43.4	2.563	3.423	10.1	18.2	4 21	15 30.74	-11 9.9	1.880	2.832	8.1	19.5
5 1	15 23.60	-42 5.8	2.512	3.428	8.2	18.0	5 1	15 22.63	-11 20.5	1.843	2.835	4.4	19.3
5 11	15 13.57	-42 8.8	2.486	3.432	6.9	18.0	5 11	15 13.58	-11 34.1	1.832	2.838	2.2	19.1
5 21	15 3.44	-41 52.4	2.487	3.437	6.9	18.0	5 21	15 4.52	-11 52.2	1.850	2.842	5.0	19.3
5 31	14 54.23	-41 19.5	2.514	3.441	8.0	18.1	5 31	14 56.39	-12 16.2	1.894	2.846	8.6	19.5
6 10	14 46.75	-40 35.0	2.567	3.445	9.8	18.2	6 10	14 49.94	-12 47.0	1.963	2.851	11.9	19.8
6 20	14 41.52	-39 44.7	2.642	3.448	11.7	18.3	6 20	14 45.65	-13 24.8	2.053	2.856	14.8	20.0
377094	2002 <i>WD</i> ₁		5 11.3 234°53' 1.6"/9.4 18				160164	2001 <i>TW</i> ₂₅₂		5 11.3 105°89' 0.2"/11.5 18			
4 11	15 29.52	- 9 6.3	4.574	5.447	5.6	20.5	4 11	15 28.40	-19 27.9	4.375	5.242	6.0	20.4
4 21	15 24.76	- 9 4.8	4.497	5.442	4.0	20.4	4 21	15 24.04	-19 23.3	4.302	5.245	4.2	20.2
5 1	15 19.29	- 9 4.4	4.449	5.436	2.3	20.3	5 1	15 18.95	-19 15.5	4.257	5.247	2.2	20.1
5 11	15 13.46	- 9 6.0	4.430	5.430	1.6	20.2	5 11	15 13.49	-19 5.5	4.240	5.250	0.2	19.9
5 21	15 7.60	- 9 10.7	4.442	5.425	2.8	20.3	5 21	15 8.02	-18 54.4	4.254	5.253	2.0	20.1
5 31	15 2.08	- 9 19.2	4.483	5.419	4.5	20.4	5 31	15 2.92	-18 43.5	4.297	5.256	4.0	20.2
6 10	14 57.20	- 9 32.2	4.552	5.413	6.2	20.5	6 10	14 58.53	-18 34.2	4.368	5.258	5.8	20.4
6 20	14 53.22	- 9 50.0	4.645	5.407	7.7	20.6	6 20	14 55.09	-18 27.7	4.463	5.261	7.4	20.5
422915	2002 <i>RO</i> ₂₇₄		5 11.3 183°17' 3.1"/9.1 17				236983	2008 <i>OJ</i> ₂₅		5 11.3 136°58' 3.4"/13.8 17			
4 11	15 37.69	-10 23.1	2.112	2.993	10.9	22.7	4 11	15 39.14	-29 42.9	2.405	3.244	11.3	21.6
4 21	15 31.01	- 9 39.4	2.046	2.994	7.7	22.5	4 21	15 31.99	-29 49.5	2.339	3.257	8.5	21.4
5 1	15 22.70	- 8 55.2	2.005	2.994	4.5	22.3	5 1	15 23.21	-29 43.1	2.299	3.270	5.6	21.2
5 11	15 13.56	- 8 14.5	1.993	2.994	3.2	22.2	5 11	15 13.60	-29 24.1	2.287	3.282	3.5	21.1
5 21	15 4.43	- 7 41.0	2.010	2.993	5.7	22.4	5 21	15 4.06	-28 54.1	2.303	3.294	4.2	21.2
5 31	14 56.20	- 7 18.0	2.054	2.991	9.0	22.5	5 31	14 55.46	-28 16.7	2.347	3.305	6.8	21.4
6 10	14 49.55	- 7 7.6	2.122	2.988	12.1	22.7	6 10	14 48.52	-27 36.7	2.418	3.316	9.6	21.6
6 20	14 44.92	- 7 10.2	2.211	2.984	14.7	22.9	6 20	14 43.65	-26 58.5	2.512	3.326	12.1	21.7
386953	2011 <i>SM</i> ₁₃₀		5 11.3 80°07' 3.2"/8.7 17				169674	2002 <i>JL</i> ₉₃		5 11.3 69°89' 0.3"/11.4 18			
4 11	15 32.57	-10 26.2	2.225	3.113	10.1	21.0	4 11	15 40.57	-19 1.8	1.340	2.230	15.3	20.1
4 21	15 27.36	- 9 30.2	2.165	3.116	7.1	20.8	4 21	15 33.63	-19 0.4	1.294	2.247	10.7	19.9
5 1	15 20.77	- 8 33.8	2.131	3.120	4.2	20.6	5 1	15 24.23	-18 50.5	1.269	2.263	5.6	19.6
5 11	15 13.50	- 7 41.2	2.124	3.124	3.3	20.5	5 11	15 13.63	-18 34.3	1.270	2.280	0.3	19.3
5 21	15 6.28	- 6 56.4	2.146	3.127	5.5	20.7	5 21	15 3.24	-18 15.3	1.296	2.296	5.1	19.7
5 31	14 59.86	- 6 22.8	2.195	3.131	8.5	20.9	5 31	14 54.41	-17 58.4	1.347	2.313	10.0	20.0
6 10	14 54.82	- 6 2.4	2.267	3.135	11.4	21.1	6 10	14 48.09	-17 48.0	1.420	2.330	14.2	20.3
6 20	14 51.54	- 5 55.7	2.360	3.138	13.8	21.2	6 20	14 44.75	-17 46.9	1.512	2.346	17.7	20.6
372375	2009 <i>OJ</i> ₂₂		5 11.3 315°55' 7.9"/16.4 17				501518	2014 <					

EPHEMERIDES

5 11.3

5 11.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
317153	2001 VY ₁₃		5 11.3 121°62	1°8/12.5 17			234762	2002 PL ₁		5 11.3 298°78	5°5/14.9 17		
4 11	15 38.15	-23 50.7	2.598	3.453	10.0	20.8	4 11	15 36.87	-33 58.8	1.858	2.697	14.1	20.1
4 21	15 31.18	-24 9.0	2.534	3.467	7.2	20.6	4 21	15 31.21	-34 0.9	1.759	2.670	11.2	19.9
5 1	15 22.77	-24 19.4	2.497	3.481	4.2	20.5	5 1	15 23.16	-33 43.0	1.681	2.644	8.1	19.6
5 11	15 13.60	-24 22.2	2.489	3.495	1.9	20.3	5 11	15 13.63	-33 3.5	1.629	2.617	5.8	19.4
5 21	15 4.46	-24 18.5	2.510	3.508	3.4	20.5	5 21	15 3.77	-32 3.8	1.602	2.590	6.2	19.4
5 31	14 56.12	-24 10.7	2.561	3.520	6.3	20.7	5 31	14 54.86	-30 49.0	1.601	2.563	9.1	19.5
6 10	14 49.21	-24 1.6	2.638	3.533	9.0	20.9	6 10	14 47.99	-29 27.1	1.624	2.536	12.6	19.6
6 20	14 44.14	-23 54.1	2.738	3.545	11.4	21.0	6 20	14 43.84	-28 6.3	1.669	2.509	16.0	19.8
196504	2003 MT ₈		5 11.3 335°22	0°5/11.6 17			284656	2008 AB ₂₀		5 11.3 136°61	5°0/16.0 18		
4 11	15 32.29	-21 29.7	1.314	2.212	15.0	19.4	4 11	15 37.56	-37 26.5	2.707	3.509	11.2	21.8
4 21	15 28.22	-20 56.5	1.238	2.195	10.7	19.1	4 21	15 30.86	-37 27.1	2.636	3.520	9.0	21.6
5 1	15 21.64	-20 8.9	1.184	2.179	5.8	18.8	5 1	15 22.62	-37 11.5	2.589	3.530	6.8	21.5
5 11	15 13.57	-19 10.5	1.154	2.164	0.6	18.4	5 11	15 13.61	-36 39.2	2.569	3.541	5.3	21.4
5 21	15 5.30	-18 6.9	1.148	2.150	5.2	18.7	5 21	15 4.69	-35 52.2	2.577	3.550	5.3	21.4
5 31	14 58.21	-17 6.1	1.165	2.137	10.5	18.9	5 31	14 56.69	-34 54.0	2.613	3.560	6.8	21.6
6 10	14 53.42	-16 15.3	1.204	2.125	15.3	19.2	6 10	14 50.26	-33 50.1	2.675	3.569	8.9	21.7
6 20	14 51.55	-15 39.4	1.261	2.115	19.4	19.4	6 20	14 45.80	-32 45.4	2.761	3.577	11.0	21.9
108934	2001 PR ₂₃		5 11.3 176°58	3°1/ 9.0 18			370921	2005 NO ₁₂		5 11.3 240°42	4°6/ 8.1 18		
4 11	15 36.86	-10 14.0	2.216	3.097	10.5	20.6	4 11	15 37.47	- 6 7.2	2.096	2.976	11.0	22.2
4 21	15 30.37	- 9 28.1	2.151	3.100	7.4	20.5	4 21	15 31.02	- 5 19.8	2.015	2.959	8.1	21.9
5 1	15 22.37	- 8 42.0	2.113	3.102	4.4	20.3	5 1	15 22.83	- 4 34.7	1.960	2.941	5.4	21.7
5 11	15 13.60	- 7 59.3	2.103	3.103	3.2	20.2	5 11	15 13.63	- 3 56.5	1.932	2.923	4.8	21.7
5 21	15 4.86	- 7 23.9	2.122	3.103	5.5	20.3	5 21	15 4.28	- 3 29.1	1.933	2.904	7.0	21.8
5 31	14 56.97	- 6 58.9	2.168	3.103	8.7	20.5	5 31	14 55.71	- 3 15.9	1.960	2.884	10.1	21.9
6 10	14 50.59	- 6 46.2	2.239	3.103	11.6	20.7	6 10	14 48.66	- 3 18.1	2.011	2.863	13.2	22.1
6 20	14 46.11	- 6 46.3	2.331	3.101	14.2	20.9	6 20	14 43.66	- 3 35.8	2.082	2.841	16.0	22.2
352109	2007 BD ₅₉		5 11.3 113°49	3°5/14.1 18			230114	2001 BR ₇₁		5 11.3 143°48	3°0/ 9.3 17		
4 11	15 35.50	-30 40.0	2.497	3.336	10.9	20.8	4 11	15 35.90	-10 39.1	2.043	2.929	11.0	20.3
4 21	15 29.48	-30 42.7	2.426	3.343	8.3	20.6	4 21	15 29.79	-10 1.6	1.984	2.934	7.7	20.1
5 1	15 21.93	-30 32.6	2.381	3.349	5.6	20.5	5 1	15 22.10	- 9 23.9	1.950	2.940	4.5	19.9
5 11	15 13.58	-30 9.8	2.362	3.356	3.7	20.3	5 11	15 13.61	- 8 49.8	1.943	2.945	3.1	19.8
5 21	15 5.26	-29 36.3	2.372	3.362	4.2	20.4	5 21	15 5.18	- 8 22.9	1.965	2.950	5.5	20.0
5 31	14 57.78	-28 55.5	2.409	3.369	6.6	20.5	5 31	14 57.67	- 8 6.1	2.013	2.955	8.8	20.2
6 10	14 51.80	-28 11.9	2.473	3.375	9.2	20.7	6 10	14 51.74	- 8 1.3	2.086	2.959	12.0	20.4
6 20	14 47.73	-27 29.8	2.559	3.381	11.7	20.9	6 20	14 47.81	- 8 8.8	2.178	2.963	14.6	20.6
363111	2000 WF ₁₄₄		5 11.3 258°16	0°4/11.1 17			105730	2000 SN ₈₃		5 11.3 212°32	4°9/14.6 18		
4 11	15 39.84	-18 16.4	1.714	2.595	13.0	21.7	4 11	15 39.22	-34 8.8	2.632	3.449	11.1	20.4
4 21	15 33.17	-17 56.7	1.624	2.574	9.2	21.4	4 21	15 32.24	-34 45.9	2.548	3.444	8.8	20.2
5 1	15 24.15	-17 28.9	1.558	2.552	4.9	21.1	5 1	15 23.48	-35 9.6	2.489	3.439	6.6	20.1
5 11	15 13.65	-16 55.2	1.519	2.529	0.4	20.7	5 11	15 13.65	-35 18.5	2.457	3.434	5.1	20.0
5 21	15 2.83	-16 19.2	1.507	2.505	4.9	21.0	5 21	15 3.65	-35 12.5	2.453	3.428	5.3	20.0
5 31	14 52.93	-15 45.8	1.521	2.481	9.7	21.2	5 31	14 54.40	-34 54.1	2.476	3.422	7.2	20.1
6 10	14 45.01	-15 20.0	1.559	2.456	14.0	21.4	6 10	14 46.69	-34 27.4	2.526	3.416	9.6	20.2
6 20	14 39.74	-15 5.2	1.617	2.430	17.7	21.6	6 20	14 41.05	-33 57.0	2.599	3.409	11.8	20.4
184148	2004 JT ₅₁		5 11.3 246°81	7°2/ 7.5 17			497968	2007 BW ₃₂		5 11.3 116°66	1°6/10.4 17		
4 11	15 38.16	+ 0 16.4	1.748	2.627	12.9	20.3	4 11	15 37.76	-15 20.5	1.786	2.672	12.3	22.0
4 21	15 31.63	+ 0 53.6	1.685	2.621	10.0	20.1	4 21	15 31.25	-14 49.9	1.731	2.683	8.6	21.8
5 1	15 23.16	+ 1 20.4	1.646	2.614	7.8	19.9	5 1	15 22.90	-14 14.9	1.700	2.693	4.4	21.6
5 11	15 13.62	+ 1 31.6	1.633	2.607	7.4	19.9	5 11	15 13.64	-13 39.3	1.695	2.704	1.6	21.4
5 21	15 4.05	+ 1 23.8	1.645	2.600	9.3	20.0	5 21	15 4.50	-13 6.7	1.719	2.714	4.9	21.7
5 31	14 55.48	+ 0 55.8	1.682	2.593	12.2	20.1	5 31	14 56.47	-12 41.2	1.769	2.724	8.9	21.9
6 10	14 48.74	+ 0 8.6	1.741	2.585	15.3	20.3	6 10	14 50.31	-12 25.8	1.843	2.733	12.5	22.2
6 20	14 44.34	- 0 55.0	1.818	2.578	17.9	20.5	6 20	14 46.46	-12 22.0	1.937	2.742	15.5	22.4
203382	2001 XR ₈₄		5 11.3 195°98	3°2/ 9.4 16			431801	2008 QV ₃₅		5 11.3 243°75	7°8/ 5.3 17		
4 11	15 39.45	-11 19.6	1.752	2.638	12.5	21.1	4 11	15 34.30	+ 0 46.4	1.835	2.718	12.2	20.9
4 21	15 32.55	-10 36.6	1.685	2.636	8.8	20.8	4 21	15 28.82	+ 2 11.9	1.781	2.714	9.7	20.8
5 1	15 23.64	- 9 52.0	1.642	2.633	5.0	20.6	5 1	15 21.65	+ 3 28.4	1.751	2.711	8.0	20.6
5 11	15 13.64	- 9 10.3	1.626	2.629	3.3	20.5	5 11	15 13.60	+ 4 28.9	1.746	2.708	8.2	20.6
5 21	15 3.62	- 8 36.1	1.638	2.625	6.3	20.7	5 21	15 5.58	+ 5 8.3	1.767	2.704	10.0	20.7
5 31	14 54.66	- 8 13.5	1.676	2.620	10.2	20.9	5 31	14 58.49	+ 5 23.9	1.811	2.700	12.7	20.9
6 10	14 47.62	- 8 4.9	1.738	2.614	13.8	21.1	6 10	14 53.06	+ 5 15.8	1.876	2.697	15.3	21.1
6 20	14 43.00	- 8 11.0	1.819	2.607	16.9	21.3	6 20	14 49.71	+ 4 46.4	1.959	2.693	17.6	21.2
477685	2010 RR ₄₈		5 11.3 271°58	3°3/13.5 18			44729	1999 TF ₁₇		5 11.3 142°37	0°9/10.8 18		
4 11	15 36.25	-28 35.3	2.451	3.297	10.8	21.6	4 11	15 38.89	-17 9.7	1.773	2.656	12.6	19.4
4 21	15 30.18	-28 51.9	2.360	3.282	8.2	21.4	4 21	15 32.09	-16 42.5	1.713	2.664	8.8	19.2
5 1	15 22.41	-28 57.4	2.294	3.268	5.4	21.2	5 1	15 23.36	-16 9.2	1.678	2.672	4.5	19.0
5 11	15 13.61	-28 51.5	2.255	3.252	3.4	21.1	5 11	15 13.65	-15 32.9	1.670	2.679	0.9	18.7
5 21	15 4.62	-28 35.0	2.245	3.237	4.2	21.1	5 21	15 4.03	-14 57.5	1.689	2.686	4.7	19.0
5 31	14 56.34	-28 10.6	2.262	3.222	6.9	21.2	5 31	14 55.55	-14 27.3	1.735	2.693	8.9	19.2
6 10	14 49.52	-27 42.4	2.305	3.206	9.9	21.4	6 10	14 49.00	-14 6.0	1.806	2.699	12.5	19.5
6 20	14 44.69	-27 14.6	2.371	3.191	12.5	21.5	6 20	14 44.84	-13 55.7	1.896	2.704	15.6	19.7
146813	2001 YM ₉₃		5 11.3 319°62	3°8/14.1 18			390124	2012 VY ₅₃		5 11.3 96°54	0°4/10.9 17		
4 11	15 3												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
37625	1993 SR ₁		5 11.3 242°08	0°6/11.6	17		294372	2007 VZ ₁₂₃		5 11.3 197°58	0°7/10.8	17	
4 11	15 40.51	-20 17.2	1.768	2.643	13.0	19.1	4 11	15 35.40	-16 51.2	2.199	3.079	10.6	21.2
4 21	15 33.58	-20 9.3	1.682	2.628	9.3	18.8	4 21	15 29.48	-16 32.9	2.128	3.078	7.4	21.0
5 1	15 24.34	-19 52.4	1.620	2.612	5.0	18.6	5 1	15 21.99	-16 10.0	2.083	3.076	3.8	20.8
5 11	15 13.70	-19 28.0	1.585	2.595	0.6	18.2	5 11	15 13.66	-15 44.6	2.065	3.075	0.7	20.5
5 21	15 2.80	-18 58.8	1.578	2.578	4.5	18.4	5 21	15 5.30	-15 19.7	2.076	3.073	4.0	20.8
5 31	14 52.86	-18 29.2	1.598	2.559	9.1	18.7	5 31	14 57.76	-14 58.4	2.115	3.071	7.5	21.0
6 10	14 44.91	-18 4.2	1.641	2.540	13.3	18.9	6 10	14 51.73	-14 43.5	2.178	3.069	10.8	21.2
6 20	14 39.58	-17 47.6	1.705	2.521	16.8	19.1	6 20	14 47.62	-14 37.0	2.263	3.067	13.5	21.4
379352	2009 WT ₁₃₆		5 11.3 175°69	0°8/11.8	17		502721	2015 DT ₃₀		5 11.3 156°53	8°0/5.0	17	
4 11	15 37.45	-21 43.4	2.012	2.884	11.8	21.9	4 11	15 36.09	+ 5 40.4	2.247	3.106	11.2	21.8
4 21	15 31.04	-21 25.2	1.942	2.885	8.4	21.7	4 21	15 29.76	+ 6 48.4	2.202	3.114	9.3	21.7
5 1	15 22.82	-20 57.7	1.896	2.887	4.5	21.5	5 1	15 22.05	+ 7 44.2	2.183	3.121	8.1	21.6
5 11	15 13.65	-20 22.8	1.878	2.887	0.9	21.2	5 11	15 13.66	+ 8 22.7	2.189	3.127	8.2	21.6
5 21	15 4.49	-19 43.7	1.888	2.888	3.9	21.4	5 21	15 5.38	+ 8 40.9	2.222	3.133	9.6	21.7
5 31	14 56.29	-19 4.8	1.926	2.888	7.8	21.7	5 31	14 57.95	+ 8 37.5	2.279	3.138	11.6	21.9
6 10	14 49.84	-18 30.3	1.988	2.888	11.3	21.9	6 10	14 51.98	+ 8 13.9	2.358	3.143	13.6	22.0
6 20	14 45.58	-18 3.8	2.072	2.887	14.3	22.1	6 20	14 47.83	+ 7 32.5	2.454	3.147	15.4	22.2
506195	2016 GK ₁₅₆		5 11.3 320°67	9°2/6.4	17		475603	2006 UU ₁₁₇		5 11.3 198°85	1°6/9.9	17	
4 11	15 35.19	+ 0 13.9	1.314	2.211	15.1	20.4	4 11	15 33.31	-15 17.0	2.242	3.126	10.2	21.8
4 21	15 30.08	+ 1 21.3	1.252	2.196	11.9	20.1	4 21	15 27.96	-14 27.3	2.174	3.125	7.1	21.6
5 1	15 22.57	+ 2 17.3	1.211	2.181	9.6	19.9	5 1	15 21.17	-13 33.1	2.131	3.125	3.7	21.4
5 11	15 13.66	+ 2 53.4	1.193	2.167	9.5	19.9	5 11	15 13.63	-12 38.2	2.117	3.124	1.7	21.2
5 21	15 4.60	+ 3 3.3	1.198	2.154	11.9	20.0	5 21	15 6.13	-11 46.6	2.131	3.123	4.4	21.4
5 31	14 56.69	+ 2 44.1	1.224	2.141	15.3	20.1	5 31	14 59.41	-11 2.2	2.172	3.122	7.8	21.6
6 10	14 51.00	+ 1 57.0	1.269	2.129	18.9	20.3	6 10	14 54.10	-10 28.2	2.238	3.121	10.9	21.8
6 20	14 48.10	+ 0 46.3	1.329	2.118	22.0	20.5	6 20	14 50.61	-10 6.3	2.326	3.120	13.5	22.0
21186	1994 EO ₆		5 11.3 201°88	1°3/10.6	18		121207	1999 PX ₃		5 11.3 300°66	18°1/20.6	18	
4 11	15 39.44	-15 29.2	1.705	2.590	12.9	18.7	4 11	15 46.25	-51 23.0	1.095	1.881	25.1	19.4
4 21	15 32.67	-15 12.6	1.636	2.587	9.0	18.4	4 21	15 40.32	-53 2.6	1.029	1.871	22.8	19.2
5 1	15 23.77	-14 51.4	1.591	2.584	4.7	18.2	5 1	15 28.96	-54 1.3	0.976	1.862	20.6	19.0
5 11	15 13.69	-14 28.6	1.572	2.581	1.3	17.9	5 11	15 13.88	-54 5.6	0.939	1.853	18.8	18.9
5 21	15 3.55	-14 7.5	1.581	2.578	5.1	18.2	5 21	14 58.07	-53 8.9	0.918	1.844	18.1	18.8
5 31	14 54.49	-13 51.9	1.617	2.573	9.4	18.4	5 31	14 44.98	-51 16.4	0.915	1.835	19.0	18.8
6 10	14 47.43	-13 45.1	1.676	2.569	13.4	18.6	6 10	14 36.97	-48 45.4	0.929	1.827	21.0	18.9
6 20	14 42.88	-13 49.0	1.755	2.564	16.7	18.9	6 20	14 34.80	-45 56.4	0.959	1.819	23.7	19.0
93850	2000 WJ ₉₄		5 11.3 157°14	0°6/11.7	18		346021	2007 TZ ₃₁₆		5 11.3 259°25	1°5/10.3	17	
4 11	15 36.81	-21 3.0	1.949	2.824	11.9	19.7	4 11	15 34.84	-14 53.9	2.074	2.958	10.9	21.4
4 21	15 30.62	-20 44.2	1.881	2.827	8.4	19.5	4 21	15 29.19	-14 24.8	1.999	2.951	7.6	21.2
5 1	15 22.61	-20 16.5	1.838	2.830	4.5	19.3	5 1	15 21.88	-13 51.8	1.951	2.944	4.0	21.0
5 11	15 13.66	-19 42.1	1.822	2.832	0.7	19.0	5 11	15 13.67	-13 18.0	1.929	2.937	1.6	20.8
5 21	15 4.72	-19 4.2	1.834	2.834	4.0	19.2	5 21	15 5.40	-12 46.9	1.935	2.930	4.6	21.0
5 31	14 56.77	-18 27.3	1.873	2.836	7.9	19.5	5 31	14 57.95	-12 21.9	1.969	2.922	8.3	21.2
6 10	14 50.58	-17 55.5	1.937	2.838	11.5	19.7	6 10	14 52.04	-12 6.0	2.027	2.915	11.6	21.4
6 20	14 46.61	-17 32.1	2.022	2.839	14.5	19.9	6 20	14 48.14	-12 0.9	2.105	2.907	14.5	21.5
43446	2000 YB ₇₅		5 11.3 111°49	1°8/12.4	18		151113	2001 WG ₃₂		5 11.3 115°51	1°2/10.6	17	R
4 11	15 38.52	-24 49.6	1.510	2.387	14.7	18.8	4 11	15 37.20	-16 23.9	1.776	2.661	12.4	20.7
4 21	15 32.18	-24 19.1	1.449	2.393	10.6	18.6	4 21	15 30.93	-15 55.3	1.716	2.668	8.6	20.5
5 1	15 23.53	-23 32.9	1.410	2.399	6.0	18.3	5 1	15 22.79	-15 21.4	1.682	2.676	4.4	20.3
5 11	15 13.68	-22 33.8	1.396	2.404	2.0	18.1	5 11	15 13.69	-14 45.4	1.674	2.683	1.2	20.0
5 21	15 3.94	-21 27.1	1.409	2.410	4.7	18.3	5 21	15 4.68	-14 11.4	1.693	2.690	4.8	20.3
5 31	14 55.56	-20 20.0	1.448	2.416	9.3	18.5	5 31	14 56.75	-13 43.4	1.739	2.696	8.8	20.6
6 10	14 49.49	-19 19.7	1.510	2.421	13.5	18.8	6 10	14 50.69	-13 24.9	1.808	2.703	12.5	20.8
6 20	14 46.19	-18 31.3	1.591	2.426	17.0	19.0	6 20	14 46.94	-13 17.7	1.898	2.709	15.5	21.0
200077	5134 T ₋₂		5 11.3 273°47	5°0/14.3	18		185373	2006 VM ₁₂₉		5 11.3 4°72	2°5/13.2	18	
4 11	15 38.17	-31 56.6	1.881	2.725	13.7	20.2	4 11	15 34.40	-27 15.6	2.055	2.917	12.0	19.6
4 21	15 31.98	-32 9.8	1.796	2.713	10.7	20.0	4 21	15 28.95	-26 54.0	1.983	2.917	8.9	19.4
5 1	15 23.51	-32 5.8	1.734	2.701	7.5	19.8	5 1	15 21.76	-26 18.8	1.935	2.917	5.4	19.2
5 11	15 13.69	-31 43.4	1.697	2.688	5.2	19.6	5 11	15 13.67	-25 31.5	1.913	2.917	2.6	19.0
5 21	15 3.66	-31 4.0	1.686	2.675	5.7	19.6	5 21	15 5.60	-24 35.5	1.919	2.918	4.0	19.1
5 31	14 54.65	-30 12.3	1.702	2.663	8.7	19.8	5 31	14 58.47	-23 35.8	1.952	2.919	7.4	19.3
6 10	14 47.67	-29 14.9	1.741	2.650	12.1	19.9	6 10	14 53.03	-22 38.0	2.011	2.920	10.7	19.5
6 20	14 43.32	-28 18.8	1.802	2.637	15.3	20.1	6 20	14 49.72	-21 46.8	2.091	2.921	13.6	19.7
159585	2001 XK ₆₅		5 11.3 237°02	1°7/12.3	17		368444	2002 XQ ₉₆		5 11.3 180°22	0°6/11.8	17	
4 11	15 39.67	-24 0.7	1.631	2.504	14.0	19.7	4 11	15 37.84	-22 3.6	1.950	2.822	12.1	21.0
4 21	15 33.09	-23 38.4	1.550	2.493	10.2	19.4	4 21	15 31.34	-21 28.8	1.879	2.823	8.6	20.8
5 1	15 24.10	-23 1.8	1.492	2.481	5.8	19.1	5 1	15 23.01	-20 43.3	1.833	2.824	4.6	20.6
5 11	15 13.71	-22 12.4	1.461	2.469	1.8	18.8	5 11	15 13.71	-19 49.8	1.815	2.824	0.7	20.3
5 21	15 3.15	-21 14.5	1.456	2.457	4.7	19.0	5 21	15 4.45	-18 52.4	1.824	2.824	4.0	20.5
5 31	14 53.73	-20 14.3	1.478	2.443	9.3	19.2	5 31	14 56.20	-17 56.3	1.862	2.823	8.0	20.8
6 10	14 46.49	-19 18.9	1.523	2.430	13.6	19.4	6 10	14 49.76	-17 6.8	1.924	2.822	11.7	21.0
6 20	14 42.04	-18 33.7	1.589	2.416	17.3	19.6	6 20	14 45.57	-16 27.6	2.007	2.820	14.7	21.2
167047	2003 QA ₅₆		5 11.3 204°31	0°1/11.2	17		248598	2006 DG ₂₈		5 11.3 342°78	3°6/12.5	17	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
292761	2006 <i>UB</i> ₁₈₈		5 11.3 163°59	1°1/12.4	18		300020	2006 <i>UM</i> ₈₅		5 11.3 185°92	0°0/11.3	18	
4 11	15 34.37	-24 12.0	2.988	3.844	8.8	22.2	4 11	15 35.06	-18 34.4	2.676	3.547	9.2	21.5
4 21	15 28.44	-23 44.2	2.915	3.849	6.3	22.0	4 21	15 29.07	-18 24.6	2.602	3.546	6.5	21.3
5 1	15 21.34	-23 8.3	2.869	3.855	3.6	21.9	5 1	15 21.76	-18 9.9	2.554	3.546	3.4	21.1
5 11	15 13.67	-22 25.7	2.852	3.860	1.2	21.7	5 11	15 13.74	-17 51.9	2.535	3.545	0.1	20.8
5 21	15 6.05	-21 39.0	2.865	3.864	2.8	21.8	5 21	15 5.70	-17 32.6	2.545	3.544	3.2	21.1
5 31	14 59.11	-20 51.3	2.908	3.868	5.6	22.0	5 31	14 58.33	-17 14.4	2.584	3.542	6.3	21.3
6 10	14 53.34	-20 6.1	2.977	3.871	8.1	22.2	6 10	14 52.22	-17 0.0	2.650	3.540	9.1	21.5
6 20	14 49.10	-19 26.1	3.071	3.874	10.4	22.3	6 20	14 47.75	-16 51.3	2.738	3.538	11.6	21.6
31727	Amandalewis		5 11.3 79°88	2°4/ 9.9	17		44734	1999 <i>TJ</i> ₂₅		5 11.3 257°82	1°4/10.4	18	
4 11	15 36.29	-13 41.1	1.670	2.562	12.7	18.9	4 11	15 37.14	-17 13.4	1.632	2.520	13.1	19.3
4 21	15 30.38	-13 1.4	1.612	2.567	8.8	18.7	4 21	15 31.23	-16 22.1	1.553	2.507	9.2	19.1
5 1	15 22.54	-12 18.5	1.578	2.572	4.8	18.4	5 1	15 23.14	-15 21.8	1.499	2.494	4.8	18.8
5 11	15 13.72	-11 36.8	1.570	2.577	2.5	18.3	5 11	15 13.79	-14 17.0	1.471	2.480	1.5	18.5
5 21	15 4.96	-11 0.7	1.589	2.581	5.6	18.5	5 21	15 4.30	-13 13.4	1.470	2.466	5.4	18.7
5 31	14 57.31	-10 34.5	1.634	2.586	9.7	18.8	5 31	14 55.85	-12 17.3	1.495	2.452	10.0	19.0
6 10	14 51.57	-10 21.0	1.701	2.591	13.4	19.0	6 10	14 49.39	-11 34.2	1.542	2.437	14.2	19.2
6 20	14 48.19	-10 21.3	1.788	2.596	16.5	19.2	6 20	14 45.50	-11 7.0	1.609	2.422	17.8	19.4
199600	2006 <i>FS</i> ₂₄		5 11.3 325°76	0°2/11.2	17		94603	2001 <i>VD</i> ₈₄		5 11.3 233°86	2°0/10.1	16	
4 11	15 36.77	-17 54.3	1.825	2.708	12.2	20.4	4 11	15 38.52	-15 53.8	1.573	2.463	13.5	20.8
4 21	15 30.74	-17 48.7	1.756	2.706	8.6	20.2	4 21	15 32.23	-15 1.5	1.499	2.453	9.5	20.6
5 1	15 22.77	-17 37.3	1.711	2.705	4.5	19.9	5 1	15 23.66	-14 1.5	1.449	2.444	5.0	20.3
5 11	15 13.74	-17 22.0	1.693	2.703	0.2	19.6	5 11	15 13.81	-12 58.7	1.426	2.433	2.0	20.0
5 21	15 4.65	-17 5.6	1.702	2.702	4.3	19.9	5 21	15 3.86	-11 59.0	1.429	2.423	5.9	20.3
5 31	14 56.54	-16 51.5	1.738	2.700	8.5	20.1	5 31	14 55.03	-11 8.7	1.457	2.412	10.5	20.5
6 10	14 50.25	-16 43.0	1.798	2.699	12.2	20.4	6 10	14 48.28	-10 32.6	1.509	2.400	14.7	20.7
6 20	14 46.29	-16 42.5	1.878	2.698	15.3	20.6	6 20	14 44.19	-10 13.3	1.579	2.388	18.2	20.9
39226	2000 <i>YE</i> ₂₆		5 11.3 319°12	4°1/ 8.9	18		476366	2008 <i>CW</i> ₁₁		5 11.3 105°70	4°7/ 7.8	18	
4 11	15 33.71	-12 59.0	1.195	2.105	15.2	18.0	4 11	15 33.46	- 4 32.3	2.252	3.135	10.2	20.9
4 21	15 29.35	-11 45.2	1.124	2.087	10.8	17.7	4 21	15 28.04	- 3 47.8	2.193	3.137	7.5	20.7
5 1	15 22.33	-10 24.1	1.074	2.069	6.2	17.4	5 1	15 21.24	- 3 7.7	2.160	3.139	5.3	20.6
5 11	15 13.73	- 9 3.7	1.048	2.052	4.3	17.2	5 11	15 13.74	- 2 36.1	2.155	3.140	4.9	20.6
5 21	15 4.90	- 7 53.0	1.045	2.036	8.2	17.4	5 21	15 6.27	- 2 16.2	2.176	3.142	6.7	20.7
5 31	14 57.30	- 7 0.5	1.065	2.020	13.3	17.6	5 31	14 59.57	- 2 10.0	2.224	3.144	9.3	20.8
6 10	14 52.10	- 6 31.3	1.104	2.005	18.1	17.9	6 10	14 54.24	- 2 18.3	2.296	3.145	11.9	21.0
6 20	14 49.95	- 6 26.6	1.159	1.992	22.1	18.1	6 20	14 50.66	- 2 40.2	2.387	3.147	14.1	21.2
420399	2012 <i>CU</i> ₄₄		5 11.3 116°25	1°7/10.3	16		21043	1990 <i>RT</i> ₂		5 11.3 236°85	5°1/14.4	18	
4 11	15 39.36	-15 11.0	1.706	2.591	12.8	21.9	4 11	15 40.28	-33 2.2	2.207	3.036	12.5	18.5
4 21	15 32.40	-14 36.3	1.655	2.607	8.9	21.7	4 21	15 33.30	-33 31.5	2.119	3.024	9.9	18.3
5 1	15 23.54	-13 57.4	1.628	2.622	4.6	21.5	5 1	15 24.21	-33 45.8	2.054	3.013	7.2	18.1
5 11	15 13.77	-13 18.1	1.629	2.637	1.8	21.3	5 11	15 13.84	-33 43.2	2.016	3.001	5.3	17.9
5 21	15 4.17	-12 42.4	1.656	2.651	5.2	21.5	5 21	15 3.22	-33 24.1	2.006	2.988	5.7	17.9
5 31	14 55.80	-12 14.8	1.711	2.664	9.2	21.8	5 31	14 53.48	-32 51.7	2.022	2.975	8.1	18.1
6 10	14 49.43	-11 58.1	1.788	2.677	12.9	22.1	6 10	14 45.55	-32 11.3	2.064	2.962	11.0	18.2
6 20	14 45.47	-11 53.9	1.886	2.690	15.9	22.3	6 20	14 40.04	-31 28.9	2.128	2.948	13.8	18.4
54655	2000 <i>SQ</i> ₃₆₂		5 11.3 249°94	3°9/ 5.6	18		437366	2013 <i>UK</i> ₁₂		5 11.3 160°85	0°0/11.3	17	
4 11	15 27.01	+ 2 48.3	4.501	5.363	6.0	19.6	4 11	15 36.42	-20 44.8	2.386	3.255	10.3	21.7
4 21	15 23.09	+ 3 21.6	4.439	5.357	4.8	19.5	4 21	15 30.05	-19 55.9	2.318	3.262	7.2	21.5
5 1	15 18.52	+ 3 49.8	4.403	5.351	4.0	19.4	5 1	15 22.26	-18 58.8	2.276	3.268	3.8	21.3
5 11	15 13.62	+ 4 10.8	4.395	5.345	4.1	19.4	5 11	15 13.77	-17 56.3	2.264	3.274	0.1	21.0
5 21	15 8.72	+ 4 23.3	4.415	5.339	4.9	19.5	5 21	15 5.37	-16 52.5	2.281	3.279	3.5	21.3
5 31	15 4.14	+ 4 26.3	4.462	5.332	6.1	19.6	5 31	14 57.83	-15 51.9	2.326	3.283	7.0	21.5
6 10	15 0.20	+ 4 19.7	4.533	5.326	7.4	19.7	6 10	14 51.76	-14 58.5	2.398	3.287	10.0	21.7
6 20	14 57.10	+ 4 3.8	4.625	5.320	8.6	19.7	6 20	14 47.53	-14 15.3	2.493	3.290	12.6	21.9
173179	1997 <i>TL</i> ₂₄		5 11.3 201°16	1°1/11.9	16		457575	2008 <i>YG</i> ₁₄₃		5 11.3 15°05	3°9/13.5	17	
4 11	15 41.59	-21 44.9	1.998	2.863	12.1	21.6	4 11	15 38.08	-28 19.7	1.275	2.152	16.8	20.7
4 21	15 34.08	-21 41.3	1.918	2.858	8.7	21.4	4 21	15 32.37	-28 8.5	1.213	2.153	12.6	20.4
5 1	15 24.53	-21 28.5	1.864	2.853	4.8	21.1	5 1	15 23.86	-27 36.1	1.171	2.155	7.9	20.2
5 11	15 13.82	-21 7.6	1.838	2.847	1.2	20.9	5 11	15 13.82	-26 43.7	1.153	2.156	4.1	20.0
5 21	15 2.99	-20 40.8	1.840	2.839	4.1	21.1	5 21	15 3.79	-25 36.1	1.159	2.158	5.7	20.0
5 31	14 53.13	-20 12.2	1.871	2.831	8.1	21.3	5 31	14 55.32	-24 22.0	1.188	2.161	10.3	20.3
6 10	14 45.13	-19 46.1	1.927	2.822	11.8	21.5	6 10	14 49.55	-23 11.0	1.240	2.163	14.8	20.6
6 20	14 39.52	-19 26.4	2.004	2.812	14.9	21.7	6 20	14 47.00	-22 10.5	1.310	2.166	18.7	20.8
290768	2005 <i>UR</i> ₅₁₅		5 11.3 316°50	6°2/ 5.8	18		478749	2012 <i>UH</i> ₈₉		5 11.3 156°86	0°3/11.1	17	
4 11	15 31.79	- 1 28.8	2.196	3.080	10.4	20.6	4 11	15 34.38	-19 18.7	2.388	3.262	10.1	21.7
4 21	15 26.92	- 0 10.4	2.138	3.076	8.1	20.5	4 21	15 28.66	-18 36.5	2.320	3.267	7.0	21.5
5 1	15 20.66	+ 1 2.2	2.105	3.072	6.4	20.3	5 1	15 21.55	-17 47.3	2.278	3.271	3.6	21.3
5 11	15 13.69	+ 2 3.2	2.099	3.068	6.4	20.3	5 11	15 13.75	-16 54.2	2.264	3.274	0.3	21.0
5 21	15 6.74	+ 2 48.3	2.119	3.064	8.2	20.4	5 21	15 6.00	-16 0.7	2.280	3.278	3.6	21.3
5 31	15 0.52	+ 3 14.8	2.165	3.060	10.6	20.6	5 31	14 59.05	-15 10.8	2.324	3.281	7.0	21.5
6 10	14 55.66	+ 3 21.8	2.232	3.057	13.0	20.7	6 10	14 53.49	-14 28.2	2.393	3.284	10.0	21.7
6 20	14 52.54	+ 3 10.5	2.319	3.054	15.2	20.9	6 20	14 49.71	-13 55.3	2.485	3.286	12.6	21.9
99118	2001 <i>FO</i> ₆₈		5 11.3 142°05	5°4/ 6.9	18		391389	2006 <i>WD</i> ₁₇₁					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
258989	2002 TR ₃₃		5 11.3 286°36	0°1/11.3 17			125662	2001 XN ₇₃		5 11.3 143°54	2°4/ 9.9 17	R	
4 11	15 37.32	-19 26.4	1.534	2.422	13.9	20.6	4 11	15 37.18	-12 56.3	1.777	2.666	12.2	19.9
4 21	15 31.63	-19 1.0	1.450	2.402	9.9	20.4	4 21	15 30.98	-12 26.2	1.716	2.668	8.6	19.7
5 1	15 23.48	-18 25.3	1.388	2.382	5.2	20.0	5 1	15 22.92	-11 54.1	1.678	2.671	4.6	19.5
5 11	15 13.83	-17 42.0	1.352	2.362	0.2	19.6	5 11	15 13.87	-11 23.6	1.668	2.674	2.4	19.3
5 21	15 3.88	-16 55.5	1.341	2.341	5.1	19.9	5 21	15 4.84	-10 58.3	1.685	2.676	5.5	19.5
5 31	14 54.96	-16 11.7	1.357	2.321	10.1	20.1	5 31	14 56.85	-10 42.0	1.728	2.679	9.4	19.7
6 10	14 48.16	-15 36.6	1.394	2.301	14.7	20.4	6 10	14 50.70	-10 37.0	1.794	2.681	12.9	20.0
6 20	14 44.15	-15 14.1	1.451	2.281	18.6	20.6	6 20	14 46.83	-10 44.2	1.880	2.683	15.9	20.2
255380	2005 WS ₁₃₆		5 11.3 319°89	1°2/10.3 17			166754	2002 US ₁₃		5 11.3 147°89	3°4/ 8.4 18		
4 11	15 32.42	-17 42.9	2.035	2.921	11.0	20.0	4 11	15 34.01	- 8 49.3	2.427	3.310	9.6	20.4
4 21	15 27.55	-16 42.0	1.960	2.912	7.7	19.7	4 21	15 28.34	- 7 53.6	2.369	3.317	6.8	20.2
5 1	15 21.08	-15 33.3	1.910	2.904	4.0	19.5	5 1	15 21.39	- 6 58.6	2.338	3.324	4.3	20.0
5 11	15 13.75	-14 21.0	1.887	2.896	1.2	19.3	5 11	15 13.82	- 6 8.5	2.335	3.330	3.5	20.0
5 21	15 6.41	-13 10.3	1.892	2.888	4.5	19.5	5 21	15 6.32	- 5 26.7	2.361	3.336	5.5	20.1
5 31	14 59.89	-12 6.4	1.925	2.880	8.3	19.7	5 31	14 59.57	- 4 56.2	2.414	3.342	8.2	20.3
6 10	14 54.90	-11 13.9	1.981	2.873	11.7	19.9	6 10	14 54.13	- 4 38.7	2.491	3.347	10.8	20.5
6 20	14 51.87	-10 35.4	2.059	2.865	14.6	20.1	6 20	14 50.35	- 4 34.2	2.589	3.352	13.1	20.7
368393	2002 SZ ₇		5 11.3 312°58	1°5/12.0 17			249129	2007 YR ₄₇		5 11.3 181°22	2°3/ 9.9 16		
4 11	15 36.66	-21 58.9	1.326	2.217	15.4	20.5	4 11	15 39.78	-12 36.7	2.005	2.885	11.5	21.6
4 21	15 31.52	-21 57.6	1.245	2.197	11.1	20.2	4 21	15 32.66	-12 8.2	1.938	2.886	8.0	21.4
5 1	15 23.58	-21 43.9	1.185	2.177	6.2	19.8	5 1	15 23.76	-11 37.7	1.896	2.887	4.4	21.2
5 11	15 13.85	-21 19.0	1.149	2.158	1.6	19.5	5 11	15 13.91	-11 8.5	1.882	2.887	2.4	21.0
5 21	15 3.73	-20 46.0	1.137	2.139	5.3	19.7	5 21	15 4.07	-10 44.0	1.897	2.887	5.2	21.2
5 31	14 54.75	-20 10.7	1.149	2.120	10.7	19.9	5 31	14 55.18	-10 27.3	1.939	2.885	8.8	21.4
6 10	14 48.21	-19 40.0	1.182	2.102	15.6	20.1	6 10	14 48.01	-10 20.9	2.006	2.883	12.2	21.6
6 20	14 44.85	-19 19.1	1.233	2.085	19.9	20.3	6 20	14 43.02	-10 25.8	2.093	2.879	15.1	21.8
298735	2004 GB ₉		5 11.3 322°66	1°1/10.5 18			350188	2011 UR ₃₃₂		5 11.3 225°40	4°5/ 7.8 18		
4 11	15 33.26	-17 38.4	2.013	2.899	11.2	20.5	4 11	15 34.09	- 3 33.4	2.532	3.409	9.5	20.7
4 21	15 28.13	-16 45.3	1.942	2.895	7.8	20.3	4 21	15 28.44	- 2 57.4	2.463	3.402	7.1	20.5
5 1	15 21.39	-15 45.0	1.896	2.891	4.0	20.1	5 1	15 21.49	- 2 26.1	2.420	3.395	5.1	20.4
5 11	15 13.79	-14 41.5	1.878	2.887	1.1	19.8	5 11	15 13.84	- 2 2.8	2.405	3.388	4.7	20.4
5 21	15 6.20	-13 39.5	1.887	2.883	4.4	20.1	5 21	15 6.17	- 1 50.2	2.419	3.381	6.3	20.4
5 31	14 59.47	-12 44.1	1.924	2.880	8.2	20.3	5 31	14 59.15	- 1 50.2	2.459	3.373	8.7	20.6
6 10	14 54.31	-11 59.2	1.984	2.877	11.6	20.5	6 10	14 53.36	- 2 3.2	2.523	3.365	11.2	20.7
6 20	14 51.14	-11 27.5	2.066	2.874	14.5	20.7	6 20	14 49.18	- 2 28.8	2.608	3.357	13.3	20.9
141403	2002 AH ₁₄₉		5 11.3 87°12	0°2/11.5 17			333437	2003 SB ₁₈₀		5 11.3 278°31	5°0/13.6 18		
4 11	15 34.93	-19 55.3	2.279	3.153	10.5	21.0	4 11	15 40.85	-29 59.2	1.911	2.758	13.4	20.4
4 21	15 29.09	-19 37.4	2.220	3.166	7.3	20.9	4 21	15 34.01	-30 46.4	1.825	2.745	10.4	20.2
5 1	15 21.80	-19 12.9	2.187	3.179	3.9	20.7	5 1	15 24.75	-31 20.4	1.763	2.732	7.3	19.9
5 11	15 13.81	-18 44.0	2.182	3.192	0.3	20.4	5 11	15 13.96	-31 38.6	1.727	2.718	5.1	19.8
5 21	15 5.90	-18 13.4	2.205	3.205	3.5	20.7	5 21	15 2.80	-31 40.7	1.718	2.705	5.9	19.8
5 31	14 58.85	-17 44.4	2.256	3.217	6.9	20.9	5 31	14 52.56	-31 29.1	1.735	2.692	8.9	19.9
6 10	14 53.28	-17 20.2	2.333	3.230	9.9	21.1	6 10	14 44.33	-31 9.2	1.776	2.679	12.2	20.1
6 20	14 49.57	-17 3.1	2.431	3.242	12.5	21.3	6 20	14 38.79	-30 46.7	1.839	2.665	15.3	20.3
188966	2008 AQ ₁₀₁		5 11.3 305°44	2°4/ 8.5 18			194501	2001 WJ ₈₅		5 11.3 115°17	0°5/10.9 18		
4 11	15 28.03	- 6 26.9	4.149	5.026	6.1	19.8	4 11	15 31.07	-17 5.2	3.481	4.353	7.3	21.4
4 21	15 23.87	- 6 8.2	4.078	5.022	4.4	19.6	4 21	15 26.05	-16 44.0	3.421	4.367	5.0	21.3
5 1	15 18.98	- 5 51.4	4.035	5.017	2.9	19.5	5 1	15 20.14	-16 19.8	3.388	4.380	2.6	21.1
5 11	15 13.72	- 5 38.3	4.021	5.013	2.4	19.5	5 11	15 13.80	-15 54.3	3.384	4.393	0.5	21.0
5 21	15 8.45	- 5 30.1	4.036	5.008	3.6	19.6	5 21	15 7.51	-15 29.2	3.410	4.406	2.6	21.2
5 31	15 3.54	- 5 28.0	4.079	5.004	5.3	19.7	5 31	15 1.75	-15 6.5	3.465	4.419	5.0	21.3
6 10	14 59.32	- 5 32.7	4.149	4.999	7.0	19.8	6 10	14 56.90	-14 48.0	3.547	4.431	7.2	21.5
6 20	14 56.04	- 5 44.4	4.241	4.995	8.5	19.9	6 20	14 53.26	-14 35.0	3.653	4.444	9.1	21.7
191811	2004 TJ ₂₇₉		5 11.3 327°60	0°9/10.7 18			918	Itha		5 11.3 269°43	6°1/15.3 18		
4 11	15 34.56	-18 53.7	1.607	2.498	13.2	19.6	4 11	15 39.07	-36 15.1	2.207	3.023	12.9	15.5
4 21	15 29.38	-17 57.9	1.538	2.492	9.2	19.3	4 21	15 32.59	-36 41.8	2.113	3.006	10.5	15.3
5 1	15 22.16	-16 51.9	1.493	2.487	4.8	19.1	5 1	15 23.93	-36 51.3	2.042	2.988	8.0	15.1
5 11	15 13.82	-15 40.3	1.473	2.483	0.9	18.8	5 11	15 13.93	-36 41.3	1.996	2.970	6.3	14.9
5 21	15 5.47	-14 29.3	1.480	2.478	5.0	19.0	5 21	15 3.66	-36 12.2	1.977	2.951	6.5	14.9
5 31	14 58.22	-13 25.5	1.513	2.474	9.6	19.3	5 31	14 54.25	-35 27.1	1.984	2.933	8.5	15.0
6 10	14 52.91	-12 34.5	1.568	2.470	13.6	19.5	6 10	14 46.69	-34 32.0	2.016	2.914	11.2	15.1
6 20	14 50.06	-11 59.4	1.643	2.466	17.0	19.7	6 20	14 41.60	-33 33.6	2.070	2.895	13.9	15.3
429666	2011 GL ₆₄		5 11.3 348°55	6°1/ 7.5 17			17853	Ronaldsayer		5 11.3 272°45	2°8/ 9.2 18		
4 11	15 35.07	- 4 0.8	1.714	2.605	12.5	20.5	4 11	15 33.89	-10 20.4	2.341	3.225	9.8	18.1
4 21	15 29.52	- 3 4.2	1.657	2.604	9.3	20.3	4 21	15 28.47	- 9 47.1	2.260	3.210	7.0	17.9
5 1	15 22.15	- 2 13.4	1.624	2.602	6.7	20.1	5 1	15 21.58	- 9 13.4	2.205	3.194	4.1	17.7
5 11	15 13.83	- 1 34.3	1.617	2.602	6.3	20.1	5 11	15 13.85	- 8 42.6	2.177	3.178	2.9	17.6
5 21	15 5.53	- 1 11.3	1.635	2.601	8.4	20.2	5 21	15 6.03	- 8 17.9	2.178	3.162	5.1	17.7
5 31	14 58.23	- 1 7.2	1.678	2.600	11.6	20.4	5 31	14 58.86	- 8 2.0	2.206	3.146	8.2	17.9
6 10	14 52.70	- 1 22.3	1.742	2.600	14.7	20.6	6 10	14 53.00	- 7 56.9	2.258	3.130	11.2	18.0
6 20	14 49.41	- 1 55.0	1.825	2.600	17.4	20.8	6 20	14 48.91	- 8 3.3	2.332	3.114	13.8	18.2
348999	2006 UR ₂₂₀		5 11.3 176°76	2°8/13.4 18			125506	2001 WS ₃₅		5 11.3 215°69	3°9/ 9.4 18		
4 11	15 37.16	-27 53.0</											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
496425	2014 <i>FT</i> ₆₄		5 11.4 335°61	2°8/13.0	16		134114	2004 <i>XQ</i> ₁₈₁		5 11.4 96°93	0°9/11.8	18	
4 11	15 37.77	-26 1.0	2.203	3.060	11.5	21.1	4 11	15 40.43	-19 48.4	1.912	2.785	12.3	19.8
4 21	15 31.37	-26 27.3	2.129	3.060	8.5	21.0	4 21	15 33.25	-20 11.4	1.852	2.796	8.7	19.6
5 1	15 23.16	-26 43.6	2.079	3.059	5.3	20.8	5 1	15 24.13	-20 28.1	1.816	2.806	4.7	19.3
5 11	15 13.91	-26 49.6	2.057	3.058	2.9	20.6	5 11	15 13.98	-20 38.6	1.808	2.817	1.0	19.1
5 21	15 4.55	-26 46.0	2.062	3.058	4.2	20.7	5 21	15 3.84	-20 44.4	1.828	2.827	4.0	19.3
5 31	14 56.04	-26 35.6	2.096	3.057	7.3	20.9	5 31	14 54.76	-20 47.8	1.875	2.838	7.9	19.6
6 10	14 49.17	-26 22.1	2.154	3.057	10.4	21.1	6 10	14 47.56	-20 52.0	1.948	2.848	11.4	19.8
6 20	14 44.45	-26 9.4	2.235	3.057	13.1	21.2	6 20	14 42.73	-20 59.7	2.041	2.858	14.4	20.0
121984	2000 <i>ED</i> ₁₆₇		5 11.4 89°02	0°3/11.2	18		270474	2002 <i>DG</i> ₁₄		5 11.4 170°79	0°7/11.8	17	
4 11	15 41.62	-17 35.7	1.290	2.182	15.6	19.7	4 11	15 37.73	-20 49.5	1.925	2.800	12.1	21.1
4 21	15 34.64	-17 34.5	1.237	2.191	11.0	19.5	4 21	15 31.40	-20 38.9	1.856	2.801	8.6	20.9
5 1	15 25.01	-17 26.2	1.205	2.200	5.7	19.2	5 1	15 23.18	-20 19.9	1.811	2.802	4.6	20.6
5 11	15 13.97	-17 13.1	1.199	2.209	0.4	18.8	5 11	15 13.95	-19 54.2	1.794	2.803	0.7	20.3
5 21	15 3.02	-16 58.7	1.217	2.217	5.4	19.2	5 21	15 4.71	-19 24.7	1.804	2.804	4.0	20.6
5 31	14 53.61	-16 47.6	1.260	2.226	10.6	19.5	5 31	14 56.45	-18 55.4	1.842	2.805	8.0	20.8
6 10	14 46.81	-16 43.9	1.325	2.235	15.1	19.8	6 10	14 49.98	-18 30.5	1.904	2.805	11.6	21.0
6 20	14 43.14	-16 50.3	1.409	2.243	18.8	20.1	6 20	14 45.79	-18 13.1	1.987	2.805	14.7	21.3
391672	2008 <i>AF</i> ₅		5 11.4 135°40	6°5/ 5.8	17		462223	2007 <i>XU</i> ₁₇		5 11.4 98°75	3°5/13.7	18	
4 11	15 34.11	+ 4 7.2	2.630	3.491	9.7	21.6	4 11	15 40.92	-29 18.1	1.634	2.491	14.8	21.0
4 21	15 28.30	+ 4 57.0	2.585	3.501	7.9	21.5	4 21	15 33.73	-28 54.2	1.581	2.511	11.0	20.8
5 1	15 21.35	+ 5 37.0	2.566	3.512	6.7	21.5	5 1	15 24.36	-28 11.7	1.551	2.530	6.9	20.6
5 11	15 13.85	+ 6 3.5	2.574	3.521	6.7	21.5	5 11	15 13.99	-27 12.6	1.547	2.549	3.7	20.4
5 21	15 6.45	+ 6 14.2	2.609	3.531	7.9	21.6	5 21	15 3.90	-26 1.7	1.570	2.568	4.9	20.5
5 31	14 59.76	+ 6 8.0	2.669	3.540	9.7	21.7	5 31	14 55.27	-24 46.4	1.619	2.586	8.6	20.8
6 10	14 54.28	+ 5 45.7	2.752	3.548	11.6	21.9	6 10	14 48.96	-23 34.5	1.693	2.603	12.3	21.1
6 20	14 50.35	+ 5 9.1	2.855	3.557	13.2	22.0	6 20	14 45.35	-22 31.8	1.788	2.620	15.5	21.3
300906	2008 <i>BQ</i> ₄₁		5 11.4 100°74	5°5/15.6	18		338186	2002 <i>RK</i> ₁₈₃		5 11.4 204°13	3°6/14.5	18	
4 11	15 38.58	-36 16.9	2.401	3.214	12.1	20.7	4 11	15 37.24	-32 5.1	2.667	3.495	10.6	21.6
4 21	15 31.84	-36 37.6	2.337	3.227	9.7	20.5	4 21	15 30.79	-31 58.2	2.581	3.490	8.2	21.4
5 1	15 23.34	-36 41.6	2.295	3.240	7.4	20.4	5 1	15 22.79	-31 37.5	2.520	3.484	5.7	21.3
5 11	15 13.92	-36 28.2	2.280	3.253	5.7	20.3	5 11	15 13.95	-31 3.3	2.487	3.478	3.8	21.1
5 21	15 4.54	-35 58.5	2.292	3.266	5.8	20.3	5 21	15 5.06	-30 17.3	2.482	3.471	4.2	21.2
5 31	14 56.16	-35 16.3	2.331	3.279	7.5	20.5	5 31	14 56.96	-29 23.2	2.507	3.464	6.5	21.3
6 10	14 49.51	-34 26.8	2.396	3.291	9.8	20.6	6 10	14 50.31	-28 25.8	2.557	3.456	9.1	21.4
6 20	14 45.06	-33 35.6	2.483	3.304	12.0	20.8	6 20	14 45.56	-27 29.7	2.632	3.448	11.5	21.6
114214	2002 <i>VA</i> ₁₁₀		5 11.4 88°20	0°1/11.4	18		186477	2002 <i>TV</i> ₇₃		5 11.4 138°75	1°2/12.1	17	
4 11	15 40.79	-18 45.3	1.696	2.575	13.2	19.5	4 11	15 39.26	-22 55.4	1.888	2.757	12.6	20.8
4 21	15 33.46	-18 41.0	1.649	2.598	9.2	19.3	4 21	15 32.41	-22 36.0	1.826	2.767	9.0	20.6
5 1	15 24.17	-18 29.8	1.627	2.620	4.8	19.1	5 1	15 23.67	-22 5.7	1.788	2.777	5.0	20.4
5 11	15 13.96	-18 13.6	1.632	2.642	0.2	18.7	5 11	15 13.97	-21 26.7	1.777	2.786	1.3	20.2
5 21	15 3.97	-17 55.4	1.664	2.664	4.4	19.1	5 21	15 4.37	-20 42.3	1.794	2.794	4.0	20.4
5 31	14 55.28	-17 39.1	1.723	2.685	8.6	19.4	5 31	14 55.88	-19 57.6	1.839	2.802	8.0	20.6
6 10	14 48.68	-17 28.1	1.806	2.706	12.2	19.7	6 10	14 49.29	-19 17.5	1.908	2.810	11.6	20.9
6 20	14 44.57	-17 24.9	1.910	2.727	15.2	19.9	6 20	14 45.06	-18 45.7	1.999	2.817	14.6	21.1
294793	2008 <i>CX</i> ₇₀		5 11.4 127°61	4°0/ 8.1	17		338850	2003 <i>XS</i> ₃₃		5 11.4 153°94	0°3/11.1	17	
4 11	15 33.29	- 7 9.3	2.339	3.224	9.8	20.8	4 11	15 35.13	-19 17.0	2.002	2.882	11.5	21.3
4 21	15 27.91	- 6 16.2	2.282	3.229	7.1	20.7	4 21	15 29.48	-18 38.9	1.934	2.883	8.0	21.1
5 1	15 21.21	- 5 25.3	2.251	3.235	4.7	20.5	5 1	15 22.14	-17 52.9	1.891	2.884	4.2	20.9
5 11	15 13.86	- 4 40.6	2.248	3.240	4.1	20.5	5 11	15 13.93	-17 2.3	1.875	2.885	0.3	20.5
5 21	15 6.57	- 4 5.7	2.273	3.244	6.0	20.6	5 21	15 5.74	-16 11.0	1.887	2.886	4.1	20.8
5 31	15 0.04	- 3 43.3	2.324	3.249	8.7	20.8	5 31	14 58.48	-15 23.7	1.927	2.887	7.9	21.1
6 10	14 54.83	- 3 34.5	2.399	3.254	11.3	21.0	6 10	14 52.86	-14 44.5	1.991	2.887	11.4	21.3
6 20	14 51.30	- 3 39.4	2.495	3.258	13.5	21.1	6 20	14 49.31	-14 16.3	2.076	2.888	14.3	21.5
301061	Egelsbach		5 11.4 152°33	0°8/11.7	16		281025	2006 <i>GR</i>		5 11.4 261°78	3°3/ 9.1	17	
4 11	15 41.65	-20 44.5	1.532	2.411	14.4	21.8	4 11	15 35.09	-10 45.8	1.893	2.783	11.5	21.1
4 21	15 34.45	-20 36.1	1.470	2.417	10.2	21.6	4 21	15 29.51	- 9 58.0	1.825	2.778	8.2	20.9
5 1	15 24.86	-20 17.5	1.431	2.423	5.5	21.3	5 1	15 22.19	- 9 9.2	1.782	2.772	4.8	20.7
5 11	15 13.99	-19 50.6	1.418	2.428	0.8	21.0	5 11	15 13.94	- 8 23.9	1.766	2.767	3.4	20.6
5 21	15 3.15	-19 19.0	1.432	2.432	4.8	21.3	5 21	15 5.65	- 7 46.6	1.776	2.761	6.0	20.7
5 31	14 53.64	-18 47.9	1.472	2.436	9.5	21.6	5 31	14 58.25	- 7 21.0	1.813	2.755	9.6	20.9
6 10	14 46.46	-18 22.4	1.535	2.440	13.7	21.9	6 10	14 52.50	- 7 9.5	1.873	2.750	13.0	21.1
6 20	14 42.11	-18 6.3	1.618	2.443	17.2	22.1	6 20	14 48.86	- 7 12.6	1.953	2.744	15.8	21.3
172141	2002 <i>JT</i> ₇₉		5 11.4 252°82	1°2/11.9	18		289327	2005 <i>AZ</i> ₅₁		5 11.4 127°90	2°2/14.3	18	
4 11	15 40.94	-20 54.4	1.655	2.532	13.6	19.9	4 11	15 29.20	-30 36.4	4.547	5.375	6.6	20.9
4 21	15 34.12	-21 2.6	1.572	2.518	9.8	19.6	4 21	15 24.74	-30 36.4	4.469	5.378	5.0	20.8
5 1	15 24.82	-21 2.0	1.513	2.503	5.4	19.3	5 1	15 19.49	-30 29.2	4.416	5.381	3.4	20.7
5 11	15 14.00	-20 53.2	1.479	2.488	1.2	19.0	5 11	15 13.85	-30 15.3	4.393	5.384	2.3	20.6
5 21	15 2.87	-20 38.0	1.473	2.473	4.7	19.2	5 21	15 8.19	-29 55.6	4.398	5.386	2.6	20.7
5 31	14 52.76	-20 20.6	1.493	2.458	9.4	19.4	5 31	15 2.93	-29 31.7	4.433	5.389	4.0	20.8
6 10	14 44.77	-20 5.6	1.537	2.442	13.7	19.7	6 10	14 58.42	-29 5.5	4.495	5.392	5.5	20.9
6 20	14 39.57	-19 57.2	1.601	2.425	17.3	19.9	6 20	14 54.92	-28 39.0	4.582	5.395	7.0	21.0
407732	2011 <i>UH</i> ₃₄₃		5 11.4 299°61	0°9/11.7	17		393476	2002 <i>GT</i> ₁₈₉		5			

EPHEMERIDES

5 11.4

5 11.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
510880	2013 CX ₁₃₀		5 11.4 160°52	0°3/11.1	17		216141	2006 SQ ₁₄₂		5 11.4 329°59	0°0/11.4	17	
4 11	15 34.32	-17 45.5	2.701	3.574	9.1	22.2	4 11	15 35.73	-18 35.5	1.177	2.080	16.0	20.4
4 21	15 28.57	-17 28.6	2.632	3.578	6.3	22.1	4 21	15 31.02	-18 30.3	1.105	2.065	11.4	20.1
5 1	15 21.57	-17 7.2	2.589	3.582	3.3	21.9	5 1	15 23.41	-18 16.0	1.054	2.050	6.0	19.7
5 11	15 13.92	-16 43.4	2.575	3.585	0.3	21.6	5 11	15 14.01	-17 55.1	1.026	2.036	0.2	19.3
5 21	15 6.28	-16 19.2	2.591	3.588	3.2	21.9	5 21	15 4.29	-17 31.6	1.021	2.023	5.7	19.6
5 31	14 59.32	-15 57.3	2.635	3.591	6.3	22.1	5 31	14 55.85	-17 11.2	1.039	2.011	11.4	19.9
6 10	14 53.58	-15 40.1	2.705	3.594	9.0	22.2	6 10	14 49.99	-16 59.4	1.077	2.000	16.6	20.2
6 20	14 49.43	-15 29.4	2.798	3.596	11.4	22.4	6 20	14 47.45	-17 0.0	1.132	1.990	20.9	20.4
225876	2001 YM ₂₇		5 11.4 269°35	2°0/10.4	18		111440	2001 XK ₂₃₁		5 11.4 280°97	3°1/13.7	18	
4 11	15 38.67	-13 19.8	1.798	2.684	12.3	20.5	4 11	15 35.35	-28 48.1	2.173	3.026	11.8	20.0
4 21	15 32.30	-13 8.3	1.714	2.666	8.7	20.2	4 21	15 29.74	-28 36.2	2.089	3.016	8.9	19.8
5 1	15 23.80	-12 54.6	1.654	2.647	4.7	19.9	5 1	15 22.36	-28 10.4	2.029	3.006	5.7	19.6
5 11	15 14.01	-12 41.5	1.621	2.629	2.0	19.7	5 11	15 13.98	-27 31.2	1.995	2.996	3.2	19.4
5 21	15 3.96	-12 31.9	1.616	2.610	5.3	19.9	5 21	15 5.51	-26 41.2	1.990	2.986	4.2	19.4
5 31	14 54.77	-12 29.0	1.637	2.591	9.5	20.1	5 31	14 57.89	-25 44.9	2.011	2.976	7.3	19.6
6 10	14 47.39	-12 35.2	1.681	2.572	13.5	20.3	6 10	14 51.92	-24 47.9	2.058	2.966	10.5	19.8
6 20	14 42.43	-12 52.2	1.746	2.552	16.9	20.4	6 20	14 48.06	-23 55.0	2.127	2.957	13.5	20.0
415657	2014 QN ₄₁₀		5 11.4 133°23	5°3/14.5	18		427873	2005 SK ₂₉		5 11.4 118°88	0°9/10.7	17	
4 11	15 43.99	-32 38.5	1.785	2.621	14.7	21.3	4 11	15 37.44	-17 54.4	1.922	2.802	11.9	21.6
4 21	15 36.01	-32 56.3	1.723	2.635	11.4	21.1	4 21	15 31.02	-17 7.5	1.867	2.816	8.2	21.4
5 1	15 25.65	-32 55.1	1.685	2.649	8.0	20.9	5 1	15 22.91	-16 13.7	1.837	2.830	4.2	21.2
5 11	15 14.07	-32 33.7	1.672	2.661	5.5	20.8	5 11	15 14.01	-15 17.1	1.834	2.843	0.9	20.9
5 21	15 2.58	-31 54.1	1.686	2.673	6.0	20.8	5 21	15 5.25	-14 22.1	1.860	2.856	4.4	21.2
5 31	14 52.48	-31 2.0	1.727	2.685	8.9	21.0	5 31	14 57.57	-13 33.6	1.912	2.868	8.3	21.5
6 10	14 44.74	-30 4.9	1.792	2.695	12.1	21.2	6 10	14 51.64	-12 55.3	1.990	2.880	11.7	21.7
6 20	14 39.86	-29 9.8	1.879	2.705	15.1	21.5	6 20	14 47.88	-12 29.6	2.088	2.892	14.5	21.9
419678	2010 TJ ₁₈₀		5 11.4 155°69	1°6/10.5	17		93627	2000 UK ₇₄		5 11.4 215°39	7°3/6.1	18	
4 11	15 39.80	-14 26.6	1.801	2.684	12.4	21.6	4 11	15 35.95	+ 1 50.2	2.052	2.925	11.5	19.7
4 21	15 32.85	-14 12.4	1.739	2.689	8.7	21.3	4 21	15 29.97	+ 2 51.7	1.992	2.920	9.2	19.5
5 1	15 23.95	-13 55.1	1.701	2.694	4.6	21.1	5 1	15 22.40	+ 3 43.6	1.958	2.915	7.6	19.4
5 11	15 14.01	-13 37.5	1.690	2.698	1.6	20.9	5 11	15 13.99	+ 4 20.6	1.949	2.909	7.5	19.4
5 21	15 4.10	-13 22.5	1.707	2.703	4.9	21.1	5 21	15 5.58	+ 4 38.8	1.967	2.904	9.2	19.5
5 31	14 55.27	-13 13.4	1.751	2.706	9.0	21.4	5 31	14 58.00	+ 4 36.4	2.009	2.897	11.6	19.6
6 10	14 48.34	-13 12.7	1.820	2.709	12.6	21.6	6 10	14 51.96	+ 4 13.8	2.073	2.891	14.1	19.8
6 20	14 43.78	-13 21.9	1.908	2.712	15.7	21.8	6 20	14 47.88	+ 3 33.2	2.155	2.884	16.3	19.9
80000	1999 FR ₃₃		5 11.4 266°46	4°2/8.0	18		394027	2005 WG ₁₅		5 11.4 224°45	1°6/10.3	18	
4 11	15 33.49	- 7 25.4	2.148	3.035	10.5	18.4	4 11	15 35.47	-12 34.3	2.650	3.527	9.1	21.2
4 21	15 28.24	- 6 27.5	2.079	3.027	7.6	18.2	4 21	15 29.45	-12 29.5	2.573	3.521	6.4	21.0
5 1	15 21.49	- 5 31.0	2.035	3.019	5.0	18.1	5 1	15 22.09	-12 24.0	2.523	3.514	3.4	20.8
5 11	15 13.93	- 4 40.5	2.019	3.011	4.4	18.0	5 11	15 13.99	-12 19.6	2.501	3.508	1.6	20.6
5 21	15 6.33	- 4 0.4	2.030	3.003	6.5	18.1	5 21	15 5.82	-12 18.0	2.509	3.501	3.9	20.8
5 31	14 59.50	- 3 33.8	2.067	2.995	9.5	18.3	5 31	14 58.28	-12 20.9	2.546	3.494	6.9	21.0
6 10	14 54.08	- 3 22.6	2.128	2.986	12.4	18.5	6 10	14 51.95	-12 29.8	2.608	3.487	9.7	21.1
6 20	14 50.50	- 3 26.8	2.209	2.978	14.9	18.6	6 20	14 47.26	-12 45.6	2.693	3.480	12.1	21.3
373059	2011 FY ₁₀		5 11.4 94°34	2°9/9.6	17		218975	2008 FX ₈₅		5 11.4 286°16	2°2/10.1	18	
4 11	15 37.05	-11 57.4	1.796	2.685	12.1	20.8	4 11	15 37.14	-14 27.4	1.587	2.480	13.2	20.7
4 21	15 30.79	-11 16.2	1.746	2.699	8.5	20.7	4 21	15 31.46	-13 50.5	1.502	2.457	9.3	20.5
5 1	15 22.80	-10 34.0	1.722	2.713	4.7	20.5	5 1	15 23.47	-13 8.1	1.441	2.435	5.0	20.1
5 11	15 13.98	- 9 55.0	1.723	2.727	2.9	20.4	5 11	15 14.05	-12 24.2	1.405	2.412	2.3	19.9
5 21	15 5.31	- 9 23.2	1.753	2.741	5.7	20.6	5 21	15 4.32	-11 43.9	1.396	2.390	6.0	20.1
5 31	14 57.73	- 9 2.2	1.808	2.755	9.3	20.8	5 31	14 55.53	-11 12.4	1.411	2.367	10.6	20.3
6 10	14 51.96	- 8 53.9	1.887	2.768	12.7	21.0	6 10	14 48.72	-10 54.0	1.449	2.344	14.9	20.5
6 20	14 48.39	- 8 58.8	1.986	2.781	15.5	21.3	6 20	14 44.55	-10 50.9	1.506	2.321	18.7	20.7
227585	2006 AT ₅		5 11.4 123°77	1°9/12.5	17		297135	2010 TD ₃₈		5 11.4 181°14	0°4/11.6	17	
4 11	15 41.15	-23 30.3	2.196	3.055	11.5	21.0	4 11	15 39.16	-20 50.2	2.022	2.892	11.8	21.6
4 21	15 33.56	-23 46.5	2.137	3.071	8.3	20.9	4 21	15 32.33	-20 24.9	1.950	2.894	8.3	21.3
5 1	15 24.24	-23 53.6	2.103	3.088	4.8	20.7	5 1	15 23.67	-19 50.5	1.903	2.894	4.4	21.1
5 11	15 14.04	-23 52.0	2.097	3.103	2.0	20.5	5 11	15 14.05	-19 9.4	1.885	2.894	0.5	20.8
5 21	15 3.90	-23 43.2	2.120	3.118	3.8	20.7	5 21	15 4.43	-18 25.1	1.894	2.894	3.9	21.1
5 31	14 54.76	-23 30.1	2.172	3.133	7.1	20.9	5 31	14 55.78	-17 42.1	1.932	2.892	7.9	21.3
6 10	14 47.36	-23 16.4	2.250	3.147	10.3	21.1	6 10	14 48.89	-17 4.7	1.995	2.890	11.4	21.5
6 20	14 42.15	-23 5.4	2.350	3.160	12.9	21.3	6 20	14 44.23	-16 36.5	2.079	2.888	14.4	21.7
261094	2005 SC ₂₅₂		5 11.4 99°19	3°6/13.7	18		115769	2003 UY ₂₀₇		5 11.4 331°62	1°0/11.9	17	
4 11	15 37.23	-29 1.4	2.278	3.125	11.5	20.3	4 11	15 35.84	-21 0.7	1.613	2.498	13.4	19.1
4 21	15 30.99	-29 22.0	2.204	3.126	8.7	20.1	4 21	15 30.48	-20 58.8	1.539	2.489	9.6	18.8
5 1	15 22.98	-29 30.6	2.154	3.127	5.8	19.9	5 1	15 22.90	-20 47.5	1.488	2.480	5.3	18.6
5 11	15 13.99	-29 26.7	2.131	3.127	3.7	19.8	5 11	15 14.03	-20 28.3	1.462	2.472	1.1	18.3
5 21	15 4.92	-29 11.3	2.136	3.128	4.5	19.8	5 21	15 5.00	-20 4.1	1.463	2.464	4.5	18.5
5 31	14 56.70	-28 47.6	2.169	3.129	7.2	20.0	5 31	14 57.01	-19 39.4	1.489	2.457	9.0	18.7
6 10	14 50.11	-28 20.0	2.226	3.130	10.1	20.2	6 10	14 51.03	-19 18.8	1.537	2.450	13.2	18.9
6 20	14 45.63	-27 52.7	2.306	3.130	12.7	20.3	6 20	14 47.66	-19 6.2	1.606	2.444	16.7	19.2
138836	2000 UW ₁₀₀		5 11.4 150°54	1°6/12.8	18		152774	1999 RM ₁₁₄		5 11.			

EPHEMERIDES

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5 11.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
89349	2001 VB ₇₁		5 11.4 220°07	0°4/11.1 17			48227	2001 KG ₅₈		5 11.4 249°87	4°2/ 7.9 18		
4 11	15 36.69	-16 38.3	2.404	3.278	10.0	19.5	4 11	15 34.30	- 7 42.6	2.204	3.089	10.3	19.3
4 21	15 30.44	-16 40.6	2.327	3.274	7.0	19.3	4 21	15 28.83	- 6 40.2	2.129	3.077	7.5	19.1
5 1	15 22.66	-16 39.5	2.277	3.269	3.6	19.1	5 1	15 21.85	- 5 38.3	2.080	3.064	4.9	18.9
5 11	15 14.02	-16 36.2	2.254	3.264	0.4	18.8	5 11	15 14.03	- 4 41.8	2.059	3.051	4.3	18.9
5 21	15 5.31	-16 32.5	2.261	3.259	3.6	19.1	5 21	15 6.14	- 3 55.1	2.065	3.037	6.5	19.0
5 31	14 57.30	-16 30.4	2.297	3.254	7.0	19.3	5 31	14 58.98	- 3 21.8	2.098	3.023	9.4	19.1
6 10	14 50.69	-16 32.3	2.358	3.248	10.1	19.5	6 10	14 53.21	- 3 4.0	2.155	3.009	12.4	19.3
6 20	14 45.92	-16 39.8	2.441	3.243	12.7	19.6	6 20	14 49.27	- 3 2.0	2.231	2.995	14.9	19.5
261405	2005 UK ₄₅₉		5 11.4 86°38	2°5/12.8 17			410287	2007 TQ ₂₁₅		5 11.4 202°38	2°0/12.5 17		
4 11	15 39.86	-25 24.9	1.718	2.585	13.7	20.9	4 11	15 41.18	-23 55.0	1.783	2.649	13.3	21.9
4 21	15 32.96	-25 22.1	1.665	2.603	10.0	20.7	4 21	15 34.09	-23 55.8	1.707	2.646	9.7	21.7
5 1	15 24.01	-25 6.1	1.637	2.621	5.9	20.5	5 1	15 24.76	-23 44.9	1.655	2.642	5.6	21.5
5 11	15 14.07	-24 38.1	1.634	2.639	2.6	20.4	5 11	15 14.14	-23 23.0	1.630	2.637	2.1	21.2
5 21	15 4.29	-24 1.3	1.658	2.657	4.4	20.5	5 21	15 3.41	-22 52.4	1.633	2.632	4.4	21.4
5 31	14 55.81	-23 20.9	1.709	2.675	8.3	20.8	5 31	14 53.75	-22 17.8	1.662	2.626	8.6	21.6
6 10	14 49.45	-22 42.6	1.784	2.693	11.9	21.0	6 10	14 46.16	-21 44.7	1.716	2.620	12.5	21.8
6 20	14 45.63	-22 10.7	1.880	2.710	15.0	21.3	6 20	14 41.20	-21 17.6	1.791	2.613	15.9	22.0
182672	2001 UU ₂₂₁		5 11.4 148°93	0°1/11.3 18			96285	1995 YG ₂₃		5 11.4 99°16	5°2/ 8.1 18		
4 11	15 35.16	-18 48.7	2.594	3.465	9.5	21.9	4 11	15 38.02	- 2 58.1	2.126	3.002	11.1	19.5
4 21	15 29.21	-18 30.8	2.528	3.472	6.6	21.7	4 21	15 31.17	- 2 20.7	2.088	3.026	8.2	19.4
5 1	15 21.94	-18 7.6	2.487	3.479	3.4	21.5	5 1	15 22.92	- 1 50.0	2.076	3.050	5.9	19.3
5 11	15 14.01	-17 41.0	2.475	3.485	0.1	21.2	5 11	15 14.07	- 1 29.9	2.091	3.073	5.3	19.3
5 21	15 6.10	-17 13.4	2.493	3.491	3.2	21.5	5 21	15 5.43	- 1 22.9	2.134	3.096	7.0	19.4
5 31	14 58.93	-16 47.6	2.539	3.497	6.4	21.7	5 31	14 57.78	- 1 30.1	2.204	3.119	9.6	19.6
6 10	14 53.06	-16 26.4	2.611	3.502	9.2	21.9	6 10	14 51.71	- 1 51.3	2.297	3.140	12.1	19.8
6 20	14 48.86	-16 11.7	2.706	3.507	11.7	22.1	6 20	14 47.55	- 2 25.0	2.411	3.162	14.2	20.0
213767	2003 CF ₁₉		5 11.4 74°74	5°0/ 7.7 18			150647	2001 DU ₇₁		5 11.4 71°06	3°6/ 8.4 18		
4 11	15 34.06	- 4 21.0	2.104	2.989	10.8	20.0	4 11	15 32.60	- 8 15.6	2.350	3.236	9.7	19.7
4 21	15 28.55	- 3 30.9	2.054	2.998	8.0	19.8	4 21	15 27.47	- 7 25.5	2.295	3.243	7.0	19.6
5 1	15 21.62	- 2 46.0	2.030	3.008	5.6	19.7	5 1	15 21.05	- 6 37.0	2.265	3.251	4.4	19.4
5 11	15 13.99	- 2 10.6	2.033	3.018	5.2	19.7	5 11	15 14.00	- 5 54.0	2.264	3.259	3.7	19.4
5 21	15 6.47	- 1 48.1	2.063	3.028	7.0	19.8	5 21	15 7.02	- 5 19.8	2.290	3.266	5.6	19.5
5 31	14 59.80	- 1 40.6	2.119	3.038	9.7	20.0	5 31	15 0.79	- 4 57.1	2.344	3.274	8.3	19.7
6 10	14 54.59	- 1 48.6	2.197	3.047	12.3	20.2	6 10	14 55.86	- 4 47.2	2.421	3.282	10.9	19.9
6 20	14 51.23	- 2 11.1	2.295	3.057	14.6	20.3	6 20	14 52.59	- 4 50.3	2.519	3.290	13.2	20.1
458140	2010 HX ₄₉		5 11.4 316°81	5°4/19.5 18			56859	2000 QA ₈₂		5 11.4 92°25	3°9/14.1 18		
4 11	15 32.61	-47 37.1	4.341	5.062	8.5	20.4	4 11	15 37.42	-30 19.4	2.239	3.082	11.9	19.1
4 21	15 27.30	-47 40.5	4.254	5.059	7.4	20.3	4 21	15 31.14	-30 35.2	2.171	3.089	9.1	18.9
5 1	15 20.91	-47 30.2	4.189	5.057	6.4	20.2	5 1	15 23.08	-30 37.4	2.126	3.095	6.2	18.8
5 11	15 13.96	-47 5.8	4.149	5.054	5.6	20.2	5 11	15 14.08	-30 25.8	2.108	3.102	4.1	18.6
5 21	15 7.05	-46 27.8	4.135	5.052	5.4	20.1	5 21	15 5.06	-30 2.1	2.118	3.108	4.7	18.7
5 31	15 0.72	-45 38.2	4.148	5.050	5.8	20.2	5 31	14 56.97	-29 29.5	2.155	3.115	7.2	18.9
6 10	14 55.47	-44 39.9	4.186	5.047	6.7	20.2	6 10	14 50.57	-28 53.1	2.217	3.121	10.1	19.1
6 20	14 51.61	-43 36.4	4.249	5.045	7.8	20.3	6 20	14 46.31	-28 17.3	2.302	3.128	12.7	19.2
67779	2000 UU ₈₁		5 11.4 101°82	8°7/20.8 18			15051	1998 YK ₁		5 11.4 206°53	1°7/10.2 18		
4 11	15 46.20	-49 20.6	2.105	2.841	16.0	17.7	4 11	15 35.41	-14 8.3	2.179	3.062	10.5	18.9
4 21	15 37.30	-48 44.5	2.034	2.857	13.7	17.5	4 21	15 29.61	-13 39.0	2.109	3.060	7.4	18.7
5 1	15 26.15	-47 37.1	1.985	2.874	11.4	17.4	5 1	15 22.25	-13 6.8	2.064	3.057	3.9	18.5
5 11	15 14.15	-45 57.4	1.959	2.889	9.5	17.3	5 11	15 14.05	-12 34.6	2.047	3.055	1.8	18.3
5 21	15 2.75	-43 49.0	1.960	2.905	8.7	17.3	5 21	15 5.84	-12 5.7	2.059	3.052	4.5	18.5
5 31	14 53.20	-41 20.4	1.989	2.920	9.5	17.3	5 31	14 58.42	-11 43.2	2.097	3.049	8.0	18.7
6 10	14 46.29	-38 43.1	2.045	2.935	11.4	17.5	6 10	14 52.48	-11 29.7	2.161	3.045	11.2	18.9
6 20	14 42.28	-36 8.1	2.126	2.950	13.6	17.7	6 20	14 48.46	-11 26.6	2.245	3.042	13.9	19.1
15985	1998 WU ₂₀		5 11.4 3°78	1°6/10.4 18			201733	2003 UQ ₂₄₈		5 11.4 290°39	0°2/11.5 17		
4 11	15 36.46	-18 31.6	1.210	2.111	15.8	16.9	4 11	15 37.21	-18 43.5	1.833	2.715	12.3	20.5
4 21	15 31.19	-17 22.1	1.152	2.111	11.0	16.6	4 21	15 31.26	-18 42.5	1.755	2.704	8.7	20.3
5 1	15 23.32	-15 59.9	1.115	2.111	5.7	16.3	5 1	15 23.27	-18 35.3	1.701	2.694	4.6	20.0
5 11	15 14.07	-14 31.9	1.102	2.111	1.6	16.0	5 11	15 14.10	-18 23.1	1.673	2.683	0.3	19.6
5 21	15 4.88	-13 7.1	1.114	2.111	6.3	16.3	5 21	15 4.75	-18 8.5	1.673	2.673	4.3	19.9
5 31	14 57.15	-11 54.5	1.149	2.112	11.6	16.6	5 31	14 56.31	-17 54.9	1.699	2.663	8.5	20.2
6 10	14 51.93	-11 0.8	1.205	2.114	16.3	16.9	6 10	14 49.68	-17 45.9	1.749	2.652	12.4	20.4
6 20	14 49.72	-10 28.7	1.278	2.115	20.2	17.2	6 20	14 45.41	-17 44.2	1.820	2.642	15.7	20.6
505785	2015 BH ₂₉₄		5 11.4 326°94	3°6/ 8.7 17			169512	2002 CD ₃₀₂		5 11.4 288°95	4°5/ 9.3 17		
4 11	15 32.96	-14 18.7	1.443	2.345	13.6	20.5	4 11	15 38.61	- 9 13.4	1.375	2.272	14.5	19.5
4 21	15 28.48	-12 42.2	1.373	2.333	9.6	20.3	4 21	15 32.58	- 8 40.0	1.309	2.264	10.4	19.2
5 1	15 21.85	-10 57.0	1.327	2.321	5.4	20.0	5 1	15 24.07	- 8 8.0	1.265	2.255	6.3	19.0
5 11	15 14.02	- 9 11.1	1.307	2.310	3.8	19.9	5 11	15 14.13	- 7 42.8	1.246	2.247	4.6	18.8
5 21	15 6.13	- 7 33.8	1.312	2.300	7.3	20.0	5 21	15 4.05	- 7 29.2	1.251	2.239	7.7	19.0
5 31	14 59.33	- 6 13.5	1.341	2.290	11.8	20.3	5 31	14 55.16	- 7 30.7	1.281	2.230	12.1	19.2
6 10	14 54.56	- 5 15.7	1.392	2.280	15.9	20.5	6 10	14 48.55	- 7 49.1	1.332	2.222	16.3	19.4
6 20	14 52.32	- 4 42.0	1.461	2.272	19.4	20.7	6 20	14 44.80	- 8 23.9	1.400	2.214	19.9	19.7
292420	2006 ST ₃₀₄		5 11.4 160°07	5°1/ 7.2 17			351470	2005 OU ₈		5 11.4 222°12	2°4/13.4 16		
4 11	1												

EPHEMERIDES

5 11.4

5 11.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
342380	2008 <i>UU</i> ₂₉		5 11.4 219°38	1°8/ 9.8 18			127819	2003 <i>FZ</i> ₈₈		5 11.4 57°79	4°4/13.4 17		
4 11	15 35.44	-15 25.0	2.338	3.217	10.1	22.0	4 11	15 41.39	-27 43.6	1.320	2.192	16.7	19.9
4 21	15 29.56	-14 22.9	2.259	3.208	7.0	21.8	4 21	15 34.81	-28 6.0	1.258	2.196	12.5	19.7
5 1	15 22.21	-13 15.2	2.206	3.199	3.7	21.6	5 1	15 25.33	-28 10.6	1.218	2.199	8.0	19.4
5 11	15 14.06	-12 5.9	2.183	3.189	1.8	21.4	5 11	15 14.19	-27 56.3	1.201	2.202	4.6	19.2
5 21	15 5.89	-10 59.6	2.188	3.179	4.5	21.6	5 21	15 2.99	-27 25.5	1.208	2.206	6.1	19.3
5 31	14 58.46	-10 0.8	2.222	3.168	7.9	21.8	5 31	14 53.33	-26 44.4	1.240	2.209	10.3	19.5
6 10	14 52.44	-9 13.1	2.282	3.157	11.0	22.0	6 10	14 46.41	-26 1.1	1.294	2.213	14.7	19.8
6 20	14 48.22	-8 38.6	2.363	3.145	13.7	22.1	6 20	14 42.84	-25 22.9	1.367	2.217	18.4	20.1
117882	2680 <i>P-L</i>		5 11.4 204°78	0°6/11.8 18			407801	2011 <i>YF</i> ₅₄		5 11.4 165°63	0°1/11.4 16		
4 11	15 37.60	-20 47.6	2.232	3.101	10.9	20.8	4 11	15 40.21	-20 8.4	1.938	2.810	12.2	22.4
4 21	15 31.20	-20 34.2	2.154	3.097	7.7	20.6	4 21	15 33.08	-19 37.4	1.871	2.816	8.6	22.2
5 1	15 23.11	-20 13.2	2.102	3.092	4.2	20.3	5 1	15 24.10	-18 57.4	1.830	2.822	4.5	22.0
5 11	15 14.10	-19 46.1	2.078	3.087	0.6	20.1	5 11	15 14.15	-18 11.4	1.816	2.826	0.2	21.6
5 21	15 5.02	-19 15.4	2.082	3.081	3.6	20.3	5 21	15 4.26	-17 23.1	1.831	2.830	4.1	21.9
5 31	14 56.76	-18 44.8	2.114	3.075	7.3	20.5	5 31	14 55.43	-16 37.4	1.874	2.833	8.2	22.2
6 10	14 50.06	-18 17.9	2.172	3.069	10.6	20.7	6 10	14 48.46	-15 58.9	1.942	2.835	11.8	22.4
6 20	14 45.37	-17 57.7	2.253	3.061	13.5	20.9	6 20	14 43.79	-15 30.7	2.031	2.837	14.8	22.6
438649	2008 <i>CS</i> ₁₆₃		5 11.4 54°53	8°4/17.9 17			431012	2005 <i>YU</i> ₉₇		5 11.4 235°76	1°6/12.5 18		
4 11	15 40.25	-43 13.2	2.097	2.879	14.7	20.6	4 11	15 38.52	-23 49.7	2.093	2.957	11.7	21.9
4 21	15 33.46	-43 51.8	2.037	2.893	12.4	20.5	4 21	15 32.05	-23 41.3	2.007	2.945	8.5	21.6
5 1	15 24.41	-44 7.6	1.997	2.908	10.3	20.4	5 1	15 23.66	-23 22.5	1.945	2.932	4.9	21.4
5 11	15 14.14	-43 58.0	1.981	2.922	8.7	20.3	5 11	15 14.16	-22 53.9	1.911	2.919	1.7	21.2
5 21	15 3.92	-43 23.9	1.990	2.937	8.5	20.3	5 21	15 4.49	-22 18.2	1.905	2.905	3.9	21.3
5 31	14 54.98	-42 29.6	2.024	2.952	9.6	20.4	5 31	14 55.67	-21 39.4	1.927	2.891	7.7	21.5
6 10	14 48.26	-41 22.3	2.081	2.967	11.4	20.6	6 10	14 48.54	-21 2.2	1.975	2.876	11.3	21.7
6 20	14 44.25	-40 9.6	2.160	2.983	13.5	20.7	6 20	14 43.64	-20 30.8	2.044	2.861	14.4	21.8
192586	1999 <i>AV</i> ₂₉		5 11.4 55°45	5°6/ 9.1 18			163387	2002 <i>PZ</i> ₁₇₈		5 11.4 240°91	1°8/10.1 17		
4 11	15 39.64	-7 55.8	1.128	2.032	16.4	19.2	4 11	15 34.94	-14 56.7	1.964	2.851	11.3	20.1
4 21	15 33.15	-7 9.4	1.095	2.053	11.7	19.0	4 21	15 29.41	-14 12.2	1.896	2.849	7.9	19.9
5 1	15 24.19	-6 28.2	1.085	2.074	7.3	18.8	5 1	15 22.20	-13 23.3	1.854	2.847	4.2	19.7
5 11	15 14.13	-5 58.7	1.097	2.096	5.7	18.8	5 11	15 14.10	-12 33.8	1.838	2.846	1.9	19.5
5 21	15 4.47	-5 45.8	1.133	2.118	8.7	19.0	5 21	15 6.00	-11 47.9	1.851	2.844	4.9	19.7
5 31	14 56.53	-5 52.1	1.192	2.140	12.9	19.3	5 31	14 58.79	-11 10.1	1.890	2.842	8.6	19.9
6 10	14 51.21	-6 17.2	1.270	2.162	16.8	19.6	6 10	14 53.20	-10 43.5	1.952	2.840	12.0	20.1
6 20	14 48.87	-6 58.7	1.366	2.184	20.1	19.9	6 20	14 49.67	-10 29.7	2.036	2.838	14.9	20.3
504603	2008 <i>UT</i> ₁₃₉		5 11.4 247°68	0°0/11.4 17			386978	2012 <i>MA</i> ₁₀		5 11.4 271°17	2°3/10.0 18		
4 11	15 37.11	-18 53.8	2.019	2.897	11.5	21.8	4 11	15 37.54	-13 3.2	1.966	2.850	11.5	21.0
4 21	15 31.02	-18 41.4	1.940	2.887	8.1	21.6	4 21	15 31.45	-12 34.6	1.875	2.826	8.1	20.8
5 1	15 23.09	-18 22.3	1.885	2.877	4.3	21.4	5 1	15 23.40	-12 2.9	1.809	2.801	4.5	20.5
5 11	15 14.11	-17 58.4	1.857	2.867	0.2	21.0	5 11	15 14.16	-11 31.6	1.770	2.776	2.3	20.3
5 21	15 5.00	-17 32.5	1.858	2.857	4.0	21.3	5 21	15 4.65	-11 4.1	1.759	2.750	5.3	20.5
5 31	14 56.73	-17 8.1	1.886	2.847	8.0	21.5	5 31	14 55.88	-10 44.2	1.775	2.724	9.3	20.6
6 10	14 50.12	-16 48.9	1.938	2.836	11.6	21.7	6 10	14 48.73	-10 35.0	1.815	2.698	13.0	20.8
6 20	14 45.68	-16 37.8	2.012	2.825	14.7	21.9	6 20	14 43.79	-10 38.1	1.875	2.671	16.2	21.0
361127	2006 <i>GT</i> ₂₀		5 11.4 275°05	0°3/11.5 17			62434	2000 <i>SW</i> ₁₈₉		5 11.4 2°14	2°2/13.2 18		
4 11	15 40.97	-18 31.7	1.468	2.353	14.5	20.4	4 11	15 33.82	-27 1.3	1.886	2.753	12.7	18.4
4 21	15 34.43	-18 41.7	1.387	2.338	10.4	20.1	4 21	15 28.77	-26 25.0	1.815	2.753	9.3	18.2
5 1	15 25.17	-18 44.9	1.328	2.321	5.6	19.8	5 1	15 21.91	-25 33.5	1.768	2.752	5.6	18.0
5 11	15 14.19	-18 42.4	1.295	2.305	0.4	19.4	5 11	15 14.09	-24 29.3	1.747	2.753	2.4	17.8
5 21	15 2.83	-18 36.2	1.288	2.289	5.1	19.7	5 21	15 6.31	-23 16.8	1.753	2.753	4.0	17.9
5 31	14 52.55	-18 30.0	1.307	2.272	10.3	19.9	5 31	14 59.54	-22 2.1	1.786	2.755	7.7	18.1
6 10	14 44.58	-18 28.4	1.347	2.255	15.0	20.1	6 10	14 54.55	-20 51.8	1.844	2.756	11.3	18.3
6 20	14 39.65	-18 34.8	1.407	2.239	18.9	20.4	6 20	14 51.78	-19 50.6	1.923	2.758	14.4	18.5
501921	2014 <i>WU</i> ₄₈₁		5 11.4 67°62	2°6/ 9.6 17			497917	2006 <i>VK</i> ₅₈		5 11.4 262°23	1°5/10.5 17		
4 11	15 35.57	-14 58.9	1.642	2.535	12.8	21.0	4 11	15 37.82	-16 17.4	1.710	2.597	12.7	22.0
4 21	15 29.90	-13 44.0	1.593	2.549	8.9	20.7	4 21	15 31.81	-15 40.1	1.628	2.580	9.0	21.7
5 1	15 22.41	-12 24.1	1.569	2.563	4.8	20.5	5 1	15 23.63	-14 55.8	1.569	2.563	4.7	21.4
5 11	15 14.08	-11 5.3	1.571	2.577	2.7	20.4	5 11	15 14.17	-14 8.2	1.537	2.546	1.5	21.2
5 21	15 5.93	-9 54.0	1.600	2.591	5.8	20.7	5 21	15 4.51	-13 22.0	1.532	2.528	5.2	21.4
5 31	14 58.96	-8 56.0	1.655	2.605	9.8	20.9	5 31	14 55.78	-12 42.3	1.554	2.511	9.7	21.6
6 10	14 53.89	-8 14.8	1.733	2.619	13.4	21.2	6 10	14 48.96	-12 13.8	1.598	2.492	13.8	21.8
6 20	14 51.10	-7 51.4	1.830	2.633	16.3	21.4	6 20	14 44.63	-11 59.0	1.662	2.474	17.3	22.0
22699	1998 <i>RU</i> ₂₂		5 11.4 244°06	0°4/11.8 18			356557	2011 <i>SJ</i> ₁₉₄		5 11.4 216°82	0°2/11.6 16		
4 11	15 31.18	-20 31.8	3.729	4.592	7.1	20.3	4 11	15 34.04	-21 2.5	2.636	3.504	9.4	21.3
4 21	15 26.26	-20 19.7	3.638	4.578	5.0	20.1	4 21	15 28.51	-20 24.4	2.555	3.498	6.7	21.1
5 1	15 20.39	-20 3.1	3.575	4.564	2.7	19.9	5 1	15 21.65	-19 38.5	2.501	3.492	3.5	20.8
5 11	15 14.01	-19 43.0	3.541	4.550	0.4	19.7	5 11	15 14.09	-18 47.3	2.475	3.485	0.3	20.6
5 21	15 7.56	-19 20.9	3.537	4.536	2.3	19.9	5 21	15 6.52	-17 53.9	2.479	3.478	3.2	20.8
5 31	15 1.53	-18 58.7	3.562	4.521	4.7	20.0	5 31	14 59.63	-17 1.9	2.511	3.471	6.4	21.0
6 10	14 56.34	-18 38.4	3.615	4.506	6.9	20.2	6 10	14 53.99	-16 15.2	2.570	3.463	9.3	21.2
6 20	14 52.30	-18 21.7	3.692	4.491	8.8	20.3	6 20	14 50.00	-15 36.4	2.652	3.455	11.8	21.3
497627	2006 <i>QU</i> ₉₅		5 11.4 289°79	2°2/10.4 17			196688	2003 <i>SQ</i> ₆₆					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
424408	2008 AG ₃₄		5 11.4 71°67'	0°6/11.7 16			121436	1999 TZ ₁₈₂		5 11.4 280°83'	3°7/14.5 18		
4 11	15 39.17	-20 43.4	1.449	2.334	14.6	21.6	4 11	15 35.30	-31 38.9	2.353	3.191	11.5	19.5
4 21	15 32.77	-20 27.7	1.396	2.346	10.3	21.3	4 21	15 29.73	-31 24.9	2.261	3.176	8.9	19.3
5 1	15 24.06	-20 1.6	1.366	2.359	5.5	21.1	5 1	15 22.44	-30 55.5	2.193	3.161	6.1	19.1
5 11	15 14.19	-19 27.7	1.361	2.371	0.7	20.8	5 11	15 14.17	-30 11.1	2.151	3.145	3.9	18.9
5 21	15 4.46	-18 50.4	1.382	2.383	4.7	21.1	5 21	15 5.81	-29 14.0	2.138	3.130	4.4	18.9
5 31	14 56.12	-18 15.1	1.429	2.396	9.5	21.4	5 31	14 58.24	-28 8.5	2.152	3.114	7.1	19.1
6 10	14 50.09	-17 47.1	1.498	2.408	13.6	21.7	6 10	14 52.22	-27 0.2	2.192	3.099	10.0	19.2
6 20	14 46.83	-17 29.6	1.586	2.420	17.0	21.9	6 20	14 48.24	-25 54.7	2.255	3.083	12.8	19.4
134184	2005 CV ₃₉		5 11.4 290°53'	0°9/11.9 17			251408	2008 AU ₃		5 11.4 182°30'	3°4/13.4 17		
4 11	15 36.32	-21 43.9	1.888	2.764	12.2	20.5	4 11	15 41.12	-27 46.2	1.769	2.626	13.8	21.0
4 21	15 30.56	-21 30.9	1.814	2.760	8.7	20.3	4 21	15 34.12	-27 51.9	1.697	2.627	10.4	20.8
5 1	15 22.89	-21 8.4	1.765	2.755	4.8	20.0	5 1	15 24.84	-27 42.5	1.648	2.627	6.6	20.6
5 11	15 14.15	-20 38.1	1.741	2.751	1.0	19.8	5 11	15 14.28	-27 18.1	1.625	2.627	3.6	20.4
5 21	15 5.34	-20 3.2	1.746	2.746	4.0	20.0	5 21	15 3.65	-26 40.9	1.630	2.626	4.9	20.5
5 31	14 57.48	-19 28.0	1.777	2.742	8.1	20.2	5 31	14 54.19	-25 55.9	1.661	2.625	8.6	20.7
6 10	14 51.39	-18 57.1	1.832	2.737	11.8	20.4	6 10	14 46.87	-25 9.7	1.716	2.624	12.3	20.9
6 20	14 47.59	-18 33.9	1.908	2.733	14.9	20.6	6 20	14 42.24	-24 28.0	1.792	2.622	15.6	21.1
118017	1448 T-2		5 11.4 187°67'	1°2/10.5 18			377435	2004 TM ₂₃₁		5 11.4 107°70'	0°1/11.3 17		
4 11	15 35.50	-15 48.9	2.167	3.048	10.7	20.2	4 11	15 37.22	-20 4.0	2.058	2.932	11.4	21.4
4 21	15 29.70	-15 18.5	2.098	3.048	7.4	20.0	4 21	15 30.84	-19 23.9	2.004	2.950	8.0	21.2
5 1	15 22.33	-14 43.9	2.054	3.047	3.9	19.7	5 1	15 22.89	-18 35.9	1.975	2.967	4.2	21.0
5 11	15 14.14	-14 7.8	2.038	3.047	1.2	19.5	5 11	15 14.20	-17 43.2	1.974	2.984	0.2	20.7
5 21	15 5.93	-13 33.6	2.050	3.046	4.2	19.8	5 21	15 5.67	-16 49.9	2.002	3.000	3.8	21.0
5 31	14 58.56	-13 4.8	2.090	3.045	7.8	20.0	5 31	14 58.17	-16 0.6	2.057	3.016	7.5	21.3
6 10	14 52.68	-12 44.4	2.155	3.043	11.0	20.2	6 10	14 52.34	-15 19.2	2.137	3.032	10.8	21.5
6 20	14 48.73	-12 34.0	2.241	3.042	13.8	20.4	6 20	14 48.56	-14 48.3	2.240	3.047	13.6	21.8
171898	2001 RZ ₉₀		5 11.4 262°80'	1°4/12.3 17			56071	1998 YF ₆		5 11.4 91°31'	15°9/30.9 18		
4 11	15 36.81	-22 41.6	2.209	3.076	11.1	20.3	4 11	15 40.07	+18 54.0	1.473	2.300	17.7	18.5
4 21	15 30.79	-22 43.8	2.124	3.063	8.0	20.0	4 21	15 33.02	+21 0.6	1.467	2.324	16.4	18.4
5 1	15 23.00	-22 37.5	2.063	3.051	4.6	19.8	5 1	15 24.02	+22 33.1	1.481	2.347	15.9	18.5
5 11	15 14.17	-22 23.6	2.030	3.038	1.5	19.6	5 11	15 14.24	+23 24.0	1.516	2.370	16.3	18.6
5 21	15 5.17	-22 3.7	2.026	3.025	3.7	19.7	5 21	15 4.89	+23 31.5	1.569	2.393	17.5	18.7
5 31	14 56.94	-21 41.2	2.049	3.012	7.3	19.9	5 31	14 57.05	+22 58.4	1.640	2.415	18.9	18.9
6 10	14 50.25	-21 19.7	2.097	2.999	10.7	20.1	6 10	14 51.45	+21 51.7	1.726	2.437	20.4	19.0
6 20	14 45.62	-21 2.7	2.167	2.986	13.6	20.2	6 20	14 48.39	+20 19.2	1.825	2.458	21.6	19.2
349069	2006 YX ₁₉		5 11.4 112°04'	2°3/ 9.7 18			57789	2001 VW ₉₀		5 11.4 223°58'	4°8/ 8.1 18		
4 11	15 34.83	-11 7.1	2.488	3.368	9.5	21.4	4 11	15 34.88	- 4 6.1	2.212	3.093	10.5	19.5
4 21	15 28.98	-10 42.2	2.432	3.381	6.6	21.3	4 21	15 29.21	- 3 30.7	2.150	3.092	7.8	19.4
5 1	15 21.87	-10 17.1	2.403	3.393	3.7	21.1	5 1	15 22.07	- 3 0.3	2.113	3.091	5.5	19.2
5 11	15 14.13	- 9 54.8	2.402	3.405	2.4	21.0	5 11	15 14.17	- 2 38.7	2.103	3.089	4.9	19.2
5 21	15 6.47	- 9 37.5	2.430	3.417	4.5	21.2	5 21	15 6.27	- 2 28.9	2.121	3.087	6.7	19.3
5 31	14 59.56	- 9 27.4	2.485	3.428	7.3	21.4	5 31	14 59.14	- 2 32.6	2.164	3.086	9.4	19.4
6 10	14 53.95	- 9 26.0	2.566	3.439	10.0	21.6	6 10	14 53.42	- 2 50.4	2.232	3.084	12.1	19.6
6 20	14 50.00	- 9 33.9	2.668	3.450	12.3	21.8	6 20	14 49.51	- 3 21.3	2.319	3.082	14.4	19.8
146246	2000 XX ₁₉		5 11.4 194°50'	2°5/13.6 18			36397	2000 OL ₄₄		5 11.4 201°62'	6°4/ 6.1 18		
4 11	15 36.29	-28 13.6	3.041	3.880	9.2	21.3	4 11	15 35.65	- 0 53.2	2.196	3.072	10.8	19.3
4 21	15 30.04	-28 19.7	2.958	3.877	6.9	21.1	4 21	15 29.74	+ 0 23.4	2.135	3.068	8.4	19.2
5 1	15 22.46	-28 16.4	2.901	3.874	4.5	20.9	5 1	15 22.35	+ 1 33.8	2.100	3.064	6.6	19.0
5 11	15 14.16	-28 3.8	2.872	3.871	2.6	20.8	5 11	15 14.19	+ 2 32.3	2.092	3.059	6.6	19.0
5 21	15 5.80	-27 43.2	2.873	3.867	3.4	20.9	5 21	15 6.02	+ 3 14.4	2.111	3.053	8.3	19.1
5 31	14 58.05	-27 16.9	2.904	3.862	5.7	21.0	5 31	14 58.64	+ 3 37.6	2.156	3.047	10.8	19.3
6 10	14 51.51	-26 48.1	2.961	3.857	8.1	21.2	6 10	14 52.69	+ 3 41.1	2.223	3.041	13.3	19.4
6 20	14 46.58	-26 20.2	3.042	3.852	10.3	21.3	6 20	14 48.58	+ 3 26.4	2.309	3.034	15.5	19.6
20149	1996 TX ₃		5 11.4 321°00'	1°5/11.9 18			455301	2002 EO ₄₄		5 11.4 11°87'	2°2/12.4 17		
4 11	15 39.55	-20 39.5	1.293	2.183	15.7	17.4	4 11	15 36.51	-23 0.9	1.080	1.979	17.4	20.7
4 21	15 33.63	-20 59.5	1.222	2.174	11.3	17.1	4 21	15 31.62	-23 3.0	1.026	1.981	12.6	20.4
5 1	15 24.83	-21 10.4	1.173	2.165	6.3	16.8	5 1	15 23.76	-22 49.9	0.992	1.984	7.1	20.1
5 11	15 14.27	-21 12.3	1.148	2.157	1.6	16.5	5 11	15 14.25	-22 23.4	0.980	1.989	2.3	19.8
5 21	15 3.41	-21 7.1	1.147	2.149	5.3	16.7	5 21	15 4.72	-21 47.8	0.991	1.994	5.6	20.0
5 31	14 53.84	-20 58.9	1.170	2.141	10.6	17.0	5 31	14 56.84	-21 10.2	1.024	2.000	11.0	20.3
6 10	14 46.83	-20 53.3	1.215	2.134	15.4	17.2	6 10	14 51.79	-20 38.2	1.078	2.007	15.9	20.6
6 20	14 43.11	-20 54.3	1.278	2.127	19.5	17.5	6 20	14 50.12	-20 16.8	1.148	2.016	20.0	20.9
507521	2012 VD ₇₆		5 11.4 94°73'	0°2/11.6 17			189386	2008 GX ₄₉		5 11.4 283°47'	0°3/11.1 18		
4 11	15 34.77	-21 31.5	2.325	3.195	10.4	21.2	4 11	15 29.23	-16 53.6	4.234	5.105	6.1	20.0
4 21	15 29.01	-20 42.1	2.267	3.211	7.3	21.0	4 21	15 24.83	-16 49.4	4.156	5.101	4.3	19.8
5 1	15 21.89	-19 44.4	2.236	3.227	3.9	20.8	5 1	15 19.66	-16 42.9	4.106	5.098	2.2	19.7
5 11	15 14.14	-18 41.4	2.232	3.242	0.3	20.6	5 11	15 14.08	-16 35.3	4.085	5.094	0.3	19.5
5 21	15 6.53	-17 37.2	2.258	3.258	3.4	20.9	5 21	15 8.48	-16 27.7	4.094	5.091	2.2	19.6
5 31	14 59.81	-16 36.4	2.313	3.273	6.8	21.1	5 31	15 3.24	-16 21.2	4.132	5.088	4.2	19.8
6 10	14 54.54	-15 43.0	2.393	3.287	9.8	21.3	6 10	14 58.71	-16 17.2	4.198	5.084	6.1	19.9
6 20	14 51.07	-14 59.6	2.495	3.302	12.4	21.5	6 20	14 55.15	-16 16.7	4.287	5.081	7.8	20.0
251933	1999 VS ₂₁₆		5 11.4 294°57'	1°5/10.7 17			192246	2008 EY ₅₇		5 11.4 343°74'	3°2/13.0 17		
4 11	15 37.4												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
475777	2006 <i>WJ</i> ₂₀₁		5 11.4 45°33'	3°3'/14.2	17		19800	2000 <i>RX</i> ₅₁		5 11.4 126°78'	0°2'/11.6	18	
4 11	15 35.04	-30 40.9	2.169	3.016	12.0	20.6	4 11	15 34.71	-19 47.4	2.660	3.529	9.3	19.5
4 21	15 29.48	-30 10.7	2.098	3.020	9.1	20.4	4 21	15 28.92	-19 29.0	2.596	3.539	6.5	19.3
5 1	15 22.25	-29 24.5	2.050	3.024	6.0	20.2	5 1	15 21.87	-19 5.0	2.559	3.550	3.4	19.1
5 11	15 14.19	-28 23.9	2.029	3.028	3.5	20.1	5 11	15 14.20	-18 37.0	2.550	3.560	0.3	18.9
5 21	15 6.21	-27 12.5	2.036	3.032	4.2	20.1	5 21	15 6.58	-18 7.5	2.570	3.569	3.1	19.1
5 31	14 59.19	-25 55.8	2.071	3.037	7.1	20.3	5 31	14 59.67	-17 39.2	2.619	3.579	6.1	19.3
6 10	14 53.83	-24 39.9	2.132	3.041	10.2	20.5	6 10	14 54.04	-17 15.1	2.695	3.588	8.9	19.5
6 20	14 50.55	-23 30.2	2.215	3.046	12.9	20.7	6 20	14 50.03	-16 57.1	2.793	3.597	11.3	19.7
29618	Jinandrew		5 11.4 15°53'	4°9'/8.9	18		511970	2015 <i>KY</i> ₄₀		5 11.4 195°04'	2°9'/9.7	17	
4 11	15 35.19	-11 40.4	1.034	1.949	16.6	17.9	4 11	15 37.34	-8 37.5	2.319	3.197	10.2	21.0
4 21	15 30.50	-10 26.0	0.987	1.951	11.7	17.6	4 21	15 30.92	-8 31.7	2.250	3.196	7.2	20.8
5 1	15 23.08	-9 9.0	0.961	1.955	6.9	17.4	5 1	15 22.99	-8 28.2	2.207	3.195	4.3	20.6
5 11	15 14.23	-7 58.5	0.956	1.959	5.1	17.3	5 11	15 14.25	-8 29.2	2.193	3.194	3.0	20.5
5 21	15 5.48	-7 3.4	0.974	1.964	8.8	17.5	5 21	15 5.48	-8 36.5	2.207	3.192	5.0	20.7
5 31	14 58.32	-6 30.2	1.014	1.970	13.7	17.8	5 31	14 57.45	-8 51.6	2.249	3.190	8.1	20.8
6 10	14 53.82	-6 21.7	1.072	1.977	18.2	18.1	6 10	14 50.84	-9 15.4	2.316	3.188	11.0	21.0
6 20	14 52.44	-6 36.7	1.146	1.984	22.0	18.3	6 20	14 46.08	-9 47.7	2.405	3.186	13.5	21.2
146425	2001 <i>QQ</i> ₂₄₀		5 11.4 59°83'	8°6'/15.5	18		15974	1998 <i>FL</i> ₁₀₃		5 11.4 170°34'	3°3'/14.1	18	
4 11	15 44.43	-37 2.4	1.556	2.383	16.9	18.8	4 11	15 36.98	-30 8.8	2.612	3.449	10.5	18.5
4 21	15 36.99	-38 13.2	1.498	2.394	13.8	18.7	4 21	15 30.69	-30 12.7	2.536	3.451	8.0	18.4
5 1	15 26.55	-39 1.3	1.461	2.405	10.8	18.5	5 1	15 22.88	-30 4.6	2.485	3.454	5.4	18.2
5 11	15 14.37	-39 21.9	1.448	2.416	8.8	18.4	5 11	15 14.25	-29 44.5	2.461	3.456	3.4	18.1
5 21	15 2.07	-39 14.7	1.459	2.427	8.9	18.4	5 21	15 5.59	-29 14.0	2.466	3.457	4.0	18.1
5 31	14 51.31	-38 44.1	1.493	2.439	11.0	18.6	5 31	14 57.72	-28 36.3	2.499	3.459	6.4	18.3
6 10	14 43.36	-37 58.8	1.551	2.450	13.9	18.8	6 10	14 51.28	-27 55.6	2.559	3.459	9.0	18.4
6 20	14 38.84	-37 8.1	1.628	2.462	16.7	19.0	6 20	14 46.72	-27 16.1	2.642	3.460	11.4	18.6
506934	2008 <i>FD</i> ₁₁₆		5 11.4 88°57'	3°3'/8.7	17		41786	2000 <i>VL</i> ₅₇		5 11.4 156°26'	0°2'/11.6	17	
4 11	15 33.18	-9 9.7	2.315	3.200	9.9	21.8	4 11	15 39.81	-18 38.3	2.220	3.090	10.9	19.6
4 21	15 27.95	-8 21.6	2.255	3.205	7.0	21.6	4 21	15 32.73	-18 44.0	2.153	3.096	7.7	19.4
5 1	15 21.39	-7 34.2	2.222	3.209	4.3	21.4	5 1	15 23.96	-18 44.5	2.111	3.102	4.1	19.2
5 11	15 14.17	-6 51.5	2.216	3.213	3.4	21.4	5 11	15 14.29	-18 40.7	2.098	3.108	0.3	18.8
5 21	15 6.98	-6 16.9	2.239	3.218	5.5	21.5	5 21	15 4.62	-18 34.4	2.114	3.113	3.6	19.1
5 31	15 0.55	-5 53.2	2.288	3.222	8.3	21.7	5 31	14 55.82	-18 28.1	2.159	3.118	7.3	19.4
6 10	14 55.44	-5 42.0	2.361	3.226	11.0	21.9	6 10	14 48.63	-18 24.6	2.229	3.122	10.5	19.6
6 20	14 52.03	-5 43.6	2.455	3.231	13.4	22.1	6 20	14 43.50	-18 26.1	2.321	3.125	13.2	19.8
430636	2003 <i>SF</i> ₄₈		5 11.4 294°72'	8°7'/15.8	17		227615	2006 <i>BD</i> ₅		5 11.4 133°48'	0°5'/11.8	17	
4 11	15 41.43	-39 46.2	1.843	2.650	15.4	20.9	4 11	15 38.20	-20 53.8	2.121	2.991	11.3	22.1
4 21	15 35.02	-40 37.7	1.743	2.623	13.1	20.7	4 21	15 31.59	-20 32.8	2.059	3.003	8.0	21.9
5 1	15 25.68	-41 8.3	1.664	2.595	10.6	20.4	5 1	15 23.34	-20 3.7	2.023	3.014	4.3	21.7
5 11	15 14.36	-41 13.3	1.608	2.567	9.0	20.3	5 11	15 14.28	-19 28.7	2.015	3.025	0.6	21.4
5 21	15 2.40	-40 50.5	1.577	2.538	9.0	20.2	5 21	15 5.30	-18 50.8	2.036	3.036	3.7	21.7
5 31	14 51.39	-40 2.6	1.570	2.510	10.9	20.3	5 31	14 57.29	-18 14.1	2.085	3.046	7.3	21.9
6 10	14 42.73	-38 57.3	1.586	2.482	13.8	20.4	6 10	14 50.95	-17 42.5	2.158	3.055	10.6	22.2
6 20	14 37.29	-37 43.6	1.622	2.454	16.8	20.5	6 20	14 46.67	-17 18.7	2.254	3.064	13.4	22.4
378854	2008 <i>TK</i> ₅₁		5 11.4 109°28'	0°1'/11.5	17		244534	2002 <i>TP</i> ₃₈₃		5 11.4 136°30'	2°3'/12.8	18	
4 11	15 37.75	-19 35.2	2.130	3.003	11.2	22.0	4 11	15 39.17	-24 29.2	2.137	2.997	11.7	21.3
4 21	15 31.22	-19 18.4	2.074	3.019	7.8	21.8	4 21	15 32.45	-24 51.3	2.067	3.001	8.5	21.1
5 1	15 23.11	-18 54.8	2.044	3.036	4.1	21.6	5 1	15 23.89	-25 4.1	2.022	3.005	5.1	20.9
5 11	15 14.24	-18 26.7	2.041	3.051	0.2	21.3	5 11	15 14.31	-25 7.4	2.004	3.008	2.4	20.8
5 21	15 5.48	-17 56.8	2.067	3.067	3.7	21.7	5 21	15 4.65	-25 2.4	2.014	3.012	4.0	20.9
5 31	14 57.69	-17 28.8	2.121	3.082	7.3	21.9	5 31	14 55.90	-24 51.7	2.052	3.015	7.3	21.1
6 10	14 51.53	-17 6.0	2.200	3.096	10.5	22.1	6 10	14 48.85	-24 39.4	2.116	3.018	10.6	21.3
6 20	14 47.41	-16 50.8	2.301	3.110	13.2	22.3	6 20	14 44.00	-24 28.9	2.202	3.021	13.4	21.5
317078	2001 <i>SE</i> ₂₅₃		5 11.4 221°14'	0°2'/11.7	18		240306	2003 <i>FY</i> ₉₃		5 11.4 36°16'	2°7'/10.1	17	
4 11	15 28.54	-19 26.3	4.798	5.662	5.6	20.9	4 11	15 36.48	-10 34.1	1.870	2.758	11.7	19.9
4 21	15 24.30	-19 21.4	4.716	5.657	3.9	20.8	4 21	15 30.50	-10 29.9	1.816	2.768	8.2	19.7
5 1	15 19.38	-19 13.6	4.663	5.653	2.1	20.6	5 1	15 22.81	-10 27.0	1.788	2.779	4.6	19.5
5 11	15 14.09	-19 3.8	4.638	5.648	0.2	20.5	5 11	15 14.26	-10 27.8	1.785	2.790	2.7	19.4
5 21	15 8.78	-18 52.8	4.645	5.643	1.8	20.6	5 21	15 5.77	-10 34.4	1.811	2.802	5.2	19.6
5 31	15 3.79	-18 42.1	4.680	5.639	3.7	20.8	5 31	14 58.27	-10 48.7	1.862	2.813	8.8	19.8
6 10	14 59.43	-18 32.7	4.744	5.634	5.4	20.9	6 10	14 52.47	-11 11.6	1.938	2.826	12.1	20.0
6 20	14 55.93	-18 25.9	4.832	5.629	6.9	21.0	6 20	14 48.81	-11 43.2	2.034	2.838	14.8	20.2
469903	2005 <i>WL</i> ₁₆₃		5 11.4 241°66'	1°5'/10.1	16		411677	2011 <i>WZ</i> ₁₃₄		5 11.4 126°11'	1°3'/10.8	16	
4 11	15 33.37	-15 28.2	2.567	3.446	9.3	21.5	4 11	15 41.45	-15 19.7	1.602	2.486	13.6	21.5
4 21	15 28.09	-14 37.4	2.486	3.436	6.5	21.3	4 21	15 34.23	-15 9.2	1.546	2.497	9.5	21.3
5 1	15 21.49	-13 42.0	2.432	3.425	3.4	21.0	5 1	15 24.85	-14 54.7	1.514	2.507	4.9	21.0
5 11	15 14.18	-12 45.3	2.407	3.414	1.5	20.9	5 11	15 14.35	-14 38.9	1.508	2.517	1.3	20.8
5 21	15 6.83	-11 50.8	2.410	3.402	4.0	21.0	5 21	15 3.93	-14 24.8	1.529	2.526	5.1	21.1
5 31	15 0.12	-11 2.4	2.443	3.391	7.1	21.2	5 31	14 54.77	-14 16.1	1.577	2.535	9.5	21.3
6 10	14 54.65	-10 23.1	2.500	3.379	10.0	21.4	6 10	14 47.76	-14 15.7	1.647	2.543	13.4	21.6
6 20	14 50.79	-9 54.8	2.580	3.367	12.5	21.5	6 20	14 43.39	-14 25.1	1.738	2.551	16.6	21.8
422888	2002 <i>QA</i> ₉₈		5 11.4 253°14'	2°2'/10.1	17		17991	Joshuaegan		5 11.4 93°19'	2°0'/10.4	18	

EPHEMERIDES

5 11.4

5 11.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
266926	2010 <i>EF</i> ₁₂₈		5 11.4 19°41'	0°4/11.6	18		227883	2007 <i>EU</i> ₃₅		5 11.4 293°91'	0°3/11.6	18	
4 11	15 36.41	-19 53.1	1.857	2.737	12.2	20.7	4 11	15 37.11	-20 1.6	1.620	2.505	13.4	20.4
4 21	15 30.62	-19 42.5	1.790	2.738	8.6	20.4	4 21	15 31.52	-19 45.3	1.537	2.488	9.6	20.1
5 1	15 22.95	-19 24.3	1.747	2.739	4.6	20.2	5 1	15 23.63	-19 19.4	1.478	2.471	5.1	19.8
5 11	15 14.27	-19 0.4	1.731	2.741	0.5	19.9	5 11	15 14.34	-18 46.0	1.444	2.454	0.4	19.4
5 21	15 5.57	-18 33.8	1.742	2.742	4.0	20.2	5 21	15 4.80	-18 8.9	1.437	2.437	4.7	19.7
5 31	14 57.84	-18 8.4	1.780	2.744	8.1	20.4	5 31	14 56.24	-17 33.0	1.455	2.421	9.4	20.0
6 10	14 51.89	-17 48.1	1.841	2.746	11.8	20.6	6 10	14 49.69	-17 3.6	1.496	2.404	13.7	20.2
6 20	14 48.21	-17 35.7	1.924	2.748	14.9	20.8	6 20	14 45.77	-16 44.7	1.556	2.388	17.4	20.4
85363	1995 <i>WY</i> ₃₆		5 11.4 211°65'	2°8/9.4	18		110028	2001 <i>SS</i> ₇₄		5 11.4 143°78'	5°6/14.9	18	
4 11	15 35.31	-8 53.8	2.577	3.455	9.3	20.1	4 11	15 42.61	-34 20.3	2.069	2.892	13.4	20.1
4 21	15 29.41	-8 34.0	2.504	3.450	6.6	19.9	4 21	15 35.05	-34 49.1	2.001	2.901	10.6	19.9
5 1	15 22.19	-8 15.5	2.458	3.445	4.0	19.7	5 1	15 25.33	-35 0.5	1.956	2.910	7.8	19.7
5 11	15 14.25	-8 1.0	2.441	3.440	2.9	19.6	5 11	15 14.43	-34 52.8	1.937	2.918	5.8	19.6
5 21	15 6.26	-7 52.5	2.452	3.435	4.8	19.7	5 21	15 3.50	-34 27.1	1.946	2.926	6.1	19.7
5 31	14 58.93	-7 52.1	2.491	3.429	7.6	19.9	5 31	14 53.70	-33 47.4	1.981	2.933	8.3	19.8
6 10	14 52.83	-8 0.8	2.556	3.423	10.3	20.1	6 10	14 45.96	-32 59.9	2.042	2.940	11.1	20.0
6 20	14 48.36	-8 19.0	2.642	3.416	12.6	20.2	6 20	14 40.79	-32 11.1	2.124	2.946	13.7	20.2
505404	2013 <i>QY</i> ₇₃		5 11.4 203°21'	3°3/13.8	17		300226	Francocanepari		5 11.4 168°00'	3°6/14.9	18	
4 11	15 38.81	-29 30.6	1.913	2.764	13.2	21.5	4 11	15 36.56	-33 13.8	3.039	3.857	9.7	21.8
4 21	15 32.38	-29 8.9	1.835	2.761	10.0	21.3	4 21	15 30.27	-33 14.0	2.961	3.862	7.6	21.6
5 1	15 23.91	-28 30.2	1.781	2.758	6.4	21.0	5 1	15 22.64	-33 1.9	2.908	3.865	5.4	21.5
5 11	15 14.32	-27 35.5	1.754	2.755	3.6	20.9	5 11	15 14.32	-32 37.4	2.884	3.869	3.8	21.4
5 21	15 4.71	-26 28.3	1.754	2.751	4.6	20.9	5 21	15 6.00	-32 2.0	2.887	3.872	4.1	21.4
5 31	14 56.19	-25 14.7	1.781	2.747	8.0	21.1	5 31	14 58.38	-31 18.7	2.920	3.874	5.9	21.5
6 10	14 49.63	-24 1.6	1.834	2.742	11.6	21.3	6 10	14 52.05	-30 31.3	2.980	3.876	8.0	21.7
6 20	14 45.51	-22 55.3	1.908	2.737	14.8	21.5	6 20	14 47.41	-29 43.9	3.064	3.878	10.1	21.8
184730	2005 <i>SM</i> ₁₈₀		5 11.4 230°29'	2°9/8.9	16		427857	2005 <i>NP</i> ₇₆		5 11.4 236°83'	4°0/14.1	17	
4 11	15 33.31	-10 16.2	2.505	3.388	9.3	21.2	4 11	15 39.30	-30 36.5	1.837	2.685	13.8	21.8
4 21	15 28.05	-9 25.5	2.432	3.381	6.6	21.0	4 21	15 32.92	-30 26.1	1.754	2.677	10.5	21.5
5 1	15 21.48	-8 34.1	2.386	3.374	4.0	20.8	5 1	15 24.30	-29 57.6	1.695	2.668	7.0	21.3
5 11	15 14.22	-7 45.8	2.368	3.367	3.0	20.7	5 11	15 14.39	-29 11.2	1.661	2.659	4.3	21.1
5 21	15 6.93	-7 3.9	2.378	3.359	5.1	20.8	5 21	15 4.38	-28 9.6	1.655	2.649	5.1	21.1
5 31	15 0.30	-6 31.6	2.416	3.352	7.9	21.0	5 31	14 55.44	-26 58.7	1.675	2.640	8.5	21.3
6 10	14 54.90	-6 10.9	2.479	3.344	10.6	21.2	6 10	14 48.57	-25 46.3	1.719	2.630	12.1	21.5
6 20	14 51.11	-6 2.8	2.563	3.335	13.0	21.3	6 20	14 44.31	-24 38.9	1.785	2.619	15.4	21.7
157469	2005 <i>AP</i> ₃₁		5 11.4 331°96'	5°7/4.3	18		244759	2003 <i>SS</i> ₈₅		5 11.4 263°66'	0°3/11.7	17	
4 11	15 29.06	+9 53.2	3.970	4.806	7.2	19.4	4 11	15 35.65	-21 31.1	1.923	2.800	12.0	20.2
4 21	15 24.71	+10 23.1	3.916	4.803	6.2	19.4	4 21	15 30.09	-20 48.0	1.847	2.793	8.5	19.9
5 1	15 19.62	+10 44.0	3.887	4.799	5.7	19.3	5 1	15 22.71	-19 54.1	1.794	2.786	4.6	19.7
5 11	15 14.14	+10 53.8	3.885	4.795	5.8	19.3	5 11	15 14.32	-18 52.3	1.769	2.779	0.4	19.3
5 21	15 8.68	+10 51.0	3.910	4.792	6.6	19.4	5 21	15 5.90	-17 47.4	1.772	2.772	4.0	19.6
5 31	15 3.62	+10 35.2	3.959	4.789	7.7	19.4	5 31	14 58.40	-16 44.9	1.801	2.764	8.1	19.9
6 10	14 59.31	+10 6.9	4.031	4.785	8.9	19.5	6 10	14 52.62	-15 50.2	1.856	2.757	11.8	20.1
6 20	14 55.99	+9 27.3	4.123	4.782	10.0	19.6	6 20	14 49.03	-15 7.0	1.931	2.750	15.0	20.3
32158	2000 <i>MD</i> ₂		5 11.4 257°93'	1°8/10.4	18		501873	2014 <i>WA</i> ₃₄₉		5 11.4 216°83'	3°8/13.6	17	
4 11	15 38.74	-14 4.2	2.052	2.932	11.2	18.3	4 11	15 41.15	-28 31.7	1.748	2.603	14.1	21.9
4 21	15 32.28	-13 42.7	1.961	2.909	7.9	18.0	4 21	15 34.30	-28 37.2	1.670	2.598	10.6	21.7
5 1	15 23.90	-13 17.8	1.894	2.887	4.3	17.8	5 1	15 25.06	-28 26.8	1.615	2.592	6.9	21.4
5 11	15 14.34	-12 52.3	1.856	2.863	1.8	17.5	5 11	15 14.43	-28 0.0	1.585	2.585	3.9	21.2
5 21	15 4.52	-12 29.1	1.846	2.839	4.8	17.7	5 21	15 3.65	-27 19.1	1.582	2.578	5.1	21.3
5 31	14 55.43	-12 11.8	1.863	2.814	8.8	17.9	5 31	14 53.99	-26 29.3	1.606	2.571	8.8	21.5
6 10	14 47.93	-12 3.4	1.905	2.789	12.4	18.1	6 10	14 46.51	-25 37.5	1.654	2.563	12.6	21.7
6 20	14 42.60	-12 5.7	1.968	2.763	15.6	18.2	6 20	14 41.78	-24 49.9	1.723	2.555	16.0	21.9
93954	2000 <i>WQ</i> ₁₈₂		5 11.4 148°35'	7°6/4.7	17		7386	Paulpellas		5 11.4 136°09'	1°6/10.7	18	
4 11	15 34.85	-0 19.4	1.904	2.786	11.9	19.4	4 11	15 40.05	-15 0.3	1.613	2.499	13.4	17.5
4 21	15 29.31	+1 35.2	1.856	2.790	9.4	19.3	4 21	15 33.30	-14 42.9	1.553	2.505	9.4	17.3
5 1	15 22.18	+3 22.2	1.833	2.793	7.8	19.2	5 1	15 24.42	-14 21.6	1.517	2.511	4.9	17.0
5 11	15 14.26	+4 53.7	1.837	2.796	8.0	19.2	5 11	15 14.40	-13 59.4	1.507	2.516	1.6	16.8
5 21	15 6.42	+6 3.6	1.868	2.799	9.9	19.3	5 21	15 4.42	-13 39.9	1.524	2.521	5.2	17.1
5 31	14 59.50	+6 48.3	1.922	2.802	12.5	19.5	5 31	14 55.62	-13 26.8	1.568	2.525	9.6	17.3
6 10	14 54.19	+7 7.7	1.997	2.804	15.0	19.7	6 10	14 48.90	-13 23.1	1.634	2.530	13.5	17.6
6 20	14 50.87	+7 3.8	2.090	2.806	17.1	19.8	6 20	14 44.76	-13 30.5	1.720	2.534	16.8	17.8
229492	2005 <i>UU</i> ₄₆₁		5 11.4 61°50'	4°2/9.3	18		129802	1999 <i>KP</i> ₅		5 11.4 347°98'	2°0/10.2	17	
4 11	15 38.16	-8 17.4	1.609	2.500	13.1	19.8	4 11	15 27.44	-19 13.1	0.882	1.806	17.6	19.1
4 21	15 31.71	-7 47.6	1.570	2.521	9.3	19.6	4 21	15 25.62	-17 50.3	0.821	1.791	12.4	18.8
5 1	15 23.43	-7 21.1	1.555	2.543	5.7	19.4	5 1	15 20.81	-16 7.6	0.780	1.778	6.4	18.4
5 11	15 14.31	-7 2.3	1.565	2.564	4.2	19.4	5 11	15 14.26	-14 14.6	0.758	1.768	2.1	18.1
5 21	15 5.43	-6 54.2	1.602	2.586	6.7	19.6	5 21	15 7.54	-12 24.3	0.758	1.759	7.5	18.4
5 31	14 57.78	-6 59.1	1.664	2.607	10.3	19.8	5 31	15 2.34	-10 50.6	0.778	1.752	13.7	18.7
6 10	14 52.11	-7 17.5	1.749	2.629	13.6	20.1	6 10	14 59.91	-9 43.4	0.814	1.748	19.2	18.9
6 20	14 48.79	-7 48.4	1.853	2.651	16.3	20.3	6 20	15 0.84	-9 6.2	0.866	1.746	23.8	19.2
31952	Bialtdcelie		5 11.4 287°71'	4°9/9.0	17		14781	1107 <i>T</i> ₋₃		5 11.4 298°69'	1°3/12.4	18	
4 11	15 38.46												

EPHEMERIDES

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5 11.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
380582	2004 <i>RD</i> ₂₀₆		5 11.4 246°13		5°1/14.7 18		281549	2008 <i>UD</i> ₃₈		5 11.5 295°91		1°1/12.1 17	
4 11	15 39.34	-32 44.2	1.895	2.734	13.8	21.0	4 11	15 37.01	-21 51.4	1.822	2.698	12.6	20.8
4 21	15 32.97	-32 56.7	1.815	2.728	10.8	20.8	4 21	15 31.19	-21 44.2	1.747	2.692	9.0	20.6
5 1	15 24.34	-32 51.3	1.758	2.722	7.7	20.5	5 1	15 23.36	-21 27.5	1.697	2.687	5.0	20.3
5 11	15 14.42	-32 26.9	1.726	2.715	5.4	20.4	5 11	15 14.39	-21 2.6	1.672	2.681	1.2	20.0
5 21	15 4.35	-31 45.2	1.721	2.709	5.8	20.4	5 21	15 5.31	-20 32.4	1.675	2.676	4.1	20.2
5 31	14 55.35	-30 50.9	1.742	2.702	8.6	20.6	5 31	14 57.20	-20 1.3	1.704	2.670	8.3	20.5
6 10	14 48.40	-29 51.0	1.787	2.695	11.9	20.7	6 10	14 50.93	-19 33.7	1.757	2.665	12.1	20.7
6 20	14 44.06	-28 52.2	1.854	2.689	14.9	20.9	6 20	14 47.04	-19 13.5	1.831	2.660	15.3	20.9
501781	2014 <i>VB</i> ₁₁		5 11.4 223°23		1°8/12.5 17		424348	2007 <i>VO</i> ₅₂		5 11.5 208°05		1°5/10.7 17	
4 11	15 40.91	-23 55.7	1.831	2.697	13.0	22.5	4 11	15 41.19	-14 33.3	1.834	2.714	12.4	22.4
4 21	15 34.01	-23 49.7	1.749	2.688	9.5	22.3	4 21	15 34.06	-14 20.9	1.759	2.708	8.7	22.2
5 1	15 24.88	-23 31.7	1.691	2.678	5.5	22.0	5 1	15 24.85	-14 5.3	1.710	2.702	4.6	21.9
5 11	15 14.44	-23 2.7	1.660	2.668	2.0	21.8	5 11	15 14.46	-13 48.9	1.687	2.696	1.5	21.7
5 21	15 3.83	-22 25.3	1.657	2.656	4.3	21.9	5 21	15 3.94	-13 34.5	1.693	2.688	4.9	21.9
5 31	14 54.22	-21 44.2	1.680	2.645	8.5	22.1	5 31	14 54.40	-13 25.4	1.726	2.680	9.1	22.1
6 10	14 46.58	-21 5.0	1.729	2.632	12.5	22.3	6 10	14 46.74	-13 24.6	1.783	2.672	12.9	22.3
6 20	14 41.52	-20 32.6	1.798	2.619	15.9	22.5	6 20	14 41.50	-13 33.5	1.861	2.662	16.1	22.5
141137	2001 <i>XY</i> ₉₃		5 11.4 135°58		0°7/11.9 18		213897	2003 <i>UP</i> ₁		5 11.5 243°96		1°9/12.5 17	
4 11	15 37.18	-20 26.0	2.335	3.204	10.5	20.2	4 11	15 39.61	-23 45.2	1.568	2.444	14.3	20.8
4 21	15 30.90	-20 32.0	2.266	3.208	7.4	20.0	4 21	15 33.31	-23 36.1	1.494	2.438	10.4	20.6
5 1	15 23.05	-20 31.8	2.223	3.213	4.0	19.8	5 1	15 24.58	-23 13.8	1.443	2.431	6.0	20.3
5 11	15 14.36	-20 26.2	2.208	3.217	0.8	19.6	5 11	15 14.45	-22 39.5	1.417	2.425	2.0	20.0
5 21	15 5.65	-20 17.1	2.222	3.221	3.4	19.8	5 21	15 4.17	-21 56.7	1.417	2.418	4.7	20.2
5 31	14 57.73	-20 7.0	2.264	3.225	6.8	20.0	5 31	14 55.06	-21 11.0	1.444	2.411	9.3	20.4
6 10	14 51.29	-19 58.6	2.331	3.229	9.9	20.2	6 10	14 48.18	-20 28.9	1.493	2.404	13.6	20.7
6 20	14 46.76	-19 54.6	2.421	3.233	12.5	20.4	6 20	14 44.11	-19 55.5	1.562	2.397	17.2	20.9
248455	2005 <i>TJ</i> ₁₈₉		5 11.4 230°23		3°8/14.5 18		397700	2008 <i>CL</i> ₁₈₇		5 11.5 60°14		2°1/13.1 17	
4 11	15 36.78	-32 14.0	2.776	3.602	10.3	21.3	4 11	15 35.53	-26 28.0	2.049	2.911	12.0	20.7
4 21	15 30.63	-32 21.9	2.686	3.592	8.0	21.1	4 21	15 29.81	-26 1.3	1.992	2.927	8.7	20.5
5 1	15 22.93	-32 17.3	2.621	3.582	5.7	20.9	5 1	15 22.47	-25 21.9	1.960	2.944	5.2	20.3
5 11	15 14.36	-31 59.9	2.583	3.571	4.0	20.8	5 11	15 14.35	-24 32.0	1.955	2.960	2.3	20.2
5 21	15 5.67	-31 30.6	2.574	3.560	4.3	20.8	5 21	15 6.38	-23 35.3	1.977	2.977	3.7	20.3
5 31	14 57.66	-30 52.5	2.593	3.549	6.4	20.9	5 31	14 59.42	-22 36.9	2.027	2.994	7.1	20.5
6 10	14 51.01	-30 9.5	2.639	3.537	8.9	21.1	6 10	14 54.17	-21 41.8	2.102	3.011	10.3	20.8
6 20	14 46.18	-29 26.1	2.708	3.525	11.2	21.2	6 20	14 50.98	-20 54.3	2.199	3.028	13.1	21.0
479615	2014 <i>DL</i> ₂₆		5 11.4 19°65		4°5/13.9 17		441301	2007 <i>YC</i> ₆₃		5 11.5 286°07		5°0/ 8.1 17	
4 11	15 38.10	-29 37.4	1.875	2.727	13.4	20.4	4 11	15 34.94	- 4 10.0	2.120	3.003	10.8	20.8
4 21	15 32.01	-30 11.5	1.808	2.731	10.2	20.2	4 21	15 29.42	- 3 33.5	2.050	2.993	8.0	20.6
5 1	15 23.80	-30 31.5	1.764	2.735	7.0	20.0	5 1	15 22.32	- 3 1.8	2.005	2.983	5.7	20.4
5 11	15 14.39	-30 36.1	1.746	2.740	4.7	19.9	5 11	15 14.35	- 2 39.2	1.987	2.973	5.1	20.4
5 21	15 4.89	-30 26.3	1.754	2.745	5.4	20.0	5 21	15 6.32	- 2 28.8	1.996	2.964	7.0	20.5
5 31	14 56.44	-30 5.5	1.789	2.751	8.3	20.1	5 31	14 59.04	- 2 32.7	2.031	2.954	9.8	20.6
6 10	14 49.96	-29 39.1	1.847	2.757	11.5	20.3	6 10	14 53.20	- 2 51.6	2.089	2.944	12.7	20.8
6 20	14 45.98	-29 12.4	1.927	2.763	14.4	20.5	6 20	14 49.25	- 3 24.5	2.167	2.935	15.2	21.0
380579	1999 <i>BO</i> ₁₅		5 11.4 251°24		4°5/14.1 18		181151	2005 <i>RG</i> ₈		5 11.5 286°85		0°2/11.6 18	
4 11	15 40.63	-30 48.8	1.990	2.832	13.2	17.7	4 11	15 35.04	-19 50.9	2.189	3.065	10.8	20.3
4 21	15 33.89	-31 5.3	1.898	2.816	10.2	17.5	4 21	15 29.60	-19 34.8	2.102	3.049	7.7	20.1
5 1	15 24.87	-31 6.4	1.830	2.799	7.0	17.3	5 1	15 22.47	-19 11.5	2.041	3.033	4.1	19.8
5 11	15 14.45	-30 50.8	1.788	2.782	4.7	17.1	5 11	15 14.36	-18 42.9	2.007	3.017	0.3	19.5
5 21	15 3.73	-30 19.3	1.774	2.764	5.4	17.1	5 21	15 6.10	-18 11.6	2.001	3.001	3.7	19.7
5 31	14 53.92	-29 36.1	1.786	2.746	8.4	17.2	5 31	14 58.56	-17 41.2	2.022	2.985	7.4	19.9
6 10	14 46.05	-28 47.1	1.823	2.728	11.9	17.4	6 10	14 52.50	-17 15.4	2.069	2.969	10.9	20.1
6 20	14 40.75	-27 58.8	1.882	2.709	15.0	17.6	6 20	14 48.42	-16 57.1	2.137	2.953	13.9	20.3
118362	1999 <i>FS</i> ₁₇		5 11.4 222°70		2°3/12.8 18		7073	Rudbelia		5 11.5 282°08		1°3/10.7 18	
4 11	15 40.26	-24 43.7	2.071	2.930	12.0	19.4	4 11	15 37.77	-17 40.7	1.448	2.340	14.3	18.0
4 21	15 33.38	-24 55.4	1.988	2.922	8.8	19.2	4 21	15 32.19	-16 53.7	1.365	2.320	10.1	17.7
5 1	15 24.50	-24 56.8	1.930	2.914	5.3	19.0	5 1	15 24.09	-15 56.2	1.305	2.300	5.3	17.3
5 11	15 14.43	-24 47.8	1.899	2.904	2.4	18.8	5 11	15 14.44	-14 52.4	1.271	2.280	1.3	17.0
5 21	15 4.18	-24 30.0	1.897	2.895	4.1	18.9	5 21	15 4.50	-13 48.5	1.262	2.260	5.8	17.2
5 31	14 54.80	-24 6.7	1.922	2.885	7.7	19.1	5 31	14 55.62	-12 51.8	1.278	2.240	10.9	17.5
6 10	14 47.18	-23 42.4	1.972	2.874	11.2	19.3	6 10	14 48.95	-12 8.5	1.316	2.219	15.6	17.7
6 20	14 41.89	-23 21.3	2.045	2.863	14.3	19.4	6 20	14 45.14	-11 42.5	1.372	2.199	19.6	17.9
55771	1992 <i>PD</i> ₁		5 11.5 254°85		2°5/ 9.8 18		280214	2002 <i>TM</i> ₂₈₈		5 11.5 259°84		2°6/13.5 18	
4 11	15 36.76	-13 18.9	1.786	2.674	12.2	18.9	4 11	15 36.99	-28 13.4	2.354	3.202	11.2	20.9
4 21	15 30.96	-12 36.4	1.712	2.665	8.6	18.7	4 21	15 30.97	-27 52.8	2.256	3.182	8.4	20.7
5 1	15 23.21	-11 50.3	1.663	2.656	4.7	18.4	5 1	15 23.19	-27 18.6	2.183	3.161	5.3	20.4
5 11	15 14.38	-11 4.9	1.641	2.647	2.6	18.3	5 11	15 14.40	-26 31.4	2.137	3.139	2.8	20.2
5 21	15 5.45	-10 24.7	1.646	2.637	5.6	18.4	5 21	15 5.44	-25 34.0	2.120	3.117	3.9	20.3
5 31	14 57.46	- 9 54.2	1.677	2.628	9.6	18.7	5 31	14 57.23	-24 30.7	2.131	3.095	7.0	20.4
6 10	14 51.25	- 9 36.7	1.731	2.618	13.3	18.9	6 10	14 50.54	-23 26.9	2.169	3.072	10.3	20.6
6 20	14 47.33	- 9 33.3	1.805	2.608	16.5	19.0	6 20	14 45.88	-22 27.7	2.229	3.049	13.2	20.7
521285	2015 <i>JV</i> ₁₄		5 11.5 203°87		2°3/12.7 17		315461	2007 <i>XN</i>					

EPHEMERIDES

5 11.5

5 11.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
379975	2012 <i>TJ</i> ₇		5 11.5 218°64	0°3/11.1	18		91417	1999 <i>NU</i> ₅₅		5 11.5 186°65	2°0/13.1	18	
4 11	15 28.00	-17 24.9	4.533	5.404	5.8	21.5	4 11	15 37.62	-26 47.5	2.333	3.185	11.1	19.2
4 21	15 23.99	-17 6.2	4.456	5.401	4.0	21.4	4 21	15 31.25	-26 19.2	2.255	3.185	8.2	19.1
5 1	15 19.29	-16 45.0	4.406	5.398	2.1	21.2	5 1	15 23.27	-25 38.5	2.203	3.184	4.9	18.8
5 11	15 14.24	-16 22.5	4.386	5.396	0.3	21.0	5 11	15 14.44	-24 46.8	2.178	3.183	2.2	18.7
5 21	15 9.17	-16 0.1	4.396	5.393	2.0	21.2	5 21	15 5.62	-23 47.3	2.182	3.181	3.6	18.7
5 31	15 4.45	-15 39.2	4.435	5.390	4.0	21.4	5 31	14 57.68	-22 44.7	2.215	3.179	6.8	18.9
6 10	15 0.38	-15 21.3	4.501	5.387	5.8	21.5	6 10	14 51.30	-21 44.2	2.275	3.176	10.0	19.1
6 20	14 57.20	-15 7.5	4.592	5.384	7.3	21.6	6 20	14 46.91	-20 50.1	2.357	3.172	12.7	19.3
432365	2009 <i>WB</i> ₃₅		5 11.5 156°28	2°0/10.1	17		161047	2002 <i>JK</i> ₁		5 11.5 289°78	2°1/9.8	18	
4 11	15 37.66	-12 47.1	2.200	3.079	10.6	21.6	4 11	15 35.01	-16 14.6	1.839	2.727	11.9	19.6
4 21	15 31.20	-12 23.7	2.137	3.086	7.4	21.4	4 21	15 29.81	-15 0.9	1.750	2.703	8.4	19.4
5 1	15 23.20	-11 58.8	2.100	3.091	4.0	21.2	5 1	15 22.69	-13 37.8	1.685	2.679	4.5	19.1
5 11	15 14.41	-11 35.1	2.091	3.097	2.1	21.1	5 11	15 14.42	-12 10.5	1.648	2.655	2.2	18.9
5 21	15 5.65	-11 15.5	2.110	3.101	4.6	21.3	5 21	15 5.97	-10 45.5	1.639	2.631	5.5	19.0
5 31	14 57.74	-11 2.7	2.158	3.106	8.0	21.5	5 31	14 58.34	-9 29.5	1.656	2.607	9.7	19.2
6 10	14 51.35	-10 58.7	2.230	3.110	11.0	21.7	6 10	14 52.40	-8 28.1	1.697	2.583	13.6	19.4
6 20	14 46.89	-11 4.4	2.324	3.113	13.7	21.9	6 20	14 48.70	-7 44.6	1.758	2.559	17.0	19.6
415449	2013 <i>TG</i> ₃₉		5 11.5 184°12	1°0/9.9	18		99334	2001 <i>VC</i> ₉₂		5 11.5 291°17	4°4/6.0	18	
4 11	15 27.34	-13 32.3	4.633	5.508	5.5	21.2	4 11	15 29.84	+ 5 44.7	4.364	5.212	6.4	19.0
4 21	15 23.51	-13 3.0	4.561	5.508	3.8	21.1	4 21	15 25.24	+ 6 0.3	4.301	5.206	5.3	18.9
5 1	15 19.03	-12 32.5	4.517	5.508	2.1	20.9	5 1	15 19.95	+ 6 9.2	4.264	5.199	4.5	18.8
5 11	15 14.23	-12 2.4	4.502	5.508	1.1	20.8	5 11	15 14.30	+ 6 9.6	4.254	5.193	4.5	18.8
5 21	15 9.44	-11 34.2	4.518	5.508	2.4	20.9	5 21	15 8.64	+ 6 0.3	4.273	5.187	5.3	18.9
5 31	15 4.98	-11 9.4	4.562	5.507	4.2	21.1	5 31	15 3.35	+ 5 41.0	4.319	5.181	6.5	18.9
6 10	15 1.14	-10 49.3	4.634	5.507	5.9	21.2	6 10	14 58.72	+ 5 11.8	4.389	5.174	7.7	19.0
6 20	14 58.14	-10 34.7	4.730	5.506	7.4	21.3	6 20	14 55.02	+ 4 33.6	4.481	5.168	8.9	19.1
165496	2001 <i>BH</i> ₄₉		5 11.5 115°37	0°4/11.7	18		501434	2014 <i>AA</i> ₁		5 11.5 203°03	1°4/10.5	18	
4 11	15 40.71	-20 45.6	1.713	2.588	13.3	20.6	4 11	15 37.39	-14 21.4	2.399	3.274	10.0	22.3
4 21	15 33.61	-20 19.1	1.659	2.605	9.4	20.4	4 21	15 31.02	-14 2.8	2.323	3.270	7.0	22.1
5 1	15 24.52	-19 43.0	1.630	2.621	5.0	20.2	5 1	15 23.15	-13 41.6	2.273	3.265	3.7	21.9
5 11	15 14.47	-19 0.0	1.627	2.637	0.5	19.9	5 11	15 14.44	-13 19.9	2.252	3.259	1.4	21.7
5 21	15 4.61	-18 14.5	1.653	2.653	4.3	20.2	5 21	15 5.68	-13 0.4	2.259	3.253	4.1	21.9
5 31	14 56.00	-17 31.6	1.705	2.667	8.6	20.5	5 31	14 57.65	-12 45.6	2.296	3.247	7.4	22.1
6 10	14 49.47	-16 56.1	1.781	2.682	12.3	20.7	6 10	14 51.00	-12 37.9	2.358	3.239	10.4	22.3
6 20	14 45.42	-16 31.1	1.878	2.695	15.4	21.0	6 20	14 46.17	-12 38.6	2.441	3.232	13.1	22.4
270555	2002 <i>GC</i> ₁₈₀		5 11.5 347°61	1°2/10.7	17		477672	2010 <i>OJ</i> ₁₀₁		5 11.5 302°91	0°0/11.4	16	
4 11	15 36.14	-16 34.4	1.734	2.622	12.5	20.5	4 11	15 33.86	-20 40.9	2.016	2.896	11.4	20.8
4 21	15 30.54	-16 3.6	1.668	2.621	8.7	20.3	4 21	15 28.87	-19 56.0	1.930	2.879	8.1	20.6
5 1	15 23.00	-15 26.8	1.626	2.620	4.6	20.0	5 1	15 22.13	-19 0.8	1.869	2.862	4.3	20.3
5 11	15 14.41	-14 47.7	1.610	2.619	1.2	19.8	5 11	15 14.40	-17 58.6	1.835	2.845	0.2	19.9
5 21	15 5.81	-14 10.4	1.621	2.618	4.8	20.0	5 21	15 6.55	-16 53.7	1.829	2.829	4.0	20.2
5 31	14 58.21	-13 39.2	1.658	2.618	9.0	20.3	5 31	14 59.49	-15 51.4	1.850	2.813	8.0	20.4
6 10	14 52.46	-13 18.0	1.719	2.617	12.8	20.5	6 10	14 54.02	-14 57.0	1.896	2.796	11.7	20.6
6 20	14 49.04	-13 8.7	1.799	2.617	16.0	20.7	6 20	14 50.61	-14 14.0	1.962	2.781	14.8	20.8
341154	2007 <i>PJ</i> ₃₁		5 11.5 233°07	3°2/8.8	17		101907	1999 <i>RC</i> ₃		5 11.5 154°64	3°2/13.9	18	
4 11	15 35.39	- 9 43.0	2.412	3.293	9.7	21.6	4 11	15 36.98	-29 46.8	2.779	3.615	10.0	19.7
4 21	15 29.62	- 8 53.3	2.333	3.280	7.0	21.4	4 21	15 30.68	-29 59.3	2.705	3.620	7.6	19.5
5 1	15 22.41	- 8 3.1	2.280	3.267	4.2	21.2	5 1	15 22.95	-30 1.0	2.656	3.625	5.1	19.3
5 11	15 14.39	- 7 16.0	2.255	3.253	3.3	21.2	5 11	15 14.43	-29 51.6	2.635	3.629	3.3	19.2
5 21	15 6.30	- 6 35.7	2.259	3.239	5.4	21.3	5 21	15 5.89	-29 32.4	2.643	3.634	3.9	19.3
5 31	14 58.87	- 6 5.6	2.291	3.224	8.4	21.4	5 31	14 58.06	-29 6.2	2.680	3.638	6.1	19.4
6 10	14 52.75	- 5 47.7	2.347	3.208	11.2	21.6	6 10	14 51.59	-28 36.4	2.743	3.641	8.6	19.6
6 20	14 48.35	- 5 42.9	2.424	3.192	13.7	21.7	6 20	14 46.88	-28 6.8	2.829	3.645	10.8	19.7
303821	2005 <i>SQ</i> ₁₀₃		5 11.5 254°26	2°6/13.2	18		253618	2003 <i>UN</i> ₆₃		5 11.5 237°94	3°2/9.8	17	
4 11	15 37.44	-26 19.2	2.439	3.291	10.7	20.2	4 11	15 40.05	-10 58.6	1.686	2.572	12.9	20.5
4 21	15 31.23	-26 37.5	2.353	3.281	8.0	20.0	4 21	15 33.42	-10 33.7	1.611	2.562	9.2	20.3
5 1	15 23.33	-26 46.4	2.293	3.272	5.0	19.8	5 1	15 24.61	-10 8.4	1.561	2.551	5.2	20.0
5 11	15 14.44	-26 45.5	2.261	3.262	2.7	19.6	5 11	15 14.53	- 9 46.3	1.537	2.540	3.2	19.9
5 21	15 5.38	-26 35.8	2.257	3.253	3.8	19.7	5 21	15 4.28	- 9 31.3	1.540	2.529	6.2	20.0
5 31	14 57.03	-26 19.9	2.281	3.243	6.8	19.9	5 31	14 55.02	- 9 26.7	1.569	2.517	10.3	20.2
6 10	14 50.13	-26 1.2	2.331	3.233	9.8	20.0	6 10	14 47.70	- 9 34.8	1.621	2.505	14.2	20.4
6 20	14 45.19	-25 43.6	2.404	3.222	12.4	20.2	6 20	14 42.91	- 9 56.0	1.692	2.492	17.6	20.6
87803	2000 <i>SE</i> ₁₃₇		5 11.5 250°19	0°3/11.7	18		615	Roswitha		5 11.5 336°09	1°3/12.1	18	
4 11	15 37.02	-22 4.5	2.029	2.900	11.7	19.6	4 11	15 36.93	-21 35.9	1.508	2.393	14.2	13.9
4 21	15 31.08	-21 15.2	1.941	2.885	8.4	19.3	4 21	15 31.50	-21 35.5	1.437	2.386	10.2	13.6
5 1	15 23.28	-20 13.9	1.878	2.869	4.5	19.1	5 1	15 23.69	-21 24.6	1.388	2.380	5.7	13.3
5 11	15 14.44	-19 3.7	1.843	2.853	0.5	18.7	5 11	15 14.49	-21 4.7	1.365	2.374	1.4	13.0
5 21	15 5.48	-17 49.1	1.836	2.836	4.0	18.9	5 21	15 5.14	-20 38.8	1.367	2.368	4.7	13.3
5 31	14 57.38	-16 36.1	1.858	2.819	8.1	19.2	5 31	14 56.92	-20 11.6	1.394	2.363	9.4	13.5
6 10	14 50.95	-15 30.5	1.904	2.801	11.8	19.4	6 10	14 50.86	-19 48.5	1.443	2.359	13.7	13.7
6 20	14 46.70	-14 36.6	1.972	2.783	15.0	19.5	6 20	14 47.56	-19 33.5	1.512	2.355	17.3	14.0
328054	2007 <i>TS</i> ₁₄₅		5 11.5 224°96	0°3/11.1	18		2922	Dikan'ka		5 11.5 44°33	1°8/10.6	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
335811	2007 <i>JE</i> ₅		5 11.5 327°17	3°9/ 8.8 17			26032	6556 <i>P-L</i>		5 11.5 264°49	4°2/ 8.2 18		
4 11	15 32.44	-13 39.7	1.359	2.265	14.0	19.7	4 11	15 35.00	-8 7.7	2.104	2.990	10.7	18.9
4 21	15 28.43	-12 12.4	1.285	2.246	9.9	19.4	4 21	15 29.56	-7 6.8	2.025	2.973	7.8	18.7
5 1	15 22.10	-10 36.7	1.233	2.227	5.7	19.1	5 1	15 22.49	-6 6.0	1.971	2.956	5.1	18.5
5 11	15 14.42	-9 0.3	1.206	2.209	4.0	19.0	5 11	15 14.48	-5 10.1	1.945	2.939	4.3	18.4
5 21	15 6.57	-7 32.4	1.204	2.193	7.6	19.2	5 21	15 6.36	-4 23.9	1.947	2.922	6.6	18.5
5 31	14 59.78	-6 21.5	1.225	2.177	12.3	19.4	5 31	14 58.97	-3 51.2	1.975	2.904	9.7	18.6
6 10	14 55.07	-5 33.3	1.267	2.162	16.7	19.6	6 10	14 53.03	-3 34.4	2.026	2.886	12.8	18.8
6 20	14 53.05	-5 9.7	1.326	2.148	20.4	19.8	6 20	14 49.02	-3 33.7	2.097	2.868	15.5	18.9
304564	2006 <i>VG</i> ₇		5 11.5 185°28	0°4/11.2 17			47293	Masamitsu		5 11.5 295°53	0°8/11.1 18		
4 11	15 35.68	-17 20.1	2.674	3.546	9.2	21.9	4 11	15 38.87	-17 10.0	1.445	2.336	14.3	19.3
4 21	15 29.71	-17 9.1	2.600	3.545	6.4	21.7	4 21	15 33.17	-16 58.0	1.355	2.309	10.2	18.9
5 1	15 22.43	-16 54.0	2.553	3.545	3.4	21.5	5 1	15 24.78	-16 38.9	1.289	2.283	5.4	18.6
5 11	15 14.44	-16 36.5	2.534	3.544	0.4	21.3	5 11	15 14.61	-16 15.1	1.247	2.256	0.8	18.2
5 21	15 6.42	-16 18.6	2.545	3.543	3.3	21.5	5 21	15 3.93	-15 50.3	1.230	2.230	5.5	18.4
5 31	14 59.05	-16 2.7	2.585	3.541	6.4	21.7	5 31	14 54.20	-15 29.3	1.238	2.203	10.8	18.7
6 10	14 52.93	-15 51.2	2.651	3.539	9.2	21.9	6 10	14 46.67	-15 17.2	1.268	2.177	15.7	18.9
6 20	14 48.44	-15 45.8	2.739	3.537	11.6	22.0	6 20	14 42.14	-15 17.4	1.317	2.150	19.9	19.1
372990	2011 <i>CJ</i> ₇₄		5 11.5 58°45	3°4/13.6 17			195464	2002 <i>GT</i> ₁₀₄		5 11.5 324°03	6°5/ 6.8 18		
4 11	15 39.15	-28 0.3	1.514	2.382	15.2	20.6	4 11	15 33.81	-4 41.5	1.635	2.530	12.7	19.1
4 21	15 32.80	-27 50.0	1.466	2.401	11.2	20.4	4 21	15 28.97	-3 16.1	1.573	2.522	9.6	18.9
5 1	15 24.19	-27 22.4	1.440	2.421	7.0	20.2	5 1	15 22.24	-1 54.5	1.535	2.514	7.0	18.8
5 11	15 14.51	-26 38.9	1.439	2.442	3.6	20.1	5 11	15 14.48	-0 44.1	1.523	2.506	6.8	18.7
5 21	15 5.06	-25 44.1	1.463	2.462	4.9	20.2	5 21	15 6.68	+0 8.5	1.536	2.498	9.2	18.8
5 31	14 57.07	-24 44.7	1.513	2.482	8.8	20.5	5 31	14 59.84	+0 39.0	1.572	2.491	12.4	19.0
6 10	14 51.41	-23 47.9	1.587	2.503	12.6	20.7	6 10	14 54.78	+0 46.1	1.630	2.485	15.6	19.2
6 20	14 48.49	-22 59.2	1.680	2.523	15.8	21.0	6 20	14 51.97	+0 31.1	1.705	2.479	18.4	19.4
25132	1998 <i>SO</i> ₉		5 11.5 196°71	1°2/10.5 18			393372	1999 <i>TP</i> ₃₁₇		5 11.5 316°47	5°7/ 6.6 16		
4 11	15 35.73	-16 18.2	2.213	3.093	10.5	19.2	4 11	15 32.14	-5 53.2	1.892	2.785	11.4	20.9
4 21	15 29.94	-15 38.7	2.142	3.091	7.3	19.0	4 21	15 27.68	-4 21.6	1.818	2.766	8.5	20.7
5 1	15 22.60	-14 54.0	2.096	3.089	3.8	18.8	5 1	15 21.54	-2 50.9	1.769	2.748	6.2	20.5
5 11	15 14.45	-14 7.5	2.078	3.086	1.2	18.6	5 11	15 14.45	-1 27.9	1.746	2.730	6.0	20.5
5 21	15 6.29	-13 22.7	2.089	3.084	4.2	18.8	5 21	15 7.25	-0 19.1	1.750	2.712	8.3	20.6
5 31	14 58.93	-12 43.6	2.127	3.081	7.7	19.0	5 31	15 0.82	+0 30.5	1.779	2.695	11.4	20.7
6 10	14 53.04	-12 13.5	2.191	3.077	10.9	19.2	6 10	14 55.91	+0 58.4	1.829	2.678	14.4	20.9
6 20	14 49.05	-11 54.1	2.275	3.074	13.7	19.4	6 20	14 52.99	+1 4.8	1.898	2.662	17.1	21.0
61801	2000 <i>QV</i> ₁₈₄		5 11.5 200°22	0°3/11.3 18			431384	2007 <i>ET</i> ₁₇₇		5 11.5 333°83	3°4/ 9.1 17		
4 11	15 41.13	-18 18.1	1.736	2.614	13.0	19.2	4 11	15 34.19	-13 50.4	1.532	2.430	13.2	20.4
4 21	15 34.14	-18 4.2	1.664	2.612	9.2	19.0	4 21	15 29.35	-12 26.9	1.467	2.424	9.3	20.2
5 1	15 24.97	-17 43.2	1.615	2.608	4.8	18.7	5 1	15 22.47	-10 56.9	1.425	2.419	5.2	19.9
5 11	15 14.57	-17 17.2	1.594	2.604	0.3	18.4	5 11	15 14.49	-9 27.8	1.410	2.413	3.5	19.8
5 21	15 4.07	-16 49.4	1.600	2.599	4.6	18.7	5 21	15 6.49	-8 7.0	1.420	2.408	6.8	20.0
5 31	14 54.64	-16 24.2	1.633	2.594	9.0	18.9	5 31	14 59.57	-7 1.6	1.455	2.404	11.0	20.2
6 10	14 47.21	-16 5.7	1.690	2.588	13.0	19.2	6 10	14 54.59	-6 16.1	1.512	2.400	14.9	20.4
6 20	14 42.35	-15 56.8	1.768	2.581	16.4	19.4	6 20	14 52.04	-5 51.7	1.588	2.396	18.2	20.6
12155	Hyginus		5 11.5 168°85	1°5/10.5 18			497325	2005 <i>TU</i> ₁₄₅		5 11.5 215°23	2°8/ 9.6 17		
4 11	15 39.66	-15 12.0	2.005	2.883	11.5	19.2	4 11	15 37.45	-11 57.9	2.071	2.953	11.0	22.9
4 21	15 32.76	-14 41.7	1.939	2.887	8.1	19.0	4 21	15 31.26	-11 13.4	1.996	2.946	7.8	22.7
5 1	15 24.10	-14 7.2	1.899	2.892	4.2	18.8	5 1	15 23.37	-10 26.7	1.948	2.938	4.4	22.5
5 11	15 14.53	-13 31.7	1.887	2.895	1.5	18.6	5 11	15 14.55	-9 41.8	1.927	2.930	2.8	22.4
5 21	15 4.98	-12 58.6	1.903	2.898	4.6	18.8	5 21	15 5.66	-9 2.7	1.935	2.922	5.4	22.5
5 31	14 56.40	-12 31.7	1.947	2.900	8.4	19.0	5 31	14 57.60	-8 33.2	1.969	2.913	8.9	22.7
6 10	14 49.54	-12 14.0	2.016	2.901	11.8	19.3	6 10	14 51.11	-8 15.9	2.028	2.903	12.2	22.9
6 20	14 44.84	-12 7.2	2.106	2.901	14.7	19.5	6 20	14 46.65	-8 11.9	2.108	2.893	15.0	23.1
98232	2000 <i>SJ</i> ₁₅₁		5 11.5 214°43	1°3/12.2 18 R			255742	2006 <i>QC</i> ₁₈₃		5 11.5 149°11	0°4/11.8 17		
4 11	15 41.43	-22 6.0	1.780	2.650	13.1	20.0	4 11	15 39.82	-20 53.2	1.820	2.694	12.7	21.6
4 21	15 34.42	-22 2.5	1.702	2.644	9.5	19.8	4 21	15 33.05	-20 29.0	1.757	2.702	9.0	21.4
5 1	15 25.16	-21 48.8	1.647	2.636	5.3	19.5	5 1	15 24.33	-19 55.4	1.718	2.709	4.8	21.1
5 11	15 14.59	-21 25.9	1.620	2.629	1.4	19.2	5 11	15 14.59	-19 14.7	1.705	2.715	0.6	20.8
5 21	15 3.85	-20 56.4	1.620	2.620	4.3	19.4	5 21	15 4.91	-18 30.8	1.721	2.721	4.1	21.1
5 31	14 54.15	-20 24.8	1.648	2.611	8.7	19.7	5 31	14 56.34	-17 48.6	1.764	2.727	8.3	21.4
6 10	14 46.47	-19 56.2	1.699	2.602	12.7	19.9	6 10	14 49.70	-17 12.9	1.831	2.732	12.0	21.6
6 20	14 41.39	-19 34.7	1.772	2.592	16.1	20.1	6 20	14 45.45	-16 46.9	1.920	2.736	15.2	21.8
165381	2000 <i>WD</i> ₁₅₆		5 11.5 208°85	2°4/12.6 17			286497	2002 <i>BQ</i> ₂₄		5 11.5 130°84	2°7/10.4 18		
4 11	15 42.31	-24 3.6	1.693	2.560	13.9	20.4	4 11	15 43.04	-11 24.1	1.591	2.475	13.7	20.6
4 21	15 35.17	-24 19.4	1.618	2.556	10.2	20.1	4 21	15 35.43	-11 19.4	1.535	2.486	9.6	20.3
5 1	15 25.61	-24 23.9	1.567	2.552	6.0	19.9	5 1	15 25.61	-11 15.0	1.504	2.495	5.3	20.1
5 11	15 14.62	-24 16.7	1.541	2.548	2.5	19.6	5 11	15 14.65	-11 13.7	1.499	2.505	2.7	20.0
5 21	15 3.44	-23 59.6	1.543	2.542	4.7	19.8	5 21	15 3.77	-11 17.9	1.521	2.514	5.8	20.2
5 31	14 53.38	-23 36.6	1.572	2.537	8.9	20.0	5 31	14 54.15	-11 29.9	1.570	2.522	10.0	20.4
6 10	14 45.49	-23 13.2	1.624	2.531	12.9	20.2	6 10	14 46.70	-11 51.3	1.642	2.530	13.8	20.7
6 20	14 40.39	-22 54.2	1.697	2.524	16.4	20.4	6 20	14 41.92	-12 22.4	1.734	2.538	17.0	20.9
35477	1998 <i>ER</i> ₁₀		5 11.5 130°62	1°2/10.5 18			184276	2005 <i>AU</i> ₁₉		5 11.5 129°10	1°6/ 9.3 18		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
32940	1995 <i>UW</i> ₄		5 11.5 277°90	0°3/11.6	18		11298	Gide		5 11.5 156°38	0°7/11.0	18	
4 11	15 42.37	-18 7.8	1.346	2.235	15.4	18.0	4 11	15 36.52	-16 57.1	2.132	3.011	10.9	18.6
4 21	15 35.76	-18 24.7	1.267	2.219	11.0	17.7	4 21	15 30.56	-16 39.5	2.065	3.013	7.6	18.4
5 1	15 26.19	-18 35.7	1.210	2.204	5.9	17.4	5 1	15 22.99	-16 17.1	2.022	3.015	4.0	18.2
5 11	15 14.70	-18 41.2	1.178	2.188	0.5	17.0	5 11	15 14.56	-15 52.3	2.008	3.017	0.7	17.9
5 21	15 2.76	-18 42.9	1.171	2.172	5.4	17.3	5 21	15 6.12	-15 27.9	2.021	3.019	3.9	18.2
5 31	14 51.96	-18 44.5	1.189	2.156	10.9	17.5	5 31	14 58.53	-15 7.1	2.062	3.021	7.6	18.4
6 10	14 43.68	-18 50.3	1.229	2.140	15.8	17.8	6 10	14 52.48	-14 52.8	2.128	3.022	10.9	18.6
6 20	14 38.70	-19 3.8	1.287	2.125	20.0	18.0	6 20	14 48.41	-14 46.9	2.215	3.023	13.7	18.8
381541	2008 <i>SB</i> ₃₀₄		5 11.5 201°96	0°8/10.9	17		1040	Klumpkea		5 11.5 144°30	4°6/15.9	18	R
4 11	15 38.21	-16 8.9	2.222	3.097	10.7	21.7	4 11	15 37.58	-36 36.7	2.797	3.602	10.8	16.2
4 21	15 31.74	-15 59.8	2.147	3.094	7.5	21.5	4 21	15 31.12	-36 27.9	2.724	3.611	8.6	16.1
5 1	15 23.62	-15 47.0	2.098	3.090	3.9	21.2	5 1	15 23.21	-36 3.4	2.674	3.619	6.4	15.9
5 11	15 14.57	-15 32.2	2.077	3.086	0.8	21.0	5 11	15 14.58	-35 23.4	2.652	3.628	4.8	15.8
5 21	15 5.46	-15 17.7	2.085	3.082	3.9	21.2	5 21	15 6.02	-34 29.9	2.658	3.636	4.8	15.8
5 31	14 57.13	-15 6.3	2.121	3.077	7.6	21.4	5 31	14 58.31	-33 26.6	2.692	3.643	6.4	15.9
6 10	14 50.32	-15 0.6	2.182	3.071	10.8	21.6	6 10	14 52.09	-32 18.6	2.753	3.650	8.6	16.1
6 20	14 45.49	-15 2.4	2.265	3.066	13.6	21.8	6 20	14 47.74	-31 10.8	2.838	3.657	10.7	16.3
153695	2001 <i>US</i> ₃₅		5 11.5 209°92	4°0/9.1	18		34724	2001 <i>QM</i> ₁₈		5 11.5 152°06	2°0/10.4	18	
4 11	15 38.33	-7 47.4	1.931	2.814	11.7	20.1	4 11	15 41.07	-14 49.0	1.611	2.496	13.5	20.1
4 21	15 31.94	-7 15.5	1.863	2.810	8.4	19.9	4 21	15 34.05	-14 11.5	1.552	2.504	9.4	19.9
5 1	15 23.75	-6 46.0	1.820	2.806	5.3	19.7	5 1	15 24.91	-13 29.4	1.517	2.511	5.0	19.6
5 11	15 14.58	-6 22.7	1.804	2.801	4.1	19.6	5 11	15 14.66	-12 46.9	1.509	2.517	2.1	19.4
5 21	15 5.36	-6 9.2	1.816	2.796	6.4	19.7	5 21	15 4.49	-12 8.5	1.528	2.523	5.5	19.7
5 31	14 57.03	-6 7.9	1.854	2.791	9.8	19.9	5 31	14 55.55	-11 38.9	1.574	2.528	9.9	19.9
6 10	14 50.38	-6 20.1	1.916	2.785	13.0	20.1	6 10	14 48.71	-11 21.6	1.642	2.532	13.8	20.2
6 20	14 45.88	-6 45.5	1.998	2.779	15.9	20.3	6 20	14 44.46	-11 18.0	1.730	2.536	17.0	20.4
325138	2008 <i>ED</i> ₁₅₀		5 11.5 58°12	0°4/11.3	17		1002	Olbersia		5 11.5 272°57	5°6/14.7	18	
4 11	15 39.35	-18 8.2	1.400	2.291	14.7	21.1	4 11	15 39.83	-33 36.6	2.048	2.879	13.2	15.5
4 21	15 33.03	-17 55.5	1.351	2.305	10.3	20.8	4 21	15 33.42	-34 6.2	1.958	2.864	10.6	15.3
5 1	15 24.40	-17 35.3	1.325	2.319	5.4	20.6	5 1	15 24.74	-34 19.6	1.891	2.848	7.8	15.1
5 11	15 14.61	-17 10.6	1.324	2.334	0.4	20.2	5 11	15 14.67	-34 14.7	1.850	2.833	5.8	15.0
5 21	15 4.98	-16 45.4	1.348	2.348	5.0	20.6	5 21	15 4.28	-33 51.8	1.835	2.817	6.1	14.9
5 31	14 56.75	-16 24.3	1.398	2.363	9.7	20.9	5 31	14 54.78	-33 14.3	1.846	2.801	8.6	15.1
6 10	14 50.85	-16 11.5	1.469	2.379	13.9	21.2	6 10	14 47.20	-32 28.1	1.882	2.786	11.6	15.2
6 20	14 47.72	-16 9.3	1.560	2.394	17.3	21.5	6 20	14 42.17	-31 39.6	1.940	2.770	14.5	15.4
98555	2000 <i>WD</i> ₇		5 11.5 33°47	0°6/11.7	18		116882	2004 <i>FO</i> ₁₁₈		5 11.5 7°08	3°6/8.7	18	
4 11	15 40.74	-18 14.9	1.616	2.498	13.6	18.7	4 11	15 33.61	-10 26.1	1.994	2.885	11.0	19.3
4 21	15 33.98	-18 45.7	1.555	2.503	9.6	18.5	4 21	15 28.56	-9 22.5	1.933	2.885	7.8	19.1
5 1	15 24.95	-19 11.5	1.517	2.509	5.2	18.2	5 1	15 21.94	-8 18.0	1.896	2.885	4.7	18.9
5 11	15 14.64	-19 32.2	1.505	2.515	0.7	17.9	5 11	15 14.53	-7 17.6	1.887	2.886	3.7	18.8
5 21	15 4.27	-19 48.9	1.520	2.521	4.5	18.2	5 21	15 7.14	-6 26.2	1.905	2.887	6.1	19.0
5 31	14 55.05	-20 3.8	1.562	2.527	8.9	18.5	5 31	15 0.60	-5 47.8	1.949	2.887	9.3	19.2
6 10	14 47.96	-20 19.9	1.627	2.534	12.9	18.7	6 10	14 55.58	-5 24.6	2.017	2.888	12.4	19.4
6 20	14 43.55	-20 39.6	1.712	2.541	16.2	19.0	6 20	14 52.48	-5 17.2	2.104	2.890	15.0	19.6
180121	2003 <i>FZ</i> ₅₂		5 11.5 47°17	6°5/7.2	18		346343	2008 <i>RJ</i> ₇₇		5 11.5 311°23	8°9/14.2	15	
4 11	15 34.64	-0 20.8	1.996	2.876	11.5	19.8	4 11	15 42.19	-35 18.4	1.522	2.360	16.7	20.9
4 21	15 29.17	+0 26.7	1.950	2.886	8.9	19.7	4 21	15 36.18	-36 39.4	1.424	2.329	13.8	20.6
5 1	15 22.20	+1 5.3	1.928	2.895	6.9	19.5	5 1	15 26.75	-37 43.7	1.346	2.297	10.9	20.3
5 11	15 14.51	+1 30.4	1.932	2.904	6.6	19.5	5 11	15 14.80	-38 24.7	1.292	2.266	9.0	20.1
5 21	15 6.91	+1 38.9	1.963	2.914	8.3	19.7	5 21	15 1.79	-38 38.1	1.262	2.235	9.5	20.1
5 31	15 0.21	+1 29.4	2.018	2.924	10.7	19.8	5 31	14 49.63	-38 24.9	1.254	2.204	12.3	20.1
6 10	14 55.03	+1 2.6	2.095	2.934	13.2	20.0	6 10	14 40.06	-37 52.2	1.269	2.174	15.9	20.3
6 20	14 51.75	+0 20.5	2.191	2.945	15.4	20.2	6 20	14 34.23	-37 9.5	1.301	2.144	19.5	20.4
281961	2011 <i>GK</i> ₆₃		5 11.5 342°48	2°1/10.3	17		439047	2011 <i>FA</i> ₁₅₇		5 11.5 327°23	4°5/12.8	17	
4 11	15 34.17	-15 13.4	1.408	2.309	14.0	20.1	4 11	15 42.64	-25 22.3	1.507	2.376	15.1	20.1
4 21	15 29.57	-14 32.7	1.341	2.300	9.8	19.8	4 21	15 35.95	-26 36.6	1.428	2.364	11.4	19.8
5 1	15 22.70	-13 46.0	1.297	2.292	5.2	19.5	5 1	15 26.33	-27 41.8	1.371	2.352	7.4	19.6
5 11	15 14.54	-12 58.1	1.277	2.285	2.2	19.3	5 11	15 14.77	-28 34.0	1.341	2.340	4.6	19.4
5 21	15 6.28	-12 14.7	1.282	2.278	6.0	19.5	5 21	15 2.66	-29 11.0	1.336	2.330	6.2	19.4
5 31	14 59.13	-11 41.4	1.311	2.272	10.7	19.7	5 31	14 51.59	-29 33.9	1.356	2.320	10.2	19.6
6 10	14 54.09	-11 22.3	1.361	2.268	14.9	20.0	6 10	14 42.94	-29 47.4	1.399	2.310	14.3	19.9
6 20	14 51.70	-11 19.3	1.430	2.264	18.6	20.2	6 20	14 37.54	-29 57.1	1.462	2.301	17.9	20.1
7312	1996 <i>AT</i> ₃		5 11.5 138°29	1°6/10.4	18		494944	2009 <i>FG</i> ₃₅		5 11.5 5°50	11°5/13.9	17	
4 11	15 36.85	-14 53.0	2.158	3.038	10.7	18.4	4 11	15 39.62	-32 43.0	0.896	1.780	21.5	19.6
4 21	15 30.70	-14 20.5	2.097	3.046	7.5	18.2	4 21	15 35.09	-35 7.1	0.846	1.779	17.6	19.3
5 1	15 23.01	-13 44.5	2.062	3.055	3.9	18.0	5 1	15 26.33	-37 9.2	0.815	1.780	13.8	19.1
5 11	15 14.55	-13 8.2	2.055	3.062	1.6	17.8	5 11	15 14.77	-38 37.9	0.802	1.783	11.6	19.0
5 21	15 6.16	-12 34.9	2.076	3.070	4.4	18.0	5 21	15 2.64	-39 27.1	0.809	1.789	12.2	19.0
5 31	14 58.64	-12 7.9	2.125	3.077	7.8	18.2	5 31	14 52.50	-39 39.5	0.836	1.796	15.2	19.2
6 10	14 52.65	-11 49.9	2.199	3.084	11.0	18.4	6 10	14 46.31	-39 26.0	0.879	1.806	18.9	19.5
6 20	14 48.60	-11 42.3	2.294	3.090	13.6	18.6	6 20	14 44.89	-38 58.9	0.937	1.818	22.4	19.7
107483	2001 <i>DQ</i> ₃₆		5 11.5 177°50	1°3/10.6	18		86239	1999 <i>TV</i> ₁₁₈		5 11.5 106°12	2°6/13.3	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
43148	1999 <i>XB</i> ₁₀₆		5 11.5 206°23	4.7/ 7.4	18		4454	Kumiko		5 11.5 189°66	0.2/11.7	18	
4 11	15 36.26	- 1 49.8	2.868	3.735	8.8	19.9	4 11	15 34.73	-20 0.1	2.630	3.499	9.4	18.3
4 21	15 30.06	- 1 7.2	2.796	3.727	6.7	19.8	4 21	15 29.14	-19 41.0	2.555	3.498	6.6	18.2
5 1	15 22.65	- 0 29.5	2.752	3.719	5.1	19.7	5 1	15 22.22	-19 15.8	2.506	3.497	3.5	18.0
5 11	15 14.60	+ 0 0.1	2.736	3.710	4.8	19.6	5 11	15 14.60	-18 46.3	2.486	3.496	0.3	17.7
5 21	15 6.51	+ 0 18.8	2.749	3.700	6.2	19.7	5 21	15 6.96	-18 14.8	2.495	3.495	3.1	17.9
5 31	14 59.01	+ 0 25.0	2.789	3.689	8.3	19.8	5 31	14 59.98	-17 44.4	2.533	3.493	6.3	18.1
6 10	14 52.61	+ 0 18.1	2.855	3.678	10.5	20.0	6 10	14 54.27	-17 17.9	2.596	3.491	9.1	18.3
6 20	14 47.71	- 0 1.4	2.941	3.666	12.5	20.1	6 20	14 50.20	-16 57.8	2.683	3.489	11.6	18.5
110725	2001 <i>TF</i> ₂₃₄		5 11.5 131°45	3.1/ 9.9	18		393254	2013 <i>TL</i> ₁₁		5 11.5 238°28	4.3/ 8.6	17	
4 11	15 39.57	-10 18.1	1.747	2.632	12.5	19.4	4 11	15 37.58	- 7 37.1	2.027	2.910	11.2	21.9
4 21	15 32.92	-10 4.5	1.686	2.637	8.9	19.1	4 21	15 31.45	- 6 47.5	1.950	2.897	8.2	21.7
5 1	15 24.32	- 9 52.0	1.650	2.641	5.1	18.9	5 1	15 23.56	- 5 59.1	1.898	2.883	5.3	21.5
5 11	15 14.68	- 9 43.8	1.641	2.644	3.1	18.8	5 11	15 14.67	- 5 16.6	1.874	2.868	4.4	21.4
5 21	15 5.04	- 9 42.6	1.658	2.648	5.8	19.0	5 21	15 5.66	- 4 44.0	1.877	2.853	6.7	21.5
5 31	14 56.45	- 9 50.6	1.702	2.651	9.6	19.2	5 31	14 57.44	- 4 24.9	1.907	2.838	9.9	21.7
6 10	14 49.75	-10 9.4	1.770	2.655	13.2	19.4	6 10	14 50.77	- 4 21.2	1.960	2.821	13.1	21.9
6 20	14 45.41	-10 38.8	1.857	2.658	16.2	19.6	6 20	14 46.17	- 4 32.8	2.034	2.805	15.9	22.0
473784	2016 <i>EM</i> ₈₂		5 11.5 269°85	6.0/ 8.5	17		352099	2006 <i>YP</i> ₄₅		5 11.5 341°53	7.3/ 7.9	18	
4 11	15 40.13	- 5 11.8	1.512	2.402	13.9	21.1	4 11	15 37.91	+ 3 8.4	1.964	2.833	12.2	20.1
4 21	15 33.78	- 4 30.0	1.435	2.383	10.4	20.8	4 21	15 31.62	+ 3 22.0	1.902	2.828	9.7	19.9
5 1	15 24.99	- 3 53.1	1.381	2.364	7.1	20.6	5 1	15 23.61	+ 3 22.9	1.865	2.823	7.8	19.8
5 11	15 14.72	- 3 26.8	1.353	2.344	6.2	20.5	5 11	15 14.68	+ 3 7.2	1.853	2.819	7.4	19.7
5 21	15 4.15	- 3 16.3	1.349	2.325	8.8	20.6	5 21	15 5.72	+ 2 33.1	1.867	2.815	8.9	19.8
5 31	14 54.57	- 3 25.0	1.370	2.304	12.7	20.7	5 31	14 57.64	+ 1 40.6	1.906	2.811	11.3	19.9
6 10	14 47.07	- 3 53.6	1.413	2.284	16.7	20.9	6 10	14 51.19	+ 0 31.8	1.969	2.808	14.0	20.1
6 20	14 42.30	- 4 40.7	1.473	2.263	20.1	21.1	6 20	14 46.81	- 0 50.4	2.051	2.805	16.3	20.3
498782	2008 <i>UJ</i> ₁₄₆		5 11.5 122°07	4.4/13.2	17		427929	2005 <i>VQ</i> ₃		5 11.5 131°66	10.4/20.2	18	
4 11	15 46.16	-27 46.1	2.008	2.851	13.0	21.1	4 11	15 54.29	-53 10.1	2.563	3.246	14.6	21.8
4 21	15 37.76	-28 56.2	1.938	2.857	9.9	20.9	4 21	15 43.83	-54 22.7	2.501	3.265	13.1	21.7
5 1	15 27.00	-29 55.3	1.893	2.863	6.7	20.7	5 1	15 30.32	-55 10.3	2.460	3.283	11.8	21.7
5 11	15 14.82	-30 40.2	1.876	2.869	4.5	20.5	5 11	15 15.01	-55 28.0	2.442	3.300	10.8	21.6
5 21	15 2.40	-31 9.7	1.887	2.875	5.4	20.6	5 21	14 59.53	-55 14.4	2.447	3.317	10.4	21.6
5 31	14 50.98	-31 25.4	1.927	2.880	8.4	20.8	5 31	14 45.56	-54 32.7	2.477	3.332	10.9	21.7
6 10	14 41.60	-31 31.8	1.992	2.886	11.5	21.0	6 10	14 34.39	-53 30.2	2.529	3.347	11.9	21.8
6 20	14 34.89	-31 33.6	2.079	2.891	14.3	21.2	6 20	14 26.67	-52 15.5	2.603	3.361	13.1	21.9
19572	Leahmarie		5 11.5 30°62	6.6/ 8.3	18		369046	2008 <i>CM</i> ₃₂		5 11.5 300°35	5.2/ 8.7	17	
4 11	15 36.60	- 6 56.5	1.144	2.052	15.9	17.9	4 11	15 36.94	- 8 10.7	1.438	2.336	14.0	20.8
4 21	15 31.36	- 5 48.4	1.102	2.059	11.6	17.7	4 21	15 31.56	- 7 19.9	1.366	2.320	10.2	20.6
5 1	15 23.63	- 4 45.3	1.080	2.067	7.7	17.5	5 1	15 23.83	- 6 30.2	1.317	2.305	6.5	20.3
5 11	15 14.65	- 3 55.5	1.081	2.076	6.7	17.5	5 11	15 14.70	- 5 48.0	1.292	2.289	5.3	20.2
5 21	15 5.83	- 3 25.6	1.106	2.085	9.6	17.6	5 21	15 5.35	- 5 19.1	1.292	2.274	8.2	20.3
5 31	14 58.50	- 3 19.4	1.152	2.095	13.7	17.9	5 31	14 57.05	- 5 7.9	1.316	2.259	12.4	20.5
6 10	14 53.63	- 3 36.8	1.217	2.106	17.6	18.2	6 10	14 50.83	- 5 16.6	1.361	2.245	16.4	20.7
6 20	14 51.67	- 4 15.2	1.299	2.117	21.0	18.4	6 20	14 47.32	- 5 44.5	1.423	2.231	19.9	20.9
4048	Samwestfall		5 11.5 226°68	1.7/12.4	18		472178	2014 <i>DD</i> ₀₁		5 11.5 167°33	0.5/11.9	17	
4 11	15 42.04	-23 25.0	1.722	2.590	13.6	18.0	4 11	15 36.35	-20 54.1	2.361	3.230	10.4	21.7
4 21	15 35.02	-23 20.0	1.640	2.580	9.9	17.8	4 21	15 30.38	-20 39.0	2.290	3.232	7.4	21.5
5 1	15 25.61	-23 3.1	1.581	2.569	5.7	17.5	5 1	15 22.91	-20 16.7	2.244	3.234	4.0	21.3
5 11	15 14.76	-22 34.9	1.549	2.557	1.9	17.2	5 11	15 14.65	-19 48.9	2.227	3.236	0.6	21.0
5 21	15 3.68	-21 58.2	1.545	2.545	4.5	17.4	5 21	15 6.37	-19 18.1	2.238	3.238	3.3	21.2
5 31	14 53.66	-21 18.0	1.567	2.532	9.0	17.6	5 31	14 58.88	-18 47.5	2.277	3.239	6.8	21.4
6 10	14 45.73	-20 40.2	1.613	2.518	13.1	17.8	6 10	14 52.82	-18 20.7	2.342	3.240	9.9	21.6
6 20	14 40.54	-20 9.7	1.680	2.503	16.7	18.0	6 20	14 48.62	-18 0.3	2.430	3.241	12.5	21.8
276936	2004 <i>TJ</i> ₂₀₆		5 11.5 186°97	0.6/11.1	18		75024	1999 <i>UA</i> ₁₄		5 11.5 158°96	1.3/10.8	18	
4 11	15 36.60	-18 28.4	1.965	2.845	11.6	20.7	4 11	15 40.24	-15 48.9	1.909	2.787	12.0	20.2
4 21	15 30.75	-17 50.2	1.895	2.844	8.2	20.5	4 21	15 33.29	-15 24.8	1.845	2.794	8.4	19.9
5 1	15 23.16	-17 4.7	1.851	2.844	4.3	20.3	5 1	15 24.49	-14 56.3	1.807	2.800	4.4	19.7
5 11	15 14.63	-16 15.0	1.834	2.844	0.6	20.0	5 11	15 14.73	-14 26.0	1.796	2.805	1.3	19.5
5 21	15 6.11	-15 25.3	1.845	2.843	4.2	20.3	5 21	15 5.01	-13 57.5	1.814	2.810	4.6	19.7
5 31	14 58.51	-14 40.1	1.883	2.842	8.1	20.5	5 31	14 56.31	-13 34.3	1.859	2.814	8.5	20.0
6 10	14 52.59	-14 3.7	1.945	2.841	11.7	20.7	6 10	14 49.42	-13 19.7	1.929	2.818	12.1	20.2
6 20	14 48.79	-13 38.6	2.029	2.839	14.7	20.9	6 20	14 44.79	-13 15.5	2.019	2.821	15.0	20.4
433784	2015 <i>BG</i> ₇₆		5 11.5 143°72	1.2/12.3	17		434256	2003 <i>UH</i> ₁₅₆		5 11.5 261°84	3.1/ 9.2	15	
4 11	15 40.24	-22 37.7	2.135	2.998	11.6	22.4	4 11	15 35.99	-11 27.0	2.130	3.014	10.7	21.6
4 21	15 33.17	-22 31.0	2.071	3.009	8.3	22.2	4 21	15 30.33	-10 32.2	2.044	2.994	7.6	21.4
5 1	15 24.38	-22 15.3	2.032	3.020	4.6	22.0	5 1	15 22.99	- 9 34.7	1.983	2.973	4.5	21.1
5 11	15 14.70	-21 51.7	2.022	3.030	1.3	21.8	5 11	15 14.67	- 8 38.7	1.951	2.952	3.2	21.0
5 21	15 5.06	-21 22.8	2.040	3.039	3.6	22.0	5 21	15 6.18	- 7 48.8	1.947	2.931	5.7	21.1
5 31	14 56.41	-20 52.3	2.086	3.048	7.3	22.2	5 31	14 58.41	- 7 9.3	1.969	2.909	9.1	21.3
6 10	14 49.47	-20 24.3	2.158	3.056	10.6	22.5	6 10	14 52.09	- 6 43.1	2.016	2.887	12.4	21.5
6 20	14 44.69	-20 2.1	2.252	3.064	13.4	22.7	6 20	14 47.74	- 6 31.6	2.083	2.865	15.3	21.6
87903	2000 <i>ST</i> ₃₀₈		5 11.5 302°89	3.1/13.3	18		121347	1999 <i>TL</i> ₃₃		5 11.5 2			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
506734	2006 VY ₁₈		5 11.5 245°57	1°1/12.1 17			37593	1991 UJ		5 11.5 284°05	2°2/12.7 18		
4 11	15 40.21	-22 5.8	1.907	2.776	12.5	23.0	4 11	15 39.39	-24 5.8	1.851	2.718	12.9	19.2
4 21	15 33.59	-21 54.1	1.818	2.760	9.0	22.7	4 21	15 33.24	-24 11.5	1.753	2.692	9.5	18.9
5 1	15 24.83	-21 32.2	1.753	2.742	5.0	22.4	5 1	15 24.77	-24 6.2	1.678	2.664	5.6	18.6
5 11	15 14.76	-21 1.2	1.715	2.724	1.2	22.1	5 11	15 14.80	-23 49.9	1.630	2.637	2.3	18.3
5 21	15 4.44	-20 24.0	1.706	2.706	4.1	22.3	5 21	15 4.40	-23 24.2	1.609	2.609	4.4	18.4
5 31	14 54.99	-19 44.9	1.723	2.687	8.4	22.5	5 31	14 54.78	-22 53.1	1.615	2.581	8.7	18.6
6 10	14 47.37	-19 9.3	1.766	2.667	12.4	22.7	6 10	14 47.00	-22 21.7	1.645	2.552	12.8	18.8
6 20	14 42.19	-18 41.2	1.829	2.647	15.8	22.9	6 20	14 41.78	-21 55.2	1.695	2.524	16.4	18.9
277639	2006 BU ₁₀₃		5 11.5 209°92	3°6/ 9.1 18			356355	2010 LW ₁₀₁		5 11.5 225°96	6°7/16.3 18		
4 11	15 36.34	- 9 45.1	1.922	2.809	11.5	20.6	4 11	15 39.93	-39 48.3	2.509	3.299	12.3	20.9
4 21	15 30.57	- 8 58.3	1.857	2.807	8.2	20.4	4 21	15 33.25	-40 28.2	2.429	3.297	10.3	20.8
5 1	15 23.08	- 8 11.5	1.817	2.805	5.0	20.2	5 1	15 24.60	-40 51.0	2.371	3.294	8.3	20.6
5 11	15 14.67	- 7 29.3	1.803	2.803	3.7	20.1	5 11	15 14.78	-40 54.5	2.338	3.292	6.9	20.5
5 21	15 6.24	- 6 55.9	1.817	2.800	6.2	20.2	5 21	15 4.79	-40 38.6	2.332	3.289	6.8	20.5
5 31	14 58.71	- 6 34.7	1.858	2.798	9.6	20.4	5 31	14 55.66	-40 6.1	2.353	3.286	8.2	20.6
6 10	14 52.82	- 6 27.8	1.921	2.795	12.8	20.6	6 10	14 48.25	-39 21.9	2.398	3.283	10.2	20.7
6 20	14 49.01	- 6 35.3	2.005	2.792	15.6	20.8	6 20	14 43.14	-38 31.9	2.466	3.280	12.3	20.9
336873	2011 GE ₄		5 11.5 330°80	3°6/ 9.3 17			141463	2002 CC ₁₂₇		5 11.5 113°41	5°6/ 6.6 18		
4 11	15 34.97	-11 22.6	1.559	2.456	13.1	20.7	4 11	15 34.55	+ 1 12.0	2.745	3.611	9.2	20.5
4 21	15 29.97	-10 32.2	1.492	2.448	9.3	20.4	4 21	15 28.79	+ 2 3.6	2.706	3.630	7.2	20.4
5 1	15 22.90	- 9 39.9	1.449	2.440	5.4	20.2	5 1	15 21.96	+ 2 47.4	2.693	3.649	5.8	20.3
5 11	15 14.68	- 8 51.2	1.431	2.433	3.7	20.1	5 11	15 14.65	+ 3 20.0	2.708	3.668	5.7	20.3
5 21	15 6.37	- 8 11.4	1.438	2.426	6.7	20.2	5 21	15 7.46	+ 3 38.9	2.750	3.686	7.0	20.4
5 31	14 59.08	- 7 45.2	1.470	2.420	10.8	20.4	5 31	15 0.96	+ 3 43.1	2.819	3.703	8.8	20.6
6 10	14 53.71	- 7 35.6	1.524	2.414	14.6	20.6	6 10	14 55.63	+ 3 32.6	2.911	3.721	10.7	20.7
6 20	14 50.78	- 7 42.9	1.597	2.409	17.9	20.9	6 20	14 51.76	+ 3 8.8	3.024	3.737	12.4	20.9
304676	2006 WH ₁₀₁		5 11.5 131°60	1°0/12.2 18			523130	2016 SZ ₅₃		5 11.5 242°64	3°0/ 8.9 16		
4 11	15 37.65	-21 22.4	2.509	3.372	10.0	21.1	4 11	15 33.64	-10 25.3	2.490	3.372	9.4	21.9
4 21	15 31.24	-21 31.9	2.441	3.380	7.2	20.9	4 21	15 28.44	- 9 29.6	2.414	3.362	6.7	21.7
5 1	15 23.26	-21 34.9	2.400	3.388	4.0	20.7	5 1	15 21.91	- 8 32.8	2.365	3.353	4.0	21.6
5 11	15 14.70	-21 32.3	2.387	3.395	1.1	20.5	5 11	15 14.65	- 7 38.8	2.344	3.342	3.1	21.5
5 21	15 6.02	-21 25.3	2.403	3.402	3.2	20.7	5 21	15 7.36	- 6 51.2	2.351	3.332	5.1	21.6
5 31	14 58.10	-21 16.4	2.448	3.409	6.4	20.9	5 31	15 0.70	- 6 13.6	2.387	3.322	8.0	21.8
6 10	14 51.58	-21 8.3	2.518	3.416	9.3	21.1	6 10	14 55.28	- 5 48.1	2.447	3.311	10.7	21.9
6 20	14 46.87	-21 3.5	2.612	3.422	11.8	21.3	6 20	14 51.47	- 5 35.6	2.528	3.300	13.1	22.1
11544	1992 UD ₃		5 11.5 180°32	0°1/11.5 18			404618	2014 GP ₃₆		5 11.5 17°03	7°6/14.6 17		
4 11	15 39.31	-20 38.0	1.872	2.746	12.4	17.9	4 11	15 43.71	-35 19.6	1.858	2.682	14.7	19.8
4 21	15 32.73	-19 51.9	1.802	2.748	8.8	17.7	4 21	15 36.44	-36 48.6	1.792	2.686	12.0	19.6
5 1	15 24.24	-18 55.4	1.757	2.749	4.6	17.4	5 1	15 26.50	-38 0.9	1.748	2.691	9.4	19.5
5 11	15 14.74	-17 52.1	1.739	2.749	0.2	17.1	5 11	15 14.90	-38 51.5	1.730	2.697	7.7	19.4
5 21	15 5.27	-16 46.7	1.749	2.748	4.2	17.4	5 21	15 2.95	-39 18.5	1.737	2.703	8.0	19.4
5 31	14 56.85	-15 45.1	1.787	2.747	8.4	17.6	5 31	14 52.09	-39 24.1	1.770	2.710	10.0	19.6
6 10	14 50.28	-14 52.4	1.850	2.746	12.2	17.9	6 10	14 43.53	-39 13.9	1.827	2.717	12.6	19.7
6 20	14 46.03	-14 12.2	1.933	2.744	15.3	18.1	6 20	14 37.95	-38 55.0	1.904	2.725	15.1	19.9
293501	2007 GD ₉		5 11.5 318°06	2°7/10.0 16			43241	2000 AB ₂₄₄		5 11.5 159°34	1°3/10.6 18		
4 11	15 36.36	-16 11.9	1.154	2.059	16.0	20.1	4 11	15 37.83	-14 45.4	2.269	3.145	10.4	19.5
4 21	15 31.53	-15 2.5	1.089	2.050	11.3	19.8	4 21	15 31.42	-14 26.1	2.203	3.151	7.3	19.3
5 1	15 23.93	-13 42.4	1.045	2.041	6.0	19.5	5 1	15 23.48	-14 3.9	2.164	3.156	3.8	19.1
5 11	15 14.73	-12 18.6	1.024	2.032	2.8	19.3	5 11	15 14.74	-13 41.2	2.152	3.160	1.3	18.9
5 21	15 5.40	-11 0.5	1.027	2.023	7.2	19.5	5 21	15 6.02	-13 20.7	2.170	3.165	4.1	19.2
5 31	14 57.45	- 9 56.9	1.053	2.015	12.6	19.8	5 31	14 58.13	-13 5.0	2.216	3.168	7.5	19.4
6 10	14 52.04	- 9 14.5	1.099	2.008	17.5	20.0	6 10	14 51.71	-12 56.6	2.287	3.172	10.6	19.6
6 20	14 49.79	- 8 55.2	1.161	2.001	21.6	20.3	6 20	14 47.19	-12 56.8	2.380	3.175	13.2	19.8
109805	2001 RW ₁₀₀		5 11.5 297°83	1°6/10.5 18			308553	2005 UR ₂₈₈		5 11.5 319°11	1°1/10.9 16		
4 11	15 35.50	-14 49.1	1.957	2.843	11.4	19.8	4 11	15 35.32	-15 31.5	2.063	2.947	11.0	20.7
4 21	15 30.07	-14 22.7	1.882	2.834	8.0	19.6	4 21	15 29.90	-15 20.0	1.987	2.938	7.7	20.5
5 1	15 22.88	-13 52.6	1.831	2.824	4.3	19.3	5 1	15 22.78	-15 5.1	1.937	2.930	4.1	20.2
5 11	15 14.68	-13 21.7	1.807	2.815	1.6	19.1	5 11	15 14.71	-14 48.9	1.914	2.923	1.1	20.0
5 21	15 6.39	-12 53.6	1.811	2.806	4.7	19.3	5 21	15 6.54	-14 34.1	1.918	2.915	4.2	20.2
5 31	14 58.92	-12 31.8	1.841	2.797	8.5	19.5	5 31	14 59.15	-14 23.6	1.949	2.908	7.9	20.4
6 10	14 53.06	-12 19.3	1.896	2.789	12.1	19.7	6 10	14 53.28	-14 19.9	2.005	2.901	11.4	20.6
6 20	14 49.29	-12 17.8	1.970	2.780	15.1	19.9	6 20	14 49.42	-14 24.8	2.081	2.894	14.3	20.8
216238	2006 UB ₂₈₇		5 11.5 321°40	1°1/10.6 18			14125	1998 QT ₆₂		5 11.5 298°01	4°5/ 8.3 18		
4 11	15 34.05	-17 24.7	2.152	3.034	10.7	20.3	4 11	15 35.13	- 9 26.0	1.773	2.665	12.0	17.6
4 21	15 28.86	-16 34.9	2.082	3.033	7.5	20.1	4 21	15 30.07	- 8 15.7	1.684	2.636	8.7	17.3
5 1	15 22.15	-15 38.7	2.038	3.031	3.9	19.9	5 1	15 23.02	- 7 2.7	1.620	2.607	5.6	17.1
5 11	15 14.65	-14 39.8	2.021	3.030	1.1	19.7	5 11	15 14.73	- 5 53.0	1.582	2.578	4.7	17.0
5 21	15 7.15	-13 42.4	2.033	3.029	4.1	19.9	5 21	15 6.17	- 4 53.0	1.571	2.549	7.4	17.0
5 31	15 0.46	-12 51.1	2.071	3.027	7.7	20.1	5 31	14 58.38	- 4 8.3	1.584	2.520	11.2	17.2
6 10	14 55.23	-12 9.5	2.135	3.026	11.0	20.3	6 10	14 52.25	- 3 42.5	1.621	2.491	14.9	17.4
6 20	14 51.89	-11 39.9	2.220	3.025	13.7	20.5	6 20	14 48.39	- 3 36.6	1.675	2.462	18.2	17.5
520886	2014 WQ ₅₂₃		5 11.5 184°94	1°7/10.6 17			278397	2007 QZ ₁		5 11.5 231°99	6°4/ 6.0 18		
4 11	15 3												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
419716	2010 <i>UL</i> ₁₀₅		5 11.5 115°87	0°9/11.0	17		343874	2011 <i>HO</i> ₇₅		5 11.5 272°71	6°1/ 6.6	18	
4 11	15 40.13	-16 45.6	1.754	2.635	12.8	22.2	4 11	15 34.75	- 4 14.3	1.892	2.780	11.6	20.9
4 21	15 33.30	-16 24.9	1.699	2.648	8.9	22.0	4 21	15 29.54	- 2 48.6	1.824	2.768	8.8	20.7
5 1	15 24.54	-15 58.8	1.668	2.661	4.6	21.7	5 1	15 22.61	- 1 26.2	1.782	2.757	6.6	20.6
5 11	15 14.81	-15 30.2	1.665	2.674	0.9	21.5	5 11	15 14.74	- 0 13.7	1.765	2.745	6.4	20.5
5 21	15 5.20	-15 2.7	1.689	2.686	4.6	21.8	5 21	15 6.80	+ 0 43.0	1.776	2.733	8.5	20.6
5 31	14 56.73	-14 40.0	1.739	2.698	8.7	22.1	5 31	14 59.68	+ 1 19.7	1.811	2.721	11.5	20.8
6 10	14 50.22	-14 25.7	1.814	2.710	12.4	22.3	6 10	14 54.14	+ 1 34.9	1.867	2.709	14.5	20.9
6 20	14 46.09	-14 21.6	1.909	2.721	15.4	22.5	6 20	14 50.65	+ 1 29.2	1.942	2.697	17.1	21.1
122641	2000 <i>RE</i> ₈₄		5 11.5 189°30	4°8/14.9	17		269289	2008 <i>SY</i> ₁₈		5 11.5 32°89	7°6/ 6.2	17	
4 11	15 41.11	-33 40.0	2.288	3.111	12.3	20.7	4 11	15 34.73	- 2 21.2	1.576	2.469	13.2	19.9
4 21	15 34.02	-33 51.9	2.208	3.110	9.7	20.5	4 21	15 29.62	- 0 47.0	1.529	2.473	10.2	19.7
5 1	15 24.98	-33 47.8	2.151	3.108	7.0	20.3	5 1	15 22.64	+ 0 39.7	1.507	2.478	7.9	19.6
5 11	15 14.84	-33 26.7	2.121	3.106	5.0	20.2	5 11	15 14.74	+ 1 50.6	1.509	2.483	7.9	19.6
5 21	15 4.62	-32 50.0	2.120	3.104	5.3	20.2	5 21	15 6.93	+ 2 39.8	1.536	2.489	10.0	19.8
5 31	14 55.35	-32 1.6	2.145	3.100	7.6	20.4	5 31	15 0.20	+ 3 3.9	1.586	2.494	13.0	19.9
6 10	14 47.86	-31 7.1	2.197	3.096	10.4	20.5	6 10	14 55.31	+ 3 2.8	1.657	2.501	15.9	20.2
6 20	14 42.68	-30 12.4	2.271	3.092	13.0	20.7	6 20	14 52.70	+ 2 39.1	1.744	2.507	18.5	20.4
510081	2010 <i>KP</i> ₉₇		5 11.5 290°02	5°0/15.1	18		264339	1999 <i>VR</i> ₁₆₃		5 11.5 190°48	0°6/11.9	17	
4 11	15 37.22	-34 3.7	2.235	3.063	12.4	21.1	4 11	15 40.75	-20 41.5	2.000	2.869	12.0	21.7
4 21	15 31.46	-34 12.3	2.138	3.043	9.9	20.9	4 21	15 33.76	-20 29.3	1.926	2.868	8.5	21.5
5 1	15 23.72	-34 4.5	2.065	3.022	7.2	20.7	5 1	15 24.84	-20 8.7	1.876	2.866	4.6	21.3
5 11	15 14.78	-33 39.1	2.017	3.002	5.3	20.5	5 11	15 14.86	-19 41.3	1.854	2.864	0.7	20.9
5 21	15 5.60	-32 57.3	1.996	2.981	5.5	20.5	5 21	15 4.81	-19 9.9	1.861	2.861	3.9	21.2
5 31	14 57.22	-32 2.8	2.002	2.960	7.8	20.6	5 31	14 55.71	-18 38.5	1.895	2.857	7.9	21.4
6 10	14 50.53	-31 1.5	2.034	2.940	10.7	20.8	6 10	14 48.39	-18 11.4	1.955	2.852	11.5	21.6
6 20	14 46.11	-29 59.4	2.087	2.919	13.6	20.9	6 20	14 43.36	-17 51.8	2.036	2.847	14.6	21.8
276892	2004 <i>RD</i> ₃₄₁		5 11.5 313°34	0°5/11.1	16		96414	1998 <i>EZ</i> ₁₉		5 11.5 86°91	4°4/13.9	18	
4 11	15 33.36	-20 25.2	1.938	2.820	11.7	19.9	4 11	15 42.31	-29 0.8	1.459	2.321	16.0	19.6
4 21	15 28.69	-19 19.0	1.848	2.798	8.3	19.6	4 21	15 35.37	-29 13.6	1.403	2.333	12.0	19.4
5 1	15 22.22	-18 0.6	1.782	2.775	4.3	19.4	5 1	15 25.83	-29 8.0	1.369	2.346	7.8	19.2
5 11	15 14.70	-16 34.2	1.744	2.753	0.5	19.0	5 11	15 14.91	-28 43.7	1.359	2.358	4.6	19.0
5 21	15 7.04	-15 5.5	1.733	2.732	4.4	19.3	5 21	15 4.08	-28 3.7	1.375	2.371	5.7	19.1
5 31	15 0.18	-13 41.2	1.750	2.710	8.5	19.5	5 31	14 54.77	-27 14.3	1.416	2.383	9.5	19.4
6 10	14 54.92	-12 27.6	1.791	2.689	12.4	19.7	6 10	14 48.02	-26 23.4	1.480	2.395	13.4	19.6
6 20	14 51.78	-11 28.7	1.853	2.669	15.6	19.8	6 20	14 44.32	-25 37.7	1.564	2.407	16.8	19.9
197392	2003 <i>YC</i> ₂₃		5 11.5 186°16	2°2/ 9.7	18		215377	2002 <i>AZ</i> ₁₀₆		5 11.5 154°20	0°0/11.5	18	
4 11	15 36.09	-11 17.1	2.768	3.642	8.8	21.1	4 11	15 31.49	-18 48.8	3.919	4.784	6.7	21.7
4 21	15 30.01	-10 46.2	2.696	3.642	6.2	20.9	4 21	15 26.57	-18 33.2	3.848	4.790	4.7	21.5
5 1	15 22.70	-10 14.7	2.652	3.641	3.5	20.8	5 1	15 20.83	-18 14.1	3.806	4.797	2.5	21.4
5 11	15 14.74	- 9 45.0	2.637	3.640	2.3	20.7	5 11	15 14.67	-17 52.8	3.793	4.803	0.1	21.1
5 21	15 6.76	- 9 19.8	2.652	3.637	4.2	20.8	5 21	15 8.52	-17 30.8	3.810	4.808	2.2	21.4
5 31	14 59.42	- 9 1.5	2.695	3.635	7.0	21.0	5 31	15 2.81	-17 9.8	3.857	4.814	4.4	21.5
6 10	14 53.25	- 8 51.6	2.764	3.631	9.6	21.1	6 10	14 57.91	-16 51.6	3.931	4.819	6.5	21.7
6 20	14 48.63	- 8 51.1	2.855	3.627	11.8	21.3	6 20	14 54.09	-16 37.4	4.029	4.824	8.2	21.8
153587	2001 <i>SG</i> ₂₅₀		5 11.5 140°89	0°7/11.1	17		511178	2013 <i>YR</i> ₈₂		5 11.5 251°71	4°6/ 8.5	18	
4 11	15 39.42	-17 4.0	1.994	2.870	11.7	21.1	4 11	15 37.17	- 5 51.3	2.095	2.976	11.0	21.9
4 21	15 32.69	-16 47.2	1.932	2.879	8.2	20.9	4 21	15 31.17	- 5 13.5	2.018	2.962	8.1	21.6
5 1	15 24.20	-16 25.2	1.896	2.888	4.2	20.7	5 1	15 23.48	- 4 39.0	1.966	2.948	5.4	21.5
5 11	15 14.81	-16 0.5	1.887	2.897	0.7	20.4	5 11	15 14.82	- 4 11.9	1.942	2.933	4.7	21.4
5 21	15 5.47	-15 36.1	1.907	2.905	4.1	20.7	5 21	15 6.02	- 3 55.7	1.945	2.918	6.7	21.5
5 31	14 57.12	-15 15.2	1.954	2.912	8.0	20.9	5 31	14 57.97	- 3 52.9	1.974	2.902	9.8	21.6
6 10	14 50.49	-15 1.1	2.026	2.919	11.4	21.2	6 10	14 51.42	- 4 4.8	2.027	2.886	12.8	21.8
6 20	14 46.03	-14 55.8	2.120	2.926	14.3	21.4	6 20	14 46.84	- 4 30.8	2.100	2.870	15.5	22.0
117232	2004 <i>SN</i> ₂		5 11.5 262°91	0°4/11.7	18		331904	2004 <i>RZ</i> ₁		5 11.5 301°97	1°3/12.5	18	
4 11	15 40.61	-18 35.4	2.006	2.878	11.8	19.5	4 11	15 39.18	-29 7.4	1.045	1.930	19.1	20.0
4 21	15 33.85	-18 49.1	1.916	2.860	8.4	19.3	4 21	15 33.79	-26 59.8	0.976	1.924	14.0	19.7
5 1	15 25.01	-18 57.7	1.850	2.842	4.5	19.0	5 1	15 25.19	-24 13.9	0.928	1.918	7.9	19.3
5 11	15 14.87	-19 1.9	1.813	2.822	0.5	18.6	5 11	15 14.90	-20 58.4	0.904	1.913	1.7	18.9
5 21	15 4.40	-19 2.9	1.803	2.803	4.0	18.9	5 21	15 4.72	-17 30.6	0.905	1.908	6.0	19.2
5 31	14 54.69	-19 3.1	1.822	2.783	8.2	19.1	5 31	14 56.39	-14 12.0	0.931	1.903	12.5	19.5
6 10	14 46.68	-19 5.8	1.865	2.763	12.0	19.3	6 10	14 51.11	-11 21.0	0.979	1.898	18.2	19.8
6 20	14 40.97	-19 13.4	1.930	2.743	15.2	19.5	6 20	14 49.36	- 9 7.1	1.045	1.893	22.9	20.1
438047	2004 <i>OO</i> ₁₀		5 11.5 256°38	10°1/30.8	18		294107	2007 <i>TP</i> ₂₃₂		5 11.5 146°82	1°2/10.8	17	
4 11	15 35.70	+19 2.4	2.743	3.538	11.2	21.0	4 11	15 39.06	-17 46.6	1.606	2.492	13.5	21.2
4 21	15 29.82	+20 0.1	2.686	3.521	10.4	20.9	4 21	15 32.75	-16 57.0	1.545	2.497	9.4	21.0
5 1	15 22.63	+20 40.3	2.653	3.504	10.1	20.9	5 1	15 24.35	-15 59.0	1.508	2.501	4.9	20.7
5 11	15 14.74	+20 58.7	2.642	3.487	10.5	20.9	5 11	15 14.86	-14 57.3	1.497	2.506	1.2	20.4
5 21	15 6.81	+20 52.8	2.654	3.469	11.4	20.9	5 21	15 5.43	-13 57.4	1.513	2.510	5.1	20.7
5 31	14 59.52	+20 22.3	2.688	3.451	12.6	21.0	5 31	14 57.19	-13 5.2	1.555	2.514	9.6	21.0
6 10	14 53.43	+19 29.1	2.742	3.432	13.9	21.1	6 10	14 51.02	-12 25.6	1.620	2.517	13.5	21.2
6 20	14 48.95	+18 16.6	2.811	3.413	15.2	21.2	6 20	14 47.37	-12 1.0	1.705	2.520	16.8	21.5
155822	2000 <i>WP</i> ₁₃₀		5 11.5 278°46	1°4/10.8	18		475543	2006 <i>TB</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
295336	2008 <i>HY</i> ₈		5 11.5 288°44	3°4/ 6.6	18		147912	2006 <i>TD</i> ₄₈		5 11.5 338°67	0°3/11.4	17	
4 11	15 27.61	- 1 23.3	4.308	5.178	6.0	20.2	4 11	15 35.17	-18 36.6	2.036	2.917	11.3	20.5
4 21	15 23.83	- 0 39.8	4.247	5.178	4.6	20.1	4 21	15 29.81	-18 14.2	1.965	2.914	7.9	20.2
5 1	15 19.39	- 0 0.0	4.214	5.178	3.6	20.0	5 1	15 22.76	-17 45.4	1.919	2.912	4.2	20.0
5 11	15 14.60	+ 0 34.0	4.209	5.177	3.5	20.0	5 11	15 14.81	-17 12.6	1.900	2.910	0.3	19.7
5 21	15 9.82	+ 1 0.5	4.233	5.177	4.5	20.1	5 21	15 6.81	-16 38.9	1.908	2.908	3.9	20.0
5 31	15 5.39	+ 1 18.2	4.285	5.177	5.9	20.2	5 31	14 59.65	-16 8.1	1.944	2.906	7.7	20.2
6 10	15 1.60	+ 1 26.5	4.361	5.176	7.3	20.3	6 10	14 54.07	-15 44.0	2.004	2.904	11.1	20.4
6 20	14 58.69	+ 1 25.5	4.458	5.176	8.6	20.4	6 20	14 50.52	-15 28.8	2.085	2.903	14.1	20.6
418016	2007 <i>UG</i> ₃₄		5 11.5 106°48	6°2/15.8	18		470382	2007 <i>TO</i> ₃₀₀		5 11.5 173°49	1°7/12.6	17	
4 11	15 44.36	-36 2.7	1.712	2.537	15.7	21.0	4 11	15 37.96	-23 25.0	2.186	3.050	11.3	21.6
4 21	15 36.55	-36 5.5	1.657	2.557	12.4	20.9	4 21	15 31.73	-23 29.2	2.113	3.051	8.2	21.4
5 1	15 26.33	-35 45.1	1.623	2.577	9.1	20.7	5 1	15 23.77	-23 24.4	2.066	3.052	4.7	21.2
5 11	15 14.96	-35 0.9	1.615	2.597	6.6	20.6	5 11	15 14.86	-23 11.5	2.045	3.052	1.8	21.0
5 21	15 3.83	-33 56.0	1.632	2.616	6.6	20.7	5 21	15 5.89	-22 52.2	2.053	3.053	3.6	21.1
5 31	14 54.27	-32 37.7	1.676	2.634	9.1	20.8	5 31	14 57.76	-22 29.7	2.089	3.053	7.1	21.3
6 10	14 47.19	-31 15.0	1.744	2.651	12.2	21.1	6 10	14 51.23	-22 8.0	2.150	3.053	10.4	21.5
6 20	14 43.04	-29 56.0	1.834	2.668	15.1	21.3	6 20	14 46.77	-21 50.3	2.233	3.053	13.2	21.7
272440	2005 <i>UA</i>		5 11.5 161°68	7°0/ 4.1	16		87819	2000 <i>SZ</i> ₁₆₁		5 11.6 227°12	4°3/ 8.2	18	
4 11	15 36.99	+ 3 1.0	2.556	3.416	10.0	22.0	4 11	15 35.18	- 4 21.3	2.520	3.397	9.5	19.8
4 21	15 30.62	+ 4 50.1	2.510	3.425	8.2	21.8	4 21	15 29.51	- 3 47.6	2.450	3.390	7.1	19.6
5 1	15 23.01	+ 6 30.8	2.491	3.432	7.1	21.8	5 1	15 22.52	- 3 17.9	2.405	3.382	5.0	19.5
5 11	15 14.80	+ 7 57.1	2.502	3.439	7.4	21.8	5 11	15 14.80	- 2 55.8	2.389	3.375	4.4	19.4
5 21	15 6.66	+ 9 4.6	2.540	3.445	8.8	21.9	5 21	15 7.04	- 2 43.7	2.401	3.367	6.1	19.5
5 31	14 59.25	+ 9 50.8	2.603	3.450	10.7	22.0	5 31	14 59.92	- 2 43.6	2.439	3.359	8.6	19.7
6 10	14 53.13	+10 15.5	2.690	3.454	12.6	22.2	6 10	14 54.03	- 2 56.1	2.502	3.350	11.1	19.8
6 20	14 48.64	+10 20.5	2.794	3.458	14.2	22.3	6 20	14 49.76	- 3 20.9	2.586	3.342	13.3	20.0
468839	2012 <i>UA</i> ₃₇		5 11.5 298°77	1°3/12.5	17		82403	2001 <i>NR</i> ₇		5 11.6 187°98	1°9/10.3	18	
4 11	15 35.76	-24 51.8	1.761	2.634	13.1	20.8	4 11	15 37.07	-12 34.6	2.280	3.159	10.3	19.9
4 21	15 30.61	-24 1.0	1.670	2.613	9.6	20.5	4 21	15 30.95	-12 19.9	2.211	3.159	7.2	19.7
5 1	15 23.34	-22 53.7	1.602	2.591	5.4	20.2	5 1	15 23.31	-12 4.2	2.167	3.158	3.9	19.5
5 11	15 14.82	-21 32.5	1.561	2.570	1.5	19.9	5 11	15 14.85	-11 49.7	2.151	3.157	1.9	19.4
5 21	15 6.10	-20 2.7	1.547	2.548	4.2	20.1	5 21	15 6.35	-11 39.0	2.164	3.156	4.4	19.6
5 31	14 58.32	-18 32.0	1.559	2.527	8.8	20.3	5 31	14 58.61	-11 34.2	2.205	3.155	7.7	19.8
6 10	14 52.41	-17 8.0	1.596	2.506	12.9	20.5	6 10	14 52.29	-11 37.3	2.271	3.153	10.8	20.0
6 20	14 48.95	-15 56.7	1.653	2.485	16.6	20.7	6 20	14 47.84	-11 49.1	2.358	3.151	13.4	20.1
216207	2006 <i>UN</i> ₄₅		5 11.5 37°99	1°1/10.9	17		173263	1999 <i>RT</i> ₁₇₈		5 11.6 236°90	1°4/10.7	18	
4 11	15 37.03	-14 46.9	2.105	2.986	10.9	20.7	4 11	15 40.18	-15 47.5	1.889	2.768	12.1	20.6
4 21	15 31.02	-14 47.3	2.039	2.988	7.7	20.5	4 21	15 33.54	-15 20.7	1.805	2.754	8.5	20.4
5 1	15 23.36	-14 45.3	1.998	2.991	4.0	20.3	5 1	15 24.85	-14 48.5	1.746	2.739	4.5	20.1
5 11	15 14.82	-14 42.9	1.985	2.994	1.1	20.0	5 11	15 14.95	-14 13.8	1.714	2.723	1.4	19.8
5 21	15 6.24	-14 41.9	2.000	2.997	4.1	20.3	5 21	15 4.83	-13 40.3	1.710	2.706	4.8	20.0
5 31	14 58.49	-14 44.4	2.043	3.001	7.7	20.5	5 31	14 55.58	-13 12.2	1.734	2.689	9.0	20.3
6 10	14 52.30	-14 52.7	2.110	3.004	11.0	20.7	6 10	14 48.11	-12 53.1	1.782	2.671	12.9	20.4
6 20	14 48.11	-15 7.8	2.199	3.007	13.7	20.9	6 20	14 42.98	-12 45.4	1.850	2.653	16.2	20.6
508235	2015 <i>HY</i> ₂₅		5 11.5 41°99	6°9/ 5.1	17		75393	1999 <i>XS</i> ₉₇		5 11.6 184°55	0°4/11.8	17	
4 11	15 34.58	- 6 2.0	1.666	2.561	12.6	20.0	4 11	15 40.11	-20 52.0	2.000	2.869	11.9	20.3
4 21	15 29.37	- 3 26.0	1.623	2.571	9.4	19.8	4 21	15 33.30	-20 29.2	1.927	2.870	8.5	20.1
5 1	15 22.47	- 0 53.0	1.607	2.582	7.2	19.7	5 1	15 24.62	-19 57.4	1.879	2.869	4.6	19.9
5 11	15 14.77	+ 1 26.2	1.618	2.593	7.4	19.8	5 11	15 14.93	-19 18.8	1.859	2.869	0.6	19.5
5 21	15 7.24	+ 3 22.5	1.656	2.604	9.8	19.9	5 21	15 5.21	-18 36.6	1.867	2.867	3.9	19.8
5 31	15 0.78	+ 4 50.1	1.719	2.616	12.8	20.1	5 31	14 56.45	-17 55.4	1.903	2.865	7.9	20.0
6 10	14 56.09	+ 5 47.5	1.803	2.628	15.6	20.3	6 10	14 49.46	-17 19.7	1.965	2.862	11.5	20.3
6 20	14 53.53	+ 6 16.6	1.905	2.640	18.0	20.5	6 20	14 44.71	-16 52.7	2.048	2.858	14.5	20.5
214759	2006 <i>TH</i> ₉₅		5 11.5 209°46	1°8/12.7	17		288790	2004 <i>RQ</i> ₁₄₀		5 11.6 276°75	0°9/11.1	17	
4 11	15 38.02	-23 40.2	2.425	3.284	10.5	20.8	4 11	15 39.48	-18 18.5	1.422	2.312	14.6	21.2
4 21	15 31.69	-23 52.0	2.346	3.281	7.6	20.6	4 21	15 33.65	-17 42.4	1.338	2.291	10.4	20.9
5 1	15 23.73	-23 55.8	2.293	3.277	4.5	20.4	5 1	15 25.15	-16 55.5	1.276	2.270	5.5	20.6
5 11	15 14.85	-23 51.8	2.267	3.273	1.9	20.2	5 11	15 14.97	-16 1.5	1.238	2.248	0.9	20.2
5 21	15 5.86	-23 41.4	2.270	3.269	3.5	20.3	5 21	15 4.41	-15 5.7	1.227	2.226	5.6	20.4
5 31	14 57.60	-23 27.0	2.302	3.265	6.6	20.5	5 31	14 54.92	-14 15.1	1.241	2.204	10.9	20.7
6 10	14 50.79	-23 12.1	2.360	3.260	9.7	20.7	6 10	14 47.69	-13 36.2	1.276	2.182	15.8	20.9
6 20	14 45.90	-22 59.8	2.440	3.256	12.3	20.8	6 20	14 43.46	-13 13.0	1.329	2.160	19.9	21.1
255580	2006 <i>LW</i> ₄		5 11.5 311°26	11°1/ 6.3	17		430372	2014 <i>BU</i> ₅₀		5 11.6 304°50	2°9/10.1	17	
4 11	15 38.84	+ 3 48.7	1.240	2.128	16.5	19.4	4 11	15 37.54	-10 48.8	1.765	2.653	12.3	20.3
4 21	15 33.40	+ 4 46.5	1.165	2.099	13.6	19.1	4 21	15 31.74	-10 36.1	1.689	2.641	8.7	20.0
5 1	15 25.10	+ 5 28.3	1.110	2.071	11.5	18.9	5 1	15 23.92	-10 24.0	1.637	2.629	5.0	19.8
5 11	15 14.94	+ 5 44.3	1.076	2.042	11.4	18.8	5 11	15 14.91	-10 15.6	1.612	2.617	2.9	19.6
5 21	15 4.26	+ 5 27.6	1.065	2.014	13.7	18.8	5 21	15 5.71	-10 13.7	1.613	2.605	5.7	19.8
5 31	14 54.62	+ 4 35.3	1.073	1.987	17.3	19.0	5 31	14 57.40	-10 21.0	1.641	2.593	9.7	20.0
6 10	14 47.32	+ 3 10.2	1.100	1.960	21.2	19.1	6 10	14 50.86	-10 39.1	1.691	2.581	13.4	20.2
6 20	14 43.18	+ 1 18.2	1.142	1.935	24.7	19.3	6 20	14 46.65	-11 8.5	1.762	2.570	16.6	20.4
459000	2011 <i>WY</i> ₁₄₃		5 11.5 237°18	0°1/11.5	18		157234	2004 <i>RK</i>					

EPHEMERIDES

5 11.6

5 11.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
222975	2002 QK ₁₂₆		5 11.6 195°27	3°6/ 8.2 18			160557	1998 RT ₁₈		5 11.6 274°63	6°7/15.2 18		
4 11	15 32.82	- 5 4.5	2.991	3.866	8.2	21.0	4 11	15 41.31	-36 0.2	2.010	2.829	13.9	19.7
4 21	15 27.70	- 4 31.3	2.925	3.865	6.0	20.8	4 21	15 34.71	-36 41.3	1.919	2.813	11.3	19.5
5 1	15 21.52	- 4 1.3	2.885	3.863	4.2	20.7	5 1	15 25.66	-37 4.9	1.850	2.797	8.7	19.3
5 11	15 14.78	- 3 37.2	2.875	3.861	3.7	20.7	5 11	15 15.04	-37 7.9	1.807	2.780	6.9	19.1
5 21	15 8.04	- 3 21.2	2.892	3.859	5.1	20.8	5 21	15 4.04	-36 49.9	1.790	2.764	7.1	19.1
5 31	15 1.84	- 3 15.1	2.938	3.857	7.3	20.9	5 31	14 53.96	-36 13.7	1.798	2.747	9.2	19.2
6 10	14 56.65	- 3 19.5	3.008	3.855	9.4	21.0	6 10	14 45.90	-35 25.8	1.831	2.730	12.1	19.3
6 20	14 52.81	- 3 34.4	3.100	3.852	11.3	21.2	6 20	14 40.58	-34 33.2	1.885	2.713	14.9	19.5
217510	Dewaldroode		5 11.6 12°16	10°5/ 5.2 18			423946	2006 UX ₇		5 11.6 233°21	1°7/10.5 17		
4 11	15 33.75	+ 0 29.5	1.174	2.077	16.0	18.5	4 11	15 38.39	-16 8.5	1.849	2.732	12.1	21.5
4 21	15 29.39	+ 2 19.1	1.135	2.080	12.8	18.3	4 21	15 32.26	-15 20.1	1.771	2.721	8.5	21.3
5 1	15 22.71	+ 3 54.9	1.116	2.083	10.7	18.2	5 1	15 24.16	-14 24.8	1.717	2.710	4.5	21.0
5 11	15 14.85	+ 5 6.0	1.120	2.087	10.9	18.2	5 11	15 14.96	-13 26.7	1.691	2.699	1.7	20.8
5 21	15 7.09	+ 5 45.1	1.145	2.093	13.2	18.4	5 21	15 5.64	-12 30.8	1.692	2.687	5.0	21.0
5 31	15 0.68	+ 5 49.4	1.190	2.099	16.4	18.6	5 31	14 57.24	-11 42.2	1.720	2.674	9.2	21.2
6 10	14 56.53	+ 3 21.0	1.253	2.106	19.5	18.8	6 10	14 50.60	-11 5.4	1.772	2.661	13.0	21.4
6 20	14 55.09	+ 4 25.5	1.331	2.114	22.2	19.0	6 20	14 46.27	-10 42.6	1.845	2.648	16.2	21.6
43372	2000 WO ₁₅		5 11.6 315°82	16°2/ 5.4 18			355155	2006 VA ₅₈		5 11.6 341°84	0°3/11.8 17		
4 11	15 44.03	+17 31.8	1.305	2.141	19.1	17.2	4 11	15 34.51	-22 44.9	2.104	2.976	11.3	20.7
4 21	15 36.88	+18 12.5	1.243	2.120	17.4	17.0	4 21	15 29.29	-21 39.0	2.030	2.974	8.0	20.5
5 1	15 26.84	+18 20.0	1.198	2.100	16.3	16.9	5 1	15 22.48	-20 21.3	1.982	2.973	4.3	20.2
5 11	15 15.08	+17 44.4	1.174	2.080	16.4	16.8	5 11	15 14.86	-18 55.7	1.962	2.971	0.4	19.9
5 21	15 3.08	+16 21.4	1.169	2.060	17.8	16.8	5 21	15 7.29	-17 27.4	1.970	2.970	3.7	20.2
5 31	14 52.40	+14 13.4	1.185	2.042	20.0	16.9	5 31	15 0.59	-16 2.7	2.006	2.969	7.5	20.4
6 10	14 44.27	+11 28.7	1.218	2.024	22.7	17.0	6 10	14 55.45	-14 47.1	2.068	2.968	10.9	20.6
6 20	14 39.36	+ 8 18.5	1.268	2.007	25.2	17.2	6 20	14 52.27	-13 44.3	2.153	2.967	13.8	20.8
35454	1998 DE ₁₄		5 11.6 290°63	3°0/13.1 18			450185	2001 WJ ₂		5 11.6 258°82	6°6/11.9 15		
4 11	15 38.86	-26 1.7	2.190	3.045	11.6	17.7	4 11	16 12.00	- 0 17.0	0.795	1.668	24.6	21.7
4 21	15 32.65	-26 29.7	2.094	3.024	8.7	17.5	4 21	16 0.30	- 1 51.9	0.705	1.644	19.1	21.2
5 1	15 24.44	-26 48.3	2.024	3.003	5.5	17.3	5 1	15 41.40	- 4 12.0	0.633	1.617	12.3	20.7
5 11	15 14.95	-26 56.5	1.980	2.981	3.1	17.1	5 11	15 16.02	- 7 23.2	0.585	1.589	6.7	20.2
5 21	15 5.13	-26 54.7	1.964	2.960	4.3	17.1	5 21	14 46.92	-11 14.5	0.565	1.559	11.6	20.3
5 31	14 55.97	-26 45.3	1.976	2.939	7.6	17.3	5 31	14 18.54	-15 21.4	0.572	1.528	20.8	20.6
6 10	14 48.41	-26 32.1	2.013	2.917	10.9	17.4	6 10	13 55.05	-19 21.0	0.601	1.495	29.3	20.9
6 20	14 43.06	-26 19.2	2.072	2.896	13.9	17.6	6 20	13 38.52	-23 3.2	0.645	1.461	36.3	21.2
143492	2003 DP ₄		5 11.6 359°87	2°1/12.6 17			392129	2009 FR ₆₃		5 11.6 91°03	0°7/11.1 17		
4 11	15 38.65	-23 7.0	1.984	2.851	12.1	19.5	4 11	15 36.40	-16 52.0	2.178	3.056	10.7	21.2
4 21	15 32.43	-23 34.3	1.912	2.851	8.8	19.3	4 21	15 30.51	-16 35.3	2.118	3.066	7.5	21.0
5 1	15 24.25	-23 53.4	1.864	2.850	5.2	19.1	5 1	15 23.10	-16 14.2	2.083	3.076	3.9	20.8
5 11	15 14.95	-24 3.9	1.844	2.850	2.2	18.9	5 11	15 14.90	-15 51.1	2.077	3.086	0.7	20.6
5 21	15 5.51	-24 6.7	1.851	2.850	4.0	19.0	5 21	15 6.76	-15 28.5	2.098	3.096	3.8	20.8
5 31	14 56.97	-24 4.4	1.885	2.850	7.7	19.2	5 31	14 59.47	-15 9.6	2.147	3.106	7.3	21.1
6 10	14 50.18	-24 0.7	1.944	2.851	11.1	19.4	6 10	14 53.69	-14 56.9	2.221	3.115	10.5	21.3
6 20	14 45.67	-23 58.8	2.024	2.852	14.1	19.6	6 20	14 49.82	-14 52.3	2.317	3.125	13.1	21.5
29643	Plücker		5 11.6 114°38	0°5/11.8 18			452692	2005 YA ₁₂		5 11.6 99°31	3°0/13.2 16		
4 11	15 40.87	-21 36.6	1.431	2.314	15.0	18.5	4 11	15 41.27	-26 34.2	1.354	2.228	16.2	21.5
4 21	15 34.24	-21 1.6	1.375	2.324	10.6	18.3	4 21	15 34.78	-26 19.6	1.294	2.235	12.0	21.2
5 1	15 25.23	-20 13.9	1.341	2.333	5.7	18.0	5 1	15 25.62	-25 46.9	1.257	2.242	7.2	21.0
5 11	15 15.00	-19 17.1	1.333	2.342	0.7	17.7	5 11	15 15.04	-24 57.5	1.243	2.249	3.2	20.8
5 21	15 4.89	-18 16.9	1.350	2.351	4.8	18.0	5 21	15 4.53	-23 56.3	1.255	2.256	5.2	20.9
5 31	14 56.20	-17 20.2	1.394	2.360	9.7	18.3	5 31	14 55.55	-22 51.1	1.292	2.263	9.8	21.2
6 10	14 49.89	-16 33.2	1.460	2.368	14.0	18.6	6 10	14 49.16	-21 50.3	1.351	2.269	14.2	21.4
6 20	14 46.42	-15 59.9	1.545	2.376	17.5	18.8	6 20	14 45.87	-21 0.2	1.430	2.276	18.0	21.7
140616	2001 UC ₇		5 11.6 183°86	0°5/11.2 18			305928	2009 FH ₇₁		5 11.6 359°47	5°4/ 8.8 17		
4 11	15 35.03	-18 32.4	2.422	3.296	9.9	20.0	4 11	15 33.12	- 6 42.1	1.426	2.329	13.7	19.4
4 21	15 29.48	-17 55.0	2.350	3.296	7.0	19.8	4 21	15 28.81	- 6 6.5	1.370	2.325	10.0	19.2
5 1	15 22.53	-17 11.5	2.304	3.296	3.6	19.5	5 1	15 22.41	- 5 35.8	1.336	2.323	6.6	19.0
5 11	15 14.86	-16 24.4	2.286	3.296	0.5	19.3	5 11	15 14.89	- 5 15.3	1.326	2.322	5.5	18.9
5 21	15 7.18	-15 37.3	2.297	3.295	3.5	19.5	5 21	15 7.33	- 5 9.4	1.340	2.322	8.0	19.0
5 31	15 0.24	-14 53.7	2.337	3.294	6.9	19.7	5 31	15 0.85	- 5 20.6	1.378	2.324	11.7	19.2
6 10	14 54.65	-14 17.1	2.402	3.293	9.9	19.9	6 10	14 56.33	- 5 49.4	1.436	2.327	15.3	19.5
6 20	14 50.79	-13 49.6	2.489	3.292	12.5	20.1	6 20	14 54.27	- 6 34.0	1.512	2.331	18.4	19.7
322408	2011 SX ₃₆		5 11.6 236°26	2°5/ 9.6 16			478217	2011 UQ ₃₀₅		5 11.6 236°41	2°3/13.2 16		
4 11	15 34.69	-11 31.7	2.414	3.295	9.7	21.5	4 11	15 37.02	-26 6.8	2.458	3.311	10.6	22.1
4 21	15 29.26	-10 52.6	2.339	3.288	6.8	21.3	4 21	15 31.04	-26 7.8	2.373	3.302	7.8	21.9
5 1	15 22.44	-10 12.3	2.290	3.280	3.9	21.1	5 1	15 23.45	-25 58.6	2.313	3.294	4.8	21.7
5 11	15 14.86	- 9 34.0	2.269	3.272	2.6	21.0	5 11	15 14.95	-25 39.8	2.281	3.285	2.4	21.5
5 21	15 7.21	- 9 1.0	2.277	3.263	4.8	21.2	5 21	15 6.32	-25 13.1	2.278	3.276	3.6	21.6
5 31	15 0.24	- 8 36.2	2.312	3.255	7.8	21.3	5 31	14 58.41	-24 41.5	2.303	3.266	6.6	21.8
6 10	14 54.56	- 8 21.7	2.372	3.246	10.7	21.5	6 10	14 51.92	-24 9.1	2.353	3.257	9.6	22.0
6 20	14 50.57	- 8 18.6	2.454	3.237	13.2	21.7	6 20	14 47.33	-23 39.4	2.427	3.247	12.3	22.1
106072	2000 SU ₃₃₅		5 11.6 192°02	5°4/ 6.3 18			280992	2006 DS ₁₀₆		5 11.6 299°98	2°9/13.2 17		
4 11	15 34.27	+ 2 38											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
147858	2005 UC ₃₈₅		5 11.6 294°33	8°0/ 6.0 18			133252	2003 RT ₁₀		5 11.6 211°60	0°4/11.2 18		
4 11	15 36.49	+ 8 24.1	2.387	3.235	11.0	19.2	4 11	15 36.29	-19 47.7	2.158	3.033	11.0	19.7
4 21	15 30.44	+ 8 56.3	2.334	3.234	9.3	19.1	4 21	15 30.55	-18 55.0	2.082	3.029	7.7	19.5
5 1	15 23.03	+ 9 14.8	2.304	3.233	8.2	19.0	5 1	15 23.20	-17 53.5	2.032	3.024	4.0	19.2
5 11	15 14.93	+ 9 15.6	2.301	3.232	8.2	19.0	5 11	15 14.99	-16 46.6	2.010	3.020	0.4	18.9
5 21	15 6.87	+ 8 56.9	2.323	3.231	9.3	19.1	5 21	15 6.77	-15 38.8	2.017	3.015	3.9	19.2
5 31	14 59.55	+ 8 18.5	2.369	3.231	11.1	19.2	5 31	14 59.39	-14 35.3	2.051	3.010	7.6	19.4
6 10	14 53.58	+ 7 22.2	2.438	3.230	13.0	19.3	6 10	14 53.54	-13 40.6	2.111	3.004	11.0	19.6
6 20	14 49.34	+ 6 10.9	2.527	3.229	14.8	19.5	6 20	14 49.65	-12 57.6	2.193	2.998	13.9	19.8
248066	2004 OA ₁₀		5 11.6 311°48	3°1/13.2 17			44081	1998 FG ₇₅		5 11.6 286°31	3°0/ 9.8 18		
4 11	15 38.80	-25 57.1	1.579	2.450	14.5	20.1	4 11	15 37.27	-14 6.0	1.464	2.359	13.9	18.5
4 21	15 33.02	-26 8.5	1.503	2.441	10.8	19.8	4 21	15 31.91	-13 6.6	1.388	2.344	9.8	18.2
5 1	15 24.77	-26 6.0	1.449	2.433	6.7	19.5	5 1	15 24.18	-12 0.7	1.335	2.329	5.4	17.9
5 11	15 15.04	-25 49.5	1.420	2.424	3.3	19.3	5 11	15 15.06	-10 53.9	1.308	2.314	3.1	17.7
5 21	15 5.08	-25 21.0	1.417	2.416	5.0	19.4	5 21	15 5.73	-9 52.9	1.307	2.299	6.6	17.9
5 31	14 56.23	-24 45.4	1.439	2.408	9.2	19.6	5 31	14 57.47	-9 4.5	1.329	2.284	11.3	18.1
6 10	14 49.57	-24 9.0	1.484	2.401	13.3	19.8	6 10	14 51.30	-8 33.4	1.374	2.269	15.6	18.3
6 20	14 45.73	-23 37.6	1.549	2.393	16.9	20.0	6 20	14 47.84	-8 21.5	1.437	2.254	19.3	18.5
57491	2001 SY ₁₇₆		5 11.6 300°36	4°7/ 8.6 17			325860	2010 TR ₉₄		5 11.6 135°94	1°8/12.6 16		
4 11	15 36.27	- 9 9.5	1.609	2.504	12.9	19.0	4 11	15 41.92	-23 21.9	1.816	2.682	13.1	22.3
4 21	15 30.86	- 8 4.2	1.546	2.499	9.3	18.8	4 21	15 34.74	-23 23.0	1.753	2.692	9.5	22.1
5 1	15 23.45	- 6 58.8	1.507	2.495	5.9	18.5	5 1	15 25.48	-23 13.3	1.715	2.702	5.4	21.9
5 11	15 14.96	- 5 59.7	1.494	2.491	4.8	18.5	5 11	15 15.13	-22 53.7	1.704	2.711	1.9	21.7
5 21	15 6.43	- 5 12.7	1.506	2.487	7.5	18.6	5 21	15 4.81	-22 26.9	1.720	2.720	4.1	21.8
5 31	14 58.94	- 4 42.4	1.544	2.483	11.2	18.8	5 31	14 55.63	-21 57.0	1.764	2.729	8.1	22.1
6 10	14 53.32	- 4 31.1	1.603	2.479	14.8	19.0	6 10	14 48.48	-21 29.1	1.832	2.737	11.8	22.3
6 20	14 50.08	- 4 38.5	1.680	2.475	17.9	19.2	6 20	14 43.83	-21 7.1	1.922	2.744	14.9	22.5
338604	2003 SM ₁₈₇		5 11.6 248°47	1°6/12.8 18			342623	2008 UC ₃₄₂		5 11.6 249°20	1°4/12.3 17		
4 11	15 36.99	-24 58.8	2.024	2.889	12.0	20.5	4 11	15 38.87	-21 58.2	1.900	2.772	12.4	20.8
4 21	15 31.22	-24 29.3	1.943	2.881	8.8	20.2	4 21	15 32.63	-22 5.6	1.829	2.771	8.9	20.6
5 1	15 23.61	-23 47.0	1.886	2.872	5.1	20.0	5 1	15 24.41	-22 4.4	1.782	2.770	5.0	20.4
5 11	15 14.97	-22 53.9	1.856	2.864	1.8	19.7	5 11	15 15.07	-21 55.3	1.761	2.770	1.5	20.1
5 21	15 6.25	-21 53.5	1.854	2.855	3.8	19.9	5 21	15 5.63	-21 40.4	1.769	2.769	4.0	20.3
5 31	14 58.44	-20 51.2	1.880	2.846	7.6	20.1	5 31	14 57.15	-21 22.9	1.803	2.768	7.9	20.6
6 10	14 52.31	-19 52.5	1.931	2.837	11.2	20.3	6 10	14 50.48	-21 7.0	1.861	2.768	11.6	20.8
6 20	14 48.38	-19 2.2	2.003	2.828	14.3	20.5	6 20	14 46.14	-20 56.2	1.941	2.767	14.7	21.0
193717	2001 FP ₁₀₂		5 11.6 350°64	5°0/ 9.3 18			75407	1999 XU ₁₀₃		5 11.6 9°37	1°9/12.5 18		
4 11	15 36.03	- 6 53.4	1.451	2.349	13.8	19.5	4 11	15 36.96	-22 51.3	1.196	2.090	16.5	18.0
4 21	15 30.90	- 6 31.9	1.389	2.343	10.1	19.2	4 21	15 32.02	-22 50.7	1.138	2.091	11.9	17.7
5 1	15 23.56	- 6 15.5	1.349	2.337	6.5	19.0	5 1	15 24.32	-22 36.2	1.102	2.093	6.8	17.4
5 11	15 14.97	- 6 8.8	1.335	2.332	5.1	18.9	5 11	15 15.07	-22 9.5	1.088	2.096	2.1	17.1
5 21	15 6.29	- 6 15.2	1.344	2.329	7.6	19.0	5 21	15 5.78	-21 34.6	1.098	2.101	5.2	17.3
5 31	14 58.70	- 6 37.0	1.378	2.326	11.5	19.2	5 31	14 57.94	-20 58.0	1.131	2.106	10.4	17.6
6 10	14 53.13	- 7 14.4	1.433	2.324	15.3	19.5	6 10	14 52.71	-20 26.5	1.185	2.112	15.1	17.9
6 20	14 50.15	- 8 6.0	1.506	2.323	18.6	19.7	6 20	14 50.63	-20 5.0	1.257	2.118	19.0	18.2
292363	2006 SN ₂₄₃		5 11.6 202°92	1°2/10.8 17			347883	2002 TU ₁₂₉		5 11.6 197°81	2°2/13.5 18		
4 11	15 39.62	-16 21.4	1.990	2.867	11.6	22.1	4 11	15 37.55	-27 18.3	2.949	3.790	9.3	22.6
4 21	15 33.00	-15 51.7	1.915	2.863	8.2	21.9	4 21	15 31.19	-27 9.8	2.863	3.786	6.9	22.4
5 1	15 24.54	-15 16.5	1.866	2.858	4.3	21.6	5 1	15 23.48	-26 51.6	2.804	3.781	4.4	22.2
5 11	15 15.05	-14 38.8	1.844	2.853	1.2	21.4	5 11	15 15.03	-26 24.2	2.774	3.776	2.3	22.1
5 21	15 5.48	-14 2.2	1.850	2.846	4.5	21.6	5 21	15 6.52	-25 49.4	2.773	3.769	3.2	22.1
5 31	14 56.81	-13 30.8	1.884	2.840	8.4	21.8	5 31	14 58.66	-25 10.0	2.802	3.763	5.7	22.3
6 10	14 49.85	-13 7.9	1.943	2.832	12.0	22.0	6 10	14 52.04	-24 29.7	2.858	3.755	8.3	22.4
6 20	14 45.08	-12 55.9	2.023	2.824	15.0	22.2	6 20	14 47.05	-23 51.9	2.938	3.747	10.6	22.6
322053	2010 VE ₇₁		5 11.6 255°26	3°9/ 9.3 17			293616	2007 LT ₂₄		5 11.6 306°33	1°3/10.9 17		
4 11	15 38.72	-10 1.4	1.655	2.545	12.9	21.2	4 11	15 36.65	-16 15.0	1.606	2.497	13.2	20.9
4 21	15 32.67	- 9 17.0	1.581	2.533	9.3	20.9	4 21	15 31.44	-15 51.5	1.522	2.476	9.3	20.6
5 1	15 24.48	- 8 32.1	1.531	2.520	5.6	20.7	5 1	15 23.95	-15 21.8	1.460	2.455	5.0	20.3
5 11	15 15.05	- 7 51.6	1.507	2.508	4.0	20.6	5 11	15 15.06	-14 49.0	1.424	2.433	1.3	20.0
5 21	15 5.45	- 7 20.2	1.509	2.495	6.8	20.7	5 21	15 5.86	-14 17.3	1.414	2.413	5.2	20.2
5 31	14 56.81	- 7 2.4	1.537	2.481	10.8	20.9	5 31	14 57.56	-13 51.3	1.430	2.392	9.9	20.4
6 10	14 50.07	- 7 0.4	1.587	2.468	14.7	21.1	6 10	14 51.18	-13 35.4	1.468	2.372	14.2	20.6
6 20	14 45.81	- 7 14.7	1.656	2.454	18.0	21.3	6 20	14 47.38	-13 32.2	1.525	2.352	17.9	20.8
248161	2004 VM ₉		5 11.6 135°16	1°9/ 9.9 17			497817	2006 TN ₁₀₄		5 11.6 247°04	0°9/11.1 17		
4 11	15 37.17	-13 40.6	2.468	3.343	9.7	21.5	4 11	15 39.86	-17 1.1	1.854	2.733	12.3	22.2
4 21	15 30.84	-12 54.1	2.412	3.359	6.8	21.4	4 21	15 33.44	-16 37.1	1.768	2.717	8.7	21.9
5 1	15 23.22	-12 5.1	2.383	3.374	3.7	21.2	5 1	15 24.91	-16 6.7	1.708	2.700	4.6	21.6
5 11	15 14.98	-11 17.1	2.383	3.388	2.0	21.1	5 11	15 15.12	-15 32.5	1.674	2.683	0.9	21.3
5 21	15 6.84	-10 33.3	2.413	3.402	4.3	21.3	5 21	15 5.10	-14 58.1	1.668	2.665	4.6	21.5
5 31	14 59.51	- 9 57.1	2.471	3.415	7.3	21.5	5 31	14 55.94	-14 27.7	1.689	2.647	9.0	21.8
6 10	14 53.55	- 9 30.8	2.554	3.427	10.0	21.7	6 10	14 48.57	-14 5.6	1.734	2.628	12.9	22.0
6 20	14 49.30	- 9 15.4	2.660	3.439	12.4	21.8	6 20	14 43.59	-13 54.3	1.800	2.609	16.3	22.1
91778	1999 TG ₂₀₈		5 11.6 78°79	7°9/18.1 18			323296	2003 UV ₅		5 11.6 166°60	0°8/11.1 16		
4 11	15 40.46												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
457009	2008 <i>CB</i> ₈₇		5 11.6 339°08	13°1/ 3.5	18		241630	1999 <i>VY</i> ₁₇₄		5 11.6 275°90	0°9/10.9	18	
4 11	15 34.18	+ 7 8.2	1.223	2.111	16.7	19.7	4 11	15 35.25	-16 28.3	2.362	3.240	10.0	21.7
4 21	15 29.86	+ 8 49.4	1.173	2.099	14.4	19.6	4 21	15 29.83	-16 6.5	2.275	3.223	7.1	21.4
5 1	15 23.11	+10 10.6	1.144	2.088	13.1	19.5	5 1	15 22.88	-15 40.2	2.214	3.206	3.7	21.2
5 11	15 15.02	+11 0.9	1.135	2.077	13.6	19.4	5 11	15 15.03	-15 11.7	2.180	3.189	0.9	21.0
5 21	15 6.83	+11 13.3	1.146	2.068	15.6	19.5	5 21	15 7.03	-14 43.6	2.175	3.172	3.8	21.1
5 31	14 59.86	+10 45.9	1.176	2.060	18.3	19.7	5 31	14 59.68	-14 19.2	2.198	3.155	7.3	21.3
6 10	14 55.13	+ 9 42.5	1.223	2.053	21.2	19.8	6 10	14 53.65	-14 1.3	2.246	3.138	10.5	21.5
6 20	14 53.17	+ 8 9.7	1.283	2.048	23.8	20.0	6 20	14 49.42	-13 51.9	2.316	3.120	13.3	21.7
305927	2009 <i>FA</i> ₇₀		5 11.6 43°69	2°4/ 9.9	17		103267	2000 <i>AK</i> ₂₇		5 11.6 224°35	0°7/11.1	18	
4 11	15 34.70	-12 44.1	2.057	2.943	10.9	20.9	4 11	15 38.05	-16 40.6	2.286	3.159	10.5	20.1
4 21	15 29.42	-12 4.3	1.996	2.948	7.6	20.7	4 21	15 31.80	-16 27.6	2.205	3.151	7.4	19.8
5 1	15 22.60	-11 22.6	1.961	2.953	4.2	20.5	5 1	15 23.91	-16 10.2	2.150	3.142	3.9	19.6
5 11	15 14.99	-10 42.8	1.953	2.958	2.4	20.4	5 11	15 15.09	-15 50.4	2.123	3.132	0.7	19.3
5 21	15 7.40	-10 8.5	1.972	2.963	5.0	20.6	5 21	15 6.15	-15 30.5	2.125	3.122	3.8	19.6
5 31	15 0.66	- 9 43.1	2.018	2.968	8.3	20.8	5 31	14 57.94	-15 13.6	2.155	3.112	7.4	19.8
6 10	14 55.43	- 9 28.9	2.089	2.973	11.5	21.0	6 10	14 51.18	-15 2.3	2.210	3.101	10.7	20.0
6 20	14 52.10	- 9 26.8	2.179	2.978	14.2	21.2	6 20	14 46.34	-14 58.7	2.288	3.090	13.5	20.1
374557	2006 <i>BU</i> ₁₄₆		5 11.6 180°45	0°4/11.9	17		483026	2014 <i>WS</i> ₄₅₄		5 11.6 171°70	5°3/ 3.4	18	
4 11	15 38.91	-20 19.8	2.315	3.181	10.7	22.4	4 11	15 28.45	+11 42.9	4.599	5.424	6.5	21.4
4 21	15 32.33	-20 5.0	2.241	3.182	7.6	22.2	4 21	15 24.45	+12 18.8	4.552	5.425	5.7	21.3
5 1	15 24.14	-19 43.1	2.193	3.183	4.1	22.0	5 1	15 19.81	+12 46.4	4.530	5.425	5.3	21.3
5 11	15 15.08	-19 15.7	2.174	3.183	0.5	21.7	5 11	15 14.86	+13 3.6	4.535	5.426	5.5	21.3
5 21	15 5.99	-18 45.4	2.183	3.183	3.4	21.9	5 21	15 9.91	+13 9.2	4.565	5.426	6.1	21.3
5 31	14 57.72	-18 15.6	2.221	3.182	7.0	22.2	5 31	15 5.31	+13 2.7	4.620	5.426	7.0	21.4
6 10	14 50.95	-17 49.7	2.285	3.180	10.2	22.4	6 10	15 1.34	+12 44.4	4.697	5.427	8.0	21.5
6 20	14 46.14	-17 30.6	2.372	3.178	12.9	22.5	6 20	14 58.22	+12 15.5	4.794	5.427	8.9	21.6
195455	2002 <i>GH</i> ₉₃		5 11.6 185°43	0°7/11.1	18		41209	1999 <i>WB</i> ₁₅		5 11.6 210°83	1°4/12.4	18	
4 11	15 37.03	-18 8.5	1.961	2.840	11.7	20.3	4 11	15 39.28	-22 1.2	1.945	2.815	12.2	18.8
4 21	15 31.18	-17 30.5	1.891	2.840	8.2	20.1	4 21	15 32.91	-22 7.8	1.872	2.814	8.8	18.6
5 1	15 23.58	-16 45.4	1.847	2.840	4.3	19.9	5 1	15 24.58	-22 5.8	1.823	2.812	5.0	18.4
5 11	15 15.05	-15 56.4	1.830	2.840	0.7	19.6	5 11	15 15.13	-21 55.9	1.801	2.810	1.5	18.1
5 21	15 6.51	-15 7.7	1.841	2.839	4.2	19.9	5 21	15 5.57	-21 40.2	1.807	2.808	3.9	18.3
5 31	14 58.88	-14 23.9	1.879	2.838	8.2	20.1	5 31	14 56.94	-21 21.9	1.840	2.806	7.8	18.5
6 10	14 52.93	-13 49.0	1.942	2.837	11.7	20.3	6 10	14 50.10	-21 5.2	1.898	2.803	11.4	18.7
6 20	14 49.11	-13 25.4	2.025	2.836	14.7	20.5	6 20	14 45.56	-20 53.4	1.977	2.801	14.5	18.9
188549	2004 <i>ST</i> ₅₉		5 11.6 163°10	4°4/ 7.5	17		142432	2002 <i>SD</i> ₄₅		5 11.6 263°81	0°1/11.6	17	
4 11	15 33.18	- 3 43.6	2.694	3.571	9.0	20.2	4 11	15 40.42	-19 15.6	1.785	2.662	12.8	20.7
4 21	15 28.06	- 2 53.2	2.635	3.573	6.7	20.1	4 21	15 34.01	-19 3.3	1.694	2.640	9.2	20.5
5 1	15 21.80	- 2 6.9	2.602	3.575	4.9	20.0	5 1	15 25.32	-18 43.0	1.626	2.618	4.9	20.2
5 11	15 14.95	- 1 28.3	2.597	3.577	4.6	19.9	5 11	15 15.20	-18 16.3	1.586	2.596	0.3	19.7
5 21	15 8.12	- 1 0.4	2.620	3.579	6.1	20.0	5 21	15 4.72	-17 46.0	1.573	2.573	4.5	20.0
5 31	15 1.91	- 0 45.1	2.670	3.580	8.3	20.2	5 31	14 55.09	-17 16.7	1.587	2.549	9.1	20.2
6 10	14 56.81	- 0 43.2	2.744	3.582	10.5	20.3	6 10	14 47.33	-16 52.9	1.624	2.525	13.3	20.4
6 20	14 53.19	- 0 54.3	2.838	3.583	12.5	20.5	6 20	14 42.11	-16 38.4	1.682	2.501	16.9	20.6
198204	2004 <i>TH</i> ₁₄₄		5 11.6 328°06	3°2/12.6	17		234995	2003 <i>BP</i> ₆₀		5 11.6 186°48	6°1/ 6.4	18	
4 11	15 41.01	-23 9.9	1.464	2.343	15.0	19.2	4 11	15 34.68	+ 0 49.4	2.450	3.320	10.0	20.5
4 21	15 34.89	-24 3.9	1.386	2.329	11.1	18.9	4 21	15 29.21	+ 1 47.1	2.392	3.320	7.9	20.4
5 1	15 25.96	-24 49.7	1.331	2.317	6.8	18.7	5 1	15 22.45	+ 2 37.2	2.361	3.319	6.4	20.3
5 11	15 15.20	-25 24.8	1.300	2.305	3.3	18.4	5 11	15 15.02	+ 3 15.4	2.356	3.318	6.3	20.3
5 21	15 3.98	-25 48.6	1.295	2.294	5.4	18.5	5 21	15 7.61	+ 3 38.6	2.379	3.317	7.7	20.3
5 31	14 53.82	-26 3.0	1.315	2.283	9.9	18.7	5 31	15 0.88	+ 3 44.9	2.427	3.316	9.9	20.5
6 10	14 46.01	-26 12.4	1.357	2.273	14.3	19.0	6 10	14 55.41	+ 3 34.2	2.498	3.314	12.0	20.6
6 20	14 41.33	-26 21.6	1.418	2.264	18.1	19.2	6 20	14 51.55	+ 3 8.1	2.588	3.313	14.0	20.8
78620	2002 <i>TB</i> ₇		5 11.6 171°27	0°5/11.3	18		315288	2007 <i>TL</i> ₁₂₉		5 11.6 118°34	0°9/12.1	18	
4 11	15 36.93	-17 35.1	2.257	3.132	10.5	20.0	4 11	15 42.69	-21 3.2	1.707	2.579	13.5	21.2
4 21	15 30.95	-17 17.3	2.187	3.133	7.4	19.8	4 21	15 35.29	-20 58.8	1.651	2.595	9.6	21.0
5 1	15 23.41	-16 54.4	2.143	3.135	3.9	19.6	5 1	15 25.79	-20 45.0	1.620	2.610	5.2	20.8
5 11	15 15.04	-16 28.7	2.126	3.136	0.5	19.3	5 11	15 15.22	-20 23.6	1.616	2.625	1.0	20.5
5 21	15 6.66	-16 2.6	2.139	3.137	3.7	19.6	5 21	15 4.76	-19 57.5	1.639	2.639	4.2	20.8
5 31	14 59.06	-15 39.5	2.179	3.138	7.2	19.8	5 31	14 55.56	-19 31.1	1.689	2.653	8.5	21.0
6 10	14 52.94	-15 22.2	2.245	3.138	10.4	20.0	6 10	14 48.49	-19 9.0	1.763	2.666	12.3	21.3
6 20	14 48.71	-15 12.8	2.332	3.139	13.1	20.2	6 20	14 43.98	-18 54.4	1.858	2.679	15.4	21.5
500803	2013 <i>GB</i> ₁₈		5 11.6 338°17	15°1/12.7	17		295226	2008 <i>GC</i> ₇		5 11.6 266°00	0°9/12.5	18	
4 11	15 53.80	-40 13.4	1.187	2.009	21.4	20.2	4 11	15 31.32	-22 18.3	4.297	5.152	6.4	20.3
4 21	15 46.11	-43 30.0	1.120	2.000	18.7	20.0	4 21	15 26.56	-22 26.3	4.213	5.147	4.6	20.2
5 1	15 33.07	-46 26.9	1.073	1.991	16.3	19.8	5 1	15 20.98	-22 30.2	4.157	5.142	2.6	20.0
5 11	15 15.66	-48 46.9	1.048	1.983	15.2	19.7	5 11	15 14.95	-22 30.5	4.129	5.137	0.9	19.9
5 21	14 56.20	-50 17.1	1.044	1.976	15.8	19.7	5 21	15 8.86	-22 28.0	4.132	5.131	2.0	20.0
5 31	14 38.05	-50 55.8	1.061	1.970	17.9	19.8	5 31	15 3.12	-22 23.9	4.165	5.126	4.0	20.1
6 10	14 24.22	-50 53.7	1.096	1.965	20.6	20.0	6 10	14 58.11	-22 19.6	4.225	5.121	5.9	20.2
6 20	14 16.31	-50 27.0	1.145	1.961	23.3	20.2	6 20	14 54.10	-22 16.7	4.310	5.116	7.6	20.4
439557	2014 <i>DQ</i> ₅₀		5 11.6 184°42	2°4/ 9.9	17		231845	2000 <i>RV</i> <					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
382823	2003 <i>WJ</i> ₇₉		5 11.6 234°38	1°5/12.7	17		246961	1999 <i>TT</i> ₃₈		5 11.6 231°14	5°8/15.5	18	
4 11	15 37.77	-24 11.2	2.280	3.140	11.0	21.6	4 11	15 41.44	-37 44.6	2.766	3.559	11.2	20.9
4 21	15 31.70	-23 56.4	2.194	3.129	8.0	21.3	4 21	15 34.35	-38 30.1	2.676	3.550	9.2	20.7
5 1	15 23.91	-23 31.4	2.133	3.118	4.7	21.1	5 1	15 25.38	-39 1.2	2.611	3.541	7.3	20.6
5 11	15 15.14	-22 57.4	2.099	3.107	1.7	20.9	5 11	15 15.25	-39 15.8	2.572	3.531	6.0	20.5
5 21	15 6.24	-22 16.7	2.095	3.095	3.5	21.0	5 21	15 4.84	-39 13.5	2.560	3.521	6.1	20.4
5 31	14 58.11	-21 33.4	2.118	3.082	7.0	21.2	5 31	14 55.11	-38 56.0	2.577	3.511	7.5	20.5
6 10	14 51.50	-20 51.9	2.167	3.069	10.4	21.4	6 10	14 46.90	-38 27.6	2.618	3.501	9.5	20.6
6 20	14 46.89	-20 16.0	2.239	3.056	13.3	21.5	6 20	14 40.79	-37 53.2	2.683	3.490	11.6	20.8
153640	2001 <i>TS</i> ₇₇		5 11.6 191°89	0°0/11.6	18		112843	2002 <i>QM</i> ₂₀		5 11.6 335°73	1°3/11.0	18	
4 11	15 39.35	-19 8.7	2.139	3.010	11.2	20.8	4 11	15 34.05	-16 58.8	1.083	1.994	16.4	18.8
4 21	15 32.77	-18 51.9	2.064	3.008	7.9	20.6	4 21	15 30.32	-16 34.6	1.012	1.976	11.6	18.4
5 1	15 24.45	-18 28.5	2.015	3.006	4.2	20.4	5 1	15 23.66	-16 1.5	0.962	1.959	6.2	18.1
5 11	15 15.17	-18 0.2	1.994	3.004	0.2	20.1	5 11	15 15.15	-15 23.6	0.933	1.943	1.3	17.7
5 21	15 5.83	-17 29.9	2.001	3.001	3.8	20.3	5 21	15 6.28	-14 46.9	0.927	1.928	6.3	17.9
5 31	14 57.34	-17 1.1	2.037	2.997	7.6	20.6	5 31	14 58.69	-14 18.3	0.942	1.915	12.2	18.2
6 10	14 50.47	-16 37.6	2.098	2.993	11.0	20.8	6 10	14 53.70	-14 3.6	0.977	1.904	17.4	18.5
6 20	14 45.68	-16 22.0	2.180	2.988	13.9	21.0	6 20	14 52.06	-14 5.8	1.028	1.894	21.9	18.7
474032	2016 <i>GX</i> ₁₇₉		5 11.6 4°78	3°8/ 9.9	17		495830	1999 <i>TB</i> ₁₈₃		5 11.6 173°64	3°0/ 9.4	15	
4 11	15 38.44	-10 5.5	1.357	2.255	14.6	20.3	4 11	15 39.07	-11 47.3	2.120	2.999	11.0	22.5
4 21	15 32.72	-9 44.3	1.299	2.255	10.4	20.1	4 21	15 32.45	-10 47.4	2.055	3.003	7.7	22.3
5 1	15 24.61	-9 24.8	1.264	2.255	6.1	19.8	5 1	15 24.22	-9 45.5	2.017	3.006	4.5	22.1
5 11	15 15.18	-9 11.1	1.252	2.256	3.9	19.7	5 11	15 15.18	-8 45.9	2.007	3.008	3.1	22.0
5 21	15 5.71	-9 7.3	1.266	2.257	7.0	19.9	5 21	15 6.17	-7 53.1	2.026	3.010	5.5	22.2
5 31	14 57.47	-9 16.4	1.304	2.259	11.4	20.1	5 31	14 58.05	-7 11.4	2.072	3.011	8.8	22.4
6 10	14 51.49	-9 39.6	1.363	2.261	15.5	20.4	6 10	14 51.51	-6 43.2	2.144	3.011	11.9	22.6
6 20	14 48.29	-10 16.4	1.440	2.264	19.0	20.6	6 20	14 46.97	-6 29.5	2.235	3.010	14.6	22.8
356875	2011 <i>WL</i> ₁₁₄		5 11.6 220°05	4°5/ 7.8	18		25780	2000 <i>CS</i> ₃₇		5 11.6 259°42	1°1/10.9	18	
4 11	15 35.35	-1 56.3	2.835	3.704	8.8	21.1	4 11	15 39.38	-17 0.1	1.803	2.684	12.5	18.9
4 21	15 29.60	-1 25.9	2.763	3.696	6.7	21.0	4 21	15 33.20	-16 26.9	1.715	2.664	8.8	18.6
5 1	15 22.66	-1 0.8	2.718	3.687	5.0	20.8	5 1	15 24.87	-15 46.5	1.651	2.644	4.7	18.3
5 11	15 15.07	-0 43.8	2.701	3.678	4.6	20.8	5 11	15 15.23	-15 1.8	1.614	2.623	1.1	18.0
5 21	15 7.43	-0 37.4	2.713	3.669	6.0	20.9	5 21	15 5.31	-14 17.1	1.604	2.602	4.9	18.2
5 31	15 0.36	-0 42.8	2.751	3.659	8.2	21.0	5 31	14 56.25	-13 37.3	1.621	2.580	9.3	18.4
6 10	14 54.38	-1 0.4	2.815	3.649	10.4	21.1	6 10	14 49.01	-13 7.1	1.662	2.557	13.4	18.6
6 20	14 49.86	-1 29.6	2.900	3.638	12.3	21.3	6 20	14 44.18	-12 49.5	1.724	2.534	16.9	18.8
23098	Huanghuang		5 11.6 276°52	1°2/10.8	18		278372	2007 <i>LP</i> ₇		5 11.6 282°29	5°5/ 8.5	17	
4 11	15 36.37	-16 46.2	1.887	2.771	11.8	18.9	4 11	15 38.42	-4 2.9	1.840	2.723	12.2	20.5
4 21	15 30.88	-16 9.7	1.810	2.761	8.3	18.7	4 21	15 32.39	-3 31.6	1.761	2.704	9.1	20.3
5 1	15 23.53	-15 26.7	1.757	2.751	4.4	18.4	5 1	15 24.39	-3 5.9	1.705	2.684	6.4	20.1
5 11	15 15.12	-14 40.8	1.731	2.740	1.2	18.2	5 11	15 15.20	-2 50.5	1.676	2.665	5.6	20.0
5 21	15 6.60	-13 56.1	1.733	2.730	4.6	18.4	5 21	15 5.78	-2 49.0	1.674	2.645	7.8	20.1
5 31	14 58.94	-13 17.2	1.761	2.719	8.7	18.6	5 31	14 57.16	-3 3.8	1.696	2.625	11.1	20.2
6 10	14 52.96	-12 48.0	1.813	2.709	12.4	18.8	6 10	14 50.22	-3 35.3	1.742	2.605	14.4	20.4
6 20	14 49.17	-12 31.0	1.885	2.698	15.5	19.0	6 20	14 45.53	-4 22.3	1.807	2.585	17.4	20.6
74896	1999 <i>TO</i> ₁₂₁		5 11.6 191°72	1°3/10.8	17		39262	2000 <i>YK</i> ₁₃₈		5 11.6 260°76	15°2/30.5	17	
4 11	15 40.14	-15 58.4	1.984	2.861	11.7	20.6	4 11	15 41.13	+19 46.6	1.654	2.467	16.7	18.9
4 21	15 33.39	-15 28.0	1.912	2.860	8.2	20.4	4 21	15 34.41	+21 13.0	1.603	2.452	15.6	18.8
5 1	15 24.80	-14 52.6	1.865	2.858	4.3	20.1	5 1	15 25.45	+22 11.9	1.573	2.437	15.2	18.8
5 11	15 15.20	-14 15.1	1.846	2.855	1.3	19.9	5 11	15 15.26	+22 34.7	1.562	2.421	15.7	18.7
5 21	15 5.55	-13 39.2	1.856	2.851	4.5	20.1	5 21	15 4.99	+22 17.2	1.572	2.405	17.0	18.8
5 31	14 56.82	-13 8.7	1.893	2.847	8.4	20.3	5 31	14 55.82	+21 19.5	1.600	2.389	18.7	18.9
6 10	14 49.81	-12 47.3	1.954	2.842	12.0	20.5	6 10	14 48.71	+19 46.6	1.644	2.372	20.6	19.0
6 20	14 45.01	-12 36.7	2.037	2.837	15.0	20.7	6 20	14 44.19	+17 45.6	1.703	2.355	22.4	19.1
409896	2006 <i>SF</i> ₄₀₅		5 11.6 259°06	1°4/10.8	18		177348	2003 <i>YP</i> ₁₃₇		5 11.6 45°09	0°8/11.3	17	
4 11	15 38.54	-13 18.4	2.367	3.242	10.1	21.0	4 11	15 39.83	-17 4.8	1.245	2.141	15.8	19.5
4 21	15 32.16	-13 23.3	2.282	3.228	7.1	20.8	4 21	15 33.70	-16 55.9	1.202	2.158	11.0	19.3
5 1	15 24.14	-13 27.4	2.223	3.214	3.8	20.5	5 1	15 25.08	-16 40.5	1.180	2.175	5.8	19.0
5 11	15 15.17	-13 32.1	2.192	3.200	1.4	20.3	5 11	15 15.23	-16 21.8	1.183	2.193	0.8	18.7
5 21	15 6.01	-13 38.9	2.191	3.186	4.0	20.5	5 21	15 5.58	-16 3.9	1.210	2.211	5.3	19.1
5 31	14 57.49	-13 49.6	2.218	3.171	7.5	20.7	5 31	14 57.47	-15 51.1	1.262	2.230	10.3	19.4
6 10	14 50.35	-14 5.7	2.271	3.157	10.6	20.8	6 10	14 51.88	-15 47.4	1.335	2.249	14.6	19.7
6 20	14 45.07	-14 28.3	2.346	3.142	13.4	21.0	6 20	14 49.23	-15 54.4	1.426	2.268	18.2	20.0
34592	2000 <i>TM</i> ₁₇		5 11.6 281°56	0°2/11.5	17		370120	2001 <i>UM</i> ₁₅₀		5 11.6 195°49	0°2/11.5	18	
4 11	15 35.82	-18 23.3	2.200	3.077	10.7	19.7	4 11	15 39.71	-18 26.2	2.259	3.128	10.8	21.7
4 21	15 30.32	-18 8.0	2.119	3.066	7.6	19.5	4 21	15 32.97	-18 13.5	2.182	3.126	7.6	21.5
5 1	15 23.19	-17 47.0	2.063	3.055	4.0	19.3	5 1	15 24.56	-17 54.9	2.131	3.122	4.0	21.3
5 11	15 15.11	-17 22.1	2.035	3.045	0.3	18.9	5 11	15 15.21	-17 32.3	2.109	3.118	0.3	21.0
5 21	15 6.91	-16 56.0	2.035	3.034	3.7	19.2	5 21	15 5.78	-17 8.1	2.115	3.114	3.7	21.2
5 31	14 59.44	-16 31.9	2.062	3.023	7.4	19.4	5 31	14 57.15	-16 45.4	2.150	3.108	7.3	21.5
6 10	14 53.43	-16 13.2	2.114	3.013	10.7	19.6	6 10	14 50.06	-16 27.6	2.210	3.102	10.6	21.7
6 20	14 49.36	-16 2.2	2.188	3.002	13.6	19.8	6 20	14 44.96	-16 16.9	2.293	3.096	13.4	21.8
157884	1999 <i>RV</i> ₄₄		5 11.6 233°24	5°3/ 7.0	18		162621	2000 <i>SD</i> ₁₁₈		5 11.6 190°			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
53311	Deucalion 5 11.6 306°74 0°0/11.6 14 C						315225	2007 RO ₁₅₅ 5 11.6 133°51 2°0/12.7 16					
4 11	15 16.96	-18 10.6	41.800	42.668	0.7	23.0	4 11	15 42.57	-24 17.1	1.681	2.547	14.0	22.4
4 21	15 16.25	-18 7.9	41.723	42.666	0.5	22.9	4 21	15 35.35	-24 9.1	1.620	2.559	10.1	22.1
5 1	15 15.49	-18 5.0	41.674	42.665	0.2	22.9	5 1	15 25.91	-23 48.2	1.584	2.570	5.9	21.9
5 11	15 14.69	-18 1.9	41.654	42.663	0.0	22.9	5 11	15 15.32	-23 15.8	1.573	2.580	2.1	21.7
5 21	15 13.89	-17 58.8	41.663	42.662	0.2	22.9	5 21	15 4.80	-22 35.3	1.590	2.590	4.4	21.9
5 31	15 13.12	-17 55.9	41.701	42.660	0.4	22.9	5 31	14 55.55	-21 52.1	1.633	2.599	8.6	22.1
6 10	15 12.41	-17 53.1	41.766	42.659	0.7	23.0	6 10	14 48.48	-21 12.0	1.701	2.608	12.4	22.4
6 20	15 11.77	-17 50.6	41.857	42.658	0.8	23.0	6 20	14 44.08	-20 39.6	1.789	2.616	15.7	22.6
519987	2013 TM ₁₆₈ 5 11.6 313°35 3°6/ 9.3 17						107540	2001 DF ₇₀ 5 11.6 162°13 1°0/10.9 18					
4 11	15 35.58	-12 35.0	1.499	2.397	13.5	21.1	4 11	15 40.55	-17 0.0	1.950	2.826	11.9	20.5
4 21	15 30.65	-11 28.8	1.429	2.385	9.6	20.8	4 21	15 33.65	-16 27.5	1.885	2.832	8.3	20.3
5 1	15 23.53	-10 18.0	1.382	2.374	5.5	20.5	5 1	15 24.93	-15 49.1	1.846	2.838	4.4	20.1
5 11	15 15.17	-9 9.0	1.361	2.364	3.7	20.4	5 11	15 15.27	-15 7.8	1.834	2.843	1.0	19.8
5 21	15 6.68	-8 8.5	1.365	2.353	6.9	20.5	5 21	15 5.64	-14 27.6	1.851	2.848	4.4	20.1
5 31	14 59.24	-7 22.6	1.393	2.343	11.2	20.8	5 31	14 57.03	-13 52.5	1.896	2.852	8.3	20.3
6 10	14 53.78	-6 55.3	1.443	2.334	15.3	21.0	6 10	14 50.18	-13 26.3	1.965	2.855	11.8	20.6
6 20	14 50.85	-6 47.7	1.511	2.325	18.7	21.2	6 20	14 45.57	-13 11.0	2.055	2.857	14.8	20.8
122253	2000 OW ₃₈ 5 11.6 225°97 3°1/14.0 18						506482	2003 SQ ₁₃₀ 5 11.6 255°12 4°2/ 8.1 18					
4 11	15 39.51	-29 39.6	2.226	3.068	11.9	20.6	4 11	15 35.92	-8 40.3	2.150	3.034	10.6	21.8
4 21	15 33.01	-29 18.7	2.137	3.057	9.0	20.4	4 21	15 30.39	-7 24.8	2.069	3.016	7.7	21.6
5 1	15 24.65	-28 42.6	2.072	3.046	5.9	20.2	5 1	15 23.24	-6 7.9	2.014	2.998	5.0	21.4
5 11	15 15.23	-27 51.8	2.034	3.034	3.3	20.0	5 11	15 15.18	-4 55.2	1.987	2.980	4.4	21.3
5 21	15 5.71	-26 49.1	2.025	3.021	4.1	20.0	5 21	15 6.98	-3 51.9	1.988	2.961	6.6	21.4
5 31	14 57.07	-25 39.6	2.044	3.008	7.3	20.2	5 31	14 59.50	-3 2.6	2.016	2.942	9.7	21.6
6 10	14 50.11	-24 29.3	2.090	2.994	10.6	20.4	6 10	14 53.45	-2 30.0	2.068	2.923	12.8	21.8
6 20	14 45.34	-23 23.8	2.158	2.980	13.5	20.5	6 20	14 49.29	-2 14.9	2.139	2.903	15.5	21.9
102904	1999 XF ₁₆ 5 11.6 232°87 4°0/ 9.3 18						65401	2002 RX ₈₆ 5 11.6 187°36 0°9/11.0 17					
4 11	15 40.93	-7 41.9	2.054	2.931	11.4	19.8	4 11	15 39.46	-17 16.0	2.021	2.896	11.6	20.6
4 21	15 34.00	-7 11.4	1.972	2.915	8.3	19.6	4 21	15 32.90	-16 42.1	1.949	2.896	8.1	20.4
5 1	15 25.19	-6 42.7	1.915	2.899	5.2	19.4	5 1	15 24.56	-16 2.1	1.903	2.895	4.3	20.2
5 11	15 15.27	-6 19.7	1.886	2.882	4.0	19.2	5 11	15 15.26	-15 18.7	1.884	2.894	0.9	19.9
5 21	15 5.16	-6 5.6	1.885	2.864	6.3	19.3	5 21	15 5.93	-14 36.0	1.895	2.892	4.3	20.2
5 31	14 55.82	-6 3.2	1.912	2.846	9.7	19.5	5 31	14 57.51	-13 58.1	1.932	2.889	8.2	20.4
6 10	14 48.07	-6 14.0	1.962	2.826	13.0	19.7	6 10	14 50.78	-13 28.7	1.995	2.885	11.7	20.6
6 20	14 42.47	-6 37.9	2.034	2.806	15.9	19.8	6 20	14 46.19	-13 10.1	2.079	2.881	14.6	20.8
437297	2013 BS ₅₄ 5 11.6 219°21 3°6/ 8.6 17						146596	2001 TW ₁₅₉ 5 11.6 104°99 1°4/12.7 18					
4 11	15 35.32	-6 7.3	2.752	3.627	8.9	21.8	4 11	15 38.95	-25 22.6	1.791	2.657	13.3	19.9
4 21	15 29.64	-5 32.2	2.677	3.618	6.5	21.6	4 21	15 32.62	-24 31.2	1.731	2.670	9.6	19.7
5 1	15 22.72	-4 59.6	2.629	3.609	4.3	21.5	5 1	15 24.38	-23 25.2	1.696	2.683	5.4	19.4
5 11	15 15.12	-4 32.5	2.609	3.599	3.7	21.4	5 11	15 15.24	-22 8.0	1.687	2.695	1.6	19.2
5 21	15 7.47	-4 13.5	2.618	3.589	5.3	21.5	5 21	15 6.27	-20 45.4	1.706	2.707	4.0	19.4
5 31	15 0.39	-4 4.7	2.655	3.579	7.8	21.6	5 31	14 58.49	-19 24.1	1.753	2.719	8.1	19.7
6 10	14 54.44	-4 7.1	2.717	3.568	10.2	21.8	6 10	14 52.67	-18 10.9	1.825	2.731	11.8	19.9
6 20	14 49.99	-4 20.7	2.800	3.556	12.4	21.9	6 20	14 49.21	-17 10.0	1.918	2.742	14.9	20.1
192262	2008 HO ₈ 5 11.6 230°30 3°2/ 6.5 18						427134	2014 UB ₁₁₄ 5 11.6 100°07 5°1/ 9.0 17					
4 11	15 27.59	-1 19.2	4.755	5.623	5.5	20.7	4 11	15 39.46	-7 10.4	1.523	2.414	13.7	20.8
4 21	15 23.88	-0 34.2	4.688	5.618	4.3	20.6	4 21	15 33.17	-6 27.6	1.470	2.420	10.0	20.6
5 1	15 19.57	+ 0 7.7	4.649	5.612	3.3	20.5	5 1	15 24.77	-5 48.7	1.440	2.426	6.4	20.4
5 11	15 14.94	+ 0 44.3	4.640	5.606	3.3	20.5	5 11	15 15.27	-5 18.9	1.436	2.432	5.2	20.3
5 21	15 10.29	+ 1 14.0	4.658	5.600	4.2	20.5	5 21	15 5.84	-5 2.6	1.457	2.437	7.7	20.5
5 31	15 5.95	+ 1 35.7	4.705	5.594	5.4	20.6	5 31	14 57.59	-5 2.7	1.503	2.443	11.4	20.7
6 10	15 2.18	+ 1 48.7	4.777	5.588	6.8	20.7	6 10	14 51.41	-5 19.9	1.571	2.449	15.0	21.0
6 20	14 59.21	+ 1 52.9	4.870	5.582	8.0	20.8	6 20	14 47.76	-5 52.8	1.658	2.454	18.0	21.2
114897	2003 QX ₂₁ 5 11.6 233°17 2°9/13.6 18						64747	2001 XE ₁₅₂ 5 11.6 115°04 1°3/10.7 18					
4 11	15 38.49	-27 58.7	2.141	2.992	12.0	20.3	4 11	15 35.82	-15 10.7	2.381	3.259	10.0	19.8
4 21	15 32.34	-27 49.2	2.057	2.984	9.0	20.0	4 21	15 30.08	-14 45.6	2.320	3.268	6.9	19.6
5 1	15 24.32	-27 26.1	1.997	2.975	5.7	19.8	5 1	15 22.97	-14 17.5	2.285	3.277	3.7	19.4
5 11	15 15.22	-26 50.0	1.964	2.966	3.1	19.6	5 11	15 15.17	-13 48.8	2.278	3.286	1.3	19.2
5 21	15 6.01	-26 3.4	1.959	2.956	4.1	19.7	5 21	15 7.40	-13 22.3	2.300	3.295	3.8	19.5
5 31	14 57.66	-25 10.6	1.981	2.946	7.4	19.9	5 31	15 0.40	-13 0.9	2.350	3.304	7.1	19.7
6 10	14 51.00	-24 17.2	2.029	2.936	10.7	20.1	6 10	14 54.76	-12 46.8	2.425	3.312	10.0	19.9
6 20	14 46.54	-23 28.1	2.100	2.926	13.7	20.2	6 20	14 50.87	-12 41.4	2.522	3.320	12.5	20.1
286449	2002 AV ₇₂ 5 11.6 181°48 1°9/13.3 16						188729	2005 UR ₅₁ 5 11.6 186°77 3°4/13.9 18					
4 11	15 36.49	-26 15.0	2.860	3.708	9.4	22.2	4 11	15 39.68	-29 45.0	2.842	3.672	10.0	21.1
4 21	15 30.49	-26 4.6	2.782	3.708	6.9	22.0	4 21	15 32.87	-30 15.3	2.761	3.672	7.6	21.0
5 1	15 23.17	-25 44.8	2.729	3.709	4.2	21.8	5 1	15 24.52	-30 35.6	2.705	3.671	5.2	20.8
5 11	15 15.16	-25 16.6	2.705	3.709	2.0	21.6	5 11	15 15.28	-30 44.9	2.678	3.670	3.5	20.7
5 21	15 7.11	-24 42.0	2.710	3.708	3.1	21.7	5 21	15 5.89	-30 43.7	2.680	3.668	4.0	20.7
5 31	14 59.73	-24 3.9	2.744	3.707	5.7	21.9	5 31	14 57.15	-30 33.9	2.712	3.667	6.2	20.9
6 10	14 53.59	-23 25.7	2.806	3.706	8.4	22.1	6 10	14 49.75	-30 18.7	2.769	3.664	8.6	21.0
6 20	14 49.08	-22 50.7	2.891	3.704	10.7	22.2	6 20	14 44.14	-30 1.8	2.851	3.662	10.9	21.2
509616	2008 FP ₆ 5 11.6 85°93 0°9/12.2 17						463158	2012 BG ₃ 5 11.6 142°52 1°4/12.5 16					
4 11	15 37.64	-20 51.0	2.262	3.130	10.8	20.8	4 11	15 42.43	-23 37.3	1.896	2.759	12.8	22.5
4 21	15 31.55	-21 0.6	2.191	3.132	7.7	20.6	4 21	15 35.03	-23 20.0	1.835	2.772	9.2	22.3
5 1	15 23.82	-21 3.7	2.146	3.135	4.3	20.4	5 1	15 25.68	-22 51.2				

EPHEMERIDES

5 11.6

5 11.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
217020	2001 <i>KS</i> ₅		5 11.6 313°82		1°0/11.2 17		66112	1998 <i>SP</i> ₄₅		5 11.6 215°93		2°4/10.3 16	
4 11	15 37.79	-16 41.8	1.334	2.231	14.9	19.4	4 11	15 40.67	-14 44.4	1.556	2.443	13.7	20.3
4 21	15 32.68	-16 30.8	1.255	2.211	10.6	19.1	4 21	15 34.21	-13 57.3	1.485	2.438	9.7	20.0
5 1	15 24.86	-16 13.4	1.197	2.191	5.7	18.7	5 1	15 25.45	-13 4.3	1.439	2.432	5.2	19.8
5 11	15 15.31	-15 52.2	1.163	2.172	1.0	18.4	5 11	15 15.38	-12 10.3	1.418	2.425	2.4	19.5
5 21	15 5.35	-15 31.3	1.153	2.154	5.6	18.6	5 21	15 5.21	-11 20.7	1.424	2.418	5.9	19.8
5 31	14 56.45	-15 15.4	1.168	2.135	11.0	18.9	5 31	14 56.17	-10 41.1	1.456	2.410	10.5	20.0
6 10	14 49.86	-15 9.4	1.203	2.118	15.8	19.1	6 10	14 49.23	-10 15.8	1.510	2.402	14.6	20.2
6 20	14 46.32	-15 15.9	1.256	2.101	20.0	19.3	6 20	14 44.96	-10 6.6	1.584	2.394	18.1	20.4
167435	2003 <i>WO</i> ₁₇₁		5 11.6 135°68		3°3/ 9.2 18		117648	2005 <i>EF</i> ₁₄₇		5 11.6 44°76		3°9/ 9.3 18	
4 11	15 36.24	- 9 56.5	2.116	2.999	10.8	20.6	4 11	15 36.74	-13 39.5	1.223	2.127	15.4	19.0
4 21	15 30.49	- 9 9.7	2.056	3.005	7.6	20.4	4 21	15 31.50	-12 11.4	1.181	2.140	10.7	18.8
5 1	15 23.23	- 8 23.2	2.023	3.011	4.6	20.2	5 1	15 23.94	-10 38.8	1.161	2.154	6.1	18.6
5 11	15 15.21	- 7 41.0	2.017	3.016	3.4	20.2	5 11	15 15.28	- 9 10.7	1.165	2.169	4.1	18.5
5 21	15 7.22	- 7 6.8	2.039	3.021	5.6	20.3	5 21	15 6.85	- 7 55.4	1.194	2.184	7.5	18.7
5 31	15 0.07	- 6 43.7	2.087	3.026	8.7	20.5	5 31	14 59.90	- 7 0.0	1.247	2.200	12.0	19.0
6 10	14 54.42	- 6 33.5	2.160	3.031	11.7	20.7	6 10	14 55.28	- 6 27.6	1.320	2.216	16.1	19.3
6 20	14 50.65	- 6 36.6	2.253	3.036	14.2	20.9	6 20	14 53.40	- 6 17.9	1.410	2.232	19.4	19.6
469378	2001 <i>SL</i> ₁₀₃		5 11.6 169°12		2°4/ 9.5 18		113459	2002 <i>SN</i> ₅₀		5 11.6 254°68		0°5/11.4 18	
4 11	15 34.97	-11 39.9	2.677	3.555	9.0	22.0	4 11	15 40.22	-18 6.6	1.874	2.750	12.3	21.0
4 21	15 29.38	-10 52.3	2.611	3.558	6.3	21.8	4 21	15 33.81	-17 45.1	1.783	2.730	8.7	20.7
5 1	15 22.58	-10 3.4	2.573	3.562	3.6	21.7	5 1	15 25.25	-17 16.2	1.718	2.710	4.7	20.4
5 11	15 15.17	- 9 16.6	2.563	3.564	2.4	21.6	5 11	15 15.38	-16 42.2	1.679	2.689	0.5	20.1
5 21	15 7.77	- 8 35.0	2.582	3.567	4.4	21.7	5 21	15 5.22	-16 6.5	1.669	2.668	4.4	20.3
5 31	15 1.04	- 8 1.4	2.629	3.569	7.2	21.9	5 31	14 55.88	-15 33.5	1.685	2.645	8.8	20.5
6 10	14 55.48	- 7 38.0	2.702	3.570	9.7	22.1	6 10	14 48.32	-15 7.6	1.726	2.623	12.9	20.7
6 20	14 51.47	- 7 25.6	2.797	3.571	12.0	22.2	6 20	14 43.16	-14 52.0	1.788	2.599	16.3	20.9
40021	1998 <i>HG</i> ₁₃₇		5 11.6 133°84		4°7/ 8.9 18		369057	2008 <i>DK</i> ₅		5 11.6 133°58		2°9/12.9 15	
4 11	15 39.27	- 8 35.0	1.573	2.464	13.4	18.8	4 11	16 3.39	-26 44.6	1.458	2.294	17.4	24.8
4 21	15 33.00	- 7 39.1	1.519	2.470	9.6	18.6	4 21	15 49.98	-26 32.2	1.407	2.329	12.7	24.6
5 1	15 24.68	- 6 44.9	1.488	2.475	6.1	18.4	5 1	15 33.57	-25 59.7	1.381	2.361	7.5	24.4
5 11	15 15.30	- 5 58.1	1.484	2.481	4.8	18.3	5 11	15 15.87	-25 7.4	1.384	2.389	3.1	24.2
5 21	15 5.99	- 5 23.8	1.505	2.486	7.4	18.5	5 21	14 58.82	-24 0.7	1.417	2.415	5.4	24.4
5 31	14 57.84	- 5 5.9	1.551	2.491	11.2	18.7	5 31	14 44.13	-22 48.9	1.480	2.437	10.1	24.7
6 10	14 51.69	- 5 5.9	1.620	2.495	14.7	19.0	6 10	14 32.86	-21 41.7	1.569	2.456	14.4	25.0
6 20	14 48.02	- 5 23.0	1.707	2.499	17.7	19.2	6 20	14 25.36	-20 46.1	1.678	2.473	17.9	25.3
11740	Georgesmith		5 11.6 164°32		0°3/11.4 18		23810	1998 <i>QO</i> ₄₅		5 11.6 280°00		6°2/ 7.3 18	
4 11	15 36.45	-18 41.4	2.082	2.960	11.2	18.0	4 11	15 36.39	- 6 44.7	1.545	2.440	13.3	17.8
4 21	15 30.77	-18 16.3	2.013	2.960	7.9	17.8	4 21	15 31.12	- 5 9.9	1.482	2.432	9.9	17.5
5 1	15 23.45	-17 44.6	1.969	2.961	4.1	17.6	5 1	15 23.78	- 3 36.1	1.442	2.424	6.9	17.3
5 11	15 15.23	-17 8.8	1.952	2.961	0.3	17.3	5 11	15 15.30	- 2 11.7	1.429	2.416	6.5	17.3
5 21	15 6.99	-16 32.3	1.963	2.962	3.8	17.6	5 21	15 6.75	- 1 4.1	1.440	2.408	9.1	17.4
5 31	14 59.60	-15 58.8	2.001	2.962	7.6	17.8	5 31	14 59.24	- 0 19.0	1.476	2.400	12.7	17.6
6 10	14 53.78	-15 32.0	2.064	2.963	11.0	18.0	6 10	14 53.65	+ 0 1.4	1.532	2.392	16.2	17.8
6 20	14 49.97	-15 14.2	2.149	2.963	13.8	18.2	6 20	14 50.49	- 0 1.9	1.606	2.385	19.2	18.0
63690	2001 <i>QY</i> ₁₅₆		5 11.6 134°20		3°0/ 9.2 18		35690	1999 <i>CT</i> ₂₁		5 11.6 353°06		5°4/ 9.2 18	
4 11	15 35.28	-10 53.5	2.297	3.179	10.1	19.9	4 11	15 37.00	- 7 1.4	1.328	2.229	14.7	17.5
4 21	15 29.73	-10 0.2	2.238	3.186	7.1	19.7	4 21	15 31.80	- 6 28.1	1.270	2.225	10.7	17.2
5 1	15 22.80	- 9 6.4	2.205	3.193	4.2	19.5	5 1	15 24.23	- 5 59.4	1.234	2.221	6.9	17.0
5 11	15 15.19	- 8 15.8	2.200	3.200	3.0	19.4	5 11	15 15.33	- 5 41.2	1.221	2.219	5.5	16.9
5 21	15 7.63	- 7 32.3	2.223	3.206	5.2	19.6	5 21	15 6.36	- 5 37.7	1.233	2.217	8.2	17.1
5 31	15 0.84	- 6 59.1	2.274	3.212	8.1	19.8	5 31	14 58.58	- 5 51.9	1.268	2.216	12.3	17.3
6 10	14 55.43	- 6 38.3	2.349	3.218	10.9	20.0	6 10	14 53.01	- 6 24.0	1.323	2.216	16.3	17.5
6 20	14 51.75	- 6 30.5	2.445	3.224	13.4	20.2	6 20	14 50.19	- 7 12.3	1.396	2.216	19.7	17.7
317661	2003 <i>FR</i> ₁₂₀		5 11.6 9°64		2°5/10.2 17		106587	2000 <i>WH</i> ₁₀₆		5 11.6 112°50		3°9/ 8.6 18	
4 11	15 34.53	-15 31.9	1.278	2.183	14.9	19.8	4 11	15 34.88	- 6 15.8	2.466	3.345	9.6	19.8
4 21	15 30.06	-14 33.6	1.224	2.184	10.4	19.5	4 21	15 29.37	- 5 36.2	2.411	3.355	7.0	19.7
5 1	15 23.26	-13 28.5	1.191	2.187	5.6	19.2	5 1	15 22.61	- 4 59.8	2.383	3.364	4.7	19.5
5 11	15 15.22	-12 22.9	1.183	2.190	2.5	19.0	5 11	15 15.23	- 4 29.9	2.383	3.373	4.0	19.5
5 21	15 7.22	-11 23.9	1.198	2.195	6.3	19.3	5 21	15 7.90	- 4 9.3	2.410	3.382	5.7	19.6
5 31	15 0.50	-10 38.1	1.238	2.200	11.1	19.6	5 31	15 1.29	- 4 0.0	2.465	3.391	8.2	19.8
6 10	14 56.02	-10 9.9	1.298	2.206	15.4	19.8	6 10	14 55.93	- 4 2.9	2.544	3.399	10.7	20.0
6 20	14 54.25	-10 0.5	1.376	2.213	19.0	20.1	6 20	14 52.19	- 4 17.7	2.643	3.408	12.8	20.1
10812	Grottingbo		5 11.6 145°02		0°3/11.9 18		61896	2000 <i>QG</i> ₂₂₇		5 11.6 234°54		0°4/12.1 18	
4 11	15 36.25	-20 29.4	2.433	3.302	10.1	18.6	4 11	15 28.98	-21 6.5	4.502	5.363	6.0	20.1
4 21	15 30.43	-20 7.6	2.365	3.308	7.1	18.4	4 21	15 24.95	-20 48.4	4.421	5.359	4.2	20.0
5 1	15 23.20	-19 38.9	2.323	3.313	3.8	18.2	5 1	15 20.20	-20 26.3	4.367	5.356	2.3	19.8
5 11	15 15.22	-19 5.3	2.309	3.319	0.4	17.9	5 11	15 15.09	-20 1.3	4.343	5.352	0.4	19.6
5 21	15 7.27	-18 29.5	2.324	3.324	3.2	18.2	5 21	15 9.95	-19 34.8	4.349	5.349	1.9	19.8
5 31	15 0.07	-17 54.8	2.367	3.329	6.6	18.4	5 31	15 5.16	-19 8.4	4.384	5.345	3.8	19.9
6 10	14 54.26	-17 24.7	2.436	3.333	9.6	18.6	6 10	15 1.04	-18 43.7	4.447	5.342	5.6	20.0
6 20	14 50.22	-17 1.6	2.528	3.338	12.1	18.8	6 20	14 57.83	-18 22.2	4.534	5.338	7.3	20.1
417537	2006 <i>TS</i> ₁₀₂		5 11.6 271°47		1°8/12.5 17		156317	2001 <i>XM</i> ₆₉		5 11.7 155°77			

EPHEMERIDES

5 11.7

5 11.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
388854	2008 <i>GS</i> ₈₅		5 11.7 84°28	4.4/ 8.1	17		518969	2010 <i>HL</i> ₅₀		5 11.7 237°31	4.7/14.4	18	
4 11	15 34.57	- 5 55.3	2.278	3.161	10.2	21.0	4 11	15 41.53	-32 15.7	2.471	3.295	11.5	21.5
4 21	15 29.22	- 5 0.4	2.230	3.174	7.4	20.9	4 21	15 34.54	-33 0.9	2.385	3.288	9.0	21.3
5 1	15 22.55	- 4 9.1	2.207	3.187	5.1	20.8	5 1	15 25.62	-33 33.8	2.324	3.281	6.6	21.1
5 11	15 15.25	- 3 25.5	2.211	3.199	4.5	20.7	5 11	15 15.50	-33 52.5	2.291	3.273	4.9	21.0
5 21	15 8.04	- 2 53.0	2.244	3.212	6.3	20.9	5 21	15 5.11	-33 56.7	2.285	3.266	5.3	21.0
5 31	15 1.61	- 2 34.2	2.302	3.225	8.9	21.1	5 31	14 55.44	-33 48.3	2.308	3.258	7.4	21.1
6 10	14 56.53	- 2 29.8	2.385	3.237	11.4	21.2	6 10	14 47.35	-33 31.2	2.356	3.250	10.0	21.3
6 20	14 53.15	- 2 39.3	2.487	3.250	13.6	21.4	6 20	14 41.42	-33 10.3	2.427	3.242	12.4	21.4
63844	2001 <i>RK</i> ₈₀		5 11.7 199°65	1°1/10.9	18 R		36867	2000 <i>SA</i> ₁₄₉		5 11.7 167°84	0°3/11.4	18	
4 11	15 38.86	-16 30.6	2.104	2.979	11.2	20.1	4 11	15 35.42	-18 19.5	2.812	3.681	8.9	20.5
4 21	15 32.50	-15 59.9	2.029	2.976	7.8	19.9	4 21	15 29.74	-17 55.4	2.741	3.685	6.2	20.3
5 1	15 24.41	-15 24.0	1.980	2.972	4.1	19.6	5 1	15 22.85	-17 26.5	2.696	3.688	3.3	20.1
5 11	15 15.38	-14 45.6	1.959	2.968	1.1	19.4	5 11	15 15.32	-16 54.7	2.681	3.691	0.3	19.9
5 21	15 6.29	-14 8.2	1.967	2.963	4.2	19.6	5 21	15 7.79	-16 22.5	2.695	3.693	3.0	20.1
5 31	14 58.04	-13 35.7	2.002	2.958	8.0	19.8	5 31	15 0.90	-15 52.5	2.738	3.695	6.0	20.3
6 10	14 51.38	-13 11.4	2.062	2.952	11.4	20.0	6 10	14 55.18	-15 27.4	2.807	3.697	8.7	20.5
6 20	14 46.78	-12 57.4	2.144	2.945	14.3	20.2	6 20	14 50.98	-15 9.1	2.899	3.698	11.0	20.6
267211	2000 <i>SZ</i> ₃₆₃		5 11.7 245°64	6°2/14.6	18		305257	2007 <i>YE</i> ₁₀		5 11.7 330°36	5°5/ 8.2	18	
4 11	15 44.10	-33 39.2	1.954	2.781	13.9	20.5	4 11	15 35.91	- 3 13.4	1.989	2.872	11.4	19.9
4 21	15 36.83	-34 32.2	1.869	2.771	11.2	20.3	4 21	15 30.44	- 2 36.6	1.926	2.868	8.6	19.7
5 1	15 27.01	-35 9.5	1.807	2.761	8.3	20.1	5 1	15 23.33	- 2 6.0	1.888	2.864	6.2	19.5
5 11	15 15.56	-35 27.7	1.771	2.750	6.4	19.9	5 11	15 15.35	- 1 45.9	1.876	2.860	5.6	19.5
5 21	15 3.69	-35 25.9	1.761	2.740	6.8	19.9	5 21	15 7.33	- 1 39.7	1.891	2.857	7.5	19.6
5 31	14 52.77	-35 6.7	1.778	2.728	9.2	20.0	5 31	15 0.12	- 1 49.1	1.931	2.854	10.3	19.8
6 10	14 43.94	-34 36.0	1.819	2.717	12.2	20.2	6 10	14 54.44	- 2 14.3	1.994	2.851	13.1	19.9
6 20	14 37.92	-34 0.6	1.881	2.705	15.1	20.4	6 20	14 50.73	- 2 54.0	2.076	2.848	15.6	20.1
341922	2008 <i>KH</i> ₃₅		5 11.7 254°11	0°8/10.5	18		94573	2001 <i>VW</i> ₄₂		5 11.7 276°26	1°1/12.2	17	
4 11	15 28.23	-14 48.9	4.622	5.495	5.6	21.4	4 11	15 40.43	-22 0.8	1.374	2.258	15.4	19.4
4 21	15 24.41	-14 23.9	4.543	5.490	3.9	21.2	4 21	15 34.39	-21 46.4	1.307	2.256	11.1	19.1
5 1	15 19.93	-13 57.3	4.493	5.484	2.1	21.1	5 1	15 25.71	-21 19.2	1.262	2.253	6.2	18.8
5 11	15 15.11	-13 30.5	4.471	5.479	0.8	21.0	5 11	15 15.51	-20 41.3	1.241	2.250	1.3	18.5
5 21	15 10.27	-13 4.9	4.480	5.473	2.2	21.1	5 21	15 5.18	-19 57.0	1.245	2.247	4.9	18.8
5 31	15 5.74	-12 42.1	4.518	5.468	4.1	21.2	5 31	14 56.16	-19 12.6	1.275	2.245	10.0	19.0
6 10	15 1.83	-12 23.2	4.583	5.462	5.8	21.4	6 10	14 49.58	-18 34.8	1.326	2.242	14.6	19.3
6 20	14 58.77	-12 9.3	4.672	5.457	7.3	21.5	6 20	14 46.02	-18 8.1	1.396	2.239	18.5	19.5
122387	2000 <i>QQ</i> ₇₂		5 11.7 223°63	1°4/12.6	18		134181	2005 <i>CG</i> ₂₆		5 11.7 280°77	14°0/28.1	18	
4 11	15 39.53	-23 37.2	2.372	3.229	10.8	21.3	4 11	15 37.53	+22 11.3	2.006	2.800	14.8	19.6
4 21	15 32.97	-23 24.4	2.283	3.217	7.8	21.1	4 21	15 31.68	+23 38.4	1.959	2.784	14.1	19.5
5 1	15 24.69	-23 1.9	2.219	3.205	4.5	20.9	5 1	15 24.04	+24 40.6	1.932	2.768	14.0	19.4
5 11	15 15.42	-22 31.0	2.184	3.191	1.5	20.6	5 11	15 15.40	+25 11.1	1.926	2.751	14.5	19.4
5 21	15 6.00	-21 53.7	2.178	3.177	3.4	20.7	5 21	15 6.71	+25 6.4	1.939	2.735	15.6	19.5
5 31	14 57.31	-21 13.9	2.200	3.163	6.9	20.9	5 31	14 58.91	+24 26.4	1.970	2.718	17.0	19.5
6 10	14 50.11	-20 35.7	2.249	3.147	10.2	21.1	6 10	14 52.77	+23 14.7	2.017	2.702	18.5	19.6
6 20	14 44.90	-20 2.9	2.320	3.131	13.1	21.3	6 20	14 48.76	+21 36.8	2.079	2.686	19.9	19.7
320553	2008 <i>AD</i> ₄₁		5 11.7 12°28	2°2/12.6	17		299754	2006 <i>RX</i> ₁₀₄		5 11.7 179°95	0°1/11.7	17	
4 11	15 38.29	-22 38.7	1.187	2.081	16.6	20.0	4 11	15 36.33	-19 30.3	2.671	3.538	9.4	22.0
4 21	15 33.10	-22 53.4	1.131	2.083	12.1	19.7	4 21	15 30.46	-19 13.4	2.597	3.539	6.6	21.8
5 1	15 25.07	-22 55.3	1.095	2.086	6.9	19.4	5 1	15 23.27	-18 50.8	2.549	3.539	3.5	21.6
5 11	15 15.44	-22 45.0	1.083	2.091	2.4	19.1	5 11	15 15.36	-18 24.2	2.530	3.540	0.3	21.3
5 21	15 5.73	-22 25.7	1.093	2.096	5.3	19.3	5 21	15 7.43	-17 55.9	2.540	3.539	3.1	21.6
5 31	14 57.50	-22 2.7	1.127	2.102	10.4	19.6	5 31	15 0.16	-17 28.7	2.579	3.539	6.2	21.8
6 10	14 51.93	-21 42.5	1.182	2.109	15.1	19.9	6 10	14 54.14	-17 5.4	2.644	3.538	9.0	22.0
6 20	14 49.59	-21 29.9	1.255	2.117	19.0	20.2	6 20	14 49.76	-16 48.3	2.732	3.536	11.5	22.1
382466	2000 <i>SW</i> ₂₂₃		5 11.7 250°24	0°5/11.3	18		437246	2012 <i>XX</i> ₃₈		5 11.7 252°27	1°2/10.9	18	
4 11	15 38.56	-18 16.2	2.105	2.979	11.2	21.6	4 11	15 36.60	-15 37.5	2.162	3.042	10.7	21.4
4 21	15 32.43	-17 47.3	2.015	2.961	8.0	21.3	4 21	15 30.93	-15 15.0	2.086	3.034	7.5	21.1
5 1	15 24.47	-17 11.3	1.951	2.943	4.2	21.1	5 1	15 23.62	-14 48.5	2.034	3.027	4.0	20.9
5 11	15 15.41	-16 30.5	1.914	2.924	0.5	20.7	5 11	15 15.39	-14 20.7	2.010	3.019	1.2	20.7
5 21	15 6.15	-15 48.5	1.906	2.904	4.1	21.0	5 21	15 7.06	-13 54.3	2.015	3.011	4.1	20.9
5 31	14 57.64	-15 9.3	1.925	2.884	8.0	21.2	5 31	14 59.48	-13 32.7	2.046	3.003	7.8	21.1
6 10	14 50.69	-14 37.1	1.970	2.863	11.7	21.4	6 10	14 53.38	-13 18.8	2.103	2.995	11.1	21.3
6 20	14 45.83	-14 14.7	2.036	2.842	14.8	21.5	6 20	14 49.23	-13 14.2	2.180	2.986	13.9	21.5
497139	2004 <i>RC</i> ₁₆		5 11.7 232°78	5°9/15.5	18		156460	2002 <i>BU</i> ₂₇		5 11.7 189°72	1°4/10.8	18	
4 11	15 42.94	-36 39.0	2.371	3.175	12.5	22.6	4 11	15 39.06	-15 10.8	2.042	2.920	11.4	20.9
4 21	15 35.68	-37 5.8	2.276	3.161	10.2	22.4	4 21	15 32.68	-14 50.4	1.971	2.919	8.0	20.7
5 1	15 26.27	-37 16.0	2.204	3.146	7.8	22.3	5 1	15 24.55	-14 26.5	1.926	2.918	4.2	20.4
5 11	15 15.54	-37 7.3	2.159	3.130	6.1	22.1	5 11	15 15.45	-14 1.4	1.908	2.917	1.4	20.2
5 21	15 4.51	-36 39.7	2.141	3.114	6.2	22.1	5 21	15 6.30	-13 38.2	1.919	2.915	4.4	20.4
5 31	14 54.32	-35 56.2	2.151	3.097	8.1	22.2	5 31	14 58.02	-13 20.3	1.957	2.912	8.1	20.6
6 10	14 45.91	-35 2.7	2.186	3.079	10.7	22.3	6 10	14 51.37	-13 10.3	2.020	2.910	11.6	20.9
6 20	14 39.90	-34 5.4	2.244	3.061	13.2	22.5	6 20	14 46.81	-13 9.8	2.104	2.906	14.5	21.0
477642	2010 <i>ME</i> ₆₈		5 11.7 261°90	5°6/15.4	18		37780	1997 <i>HO</</i>					

EPHEMERIDES

5 11.7

5 11.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
125386	2001 VG ₈₃		5 11.7 30°74	1.3/12.4	18		123841	2001 CR ₂₂		5 11.7 202°20	4.7/15.8	18	
4 11	15 37.75	-23 55.9	1.115	2.010	17.3	18.5	4 11	15 38.16	-36 6.7	2.846	3.651	10.6	20.4
4 21	15 32.69	-23 10.5	1.063	2.016	12.5	18.2	4 21	15 31.93	-36 19.1	2.761	3.648	8.6	20.2
5 1	15 24.82	-22 6.3	1.031	2.024	6.9	17.9	5 1	15 24.13	-36 17.3	2.701	3.644	6.5	20.1
5 11	15 15.47	-20 48.2	1.023	2.032	1.5	17.6	5 11	15 15.47	-36 0.5	2.667	3.640	5.0	20.0
5 21	15 6.25	-19 24.4	1.037	2.041	5.3	17.9	5 21	15 6.71	-35 29.8	2.661	3.636	5.0	19.9
5 31	14 58.68	-18 4.8	1.075	2.050	10.8	18.2	5 31	14 58.68	-34 47.8	2.683	3.632	6.6	20.0
6 10	14 53.84	-16 58.3	1.134	2.060	15.7	18.5	6 10	14 52.05	-33 58.9	2.731	3.627	8.7	20.2
6 20	14 52.18	-16 9.9	1.211	2.070	19.7	18.8	6 20	14 47.27	-33 7.9	2.803	3.622	10.8	20.3
114017	2002 UG ₄₁		5 11.7 14°41	2.4/9.8	18		416423	2003 UY ₂₃₀		5 11.7 256°88	1.4/12.5	17	
4 11	15 35.12	-13 56.7	1.989	2.876	11.2	19.9	4 11	15 40.84	-22 58.2	1.665	2.537	13.8	21.7
4 21	15 29.90	-12 58.7	1.924	2.876	7.8	19.7	4 21	15 34.54	-22 44.7	1.579	2.521	10.0	21.4
5 1	15 23.05	-11 56.9	1.885	2.877	4.3	19.5	5 1	15 25.81	-22 18.9	1.516	2.505	5.7	21.2
5 11	15 15.37	-10 55.7	1.872	2.877	2.4	19.3	5 11	15 15.59	-21 41.9	1.479	2.488	1.6	20.8
5 21	15 7.69	-9 59.9	1.887	2.878	5.1	19.5	5 21	15 5.06	-20 56.9	1.469	2.470	4.5	21.0
5 31	15 0.87	-9 14.0	1.929	2.878	8.7	19.7	5 31	14 55.53	-20 9.6	1.485	2.452	9.2	21.2
6 10	14 55.60	-8 41.2	1.995	2.879	12.0	19.9	6 10	14 48.06	-19 26.0	1.525	2.434	13.5	21.4
6 20	14 52.31	-8 22.8	2.081	2.879	14.8	20.1	6 20	14 43.32	-18 51.4	1.586	2.416	17.2	21.6
357301	2002 VC ₁₄₄		5 11.7 140°15	0.8/11.3	18		475600	2006 UP ₈₇		5 11.7 241°96	0.3/11.9	18	
4 11	15 43.26	-17 40.3	1.535	2.416	14.2	22.2	4 11	15 37.12	-19 30.7	2.463	3.332	10.0	21.8
4 21	15 35.96	-17 15.3	1.477	2.427	10.0	21.9	4 21	15 31.22	-19 24.1	2.379	3.321	7.1	21.6
5 1	15 26.36	-16 42.9	1.444	2.437	5.3	21.7	5 1	15 23.78	-19 11.8	2.320	3.310	3.8	21.4
5 11	15 15.58	-16 6.4	1.436	2.446	0.8	21.4	5 11	15 15.46	-18 54.9	2.289	3.299	0.4	21.1
5 21	15 4.87	-15 30.0	1.456	2.455	5.0	21.7	5 21	15 6.99	-18 35.7	2.287	3.287	3.3	21.3
5 31	14 55.49	-14 58.9	1.501	2.463	9.6	22.0	5 31	14 59.19	-18 16.6	2.314	3.275	6.7	21.5
6 10	14 48.38	-14 37.3	1.570	2.470	13.7	22.2	6 10	14 52.71	-18 0.8	2.366	3.263	9.8	21.7
6 20	14 44.02	-14 27.8	1.659	2.477	17.1	22.5	6 20	14 48.04	-17 50.7	2.441	3.250	12.5	21.8
198609	2005 AJ ₂₃		5 11.7 135°73	5.3/7.8	17		153865	2001 XX ₇₄		5 11.7 123°04	2.1/10.5	17	
4 11	15 37.45	-2 8.2	2.339	3.212	10.3	20.9	4 11	15 39.51	-13 33.6	1.812	2.695	12.3	20.2
4 21	15 31.21	-1 24.4	2.289	3.224	7.8	20.8	4 21	15 33.08	-13 10.3	1.753	2.703	8.6	20.0
5 1	15 23.64	-0 46.8	2.265	3.235	5.8	20.7	5 1	15 24.78	-12 44.7	1.719	2.711	4.7	19.7
5 11	15 15.40	-0 19.5	2.269	3.246	5.4	20.7	5 11	15 15.52	-12 20.0	1.712	2.718	2.1	19.6
5 21	15 7.25	-0 5.1	2.300	3.256	6.9	20.8	5 21	15 6.29	-11 59.5	1.732	2.726	5.0	19.8
5 31	14 59.90	-0 5.4	2.358	3.266	9.3	21.0	5 31	14 58.09	-11 46.6	1.779	2.733	8.9	20.0
6 10	14 53.93	-0 20.2	2.439	3.276	11.7	21.1	6 10	14 51.71	-11 43.5	1.849	2.740	12.4	20.3
6 20	14 49.70	-0 48.4	2.541	3.285	13.8	21.3	6 20	14 47.60	-11 51.4	1.940	2.746	15.4	20.5
129762	1999 GZ ₁₀		5 11.7 312°94	1.1/12.2	17		281523	2008 TQ ₈₂		5 11.7 171°77	0.1/11.6	18	
4 11	15 41.04	-20 49.3	1.352	2.238	15.5	20.0	4 11	15 38.74	-18 32.1	2.157	3.029	11.1	21.0
4 21	15 34.92	-20 54.6	1.284	2.234	11.1	19.7	4 21	15 32.42	-18 22.0	2.087	3.032	7.8	20.8
5 1	15 26.06	-20 49.8	1.239	2.230	6.2	19.4	5 1	15 24.42	-18 6.2	2.042	3.033	4.1	20.5
5 11	15 15.58	-20 35.9	1.217	2.227	1.3	19.0	5 11	15 15.50	-17 46.3	2.025	3.035	0.3	20.2
5 21	15 4.91	-20 15.8	1.221	2.223	5.0	19.3	5 21	15 6.54	-17 24.9	2.036	3.036	3.7	20.5
5 31	14 55.52	-19 54.4	1.250	2.220	10.1	19.6	5 31	14 58.42	-17 5.1	2.076	3.037	7.4	20.7
6 10	14 48.61	-19 37.4	1.300	2.217	14.8	19.8	6 10	14 51.87	-16 50.1	2.140	3.037	10.7	20.9
6 20	14 44.80	-19 28.8	1.369	2.214	18.7	20.1	6 20	14 47.35	-16 42.2	2.227	3.037	13.5	21.1
86924	2000 HG ₅₉		5 11.7 302°59	0.7/12.1	17		198936	2005 US ₂₆₀		5 11.7 319°35	1.4/11.2	16	
4 11	15 38.17	-21 37.9	1.581	2.462	13.9	19.6	4 11	15 37.89	-16 2.7	1.028	1.937	17.2	19.8
4 21	15 32.54	-21 12.9	1.509	2.457	9.9	19.4	4 21	15 33.43	-15 55.0	0.954	1.916	12.3	19.4
5 1	15 24.66	-20 36.2	1.461	2.452	5.4	19.1	5 1	15 25.64	-15 41.0	0.899	1.895	6.6	19.1
5 11	15 15.49	-19 50.5	1.438	2.448	0.9	18.8	5 11	15 15.62	-15 23.7	0.865	1.875	1.4	18.6
5 21	15 6.22	-19 0.1	1.441	2.443	4.5	19.0	5 21	15 5.00	-15 7.9	0.854	1.856	6.6	18.9
5 31	14 58.05	-18 11.0	1.470	2.438	9.1	19.3	5 31	14 55.63	-14 59.3	0.864	1.838	12.9	19.2
6 10	14 51.96	-17 28.9	1.522	2.434	13.3	19.5	6 10	14 49.11	-15 3.2	0.893	1.821	18.6	19.4
6 20	14 48.49	-16 58.1	1.594	2.430	16.9	19.7	6 20	14 46.32	-15 22.3	0.937	1.805	23.5	19.6
519932	2013 RW ₁₀₅		5 11.7 169°31	1.2/10.8	17		151023	2001 UT ₁₂₆		5 11.7 77°58	2.6/10.1	18	
4 11	15 37.90	-16 27.9	2.136	3.013	11.0	22.1	4 11	15 38.89	-13 38.4	1.636	2.524	13.1	19.6
4 21	15 31.77	-15 50.9	2.068	3.016	7.7	21.9	4 21	15 32.64	-12 51.4	1.591	2.543	9.1	19.4
5 1	15 24.04	-15 8.8	2.026	3.019	4.0	21.7	5 1	15 24.52	-12 1.8	1.570	2.563	5.0	19.2
5 11	15 15.45	-14 24.7	2.012	3.021	1.2	21.5	5 11	15 15.52	-11 14.2	1.576	2.582	2.6	19.1
5 21	15 6.88	-13 42.2	2.027	3.023	4.2	21.7	5 21	15 6.72	-10 33.5	1.608	2.601	5.6	19.4
5 31	14 59.16	-13 5.3	2.069	3.024	7.8	21.9	5 31	14 59.12	-10 3.7	1.667	2.619	9.5	19.6
6 10	14 52.99	-12 37.3	2.136	3.025	11.1	22.1	6 10	14 53.48	-9 47.5	1.748	2.638	13.1	19.9
6 20	14 48.80	-12 20.0	2.225	3.026	13.9	22.3	6 20	14 50.18	-9 45.5	1.849	2.657	16.0	20.1
32504	2001 HP ₈		5 11.7 198°42	1.7/8/2.3	18		61915	2000 RO		5 11.7 147°31	3.2/14.5	18	
4 11	15 46.24	+21 16.7	1.357	2.170	19.7	18.6	4 11	15 37.19	-30 46.4	2.453	3.290	11.1	19.5
4 21	15 38.27	+22 47.5	1.321	2.169	18.3	18.5	4 21	15 31.25	-30 28.7	2.379	3.295	8.5	19.4
5 1	15 27.66	+23 43.0	1.302	2.166	17.8	18.5	5 1	15 23.77	-29 57.0	2.329	3.299	5.7	19.2
5 11	15 15.69	+23 53.6	1.302	2.163	18.1	18.5	5 11	15 15.48	-29 12.2	2.307	3.303	3.5	19.0
5 21	15 3.84	+23 15.8	1.321	2.159	19.4	18.6	5 21	15 7.22	-28 17.0	2.313	3.307	3.9	19.1
5 31	14 53.56	+21 52.0	1.357	2.154	21.1	18.7	5 31	14 59.81	-27 15.6	2.347	3.311	6.5	19.2
6 10	14 45.88	+19 50.3	1.409	2.149	23.0	18.8	6 10	14 53.90	-26 13.2	2.408	3.315	9.3	19.4
6 20	14 41.31	+17 20.7	1.475	2.143	24.9	18.9	6 20	14 49.91	-25 14.4	2.492	3.318	11.8	19.6
187865	2000 OG ₅₆		5 11.7 298°18	9.3/15.7	16		175858	1999 VL		5 11.7 194°17	0.4/11.5	17	
4 11	15 43.02	-39 15.5	1.673	2.487	16.5	20.2	4 11	15 40.99	-18 18.4	1.965	2.838	12.0	21.0
4 21	15 36.84	-40 13.2	1.572	2.457	13.9	19.9	4 21	15 34.16	-17 59.0	1.891	2.836	8.5	20.7
5 1	15 27.42	-40 49.8	1.491	2.426	11.4	19.7	5 1	15 25.42	-17 32.8	1.842	2.833	4.5	20.5
5 11	15 15.70	-40 59.1	1.433	2.395	9.5	19.5	5 11	15 15.60	-17 2.2	1.820	2.830	0.4	20.1
5 21	15 3.15	-40 38.3	1.399	2.365	9.6	19.4	5 21	15 5.70	-16 30.3	1.827	2.826	4.1	20.4
5 31	14 51.54	-39 49.8	1.389	2.334	11.7	19.5	5 31	14 56.72	-16 1.0	1.862	2.821	8.2	20.7
6 10	14 42.47	-38 41.7	1.401	2.303	14.9	19.6	6 10	14 49.52	-15 38.2	1.921	2.816	11.8	20.9
6 20	14 36.92	-37 24.4	1.432	2.272	18.2	19.7	6 20	14 44.57	-15 24.5				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
353594	2011 <i>TQ</i> ₁₁		5 11.7 174°95	3°9/ 8.4	18		192735	1999 <i>TK</i> ₁₉₃		5 11.7 154°05	1°6/13.0	17	
4 11	15 34.77	- 6 35.9	2.502	3.382	9.5	20.8	4 11	15 38.59	-25 18.2	2.484	3.336	10.5	20.9
4 21	15 29.39	- 5 47.0	2.439	3.383	6.9	20.6	4 21	15 32.14	-24 54.8	2.414	3.345	7.6	20.7
5 1	15 22.74	- 5 0.4	2.403	3.384	4.6	20.5	5 1	15 24.21	-24 21.1	2.370	3.353	4.5	20.5
5 11	15 15.42	- 4 19.9	2.395	3.385	4.0	20.4	5 11	15 15.54	-23 38.6	2.354	3.360	1.7	20.3
5 21	15 8.11	- 3 48.7	2.414	3.385	5.7	20.5	5 21	15 6.92	-22 50.1	2.367	3.367	3.2	20.4
5 31	15 1.47	- 3 29.2	2.461	3.386	8.3	20.7	5 31	14 59.11	-21 59.6	2.410	3.373	6.3	20.6
6 10	14 56.05	- 3 22.6	2.532	3.386	10.8	20.8	6 10	14 52.78	-21 11.3	2.479	3.379	9.3	20.8
6 20	14 52.23	- 3 28.9	2.624	3.385	13.0	21.0	6 20	14 48.29	-20 28.8	2.571	3.384	11.9	21.0
119433	2001 <i>TT</i> ₁₃₂		5 11.7 66°63	0°2/11.8	17		172584	2003 <i>UO</i> ₂₆₇		5 11.7 159°09	0°1/11.6	18	
4 11	15 37.57	-22 25.4	1.617	2.497	13.7	19.4	4 11	15 41.65	-18 39.0	1.755	2.631	13.0	20.4
4 21	15 31.94	-21 20.7	1.553	2.500	9.7	19.2	4 21	15 34.75	-18 28.2	1.690	2.636	9.2	20.2
5 1	15 24.26	-20 2.1	1.512	2.504	5.2	18.9	5 1	15 25.77	-18 10.4	1.649	2.641	4.9	19.9
5 11	15 15.52	-18 34.3	1.498	2.508	0.4	18.6	5 11	15 15.65	-17 47.6	1.635	2.645	0.3	19.6
5 21	15 6.85	-17 4.2	1.511	2.512	4.4	18.9	5 21	15 5.50	-17 22.9	1.648	2.648	4.3	19.9
5 31	14 59.37	-15 39.5	1.551	2.516	9.0	19.2	5 31	14 56.45	-17 0.2	1.689	2.651	8.6	20.1
6 10	14 53.90	-14 26.9	1.614	2.520	13.0	19.4	6 10	14 49.37	-16 43.6	1.753	2.654	12.5	20.4
6 20	14 50.89	-13 30.5	1.697	2.524	16.4	19.6	6 20	14 44.77	-16 35.8	1.838	2.656	15.7	20.6
379707	2011 <i>FR</i> ₁₅₁		5 11.7 173°64	6°5/14.9	18		503978	2004 <i>TG</i> ₃₄		5 11.7 206°85	0°9/12.3	17	
4 11	15 43.20	-34 13.5	1.817	2.647	14.7	20.3	4 11	15 39.18	-21 56.3	2.228	3.092	11.1	22.4
4 21	15 36.25	-35 4.0	1.744	2.647	11.8	20.1	4 21	15 32.79	-21 44.8	2.148	3.087	8.0	22.2
5 1	15 26.74	-35 36.9	1.694	2.647	8.8	20.0	5 1	15 24.67	-21 24.8	2.094	3.082	4.4	21.9
5 11	15 15.70	-35 48.9	1.668	2.647	6.8	19.8	5 11	15 15.58	-20 57.7	2.067	3.076	1.0	21.7
5 21	15 4.39	-35 39.9	1.669	2.647	7.0	19.8	5 21	15 6.39	-20 25.8	2.069	3.070	3.5	21.9
5 31	14 54.22	-35 13.2	1.695	2.647	9.4	20.0	5 31	14 57.99	-19 52.9	2.100	3.063	7.2	22.1
6 10	14 46.29	-34 35.6	1.744	2.647	12.4	20.2	6 10	14 51.15	-19 22.8	2.156	3.056	10.5	22.3
6 20	14 41.26	-33 54.2	1.815	2.647	15.3	20.4	6 20	14 46.36	-18 59.0	2.234	3.048	13.4	22.4
168869	2000 <i>WS</i> ₄		5 11.7 278°02	2°8/13.3	17		497302	2005 <i>SA</i> ₂₄₆		5 11.7 207°02	2°2/ 9.9	17	
4 11	15 39.83	-26 36.5	1.468	2.340	15.3	19.9	4 11	15 38.08	-13 49.5	2.236	3.113	10.5	23.7
4 21	15 34.10	-26 15.8	1.385	2.325	11.4	19.6	4 21	15 31.91	-12 54.4	2.159	3.107	7.4	23.5
5 1	15 25.69	-25 36.6	1.324	2.309	7.0	19.3	5 1	15 24.16	-11 55.2	2.109	3.100	4.1	23.2
5 11	15 15.63	-24 40.1	1.287	2.293	3.0	19.1	5 11	15 15.55	-10 56.0	2.088	3.093	2.3	23.1
5 21	15 5.28	-23 30.2	1.275	2.277	5.0	19.1	5 21	15 6.88	-10 0.9	2.095	3.085	4.8	23.3
5 31	14 56.08	-22 14.7	1.289	2.260	9.8	19.4	5 31	14 58.99	- 9 14.2	2.131	3.076	8.2	23.5
6 10	14 49.24	-21 2.3	1.326	2.244	14.4	19.6	6 10	14 52.56	- 8 39.2	2.192	3.067	11.4	23.6
6 20	14 45.42	-20 0.3	1.382	2.228	18.5	19.8	6 20	14 48.03	- 8 17.4	2.274	3.056	14.1	23.8
233873	2008 <i>WG</i> ₂₅		5 11.7 171°97	1°7/10.6	17		164628	1993 <i>UX</i> ₇		5 11.7 160°41	3°3/ 9.8	18	
4 11	15 38.05	-13 58.3	2.069	2.949	11.1	21.1	4 11	15 40.10	-12 6.9	1.592	2.481	13.4	20.4
4 21	15 31.96	-13 38.2	2.002	2.951	7.8	20.9	4 21	15 33.72	-11 19.3	1.532	2.484	9.5	20.1
5 1	15 24.19	-13 15.6	1.960	2.952	4.2	20.7	5 1	15 25.23	-10 29.5	1.496	2.487	5.4	19.9
5 11	15 15.53	-12 53.2	1.945	2.953	1.7	20.5	5 11	15 15.62	- 9 42.6	1.486	2.490	3.3	19.8
5 21	15 6.83	-12 33.9	1.959	2.953	4.5	20.7	5 21	15 6.02	- 9 3.5	1.503	2.492	6.3	20.0
5 31	14 58.97	-12 20.7	2.000	2.954	8.1	20.9	5 31	14 57.57	- 8 36.9	1.545	2.494	10.4	20.2
6 10	14 52.69	-12 15.9	2.065	2.954	11.4	21.1	6 10	14 51.14	- 8 25.4	1.610	2.496	14.2	20.4
6 20	14 48.44	-12 20.8	2.152	2.954	14.2	21.3	6 20	14 47.22	- 8 29.6	1.694	2.497	17.4	20.6
185244	2006 <i>UK</i> ₃₈		5 11.7 93°57	0°3/11.5	17		300924	2008 <i>CR</i> ₅₄		5 11.7 139°73	0°4/12.0	18	
4 11	15 35.97	-18 55.3	2.323	3.197	10.3	20.9	4 11	15 36.18	-21 10.7	2.458	3.325	10.1	21.7
4 21	15 30.29	-18 24.3	2.265	3.210	7.2	20.7	4 21	15 30.46	-20 45.4	2.390	3.332	7.1	21.5
5 1	15 23.22	-17 47.3	2.232	3.224	3.8	20.5	5 1	15 23.34	-20 12.8	2.348	3.338	3.9	21.3
5 11	15 15.46	-17 7.0	2.228	3.238	0.3	20.3	5 11	15 15.50	-19 34.8	2.334	3.344	0.6	21.1
5 21	15 7.78	-16 26.4	2.252	3.251	3.4	20.6	5 21	15 7.67	-18 54.3	2.349	3.350	3.1	21.3
5 31	15 0.92	-15 49.2	2.305	3.265	6.8	20.8	5 31	15 0.61	-18 14.8	2.393	3.355	6.4	21.5
6 10	14 55.48	-15 18.5	2.382	3.278	9.8	21.0	6 10	14 54.91	-17 39.8	2.462	3.361	9.4	21.7
6 20	14 51.82	-14 56.4	2.482	3.291	12.4	21.2	6 20	14 50.96	-17 11.8	2.554	3.366	12.0	21.9
166485	2002 <i>PA</i> ₁₄₁		5 11.7 278°07	4°9/ 8.8	18		429146	2009 <i>UD</i> ₈₃		5 11.7 135°52	0°8/11.1	17	
4 11	15 39.80	- 4 4.6	2.112	2.986	11.2	19.6	4 11	15 39.07	-17 4.7	2.293	3.164	10.5	22.5
4 21	15 33.36	- 3 43.4	2.020	2.959	8.4	19.4	4 21	15 32.46	-16 34.9	2.234	3.179	7.4	22.3
5 1	15 25.07	- 3 27.5	1.953	2.931	5.8	19.2	5 1	15 24.38	-16 0.3	2.201	3.193	3.8	22.1
5 11	15 15.60	- 3 20.7	1.914	2.903	5.0	19.0	5 11	15 15.57	-15 23.5	2.197	3.206	0.8	21.9
5 21	15 5.84	- 3 25.8	1.903	2.875	7.0	19.1	5 21	15 6.85	-14 47.6	2.222	3.219	3.7	22.1
5 31	14 56.70	- 3 44.8	1.919	2.846	10.1	19.2	5 31	14 59.00	-14 15.9	2.275	3.231	7.2	22.4
6 10	14 49.04	- 4 18.3	1.958	2.816	13.3	19.4	6 10	14 52.65	-13 51.5	2.354	3.242	10.2	22.6
6 20	14 43.42	- 5 5.3	2.019	2.787	16.1	19.5	6 20	14 48.20	-13 36.2	2.456	3.253	12.8	22.8
410814	2009 <i>KY</i> ₂₃		5 11.7 89°26	5°3/ 9.1	17		241369	2008 <i>KB</i> ₄₃		5 11.7 24°20	25°1/24.6	18	
4 11	15 40.06	- 6 48.4	1.483	2.374	14.0	20.3	4 11	15 39.94	+26 0.8	0.892	1.728	25.8	19.8
4 21	15 33.72	- 6 8.5	1.431	2.381	10.2	20.1	4 21	15 34.51	+28 40.0	0.881	1.730	25.2	19.8
5 1	15 25.22	- 5 33.1	1.402	2.387	6.6	19.9	5 1	15 25.87	+30 24.0	0.882	1.733	25.2	19.8
5 11	15 15.60	- 5 7.5	1.399	2.394	5.4	19.9	5 11	15 15.67	+31 0.7	0.896	1.736	26.0	19.8
5 21	15 6.04	- 4 55.9	1.420	2.400	7.8	20.0	5 21	15 5.78	+30 28.1	0.921	1.739	27.2	19.9
5 31	14 57.70	- 5 1.0	1.466	2.407	11.6	20.2	5 31	14 57.91	+28 51.6	0.957	1.744	28.7	20.1
6 10	14 51.47	- 5 23.1	1.534	2.413	15.2	20.5	6 10	14 53.16	+26 23.6	1.003	1.748	30.2	20.2
6 20	14 47.82	- 6 0.8	1.621	2.419	18.3	20.7	6 20	14 51.91	+23 18.1	1.057	1.753	31.5	20.4
432323	2009 <i>UT</i> ₃₉		5 11.7 204°52	0°1/11.6	18		351955	2006 <i>TC</i> ₉₅					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
139718	2001 <i>QW</i> ₂₄₀		5 11.7 223°99	2°6/ 9.7 18			53307	1999 <i>HC</i> ₈		5 11.7 143°09	0°1/11.7 18		
4 11	15 35.42	-12 24.9	2.199	3.083	10.4	19.9	4 11	15 39.84	-19 23.4	1.888	2.763	12.3	18.8
4 21	15 30.05	-11 36.9	2.130	3.080	7.3	19.7	4 21	15 33.37	-19 6.5	1.824	2.769	8.7	18.6
5 1	15 23.18	-10 46.7	2.086	3.077	4.2	19.5	5 1	15 25.02	-18 42.3	1.784	2.775	4.6	18.4
5 11	15 15.51	-9 58.1	2.070	3.073	2.6	19.4	5 11	15 15.66	-18 12.8	1.771	2.781	0.3	18.0
5 21	15 7.81	-9 15.1	2.082	3.070	5.0	19.5	5 21	15 6.31	-17 41.3	1.786	2.786	4.0	18.4
5 31	15 0.87	-8 41.2	2.121	3.067	8.2	19.7	5 31	14 57.97	-17 11.8	1.829	2.792	8.1	18.6
6 10	14 55.33	-8 19.0	2.185	3.063	11.3	19.9	6 10	14 51.44	-16 48.3	1.895	2.796	11.7	18.8
6 20	14 51.63	-8 9.6	2.269	3.059	13.9	20.1	6 20	14 47.19	-16 33.5	1.983	2.801	14.7	19.0
308439	2005 <i>SW</i> ₁₈₀		5 11.7 233°55	0°5/11.3 18			318407	2004 <i>YF</i> ₂₂		5 11.7 322°43	1°6/ 9.7 18		
4 11	15 35.86	-17 25.4	2.703	3.574	9.2	21.8	4 11	15 29.24	-10 50.5	4.071	4.947	6.2	20.8
4 21	15 30.23	-17 5.8	2.618	3.563	6.4	21.6	4 21	15 25.25	-10 28.8	3.996	4.943	4.4	20.7
5 1	15 23.25	-16 41.6	2.560	3.551	3.4	21.4	5 1	15 20.51	-10 7.1	3.950	4.938	2.5	20.5
5 11	15 15.52	-16 14.9	2.530	3.540	0.5	21.2	5 11	15 15.37	-9 47.1	3.932	4.934	1.7	20.5
5 21	15 7.69	-15 47.8	2.530	3.528	3.2	21.4	5 21	15 10.20	-9 30.3	3.944	4.930	3.0	20.5
5 31	15 0.44	-15 23.1	2.558	3.515	6.4	21.6	5 31	15 5.40	-9 18.0	3.985	4.926	4.9	20.7
6 10	14 54.38	-15 3.4	2.613	3.502	9.3	21.7	6 10	15 1.29	-9 11.4	4.052	4.922	6.7	20.8
6 20	14 49.92	-14 50.7	2.690	3.489	11.7	21.9	6 20	14 58.13	-9 11.1	4.142	4.918	8.3	20.9
370969	2005 <i>SB</i> ₁₇₆		5 11.7 51°66	1°1/10.9 17			211454	2003 <i>BF</i> ₃₃		5 11.7 140°62	2°2/10.1 18		
4 11	15 37.15	-18 58.0	1.507	2.396	14.0	20.1	4 11	15 36.33	-12 10.3	2.369	3.248	9.9	20.9
4 21	15 31.70	-17 54.0	1.452	2.405	9.8	19.9	4 21	15 30.58	-11 41.3	2.306	3.254	7.0	20.7
5 1	15 24.16	-16 40.0	1.420	2.414	5.1	19.6	5 1	15 23.43	-11 11.4	2.269	3.260	3.9	20.5
5 11	15 15.57	-15 21.5	1.414	2.423	1.1	19.3	5 11	15 15.57	-10 43.3	2.261	3.265	2.2	20.4
5 21	15 7.11	-14 5.3	1.434	2.433	5.1	19.6	5 21	15 7.73	-10 19.8	2.281	3.270	4.4	20.6
5 31	14 59.88	-12 58.5	1.480	2.443	9.6	19.9	5 31	15 0.62	-10 3.6	2.328	3.275	7.5	20.8
6 10	14 54.72	-12 6.3	1.549	2.453	13.6	20.2	6 10	14 54.87	-9 56.4	2.401	3.280	10.4	20.9
6 20	14 52.05	-11 31.3	1.637	2.463	17.0	20.4	6 20	14 50.85	-9 59.2	2.495	3.285	12.8	21.1
355262	2007 <i>OC</i> ₇		5 11.7 315°63	6°6/ 8.7 17			84047	2002 <i>PZ</i> ₅₉		5 11.7 244°13	4°3/ 8.9 17		
4 11	15 37.70	-6 51.8	1.153	2.059	16.0	19.9	4 11	15 39.18	-8 43.0	1.839	2.723	12.1	19.8
4 21	15 32.83	-5 58.3	1.085	2.042	11.9	19.6	4 21	15 33.04	-7 51.1	1.761	2.709	8.8	19.6
5 1	15 25.12	-5 8.1	1.038	2.025	7.9	19.4	5 1	15 24.94	-6 59.3	1.708	2.694	5.5	19.4
5 11	15 15.66	-4 29.0	1.013	2.009	6.7	19.2	5 11	15 15.69	-6 12.6	1.682	2.679	4.4	19.3
5 21	15 5.86	-4 8.2	1.010	1.993	9.8	19.4	5 21	15 6.27	-5 35.9	1.683	2.663	6.9	19.4
5 31	14 57.27	-4 10.6	1.030	1.978	14.4	19.6	5 31	14 57.69	-5 13.1	1.710	2.647	10.5	19.5
6 10	14 51.15	-4 37.5	1.068	1.964	19.0	19.8	6 10	14 50.83	-5 6.6	1.760	2.630	14.0	19.7
6 20	14 48.22	-5 26.9	1.122	1.951	22.9	20.0	6 20	14 46.23	-5 16.7	1.830	2.613	17.0	19.9
491067	2011 <i>QB</i> ₈₅		5 11.7 302°90	4°2/16.8 18			219664	2001 <i>VM</i> ₁₇		5 11.7 120°13	0°1/11.6 17		
4 11	15 32.90	-39 27.7	4.211	4.988	7.9	21.5	4 11	15 39.88	-19 37.7	2.093	2.963	11.5	21.5
4 21	15 27.97	-39 43.6	4.120	4.981	6.6	21.4	4 21	15 33.14	-19 5.6	2.038	2.981	8.0	21.3
5 1	15 22.00	-39 48.8	4.055	4.974	5.3	21.3	5 1	15 24.80	-18 26.3	2.008	2.999	4.2	21.1
5 11	15 15.45	-39 42.8	4.016	4.967	4.3	21.2	5 11	15 15.68	-17 42.5	2.006	3.016	0.3	20.8
5 21	15 8.82	-39 26.2	4.004	4.961	4.3	21.2	5 21	15 6.70	-16 57.8	2.033	3.032	3.7	21.1
5 31	15 2.63	-39 0.5	4.021	4.954	5.1	21.2	5 31	14 58.71	-16 16.3	2.088	3.048	7.4	21.4
6 10	14 57.34	-38 28.1	4.063	4.947	6.4	21.3	6 10	14 52.40	-15 41.8	2.168	3.063	10.7	21.6
6 20	14 53.30	-37 51.9	4.130	4.941	7.8	21.4	6 20	14 48.15	-15 16.8	2.271	3.078	13.4	21.8
438443	2006 <i>WJ</i> ₁₇₀		5 11.7 246°19	0°6/12.2 16			94938	2001 <i>YE</i> ₇₈		5 11.7 276°49	3°3/13.3 18		
4 11	15 35.71	-22 10.8	2.386	3.252	10.2	21.3	4 11	15 41.41	-26 39.5	1.465	2.335	15.5	19.1
4 21	15 30.28	-21 38.6	2.303	3.244	7.4	21.1	4 21	15 35.41	-26 38.2	1.377	2.315	11.6	18.8
5 1	15 23.33	-20 57.4	2.246	3.235	4.1	20.9	5 1	15 26.54	-26 19.9	1.311	2.294	7.3	18.5
5 11	15 15.54	-20 9.3	2.217	3.226	0.8	20.6	5 11	15 15.83	-25 44.4	1.269	2.274	3.5	18.2
5 21	15 7.69	-19 17.5	2.217	3.217	3.3	20.8	5 21	15 4.65	-24 54.0	1.252	2.253	5.3	18.3
5 31	15 0.55	-18 26.1	2.245	3.208	6.7	21.0	5 31	14 54.57	-23 55.2	1.261	2.231	10.0	18.5
6 10	14 54.79	-17 39.2	2.299	3.199	9.9	21.2	6 10	14 46.87	-22 56.3	1.292	2.210	14.7	18.7
6 20	14 50.85	-17 0.2	2.375	3.190	12.7	21.3	6 20	14 42.35	-22 4.7	1.342	2.188	18.9	18.9
475008	2005 <i>TG</i> ₁₆₅		5 11.7 230°59	1°9/13.0 18			141283	2001 <i>YV</i> ₅₈		5 11.7 274°00	1°5/10.8 18		
4 11	15 37.70	-24 40.6	2.540	3.395	10.2	22.0	4 11	15 37.59	-13 46.8	2.220	3.098	10.6	20.4
4 21	15 31.67	-24 50.2	2.458	3.389	7.5	21.8	4 21	15 31.73	-13 39.1	2.136	3.084	7.5	20.1
5 1	15 24.08	-24 51.5	2.401	3.383	4.5	21.6	5 1	15 24.19	-13 29.5	2.078	3.069	4.0	19.9
5 11	15 15.60	-24 44.6	2.372	3.377	2.1	21.5	5 11	15 15.66	-13 20.2	2.047	3.055	1.5	19.7
5 21	15 6.98	-24 30.9	2.372	3.370	3.4	21.5	5 21	15 6.96	-13 13.3	2.045	3.040	4.2	19.8
5 31	14 59.04	-24 12.9	2.400	3.363	6.4	21.7	5 31	14 58.93	-13 11.2	2.071	3.026	7.8	20.0
6 10	14 52.45	-23 53.9	2.454	3.357	9.3	21.9	6 10	14 52.32	-13 16.0	2.121	3.011	11.1	20.2
6 20	14 47.69	-23 37.1	2.531	3.350	11.9	22.1	6 20	14 47.64	-13 29.0	2.193	2.996	14.0	20.4
470225	2006 <i>WM</i> ₉₈		5 11.7 256°39	0°9/12.4 16			512590	2016 <i>SZ</i> ₄₈		5 11.7 271°38	6°1/ 6.9 18		
4 11	15 35.56	-23 31.9	2.292	3.158	10.8	21.2	4 11	15 36.05	+ 1 13.5	2.457	3.324	10.1	20.8
4 21	15 30.20	-22 50.2	2.212	3.151	7.8	21.0	4 21	15 30.46	+ 1 53.7	2.380	3.305	8.0	20.6
5 1	15 23.29	-21 57.8	2.156	3.144	4.3	20.7	5 1	15 23.45	+ 2 26.2	2.327	3.286	6.4	20.5
5 11	15 15.54	-20 57.1	2.129	3.138	1.0	20.5	5 11	15 15.61	+ 2 46.9	2.302	3.267	6.3	20.5
5 21	15 7.75	-19 51.8	2.130	3.131	3.3	20.6	5 21	15 7.65	+ 2 53.0	2.304	3.247	7.7	20.5
5 31	15 0.74	-18 46.8	2.159	3.124	6.9	20.9	5 31	15 0.28	+ 2 42.6	2.332	3.228	9.9	20.6
6 10	14 55.17	-17 46.9	2.214	3.117	10.1	21.0	6 10	14 54.15	+ 2 15.9	2.383	3.208	12.3	20.8
6 20	14 51.48	-16 55.8	2.292	3.110	13.0	21.2	6 20	14 49.67	+ 1 34.1	2.454	3.188	14.4	20.9
380596	2004 <i>SX</i> ₃		5 11.7 238°03	2°0/12.9 18			391384	2006 <i>WN</i> ₁₃₄		5 11.7 167°			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
350821	2002 <i>DT</i> ₁₅		5 11.7 137°31'	5°8'	6.0	18	357763	2005 <i>SF</i> ₁₁₉		5 11.7 204°56'	4°2'	7.2	18
4 11	15 34.46	+ 2 6.7	2.809	3.672	9.1	21.3	4 11	15 33.92	- 2 35.1	3.213	4.081	7.9	22.1
4 21	15 29.05	+ 3 8.0	2.763	3.683	7.3	21.2	4 21	15 28.66	- 1 41.8	3.143	4.075	6.0	22.0
5 1	15 22.56	+ 4 1.6	2.744	3.694	6.0	21.1	5 1	15 22.39	- 0 52.3	3.101	4.068	4.5	21.9
5 11	15 15.55	+ 4 43.5	2.752	3.704	6.0	21.1	5 11	15 15.58	- 0 9.7	3.088	4.061	4.3	21.9
5 21	15 8.60	+ 5 11.2	2.787	3.714	7.2	21.2	5 21	15 8.74	+ 0 23.3	3.103	4.054	5.6	22.0
5 31	15 2.28	+ 5 23.1	2.848	3.724	9.0	21.3	5 31	15 2.38	+ 0 44.8	3.147	4.046	7.5	22.1
6 10	14 57.06	+ 5 19.3	2.933	3.733	10.8	21.5	6 10	14 56.97	+ 0 53.8	3.215	4.037	9.5	22.2
6 20	14 53.26	+ 5 1.0	3.037	3.741	12.5	21.6	6 20	14 52.82	+ 0 50.7	3.304	4.028	11.2	22.3
285846	2001 <i>FO</i> ₁₀₈		5 11.7 53°88'	2°3'	12.8	18	355117	2006 <i>UY</i> ₈₈		5 11.7 235°30'	0°4'	12.0	18
4 11	15 41.47	-23 47.3	1.301	2.183	16.2	20.1	4 11	15 36.26	-21 1.7	2.468	3.335	10.1	21.7
4 21	15 35.10	-23 52.5	1.253	2.199	11.7	19.9	4 21	15 30.66	-20 37.0	2.384	3.326	7.2	21.5
5 1	15 26.12	-23 43.7	1.226	2.215	6.8	19.7	5 1	15 23.58	-20 4.8	2.327	3.316	3.9	21.3
5 11	15 15.79	-23 22.2	1.224	2.231	2.5	19.5	5 11	15 15.66	-19 26.8	2.297	3.307	0.5	21.0
5 21	15 5.61	-22 51.5	1.246	2.248	5.0	19.7	5 21	15 7.66	-18 45.8	2.296	3.297	3.2	21.2
5 31	14 56.99	-22 17.6	1.293	2.265	9.7	20.0	5 31	15 0.33	-18 5.3	2.324	3.287	6.6	21.4
6 10	14 50.95	-21 47.1	1.362	2.282	14.0	20.3	6 10	14 54.33	-17 29.0	2.378	3.276	9.7	21.6
6 20	14 47.96	-21 24.6	1.450	2.300	17.6	20.5	6 20	14 50.10	-16 59.8	2.454	3.265	12.4	21.8
286075	2001 <i>SQ</i> ₃₅₀		5 11.7 291°99'	2°2'	12.9	17	445259	2009 <i>RR</i> ₅₀		5 11.7 274°13'	1°6'	12.9	18
4 11	15 38.86	-24 2.4	2.055	2.918	11.9	20.5	4 11	15 36.02	-24 5.6	2.658	3.515	9.7	21.4
4 21	15 32.85	-24 20.2	1.972	2.908	8.8	20.3	4 21	15 30.49	-24 9.2	2.570	3.503	7.1	21.2
5 1	15 24.88	-24 29.0	1.914	2.898	5.3	20.1	5 1	15 23.50	-24 4.9	2.507	3.491	4.2	21.0
5 11	15 15.72	-24 28.6	1.882	2.888	2.3	19.8	5 11	15 15.66	-23 53.4	2.473	3.479	1.8	20.8
5 21	15 6.35	-24 20.2	1.878	2.878	4.0	19.9	5 21	15 7.67	-23 35.9	2.467	3.467	3.1	20.9
5 31	14 57.77	-24 6.6	1.902	2.868	7.6	20.1	5 31	15 0.28	-23 15.1	2.490	3.454	6.1	21.0
6 10	14 50.86	-23 51.8	1.950	2.858	11.0	20.3	6 10	14 54.14	-22 54.1	2.539	3.442	9.0	21.2
6 20	14 46.18	-23 39.6	2.020	2.848	14.1	20.5	6 20	14 49.69	-22 35.8	2.610	3.429	11.5	21.4
845	<i>Naëma</i>		5 11.7 261°81'	1°0'	12.3	18	433372	2013 <i>SZ</i> ₄₉		5 11.7 222°36'	0°3'	11.5	18
4 11	15 39.65	-20 28.6	2.133	3.001	11.4	14.9	4 11	15 39.03	-19 8.1	2.414	3.281	10.3	22.0
4 21	15 33.28	-20 46.0	2.054	2.995	8.2	14.7	4 21	15 32.63	-18 35.4	2.326	3.269	7.3	21.7
5 1	15 25.06	-20 57.3	1.999	2.988	4.5	14.5	5 1	15 24.65	-17 55.6	2.265	3.256	3.9	21.5
5 11	15 15.75	-21 2.8	1.972	2.981	1.1	14.2	5 11	15 15.75	-17 10.8	2.232	3.242	0.3	21.2
5 21	15 6.25	-21 3.8	1.974	2.974	3.6	14.4	5 21	15 6.73	-16 24.4	2.229	3.227	3.5	21.4
5 31	14 57.53	-21 2.4	2.003	2.968	7.4	14.6	5 31	14 58.41	-15 40.0	2.254	3.212	7.1	21.6
6 10	14 50.40	-21 1.8	2.058	2.961	10.8	14.8	6 10	14 51.48	-15 1.6	2.306	3.195	10.3	21.8
6 20	14 45.40	-21 4.7	2.135	2.954	13.8	15.0	6 20	14 46.43	-14 32.0	2.380	3.178	13.1	22.0
467141	2016 <i>EV</i> ₇₉		5 11.7 86°46'	0°4'	11.6	17	17975	1999 <i>JB</i> ₅₃		5 11.7 240°03'	1°8'	10.4	18
4 11	15 42.51	-17 7.2	1.467	2.352	14.5	20.9	4 11	15 37.86	-15 20.4	2.082	2.961	11.1	18.8
4 21	15 35.68	-17 13.8	1.409	2.360	10.3	20.7	4 21	15 31.98	-14 31.9	2.000	2.948	7.8	18.6
5 1	15 26.43	-17 14.9	1.374	2.367	5.4	20.4	5 1	15 24.35	-13 37.9	1.943	2.935	4.2	18.4
5 11	15 15.84	-17 12.3	1.364	2.374	0.5	20.0	5 11	15 15.73	-12 42.0	1.914	2.921	1.8	18.2
5 21	15 5.23	-17 8.3	1.381	2.381	4.8	20.4	5 21	15 6.98	-11 48.6	1.913	2.906	4.7	18.3
5 31	14 55.91	-17 6.5	1.423	2.388	9.6	20.7	5 31	14 59.00	-11 2.3	1.939	2.891	8.5	18.5
6 10	14 48.89	-17 10.2	1.488	2.395	13.8	21.0	6 10	14 52.56	-10 26.9	1.991	2.876	11.9	18.7
6 20	14 44.71	-17 21.8	1.572	2.402	17.3	21.2	6 20	14 48.15	-10 4.5	2.063	2.860	14.9	18.9
284585	2007 <i>TX</i> ₁₇₆		5 11.7 286°65'	2°0'	10.3	17	457321	2008 <i>SC</i> ₁₀₁		5 11.7 167°28'	2°9'	10.1	16
4 11	15 35.89	-14 40.1	1.969	2.855	11.4	21.0	4 11	15 41.81	-12 55.8	1.564	2.450	13.7	21.7
4 21	15 30.59	-13 54.9	1.898	2.850	8.0	20.7	4 21	15 35.02	-12 12.0	1.503	2.454	9.7	21.5
5 1	15 23.58	-13 5.3	1.852	2.845	4.3	20.5	5 1	15 26.02	-11 25.2	1.466	2.458	5.4	21.2
5 11	15 15.64	-12 15.2	1.833	2.840	2.0	20.3	5 11	15 15.84	-10 40.2	1.455	2.460	3.0	21.1
5 21	15 7.65	-11 29.0	1.841	2.835	4.9	20.5	5 21	15 5.67	-10 1.8	1.471	2.462	6.1	21.3
5 31	15 0.49	-10 51.0	1.876	2.830	8.6	20.7	5 31	14 56.69	- 9 34.9	1.513	2.464	10.4	21.5
6 10	14 54.91	-10 24.3	1.935	2.825	12.0	20.9	6 10	14 49.82	- 9 22.4	1.577	2.465	14.3	21.8
6 20	14 51.37	-10 10.7	2.015	2.820	14.9	21.1	6 20	14 45.56	- 9 25.1	1.600	2.465	17.6	22.0
486682	2013 <i>TA</i> ₉₈		5 11.7 95°34'	13°3'	14.1	18	317915	2003 <i>UW</i> ₃₀₃		5 11.7 113°30'	3°3'	13.6	17
4 11	16 0.11	-37 5.6	1.061	1.895	22.5	20.6	4 11	15 44.14	-27 28.1	1.746	2.600	14.1	21.5
4 21	15 50.44	-39 58.7	1.010	1.906	18.9	20.4	4 21	15 36.58	-27 37.2	1.690	2.618	10.5	21.3
5 1	15 35.37	-42 26.3	0.979	1.917	15.4	20.2	5 1	15 26.80	-27 31.6	1.657	2.635	6.6	21.1
5 11	15 16.50	-44 12.0	0.970	1.928	13.4	20.1	5 11	15 15.89	-27 11.4	1.650	2.652	3.6	20.9
5 21	14 56.68	-45 6.7	0.983	1.938	13.9	20.2	5 21	15 5.08	-26 39.0	1.671	2.668	4.7	21.1
5 31	14 39.21	-45 13.8	1.017	1.948	16.4	20.4	5 31	14 55.58	-25 59.6	1.718	2.683	8.3	21.3
6 10	14 26.56	-44 48.2	1.070	1.958	19.6	20.6	6 10	14 48.28	-25 19.3	1.790	2.698	11.9	21.5
6 20	14 19.69	-44 6.7	1.139	1.968	22.7	20.8	6 20	14 43.67	-24 43.3	1.884	2.713	14.9	21.8
272575	2005 <i>VM</i> ₆		5 11.7 129°31'	1°1'	12.3	17	188026	2001 <i>UE</i> ₇₉		5 11.7 267°85'	1°4'	9.6	18
4 11	15 42.56	-20 51.3	1.986	2.851	12.2	21.4	4 11	15 28.67	-12 24.9	4.379	5.254	5.8	19.9
4 21	15 35.28	-21 7.8	1.922	2.862	8.7	21.2	4 21	15 24.84	-11 41.3	4.305	5.251	4.1	19.7
5 1	15 26.07	-21 16.9	1.884	2.873	4.8	21.0	5 1	15 20.32	-10 56.7	4.258	5.248	2.3	19.6
5 11	15 15.82	-21 19.2	1.874	2.882	1.2	20.7	5 11	15 15.46	-10 12.8	4.242	5.245	1.5	19.5
5 21	15 5.55	-21 16.1	1.892	2.892	3.8	20.9	5 21	15 10.58	- 9 31.8	4.256	5.242	2.8	19.6
5 31	14 56.29	-21 10.4	1.938	2.901	7.6	21.2	5 31	15 6.05	- 8 55.4	4.299	5.238	4.6	19.8
6 10	14 48.85	-21 5.5	2.009	2.910	11.1	21.4	6 10	15 2.17	- 8 25.0	4.368	5.235	6.3	19.9
6 20	14 43.73	-21 4.5	2.102	2.918	14.0	21.6	6 20	14 59.17	- 8 1.5	4.462	5.232	7.9	20.0
83624	2001 <i>SH</i> ₃₁₃		5 11.7 223°27'	3°0'	9.7	18	45206	1999 <i>XK</i> ₁₇₄		5 11.7 229			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
496046	2008 <i>WN</i> ₁₀₆		5 11.7 205 ^o 77	0 ^o 1/11.8 18			374351	2005 <i>US</i> ₁₅₅		5 11.7 219 ^o 34	2 ^o 0/10.4 18		
4 11	15 40.50	-18 8.1	2.392	3.258	10.4	21.7	4 11	15 40.13	-12 49.5	2.238	3.113	10.6	22.4
4 21	15 33.69	-18 14.3	2.312	3.253	7.3	21.5	4 21	15 33.49	-12 28.0	2.157	3.103	7.5	22.2
5 1	15 25.22	-18 16.2	2.258	3.248	3.9	21.3	5 1	15 25.16	-12 4.5	2.101	3.092	4.2	21.9
5 11	15 15.81	-18 14.4	2.232	3.242	0.3	21.0	5 11	15 15.84	-11 41.8	2.074	3.080	2.0	21.8
5 21	15 6.25	-18 10.6	2.236	3.235	3.4	21.2	5 21	15 6.38	-11 22.6	2.076	3.068	4.6	21.9
5 31	14 57.41	-18 6.9	2.269	3.228	6.9	21.4	5 31	14 57.66	-11 9.7	2.106	3.055	8.1	22.1
6 10	14 50.00	-18 5.8	2.328	3.221	10.1	21.6	6 10	14 50.40	-11 5.5	2.162	3.042	11.3	22.3
6 20	14 44.51	-18 9.5	2.409	3.213	12.8	21.8	6 20	14 45.12	-11 11.1	2.239	3.027	14.1	22.5
50254	2000 <i>BC</i> ₂₅		5 11.7 224 ^o 37	0 ^o 8/11.3 18			446676	2015 <i>OS</i> ₂		5 11.7 350 ^o 27	7 ^o 1/16.7 18		
4 11	15 42.62	-17 47.1	1.627	2.506	13.7	19.4	4 11	15 34.93	-37 21.9	1.627	2.462	15.9	19.6
4 21	15 35.79	-17 19.0	1.548	2.496	9.7	19.2	4 21	15 30.64	-37 27.6	1.550	2.453	13.0	19.4
5 1	15 26.56	-16 42.8	1.493	2.486	5.2	18.9	5 1	15 23.90	-37 8.8	1.493	2.445	9.9	19.2
5 11	15 15.90	-16 1.4	1.465	2.475	0.8	18.5	5 11	15 15.75	-36 24.1	1.459	2.438	7.6	19.0
5 21	15 5.04	-15 19.2	1.464	2.463	5.0	18.8	5 21	15 7.46	-35 15.6	1.449	2.432	7.4	19.0
5 31	14 55.22	-14 41.4	1.489	2.450	9.7	19.0	5 31	15 0.36	-33 49.6	1.464	2.427	9.6	19.1
6 10	14 47.51	-14 13.0	1.538	2.436	14.0	19.3	6 10	14 55.49	-32 15.5	1.501	2.424	12.7	19.3
6 20	14 42.50	-13 57.2	1.606	2.422	17.7	19.5	6 20	14 53.43	-30 42.4	1.559	2.421	15.9	19.5
345996	2007 <i>TV</i> ₁₈₄		5 11.7 205 ^o 21	1 ^o 3/10.8 17			127214	2002 <i>HC</i> ₁₅		5 11.7 305 ^o 08	0 ^o 4/11.5 18		
4 11	15 36.96	-15 39.4	2.205	3.083	10.6	21.6	4 11	15 35.74	-17 49.5	2.200	3.078	10.7	19.7
4 21	15 31.21	-15 10.1	2.133	3.081	7.5	21.4	4 21	15 30.47	-17 36.1	2.120	3.067	7.5	19.5
5 1	15 23.89	-14 36.6	2.086	3.078	4.0	21.2	5 1	15 23.57	-17 17.6	2.064	3.057	4.0	19.3
5 11	15 15.71	-14 1.9	2.067	3.075	1.3	21.0	5 11	15 15.73	-16 55.8	2.036	3.046	0.4	19.0
5 21	15 7.48	-13 29.0	2.076	3.072	4.1	21.2	5 21	15 7.76	-16 33.2	2.036	3.036	3.7	19.2
5 31	15 0.03	-13 1.3	2.113	3.069	7.6	21.4	5 31	15 0.50	-16 13.1	2.064	3.026	7.3	19.4
6 10	14 54.02	-12 41.8	2.175	3.065	10.9	21.6	6 10	14 54.67	-15 58.4	2.116	3.016	10.7	19.6
6 20	14 49.92	-12 32.2	2.259	3.061	13.6	21.8	6 20	14 50.74	-15 51.3	2.190	3.006	13.5	19.8
434840	2006 <i>ST</i> ₉₇		5 11.7 260 ^o 02	0 ^o 6/12.1 18			480417	2015 <i>KZ</i> ₉₈		5 11.7 245 ^o 59	3 ^o 5/ 9.7 17		
4 11	15 37.47	-20 41.3	2.289	3.157	10.7	21.6	4 11	15 38.33	- 7 22.0	2.199	3.077	10.7	21.2
4 21	15 31.67	-20 33.6	2.202	3.144	7.6	21.3	4 21	15 32.18	- 7 10.6	2.129	3.073	7.7	21.0
5 1	15 24.20	-20 18.7	2.141	3.131	4.2	21.1	5 1	15 24.43	- 7 2.5	2.083	3.068	4.8	20.8
5 11	15 15.74	-19 58.1	2.108	3.117	0.7	20.8	5 11	15 15.80	- 7 0.2	2.066	3.063	3.6	20.7
5 21	15 7.12	-19 33.8	2.103	3.103	3.4	21.0	5 21	15 7.08	- 7 6.0	2.076	3.059	5.5	20.9
5 31	14 59.18	-19 9.1	2.126	3.089	7.0	21.2	5 31	14 59.11	- 7 21.5	2.114	3.054	8.6	21.0
6 10	14 52.68	-18 47.3	2.174	3.075	10.4	21.4	6 10	14 52.58	- 7 47.2	2.177	3.049	11.6	21.2
6 20	14 48.12	-18 31.5	2.245	3.061	13.3	21.6	6 20	14 47.94	- 8 23.0	2.260	3.044	14.2	21.4
233741	2008 <i>SN</i> ₂₇₁		5 11.7 165 ^o 76	0 ^o 8/11.2 17			458806	2011 <i>SN</i> ₂₂₁		5 11.7 191 ^o 26	2 ^o 8/13.1 16		
4 11	15 38.03	-17 12.8	2.012	2.890	11.5	21.6	4 11	15 44.67	-25 16.7	1.677	2.538	14.3	22.2
4 21	15 32.08	-16 50.2	1.944	2.892	8.1	21.4	4 21	15 37.28	-25 30.2	1.603	2.537	10.6	21.9
5 1	15 24.38	-16 22.2	1.900	2.893	4.3	21.2	5 1	15 27.38	-25 30.9	1.553	2.536	6.4	21.7
5 11	15 15.75	-15 51.4	1.885	2.894	0.8	20.9	5 11	15 16.01	-25 18.3	1.529	2.534	3.0	21.4
5 21	15 7.09	-15 21.0	1.897	2.895	4.1	21.2	5 21	15 4.46	-24 54.2	1.532	2.531	4.7	21.5
5 31	14 59.31	-14 54.6	1.936	2.896	7.9	21.4	5 31	14 54.08	-24 23.3	1.561	2.527	8.9	21.8
6 10	14 53.16	-14 35.5	2.000	2.897	11.3	21.6	6 10	14 45.93	-23 51.4	1.615	2.523	12.9	22.0
6 20	14 49.10	-14 25.8	2.085	2.897	14.3	21.8	6 20	14 40.63	-23 24.1	1.690	2.518	16.4	22.2
357960	2006 <i>BR</i> ₂		5 11.7 80 ^o 20	3 ^o 8/13.8 18			377337	2004 <i>PK</i> ₇₁		5 11.7 308 ^o 94	4 ^o 2/ 9.4 17		
4 11	15 42.31	-28 25.4	1.331	2.200	16.8	20.1	4 11	15 37.16	- 9 51.3	1.517	2.413	13.5	19.9
4 21	15 35.78	-28 14.5	1.276	2.212	12.5	19.9	4 21	15 32.00	- 9 8.5	1.443	2.397	9.7	19.6
5 1	15 26.55	-27 43.4	1.243	2.224	7.9	19.7	5 1	15 24.58	- 8 25.4	1.391	2.381	5.9	19.4
5 11	15 15.91	-26 53.4	1.234	2.237	4.1	19.5	5 11	15 15.82	- 7 47.3	1.364	2.365	4.3	19.2
5 21	15 5.40	-25 49.3	1.249	2.249	5.4	19.6	5 21	15 6.81	- 7 19.5	1.363	2.350	7.2	19.4
5 31	14 56.51	-24 39.3	1.290	2.261	9.7	19.9	5 31	14 58.77	- 7 6.3	1.386	2.335	11.4	19.6
6 10	14 50.27	-23 32.4	1.353	2.274	14.0	20.1	6 10	14 52.68	- 7 10.1	1.430	2.321	15.4	19.8
6 20	14 47.17	-22 35.4	1.435	2.286	17.7	20.4	6 20	14 49.17	- 7 31.1	1.493	2.307	18.9	19.9
412160	2013 <i>GM</i> ₈₂		5 11.7 14 ^o 54	0 ^o 8/11.3 17			227359	2005 <i>UP</i> ₁₃₁		5 11.7 180 ^o 36	6 ^o 9/ 6.3 17		
4 11	15 37.41	-18 56.1	1.122	2.024	16.6	20.6	4 11	15 37.73	+ 0 48.5	2.168	3.038	11.1	21.2
4 21	15 32.56	-18 15.6	1.068	2.027	11.7	20.3	4 21	15 31.67	+ 2 0.5	2.112	3.039	8.8	21.0
5 1	15 24.94	-17 23.7	1.034	2.030	6.2	20.0	5 1	15 24.12	+ 3 4.4	2.082	3.040	7.1	20.9
5 11	15 15.80	-16 25.3	1.023	2.033	0.8	19.6	5 11	15 15.78	+ 3 54.6	2.079	3.040	7.1	20.9
5 21	15 6.67	-15 27.7	1.036	2.038	5.8	20.0	5 21	15 7.46	+ 4 27.2	2.103	3.040	8.7	21.0
5 31	14 59.06	-14 38.5	1.072	2.043	11.3	20.3	5 31	14 59.94	+ 4 39.9	2.151	3.039	11.0	21.2
6 10	14 54.06	-14 4.0	1.128	2.049	16.1	20.6	6 10	14 53.88	+ 4 32.8	2.222	3.037	13.4	21.3
6 20	14 52.20	-13 47.0	1.201	2.055	20.2	20.9	6 20	14 49.68	+ 4 7.7	2.312	3.035	15.5	21.5
380066	2013 <i>SQ</i> ₂₂		5 11.7 197 ^o 04	1 ^o 5/12.7 17			78131	2002 <i>NV</i> ₁₂		5 11.7 238 ^o 29	4 ^o 1/14.9 18		
4 11	15 39.20	-23 56.3	1.933	2.799	12.5	21.0	4 11	15 39.49	-32 35.0	2.354	3.183	11.8	20.6
4 21	15 33.05	-23 36.5	1.859	2.798	9.0	20.8	4 21	15 33.20	-32 31.3	2.263	3.170	9.2	20.4
5 1	15 24.97	-23 5.0	1.809	2.796	5.2	20.6	5 1	15 25.06	-32 12.0	2.195	3.157	6.5	20.2
5 11	15 15.82	-22 23.6	1.786	2.794	1.7	20.3	5 11	15 15.85	-31 36.9	2.154	3.144	4.4	20.0
5 21	15 6.60	-21 35.7	1.791	2.792	3.8	20.5	5 21	15 6.49	-30 47.7	2.141	3.130	4.7	20.0
5 31	14 58.35	-20 46.0	1.823	2.789	7.8	20.7	5 31	14 57.94	-29 48.4	2.156	3.116	7.2	20.2
6 10	14 51.89	-19 59.9	1.879	2.786	11.4	20.9	6 10	14 51.01	-28 44.6	2.197	3.102	10.1	20.3
6 20	14 47.73	-19 21.7	1.958	2.783	14.6	21.1	6						

EPHEMERIDES

5 11.7

5 11.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
211942	2004 <i>XM</i> ₆₄		5 11.7 149°77	1.4/12.5	16		114728	2003 <i>HP</i> ₃		5 11.8 284°48	3°3/ 9.7	18	
4 11	15 42.93	-22 48.6	1.704	2.572	13.7	21.2	4 11	15 39.01	-14 8.6	1.420	2.314	14.3	19.1
4 21	15 35.82	-22 41.6	1.640	2.580	9.9	21.0	4 21	15 33.61	-12 59.8	1.333	2.288	10.3	18.8
5 1	15 26.48	-22 23.4	1.599	2.587	5.6	20.7	5 1	15 25.60	-11 42.0	1.269	2.262	5.8	18.5
5 11	15 15.95	-21 55.3	1.585	2.593	1.6	20.5	5 11	15 15.94	-10 21.5	1.230	2.235	3.4	18.2
5 21	15 5.42	-21 20.5	1.598	2.599	4.2	20.7	5 21	15 5.85	-9 6.0	1.217	2.209	7.1	18.4
5 31	14 56.07	-20 43.9	1.639	2.605	8.5	20.9	5 31	14 56.73	-8 3.7	1.228	2.182	12.1	18.6
6 10	14 48.85	-20 10.8	1.703	2.610	12.5	21.2	6 10	14 49.76	-7 20.7	1.261	2.154	16.8	18.8
6 20	14 44.25	-19 45.5	1.788	2.614	15.8	21.4	6 20	14 45.67	-6 59.7	1.311	2.127	20.9	19.0
235949	2005 <i>EE</i> ₁₅₉		5 11.8 174°32	0°8/11.2	18		58905	1998 <i>KE</i> ₁₁		5 11.8 315°87	7°2/ 5.9	18	
4 11	15 37.28	-17 19.8	2.153	3.030	10.9	21.3	4 11	15 34.14	+ 0 47.3	2.045	2.923	11.3	18.9
4 21	15 31.48	-16 51.7	2.083	3.031	7.7	21.0	4 21	15 29.32	+ 1 58.7	1.983	2.914	9.0	18.7
5 1	15 24.06	-16 18.2	2.039	3.032	4.0	20.8	5 1	15 22.95	+ 3 2.1	1.945	2.905	7.4	18.6
5 11	15 15.79	-15 42.0	2.023	3.032	0.8	20.6	5 11	15 15.74	+ 3 51.4	1.933	2.896	7.4	18.6
5 21	15 7.49	-15 6.2	2.035	3.033	3.9	20.8	5 21	15 8.47	+ 4 22.5	1.947	2.887	9.1	18.7
5 31	15 0.00	-14 34.6	2.074	3.033	7.5	21.0	5 31	15 1.95	+ 4 32.7	1.985	2.879	11.5	18.8
6 10	14 54.03	-14 10.4	2.139	3.033	10.8	21.2	6 10	14 56.84	+ 4 21.9	2.044	2.870	14.0	18.9
6 20	14 50.01	-13 55.6	2.225	3.033	13.6	21.4	6 20	14 53.59	+ 3 52.0	2.122	2.862	16.2	19.1
152652	1997 <i>WG</i> ₈		5 11.8 150°00	0°4/11.9	17		283553	2001 <i>UJ</i> ₂₂₅		5 11.8 210°78	2°3/ 8.5	18	
4 11	15 42.96	-18 46.5	2.069	2.935	11.7	20.9	4 11	15 28.73	- 6 23.1	4.637	5.510	5.6	21.3
4 21	15 35.54	-18 59.6	2.002	2.944	8.3	20.7	4 21	15 24.88	- 5 54.9	4.567	5.508	4.1	21.2
5 1	15 26.26	-19 7.3	1.961	2.951	4.5	20.5	5 1	15 20.39	- 5 28.4	4.525	5.505	2.7	21.1
5 11	15 15.95	-19 10.3	1.949	2.959	0.5	20.2	5 11	15 15.57	- 5 5.2	4.513	5.502	2.3	21.0
5 21	15 5.60	-19 9.9	1.965	2.965	3.7	20.5	5 21	15 10.73	- 4 46.6	4.529	5.499	3.3	21.1
5 31	14 56.19	-19 8.7	2.010	2.971	7.6	20.7	5 31	15 6.20	- 4 33.9	4.574	5.496	4.8	21.2
6 10	14 48.53	-19 9.6	2.080	2.977	11.0	20.9	6 10	15 2.27	- 4 27.9	4.645	5.493	6.3	21.3
6 20	14 43.10	-19 14.9	2.172	2.982	13.9	21.2	6 20	14 59.16	- 4 28.8	4.740	5.490	7.7	21.4
498151	2007 <i>TO</i> ₁₀₉		5 11.8 272°21	1°2/11.1	17		40392	1999 <i>NS</i> ₅₃		5 11.8 261°52	4°2/ 8.4	18	
4 11	15 39.87	-18 21.3	1.523	2.409	14.1	21.7	4 11	15 36.91	- 9 20.3	2.031	2.915	11.1	19.2
4 21	15 34.08	-17 30.4	1.435	2.387	10.0	21.4	4 21	15 31.38	- 8 5.9	1.948	2.896	8.1	18.9
5 1	15 25.79	-16 27.9	1.371	2.365	5.4	21.1	5 1	15 24.12	- 6 49.5	1.891	2.877	5.2	18.7
5 11	15 15.93	-15 18.0	1.333	2.342	1.2	20.7	5 11	15 15.84	- 5 36.6	1.862	2.857	4.3	18.6
5 21	15 5.72	-14 6.7	1.321	2.319	5.4	21.0	5 21	15 7.40	- 4 32.8	1.860	2.837	6.7	18.7
5 31	14 56.50	-13 1.6	1.334	2.295	10.5	21.2	5 31	14 59.69	- 3 43.1	1.885	2.816	10.0	18.9
6 10	14 49.38	-12 9.3	1.370	2.272	15.2	21.4	6 10	14 53.48	- 3 10.6	1.934	2.795	13.3	19.0
6 20	14 45.06	-11 33.9	1.425	2.248	19.2	21.6	6 20	14 49.27	- 2 56.1	2.002	2.773	16.1	19.2
44416	1998 <i>ST</i> ₁₄₃		5 11.8 227°54	0°2/11.9	18		311225	2005 <i>AQ</i> ₇₆		5 11.8 88°97	3°7/10.0	17	
4 11	15 37.66	-20 14.8	2.173	3.044	11.1	19.9	4 11	15 41.02	-10 25.7	1.440	2.332	14.3	20.4
4 21	15 31.82	-19 51.5	2.094	3.037	7.9	19.7	4 21	15 34.60	- 9 57.4	1.386	2.338	10.2	20.2
5 1	15 24.30	-19 20.4	2.040	3.031	4.2	19.4	5 1	15 25.89	- 9 29.9	1.354	2.345	5.9	20.0
5 11	15 15.82	-18 43.6	2.014	3.023	0.4	19.1	5 11	15 15.96	- 9 7.6	1.348	2.351	3.8	19.9
5 21	15 7.25	-18 4.2	2.016	3.016	3.6	19.4	5 21	15 6.06	- 8 54.7	1.367	2.358	6.7	20.0
5 31	14 59.46	-17 26.1	2.046	3.009	7.3	19.6	5 31	14 57.43	- 8 54.4	1.412	2.364	10.9	20.3
6 10	14 53.20	-16 53.2	2.101	3.001	10.7	19.8	6 10	14 51.00	- 9 8.1	1.478	2.370	14.9	20.6
6 20	14 48.93	-16 28.5	2.178	2.993	13.7	20.0	6 20	14 47.26	- 9 35.7	1.562	2.376	18.2	20.8
432020	2008 <i>VH</i> ₃₄		5 11.8 11°54	2°5/10.3	17		309681	2008 <i>ES</i> ₁₁₁		5 11.8 135°79	6°3/ 6.3	18	
4 11	15 37.37	-12 46.4	1.800	2.688	12.1	21.0	4 11	15 34.43	+ 0 40.3	2.396	3.268	10.1	20.6
4 21	15 31.75	-12 16.4	1.736	2.688	8.6	20.7	4 21	15 29.27	+ 1 45.3	2.343	3.271	8.0	20.5
5 1	15 24.29	-11 44.5	1.697	2.688	4.8	20.5	5 1	15 22.83	+ 2 42.7	2.316	3.274	6.5	20.4
5 11	15 15.82	-11 14.4	1.683	2.689	2.5	20.4	5 11	15 15.74	+ 3 27.8	2.315	3.277	6.4	20.4
5 21	15 7.31	-10 49.8	1.697	2.690	5.3	20.5	5 21	15 8.67	+ 3 57.3	2.342	3.280	7.9	20.5
5 31	14 59.75	-10 34.1	1.737	2.691	9.1	20.8	5 31	15 2.30	+ 4 9.2	2.393	3.282	10.0	20.6
6 10	14 53.92	-10 29.8	1.800	2.692	12.7	21.0	6 10	14 57.18	+ 4 3.4	2.467	3.285	12.1	20.8
6 20	14 50.30	-10 37.6	1.884	2.693	15.7	21.2	6 20	14 53.67	+ 3 41.5	2.561	3.287	14.1	20.9
310515	2000 <i>XS</i> ₁₈		5 11.8 130°72	4°5/14.7	18		381877	2010 <i>AB</i> ₅₆		5 11.8 133°70	5°3/ 8.3	17	
4 11	15 45.61	-31 46.1	1.964	2.796	13.7	21.9	4 11	15 37.58	- 4 23.2	1.970	2.851	11.5	20.6
4 21	15 37.54	-31 57.2	1.904	2.814	10.6	21.7	4 21	15 31.71	- 3 37.5	1.913	2.855	8.6	20.4
5 1	15 27.34	-31 51.1	1.867	2.831	7.3	21.5	5 1	15 24.21	- 2 57.0	1.881	2.859	6.0	20.2
5 11	15 16.03	-31 27.4	1.856	2.848	4.8	21.4	5 11	15 15.86	- 2 26.3	1.876	2.863	5.4	20.2
5 21	15 4.83	-30 48.1	1.874	2.863	5.2	21.5	5 21	15 7.53	- 2 8.9	1.898	2.866	7.3	20.3
5 31	14 54.87	-29 58.3	1.919	2.878	8.0	21.7	5 31	15 0.08	- 2 7.2	1.946	2.870	10.1	20.5
6 10	14 47.06	-29 4.5	1.989	2.892	11.1	21.9	6 10	14 54.22	- 2 21.4	2.016	2.873	13.0	20.7
6 20	14 41.84	-28 13.0	2.082	2.905	13.9	22.1	6 20	14 50.35	- 2 50.5	2.107	2.876	15.5	20.9
33284	1998 <i>HD</i> ₁₅₃		5 11.8 242°02	6°3/ 6.8	18		310219	2011 <i>SS</i> ₁₉₄		5 11.8 188°74	0°1/11.7	18	
4 11	15 37.13	- 1 40.3	2.100	2.976	11.2	17.7	4 11	15 35.40	-19 58.2	2.503	3.372	9.8	20.6
4 21	15 31.42	- 0 30.7	2.028	2.963	8.6	17.5	4 21	15 30.02	-19 18.7	2.428	3.372	6.9	20.4
5 1	15 24.08	+ 0 33.5	1.982	2.950	6.7	17.3	5 1	15 23.27	-18 32.1	2.380	3.371	3.7	20.2
5 11	15 15.81	+ 1 26.5	1.964	2.936	6.5	17.3	5 11	15 15.80	-17 41.1	2.361	3.370	0.3	19.9
5 21	15 7.44	+ 2 3.8	1.971	2.921	8.3	17.4	5 21	15 8.32	-16 48.8	2.370	3.369	3.2	20.1
5 31	14 59.80	+ 2 22.2	2.005	2.907	11.0	17.5	5 31	15 1.54	-15 59.2	2.408	3.368	6.5	20.3
6 10	14 53.62	+ 2 21.0	2.060	2.891	13.7	17.7	6 10	14 56.06	-15 15.8	2.472	3.367	9.5	20.5
6 20	14 49.36	+ 2 1.3	2.135	2.876	16.1	17.8	6 20	14 52.27	-14 41.2	2.558	3.365	12.1	20.7
416752	2005 <i>EL</i> ₁₂₆		5 11.8 32°87	2°1/10.7	17		133595	2003 <i>US</i> <					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
80669	2000 <i>BR</i> ₁₅		5 11.8 208°43	1°3/11.1	17		186003	2001 <i>QD</i> ₄₉		5 11.8 314°74	0°7/12.1	17	
4 11	15 41.59	-15 8.5	1.933	2.809	12.0	20.0	4 11	15 37.70	-20 38.5	1.351	2.242	15.1	20.3
4 21	15 34.76	-14 56.1	1.857	2.804	8.5	19.8	4 21	15 32.88	-20 28.6	1.267	2.220	11.0	20.0
5 1	15 25.95	-14 40.2	1.807	2.798	4.5	19.5	5 1	15 25.33	-20 7.6	1.205	2.198	6.1	19.7
5 11	15 16.00	-14 22.9	1.783	2.792	1.3	19.3	5 11	15 16.00	-19 37.1	1.166	2.176	0.9	19.3
5 21	15 5.92	-14 7.0	1.788	2.785	4.5	19.5	5 21	15 6.21	-19 0.8	1.152	2.155	5.0	19.5
5 31	14 56.72	-13 55.7	1.821	2.778	8.6	19.7	5 31	14 57.45	-18 24.7	1.162	2.135	10.5	19.7
6 10	14 49.27	-13 51.9	1.878	2.769	12.2	19.9	6 10	14 51.00	-17 55.1	1.194	2.115	15.4	20.0
6 20	14 44.11	-13 57.3	1.956	2.761	15.3	20.1	6 20	14 47.61	-17 36.8	1.243	2.096	19.7	20.2
140231	2001 <i>SQ</i> ₂₄₅		5 11.8 281°28	1°1/11.0	18		35284	1996 <i>TM</i> ₃		5 11.8 302°22	4°8/9.1	18	
4 11	15 36.38	-16 32.7	2.097	2.978	11.0	20.1	4 11	15 37.58	-10 36.9	1.328	2.229	14.7	17.7
4 21	15 31.01	-16 4.2	2.015	2.964	7.8	19.8	4 21	15 32.55	-9 30.5	1.258	2.214	10.6	17.4
5 1	15 23.93	-15 30.3	1.957	2.950	4.1	19.6	5 1	15 25.01	-8 21.2	1.209	2.200	6.5	17.1
5 11	15 15.86	-14 53.9	1.927	2.936	1.1	19.3	5 11	15 15.97	-7 16.3	1.185	2.186	4.9	17.0
5 21	15 7.63	-14 18.4	1.925	2.922	4.2	19.5	5 21	15 6.70	-6 23.2	1.185	2.172	8.1	17.1
5 31	15 0.14	-13 47.4	1.949	2.908	7.9	19.7	5 31	14 58.53	-5 48.3	1.209	2.158	12.7	17.3
6 10	14 54.15	-13 24.5	1.999	2.894	11.4	19.9	6 10	14 52.59	-5 35.2	1.253	2.145	17.0	17.5
6 20	14 50.14	-13 11.8	2.069	2.880	14.4	20.1	6 20	14 49.48	-5 44.0	1.314	2.132	20.7	17.8
673	Edda		5 11.8 128°89	0°1/11.7	18		477213	2009 <i>JT</i> ₁₆		5 11.8 347°34	0°3/11.6	17	
4 11	15 37.32	-19 32.6	1.953	2.830	11.8	14.6	4 11	15 33.88	-20 53.5	1.751	2.635	12.6	20.3
4 21	15 31.68	-19 3.9	1.884	2.831	8.4	14.4	4 21	15 29.45	-19 55.1	1.678	2.629	8.9	20.0
5 1	15 24.26	-18 27.5	1.840	2.832	4.5	14.2	5 1	15 23.15	-18 45.2	1.630	2.623	4.7	19.8
5 11	15 15.88	-17 45.8	1.823	2.833	0.3	13.8	5 11	15 15.82	-17 27.9	1.608	2.618	0.4	19.4
5 21	15 7.48	-17 2.8	1.834	2.834	3.9	14.1	5 21	15 8.46	-16 9.2	1.613	2.613	4.3	19.7
5 31	14 59.98	-16 22.7	1.871	2.835	7.9	14.4	5 31	15 2.03	-14 55.6	1.644	2.609	8.5	19.9
6 10	14 54.16	-15 49.7	1.933	2.835	11.4	14.6	6 10	14 57.35	-13 52.9	1.698	2.606	12.4	20.2
6 20	14 50.46	-15 26.5	2.016	2.836	14.4	14.8	6 20	14 54.87	-13 4.8	1.774	2.604	15.7	20.4
181566	2006 <i>VT</i> ₈		5 11.8 113°41	1°9/10.6	18		202696	2007 <i>ET</i> ₁₈₉		5 11.8 294°70	1°0/12.2	16	
4 11	15 37.51	-12 17.3	2.273	3.151	10.3	20.3	4 11	15 40.16	-21 35.7	1.222	2.113	16.4	20.7
4 21	15 31.58	-12 8.7	2.206	3.154	7.3	20.1	4 21	15 34.90	-21 20.5	1.140	2.092	12.0	20.4
5 1	15 24.14	-11 59.6	2.166	3.157	4.0	19.9	5 1	15 26.52	-20 51.1	1.079	2.071	6.7	20.0
5 11	15 15.88	-11 52.1	2.153	3.159	1.9	19.8	5 11	15 16.09	-20 9.2	1.040	2.050	1.2	19.6
5 21	15 7.59	-11 48.3	2.169	3.162	4.3	20.0	5 21	15 5.13	-19 19.2	1.026	2.029	5.5	19.8
5 31	15 0.05	-11 50.2	2.212	3.165	7.6	20.2	5 31	14 55.34	-18 28.6	1.035	2.008	11.4	20.1
6 10	14 53.92	-11 59.5	2.281	3.167	10.6	20.4	6 10	14 48.17	-17 45.4	1.065	1.988	16.8	20.3
6 20	14 49.62	-12 16.8	2.371	3.170	13.2	20.5	6 20	14 44.44	-17 15.6	1.112	1.968	21.4	20.5
106564	2000 <i>WY</i> ₈₅		5 11.8 245°11	0°4/11.6	17		326642	2002 <i>SG</i> ₄₆		5 11.8 247°70	1°5/10.9	18	
4 11	15 42.50	-17 48.2	1.727	2.604	13.1	20.1	4 11	15 39.85	-16 8.6	1.844	2.724	12.3	21.3
4 21	15 35.75	-17 41.3	1.643	2.589	9.4	19.9	4 21	15 33.69	-15 32.6	1.760	2.709	8.7	21.1
5 1	15 26.64	-17 28.0	1.582	2.574	5.0	19.6	5 1	15 25.46	-14 50.3	1.701	2.693	4.7	20.8
5 11	15 16.08	-17 10.0	1.548	2.558	0.5	19.2	5 11	15 16.01	-14 5.1	1.668	2.677	1.5	20.5
5 21	15 5.20	-16 50.1	1.541	2.541	4.6	19.5	5 21	15 6.34	-13 21.1	1.664	2.660	4.9	20.7
5 31	14 55.23	-16 32.2	1.562	2.524	9.2	19.7	5 31	14 57.52	-12 43.1	1.686	2.643	9.1	21.0
6 10	14 47.22	-16 20.4	1.606	2.506	13.4	19.9	6 10	14 50.46	-12 15.3	1.732	2.625	13.0	21.2
6 20	14 41.83	-16 17.7	1.670	2.488	17.0	20.1	6 20	14 45.74	-12 0.2	1.798	2.606	16.4	21.3
180128	2003 <i>FM</i> ₆₈		5 11.8 122°03	0°7/12.2	17		497576	2006 <i>FD</i>		5 11.8 32°08	4°1/13.6	17	
4 11	15 38.07	-20 26.9	2.318	3.186	10.6	20.2	4 11	15 41.35	-26 44.7	1.513	2.381	15.2	20.4
4 21	15 32.02	-20 30.8	2.249	3.190	7.5	20.0	4 21	15 35.07	-27 25.7	1.456	2.390	11.4	20.2
5 1	15 24.39	-20 28.4	2.204	3.193	4.1	19.8	5 1	15 26.28	-27 52.9	1.420	2.400	7.3	20.0
5 11	15 15.91	-20 20.9	2.188	3.197	0.8	19.6	5 11	15 16.07	-28 4.8	1.410	2.410	4.3	19.8
5 21	15 7.36	-20 9.8	2.200	3.201	3.3	19.8	5 21	15 5.78	-28 2.2	1.425	2.421	5.4	19.9
5 31	14 59.59	-19 57.9	2.241	3.205	6.7	20.0	5 31	14 56.78	-27 49.3	1.465	2.433	9.1	20.2
6 10	14 53.27	-19 48.0	2.307	3.208	9.8	20.2	6 10	14 50.14	-27 31.7	1.528	2.445	12.9	20.4
6 20	14 48.86	-19 42.5	2.395	3.211	12.5	20.4	6 20	14 46.41	-27 15.0	1.611	2.457	16.2	20.7
1872	Helenos		5 11.8 291°55	2°2/8.6	18		285006	2010 <i>VV</i> ₁₃₂		5 11.8 220°86	1°9/12.8	17	
4 11	15 28.51	-7 43.7	4.372	5.247	5.8	18.0	4 11	15 42.37	-23 34.7	1.843	2.707	13.1	21.7
4 21	15 24.78	-7 6.1	4.301	5.244	4.2	17.8	4 21	15 35.54	-23 40.2	1.763	2.700	9.6	21.4
5 1	15 20.37	-6 29.4	4.258	5.240	2.7	17.7	5 1	15 26.48	-23 35.2	1.707	2.692	5.6	21.2
5 11	15 15.62	-5 55.7	4.245	5.237	2.3	17.7	5 11	15 16.09	-23 19.9	1.677	2.684	2.1	20.9
5 21	15 10.85	-5 26.6	4.261	5.233	3.4	17.8	5 21	15 5.47	-22 56.2	1.675	2.675	4.2	21.0
5 31	15 6.40	-5 3.7	4.305	5.230	5.0	17.9	5 31	14 55.82	-22 28.2	1.700	2.666	8.3	21.3
6 10	15 2.60	-4 47.9	4.375	5.227	6.6	18.0	6 10	14 48.11	-22 0.8	1.750	2.657	12.2	21.5
6 20	14 59.65	-4 39.6	4.468	5.223	8.1	18.1	6 20	14 42.93	-21 38.6	1.821	2.646	15.5	21.7
66285	1999 <i>JV</i> ₁₅		5 11.8 295°66	3°4/10.4	18		187882	2000 <i>QW</i> ₂₃₀		5 11.8 284°14	2°3/10.4	18	
4 11	15 40.81	-11 13.1	1.362	2.257	14.8	19.5	4 11	15 38.58	-14 10.9	1.782	2.667	12.4	20.6
4 21	15 34.90	-10 58.0	1.287	2.242	10.6	19.2	4 21	15 32.94	-13 31.6	1.689	2.641	8.8	20.3
5 1	15 26.31	-10 43.1	1.235	2.227	6.1	18.9	5 1	15 25.15	-12 47.1	1.621	2.613	4.9	20.0
5 11	15 16.06	-10 32.2	1.207	2.212	3.4	18.7	5 11	15 16.00	-12 1.3	1.579	2.586	2.3	19.8
5 21	15 5.46	-10 29.2	1.204	2.198	6.7	18.8	5 21	15 6.49	-11 18.6	1.564	2.558	5.5	20.0
5 31	14 55.95	-10 37.6	1.225	2.183	11.6	19.0	5 31	14 57.75	-10 44.1	1.576	2.530	9.8	20.1
6 10	14 48.71	-10 59.5	1.267	2.169	16.2	19.3	6 10	14 50.74	-10 21.9	1.610	2.502	13.9	20.3
6 20	14 44.46	-11 35.4	1.328	2.155	20.1	19.5	6 20	14 46.10	-10 14.1	1.664	2.473	17.4	20.5
385448	2003 <i>QC</i> ₁₁₅		5 11.8 236°12	4°1/8.6	18		107410	2001 <i>DV</i> ₇		5 11.8 78°32	0°8/12.2	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
470294	2007 <i>FA</i> ₃₈		5 11.8	7°13	9°2/ 5.6	17	74692	1999 <i>RF</i> ₁₃₄		5 11.8	238°23	3°5/13.8	18
4 11	15 32.70	- 2 25.6	1.219	2.126	15.2	19.6	4 11	15 41.71	-28 24.5	1.709	2.565	14.3	19.8
4 21	15 28.94	- 0 28.0	1.176	2.126	11.9	19.4	4 21	15 35.28	-28 19.3	1.627	2.555	10.8	19.6
5 1	15 22.96	+ 1 20.6	1.155	2.129	9.5	19.3	5 1	15 26.43	-27 57.4	1.567	2.546	6.9	19.3
5 11	15 15.82	+ 2 49.1	1.157	2.132	9.6	19.3	5 11	15 16.12	-27 18.7	1.534	2.535	3.8	19.1
5 21	15 8.74	+ 3 49.0	1.181	2.136	12.1	19.4	5 21	15 5.60	-26 26.1	1.527	2.525	4.9	19.1
5 31	15 2.89	+ 4 16.0	1.226	2.142	15.4	19.6	5 31	14 56.16	-25 25.1	1.546	2.514	8.8	19.3
6 10	14 59.16	+ 4 10.8	1.289	2.149	18.6	19.9	6 10	14 48.86	-24 23.4	1.590	2.503	12.8	19.6
6 20	14 57.99	+ 3 37.4	1.367	2.157	21.4	20.1	6 20	14 44.33	-23 27.5	1.654	2.491	16.3	19.8
111474	2001 <i>YH</i> ₁₂		5 11.8	309°54	0°0/11.8	18	476413	2008 <i>DD</i> ₁₃		5 11.8	165°83	2°3/13.5	17
4 11	15 35.50	-20 39.4	2.000	2.877	11.6	19.8	4 11	15 37.85	-26 36.2	2.623	3.470	10.2	21.8
4 21	15 30.45	-19 59.0	1.922	2.869	8.2	19.6	4 21	15 31.80	-26 37.0	2.547	3.473	7.5	21.7
5 1	15 23.65	-19 9.2	1.868	2.860	4.4	19.3	5 1	15 24.28	-26 28.1	2.498	3.476	4.7	21.5
5 11	15 15.89	-18 12.8	1.842	2.852	0.3	19.0	5 11	15 15.97	-26 10.0	2.476	3.478	2.4	21.3
5 21	15 8.04	-17 14.2	1.843	2.844	3.8	19.3	5 21	15 7.60	-25 44.2	2.483	3.481	3.4	21.4
5 31	15 1.01	-16 18.2	1.871	2.836	7.8	19.5	5 31	14 59.95	-25 13.9	2.519	3.482	6.1	21.6
6 10	14 55.58	-15 29.8	1.924	2.828	11.4	19.7	6 10	14 53.65	-24 42.5	2.581	3.484	8.9	21.8
6 20	14 52.20	-14 52.3	1.998	2.821	14.4	19.9	6 20	14 49.13	-24 13.5	2.666	3.485	11.3	21.9
519283	2011 <i>BT</i> ₁₆₆		5 11.8	340°44	9°4/ 5.9	17	30600	2078 <i>P-L</i>		5 11.8	149°07	3°3/13.8	18
4 11	15 35.14	+ 1 3.6	1.407	2.299	14.6	20.6	4 11	15 42.19	-27 53.5	2.008	2.856	12.8	18.1
4 21	15 30.57	+ 2 26.8	1.352	2.290	11.7	20.4	4 21	15 35.21	-28 3.0	1.939	2.863	9.6	18.0
5 1	15 23.84	+ 3 38.4	1.318	2.282	9.7	20.2	5 1	15 26.21	-27 59.2	1.894	2.870	6.2	17.8
5 11	15 15.90	+ 4 29.8	1.308	2.275	9.7	20.2	5 11	15 16.11	-27 42.0	1.876	2.877	3.5	17.6
5 21	15 7.88	+ 4 54.8	1.321	2.268	11.8	20.3	5 21	15 5.97	-27 13.3	1.886	2.883	4.4	17.7
5 31	15 0.93	+ 4 50.4	1.355	2.262	14.8	20.5	5 31	14 56.86	-26 37.3	1.924	2.888	7.6	17.9
6 10	14 55.97	+ 4 17.8	1.408	2.257	18.0	20.6	6 10	14 49.64	-25 59.2	1.986	2.893	10.9	18.1
6 20	14 53.51	+ 3 20.7	1.477	2.253	20.7	20.8	6 20	14 44.80	-25 24.0	2.071	2.897	13.9	18.3
469405	2001 <i>UA</i> ₁₉₉		5 11.8	213°82	0°1/11.9	17	338048	2002 <i>NL</i> ₆		5 11.8	284°92	0°2/11.9	16
4 11	15 36.80	-19 59.4	2.789	3.652	9.1	23.0	4 11	15 37.52	-20 7.0	1.907	2.784	12.1	21.4
4 21	15 30.97	-19 38.0	2.704	3.645	6.5	22.8	4 21	15 32.04	-19 44.5	1.822	2.769	8.6	21.1
5 1	15 23.81	-19 10.6	2.646	3.636	3.5	22.6	5 1	15 24.61	-19 13.2	1.761	2.753	4.7	20.8
5 11	15 15.91	-18 38.7	2.617	3.627	0.3	22.3	5 11	15 16.00	-18 35.4	1.727	2.737	0.4	20.5
5 21	15 7.92	-18 4.6	2.618	3.618	2.9	22.5	5 21	15 7.19	-17 54.4	1.720	2.721	4.0	20.7
5 31	15 0.54	-17 31.4	2.648	3.608	6.0	22.7	5 31	14 59.19	-17 14.8	1.740	2.705	8.2	20.9
6 10	14 54.34	-17 1.9	2.704	3.597	8.9	22.8	6 10	14 52.88	-16 41.2	1.785	2.690	12.0	21.1
6 20	14 49.73	-16 38.5	2.784	3.586	11.3	23.0	6 20	14 48.82	-16 17.0	1.850	2.674	15.4	21.3
456665	2007 <i>RH</i> ₅₉		5 11.8	145°61	3°9/ 9.1	18	438075	2004 <i>RS</i> ₂₁₁		5 11.8	296°12	2°1/ 9.9	17
4 11	15 40.81	- 9 49.1	1.873	2.754	12.1	21.7	4 11	15 34.36	-15 15.7	2.191	3.074	10.5	20.4
4 21	15 34.00	- 8 45.3	1.819	2.766	8.6	21.5	4 21	15 29.52	-14 6.7	2.107	3.058	7.4	20.2
5 1	15 25.44	- 7 41.5	1.790	2.777	5.3	21.3	5 1	15 23.14	-12 51.5	2.050	3.042	4.0	19.9
5 11	15 16.02	- 6 43.0	1.790	2.787	4.0	21.3	5 11	15 15.89	-11 34.5	2.020	3.026	2.1	19.8
5 21	15 6.70	- 5 54.8	1.817	2.797	6.4	21.4	5 21	15 8.54	-10 20.8	2.019	3.010	4.8	19.9
5 31	14 58.43	- 5 20.6	1.870	2.806	9.8	21.6	5 31	15 1.88	- 9 15.5	2.046	2.995	8.3	20.1
6 10	14 51.94	- 5 2.6	1.948	2.814	13.0	21.9	6 10	14 56.61	- 8 22.8	2.097	2.979	11.5	20.3
6 20	14 47.62	- 5 0.7	2.045	2.821	15.7	22.1	6 20	14 53.16	- 7 44.8	2.169	2.964	14.3	20.5
288696	2004 <i>QZ</i> ₁₆		5 11.8	236°49	1°9/10.6	16	236527	2006 <i>HP</i> ₁₁		5 11.8	229°35	3°8/ 9.3	18
4 11	15 41.07	-15 41.9	1.635	2.519	13.4	21.2	4 11	15 37.19	- 9 3.7	1.935	2.820	11.5	20.2
4 21	15 34.71	-14 57.0	1.557	2.507	9.5	21.0	4 21	15 31.57	- 8 20.8	1.870	2.819	8.3	20.0
5 1	15 26.07	-14 5.1	1.502	2.495	5.1	20.7	5 1	15 24.23	- 7 38.9	1.830	2.817	5.1	19.8
5 11	15 16.08	-13 10.5	1.474	2.482	1.9	20.5	5 11	15 15.97	- 7 2.3	1.817	2.815	3.9	19.7
5 21	15 5.88	-12 18.4	1.473	2.468	5.5	20.6	5 21	15 7.67	- 6 34.8	1.831	2.813	6.1	19.8
5 31	14 56.69	-11 34.6	1.498	2.454	10.1	20.9	5 31	15 0.23	- 6 19.6	1.871	2.811	9.5	20.0
6 10	14 49.50	-11 3.6	1.546	2.439	14.3	21.1	6 10	14 54.38	- 6 18.4	1.935	2.810	12.7	20.2
6 20	14 44.91	-10 48.0	1.614	2.424	17.8	21.3	6 20	14 50.59	- 6 31.3	2.018	2.808	15.4	20.4
405116	2002 <i>FQ</i> ₁₅		5 11.8	55°01	4°7/ 9.8	18	405223	2003 <i>SK</i> ₃₁		5 11.8	121°36	0°3/11.6	16
4 11	15 41.13	- 9 19.1	1.201	2.101	16.0	20.3	4 11	15 41.82	-19 18.8	1.751	2.626	13.1	21.9
4 21	15 34.81	- 8 44.1	1.163	2.118	11.4	20.1	4 21	15 34.88	-18 48.6	1.696	2.642	9.2	21.7
5 1	15 26.03	- 8 12.0	1.146	2.136	6.8	19.9	5 1	15 25.97	-18 10.1	1.665	2.656	4.9	21.4
5 11	15 16.06	- 7 48.5	1.153	2.154	4.7	19.8	5 11	15 16.09	-17 26.5	1.661	2.671	0.4	21.1
5 21	15 6.33	- 7 38.0	1.184	2.173	7.7	20.0	5 21	15 6.34	-16 42.1	1.685	2.685	4.2	21.5
5 31	14 58.17	- 7 43.4	1.238	2.191	12.0	20.3	5 31	14 57.76	-16 1.6	1.736	2.698	8.5	21.7
6 10	14 52.51	- 8 5.1	1.313	2.210	16.0	20.6	6 10	14 51.18	-15 29.4	1.811	2.711	12.2	22.0
6 20	14 49.76	- 8 41.9	1.406	2.229	19.4	20.9	6 20	14 47.00	-15 8.3	1.907	2.723	15.3	22.2
332146	2005 <i>XH</i> ₆₁		5 11.8	220°32	0°6/12.3	18	111639	2002 <i>AZ</i> ₁₅₇		5 11.8	225°59	5°1/ 7.6	18
4 11	15 39.61	-22 8.3	2.402	3.262	10.5	21.9	4 11	15 35.18	- 2 31.9	2.474	3.349	9.7	20.2
4 21	15 33.15	-21 37.9	2.313	3.251	7.6	21.7	4 21	15 29.86	- 1 43.1	2.408	3.344	7.4	20.1
5 1	15 25.04	-20 58.1	2.250	3.239	4.2	21.5	5 1	15 23.23	- 0 59.4	2.368	3.338	5.5	19.9
5 11	15 16.01	-20 10.8	2.216	3.225	0.8	21.2	5 11	15 15.90	- 0 24.8	2.356	3.333	5.2	19.9
5 21	15 6.85	-19 19.1	2.211	3.212	3.3	21.4	5 21	15 8.52	- 0 2.4	2.371	3.327	6.8	20.0
5 31	14 58.42	-18 27.2	2.235	3.197	6.9	21.6	5 31	15 1.79	+ 0 5.7	2.412	3.322	9.1	20.1
6 10	14 51.43	-17 39.5	2.286	3.181	10.2	21.8	6 10	14 56.27	- 0 1.1	2.477	3.316	11.5	20.3
6 20	14 46.36	-16 59.3	2.359	3.165	13.0	21.9	6 20	14 52.36	- 0 22.0	2.563	3.310	13.6	20.4
393860	2005 <i>SA</i> ₂₂₆		5 11.8	141°50	2°6/ 9.5	18	364623	2007 <i>TH</i>					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
430288	2013 <i>WH</i> ₆₆		5 11.8 262°99	0°3/11.6 18			380124	1996 <i>RW</i> ₁₀		5 11.8 306°76	0°5/12.0 17		
4 11	15 39.31	-19 15.2	1.947	2.821	12.0	21.2	4 11	15 38.57	-20 11.2	1.546	2.431	14.0	21.2
4 21	15 33.32	-18 42.0	1.854	2.800	8.6	21.0	4 21	15 33.19	-20 2.0	1.467	2.416	10.0	20.9
5 1	15 25.31	-17 59.8	1.786	2.778	4.6	20.7	5 1	15 25.39	-19 43.5	1.410	2.402	5.5	20.6
5 11	15 16.07	-17 11.2	1.745	2.755	0.4	20.3	5 11	15 16.12	-19 17.4	1.378	2.388	0.7	20.2
5 21	15 6.55	-16 20.1	1.733	2.732	4.2	20.6	5 21	15 6.55	-18 47.0	1.372	2.374	4.6	20.5
5 31	14 57.81	-15 31.4	1.747	2.709	8.5	20.8	5 31	14 57.98	-18 17.2	1.391	2.360	9.4	20.7
6 10	14 50.74	-14 50.1	1.786	2.685	12.4	20.9	6 10	14 51.48	-17 53.3	1.433	2.347	13.8	20.9
6 20	14 45.95	-14 19.8	1.847	2.660	15.8	21.1	6 20	14 47.70	-17 39.0	1.494	2.334	17.6	21.1
3355	Onizuka		5 11.8 145°43	3°1/10.2 18			88655	2001 <i>RY</i> ₆₉		5 11.8 156°77	0°1/11.9 18		
4 11	15 41.78	-12 54.3	1.404	2.296	14.7	17.0	4 11	15 36.68	-20 9.2	2.536	3.403	9.8	19.9
4 21	15 35.25	-12 10.6	1.347	2.300	10.4	16.7	4 21	15 30.93	-19 40.3	2.467	3.408	6.9	19.7
5 1	15 26.34	-11 23.9	1.313	2.305	5.8	16.5	5 1	15 23.82	-19 4.7	2.423	3.413	3.7	19.5
5 11	15 16.14	-10 39.3	1.303	2.309	3.2	16.3	5 11	15 16.00	-18 24.6	2.408	3.418	0.3	19.3
5 21	15 5.95	-10 2.4	1.320	2.313	6.5	16.5	5 21	15 8.19	-17 42.9	2.422	3.422	3.1	19.5
5 31	14 57.07	-9 38.0	1.361	2.316	11.0	16.8	5 31	15 1.09	-17 3.0	2.465	3.426	6.4	19.7
6 10	14 50.48	-9 29.2	1.425	2.319	15.2	17.0	6 10	14 55.32	-16 28.2	2.533	3.429	9.3	19.9
6 20	14 46.68	-9 36.5	1.507	2.322	18.7	17.3	6 20	14 51.24	-16 0.8	2.625	3.432	11.8	20.1
37776	2005 <i>YG</i> ₁₈₅		5 11.8 181°73	6°1/ 7.5 17			476488	2008 <i>FK</i> ₉₀		5 11.8 26°94	5°9/ 7.7 17		
4 11	15 38.68	- 0 18.7	2.235	3.104	10.9	21.3	4 11	15 34.63	- 3 39.7	1.868	2.756	11.8	20.4
4 21	15 32.39	+ 0 29.9	2.175	3.105	8.4	21.1	4 21	15 29.73	- 2 38.7	1.819	2.763	8.9	20.2
5 1	15 24.59	+ 1 11.1	2.142	3.105	6.5	21.0	5 1	15 23.25	- 1 43.9	1.795	2.770	6.5	20.1
5 11	15 16.01	+ 1 40.2	2.135	3.105	6.3	21.0	5 11	15 15.97	- 1 0.6	1.796	2.778	6.1	20.1
5 21	15 7.43	+ 1 54.2	2.155	3.104	7.8	21.1	5 21	15 8.74	- 0 33.0	1.824	2.787	7.9	20.2
5 31	14 59.63	+ 1 51.2	2.202	3.103	10.2	21.2	5 31	15 2.41	- 0 23.4	1.876	2.796	10.7	20.4
6 10	14 53.26	+ 1 31.5	2.272	3.101	12.7	21.4	6 10	14 57.63	- 0 32.1	1.950	2.805	13.4	20.6
6 20	14 48.73	+ 0 56.6	2.361	3.099	14.8	21.5	6 20	14 54.81	- 0 57.7	2.043	2.815	15.8	20.8
359695	2011 <i>ST</i> ₂₀₅		5 11.8 160°00	3°7/ 9.6 18			501285	2013 <i>WY</i> ₄₆		5 11.8 140°00	2°1/10.5 17		
4 11	15 40.39	-12 20.7	1.493	2.384	14.0	20.7	4 11	15 39.21	-12 47.8	2.136	3.013	10.9	21.8
4 21	15 34.16	-11 16.3	1.435	2.388	9.9	20.4	4 21	15 32.84	-12 24.6	2.075	3.022	7.7	21.6
5 1	15 25.71	-10 8.7	1.400	2.391	5.7	20.2	5 1	15 24.88	-11 59.9	2.040	3.030	4.2	21.4
5 11	15 16.10	- 9 4.0	1.390	2.393	3.7	20.1	5 11	15 16.09	-11 36.6	2.032	3.038	2.1	21.3
5 21	15 6.50	- 8 8.7	1.407	2.395	6.8	20.2	5 21	15 7.33	-11 17.6	2.053	3.046	4.6	21.5
5 31	14 58.11	- 7 28.3	1.449	2.397	11.0	20.5	5 31	14 59.44	-11 5.4	2.102	3.053	8.0	21.7
6 10	14 51.85	- 7 5.9	1.513	2.399	14.9	20.7	6 10	14 53.08	-11 2.2	2.176	3.059	11.1	21.9
6 20	14 48.19	- 7 2.1	1.595	2.400	18.2	21.0	6 20	14 48.69	-11 8.8	2.271	3.066	13.8	22.1
348844	2006 <i>SQ</i> ₃₂		5 11.8 174°90	2°5/ 9.6 18			474805	2005 <i>SQ</i> ₁₁		5 11.8 233°77	0°2/11.9 18		
4 11	15 35.54	-11 46.2	2.499	3.378	9.5	21.5	4 11	15 36.54	-19 57.5	2.753	3.618	9.2	22.4
4 21	15 30.10	-10 56.4	2.432	3.380	6.7	21.3	4 21	15 30.87	-19 42.2	2.666	3.606	6.5	22.2
5 1	15 23.35	-10 5.1	2.392	3.381	3.9	21.1	5 1	15 23.83	-19 21.2	2.605	3.594	3.5	22.0
5 11	15 15.92	- 9 15.8	2.380	3.382	2.6	21.0	5 11	15 16.02	-18 55.6	2.572	3.582	0.4	21.7
5 21	15 8.49	- 8 32.1	2.397	3.383	4.6	21.1	5 21	15 8.09	-18 27.8	2.569	3.569	2.9	21.9
5 31	15 1.74	- 7 57.1	2.442	3.383	7.5	21.3	5 31	15 0.75	-18 0.4	2.595	3.556	6.1	22.1
6 10	14 56.24	- 7 33.0	2.512	3.383	10.3	21.5	6 10	14 54.57	-17 36.2	2.647	3.543	9.0	22.3
6 20	14 52.37	- 7 20.7	2.603	3.383	12.6	21.7	6 20	14 50.00	-17 17.7	2.723	3.529	11.5	22.4
229510	2005 <i>WO</i> ₈₈		5 11.8 180°32	6°0/ 7.8 18			305972	2009 <i>HG</i> ₇₆		5 11.8 350°56	1°1/11.1 17		
4 11	15 39.20	- 0 34.7	2.229	3.098	10.9	21.0	4 11	15 36.58	-16 4.6	2.028	2.910	11.3	21.2
4 21	15 32.75	+ 0 7.6	2.169	3.099	8.4	20.8	4 21	15 31.17	-15 44.9	1.959	2.908	7.9	20.9
5 1	15 24.80	+ 0 42.2	2.135	3.100	6.5	20.7	5 1	15 24.07	-15 21.1	1.915	2.907	4.2	20.7
5 11	15 16.05	+ 1 5.2	2.127	3.100	6.1	20.7	5 11	15 16.04	-14 55.6	1.897	2.906	1.1	20.5
5 21	15 7.29	+ 1 13.4	2.148	3.100	7.6	20.8	5 21	15 7.95	-14 31.4	1.908	2.906	4.1	20.7
5 31	14 59.33	+ 1 5.4	2.194	3.099	10.1	20.9	5 31	15 0.68	-14 12.0	1.945	2.905	7.9	20.9
6 10	14 52.81	+ 0 41.4	2.264	3.097	12.6	21.1	6 10	14 54.97	-14 0.1	2.006	2.905	11.3	21.1
6 20	14 48.15	+ 0 2.8	2.354	3.095	14.8	21.2	6 20	14 51.26	-13 57.4	2.089	2.904	14.2	21.3
43097	1999 <i>XM</i> ₁₃		5 11.8 239°10	3°3/ 9.5 18			377689	2005 <i>VG</i> ₉₄		5 11.8 215°46	1°8/13.2 17		
4 11	15 36.84	-11 15.6	1.944	2.830	11.5	19.5	4 11	15 39.85	-25 57.3	2.183	3.037	11.7	22.6
4 21	15 31.34	-10 23.4	1.876	2.826	8.1	19.3	4 21	15 33.48	-25 25.3	2.098	3.029	8.6	22.4
5 1	15 24.14	- 9 29.5	1.832	2.822	4.8	19.1	5 1	15 25.31	-24 40.2	2.038	3.021	5.1	22.2
5 11	15 16.00	- 8 38.7	1.816	2.818	3.3	19.0	5 11	15 16.14	-23 43.7	2.006	3.012	2.0	21.9
5 21	15 7.81	- 7 55.3	1.828	2.814	5.8	19.1	5 21	15 6.87	-22 39.2	2.002	3.002	3.6	22.0
5 31	15 0.46	- 7 23.4	1.865	2.809	9.3	19.3	5 31	14 58.47	-21 31.9	2.027	2.992	7.2	22.2
6 10	14 54.71	- 7 5.5	1.926	2.805	12.6	19.5	6 10	14 51.71	-20 27.4	2.078	2.982	10.7	22.4
6 20	14 51.00	- 7 2.5	2.008	2.801	15.4	19.7	6 20	14 47.07	-19 30.5	2.152	2.970	13.7	22.6
253155	2002 <i>VV</i> ₁₀₃		5 11.8 259°41	3°1/13.7 18			386493	2009 <i>BC</i> ₃₂		5 11.8 146°46	1°3/10.9 17		
4 11	15 40.77	-27 37.3	1.750	2.609	13.9	20.3	4 11	15 37.56	-15 19.2	2.072	2.952	11.1	21.6
4 21	15 34.63	-27 29.5	1.663	2.594	10.5	20.0	4 21	15 31.80	-14 58.5	2.004	2.953	7.8	21.4
5 1	15 26.12	-27 5.9	1.599	2.579	6.6	19.8	5 1	15 24.38	-14 34.2	1.962	2.954	4.2	21.2
5 11	15 16.16	-26 26.7	1.561	2.564	3.4	19.5	5 11	15 16.07	-14 9.0	1.947	2.955	1.3	21.0
5 21	15 5.93	-25 34.4	1.550	2.549	4.7	19.6	5 21	15 7.70	-13 45.9	1.959	2.956	4.2	21.2
5 31	14 56.69	-24 34.7	1.565	2.533	8.7	19.8	5 31	15 0.17	-13 27.8	1.999	2.957	7.9	21.4
6 10	14 49.49	-23 34.7	1.604	2.517	12.7	20.0	6 10	14 54.19	-13 17.7	2.064	2.958	11.2	21.6
6 20	14 44.97	-22 40.7	1.664	2.500	16.3	20.2	6 20	14 50.20	-13 16.9	2.150	2.959	14.0	21.8
11552	Boucolion		5 11.8 284°10	3°5/ 7.0 18			502777	2015 <i>DX</i> ₈₉		5 11.8 148°54	0°		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
501226	2013 <i>UH</i> ₁₄		5 11.8 223°04	3°4/13.5 17			253065	2002 <i>TA</i> ₈₄		5 11.8 188°08	0°3/11.9 17		
4 11	15 43.98	-26 59.7	2.088	2.934	12.4	22.1	4 11	15 42.91	-18 42.8	1.839	2.711	12.7	20.5
4 21	15 36.67	-27 33.3	2.002	2.926	9.4	21.9	4 21	15 35.87	-18 50.9	1.767	2.711	9.0	20.3
5 1	15 27.16	-27 56.1	1.941	2.917	6.1	21.6	5 1	15 26.69	-18 53.0	1.720	2.710	4.9	20.1
5 11	15 16.30	-28 6.6	1.908	2.907	3.6	21.5	5 11	15 16.30	-18 50.1	1.699	2.709	0.5	19.7
5 21	15 5.13	-28 5.0	1.903	2.897	4.6	21.5	5 21	15 5.76	-18 43.9	1.707	2.708	4.1	20.0
5 31	14 54.78	-27 54.0	1.926	2.887	7.8	21.7	5 31	14 56.20	-18 37.6	1.742	2.706	8.3	20.2
6 10	14 46.24	-27 37.9	1.974	2.876	11.2	21.9	6 10	14 48.54	-18 34.6	1.802	2.703	12.1	20.5
6 20	14 40.13	-27 21.5	2.044	2.865	14.2	22.0	6 20	14 43.33	-18 37.5	1.882	2.700	15.4	20.7
125850	2001 <i>XM</i> ₁₈₄		5 11.8 185°58	2°8/ 9.9 17			314188	2005 <i>JL</i> ₅₀		5 11.8 21°49	2°2/10.9 17		
4 11	15 39.07	-11 23.2	2.101	2.980	11.0	20.6	4 11	15 39.14	-14 18.9	1.232	2.133	15.6	20.9
4 21	15 32.82	-10 48.1	2.033	2.980	7.8	20.4	4 21	15 33.69	-14 0.7	1.179	2.137	11.0	20.6
5 1	15 24.92	-10 12.1	1.991	2.980	4.5	20.2	5 1	15 25.65	-13 39.0	1.148	2.142	5.9	20.3
5 11	15 16.12	-9 9 38.7	1.976	2.979	2.8	20.0	5 11	15 16.21	-13 17.9	1.140	2.148	2.2	20.1
5 21	15 7.28	-9 11.2	1.990	2.978	5.2	20.2	5 21	15 6.76	-13 1.7	1.156	2.154	6.0	20.4
5 31	14 59.27	-8 52.8	2.030	2.976	8.6	20.4	5 31	14 58.70	-12 54.7	1.196	2.161	11.0	20.6
6 10	14 52.81	-8 45.6	2.096	2.973	11.7	20.6	6 10	14 53.07	-12 59.9	1.256	2.169	15.5	20.9
6 20	14 48.33	-8 50.3	2.182	2.970	14.5	20.8	6 20	14 50.41	-13 18.3	1.335	2.177	19.2	21.2
369075	2008 <i>FP</i> ₆₃		5 11.8 171°96	6°5/ 6.9 17			292529	2006 <i>TD</i> ₄₀		5 11.8 149°47	0°2/11.9 17		
4 11	15 38.14	-3 23.5	1.848	2.731	12.2	21.0	4 11	15 36.97	-19 56.6	2.580	3.446	9.7	22.2
4 21	15 32.24	-1 56.3	1.793	2.733	9.2	20.9	4 21	15 31.15	-19 40.0	2.511	3.452	6.9	22.0
5 1	15 24.62	-0 34.2	1.763	2.735	7.0	20.7	5 1	15 23.97	-19 17.5	2.468	3.458	3.7	21.8
5 11	15 16.09	+0 36.0	1.760	2.736	6.7	20.7	5 11	15 16.09	-18 50.6	2.453	3.463	0.4	21.5
5 21	15 7.60	+1 28.6	1.783	2.737	8.7	20.8	5 21	15 8.19	-18 21.8	2.468	3.468	3.0	21.8
5 31	15 0.04	+2 0.1	1.831	2.738	11.6	21.0	5 31	15 1.00	-17 54.0	2.512	3.473	6.2	22.0
6 10	14 54.15	+2 9.6	1.900	2.738	14.4	21.2	6 10	14 55.11	-17 30.0	2.581	3.478	9.1	22.2
6 20	14 50.37	+1 58.7	1.988	2.738	16.9	21.4	6 20	14 50.89	-17 12.2	2.673	3.482	11.6	22.4
249476	2009 <i>LS</i> ₆		5 11.8 234°80	7°0/29.6 18			244502	2002 <i>TY</i> ₁₂₁		5 11.8 263°48	5°1/14.8 17		
4 11	15 30.03	+21 45.9	4.563	5.329	7.5	20.1	4 11	15 41.63	-32 55.3	2.234	3.060	12.4	20.6
4 21	15 25.88	+22 28.7	4.525	5.326	7.1	20.0	4 21	15 35.06	-33 26.7	2.139	3.043	9.9	20.4
5 1	15 21.03	+22 59.8	4.510	5.323	7.0	20.0	5 1	15 26.36	-33 43.8	2.068	3.025	7.2	20.2
5 11	15 15.83	+23 16.8	4.518	5.320	7.2	20.0	5 11	15 16.29	-33 44.7	2.023	3.007	5.3	20.1
5 21	15 10.64	+23 18.9	4.549	5.317	7.7	20.1	5 21	15 5.86	-33 29.3	2.006	2.989	5.6	20.0
5 31	15 5.80	+23 5.7	4.602	5.314	8.4	20.1	5 31	14 56.18	-33 0.3	2.015	2.970	8.0	20.1
6 10	15 1.64	+22 38.1	4.673	5.311	9.1	20.2	6 10	14 48.22	-32 22.9	2.050	2.952	10.9	20.3
6 20	14 58.39	+21 57.6	4.761	5.308	9.8	20.3	6 20	14 42.62	-31 42.6	2.107	2.932	13.7	20.4
51339	2000 <i>OA</i> ₆₁		5 11.8 27°19	1°9/14.0 18 R			368086	2012 <i>TE</i> ₂₉₇		5 11.8 257°71	3°7/15.9 18		
4 11	15 31.30	-27 52.0	3.994	4.833	7.1	19.1	4 11	15 35.12	-36 53.4	4.392	5.179	7.5	20.6
4 21	15 26.90	-27 48.8	3.916	4.836	5.3	18.9	4 21	15 29.64	-37 22.6	4.305	5.177	6.1	20.5
5 1	15 21.62	-27 38.7	3.865	4.838	3.5	18.8	5 1	15 23.14	-37 42.7	4.245	5.175	4.7	20.4
5 11	15 15.88	-27 22.2	3.842	4.841	2.0	18.7	5 11	15 16.03	-37 53.0	4.212	5.173	3.8	20.3
5 21	15 10.11	-27 0.5	3.848	4.844	2.4	18.7	5 21	15 8.81	-37 53.7	4.208	5.171	3.8	20.3
5 31	15 4.76	-26 35.4	3.884	4.847	4.2	18.9	5 31	15 1.98	-37 45.9	4.232	5.168	4.8	20.4
6 10	15 0.23	-26 9.1	3.946	4.850	6.1	19.0	6 10	14 55.99	-37 31.8	4.284	5.166	6.1	20.5
6 20	14 56.80	-25 43.5	4.034	4.852	7.8	19.1	6 20	14 51.18	-37 13.8	4.359	5.164	7.5	20.6
2065	Spicer		5 11.8 208°88	2°8/13.9 18 R			26085	1981 <i>ED</i> ₁₈		5 11.8 27°92	0°9/11.2 18		
4 11	15 40.37	-28 20.2	2.458	3.298	11.0	17.6	4 11	15 37.11	-17 22.1	1.884	2.766	12.0	18.3
4 21	15 33.77	-28 19.5	2.372	3.292	8.3	17.4	4 21	15 31.63	-16 50.6	1.818	2.768	8.4	18.1
5 1	15 25.47	-28 6.9	2.311	3.285	5.4	17.2	5 1	15 24.36	-16 13.0	1.776	2.769	4.4	17.8
5 11	15 16.18	-27 42.5	2.277	3.277	3.0	17.1	5 11	15 16.13	-15 32.4	1.761	2.771	0.9	17.6
5 21	15 6.76	-27 8.1	2.273	3.269	3.8	17.1	5 21	15 7.86	-14 52.7	1.774	2.772	4.3	17.8
5 31	14 58.10	-26 27.1	2.297	3.260	6.7	17.3	5 31	15 0.51	-14 18.2	1.813	2.774	8.2	18.1
6 10	14 50.94	-25 44.0	2.348	3.250	9.7	17.4	6 10	14 54.85	-13 52.5	1.876	2.776	11.8	18.3
6 20	14 45.78	-25 3.1	2.421	3.240	12.3	17.6	6 20	14 51.33	-13 37.8	1.959	2.778	14.8	18.5
285765	2000 <i>UA</i> ₄₂		5 11.8 169°01	1°1/10.7 18			254110	2004 <i>NV</i> ₂		5 11.8 299°45	0°2/11.9 18		
4 11	15 35.10	-16 11.2	3.107	3.976	8.1	21.0	4 11	15 43.48	-16 50.8	2.199	3.065	11.2	19.7
4 21	15 29.62	-15 25.3	3.037	3.981	5.7	20.9	4 21	15 36.36	-17 28.9	2.091	3.032	8.0	19.5
5 1	15 23.08	-14 35.7	2.993	3.985	3.0	20.7	5 1	15 27.10	-18 5.9	2.009	2.999	4.4	19.2
5 11	15 16.00	-13 44.9	2.980	3.988	1.1	20.5	5 11	15 16.37	-18 41.3	1.956	2.966	0.4	18.8
5 21	15 8.94	-12 55.7	2.997	3.991	3.2	20.7	5 21	15 5.07	-19 14.9	1.932	2.932	3.8	19.0
5 31	15 2.45	-12 11.1	3.043	3.993	5.8	20.9	5 31	14 54.24	-19 47.4	1.938	2.899	7.9	19.2
6 10	14 57.00	-11 33.4	3.116	3.995	8.3	21.1	6 10	14 44.88	-20 20.3	1.970	2.865	11.6	19.4
6 20	14 52.90	-11 4.4	3.213	3.996	10.4	21.2	6 20	14 37.68	-20 55.5	2.025	2.832	14.8	19.5
321662	2010 <i>CJ</i> ₅₇		5 11.8 66°24	5°0/ 8.6 17			228325	2000 <i>QS</i> ₂₂₄		5 11.8 269°04	3°2/14.0 18		
4 11	15 37.20	-6 37.7	1.778	2.666	12.3	19.9	4 11	15 39.91	-29 10.6	1.917	2.767	13.2	19.9
4 21	15 31.57	-5 41.6	1.731	2.678	8.9	19.7	4 21	15 33.93	-28 45.0	1.820	2.746	10.0	19.6
5 1	15 24.25	-4 49.2	1.708	2.691	6.0	19.6	5 1	15 25.77	-28 1.9	1.748	2.725	6.5	19.4
5 11	15 16.09	-4 6.0	1.712	2.704	5.1	19.6	5 11	15 16.27	-27 1.8	1.701	2.703	3.4	19.1
5 21	15 8.04	-3 36.1	1.743	2.717	7.2	19.7	5 21	15 6.51	-25 47.9	1.682	2.681	4.4	19.2
5 31	15 0.99	-3 22.5	1.798	2.730	10.3	19.9	5 31	14 57.65	-24 26.3	1.691	2.659	8.2	19.3
6 10	14 55.66	-3 25.7	1.876	2.743	13.4	20.1	6 10	14 50.67	-23 4.5	1.724	2.636	12.0	19.5
6 20	14 52.44	-3 44.9	1.973	2.756	16.0	20.3	6 20	14 46.15	-21 49.5	1.780	2.613	15.5	19.7
176441	2001 <i>WA</i> ₄₀		5 11.8 153°20	0°8/11.1 18									

EPHEMERIDES

5 11.8

5 11.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
158095	2000 <i>WH</i> ₁₀₀		5 11.8 201 ^o .41	0 ^o .7/11.4	18		268951	2007 <i>DW</i> ₅₃		5 11.8 131 ^o .20	7 ^o .8/16.5	17	
4 11	15 39.51	-16 54.6	2.405	3.274	10.2	20.9	4 11	15 46.06	-39 12.3	1.958	2.757	14.9	21.1
4 21	15 33.08	-16 36.7	2.326	3.270	7.2	20.7	4 21	15 38.44	-40 2.9	1.890	2.765	12.4	20.9
5 1	15 25.09	-16 14.2	2.274	3.265	3.8	20.5	5 1	15 28.24	-40 32.6	1.844	2.773	9.9	20.8
5 11	15 16.23	-15 49.2	2.250	3.259	0.7	20.2	5 11	15 16.54	-40 37.9	1.822	2.781	8.1	20.7
5 21	15 7.27	-15 24.1	2.255	3.253	3.6	20.5	5 21	15 4.68	-40 18.8	1.826	2.788	8.0	20.7
5 31	14 59.03	-15 1.8	2.289	3.246	7.0	20.7	5 31	14 54.04	-39 39.0	1.856	2.795	9.6	20.8
6 10	14 52.18	-14 45.3	2.349	3.238	10.2	20.9	6 10	14 45.73	-38 45.8	1.910	2.802	12.0	21.0
6 20	14 47.17	-14 36.5	2.431	3.230	12.9	21.0	6 20	14 40.35	-37 47.1	1.985	2.808	14.5	21.1
173324	1999 <i>VT</i> ₁₃₉		5 11.8 121 ^o .83	1 ^o .1/12.4	18		216801	2006 <i>SW</i> ₃₁₅		5 11.8 297 ^o .16	1 ^o .5/11.1	17	
4 11	15 42.59	-22 1.7	1.745	2.614	13.4	20.8	4 11	15 39.50	-16 1.9	1.423	2.315	14.5	20.9
4 21	15 35.58	-21 51.3	1.687	2.628	9.6	20.6	4 21	15 34.10	-15 38.9	1.340	2.294	10.3	20.6
5 1	15 26.49	-21 30.6	1.652	2.641	5.3	20.3	5 1	15 26.08	-15 9.3	1.279	2.273	5.6	20.3
5 11	15 16.33	-21 1.6	1.645	2.653	1.3	20.1	5 11	15 16.39	-14 36.6	1.243	2.252	1.5	19.9
5 21	15 6.24	-20 27.3	1.664	2.666	4.0	20.3	5 21	15 6.27	-14 5.1	1.232	2.231	5.6	20.1
5 31	14 57.33	-19 52.5	1.711	2.677	8.2	20.6	5 31	14 57.12	-13 40.3	1.245	2.210	10.8	20.4
6 10	14 50.46	-19 22.1	1.782	2.688	12.0	20.8	6 10	14 50.15	-13 26.7	1.281	2.190	15.5	20.6
6 20	14 46.09	-18 59.7	1.874	2.699	15.2	21.1	6 20	14 46.09	-13 27.2	1.334	2.169	19.6	20.8
238969	2006 <i>BE</i> ₁₄₈		5 11.8 171 ^o .99	5 ^o .9/ 7.2	17		277667	2006 <i>BM</i> ₂₀₃		5 11.8 107 ^o .05	1 ^o .7/10.8	17	
4 11	15 37.96	- 1 1.2	2.290	3.161	10.6	21.3	4 11	15 38.71	-14 58.6	1.824	2.708	12.2	20.9
4 21	15 31.89	- 0 1.9	2.234	3.164	8.2	21.1	4 21	15 32.81	-14 31.6	1.761	2.711	8.6	20.7
5 1	15 24.40	+ 0 50.8	2.203	3.167	6.3	21.0	5 1	15 25.05	-14 0.9	1.722	2.715	4.6	20.4
5 11	15 16.17	+ 1 32.1	2.199	3.169	6.1	21.0	5 11	15 16.29	-13 29.6	1.710	2.718	1.7	20.2
5 21	15 7.96	+ 1 58.6	2.223	3.171	7.6	21.1	5 21	15 7.50	-13 1.4	1.725	2.721	4.7	20.5
5 31	15 0.52	+ 2 8.2	2.273	3.172	10.0	21.2	5 31	14 59.68	-12 39.9	1.767	2.725	8.7	20.7
6 10	14 54.45	+ 2 0.7	2.345	3.173	12.4	21.4	6 10	14 53.62	-12 28.1	1.832	2.728	12.3	20.9
6 20	14 50.16	+ 1 37.4	2.438	3.173	14.5	21.6	6 20	14 49.78	-12 27.5	1.918	2.731	15.3	21.1
107481	2001 <i>DH</i> ₃₆		5 11.8 96 ^o .50	1 ^o .1/11.2	18		356810	2011 <i>US</i> ₃₅₉		5 11.8 191 ^o .18	0 ^o .3/12.1	17	
4 11	15 41.58	-17 4.7	1.539	2.423	14.0	20.3	4 11	15 35.92	-20 42.9	2.679	3.544	9.4	21.5
4 21	15 34.95	-16 34.0	1.488	2.438	9.8	20.0	4 21	15 30.45	-20 19.1	2.602	3.543	6.7	21.3
5 1	15 26.16	-15 56.9	1.460	2.453	5.2	19.8	5 1	15 23.67	-19 48.7	2.552	3.541	3.6	21.1
5 11	15 16.31	-15 17.0	1.459	2.468	1.1	19.5	5 11	15 16.18	-19 13.5	2.530	3.540	0.5	20.9
5 21	15 6.58	-14 38.9	1.484	2.482	4.9	19.8	5 21	15 8.65	-18 36.0	2.538	3.538	2.9	21.1
5 31	14 58.14	-14 7.5	1.535	2.497	9.4	20.1	5 31	15 1.76	-17 59.4	2.574	3.536	6.1	21.3
6 10	14 51.86	-13 46.7	1.609	2.510	13.3	20.4	6 10	14 56.10	-17 26.7	2.636	3.534	8.9	21.4
6 20	14 48.17	-13 38.2	1.702	2.524	16.6	20.7	6 20	14 52.04	-17 0.4	2.722	3.532	11.4	21.6
146213	2000 <i>UD</i> ₁₀₇		5 11.8 205 ^o .05	2 ^o .4/ 9.9	18		387950	2005 <i>EL</i> ₂₃₇		5 11.8 56 ^o .75	1 ^o .7/10.8	17	R
4 11	15 36.99	- 9 49.1	2.776	3.648	8.9	20.6	4 11	15 37.46	-14 56.6	1.938	2.821	11.6	21.1
4 21	15 31.11	- 9 31.8	2.700	3.644	6.3	20.5	4 21	15 31.86	-14 27.2	1.873	2.823	8.2	20.9
5 1	15 23.98	- 9 15.2	2.652	3.639	3.7	20.3	5 1	15 24.53	-13 54.2	1.832	2.824	4.4	20.7
5 11	15 16.15	- 9 1.5	2.633	3.634	2.5	20.2	5 11	15 16.25	-13 20.6	1.818	2.826	1.7	20.5
5 21	15 8.25	- 8 52.8	2.643	3.628	4.3	20.3	5 21	15 7.94	-12 50.0	1.831	2.827	4.6	20.7
5 31	15 0.93	- 8 50.9	2.681	3.622	6.9	20.5	5 31	15 0.51	-12 26.1	1.872	2.829	8.3	20.9
6 10	14 54.75	- 8 56.9	2.745	3.616	9.5	20.6	6 10	14 54.71	-12 11.7	1.936	2.830	11.8	21.1
6 20	14 50.09	- 9 11.5	2.832	3.609	11.8	20.8	6 20	14 51.00	-12 8.3	2.021	2.832	14.7	21.3
173246	1999 <i>MP</i>		5 11.8 257 ^o .61	4 ^o .9/ 9.1	18		500902	2013 <i>MA</i> ₅		5 11.8 296 ^o .51	1 ^o .4/11.0	17	
4 11	15 42.18	- 6 25.3	1.828	2.706	12.5	20.1	4 11	15 38.29	-17 30.0	1.448	2.340	14.3	21.4
4 21	15 35.48	- 5 48.1	1.740	2.683	9.2	19.9	4 21	15 33.18	-16 45.4	1.364	2.319	10.2	21.1
5 1	15 26.62	- 5 13.7	1.677	2.659	6.1	19.6	5 1	15 25.55	-15 50.7	1.303	2.297	5.5	20.7
5 11	15 16.39	- 4 46.7	1.641	2.634	5.0	19.5	5 11	15 16.35	-14 50.1	1.267	2.276	1.4	20.4
5 21	15 5.82	- 4 31.3	1.632	2.609	7.3	19.6	5 21	15 6.79	-13 49.5	1.256	2.255	5.6	20.6
5 31	14 56.01	- 4 30.8	1.649	2.582	11.0	19.7	5 31	14 58.21	-12 55.9	1.269	2.233	10.7	20.8
6 10	14 47.93	- 4 46.7	1.689	2.555	14.7	19.9	6 10	14 51.76	-12 15.5	1.305	2.213	15.4	21.0
6 20	14 42.22	- 5 18.7	1.749	2.528	17.9	20.1	6 20	14 48.12	-11 51.9	1.359	2.192	19.4	21.3
425289	2009 <i>WS</i> ₂₀₉		5 11.8 53 ^o .88	4 ^o .7/ 9.7	17		336474	2008 <i>VJ</i> ₂₃		5 11.8 170 ^o .53	0 ^o .7/11.3	17	
4 11	15 40.20	- 6 49.2	1.574	2.463	13.5	20.4	4 11	15 37.59	-18 8.3	2.071	2.948	11.3	21.2
4 21	15 33.84	- 6 28.6	1.533	2.481	9.8	20.2	4 21	15 31.88	-17 30.7	2.002	2.949	7.9	21.0
5 1	15 25.53	- 6 13.1	1.514	2.500	6.2	20.1	5 1	15 24.51	-16 46.5	1.958	2.950	4.2	20.8
5 11	15 16.29	- 6 6.6	1.521	2.518	4.7	20.0	5 11	15 16.25	-15 58.7	1.942	2.951	0.7	20.5
5 21	15 7.21	- 6 11.9	1.555	2.538	7.0	20.2	5 21	15 7.97	-15 11.1	1.954	2.952	3.9	20.8
5 31	14 59.34	- 6 30.3	1.613	2.557	10.4	20.4	5 31	15 0.55	-14 28.2	1.993	2.953	7.7	21.0
6 10	14 53.46	- 7 2.0	1.694	2.576	13.8	20.7	6 10	14 54.69	-13 53.5	2.057	2.953	11.1	21.2
6 20	14 49.97	- 7 45.4	1.794	2.596	16.6	20.9	6 20	14 50.84	-13 29.6	2.142	2.953	14.0	21.4
71852	2000 <i>UU</i> ₁₀₅		5 11.8 46 ^o .86	4 ^o .4/ 9.9	18		438029	2004 <i>FE</i> ₂₉		5 11.8 59 ^o .44	3 ^o .3/ 9.5	17	
4 11	15 41.17	- 9 5.5	1.334	2.229	15.0	18.5	4 11	15 36.45	-11 29.0	1.873	2.761	11.7	21.1
4 21	15 34.98	- 8 38.4	1.280	2.234	10.8	18.3	4 21	15 31.01	-10 30.2	1.828	2.779	8.3	20.9
5 1	15 26.34	- 8 13.9	1.248	2.238	6.5	18.0	5 1	15 23.98	- 9 30.9	1.807	2.797	4.8	20.7
5 11	15 16.38	- 7 56.8	1.241	2.242	4.5	17.9	5 11	15 16.21	- 8 35.8	1.813	2.815	3.3	20.7
5 21	15 6.40	- 7 51.3	1.258	2.247	7.4	18.1	5 21	15 8.56	- 7 49.5	1.847	2.833	5.7	20.9
5 31	14 57.73	- 8 0.2	1.299	2.252	11.7	18.3	5 31	15 1.90	- 7 15.8	1.906	2.851	9.1	21.1
6 10	14 51.38	- 8 24.6	1.362	2.257	15.7	18.6	6 10	14 56.88	- 6 56.7	1.989	2.870	12.2	21.3
6 20													

EPHEMERIDES

5 11.9

5 11.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
77689	2001 <i>NZ</i> ₁₀		5 11.9 153°53	3°4/14.3	18		82334	2001 <i>LF</i> ₉		5 11.9 287°73	3°4/ 9.8	18	
4 11	15 39.63	-29 36.8	2.295	3.135	11.7	19.4	4 11	15 38.07	-12 45.2	1.549	2.441	13.5	19.2
4 21	15 33.35	-29 42.5	2.221	3.139	8.9	19.2	4 21	15 32.81	-11 46.8	1.471	2.425	9.6	18.9
5 1	15 25.32	-29 35.3	2.172	3.143	5.9	19.0	5 1	15 25.28	-10 43.5	1.416	2.408	5.5	18.6
5 11	15 16.32	-29 15.1	2.150	3.147	3.6	18.9	5 11	15 16.39	-9 41.1	1.387	2.391	3.5	18.4
5 21	15 7.27	-28 43.6	2.156	3.150	4.2	18.9	5 21	15 7.25	-8 45.6	1.384	2.374	6.6	18.6
5 31	14 59.08	-28 4.4	2.190	3.153	6.9	19.1	5 31	14 59.07	-8 3.3	1.406	2.358	11.0	18.8
6 10	14 52.51	-27 22.5	2.249	3.155	9.8	19.3	6 10	14 52.85	-7 38.1	1.449	2.341	15.2	19.0
6 20	14 48.02	-26 42.3	2.331	3.158	12.5	19.5	6 20	14 49.18	-7 31.5	1.511	2.324	18.7	19.2
519982	2013 <i>TQ</i> ₁₆₇		5 11.9 124°37	4°1/ 8.6	17		337013	1994 <i>PY</i> ₅		5 11.9 279°21	5°4/ 7.9	18	
4 11	15 37.93	-7 52.5	2.191	3.070	10.6	22.2	4 11	15 38.38	-4 46.0	2.050	2.929	11.3	20.8
4 21	15 31.87	-6 46.1	2.141	3.085	7.7	22.0	4 21	15 32.66	-3 47.0	1.958	2.898	8.5	20.6
5 1	15 24.40	-5 41.4	2.118	3.100	5.0	21.9	5 1	15 25.10	-2 50.3	1.891	2.867	6.1	20.3
5 11	15 16.25	-4 43.4	2.122	3.114	4.2	21.9	5 11	15 16.38	-2 1.2	1.851	2.836	5.6	20.3
5 21	15 8.21	-3 56.1	2.155	3.128	6.2	22.0	5 21	15 7.35	-1 24.5	1.838	2.804	7.7	20.3
5 31	15 1.03	-3 22.7	2.215	3.141	9.0	22.2	5 31	14 58.94	-1 4.2	1.851	2.771	10.8	20.4
6 10	14 55.31	-3 4.6	2.299	3.154	11.7	22.4	6 10	14 51.98	-1 2.1	1.888	2.738	14.0	20.6
6 20	14 51.41	-3 1.7	2.403	3.166	14.0	22.6	6 20	14 47.05	-1 18.1	1.943	2.705	16.9	20.7
198685	2005 <i>CH</i> ₁₂		5 11.9 155°93	1°3/10.9	18		375714	2009 <i>QE</i> ₉		5 11.9 303°14	2°2/10.4	18	R
4 11	15 38.94	-14 46.9	2.396	3.268	10.1	21.0	4 11	15 36.89	-17 25.5	1.434	2.328	14.2	19.9
4 21	15 32.61	-14 26.3	2.330	3.275	7.1	20.8	4 21	15 32.21	-16 9.9	1.348	2.304	10.1	19.6
5 1	15 24.83	-14 2.9	2.291	3.282	3.8	20.6	5 1	15 25.06	-14 41.2	1.285	2.279	5.5	19.3
5 11	15 16.29	-13 38.9	2.280	3.288	1.3	20.5	5 11	15 16.38	-13 5.1	1.246	2.254	2.2	19.0
5 21	15 7.75	-13 17.1	2.299	3.294	3.8	20.7	5 21	15 7.36	-11 30.0	1.234	2.230	6.2	19.2
5 31	14 59.98	-12 59.9	2.345	3.299	7.1	20.9	5 31	14 59.31	-10 5.1	1.246	2.206	11.3	19.4
6 10	14 53.59	-12 49.8	2.418	3.303	10.1	21.1	6 10	14 53.35	-8 58.0	1.280	2.182	16.0	19.6
6 20	14 49.00	-12 47.9	2.512	3.308	12.6	21.2	6 20	14 50.15	-8 12.7	1.332	2.159	20.1	19.8
15419	1998 <i>FZ</i> ₆₂		5 11.9 199°97	4°4/ 8.2	18		270396	2002 <i>AF</i> ₁₈₈		5 11.9 155°53	0°5/12.4	18	
4 11	15 37.51	-7 20.9	2.244	3.123	10.4	18.2	4 11	15 33.10	-21 16.9	3.857	4.714	7.0	21.7
4 21	15 31.69	-6 8.9	2.176	3.120	7.6	18.0	4 21	15 28.18	-21 2.2	3.784	4.720	5.0	21.6
5 1	15 24.37	-4 57.9	2.135	3.116	5.1	17.8	5 1	15 22.39	-20 43.0	3.738	4.726	2.7	21.4
5 11	15 16.26	-3 52.7	2.122	3.111	4.5	17.8	5 11	15 16.16	-20 20.2	3.722	4.731	0.6	21.2
5 21	15 8.11	-2 58.2	2.136	3.106	6.5	17.9	5 21	15 9.91	-19 55.5	3.736	4.737	2.1	21.4
5 31	15 0.71	-2 17.9	2.178	3.100	9.3	18.1	5 31	15 4.11	-19 30.6	3.780	4.741	4.3	21.6
6 10	14 54.70	-1 53.8	2.244	3.094	12.1	18.2	6 10	14 59.13	-19 7.5	3.851	4.746	6.4	21.7
6 20	14 50.50	-1 46.1	2.330	3.087	14.5	18.4	6 20	14 55.27	-18 47.9	3.947	4.751	8.2	21.8
247147	2000 <i>XX</i> ₁₂		5 11.9 193°33	2°8/14.5	18	R	433054	2012 <i>SC</i> ₆₃		5 11.9 263°30	2°5/13.4	17	
4 11	15 37.61	-30 15.7	3.065	3.894	9.4	21.1	4 11	15 39.07	-26 4.8	1.940	2.800	12.7	21.2
4 21	15 31.61	-30 11.3	2.980	3.891	7.1	20.9	4 21	15 33.21	-26 0.7	1.864	2.797	9.4	21.0
5 1	15 24.30	-29 56.2	2.922	3.889	4.8	20.8	5 1	15 25.37	-25 44.0	1.812	2.794	5.8	20.8
5 11	15 16.26	-29 30.6	2.891	3.885	3.0	20.7	5 11	15 16.40	-25 15.6	1.786	2.790	2.7	20.6
5 21	15 8.17	-28 56.0	2.889	3.882	3.4	20.7	5 21	15 7.31	-24 37.8	1.787	2.787	4.0	20.7
5 31	15 0.69	-28 15.3	2.917	3.877	5.5	20.8	5 31	14 59.15	-23 55.1	1.816	2.784	7.7	20.9
6 10	14 54.41	-27 32.0	2.972	3.873	7.9	21.0	6 10	14 52.78	-23 12.9	1.869	2.780	11.2	21.1
6 20	14 49.72	-26 49.6	3.051	3.868	10.1	21.1	6 20	14 48.72	-22 35.8	1.943	2.777	14.4	21.3
40572	1999 <i>RP</i> ₁₂₉		5 11.9 290°67	4°9/14.1	18		239201	2006 <i>ML</i> ₁₃		5 11.9 281°96	0°7/12.3	17	
4 11	15 42.05	-29 1.3	1.452	2.314	16.0	18.9	4 11	15 38.18	-21 1.5	1.980	2.852	11.9	21.1
4 21	15 36.14	-29 27.0	1.369	2.300	12.3	18.6	4 21	15 32.51	-20 51.0	1.903	2.847	8.5	20.9
5 1	15 27.29	-29 35.6	1.309	2.285	8.3	18.4	5 1	15 24.97	-20 32.1	1.851	2.841	4.7	20.6
5 11	15 16.54	-29 25.1	1.271	2.270	5.1	18.1	5 11	15 16.37	-20 6.6	1.826	2.835	0.9	20.3
5 21	15 5.32	-28 56.3	1.259	2.255	6.1	18.1	5 21	15 7.64	-19 37.0	1.828	2.830	3.7	20.5
5 31	14 55.25	-28 14.1	1.271	2.241	10.1	18.3	5 31	14 59.76	-19 7.3	1.858	2.824	7.7	20.7
6 10	14 47.65	-27 26.6	1.306	2.226	14.4	18.5	6 10	14 53.53	-18 41.6	1.912	2.819	11.3	21.0
6 20	14 43.30	-26 41.4	1.360	2.212	18.4	18.7	6 20	14 49.48	-18 23.0	1.987	2.813	14.4	21.1
74772	1999 <i>RT</i> ₂₂₉		5 11.9 303°61	2°9/10.6	18		497081	2003 <i>WQ</i> ₄₂		5 11.9 183°78	3°2/ 9.0	18	
4 11	15 39.68	-13 4.2	1.320	2.217	15.0	19.2	4 11	15 37.66	-6 50.8	3.001	3.869	8.4	23.1
4 21	15 34.45	-12 39.9	1.236	2.192	10.8	18.8	4 21	15 31.51	-6 16.6	2.932	3.870	6.1	23.0
5 1	15 26.40	-12 12.3	1.173	2.166	6.1	18.5	5 1	15 24.22	-5 44.5	2.890	3.870	4.0	22.8
5 11	15 16.49	-11 45.5	1.134	2.140	2.9	18.2	5 11	15 16.33	-5 16.9	2.877	3.869	3.3	22.8
5 21	15 6.02	-11 24.4	1.119	2.115	6.7	18.4	5 21	15 8.41	-4 56.4	2.894	3.867	4.8	22.9
5 31	14 56.50	-11 14.1	1.128	2.090	11.9	18.6	5 31	15 1.06	-4 44.7	2.940	3.865	7.1	23.0
6 10	14 49.26	-11 18.6	1.158	2.066	16.9	18.8	6 10	14 54.79	-4 43.0	3.011	3.861	9.3	23.1
6 20	14 45.10	-11 39.3	1.205	2.042	21.2	19.0	6 20	14 49.93	-4 51.3	3.106	3.857	11.3	23.3
115504	2003 <i>UH</i> ₂₉		5 11.9 193°59	0°1/11.8	17	R	384111	2008 <i>WJ</i> ₉₅		5 11.9 167°96	0°8/11.2	18	
4 11	15 38.43	-19 2.8	2.140	3.012	11.1	20.6	4 11	15 37.98	-17 25.8	2.568	3.436	9.6	22.1
4 21	15 32.50	-18 43.0	2.067	3.011	7.9	20.4	4 21	15 31.90	-16 50.2	2.498	3.441	6.8	21.9
5 1	15 24.89	-18 16.7	2.019	3.010	4.2	20.2	5 1	15 24.47	-16 9.7	2.454	3.446	3.6	21.7
5 11	15 16.34	-17 45.8	1.999	3.009	0.3	19.9	5 11	15 16.35	-15 26.7	2.440	3.449	0.8	21.5
5 21	15 7.73	-17 13.5	2.007	3.007	3.6	20.1	5 21	15 8.22	-14 44.2	2.455	3.452	3.4	21.7
5 31	14 59.94	-16 43.2	2.043	3.005	7.4	20.4	5 31	15 0.81	-14 5.6	2.499	3.455	6.6	21.9
6 10	14 53.69	-16 18.6	2.103	3.003	10.8	20.6	6 10	14 54.69	-13 33.8	2.569	3.457	9.5	22.1
6 20	14 49.44	-16 2.1	2.186	3.000	13.6	20.8	6 20	14 50.26	-13 10.8	2.662	3.458	12.0	22.2
117345	2004 <i>XO</i> ₄₁		5 11.9 174°25	4°8									

EPHEMERIDES

5 11.9

5 11.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
268436	2005 <i>VE</i> ₅₃		5 11.9 190°77	1°4/10.8	18		311265	2005 <i>EL</i> ₁₃₁		5 11.9 127°61	1°0/12.5	17	
4 11	15 39.50	-15 20.2	2.316	3.188	10.4	21.7	4 11	15 42.82	-22 23.3	1.687	2.557	13.8	21.5
4 21	15 33.13	-14 46.5	2.242	3.187	7.3	21.5	4 21	15 35.86	-22 4.0	1.628	2.570	9.9	21.2
5 1	15 25.19	-14 8.7	2.194	3.185	3.9	21.3	5 1	15 26.76	-21 33.6	1.593	2.582	5.5	21.0
5 11	15 16.41	-13 29.7	2.174	3.182	1.4	21.1	5 11	15 16.56	-20 54.1	1.584	2.593	1.2	20.7
5 21	15 7.57	-12 52.7	2.184	3.179	4.1	21.3	5 21	15 6.42	-20 9.5	1.602	2.604	4.1	21.0
5 31	14 59.49	-12 21.2	2.222	3.174	7.5	21.5	5 31	14 57.50	-19 25.1	1.648	2.614	8.5	21.3
6 10	14 52.85	-11 57.9	2.285	3.169	10.6	21.7	6 10	14 50.69	-18 46.2	1.717	2.624	12.3	21.5
6 20	14 48.08	-11 44.8	2.371	3.164	13.3	21.8	6 20	14 46.44	-18 16.7	1.807	2.633	15.6	21.7
129005	2004 <i>TK</i> ₂₉₁		5 11.9 76°66	0°1/11.8	17		354275	2002 <i>RK</i> ₂₀₇		5 11.9 202°51	2°0/12.9	16	
4 11	15 38.84	-19 25.4	1.766	2.645	12.8	20.6	4 11	15 44.47	-24 3.1	1.570	2.438	14.7	22.2
4 21	15 33.03	-19 2.2	1.701	2.648	9.0	20.4	4 21	15 37.42	-23 55.6	1.496	2.434	10.8	22.0
5 1	15 25.26	-18 30.8	1.660	2.651	4.8	20.1	5 1	15 27.80	-23 34.5	1.444	2.430	6.3	21.7
5 11	15 16.41	-17 54.1	1.645	2.654	0.4	19.8	5 11	15 16.66	-23 0.7	1.418	2.426	2.2	21.4
5 21	15 7.54	-17 15.7	1.657	2.658	4.1	20.1	5 21	15 5.33	-22 17.4	1.419	2.420	4.6	21.6
5 31	14 59.67	-16 40.2	1.695	2.661	8.4	20.4	5 31	14 55.20	-21 30.4	1.446	2.414	9.3	21.8
6 10	14 53.66	-16 12.0	1.758	2.664	12.2	20.6	6 10	14 47.37	-20 46.5	1.497	2.408	13.6	22.1
6 20	14 49.97	-15 53.9	1.841	2.667	15.4	20.8	6 20	14 42.46	-20 11.0	1.568	2.400	17.3	22.3
393899	2005 <i>TV</i> ₁₅₀		5 11.9 165°43	1°4/12.9	16		87509	2000 <i>QT</i> ₁₈₁		5 11.9 235°76	1°6/12.7	18	
4 11	15 38.77	-22 57.0	2.642	3.498	9.8	22.2	4 11	15 42.79	-22 7.6	2.100	2.960	11.8	19.6
4 21	15 32.55	-23 8.2	2.567	3.500	7.1	22.0	4 21	15 35.83	-22 30.2	2.014	2.950	8.6	19.4
5 1	15 24.88	-23 12.4	2.518	3.503	4.2	21.8	5 1	15 26.84	-22 45.6	1.953	2.939	5.0	19.1
5 11	15 16.38	-23 10.0	2.498	3.505	1.6	21.6	5 11	15 16.58	-22 53.4	1.920	2.928	1.8	18.9
5 21	15 7.81	-23 2.3	2.507	3.507	3.0	21.7	5 21	15 6.04	-22 54.4	1.916	2.916	3.8	19.0
5 31	14 59.90	-22 51.5	2.545	3.509	6.0	21.9	5 31	14 56.26	-22 50.9	1.940	2.904	7.6	19.2
6 10	14 53.31	-22 40.5	2.609	3.510	8.9	22.1	6 10	14 48.17	-22 46.5	1.989	2.891	11.1	19.4
6 20	14 48.45	-22 31.7	2.697	3.511	11.3	22.3	6 20	14 42.34	-22 44.6	2.060	2.878	14.2	19.6
181773	1997 <i>LH</i> ₅		5 11.9 283°70	2°8/ 8.3	18		341508	2007 <i>TC</i> ₄₁₀		5 11.9 127°05	2°6/13.7	17	
4 11	15 29.85	- 4 21.8	4.228	5.100	6.1	20.3	4 11	15 41.61	-26 51.7	2.671	3.511	10.3	22.6
4 21	15 25.87	- 3 56.0	4.158	5.094	4.5	20.2	4 21	15 34.51	-27 11.5	2.606	3.527	7.6	22.5
5 1	15 21.17	- 3 32.8	4.114	5.089	3.2	20.1	5 1	15 25.90	-27 21.7	2.568	3.542	4.9	22.3
5 11	15 16.08	- 3 14.0	4.100	5.083	2.9	20.1	5 11	15 16.49	-27 22.4	2.557	3.557	2.7	22.2
5 21	15 10.98	- 3 1.2	4.114	5.078	3.9	20.2	5 21	15 7.08	-27 14.4	2.577	3.572	3.5	22.3
5 31	15 6.20	- 2 55.5	4.157	5.073	5.4	20.3	5 31	14 58.43	-27 0.2	2.625	3.586	6.1	22.4
6 10	15 2.08	- 2 57.5	4.225	5.067	7.0	20.4	6 10	14 51.22	-26 43.2	2.701	3.599	8.7	22.6
6 20	14 58.86	- 3 7.3	4.315	5.062	8.5	20.5	6 20	14 45.85	-26 26.6	2.799	3.612	11.0	22.8
222686	2001 <i>YY</i> ₁₁₆		5 11.9 201°73	1°6/10.7	18		38078	1999 <i>GW</i> ₄₂		5 11.9 299°24	4°0/10.1	18	
4 11	15 40.00	-14 7.6	2.498	3.368	9.9	21.8	4 11	15 40.39	-10 54.8	1.322	2.219	15.0	18.2
4 21	15 33.42	-13 42.7	2.419	3.362	6.9	21.6	4 21	15 34.98	-10 24.4	1.237	2.192	10.9	17.8
5 1	15 25.34	-13 15.1	2.366	3.356	3.8	21.4	5 1	15 26.74	- 9 52.7	1.173	2.165	6.5	17.5
5 11	15 16.43	-12 47.1	2.342	3.349	1.6	21.2	5 11	15 16.59	- 9 24.8	1.134	2.138	4.0	17.3
5 21	15 7.43	-12 21.4	2.348	3.341	4.0	21.3	5 21	15 5.86	- 9 6.0	1.118	2.111	7.4	17.4
5 31	14 59.10	-12 0.7	2.383	3.333	7.2	21.5	5 31	14 56.06	- 9 1.2	1.127	2.084	12.5	17.6
6 10	14 52.10	-11 47.5	2.444	3.323	10.2	21.7	6 10	14 48.52	- 9 13.7	1.155	2.057	17.4	17.8
6 20	14 46.88	-11 43.2	2.527	3.313	12.8	21.9	6 20	14 44.07	- 9 44.1	1.201	2.031	21.7	18.0
174810	2003 <i>XZ</i> ₉		5 11.9 206°20	4°4/14.9	18		227522	2005 <i>YD</i> ₄₆		5 11.9 194°44	3°4/14.6	17	
4 11	15 42.40	-32 51.2	2.600	3.418	11.2	20.7	4 11	15 41.21	-30 57.3	2.395	3.226	11.6	21.2
4 21	15 35.35	-33 18.1	2.513	3.412	8.8	20.6	4 21	15 34.47	-30 43.7	2.311	3.223	8.9	21.1
5 1	15 26.48	-33 32.1	2.451	3.406	6.4	20.4	5 1	15 25.98	-30 15.4	2.252	3.220	6.0	20.9
5 11	15 16.53	-33 31.8	2.416	3.399	4.6	20.3	5 11	15 16.52	-29 32.8	2.221	3.216	3.7	20.7
5 21	15 6.37	-33 17.5	2.409	3.392	4.9	20.3	5 21	15 7.00	-28 38.2	2.218	3.212	4.1	20.7
5 31	14 56.94	-32 51.8	2.431	3.384	6.9	20.4	5 31	14 58.34	-27 36.0	2.244	3.206	6.8	20.9
6 10	14 49.02	-32 18.9	2.479	3.376	9.5	20.5	6 10	14 51.29	-26 31.6	2.296	3.200	9.8	21.1
6 20	14 43.16	-31 43.6	2.551	3.367	11.9	20.7	6 20	14 46.33	-25 30.3	2.372	3.194	12.5	21.2
302238	2001 <i>WP</i> ₄₂		5 11.9 221°97	0°9/11.1	17		38670	2000 <i>PR</i> ₆		5 11.9 234°67	7°8/ 4.8	18	
4 11	15 36.18	-17 29.7	2.387	3.262	10.1	21.3	4 11	15 38.47	+ 6 0.6	2.452	3.303	10.7	19.1
4 21	15 30.79	-16 45.4	2.310	3.257	7.1	21.1	4 21	15 32.38	+ 7 13.3	2.381	3.286	9.0	19.0
5 1	15 23.95	-15 55.2	2.259	3.251	3.7	20.9	5 1	15 24.83	+ 8 16.0	2.336	3.268	7.9	18.9
5 11	15 16.32	-15 2.1	2.237	3.246	0.9	20.7	5 11	15 16.43	+ 9 3.4	2.317	3.250	8.1	18.9
5 21	15 8.64	-14 9.8	2.243	3.240	3.7	20.9	5 21	15 7.91	+ 9 31.5	2.325	3.231	9.5	18.9
5 31	15 1.66	-13 22.1	2.277	3.234	7.1	21.1	5 31	15 0.01	+ 9 38.3	2.357	3.211	11.4	19.0
6 10	14 56.01	-12 42.6	2.337	3.228	10.2	21.2	6 10	14 53.38	+ 9 24.0	2.411	3.190	13.5	19.1
6 20	14 52.11	-12 13.5	2.419	3.221	12.8	21.4	6 20	14 48.46	+ 8 50.7	2.484	3.168	15.4	19.2
506157	2016 <i>EH</i> ₁₄₇		5 11.9 220°11	4°2/ 9.3	17		414432	2009 <i>DM</i> ₇₄		5 11.9 345°41	1°4/12.4	17	
4 11	15 40.09	- 9 17.6	1.738	2.623	12.6	21.4	4 11	15 36.92	-20 59.6	1.043	1.947	17.5	19.7
4 21	15 33.94	- 8 27.2	1.669	2.617	9.1	21.2	4 21	15 32.89	-21 9.5	0.978	1.936	12.7	19.3
5 1	15 25.77	- 7 37.0	1.624	2.611	5.7	21.0	5 1	15 25.69	-21 7.6	0.933	1.927	7.2	19.0
5 11	15 16.47	- 6 52.0	1.606	2.604	4.3	20.9	5 11	15 16.52	-20 54.9	0.909	1.918	1.7	18.6
5 21	15 7.07	- 6 17.0	1.615	2.597	6.8	21.0	5 21	15 6.98	-20 35.0	0.907	1.911	5.5	18.8
5 31	14 58.61	- 5 56.1	1.649	2.590	10.5	21.2	5 31	14 58.85	-20 13.6	0.927	1.906	11.4	19.1
6 10	14 51.97	- 5 51.4	1.706	2.582	14.1	21.4	6 10	14 53.52	-19 57.5	0.966	1.902	16.7	19.4
6 20	14 47.67	- 6 3.0	1.783	2.574	17.1	21.6	6 20	14 51.74	-19 51.5	1.022	1.899	21.2	19.7
278373	2007 <i>LU</i> ₈		5 11.9 219°96	3°3/ 9.7	17		414176	2008 <i>BK</i> <					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
212664	2006 <i>UF</i> ₂₃₃		5 11.9 259°97	0°3/12.0	18		7613	Akikiki		5 11.9 54°22	1°0/11.2	18	
4 11	15 39.40	-18 46.2	2.227	3.097	10.9	20.4	4 11	15 36.39	-16 20.8	2.112	2.992	10.9	18.2
4 21	15 33.26	-18 55.2	2.147	3.089	7.8	20.2	4 21	15 31.00	-15 54.9	2.055	3.004	7.7	18.0
5 1	15 25.39	-18 59.4	2.091	3.081	4.2	19.9	5 1	15 24.08	-15 24.8	2.023	3.015	4.0	17.8
5 11	15 16.49	-18 59.6	2.063	3.073	0.5	19.6	5 11	15 16.39	-14 53.4	2.018	3.027	1.0	17.6
5 21	15 7.41	-18 57.1	2.064	3.065	3.5	19.8	5 21	15 8.74	-14 23.6	2.041	3.039	3.9	17.8
5 31	14 59.04	-18 54.4	2.093	3.057	7.1	20.1	5 31	15 1.93	-13 58.9	2.091	3.051	7.4	18.1
6 10	14 52.16	-18 54.1	2.148	3.049	10.5	20.2	6 10	14 56.62	-13 41.8	2.166	3.063	10.6	18.3
6 20	14 47.27	-18 58.5	2.224	3.040	13.4	20.4	6 20	14 53.20	-13 34.1	2.262	3.075	13.3	18.5
149103	2002 <i>CH</i> ₂₀₃		5 11.9 204°48	1°6/13.2	18		506985	2008 <i>SG</i> ₂₀₀		5 11.9 243°39	2°1/13.2	17	
4 11	15 37.45	-24 54.9	2.721	3.573	9.7	21.0	4 11	15 40.27	-24 53.9	2.061	2.920	12.1	22.1
4 21	15 31.63	-24 48.1	2.639	3.569	7.1	20.8	4 21	15 34.07	-24 55.3	1.976	2.910	8.9	21.9
5 1	15 24.41	-24 32.7	2.583	3.565	4.3	20.6	5 1	15 25.90	-24 45.8	1.916	2.899	5.4	21.7
5 11	15 16.41	-24 9.3	2.555	3.560	1.8	20.4	5 11	15 16.56	-24 25.9	1.883	2.889	2.3	21.4
5 21	15 8.32	-23 40.0	2.556	3.555	3.0	20.5	5 21	15 7.01	-23 57.6	1.878	2.878	3.9	21.5
5 31	15 0.87	-23 7.5	2.586	3.550	5.9	20.7	5 31	14 58.28	-23 24.5	1.900	2.866	7.5	21.7
6 10	14 54.67	-22 35.4	2.642	3.545	8.7	20.9	6 10	14 51.23	-22 51.4	1.947	2.855	11.1	21.9
6 20	14 50.16	-22 6.6	2.722	3.539	11.2	21.0	6 20	14 46.43	-22 22.6	2.016	2.843	14.2	22.1
231740	1999 <i>RD</i> ₁₁₁		5 11.9 208°45	7°3/16.9	18		518976	2010 <i>HH</i> ₆₇		5 11.9 50°93	1°8/11.0	17	
4 11	15 44.85	-41 23.4	2.408	3.184	13.1	20.9	4 11	15 40.44	-13 31.2	1.636	2.522	13.2	20.6
4 21	15 37.43	-42 2.9	2.322	3.179	11.1	20.7	4 21	15 34.16	-13 29.1	1.585	2.536	9.3	20.4
5 1	15 27.75	-42 23.5	2.258	3.173	9.1	20.6	5 1	15 25.88	-13 25.5	1.558	2.550	5.0	20.2
5 11	15 16.69	-42 22.3	2.220	3.167	7.6	20.5	5 11	15 16.55	-13 22.8	1.557	2.565	1.8	20.0
5 21	15 5.37	-41 58.9	2.207	3.160	7.5	20.5	5 21	15 7.29	-13 23.5	1.582	2.579	4.9	20.3
5 31	14 54.97	-41 16.0	2.222	3.152	8.7	20.5	5 31	14 59.17	-13 30.1	1.634	2.594	9.0	20.5
6 10	14 46.49	-40 19.7	2.261	3.144	10.8	20.6	6 10	14 53.01	-13 44.3	1.709	2.610	12.7	20.8
6 20	14 40.55	-39 16.8	2.322	3.135	13.0	20.8	6 20	14 49.28	-14 7.1	1.804	2.625	15.8	21.0
35552	1998 <i>FE</i> ₁₁₅		5 11.9 15°57	0°9/11.2	18		420798	2013 <i>HW</i> ₅		5 11.9 332°13	7°1/ 8.8	17	
4 11	15 35.86	-20 12.9	1.432	2.323	14.4	16.6	4 11	15 35.04	- 6 50.8	1.016	1.931	16.8	20.0
4 21	15 31.20	-18 58.8	1.373	2.327	10.1	16.4	4 21	15 31.51	- 5 57.7	0.947	1.908	12.5	19.6
5 1	15 24.37	-17 32.1	1.336	2.331	5.3	16.1	5 1	15 24.98	- 5 8.0	0.898	1.887	8.5	19.3
5 11	15 16.40	-15 58.8	1.325	2.335	0.9	15.8	5 11	15 16.50	- 4 30.6	0.870	1.867	7.2	19.2
5 21	15 8.49	-14 26.8	1.340	2.340	5.1	16.1	5 21	15 7.55	- 4 13.6	0.862	1.848	10.4	19.3
5 31	15 1.78	-13 4.6	1.380	2.346	9.8	16.4	5 31	14 59.79	- 4 22.5	0.875	1.831	15.3	19.5
6 10	14 57.16	-11 58.5	1.443	2.353	14.0	16.7	6 10	14 54.62	- 4 58.6	0.905	1.816	20.1	19.7
6 20	14 55.06	-11 11.7	1.525	2.360	17.6	16.9	6 20	14 52.82	- 5 59.4	0.950	1.802	24.4	19.9
497075	2003 <i>UR</i> ₄₀₇		5 11.9 187°39	1°4/10.9	17		32482	2000 <i>ST</i> ₃₅₄		5 11.9 322°00	0°1/11.8	18	
4 11	15 38.90	-14 23.1	2.391	3.264	10.1	22.1	4 11	15 31.44	-17 57.0	4.169	5.034	6.3	18.1
4 21	15 32.69	-14 3.7	2.318	3.263	7.1	21.9	4 21	15 27.04	-17 54.1	4.092	5.033	4.4	18.0
5 1	15 24.99	-13 41.8	2.271	3.262	3.8	21.7	5 1	15 21.85	-17 48.6	4.041	5.032	2.4	17.8
5 11	15 16.46	-13 19.5	2.253	3.261	1.4	21.5	5 11	15 16.22	-17 41.5	4.020	5.030	0.2	17.6
5 21	15 7.87	-12 59.4	2.264	3.259	3.9	21.7	5 21	15 10.56	-17 33.8	4.029	5.029	2.0	17.8
5 31	15 0.00	-12 44.2	2.303	3.257	7.2	21.9	5 31	15 5.25	-17 26.8	4.068	5.028	4.1	17.9
6 10	14 53.49	-12 36.1	2.368	3.254	10.3	22.1	6 10	15 0.66	-17 21.9	4.133	5.026	6.1	18.1
6 20	14 48.79	-12 36.4	2.455	3.250	12.9	22.3	6 20	14 57.05	-17 20.2	4.224	5.025	7.8	18.2
184658	2005 <i>SO</i> ₄₀		5 11.9 190°88	0°6/11.4	18		393870	2005 <i>TG</i> ₄		5 11.9 280°98	1°3/10.9	16	
4 11	15 36.05	-17 21.0	2.910	3.778	8.7	21.4	4 11	15 35.98	-15 58.1	2.252	3.130	10.4	21.5
4 21	15 30.50	-16 57.2	2.833	3.776	6.1	21.2	4 21	15 30.82	-15 23.2	2.167	3.116	7.3	21.3
5 1	15 23.76	-16 29.3	2.784	3.775	3.2	21.0	5 1	15 24.07	-14 43.5	2.109	3.101	3.9	21.0
5 11	15 16.36	-15 59.2	2.763	3.772	0.6	20.8	5 11	15 16.41	-14 1.8	2.078	3.086	1.3	20.8
5 21	15 8.93	-15 29.1	2.772	3.770	3.0	21.0	5 21	15 8.61	-13 21.5	2.075	3.071	4.1	21.0
5 31	15 2.06	-15 1.7	2.810	3.767	5.9	21.2	5 31	15 1.48	-12 46.5	2.100	3.057	7.6	21.2
6 10	14 56.30	-14 39.2	2.874	3.763	8.5	21.4	6 10	14 55.72	-12 19.8	2.150	3.042	10.9	21.4
6 20	14 52.01	-14 23.6	2.962	3.759	10.8	21.5	6 20	14 51.79	-12 3.6	2.221	3.027	13.7	21.5
512892	2016 <i>WN</i> ₃₁		5 11.9 171°91	2°7/ 8.7	18		190430	1999 <i>VB</i> ₁₈₉		5 11.9 165°70	0°7/11.3	18	
4 11	15 32.04	- 6 27.7	3.864	4.735	6.6	21.9	4 11	15 37.92	-18 57.0	2.241	3.113	10.7	20.1
4 21	15 27.44	- 5 54.6	3.799	4.738	4.8	21.8	4 21	15 32.04	-18 1.0	2.172	3.117	7.5	19.9
5 1	15 22.03	- 5 23.4	3.761	4.740	3.2	21.7	5 1	15 24.64	-16 57.4	2.128	3.120	4.0	19.7
5 11	15 16.22	- 4 56.1	3.752	4.742	2.7	21.6	5 11	15 16.46	-15 49.8	2.113	3.123	0.7	19.4
5 21	15 10.40	- 4 34.5	3.773	4.743	3.9	21.7	5 21	15 8.30	-14 42.6	2.128	3.125	3.8	19.7
5 31	15 4.98	- 4 20.1	3.822	4.745	5.7	21.8	5 31	15 0.97	-13 40.5	2.170	3.127	7.3	19.9
6 10	15 0.32	- 4 13.7	3.897	4.746	7.4	22.0	6 10	14 55.11	-12 47.8	2.238	3.129	10.6	20.1
6 20	14 56.68	- 4 15.6	3.996	4.746	9.0	22.1	6 20	14 51.13	-12 7.0	2.328	3.130	13.3	20.3
498575	2008 <i>LU</i> ₁₃		5 11.9 267°46	3°3/ 9.3	17		389555	2010 <i>RY</i> ₁₅₉		5 11.9 296°29	5°1/ 7.6	16	
4 11	15 38.12	-13 23.0	1.854	2.738	12.0	21.7	4 11	15 34.63	- 5 20.8	2.154	3.038	10.6	21.1
4 21	15 32.59	-12 0.3	1.768	2.718	8.5	21.4	4 21	15 29.85	- 4 11.3	2.081	3.024	7.9	20.9
5 1	15 25.11	-10 30.6	1.707	2.697	5.0	21.1	5 1	15 23.54	- 3 4.0	2.033	3.010	5.7	20.7
5 11	15 16.49	- 8 59.9	1.674	2.676	3.4	21.0	5 11	15 16.37	- 2 4.3	2.012	2.997	5.3	20.6
5 21	15 7.65	- 7 35.1	1.669	2.655	6.2	21.1	5 21	15 9.10	- 1 17.0	2.018	2.983	7.2	20.7
5 31	14 59.62	- 6 22.6	1.690	2.633	10.2	21.3	5 31	15 2.50	- 0 45.5	2.050	2.969	10.0	20.9
6 10	14 53.26	- 5 27.4	1.735	2.610	13.9	21.5	6 10	14 57.25	- 0 31.6	2.105	2.956	12.8	21.0
6 20	14 49.10	- 4 51.7	1.799	2.588	17.1	21.6	6 20	14 53.79	- 0 35.0	2.179	2.942	15.2	21.2
61111	2000 <i>LD</i> ₃₃		5 11.9 256°84	2°5/10.5	18		482162	2010 <i>TN</i> ₉₂					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
307011	2001 <i>XT</i> ₅₇		5 11.9 136°09'	0.4/12.2	17		118850	2000 <i>SL</i> ₂₅₇		5 11.9 174°33'	0.1/11.8	17	R
4 11	15 39.59	-21 43.2	1.899	2.770	12.4	20.9	4 11	15 39.51	-19 32.0	2.087	2.958	11.5	21.0
4 21	15 33.46	-21 7.2	1.834	2.776	8.8	20.7	4 21	15 33.33	-19 4.9	2.016	2.960	8.1	20.7
5 1	15 25.48	-20 21.0	1.793	2.783	4.8	20.5	5 1	15 25.41	-18 30.2	1.971	2.961	4.3	20.5
5 11	15 16.53	-19 27.4	1.779	2.789	0.7	20.2	5 11	15 16.57	-17 50.6	1.953	2.963	0.4	20.2
5 21	15 7.62	-18 30.7	1.794	2.795	3.8	20.5	5 21	15 7.69	-17 9.2	1.963	2.964	3.7	20.5
5 31	14 59.72	-17 36.1	1.836	2.801	7.9	20.7	5 31	14 59.68	-16 30.3	2.002	2.964	7.5	20.7
6 10	14 53.60	-16 48.6	1.902	2.806	11.5	20.9	6 10	14 53.28	-15 57.8	2.065	2.964	11.0	20.9
6 20	14 49.71	-16 11.6	1.990	2.811	14.5	21.2	6 20	14 48.95	-15 34.4	2.150	2.963	13.9	21.1
165494	2001 <i>BD</i> ₄₂		5 11.9 83°03'	12°3/3.8	18		419880	2011 <i>AH</i> ₃₇		5 11.9 123°67'	2°6/9.7	18	C
4 11	15 41.96	+10 11.2	1.574	2.427	15.4	19.9	4 11	15 41.80	-9 7.7	3.010	3.871	8.6	25.4
4 21	15 34.90	+12 18.1	1.565	2.460	13.4	19.8	4 21	15 34.27	-8 31.9	2.963	3.900	6.1	25.3
5 1	15 26.07	+14 0.4	1.580	2.493	12.3	19.8	5 1	15 25.66	-7 57.0	2.945	3.929	3.7	25.2
5 11	15 16.57	+15 10.3	1.618	2.525	12.6	19.9	5 11	15 16.59	-7 25.6	2.958	3.956	2.7	25.1
5 21	15 7.48	+15 44.7	1.678	2.556	14.0	20.1	5 21	15 7.67	-7 0.0	3.003	3.982	4.3	25.3
5 31	14 59.75	+15 44.2	1.760	2.587	15.8	20.3	5 31	14 59.48	-6 42.1	3.077	4.006	6.6	25.5
6 10	14 54.06	+15 13.6	1.859	2.617	17.6	20.5	6 10	14 52.51	-6 33.0	3.178	4.030	8.9	25.6
6 20	14 50.71	+14 19.1	1.973	2.646	19.2	20.7	6 20	14 47.05	-6 33.2	3.302	4.052	10.8	25.8
351535	2005 <i>SS</i> ₁₉₄		5 11.9 190°94'	3°6/14.7	16		378691	2008 <i>KU</i> ₇		5 11.9 103°24'	0°5/11.1	18	
4 11	15 39.26	-31 2.2	2.634	3.464	10.7	21.2	4 11	15 29.54	-16 45.1	4.459	5.328	5.9	20.8
4 21	15 33.05	-31 15.8	2.554	3.463	8.3	21.0	4 21	15 25.67	-16 14.6	4.387	5.331	4.1	20.7
5 1	15 25.24	-31 17.2	2.498	3.461	5.7	20.8	5 1	15 21.12	-15 41.7	4.343	5.334	2.2	20.6
5 11	15 16.53	-31 6.2	2.469	3.460	3.8	20.7	5 11	15 16.22	-15 7.9	4.329	5.337	0.5	20.4
5 21	15 7.70	-30 43.8	2.469	3.458	4.2	20.7	5 21	15 11.31	-14 34.7	4.344	5.341	2.1	20.6
5 31	14 59.58	-30 12.8	2.497	3.456	6.4	20.9	5 31	15 6.76	-14 3.9	4.389	5.344	4.0	20.7
6 10	14 52.88	-29 37.3	2.551	3.454	9.0	21.0	6 10	15 2.85	-13 37.0	4.461	5.347	5.8	20.9
6 20	14 48.05	-29 1.5	2.629	3.451	11.4	21.2	6 20	14 59.83	-13 15.1	4.558	5.350	7.4	21.0
169887	2002 <i>RM</i> ₁₆₅		5 11.9 300°53'	0°8/12.4	17		231889	2000 <i>WW</i> ₁₄		5 11.9 211°92'	2°2/13.6	18	
4 11	15 38.45	-21 18.2	1.939	2.812	12.1	20.7	4 11	15 40.15	-26 59.5	2.320	3.168	11.3	21.0
4 21	15 32.75	-21 8.1	1.866	2.809	8.7	20.5	4 21	15 33.78	-26 40.4	2.235	3.161	8.4	20.8
5 1	15 25.17	-20 49.3	1.817	2.806	4.8	20.2	5 1	15 25.69	-26 8.9	2.174	3.153	5.2	20.6
5 11	15 16.52	-20 23.6	1.795	2.804	1.0	20.0	5 11	15 16.61	-25 26.0	2.141	3.145	2.4	20.4
5 21	15 7.77	-19 53.6	1.800	2.801	3.7	20.2	5 21	15 7.43	-24 34.2	2.138	3.137	3.6	20.5
5 31	14 59.90	-19 23.3	1.832	2.799	7.7	20.4	5 31	14 59.05	-23 37.9	2.162	3.127	6.8	20.7
6 10	14 53.73	-18 56.9	1.888	2.796	11.3	20.6	6 10	14 52.23	-22 42.3	2.213	3.118	10.1	20.8
6 20	14 49.76	-18 37.7	1.966	2.794	14.4	20.8	6 20	14 47.43	-21 51.8	2.287	3.107	12.9	21.0
165320	2000 <i>UX</i> ₇₂		5 11.9 142°14'	2°0/12.9	18		507123	2009 <i>SQ</i> ₃₄₉		5 11.9 205°14'	2°2/10.1	17	
4 11	15 44.79	-23 25.7	1.703	2.567	13.9	20.3	4 11	15 38.80	-14 50.9	2.170	3.046	10.8	23.2
4 21	15 37.41	-23 38.2	1.639	2.576	10.2	20.1	4 21	15 32.75	-13 42.4	2.094	3.041	7.6	23.0
5 1	15 27.72	-23 39.8	1.599	2.584	5.9	19.8	5 1	15 25.10	-12 28.3	2.045	3.035	4.2	22.7
5 11	15 16.75	-23 30.6	1.585	2.592	2.2	19.6	5 11	15 16.56	-11 13.1	2.024	3.029	2.2	22.6
5 21	15 5.72	-23 12.8	1.598	2.599	4.3	19.8	5 21	15 7.98	-10 2.0	2.032	3.022	4.9	22.8
5 31	14 55.88	-22 50.4	1.639	2.606	8.5	20.0	5 31	15 0.20	-9 0.0	2.069	3.015	8.4	23.0
6 10	14 48.20	-22 28.5	1.704	2.612	12.4	20.3	6 10	14 53.92	-8 10.9	2.130	3.007	11.6	23.1
6 20	14 43.22	-22 11.5	1.790	2.617	15.6	20.5	6 20	14 49.57	-7 36.6	2.213	2.998	14.4	23.3
48781	1997 <i>SL</i>		5 11.9 222°93'	0°2/11.8	18		84698	2002 <i>VN</i> ₁₁₀		5 11.9 174°07'	1°7/10.6	18	
4 11	15 38.00	-19 5.1	2.597	3.462	9.7	20.5	4 11	15 38.11	-12 19.0	2.937	3.806	8.6	19.3
4 21	15 32.08	-18 40.5	2.510	3.452	6.9	20.3	4 21	15 31.92	-12 4.3	2.866	3.809	6.0	19.2
5 1	15 24.70	-18 9.8	2.450	3.441	3.7	20.1	5 1	15 24.54	-11 48.9	2.823	3.812	3.4	19.0
5 11	15 16.50	-17 34.9	2.419	3.429	0.3	19.8	5 11	15 16.53	-11 34.6	2.808	3.814	1.7	18.9
5 21	15 8.18	-16 58.4	2.417	3.417	3.2	20.0	5 21	15 8.48	-11 23.1	2.824	3.815	3.6	19.0
5 31	15 0.49	-16 23.5	2.444	3.404	6.5	20.2	5 31	15 1.01	-11 16.5	2.869	3.816	6.3	19.2
6 10	14 54.06	-15 53.4	2.498	3.391	9.5	20.4	6 10	14 54.66	-11 16.1	2.941	3.816	8.8	19.3
6 20	14 49.33	-15 30.5	2.574	3.377	12.1	20.5	6 20	14 49.78	-11 22.8	3.035	3.816	11.0	19.5
125032	2001 <i>TE</i> ₁₉₂		5 11.9 228°57'	3°5/13.7	18		338413	2003 <i>BL</i> ₄₈		5 11.9 80°14'	0°4/11.6	17	
4 11	15 44.04	-27 39.6	1.662	2.518	14.6	20.1	4 11	15 38.07	-18 29.0	2.164	3.038	11.0	21.0
4 21	15 37.21	-27 43.8	1.579	2.509	11.0	19.9	4 21	15 32.13	-18 3.8	2.112	3.057	7.7	20.8
5 1	15 27.78	-27 32.1	1.520	2.499	7.0	19.6	5 1	15 24.69	-17 32.9	2.086	3.077	4.1	20.6
5 11	15 16.76	-27 4.1	1.486	2.488	3.7	19.4	5 11	15 16.53	-16 58.9	2.087	3.097	0.4	20.3
5 21	15 5.46	-26 21.8	1.479	2.477	5.0	19.4	5 21	15 8.47	-16 24.8	2.117	3.116	3.5	20.6
5 31	14 55.25	-25 30.8	1.498	2.465	9.0	19.6	5 31	15 1.32	-15 54.2	2.174	3.136	7.1	20.9
6 10	14 47.27	-24 38.1	1.541	2.453	13.2	19.9	6 10	14 55.70	-15 30.1	2.257	3.155	10.2	21.1
6 20	14 42.19	-23 50.6	1.604	2.440	16.8	20.1	6 20	14 51.98	-15 14.5	2.361	3.174	12.8	21.3
403929	2012 <i>BX</i> ₃		5 11.9 185°87'	3°4/9.9	16		500676	2012 <i>VX</i> ₆₀		5 11.9 142°62'	0°7/11.4	17	
4 11	15 42.11	-10 35.7	1.833	2.712	12.4	22.2	4 11	15 39.03	-15 58.4	2.569	3.437	9.6	22.5
4 21	15 35.28	-9 58.4	1.766	2.713	8.8	22.0	4 21	15 32.70	-15 52.4	2.503	3.447	6.8	22.3
5 1	15 26.51	-9 20.7	1.724	2.712	5.2	21.8	5 1	15 25.00	-15 43.4	2.465	3.455	3.6	22.1
5 11	15 16.66	-8 46.7	1.709	2.711	3.4	21.7	5 11	15 16.57	-15 32.9	2.455	3.464	0.7	21.9
5 21	15 6.74	-8 20.2	1.722	2.709	5.9	21.8	5 21	15 8.14	-15 22.9	2.474	3.472	3.3	22.1
5 31	14 57.80	-8 4.8	1.762	2.707	9.7	22.0	5 31	15 0.41	-15 15.4	2.523	3.480	6.5	22.3
6 10	14 50.66	-8 2.6	1.826	2.704	13.2	22.2	6 10	14 53.99	-15 12.4	2.597	3.487	9.3	22.5
6 20	14 45.83	-8 13.9	1.909	2.700	16.2	22.4	6 20	14 49.27	-15 15.5	2.695	3.494	11.7	22.7
224471	2005 <i>VS</i> ₆₂		5 11.9 77°85'	2°4/10.3	17		280						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
254228	2004 <i>RD</i> ₁₁₄		5 11.9 261°35	0°3/12.1 18			132053	2002 <i>CD</i> ₁₃₉		5 11.9 73°89	0°6/11.6 18		
4 11	15 37.01	-20 4.6	2.623	3.488	9.6	21.4	4 11	15 40.68	-19 14.7	1.359	2.248	15.2	19.8
4 21	15 31.45	-19 51.0	2.530	3.470	6.9	21.2	4 21	15 34.77	-18 33.8	1.302	2.255	10.8	19.5
5 1	15 24.43	-19 31.1	2.463	3.452	3.7	21.0	5 1	15 26.41	-17 42.5	1.268	2.262	5.7	19.2
5 11	15 16.54	-19 6.4	2.424	3.434	0.5	20.7	5 11	15 16.75	-16 45.2	1.259	2.269	0.7	18.9
5 21	15 8.47	-18 39.0	2.414	3.415	3.0	20.9	5 21	15 7.13	-15 47.8	1.275	2.276	5.1	19.2
5 31	15 0.97	-18 11.8	2.433	3.395	6.4	21.1	5 31	14 58.86	-14 57.1	1.316	2.283	10.1	19.5
6 10	14 54.68	-17 47.8	2.478	3.376	9.4	21.2	6 10	14 52.94	-14 18.7	1.379	2.290	14.5	19.8
6 20	14 50.07	-17 29.5	2.546	3.356	12.0	21.4	6 20	14 49.86	-13 55.5	1.460	2.297	18.1	20.1
500098	2012 <i>BY</i> ₂₈		5 11.9 235°39	3°1/13.7 17			309716	2008 <i>GO</i> ₁₁₄		5 11.9 174°47	3°0/ 9.4 18		
4 11	15 42.49	-27 14.5	1.627	2.488	14.6	21.7	4 11	15 35.71	- 8 45.2	2.627	3.504	9.2	21.0
4 21	15 36.10	-27 4.7	1.547	2.480	11.0	21.4	4 21	15 30.37	- 8 10.5	2.561	3.505	6.6	20.9
5 1	15 27.19	-26 38.3	1.490	2.471	6.9	21.1	5 1	15 23.79	- 7 37.0	2.521	3.506	4.1	20.7
5 11	15 16.78	-25 55.9	1.457	2.461	3.3	20.9	5 11	15 16.54	- 7 7.5	2.510	3.507	3.1	20.6
5 21	15 6.15	-25 0.4	1.452	2.452	4.8	21.0	5 21	15 9.28	- 6 44.8	2.527	3.507	4.8	20.7
5 31	14 56.64	-23 58.2	1.472	2.442	9.0	21.2	5 31	15 2.63	- 6 31.1	2.572	3.508	7.4	20.9
6 10	14 49.33	-22 56.8	1.516	2.431	13.2	21.4	6 10	14 57.15	- 6 27.7	2.641	3.508	10.0	21.1
6 20	14 44.86	-22 2.7	1.581	2.420	16.9	21.6	6 20	14 53.20	- 6 34.9	2.733	3.508	12.2	21.2
272472	2005 <i>UL</i> ₇₇		5 11.9 140°06	3°9/ 8.8 17			377747	2005 <i>XN</i> ₁₀₅		5 11.9 215°46	1°3/11.1 17		
4 11	15 38.80	- 8 50.3	2.194	3.072	10.7	21.3	4 11	15 39.45	-15 39.2	1.983	2.861	11.6	21.7
4 21	15 32.60	- 7 41.9	2.140	3.085	7.7	21.1	4 21	15 33.42	-15 14.8	1.909	2.857	8.2	21.5
5 1	15 24.94	- 6 34.2	2.113	3.096	4.9	21.0	5 1	15 25.58	-14 46.0	1.861	2.853	4.4	21.2
5 11	15 16.58	- 5 32.2	2.114	3.108	4.0	21.0	5 11	15 16.70	-14 15.6	1.839	2.848	1.3	21.0
5 21	15 8.30	- 4 40.1	2.143	3.118	6.0	21.1	5 21	15 7.72	-13 47.0	1.846	2.843	4.4	21.2
5 31	15 0.87	- 4 1.4	2.200	3.128	8.9	21.3	5 31	14 59.59	-13 23.6	1.880	2.838	8.2	21.4
6 10	14 54.92	- 3 37.9	2.281	3.138	11.7	21.5	6 10	14 53.08	-13 8.7	1.938	2.832	11.8	21.6
6 20	14 50.81	- 3 29.7	2.382	3.147	14.0	21.7	6 20	14 48.70	-13 4.1	2.017	2.827	14.8	21.8
360999	2005 <i>UU</i> ₄₅₄		5 11.9 206°49	5°9/ 5.9 16			297423	2000 <i>SP</i> ₅₉		5 11.9 237°06	2°4/13.7 18		
4 11	15 34.82	+ 2 25.4	2.857	3.718	9.0	21.7	4 11	15 38.54	-26 41.5	2.515	3.363	10.5	20.6
4 21	15 29.65	+ 3 27.2	2.795	3.713	7.3	21.6	4 21	15 32.63	-26 42.9	2.428	3.354	7.9	20.4
5 1	15 23.35	+ 4 21.8	2.760	3.708	6.1	21.5	5 1	15 25.12	-26 34.2	2.367	3.345	4.9	20.2
5 11	15 16.45	+ 5 5.2	2.752	3.703	6.1	21.5	5 11	15 16.66	-26 15.6	2.332	3.335	2.6	20.0
5 21	15 9.52	+ 5 34.5	2.771	3.697	7.3	21.6	5 21	15 8.06	-25 48.7	2.327	3.325	3.5	20.1
5 31	15 3.14	+ 5 47.9	2.817	3.691	9.1	21.7	5 31	15 0.12	-25 16.4	2.350	3.314	6.4	20.2
6 10	14 57.80	+ 5 45.2	2.885	3.685	11.0	21.8	6 10	14 53.57	-24 42.8	2.398	3.304	9.4	20.4
6 20	14 53.85	+ 5 27.4	2.973	3.678	12.7	21.9	6 20	14 48.87	-24 11.6	2.470	3.293	12.0	20.6
501627	2014 <i>SD</i> ₂₀₆		5 11.9 298°23	4°9/13.7 17			357306	2003 <i>AC</i> ₄₀		5 11.9 136°19	3°5/ 8.9 17		
4 11	15 42.76	-27 30.2	1.266	2.140	17.2	21.1	4 11	15 36.86	- 6 41.7	2.796	3.668	8.8	21.9
4 21	15 37.17	-28 6.1	1.181	2.119	13.2	20.8	4 21	15 31.03	- 6 0.0	2.743	3.682	6.4	21.7
5 1	15 28.20	-28 26.2	1.117	2.097	8.7	20.4	5 1	15 24.08	- 5 20.8	2.716	3.696	4.2	21.6
5 11	15 16.91	-28 27.4	1.075	2.076	5.2	20.2	5 11	15 16.57	- 4 47.1	2.718	3.709	3.5	21.6
5 21	15 4.86	-28 9.5	1.057	2.055	6.5	20.2	5 21	15 9.12	- 4 21.5	2.749	3.721	5.1	21.7
5 31	14 53.93	-27 37.1	1.062	2.034	11.2	20.4	5 31	15 2.32	- 4 6.0	2.809	3.733	7.4	21.8
6 10	14 45.74	-26 58.4	1.088	2.013	16.2	20.6	6 10	14 56.66	- 4 1.4	2.893	3.745	9.6	22.0
6 20	14 41.25	-26 22.0	1.132	1.993	20.7	20.8	6 20	14 52.46	- 4 7.9	3.000	3.756	11.6	22.2
9803	1997 <i>GL</i> ₈		5 11.9 307°93	1°8/12.7 18			43597	Changshaopo		5 11.9 162°02	4°6/14.3 18		
4 11	15 40.59	-22 7.8	1.418	2.300	15.1	17.5	4 11	15 45.63	-29 34.7	1.601	2.452	15.4	19.7
4 21	15 35.10	-22 21.5	1.336	2.283	11.1	17.2	4 21	15 38.36	-29 55.2	1.533	2.456	11.8	19.5
5 1	15 26.84	-22 24.8	1.276	2.266	6.4	16.9	5 1	15 28.43	-29 58.4	1.487	2.460	7.9	19.3
5 11	15 16.78	-22 17.8	1.241	2.249	2.0	16.6	5 11	15 16.96	-29 43.1	1.466	2.463	4.8	19.1
5 21	15 6.26	-22 2.3	1.230	2.233	4.9	16.7	5 21	15 5.35	-29 10.8	1.471	2.466	5.6	19.2
5 31	14 56.78	-21 42.7	1.244	2.217	9.9	16.9	5 31	14 55.05	-28 27.0	1.502	2.468	9.2	19.4
6 10	14 49.60	-21 24.7	1.281	2.201	14.7	17.2	6 10	14 47.16	-27 39.1	1.557	2.470	13.0	19.6
6 20	14 45.48	-21 13.3	1.335	2.186	18.7	17.4	6 20	14 42.29	-26 54.0	1.633	2.471	16.4	19.8
507739	2013 <i>XR</i> ₁₀		5 11.9 211°81	2°4/13.8 17			280357	2003 <i>SZ</i> ₃₀₀		5 11.9 216°09	0°5/12.3 18		
4 11	15 39.85	-28 8.3	2.081	2.930	12.3	21.1	4 11	15 38.55	-21 40.0	2.069	2.938	11.6	21.4
4 21	15 33.71	-27 33.0	1.999	2.926	9.2	20.9	4 21	15 32.77	-21 11.2	1.992	2.934	8.3	21.2
5 1	15 25.71	-26 42.3	1.942	2.921	5.7	20.6	5 1	15 25.21	-20 33.0	1.941	2.930	4.6	21.0
5 11	15 16.68	-25 37.9	1.912	2.915	2.7	20.4	5 11	15 16.68	-19 47.6	1.917	2.926	0.8	20.7
5 21	15 7.60	-24 23.5	1.910	2.910	3.8	20.5	5 21	15 8.07	-18 58.5	1.921	2.922	3.6	20.9
5 31	14 59.45	-23 4.9	1.936	2.903	7.3	20.7	5 31	15 0.30	-18 10.1	1.952	2.917	7.5	21.1
6 10	14 53.03	-21 48.7	1.988	2.897	10.8	20.9	6 10	14 54.13	-17 27.2	2.009	2.912	11.0	21.3
6 20	14 48.82	-20 40.3	2.063	2.890	13.9	21.1	6 20	14 50.06	-16 53.1	2.087	2.908	14.0	21.5
326638	2002 <i>SS</i> ₂₅		5 11.9 217°33	1°6/10.9 18			225812	2001 <i>VF</i> ₁₁₅		5 11.9 268°53	0°2/12.1 18		
4 11	15 41.01	-15 9.5	1.920	2.798	12.0	21.0	4 11	15 40.96	-19 23.8	1.799	2.674	12.8	20.5
4 21	15 34.59	-14 42.0	1.843	2.791	8.5	20.7	4 21	15 34.85	-19 18.4	1.712	2.658	9.2	20.2
5 1	15 26.23	-14 10.0	1.791	2.783	4.6	20.5	5 1	15 26.52	-19 5.6	1.650	2.640	5.0	19.9
5 11	15 16.74	-13 36.7	1.767	2.775	1.6	20.3	5 11	15 16.81	-18 46.8	1.613	2.623	0.5	19.5
5 21	15 7.10	-13 5.4	1.770	2.766	4.7	20.5	5 21	15 6.77	-18 24.4	1.604	2.605	4.2	19.8
5 31	14 58.33	-12 40.3	1.801	2.757	8.7	20.7	5 31	14 57.56	-18 2.5	1.621	2.587	8.7	20.0
6 10	14 51.27	-12 24.4	1.856	2.747	12.4	20.9	6 10	14 50.18	-17 45.2	1.663	2.569	12.7	20.2
6 20	14 46.46	-12 19.8	1.931	2.737	15.5	21.1	6 20	14 45.27	-17 35.9	1.725	2.551	16.3	20.4
378665	2008 <i>GB</i> ₁₁₆		5 11.9 16°84	2°9/ 7.9 17			243260	2007 <i>XD</i> ₃₅					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
507694	2013 TZ ₁₈		5 11.9 288°73	3°1/13.5 17			87176	2000 OZ ₅		5 11.9 237°85	6°5/16.2 18		
4 11	15 40.83	-26 32.8	1.591	2.457	14.6	21.7	4 11	15 43.69	-37 49.7	2.177	2.980	13.5	18.6
4 21	15 35.18	-26 31.4	1.498	2.434	11.0	21.4	4 21	15 36.78	-38 11.7	2.085	2.967	11.1	18.4
5 1	15 26.87	-26 14.5	1.428	2.410	6.9	21.1	5 1	15 27.57	-38 14.7	2.015	2.953	8.6	18.3
5 11	15 16.85	-25 41.7	1.382	2.386	3.3	20.8	5 11	15 16.93	-37 56.3	1.970	2.939	6.8	18.1
5 21	15 6.34	-24 55.4	1.362	2.362	4.9	20.9	5 21	15 6.00	-37 16.8	1.952	2.924	6.7	18.1
5 31	14 56.77	-24 1.0	1.367	2.338	9.4	21.0	5 31	14 56.00	-36 19.9	1.961	2.909	8.6	18.2
6 10	14 49.35	-23 6.0	1.396	2.314	13.8	21.2	6 10	14 47.94	-35 12.2	1.994	2.893	11.3	18.3
6 20	14 44.83	-22 17.2	1.445	2.290	17.8	21.4	6 20	14 42.46	-34 1.1	2.050	2.877	14.0	18.5
457437	2008 UK ₁₀₂		5 11.9 198°56	1°0/12.5 16			33959	2000 ND ₆		5 11.9 170°40	0°5/12.2 18		
4 11	15 44.17	-22 4.2	1.693	2.561	13.8	22.9	4 11	15 42.43	-21 33.7	1.666	2.538	13.8	19.4
4 21	15 37.11	-21 50.1	1.618	2.558	10.0	22.6	4 21	15 35.79	-21 1.0	1.598	2.542	9.8	19.2
5 1	15 27.69	-21 24.8	1.566	2.555	5.6	22.4	5 1	15 26.93	-20 16.9	1.554	2.544	5.4	18.9
5 11	15 16.91	-20 49.9	1.541	2.550	1.3	22.0	5 11	15 16.87	-19 24.1	1.537	2.546	0.7	18.6
5 21	15 5.96	-20 8.7	1.544	2.545	4.3	22.3	5 21	15 6.78	-18 27.4	1.546	2.548	4.3	18.9
5 31	14 56.11	-19 26.5	1.573	2.540	8.8	22.5	5 31	14 57.84	-17 32.6	1.583	2.549	8.8	19.1
6 10	14 48.37	-18 48.9	1.627	2.533	13.0	22.7	6 10	14 50.97	-16 45.5	1.644	2.549	12.9	19.4
6 20	14 43.31	-18 20.4	1.702	2.526	16.5	23.0	6 20	14 46.70	-16 10.2	1.725	2.549	16.3	19.6
430342	2013 YQ ₇₀		5 11.9 193°22	5°3/ 8.8 17			205677	2001 XT ₂₅₃		5 11.9 212°52	3°5/10.2 16		
4 11	15 40.39	- 2 32.3	2.150	3.021	11.2	21.1	4 11	15 43.31	-10 21.2	1.690	2.571	13.2	21.0
4 21	15 33.88	- 2 5.3	2.085	3.019	8.5	20.9	4 21	15 36.41	- 9 54.6	1.618	2.565	9.5	20.7
5 1	15 25.75	- 1 44.9	2.045	3.018	6.1	20.7	5 1	15 27.31	- 9 28.1	1.570	2.559	5.6	20.5
5 11	15 16.74	- 1 34.8	2.033	3.015	5.4	20.7	5 11	15 16.91	- 9 5.6	1.549	2.552	3.5	20.3
5 21	15 7.67	- 1 37.7	2.048	3.013	7.1	20.8	5 21	15 6.35	- 8 50.9	1.555	2.544	6.2	20.5
5 31	14 59.39	- 1 54.9	2.090	3.010	9.7	20.9	5 31	14 56.78	- 8 47.2	1.587	2.536	10.3	20.7
6 10	14 52.61	- 2 26.3	2.156	3.007	12.5	21.1	6 10	14 49.15	- 8 56.4	1.643	2.527	14.1	20.9
6 20	14 47.77	- 3 10.5	2.242	3.003	14.9	21.3	6 20	14 44.05	- 9 19.0	1.718	2.517	17.4	21.1
390315	2013 AB ₁₂₇		5 11.9 180°45	2°9/ 9.8 18			55003	2001 QV ₂₁		5 11.9 154°47	4°5/ 8.2 18		
4 11	15 37.59	- 8 53.5	2.526	3.401	9.6	21.3	4 11	15 36.34	- 5 12.2	2.412	3.289	9.9	18.9
4 21	15 31.74	- 8 31.9	2.458	3.402	6.9	21.1	4 21	15 30.87	- 4 17.8	2.353	3.293	7.3	18.8
5 1	15 24.55	- 8 11.7	2.417	3.402	4.2	21.0	5 1	15 24.09	- 3 26.7	2.321	3.297	5.1	18.6
5 11	15 16.63	- 7 55.6	2.403	3.402	3.0	20.9	5 11	15 16.62	- 2 43.3	2.316	3.302	4.6	18.6
5 21	15 8.68	- 7 45.7	2.418	3.402	4.8	21.0	5 21	15 9.17	- 2 10.7	2.339	3.305	6.2	18.7
5 31	15 1.37	- 7 44.1	2.462	3.402	7.5	21.2	5 31	15 2.41	- 1 51.5	2.389	3.309	8.7	18.9
6 10	14 55.31	- 7 52.0	2.530	3.401	10.2	21.3	6 10	14 56.92	- 1 46.6	2.463	3.312	11.2	19.1
6 20	14 50.89	- 8 9.4	2.621	3.400	12.5	21.5	6 20	14 53.08	- 1 55.7	2.558	3.315	13.4	19.2
332684	2009 FT ₅₆		5 11.9 40°14	1°1/12.7 18			9667	Amastrianc		5 11.9 293°21	1°0/11.4 18		
4 11	15 40.97	-29 49.6	0.949	1.835	20.4	19.7	4 11	15 39.15	-17 46.2	1.513	2.401	14.0	17.7
4 21	15 35.67	-27 24.3	0.891	1.839	14.9	19.4	4 21	15 33.86	-17 12.8	1.429	2.381	10.0	17.4
5 1	15 27.07	-24 18.9	0.854	1.844	8.5	19.1	5 1	15 26.11	-16 30.4	1.368	2.361	5.4	17.1
5 11	15 16.84	-20 45.1	0.840	1.849	1.7	18.7	5 11	15 16.82	-15 42.3	1.332	2.341	1.0	16.7
5 21	15 6.91	-17 3.5	0.851	1.854	6.0	19.0	5 21	15 7.18	-14 53.6	1.322	2.322	5.1	17.0
5 31	14 59.03	-13 37.7	0.886	1.860	12.6	19.3	5 31	14 58.49	-14 10.2	1.337	2.302	10.1	17.2
6 10	14 54.32	-10 45.8	0.943	1.866	18.3	19.7	6 10	14 51.86	-13 37.7	1.374	2.282	14.7	17.4
6 20	14 53.14	- 8 35.5	1.017	1.873	22.9	20.0	6 20	14 47.95	-13 19.6	1.430	2.263	18.6	17.6
466118	2012 DS ₆₇		5 11.9 127°87	2°5/13.4 17			283232	2010 RY ₁₇₁		5 11.9 181°85	2°3/10.5 17		
4 11	15 42.65	-25 40.9	1.631	2.496	14.4	21.9	4 11	15 40.56	-14 26.4	1.777	2.659	12.6	21.3
4 21	15 36.03	-25 35.5	1.567	2.503	10.6	21.6	4 21	15 34.30	-13 39.8	1.710	2.659	8.9	21.1
5 1	15 27.08	-25 15.8	1.526	2.510	6.4	21.4	5 1	15 26.09	-12 48.6	1.668	2.660	4.9	20.8
5 11	15 16.86	-24 42.9	1.511	2.517	2.8	21.2	5 11	15 16.81	-11 57.2	1.653	2.660	2.3	20.7
5 21	15 6.62	-23 59.9	1.522	2.523	4.4	21.3	5 21	15 7.49	-11 10.4	1.666	2.659	5.3	20.9
5 31	14 57.61	-23 12.5	1.560	2.529	8.6	21.6	5 31	14 59.17	-10 32.8	1.705	2.658	9.3	21.1
6 10	14 50.78	-22 27.1	1.621	2.535	12.5	21.8	6 10	14 52.67	-10 7.9	1.767	2.657	13.0	21.3
6 20	14 46.67	-21 48.8	1.703	2.540	15.9	22.0	6 20	14 48.49	- 9 57.2	1.850	2.655	16.1	21.5
102067	1999 RF ₁₃₈		5 11.9 225°31	0°5/12.3 18			468164	2014 WK ₃₉₈		5 11.9 99°42	6°1/ 7.8 18		
4 11	15 39.95	-21 4.4	2.706	3.563	9.6	22.0	4 11	15 40.61	- 3 47.3	1.834	2.713	12.4	21.5
4 21	15 33.50	-20 48.7	2.613	3.549	6.9	21.7	4 21	15 33.97	- 2 28.8	1.799	2.738	9.3	21.4
5 1	15 25.56	-20 26.0	2.546	3.534	3.8	21.5	5 1	15 25.73	- 1 17.1	1.789	2.762	6.8	21.3
5 11	15 16.74	-19 57.5	2.508	3.518	0.7	21.2	5 11	15 16.77	- 0 18.3	1.807	2.786	6.3	21.3
5 21	15 7.76	-19 25.4	2.500	3.501	3.0	21.4	5 21	15 8.04	+ 0 23.3	1.851	2.809	8.2	21.4
5 31	14 59.36	-18 52.6	2.522	3.483	6.3	21.6	5 31	15 0.41	+ 0 45.1	1.920	2.832	10.9	21.7
6 10	14 52.23	-18 22.4	2.571	3.465	9.3	21.8	6 10	14 54.53	+ 0 47.0	2.012	2.854	13.6	21.9
6 20	14 46.80	-17 57.7	2.643	3.446	11.9	21.9	6 20	14 50.75	+ 0 31.1	2.123	2.876	15.9	22.1
51348	2000 QR ₁₆₉		5 11.9 1°35	2°0/14.3 18			261108	2005 SZ ₂₈₃		5 11.9 308°72	1°9/10.7 16		
4 11	15 31.79	-28 29.5	3.956	4.793	7.3	18.9	4 11	15 37.10	-13 13.5	2.090	2.972	11.0	21.1
4 21	15 27.43	-28 24.5	3.876	4.793	5.5	18.8	4 21	15 31.74	-12 56.2	2.014	2.963	7.8	20.8
5 1	15 22.18	-28 12.2	3.821	4.793	3.6	18.7	5 1	15 24.70	-12 37.2	1.963	2.954	4.3	20.6
5 11	15 16.44	-27 53.1	3.795	4.793	2.1	18.5	5 11	15 16.70	-12 19.0	1.939	2.946	1.9	20.4
5 21	15 10.67	-27 28.6	3.798	4.793	2.5	18.6	5 21	15 8.55	-12 4.5	1.943	2.937	4.5	20.6
5 31	15 5.32	-27 0.3	3.830	4.793	4.2	18.7	5 31	15 1.14	-11 56.4	1.973	2.929	8.1	20.8
6 10	15 0.79	-26 30.6	3.889	4.793	6.1	18.8	6 10	14 55.20	-11 56.9	2.029	2.921	11.4	21.0
6 20	14 57.37	-26 1.7	3.973	4.794	7.9	19.0	6 20	14 51.20	-12 7.0	2.105	2.913	14.3	21.1
463200	2012 CP ₁₅		5 11.9 48°70	3°3/13.7 17			504573	2008 TM ₅₀		5 11.9 306°02	1°0/11.4 17		
4 11	15 41.57												

EPHEMERIDES

5 11.9

5 11.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
272155	2005 <i>NS</i> ₆₉		5 11.9 269°50	3°5/13.9	17		177472	2004 <i>DX</i> ₇₅		5 11.9 200°81	0°9/12.6	17	
4 11	15 41.34	-27 57.9	1.711	2.569	14.2	21.2	4 11	15 42.16	-22 10.6	2.063	2.925	11.9	21.2
4 21	15 35.34	-27 57.8	1.624	2.554	10.8	21.0	4 21	15 35.39	-21 55.5	1.984	2.921	8.6	21.0
5 1	15 26.88	-27 41.9	1.560	2.539	6.9	20.7	5 1	15 26.70	-21 30.9	1.929	2.917	4.8	20.8
5 11	15 16.90	-27 9.9	1.521	2.523	3.7	20.5	5 11	15 16.90	-20 58.2	1.902	2.911	1.1	20.5
5 21	15 6.59	-26 24.0	1.508	2.507	4.9	20.5	5 21	15 6.98	-20 20.1	1.904	2.905	3.6	20.7
5 31	14 57.26	-25 29.4	1.522	2.491	8.8	20.7	5 31	14 57.93	-19 40.9	1.934	2.898	7.6	20.9
6 10	14 50.01	-24 33.3	1.559	2.475	12.8	20.9	6 10	14 50.59	-19 5.2	1.989	2.891	11.2	21.1
6 20	14 45.49	-23 42.2	1.617	2.458	16.4	21.1	6 20	14 45.48	-18 36.6	2.066	2.882	14.3	21.3
364877	2008 <i>EM</i> ₉		5 11.9 178°89	0°1/11.9	18		497932	2006 <i>WX</i> ₂₈		5 11.9 203°95	0°2/11.8	17	
4 11	15 49.32	-20 3.6	2.777	3.617	9.9	23.0	4 11	15 41.68	-18 45.3	2.024	2.894	11.8	22.5
4 21	15 39.87	-19 25.9	2.693	3.623	7.0	22.8	4 21	15 35.05	-18 27.5	1.947	2.890	8.4	22.2
5 1	15 28.87	-18 40.2	2.639	3.626	3.8	22.6	5 1	15 26.52	-18 2.7	1.894	2.885	4.5	22.0
5 11	15 17.06	-17 48.6	2.618	3.628	0.3	22.3	5 11	15 16.90	-17 33.2	1.869	2.879	0.4	21.6
5 21	15 5.27	-16 54.2	2.630	3.627	3.2	22.5	5 21	15 7.14	-17 1.7	1.872	2.872	3.9	21.9
5 31	14 54.32	-16 0.9	2.675	3.625	6.5	22.7	5 31	14 58.24	-16 32.3	1.904	2.865	7.9	22.1
6 10	14 44.87	-15 12.6	2.749	3.621	9.5	22.9	6 10	14 51.02	-16 8.6	1.960	2.858	11.5	22.3
6 20	14 37.35	-14 32.2	2.848	3.615	11.9	23.1	6 20	14 46.01	-15 53.5	2.038	2.849	14.6	22.5
199906	2007 <i>GS</i> ₁₆		5 11.9 295°22	3°7/13.3	17		88803	2001 <i>SD</i> ₁₂₉		5 11.9 80°18	6°2/7.4	18	
4 11	15 43.42	-25 38.2	1.709	2.570	14.0	20.5	4 11	15 37.63	-6 37.2	1.613	2.505	13.1	19.2
4 21	15 36.97	-26 24.7	1.620	2.551	10.6	20.3	4 21	15 32.25	-4 54.8	1.562	2.510	9.7	19.0
5 1	15 27.87	-27 1.5	1.553	2.533	6.8	20.0	5 1	15 24.98	-3 14.8	1.536	2.516	6.9	18.8
5 11	15 17.01	-27 26.1	1.513	2.514	3.9	19.8	5 11	15 16.75	-1 45.5	1.536	2.522	6.4	18.8
5 21	15 5.58	-27 37.9	1.499	2.495	5.2	19.8	5 21	15 8.59	-0 34.0	1.562	2.528	8.7	19.0
5 31	14 54.98	-27 38.9	1.511	2.477	9.1	20.0	5 31	15 1.48	+0 14.8	1.612	2.533	12.0	19.2
6 10	14 46.44	-27 33.9	1.547	2.459	13.1	20.2	6 10	14 56.21	+0 39.4	1.683	2.539	15.2	19.4
6 20	14 40.75	-27 28.1	1.603	2.440	16.7	20.4	6 20	14 53.20	+0 41.0	1.773	2.545	17.9	19.6
230040	2000 <i>QT</i> ₁₆₂		5 11.9 229°92	1°1/11.1	18		519431	2011 <i>UC</i> ₄₁₆		5 11.9 129°67	0°0/11.9	18	
4 11	15 39.59	-16 38.6	2.428	3.297	10.1	21.7	4 11	15 36.08	-21 0.4	2.425	3.293	10.2	21.8
4 21	15 33.35	-16 0.3	2.339	3.282	7.2	21.5	4 21	15 30.77	-20 9.2	2.355	3.297	7.2	21.6
5 1	15 25.52	-15 16.4	2.275	3.266	3.8	21.2	5 1	15 24.07	-19 9.6	2.311	3.301	3.9	21.4
5 11	15 16.78	-14 29.7	2.241	3.250	1.1	21.0	5 11	15 16.67	-18 4.9	2.295	3.305	0.3	21.1
5 21	15 7.89	-13 43.3	2.236	3.232	3.8	21.2	5 21	15 9.30	-16 58.9	2.308	3.309	3.2	21.3
5 31	14 59.64	-13 1.2	2.260	3.214	7.3	21.3	5 31	15 2.66	-15 55.9	2.350	3.312	6.6	21.6
6 10	14 52.73	-12 26.8	2.310	3.195	10.5	21.5	6 10	14 57.37	-15 0.2	2.418	3.316	9.6	21.8
6 20	14 47.65	-12 2.4	2.382	3.175	13.3	21.7	6 20	14 53.79	-14 14.5	2.509	3.319	12.2	21.9
184929	2005 <i>VN</i> ₂		5 11.9 266°21	1°8/9.7	18		477158	2009 <i>DH</i> ₁₃₂		5 11.9 347°43	0°7/12.4	17	
4 11	15 30.17	-10 0.2	4.204	5.078	6.1	20.2	4 11	15 37.34	-20 53.2	1.814	2.692	12.6	20.7
4 21	15 26.20	-9 34.5	4.131	5.075	4.3	20.1	4 21	15 32.17	-20 46.0	1.741	2.687	9.0	20.5
5 1	15 21.51	-9 9.1	4.085	5.072	2.6	20.0	5 1	15 25.03	-20 30.3	1.693	2.683	5.0	20.2
5 11	15 16.42	-8 45.7	4.069	5.068	1.8	19.9	5 11	15 16.77	-20 7.8	1.671	2.680	0.9	19.9
5 21	15 11.31	-8 25.8	4.082	5.065	3.0	20.0	5 21	15 8.37	-19 41.4	1.675	2.677	3.8	20.1
5 31	15 6.54	-8 10.9	4.123	5.062	4.8	20.1	5 31	15 0.88	-19 14.9	1.706	2.675	8.0	20.4
6 10	15 2.44	-8 1.9	4.191	5.058	6.6	20.2	6 10	14 55.14	-18 52.7	1.760	2.673	11.8	20.6
6 20	14 59.25	-7 59.5	4.283	5.055	8.1	20.3	6 20	14 51.68	-18 37.8	1.835	2.671	15.0	20.8
248809	2006 <i>SX</i> ₁₆₂		5 11.9 349°42	1°5/12.8	17		305523	2008 <i>FV</i> ₃₆		5 11.9 153°67	6°2/16.4	16	
4 11	15 39.74	-22 8.6	2.045	2.912	11.8	20.3	4 11	15 43.12	-38 55.4	2.637	3.424	11.8	21.3
4 21	15 33.71	-22 25.1	1.972	2.910	8.6	20.1	4 21	15 36.05	-39 39.1	2.561	3.428	9.8	21.2
5 1	15 25.80	-22 33.9	1.923	2.909	5.0	19.9	5 1	15 27.06	-40 6.9	2.508	3.432	7.8	21.0
5 11	15 16.81	-22 35.3	1.901	2.909	1.7	19.6	5 11	15 16.95	-40 16.7	2.481	3.436	6.4	20.9
5 21	15 7.66	-22 30.7	1.907	2.908	3.7	19.8	5 21	15 6.65	-40 8.4	2.481	3.440	6.4	20.9
5 31	14 59.35	-22 22.7	1.940	2.907	7.3	20.0	5 31	14 57.16	-39 44.2	2.509	3.443	7.7	21.0
6 10	14 52.69	-22 14.8	1.998	2.907	10.8	20.2	6 10	14 49.31	-39 8.8	2.561	3.446	9.6	21.2
6 20	14 48.20	-22 10.2	2.078	2.907	13.8	20.4	6 20	14 43.65	-38 27.7	2.637	3.449	11.6	21.3
509043	2005 <i>SF</i> ₁₄₄		5 11.9 192°56	2°7/14.2	18		258365	2001 <i>WW</i> ₆₅		5 11.9 210°15	0°2/12.3	18	
4 11	15 39.28	-29 5.8	3.242	4.070	8.9	23.1	4 11	15 29.98	-20 12.4	4.829	5.689	5.6	21.3
4 21	15 32.90	-29 19.4	3.156	4.067	6.8	23.0	4 21	15 26.04	-19 59.9	4.749	5.686	4.0	21.2
5 1	15 25.20	-29 23.9	3.097	4.065	4.5	22.8	5 1	15 21.42	-19 44.2	4.696	5.684	2.2	21.1
5 11	15 16.75	-29 19.2	3.066	4.061	2.8	22.7	5 11	15 16.45	-19 26.2	4.673	5.682	0.3	20.9
5 21	15 8.20	-29 6.0	3.066	4.057	3.3	22.7	5 21	15 11.45	-19 7.0	4.679	5.680	1.7	21.0
5 31	15 0.18	-28 46.4	3.094	4.053	5.3	22.8	5 31	15 6.76	-18 48.0	4.715	5.677	3.5	21.2
6 10	14 53.30	-28 23.2	3.150	4.048	7.6	23.0	6 10	15 2.67	-18 30.5	4.779	5.675	5.3	21.3
6 20	14 47.94	-27 59.6	3.231	4.043	9.7	23.1	6 20	14 59.43	-18 15.9	4.868	5.673	6.8	21.4
478149	2011 <i>UT</i> ₁₅₄		5 11.9 228°88	0°0/11.9	18		329990	2005 <i>ST</i> ₂₈₃		5 11.9 158°29	7°1/7.3	17	
4 11	15 36.97	-19 22.1	2.751	3.616	9.2	22.3	4 11	15 38.68	-1 11.5	1.792	2.672	12.6	21.2
4 21	15 31.37	-19 3.1	2.665	3.606	6.5	22.1	4 21	15 32.90	-0 3.8	1.738	2.674	9.8	21.1
5 1	15 24.41	-18 38.5	2.606	3.595	3.5	21.9	5 1	15 25.32	+0 55.9	1.708	2.676	7.6	20.9
5 11	15 16.69	-18 9.9	2.574	3.584	0.3	21.6	5 11	15 16.80	+1 41.4	1.704	2.677	7.3	20.9
5 21	15 8.86	-17 39.5	2.573	3.573	2.9	21.8	5 21	15 8.29	+2 8.1	1.726	2.679	9.1	21.0
5 31	15 1.60	-17 10.2	2.600	3.561	6.1	22.0	5 31	15 0.72	+2 13.5	1.772	2.680	11.9	21.2
6 10	14 55.51	-16 44.7	2.654	3.549	9.0	22.2	6 10	14 54.85	+1 57.9	1.839	2.681	14.7	21.4
6 20	14 51.01	-16 25.4	2.731	3.536	11.4	22.3	6 20	14 51.13	+1 23.4	1.925	2.682	17.2	21.6
60461	2000 <i>DH</i> ₄		5 11.9 351°46	4°3/10.2	18		382845	2004 <i>CR</i> ₁₀₃		5 11.9 58°17	1°4/12.9		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
238816	2005 <i>PU</i> ₉		5 11.9 336°39	5°2/ 8.3 18			324990	2008 <i>BW</i> ₉		5 11.9 202°30	0°7/12.4 17		
4 11	15 35.71	- 5 34.3	1.928	2.815	11.5	20.1	4 11	15 42.70	-20 55.2	1.832	2.701	12.9	21.3
4 21	15 30.78	- 4 39.1	1.865	2.810	8.6	19.9	4 21	15 35.98	-20 48.9	1.757	2.698	9.3	21.1
5 1	15 24.21	- 3 47.6	1.826	2.805	6.0	19.7	5 1	15 27.13	-20 33.9	1.706	2.695	5.1	20.8
5 11	15 16.72	- 3 4.7	1.813	2.801	5.3	19.7	5 11	15 17.03	-20 11.3	1.681	2.691	1.0	20.5
5 21	15 9.17	- 2 34.9	1.826	2.797	7.3	19.8	5 21	15 6.77	-19 44.0	1.685	2.686	4.0	20.7
5 31	15 2.42	- 2 21.1	1.865	2.793	10.2	19.9	5 31	14 57.47	-19 15.9	1.715	2.681	8.3	21.0
6 10	14 57.18	- 2 24.4	1.926	2.790	13.2	20.1	6 10	14 50.07	-18 51.7	1.770	2.675	12.1	21.2
6 20	14 53.91	- 2 44.1	2.006	2.787	15.8	20.3	6 20	14 45.13	-18 34.9	1.846	2.669	15.4	21.4
508619	2017 <i>SA</i> ₃₉		5 11.9 172°65	2°7/13.9 17			345850	2007 <i>OS</i> ₇		5 11.9 301°62	2°4/10.2 16		
4 11	15 41.13	-27 37.8	2.566	3.405	10.6	21.8	4 11	15 36.57	-15 59.6	1.713	2.602	12.6	20.9
4 21	15 34.42	-27 45.9	2.489	3.409	8.0	21.6	4 21	15 31.79	-14 44.7	1.626	2.578	9.0	20.6
5 1	15 26.10	-27 43.5	2.437	3.411	5.1	21.4	5 1	15 24.94	-13 20.1	1.562	2.555	4.9	20.3
5 11	15 16.90	-27 30.6	2.414	3.414	2.9	21.3	5 11	15 16.85	-11 51.4	1.525	2.532	2.4	20.1
5 21	15 7.60	-27 8.5	2.419	3.415	3.6	21.3	5 21	15 8.50	-10 25.4	1.515	2.508	5.7	20.3
5 31	14 59.06	-26 40.3	2.454	3.416	6.3	21.5	5 31	15 0.97	- 9 9.4	1.531	2.485	10.1	20.5
6 10	14 51.96	-26 9.7	2.515	3.417	9.1	21.7	6 10	14 55.18	- 8 9.3	1.570	2.463	14.1	20.6
6 20	14 46.76	-25 40.5	2.599	3.417	11.6	21.9	6 20	14 51.73	- 7 28.2	1.628	2.440	17.6	20.8
396961	2005 <i>QF</i> ₁₁₁		5 11.9 247°80	3°3/14.3 17			129357	3099 <i>P-L</i>		5 11.9 169°74	12°0/20.7 18		
4 11	15 39.12	-29 12.8	2.421	3.261	11.2	21.6	4 11	15 56.06	-55 35.5	2.421	3.089	15.7	20.5
4 21	15 33.19	-29 23.6	2.336	3.254	8.5	21.4	4 21	15 46.51	-57 3.3	2.348	3.092	14.4	20.4
5 1	15 25.52	-29 22.5	2.275	3.245	5.7	21.2	5 1	15 33.30	-58 5.8	2.295	3.095	13.2	20.3
5 11	15 16.85	-29 9.3	2.241	3.237	3.5	21.0	5 11	15 17.62	-58 36.4	2.262	3.098	12.3	20.3
5 21	15 8.00	-28 45.4	2.235	3.229	4.1	21.1	5 21	15 1.31	-58 32.3	2.251	3.100	12.0	20.2
5 31	14 59.87	-28 13.5	2.257	3.220	6.7	21.2	5 31	14 46.39	-57 55.5	2.262	3.101	12.3	20.3
6 10	14 53.21	-27 38.1	2.305	3.212	9.6	21.4	6 10	14 34.53	-56 53.2	2.295	3.102	13.2	20.3
6 20	14 48.53	-27 3.5	2.376	3.203	12.3	21.5	6 20	14 26.59	-55 34.9	2.347	3.103	14.5	20.4
4937	Lintott		5 11.9 346°24	9°0/18.5 18			493667	2015 <i>RF</i> ₁₀₈		5 11.9 261°34	13°9/13.9 17		
4 11	15 38.40	-41 30.5	1.397	2.220	18.7	15.8	4 11	15 57.74	-39 53.3	1.226	2.042	21.2	20.9
4 21	15 33.83	-41 25.9	1.322	2.212	15.7	15.6	4 21	15 49.41	-42 36.0	1.153	2.032	18.3	20.7
5 1	15 26.24	-40 47.9	1.264	2.205	12.5	15.4	5 1	15 35.78	-44 58.4	1.099	2.022	15.6	20.5
5 11	15 16.92	-39 34.0	1.228	2.198	9.8	15.2	5 11	15 17.92	-46 44.9	1.068	2.012	14.0	20.4
5 21	15 7.49	-37 46.9	1.215	2.193	9.1	15.1	5 21	14 58.18	-47 44.2	1.058	2.001	14.5	20.3
5 31	14 59.60	-35 35.7	1.225	2.189	11.0	15.2	5 31	14 39.78	-47 55.4	1.070	1.991	16.7	20.4
6 10	14 54.48	-33 14.2	1.258	2.186	14.3	15.4	6 10	14 25.58	-47 30.0	1.101	1.980	19.8	20.6
6 20	14 52.68	-30 55.6	1.312	2.183	17.8	15.6	6 20	14 17.05	-46 44.1	1.148	1.969	23.0	20.8
374431	2005 <i>WW</i> ₁₅₀		5 11.9 228°14	0°3/12.1 17			46452	3097 <i>P-L</i>		5 11.9 318°45	4°3/14.5 18 R		
4 11	15 41.50	-19 37.2	2.165	3.031	11.3	21.8	4 11	15 38.05	-29 46.7	1.635	2.494	14.7	18.0
4 21	15 34.93	-19 29.3	2.079	3.019	8.1	21.6	4 21	15 33.17	-29 49.4	1.547	2.475	11.3	17.7
5 1	15 26.50	-19 14.7	2.018	3.007	4.4	21.3	5 1	15 25.83	-29 34.4	1.481	2.456	7.6	17.4
5 11	15 16.95	-18 54.7	1.984	2.994	0.5	21.0	5 11	15 16.94	-29 1.0	1.438	2.437	4.6	17.2
5 21	15 7.19	-18 31.5	1.980	2.981	3.6	21.2	5 21	15 7.70	-28 11.4	1.422	2.419	5.3	17.2
5 31	14 58.17	-18 8.3	2.004	2.967	7.5	21.4	5 31	14 59.42	-27 10.8	1.430	2.402	9.0	17.4
6 10	14 50.72	-17 49.0	2.053	2.952	11.0	21.6	6 10	14 53.22	-26 7.0	1.462	2.385	13.0	17.6
6 20	14 45.37	-17 36.2	2.125	2.937	14.1	21.8	6 20	14 49.79	-25 7.2	1.514	2.368	16.7	17.8
198453	2004 <i>XL</i> ₈		5 11.9 160°17	1°8/10.9 18			179384	2001 <i>YY</i> ₁₆		5 11.9 149°50	0°4/11.6 18		
4 11	15 40.22	-13 25.7	2.059	2.936	11.3	20.3	4 11	15 37.51	-17 40.5	2.721	3.588	9.2	21.7
4 21	15 33.90	-13 10.5	1.993	2.940	8.0	20.1	4 21	15 31.68	-17 21.7	2.653	3.595	6.5	21.5
5 1	15 25.86	-12 53.5	1.952	2.943	4.4	19.9	5 1	15 24.58	-16 58.5	2.612	3.603	3.4	21.3
5 11	15 16.90	-12 37.1	1.939	2.946	1.8	19.7	5 11	15 16.81	-16 32.8	2.600	3.610	0.5	21.1
5 21	15 7.88	-12 24.1	1.953	2.948	4.5	19.9	5 21	15 9.04	-16 7.0	2.617	3.616	3.0	21.3
5 31	14 59.71	-12 17.1	1.996	2.950	8.1	20.1	5 31	15 1.92	-15 43.6	2.664	3.622	6.1	21.5
6 10	14 53.13	-12 18.2	2.063	2.952	11.4	20.3	6 10	14 56.02	-15 25.0	2.736	3.628	8.8	21.7
6 20	14 48.59	-12 28.4	2.151	2.954	14.2	20.5	6 20	14 51.69	-15 13.0	2.832	3.634	11.2	21.9
436731	2011 <i>UO</i> ₁₉₃		5 11.9 262°26	1°2/11.2 17			247148	2000 <i>XR</i> ₁₄		5 11.9 279°92	4°0/ 8.1 18		
4 11	15 38.15	-15 5.7	2.300	3.175	10.4	21.4	4 11	15 36.78	- 8 18.3	2.493	3.369	9.6	20.5
4 21	15 32.45	-14 50.8	2.215	3.161	7.3	21.2	4 21	15 31.42	- 7 0.0	2.394	3.337	7.1	20.2
5 1	15 25.12	-14 32.8	2.155	3.147	4.0	20.9	5 1	15 24.58	- 5 39.5	2.322	3.303	4.7	20.0
5 11	15 16.84	-14 13.7	2.124	3.132	1.2	20.7	5 11	15 16.82	- 4 21.7	2.279	3.270	4.2	19.9
5 21	15 8.37	-13 56.1	2.121	3.118	3.9	20.9	5 21	15 8.84	- 3 11.6	2.265	3.235	6.1	20.0
5 31	15 0.55	-13 42.7	2.146	3.103	7.4	21.1	5 31	15 1.37	- 2 13.7	2.279	3.200	9.0	20.1
6 10	14 54.10	-13 35.9	2.196	3.088	10.7	21.2	6 10	14 55.07	- 1 30.9	2.318	3.165	11.9	20.2
6 20	14 49.49	-13 37.5	2.268	3.073	13.5	21.4	6 20	14 50.42	- 1 4.7	2.377	3.129	14.4	20.4
368796	2005 <i>XB</i> ₈₀		5 11.9 207°58	4°9/14.7 17			181513	2006 <i>UC</i> ₇₁		5 11.9 106°24	3°1/ 9.4 18		
4 11	15 44.43	-31 59.4	2.161	2.988	12.8	21.1	4 11	15 36.02	-10 16.4	2.367	3.247	9.9	20.2
4 21	15 37.22	-32 33.6	2.077	2.983	10.0	20.9	4 21	15 30.70	- 9 22.1	2.310	3.257	7.1	20.0
5 1	15 27.82	-32 53.4	2.018	2.978	7.2	20.7	5 1	15 24.06	- 8 27.8	2.280	3.267	4.3	19.8
5 11	15 17.08	-32 57.0	1.986	2.972	5.1	20.6	5 11	15 16.76	- 7 37.3	2.278	3.277	3.2	19.8
5 21	15 6.07	-32 44.5	1.981	2.966	5.5	20.6	5 21	15 9.51	- 6 54.3	2.305	3.287	5.1	19.9
5 31	14 55.93	-32 18.9	2.003	2.959	7.9	20.7	5 31	15 2.99	- 6 21.9	2.358	3.296	7.9	20.1
6 10	14 47.63	-31 45.4	2.051	2.952	10.9	20.9	6 10	14 57.78	- 6 1.8	2.437	3.306	10.6	20.3
6 20	14 41.77	-31 9.7	2.121	2.945	13.7	21.1	6 20	14 54.22	- 5 54.6	2.536	3.315	12.9	20.5
173803	2001 <i>SO</i> ₂₂₉		5 11.9 183°78	1°1/11.1 18			521282	2015 <i>JO</i> ₁₄	</				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
33132	1998 <i>CD</i> ₄		5 11.9 106°43	9°2/ 6.4 18			111102	2001 <i>VF</i> ₇₄		5 11.9 190°26	7°9/17.0 18	R	
4 11	15 39.64	+ 5 18.5	1.792	2.656	13.3	17.8	4 11	15 45.85	-40 37.6	2.030	2.820	14.8	19.7
4 21	15 33.54	+ 6 20.2	1.747	2.663	11.0	17.6	4 21	15 38.53	-41 17.0	1.952	2.820	12.4	19.5
5 1	15 25.67	+ 7 7.3	1.726	2.670	9.4	17.5	5 1	15 28.65	-41 35.0	1.895	2.819	10.0	19.4
5 11	15 16.91	+ 7 33.8	1.730	2.677	9.3	17.5	5 11	15 17.23	-41 28.2	1.863	2.817	8.3	19.3
5 21	15 8.23	+ 7 36.2	1.757	2.683	10.8	17.6	5 21	15 5.57	-40 56.4	1.855	2.815	8.1	19.3
5 31	15 0.54	+ 7 13.9	1.809	2.690	13.1	17.8	5 31	14 55.06	-40 3.5	1.874	2.813	9.6	19.3
6 10	14 54.59	+ 6 28.9	1.881	2.696	15.4	18.0	6 10	14 46.79	-38 56.9	1.917	2.810	11.9	19.5
6 20	14 50.80	+ 5 25.1	1.970	2.702	17.6	18.2	6 20	14 41.41	-37 44.7	1.981	2.807	14.4	19.6
440428	2005 <i>RU</i> ₅₁		5 11.9 225°75	1°3/10.9 17			443790	2015 <i>MB</i> ₉₃		5 11.9 295°28	4°5/ 9.1 17		
4 11	15 36.45	-15 22.1	2.633	3.506	9.3	21.9	4 11	15 37.51	- 5 55.7	2.055	2.936	11.1	20.3
4 21	15 31.04	-14 48.5	2.552	3.497	6.5	21.8	4 21	15 32.07	- 5 23.8	1.983	2.926	8.2	20.1
5 1	15 24.29	-14 11.3	2.498	3.489	3.5	21.5	5 1	15 24.96	- 4 55.7	1.935	2.916	5.5	19.9
5 11	15 16.80	-13 33.0	2.472	3.480	1.3	21.4	5 11	15 16.90	- 4 35.3	1.915	2.907	4.6	19.8
5 21	15 9.22	-12 56.5	2.476	3.471	3.6	21.5	5 21	15 8.71	- 4 25.7	1.921	2.897	6.5	19.9
5 31	15 2.24	-12 24.6	2.508	3.462	6.7	21.7	5 31	15 1.25	- 4 29.2	1.953	2.887	9.5	20.1
6 10	14 56.45	-12 0.2	2.566	3.452	9.6	21.9	6 10	14 55.25	- 4 46.7	2.009	2.878	12.5	20.3
6 20	14 52.24	-11 44.7	2.646	3.442	12.0	22.0	6 20	14 51.20	- 5 17.6	2.085	2.869	15.2	20.4
395876	2013 <i>AW</i> ₂₈		5 11.9 90°29	1°9/10.8 17			93441	2000 <i>SV</i> ₃₃₀		5 11.9 198°50	0°8/11.5 18		
4 11	15 38.18	-12 34.6	2.284	3.161	10.4	20.9	4 11	15 40.19	-16 56.9	2.326	3.196	10.5	21.1
4 21	15 32.36	-12 26.3	2.217	3.164	7.3	20.7	4 21	15 33.83	-16 36.3	2.249	3.192	7.4	20.9
5 1	15 25.02	-12 17.2	2.176	3.167	4.0	20.5	5 1	15 25.85	-16 10.9	2.197	3.188	4.0	20.7
5 11	15 16.86	-12 9.6	2.163	3.169	1.9	20.3	5 11	15 16.98	-15 42.9	2.174	3.183	0.8	20.4
5 21	15 8.65	-12 5.4	2.178	3.172	4.2	20.5	5 21	15 8.01	-15 14.9	2.180	3.178	3.7	20.6
5 31	15 1.17	-12 6.8	2.221	3.175	7.4	20.7	5 31	14 59.77	-14 50.1	2.214	3.172	7.2	20.9
6 10	14 55.08	-12 15.2	2.289	3.178	10.4	20.9	6 10	14 52.96	-14 31.4	2.275	3.166	10.4	21.0
6 20	14 50.81	-12 31.5	2.379	3.180	13.0	21.1	6 20	14 48.04	-14 20.9	2.357	3.159	13.1	21.2
374405	2005 <i>WL</i> ₃		5 11.9 216°66	6°4/15.5 18			497038	2003 <i>SC</i> ₁₂₁		5 11.9 247°70	2°7/10.4 17		
4 11	15 47.40	-36 53.1	2.352	3.149	12.8	21.3	4 11	15 42.30	-12 33.7	1.833	2.712	12.4	22.1
4 21	15 39.43	-37 44.8	2.261	3.140	10.5	21.1	4 21	15 35.78	-11 59.4	1.746	2.693	8.9	21.9
5 1	15 29.10	-38 20.7	2.195	3.130	8.2	21.0	5 1	15 27.11	-11 22.1	1.684	2.674	5.1	21.6
5 11	15 17.25	-38 37.5	2.154	3.119	6.6	20.8	5 11	15 17.11	-10 45.6	1.648	2.653	2.7	21.4
5 21	15 4.98	-38 34.1	2.142	3.108	6.7	20.8	5 21	15 6.79	-10 13.9	1.641	2.632	5.6	21.5
5 31	14 53.51	-38 12.7	2.157	3.096	8.5	20.9	5 31	14 57.27	- 9 51.2	1.660	2.611	9.7	21.7
6 10	14 43.90	-37 38.5	2.198	3.084	10.9	21.0	6 10	14 49.51	- 9 40.7	1.703	2.588	13.6	21.9
6 20	14 36.83	-36 57.8	2.261	3.070	13.4	21.2	6 20	14 44.12	- 9 43.9	1.766	2.565	17.0	22.1
501352	2013 <i>YM</i> ₂₀		5 11.9 252°47	1°7/10.8 18			259561	2003 <i>UG</i> ₁₆₂		5 11.9 124°94	1°2/12.5 17		
4 11	15 40.01	-15 1.5	2.052	2.929	11.4	21.4	4 11	15 44.22	-21 3.6	1.608	2.481	14.2	20.9
4 21	15 33.96	-14 27.3	1.963	2.910	8.1	21.2	4 21	15 37.21	-21 14.4	1.546	2.488	10.2	20.7
5 1	15 26.04	-13 48.4	1.899	2.891	4.4	20.9	5 1	15 27.85	-21 16.3	1.507	2.496	5.7	20.4
5 11	15 16.97	-13 7.7	1.863	2.871	1.7	20.7	5 11	15 17.16	-21 10.0	1.494	2.503	1.4	20.2
5 21	15 7.66	-12 29.0	1.855	2.850	4.6	20.8	5 21	15 6.41	-20 57.5	1.508	2.510	4.3	20.4
5 31	14 59.07	-11 56.4	1.875	2.830	8.5	21.0	5 31	14 56.84	-20 42.8	1.548	2.516	8.8	20.6
6 10	14 52.03	-11 33.4	1.919	2.808	12.1	21.2	6 10	14 49.47	-20 30.4	1.612	2.522	12.8	20.9
6 20	14 47.10	-11 22.1	1.984	2.786	15.3	21.4	6 20	14 44.83	-20 24.0	1.697	2.528	16.2	21.1
123515	2000 <i>WH</i> ₁₉₂		5 11.9 192°50	4°9/ 8.8 17			321885	2010 <i>SG</i> ₂₈		5 11.9 50°69	3°7/13.6 16		
4 11	15 39.44	- 4 55.6	2.119	2.995	11.1	20.5	4 11	15 43.41	-26 9.3	1.422	2.292	15.9	20.8
4 21	15 33.30	- 4 14.7	2.054	2.994	8.2	20.3	4 21	15 37.00	-26 36.1	1.361	2.298	11.8	20.6
5 1	15 25.55	- 3 38.0	2.014	2.992	5.7	20.2	5 1	15 27.88	-26 48.4	1.322	2.304	7.5	20.4
5 11	15 16.92	- 3 9.8	2.002	2.990	4.9	20.1	5 11	15 17.19	-26 45.3	1.307	2.310	3.9	20.2
5 21	15 8.24	- 2 53.3	2.017	2.987	6.7	20.2	5 21	15 6.37	-26 28.3	1.317	2.317	5.3	20.3
5 31	15 0.35	- 2 50.8	2.059	2.984	9.6	20.4	5 31	14 56.90	-26 2.5	1.353	2.323	9.5	20.5
6 10	14 53.95	- 3 3.1	2.124	2.981	12.4	20.5	6 10	14 49.92	-25 34.3	1.410	2.330	13.6	20.8
6 20	14 49.47	- 3 29.4	2.210	2.977	14.9	20.7	6 20	14 46.02	-25 9.7	1.488	2.337	17.2	21.0
15195	2407 <i>T</i> ₋₃		5 11.9 242°31	0°6/12.4 18	R		509044	2005 <i>SD</i> ₁₅₁		5 11.9 279°00	1°2/11.1 18		
4 11	15 38.51	-20 57.3	2.169	3.037	11.2	19.4	4 11	15 36.81	-16 8.3	2.284	3.160	10.4	21.4
4 21	15 32.78	-20 43.6	2.090	3.031	8.0	19.2	4 21	15 31.55	-15 39.1	2.196	3.143	7.3	21.1
5 1	15 25.34	-20 22.0	2.036	3.025	4.4	18.9	5 1	15 24.69	-15 5.2	2.134	3.126	4.0	20.9
5 11	15 16.91	-19 54.2	2.009	3.019	0.8	18.6	5 11	15 16.90	-14 29.1	2.100	3.109	1.2	20.6
5 21	15 8.36	-19 22.9	2.011	3.012	3.4	18.8	5 21	15 8.93	-13 54.0	2.094	3.091	3.9	20.8
5 31	15 0.57	-18 51.5	2.040	3.005	7.2	19.1	5 31	15 1.59	-13 23.4	2.116	3.074	7.5	21.0
6 10	14 54.29	-18 24.0	2.094	2.998	10.6	19.3	6 10	14 55.60	-13 0.5	2.163	3.056	10.8	21.2
6 20	14 50.02	-18 3.3	2.170	2.991	13.5	19.4	6 20	14 51.43	-12 47.2	2.231	3.039	13.6	21.3
195169	2002 <i>CN</i> ₂₃₇		5 11.9 5°75	6°3/ 8.3 18			175822	1999 <i>TZ</i> ₃₆		5 11.9 229°59	6°2/ 7.3 17		
4 11	15 35.41	- 6 44.8	1.342	2.245	14.4	19.2	4 11	15 40.39	- 3 0.0	2.046	2.920	11.5	20.9
4 21	15 31.07	- 5 32.9	1.291	2.245	10.6	19.0	4 21	15 34.13	- 1 46.3	1.971	2.906	8.8	20.7
5 1	15 24.54	- 4 24.8	1.261	2.246	7.3	18.8	5 1	15 26.09	- 0 36.6	1.921	2.891	6.7	20.5
5 11	15 16.84	- 3 28.1	1.255	2.248	6.4	18.7	5 11	15 17.03	+ 0 23.2	1.899	2.875	6.3	20.5
5 21	15 9.12	- 2 49.2	1.274	2.251	9.0	18.9	5 21	15 7.80	+ 1 7.9	1.904	2.859	8.2	20.6
5 31	15 2.54	- 2 32.5	1.315	2.255	12.7	19.1	5 31	14 59.33	+ 1 33.9	1.935	2.842	11.1	20.7
6 10	14 58.01	- 2 38.8	1.376	2.260	16.3	19.3	6 10	14 52.39	+ 1 39.8	1.988	2.823	14.0	20.8
6 20	14 56.00	- 3 6.3	1.454	2.265	19.4	19.6	6 20	14 47.47	+ 1 26.7	2.061	2.804	16.6	21.0
343996	2011 <i>QK</i> ₃		5 11.9 145°67	1°6/14.3 18			272659	2005 <i></i>					

EPHEMERIDES

5 11.9

5 12.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
88206	2000 YE ₁₁₈	5 11.9 259°96' 21.4/29.9 18					297941	2002 EA ₁₆₀	5 11.9 169°59' 0.1/11.9 18				
4 11	15 46.46	+24 50.7	1.154	1.963	22.6	19.2	4 11	15 36.69	-19 20.8	2.954	3.817	8.7	21.6
4 21	15 39.36	+26 36.5	1.120	1.956	21.7	19.1	4 21	15 31.08	-18 52.8	2.880	3.820	6.1	21.4
5 1	15 29.17	+27 39.6	1.100	1.949	21.4	19.0	5 1	15 24.29	-18 19.4	2.834	3.824	3.3	21.2
5 11	15 17.31	+27 48.4	1.097	1.942	21.8	19.0	5 11	15 16.89	-17 42.7	2.817	3.827	0.3	20.9
5 21	15 5.47	+26 58.5	1.109	1.935	23.1	19.1	5 21	15 9.47	-17 4.9	2.829	3.829	2.8	21.2
5 31	14 55.32	+25 12.6	1.135	1.927	24.7	19.1	5 31	15 2.64	-16 28.8	2.871	3.831	5.6	21.4
6 10	14 48.06	+22 40.8	1.175	1.919	26.6	19.3	6 10	14 56.93	-15 57.3	2.940	3.833	8.3	21.5
6 20	14 44.23	+19 35.4	1.226	1.912	28.4	19.4	6 20	14 52.67	-15 32.3	3.032	3.834	10.5	21.7
371154	2005 XC ₆₅	5 11.9 180°18' 5.7/ 7.9 17					451056	2008 YW ₁₁₂	5 12.0 223°62' 0.7/11.2 17				
4 11	15 39.40	- 2 6.8	2.214	3.084	10.9	21.2	4 11	15 33.07	-15 33.8	3.919	4.786	6.7	22.5
4 21	15 33.20	- 1 16.3	2.153	3.086	8.3	21.0	4 21	15 28.37	-15 16.0	3.834	4.777	4.7	22.3
5 1	15 25.49	- 0 31.9	2.118	3.087	6.2	20.9	5 1	15 22.80	-14 56.0	3.777	4.768	2.5	22.2
5 11	15 16.97	+ 0 1.8	2.110	3.087	5.8	20.8	5 11	15 16.75	-14 35.3	3.750	4.758	0.7	22.0
5 21	15 8.43	+ 0 21.6	2.130	3.086	7.4	20.9	5 21	15 10.65	-14 15.4	3.752	4.748	2.4	22.1
5 31	15 0.66	+ 0 25.3	2.176	3.086	9.9	21.1	5 31	15 4.91	-13 57.8	3.784	4.738	4.6	22.3
6 10	14 54.32	+ 0 12.7	2.245	3.084	12.5	21.2	6 10	14 59.93	-13 44.2	3.843	4.728	6.7	22.4
6 20	14 49.83	- 0 15.0	2.335	3.082	14.7	21.4	6 20	14 56.00	-13 35.7	3.927	4.717	8.5	22.5
330763	2008 SW ₂₅₉	5 11.9 219°63' 0.8/12.6 17					498739	2008 TN ₁₅₂	5 12.0 225°68' 3.8/13.9 17				
4 11	15 38.94	-22 29.6	1.930	2.799	12.3	20.8	4 11	15 44.11	-28 12.2	2.136	2.977	12.4	21.8
4 21	15 33.23	-22 1.1	1.856	2.797	8.9	20.6	4 21	15 37.03	-28 48.9	2.051	2.970	9.5	21.5
5 1	15 25.63	-21 22.0	1.807	2.795	5.0	20.3	5 1	15 27.80	-29 14.3	1.991	2.962	6.3	21.3
5 11	15 16.98	-20 34.5	1.784	2.793	1.1	20.0	5 11	15 17.23	-29 26.8	1.958	2.954	4.0	21.2
5 21	15 8.26	-19 42.3	1.789	2.790	3.7	20.2	5 21	15 6.34	-29 26.4	1.953	2.946	4.7	21.2
5 31	15 0.46	-18 50.5	1.821	2.788	7.7	20.5	5 31	14 56.25	-29 15.6	1.976	2.937	7.7	21.4
6 10	14 54.38	-18 4.2	1.877	2.785	11.4	20.7	6 10	14 47.92	-28 58.8	2.024	2.928	10.9	21.5
6 20	14 50.51	-17 27.0	1.956	2.783	14.5	20.9	6 20	14 41.96	-28 40.8	2.095	2.918	13.8	21.7
326198	2012 CN ₁₄	5 11.9 312°80' 5.5/14.4 17					215032	2009 BD ₁₇₉	5 12.0 316°62' 3.1/ 9.6 17				
4 11	15 41.80	-29 52.8	1.382	2.245	16.6	20.6	4 11	15 35.85	-11 37.8	2.085	2.970	10.9	19.9
4 21	15 36.26	-30 24.7	1.304	2.233	12.9	20.4	4 21	15 30.85	-10 40.3	2.017	2.966	7.7	19.7
5 1	15 27.70	-30 38.5	1.247	2.221	8.9	20.1	5 1	15 24.30	- 9 40.9	1.974	2.963	4.6	19.5
5 11	15 17.19	-30 31.6	1.213	2.210	5.8	19.9	5 11	15 16.89	- 8 44.1	1.959	2.960	3.1	19.4
5 21	15 6.24	-30 4.8	1.203	2.199	6.5	19.9	5 21	15 9.45	- 7 54.3	1.971	2.957	5.4	19.6
5 31	14 56.49	-29 22.9	1.218	2.188	10.3	20.1	5 31	15 2.76	- 7 15.5	2.010	2.955	8.7	19.8
6 10	14 49.31	-28 34.5	1.254	2.178	14.6	20.3	6 10	14 57.51	- 6 50.3	2.073	2.952	11.8	20.0
6 20	14 45.47	-27 47.5	1.309	2.168	18.5	20.5	6 20	14 54.13	- 6 39.6	2.156	2.949	14.5	20.1
485236	2010 VR ₇₀	5 11.9 224°78' 6.4/10.9 18					230877	2004 RC ₂₁₉	5 12.0 222°06' 5.3/15.7 18				
4 11	15 54.83	- 2 15.1	1.229	2.103	17.6	20.3	4 11	15 42.38	-34 51.5	2.172	2.990	13.0	20.7
4 21	15 45.48	- 2 47.6	1.158	2.097	13.3	20.0	4 21	15 35.79	-35 1.2	2.086	2.983	10.4	20.5
5 1	15 32.68	- 3 36.3	1.110	2.090	8.8	19.7	5 1	15 27.10	-34 53.3	2.022	2.975	7.7	20.3
5 11	15 17.67	- 4 43.9	1.087	2.083	6.4	19.6	5 11	15 17.16	-34 26.6	1.985	2.967	5.6	20.2
5 21	15 2.19	- 6 9.6	1.090	2.075	8.9	19.7	5 21	15 7.04	-33 42.4	1.975	2.958	5.7	20.2
5 31	14 48.14	- 7 50.5	1.120	2.067	13.6	19.9	5 31	14 57.84	-32 44.7	1.992	2.949	7.9	20.3
6 10	14 37.03	- 9 42.1	1.172	2.058	18.3	20.2	6 10	14 50.47	-31 40.0	2.034	2.940	10.8	20.5
6 20	14 29.63	-11 40.1	1.243	2.049	22.4	20.4	6 20	14 45.50	-30 34.7	2.099	2.930	13.6	20.6
305478	2008 DE ₆₂	5 11.9 210°28' 4.3/15.1 18					342590	2008 UB ₂₉₂	5 12.0 180°87' 0.3/12.2 17				
4 11	15 40.10	-32 36.5	2.516	3.340	11.3	20.6	4 11	15 38.90	-20 56.5	2.046	2.917	11.7	21.5
4 21	15 33.90	-32 55.7	2.434	3.337	8.9	20.4	4 21	15 33.09	-20 27.6	1.975	2.917	8.3	21.3
5 1	15 25.97	-33 1.6	2.376	3.334	6.4	20.3	5 1	15 25.53	-19 50.0	1.927	2.917	4.5	21.0
5 11	15 17.03	-32 53.4	2.345	3.330	4.5	20.2	5 11	15 17.01	-19 6.0	1.908	2.917	0.6	20.7
5 21	15 7.94	-32 32.0	2.342	3.327	4.7	20.2	5 21	15 8.44	-18 19.1	1.916	2.917	3.6	21.0
5 31	14 59.59	-32 0.1	2.366	3.323	6.8	20.3	5 31	15 0.74	-17 33.8	1.952	2.917	7.5	21.2
6 10	14 52.74	-31 22.2	2.417	3.320	9.4	20.4	6 10	14 54.65	-16 54.5	2.013	2.916	11.0	21.4
6 20	14 47.89	-30 42.9	2.490	3.316	11.8	20.6	6 20	14 50.65	-16 24.2	2.095	2.915	13.9	21.6
384606	2010 XA ₃₅	5 11.9 112°36' 0.4/12.0 18					342846	2008 YV ₄	5 12.0 186°25' 2.6/10.1 18				
4 11	15 57.63	-13 53.8	1.116	1.995	18.6	20.2	4 11	15 39.30	-10 16.5	2.529	3.401	9.7	21.6
4 21	15 47.74	-15 29.3	1.057	2.004	13.4	19.9	4 21	15 33.06	- 9 51.4	2.458	3.401	6.9	21.4
5 1	15 33.97	-17 8.3	1.021	2.012	7.3	19.6	5 1	15 25.41	- 9 26.4	2.413	3.400	4.1	21.2
5 11	15 17.79	-18 45.4	1.011	2.020	0.8	19.2	5 11	15 17.01	- 9 4.4	2.397	3.399	2.6	21.1
5 21	15 1.25	-20 15.3	1.027	2.028	5.9	19.6	5 21	15 8.55	- 8 47.6	2.411	3.397	4.6	21.3
5 31	14 46.53	-21 35.7	1.069	2.036	11.9	19.9	5 31	15 0.75	- 8 38.5	2.452	3.394	7.4	21.4
6 10	14 35.28	-22 48.1	1.135	2.043	17.1	20.2	6 10	14 54.23	- 8 38.5	2.519	3.391	10.2	21.6
6 20	14 28.23	-23 55.7	1.218	2.050	21.3	20.5	6 20	14 49.39	- 8 48.2	2.608	3.387	12.6	21.8
462155	2007 TW ₁₂₂	5 11.9 158°24' 0.9/12.4 16					56929	2000 RY ₂₇	5 12.0 280°97' 5.5/15.5 16				
4 11	15 44.57	-20 19.8	1.618	2.491	14.1	22.2	4 11	15 40.80	-34 30.7	2.224	3.046	12.7	19.7
4 21	15 37.51	-20 30.1	1.552	2.495	10.1	22.0	4 21	15 34.68	-34 59.9	2.141	3.039	10.2	19.5
5 1	15 28.06	-20 32.2	1.509	2.498	5.6	21.7	5 1	15 26.51	-35 13.4	2.081	3.032	7.6	19.3
5 11	15 17.24	-20 26.9	1.492	2.501	1.1	21.4	5 11	15 17.12	-35 9.7	2.047	3.026	5.7	19.2
5 21	15 6.28	-20 16.2	1.502	2.504	4.3	21.7	5 21	15 7.48	-34 49.1	2.039	3.019	5.8	19.2
5 31	14 56.48	-20 3.8	1.539	2.506	8.9	21.9	5 31	14 58.68	-34 14.7	2.058	3.012	7.9	19.3
6 10	14 48.84	-19 54.1	1.599	2.508	13.0	22.2	6 10	14 51.62	-33 31.8	2.102	3.006	10.5	19.5
6 20	14 43.95	-19 50.6	1.680	2.510	16.4	22.4	6 20	14 46.86	-32 46.1	2.168	2.999	13.2	19.6
421032	2013 PM ₆₅	5 11.9 192°74' 2.4/ 8.3 18					430526	2002 BR ₂₀	5 12.0 153°76' 11.1/22.6 17				
4 11	15 29.30	- 4 19.4	5.149	6.017	5.2	21.5	4 11	15 57.14	-57 47.0	2.710	3.350	14.7	22.3
4 21	15 25.55	- 3 53.1	5.081	6.016	3.8								