

EPHEMERIDES

5 1.9

5 2.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
33193	Emhydr		5	1.9 244°95	0°8/ 2.6 18		278863	2008 TO ₃₅		5	2.0 211°85	1°0/ 1.2 17	
4 1	15 0.40	-19 23.4	1.915	2.780	12.4	18.3	4 1	14 58.93	-15 4.2	1.920	2.796	11.9	20.9
4 11	14 54.70	-19 3.2	1.836	2.773	9.0	18.0	4 11	14 53.54	-14 18.1	1.849	2.795	8.4	20.6
4 21	14 47.06	-18 31.9	1.780	2.766	5.1	17.8	4 21	14 46.38	-13 23.9	1.803	2.793	4.4	20.4
5 1	14 38.27	-17 51.7	1.752	2.759	1.1	17.5	5 1	14 38.23	-12 25.7	1.784	2.791	1.0	20.1
5 11	14 29.34	-17 6.8	1.751	2.751	3.7	17.7	5 11	14 30.03	-11 28.7	1.794	2.789	4.3	20.4
5 21	14 21.25	-16 22.2	1.778	2.743	7.9	17.9	5 21	14 22.69	-10 38.3	1.830	2.788	8.3	20.6
5 31	14 14.86	-15 43.0	1.829	2.735	11.7	18.1	5 31	14 16.97	-9 58.9	1.890	2.786	11.9	20.8
6 10	14 10.70	-15 13.3	1.901	2.727	14.9	18.3	6 10	14 13.34	-9 33.3	1.972	2.783	15.0	21.0
193486	2000 XF ₅₃		5	1.9 204°99	2°0/30.7 18		377254	2004 CG ₅₂		5	2.0 35°27	7°3/ 2.4 18	
4 1	15 3.15	-9 36.9	2.132	3.004	11.1	20.1	4 1	15 23.35	-19 4.4	0.875	1.751	22.4	19.3
4 11	14 56.39	-9 31.3	2.058	3.000	7.9	19.9	4 11	15 13.51	-22 12.8	0.820	1.757	17.0	19.0
4 21	14 47.88	-9 24.5	2.009	2.997	4.3	19.7	4 21	14 58.37	-25 18.6	0.785	1.764	11.2	18.7
5 1	14 38.34	-9 18.7	1.988	2.992	2.0	19.5	5 1	14 39.40	-28 4.6	0.775	1.771	7.4	18.5
5 11	14 28.70	-9 16.8	1.997	2.988	4.6	19.7	5 11	14 19.47	-30 16.4	0.789	1.779	9.7	18.7
5 21	14 19.82	-9 21.2	2.033	2.983	8.1	19.9	5 21	14 1.72	-31 50.3	0.826	1.787	15.0	19.0
5 31	14 12.49	-9 33.8	2.095	2.978	11.5	20.1	5 31	13 48.59	-32 53.8	0.884	1.796	20.2	19.3
6 10	14 7.20	-9 55.7	2.179	2.972	14.3	20.3	6 10	13 41.16	-33 40.1	0.957	1.806	24.4	19.6
416713	2005 BR ₃₃		5	1.9 167°81	4°3/24.2 18		47578	2000 AT ₁₇₄		5	2.0 82°79	0°5/ 2.4 18	
4 1	14 50.82	+8 29.8	4.631	5.482	5.9	21.1	4 1	15 0.95	-20 22.6	1.538	2.410	14.5	18.8
4 11	14 47.03	+9 9.0	4.579	5.483	4.9	21.0	4 11	14 55.17	-19 27.1	1.483	2.424	10.4	18.5
4 21	14 42.61	+9 42.4	4.553	5.484	4.4	21.0	4 21	14 47.28	-18 16.5	1.451	2.438	5.7	18.3
5 1	14 37.85	+10 7.8	4.556	5.484	4.5	21.0	5 1	14 38.31	-16 55.9	1.445	2.452	0.9	18.0
5 11	14 33.10	+10 23.4	4.586	5.485	5.3	21.0	5 11	14 29.48	-15 32.6	1.466	2.466	4.3	18.3
5 21	14 28.66	+10 28.6	4.642	5.486	6.4	21.1	5 21	14 21.89	-14 14.7	1.513	2.479	8.9	18.6
5 31	14 24.82	+10 22.9	4.722	5.486	7.5	21.2	5 31	14 16.37	-13 9.0	1.584	2.493	13.0	18.8
6 10	14 21.80	+10 7.0	4.822	5.487	8.6	21.3	6 10	14 13.38	-12 19.8	1.675	2.506	16.4	19.1
51999	2001 UC ₂₂		5	2.0 121°42	2°0/ 3.8 18		461654	2005 GN ₂₄		5	2.0 60°90	0°7/ 2.4 17	
4 1	14 58.36	-23 46.5	2.198	3.048	11.7	18.6	4 1	15 2.58	-18 33.6	1.363	2.243	15.6	21.7
4 11	14 53.01	-23 19.9	2.124	3.050	8.6	18.4	4 11	14 56.59	-18 17.5	1.310	2.255	11.1	21.4
4 21	14 46.04	-22 40.3	2.075	3.053	5.3	18.2	4 21	14 48.15	-17 48.8	1.279	2.267	6.2	21.2
5 1	14 38.18	-21 49.4	2.053	3.056	2.3	18.0	5 1	14 38.39	-17 10.7	1.273	2.280	1.1	20.9
5 11	14 30.31	-20 51.3	2.059	3.058	3.4	18.1	5 11	14 28.72	-16 28.7	1.292	2.293	4.6	21.2
5 21	14 23.24	-19 51.0	2.093	3.061	6.7	18.3	5 21	14 20.40	-15 49.1	1.336	2.305	9.5	21.5
5 31	14 17.67	-18 53.7	2.153	3.063	10.0	18.5	5 31	14 14.42	-15 18.1	1.403	2.318	13.9	21.8
6 10	14 14.05	-18 4.1	2.236	3.065	12.8	18.7	6 10	14 11.29	-14 59.6	1.489	2.332	17.5	22.0
51293	2000 KP ₃₀		5	2.0 203°84	2°0/ 3.9 18		115108	2003 SA ₃₁		5	2.0 185°90	2°4/ 3.9 18	
4 1	14 58.70	-24 18.2	2.447	3.290	10.9	19.1	4 1	15 2.09	-23 38.2	2.393	3.233	11.2	20.0
4 11	14 53.16	-23 53.2	2.365	3.287	8.1	18.9	4 11	14 55.61	-23 43.8	2.313	3.233	8.3	19.8
4 21	14 46.10	-23 15.7	2.308	3.284	5.0	18.7	4 21	14 47.46	-23 38.4	2.258	3.232	5.2	19.6
5 1	14 38.19	-22 27.3	2.278	3.280	2.3	18.5	5 1	14 38.34	-23 22.4	2.231	3.231	2.6	19.5
5 11	14 30.23	-21 31.4	2.278	3.276	3.2	18.6	5 11	14 29.10	-22 58.1	2.233	3.230	3.5	19.5
5 21	14 22.97	-20 32.4	2.306	3.272	6.3	18.8	5 21	14 20.60	-22 28.6	2.264	3.228	6.6	19.7
5 31	14 17.07	-19 35.2	2.361	3.267	9.4	19.0	5 31	14 13.56	-21 58.4	2.321	3.225	9.6	19.9
6 10	14 13.00	-18 44.4	2.438	3.263	12.1	19.1	6 10	14 8.49	-21 31.6	2.401	3.222	12.3	20.1
419561	2010 RL ₄		5	2.0 201°69	1°9/30.6 16		229111	2004 RR ₇₄		5	2.0 178°74	1°6/30.7 18	
4 1	15 2.57	-12 0.8	1.969	2.842	11.8	22.5	4 1	15 0.52	-12 7.7	2.283	3.154	10.5	21.4
4 11	14 56.09	-11 22.9	1.894	2.838	8.3	22.2	4 11	14 54.40	-11 34.7	2.213	3.156	7.4	21.2
4 21	14 47.76	-10 39.9	1.845	2.833	4.5	22.0	4 21	14 46.76	-10 57.6	2.168	3.157	4.0	20.9
5 1	14 38.35	-9 55.5	1.823	2.828	1.9	21.8	5 1	14 38.27	-10 19.5	2.152	3.157	1.6	20.8
5 11	14 28.85	-9 14.6	1.830	2.822	4.8	22.0	5 11	14 29.75	-9 44.3	2.166	3.157	4.2	20.9
5 21	14 20.20	-8 41.4	1.865	2.815	8.7	22.2	5 21	14 21.98	-9 15.4	2.207	3.157	7.6	21.2
5 31	14 13.19	-8 19.5	1.924	2.807	12.3	22.4	5 31	14 15.61	-8 55.9	2.274	3.156	10.7	21.4
6 10	14 8.37	-8 11.1	2.004	2.799	15.3	22.6	6 10	14 11.10	-8 47.5	2.362	3.154	13.4	21.5
3356	Resnik		5	2.0 322°67	3°8/30.0 18		281044	2006 HF ₆₀		5	2.0 59°69	3°6/29.5 17	
4 1	15 0.66	-9 33.5	1.135	2.037	16.2	15.7	4 1	14 59.77	-7 29.2	1.726	2.613	12.5	20.2
4 11	14 55.76	-8 53.4	1.069	2.026	11.6	15.4	4 11	14 54.12	-6 47.5	1.674	2.623	8.8	20.0
4 21	14 47.97	-8 8.8	1.025	2.016	6.6	15.1	4 21	14 46.66	-6 5.5	1.647	2.634	5.2	19.8
5 1	14 38.38	-7 26.4	1.003	2.006	3.9	14.9	5 1	14 38.26	-5 28.2	1.646	2.645	3.7	19.7
5 11	14 28.53	-6 54.1	1.005	1.997	7.7	15.1	5 11	14 29.93	-5 0.6	1.672	2.656	6.2	19.9
5 21	14 19.94	-6 37.9	1.028	1.988	12.9	15.3	5 21	14 22.61	-4 46.0	1.723	2.667	9.8	20.2
5 31	14 13.87	-6 41.9	1.072	1.980	17.8	15.6	5 31	14 17.05	-4 46.3	1.798	2.678	13.2	20.4
6 10	14 11.03	-7 6.6	1.132	1.973	22.0	15.8	6 10	14 13.69	-5 1.8	1.892	2.690	16.0	20.6
40765	1999 TF ₁₆		5	2.0 344°65	2°1/30.5 18		48835	1997 YK ₁₈		5	2.0 139°72	4°6/27.7 18	
4 1	14 59.11	-11 48.3	1.777	2.660	12.3	18.4	4 1	14 57.62	-2 35.1	2.308	3.187	10.1	18.7
4 11	14 53.76	-11 8.4	1.710	2.659	8.7	18.2	4 11	14 52.28	-1 36.3	2.252	3.192	7.4	18.5
4 21	14 46.53	-10 23.5	1.668	2.658	4.7	17.9	4 21	14 45.58	-0 40.2	2.222	3.198	5.2	18.4
5 1	14 38.24	-9 38.0	1.653	2.657	2.1	17.8	5 1	14 38.16	+0 8.2	2.220	3.203	4.7	18.4
5 11	14 29.90	-8 57.0	1.665	2.657	5.1	18.0	5 11	14 30.77	+0 44.7	2.245	3.207	6.5	18.5
5 21	14 22.48	-8 25.3	1.702	2.656	9.1	18.2	5 21	14 24.10	+1 6.7	2.297	3.212	9.1	18.7
5 31	14 16.76	-8 6.3	1.764	2.656	12.8	18.4	5 31	14 18.73	+1 12.7	2.373	3.216	11.7	18.8
6 10	14 13.26	-8 1.9	1.845	2.655	15.9	18.6	6 10	14 15.06	+1 3.2	2.468	3.220	13.9	19.0
278465	2007 TQ ₁₆₆		5	2.0 268°96	6°6/24.7 18		68241	2001 DT ₅₉		5	2.0 111°56	4°1/29.2 18	
4 1	14 57.64	+0 38.5	2.123	3.002	10.8	20.9	4 1	15 3.31	-6 54.0	1.673	2.556		

EPHEMERIDES

5 2.0

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
333934	1999 VG ₂₇		5 2.0 276°56	1.7/ 3.1	17		156098	2001 SR ₂₂₈		5 2.0 224°05	1.2/29.9	18	
4 1	15 1.19	-20 37.1	1.869	2.731	12.8	20.8	4 1	14 50.77	-9 51.7	4.671	5.541	5.5	20.9
4 11	14 55.34	-20 38.1	1.791	2.725	9.4	20.6	4 11	14 47.04	-9 23.0	4.594	5.537	3.9	20.8
4 21	14 47.46	-20 28.1	1.737	2.720	5.5	20.3	4 21	14 42.65	-8 53.2	4.546	5.533	2.1	20.7
5 1	14 38.35	-20 8.0	1.709	2.714	1.9	20.1	5 1	14 37.92	-8 23.9	4.527	5.528	1.2	20.6
5 11	14 29.07	-19 41.0	1.709	2.709	3.8	20.2	5 11	14 33.16	-7 56.9	4.538	5.524	2.5	20.7
5 21	14 20.66	-19 11.3	1.736	2.703	7.9	20.4	5 21	14 28.70	-7 33.7	4.578	5.519	4.2	20.8
5 31	14 14.00	-18 43.9	1.787	2.697	11.7	20.6	5 31	14 24.83	-7 15.7	4.645	5.515	5.9	20.9
6 10	14 9.69	-18 23.3	1.859	2.692	14.9	20.8	6 10	14 21.77	-7 3.9	4.737	5.510	7.4	21.0
503024	2015 FB ₁₂₃		5 2.0 99°22	0°9/ 2.6	17		417021	2005 UU ₆₈		5 2.0 97°73	1°2/ 3.1	18	
4 1	15 2.73	-18 14.8	1.958	2.821	12.3	21.2	4 1	15 1.43	-22 25.0	1.907	2.763	12.9	21.0
4 11	14 56.18	-18 19.8	1.895	2.832	8.8	21.0	4 11	14 55.15	-21 31.1	1.853	2.785	9.3	20.8
4 21	14 47.79	-18 16.4	1.857	2.843	4.9	20.8	4 21	14 47.16	-20 23.1	1.823	2.806	5.3	20.6
5 1	14 38.37	-18 5.8	1.847	2.853	1.1	20.6	5 1	14 38.33	-19 5.0	1.821	2.827	1.5	20.4
5 11	14 28.96	-17 50.8	1.864	2.864	3.6	20.8	5 11	14 29.70	-17 42.9	1.848	2.847	3.6	20.5
5 21	14 20.49	-17 35.1	1.910	2.874	7.5	21.0	5 21	14 22.16	-16 23.3	1.902	2.867	7.5	20.8
5 31	14 13.76	-17 22.5	1.980	2.885	11.0	21.3	5 31	14 16.40	-15 12.5	1.982	2.887	11.0	21.1
6 10	14 9.25	-17 16.2	2.072	2.895	14.0	21.5	6 10	14 12.82	-14 14.8	2.084	2.906	13.9	21.3
520045	2013 VN ₂₉		5 2.0 290°43	1°2/ 1.1	17		132373	2002 GK ₇₅		5 2.0 301°27	9°9/22.9	18	
4 1	14 58.60	-15 7.1	1.750	2.631	12.6	21.2	4 1	14 57.75	+8 5.0	1.726	2.601	13.1	19.0
4 11	14 53.51	-14 18.7	1.675	2.623	8.9	20.9	4 11	14 52.92	+9 43.5	1.664	2.583	11.0	18.9
4 21	14 46.46	-13 20.9	1.625	2.615	4.8	20.6	4 21	14 46.16	+11 10.5	1.625	2.565	10.0	18.7
5 1	14 38.26	-12 18.3	1.600	2.607	1.2	20.4	5 1	14 38.26	+12 17.0	1.610	2.547	10.5	18.7
5 11	14 29.95	-11 16.8	1.603	2.599	4.7	20.6	5 11	14 30.20	+12 56.2	1.619	2.530	12.4	18.8
5 21	14 22.53	-10 22.4	1.632	2.591	9.0	20.8	5 21	14 22.98	+13 5.0	1.650	2.512	14.9	18.9
5 31	14 16.83	-9 40.3	1.685	2.584	12.9	21.1	5 31	14 17.42	+12 43.8	1.699	2.495	17.5	19.1
6 10	14 13.41	-9 13.6	1.758	2.576	16.2	21.3	6 10	14 14.09	+11 55.7	1.764	2.478	19.9	19.2
201539	2003 QA ₇₅		5 2.0 261°31	0°8/ 1.4	18		252760	2002 ET ₅₄		5 2.0 309°97	3°0/ 3.4	17	
4 1	14 59.03	-15 27.7	1.963	2.837	11.8	20.6	4 1	15 2.15	-21 34.3	1.306	2.182	16.4	20.4
4 11	14 53.68	-14 47.0	1.882	2.826	8.3	20.4	4 11	14 56.98	-21 55.8	1.222	2.162	12.3	20.0
4 21	14 46.51	-13 57.7	1.825	2.815	4.4	20.1	4 21	14 48.79	-22 3.0	1.158	2.141	7.6	19.7
5 1	14 38.27	-13 3.4	1.796	2.803	0.8	19.8	5 1	14 38.53	-21 55.3	1.118	2.121	3.3	19.4
5 11	14 29.89	-12 9.2	1.795	2.792	4.2	20.1	5 11	14 27.68	-21 35.0	1.102	2.102	5.3	19.5
5 21	14 22.29	-11 20.2	1.821	2.780	8.3	20.3	5 21	14 17.83	-21 7.5	1.109	2.083	10.5	19.7
5 31	14 16.25	-10 41.0	1.872	2.768	11.9	20.5	5 31	14 10.42	-20 40.1	1.139	2.064	15.5	19.9
6 10	14 12.33	-10 14.8	1.944	2.756	15.1	20.7	6 10	14 6.35	-20 19.9	1.186	2.047	19.9	20.1
138704	2000 SO ₉₀		5 2.0 210°61	3°1/ 5.4	18		313593	2003 NQ ₄		5 2.0 310°70	6°5/ 6.1	17	
4 1	14 58.80	-28 57.0	2.848	3.666	10.2	20.1	4 1	14 58.94	-31 22.6	1.250	2.103	18.5	19.7
4 11	14 53.13	-28 38.9	2.758	3.659	7.9	20.0	4 11	14 55.04	-31 16.8	1.152	2.070	14.9	19.4
4 21	14 46.08	-28 7.3	2.692	3.653	5.4	19.8	4 21	14 47.91	-30 40.3	1.072	2.038	10.8	19.1
5 1	14 38.23	-27 22.9	2.655	3.645	3.4	19.7	5 1	14 38.46	-29 29.5	1.014	2.005	7.2	18.8
5 11	14 30.33	-26 28.2	2.646	3.638	3.6	19.7	5 11	14 28.27	-27 47.1	0.979	1.973	7.2	18.7
5 21	14 23.05	-25 27.1	2.667	3.630	5.8	19.8	5 21	14 19.13	-25 42.3	0.966	1.942	11.3	18.8
5 31	14 17.00	-24 24.1	2.715	3.621	8.3	19.9	5 31	14 12.62	-23 29.9	0.975	1.911	16.4	18.9
6 10	14 12.61	-23 24.0	2.788	3.612	10.7	20.1	6 10	14 9.75	-21 25.1	1.003	1.881	21.3	19.1
312520	2009 DE ₃₃		5 2.0 63°31	0°1/ 2.1	16		437889	2001 SS ₂₀₅		5 2.0 231°29	0°1/ 2.1	17	
4 1	15 4.14	-16 47.0	1.293	2.177	16.0	21.6	4 1	14 59.02	-17 11.0	2.462	3.324	10.1	22.0
4 11	14 57.69	-16 35.3	1.247	2.195	11.3	21.4	4 11	14 53.40	-16 50.6	2.377	3.315	7.2	21.8
4 21	14 48.73	-16 13.0	1.223	2.213	6.1	21.1	4 21	14 46.28	-16 22.9	2.319	3.305	3.9	21.6
5 1	14 38.47	-15 43.4	1.224	2.231	0.6	20.8	5 1	14 38.28	-15 49.9	2.288	3.295	0.4	21.3
5 11	14 28.40	-15 11.9	1.250	2.250	4.8	21.2	5 11	14 30.16	-15 14.9	2.287	3.285	3.2	21.5
5 21	14 19.81	-14 44.4	1.300	2.268	9.9	21.5	5 21	14 22.67	-14 41.3	2.314	3.274	6.6	21.7
5 31	14 13.68	-14 26.0	1.373	2.287	14.2	21.8	5 31	14 16.46	-14 12.6	2.367	3.263	9.8	21.9
6 10	14 10.50	-14 19.9	1.465	2.306	17.8	22.1	6 10	14 12.01	-13 51.9	2.443	3.252	12.5	22.0
371254	2006 BL ₁₇₃		5 2.0 350°56	0°2/ 1.7	18		174432	2002 XG ₁₃		5 2.0 236°74	0°9/ 1.3	18	
4 1	14 51.93	-15 26.0	3.957	4.820	6.6	21.0	4 1	14 59.74	-13 36.3	2.258	3.128	10.6	20.4
4 11	14 47.95	-15 4.4	3.880	4.819	4.6	20.9	4 11	14 53.98	-13 18.9	2.179	3.121	7.5	20.2
4 21	14 43.17	-14 39.2	3.831	4.819	2.5	20.7	4 21	14 46.61	-12 56.6	2.125	3.114	4.0	20.0
5 1	14 37.96	-14 12.0	3.810	4.818	0.3	20.5	5 1	14 38.31	-12 32.0	2.099	3.106	0.9	19.7
5 11	14 32.73	-13 44.7	3.820	4.817	2.2	20.7	5 11	14 29.89	-12 8.2	2.103	3.098	3.8	19.9
5 21	14 27.87	-13 19.3	3.859	4.817	4.4	20.8	5 21	14 22.16	-11 48.5	2.134	3.090	7.4	20.1
5 31	14 23.73	-12 57.6	3.925	4.816	6.4	21.0	5 31	14 15.81	-11 35.9	2.190	3.082	10.6	20.3
6 10	14 20.58	-12 41.2	4.016	4.816	8.1	21.1	6 10	14 11.34	-11 32.6	2.268	3.074	13.5	20.5
191389	2003 SQ ₄₂		5 2.0 216°05	3°2/ 4.9	18		424796	2008 UM ₂₉		5 2.0 222°96	0°7/ 1.5	17	
4 1	15 1.20	-27 38.4	2.467	3.292	11.3	20.7	4 1	14 59.20	-15 41.0	2.099	2.970	11.3	21.6
4 11	14 55.03	-27 30.1	2.376	3.284	8.7	20.6	4 11	14 53.67	-15 1.6	2.022	2.964	8.0	21.3
4 21	14 47.18	-27 7.5	2.311	3.275	5.9	20.4	4 21	14 46.47	-14 14.3	1.970	2.959	4.2	21.1
5 1	14 38.34	-26 31.2	2.272	3.266	3.5	20.2	5 1	14 38.30	-13 22.3	1.946	2.953	0.7	20.8
5 11	14 29.37	-25 43.5	2.263	3.256	3.9	20.2	5 11	14 30.05	-12 30.4	1.950	2.947	3.9	21.1
5 21	14 21.11	-24 48.7	2.282	3.245	6.5	20.3	5 21	14 22.57	-11 43.1	1.982	2.940	7.7	21.3
5 31	14 14.28	-23 51.8	2.328	3.234	9.5	20.5	5 31	14 16.58	-11 4.9	2.039	2.934	11.2	21.5
6 10	14 9.40	-22 58.2	2.397	3.222	12.2	20.7	6 10	14 12.57	-10 38.6	2.118	2.927	14.2	21.7
289998	2005 PT ₁₂		5 2.0 270°64	1°4/ 3.1	17		522788	2016 NE ₇₈		5 2.0 229°13	3°8/28.7	17	
4 1	14 59.92	-20 15.3	2.283	3.									

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5 2.0

5 2.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
242148	2003 CR ₄		5 2.0 69°86	0°7/ 1.2 17			219527	2001 QK ₁₄₂		5 2.0 278°32	0°0/ 2.1 18		
4 1	14 54.95	-14 42.9	2.928	3.796	8.5	21.0	4 1	15 5.57	-16 58.7	2.228	3.083	11.3	21.6
4 11	14 50.19	-14 2.9	2.874	3.816	5.9	20.9	4 11	14 58.53	-16 40.8	2.107	3.041	8.2	21.3
4 21	14 44.40	-13 18.6	2.847	3.836	3.1	20.7	4 21	14 49.34	-16 14.0	2.011	2.996	4.6	21.0
5 1	14 38.11	-12 32.5	2.849	3.856	0.7	20.5	5 1	14 38.64	-15 39.7	1.943	2.951	0.5	20.6
5 11	14 31.88	-11 48.0	2.881	3.876	3.0	20.7	5 11	14 27.36	-15 0.9	1.906	2.904	3.8	20.8
5 21	14 26.26	-11 8.0	2.941	3.895	5.7	21.0	5 21	14 16.51	-14 21.8	1.898	2.856	8.1	20.9
5 31	14 21.67	-10 35.1	3.028	3.915	8.2	21.1	5 31	14 7.07	-13 47.3	1.917	2.806	12.1	21.1
6 10	14 18.44	-10 11.0	3.137	3.935	10.3	21.3	6 10	13 59.77	-13 21.7	1.958	2.755	15.6	21.2
181445	2006 TT ₁₅		5 2.0 272°12	0°7/ 1.6 17			100700	1997 YX ₁₇		5 2.0 161°80	4°3/ 4.9 18		
4 1	15 0.43	-16 32.8	1.592	2.472	13.7	21.0	4 1	15 4.46	-27 31.5	1.628	2.471	15.4	20.4
4 11	14 55.06	-15 48.6	1.512	2.459	9.8	20.7	4 11	14 57.95	-27 35.4	1.557	2.475	11.8	20.1
4 21	14 47.43	-14 52.5	1.456	2.446	5.3	20.4	4 21	14 48.99	-27 19.9	1.508	2.477	7.9	19.9
5 1	14 38.41	-13 48.7	1.425	2.432	0.7	20.0	5 1	14 38.58	-26 44.8	1.485	2.480	4.7	19.7
5 11	14 29.18	-12 43.6	1.421	2.419	4.8	20.3	5 11	14 28.08	-25 53.8	1.487	2.482	5.3	19.8
5 21	14 20.89	-11 44.1	1.443	2.406	9.6	20.5	5 21	14 18.75	-24 53.1	1.516	2.483	8.8	20.0
5 31	14 14.55	-10 56.5	1.488	2.392	14.0	20.8	5 31	14 11.65	-23 51.0	1.568	2.485	12.6	20.2
6 10	14 10.78	-10 25.1	1.552	2.379	17.7	21.0	6 10	14 7.37	-22 54.9	1.642	2.486	16.1	20.4
176009	2000 RY ₈₆		5 2.0 153°25	1°9/29.9 18			114156	Eamonlittle		5 2.0 201°35	1°4/30.9 18		
4 1	14 56.88	-11 5.3	2.679	3.552	9.0	20.4	4 1	14 58.61	-13 7.4	2.100	2.976	11.0	20.4
4 11	14 51.66	-10 13.0	2.614	3.558	6.3	20.2	4 11	14 53.22	-12 33.6	2.030	2.975	7.8	20.2
4 21	14 45.24	-9 17.5	2.576	3.564	3.5	20.0	4 21	14 46.22	-11 54.7	1.985	2.975	4.1	19.9
5 1	14 38.19	-8 22.3	2.567	3.569	1.9	19.9	5 1	14 38.32	-11 13.8	1.968	2.974	1.4	19.7
5 11	14 31.16	-7 31.3	2.587	3.574	4.0	20.1	5 11	14 30.37	-10 35.4	1.979	2.974	4.2	19.9
5 21	14 24.76	-6 47.9	2.636	3.579	6.9	20.3	5 21	14 23.19	-10 3.4	2.018	2.973	7.8	20.1
5 31	14 19.50	-6 14.8	2.711	3.583	9.5	20.5	5 31	14 17.48	-9 41.0	2.081	2.972	11.2	20.3
6 10	14 15.74	-5 53.5	2.808	3.587	11.8	20.6	6 10	14 13.70	-9 30.4	2.165	2.971	14.0	20.5
383988	2008 TQ ₁₅₄		5 2.0 185°92	2°2/ 3.8 17			179463	2002 AG ₂₀₉		5 2.0 345°78	3°5/28.7 18		
4 1	15 2.27	-23 18.4	2.501	3.341	10.8	21.8	4 1	14 56.47	-6 45.0	2.269	3.151	10.1	20.2
4 11	14 55.70	-23 22.3	2.420	3.340	8.0	21.6	4 11	14 51.58	-5 47.6	2.205	3.151	7.2	20.0
4 21	14 47.53	-23 15.7	2.365	3.340	5.0	21.4	4 21	14 45.28	-4 49.6	2.166	3.150	4.5	19.9
5 1	14 38.42	-22 59.2	2.338	3.338	2.4	21.2	5 1	14 38.23	-3 55.5	2.156	3.150	3.6	19.8
5 11	14 29.20	-22 34.9	2.340	3.337	3.3	21.3	5 11	14 31.16	-3 10.1	2.173	3.150	5.6	19.9
5 21	14 20.69	-22 5.9	2.371	3.334	6.3	21.5	5 21	14 24.78	-2 36.8	2.218	3.150	8.5	20.1
5 31	14 13.58	-21 36.4	2.429	3.331	9.3	21.7	5 31	14 19.69	-2 17.8	2.286	3.150	11.4	20.3
6 10	14 8.35	-21 10.3	2.510	3.328	12.0	21.8	6 10	14 16.31	-2 13.8	2.375	3.150	13.8	20.5
6913	Yukawa		5 2.0 211°23	2°6/30.4 18			427853	2005 MJ ₅₄		5 2.0 244°86	4°2/ 5.6 18		
4 1	15 3.81	-10 43.7	1.649	2.530	13.3	18.2	4 1	15 2.58	-30 4.8	2.077	2.899	13.3	21.6
4 11	14 57.29	-10 4.8	1.578	2.525	9.4	17.9	4 11	14 56.38	-29 45.8	1.979	2.882	10.4	21.3
4 21	14 48.57	-9 21.3	1.530	2.519	5.2	17.7	4 21	14 48.08	-29 7.2	1.904	2.864	7.3	21.1
5 1	14 38.53	-8 37.7	1.509	2.513	2.6	17.5	5 1	14 38.50	-28 8.9	1.856	2.846	4.6	20.9
5 11	14 28.36	-7 59.7	1.515	2.506	5.8	17.7	5 11	14 28.70	-26 54.1	1.835	2.827	4.8	20.9
5 21	14 19.19	-7 32.2	1.547	2.498	10.1	17.9	5 21	14 19.73	-25 28.7	1.843	2.808	7.7	21.0
5 31	14 11.96	-7 18.9	1.603	2.490	14.1	18.1	5 31	14 12.51	-24 0.5	1.876	2.787	11.2	21.2
6 10	14 7.28	-7 21.3	1.678	2.481	17.5	18.3	6 10	14 7.65	-22 37.1	1.933	2.767	14.4	21.4
317834	2003 SP ₃₂₆		5 2.0 154°72	0°3/ 2.3 16			435927	2009 BL ₁₃₉		5 2.0 74°65	2°1/30.3 17		
4 1	15 3.85	-17 53.9	1.866	2.730	12.8	22.5	4 1	14 58.95	-10 56.0	1.996	2.876	11.3	21.7
4 11	14 57.06	-17 32.2	1.800	2.738	9.1	22.3	4 11	14 53.40	-10 17.2	1.942	2.889	7.9	21.5
4 21	14 48.32	-17 0.6	1.758	2.745	5.0	22.0	4 21	14 46.27	-9 35.4	1.913	2.902	4.3	21.3
5 1	14 38.50	-16 21.8	1.744	2.751	0.6	21.7	5 1	14 38.32	-8 54.3	1.912	2.915	2.2	21.2
5 11	14 28.68	-15 40.2	1.758	2.757	3.9	22.0	5 11	14 30.45	-8 18.6	1.938	2.929	4.8	21.4
5 21	14 19.87	-15 0.6	1.800	2.762	8.1	22.2	5 21	14 23.46	-7 51.8	1.992	2.942	8.3	21.6
5 31	14 12.90	-14 27.9	1.866	2.767	11.8	22.5	5 31	14 18.02	-7 36.5	2.069	2.955	11.5	21.8
6 10	14 8.26	-14 5.5	1.954	2.771	14.9	22.7	6 10	14 14.53	-7 34.1	2.168	2.968	14.1	22.0
59438	1999 GA ₂₂		5 2.0 55°59	0°0/ 1.9 17			98658	2000 WT ₁₅₃		5 2.0 79°41	2°4/30.5 18		
4 1	15 4.21	-14 57.5	1.534	2.412	14.3	18.8	4 1	15 2.15	-9 24.1	1.815	2.695	12.3	19.1
4 11	14 57.59	-15 9.5	1.478	2.423	10.1	18.6	4 11	14 55.81	-9 9.6	1.759	2.706	8.7	18.9
4 21	14 48.70	-15 14.9	1.445	2.434	5.5	18.4	4 21	14 47.63	-8 53.7	1.728	2.716	4.8	18.7
5 1	14 38.54	-15 15.4	1.438	2.446	0.5	18.0	5 1	14 38.45	-8 39.8	1.724	2.727	2.4	18.5
5 11	14 28.39	-15 14.2	1.458	2.457	4.4	18.4	5 11	14 29.33	-8 31.3	1.747	2.738	5.1	18.7
5 21	14 19.44	-15 14.5	1.504	2.469	9.0	18.7	5 21	14 21.19	-8 31.1	1.796	2.748	8.9	19.0
5 31	14 12.64	-15 20.0	1.573	2.481	13.1	18.9	5 31	14 14.82	-8 41.2	1.870	2.759	12.3	19.2
6 10	14 8.52	-15 33.4	1.662	2.494	16.5	19.2	6 10	14 10.68	-9 2.2	1.965	2.769	15.3	19.4
38830	2000 RK ₉₉		5 2.0 112°34	1°0/ 3.4 18			507434	2012 RZ ₃₄		5 2.0 250°61	0°4/ 2.4 18		
4 1	14 54.81	-22 12.3	3.435	4.279	8.0	19.2	4 1	14 59.24	-18 33.2	2.039	2.905	11.7	21.5
4 11	14 50.04	-21 39.1	3.367	4.292	5.8	19.1	4 11	14 53.81	-18 5.7	1.960	2.898	8.4	21.3
4 21	14 44.32	-20 58.0	3.326	4.305	3.4	18.9	4 21	14 46.60	-17 28.0	1.905	2.892	4.7	21.0
5 1	14 38.13	-20 10.9	3.313	4.318	1.2	18.8	5 1	14 38.37	-16 42.9	1.878	2.885	0.7	20.7
5 11	14 31.97	-19 20.6	3.331	4.330	2.2	18.9	5 11	14 30.02	-15 54.5	1.879	2.878	3.6	20.9
5 21	14 26.33	-18 29.8	3.379	4.342	4.6	19.0	5 21	14 22.46	-15 7.6	1.907	2.871	7.5	21.1
5 31	14 21.62	-17 41.7	3.454	4.355	6.9	19.2	5 31	14 16.45	-14 27.1	1.960	2.864	11.1	21.3
6 10	14 18.14	-16 59.0	3.554	4.367	8.9	19.4	6 10	14 12.51	-13 56.6	2.035	2.857	14.2	21.5
481946	2009 CM ₅₀		5 2.0 49°94	20°0/14.3 18			132634	2002 LQ ₃₀		5 2.0 313°55	3°5/29.3 18		
4 1	15 14.53	-51 16.8	1.072	1.825	27.2	20.6	4 1	14 58.18	-8 45.				

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
418224	2008 <i>CY</i> ₁₉₆		5 2.0 167°27	1°5/ 3.1 17			432272	2009 <i>SP</i> ₇₇		5 2.0 230°51	1°3/ 3.2 18		
4 1	15 2.72	-20 50.8	1.714	2.578	13.8	21.9	4 1	15 1.86	-21 22.9	2.504	3.350	10.5	22.1
4 11	14 56.51	-20 36.8	1.644	2.580	10.0	21.7	4 11	14 55.49	-21 2.0	2.407	3.334	7.7	21.9
4 21	14 48.14	-20 9.8	1.598	2.581	5.8	21.4	4 21	14 47.49	-20 30.3	2.336	3.317	4.5	21.6
5 1	14 38.52	-19 31.7	1.577	2.583	1.8	21.2	5 1	14 38.49	-19 49.5	2.294	3.299	1.5	21.4
5 11	14 28.83	-18 46.8	1.584	2.584	4.0	21.3	5 11	14 29.30	-19 2.4	2.282	3.280	3.1	21.5
5 21	14 20.18	-18 0.6	1.618	2.585	8.3	21.6	5 21	14 20.73	-18 13.2	2.298	3.261	6.6	21.7
5 31	14 13.49	-17 19.3	1.676	2.586	12.3	21.8	5 31	14 13.51	-17 26.3	2.342	3.240	9.8	21.8
6 10	14 9.31	-16 47.5	1.754	2.586	15.7	22.0	6 10	14 8.13	-16 46.0	2.409	3.219	12.6	22.0
211341	2002 <i>TF</i> ₄₁		5 2.0 148°98	3°7/ 2.9 18			348995	2006 <i>UA</i> ₁₉₁		5 2.0 190°58	3°1/ 5.1 17		
4 1	15 19.25	-18 43.2	1.199	2.061	18.5	19.6	4 1	14 59.61	-27 42.0	2.722	3.545	10.5	21.5
4 11	15 9.39	-20 20.1	1.134	2.067	13.7	19.3	4 11	14 53.78	-27 36.9	2.638	3.544	8.0	21.3
4 21	14 55.61	-21 49.5	1.091	2.072	8.4	19.1	4 21	14 46.50	-27 19.2	2.579	3.543	5.4	21.1
5 1	14 39.26	-23 5.2	1.075	2.077	3.9	18.8	5 1	14 38.39	-26 49.3	2.548	3.541	3.3	21.0
5 11	14 22.42	-24 3.5	1.085	2.081	6.3	19.0	5 11	14 30.21	-26 9.5	2.546	3.538	3.6	21.0
5 21	14 7.24	-24 45.4	1.121	2.085	11.6	19.3	5 21	14 22.68	-25 23.3	2.573	3.535	5.9	21.2
5 31	13 55.43	-25 16.6	1.181	2.088	16.6	19.5	5 31	14 16.44	-24 35.0	2.626	3.532	8.6	21.3
6 10	13 47.86	-25 44.2	1.259	2.091	20.7	19.8	6 10	14 11.92	-23 49.1	2.703	3.529	11.0	21.5
503096	2015 <i>FF</i> ₃₀₄		5 2.0 284°68	10°4/30.5 18			390507	2014 <i>BU</i> ₂₄		5 2.0 268°61	3°4/28.9 17		
4 1	15 18.59	+ 6 41.9	0.993	1.868	20.4	20.3	4 1	14 57.06	- 7 59.6	2.107	2.990	10.7	20.7
4 11	15 9.22	+ 6 18.5	0.925	1.857	16.2	20.0	4 11	14 52.13	- 6 54.4	2.038	2.985	7.6	20.5
4 21	14 55.66	+ 5 27.8	0.877	1.845	12.2	19.7	4 21	14 45.65	- 5 46.8	1.994	2.980	4.6	20.3
5 1	14 39.28	+ 4 2.3	0.852	1.834	10.4	19.5	5 1	14 38.31	- 4 42.1	1.978	2.974	3.5	20.2
5 11	14 22.31	+ 2 0.5	0.851	1.822	12.7	19.6	5 11	14 30.92	- 3 45.7	1.989	2.969	5.8	20.3
5 21	14 7.07	- 0 30.9	0.873	1.811	17.4	19.8	5 21	14 24.25	- 3 2.0	2.028	2.963	9.0	20.5
5 31	13 55.38	- 3 21.6	0.916	1.800	22.3	20.1	5 31	14 18.98	- 2 33.9	2.090	2.958	12.1	20.7
6 10	13 48.14	- 6 21.5	0.975	1.789	26.6	20.3	6 10	14 15.55	- 2 22.3	2.172	2.952	14.7	20.9
44796	1999 <i>TY</i> ₁₈₀		5 2.0 238°50	1°2/ 1.2 18			40861	1999 <i>TR</i> ₁₁₃		5 2.0 242°14	2°8/ 4.0 18		
4 1	15 1.22	-15 6.8	1.729	2.606	13.0	18.6	4 1	15 1.46	-24 3.2	1.949	2.798	12.9	19.3
4 11	14 55.45	-14 19.9	1.651	2.596	9.2	18.4	4 11	14 55.55	-24 4.9	1.869	2.794	9.7	19.1
4 21	14 47.59	-13 23.3	1.597	2.587	4.9	18.1	4 21	14 47.63	-23 53.0	1.813	2.789	6.1	18.9
5 1	14 38.48	-12 21.4	1.570	2.576	1.2	17.8	5 1	14 38.51	-23 28.0	1.784	2.784	3.1	18.7
5 11	14 29.21	-11 20.1	1.570	2.566	4.8	18.0	5 11	14 29.23	-22 52.8	1.782	2.779	4.1	18.7
5 21	14 20.85	-10 25.7	1.597	2.555	9.3	18.3	5 21	14 20.81	-22 12.0	1.807	2.774	7.6	18.9
5 31	14 14.32	- 9 43.6	1.647	2.543	13.3	18.5	5 31	14 14.13	-21 31.0	1.857	2.769	11.2	19.2
6 10	14 10.18	- 9 16.9	1.718	2.532	16.7	18.7	6 10	14 9.76	-20 55.4	1.929	2.764	14.4	19.3
427224	2014 <i>WQ</i> ₄₁		5 2.0 187°49	1°7/30.8 16			163345	2002 <i>MK</i> ₅		5 2.0 263°70	0°5/ 1.6 17		
4 1	15 2.59	-12 40.0	1.952	2.825	11.9	22.7	4 1	14 58.93	-16 6.2	2.016	2.889	11.6	20.4
4 11	14 56.13	-11 59.6	1.881	2.825	8.4	22.5	4 11	14 53.62	-15 30.4	1.936	2.879	8.2	20.2
4 21	14 47.84	-11 13.5	1.835	2.824	4.5	22.3	4 21	14 46.54	-14 46.0	1.880	2.868	4.4	19.9
5 1	14 38.50	-10 25.5	1.817	2.822	1.7	22.1	5 1	14 38.41	-13 56.2	1.851	2.858	0.6	19.6
5 11	14 29.11	- 9 40.6	1.827	2.820	4.7	22.3	5 11	14 30.15	-13 5.6	1.850	2.848	3.9	19.9
5 21	14 20.60	- 9 3.4	1.865	2.817	8.6	22.5	5 21	14 22.65	-12 19.2	1.877	2.837	7.9	20.1
5 31	14 13.77	- 8 37.5	1.928	2.813	12.2	22.7	5 31	14 16.68	-11 41.5	1.928	2.826	11.6	20.3
6 10	14 9.11	- 8 25.1	2.012	2.809	15.2	22.9	6 10	14 12.77	-11 15.8	2.001	2.816	14.7	20.5
135320	2001 <i>SM</i> ₂₉₅		5 2.0 44°55	0°8/ 1.3 18			389799	2011 <i>UC</i> ₁₄₄		5 2.0 327°91	1°2/ 2.9 17		
4 1	14 58.20	-14 52.8	2.080	2.954	11.2	20.1	4 1	14 57.11	-20 39.9	1.938	2.805	12.2	20.4
4 11	14 52.96	-14 17.4	2.010	2.954	7.9	19.9	4 11	14 52.43	-20 15.2	1.857	2.795	8.9	20.2
4 21	14 46.10	-13 35.2	1.965	2.955	4.2	19.7	4 21	14 45.93	-19 38.4	1.801	2.785	5.1	19.9
5 1	14 38.34	-12 49.5	1.948	2.955	0.9	19.4	5 1	14 38.36	-18 51.7	1.770	2.776	1.4	19.7
5 11	14 30.54	-12 4.9	1.959	2.956	3.9	19.7	5 11	14 30.65	-17 59.5	1.767	2.767	3.6	19.8
5 21	14 23.52	-11 25.5	1.997	2.956	7.7	19.9	5 21	14 23.72	-17 6.9	1.791	2.759	7.6	20.0
5 31	14 17.98	-10 55.2	2.061	2.956	11.0	20.1	5 31	14 18.38	-16 19.4	1.839	2.751	11.3	20.2
6 10	14 14.38	-10 36.5	2.145	2.957	13.9	20.3	6 10	14 15.15	-15 41.6	1.908	2.744	14.5	20.4
434425	2005 <i>ML</i> ₂₉		5 2.0 235°59	2°0/ 3.9 17			341695	2007 <i>VU</i> ₁₄₆		5 2.0 134°36	0°1/ 1.9 17		
4 1	14 58.50	-24 6.4	2.647	3.488	10.2	21.8	4 1	14 58.84	-16 35.2	2.696	3.557	9.4	22.2
4 11	14 53.03	-23 46.0	2.556	3.476	7.6	21.6	4 11	14 53.06	-16 10.0	2.632	3.569	6.6	22.1
4 21	14 46.11	-23 14.2	2.489	3.465	4.7	21.4	4 21	14 46.04	-15 38.7	2.594	3.581	3.6	21.9
5 1	14 38.34	-22 32.2	2.451	3.453	2.2	21.2	5 1	14 38.37	-15 3.6	2.585	3.592	0.3	21.6
5 11	14 30.46	-21 42.8	2.442	3.440	3.1	21.2	5 11	14 30.73	-14 27.7	2.606	3.604	2.9	21.9
5 21	14 23.18	-20 49.8	2.462	3.428	6.0	21.4	5 21	14 23.75	-13 54.3	2.655	3.614	6.0	22.1
5 31	14 17.15	-19 57.8	2.509	3.415	8.9	21.6	5 31	14 17.98	-13 26.2	2.732	3.624	8.8	22.3
6 10	14 12.81	-19 11.0	2.580	3.401	11.6	21.7	6 10	14 13.79	-13 5.8	2.831	3.634	11.1	22.5
296210	2009 <i>CQ</i> ₁₂		5 2.0 90°15	1°2/ 1.3 18			521018	2015 <i>CM</i> ₆₈		5 2.0 130°08	0°7/ 1.5 17		
4 1	15 3.38	-15 22.1	1.445	2.327	14.8	21.4	4 1	15 0.33	-15 21.6	1.909	2.782	12.1	21.8
4 11	14 56.93	-14 33.8	1.398	2.345	10.3	21.1	4 11	14 54.56	-14 48.1	1.844	2.788	8.5	21.5
4 21	14 48.29	-13 36.2	1.374	2.364	5.5	20.9	4 21	14 47.00	-14 7.1	1.803	2.793	4.5	21.3
5 1	14 38.54	-12 34.6	1.375	2.382	1.2	20.6	5 1	14 38.47	-13 22.0	1.790	2.797	0.7	21.0
5 11	14 28.99	-11 36.0	1.403	2.400	5.1	21.0	5 11	14 29.93	-12 37.4	1.805	2.802	4.1	21.3
5 21	14 20.79	-10 46.8	1.457	2.418	9.7	21.3	5 21	14 22.30	-11 58.2	1.847	2.806	8.1	21.5
5 31	14 14.79	-10 11.7	1.534	2.435	13.8	21.6	5 31	14 16.33	-11 28.3	1.913	2.811	11.7	21.8
6 10	14 11.45	- 9 53.2	1.630	2.452	17.1	21.8	6 10	14 12.50	-11 10.5	2.001	2.815	14.7	22.0
69240	1979 <i>MZ</i> ₁		5 2.0 239°63	3°0/29.6 18			28705	Michaelbecker		5 2.0 97°47	4°5		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V		
190418	1999 <i>UO</i> ₃₅		5	2.0	152°17'	2°6'/29.1	17	375791	2009 <i>SO</i> ₃₃₂		5	2.1	134°75'	4°6'/5.8	15
4 1	14 58.88	- 8 28.6	2.802	3.672	8.8	21.3	4 1	15 5.41	-30 27.1	2.313	3.124	12.5	21.8		
4 11	14 53.00	- 7 23.6	2.742	3.683	6.2	21.1	4 11	14 58.07	-30 46.0	2.245	3.138	9.8	21.7		
4 21	14 45.98	- 6 16.9	2.710	3.694	3.7	20.9	4 21	14 48.90	-30 48.9	2.201	3.152	7.0	21.5		
5 1	14 38.38	- 5 12.6	2.708	3.704	2.7	20.9	5 1	14 38.70	-30 35.3	2.184	3.166	4.9	21.4		
5 11	14 30.83	- 4 14.8	2.736	3.714	4.6	21.0	5 11	14 28.49	-30 6.9	2.195	3.179	5.0	21.4		
5 21	14 23.92	- 3 26.6	2.793	3.722	7.1	21.2	5 21	14 19.20	-29 27.7	2.234	3.191	7.1	21.6		
5 31	14 18.15	- 2 50.6	2.876	3.730	9.6	21.4	5 31	14 11.63	-28 43.1	2.300	3.202	9.8	21.8		
6 10	14 13.87	- 2 27.6	2.982	3.737	11.7	21.5	6 10	14 6.27	-27 58.8	2.389	3.213	12.3	22.0		
172014	2001 <i>UX</i> ₁₀₃		5	2.0	115°27'	0°8'/1.3	18	467248	2016 <i>EM</i> ₁₇₂		5	2.1	343°22'	5°4'/28.4	17
4 1	14 59.09	-14 2.8	2.561	3.427	9.6	21.4	4 1	14 56.19	- 7 40.5	1.192	2.099	15.2	20.6		
4 11	14 53.26	-13 35.4	2.503	3.443	6.7	21.3	4 11	14 52.45	- 6 18.9	1.131	2.089	10.9	20.4		
4 21	14 46.15	-13 3.3	2.471	3.459	3.6	21.1	4 21	14 46.20	- 4 53.2	1.092	2.080	6.8	20.1		
5 1	14 38.39	-12 29.4	2.468	3.475	0.8	20.9	5 1	14 38.46	- 3 32.9	1.076	2.073	5.6	20.0		
5 11	14 30.70	-11 56.8	2.495	3.491	3.3	21.1	5 11	14 30.59	- 2 28.1	1.083	2.066	8.9	20.2		
5 21	14 23.72	-11 28.6	2.551	3.505	6.4	21.3	5 21	14 23.87	- 1 46.3	1.112	2.060	13.5	20.4		
5 31	14 18.00	-11 7.3	2.632	3.520	9.2	21.6	5 31	14 19.38	- 1 31.1	1.161	2.055	17.8	20.6		
6 10	14 13.91	-10 54.9	2.737	3.534	11.6	21.7	6 10	14 17.71	- 1 42.3	1.225	2.052	21.4	20.8		
299868	2006 <i>SR</i> ₂₈₉		5	2.0	221°72'	5°8'/26.1	18	259588	2003 <i>UF</i> ₂₃₂		5	2.1	97°16'	0°2'/1.9	18
4 1	14 57.35	+ 1 58.7	2.400	3.274	9.9	20.8	4 1	15 3.94	-16 25.6	1.565	2.440	14.2	21.1		
4 11	14 52.17	+ 3 4.6	2.338	3.269	7.7	20.7	4 11	14 57.35	-16 4.7	1.511	2.455	10.0	20.9		
4 21	14 45.64	+ 4 5.0	2.302	3.263	6.1	20.6	4 21	14 48.60	-15 34.5	1.481	2.469	5.4	20.7		
5 1	14 38.35	+ 4 54.7	2.293	3.258	6.1	20.5	5 1	14 38.69	-14 58.4	1.476	2.484	0.5	20.3		
5 11	14 31.03	+ 5 29.6	2.311	3.252	7.7	20.6	5 11	14 28.89	-14 21.4	1.499	2.498	4.4	20.7		
5 21	14 24.36	+ 5 47.1	2.355	3.246	10.0	20.8	5 21	14 20.31	-13 48.6	1.548	2.512	9.0	21.0		
5 31	14 18.92	+ 5 46.4	2.422	3.240	12.3	20.9	5 31	14 13.83	-13 24.8	1.620	2.525	13.0	21.2		
6 10	14 15.12	+ 5 28.5	2.509	3.234	14.3	21.1	6 10	14 9.95	-13 13.0	1.713	2.539	16.3	21.5		
47415	1999 <i>XD</i> ₁₅₄		5	2.0	95°68'	1°1'/1.2	18	241036	2006 <i>QV</i> ₁₃₂		5	2.1	275°00'	1°3'/1.0	18
4 1	14 59.10	-14 22.5	1.919	2.796	11.9	18.8	4 1	14 58.94	-12 57.6	2.122	2.998	11.0	20.9		
4 11	14 53.69	-13 42.6	1.853	2.799	8.3	18.6	4 11	14 53.60	-12 28.7	2.039	2.984	7.8	20.7		
4 21	14 46.54	-12 55.9	1.812	2.802	4.4	18.3	4 21	14 46.57	-11 54.5	1.980	2.970	4.2	20.4		
5 1	14 38.44	-12 6.1	1.799	2.805	1.1	18.1	5 1	14 38.51	-11 18.2	1.949	2.955	1.3	20.2		
5 11	14 30.32	-11 18.3	1.813	2.809	4.3	18.3	5 11	14 30.28	-10 43.6	1.947	2.941	4.2	20.4		
5 21	14 23.08	-10 37.1	1.854	2.812	8.2	18.6	5 21	14 22.73	-10 14.9	1.971	2.927	8.0	20.6		
5 31	14 17.44	-10 6.5	1.919	2.815	11.7	18.8	5 31	14 16.62	- 9 55.3	2.020	2.912	11.4	20.8		
6 10	14 13.89	- 9 48.9	2.006	2.818	14.7	19.0	6 10	14 12.45	- 9 47.2	2.091	2.898	14.4	20.9		
432971	Loving		5	2.1	288°65'	7°9'/25.7	17	230640	2003 <i>QE</i> ₈₉		5	2.1	232°84'	1°9'/30.6	18
4 1	14 59.06	+ 2 23.4	1.680	2.564	12.9	20.8	4 1	15 0.27	-11 16.2	2.082	2.958	11.1	20.3		
4 11	14 53.90	+ 3 45.1	1.616	2.552	10.1	20.6	4 11	14 54.51	-10 45.5	2.005	2.950	7.9	20.1		
4 21	14 46.77	+ 4 59.9	1.576	2.539	8.2	20.5	4 21	14 47.03	-10 10.8	1.954	2.943	4.3	19.9		
5 1	14 38.48	+ 5 59.6	1.561	2.527	8.3	20.5	5 1	14 38.55	- 9 35.7	1.931	2.935	1.9	19.7		
5 11	14 30.06	+ 6 37.5	1.570	2.514	10.4	20.5	5 11	14 29.96	- 9 4.2	1.935	2.927	4.6	19.9		
5 21	14 22.52	+ 6 50.1	1.603	2.502	13.4	20.7	5 21	14 22.11	- 8 40.1	1.967	2.919	8.3	20.1		
5 31	14 16.71	+ 6 36.8	1.657	2.490	16.4	20.9	5 31	14 15.76	- 8 26.5	2.024	2.910	11.7	20.3		
6 10	14 13.19	+ 5 59.7	1.727	2.478	19.0	21.0	6 10	14 11.39	- 8 25.0	2.102	2.901	14.6	20.4		
501125	2013 <i>TU</i> ₂₅		5	2.1	203°02'	1°4'/3.2	17	138819	2000 <i>UL</i> ₂₂		5	2.1	100°41'	1°6'/30.9	18
4 1	15 2.60	-20 50.5	2.286	3.136	11.3	22.7	4 1	15 1.60	-10 7.0	2.360	3.230	10.2	19.4		
4 11	14 56.09	-20 42.1	2.203	3.131	8.2	22.5	4 11	14 55.19	-10 8.7	2.297	3.238	7.2	19.2		
4 21	14 47.85	-20 23.6	2.145	3.126	4.8	22.2	4 21	14 47.29	-10 9.1	2.259	3.247	3.9	19.0		
5 1	14 38.59	-19 56.1	2.115	3.120	1.6	22.0	5 1	14 38.58	-10 10.1	2.250	3.255	1.6	18.8		
5 11	14 29.19	-19 22.6	2.114	3.113	3.3	22.1	5 11	14 29.85	-10 14.0	2.270	3.263	3.9	19.0		
5 21	14 20.52	-18 46.9	2.142	3.106	6.9	22.3	5 21	14 21.87	-10 22.6	2.319	3.271	7.2	19.2		
5 31	14 13.36	-18 13.3	2.197	3.098	10.2	22.5	5 31	14 15.27	-10 37.5	2.394	3.279	10.1	19.4		
6 10	14 8.20	-17 45.9	2.273	3.089	13.1	22.7	6 10	14 10.48	-10 59.7	2.491	3.286	12.7	19.6		
222741	2002 <i>BK</i> ₅		5	2.1	127°17'	12°6'/16.1	18	126019	2001 <i>YA</i> ₆₁		5	2.1	265°06'	7°4'/26.9	18
4 1	15 19.68	-57 55.5	2.474	3.078	16.6	21.1	4 1	15 2.98	+ 3 49.7	1.875	2.746	12.4	19.7		
4 11	15 9.52	-59 16.4	2.411	3.095	15.4	21.0	4 11	14 56.60	+ 4 34.4	1.801	2.729	9.8	19.5		
4 21	14 55.63	-60 8.8	2.365	3.112	14.2	20.9	4 21	14 48.24	+ 5 10.1	1.751	2.711	7.8	19.3		
5 1	14 39.36	-60 26.4	2.337	3.128	13.3	20.9	5 1	14 38.68	+ 5 30.8	1.727	2.693	7.6	19.3		
5 11	14 22.74	-60 7.0	2.330	3.144	12.7	20.9	5 11	14 28.93	+ 5 31.9	1.729	2.675	9.4	19.3		
5 21	14 7.84	-59 13.9	2.345	3.159	12.7	20.9	5 21	14 19.98	+ 5 11.4	1.756	2.657	12.3	19.5		
5 31	13 56.24	-57 54.6	2.380	3.173	13.2	21.0	5 31	14 12.69	+ 4 29.4	1.805	2.638	15.2	19.6		
6 10	13 48.71	-56 19.5	2.435	3.186	14.1	21.1	6 10	14 7.64	+ 3 28.3	1.873	2.619	17.9	19.8		
443816	1999 <i>TR</i> ₁₀₇		5	2.1	197°37'	0°5'/2.9	18	272822	2006 <i>AW</i> ₇₂		5	2.1	310°38'	1°9'/30.9	17
4 1	14 53.87	-19 43.0	4.250	5.096	6.5	22.0	4 1	15 0.84	-11 44.2	1.693	2.575	12.9	20.6		
4 11	14 49.33	-19 19.2	4.164	5.093	4.7	21.8	4 11	14 55.21	-11 22.4	1.622	2.570	9.1	20.3		
4 21	14 43.99	-18 50.0	4.106	5.088	2.7	21.7	4 21	14 47.52	-10 56.2	1.575	2.565	4.9	20.0		
5 1	14 38.22	-18 16.7	4.078	5.084	0.7	21.5	5 1	14 38.61	-10 29.2	1.555	2.560	1.9	19.8		
5 11	14 32.42	-17 41.2	4.080	5.079	1.9	21.6	5 11	14 29.57	-10 5.9	1.561	2.555	5.1	20.0		
5 21	14 26.98	-17 5.6	4.113	5.074	4.0	21.8	5 21	14 21.45	- 9 50.4	1.593	2.551	9.3	20.3		
5 31	14 22.25	-16 32.0	4.174	5.069	5.9	21.9	5 31	14 15.15	- 9 45.9	1.649	2.546	13.2	20.5		
6 10	14 18.51	-16 2.4	4.259	5.063	7.7	22.0	6 10	14 11.23	- 9 54.3	1.724	2.542	16.5	20.7		
208384	2001 <i>SO</i> ₁₀₀		5	2.1	40°90'										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
14151	1998 <i>SJ</i> ₇₃		5 2.1 207°27	1°8/30.7	18		114949	2003 <i>QX</i> ₅₄		5 2.1 207°21	1°1/ 2.8	17	
4 1	15 1.91	-12 8.1	2.035	2.908	11.5	19.6	4 1	15 4.58	-19 37.3	1.936	2.793	12.7	21.0
4 11	14 55.69	-11 28.6	1.959	2.903	8.1	19.3	4 11	14 57.78	-19 27.4	1.855	2.788	9.2	20.8
4 21	14 47.68	-10 44.0	1.908	2.897	4.4	19.1	4 21	14 48.91	-19 6.7	1.798	2.782	5.3	20.5
5 1	14 38.63	-9 57.9	1.885	2.890	1.8	18.9	5 1	14 38.78	-18 36.6	1.768	2.775	1.4	20.2
5 11	14 29.48	-9 15.0	1.891	2.883	4.7	19.1	5 11	14 28.48	-18 0.7	1.767	2.767	3.8	20.4
5 21	14 21.12	-8 39.7	1.925	2.875	8.5	19.3	5 21	14 19.04	-17 23.6	1.794	2.758	7.9	20.6
5 31	14 14.35	-8 15.5	1.983	2.867	12.0	19.5	5 31	14 11.39	-16 50.3	1.846	2.749	11.8	20.8
6 10	14 9.65	-8 4.6	2.062	2.858	14.9	19.7	6 10	14 6.10	-16 25.2	1.920	2.739	15.0	21.0
430812	2005 <i>EK</i> ₁₆₁		5 2.1 51°58	1°3/ 1.1	17		306419	1998 <i>MS</i> ₆		5 2.1 350°51	5°3/ 6.9	18	
4 1	14 59.00	-13 43.8	1.804	2.685	12.3	21.1	4 1	14 59.54	-33 15.3	2.273	3.080	12.8	20.3
4 11	14 53.67	-13 7.4	1.747	2.695	8.6	20.9	4 11	14 54.11	-33 23.2	2.193	3.079	10.3	20.1
4 21	14 46.57	-12 24.9	1.715	2.705	4.6	20.6	4 21	14 46.87	-33 13.2	2.135	3.079	7.7	19.9
5 1	14 38.52	-11 40.4	1.709	2.715	1.3	20.4	5 1	14 38.58	-32 44.6	2.103	3.078	5.7	19.8
5 11	14 30.52	-10 58.7	1.730	2.726	4.5	20.7	5 11	14 30.18	-31 59.5	2.097	3.077	5.5	19.8
5 21	14 23.47	-10 24.5	1.778	2.737	8.4	20.9	5 21	14 22.60	-31 2.2	2.118	3.077	7.3	19.9
5 31	14 18.12	-10 1.3	1.850	2.748	12.0	21.2	5 31	14 16.63	-29 58.6	2.165	3.076	9.9	20.1
6 10	14 14.91	-9 51.1	1.942	2.759	15.0	21.4	6 10	14 12.77	-28 55.1	2.235	3.076	12.5	20.2
416167	2002 <i>RS</i> ₂₅₂		5 2.1 156°92	0°1/ 1.9	17		73163	2002 <i>GK</i> ₁₅₂		5 2.1 278°66	4°1/29.4	18	
4 1	15 2.32	-17 22.9	1.981	2.847	12.1	22.3	4 1	15 2.30	-4 57.6	1.919	2.797	11.8	19.3
4 11	14 55.94	-16 46.3	1.915	2.854	8.6	22.1	4 11	14 56.18	-4 33.5	1.833	2.776	8.6	19.0
4 21	14 47.78	-16 0.3	1.873	2.860	4.6	21.8	4 21	14 48.08	-4 11.0	1.772	2.755	5.4	18.8
5 1	14 38.64	-15 8.1	1.859	2.866	0.4	21.5	5 1	14 38.71	-3 54.3	1.738	2.733	4.1	18.7
5 11	14 29.52	-14 14.5	1.873	2.871	3.8	21.8	5 11	14 29.06	-3 47.5	1.731	2.711	6.5	18.8
5 21	14 21.32	-13 24.7	1.915	2.876	7.8	22.1	5 21	14 20.12	-3 53.5	1.751	2.689	10.1	18.9
5 31	14 14.81	-12 43.3	1.983	2.880	11.4	22.3	5 31	14 12.77	-4 13.9	1.795	2.667	13.6	19.1
6 10	14 10.46	-12 13.6	2.072	2.883	14.3	22.5	6 10	14 7.62	-4 48.9	1.858	2.644	16.7	19.2
302167	2001 <i>TS</i> ₁₄		5 2.1 266°87	2°9/ 3.8	16		285727	2000 <i>SJ</i> ₃₂₂		5 2.1 141°01	2°6/30.2	16	
4 1	15 3.84	-23 38.1	1.495	2.356	15.5	20.9	4 1	15 1.82	-12 10.7	1.556	2.440	13.7	20.8
4 11	14 57.95	-23 30.6	1.406	2.338	11.7	20.6	4 11	14 55.90	-11 4.7	1.497	2.446	9.6	20.5
4 21	14 49.29	-23 5.2	1.339	2.319	7.3	20.3	4 21	14 47.86	-9 51.8	1.461	2.451	5.3	20.3
5 1	14 38.82	-22 22.2	1.297	2.300	3.2	20.0	5 1	14 38.67	-8 38.3	1.453	2.456	2.7	20.1
5 11	14 27.89	-21 25.5	1.280	2.280	4.9	20.0	5 11	14 29.52	-7 31.6	1.471	2.461	6.0	20.4
5 21	14 17.96	-20 22.1	1.290	2.260	9.7	20.3	5 21	14 21.50	-6 38.1	1.514	2.466	10.3	20.6
5 31	14 10.27	-19 20.6	1.322	2.240	14.4	20.5	5 31	14 15.47	-6 2.1	1.581	2.470	14.2	20.9
6 10	14 5.61	-18 28.8	1.374	2.219	18.5	20.7	6 10	14 11.94	-5 45.2	1.667	2.474	17.5	21.1
300889	2008 <i>BL</i> ₅		5 2.1 140°42	1°4/30.9	17		185512	2007 <i>UL</i>		5 2.1 176°24	1°2/ 3.0	16	
4 1	14 59.98	-11 21.2	2.338	3.210	10.2	20.6	4 1	15 3.90	-20 56.3	1.887	2.744	13.0	21.3
4 11	14 54.09	-11 8.4	2.270	3.213	7.2	20.4	4 11	14 57.23	-20 31.3	1.814	2.746	9.5	21.1
4 21	14 46.73	-10 53.0	2.228	3.216	3.9	20.2	4 21	14 48.56	-19 53.3	1.766	2.749	5.4	20.9
5 1	14 38.54	-10 37.4	2.214	3.220	1.4	20.1	5 1	14 38.75	-19 4.8	1.744	2.750	1.5	20.6
5 11	14 30.32	-10 24.4	2.230	3.223	3.9	20.2	5 11	14 28.88	-18 10.1	1.751	2.750	3.8	20.8
5 21	14 22.81	-10 16.6	2.273	3.226	7.2	20.5	5 21	14 20.00	-17 15.0	1.785	2.750	7.9	21.0
5 31	14 16.65	-10 16.3	2.341	3.228	10.2	20.6	5 31	14 12.95	-16 25.3	1.845	2.750	11.7	21.2
6 10	14 12.28	-10 24.7	2.432	3.231	12.8	20.8	6 10	14 8.26	-15 45.6	1.927	2.748	14.9	21.4
68083	2000 <i>YH</i> ₁₀₁		5 2.1 219°53	4°4/28.8	17		182876	2002 <i>CZ</i> ₂₃₈		5 2.1 67°47	0°6/ 1.5	17	
4 1	15 1.95	-6 36.2	1.777	2.659	12.4	19.6	4 1	14 57.65	-15 34.1	2.211	3.083	10.7	20.5
4 11	14 55.89	-5 31.0	1.705	2.651	8.9	19.4	4 11	14 52.48	-14 57.4	2.152	3.095	7.5	20.4
4 21	14 47.85	-4 24.1	1.659	2.643	5.6	19.2	4 21	14 45.85	-14 14.2	2.119	3.108	4.0	20.2
5 1	14 38.66	-3 21.8	1.640	2.634	4.5	19.1	5 1	14 38.48	-13 27.7	2.113	3.120	0.6	19.9
5 11	14 29.35	-2 30.4	1.648	2.625	7.1	19.2	5 11	14 31.15	-12 42.2	2.135	3.132	3.6	20.2
5 21	14 20.93	-1 54.9	1.682	2.615	10.7	19.4	5 21	14 24.61	-12 1.5	2.186	3.145	7.1	20.4
5 31	14 14.26	-1 38.0	1.739	2.605	14.2	19.6	5 31	14 19.47	-11 29.3	2.261	3.157	10.2	20.6
6 10	14 9.88	-1 40.3	1.815	2.594	17.3	19.8	6 10	14 16.12	-11 7.7	2.359	3.170	12.8	20.8
188285	2003 <i>BQ</i> ₃₈		5 2.1 141°75	2°5/30.2	17		105539	2000 <i>RJ</i> ₃₉		5 2.1 127°04	6°1/ 8.7	18	
4 1	15 1.26	-10 36.5	1.857	2.737	12.1	21.2	4 1	15 2.19	-38 43.5	2.723	3.486	12.0	20.0
4 11	14 55.22	-9 49.8	1.797	2.744	8.5	20.9	4 11	14 55.74	-38 55.7	2.650	3.498	10.1	19.9
4 21	14 47.40	-8 59.3	1.762	2.750	4.7	20.7	4 21	14 47.65	-38 49.5	2.599	3.510	8.1	19.8
5 1	14 38.61	-8 9.7	1.754	2.756	2.6	20.6	5 1	14 38.66	-38 24.0	2.574	3.522	6.5	19.7
5 11	14 29.84	-7 26.3	1.773	2.762	5.3	20.8	5 11	14 29.67	-37 40.8	2.575	3.533	6.1	19.7
5 21	14 22.02	-6 53.4	1.820	2.768	9.1	21.0	5 21	14 21.52	-36 43.4	2.604	3.544	7.1	19.7
5 31	14 15.90	-6 34.0	1.890	2.773	12.5	21.2	5 31	14 14.91	-35 37.3	2.660	3.554	8.9	19.9
6 10	14 11.94	-6 29.4	1.981	2.777	15.4	21.5	6 10	14 10.30	-34 28.5	2.739	3.564	10.9	20.0
282849	2006 <i>VV</i> ₅₆		5 2.1 211°99	0°4/ 1.6	18		498869	2008 <i>YK</i> ₈₆		5 2.1 167°28	6°3/26.5	17	
4 1	14 58.24	-15 18.4	2.898	3.759	8.8	22.1	4 1	15 0.28	+ 4 29.4	2.375	3.239	10.4	22.0
4 11	14 52.71	-14 51.2	2.813	3.752	6.2	21.9	4 11	14 54.21	+ 5 16.9	2.320	3.243	8.2	21.9
4 21	14 45.95	-14 18.7	2.756	3.744	3.3	21.7	4 21	14 46.76	+ 5 56.1	2.291	3.246	6.6	21.8
5 1	14 38.47	-13 42.9	2.728	3.735	0.5	21.4	5 1	14 38.57	+ 6 22.6	2.290	3.248	6.5	21.8
5 11	14 30.92	-13 6.9	2.730	3.726	3.0	21.6	5 11	14 30.41	+ 6 32.9	2.315	3.250	8.0	21.8
5 21	14 23.91	-12 33.5	2.761	3.717	6.0	21.8	5 21	14 22.97	+ 6 25.8	2.367	3.252	10.1	22.0
5 31	14 17.96	-12 5.7	2.819	3.707	8.7	22.0	5 31	14 16.87	+ 6 1.3	2.441	3.254	12.4	22.1
6 10	14 13.49	-11 45.6	2.900	3.696	11.0	22.1	6 10	14 12.49	+ 5 21.2	2.536	3.255	14.3	22.3
505240	2012 <i>UE</i> ₆₆		5 2.1 69°95	0°1/ 1.9	17		214830	2006 <i>VG</i> ₈₀		5 2.1 97°92	0°5/ 1.6	18	

EPHEMERIDES

5 2.1

5 2.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
146179	2000 SY ₃₀₉		5 2.1 100°59	6°2/ 8.7 18			153715	2001 UT ₉₆		5 2.1 149°75	0°5/ 1.7 17		
4 1	15 0.16	-38 9.5	2.360	3.137	13.2	19.2	4 1	15 1.49	-15 58.6	1.964	2.834	12.0	21.3
4 11	14 54.50	-38 0.8	2.278	3.139	11.0	19.1	4 11	14 55.39	-15 24.8	1.899	2.840	8.5	21.0
4 21	14 47.05	-37 30.5	2.219	3.141	8.7	18.9	4 21	14 47.53	-14 43.0	1.858	2.846	4.5	20.8
5 1	14 38.60	-36 38.2	2.185	3.143	6.8	18.8	5 1	14 38.69	-13 56.5	1.844	2.852	0.6	20.5
5 11	14 30.15	-35 26.4	2.177	3.145	6.3	18.8	5 11	14 29.86	-13 9.9	1.859	2.857	3.9	20.8
5 21	14 22.62	-34 0.1	2.196	3.147	7.5	18.8	5 21	14 21.94	-12 27.9	1.902	2.862	7.9	21.0
5 31	14 16.77	-32 26.4	2.242	3.149	9.8	19.0	5 31	14 15.67	-11 54.8	1.969	2.866	11.4	21.3
6 10	14 13.06	-30 52.8	2.311	3.151	12.1	19.1	6 10	14 11.52	-11 33.4	2.058	2.870	14.4	21.5
317843	2003 SH ₄₂₄		5 2.1 147°11	1°7/ 3.4 17			496882	2000 SH ₃₆₂		5 2.1 186°88	3°0/ 29.2 17		
4 1	15 1.43	-21 32.7	2.066	2.920	12.1	21.1	4 1	15 0.40	-6 59.0	2.513	3.384	9.6	22.9
4 11	14 55.38	-21 27.6	1.994	2.924	8.9	20.9	4 11	14 54.32	-6 11.8	2.443	3.384	6.9	22.7
4 21	14 47.53	-21 11.3	1.947	2.928	5.3	20.7	4 21	14 46.86	-5 23.9	2.400	3.383	4.2	22.5
5 1	14 38.60	-20 45.2	1.927	2.931	2.0	20.5	5 1	14 38.64	-4 39.1	2.385	3.381	3.1	22.4
5 11	14 29.72	-20 12.3	1.935	2.935	3.5	20.6	5 11	14 30.38	-4 1.3	2.401	3.379	5.1	22.6
5 21	14 21.64	-19 37.0	1.971	2.938	7.2	20.8	5 21	14 22.79	-3 33.7	2.444	3.375	7.9	22.7
5 31	14 15.18	-19 3.8	2.032	2.940	10.6	21.1	5 31	14 16.46	-3 18.2	2.513	3.371	10.6	22.9
6 10	14 10.86	-18 36.9	2.116	2.943	13.5	21.3	6 10	14 11.79	-3 15.8	2.603	3.367	13.0	23.1
410303	2007 TY ₃₆₁		5 2.1 137°74	0°6/ 1.7 16			476534	2008 GQ ₁₄₁		5 2.1 38°88	0°3/ 1.6 18		
4 1	15 2.35	-16 16.4	1.599	2.476	13.8	22.1	4 1	14 52.03	-14 32.1	4.274	5.137	6.2	21.3
4 11	14 56.30	-15 36.3	1.536	2.481	9.8	21.8	4 11	14 48.07	-14 15.0	4.199	5.138	4.3	21.2
4 21	14 48.10	-14 46.0	1.497	2.487	5.2	21.6	4 21	14 43.38	-13 54.9	4.152	5.140	2.3	21.0
5 1	14 38.71	-13 49.8	1.484	2.491	0.7	21.3	5 1	14 38.29	-13 33.4	4.134	5.141	0.4	20.8
5 11	14 29.32	-12 53.7	1.498	2.496	4.6	21.6	5 11	14 33.18	-13 12.2	4.146	5.142	2.0	21.0
5 21	14 21.05	-12 3.9	1.538	2.501	9.2	21.8	5 21	14 28.41	-12 52.8	4.187	5.143	4.1	21.1
5 31	14 14.78	-11 25.7	1.602	2.505	13.2	22.1	5 31	14 24.30	-12 36.9	4.256	5.145	6.0	21.3
6 10	14 11.03	-11 2.2	1.686	2.509	16.6	22.3	6 10	14 21.11	-12 25.8	4.349	5.146	7.6	21.4
344535	2002 TD ₃₂₉		5 2.1 308°25	0°5/ 1.7 17			31766	1999 JD ₁₁₆		5 2.1 210°29	4°0/ 28.6 18		
4 1	14 59.72	-15 8.2	1.951	2.825	11.8	21.4	4 1	14 58.82	-3 19.7	2.401	3.277	9.8	19.4
4 11	14 54.23	-14 48.9	1.878	2.822	8.4	21.2	4 11	14 53.27	-2 41.9	2.334	3.274	7.2	19.2
4 21	14 46.94	-14 22.8	1.830	2.819	4.5	21.0	4 21	14 46.32	-2 6.4	2.292	3.270	4.8	19.1
5 1	14 38.60	-13 52.7	1.809	2.817	0.6	20.6	5 1	14 38.59	-1 37.3	2.279	3.267	4.1	19.0
5 11	14 30.18	-13 22.4	1.816	2.814	4.0	20.9	5 11	14 30.82	-1 17.9	2.293	3.263	5.9	19.1
5 21	14 22.56	-12 56.0	1.850	2.812	7.9	21.1	5 21	14 23.70	-1 10.7	2.335	3.259	8.6	19.3
5 31	14 16.55	-12 37.2	1.908	2.809	11.5	21.4	5 31	14 17.84	-1 16.8	2.401	3.255	11.2	19.5
6 10	14 12.64	-12 28.7	1.988	2.807	14.6	21.6	6 10	14 13.66	-1 36.3	2.488	3.251	13.5	19.6
278497	2007 WV ₂₀		5 2.1 176°13	3°8/ 29.5 17			473200	2015 KB ₉₁		5 2.1 233°15	3°7/ 29.1 17		
4 1	15 2.69	-7 2.3	1.801	2.681	12.4	21.0	4 1	14 59.72	-4 24.5	2.340	3.215	10.1	20.8
4 11	14 56.33	-6 17.9	1.738	2.683	8.8	20.7	4 11	14 53.95	-3 57.5	2.269	3.210	7.3	20.6
4 21	14 48.06	-5 32.9	1.699	2.684	5.3	20.5	4 21	14 46.71	-3 32.4	2.224	3.205	4.7	20.5
5 1	14 38.72	-4 52.4	1.688	2.685	3.8	20.4	5 1	14 38.63	-3 12.8	2.206	3.199	3.7	20.4
5 11	14 29.36	-4 21.4	1.704	2.686	6.3	20.6	5 11	14 30.48	-3 2.0	2.217	3.193	5.6	20.5
5 21	14 20.95	-4 3.7	1.746	2.686	10.0	20.8	5 21	14 22.98	-3 2.0	2.255	3.187	8.5	20.7
5 31	14 14.30	-4 1.4	1.812	2.685	13.4	21.0	5 31	14 16.80	-3 14.3	2.318	3.181	11.3	20.8
6 10	14 9.92	-4 14.9	1.898	2.684	16.3	21.2	6 10	14 12.37	-3 38.8	2.402	3.174	13.7	21.0
222708	2002 AD ₈₆		5 2.1 170°25	1°5/ 30.7 17			198252	2004 TD ₂₂₂		5 2.1 254°60	6°1/ 26.5 18		
4 1	15 0.88	-12 32.5	2.543	3.408	9.7	21.8	4 1	14 59.16	-0 42.1	2.025	2.905	11.2	20.6
4 11	14 54.61	-11 49.8	2.473	3.414	6.8	21.6	4 11	14 53.80	+0 39.2	1.951	2.889	8.5	20.4
4 21	14 46.99	-11 2.6	2.430	3.418	3.7	21.4	4 21	14 46.73	+1 58.0	1.903	2.873	6.5	20.3
5 1	14 38.62	-10 14.3	2.417	3.422	1.5	21.3	5 1	14 38.64	+3 7.4	1.882	2.856	6.3	20.2
5 11	14 30.26	-9 28.7	2.434	3.425	3.9	21.5	5 11	14 30.41	+4 1.2	1.888	2.839	8.4	20.3
5 21	14 22.60	-8 49.4	2.479	3.427	7.0	21.7	5 21	14 22.89	+4 35.4	1.919	2.822	11.3	20.5
5 31	14 16.22	-8 19.2	2.551	3.428	9.9	21.9	5 31	14 16.82	+4 48.1	1.972	2.804	14.2	20.6
6 10	14 11.53	-8 0.0	2.646	3.429	12.3	22.0	6 10	14 12.72	+4 39.7	2.044	2.786	16.7	20.8
264663	2001 XJ ₁₂₄		5 2.1 271°99	0°5/ 1.7 17			198990	2005 VS ₁₁₀		5 2.1 288°90	0°7/ 1.7 17		
4 1	15 0.19	-16 29.5	1.733	2.609	13.0	20.2	4 1	15 1.39	-16 56.5	1.263	2.152	16.0	20.6
4 11	14 54.82	-15 52.0	1.653	2.598	9.3	20.0	4 11	14 56.43	-16 11.3	1.181	2.131	11.5	20.3
4 21	14 47.38	-15 4.2	1.598	2.587	5.0	19.7	4 21	14 48.59	-15 10.5	1.120	2.111	6.3	20.0
5 1	14 38.68	-14 9.5	1.568	2.576	0.6	19.3	5 1	14 38.85	-13 58.4	1.083	2.090	0.8	19.5
5 11	14 29.80	-13 13.6	1.566	2.564	4.4	19.6	5 11	14 28.65	-12 43.2	1.071	2.070	5.7	19.8
5 21	14 21.80	-12 22.4	1.590	2.553	8.9	19.8	5 21	14 19.52	-11 34.1	1.082	2.049	11.5	20.0
5 31	14 15.58	-11 41.2	1.638	2.541	13.0	20.1	5 31	14 12.77	-10 39.8	1.115	2.029	16.8	20.3
6 10	14 11.74	-11 14.0	1.706	2.530	16.4	20.3	6 10	14 9.20	-10 5.8	1.164	2.009	21.2	20.5
184306	2005 ES ₂₀₃		5 2.1 291°35	2°7/ 27.9 18			198493	2004 XD ₆₅		5 2.1 128°98	2°6/ 3.9 18		
4 1	14 51.45	-2 16.5	4.281	5.153	6.0	19.9	4 1	15 1.96	-23 30.3	1.906	2.758	13.1	20.3
4 11	14 47.65	-1 45.2	4.209	5.146	4.4	19.8	4 11	14 55.95	-23 34.0	1.834	2.760	9.8	20.1
4 21	14 43.14	-1 15.7	4.165	5.140	3.1	19.7	4 21	14 47.95	-23 24.4	1.785	2.762	6.1	19.8
5 1	14 38.25	-0 50.3	4.150	5.133	2.8	19.6	5 1	14 38.77	-23 2.2	1.762	2.764	2.9	19.6
5 11	14 33.33	-0 30.7	4.165	5.126	3.8	19.7	5 11	14 29.49	-22 30.4	1.767	2.765	4.0	19.7
5 21	14 28.72	-0 18.3	4.207	5.120	5.4	19.8	5 21	14 21.13	-21 53.5	1.799	2.767	7.6	19.9
5 31	14 24.75	-0 14.0	4.275	5.113	7.0	19.9	5 31	14 14.56	-21 17.0	1.856	2.769	11.2	20.1
6 10	14 21.65	-0 18.2	4.365	5.106	8.4	20.0	6 10	14 10.31	-20 45.8	1.935	2.770	14.3	20.4
293310	2007 DW ₄₀		5 2.1 64°36	4°1/ 29.1 16			4023	Jarník		5 2.1 215°08	0°5/ 2.4 18		
4 1	14 59.86	-8 10.9	1.548	2.439	13.4	21.1	4 1	15 3.58	-1				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
443121	2014 <i>AW</i> ₄₃		5 2.1 161°54	17°9/17.4	18		297619	2001 <i>TO</i> ₃₁		5 2.1 223°97	2°9/4.8	18	
4 1	15 6.82	+24 38.6	1.375	2.193	19.0	20.7	4 1	14 59.47	-26 44.9	2.457	3.290	11.2	20.8
4 11	14 59.64	+26 53.3	1.356	2.198	18.1	20.6	4 11	14 53.90	-26 33.3	2.371	3.284	8.5	20.6
4 21	14 49.94	+28 32.2	1.355	2.203	17.9	20.6	4 21	14 46.75	-26 8.2	2.310	3.278	5.6	20.4
5 1	14 38.95	+29 24.7	1.373	2.207	18.7	20.7	5 1	14 38.67	-25 30.2	2.275	3.271	3.2	20.3
5 11	14 28.20	+29 27.0	1.408	2.211	20.0	20.8	5 11	14 30.49	-24 42.2	2.270	3.265	3.6	20.3
5 21	14 18.98	+28 41.8	1.459	2.213	21.6	20.9	5 21	14 22.99	-23 48.3	2.292	3.258	6.4	20.5
5 31	14 12.28	+27 16.0	1.524	2.215	23.3	21.0	5 31	14 16.89	-22 53.5	2.341	3.251	9.3	20.6
6 10	14 8.54	+25 19.0	1.599	2.217	24.7	21.2	6 10	14 12.64	-22 2.5	2.413	3.243	12.0	20.8
64544	2001 <i>VD</i> ₁₂₁		5 2.1 117°93	4°6/27.0	17		240501	2004 <i>EK</i> ₂₂		5 2.1 128°66	3°8/28.3	18	
4 1	14 57.35	- 1 50.3	2.586	3.461	9.3	20.2	4 1	14 57.83	- 5 40.9	2.320	3.199	10.0	20.9
4 11	14 52.04	- 0 35.7	2.540	3.477	6.9	20.0	4 11	14 52.54	- 4 32.7	2.264	3.208	7.2	20.7
4 21	14 45.57	+ 0 35.8	2.520	3.492	5.0	19.9	4 21	14 45.91	- 3 24.8	2.235	3.216	4.6	20.6
5 1	14 38.53	+ 1 39.1	2.530	3.507	4.8	19.9	5 1	14 38.58	- 2 22.3	2.235	3.225	4.0	20.6
5 11	14 31.56	+ 2 30.2	2.568	3.521	6.4	20.1	5 11	14 31.30	- 1 29.8	2.262	3.233	5.9	20.7
5 21	14 25.26	+ 3 6.4	2.633	3.535	8.6	20.2	5 21	14 24.74	- 0 50.9	2.317	3.241	8.6	20.9
5 31	14 20.14	+ 3 26.5	2.722	3.549	10.8	20.4	5 31	14 19.49	- 0 27.4	2.396	3.249	11.3	21.1
6 10	14 16.53	+ 3 30.8	2.831	3.562	12.7	20.6	6 10	14 15.91	- 0 19.6	2.495	3.256	13.5	21.2
248356	2005 <i>QC</i> ₁₄₃		5 2.1 215°47	2°1/4.4	18		522991	2016 <i>PA</i> ₁₂₀		5 2.1 234°22	2°2/3.6	16	
4 1	14 58.50	-25 13.9	3.023	3.854	9.3	21.4	4 1	15 2.56	-21 51.0	2.322	3.168	11.2	21.7
4 11	14 52.96	-24 55.8	2.931	3.845	7.0	21.2	4 11	14 56.17	-22 15.2	2.241	3.166	8.3	21.5
4 21	14 46.14	-24 27.1	2.865	3.836	4.5	21.0	4 21	14 48.02	-22 30.3	2.186	3.163	5.1	21.3
5 1	14 38.60	-23 48.7	2.828	3.827	2.3	20.8	5 1	14 38.81	-22 36.2	2.159	3.160	2.4	21.1
5 11	14 30.96	-23 3.1	2.821	3.817	2.9	20.9	5 11	14 29.42	-22 34.4	2.160	3.157	3.5	21.2
5 21	14 23.88	-22 13.5	2.843	3.807	5.4	21.0	5 21	14 20.73	-22 27.4	2.190	3.154	6.7	21.4
5 31	14 17.89	-21 23.8	2.892	3.796	7.9	21.2	5 31	14 13.50	-22 18.7	2.246	3.151	9.8	21.6
6 10	14 13.41	-20 37.8	2.966	3.785	10.3	21.3	6 10	14 8.28	-22 11.9	2.325	3.148	12.6	21.8
265943	2006 <i>BV</i> ₂₀₇		5 2.1 111°63	2°6/4.2	17		400320	2007 <i>TG</i> ₃₅₇		5 2.1 209°50	0°3/2.5	18	
4 1	15 1.80	-24 32.5	1.959	2.806	13.0	21.1	4 1	14 54.44	-18 1.3	4.013	4.865	6.8	22.4
4 11	14 55.70	-24 20.3	1.893	2.816	9.7	20.9	4 11	14 49.83	-17 43.5	3.927	4.860	4.8	22.2
4 21	14 47.74	-23 53.7	1.851	2.827	6.0	20.7	4 21	14 44.37	-17 20.9	3.869	4.853	2.7	22.1
5 1	14 38.75	-23 14.0	1.836	2.837	2.9	20.5	5 1	14 38.44	-16 54.9	3.840	4.847	0.5	21.8
5 11	14 29.78	-22 25.1	1.848	2.847	3.9	20.6	5 11	14 32.46	-16 27.2	3.841	4.840	2.0	22.0
5 21	14 21.79	-21 32.2	1.888	2.856	7.3	20.8	5 21	14 26.84	-15 59.9	3.872	4.833	4.2	22.1
5 31	14 15.56	-20 41.1	1.954	2.865	10.8	21.0	5 31	14 21.97	-15 34.9	3.932	4.826	6.3	22.3
6 10	14 11.57	-19 56.9	2.041	2.874	13.7	21.2	6 10	14 18.13	-15 14.2	4.015	4.818	8.1	22.4
355221	2007 <i>AW</i> ₂₇		5 2.1 143°76	4°1/28.2	17		106531	2000 <i>WY</i> ₅₈		5 2.1 214°56	6°9/25.2	18	
4 1	14 57.72	- 2 37.0	2.558	3.433	9.3	21.4	4 1	14 59.26	+ 9 20.2	2.716	3.567	9.7	19.7
4 11	14 52.39	- 1 55.7	2.499	3.438	6.9	21.3	4 11	14 53.45	+10 3.0	2.657	3.561	8.1	19.5
4 21	14 45.81	- 1 17.3	2.466	3.442	4.7	21.1	4 21	14 46.39	+10 35.5	2.624	3.556	7.0	19.5
5 1	14 38.56	- 0 45.6	2.461	3.446	4.2	21.1	5 1	14 38.64	+10 53.8	2.617	3.550	7.1	19.5
5 11	14 31.32	- 0 23.8	2.484	3.450	5.8	21.2	5 11	14 30.88	+10 55.0	2.637	3.544	8.3	19.5
5 21	14 24.72	- 0 14.0	2.534	3.453	8.2	21.4	5 21	14 23.74	+10 38.2	2.682	3.538	10.1	19.6
5 31	14 19.29	- 0 17.4	2.609	3.457	10.6	21.5	5 31	14 17.74	+10 3.9	2.751	3.532	11.9	19.8
6 10	14 15.41	- 0 33.7	2.705	3.460	12.7	21.7	6 10	14 13.28	+ 9 14.2	2.838	3.525	13.6	19.9
29810	1999 <i>CF</i> ₁₀₆		5 2.1 178°51	5°5/26.9	18		289317	2005 <i>AE</i> ₂₈		5 2.1 326°85	5°9/28.6	17	
4 1	15 0.56	- 0 39.6	2.230	3.103	10.6	19.5	4 1	15 0.62	- 4 41.9	1.312	2.210	14.8	19.9
4 11	14 54.53	+ 0 36.0	2.171	3.106	8.0	19.3	4 11	14 55.47	- 3 41.1	1.252	2.203	10.9	19.7
4 21	14 47.01	+ 1 47.9	2.138	3.107	5.9	19.2	4 21	14 47.86	- 2 41.6	1.213	2.197	7.2	19.5
5 1	14 38.68	+ 2 50.2	2.134	3.108	5.7	19.2	5 1	14 38.80	- 1 51.4	1.199	2.192	6.1	19.4
5 11	14 30.37	+ 3 37.9	2.157	3.108	7.6	19.3	5 11	14 29.62	- 1 17.9	1.209	2.187	8.9	19.5
5 21	14 22.81	+ 4 7.9	2.207	3.107	10.1	19.4	5 21	14 21.59	- 1 6.0	1.241	2.182	13.1	19.7
5 31	14 16.65	+ 4 19.0	2.280	3.106	12.7	19.6	5 31	14 15.75	- 1 17.5	1.294	2.177	17.1	20.0
6 10	14 12.32	+ 4 11.9	2.373	3.104	14.9	19.8	6 10	14 12.70	- 1 51.1	1.364	2.173	20.5	20.2
232393	2003 <i>BB</i> ₈₈		5 2.1 73°53	3°3/28.4	18		219575	2001 <i>SC</i> ₂₁₉		5 2.1 178°54	0°0/2.1	17	
4 1	14 55.36	- 3 53.4	2.982	3.857	8.2	20.6	4 1	15 2.14	-17 12.8	2.007	2.872	12.0	21.8
4 11	14 50.53	- 3 11.2	2.937	3.877	5.9	20.4	4 11	14 55.92	-16 49.4	1.934	2.873	8.5	21.6
4 21	14 44.73	- 2 31.0	2.919	3.897	3.9	20.3	4 21	14 47.87	-16 17.1	1.887	2.874	4.6	21.4
5 1	14 38.45	- 1 56.2	2.929	3.917	3.4	20.3	5 1	14 38.80	-15 38.7	1.867	2.875	0.5	21.0
5 11	14 32.24	- 1 29.4	2.969	3.937	4.8	20.4	5 11	14 29.66	-14 58.3	1.876	2.875	3.7	21.3
5 21	14 26.60	- 1 12.6	3.036	3.957	6.9	20.6	5 21	14 21.38	-14 20.2	1.912	2.874	7.7	21.5
5 31	14 21.96	- 1 6.7	3.128	3.977	9.0	20.8	5 31	14 14.75	-13 48.9	1.974	2.873	11.3	21.8
6 10	14 18.61	- 1 12.0	3.242	3.996	10.8	20.9	6 10	14 10.26	-13 27.6	2.057	2.872	14.3	22.0
66005	1998 <i>OA</i> ₁₂		5 2.1 196°24	5°7/7.5	18		479167	2013 <i>CT</i> ₂₉		5 2.1 168°99	3°1/5.1	18	
4 1	15 3.70	-36 7.0	2.632	3.410	12.0	19.6	4 1	15 0.00	-27 37.7	2.781	3.603	10.3	22.1
4 11	14 56.97	-36 22.4	2.544	3.407	9.9	19.4	4 11	14 54.12	-27 42.1	2.701	3.605	7.9	21.9
4 21	14 48.44	-36 20.4	2.478	3.403	7.8	19.3	4 21	14 46.81	-27 34.7	2.646	3.608	5.4	21.7
5 1	14 38.84	-35 59.5	2.439	3.399	6.1	19.2	5 1	14 38.69	-27 15.5	2.619	3.610	3.4	21.6
5 11	14 29.10	-35 21.0	2.427	3.394	5.8	19.1	5 11	14 30.51	-26 46.6	2.621	3.612	3.6	21.6
5 21	14 20.12	-34 28.3	2.443	3.388	7.2	19.2	5 21	14 22.95	-26 11.0	2.651	3.613	5.8	21.8
5 31	14 12.68	-33 26.8	2.485	3.382	9.3	19.3	5 31	14 16.66	-25 32.6	2.709	3.614	8.4	21.9
6 10	14 7.31	-32 22.6	2.552	3.376	11.6	19.5	6 10	14 12.07	-24 55.6	2.790	3.615	10.7	22.1
304960	2007 <i>TT</i> ₇₇		5 2.1 163°69	0°7/2.6	18		11545	Hashimoto		5 2.1 173°66	1°5/		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
146156	2000 SG ₁₅₈		5 2.1 99°41'	4.7/ 7.2	18		13248	Fornasier		5 2.1 198°56'	0°1/ 2.0	18	
4 1	15 0.71	-34 1.2	2.583	3.377	11.8	19.6	4 1	15 0.73	-16 18.5	2.503	3.363	10.1	19.4
4 11	14 54.65	-33 54.0	2.517	3.396	9.5	19.5	4 11	14 54.68	-15 57.8	2.423	3.360	7.1	19.2
4 21	14 47.07	-33 29.8	2.474	3.414	7.0	19.4	4 21	14 47.14	-15 30.4	2.369	3.356	3.9	19.0
5 1	14 38.72	-32 48.8	2.458	3.432	5.1	19.3	5 1	14 38.76	-14 58.6	2.344	3.351	0.4	18.7
5 11	14 30.45	-31 53.8	2.470	3.449	4.9	19.3	5 11	14 30.29	-14 25.5	2.348	3.346	3.2	18.9
5 21	14 23.03	-30 49.0	2.510	3.466	6.4	19.4	5 21	14 22.47	-13 54.5	2.381	3.340	6.6	19.1
5 31	14 17.09	-29 40.0	2.577	3.483	8.7	19.6	5 31	14 15.95	-13 28.8	2.441	3.334	9.7	19.3
6 10	14 13.06	-28 32.4	2.668	3.500	10.9	19.7	6 10	14 11.17	-13 11.1	2.524	3.327	12.3	19.5
471794	2012 VT ₅₁		5 2.1 199°15'	3°6/29.1	18		21358	Mijerbarany		5 2.1 332°12'	0°3/ 1.9	18	
4 1	14 59.68	- 4 42.7	2.392	3.267	9.9	21.0	4 1	15 0.08	-15 59.9	1.757	2.633	12.8	18.6
4 11	14 53.90	- 4 11.9	2.324	3.265	7.2	20.8	4 11	14 54.70	-15 39.4	1.686	2.630	9.1	18.3
4 21	14 46.69	- 3 42.8	2.281	3.262	4.6	20.7	4 21	14 47.32	-15 10.6	1.638	2.627	4.9	18.1
5 1	14 38.69	- 3 18.8	2.267	3.260	3.6	20.6	5 1	14 38.78	-14 36.3	1.617	2.625	0.5	17.7
5 11	14 30.64	- 3 3 3	2.282	3.257	5.5	20.7	5 11	14 30.13	-14 1 2	1.623	2.622	4.1	18.0
5 21	14 23.26	- 2 58.5	2.323	3.254	8.3	20.9	5 21	14 22.38	-13 29.8	1.655	2.620	8.5	18.3
5 31	14 17.16	- 3 5 9	2.390	3.251	11.0	21.0	5 31	14 16.40	-13 6 5	1.711	2.617	12.3	18.5
6 10	14 12.78	- 3 25.5	2.478	3.248	13.4	21.2	6 10	14 12.72	-12 54.5	1.788	2.615	15.6	18.7
199075	2005 XS ₆₅		5 2.1 215°17'	0°6/ 2.5	16		519615	2012 UB ₁₈₁		5 2.1 100°84'	1°6/30.6	17	
4 1	15 6.03	-17 52.2	1.589	2.458	14.4	21.2	4 1	14 57.82	-13 21.7	2.152	3.028	10.8	21.1
4 11	14 59.21	-17 45.2	1.513	2.452	10.4	20.9	4 11	14 52.69	-12 26.4	2.089	3.034	7.6	21.0
4 21	14 49.89	-17 27.4	1.459	2.446	5.8	20.6	4 21	14 46.07	-11 25.2	2.051	3.040	4.0	20.7
5 1	14 39.03	-17 0 8	1.431	2.438	1.0	20.3	5 1	14 38.65	-10 22.6	2.041	3.046	1.6	20.6
5 11	14 27.93	-16 29.4	1.431	2.431	4.4	20.5	5 11	14 31.25	- 9 23.4	2.059	3.052	4.3	20.8
5 21	14 17.87	-15 58.3	1.457	2.423	9.3	20.8	5 21	14 24.63	- 8 32.4	2.105	3.057	7.8	21.0
5 31	14 9.95	-15 33.1	1.507	2.414	13.7	21.0	5 31	14 19.41	- 7 53.0	2.176	3.063	10.9	21.2
6 10	14 4.82	-15 18.3	1.577	2.404	17.4	21.2	6 10	14 16.03	- 7 27.4	2.269	3.069	13.6	21.4
511099	2013 TV ₁₅₉		5 2.1 234°54'	0°5/ 1.4	18		474784	2005 QW ₁₃₉		5 2.1 253°25'	0°4/ 1.7	16	
4 1	14 52.02	-14 6 2	4.338	5.201	6.1	21.8	4 1	14 58.65	-15 20.4	2.501	3.367	9.9	22.3
4 11	14 48.08	-13 45.4	4.259	5.199	4.2	21.7	4 11	14 53.26	-14 57.4	2.413	3.353	7.0	22.1
4 21	14 43.42	-13 21.9	4.208	5.196	2.3	21.6	4 21	14 46.42	-14 28.4	2.352	3.340	3.8	21.8
5 1	14 38.37	-12 57.0	4.187	5.193	0.5	21.4	5 1	14 38.69	-13 55.6	2.318	3.326	0.5	21.5
5 11	14 33.28	-12 32.7	4.195	5.191	2.1	21.5	5 11	14 30.83	-13 22.2	2.314	3.311	3.3	21.7
5 21	14 28.52	-12 10.4	4.233	5.188	4.1	21.7	5 21	14 23.54	-12 51.7	2.338	3.297	6.7	21.9
5 31	14 24.41	-11 52.0	4.299	5.185	6.0	21.8	5 31	14 17.48	-12 27.2	2.388	3.282	9.8	22.1
6 10	14 21.19	-11 38.5	4.388	5.183	7.6	21.9	6 10	14 13.11	-12 11.2	2.461	3.267	12.5	22.3
283484	2001 SR ₇		5 2.1 171°05'	0°9/ 1.3	17		506456	2001 XA ₂₂₄		5 2.1 90°66'	3°6/29.5	18	
4 1	14 58.95	-13 53.1	2.511	3.379	9.8	21.4	4 1	15 1.87	- 3 42.4	2.342	3.213	10.2	20.8
4 11	14 53.35	-13 22.7	2.440	3.382	6.9	21.2	4 11	14 55.31	- 3 27.0	2.293	3.232	7.4	20.7
4 21	14 46.38	-12 47.3	2.395	3.384	3.7	21.0	4 21	14 47.39	- 3 14.8	2.271	3.251	4.7	20.5
5 1	14 38.66	-12 9 8	2.379	3.386	0.9	20.8	5 1	14 38.78	- 3 8 7	2.278	3.270	3.7	20.5
5 11	14 30.92	-11 33.5	2.392	3.387	3.5	21.0	5 11	14 30.28	- 3 11.1	2.313	3.288	5.4	20.6
5 21	14 23.84	-11 1 8	2.433	3.388	6.7	21.2	5 21	14 22.58	- 3 23.5	2.376	3.307	8.1	20.8
5 31	14 18.00	-10 37.6	2.501	3.389	9.6	21.4	5 31	14 16.28	- 3 46.5	2.464	3.325	10.7	21.0
6 10	14 13.83	-10 22.9	2.591	3.389	12.1	21.5	6 10	14 11.76	- 4 19.5	2.573	3.343	13.0	21.2
77469	2001 HZ ₂₅		5 2.1 260°62'	0°9/ 1.4	18		300977	2008 EE ₉₁		5 2.1 76°15'	3°8/27.9	17	
4 1	15 0.30	-13 58.1	2.022	2.896	11.5	20.1	4 1	14 57.77	- 7 28.7	2.251	3.131	10.2	20.4
4 11	14 54.67	-13 38.0	1.944	2.888	8.2	19.9	4 11	14 52.43	- 5 45.3	2.210	3.155	7.2	20.2
4 21	14 47.25	-13 12.1	1.891	2.880	4.4	19.7	4 21	14 45.83	- 4 1 4	2.196	3.179	4.6	20.1
5 1	14 38.77	-12 43.2	1.865	2.872	0.9	19.4	5 1	14 38.62	- 2 23.5	2.212	3.202	4.0	20.1
5 11	14 30.15	-12 15.0	1.868	2.864	4.1	19.6	5 11	14 31.58	- 0 57.5	2.257	3.226	6.0	20.3
5 21	14 22.28	-11 51.4	1.897	2.856	8.0	19.8	5 21	14 25.35	+ 0 12.2	2.329	3.249	8.8	20.5
5 31	14 15.95	-11 35.9	1.951	2.848	11.5	20.0	5 31	14 20.46	+ 1 3 3	2.426	3.272	11.4	20.7
6 10	14 11.69	-11 30.9	2.027	2.840	14.6	20.2	6 10	14 17.27	+ 1 35.4	2.543	3.295	13.5	20.9
243639	1999 TO ₅₁		5 2.1 314°42'	1°4/ 3.2	16		171507	1998 HC ₁₁₁		5 2.1 356°05'	4°2/30.2	17	
4 1	14 57.94	-21 0 4	2.086	2.947	11.7	20.8	4 1	15 0.73	- 7 24.8	1.106	2.010	16.4	18.9
4 11	14 53.04	-20 44.9	2.002	2.936	8.6	20.5	4 11	14 55.91	- 7 7 2	1.049	2.006	11.8	18.6
4 21	14 46.39	-20 18.2	1.942	2.925	5.0	20.3	4 21	14 48.26	- 6 50.2	1.012	2.002	6.9	18.3
5 1	14 38.68	-19 42.0	1.908	2.914	1.7	20.0	5 1	14 38.90	- 6 39.7	0.998	2.000	4.3	18.2
5 11	14 30.82	-18 59.8	1.903	2.903	3.4	20.1	5 11	14 29.38	- 6 41.3	1.007	1.999	7.7	18.4
5 21	14 23.67	-18 16.1	1.924	2.892	7.2	20.4	5 21	14 21.19	- 6 58.4	1.038	1.999	12.6	18.6
5 31	14 18.01	-17 35.6	1.971	2.882	10.7	20.5	5 31	14 15.53	- 7 32.6	1.089	2.000	17.3	18.9
6 10	14 14.37	-17 2 8	2.039	2.872	13.8	20.7	6 10	14 13.06	- 8 23.3	1.156	2.003	21.2	19.2
320381	2007 UR ₁₀		5 2.1 199°03'	0°6/ 2.6	16		162139	1998 UL ₁₉		5 2.1 244°02'	0°4/ 2.4	18	
4 1	15 3.94	-19 7 5	1.990	2.849	12.3	22.4	4 1	15 3.85	-16 43.4	2.527	3.380	10.2	20.8
4 11	14 57.28	-18 40.9	1.911	2.845	8.9	22.2	4 11	14 57.03	-16 49.6	2.429	3.361	7.4	20.6
4 21	14 48.67	-18 3 4	1.856	2.841	5.0	21.9	4 21	14 48.52	-16 50.1	2.357	3.342	4.1	20.4
5 1	14 38.92	-17 17.1	1.828	2.835	0.9	21.6	5 1	14 38.93	-16 45.7	2.314	3.322	0.6	20.0
5 11	14 29.04	-16 26.5	1.830	2.829	3.7	21.8	5 11	14 29.06	-16 38.2	2.302	3.301	3.2	20.2
5 21	14 20.03	-15 36.6	1.860	2.822	7.8	22.1	5 21	14 19.74	-16 30.2	2.319	3.279	6.7	20.4
5 31	14 12.74	-14 52.8	1.915	2.815	11.6	22.3	5 31	14 11.71	-16 24.5	2.364	3.257	9.9	20.6
6 10	14 7.70	-14 19.1	1.992	2.806	14.7	22.5	6 10	14 5.52	-16 23.9	2.431	3.234	12.7	20.7
429237	2010 AB ₆₀		5 2.1 98°12'	2°4/30.5	17		478256	2011 UV ₃₈₇		5 2.1 234°91'	1°9/30.0	18	
4 1	15 2.67	- 9 24.6	1.991	2.866	11.6								

EPHEMERIDES

5 2.1

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
330152	2006 BY ₂₂		5 2.1 244°53	5°1/27.9	18		311913	2007 BY ₁₀		5 2.1 205°10	5°5/25.5	18	
4 1	14 58.95	- 3 43.2	1.895	2.779	11.6	20.6	4 1	14 57.47	+ 5 44.4	3.127	3.984	8.3	22.1
4 11	14 53.68	- 2 36.0	1.831	2.776	8.5	20.4	4 11	14 52.10	+ 6 35.0	3.064	3.979	6.7	21.9
4 21	14 46.69	- 1 30.3	1.793	2.772	5.8	20.2	4 21	14 45.67	+ 7 18.9	3.027	3.972	5.6	21.9
5 1	14 38.73	- 0 32.3	1.782	2.768	5.3	20.2	5 1	14 38.65	+ 7 52.4	3.018	3.966	5.7	21.8
5 11	14 30.73	+ 0 12.2	1.797	2.765	7.4	20.3	5 11	14 31.61	+ 8 12.8	3.038	3.959	6.9	21.9
5 21	14 23.55	+ 0 39.5	1.838	2.761	10.6	20.5	5 21	14 25.05	+ 8 18.4	3.084	3.951	8.6	22.0
5 31	14 17.93	+ 0 47.6	1.901	2.757	13.6	20.7	5 31	14 19.46	+ 8 9.0	3.153	3.943	10.4	22.1
6 10	14 14.35	+ 0 36.9	1.984	2.753	16.3	20.9	6 10	14 15.18	+ 7 45.5	3.243	3.934	11.9	22.3
474289	2001 WC ₈₆		5 2.1 201°00	2°6/30.0	17		33661	Sophiaswartz		5 2.1 86°42	5°8/28.5	18	
4 1	15 0.05	- 7 29.8	2.398	3.271	9.9	21.3	4 1	15 2.23	- 4 31.2	1.397	2.289	14.5	18.2
4 11	14 54.19	- 7 10.6	2.327	3.270	7.1	21.1	4 11	14 56.37	- 3 25.9	1.347	2.295	10.5	18.0
4 21	14 46.89	- 6 51.3	2.282	3.268	4.1	20.9	4 21	14 48.25	- 2 22.8	1.319	2.302	6.9	17.8
5 1	14 38.76	- 6 34.9	2.266	3.266	2.6	20.8	5 1	14 38.91	- 1 29.6	1.317	2.308	5.9	17.8
5 11	14 30.58	- 6 24.3	2.278	3.263	4.7	21.0	5 11	14 29.64	- 0 53.1	1.340	2.315	8.6	17.9
5 21	14 23.05	- 6 21.8	2.318	3.261	7.7	21.1	5 21	14 21.58	- 0 37.6	1.386	2.321	12.4	18.2
5 31	14 16.82	- 6 29.0	2.384	3.258	10.6	21.3	5 31	14 15.66	- 0 44.2	1.454	2.328	16.1	18.4
6 10	14 12.32	- 6 46.6	2.472	3.255	13.1	21.5	6 10	14 12.38	- 1 11.6	1.539	2.334	19.2	18.6
413010	2000 CV ₃₉		5 2.1 167°32	3°8/ 5.6	16		461455	2002 PX ₅₁		5 2.1 254°01	3°9/29.4	17	
4 1	15 4.92	-29 37.1	2.416	3.228	12.0	22.2	4 1	15 2.09	- 7 34.6	1.748	2.630	12.6	21.3
4 11	14 57.74	-29 28.5	2.338	3.235	9.3	22.0	4 11	14 56.20	- 6 44.3	1.668	2.615	9.0	21.0
4 21	14 48.83	-29 4.1	2.284	3.241	6.4	21.8	4 21	14 48.21	- 5 51.7	1.613	2.599	5.5	20.8
5 1	14 38.96	-28 23.9	2.258	3.246	4.1	21.7	5 1	14 38.93	- 5 2.1	1.585	2.583	3.9	20.6
5 11	14 29.07	-27 30.9	2.261	3.250	4.3	21.7	5 11	14 29.42	- 4 21.5	1.583	2.566	6.6	20.7
5 21	14 20.04	-26 29.5	2.293	3.254	6.7	21.9	5 21	14 20.73	- 3 54.6	1.608	2.549	10.6	20.9
5 31	14 12.63	-25 25.6	2.352	3.256	9.5	22.0	5 31	14 13.80	- 3 44.7	1.655	2.531	14.3	21.1
6 10	14 7.31	-24 24.8	2.435	3.257	12.1	22.2	6 10	14 9.22	- 3 52.6	1.722	2.513	17.6	21.3
499651	2010 VL ₈₇		5 2.1 264°61	0°8/ 2.6	17		269946	2000 SO ₃₁		5 2.1 226°54	3°8/28.5	18	
4 1	15 3.62	-18 44.0	1.707	2.574	13.6	22.2	4 1	14 59.40	- 7 27.4	2.094	2.974	10.9	21.0
4 11	14 57.53	-18 33.2	1.616	2.555	9.9	21.9	4 11	14 53.93	- 6 9.6	2.020	2.965	7.8	20.7
4 21	14 49.05	-18 11.0	1.549	2.535	5.6	21.6	4 21	14 46.83	- 4 48.8	1.972	2.955	4.9	20.5
5 1	14 39.01	-17 39.0	1.507	2.514	1.2	21.3	5 1	14 38.79	- 3 31.1	1.952	2.945	4.0	20.5
5 11	14 28.57	-17 1.1	1.493	2.493	4.2	21.4	5 11	14 30.66	- 2 22.5	1.960	2.935	6.3	20.6
5 21	14 18.96	-16 22.5	1.506	2.472	9.0	21.7	5 21	14 23.25	- 1 28.0	1.995	2.924	9.5	20.8
5 31	14 11.24	-15 49.0	1.542	2.450	13.3	21.9	5 31	14 17.28	- 0 50.8	2.054	2.913	12.7	20.9
6 10	14 6.14	-15 25.6	1.599	2.428	17.1	22.1	6 10	14 13.24	- 0 32.1	2.133	2.901	15.4	21.1
149448	2003 CJ ₆		5 2.1 181°08	1°4/30.9	17		295540	2008 RR ₁₄₂		5 2.1 124°84	4°9/ 6.3	18	
4 1	15 1.43	-13 28.0	2.058	2.930	11.4	20.6	4 1	15 2.41	-31 28.9	2.072	2.889	13.5	20.7
4 11	14 55.35	-12 44.7	1.988	2.931	8.0	20.4	4 11	14 56.24	-31 28.4	2.001	2.897	10.7	20.5
4 21	14 47.57	-11 55.2	1.943	2.932	4.3	20.2	4 21	14 48.12	-31 9.1	1.952	2.905	7.7	20.3
5 1	14 38.84	-11 3.3	1.926	2.932	1.4	20.0	5 1	14 38.93	-30 31.0	1.929	2.913	5.3	20.2
5 11	14 30.07	-10 13.9	1.938	2.931	4.4	20.2	5 11	14 29.71	-29 36.9	1.933	2.920	5.2	20.2
5 21	14 22.12	- 9 31.5	1.977	2.930	8.1	20.4	5 21	14 21.48	-28 32.2	1.965	2.927	7.5	20.3
5 31	14 15.73	- 8 59.8	2.041	2.929	11.5	20.6	5 31	14 15.04	-27 23.5	2.022	2.934	10.4	20.5
6 10	14 11.38	- 8 41.2	2.127	2.926	14.4	20.8	6 10	14 10.90	-26 17.8	2.102	2.941	13.2	20.7
386528	2009 CB ₅		5 2.1 240°30	2°1/ 3.9	17		422760	2001 TC ₁₅₉		5 2.1 120°09	1°6/30.7	18	
4 1	15 0.05	-23 23.7	2.165	3.014	11.8	21.6	4 1	15 2.07	-12 55.4	2.189	3.058	10.9	22.4
4 11	14 54.49	-23 9.2	2.082	3.008	8.8	21.4	4 11	14 55.56	-12 5.6	2.137	3.079	7.6	22.2
4 21	14 47.17	-22 41.9	2.023	3.001	5.4	21.2	4 21	14 47.57	-11 10.9	2.112	3.100	4.1	22.1
5 1	14 38.81	-22 3.1	1.991	2.994	2.4	20.9	5 1	14 38.87	-10 15.5	2.115	3.120	1.6	21.9
5 11	14 30.31	-21 16.2	1.988	2.987	3.5	21.0	5 11	14 30.29	- 9 24.0	2.147	3.139	4.2	22.1
5 21	14 22.57	-20 25.7	2.012	2.979	7.0	21.2	5 21	14 22.62	- 8 40.4	2.208	3.157	7.6	22.4
5 31	14 16.36	-19 37.0	2.062	2.972	10.4	21.4	5 31	14 16.46	- 8 8.0	2.294	3.174	10.7	22.6
6 10	14 12.19	-18 54.6	2.134	2.964	13.3	21.6	6 10	14 12.21	- 7 48.3	2.402	3.191	13.2	22.8
188042	2001 UE ₁₈₅		5 2.1 194°42	2°3/30.2	17		332731	2009 SX ₃₁₅		5 2.1 214°42	0°7/ 1.6	17	
4 1	15 1.26	-10 31.7	2.169	3.042	10.9	21.7	4 1	15 0.77	-15 47.5	1.828	2.702	12.5	21.4
4 11	14 55.18	- 9 45.1	2.096	3.040	7.7	21.5	4 11	14 55.13	-15 8.3	1.755	2.699	8.9	21.2
4 21	14 47.47	- 8 54.7	2.049	3.037	4.3	21.3	4 21	14 47.56	-14 20.2	1.707	2.696	4.8	20.9
5 1	14 38.84	- 8 4.7	2.031	3.033	2.4	21.1	5 1	14 38.88	-13 26.8	1.686	2.693	0.8	20.6
5 11	14 30.15	- 7 19.5	2.042	3.029	4.9	21.3	5 11	14 30.11	-12 33.5	1.692	2.689	4.3	20.9
5 21	14 22.22	- 6 43.4	2.080	3.025	8.3	21.5	5 21	14 22.24	-11 45.7	1.725	2.686	8.5	21.1
5 31	14 15.75	- 6 19.2	2.143	3.019	11.5	21.7	5 31	14 16.08	-11 8.1	1.783	2.682	12.3	21.3
6 10	14 11.21	- 6 8.7	2.228	3.013	14.3	21.8	6 10	14 12.18	-10 43.9	1.861	2.678	15.5	21.5
131033	2000 XG ₅₀		5 2.1 51°11	4°8/ 4.9	18		74933	1999 TB ₁₆₂		5 2.1 99°50	2°0/30.9	18	
4 1	15 5.35	-26 48.9	1.702	2.543	14.9	19.0	4 1	15 3.95	-11 47.4	1.590	2.471	13.7	19.6
4 11	14 58.64	-27 34.7	1.640	2.555	11.5	18.8	4 11	14 57.39	-11 18.3	1.538	2.485	9.6	19.3
4 21	14 49.55	-28 4.7	1.601	2.566	7.9	18.6	4 21	14 48.74	-10 44.8	1.509	2.499	5.2	19.1
5 1	14 39.05	-28 17.0	1.587	2.578	5.2	18.5	5 1	14 39.00	-10 11.0	1.507	2.512	2.0	18.9
5 11	14 28.45	-28 13.0	1.600	2.590	5.6	18.5	5 11	14 29.35	- 9 41.9	1.532	2.526	5.2	19.2
5 21	14 18.98	-27 56.5	1.639	2.603	8.6	18.7	5 21	14 20.87	- 9 21.7	1.583	2.539	9.5	19.4
5 31	14 11.66	-27 33.7	1.702	2.615	12.0	19.0	5 31	14 14.43	- 9 13.7	1.657	2.552	13.3	19.7
6 10	14 7.08	-27 10.8	1.786	2.628	15.0	19.2	6 10	14 10.48	- 9 19.3	1.751	2.564	16.5	19.9
216103	2006 RE ₃₄		5 2.1 227°89	1°1/ 1.3	17		477614	2010 KW ₁₂₁		5 2.1 268°69	6°0/ 7.7	18	
4 1	15 3.30	-13 47.7	1.996	2.865									

EPHEMERIDES

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5 2.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
20793	Goldinaaron		5 2.1 245°36	0°9/ 1.5 18			100234	1994 PS ₂₄		5 2.1 213°82	0°3/ 1.9 18		
4 1	15 1.29	-14 23.3	1.946	2.819	11.9	19.4	4 1	14 58.71	-15 48.8	2.694	3.556	9.4	20.3
4 11	14 55.48	-13 57.6	1.866	2.809	8.5	19.2	4 11	14 53.23	-15 27.1	2.612	3.550	6.6	20.1
4 21	14 47.77	-13 25.1	1.810	2.799	4.6	18.9	4 21	14 46.41	-14 59.5	2.557	3.544	3.6	19.9
5 1	14 38.91	-12 48.9	1.781	2.788	0.9	18.6	5 1	14 38.82	-14 28.3	2.530	3.537	0.4	19.6
5 11	14 29.89	-12 13.0	1.781	2.778	4.2	18.9	5 11	14 31.15	-13 56.4	2.533	3.531	3.0	19.9
5 21	14 21.64	-11 42.0	1.808	2.767	8.3	19.1	5 21	14 24.04	-13 26.7	2.565	3.523	6.2	20.1
5 31	14 15.01	-11 19.8	1.859	2.755	12.0	19.3	5 31	14 18.10	-13 2.4	2.623	3.516	9.1	20.2
6 10	14 10.54	-11 9.1	1.931	2.744	15.2	19.5	6 10	14 13.73	-12 45.6	2.704	3.508	11.6	20.4
463199	2012 CL ₉		5 2.1 179°41	2°8/ 4.1 16			465055	2006 SE ₁₁		5 2.1 281°61	1°3/ 1.3 17		
4 1	15 4.56	-24 17.8	1.797	2.645	13.9	22.3	4 1	15 1.72	-14 41.9	1.575	2.456	13.8	21.7
4 11	14 57.97	-24 13.3	1.723	2.647	10.4	22.1	4 11	14 56.31	-14 0.3	1.485	2.432	9.9	21.4
4 21	14 49.16	-23 53.4	1.672	2.648	6.5	21.8	4 21	14 48.48	-13 8.1	1.418	2.408	5.4	21.1
5 1	14 39.06	-23 18.9	1.647	2.648	3.2	21.6	5 1	14 39.06	-12 9.5	1.377	2.383	1.4	20.8
5 11	14 28.84	-22 33.3	1.650	2.648	4.2	21.7	5 11	14 29.23	-11 10.8	1.362	2.358	5.3	21.0
5 21	14 19.65	-21 42.1	1.680	2.647	8.1	21.9	5 21	14 20.22	-10 18.7	1.373	2.333	10.2	21.2
5 31	14 12.42	-20 52.0	1.734	2.646	11.9	22.1	5 31	14 13.14	-9 39.4	1.406	2.308	14.8	21.4
6 10	14 7.73	-20 8.9	1.810	2.644	15.2	22.3	6 10	14 8.73	-9 17.0	1.459	2.282	18.7	21.6
415767	2000 SZ ₁₈₂		5 2.1 262°26	2°4/ 3.5 17			15067	1999 AM ₉		5 2.1 283°24	1°7/ 1.0 18		
4 1	15 5.36	-22 4.1	1.682	2.539	14.3	22.8	4 1	15 1.84	-11 5.6	1.937	2.813	11.8	17.8
4 11	14 58.94	-22 6.4	1.587	2.517	10.7	22.5	4 11	14 55.95	-10 55.8	1.852	2.797	8.4	17.6
4 21	14 49.93	-21 54.8	1.514	2.494	6.5	22.2	4 21	14 48.10	-10 43.1	1.792	2.781	4.6	17.3
5 1	14 39.16	-21 29.4	1.468	2.471	2.7	21.9	5 1	14 39.01	-10 30.1	1.759	2.765	1.7	17.1
5 11	14 27.89	-20 52.9	1.448	2.447	4.5	21.9	5 11	14 29.68	-10 20.2	1.754	2.749	4.7	17.2
5 21	14 17.43	-20 10.6	1.455	2.423	9.1	22.1	5 21	14 21.06	-10 16.6	1.776	2.732	8.7	17.4
5 31	14 8.98	-19 29.1	1.486	2.398	13.5	22.3	5 31	14 14.03	-10 21.9	1.823	2.716	12.4	17.6
6 10	14 3.33	-18 54.8	1.538	2.372	17.4	22.5	6 10	14 9.19	-10 37.9	1.890	2.700	15.6	17.8
10496	1986 RK		5 2.1 281°08	1°3/ 3.1 18			38788	2000 RW ₄₅		5 2.1 199°49	0°6/ 2.7 18		
4 1	15 1.58	-21 44.5	1.488	2.358	15.1	17.3	4 1	15 1.00	-19 34.7	2.395	3.249	10.7	19.6
4 11	14 56.37	-21 3.9	1.397	2.336	11.1	17.0	4 11	14 54.98	-19 1.4	2.313	3.245	7.7	19.4
4 21	14 48.55	-20 4.2	1.328	2.313	6.5	16.6	4 21	14 47.40	-18 18.3	2.257	3.241	4.3	19.2
5 1	14 39.03	-18 47.8	1.284	2.290	1.7	16.3	5 1	14 38.93	-17 27.6	2.229	3.236	0.8	18.9
5 11	14 29.09	-17 21.1	1.266	2.267	4.6	16.4	5 11	14 30.39	-16 33.3	2.231	3.230	3.1	19.1
5 21	14 20.10	-15 53.1	1.274	2.244	9.8	16.6	5 21	14 22.55	-15 39.6	2.261	3.223	6.7	19.3
5 31	14 13.24	-14 33.0	1.304	2.220	14.7	16.8	5 31	14 16.08	-14 51.1	2.318	3.216	9.9	19.5
6 10	14 9.26	-13 28.6	1.355	2.197	18.9	17.0	6 10	14 11.46	-14 11.5	2.398	3.208	12.7	19.7
510625	2012 TX ₁₆₄		5 2.1 281°84	0°8/ 3.2 18			95719	2003 BG ₃₅		5 2.1 340°36	2°9/ 3.9 17		
4 1	14 53.43	-19 51.4	4.281	5.128	6.5	21.5	4 1	14 58.13	-23 36.6	1.061	1.948	18.4	19.0
4 11	14 49.16	-19 48.1	4.192	5.119	4.7	21.4	4 11	14 54.48	-23 16.7	0.993	1.938	13.8	18.7
4 21	14 44.08	-19 39.9	4.129	5.110	2.7	21.2	4 21	14 47.72	-22 32.9	0.944	1.929	8.4	18.4
5 1	14 38.54	-19 27.8	4.096	5.101	0.9	21.0	5 1	14 39.00	-21 27.4	0.917	1.921	3.4	18.1
5 11	14 32.94	-19 13.2	4.093	5.093	1.9	21.1	5 11	14 29.99	-20 7.4	0.912	1.914	5.4	18.1
5 21	14 27.66	-18 57.5	4.120	5.084	3.9	21.3	5 21	14 22.35	-18 43.9	0.929	1.908	11.0	18.4
5 31	14 23.05	-18 42.7	4.175	5.075	5.8	21.4	5 31	14 17.43	-17 28.5	0.966	1.904	16.4	18.7
6 10	14 19.41	-18 30.3	4.254	5.066	7.5	21.5	6 10	14 15.96	-16 29.8	1.021	1.900	21.0	19.0
138623	2000 QQ ₂₂₅		5 2.1 312°01	4°0/ 5.0 18			496854	1999 VY ₈₄		5 2.1 253°68	0°1/ 2.1 17		
4 1	15 0.97	-27 16.4	2.049	2.886	12.9	19.7	4 1	15 2.92	-17 9.5	1.770	2.640	13.1	22.5
4 11	14 55.37	-27 34.8	1.966	2.879	10.0	19.5	4 11	14 56.92	-16 41.1	1.682	2.623	9.4	22.2
4 21	14 47.77	-27 38.7	1.907	2.872	6.9	19.3	4 21	14 48.72	-16 1.8	1.618	2.605	5.2	22.0
5 1	14 38.95	-27 27.4	1.873	2.865	4.3	19.1	5 1	14 39.10	-15 14.6	1.580	2.587	0.5	21.6
5 11	14 29.90	-27 2.8	1.866	2.858	4.7	19.1	5 11	14 29.18	-14 24.3	1.570	2.569	4.3	21.8
5 21	14 21.64	-26 28.7	1.886	2.852	7.5	19.3	5 21	14 20.09	-13 36.5	1.587	2.550	8.9	22.0
5 31	14 15.06	-25 50.5	1.931	2.845	10.7	19.5	5 31	14 12.80	-12 56.9	1.628	2.530	13.1	22.2
6 10	14 10.73	-25 13.8	1.998	2.839	13.7	19.7	6 10	14 7.97	-12 29.8	1.689	2.510	16.7	22.4
89786	2002 AA ₁₁₂		5 2.1 124°14	2°3/30.4 18			315512	2008 AR ₅₄		5 2.2 307°83	5°9/28.5 17		
4 1	15 1.91	-10 25.2	2.088	2.961	11.2	20.0	4 1	15 0.64	-4 19.8	1.384	2.279	14.4	20.0
4 11	14 55.57	-9 46.1	2.033	2.977	7.9	19.9	4 11	14 55.57	-3 23.1	1.315	2.265	10.6	19.7
4 21	14 47.65	-9 4.2	2.004	2.991	4.4	19.7	4 21	14 48.05	-2 27.4	1.267	2.250	7.1	19.5
5 1	14 38.92	-8 23.4	2.003	3.005	2.3	19.6	5 1	14 39.03	-1 40.5	1.244	2.237	6.0	19.4
5 11	14 30.27	-7 48.1	2.030	3.019	4.8	19.7	5 11	14 29.76	-1 9.6	1.246	2.223	8.8	19.5
5 21	14 22.52	-7 21.6	2.085	3.032	8.2	20.0	5 21	14 21.51	-0 59.5	1.271	2.210	12.9	19.7
5 31	14 16.31	-7 6.6	2.165	3.045	11.3	20.2	5 31	14 15.33	-1 12.4	1.316	2.197	17.0	19.9
6 10	14 12.07	-7 4.1	2.267	3.057	13.9	20.4	6 10	14 11.89	-1 47.4	1.379	2.185	20.5	20.1
300036	2006 UV ₁₂₃		5 2.1 79°70	1°8/30.5 17			90620	4342 T ₋₁		5 2.2 69°67	0°5/ 1.9 18		
4 1	14 57.37	-13 1.8	2.171	3.048	10.7	21.3	4 1	15 3.17	-14 52.7	1.587	2.465	13.9	18.9
4 11	14 52.39	-12 1.5	2.109	3.055	7.5	21.1	4 11	14 57.00	-14 43.2	1.528	2.473	9.8	18.6
4 21	14 45.95	-10 55.5	2.073	3.062	4.0	20.9	4 21	14 48.65	-14 26.6	1.492	2.482	5.3	18.4
5 1	14 38.75	-9 48.5	2.064	3.069	1.8	20.7	5 1	14 39.09	-14 5.6	1.482	2.490	0.7	18.1
5 11	14 31.58	-8 45.7	2.085	3.076	4.4	20.9	5 11	14 29.51	-13 44.5	1.499	2.498	4.5	18.4
5 21	14 25.17	-7 51.6	2.133	3.083	7.8	21.1	5 21	14 21.04	-13 27.6	1.542	2.506	9.0	18.6
5 31	14 20.14	-7 9.8	2.206	3.091	10.9	21.3	5 31	14 14.59	-13 18.6	1.608	2.515	13.0	18.9
6 10	14 16.91	-6 42.2	2.300	3.098	13.5	21.5	6 10	14 10.69	-13 20.3	1.695	2.523	16.3	19.1
347661	2001 TJ ₁₉₈		5 2.1 166°57	0°0/ 2.1 18			504627	2008 UL ₃₆₀		5 2.2 178°58	1°2/ 3.2 17		
4 1	15 7.00	-16 18.2	1.742	2.608	13.5	21.3	4 1	15 0.81					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
191234	2002 TX ₁₇		5 2.2 305°83	2°4/30.9	17		21855	1999 TG ₁₅₀		5 2.2 353°52	1°2/	1.3	18
4 1	15 1.90	-12 20.3	1.120	2.020	16.7	20.0	4 1	14 58.13	-13 24.2	1.999	2.878	11.4	17.8
4 11	14 57.11	-11 50.3	1.044	2.000	12.0	19.6	4 11	14 53.16	-13 1.0	1.929	2.875	8.0	17.6
4 21	14 49.20	-11 11.8	0.989	1.981	6.6	19.3	4 21	14 46.52	-12 32.7	1.884	2.873	4.3	17.4
5 1	14 39.18	-10 30.1	0.956	1.962	2.4	18.9	5 1	14 38.91	-12 2.2	1.865	2.872	1.2	17.1
5 11	14 28.63	-9 52.6	0.946	1.943	6.8	19.1	5 11	14 31.22	-11 33.6	1.874	2.871	4.1	17.3
5 21	14 19.21	-9 26.7	0.959	1.925	12.7	19.4	5 21	14 24.30	-11 10.5	1.910	2.870	7.9	17.6
5 31	14 12.37	-9 18.3	0.991	1.907	18.1	19.6	5 31	14 18.87	-10 56.3	1.970	2.869	11.3	17.8
6 10	14 8.96	-9 30.1	1.039	1.891	22.8	19.9	6 10	14 15.43	-10 52.9	2.052	2.869	14.3	18.0
279752	1998 SB ₆₈		5 2.2 224°99	0°3/	1.8	18	279462	2010 RJ ₁₇₉		5 2.2 255°81	0°3/	2.0	17
4 1	14 59.63	-16 51.1	2.564	3.425	9.8	21.7	4 1	15 3.95	-16 3.0	1.693	2.565	13.5	21.3
4 11	14 53.96	-16 7.6	2.475	3.413	7.0	21.5	4 11	14 57.77	-15 46.2	1.607	2.549	9.7	21.0
4 21	14 46.86	-15 16.1	2.413	3.400	3.8	21.2	4 21	14 49.25	-15 20.4	1.544	2.532	5.3	20.7
5 1	14 38.91	-14 19.2	2.380	3.387	0.4	20.9	5 1	14 39.22	-14 48.0	1.508	2.515	0.6	20.3
5 11	14 30.85	-13 21.1	2.376	3.373	3.3	21.1	5 11	14 28.86	-14 13.2	1.499	2.498	4.4	20.6
5 21	14 23.39	-12 25.9	2.402	3.359	6.6	21.3	5 21	14 19.35	-13 41.2	1.516	2.480	9.2	20.8
5 31	14 17.16	-11 37.7	2.454	3.344	9.7	21.5	5 31	14 11.73	-13 17.1	1.558	2.461	13.5	21.0
6 10	14 12.62	-10 59.6	2.529	3.328	12.4	21.7	6 10	14 6.70	-13 4.7	1.619	2.443	17.2	21.2
462347	2008 QK ₄₄		5 2.2 260°75	6°2/27.0	18		333701	2008 WK ₅₉		5 2.2 260°26	2°4/30.4	18	
4 1	15 2.53	+ 2 2.7	2.220	3.087	10.9	21.3	4 1	15 1.69	- 9 52.8	2.141	3.015	11.0	21.2
4 11	14 56.23	+ 2 52.7	2.134	3.062	8.5	21.1	4 11	14 55.73	- 9 21.4	2.050	2.993	7.8	21.0
4 21	14 48.20	+ 3 37.2	2.073	3.036	6.6	20.9	4 21	14 47.98	- 8 46.9	1.984	2.971	4.4	20.7
5 1	14 39.07	+ 4 10.9	2.040	3.009	6.4	20.8	5 1	14 39.08	- 8 12.6	1.946	2.949	2.4	20.6
5 11	14 29.69	+ 4 29.1	2.034	2.982	8.1	20.9	5 11	14 29.93	- 7 42.6	1.937	2.925	4.9	20.7
5 21	14 20.92	+ 4 29.3	2.055	2.954	10.8	21.0	5 21	14 21.40	- 7 20.8	1.955	2.902	8.6	20.9
5 31	14 13.52	+ 4 10.4	2.099	2.925	13.6	21.1	5 31	14 14.30	- 7 10.2	1.998	2.878	12.1	21.0
6 10	14 8.04	+ 3 33.5	2.162	2.896	16.1	21.3	6 10	14 9.19	- 7 12.4	2.062	2.853	15.1	21.2
497317	2005 TO ₁₀₃		5 2.2 168°01	1°9/	3.9	17	67974	2000 XP ₆		5 2.2 251°93	3°7/	4.5	18
4 1	15 3.38	-23 11.9	2.485	3.323	10.9	23.3	4 1	15 6.18	-25 49.2	1.854	2.693	13.9	19.3
4 11	14 56.62	-23 2.6	2.409	3.329	8.1	23.1	4 11	14 59.44	-25 57.7	1.755	2.672	10.7	19.0
4 21	14 48.29	-22 42.3	2.358	3.334	4.9	22.9	4 21	14 50.22	-25 50.4	1.679	2.650	7.1	18.8
5 1	14 39.07	-22 12.0	2.336	3.338	2.2	22.7	5 1	14 39.34	-25 26.4	1.630	2.627	4.0	18.5
5 11	14 29.82	-21 34.4	2.344	3.342	3.2	22.8	5 11	14 27.97	-24 47.6	1.608	2.604	4.8	18.5
5 21	14 21.31	-20 53.4	2.381	3.344	6.3	23.0	5 21	14 17.39	-23 58.8	1.613	2.579	8.5	18.7
5 31	14 14.24	-20 13.3	2.445	3.346	9.3	23.2	5 31	14 8.72	-23 6.8	1.644	2.554	12.5	18.9
6 10	14 9.07	-19 38.2	2.532	3.348	11.9	23.4	6 10	14 2.72	-22 18.8	1.696	2.528	16.1	19.0
253176	2002 XD ₃		5 2.2 116°64	0°8/	1.5	18	343050	2009 BF ₁₇₆		5 2.2 190°84	0°3/	1.9	17
4 1	15 1.58	-16 44.8	1.818	2.690	12.7	20.5	4 1	15 0.01	-15 29.3	2.310	3.176	10.6	21.5
4 11	14 55.57	-15 45.0	1.761	2.703	8.9	20.3	4 11	14 54.32	-15 11.6	2.236	3.176	7.5	21.3
4 21	14 47.76	-14 35.3	1.728	2.716	4.8	20.1	4 21	14 47.09	-14 47.7	2.187	3.175	4.0	21.1
5 1	14 39.01	-13 20.5	1.722	2.729	0.8	19.8	5 1	14 38.98	-14 20.0	2.166	3.174	0.5	20.8
5 11	14 30.37	-12 7.1	1.745	2.742	4.3	20.1	5 11	14 30.80	-13 51.7	2.174	3.172	3.4	21.0
5 21	14 22.76	-11 1.2	1.795	2.754	8.4	20.3	5 21	14 23.31	-13 26.3	2.211	3.171	6.9	21.2
5 31	14 16.92	-10 7.9	1.870	2.765	12.0	20.6	5 31	14 17.19	-13 6.8	2.273	3.169	10.1	21.4
6 10	14 13.28	-9 30.0	1.965	2.777	15.0	20.8	6 10	14 12.90	-12 55.9	2.357	3.167	12.8	21.6
196456	2003 HJ ₅₁		5 2.2 291°44	4°1/28.6	18		168136	2006 GP ₄₁		5 2.2 326°23	1°5/	2.9	17
4 1	14 58.97	- 8 51.4	1.751	2.638	12.3	20.4	4 1	15 0.47	-18 38.5	1.120	2.012	17.2	19.6
4 11	14 54.12	- 7 24.2	1.659	2.609	8.9	20.1	4 11	14 56.20	-18 48.6	1.043	1.993	12.7	19.2
4 21	14 47.22	- 5 49.5	1.593	2.579	5.4	19.8	4 21	14 48.78	-18 45.5	0.986	1.975	7.3	18.9
5 1	14 38.98	- 4 14.4	1.553	2.549	4.3	19.7	5 1	14 39.20	-18 30.3	0.951	1.958	1.9	18.5
5 11	14 30.42	- 2 47.3	1.540	2.519	7.2	19.8	5 11	14 29.04	-18 6.9	0.940	1.942	5.3	18.6
5 21	14 22.56	- 1 35.5	1.553	2.489	11.2	19.9	5 21	14 20.02	-17 41.7	0.950	1.927	11.3	18.9
5 31	14 16.33	- 0 44.5	1.588	2.458	15.1	20.1	5 31	14 13.62	-17 22.1	0.980	1.913	16.7	19.2
6 10	14 12.39	- 0 16.6	1.642	2.428	18.5	20.3	6 10	14 10.74	-17 14.2	1.027	1.900	21.4	19.4
305419	2008 CH ₁₃₃		5 2.2 267°29	4°1/	5.5	17	420013	2011 CK ₇₂		5 2.2 123°43	1°2/	1.3	18
4 1	15 0.86	-28 49.1	2.349	3.173	11.9	20.9	4 1	15 3.50	-13 11.4	2.088	2.956	11.4	21.7
4 11	14 55.13	-29 4.2	2.262	3.166	9.3	20.7	4 11	14 56.73	-12 44.3	2.032	2.973	8.0	21.5
4 21	14 47.62	-29 5.2	2.199	3.158	6.6	20.5	4 21	14 48.35	-12 12.4	2.002	2.991	4.3	21.3
5 1	14 39.02	-28 51.6	2.163	3.151	4.4	20.4	5 1	14 39.12	-11 38.8	2.001	3.007	1.2	21.1
5 11	14 30.23	-28 24.9	2.154	3.143	4.5	20.3	5 11	14 29.99	-11 7.5	2.028	3.023	4.1	21.3
5 21	14 22.13	-27 48.6	2.173	3.135	6.9	20.5	5 21	14 21.78	-10 42.0	2.084	3.038	7.7	21.6
5 31	14 15.52	-27 7.5	2.218	3.128	9.7	20.6	5 31	14 15.18	-10 25.4	2.165	3.053	10.9	21.8
6 10	14 10.94	-26 26.9	2.285	3.120	12.4	20.8	6 10	14 10.61	-10 19.3	2.267	3.067	13.6	22.0
161283	2003 GE ₃₅		5 2.2 274°44	5°5/28.7	17		96925	1999 TX ₁₂₅		5 2.2 172°68	0°2/	2.3	18
4 1	15 2.23	- 5 19.6	1.430	2.321	14.3	19.6	4 1	15 0.19	-18 31.1	2.134	2.997	11.4	20.1
4 11	14 56.68	- 4 16.6	1.357	2.306	10.5	19.3	4 11	14 54.54	-17 52.2	2.062	2.999	8.2	19.9
4 21	14 48.68	- 3 12.8	1.307	2.291	6.8	19.1	4 21	14 47.23	-17 3.4	2.014	3.001	4.5	19.7
5 1	14 39.14	- 2 15.8	1.282	2.275	5.7	19.0	5 1	14 39.01	-16 7.8	1.995	3.002	0.6	19.4
5 11	14 29.33	- 1 33.4	1.282	2.260	8.5	19.1	5 11	14 30.76	-15 9.8	2.004	3.003	3.4	19.6
5 21	14 20.51	- 1 10.9	1.306	2.244	12.8	19.3	5 21	14 23.31	-14 14.5	2.041	3.003	7.2	19.9
5 31	14 13.77	- 1 11.4	1.351	2.228	16.8	19.5	5 31	14 17.36	-13 26.6	2.103	3.004	10.6	20.1
6 10	14 9.76	- 1 34.4	1.413	2.212	20.4	19.7	6 10	14 13.39	-12 49.6	2.188	3.004	13.5	20.3
423510	2005 UZ ₁₉		5 2.2 115°71	1°9/	3.9	18	464711	2002 QW ₁₂₈		5 2.2 302°93	0°7/	2.6	17
4 1	15 1.30	-25 5.7	1.933	2.7									

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
64145	2001 TZ ₃₇		5 2.2 175°44	1°2/ 3.1 18			341861	2008 FA ₁₁₈		5 2.2 281°08	0°6/ 1.2 18		
4 1	15 3.10	-20 18.9	2.229	3.081	11.4	19.8	4 1	14 51.59	-14 30.3	4.334	5.198	6.1	20.6
4 11	14 56.59	-20 8.2	2.154	3.084	8.3	19.6	4 11	14 47.88	-13 48.8	4.250	5.189	4.2	20.5
4 21	14 48.36	-19 47.5	2.104	3.086	4.8	19.4	4 21	14 43.46	-13 3.6	4.193	5.181	2.3	20.3
5 1	14 39.14	-19 18.5	2.082	3.087	1.4	19.1	5 1	14 38.64	-12 16.9	4.166	5.173	0.6	20.2
5 11	14 29.86	-18 44.1	2.089	3.088	3.3	19.3	5 11	14 33.79	-11 30.8	4.170	5.165	2.2	20.3
5 21	14 21.36	-18 8.3	2.124	3.088	6.9	19.5	5 21	14 29.26	-10 47.4	4.204	5.156	4.2	20.5
5 31	14 14.40	-17 35.6	2.186	3.088	10.2	19.7	5 31	14 25.37	-10 8.8	4.265	5.148	6.1	20.6
6 10	14 9.47	-17 9.5	2.270	3.087	13.1	19.9	6 10	14 22.36	-9 36.6	4.350	5.140	7.7	20.7
144837	2004 JG ₂₉		5 2.2 303°66	2°3/30.5 18			216293	2007 GP ₁₁		5 2.2 41°24	2°4/28.7 18		
4 1	14 59.38	-9 38.7	2.085	2.964	11.0	19.7	4 1	14 52.16	-4 14.7	4.173	5.045	6.1	20.6
4 11	14 54.02	-9 15.5	2.011	2.957	7.8	19.5	4 11	14 48.26	-3 46.5	4.108	5.047	4.4	20.5
4 21	14 47.01	-8 50.2	1.961	2.949	4.4	19.3	4 21	14 43.65	-3 19.6	4.070	5.049	2.9	20.4
5 1	14 39.01	-8 26.2	1.939	2.942	2.3	19.1	5 1	14 38.66	-2 56.0	4.062	5.051	2.4	20.3
5 11	14 30.89	-8 7.1	1.944	2.934	4.8	19.3	5 11	14 33.65	-2 37.5	4.083	5.054	3.5	20.4
5 21	14 23.48	-7 56.0	1.977	2.927	8.3	19.5	5 21	14 28.99	-2 25.5	4.132	5.056	5.2	20.5
5 31	14 17.52	-7 55.4	2.034	2.920	11.6	19.7	5 31	14 24.98	-2 20.9	4.208	5.058	6.9	20.7
6 10	14 13.49	-8 6.5	2.112	2.914	14.4	19.9	6 10	14 21.87	-2 24.3	4.306	5.061	8.3	20.8
208625	2002 EW ₅₉		5 2.2 171°73	2°6/ 3.9 18			127240	2002 JM ₂₅		5 2.2 340°91	3°0/30.8 18		
4 1	15 5.93	-23 44.0	1.871	2.717	13.6	20.8	4 1	15 3.83	-7 27.6	1.532	2.418	13.8	18.8
4 11	14 58.90	-23 39.2	1.798	2.721	10.1	20.6	4 11	14 57.70	-7 36.6	1.463	2.411	9.9	18.6
4 21	14 49.73	-23 20.1	1.748	2.724	6.3	20.4	4 21	14 49.21	-7 47.5	1.416	2.404	5.7	18.3
5 1	14 39.30	-22 47.3	1.725	2.727	2.9	20.2	5 1	14 39.27	-8 3.1	1.395	2.398	3.0	18.1
5 11	14 28.78	-22 4.2	1.731	2.729	4.1	20.2	5 11	14 29.11	-8 26.0	1.401	2.393	5.9	18.3
5 21	14 19.28	-21 16.3	1.764	2.730	7.9	20.5	5 21	14 19.95	-8 58.2	1.432	2.388	10.3	18.5
5 31	14 11.71	-20 29.5	1.822	2.730	11.6	20.7	5 31	14 12.81	-9 40.5	1.486	2.384	14.3	18.8
6 10	14 6.62	-19 49.5	1.902	2.730	14.8	20.9	6 10	14 8.33	-10 33.0	1.559	2.381	17.8	19.0
286005	2001 SC ₉₄		5 2.2 252°08	0°1/ 2.3 17			147349	2003 BC ₇₃		5 2.2 97°18	3°9/29.4 18		
4 1	14 59.57	-17 31.2	2.462	3.322	10.2	22.2	4 1	15 3.11	-6 37.1	1.840	2.719	12.2	20.2
4 11	14 54.06	-17 4.3	2.369	3.305	7.3	22.0	4 11	14 56.50	-5 45.1	1.799	2.743	8.7	20.1
4 21	14 47.01	-16 29.3	2.301	3.287	4.0	21.8	4 21	14 48.22	-4 53.9	1.782	2.766	5.3	19.9
5 1	14 39.02	-15 48.4	2.262	3.269	0.5	21.4	5 1	14 39.14	-4 8.6	1.793	2.789	4.0	19.9
5 11	14 30.85	-15 5.0	2.252	3.251	3.2	21.6	5 11	14 30.25	-3 34.1	1.832	2.811	6.2	20.0
5 21	14 23.26	-14 22.9	2.271	3.232	6.7	21.8	5 21	14 22.42	-3 13.6	1.897	2.833	9.5	20.3
5 31	14 16.93	-13 46.1	2.316	3.213	9.9	22.0	5 31	14 16.33	-3 8.6	1.986	2.854	12.6	20.5
6 10	14 12.36	-13 17.9	2.383	3.193	12.7	22.2	6 10	14 12.39	-3 18.9	2.095	2.875	15.2	20.7
290961	2005 WK ₁₈₆		5 2.2 177°23	4°5/28.9 18			353823	2012 TC ₃₁₉		5 2.2 276°70	7°0/25.4 16		
4 1	15 5.11	-5 1.9	1.851	2.726	12.3	21.8	4 1	15 0.22	+2 28.2	2.116	2.989	11.1	21.7
4 11	14 58.12	-4 8.5	1.788	2.730	8.9	21.5	4 11	14 54.73	+3 51.5	2.029	2.958	8.8	21.5
4 21	14 49.21	-3 15.9	1.751	2.732	5.7	21.4	4 21	14 47.47	+5 11.0	1.967	2.926	7.2	21.3
5 1	14 39.25	-2 29.9	1.741	2.733	4.6	21.3	5 1	14 39.09	+6 19.4	1.933	2.894	7.3	21.3
5 11	14 29.27	-1 55.6	1.759	2.734	6.9	21.4	5 11	14 30.42	+7 10.7	1.925	2.862	9.2	21.3
5 21	14 20.24	-1 36.7	1.804	2.733	10.4	21.6	5 21	14 22.33	+7 40.6	1.943	2.828	12.0	21.4
5 31	14 12.99	-1 34.8	1.872	2.732	13.7	21.8	5 31	14 15.60	+7 47.3	1.982	2.794	14.8	21.5
6 10	14 8.01	-1 50.0	1.960	2.729	16.5	22.0	6 10	14 10.82	+7 31.5	2.039	2.760	17.3	21.7
300026	2006 UO ₉₇		5 2.2 170°24	0°9/ 1.2 17			479721	2014 DM ₁₃₂		5 2.2 22°82	2°2/ 3.9 17		
4 1	14 58.26	-13 41.0	2.875	3.739	8.8	22.3	4 1	14 59.88	-22 53.8	2.093	2.946	12.1	21.3
4 11	14 52.81	-13 6.9	2.803	3.743	6.2	22.1	4 11	14 54.45	-22 51.8	2.020	2.947	8.9	21.1
4 21	14 46.19	-12 28.5	2.758	3.746	3.3	21.9	4 21	14 47.26	-22 37.8	1.971	2.949	5.5	20.9
5 1	14 38.93	-11 48.4	2.742	3.748	0.9	21.7	5 1	14 39.05	-22 13.1	1.949	2.951	2.5	20.7
5 11	14 31.65	-11 9.6	2.756	3.750	3.2	21.9	5 11	14 30.76	-21 40.6	1.954	2.953	3.6	20.7
5 21	14 24.93	-10 35.1	2.800	3.752	6.1	22.1	5 21	14 23.27	-21 4.3	1.987	2.955	7.0	21.0
5 31	14 19.31	-10 7.6	2.870	3.754	8.7	22.3	5 31	14 17.34	-20 29.1	2.045	2.958	10.3	21.2
6 10	14 15.13	-9 48.9	2.963	3.754	10.9	22.4	6 10	14 13.48	-19 59.3	2.125	2.960	13.2	21.4
34344	2000 QP ₂₂₉		5 2.2 209°71	4°7/26.8 18			436354	2010 JN ₁₁₆		5 2.2 280°99	4°7/28.4 17		
4 1	14 57.59	+0 58.6	2.925	3.792	8.5	19.4	4 1	14 59.21	-3 2.8	2.096	2.976	10.9	20.8
4 11	14 52.33	+1 52.0	2.857	3.786	6.5	19.3	4 11	14 53.87	-2 19.6	2.025	2.966	8.0	20.6
4 21	14 45.93	+2 41.2	2.815	3.779	5.0	19.2	4 21	14 46.92	-1 38.9	1.979	2.957	5.5	20.4
5 1	14 38.90	+3 22.6	2.803	3.772	4.9	19.1	5 1	14 39.02	-1 5.5	1.959	2.947	4.8	20.3
5 11	14 31.82	+3 52.6	2.818	3.764	6.2	19.2	5 11	14 31.01	-0 43.7	1.967	2.937	6.7	20.4
5 21	14 25.26	+4 9.3	2.861	3.756	8.3	19.3	5 21	14 23.71	-0 36.3	2.002	2.928	9.7	20.6
5 31	14 19.71	+4 11.6	2.928	3.747	10.4	19.5	5 31	14 17.81	-0 44.6	2.059	2.918	12.6	20.7
6 10	14 15.53	+3 59.9	3.016	3.738	12.2	19.6	6 10	14 13.81	-1 8.6	2.137	2.908	15.2	20.9
505786	2015 BB ₂₉₅		5 2.2 187°52	5°9/26.5 17			208538	2002 AX ₈		5 2.2 124°12	0°0/ 2.0 18		
4 1	14 59.63	-1 36.6	2.023	2.902	11.2	21.9	4 1	15 5.56	-17 12.3	1.659	2.527	13.9	22.3
4 11	14 54.12	-0 1.9	1.964	2.902	8.4	21.8	4 11	14 58.59	-16 46.7	1.602	2.542	9.9	22.1
4 21	14 47.01	+1 30.3	1.930	2.901	6.3	21.6	4 21	14 49.50	-16 11.2	1.569	2.556	5.4	21.9
5 1	14 39.02	+2 52.6	1.925	2.900	6.2	21.6	5 1	14 39.29	-15 29.0	1.563	2.570	0.6	21.5
5 11	14 31.01	+3 58.8	1.947	2.898	8.2	21.7	5 11	14 29.16	-14 45.1	1.585	2.584	4.2	21.8
5 21	14 23.80	+4 44.8	1.995	2.896	11.0	21.9	5 21	14 20.22	-14 5.0	1.633	2.596	8.6	22.1
5 31	14 18.07	+5 8.9	2.065	2.894	13.7	22.1	5 31	14 13.33	-13 33.5	1.706	2.608	12.6	22.4
6 10	14 14.27	+5 11.6	2.154	2.891	16.1	22.2	6 10	14 8.97	-13 14.1	1.799	2.620	15.8	22.6
126954	2002 FN ₁₀		5 2.2	4°62 3°1/ 3.6 17			416132	2002 QS ₁₀₅		5 2.2 166°81	0°5/ 1.9 17		
4 1	15 2.10	-20 55.9	1.306	2.184	16.3	18.5	4 1	15 3.79	-15 35.1	2.003	2.		

EPHEMERIDES

5 2.2

5 2.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
267349	2001 <i>WK</i> ₄₃		5 2.2 245°24	1°2/ 1.3 17			120848	1998 <i>MM</i> ₃₃		5 2.2 308°94	6°1/29.1 17		
4 1	15 1.47	-14 17.2	1.943	2.816	11.9	21.7	4 1	15 1.79	-5 21.9	1.121	2.023	16.4	19.3
4 11	14 55.70	-13 38.8	1.859	2.803	8.5	21.5	4 11	14 57.05	-4 32.7	1.045	2.000	12.1	18.9
4 21	14 48.02	-12 52.7	1.800	2.789	4.6	21.2	4 21	14 49.24	-3 43.1	0.990	1.977	7.8	18.6
5 1	14 39.16	-12 2.5	1.769	2.775	1.2	20.9	5 1	14 39.34	-3 1.6	0.957	1.954	6.2	18.4
5 11	14 30.12	-11 13.1	1.765	2.761	4.4	21.1	5 11	14 28.87	-2 37.1	0.947	1.932	9.6	18.5
5 21	14 21.83	-10 29.6	1.789	2.746	8.5	21.3	5 21	14 19.46	-2 35.5	0.959	1.910	14.7	18.7
5 31	14 15.15	-9 56.4	1.837	2.730	12.3	21.5	5 31	14 12.54	-2 59.9	0.989	1.889	19.7	18.9
6 10	14 10.64	-9 36.5	1.906	2.714	15.5	21.7	6 10	14 9.00	-3 49.4	1.034	1.869	24.0	19.2
108850	2001 <i>OU</i> ₉₂		5 2.2 253°45	1°1/ 2.9 17			468535	2006 <i>BG</i> ₂₃₃		5 2.2 144°34	2°5/30.4 17		
4 1	15 3.03	-19 26.0	1.749	2.614	13.4	20.0	4 1	15 1.28	-10 1.8	1.951	2.829	11.7	21.6
4 11	14 57.05	-19 19.3	1.668	2.605	9.8	19.7	4 11	14 55.38	-9 26.3	1.888	2.834	8.2	21.4
4 21	14 48.84	-19 1.4	1.610	2.595	5.6	19.5	4 21	14 47.74	-8 48.0	1.850	2.838	4.6	21.2
5 1	14 39.26	-18 33.7	1.579	2.585	1.5	19.1	5 1	14 39.14	-8 11.0	1.840	2.842	2.5	21.1
5 11	14 29.43	-18 0.0	1.575	2.575	4.0	19.3	5 11	14 30.53	-7 39.7	1.857	2.846	5.1	21.2
5 21	14 20.48	-17 25.1	1.597	2.565	8.4	19.5	5 21	14 22.78	-7 17.7	1.901	2.850	8.7	21.5
5 31	14 13.40	-16 54.4	1.644	2.554	12.5	19.8	5 31	14 16.63	-7 7.8	1.969	2.853	12.0	21.7
6 10	14 8.82	-16 32.6	1.711	2.544	16.0	20.0	6 10	14 12.56	-7 11.0	2.058	2.856	14.9	21.9
22118	2000 <i>SL</i> ₈₆		5 2.2 173°55	1°0/ 1.3 18			500935	2013 <i>PX</i> ₅₅		5 2.2 160°92	5°7/ 6.7 17		
4 1	14 59.70	-12 28.9	2.944	3.807	8.6	19.3	4 1	15 5.97	-33 29.2	2.215	3.013	13.4	22.8
4 11	14 53.82	-12 15.0	2.871	3.810	6.1	19.2	4 11	14 58.88	-33 53.5	2.139	3.019	10.8	22.6
4 21	14 46.76	-11 58.0	2.825	3.812	3.3	19.0	4 21	14 49.73	-33 59.6	2.085	3.024	8.2	22.5
5 1	14 39.02	-11 40.0	2.808	3.814	1.0	18.8	5 1	14 39.36	-33 45.8	2.057	3.029	6.1	22.4
5 11	14 31.25	-11 23.3	2.821	3.815	3.1	19.0	5 11	14 28.87	-33 13.6	2.057	3.033	6.0	22.3
5 21	14 24.03	-11 10.2	2.864	3.816	5.9	19.2	5 21	14 19.30	-32 27.1	2.084	3.037	7.8	22.5
5 31	14 17.88	-11 2.6	2.933	3.817	8.5	19.3	5 31	14 11.55	-31 32.3	2.137	3.040	10.4	22.6
6 10	14 13.19	-11 2.1	3.026	3.817	10.8	19.5	6 10	14 6.18	-30 36.2	2.213	3.043	12.9	22.8
498442	2008 <i>AD</i> ₁₁₁		5 2.2 55°93	4°2/29.7 17			478004	2011 <i>SH</i> ₁₄₂		5 2.2 239°78	0°3/ 1.9 16		
4 1	15 2.00	-8 0.7	1.353	2.246	14.8	20.9	4 1	14 58.66	-16 7.9	2.390	3.256	10.3	22.0
4 11	14 56.27	-7 9.0	1.309	2.261	10.5	20.7	4 11	14 53.39	-15 39.5	2.309	3.249	7.3	21.8
4 21	14 48.30	-6 16.4	1.288	2.276	6.2	20.5	4 21	14 46.64	-15 4.1	2.254	3.242	3.9	21.6
5 1	14 39.18	-5 29.7	1.291	2.291	4.2	20.4	5 1	14 39.03	-14 24.3	2.227	3.234	0.5	21.3
5 11	14 30.21	-4 55.2	1.320	2.306	7.2	20.6	5 11	14 31.31	-13 43.7	2.229	3.227	3.3	21.5
5 21	14 22.54	-4 37.3	1.373	2.322	11.3	20.9	5 21	14 24.24	-13 6.0	2.259	3.219	6.8	21.7
5 31	14 17.05	-4 38.0	1.448	2.338	15.1	21.2	5 31	14 18.45	-12 34.9	2.315	3.212	10.0	21.9
6 10	14 14.20	-4 56.7	1.540	2.354	18.3	21.4	6 10	14 14.40	-12 13.1	2.393	3.204	12.7	22.1
239534	2008 <i>SO</i> ₁₂		5 2.2 213°27	1°8/30.9 18			34940	9586 <i>P-L</i>		5 2.2 45°38	3°1/29.6 18		
4 1	15 3.67	-14 7.4	1.614	2.492	13.7	20.9	4 1	14 58.10	-7 54.8	2.066	2.948	10.9	18.5
4 11	14 57.48	-13 11.0	1.540	2.486	9.7	20.7	4 11	14 53.02	-7 12.0	2.009	2.955	7.7	18.3
4 21	14 49.05	-12 5.1	1.490	2.479	5.2	20.4	4 21	14 46.42	-6 28.4	1.977	2.963	4.6	18.1
5 1	14 39.28	-10 54.7	1.466	2.472	1.8	20.1	5 1	14 39.00	-5 48.3	1.972	2.971	3.2	18.1
5 11	14 29.37	-9 46.9	1.470	2.464	5.4	20.3	5 11	14 31.60	-5 16.1	1.995	2.979	5.4	18.2
5 21	14 20.46	-8 48.5	1.500	2.456	10.0	20.6	5 21	14 24.99	-4 54.9	2.044	2.987	8.6	18.4
5 31	14 13.54	-8 4.9	1.554	2.447	14.1	20.8	5 31	14 19.82	-4 46.8	2.118	2.995	11.6	18.6
6 10	14 9.18	-7 39.3	1.627	2.437	17.7	21.0	6 10	14 16.49	-4 52.5	2.212	3.004	14.2	18.8
421282	2013 <i>SR</i> ₈₅		5 2.2 131°41	1°8/ 4.6 18			518816	2010 <i>CZ</i> ₅₃		5 2.2 27°93	4°1/ 5.7 17		
4 1	14 55.31	-24 48.6	4.431	5.256	6.7	20.4	4 1	14 59.44	-29 18.2	1.859	2.695	14.0	20.4
4 11	14 50.53	-24 59.9	4.349	5.258	5.1	20.3	4 11	14 54.35	-29 0.8	1.788	2.700	10.9	20.2
4 21	14 44.92	-25 5.0	4.293	5.260	3.3	20.2	4 21	14 47.27	-28 23.9	1.740	2.704	7.5	20.0
5 1	14 38.83	-25 4.1	4.267	5.262	1.9	20.1	5 1	14 39.09	-27 28.5	1.717	2.709	4.6	19.8
5 11	14 32.69	-24 58.3	4.270	5.263	2.2	20.1	5 11	14 30.89	-26 19.0	1.720	2.714	4.7	19.9
5 21	14 26.87	-24 49.0	4.303	5.265	3.8	20.2	5 21	14 23.68	-25 1.7	1.750	2.720	7.6	20.0
5 31	14 21.77	-24 37.8	4.364	5.267	5.5	20.4	5 31	14 18.29	-23 44.1	1.805	2.726	11.0	20.2
6 10	14 17.66	-24 26.9	4.451	5.268	7.1	20.5	6 10	14 15.21	-22 33.1	1.882	2.732	14.1	20.5
13663	1997 <i>GA</i> ₁₄		5 2.2 249°96	0°9/ 2.8 18			262054	2006 <i>RB</i> ₈		5 2.2 299°42	4°3/ 4.5 17		
4 1	15 3.05	-19 32.9	1.860	2.722	12.9	18.9	4 1	15 3.43	-25 17.5	1.443	2.302	16.1	20.6
4 11	14 57.01	-19 12.1	1.770	2.706	9.4	18.6	4 11	14 57.92	-25 38.7	1.360	2.287	12.4	20.3
4 21	14 48.82	-18 39.2	1.704	2.689	5.4	18.3	4 21	14 49.59	-25 42.6	1.298	2.273	8.2	20.0
5 1	14 39.26	-17 56.4	1.665	2.672	1.2	18.0	5 1	14 39.38	-25 27.9	1.261	2.259	4.7	19.8
5 11	14 29.42	-17 7.6	1.654	2.654	3.9	18.2	5 11	14 28.70	-24 56.6	1.248	2.245	5.5	19.8
5 21	14 20.38	-16 18.3	1.670	2.636	8.3	18.4	5 21	14 19.05	-24 14.4	1.260	2.231	9.7	20.0
5 31	14 13.08	-15 34.3	1.711	2.617	12.3	18.6	5 31	14 11.72	-23 29.0	1.294	2.218	14.2	20.2
6 10	14 8.18	-15 0.4	1.773	2.598	15.8	18.8	6 10	14 7.51	-22 48.6	1.348	2.205	18.2	20.4
38711	2000 <i>QU</i> ₉₇		5 2.2 140°98	0°6/ 1.7 18			213858	2003 <i>SZ</i> ₁₂₀		5 2.2 144°72	2°9/30.4 18		
4 1	15 2.65	-14 45.6	2.228	3.092	11.0	20.3	4 1	15 4.77	-9 9.5	1.744	2.622	12.8	20.7
4 11	14 56.16	-14 24.1	2.164	3.104	7.7	20.1	4 11	14 57.97	-8 38.9	1.685	2.630	9.1	20.4
4 21	14 48.09	-13 56.8	2.127	3.115	4.1	19.9	4 21	14 49.18	-8 6.4	1.651	2.638	5.2	20.2
5 1	14 39.17	-13 26.3	2.118	3.125	0.7	19.6	5 1	14 39.30	-7 36.2	1.643	2.645	2.9	20.1
5 11	14 30.27	-12 56.2	2.138	3.135	3.6	19.9	5 11	14 29.44	-7 12.9	1.664	2.652	5.6	20.3
5 21	14 22.20	-12 29.9	2.186	3.144	7.2	20.1	5 21	14 20.62	-7 0.0	1.710	2.659	9.5	20.5
5 31	14 15.62	-12 10.6	2.261	3.153	10.4	20.3	5 31	14 13.67	-6 59.9	1.781	2.665	13.1	20.7
6 10	14 10.98	-12 0.5	2.357	3.161	13.1	20.5	6 10	14 9.10	-7 13.4	1.872	2.670	16.1	21.0
489402	2006 <i>VP</i> ₁₀		5 2.2 184°68	2°0/30.4 18			510063	2010 <i>HU</i> ₂₁		5 2.2 327°66	3°1/27.2 18		
4 1	15 0.29												

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
341589	2007 <i>UJ</i> ₈₉		5 2.2 205°74	0°4/ 1.8	17		283024	2007 <i>VV</i> ₂₆₇		5 2.2 140°66	3°9/ 5.9	18	
4 1	14 59.87	-15 32.4	2.237	3.104	10.8	21.9	4 1	15 1.17	-29 47.4	2.421	3.238	11.8	20.9
4 11	14 54.31	-15 9.2	2.162	3.102	7.7	21.7	4 11	14 55.22	-29 43.5	2.346	3.245	9.2	20.7
4 21	14 47.16	-14 39.4	2.112	3.100	4.1	21.5	4 21	14 47.65	-29 24.2	2.295	3.252	6.4	20.6
5 1	14 39.10	-14 5.7	2.090	3.098	0.5	21.2	5 1	14 39.17	-28 50.0	2.271	3.259	4.2	20.4
5 11	14 30.97	-13 31.5	2.097	3.095	3.5	21.4	5 11	14 30.65	-28 3.5	2.276	3.265	4.3	20.4
5 21	14 23.54	-13 0.6	2.132	3.092	7.1	21.6	5 21	14 22.93	-27 8.7	2.308	3.271	6.5	20.6
5 31	14 17.51	-12 36.6	2.192	3.089	10.4	21.8	5 31	14 16.71	-26 11.2	2.366	3.276	9.2	20.8
6 10	14 13.35	-12 21.9	2.274	3.086	13.2	22.0	6 10	14 12.43	-25 16.0	2.449	3.282	11.8	20.9
462202	2007 <i>VG</i> ₆₂		5 2.2 152°66	0°1/ 2.1	17		19257	1995 <i>DS</i> ₅		5 2.2 289°20	5°5/ 5.3	18	
4 1	15 5.51	-15 53.7	1.713	2.582	13.5	21.9	4 1	15 3.84	-28 27.4	1.427	2.275	16.8	17.6
4 11	14 58.65	-15 45.9	1.647	2.588	9.6	21.7	4 11	14 58.29	-28 46.7	1.345	2.263	13.2	17.3
4 21	14 49.63	-15 30.3	1.606	2.593	5.2	21.4	4 21	14 49.82	-28 44.9	1.284	2.251	9.2	17.0
5 1	14 39.37	-15 9.1	1.591	2.598	0.5	21.1	5 1	14 39.43	-28 19.8	1.246	2.239	6.0	16.8
5 11	14 29.05	-14 46.2	1.604	2.603	4.2	21.4	5 11	14 28.61	-27 33.8	1.233	2.227	6.3	16.8
5 21	14 19.78	-14 25.7	1.643	2.607	8.6	21.6	5 21	14 18.91	-26 33.2	1.244	2.215	10.0	16.9
5 31	14 12.48	-14 11.9	1.708	2.610	12.6	21.9	5 31	14 11.63	-25 27.4	1.278	2.203	14.2	17.2
6 10	14 7.69	-14 7.8	1.792	2.613	15.9	22.1	6 10	14 7.58	-24 25.9	1.332	2.191	18.2	17.4
285736	2000 <i>TV</i> ₂		5 2.2 196°11	4°0/27.5	18		3702	<i>Trubetskaya</i>		5 2.2 214°12	7°0/25.7	18	
4 1	14 57.16	-3 9.5	2.770	3.644	8.8	21.5	4 1	15 1.25	+ 5 28.4	2.336	3.198	10.6	16.6
4 11	14 52.09	-2 0.9	2.703	3.641	6.4	21.4	4 11	14 55.18	+ 6 32.7	2.271	3.190	8.6	16.5
4 21	14 45.85	-0 53.6	2.664	3.638	4.5	21.2	4 21	14 47.60	+ 7 28.9	2.232	3.181	7.2	16.4
5 1	14 38.96	+ 0 7.9	2.653	3.635	4.2	21.2	5 1	14 39.17	+ 8 11.4	2.221	3.171	7.2	16.4
5 11	14 32.05	+ 0 59.7	2.671	3.631	5.8	21.3	5 11	14 30.67	+ 8 36.2	2.236	3.161	8.7	16.4
5 21	14 25.69	+ 1 38.6	2.717	3.627	8.1	21.4	5 21	14 22.85	+ 8 40.9	2.277	3.151	10.9	16.6
5 31	14 20.39	+ 2 3.0	2.788	3.622	10.4	21.6	5 31	14 16.36	+ 8 25.7	2.340	3.139	13.2	16.7
6 10	14 16.52	+ 2 12.4	2.879	3.617	12.4	21.7	6 10	14 11.65	+ 7 52.0	2.422	3.127	15.3	16.8
416678	2004 <i>XT</i> ₅		5 2.2 195°90	4°1/ 6.2	17		326575	2002 <i>QY</i> ₃₅		5 2.2 220°88	4°4/ 5.0	17	
4 1	15 6.21	-32 20.3	2.134	2.939	13.6	21.2	4 1	15 6.63	-27 51.9	2.039	2.865	13.4	21.6
4 11	14 58.97	-31 29.5	2.043	2.936	10.7	21.0	4 11	14 59.57	-28 15.5	1.950	2.856	10.4	21.4
4 21	14 49.72	-30 15.8	1.977	2.932	7.5	20.8	4 21	14 50.24	-28 24.0	1.884	2.846	7.2	21.2
5 1	14 39.38	-28 40.1	1.938	2.927	4.7	20.6	5 1	14 39.47	-28 15.8	1.845	2.835	4.7	21.0
5 11	14 29.05	-26 47.4	1.929	2.921	4.6	20.6	5 11	14 28.38	-27 52.4	1.834	2.824	5.0	21.0
5 21	14 19.75	-24 45.5	1.949	2.914	7.4	20.7	5 21	14 18.10	-27 17.4	1.851	2.812	7.9	21.1
5 31	14 12.33	-22 43.9	1.998	2.906	10.7	20.9	5 31	14 9.64	-26 36.7	1.893	2.800	11.3	21.3
6 10	14 7.28	-20 50.8	2.071	2.897	13.8	21.1	6 10	14 3.67	-25 56.7	1.957	2.787	14.4	21.5
300205	2006 <i>WH</i> ₁₂₅		5 2.2 70°99	0°3/ 1.9	14 C		368430	2002 <i>UY</i> ₅₅		5 2.2 344°93	5°6/28.9	17	
4 1	14 59.21	-15 57.5	2.167	3.036	11.0	21.6	4 1	15 0.55	-4 52.0	1.340	2.237	14.7	20.7
4 11	14 53.78	-15 32.6	2.108	3.049	7.8	21.4	4 11	14 55.50	-4 0.7	1.281	2.232	10.7	20.5
4 21	14 46.82	-15 1.1	2.074	3.062	4.2	21.2	4 21	14 48.07	-3 11.2	1.243	2.228	7.0	20.2
5 1	14 39.07	-14 25.7	2.068	3.075	0.5	20.9	5 1	14 39.23	-2 30.6	1.230	2.224	5.7	20.1
5 11	14 31.35	-13 50.2	2.090	3.088	3.5	21.2	5 11	14 30.28	-2 5.7	1.241	2.221	8.4	20.3
5 21	14 24.43	-13 18.3	2.140	3.102	7.0	21.4	5 21	14 22.45	-2 0.6	1.275	2.218	12.5	20.5
5 31	14 18.97	-12 53.6	2.215	3.115	10.2	21.6	5 31	14 16.75	-2 17.0	1.330	2.216	16.5	20.7
6 10	14 15.36	-12 38.3	2.312	3.128	12.9	21.9	6 10	14 13.78	-2 53.7	1.402	2.215	19.9	21.0
414067	2007 <i>SB</i> ₂₂		5 2.2 317°71	1°8/ 1.4	17		239750	2010 <i>AZ</i> ₂		5 2.2 124°17	0°7/ 2.8	17	
4 1	15 2.26	-12 6.0	1.157	2.054	16.4	20.0	4 1	15 1.54	-19 35.6	2.142	3.000	11.6	21.5
4 11	14 57.41	-12 2.1	1.079	2.033	11.8	19.6	4 11	14 55.47	-19 10.0	2.078	3.012	8.3	21.4
4 21	14 49.47	-11 52.9	1.021	2.013	6.5	19.3	4 21	14 47.76	-18 34.5	2.040	3.024	4.7	21.2
5 1	14 39.40	-11 42.2	0.986	1.993	1.8	18.9	5 1	14 39.18	-17 51.6	2.029	3.036	1.0	20.9
5 11	14 28.74	-11 34.8	0.975	1.974	6.2	19.1	5 11	14 30.64	-17 5.2	2.047	3.047	3.3	21.1
5 21	14 19.12	-11 35.9	0.986	1.955	12.1	19.4	5 21	14 22.97	-16 19.8	2.093	3.058	6.9	21.3
5 31	14 12.02	-11 49.9	1.018	1.938	17.4	19.6	5 31	14 16.85	-15 39.9	2.165	3.068	10.3	21.6
6 10	14 8.33	-12 19.1	1.066	1.922	22.0	19.8	6 10	14 12.72	-15 8.9	2.259	3.078	13.1	21.8
93996	2000 <i>XO</i> ₁₉		5 2.2 26°63	6°4/ 7.4	18		281020	2006 <i>EH</i> ₆₅		5 2.2 11°46	2°7/30.0	17	
4 1	15 2.15	-34 27.2	1.806	2.618	15.4	18.6	4 1	14 58.08	-11 50.3	1.659	2.547	12.8	20.5
4 11	14 56.51	-34 31.5	1.731	2.619	12.5	18.4	4 11	14 53.37	-10 41.6	1.598	2.548	9.0	20.3
4 21	14 48.56	-34 12.5	1.676	2.620	9.5	18.2	4 21	14 46.75	-9 26.5	1.560	2.550	5.0	20.0
5 1	14 39.27	-33 28.9	1.646	2.621	7.0	18.2	5 1	14 39.08	-8 11.1	1.548	2.551	2.8	19.9
5 11	14 29.87	-32 23.7	1.641	2.622	6.6	18.1	5 11	14 31.39	-7 2.7	1.564	2.553	5.8	20.1
5 21	14 21.57	-31 3.1	1.662	2.623	8.7	18.2	5 21	14 24.65	-6 7.2	1.604	2.556	9.8	20.3
5 31	14 15.33	-29 35.7	1.707	2.625	11.7	18.4	5 31	14 19.66	-5 28.9	1.668	2.558	13.5	20.5
6 10	14 11.73	-28 10.5	1.775	2.626	14.7	18.6	6 10	14 16.89	-5 9.5	1.751	2.561	16.6	20.7
502346	2015 <i>BJ</i> ₁₉₇		5 2.2 225°19	1°1/ 2.9	17		86141	1999 <i>RD</i> ₁₈₄		5 2.2 128°94	6°4/ 7.6	18	
4 1	15 2.69	-19 46.5	1.897	2.758	12.7	22.2	4 1	15 5.59	-37 1.4	2.669	3.437	12.1	19.6
4 11	14 56.64	-19 31.9	1.817	2.752	9.3	22.0	4 11	14 58.49	-37 50.2	2.593	3.445	10.1	19.5
4 21	14 48.57	-19 6.1	1.761	2.745	5.3	21.8	4 21	14 49.51	-38 22.4	2.540	3.453	8.1	19.4
5 1	14 39.27	-18 31.0	1.732	2.738	1.4	21.5	5 1	14 39.39	-38 35.9	2.513	3.460	6.7	19.3
5 11	14 29.80	-17 50.2	1.730	2.730	3.7	21.6	5 11	14 29.07	-38 30.7	2.513	3.467	6.5	19.3
5 21	14 21.18	-17 8.6	1.756	2.722	7.9	21.9	5 21	14 19.50	-38 9.3	2.541	3.474	7.6	19.4
5 31	14 14.29	-16 31.6	1.807	2.714	11.7	22.1	5 31	14 11.49	-37 36.4	2.595	3.481	9.4	19.5
6 10	14 9.72	-16 3.5	1.879	2.706	15.0	22.3	6 10	14 5.61	-36 57.6	2.671	3.487	11.3	19.6
161398	2003 <i>UY</i> ₁₆₂		5 2.2 251°22	1°2/ 1.3	17		496530	2014 <i>WB</i> ₁₃₆		5 2.2 296°53	0°9/ 2.8	17	

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
285819	2001 <i>BB</i> ₄₁	5	2.2 119°89	2°9/30.1	18		319606	2006 <i>SA</i> ₂₂₆	5	2.2 310°20	3°5/4.2	17	
4 1	15 3.72	-10 10.5	1.748	2.626	12.8	21.1	4 1	15 1.54	-24 11.6	1.372	2.240	16.3	20.8
4 11	14 57.12	-9 15.2	1.698	2.643	9.0	20.9	4 11	14 56.64	-24 15.3	1.290	2.224	12.3	20.5
4 21	14 48.68	-8 16.5	1.672	2.659	5.1	20.7	4 21	14 48.94	-24 0.6	1.229	2.208	7.9	20.2
5 1	14 39.29	-7 20.0	1.673	2.675	3.0	20.6	5 1	14 39.39	-23 27.4	1.191	2.193	3.9	19.9
5 11	14 30.03	-6 31.4	1.703	2.690	5.7	20.8	5 11	14 29.41	-22 39.3	1.178	2.178	5.1	20.0
5 21	14 21.86	-5 55.1	1.759	2.705	9.5	21.0	5 21	14 20.48	-21 43.3	1.190	2.164	9.8	20.2
5 31	14 15.53	-5 34.1	1.838	2.718	12.9	21.3	5 31	14 13.87	-20 47.9	1.223	2.150	14.5	20.4
6 10	14 11.49	-5 29.3	1.938	2.732	15.8	21.5	6 10	14 10.38	-20 1.2	1.275	2.137	18.7	20.6
199360	2006 <i>BP</i> ₁₈₆	5	2.2 314°69	0°7/2.6	17		43846	1993 <i>PV</i> ₈	5	2.2 297°36	1°8/30.8	18	
4 1	15 0.49	-18 10.6	1.650	2.524	13.6	20.7	4 1	14 59.33	-12 42.5	1.864	2.744	12.0	18.8
4 11	14 55.36	-18 1.5	1.569	2.511	9.9	20.4	4 11	14 54.19	-12 1.3	1.791	2.738	8.5	18.5
4 21	14 48.01	-17 41.8	1.512	2.499	5.5	20.1	4 21	14 47.22	-11 14.0	1.743	2.732	4.6	18.3
5 1	14 39.25	-17 13.7	1.480	2.487	1.0	19.8	5 1	14 39.18	-10 24.9	1.721	2.727	1.8	18.1
5 11	14 30.22	-16 41.0	1.474	2.475	4.1	20.0	5 11	14 31.03	-9 39.1	1.727	2.721	4.8	18.3
5 21	14 22.07	-16 8.8	1.495	2.464	8.7	20.2	5 21	14 23.70	-9 1.4	1.759	2.715	8.7	18.5
5 31	14 15.79	-15 42.5	1.538	2.453	13.0	20.4	5 31	14 17.97	-8 35.7	1.815	2.710	12.4	18.7
6 10	14 12.02	-15 26.2	1.602	2.442	16.6	20.6	6 10	14 14.37	-8 24.1	1.892	2.704	15.5	18.9
114908	2003 <i>QO</i> ₂₇	5	2.2 217°07	4°3/28.1	18		381185	2007 <i>LQ</i> ₂₈	5	2.2 209°88	0°7/1.6	18	
4 1	14 59.67	-3 43.6	2.375	3.250	10.0	20.5	4 1	14 59.51	-17 14.4	2.037	2.906	11.6	20.7
4 11	14 54.06	-2 44.6	2.302	3.242	7.3	20.3	4 11	14 54.17	-16 8.4	1.961	2.903	8.3	20.5
4 21	14 47.01	-1 46.6	2.256	3.233	5.0	20.1	4 21	14 47.14	-14 51.7	1.911	2.899	4.4	20.2
5 1	14 39.13	-0 54.6	2.238	3.224	4.4	20.1	5 1	14 39.17	-13 28.6	1.889	2.896	0.7	19.9
5 11	14 31.16	-0 12.8	2.249	3.215	6.3	20.2	5 11	14 31.15	-12 5.4	1.895	2.892	4.0	20.2
5 21	14 23.84	+0 15.3	2.286	3.205	9.0	20.3	5 21	14 23.94	-10 48.2	1.929	2.888	7.9	20.4
5 31	14 17.78	+0 28.0	2.348	3.194	11.7	20.5	5 31	14 18.25	-9 42.5	1.989	2.883	11.5	20.6
6 10	14 13.43	+0 24.9	2.430	3.183	14.1	20.6	6 10	14 14.57	-8 52.0	2.071	2.879	14.5	20.8
397412	2006 <i>YQ</i> ₃	5	2.2 82°03	4°4/29.1	17		253885	2004 <i>BC</i> ₅₀	5	2.2 132°73	3°2/4.4	18	
4 1	15 1.65	-1 37.2	2.266	3.138	10.5	20.8	4 1	15 3.65	-25 13.9	1.676	2.527	14.6	20.7
4 11	14 55.40	-1 21.4	2.211	3.147	7.7	20.7	4 11	14 57.51	-25 6.4	1.608	2.532	11.0	20.4
4 21	14 47.68	-1 10.5	2.180	3.156	5.3	20.5	4 21	14 49.10	-24 41.8	1.561	2.536	7.0	20.2
5 1	14 39.20	-1 7.5	2.178	3.165	4.4	20.5	5 1	14 39.39	-24 1.0	1.541	2.541	3.6	20.0
5 11	14 30.74	-1 15.1	2.204	3.174	6.1	20.6	5 11	14 29.60	-23 8.2	1.547	2.545	4.4	20.1
5 21	14 23.05	-1 34.5	2.257	3.183	8.7	20.8	5 21	14 20.93	-22 9.5	1.580	2.549	8.3	20.3
5 31	14 16.77	-2 5.9	2.335	3.192	11.4	21.0	5 31	14 14.31	-21 12.4	1.636	2.553	12.2	20.5
6 10	14 12.30	-2 48.6	2.434	3.201	13.7	21.1	6 10	14 10.31	-20 23.0	1.714	2.557	15.5	20.8
118866	2000 <i>SS</i> ₃₅₄	5	2.2 176°47	2°1/30.5	18		374095	2004 <i>RM</i> ₂₃₇	5	2.2 166°70	1°5/3.5	17	
4 1	15 1.76	-10 23.2	2.287	3.157	10.5	20.4	4 1	15 2.32	-21 44.9	2.395	3.241	11.0	22.1
4 11	14 55.56	-9 49.2	2.218	3.160	7.4	20.2	4 11	14 55.98	-21 29.7	2.321	3.246	8.0	21.9
4 21	14 47.81	-9 12.3	2.174	3.162	4.1	20.0	4 21	14 48.07	-21 4.0	2.271	3.251	4.8	21.7
5 1	14 39.22	-8 36.0	2.160	3.163	2.1	19.8	5 1	14 39.27	-20 29.3	2.250	3.255	1.7	21.5
5 11	14 30.58	-8 4.0	2.174	3.163	4.5	20.0	5 11	14 30.43	-19 48.8	2.259	3.258	3.1	21.6
5 21	14 22.68	-7 39.7	2.217	3.163	7.8	20.2	5 21	14 22.35	-19 6.4	2.296	3.261	6.4	21.9
5 31	14 16.18	-7 25.6	2.285	3.163	10.8	20.4	5 31	14 15.70	-18 26.4	2.360	3.263	9.5	22.1
6 10	14 11.53	-7 23.1	2.374	3.162	13.4	20.6	6 10	14 10.94	-17 52.6	2.447	3.264	12.2	22.2
200323	2000 <i>GH</i> ₂₂	5	2.2 306°50	0°1/2.1	17		496752	2016 <i>SB</i> ₁₄	5	2.2 252°14	3°3/28.8	16	
4 1	15 2.82	-15 54.7	1.217	2.107	16.3	20.1	4 1	14 57.34	-7 3.3	2.445	3.323	9.6	21.4
4 11	14 57.71	-15 48.3	1.140	2.090	11.8	19.8	4 11	14 52.43	-6 3.0	2.368	3.312	6.9	21.2
4 21	14 49.59	-15 31.6	1.083	2.073	6.5	19.5	4 21	14 46.14	-5 1.2	2.317	3.301	4.3	21.0
5 1	14 39.44	-15 7.0	1.049	2.056	0.7	19.0	5 1	14 39.07	-4 2.2	2.295	3.290	3.4	20.9
5 11	14 28.79	-14 39.6	1.039	2.040	5.4	19.3	5 11	14 31.90	-3 10.7	2.302	3.278	5.4	21.0
5 21	14 19.23	-14 15.5	1.053	2.024	11.2	19.5	5 21	14 25.32	-2 30.5	2.335	3.267	8.2	21.2
5 31	14 12.14	-14 1.2	1.088	2.009	16.5	19.8	5 31	14 19.93	-2 3.9	2.394	3.255	11.0	21.3
6 10	14 8.38	-14 1.0	1.140	1.994	20.9	20.0	6 10	14 16.15	-1 52.2	2.473	3.243	13.4	21.5
428758	2008 <i>SP</i> ₉₆	5	2.2 219°35	1°8/3.6	17		210278	2007 <i>TJ</i> ₂₉	5	2.2 114°78	0°3/1.9	17	
4 1	15 2.15	-21 47.9	2.096	2.948	12.1	21.9	4 1	15 0.17	-16 14.3	2.410	3.273	10.3	21.3
4 11	14 56.14	-21 43.5	2.015	2.943	8.9	21.7	4 11	14 54.33	-15 45.5	2.350	3.288	7.3	21.2
4 21	14 48.27	-21 27.9	1.958	2.938	5.3	21.4	4 21	14 47.11	-15 10.2	2.316	3.304	3.9	21.0
5 1	14 39.28	-21 1.9	1.928	2.932	2.1	21.2	5 1	14 39.17	-14 31.1	2.311	3.319	0.4	20.7
5 11	14 30.13	-20 28.6	1.927	2.926	3.5	21.3	5 11	14 31.28	-13 51.8	2.335	3.333	3.2	21.0
5 21	14 21.76	-19 52.2	1.953	2.920	7.2	21.5	5 21	14 24.14	-13 15.9	2.388	3.347	6.5	21.2
5 31	14 14.99	-19 17.3	2.005	2.914	10.7	21.7	5 31	14 18.36	-12 46.5	2.466	3.361	9.5	21.4
6 10	14 10.34	-18 48.5	2.079	2.907	13.7	21.9	6 10	14 14.30	-12 26.2	2.567	3.374	12.0	21.6
89054	2001 <i>TR</i> ₁₂₂	5	2.2 209°31	3°3/4.4	18		124837	2001 <i>TF</i> ₅	5	2.2 179°49	0°2/2.1	16	
4 1	15 5.92	-25 27.9	1.772	2.615	14.3	20.7	4 1	15 6.50	-16 0.1	1.664	2.533	13.8	21.0
4 11	14 59.18	-25 22.9	1.689	2.609	10.9	20.5	4 11	14 59.49	-15 47.8	1.594	2.535	9.9	20.8
4 21	14 50.06	-25 0.9	1.630	2.603	7.0	20.3	4 21	14 50.18	-15 27.0	1.548	2.536	5.4	20.5
5 1	14 39.49	-24 22.3	1.596	2.596	3.6	20.0	5 1	14 39.52	-15 0.0	1.529	2.536	0.6	20.2
5 11	14 28.69	-23 30.3	1.591	2.588	4.5	20.1	5 11	14 28.73	-14 31.1	1.537	2.536	4.3	20.4
5 21	14 18.89	-22 31.0	1.612	2.579	8.4	20.3	5 21	14 19.01	-14 5.1	1.572	2.535	9.0	20.7
5 31	14 11.10	-21 31.7	1.658	2.570	12.3	20.5	5 31	14 11.33	-13 46.4	1.632	2.534	13.1	20.9
6 10	14 5.99	-20 39.1	1.726	2.560	15.8	20.7	6 10	14 6.27	-13 38.6	1.712	2.531	16.5	21.2
472483	2015 <i>BK</i> ₅₁₂	5	2.2 74°48	1°3/1.2	17		109975	2001 <i>SM</i> ₅₃	5	2.2 254°69	0°4/2.5	18	
4 1	15 0.89												

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
52004	2001 YH ₂		5 2.2 226°24	3°2/29.6	18		338653	2003 SW ₃₃₀		5 2.2 262°95	0°7/ 2.7	17	
4 1	15 0.08	- 6 15.4	2.355	3.229	10.1	18.8	4 1	15 3.97	-17 17.3	2.036	2.897	12.0	20.8
4 11	14 54.38	- 5 45.9	2.281	3.223	7.2	18.6	4 11	14 57.57	-17 29.1	1.947	2.883	8.7	20.5
4 21	14 47.21	- 5 16.7	2.234	3.217	4.4	18.4	4 21	14 49.15	-17 33.9	1.883	2.868	4.9	20.3
5 1	14 39.19	- 4 51.5	2.214	3.211	3.2	18.3	5 1	14 39.44	-17 32.6	1.847	2.854	1.0	20.0
5 11	14 31.08	- 4 33.6	2.224	3.204	5.2	18.4	5 11	14 29.42	-17 27.3	1.839	2.838	3.6	20.1
5 21	14 23.61	- 4 25.5	2.260	3.197	8.2	18.6	5 21	14 20.10	-17 20.8	1.859	2.823	7.7	20.3
5 31	14 17.43	- 4 29.0	2.322	3.190	11.0	18.7	5 31	14 12.37	-17 16.7	1.904	2.808	11.4	20.5
6 10	14 13.00	- 4 44.5	2.405	3.183	13.5	18.9	6 10	14 6.86	-17 18.4	1.971	2.792	14.6	20.7
319849	2006 WK ₂₂		5 2.2 202°57	2°6/ 5.2	18		199711	2006 HR ₅₉		5 2.2 343°55	1°9/30.9	18	
4 1	14 59.26	-27 48.3	2.932	3.752	9.9	21.3	4 1	15 0.36	-11 48.0	1.739	2.621	12.6	20.0
4 11	14 53.68	-27 23.2	2.843	3.748	7.6	21.2	4 11	14 55.02	-11 22.3	1.671	2.619	8.9	19.8
4 21	14 46.78	-26 45.4	2.779	3.743	5.0	21.0	4 21	14 47.72	-10 52.1	1.627	2.616	4.9	19.6
5 1	14 39.14	-25 55.9	2.743	3.737	2.9	20.9	5 1	14 39.27	-10 21.2	1.609	2.614	1.9	19.3
5 11	14 31.45	-24 57.4	2.737	3.731	3.2	20.9	5 11	14 30.72	- 9 54.2	1.617	2.612	4.9	19.5
5 21	14 24.36	-23 53.7	2.761	3.725	5.5	21.0	5 21	14 23.07	- 9 35.1	1.652	2.610	9.0	19.8
5 31	14 18.44	-22 49.4	2.812	3.718	8.0	21.2	5 31	14 17.14	- 9 27.2	1.711	2.609	12.8	20.0
6 10	14 14.11	-21 48.8	2.887	3.711	10.4	21.3	6 10	14 13.50	- 9 32.3	1.789	2.608	16.0	20.2
43363	2000 VG ₃₅		5 2.2 79°88	4°8/29.9	18		105708	2000 SB ₇₁		5 2.2 207°82	0°5/ 1.7	18	
4 1	15 6.10	- 4 50.1	1.427	2.313	14.7	18.2	4 1	14 58.95	-14 58.0	2.797	3.659	9.1	20.7
4 11	14 59.12	- 4 25.6	1.382	2.328	10.6	18.0	4 11	14 53.45	-14 34.3	2.716	3.654	6.4	20.5
4 21	14 49.88	- 4 4.6	1.360	2.344	6.6	17.8	4 21	14 46.67	-14 5.5	2.661	3.648	3.4	20.3
5 1	14 39.48	- 3 52.1	1.364	2.360	4.8	17.7	5 1	14 39.16	-13 33.8	2.635	3.642	0.6	20.0
5 11	14 29.22	- 3 52.4	1.393	2.376	7.3	17.9	5 11	14 31.56	-13 1.9	2.639	3.635	3.0	20.2
5 21	14 20.30	- 4 7.6	1.448	2.392	11.3	18.2	5 21	14 24.51	-12 32.9	2.671	3.629	6.1	20.4
5 31	14 13.60	- 4 38.1	1.524	2.407	14.9	18.5	5 31	14 18.57	-12 9.5	2.731	3.621	8.9	20.6
6 10	14 9.61	- 5 22.9	1.619	2.422	18.0	18.7	6 10	14 14.14	-11 53.9	2.814	3.613	11.3	20.7
504145	2006 SU ₁₄₆		5 2.2 136°73	2°4/ 4.1	17		2092	Sumiana		5 2.2 299°25	0°9/ 1.6	18	
4 1	15 1.66	-23 27.7	2.379	3.221	11.2	21.9	4 1	15 0.40	-14 14.8	1.943	2.818	11.9	16.3
4 11	14 55.59	-23 36.0	2.305	3.226	8.3	21.7	4 11	14 54.91	-13 53.3	1.871	2.815	8.4	16.1
4 21	14 47.90	-23 33.7	2.257	3.231	5.2	21.5	4 21	14 47.61	-13 25.6	1.823	2.812	4.5	15.8
5 1	14 39.27	-23 21.2	2.236	3.236	2.6	21.4	5 1	14 39.27	-12 54.8	1.803	2.810	0.9	15.6
5 11	14 30.57	-23 0.6	2.243	3.240	3.4	21.4	5 11	14 30.81	-12 24.8	1.810	2.807	4.1	15.8
5 21	14 22.59	-22 35.3	2.279	3.245	6.4	21.6	5 21	14 23.17	-11 59.5	1.844	2.805	8.0	16.0
5 31	14 16.05	-22 9.1	2.341	3.249	9.4	21.8	5 31	14 17.12	-11 42.7	1.903	2.802	11.6	16.2
6 10	14 11.42	-21 46.1	2.426	3.253	12.0	22.0	6 10	14 13.16	-11 36.6	1.982	2.800	14.7	16.4
37293	2001 AF ₄₃		5 2.2 325°19	3°3/ 4.4	18		372562	2009 UN ₂₀		5 2.2 205°13	7°2/ 5.6	17	
4 1	15 1.61	-24 42.1	2.106	2.950	12.3	18.2	4 1	15 11.48	-31 59.5	1.861	2.668	15.2	20.6
4 11	14 55.89	-25 10.5	2.022	2.941	9.4	18.0	4 11	15 3.47	-33 22.6	1.782	2.667	12.4	20.4
4 21	14 48.22	-25 27.3	1.962	2.933	6.2	17.8	4 21	14 52.62	-34 29.1	1.726	2.665	9.5	20.2
5 1	14 39.32	-25 31.8	1.929	2.925	3.6	17.6	5 1	14 39.85	-35 13.8	1.695	2.664	7.5	20.1
5 11	14 30.17	-25 25.4	1.923	2.918	4.2	17.6	5 11	14 26.55	-35 34.9	1.692	2.662	7.6	20.1
5 21	14 21.74	-25 10.9	1.944	2.910	7.3	17.8	5 21	14 14.17	-35 34.6	1.715	2.660	9.7	20.2
5 31	14 14.89	-24 52.7	1.991	2.903	10.5	18.0	5 31	14 4.03	-35 18.9	1.763	2.659	12.6	20.4
6 10	14 10.22	-24 35.5	2.059	2.897	13.5	18.2	6 10	13 56.93	-34 55.7	1.832	2.657	15.4	20.6
501320	2013 WA ₁₀₆		5 2.2 131°61	4°5/28.7	17		33289	1998 KP ₅		5 2.2 150°92	5°2/26.3	18	
4 1	15 1.62	- 3 0.0	2.125	3.000	11.0	20.8	4 1	14 57.47	+ 2 16.3	2.806	3.673	8.9	18.9
4 11	14 55.46	- 2 19.2	2.071	3.010	8.0	20.6	4 11	14 52.28	+ 3 19.4	2.754	3.681	6.9	18.7
4 21	14 47.77	- 1 41.7	2.042	3.019	5.4	20.5	4 21	14 45.97	+ 4 17.0	2.729	3.688	5.5	18.7
5 1	14 39.26	- 1 11.9	2.041	3.028	4.6	20.5	5 1	14 39.08	+ 5 4.9	2.732	3.694	5.4	18.7
5 11	14 30.80	- 0 53.6	2.067	3.037	6.5	20.6	5 11	14 32.22	+ 5 39.8	2.763	3.700	6.8	18.8
5 21	14 23.16	- 0 49.1	2.121	3.045	9.3	20.8	5 21	14 25.93	+ 5 59.5	2.821	3.706	8.7	18.9
5 31	14 17.01	- 0 59.3	2.198	3.053	12.1	21.0	5 31	14 20.71	+ 6 3.6	2.902	3.711	10.7	19.0
6 10	14 12.75	- 1 23.5	2.296	3.061	14.5	21.1	6 10	14 16.91	+ 5 52.7	3.003	3.716	12.4	19.2
176596	2002 CV ₂₄₅		5 2.2 86°39	4°8/27.7	18		43542	2001 EC ₂₇		5 2.2 253°60	2°5/30.1	18	
4 1	14 57.92	- 1 53.0	2.296	3.174	10.1	20.1	4 1	14 59.99	-10 18.1	2.184	3.059	10.7	19.6
4 11	14 52.75	- 0 52.2	2.248	3.187	7.5	19.9	4 11	14 54.52	- 9 28.1	2.098	3.042	7.6	19.4
4 21	14 46.26	+ 0 4.9	2.226	3.200	5.4	19.8	4 21	14 47.39	- 8 33.8	2.038	3.025	4.3	19.1
5 1	14 39.10	+ 0 53.4	2.232	3.212	5.0	19.8	5 1	14 39.25	- 7 39.3	2.005	3.007	2.5	19.0
5 11	14 31.99	+ 1 29.2	2.265	3.224	6.7	19.9	5 11	14 30.93	- 6 49.4	2.002	2.989	5.0	19.1
5 21	14 25.62	+ 1 49.8	2.324	3.237	9.1	20.1	5 21	14 23.25	- 6 8.7	2.025	2.970	8.5	19.3
5 31	14 20.54	+ 1 54.3	2.407	3.249	11.6	20.3	5 31	14 16.95	- 5 40.5	2.074	2.951	11.8	19.5
6 10	14 17.13	+ 1 43.1	2.509	3.261	13.7	20.5	6 10	14 12.53	- 5 26.8	2.143	2.932	14.7	19.6
75596	2000 AA ₂₃		5 2.2 77°99	0°1/ 2.3	18		140589	2001 TY ₂₃₀		5 2.2 254°73	2°8/30.2	18	
4 1	15 3.90	-17 17.2	1.512	2.387	14.6	19.4	4 1	15 0.73	- 7 46.1	2.209	3.084	10.6	19.5
4 11	14 57.60	-16 56.8	1.460	2.403	10.4	19.2	4 11	14 54.97	- 7 24.8	2.133	3.076	7.6	19.3
4 21	14 49.09	-16 26.1	1.431	2.419	5.7	19.0	4 21	14 47.60	- 7 3.2	2.082	3.068	4.4	19.1
5 1	14 39.41	-15 48.4	1.428	2.435	0.7	18.6	5 1	14 39.27	- 6 44.3	2.060	3.060	2.8	19.0
5 11	14 29.83	-15 8.9	1.451	2.451	4.3	18.9	5 11	14 30.83	- 6 31.5	2.066	3.052	5.0	19.1
5 21	14 21.50	-14 33.2	1.501	2.467	8.9	19.2	5 21	14 23.06	- 6 27.5	2.099	3.043	8.2	19.3
5 31	14 15.30	-14 6.2	1.573	2.483	13.0	19.5	5 31	14 16.67	- 6 34.1	2.157	3.035	11.4	19.5
6 10	14 11.73	-13 51.2	1.666	2.499	16.4	19.8	6 10	14 12.15	- 6 52.2	2.236	3.026	14.1	19.7
214882	2007 RC ₂₁₈		5 2.2 166°88	1°6/ 1.0	16		189761	2002 AR ₁₅₅		5 2.2 125°95	10°8/21.5	17	
4 1	15 2.56	-14 16.5	1.694	2.571	1								

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
268397	2005 <i>UJ</i> ₁₆₉		5 2.2 127°54	0°8/ 2.9 17			103783	2000 <i>DZ</i> ₇		5 2.2 307°14	2°4/30.8 18		
4 1	15 2.38	-19 56.6	2.000	2.859	12.3	21.3	4 1	15 0.27	-12 15.8	1.421	2.312	14.4	19.3
4 11	14 56.19	-19 28.7	1.937	2.871	8.8	21.1	4 11	14 55.49	-11 34.7	1.341	2.293	10.3	19.0
4 21	14 48.23	-18 49.7	1.898	2.882	5.0	20.9	4 21	14 48.24	-10 45.8	1.283	2.274	5.7	18.7
5 1	14 39.34	-18 2.5	1.887	2.893	1.1	20.7	5 1	14 39.38	-9 54.2	1.250	2.255	2.4	18.4
5 11	14 30.47	-17 11.3	1.904	2.904	3.5	20.8	5 11	14 30.17	-9 6.7	1.242	2.236	6.0	18.6
5 21	14 22.55	-16 21.2	1.948	2.914	7.3	21.1	5 21	14 21.89	-8 29.7	1.258	2.218	11.0	18.8
5 31	14 16.29	-15 37.2	2.019	2.923	10.8	21.3	5 31	14 15.65	-8 8.5	1.296	2.201	15.6	19.0
6 10	14 12.17	-15 3.0	2.111	2.933	13.8	21.5	6 10	14 12.16	-8 5.9	1.352	2.184	19.5	19.2
293949	2007 <i>TG</i> ₂₇		5 2.2 272°82	1°4/ 3.2 17			94712	2001 <i>XU</i> ₅₉		5 2.2 90°42	3°6/ 4.7 18		
4 1	15 1.72	-19 48.4	2.023	2.882	12.1	20.7	4 1	15 4.05	-26 22.0	1.413	2.269	16.6	18.8
4 11	14 55.91	-19 51.1	1.943	2.877	8.8	20.4	4 11	14 58.06	-26 3.1	1.352	2.278	12.5	18.6
4 21	14 48.20	-19 44.3	1.888	2.871	5.2	20.2	4 21	14 49.50	-25 22.7	1.312	2.287	8.0	18.4
5 1	14 39.35	-19 29.0	1.859	2.865	1.6	19.9	5 1	14 39.50	-24 22.5	1.297	2.297	4.1	18.1
5 11	14 30.31	-19 7.8	1.859	2.859	3.5	20.1	5 11	14 29.53	-23 8.3	1.307	2.306	4.9	18.2
5 21	14 22.05	-18 44.6	1.886	2.853	7.4	20.3	5 21	14 20.93	-21 48.9	1.343	2.315	9.1	18.5
5 31	14 15.39	-18 23.6	1.938	2.847	11.0	20.5	5 31	14 14.72	-20 33.4	1.402	2.324	13.4	18.7
6 10	14 10.89	-18 8.6	2.012	2.842	14.1	20.7	6 10	14 11.46	-19 29.5	1.481	2.333	17.1	19.0
396879	2004 <i>TP</i> ₁₄₆		5 2.2 233°87	0°0/ 2.2 16			366300	2013 <i>CN</i> ₁₉		5 2.2 346°79	2°1/30.5 18		
4 1	15 3.02	-18 31.5	1.620	2.491	14.0	21.1	4 1	14 58.56	-10 23.3	2.139	3.018	10.8	20.5
4 11	14 57.16	-17 41.6	1.540	2.482	10.1	20.9	4 11	14 53.45	-9 54.7	2.070	3.016	7.6	20.3
4 21	14 49.00	-16 37.5	1.484	2.471	5.5	20.6	4 21	14 46.77	-9 23.4	2.026	3.014	4.2	20.1
5 1	14 39.45	-15 23.1	1.453	2.461	0.6	20.2	5 1	14 39.20	-8 52.8	2.009	3.013	2.1	20.0
5 11	14 29.69	-14 5.2	1.450	2.450	4.5	20.4	5 11	14 31.57	-8 26.7	2.021	3.011	4.5	20.1
5 21	14 20.92	-12 51.3	1.474	2.438	9.3	20.7	5 21	14 24.65	-8 8.5	2.059	3.010	7.9	20.3
5 31	14 14.13	-11 48.8	1.521	2.426	13.7	20.9	5 31	14 19.12	-8 0.5	2.121	3.009	11.1	20.5
6 10	14 9.94	-11 2.4	1.589	2.413	17.4	21.1	6 10	14 15.45	-8 4.2	2.205	3.008	13.9	20.7
36540	2000 <i>QB</i> ₉₃		5 2.2 192°67	0°9/ 1.3 18			236733	2007 <i>HY</i> ₇₆		5 2.2 322°42	4°5/29.9 16		
4 1	14 58.69	-13 37.9	2.854	3.718	8.8	19.8	4 1	15 0.41	-8 50.6	1.088	1.993	16.5	20.2
4 11	14 53.23	-13 10.0	2.777	3.716	6.2	19.7	4 11	14 56.06	-8 4.3	1.020	1.977	11.9	19.8
4 21	14 46.54	-12 37.9	2.726	3.714	3.3	19.5	4 21	14 48.72	-7 13.6	0.972	1.962	7.0	19.5
5 1	14 39.16	-12 3.9	2.705	3.711	0.9	19.3	5 1	14 39.45	-6 26.0	0.946	1.948	4.5	19.3
5 11	14 31.73	-11 30.9	2.713	3.708	3.2	19.4	5 11	14 29.79	-5 50.1	0.943	1.934	8.2	19.5
5 21	14 24.85	-11 1.8	2.751	3.704	6.1	19.6	5 21	14 21.32	-5 32.7	0.962	1.922	13.5	19.7
5 31	14 19.04	-10 39.2	2.815	3.700	8.8	19.8	5 31	14 15.37	-5 38.0	0.999	1.910	18.6	20.0
6 10	14 14.71	-10 25.0	2.902	3.696	11.1	19.9	6 10	14 12.75	-6 6.4	1.052	1.899	22.9	20.2
238664	2005 <i>EL</i> ₁₄₃		5 2.2 181°29	0°3/ 2.5 17			477625	2010 <i>LR</i> ₅₈		5 2.2 294°98	3°0/ 5.0 16		
4 1	15 0.74	-17 39.9	2.079	2.944	11.6	20.9	4 1	14 58.51	-27 7.2	2.209	3.046	12.1	20.9
4 11	14 55.08	-17 23.4	2.006	2.944	8.3	20.7	4 11	14 53.60	-26 43.3	2.116	3.031	9.2	20.7
4 21	14 47.68	-16 58.5	1.958	2.944	4.6	20.5	4 21	14 46.95	-26 3.4	2.046	3.016	6.1	20.4
5 1	14 39.30	-16 27.4	1.937	2.944	0.7	20.2	5 1	14 39.24	-25 8.4	2.003	3.000	3.4	20.2
5 11	14 30.83	-15 53.6	1.945	2.944	3.4	20.4	5 11	14 31.36	-24 1.9	1.988	2.985	3.8	20.2
5 21	14 23.14	-15 21.3	1.979	2.944	7.3	20.7	5 21	14 24.18	-22 49.1	2.001	2.970	6.9	20.4
5 31	14 16.99	-14 54.5	2.040	2.944	10.7	20.9	5 31	14 18.49	-21 36.2	2.040	2.955	10.2	20.6
6 10	14 12.87	-14 36.4	2.122	2.943	13.7	21.1	6 10	14 14.80	-20 29.2	2.101	2.940	13.2	20.7
332116	2005 <i>UW</i> ₄₅₄		5 2.2 207°12	2°8/30.5 17			209311	2004 <i>AB</i> ₂		5 2.2 210°34	2°0/18.2 18		
4 1	15 4.92	-7 32.3	2.031	2.902	11.6	20.7	4 1	15 10.84	+27 2.3	1.232	2.042	21.3	20.4
4 11	14 58.04	-7 22.3	1.957	2.898	8.3	20.4	4 11	15 3.08	+28 56.4	1.203	2.039	20.3	20.4
4 21	14 49.31	-7 12.6	1.909	2.894	4.8	20.2	4 21	14 52.27	+30 10.8	1.190	2.035	20.1	20.3
5 1	14 39.48	-7 6.0	1.888	2.889	2.8	20.1	5 1	14 39.83	+30 33.2	1.194	2.031	20.8	20.3
5 11	14 29.52	-7 5.7	1.896	2.884	5.2	20.2	5 11	14 27.52	+29 59.2	1.214	2.025	22.1	20.4
5 21	14 20.35	-7 13.9	1.932	2.878	8.8	20.4	5 21	14 16.96	+28 32.1	1.250	2.020	23.9	20.5
5 31	14 12.79	-7 32.3	1.993	2.872	12.1	20.6	5 31	14 9.29	+26 20.7	1.298	2.013	25.7	20.7
6 10	14 7.37	-8 1.3	2.075	2.865	15.0	20.8	6 10	14 5.04	+23 36.5	1.358	2.007	27.4	20.8
402860	2007 <i>RP</i> ₉₄		5 2.2 199°51	2°5/30.4 16			499891	2011 <i>FY</i> ₁₂₆		5 2.2 77°43	14°3/16.1 17		
4 1	15 3.31	-11 13.2	1.818	2.694	12.5	22.0	4 1	14 59.75	+22 16.5	1.778	2.600	15.2	21.1
4 11	14 57.05	-10 21.0	1.746	2.691	8.8	22.0	4 11	14 54.44	+24 39.6	1.765	2.610	14.4	21.0
4 21	14 48.81	-9 23.3	1.699	2.687	4.9	21.7	4 21	14 47.32	+26 34.9	1.773	2.621	14.4	21.0
5 1	14 39.43	-8 25.2	1.680	2.683	2.5	21.5	5 1	14 39.27	+27 54.1	1.803	2.631	15.1	21.1
5 11	14 29.95	-7 32.5	1.688	2.678	5.4	21.7	5 11	14 31.35	+28 33.5	1.851	2.641	16.4	21.2
5 21	14 21.37	-6 50.2	1.724	2.672	9.4	21.9	5 21	14 24.46	+28 34.1	1.917	2.652	17.8	21.4
5 31	14 14.55	-6 22.3	1.783	2.666	13.1	22.2	5 31	14 19.36	+27 59.9	1.998	2.662	19.1	21.5
6 10	14 10.01	-6 10.6	1.863	2.659	16.3	22.4	6 10	14 16.45	+26 57.1	2.090	2.672	20.3	21.6
507033	2008 <i>UC</i> ₁₃₇		5 2.2 275°82	0°3/ 2.0 17			243631	1999 <i>RP</i> ₂₀₃		5 2.2 253°20	0°3/ 1.9 18		
4 1	15 1.65	-15 52.4	1.916	2.786	12.2	21.5	4 1	14 57.86	-17 37.0	2.699	3.559	9.4	20.9
4 11	14 56.00	-15 35.4	1.826	2.768	8.8	21.2	4 11	14 52.79	-16 40.6	2.605	3.542	6.7	20.7
4 21	14 48.34	-15 10.4	1.761	2.749	4.8	20.9	4 21	14 46.38	-15 35.1	2.537	3.524	3.6	20.5
5 1	14 39.38	-14 39.9	1.722	2.729	0.5	20.6	5 1	14 39.19	-14 23.8	2.499	3.506	0.4	20.2
5 11	14 30.14	-14 7.6	1.711	2.710	4.0	20.8	5 11	14 31.88	-13 10.8	2.491	3.488	3.1	20.4
5 21	14 21.60	-13 37.8	1.728	2.691	8.3	21.0	5 21	14 25.12	-12 0.7	2.512	3.469	6.4	20.6
5 31	14 14.68	-13 15.1	1.768	2.671	12.2	21.2	5 31	14 19.48	-10 57.9	2.560	3.450	9.4	20.8
6 10	14 10.00	-13 2.8	1.830	2.651	15.6	21.4	6 10	14 15.40	-10 5.6	2.631	3.431	11.9	20.9
497508	2006 <i>BB</i> ₅₁		5 2.2 116°79	0°9/ 2.9 17			161888	2007 <i>CP</i> ₆₂		5 2.2 102°46	10°1/ 7.9 18		

EPHEMERIDES

5 2.2

5 2.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
66317	1999 JL ₅₀		5 2.2 72°21	3°4/30.1	18		234007	1997 ES ₃₁		5 2.2 154°18	3°0/ 3.9	16	
4 1	15 2.23	-10 34.9	1.362	2.253	14.8	18.7	4 1	15 7.41	-22 53.5	1.461	2.320	15.9	21.1
4 11	14 56.62	-9 36.0	1.308	2.260	10.5	18.4	4 11	15 0.54	-23 7.2	1.394	2.324	11.9	20.9
4 21	14 48.67	-8 32.1	1.278	2.267	5.9	18.2	4 21	14 50.95	-23 5.3	1.349	2.328	7.4	20.6
5 1	14 39.44	-7 30.0	1.272	2.275	3.4	18.0	5 1	14 39.74	-22 47.9	1.329	2.331	3.4	20.4
5 11	14 30.25	-6 37.3	1.292	2.282	6.7	18.3	5 11	14 28.35	-22 18.1	1.335	2.334	4.8	20.5
5 21	14 22.31	-5 59.8	1.336	2.289	11.2	18.5	5 21	14 18.23	-21 41.7	1.367	2.337	9.3	20.7
5 31	14 16.55	-5 41.3	1.402	2.297	15.3	18.8	5 31	14 10.51	-21 5.9	1.422	2.339	13.6	21.0
6 10	14 13.49	-5 42.5	1.486	2.304	18.7	19.0	6 10	14 5.85	-20 37.1	1.497	2.341	17.3	21.2
129911	1999 TH ₉₉		5 2.2 276°99	6°6/25.9	18		372535	2009 TU ₁		5 2.2 145°25	1°9/ 3.6	17	
4 1	14 59.55	+ 0 1.8	1.969	2.849	11.5	20.0	4 1	15 5.53	-21 39.8	2.317	3.159	11.4	21.7
4 11	14 54.40	+ 1 32.1	1.887	2.823	8.9	19.7	4 11	14 58.33	-21 48.9	2.248	3.170	8.4	21.5
4 21	14 47.43	+ 3 0.4	1.831	2.798	6.9	19.6	4 21	14 49.42	-21 48.1	2.204	3.181	5.1	21.4
5 1	14 39.32	+ 4 19.2	1.801	2.772	6.9	19.5	5 1	14 39.56	-21 37.9	2.189	3.192	2.1	21.2
5 11	14 30.96	+ 5 21.4	1.798	2.745	9.1	19.6	5 11	14 29.65	-21 20.7	2.203	3.201	3.3	21.3
5 21	14 23.26	+ 6 2.2	1.820	2.718	12.0	19.7	5 21	14 20.57	-20 59.5	2.247	3.210	6.6	21.5
5 31	14 17.00	+ 6 19.3	1.864	2.691	15.0	19.8	5 31	14 13.04	-20 38.3	2.317	3.219	9.7	21.7
6 10	14 12.78	+ 6 13.2	1.925	2.663	17.7	20.0	6 10	14 7.56	-20 20.9	2.410	3.227	12.4	21.9
29888	1999 GJ ₃₆		5 2.2 112°07	0°2/ 2.4	18		406346	2007 RG ₁₁₁		5 2.2 215°88	0°2/ 2.6	18	
4 1	14 58.76	-18 40.7	2.172	3.036	11.2	18.6	4 1	14 55.51	-17 38.6	3.939	4.790	6.9	22.6
4 11	14 53.58	-17 59.8	2.102	3.040	8.0	18.4	4 11	14 50.79	-17 22.7	3.851	4.782	4.9	22.4
4 21	14 46.84	-17 9.1	2.057	3.043	4.4	18.2	4 21	14 45.19	-17 2.1	3.790	4.774	2.7	22.3
5 1	14 39.24	-16 11.8	2.040	3.047	0.6	17.9	5 1	14 39.08	-16 38.1	3.759	4.766	0.4	22.1
5 11	14 31.62	-15 12.5	2.051	3.050	3.3	18.1	5 11	14 32.91	-16 12.5	3.758	4.757	2.0	22.2
5 21	14 24.77	-14 16.0	2.090	3.054	7.0	18.3	5 21	14 27.11	-15 47.4	3.787	4.748	4.3	22.4
5 31	14 19.37	-13 26.9	2.154	3.057	10.3	18.6	5 31	14 22.05	-15 24.7	3.844	4.739	6.4	22.5
6 10	14 15.84	-12 48.6	2.241	3.060	13.1	18.7	6 10	14 18.05	-15 6.3	3.926	4.729	8.3	22.6
19254	1994 VD ₇		5 2.2 289°89	2°0/ 4.4	18		160551	1998 QA ₄₅		5 2.2 215°56	5°2/ 6.9	18	
4 1	14 58.06	-25 50.1	2.260	3.102	11.7	17.5	4 1	15 3.81	-33 45.5	2.540	3.332	12.0	20.5
4 11	14 53.17	-24 54.9	2.170	3.091	8.8	17.3	4 11	14 57.31	-34 1.1	2.448	3.324	9.8	20.3
4 21	14 46.66	-23 43.0	2.104	3.079	5.5	17.1	4 21	14 48.98	-34 0.3	2.379	3.316	7.4	20.1
5 1	14 39.22	-22 17.1	2.065	3.067	2.4	16.9	5 1	14 39.52	-33 41.8	2.337	3.307	5.6	20.0
5 11	14 31.71	-20 42.1	2.056	3.056	3.3	16.9	5 11	14 29.85	-33 6.7	2.322	3.297	5.4	20.0
5 21	14 24.92	-19 4.3	2.075	3.044	6.7	17.1	5 21	14 20.89	-32 18.4	2.335	3.287	7.1	20.0
5 31	14 19.56	-17 30.6	2.122	3.033	10.1	17.3	5 31	14 13.45	-31 22.2	2.375	3.277	9.5	20.2
6 10	14 16.10	-16 6.9	2.191	3.021	13.0	17.5	6 10	14 8.07	-30 24.3	2.438	3.266	12.0	20.3
502657	2015 CO ₄₈		5 2.2 110°53	1°4/ 3.2	17		22798	1999 NU ₁₈		5 2.2 298°91	4°9/28.4	18	
4 1	15 2.94	-20 10.9	1.916	2.775	12.7	21.6	4 1	14 59.40	- 1 54.1	2.133	3.011	10.8	18.3
4 11	14 56.75	-20 9.1	1.850	2.783	9.2	21.4	4 11	14 54.06	- 1 15.8	2.064	3.003	8.0	18.1
4 21	14 48.65	-19 56.7	1.807	2.790	5.4	21.2	4 21	14 47.14	- 0 41.3	2.020	2.996	5.6	18.0
5 1	14 39.45	-19 35.2	1.792	2.797	1.7	20.9	5 1	14 39.31	- 0 15.0	2.004	2.989	5.0	17.9
5 11	14 30.20	-19 7.9	1.804	2.804	3.6	21.1	5 11	14 31.38	- 0 1.0	2.015	2.982	6.8	18.0
5 21	14 21.88	-18 38.8	1.844	2.811	7.5	21.3	5 21	14 24.16	- 0 1.4	2.052	2.975	9.6	18.2
5 31	14 15.31	-18 12.7	1.908	2.818	11.1	21.5	5 31	14 18.33	- 0 17.4	2.112	2.968	12.5	18.3
6 10	14 10.99	-17 53.5	1.994	2.824	14.2	21.8	6 10	14 14.35	- 0 48.4	2.192	2.961	14.9	18.5
374371	2005 UH ₃₃₁		5 2.2 220°63	0°8/ 1.6	17		63001	2000 WW ₂₁		5 2.2 246°98	4°3/29.2	18	
4 1	15 2.36	-14 53.8	2.063	2.931	11.6	22.2	4 1	15 3.08	- 4 1.6	2.052	2.927	11.3	19.6
4 11	14 56.29	-14 23.8	1.982	2.922	8.2	22.0	4 11	14 56.80	- 3 30.9	1.973	2.913	8.3	19.4
4 21	14 48.41	-13 46.6	1.926	2.914	4.4	21.7	4 21	14 48.70	- 3 2.2	1.918	2.898	5.4	19.2
5 1	14 39.43	-13 5.2	1.897	2.904	0.8	21.4	5 1	14 39.49	- 2 39.9	1.891	2.883	4.3	19.1
5 11	14 30.30	-12 23.8	1.898	2.894	4.0	21.7	5 11	14 30.08	- 2 27.9	1.892	2.868	6.4	19.2
5 21	14 21.92	-11 46.8	1.926	2.884	7.9	21.9	5 21	14 21.38	- 2 29.0	1.920	2.852	9.7	19.3
5 31	14 15.09	-11 18.3	1.979	2.873	11.5	22.1	5 31	14 14.19	- 2 44.6	1.972	2.835	12.9	19.5
6 10	14 10.34	-11 1.1	2.054	2.862	14.6	22.3	6 10	14 9.06	- 3 14.7	2.044	2.819	15.7	19.7
17337	3198 T ₋₂		5 2.2 105°39	0°3/ 2.5	18		156232	2001 UC ₁₂₈		5 2.2 130°54	5°9/27.4	18	
4 1	15 0.76	-17 28.0	2.390	3.249	10.5	18.9	4 1	15 2.80	+ 2 6.1	2.255	3.121	10.8	19.5
4 11	14 54.84	-17 17.5	2.327	3.262	7.5	18.7	4 11	14 56.19	+ 2 58.2	2.210	3.137	8.3	19.4
4 21	14 47.47	-17 0.1	2.290	3.276	4.1	18.5	4 21	14 48.15	+ 3 43.3	2.191	3.153	6.3	19.3
5 1	14 39.32	-16 37.7	2.281	3.288	0.6	18.3	5 1	14 39.41	+ 4 16.4	2.201	3.169	6.1	19.3
5 11	14 31.19	-16 13.1	2.302	3.301	3.0	18.5	5 11	14 30.78	+ 4 34.1	2.237	3.183	7.6	19.4
5 21	14 23.80	-15 49.5	2.350	3.314	6.4	18.7	5 21	14 22.98	+ 4 34.9	2.300	3.197	9.9	19.6
5 31	14 17.78	-15 30.0	2.425	3.326	9.4	19.0	5 31	14 16.64	+ 4 18.7	2.387	3.210	12.3	19.8
6 10	14 13.54	-15 17.4	2.523	3.338	12.0	19.2	6 10	14 12.12	+ 3 47.1	2.494	3.223	14.3	19.9
100836	1998 HF ₁₄		5 2.2 293°00	2°9/29.9	18		136712	1995 UE ₁₁		5 2.2 168°08	1°2/ 1.0	17	
4 1	14 58.67	- 8 27.1	2.143	3.022	10.7	19.4	4 1	14 58.22	-13 47.3	2.447	3.317	9.9	20.1
4 11	14 53.61	- 7 50.5	2.064	3.009	7.6	19.2	4 11	14 53.05	-13 0.6	2.376	3.319	7.0	19.9
4 21	14 46.93	- 7 12.1	2.010	2.996	4.5	19.0	4 21	14 46.52	-12 8.4	2.332	3.321	3.7	19.7
5 1	14 39.28	- 6 35.7	1.983	2.983	2.9	18.9	5 1	14 39.24	-11 14.1	2.316	3.322	1.2	19.5
5 11	14 31.48	- 6 5.6	1.984	2.970	5.2	19.0	5 11	14 31.93	-10 21.9	2.330	3.324	3.7	19.7
5 21	14 24.33	- 5 45.3	2.012	2.957	8.5	19.2	5 21	14 25.29	- 9 35.8	2.371	3.325	6.9	19.9
5 31	14 18.55	- 5 37.3	2.064	2.944	11.7	19.3	5 31	14 19.89	- 8 59.0	2.439	3.326	9.9	20.1
6 10	14 14.63	- 5 42.7	2.137	2.931	14.5	19.5	6 10	14 16.14	- 8 33.8	2.528	3.326	12.4	20.3
415961	2001 XK ₁₃₇		5 2.2 129°88	6°1/ 8.1	17		91203	1998 UE ₁₈		5 2.2 84°73	5°2/ 5.4	18	
4 1	15 2.96	-36 24.5	1.870	2.668	15.5	20.4							

EPHEMERIDES

5 2.2

5 2.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
249224	2008 <i>EB</i> ₁₃₆		5 2.2 180°30	4.3/27.4	18		173167	1997 <i>CS</i> ₁₇		5 2.3 229°62	4.5/28.9	17	
4 1	14 56.91	- 2 28.5	2.710	3.584	8.9	20.7	4 1	15 2.34	- 6 1.8	1.809	2.690	12.3	20.5
4 11	14 52.00	- 1 20.9	2.648	3.585	6.6	20.6	4 11	14 56.44	- 5 0.9	1.736	2.680	8.9	20.2
4 21	14 45.91	- 0 15.4	2.612	3.585	4.7	20.5	4 21	14 48.58	- 3 58.9	1.688	2.671	5.7	20.0
5 1	14 39.19	+ 0 43.5	2.606	3.585	4.4	20.4	5 1	14 39.55	- 3 1.9	1.667	2.660	4.6	19.9
5 11	14 32.46	+ 1 32.0	2.627	3.585	6.0	20.5	5 11	14 30.37	- 2 16.0	1.673	2.650	7.0	20.1
5 21	14 26.28	+ 2 7.0	2.676	3.585	8.3	20.7	5 21	14 22.03	- 1 45.7	1.705	2.638	10.6	20.2
5 31	14 21.19	+ 2 27.2	2.750	3.584	10.5	20.8	5 31	14 15.38	- 1 33.7	1.760	2.627	14.1	20.4
6 10	14 17.54	+ 2 32.3	2.844	3.583	12.5	21.0	6 10	14 10.98	- 1 40.4	1.835	2.615	17.1	20.6
209923	2005 <i>UX</i> ₅₀₄		5 2.3 309°89	6.6/28.2	17		12408	Fujioka		5 2.3 245°73	3.3/30.2	18	
4 1	15 1.25	- 3 43.0	1.285	2.182	15.1	19.6	4 1	15 4.11	- 8 13.1	1.745	2.624	12.8	19.1
4 11	14 56.22	- 2 32.7	1.222	2.172	11.2	19.3	4 11	14 57.83	- 7 42.4	1.666	2.611	9.2	18.8
4 21	14 48.64	- 1 24.2	1.181	2.162	7.7	19.1	4 21	14 49.41	- 7 10.1	1.612	2.599	5.4	18.6
5 1	14 39.52	- 0 26.1	1.163	2.153	6.8	19.0	5 1	14 39.66	- 6 40.3	1.585	2.586	3.3	18.4
5 11	14 30.20	+ 0 13.0	1.170	2.144	9.6	19.1	5 11	14 29.66	- 6 18.1	1.585	2.572	6.0	18.5
5 21	14 22.01	+ 0 28.0	1.199	2.136	13.8	19.3	5 21	14 20.51	- 6 7.3	1.611	2.558	10.1	18.7
5 31	14 16.02	+ 0 17.0	1.248	2.127	17.8	19.5	5 31	14 13.15	- 6 10.5	1.661	2.544	13.9	18.9
6 10	14 12.89	- 0 18.3	1.313	2.119	21.3	19.8	6 10	14 8.20	- 6 28.7	1.730	2.529	17.2	19.1
179423	2002 <i>AM</i> ₄₆		5 2.3 153°50	0.7/1.6	18		85730	1998 <i>SQ</i> ₇₇		5 2.3 249°28	0.0/2.1	18	
4 1	14 58.71	-14 43.0	2.679	3.544	9.3	21.3	4 1	15 6.24	-16 37.6	1.615	2.485	14.1	19.9
4 11	14 53.30	-14 10.9	2.610	3.550	6.6	21.1	4 11	14 59.70	-16 22.9	1.527	2.467	10.2	19.6
4 21	14 46.63	-13 33.7	2.567	3.555	3.5	20.9	4 21	14 50.60	-15 58.2	1.462	2.449	5.7	19.3
5 1	14 39.28	-12 53.9	2.553	3.560	0.7	20.7	5 1	14 39.81	-15 25.6	1.423	2.430	0.6	18.9
5 11	14 31.91	-12 14.9	2.569	3.565	3.2	20.9	5 11	14 28.60	-14 49.4	1.411	2.410	4.5	19.2
5 21	14 25.17	-11 39.8	2.614	3.570	6.2	21.1	5 21	14 18.25	-14 15.1	1.426	2.390	9.6	19.4
5 31	14 19.58	-11 11.5	2.684	3.574	9.0	21.3	5 31	14 9.93	-13 48.4	1.464	2.369	14.1	19.6
6 10	14 15.55	-10 52.2	2.778	3.578	11.4	21.5	6 10	14 4.39	-13 33.5	1.523	2.347	18.0	19.8
41996	2000 <i>YE</i> ₄₃		5 2.3 235°34	3.5/29.7	18		416428	2003 <i>UK</i> ₂₄₉		5 2.3 224°03	1.1/3.1	16	
4 1	15 3.28	- 8 29.6	1.822	2.700	12.3	19.6	4 1	15 3.91	-20 41.6	1.886	2.743	13.0	21.8
4 11	14 57.15	- 7 36.8	1.742	2.687	8.9	19.4	4 11	14 57.65	-20 15.0	1.801	2.734	9.5	21.6
4 21	14 48.97	- 6 40.7	1.688	2.673	5.3	19.1	4 21	14 49.29	-19 35.2	1.740	2.723	5.5	21.3
5 1	14 39.56	- 5 46.6	1.660	2.659	3.6	19.0	5 1	14 39.65	-18 44.5	1.706	2.712	1.5	21.0
5 11	14 29.93	- 5 0.2	1.660	2.644	6.2	19.1	5 11	14 29.80	-17 47.1	1.700	2.700	3.8	21.2
5 21	14 21.11	- 4 26.4	1.687	2.628	10.1	19.3	5 21	14 20.79	-16 48.9	1.722	2.688	8.0	21.4
5 31	14 13.99	- 4 8.8	1.737	2.612	13.8	19.5	5 31	14 13.56	-15 55.9	1.769	2.675	12.0	21.6
6 10	14 9.17	- 4 8.5	1.807	2.595	17.0	19.7	6 10	14 8.70	-15 13.3	1.837	2.661	15.4	21.8
505981	2015 <i>GE</i> ₂₄		5 2.3 249°44	5.7/27.3	18		305382	2008 <i>CP</i> ₃₆		5 2.3 52°01	5.7/7.2	17	
4 1	14 59.49	- 0 12.4	2.135	3.011	10.9	21.3	4 1	15 1.64	-33 48.3	2.246	3.048	13.1	20.5
4 11	14 54.14	+ 0 45.4	2.068	3.003	8.2	21.1	4 11	14 55.90	-34 7.2	2.170	3.051	10.6	20.4
4 21	14 47.20	+ 1 38.9	2.026	2.995	6.1	21.0	4 21	14 48.27	-34 8.2	2.116	3.055	8.1	20.2
5 1	14 39.37	+ 2 22.6	2.011	2.987	5.8	21.0	5 1	14 39.52	-33 50.1	2.088	3.059	6.1	20.1
5 11	14 31.44	+ 2 51.8	2.023	2.979	7.6	21.0	5 11	14 30.67	-33 14.6	2.086	3.063	5.8	20.1
5 21	14 24.22	+ 3 3.9	2.060	2.970	10.3	21.2	5 21	14 22.65	-32 25.6	2.111	3.067	7.5	20.2
5 31	14 18.38	+ 2 57.7	2.121	2.961	13.0	21.4	5 31	14 16.30	-31 29.1	2.162	3.071	10.0	20.4
6 10	14 14.39	+ 2 34.0	2.201	2.952	15.4	21.5	6 10	14 12.13	-30 31.5	2.235	3.075	12.5	20.5
126410	2002 <i>BU</i> ₁₈		5 2.3 213°09	6.4/25.1	18		439087	2011 <i>QZ</i> ₁₀		5 2.3 210°85	3.4/28.8	17	
4 1	15 0.83	+ 5 25.1	2.683	3.540	9.6	20.3	4 1	14 58.13	- 6 8.6	2.517	3.392	9.5	22.0
4 11	14 54.82	+ 6 39.4	2.615	3.530	7.7	20.2	4 11	14 52.99	- 5 11.9	2.446	3.388	6.8	21.8
4 21	14 47.50	+ 7 47.0	2.574	3.519	6.5	20.1	4 21	14 46.53	- 4 14.7	2.401	3.383	4.3	21.6
5 1	14 39.41	+ 8 42.8	2.561	3.507	6.7	20.1	5 1	14 39.33	- 3 21.4	2.385	3.378	3.5	21.6
5 11	14 31.24	+ 9 22.5	2.577	3.494	8.1	20.1	5 11	14 32.08	- 2 36.1	2.398	3.372	5.4	21.7
5 21	14 23.64	+ 9 43.9	2.618	3.480	10.1	20.2	5 21	14 25.42	- 2 2.0	2.438	3.367	8.1	21.8
5 31	14 17.19	+ 9 46.4	2.682	3.466	12.1	20.4	5 31	14 19.93	- 1 41.4	2.503	3.361	10.7	22.0
6 10	14 12.30	+ 9 31.0	2.766	3.450	13.9	20.5	6 10	14 16.03	- 1 34.9	2.590	3.354	13.0	22.2
506168	2016 <i>FC</i> ₃₀		5 2.3 326°92	1.2/1.6	17		264652	2001 <i>XR</i> ₅₅		5 2.3 163°76	2.1/30.6	17	
4 1	15 0.90	-13 49.0	1.297	2.190	15.3	20.6	4 1	15 1.24	-11 56.1	1.961	2.837	11.7	20.8
4 11	14 56.16	-13 35.8	1.223	2.175	11.0	20.3	4 11	14 55.47	-11 6.6	1.896	2.840	8.3	20.6
4 21	14 48.73	-13 15.0	1.170	2.161	6.0	20.0	4 21	14 47.97	-10 11.9	1.855	2.843	4.5	20.4
5 1	14 39.57	-12 50.1	1.141	2.148	1.3	19.6	5 1	14 39.50	- 9 16.5	1.842	2.846	2.1	20.2
5 11	14 30.04	-12 26.4	1.137	2.136	5.4	19.9	5 11	14 31.02	- 8 25.8	1.857	2.848	4.8	20.4
5 21	14 21.56	-12 9.4	1.156	2.124	10.8	20.1	5 21	14 23.39	- 7 44.2	1.899	2.850	8.5	20.7
5 31	14 15.33	-12 3.8	1.196	2.113	15.6	20.4	5 31	14 17.34	- 7 15.4	1.966	2.852	12.0	20.9
6 10	14 12.09	-12 12.9	1.254	2.104	19.7	20.6	6 10	14 13.36	- 7 1.1	2.054	2.853	14.9	21.1
479866	2014 <i>GY</i> ₃₈		5 2.3 323°03	5.0/27.4	18		25720	Mallidi		5 2.3 63°07	4.1/29.5	18	
4 1	14 56.79	- 2 56.4	2.129	3.012	10.6	21.1	4 1	15 1.19	- 8 37.7	1.450	2.341	14.1	18.7
4 11	14 52.22	- 1 43.8	2.064	3.007	7.8	20.9	4 11	14 55.78	- 7 30.4	1.399	2.350	10.0	18.4
4 21	14 46.16	- 0 32.9	2.026	3.002	5.6	20.8	4 21	14 48.24	- 6 20.6	1.371	2.358	5.9	18.2
5 1	14 39.26	+ 0 30.3	2.014	2.997	5.2	20.7	5 1	14 39.53	- 5 15.3	1.368	2.367	4.2	18.1
5 11	14 32.30	+ 1 20.7	2.029	2.992	7.1	20.8	5 11	14 30.89	- 4 21.9	1.391	2.376	7.1	18.3
5 21	14 26.04	+ 1 54.4	2.070	2.987	9.9	21.0	5 21	14 23.40	- 3 45.7	1.438	2.385	11.1	18.6
5 31	14 21.10	+ 2 9.8	2.135	2.983	12.6	21.2	5 31	14 17.94	- 3 29.6	1.508	2.394	14.9	18.8
6 10	14 17.92	+ 2 6.8	2.218	2.978	15.0	21.3	6 10	14 14.98	- 3 33.7	1.596	2.403	18.1	19.1
64162	2001 <i>TJ</i> ₄₈		5 2.3 293°86	1.0/1.5	18		259383	2003 <i>JH</i> ₈		5 2.3 52°71	3.8/30.6	18	

EPHEMERIDES

5 2.3

5 2.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
47320	1999 XA ₁₅		5 2.3 289°03	11°0/27.1	18	R	225800	2001 VR ₄₁		5 2.3 104°22	0°1/ 2.4	18	
4 1	15 8.62	+11 13.8	1.529	2.385	15.5	17.6	4 1	14 56.70	-16 59.6	3.414	4.270	7.8	20.9
4 11	15 1.17	+11 44.8	1.467	2.375	13.1	17.4	4 11	14 51.69	-16 44.2	3.352	4.286	5.5	20.7
4 21	14 51.26	+11 56.0	1.428	2.365	11.3	17.2	4 21	14 45.73	-16 24.0	3.316	4.301	3.0	20.6
5 1	14 39.89	+11 40.0	1.411	2.355	11.1	17.2	5 1	14 39.27	-16 0.7	3.310	4.317	0.4	20.4
5 11	14 28.41	+10 52.9	1.420	2.345	12.7	17.3	5 11	14 32.82	-15 36.4	3.333	4.332	2.3	20.6
5 21	14 18.07	+ 9 35.7	1.451	2.336	15.4	17.4	5 21	14 26.87	-15 13.2	3.386	4.347	4.7	20.7
5 31	14 9.91	+ 7 52.6	1.503	2.326	18.2	17.6	5 31	14 21.83	-14 53.2	3.467	4.362	7.0	20.9
6 10	14 4.55	+ 5 49.8	1.574	2.317	20.9	17.7	6 10	14 18.00	-14 38.4	3.571	4.377	9.0	21.1
278433	2007 RT ₂₇₅		5 2.3 274°69	10°6/21.4	16		214832	2006 VC ₉₃		5 2.3 13°51	4°6/29.1	17	
4 1	15 2.50	+16 15.4	2.198	3.029	12.4	20.3	4 1	15 0.63	- 2 22.2	2.029	2.907	11.3	20.0
4 11	14 56.41	+17 30.2	2.128	3.002	11.1	20.1	4 11	14 54.97	- 1 57.7	1.968	2.909	8.3	19.8
4 21	14 48.55	+18 29.3	2.080	2.974	10.6	20.0	4 21	14 47.69	- 1 37.6	1.932	2.910	5.6	19.6
5 1	14 39.59	+19 5.7	2.057	2.945	11.1	20.0	5 1	14 39.49	- 1 25.8	1.923	2.912	4.7	19.5
5 11	14 30.42	+19 14.5	2.057	2.916	12.5	20.0	5 11	14 31.27	- 1 25.6	1.942	2.914	6.6	19.7
5 21	14 21.91	+18 54.4	2.080	2.887	14.3	20.1	5 21	14 23.83	- 1 38.8	1.986	2.916	9.5	19.8
5 31	14 14.84	+18 6.4	2.122	2.857	16.3	20.2	5 31	14 17.88	- 2 6.1	2.054	2.919	12.4	20.0
6 10	14 9.75	+16 54.3	2.180	2.827	18.1	20.3	6 10	14 13.89	- 2 46.5	2.143	2.922	14.9	20.2
338703	2003 UQ ₃₈		5 2.3 204°08	2°2/ 4.5	18		461524	2003 SS ₂₆₄		5 2.3 176°49	0°4/ 2.0	16	
4 1	15 0.90	-25 28.1	2.521	3.355	10.9	21.5	4 1	15 5.24	-15 34.4	1.968	2.832	12.2	22.2
4 11	14 55.07	-24 58.2	2.434	3.350	8.2	21.3	4 11	14 58.38	-15 15.7	1.896	2.834	8.7	21.9
4 21	14 47.72	-24 15.0	2.373	3.345	5.2	21.1	4 21	14 49.60	-14 49.6	1.849	2.836	4.7	21.7
5 1	14 39.49	-23 19.9	2.339	3.339	2.5	20.9	5 1	14 39.72	-14 18.8	1.830	2.838	0.6	21.4
5 11	14 31.18	-22 16.4	2.335	3.332	3.2	21.0	5 11	14 29.76	-13 47.0	1.840	2.838	3.9	21.6
5 21	14 23.56	-21 9.0	2.359	3.326	6.2	21.2	5 21	14 20.68	-13 18.4	1.878	2.838	8.0	21.9
5 31	14 17.29	-20 3.0	2.411	3.318	9.2	21.3	5 31	14 13.32	-12 57.0	1.941	2.837	11.6	22.1
6 10	14 12.83	-19 3.1	2.487	3.310	11.9	21.5	6 10	14 8.21	-12 45.7	2.026	2.836	14.7	22.3
368788	2005 XM ₃		5 2.3 162°04	1°5/30.9	17		426541	2013 RX ₈₁		5 2.3 298°74	0°5/ 2.6	17	
4 1	15 2.34	-12 10.5	2.390	3.256	10.3	22.2	4 1	15 1.94	-18 2.0	1.501	2.378	14.6	21.5
4 11	14 55.98	-11 37.5	2.323	3.263	7.2	22.0	4 11	14 56.78	-17 48.7	1.414	2.358	10.6	21.2
4 21	14 48.16	-11 0.6	2.282	3.270	3.9	21.8	4 21	14 49.08	-17 23.6	1.350	2.338	6.0	20.9
5 1	14 39.53	-10 22.8	2.270	3.275	1.5	21.7	5 1	14 39.68	-16 48.7	1.310	2.317	1.0	20.5
5 11	14 30.90	- 9 47.8	2.288	3.280	3.9	21.8	5 11	14 29.86	-16 8.6	1.296	2.297	4.5	20.7
5 21	14 23.01	- 9 18.8	2.334	3.285	7.2	22.1	5 21	14 20.90	-15 29.2	1.308	2.277	9.6	20.9
5 31	14 16.47	- 8 58.7	2.407	3.289	10.2	22.2	5 31	14 13.99	-14 56.9	1.342	2.258	14.3	21.1
6 10	14 11.73	- 8 49.2	2.501	3.292	12.8	22.4	6 10	14 9.88	-14 36.7	1.395	2.239	18.4	21.3
177349	2003 YH ₁₃₈		5 2.3 29°84	8°4/28.0	18		111304	2001 XC ₆₀		5 2.3 143°73	1°5/30.8	18	
4 1	15 1.72	+ 1 0.4	1.178	2.075	16.2	19.6	4 1	14 59.08	-11 32.7	2.692	3.560	9.2	20.2
4 11	14 56.39	+ 1 55.3	1.141	2.086	12.3	19.4	4 11	14 53.55	-10 59.5	2.628	3.569	6.4	20.1
4 21	14 48.62	+ 2 38.8	1.124	2.098	9.2	19.3	4 21	14 46.80	-10 23.3	2.590	3.577	3.5	19.9
5 1	14 39.58	+ 3 2.9	1.130	2.111	8.6	19.3	5 1	14 39.39	- 9 47.0	2.581	3.585	1.5	19.7
5 11	14 30.70	+ 3 1.9	1.160	2.125	10.8	19.4	5 11	14 31.99	- 9 13.8	2.602	3.593	3.6	19.9
5 21	14 23.24	+ 2 34.8	1.210	2.140	14.3	19.7	5 21	14 25.21	- 8 46.5	2.651	3.600	6.5	20.1
5 31	14 18.12	+ 1 43.5	1.281	2.155	17.7	19.9	5 31	14 19.58	- 8 27.5	2.727	3.607	9.2	20.3
6 10	14 15.81	+ 0 32.5	1.367	2.171	20.7	20.2	6 10	14 15.48	- 8 18.1	2.825	3.614	11.5	20.4
256734	2008 AA ₁₃₇		5 2.3 209°36	1°6/ 1.0	17		105805	2000 SL ₁₃₅		5 2.3 143°93	3°8/ 6.0	18	
4 1	15 2.40	-13 55.5	1.829	2.703	12.5	21.1	4 1	15 1.59	-30 9.0	2.725	3.535	10.8	19.6
4 11	14 56.48	-13 3.8	1.755	2.699	8.8	20.9	4 11	14 55.51	-30 16.5	2.649	3.543	8.5	19.4
4 21	14 48.61	-12 4.1	1.705	2.694	4.8	20.6	4 21	14 47.94	-30 10.6	2.598	3.550	6.1	19.3
5 1	14 39.60	-11 0.8	1.682	2.688	1.6	20.4	5 1	14 39.53	-29 51.0	2.574	3.557	4.2	19.2
5 11	14 30.47	-10 0.0	1.688	2.682	4.8	20.6	5 11	14 31.06	-29 19.7	2.579	3.564	4.2	19.2
5 21	14 22.22	- 9 7.2	1.720	2.675	9.0	20.8	5 21	14 23.29	-28 39.8	2.611	3.571	6.0	19.3
5 31	14 15.70	- 8 27.2	1.777	2.668	12.7	21.0	5 31	14 16.85	-27 55.8	2.671	3.577	8.4	19.5
6 10	14 11.43	- 8 2.8	1.854	2.661	16.0	21.2	6 10	14 12.19	-27 12.2	2.755	3.583	10.7	19.6
509746	2008 TX ₇₀		5 2.3 290°80	3°8/29.1	17		308513	2005 UB ₃₃		5 2.3 238°91	0°2/ 2.1	18	
4 1	14 59.33	- 9 41.7	1.772	2.657	12.3	21.5	4 1	15 0.88	-14 55.4	2.552	3.414	9.8	21.2
4 11	14 54.52	- 8 18.8	1.680	2.629	8.8	21.2	4 11	14 55.04	-14 53.8	2.469	3.407	7.0	21.0
4 21	14 47.66	- 6 48.1	1.614	2.601	5.3	20.9	4 21	14 47.72	-14 47.5	2.412	3.399	3.8	20.8
5 1	14 39.50	- 5 16.3	1.574	2.573	3.9	20.8	5 1	14 39.51	-14 38.1	2.383	3.391	0.4	20.5
5 11	14 31.03	- 3 51.3	1.562	2.544	6.8	20.9	5 11	14 31.17	-14 27.9	2.384	3.383	3.1	20.7
5 21	14 23.24	- 2 40.5	1.576	2.516	10.8	21.1	5 21	14 23.40	-14 19.3	2.414	3.374	6.4	20.9
5 31	14 17.07	- 1 49.1	1.612	2.487	14.7	21.2	5 31	14 16.85	-14 14.8	2.470	3.366	9.4	21.1
6 10	14 13.15	- 1 19.8	1.667	2.458	18.1	21.4	6 10	14 12.00	-14 16.6	2.549	3.357	12.1	21.3
428700	2008 QM ₁₉		5 2.3 236°50	2°4/30.7	18		506430	2000 SW ₂₉₁		5 2.3 263°93	0°0/ 2.4	17	
4 1	15 3.65	- 8 57.9	2.090	2.961	11.3	21.0	4 1	15 2.19	-17 45.4	2.051	2.914	11.8	21.8
4 11	14 57.23	- 8 42.9	2.009	2.951	8.1	20.7	4 11	14 56.40	-17 15.7	1.953	2.890	8.6	21.5
4 21	14 49.00	- 8 26.7	1.953	2.940	4.6	20.5	4 21	14 48.65	-16 35.8	1.880	2.866	4.8	21.3
5 1	14 39.65	- 8 12.2	1.925	2.928	2.4	20.3	5 1	14 39.64	-15 48.0	1.834	2.842	0.6	20.9
5 11	14 30.11	- 8 2.6	1.926	2.916	4.9	20.5	5 11	14 30.31	-14 56.5	1.817	2.816	3.7	21.1
5 21	14 21.28	- 8 0.8	1.955	2.904	8.5	20.7	5 21	14 21.63	-14 6.3	1.828	2.791	7.9	21.3
5 31	14 13.96	- 8 8.9	2.009	2.891	11.9	20.8	5 31	14 14.48	-13 22.6	1.864	2.764	11.8	21.5
6 10	14 8.70	- 8 28.0	2.084	2.878	14.8	21.0	6 10	14 9.47	-12 49.6	1.921	2.737	15.1	21.6
370079	2001 SP ₉₆		5 2.3 213°53	4°2/ 5.3	17		188030	2001 UD ₁₁₇		5 2.3 224°91	1°2/ 1.4	18	
4 1	15 5.88	-28 33.3	2.218										

EPHEMERIDES

5 2.3

5 2.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
44736	1999 <i>TF</i> ₃₀		5 2.3 126°73	1°0/ 2.9 18			219075	1998 <i>BR</i> ₃₄		5 2.3 111°54	1°1/ 3.1 17		
4 1	15 4.92	-19 45.0	1.783	2.644	13.4	19.1	4 1	15 3.32	-19 53.7	1.873	2.733	12.9	20.8
4 11	14 58.24	-19 25.1	1.722	2.657	9.7	18.9	4 11	14 57.06	-19 39.4	1.811	2.745	9.3	20.6
4 21	14 49.53	-18 53.5	1.685	2.670	5.5	18.7	4 21	14 48.90	-19 14.1	1.773	2.757	5.3	20.4
5 1	14 39.73	-18 12.9	1.675	2.682	1.3	18.4	5 1	14 39.69	-18 39.9	1.762	2.768	1.4	20.1
5 11	14 29.97	-17 27.5	1.693	2.693	3.8	18.6	5 11	14 30.49	-18 0.9	1.778	2.779	3.6	20.3
5 21	14 21.28	-16 42.9	1.738	2.704	8.0	18.9	5 21	14 22.28	-17 21.9	1.822	2.789	7.6	20.6
5 31	14 14.51	-16 4.2	1.808	2.715	11.7	19.2	5 31	14 15.85	-16 47.6	1.891	2.800	11.2	20.8
6 10	14 10.15	-15 35.6	1.899	2.725	14.9	19.4	6 10	14 11.70	-16 22.1	1.982	2.810	14.3	21.0
80829	2000 <i>DX</i> ₂		5 2.3 267°74	5°0/ 4.9 17			266315	2007 <i>CQ</i> ₅₀		5 2.3 90°46	6°5/ 27.1 18		
4 1	15 6.86	-27 26.5	1.515	2.359	16.3	19.6	4 1	15 0.56	-1 14.4	1.717	2.601	12.6	20.2
4 11	15 0.63	-27 45.6	1.420	2.337	12.7	19.4	4 11	14 55.05	+ 0 10.9	1.672	2.613	9.5	20.0
4 21	14 51.37	-27 45.5	1.346	2.314	8.8	19.1	4 21	14 47.76	+ 1 31.0	1.652	2.624	7.0	19.9
5 1	14 40.00	-27 23.7	1.296	2.291	5.4	18.8	5 1	14 39.56	+ 2 38.6	1.658	2.635	6.7	19.9
5 11	14 27.95	-26 41.6	1.272	2.267	6.0	18.8	5 11	14 31.44	+ 3 27.3	1.690	2.647	8.8	20.0
5 21	14 16.81	-25 44.8	1.274	2.242	10.0	18.9	5 21	14 24.32	+ 3 54.0	1.746	2.658	11.7	20.2
5 31	14 8.00	-24 42.2	1.298	2.217	14.5	19.1	5 31	14 18.93	+ 3 57.8	1.825	2.669	14.6	20.5
6 10	14 2.43	-23 43.3	1.342	2.192	18.6	19.3	6 10	14 15.68	+ 3 40.4	1.921	2.680	17.1	20.7
199358	2006 <i>BZ</i> ₁₈₂		5 2.3 253°86	2°5/ 30.4 18			174013	2001 <i>YQ</i> ₃₆		5 2.3 95°79	1°8/ 3.9 17		
4 1	15 0.75	-10 34.3	1.934	2.813	11.7	20.4	4 1	15 0.40	-22 48.8	2.333	3.180	11.2	20.6
4 11	14 55.27	-9 53.4	1.858	2.804	8.3	20.2	4 11	14 54.73	-22 36.3	2.268	3.193	8.2	20.5
4 21	14 47.96	-9 8.4	1.806	2.795	4.7	19.9	4 21	14 47.55	-22 12.8	2.227	3.205	5.0	20.3
5 1	14 39.57	-8 23.6	1.782	2.785	2.5	19.7	5 1	14 39.54	-21 39.9	2.215	3.217	2.1	20.1
5 11	14 31.03	-7 43.8	1.786	2.776	5.1	19.9	5 11	14 31.54	-21 0.6	2.230	3.230	3.1	20.2
5 21	14 23.26	-7 13.4	1.816	2.766	8.9	20.1	5 21	14 24.31	-20 19.0	2.274	3.242	6.3	20.4
5 31	14 17.04	-6 55.7	1.870	2.756	12.5	20.3	5 31	14 18.52	-19 39.4	2.344	3.253	9.3	20.6
6 10	14 12.93	-6 52.4	1.944	2.746	15.5	20.5	6 10	14 14.57	-19 5.5	2.437	3.265	12.0	20.8
332113	2005 <i>UE</i> ₄₂₄		5 2.3 282°64	0°0/ 2.2 17			366589	2002 <i>TV</i> ₃₁₁		5 2.3 166°75	4°2/ 29.2 17		
4 1	15 1.68	-17 19.5	1.679	2.553	13.5	21.4	4 1	15 2.52	- 6 10.7	1.814	2.695	12.3	21.4
4 11	14 56.21	-16 56.4	1.604	2.547	9.7	21.2	4 11	14 56.48	- 5 16.9	1.753	2.698	8.8	21.2
4 21	14 48.58	-16 22.9	1.553	2.540	5.3	20.9	4 21	14 48.59	- 4 23.0	1.717	2.700	5.5	21.0
5 1	14 39.64	-15 42.0	1.527	2.534	0.6	20.6	5 1	14 39.66	- 3 34.8	1.708	2.702	4.3	20.9
5 11	14 30.54	-14 58.5	1.528	2.528	4.1	20.8	5 11	14 30.71	- 2 57.5	1.726	2.704	6.6	21.0
5 21	14 22.36	-14 17.7	1.556	2.522	8.7	21.1	5 21	14 22.69	- 2 34.9	1.770	2.706	10.1	21.3
5 31	14 16.03	-13 45.1	1.607	2.516	12.8	21.3	5 31	14 16.36	- 2 29.1	1.837	2.707	13.4	21.5
6 10	14 12.16	-13 24.3	1.678	2.510	16.3	21.5	6 10	14 12.24	- 2 40.3	1.924	2.707	16.3	21.7
174715	2003 <i>UM</i> ₁₄₂		5 2.3 202°88	2°8/ 4.4 17			117097	2004 <i>NJ</i> ₂₂		5 2.3 284°36	0°4/ 1.9 18		
4 1	15 5.22	-25 3.7	2.000	2.839	13.1	20.8	4 1	14 59.98	-15 0.7	2.274	3.141	10.6	19.5
4 11	14 58.55	-24 55.9	1.916	2.834	9.9	20.6	4 11	14 54.61	-14 49.0	2.186	3.127	7.6	19.3
4 21	14 49.80	-24 33.1	1.856	2.829	6.3	20.4	4 21	14 47.59	-14 31.6	2.124	3.112	4.1	19.1
5 1	14 39.79	-23 55.9	1.824	2.823	3.2	20.2	5 1	14 39.56	-14 10.5	2.089	3.097	0.6	18.8
5 11	14 29.61	-23 7.4	1.819	2.817	4.0	20.2	5 11	14 31.33	-13 48.8	2.083	3.082	3.5	19.0
5 21	14 20.29	-22 12.7	1.842	2.809	7.6	20.4	5 21	14 23.70	-13 29.6	2.105	3.067	7.1	19.2
5 31	14 12.76	-21 18.1	1.892	2.801	11.2	20.6	5 31	14 17.40	-13 16.2	2.152	3.052	10.5	19.4
6 10	14 7.59	-20 29.5	1.963	2.792	14.4	20.8	6 10	14 12.96	-13 11.1	2.222	3.037	13.4	19.5
113025	2002 <i>RK</i> ₄₅		5 2.3 248°69	3°5/ 29.4 18			483140	2015 <i>OU</i> ₄₀		5 2.3 178°70	2°6/ 6.2 18		
4 1	14 59.61	- 7 9.1	2.069	2.949	11.0	19.7	4 1	14 56.64	-30 24.6	4.408	5.205	7.2	22.7
4 11	14 54.32	- 6 20.2	1.998	2.943	7.9	19.5	4 11	14 51.62	-30 22.7	4.321	5.206	5.7	22.6
4 21	14 47.39	- 5 30.1	1.953	2.937	4.8	19.3	4 21	14 45.72	-30 11.9	4.260	5.207	4.1	22.5
5 1	14 39.51	- 4 43.7	1.934	2.931	3.6	19.2	5 1	14 39.34	-29 52.6	4.227	5.208	2.8	22.4
5 11	14 31.55	- 4 5.6	1.944	2.925	5.8	19.3	5 11	14 32.91	-29 26.0	4.224	5.208	2.8	22.4
5 21	14 24.30	- 3 39.6	1.980	2.918	9.0	19.5	5 21	14 26.86	-28 54.0	4.251	5.208	4.0	22.5
5 31	14 18.50	- 3 28.1	2.040	2.912	12.2	19.7	5 31	14 21.57	-28 18.9	4.306	5.207	5.6	22.6
6 10	14 14.60	- 3 31.8	2.120	2.905	14.9	19.9	6 10	14 17.36	-27 43.3	4.386	5.206	7.2	22.7
352473	2008 <i>BD</i> ₂		5 2.3 103°13	8°0/ 24.7 18			420658	2012 <i>JX</i> ₂₅		5 2.3 355°88	1°9/ 1.1 17		
4 1	14 59.55	+10 7.9	2.362	3.215	10.8	20.8	4 1	15 2.81	-11 40.1	1.608	2.490	13.5	20.8
4 11	14 53.96	+11 9.0	2.323	3.226	9.1	20.7	4 11	14 56.99	-11 19.7	1.542	2.489	9.6	20.6
4 21	14 47.05	+11 57.7	2.308	3.236	8.1	20.6	4 21	14 48.99	-10 55.0	1.500	2.489	5.2	20.3
5 1	14 39.46	+12 29.0	2.320	3.247	8.3	20.7	5 1	14 39.73	-10 29.7	1.483	2.489	1.9	20.1
5 11	14 31.95	+12 39.8	2.357	3.257	9.5	20.8	5 11	14 30.35	-10 8.4	1.494	2.489	5.1	20.3
5 21	14 25.19	+12 29.4	2.418	3.267	11.2	20.9	5 21	14 21.98	- 9 55.1	1.530	2.489	9.5	20.5
5 31	14 19.75	+11 58.8	2.500	3.277	13.1	21.0	5 31	14 15.52	- 9 53.0	1.589	2.489	13.5	20.8
6 10	14 15.98	+11 10.7	2.601	3.287	14.7	21.2	6 10	14 11.55	-10 3.9	1.668	2.489	16.8	21.0
182786	2001 <i>YU</i> ₁₅₈		5 2.3 22°01	4°0/ 5.4 17			247865	2003 <i>UD</i> ₈₀		5 2.3 194°76	4°2/ 28.9 16		
4 1	15 1.37	-27 58.9	2.175	3.006	12.5	20.3	4 1	15 3.18	- 5 47.4	2.014	2.889	11.5	21.5
4 11	14 55.71	-28 14.7	2.099	3.007	9.7	20.1	4 11	14 56.86	- 4 47.8	1.945	2.887	8.3	21.3
4 21	14 48.21	-28 16.1	2.046	3.008	6.7	20.0	4 21	14 48.78	- 3 47.9	1.902	2.883	5.3	21.1
5 1	14 39.61	-28 2.6	2.020	3.010	4.3	19.8	5 1	14 39.70	- 2 53.0	1.887	2.880	4.3	21.1
5 11	14 30.88	-27 36.3	2.021	3.012	4.5	19.8	5 11	14 30.55	- 2 8.5	1.900	2.875	6.5	21.2
5 21	14 22.94	-27 1.0	2.049	3.014	7.1	20.0	5 21	14 22.21	- 1 38.2	1.940	2.870	9.7	21.4
5 31	14 16.59	-26 21.6	2.102	3.016	10.0	20.2	5 31	14 15.44	- 1 24.6	2.004	2.863	12.9	21.6
6 10	14 12.36	-25 43.7	2.178	3.018	12.8	20.3	6 10	14 10.72	- 1 28.0	2.088	2.856	15.6	21.7
388741	2007 <i>VH</i> ₃₀₈		5 2.3 82°13	4°1/ 29.1 17			107169	2001 <i>BQ</i> ₂₂		5 2.3 21			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
335133	2004 <i>TW</i> ₃₄₈		5 2.3 281°77	1.4/ 1.5	17		192712	1999 <i>TC</i> ₁₁₂		5 2.3 267°70	2°5/30.1	18	
4 1	15 4.95	-11 24.1	1.820	2.693	12.6	20.4	4 1	14 59.99	-12 1.0	2.039	2.915	11.3	20.1
4 11	14 58.56	-11 28.9	1.732	2.675	9.0	20.1	4 11	14 54.77	-10 50.3	1.948	2.893	8.0	19.8
4 21	14 49.94	-11 31.3	1.668	2.656	5.0	19.9	4 21	14 47.75	-9 31.9	1.883	2.871	4.5	19.6
5 1	14 39.87	-11 33.3	1.631	2.637	1.5	19.6	5 1	14 39.62	-8 10.7	1.846	2.848	2.5	19.4
5 11	14 29.42	-11 37.6	1.622	2.618	4.6	19.7	5 11	14 31.27	-6 53.2	1.837	2.825	5.3	19.5
5 21	14 19.69	-11 46.9	1.640	2.599	9.0	20.0	5 21	14 23.58	-5 45.4	1.856	2.802	9.1	19.7
5 31	14 11.68	-12 3.8	1.682	2.580	13.0	20.1	5 31	14 17.34	-4 52.2	1.899	2.778	12.6	19.9
6 10	14 6.09	-12 30.1	1.745	2.560	16.5	20.3	6 10	14 13.11	-4 16.4	1.963	2.754	15.7	20.0
397036	2005 <i>UM</i> ₅₂		5 2.3 260°63	2°5/ 3.9	18 R		122891	2000 <i>SF</i> ₁₅₂		5 2.3 231°97	0°7/ 1.7	18	
4 1	15 5.90	-22 30.9	2.537	3.371	10.8	20.8	4 1	15 1.65	-15 21.8	2.151	3.018	11.2	20.8
4 11	14 58.85	-23 10.3	2.440	3.357	8.1	20.6	4 11	14 55.84	-14 47.3	2.066	3.006	8.0	20.5
4 21	14 49.96	-23 41.8	2.370	3.342	5.2	20.4	4 21	14 48.29	-14 5.1	2.007	2.995	4.3	20.3
5 1	14 39.87	-24 4.4	2.328	3.327	2.8	20.2	5 1	14 39.68	-13 18.3	1.975	2.982	0.8	20.0
5 11	14 29.43	-24 18.3	2.316	3.311	3.6	20.3	5 11	14 30.91	-12 31.2	1.973	2.970	3.8	20.2
5 21	14 19.51	-24 25.3	2.334	3.296	6.5	20.4	5 21	14 22.83	-11 48.2	1.998	2.956	7.7	20.4
5 31	14 10.94	-24 28.3	2.379	3.280	9.6	20.6	5 31	14 16.22	-11 13.4	2.048	2.943	11.2	20.6
6 10	14 4.30	-24 30.8	2.448	3.264	12.3	20.7	6 10	14 11.58	-10 50.1	2.121	2.928	14.2	20.8
366492	2002 <i>NT</i> ₇₄		5 2.3 6°66	3°7/ 4.3	17		490039	2008 <i>TO</i> ₂₀		5 2.3 149°34	0°0/ 2.2	17	
4 1	14 59.42	-23 49.0	1.083	1.967	18.3	19.8	4 1	15 1.16	-17 27.0	2.291	3.152	10.8	22.7
4 11	14 55.46	-23 56.7	1.025	1.967	13.8	19.5	4 11	14 55.28	-16 58.0	2.222	3.159	7.7	22.5
4 21	14 48.50	-23 43.5	0.986	1.969	8.7	19.2	4 21	14 47.87	-16 21.1	2.179	3.166	4.2	22.3
5 1	14 39.70	-23 10.3	0.969	1.972	4.2	19.0	5 1	14 39.63	-15 38.9	2.165	3.172	0.5	22.0
5 11	14 30.73	-22 22.4	0.974	1.976	5.5	19.1	5 11	14 31.37	-14 55.1	2.179	3.178	3.2	22.2
5 21	14 23.20	-21 28.3	1.002	1.981	10.4	19.4	5 21	14 23.87	-14 13.8	2.222	3.184	6.8	22.5
5 31	14 18.36	-20 37.3	1.049	1.987	15.3	19.6	5 31	14 17.78	-13 38.8	2.290	3.189	10.0	22.7
6 10	14 16.85	-19 57.3	1.115	1.995	19.5	19.9	6 10	14 13.55	-13 13.1	2.381	3.193	12.7	22.9
433435	2013 <i>TE</i> ₁₁₁		5 2.3 185°64	1°3/ 3.4	17		123581	2000 <i>XO</i> ₄₀		5 2.3 138°24	8°5/ 9.9	18	
4 1	15 2.64	-21 3.3	2.359	3.207	11.0	22.3	4 1	15 6.40	-41 53.7	2.107	2.861	15.3	19.7
4 11	14 56.39	-20 47.4	2.280	3.207	8.1	22.1	4 11	14 59.63	-42 23.0	2.032	2.868	13.2	19.6
4 21	14 48.51	-20 21.3	2.226	3.206	4.7	21.9	4 21	14 50.49	-42 27.9	1.977	2.874	10.9	19.5
5 1	14 39.69	-19 46.5	2.200	3.205	1.5	21.6	5 1	14 39.94	-42 5.3	1.946	2.880	9.2	19.4
5 11	14 30.78	-19 6.2	2.204	3.203	3.1	21.8	5 11	14 29.28	-41 16.3	1.939	2.886	8.6	19.3
5 21	14 22.60	-18 24.3	2.236	3.201	6.5	22.0	5 21	14 19.75	-40 5.5	1.958	2.891	9.5	19.4
5 31	14 15.84	-17 45.2	2.295	3.198	9.8	22.2	5 31	14 12.34	-38 40.6	2.001	2.896	11.4	19.5
6 10	14 11.00	-17 12.7	2.376	3.194	12.5	22.3	6 10	14 7.64	-37 10.8	2.067	2.901	13.6	19.7
512778	2016 <i>US</i> ₆₉		5 2.3 132°48	0°6/ 1.6	18		514553	2017 <i>WS</i> ₄		5 2.3 269°11	2°8/ 4.5	18	
4 1	14 55.33	-14 18.8	3.749	4.609	7.0	22.7	4 1	15 2.25	-25 21.8	1.936	2.780	13.2	21.0
4 11	14 50.70	-13 52.2	3.682	4.620	4.9	22.6	4 11	14 56.65	-25 1.0	1.838	2.759	10.0	20.8
4 21	14 45.22	-13 22.3	3.643	4.630	2.6	22.4	4 21	14 48.90	-24 23.5	1.763	2.737	6.4	20.5
5 1	14 39.30	-12 50.9	3.634	4.641	0.6	22.2	5 1	14 39.77	-23 29.8	1.714	2.715	3.2	20.3
5 11	14 33.38	-12 20.1	3.655	4.651	2.3	22.4	5 11	14 30.32	-22 23.7	1.693	2.692	4.0	20.3
5 21	14 27.89	-11 52.2	3.705	4.660	4.6	22.6	5 21	14 21.61	-21 11.1	1.700	2.669	7.8	20.4
5 31	14 23.18	-11 28.9	3.783	4.670	6.7	22.7	5 31	14 14.62	-19 59.1	1.732	2.646	11.8	20.6
6 10	14 19.56	-11 11.8	3.885	4.679	8.5	22.9	6 10	14 10.00	-18 54.6	1.785	2.622	15.3	20.8
316008	2009 <i>FQ</i> ₁		5 2.3 12°10	3°6/29.9	17		400280	2007 <i>RH</i> ₃₁₀		5 2.3 290°82	3°3/ 4.4	17	
4 1	14 59.68	-11 19.2	1.228	2.127	15.5	19.9	4 1	15 2.23	-25 22.9	1.370	2.233	16.5	20.4
4 11	14 55.13	-10 6.0	1.173	2.128	11.0	19.7	4 11	14 57.27	-25 3.9	1.286	2.217	12.6	20.1
4 21	14 48.10	-8 45.4	1.139	2.130	6.2	19.4	4 21	14 49.48	-24 22.8	1.223	2.201	8.1	19.8
5 1	14 39.64	-7 25.7	1.130	2.132	3.7	19.3	5 1	14 39.85	-23 20.2	1.183	2.185	3.9	19.5
5 11	14 31.16	-6 16.2	1.145	2.135	7.2	19.5	5 11	14 29.82	-22 1.3	1.169	2.169	5.0	19.5
5 21	14 23.93	-5 24.6	1.182	2.139	12.0	19.7	5 21	14 20.87	-20 35.0	1.178	2.153	9.8	19.8
5 31	14 18.95	-4 55.4	1.241	2.143	16.3	20.0	5 31	14 14.27	-19 11.7	1.211	2.137	14.7	20.0
6 10	14 16.79	-4 49.6	1.317	2.148	20.0	20.3	6 10	14 10.79	-18 0.6	1.262	2.122	19.0	20.2
328285	2008 <i>GR</i> ₁₀₁		5 2.3 264°41	2°7/30.4	17		311192	2004 <i>XG</i> ₃₅		5 2.3 218°93	3°5/ 4.7	16	
4 1	15 1.39	-10 58.5	1.677	2.560	13.0	21.0	4 1	15 5.13	-26 8.4	1.709	2.553	14.7	21.0
4 11	14 55.94	-10 12.4	1.605	2.553	9.2	20.8	4 11	14 58.83	-25 59.0	1.627	2.547	11.2	20.8
4 21	14 48.43	-9 21.2	1.558	2.547	5.2	20.5	4 21	14 50.11	-25 31.4	1.568	2.540	7.3	20.5
5 1	14 39.69	-8 29.9	1.537	2.540	2.7	20.3	5 1	14 39.91	-24 45.8	1.534	2.532	3.9	20.3
5 11	14 30.81	-7 44.4	1.543	2.534	5.6	20.5	5 11	14 29.48	-23 46.1	1.527	2.524	4.6	20.3
5 21	14 22.83	-7 9.7	1.574	2.527	9.8	20.7	5 21	14 20.06	-22 38.7	1.547	2.516	8.5	20.5
5 31	14 16.65	-6 49.9	1.629	2.520	13.7	21.0	5 31	14 12.69	-21 31.5	1.591	2.507	12.5	20.7
6 10	14 12.83	-6 46.5	1.703	2.514	17.0	21.2	6 10	14 8.02	-20 31.8	1.657	2.497	16.1	21.0
50880	2000 <i>GC</i> ₃₃		5 2.3 114°99	2°5/ 4.1	18		90241	2003 <i>BG</i> ₄₉		5 2.3 358°48	5°5/27.4	18	
4 1	15 3.14	-23 16.7	2.126	2.971	12.2	19.6	4 1	14 58.49	-0 30.7	2.140	3.018	10.7	19.5
4 11	14 56.91	-23 28.8	2.055	2.978	9.1	19.4	4 11	14 53.44	+0 28.0	2.081	3.018	8.1	19.4
4 21	14 48.85	-23 29.5	2.009	2.984	5.7	19.2	4 21	14 46.89	+1 22.1	2.047	3.018	6.0	19.2
5 1	14 39.74	-23 19.0	1.989	2.990	2.8	19.1	5 1	14 39.52	+2 6.4	2.041	3.018	5.7	19.2
5 11	14 30.53	-22 59.6	1.998	2.996	3.7	19.1	5 11	14 32.13	+2 36.4	2.061	3.018	7.4	19.3
5 21	14 22.15	-22 34.9	2.034	3.001	6.9	19.3	5 21	14 25.46	+2 49.5	2.107	3.018	10.0	19.5
5 31	14 15.38	-22 9.3	2.097	3.007	10.2	19.6	5 31	14 20.14	+2 44.8	2.175	3.018	12.6	19.6
6 10	14 10.75	-21 47.3	2.181	3.013	13.1	19.8	6 10	14 16.63	+2 23.2	2.264	3.018	14.9	19.8
336185	2008 <i>RX</i> ₁₁₂		5 2.3 229°11	0°8/ 2.9	17		157486	2005 <i>QB</i> ₁₆₁		5 2.3 168°44	2°5/30.8		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
165554	2001 <i>DA</i> ₄₄		5 2.3 176°18	2°6/ 4.3 18			407853	2012 <i>BC</i> ₆₀		5 2.3 171°74	0°4/ 2.6 16		
4 1	15 5.95	-24 36.7	2.169	3.005	12.3	20.9	4 1	15 5.70	-18 15.4	1.962	2.820	12.5	23.1
4 11	14 58.89	-24 29.1	2.091	3.008	9.3	20.7	4 11	14 58.79	-17 55.9	1.890	2.825	9.0	22.8
4 21	14 49.94	-24 7.9	2.038	3.011	5.8	20.5	4 21	14 49.93	-17 26.7	1.843	2.828	5.0	22.6
5 1	14 39.89	-23 33.9	2.012	3.012	2.9	20.3	5 1	14 39.95	-16 49.9	1.824	2.831	0.8	22.3
5 11	14 29.76	-22 50.1	2.016	3.013	3.7	20.4	5 11	14 29.90	-16 9.6	1.834	2.833	3.6	22.5
5 21	14 20.49	-22 1.0	2.048	3.013	7.0	20.6	5 21	14 20.78	-15 30.5	1.871	2.834	7.7	22.8
5 31	14 12.90	-21 12.2	2.106	3.012	10.4	20.8	5 31	14 13.40	-14 57.1	1.934	2.835	11.4	23.0
6 10	14 7.52	-20 28.9	2.188	3.010	13.3	21.0	6 10	14 8.31	-14 33.3	2.019	2.834	14.5	23.2
341575	2007 <i>UJ</i> ₆₀		5 2.3 124°80	0°2/ 2.5 17			181221	2005 <i>SR</i> ₂₇₀		5 2.3 234°52	0°7/ 1.8 18		
4 1	15 0.29	-17 40.2	2.171	3.035	11.2	21.3	4 1	14 59.94	-14 14.2	2.487	3.353	9.9	20.4
4 11	14 54.78	-17 18.2	2.101	3.039	8.0	21.1	4 11	14 54.44	-13 58.5	2.407	3.347	7.0	20.3
4 21	14 47.65	-16 47.9	2.057	3.043	4.4	20.9	4 21	14 47.48	-13 38.0	2.352	3.340	3.8	20.0
5 1	14 39.63	-16 11.9	2.039	3.047	0.6	20.6	5 1	14 39.67	-13 14.8	2.326	3.333	0.7	19.8
5 11	14 31.55	-15 33.7	2.051	3.050	3.3	20.8	5 11	14 31.74	-12 51.9	2.329	3.326	3.3	20.0
5 21	14 24.24	-14 57.5	2.090	3.054	7.0	21.0	5 21	14 24.40	-12 32.2	2.360	3.319	6.6	20.2
5 31	14 18.38	-14 27.1	2.154	3.057	10.3	21.3	5 31	14 18.30	-12 18.5	2.418	3.312	9.7	20.4
6 10	14 14.44	-14 5.6	2.241	3.061	13.1	21.4	6 10	14 13.89	-12 12.8	2.498	3.305	12.3	20.5
402960	2007 <i>TT</i> ₄₃₃		5 2.3 135°88	3°1/30.2 18			478155	2011 <i>UF</i> ₁₅₉		5 2.3 153°30	3°4/ 5.4 17		
4 1	15 4.52	- 9 17.9	1.775	2.652	12.7	21.6	4 1	15 1.37	-27 49.9	2.531	3.354	11.2	21.8
4 11	14 57.89	- 8 30.7	1.720	2.664	9.0	21.4	4 11	14 55.51	-27 57.1	2.453	3.357	8.6	21.7
4 21	14 49.36	- 7 41.2	1.689	2.676	5.2	21.2	4 21	14 48.08	-27 51.4	2.399	3.361	5.9	21.5
5 1	14 39.82	- 6 54.1	1.686	2.687	3.1	21.1	5 1	14 39.74	-27 32.9	2.373	3.364	3.7	21.4
5 11	14 30.34	- 6 14.9	1.710	2.697	5.7	21.3	5 11	14 31.30	-27 3.5	2.376	3.367	3.9	21.4
5 21	14 21.90	- 5 47.7	1.761	2.707	9.5	21.5	5 21	14 23.55	-26 26.6	2.406	3.370	6.2	21.5
5 31	14 15.28	- 5 35.0	1.836	2.716	13.0	21.7	5 31	14 17.18	-25 46.6	2.463	3.372	8.9	21.7
6 10	14 10.95	- 5 37.6	1.931	2.724	15.9	22.0	6 10	14 12.67	-25 8.1	2.543	3.374	11.4	21.9
228221	1996 <i>XO</i> ₇		5 2.3 183°25	0°8/ 1.6 17			123606	2000 <i>YF</i> ₁₁		5 2.3 161°25	4°4/28.9 18		
4 1	15 1.70	-14 50.4	2.366	3.230	10.4	21.7	4 1	15 2.90	- 2 22.6	2.271	3.141	10.6	20.7
4 11	14 55.66	-14 13.8	2.291	3.230	7.4	21.5	4 11	14 56.48	- 1 47.6	2.211	3.146	7.8	20.6
4 21	14 48.11	-13 30.7	2.243	3.230	4.0	21.3	4 21	14 48.55	- 1 16.1	2.176	3.152	5.3	20.4
5 1	14 39.70	-12 44.4	2.223	3.230	0.9	21.0	5 1	14 39.80	- 0 52.1	2.170	3.156	4.5	20.4
5 11	14 31.23	-11 58.6	2.233	3.229	3.6	21.2	5 11	14 31.04	- 0 39.1	2.192	3.161	6.3	20.5
5 21	14 23.47	-11 17.4	2.271	3.227	7.0	21.4	5 21	14 23.05	- 0 39.1	2.242	3.164	9.0	20.7
5 31	14 17.06	-10 44.3	2.335	3.224	10.2	21.6	5 31	14 16.46	- 0 53.0	2.316	3.167	11.7	20.8
6 10	14 12.47	-10 21.7	2.422	3.221	12.9	21.8	6 10	14 11.71	- 1 20.2	2.411	3.170	14.0	21.0
497485	2005 <i>YA</i> ₂₉₁		5 2.3 307°81	4°0/29.7 17			295585	2008 <i>SS</i> ₁₂₄		5 2.3 161°16	1°0/ 2.9 18		
4 1	15 0.63	- 7 22.0	1.629	2.517	13.0	20.9	4 1	15 6.42	-19 41.3	1.604	2.468	14.5	21.5
4 11	14 55.52	- 6 40.4	1.555	2.504	9.4	20.7	4 11	14 59.65	-19 24.3	1.537	2.473	10.5	21.3
4 21	14 48.27	- 5 57.4	1.504	2.491	5.7	20.4	4 21	14 50.52	-18 54.5	1.493	2.478	6.0	21.0
5 1	14 39.73	- 5 18.5	1.479	2.478	4.0	20.3	5 1	14 40.04	-18 14.2	1.475	2.482	1.4	20.7
5 11	14 30.97	- 4 49.2	1.481	2.466	6.7	20.4	5 11	14 29.47	-17 28.1	1.485	2.485	4.1	20.9
5 21	14 23.06	- 4 34.0	1.507	2.454	10.7	20.6	5 21	14 20.05	-16 42.2	1.521	2.488	8.8	21.2
5 31	14 16.94	- 4 35.5	1.555	2.442	14.5	20.8	5 31	14 12.75	-16 2.7	1.581	2.490	13.0	21.4
6 10	14 13.22	- 4 54.4	1.623	2.431	17.8	21.0	6 10	14 8.15	-15 34.1	1.662	2.492	16.5	21.7
241888	2001 <i>VM</i> ₉₁		5 2.3 161°45	5°1/27.2 18			166900	2003 <i>AJ</i> ₇		5 2.3 150°62	18°8/19.5 18		
4 1	14 59.70	+ 2 34.5	2.804	3.667	9.0	20.6	4 1	15 9.82	+25 35.2	1.294	2.108	20.2	19.8
4 11	14 53.98	+ 3 17.9	2.748	3.672	7.0	20.4	4 11	15 2.20	+27 31.2	1.274	2.114	19.1	19.7
4 21	14 47.09	+ 3 55.4	2.718	3.677	5.4	20.3	4 21	14 51.87	+28 49.0	1.271	2.120	18.8	19.7
5 1	14 39.58	+ 4 23.3	2.717	3.682	5.2	20.3	5 1	14 40.18	+29 18.1	1.286	2.126	19.4	19.8
5 11	14 32.09	+ 4 38.7	2.744	3.686	6.5	20.4	5 11	14 28.77	+28 55.1	1.318	2.131	20.6	19.9
5 21	14 25.18	+ 4 40.2	2.798	3.690	8.5	20.6	5 21	14 19.05	+27 43.6	1.366	2.135	22.2	20.0
5 31	14 19.38	+ 4 27.4	2.876	3.694	10.6	20.7	5 31	14 12.03	+25 51.9	1.427	2.138	23.9	20.1
6 10	14 15.04	+ 4 1.2	2.975	3.697	12.4	20.8	6 10	14 8.14	+23 30.2	1.501	2.141	25.4	20.3
131515	2001 <i>TO</i> ₉₆		5 2.3 138°98	1°2/ 3.1 18			286110	2001 <i>TQ</i> ₉₉		5 2.3 321°97	0°3/ 2.8 18		
4 1	15 4.85	-20 57.8	1.541	2.406	14.9	20.3	4 1	14 52.78	-18 45.1	4.012	4.866	6.7	19.6
4 11	14 58.53	-20 25.6	1.478	2.414	10.9	20.0	4 11	14 48.97	-18 14.3	3.929	4.861	4.8	19.4
4 21	14 49.88	-19 38.2	1.437	2.421	6.2	19.8	4 21	14 44.36	-17 38.1	3.873	4.857	2.7	19.3
5 1	14 39.92	-18 38.7	1.421	2.428	1.6	19.5	5 1	14 39.30	-16 58.3	3.846	4.853	0.5	19.1
5 11	14 29.94	-17 33.1	1.433	2.434	4.2	19.7	5 11	14 34.22	-16 17.0	3.850	4.849	1.9	19.2
5 21	14 21.17	-16 28.7	1.471	2.440	8.9	20.0	5 21	14 29.49	-15 36.4	3.883	4.846	4.1	19.3
5 31	14 14.55	-15 32.6	1.533	2.445	13.1	20.2	5 31	14 25.47	-14 58.8	3.943	4.842	6.2	19.5
6 10	14 10.64	-14 49.8	1.615	2.450	16.7	20.5	6 10	14 22.43	-14 26.2	4.028	4.838	8.0	19.6
10810	<i>Lejsturojr</i>		5 2.3 178°48	1°2/ 1.2 18			470489	2008 <i>BD</i> ₄₅		5 2.3 66°71	5°0/ 6.1 17		
4 1	14 59.83	-12 35.8	2.551	3.419	9.6	18.8	4 1	15 4.11	-30 28.7	2.160	2.976	13.1	20.8
4 11	14 54.25	-12 9.4	2.479	3.420	6.8	18.6	4 11	14 57.69	-31 2.0	2.096	2.991	10.3	20.6
4 21	14 47.32	-11 39.2	2.433	3.420	3.7	18.4	4 21	14 49.35	-31 19.3	2.055	3.005	7.5	20.5
5 1	14 39.62	-11 7.8	2.415	3.421	1.2	18.3	5 1	14 39.91	-31 19.6	2.039	3.020	5.4	20.4
5 11	14 31.87	-10 38.4	2.427	3.421	3.6	18.4	5 11	14 30.39	-31 4.1	2.051	3.034	5.3	20.4
5 21	14 24.74	-10 14.0	2.467	3.421	6.7	18.6	5 21	14 21.77	-30 36.6	2.090	3.049	7.4	20.6
5 31	14 18.83	- 9 57.1	2.533	3.420	9.6	18.8	5 31	14 14.88	-30 2.2	2.155	3.064	10.0	20.7
6 10	14 14.54	- 9 49.6	2.622	3.419	12.1	19.0	6 10	14 10.25	-29 26.7	2.242	3.078	12.6	20.9
509250	2006 <i>UJ</i> ₃₀		5 2.3 180°70	0°5/ 2.9 17			191429	2003 <i>SL</i> ₁₅₇		5 2.3 2			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
171884	2001 <i>QC</i> ₃₂₉		5 2.3 207°14	0°6/ 2.9 18			361122	2006 <i>GW</i> ₁		5 2.3 344°79	0°9/ 2.7 17		
4 1	15 0.41	-19 5.3	2.399	3.255	10.6	21.1	4 1	15 3.88	-16 30.6	1.134	2.025	17.2	20.5
4 11	14 54.83	-18 45.9	2.319	3.251	7.6	20.9	4 11	14 58.71	-16 53.8	1.068	2.018	12.5	20.2
4 21	14 47.72	-18 17.9	2.264	3.248	4.3	20.7	4 21	14 50.42	-17 8.0	1.022	2.012	7.1	19.9
5 1	14 39.72	-17 43.1	2.237	3.244	0.9	20.5	5 1	14 40.09	-17 14.0	0.999	2.006	1.3	19.5
5 11	14 31.62	-17 4.8	2.240	3.240	3.0	20.6	5 11	14 29.39	-17 14.9	1.000	2.002	5.1	19.7
5 21	14 24.17	-16 26.6	2.270	3.235	6.5	20.8	5 21	14 19.95	-17 15.1	1.023	1.998	10.9	20.0
5 31	14 18.06	-15 52.6	2.327	3.230	9.6	21.0	5 31	14 13.18	-17 20.1	1.067	1.995	16.1	20.3
6 10	14 13.73	-15 25.9	2.407	3.225	12.4	21.2	6 10	14 9.86	-17 34.0	1.129	1.993	20.4	20.6
439143	2011 <i>UX</i> ₄₇		5 2.3 225°98	0°3/ 2.6 17			423598	2005 <i>WW</i> ₂₁		5 2.3 147°34	0°7/ 1.9 15		
4 1	14 59.12	-18 20.7	2.776	3.630	9.4	22.0	4 1	15 3.34	-14 36.1	1.795	2.667	12.8	21.5
4 11	14 53.77	-17 52.0	2.687	3.620	6.7	21.8	4 11	14 57.26	-14 23.7	1.727	2.669	9.1	21.2
4 21	14 47.10	-17 15.7	2.625	3.610	3.7	21.6	4 21	14 49.18	-14 4.8	1.683	2.671	4.9	21.0
5 1	14 39.65	-16 33.7	2.592	3.599	0.6	21.4	5 1	14 39.93	-13 42.1	1.666	2.673	0.8	20.7
5 11	14 32.09	-15 49.2	2.588	3.587	2.8	21.5	5 11	14 30.58	-13 19.4	1.676	2.674	4.1	20.9
5 21	14 25.07	-15 5.6	2.614	3.576	5.9	21.7	5 21	14 22.14	-13 0.7	1.713	2.676	8.4	21.2
5 31	14 19.17	-14 26.4	2.666	3.564	8.8	21.9	5 31	14 15.49	-12 49.7	1.774	2.677	12.2	21.4
6 10	14 14.81	-13 54.6	2.742	3.551	11.3	22.0	6 10	14 11.16	-12 48.9	1.857	2.678	15.4	21.6
255135	2005 <i>UR</i> ₁₃₈		5 2.3 317°46	0°0/ 2.4 18			239496	2007 <i>VV</i> ₅₇		5 2.3 246°74	3°0/ 29.9 18		
4 1	14 57.24	-19 33.1	2.137	3.003	11.3	19.9	4 1	14 59.93	- 8 2.3	2.087	2.966	11.0	20.1
4 11	14 52.72	-18 30.5	2.056	2.994	8.1	19.7	4 11	14 54.58	- 7 24.7	2.020	2.965	7.8	19.9
4 21	14 46.61	-17 15.5	2.000	2.986	4.5	19.5	4 21	14 47.61	- 6 45.9	1.979	2.964	4.6	19.7
5 1	14 39.59	-15 52.2	1.971	2.978	0.6	19.2	5 1	14 39.74	- 6 10.1	1.964	2.963	3.1	19.6
5 11	14 32.49	-14 26.3	1.971	2.971	3.4	19.4	5 11	14 31.80	- 5 41.4	1.978	2.963	5.3	19.8
5 21	14 26.11	-13 3.8	1.999	2.963	7.3	19.6	5 21	14 24.60	- 5 23.1	2.018	2.962	8.6	20.0
5 31	14 21.13	-11 50.5	2.053	2.956	10.7	19.8	5 31	14 18.84	- 5 17.4	2.082	2.961	11.7	20.2
6 10	14 18.01	-10 50.6	2.129	2.949	13.7	20.0	6 10	14 14.98	- 5 25.2	2.167	2.960	14.4	20.3
198271	2004 <i>TG</i> ₂₆₅		5 2.3 247°80	0°6/ 2.8 17			9120	1998 <i>DR</i> ₈		5 2.3 237°87	1°4/ 3.3 18		
4 1	15 2.40	-18 27.5	1.986	2.849	12.2	21.3	4 1	15 4.55	-21 35.1	1.752	2.609	13.8	17.8
4 11	14 56.58	-18 14.2	1.902	2.839	8.8	21.1	4 11	14 58.39	-21 4.8	1.663	2.595	10.2	17.5
4 21	14 48.82	-17 51.2	1.843	2.828	5.0	20.8	4 21	14 49.94	-20 19.2	1.599	2.581	6.0	17.2
5 1	14 39.86	-17 20.5	1.810	2.817	1.0	20.5	5 1	14 40.03	-19 20.2	1.560	2.566	1.8	16.9
5 11	14 30.69	-16 45.7	1.806	2.806	3.6	20.7	5 11	14 29.84	-18 12.9	1.550	2.550	4.0	17.0
5 21	14 22.28	-16 10.9	1.829	2.795	7.7	20.9	5 21	14 20.54	-17 3.9	1.566	2.534	8.5	17.3
5 31	14 15.47	-15 41.0	1.877	2.783	11.4	21.1	5 31	14 13.13	-16 0.4	1.607	2.517	12.8	17.5
6 10	14 10.85	-15 19.7	1.946	2.771	14.6	21.3	6 10	14 8.28	-15 8.5	1.670	2.499	16.5	17.7
130556	2000 <i>RE</i> ₃₀		5 2.3 285°15	2°8/ 4.1 17			207695	<i>Olgakopyl</i>		5 2.3 310°62	4°5/ 29.5 17		
4 1	15 2.61	-24 9.7	1.423	2.287	16.0	19.0	4 1	15 1.29	- 8 35.6	1.284	2.180	15.2	19.8
4 11	14 57.46	-23 49.8	1.340	2.272	12.1	18.7	4 11	14 56.40	- 7 31.4	1.218	2.171	10.9	19.5
4 21	14 49.60	-23 9.8	1.278	2.258	7.5	18.4	4 21	14 48.94	- 6 22.8	1.174	2.162	6.6	19.2
5 1	14 39.99	-22 10.9	1.240	2.243	3.3	18.1	5 1	14 39.91	- 5 17.5	1.154	2.154	4.6	19.1
5 11	14 30.01	-20 58.2	1.228	2.229	4.7	18.2	5 11	14 30.68	- 4 24.1	1.159	2.146	7.9	19.2
5 21	14 21.08	-19 40.1	1.240	2.214	9.6	18.4	5 21	14 22.56	- 3 49.3	1.187	2.138	12.5	19.5
5 31	14 14.41	-18 25.9	1.276	2.199	14.3	18.7	5 31	14 16.65	- 3 37.0	1.235	2.130	16.9	19.7
6 10	14 10.75	-17 23.9	1.330	2.185	18.5	18.9	6 10	14 13.62	- 3 47.6	1.301	2.123	20.6	19.9
3594	<i>Scotti</i>		5 2.3 79°76	8°7/ 7.7 18			276513	2003 <i>QS</i> ₁₀₀		5 2.3 241°48	4°1/ 28.6 18		
4 1	15 8.09	-36 39.6	1.716	2.512	16.7	17.1	4 1	15 0.12	- 5 41.7	2.210	3.086	10.5	21.0
4 11	15 1.32	-37 40.9	1.644	2.515	14.0	16.9	4 11	14 54.71	- 4 36.6	2.131	3.073	7.7	20.8
4 21	14 51.69	-38 19.3	1.593	2.518	11.3	16.7	4 21	14 47.71	- 3 30.5	2.078	3.059	5.0	20.6
5 1	14 40.23	-38 30.1	1.565	2.521	9.2	16.6	5 1	14 39.76	- 2 28.6	2.053	3.044	4.2	20.6
5 11	14 28.44	-38 13.0	1.561	2.524	8.8	16.6	5 11	14 31.67	- 1 36.1	2.057	3.029	6.3	20.7
5 21	14 17.81	-37 32.2	1.583	2.528	10.4	16.7	5 21	14 24.22	- 0 57.2	2.087	3.014	9.3	20.8
5 31	14 9.60	-36 36.0	1.627	2.531	13.0	16.8	5 31	14 18.11	- 0 34.5	2.142	2.998	12.3	21.0
6 10	14 4.54	-35 33.9	1.692	2.534	15.7	17.0	6 10	14 13.83	- 0 28.7	2.217	2.982	14.9	21.1
210425	<i>Imogene</i>		5 2.3 123°33	3°7/ 28.9 18			212715	2007 <i>RO</i> ₉₂		5 2.3 173°07	2°1/ 3.6 16		
4 1	14 59.06	- 5 5.8	2.346	3.223	10.0	20.6	4 1	15 6.31	-21 43.9	1.720	2.575	14.1	21.4
4 11	14 53.74	- 4 16.7	2.288	3.230	7.2	20.5	4 11	14 59.56	-21 43.1	1.648	2.578	10.4	21.2
4 21	14 47.07	- 3 28.6	2.256	3.237	4.7	20.3	4 21	14 50.51	-21 29.2	1.600	2.580	6.3	21.0
5 1	14 39.66	- 2 46.0	2.253	3.244	3.8	20.3	5 1	14 40.10	-21 2.9	1.577	2.581	2.4	20.7
5 11	14 32.26	- 2 12.7	2.277	3.251	5.6	20.4	5 11	14 29.54	-20 27.8	1.583	2.582	4.0	20.8
5 21	14 25.56	- 1 51.5	2.328	3.257	8.4	20.6	5 21	14 20.02	-19 49.1	1.615	2.583	8.3	21.1
5 31	14 20.13	- 1 44.0	2.404	3.263	11.0	20.8	5 31	14 12.52	-19 12.6	1.671	2.583	12.3	21.3
6 10	14 16.38	- 1 50.4	2.500	3.270	13.3	20.9	6 10	14 7.64	-18 43.7	1.749	2.582	15.7	21.5
79520	1998 <i>MZ</i> ₁₆		5 2.3 222°82	3°2/ 4.8 18			253799	2003 <i>XL</i> ₂₁		5 2.3 65°74	3°5/ 4.6 18		
4 1	15 4.98	-26 13.3	2.098	2.931	12.8	20.4	4 1	15 4.80	-25 11.0	1.441	2.299	16.2	19.8
4 11	14 58.45	-26 8.0	2.007	2.921	9.8	20.2	4 11	14 58.65	-25 11.2	1.388	2.315	12.2	19.6
4 21	14 49.87	-25 47.5	1.940	2.909	6.4	19.9	4 21	14 50.02	-24 52.9	1.355	2.331	7.8	19.4
5 1	14 40.01	-25 11.9	1.900	2.897	3.5	19.7	5 1	14 40.03	-24 16.9	1.347	2.347	4.0	19.2
5 11	14 29.91	-24 23.9	1.888	2.884	4.1	19.8	5 11	14 30.10	-23 28.2	1.365	2.364	4.8	19.3
5 21	14 20.59	-23 28.3	1.904	2.871	7.4	19.9	5 21	14 21.53	-22 33.5	1.408	2.380	8.8	19.5
5 31	14 12.95	-22 31.3	1.947	2.856	10.9	20.1	5 31	14 15.30	-21 40.7	1.474	2.396	12.9	19.8
6 10	14 7.61	-21 38.9	2.011	2.841	14.1	20.3	6 10	14 11.93	-20 56.4	1.561	2.413	16.3	20.1
175820	1999 <i>TS</i> ₂₅		5 2.3 209°18	1°9/ 3.5 17			286385	2001 <i>YM</i> ₉		5 2.3 216°53	0°3/ 2.7 18		

EPHEMERIDES

5 2.3

5 2.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
66552	1999 <i>RQ</i> ₁₃₀		5 2.3 111°59	4.2/ 5.1	18		466606	2014 <i>UF</i> ₂₀₈		5 2.3 130°02	1.4/ 1.4	16	
4 1	15 5.89	-27 1.3	1.599	2.443	15.6	18.4	4 1	15 4.61	-13 39.7	1.774	2.646	12.9	22.1
4 11	14 59.40	-27 8.6	1.534	2.452	11.9	18.2	4 11	14 58.06	-13 6.9	1.715	2.658	9.1	21.9
4 21	14 50.46	-26 57.2	1.492	2.461	8.0	18.0	4 21	14 49.56	-12 27.8	1.681	2.670	4.9	21.7
5 1	14 40.10	-26 26.9	1.474	2.470	4.7	17.8	5 1	14 40.01	-11 46.3	1.674	2.681	1.4	21.4
5 11	14 29.68	-25 41.4	1.483	2.478	5.1	17.9	5 11	14 30.49	-11 7.3	1.695	2.691	4.5	21.7
5 21	14 20.47	-24 46.7	1.517	2.487	8.6	18.1	5 21	14 22.01	-10 35.2	1.743	2.701	8.6	22.0
5 31	14 13.49	-23 50.8	1.576	2.495	12.4	18.3	5 31	14 15.37	-10 13.9	1.815	2.710	12.3	22.2
6 10	14 9.32	-23 0.7	1.656	2.503	15.8	18.5	6 10	14 11.06	-10 5.5	1.908	2.719	15.4	22.4
62466	2000 <i>SR</i> ₂₁₃		5 2.3 174°18	3.7/28.5	18		504130	2006 <i>RG</i> ₈₆		5 2.3 173°56	1.5/ 3.7	17	
4 1	14 58.53	- 3 34.9	2.712	3.584	9.0	19.7	4 1	15 1.00	-21 45.8	2.760	3.603	9.8	22.8
4 11	14 53.26	- 2 47.8	2.648	3.586	6.6	19.6	4 11	14 55.11	-21 39.4	2.682	3.605	7.2	22.7
4 21	14 46.79	- 2 2.5	2.611	3.587	4.4	19.4	4 21	14 47.85	-21 24.2	2.629	3.607	4.3	22.5
5 1	14 39.66	- 1 22.8	2.602	3.589	3.8	19.4	5 1	14 39.81	-21 1.3	2.605	3.609	1.7	22.3
5 11	14 32.50	- 0 52.1	2.622	3.589	5.4	19.5	5 11	14 31.70	-20 32.9	2.611	3.610	2.8	22.4
5 21	14 25.93	- 0 32.6	2.670	3.590	7.8	19.7	5 21	14 24.19	-20 2.1	2.646	3.611	5.6	22.6
5 31	14 20.45	- 0 25.9	2.742	3.590	10.2	19.8	5 31	14 17.89	-19 32.3	2.707	3.611	8.4	22.7
6 10	14 16.44	- 0 32.2	2.836	3.590	12.2	20.0	6 10	14 13.20	-19 6.7	2.793	3.611	10.9	22.9
363768	2005 <i>EW</i> ₁₂₂		5 2.3 105°63	3.0/30.3	18		465856	2010 <i>RC</i> ₆₇		5 2.3 229°27	0.8/ 3.0	17	
4 1	15 4.78	-10 31.7	1.659	2.537	13.3	21.4	4 1	15 4.28	-20 11.5	1.995	2.850	12.5	22.1
4 11	14 58.11	- 9 33.2	1.613	2.558	9.4	21.2	4 11	14 57.97	-19 41.4	1.905	2.837	9.1	21.9
4 21	14 49.52	- 8 31.2	1.592	2.579	5.3	21.0	4 21	14 49.64	-18 58.8	1.839	2.823	5.2	21.6
5 1	14 39.98	- 7 31.4	1.597	2.599	3.0	20.9	5 1	14 40.05	-18 5.8	1.801	2.808	1.2	21.3
5 11	14 30.61	- 6 39.9	1.631	2.619	5.8	21.1	5 11	14 30.23	-17 7.0	1.792	2.792	3.6	21.4
5 21	14 22.42	- 6 1.5	1.690	2.638	9.6	21.4	5 21	14 21.18	-16 7.6	1.811	2.776	7.8	21.7
5 31	14 16.16	- 5 39.2	1.773	2.656	13.2	21.6	5 31	14 13.79	-15 13.7	1.856	2.759	11.7	21.9
6 10	14 12.26	- 5 33.6	1.876	2.674	16.1	21.9	6 10	14 8.67	-14 30.2	1.922	2.741	15.0	22.0
490343	2009 <i>DD</i> ₇₁		5 2.3 93°02	0.8/ 3.1	17		510370	2011 <i>UO</i>		5 2.3 236°08	4.6/28.0	17	
4 1	15 1.54	-19 46.3	2.219	3.075	11.3	22.2	4 1	14 59.20	- 1 28.0	2.456	3.329	9.8	21.9
4 11	14 55.58	-19 24.6	2.162	3.094	8.1	22.0	4 11	14 53.90	- 0 41.7	2.386	3.322	7.3	21.7
4 21	14 48.09	-18 53.5	2.130	3.114	4.6	21.8	4 21	14 47.22	+ 0 1.3	2.341	3.314	5.2	21.6
5 1	14 39.81	-18 15.3	2.127	3.133	1.1	21.6	5 1	14 39.75	+ 0 36.8	2.325	3.306	4.7	21.5
5 11	14 31.60	-17 33.7	2.151	3.152	3.1	21.8	5 11	14 32.20	+ 1 1.1	2.337	3.298	6.4	21.6
5 21	14 24.25	-16 52.9	2.205	3.170	6.6	22.0	5 21	14 25.25	+ 1 11.7	2.375	3.290	8.9	21.8
5 31	14 18.38	-16 16.9	2.284	3.189	9.7	22.2	5 31	14 19.49	+ 1 7.5	2.437	3.281	11.4	21.9
6 10	14 14.42	-15 48.9	2.385	3.207	12.4	22.5	6 10	14 15.37	+ 0 48.7	2.520	3.272	13.6	22.1
172212	2002 <i>QW</i> ₈₉		5 2.3 52°73	2.5/ 3.8	18		372401	2009 <i>RX</i> ₉		5 2.3 134°17	6.0/26.5	17	
4 1	15 3.72	-22 30.2	1.364	2.233	16.2	19.7	4 1	15 0.00	- 3 35.2	1.839	2.723	12.0	20.8
4 11	14 57.98	-22 24.2	1.310	2.246	12.0	19.5	4 11	14 54.70	- 1 34.1	1.787	2.729	8.9	20.6
4 21	14 49.70	-22 1.5	1.277	2.259	7.2	19.2	4 21	14 47.70	+ 0 26.0	1.760	2.735	6.5	20.5
5 1	14 40.01	-21 24.1	1.268	2.272	2.9	19.0	5 1	14 39.80	+ 2 16.3	1.762	2.740	6.3	20.5
5 11	14 30.36	-20 37.1	1.284	2.285	4.5	19.1	5 11	14 31.94	+ 3 48.6	1.791	2.745	8.6	20.6
5 21	14 22.04	-19 47.4	1.325	2.299	9.1	19.4	5 21	14 24.96	+ 4 57.8	1.846	2.750	11.6	20.8
5 31	14 16.08	-19 2.5	1.389	2.313	13.4	19.7	5 31	14 19.59	+ 5 41.4	1.922	2.755	14.4	21.0
6 10	14 13.02	-18 28.0	1.473	2.327	17.1	20.0	6 10	14 16.26	+ 6 0.4	2.017	2.760	16.9	21.2
413474	2005 <i>GW</i> ₁₅₀		5 2.3 19°58	2.4/ 1.1	16		460313	2014 <i>QF</i> ₃₉₆		5 2.3 127°51	3.5/29.9	16	
4 1	15 4.49	-10 23.8	1.399	2.286	14.8	21.0	4 1	15 3.03	- 9 53.0	1.549	2.434	13.7	21.5
4 11	14 58.48	-10 12.8	1.338	2.287	10.5	20.7	4 11	14 57.15	- 8 50.8	1.492	2.440	9.7	21.2
4 21	14 50.00	- 9 59.1	1.300	2.289	5.9	20.4	4 21	14 49.15	- 7 44.6	1.459	2.447	5.6	21.0
5 1	14 40.06	- 9 46.5	1.286	2.291	2.4	20.2	5 1	14 39.98	- 6 40.7	1.452	2.453	3.5	20.9
5 11	14 30.01	- 9 39.3	1.298	2.293	5.7	20.4	5 11	14 30.83	- 5 46.0	1.471	2.459	6.4	21.1
5 21	14 21.13	- 9 41.3	1.335	2.296	10.4	20.7	5 21	14 22.77	- 5 6.0	1.516	2.464	10.5	21.3
5 31	14 14.44	- 9 55.2	1.395	2.299	14.7	21.0	5 31	14 16.69	- 4 44.0	1.583	2.469	14.3	21.6
6 10	14 10.55	-10 21.9	1.473	2.302	18.3	21.2	6 10	14 13.09	- 4 41.0	1.670	2.475	17.5	21.8
228336	2000 <i>SE</i> ₇₆		5 2.3 226°40	0.9/ 1.6	17		289035	2004 <i>TR</i> ₁₃₄		5 2.4 197°29	3.6/ 5.7	18	
4 1	15 2.81	-13 55.2	2.254	3.119	10.8	21.3	4 1	15 2.00	-29 11.8	2.923	3.733	10.2	21.5
4 11	14 56.66	-13 31.8	2.168	3.108	7.7	21.1	4 11	14 55.91	-29 31.8	2.837	3.731	8.0	21.4
4 21	14 48.81	-13 2.7	2.108	3.096	4.2	20.9	4 21	14 48.35	-29 40.2	2.775	3.728	5.7	21.2
5 1	14 39.92	-12 30.6	2.077	3.084	1.0	20.6	5 1	14 39.90	-29 36.4	2.742	3.725	3.9	21.1
5 11	14 30.85	-11 58.9	2.075	3.071	3.8	20.8	5 11	14 31.29	-29 21.6	2.737	3.722	4.0	21.1
5 21	14 22.43	-11 31.4	2.100	3.057	7.5	21.0	5 21	14 23.24	-28 58.2	2.761	3.719	5.8	21.2
5 31	14 15.42	-11 11.4	2.152	3.043	10.9	21.2	5 31	14 16.40	-28 29.7	2.812	3.715	8.2	21.4
6 10	14 10.34	-11 1.4	2.226	3.028	13.8	21.3	6 10	14 11.23	-28 0.2	2.887	3.711	10.4	21.5
21146	1993 <i>FD</i> ₆₇		5 2.3 253°68	0.7/ 2.9	18		466974	2016 <i>BN</i> ₁₀		5 2.4 49°99	4.0/29.7	17	
4 1	15 1.94	-19 23.0	2.139	2.997	11.6	19.0	4 1	15 1.32	- 9 36.4	1.338	2.232	14.8	20.8
4 11	14 56.21	-19 1.8	2.047	2.980	8.5	18.8	4 11	14 56.12	- 8 27.1	1.289	2.241	10.5	20.6
4 21	14 48.63	-18 30.1	1.979	2.963	4.8	18.6	4 21	14 48.64	- 7 14.0	1.262	2.251	6.1	20.3
5 1	14 39.90	-17 50.0	1.939	2.946	1.1	18.2	5 1	14 39.92	- 6 4.7	1.260	2.260	4.1	20.2
5 11	14 30.93	-17 5.0	1.927	2.928	3.4	18.4	5 11	14 31.27	- 5 7.2	1.283	2.270	7.1	20.4
5 21	14 22.62	-16 19.5	1.944	2.909	7.3	18.6	5 21	14 23.85	- 4 27.4	1.330	2.281	11.4	20.7
5 31	14 15.79	-15 38.5	1.986	2.890	11.0	18.8	5 31	14 18.57	- 4 8.5	1.398	2.291	15.4	21.0
6 10	14 11.02	-15 6.1	2.050	2.871	14.1	19.0	6 10	14 15.93	- 4 10.9	1.485	2.302	18.8	21.2
244748	2003 <i>SU</i> ₅₂		5 2.3 253°48	0.5/ 1.9	18		105815	2000 <i>SB</i> ₁₄₁		5 2.4 263°50	4.1/		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
245244	2004 <i>XF</i> ₁₆₃		5 2.4 22°40'	0°9/ 1.7 17			307079	2002 <i>AN</i> ₇₇		5 2.4 87°54'	3°8/30.2 16		
4 1	15 1.95	-13 56.6	1.866	2.740	12.3	20.4	4 1	15 4.29	-8 27.2	1.387	2.276	14.8	20.6
4 11	14 56.24	-13 40.7	1.797	2.741	8.7	20.2	4 11	14 58.31	-7 47.5	1.330	2.279	10.6	20.4
4 21	14 48.63	-13 19.0	1.753	2.741	4.7	19.9	4 21	14 49.90	-7 6.0	1.294	2.282	6.2	20.1
5 1	14 39.93	-12 54.4	1.735	2.742	1.0	19.6	5 1	14 40.12	-6 28.5	1.284	2.285	3.8	20.0
5 11	14 31.13	-12 30.7	1.744	2.742	4.1	19.9	5 11	14 30.27	-6 1.0	1.299	2.288	6.8	20.2
5 21	14 23.18	-12 11.8	1.781	2.743	8.2	20.1	5 21	14 21.62	-5 48.0	1.339	2.291	11.2	20.4
5 31	14 16.90	-12 1.0	1.842	2.743	11.9	20.3	5 31	14 15.15	-5 52.2	1.400	2.294	15.4	20.7
6 10	14 12.81	-12 0.7	1.924	2.744	15.0	20.5	6 10	14 11.44	-6 13.6	1.480	2.297	18.8	20.9
166002	2002 <i>AW</i> ₅₈		5 2.4 97°26'	4°2/29.7 18			147185	2002 <i>VX</i> ₇₉		5 2.4 266°53'	3°6/29.9 17		
4 1	15 4.55	-8 5.4	1.458	2.344	14.4	19.9	4 1	15 2.05	-8 42.6	1.652	2.536	13.1	19.4
4 11	14 58.20	-7 6.3	1.412	2.360	10.2	19.7	4 11	14 56.56	-7 53.3	1.578	2.526	9.4	19.1
4 21	14 49.68	-6 6.0	1.390	2.376	6.1	19.5	4 21	14 48.93	-7 0.8	1.528	2.515	5.5	18.9
5 1	14 40.04	-5 11.1	1.393	2.391	4.2	19.4	5 1	14 40.01	-6 10.5	1.505	2.505	3.6	18.7
5 11	14 30.54	-4 28.1	1.422	2.406	7.0	19.6	5 11	14 30.89	-5 28.7	1.507	2.494	6.4	18.9
5 21	14 22.30	-4 1.6	1.476	2.421	11.0	19.9	5 21	14 22.64	-5 0.2	1.535	2.483	10.5	19.1
5 31	14 16.17	-3 53.9	1.552	2.435	14.7	20.1	5 31	14 16.21	-4 48.4	1.586	2.472	14.3	19.3
6 10	14 12.62	-4 4.8	1.647	2.449	17.8	20.4	6 10	14 12.18	-4 54.5	1.656	2.461	17.6	19.5
330514	2007 <i>RB</i> ₈₄		5 2.4 201°39'	1°0/30.9 18			298707	2004 <i>EV</i> ₉₀		5 2.4 86°75'	3°7/28.9 17		
4 1	14 55.00	-11 39.1	4.176	5.039	6.3	21.8	4 1	14 58.56	-6 48.6	2.118	2.999	10.7	20.8
4 11	14 50.51	-11 13.4	4.095	5.034	4.4	21.7	4 11	14 53.57	-5 46.0	2.058	3.003	7.7	20.6
4 21	14 45.23	-10 45.5	4.042	5.029	2.4	21.5	4 21	14 47.08	-4 42.7	2.023	3.007	4.8	20.4
5 1	14 39.52	-10 17.4	4.019	5.024	1.0	21.4	5 1	14 39.77	-3 43.9	2.016	3.010	3.8	20.4
5 11	14 33.76	-9 50.8	4.027	5.018	2.5	21.5	5 11	14 32.45	-2 54.5	2.037	3.014	5.9	20.5
5 21	14 28.34	-9 27.7	4.064	5.012	4.5	21.6	5 21	14 25.87	-2 18.5	2.084	3.018	8.9	20.7
5 31	14 23.60	-9 9.4	4.128	5.006	6.4	21.8	5 31	14 20.68	-1 58.0	2.155	3.021	11.8	20.9
6 10	14 19.81	-8 57.4	4.217	4.999	8.1	21.9	6 10	14 17.29	-1 53.7	2.246	3.025	14.4	21.1
310373	2718 <i>P-L</i>		5 2.4 235°21'	0°8/ 2.9 17			512597	2016 <i>TG</i> ₃		5 2.4 256°06'	2°0/ 3.9 18		
4 1	15 3.59	-19 20.9	2.217	3.071	11.4	22.4	4 1	15 3.18	-22 2.0	2.666	3.505	10.2	21.4
4 11	14 57.35	-19 4.0	2.125	3.056	8.3	22.1	4 11	14 56.89	-22 21.5	2.569	3.489	7.6	21.2
4 21	14 49.26	-18 37.3	2.057	3.040	4.8	21.9	4 21	14 48.97	-22 32.8	2.497	3.472	4.7	21.0
5 1	14 40.02	-18 2.2	2.017	3.024	1.1	21.6	5 1	14 40.02	-22 35.8	2.454	3.455	2.2	20.8
5 11	14 30.54	-17 22.2	2.007	3.007	3.3	21.7	5 11	14 30.79	-22 31.9	2.441	3.438	3.1	20.8
5 21	14 21.72	-16 41.3	2.024	2.989	7.2	21.9	5 21	14 22.06	-22 23.0	2.456	3.421	6.1	21.0
5 31	14 14.37	-16 4.2	2.068	2.970	10.7	22.1	5 31	14 14.55	-22 12.4	2.499	3.403	9.0	21.2
6 10	14 9.06	-15 35.0	2.135	2.951	13.8	22.3	6 10	14 8.80	-22 3.4	2.566	3.385	11.7	21.3
19822	Vonzielonka		5 2.4 203°70'	1°0/ 3.1 18			245151	2004 <i>RG</i> ₃₃₉		5 2.4 210°49'	0°2/ 2.2 16		
4 1	15 4.09	-20 39.6	1.711	2.573	13.9	19.1	4 1	15 4.35	-17 35.8	1.702	2.570	13.6	21.3
4 11	14 57.99	-20 7.0	1.635	2.570	10.1	18.9	4 11	14 58.18	-16 54.8	1.625	2.565	9.8	21.0
4 21	14 49.69	-19 20.1	1.582	2.566	5.8	18.6	4 21	14 49.81	-16 2.0	1.572	2.559	5.4	20.8
5 1	14 40.07	-18 21.8	1.556	2.562	1.4	18.3	5 1	14 40.12	-15 0.9	1.545	2.553	0.6	20.4
5 11	14 30.31	-17 17.3	1.557	2.558	3.9	18.5	5 11	14 30.26	-13 57.4	1.547	2.546	4.3	20.7
5 21	14 21.53	-16 13.2	1.585	2.553	8.5	18.7	5 21	14 21.36	-12 58.0	1.575	2.538	8.9	20.9
5 31	14 14.69	-15 16.2	1.638	2.547	12.6	18.9	5 31	14 14.37	-12 8.7	1.627	2.530	13.0	21.1
6 10	14 10.36	-14 31.5	1.711	2.541	16.1	19.2	6 10	14 9.88	-11 33.7	1.700	2.522	16.6	21.3
33159	1998 <i>DQ</i> ₃₃		5 2.4 155°60'	1°6/ 1.1 18 R			500431	2012 <i>TF</i> ₁₄₉		5 2.4 73°21'	0°4/ 2.7 17		
4 1	15 2.07	-12 40.9	1.970	2.843	11.8	18.7	4 1	15 4.28	-16 52.2	2.218	3.076	11.3	21.5
4 11	14 56.18	-12 5.6	1.904	2.848	8.3	18.4	4 11	14 57.50	-16 59.9	2.168	3.102	8.0	21.3
4 21	14 48.55	-11 25.2	1.863	2.851	4.5	18.2	4 21	14 49.16	-17 1.2	2.144	3.129	4.4	21.1
5 1	14 39.93	-10 43.3	1.849	2.855	1.6	18.0	5 1	14 40.04	-16 57.3	2.149	3.156	0.8	20.9
5 11	14 31.27	-10 4.5	1.864	2.858	4.4	18.2	5 11	14 31.00	-16 50.5	2.182	3.182	3.1	21.1
5 21	14 23.45	-9 32.9	1.905	2.861	8.2	18.5	5 21	14 22.86	-16 43.7	2.244	3.208	6.6	21.4
5 31	14 17.23	-9 11.9	1.972	2.863	11.7	18.7	5 31	14 16.27	-16 39.6	2.332	3.234	9.7	21.6
6 10	14 13.09	-9 3.5	2.059	2.866	14.6	18.9	6 10	14 11.64	-16 40.7	2.443	3.259	12.3	21.8
140023	2001 <i>SL</i> ₅₄		5 2.4 273°07'	0°9/ 1.7 18			471418	2011 <i>TO</i> ₁₆		5 2.4 196°87'	3°2/ 5.3 17		
4 1	15 2.10	-12 56.9	2.143	3.012	11.1	19.2	4 1	15 1.12	-27 37.4	2.471	3.297	11.3	22.0
4 11	14 56.23	-12 53.1	2.063	3.004	7.9	19.0	4 11	14 55.44	-27 31.8	2.388	3.295	8.7	21.8
4 21	14 48.62	-12 45.5	2.008	2.995	4.3	18.8	4 21	14 48.15	-27 12.5	2.330	3.293	5.9	21.6
5 1	14 39.95	-12 36.0	1.980	2.987	1.0	18.5	5 1	14 39.92	-26 40.0	2.298	3.291	3.6	21.4
5 11	14 31.09	-12 27.5	1.981	2.978	3.8	18.7	5 11	14 31.59	-25 56.7	2.295	3.289	3.8	21.4
5 21	14 22.91	-12 22.8	2.010	2.970	7.6	18.9	5 21	14 23.95	-25 6.6	2.320	3.286	6.3	21.6
5 31	14 16.19	-12 24.4	2.064	2.961	11.0	19.1	5 31	14 17.70	-24 14.6	2.372	3.283	9.1	21.8
6 10	14 11.44	-12 34.3	2.140	2.953	13.9	19.3	6 10	14 13.32	-23 25.6	2.447	3.280	11.8	21.9
389843	2012 <i>QP</i> ₃₀		5 2.4 179°98'	7°2/ 8.8 18			376933	2002 <i>CW</i> ₁₅₃		5 2.4 47°38'	3°1/30.1 17		
4 1	15 6.03	-39 42.1	2.470	3.226	13.3	21.5	4 1	15 0.39	-10 9.7	1.646	2.532	13.0	20.9
4 11	14 59.19	-40 14.1	2.386	3.228	11.3	21.3	4 11	14 55.21	-9 14.8	1.589	2.538	9.2	20.6
4 21	14 50.30	-40 26.3	2.325	3.228	9.2	21.2	4 21	14 48.09	-8 16.2	1.556	2.544	5.2	20.4
5 1	14 40.15	-40 16.4	2.288	3.228	7.7	21.1	5 1	14 39.91	-7 19.5	1.549	2.551	3.1	20.3
5 11	14 29.81	-39 44.7	2.278	3.228	7.2	21.1	5 11	14 31.74	-6 30.9	1.569	2.558	5.9	20.5
5 21	14 20.32	-38 54.7	2.294	3.228	8.2	21.1	5 21	14 24.56	-5 55.2	1.614	2.565	9.8	20.7
5 31	14 12.56	-37 52.3	2.335	3.226	10.1	21.2	5 31	14 19.16	-5 35.6	1.682	2.572	13.4	21.0
6 10	14 7.14	-36 44.4	2.400	3.225	12.2	21.4	6 10	14 16.04	-5 33.2	1.770	2.579	16.5	21.2
470282	2007 <i>DN</i> ₄₉		5 2.4 178°24'	8°3/21.0 18			486679	2013 <i>TC</i> ₇₈		5 2.4 278°90'	0°8/ 3.6 18		
4 1	14 58.87	+18 32.2	3										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
252387	2001 SB ₃₅₂		5 2.4 43°68	6°5/29.2	18		225943	2002 AM ₂₀₃		5 2.4 124°04	1°8/ 1.1	17	
4 1	15 5.11	- 0 8.7	1.461	2.344	14.5	19.9	4 1	15 2.13	-12 27.5	1.827	2.704	12.4	20.9
4 11	14 58.66	+ 0 13.7	1.413	2.354	10.9	19.7	4 11	14 56.36	-11 52.7	1.764	2.709	8.8	20.7
4 21	14 50.00	+ 0 27.4	1.388	2.364	7.6	19.5	4 21	14 48.72	-11 12.7	1.725	2.713	4.8	20.5
5 1	14 40.15	+ 0 27.1	1.388	2.374	6.6	19.5	5 1	14 40.04	-10 31.6	1.712	2.718	1.8	20.3
5 11	14 30.37	+ 0 9.2	1.414	2.385	8.6	19.6	5 11	14 31.33	- 9 54.1	1.728	2.722	4.7	20.5
5 21	14 21.81	- 0 27.1	1.464	2.397	12.0	19.9	5 21	14 23.52	- 9 24.5	1.770	2.726	8.6	20.7
5 31	14 15.35	- 1 20.7	1.535	2.408	15.4	20.1	5 31	14 17.41	- 9 6.4	1.836	2.731	12.2	20.9
6 10	14 11.50	- 2 28.9	1.625	2.420	18.3	20.3	6 10	14 13.49	- 9 1.4	1.923	2.734	15.3	21.1
250453	2003 YM ₁₆₀		5 2.4 105°52	1°4/ 3.2	17		357936	2005 YL ₅		5 2.4 99°98	0°3/ 2.2	18	
4 1	15 5.53	-19 30.1	1.588	2.453	14.5	20.3	4 1	15 6.76	-16 2.5	1.374	2.252	15.6	21.5
4 11	14 59.10	-19 32.4	1.524	2.460	10.6	20.0	4 11	15 0.10	-15 47.1	1.319	2.264	11.1	21.3
4 21	14 50.34	-19 23.3	1.483	2.467	6.1	19.8	4 21	14 50.91	-15 22.0	1.287	2.275	6.1	21.0
5 1	14 40.21	-19 4.1	1.468	2.473	1.8	19.5	5 1	14 40.31	-14 50.5	1.280	2.287	0.7	20.7
5 11	14 29.99	-18 38.5	1.479	2.480	4.1	19.7	5 11	14 29.74	-14 17.9	1.298	2.298	4.7	21.0
5 21	14 20.90	-18 11.3	1.517	2.486	8.6	20.0	5 21	14 20.51	-13 49.8	1.342	2.309	9.7	21.3
5 31	14 13.90	-17 47.9	1.579	2.492	12.7	20.2	5 31	14 13.65	-13 31.1	1.409	2.320	14.1	21.6
6 10	14 9.59	-17 32.8	1.661	2.499	16.2	20.5	6 10	14 9.70	-13 25.2	1.496	2.331	17.8	21.8
351572	2005 UH ₂₄₆		5 2.4 60°90	3°3/30.8	18		90172	2003 AM ₁₄		5 2.4 59°43	10°1/26.7	18	
4 1	15 5.56	- 9 41.0	1.231	2.122	16.0	21.0	4 1	15 4.40	+ 7 9.4	1.415	2.291	15.4	18.8
4 11	14 59.43	- 9 14.7	1.177	2.129	11.4	20.7	4 11	14 58.00	+ 8 16.3	1.389	2.313	12.4	18.7
4 21	14 50.60	- 8 45.6	1.146	2.135	6.5	20.4	4 21	14 49.54	+ 9 6.0	1.385	2.335	10.4	18.6
5 1	14 40.24	- 8 19.1	1.138	2.142	3.3	20.3	5 1	14 40.12	+ 9 31.1	1.404	2.358	10.3	18.7
5 11	14 29.86	- 8 1.0	1.155	2.148	6.6	20.5	5 11	14 31.00	+ 9 27.6	1.447	2.380	11.9	18.8
5 21	14 20.85	- 7 55.8	1.196	2.155	11.5	20.8	5 21	14 23.22	+ 8 56.0	1.512	2.403	14.5	19.0
5 31	14 14.30	- 8 6.2	1.258	2.162	16.0	21.0	5 31	14 17.58	+ 7 59.6	1.597	2.426	17.1	19.2
6 10	14 10.80	- 8 32.7	1.338	2.169	19.7	21.3	6 10	14 14.44	+ 6 43.5	1.698	2.449	19.3	19.5
458933	2011 US ₃₁₃		5 2.4 124°33	1°4/ 1.6	16		3731	Hancock		5 2.4 54°33	6°4/ 9.3	18	
4 1	15 6.46	-13 2.1	1.542	2.418	14.3	22.0	4 1	15 1.18	-38 47.8	2.236	3.012	13.9	15.7
4 11	14 59.68	-12 44.4	1.483	2.428	10.1	21.7	4 11	14 55.67	-38 30.8	2.162	3.021	11.6	15.6
4 21	14 50.60	-12 21.0	1.448	2.437	5.5	21.5	4 21	14 48.31	-37 50.8	2.110	3.031	9.1	15.4
5 1	14 40.24	-11 55.3	1.439	2.445	1.5	21.2	5 1	14 39.99	-36 47.5	2.083	3.041	7.1	15.3
5 11	14 29.87	-11 32.0	1.457	2.454	4.9	21.5	5 11	14 31.72	-35 24.2	2.082	3.052	6.4	15.3
5 21	14 20.67	-11 15.3	1.501	2.462	9.5	21.8	5 21	14 24.45	-33 46.6	2.108	3.062	7.6	15.4
5 31	14 13.59	-11 9.0	1.569	2.470	13.6	22.0	5 31	14 18.93	-32 2.6	2.160	3.073	9.9	15.6
6 10	14 9.17	-11 15.1	1.656	2.477	17.0	22.3	6 10	14 15.60	-30 20.1	2.237	3.083	12.3	15.7
198872	2005 SU ₂		5 2.4 213°54	0°7/ 2.9	17		408945	2002 CQ ₃₀₀		5 2.4 44°00	5°1/ 5.4	17	
4 1	15 6.62	-19 7.3	1.635	2.498	14.3	21.9	4 1	15 5.09	-27 48.5	1.364	2.216	17.3	21.0
4 11	14 59.98	-18 46.9	1.556	2.492	10.4	21.6	4 11	14 59.30	-28 4.0	1.298	2.219	13.4	20.8
4 21	14 50.90	-18 13.8	1.500	2.485	5.9	21.3	4 21	14 50.66	-27 58.0	1.254	2.223	9.2	20.5
5 1	14 40.31	-17 30.3	1.470	2.477	1.2	21.0	5 1	14 40.30	-27 29.3	1.232	2.226	5.6	20.3
5 11	14 29.47	-16 41.0	1.467	2.468	4.2	21.2	5 11	14 29.76	-26 41.6	1.235	2.230	5.9	20.4
5 21	14 19.63	-15 52.1	1.492	2.458	9.0	21.4	5 21	14 20.55	-25 42.1	1.262	2.234	9.6	20.6
5 31	14 11.84	-15 9.9	1.540	2.448	13.4	21.7	5 31	14 13.86	-24 39.9	1.312	2.239	13.8	20.8
6 10	14 6.77	-14 39.3	1.609	2.437	17.1	21.9	6 10	14 10.35	-23 44.0	1.382	2.243	17.6	21.1
61959	2000 RS ₁₉		5 2.4 81°52	1°3/ 1.1	18		305990	2009 JR ₈		5 2.4 95°81	6°1/28.9	18	
4 1	14 59.01	-14 37.2	2.250	3.120	10.6	19.1	4 1	15 5.58	- 1 45.6	1.543	2.425	14.0	20.6
4 11	14 53.76	-13 35.5	2.196	3.139	7.4	18.9	4 11	14 58.87	- 1 1.7	1.498	2.439	10.4	20.4
4 21	14 47.14	-12 27.7	2.169	3.157	4.0	18.7	4 21	14 50.08	- 0 23.9	1.477	2.453	7.1	20.2
5 1	14 39.82	-11 18.1	2.170	3.176	1.3	18.6	5 1	14 40.21	+ 0 1.8	1.481	2.467	6.1	20.2
5 11	14 32.60	-10 11.8	2.200	3.194	3.9	18.8	5 11	14 30.46	+ 0 10.9	1.511	2.481	8.3	20.3
5 21	14 26.17	- 9 13.3	2.258	3.213	7.2	19.0	5 21	14 21.91	+ 0 1.2	1.565	2.495	11.7	20.6
5 31	14 21.11	- 8 26.3	2.342	3.231	10.2	19.2	5 31	14 15.39	- 0 27.3	1.642	2.508	14.9	20.8
6 10	14 17.78	- 7 52.7	2.448	3.248	12.7	19.5	6 10	14 11.37	- 1 12.4	1.738	2.521	17.8	21.0
521281	2015 JN ₁₄		5 2.4 345°73	0°1/ 2.5	17		180368	2003 YB ₁₁₁		5 2.4 202°74	1°8/ 1.1	17	
4 1	15 0.00	-17 25.4	1.887	2.758	12.3	21.5	4 1	15 3.91	-12 22.5	1.952	2.823	12.0	21.5
4 11	14 54.92	-17 5.1	1.814	2.755	8.9	21.3	4 11	14 57.62	-11 45.3	1.876	2.819	8.5	21.3
4 21	14 47.98	-16 35.7	1.765	2.752	4.9	21.0	4 21	14 49.44	-11 2.6	1.826	2.814	4.7	21.1
5 1	14 39.94	-16 0.0	1.743	2.750	0.7	20.7	5 1	14 40.15	-10 18.2	1.804	2.809	1.8	20.8
5 11	14 31.79	-15 21.9	1.748	2.748	3.7	21.0	5 11	14 30.73	- 9 36.8	1.810	2.803	4.7	21.0
5 21	14 24.46	-14 46.1	1.780	2.747	7.8	21.2	5 21	14 22.13	- 9 2.9	1.843	2.796	8.6	21.2
5 31	14 18.74	-14 17.1	1.836	2.745	11.5	21.4	5 31	14 15.16	- 8 40.2	1.901	2.789	12.2	21.5
6 10	14 15.17	-13 58.1	1.914	2.744	14.6	21.6	6 10	14 10.36	- 8 30.8	1.980	2.781	15.3	21.6
171577	1999 VW ₁₄		5 2.4 161°91	3°4/ 4.5	16		109130	2001 QK ₅₁		5 2.4 167°05	1°4/ 1.3	17	
4 1	15 6.47	-24 50.2	1.737	2.583	14.4	20.5	4 1	15 3.22	-13 1.1	2.071	2.940	11.5	20.1
4 11	14 59.77	-25 1.8	1.666	2.586	10.9	20.3	4 11	14 56.97	-12 27.4	2.003	2.944	8.1	19.9
4 21	14 50.73	-24 58.0	1.617	2.590	7.1	20.0	4 21	14 49.01	-11 48.5	1.960	2.948	4.4	19.7
5 1	14 40.28	-24 38.7	1.594	2.592	3.8	19.8	5 1	14 40.09	-11 7.7	1.945	2.951	1.4	19.5
5 11	14 29.68	-24 6.7	1.598	2.595	4.5	19.9	5 11	14 31.13	-10 29.3	1.959	2.954	4.2	19.7
5 21	14 20.12	-23 27.1	1.629	2.597	8.2	20.1	5 21	14 22.99	- 9 57.4	2.001	2.956	7.9	19.9
5 31	14 12.61	-22 46.2	1.684	2.599	12.0	20.3	5 31	14 16.40	- 9 35.3	2.068	2.958	11.3	20.1
6 10	14 7.76	-22 10.2	1.761	2.600	15.4	20.5	6 10	14 11.84	- 9 25.0	2.157	2.959	14.2	20.3
92925	2000 RO ₂₂		5 2.4 64°57	8°3/24.5	18		210290	Borsellino		5 2.4 156°01	1°2/ 1.2	18	
4 1	15 0.52	+ 0 19.3	1.583	2.469	13.4	1							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
324987	2008 AB ₁₃₇		5 2.4 49°09'	0.8/2.8	17		374519	2005 YO ₂₆₉		5 2.4 64°06'	5.8/28.3	17	
4 1	15 4.15	-18 27.7	1.298	2.178	16.2	20.5	4 1	15 1.69	-2 41.6	1.658	2.542	13.0	20.6
4 11	14 58.31	-18 17.8	1.250	2.194	11.6	20.3	4 11	14 55.95	-1 35.4	1.621	2.564	9.6	20.4
4 21	14 49.94	-17 55.5	1.223	2.211	6.5	20.1	4 21	14 48.43	-0 34.1	1.608	2.585	6.6	20.3
5 1	14 40.21	-17 23.7	1.221	2.228	1.3	19.8	5 1	14 40.05	+0 15.9	1.621	2.606	5.9	20.3
5 11	14 30.57	-16 47.9	1.243	2.245	4.5	20.0	5 11	14 31.83	+0 49.2	1.660	2.628	8.0	20.5
5 21	14 22.33	-16 14.1	1.290	2.262	9.5	20.4	5 21	14 24.70	+1 3.1	1.724	2.649	11.0	20.7
5 31	14 16.47	-15 48.2	1.360	2.280	13.9	20.7	5 31	14 19.36	+0 57.1	1.810	2.670	14.0	20.9
6 10	14 13.52	-15 34.2	1.449	2.298	17.5	20.9	6 10	14 16.22	+0 32.8	1.915	2.692	16.6	21.1
303611	2005 JG ₂₉		5 2.4 304°10'	2.9/29.8	17		255868	2006 SW ₁₈₇		5 2.4 199°06'	1.8/3.5	17	
4 1	14 58.26	-10 27.2	1.980	2.862	11.3	21.2	4 1	15 6.01	-20 52.5	1.891	2.744	13.1	21.2
4 11	14 53.56	-9 18.9	1.908	2.856	8.0	20.9	4 11	14 59.32	-20 56.5	1.812	2.741	9.7	21.0
4 21	14 47.21	-8 5.6	1.862	2.849	4.6	20.7	4 21	14 50.48	-20 49.3	1.758	2.738	5.8	20.8
5 1	14 39.89	-6 52.9	1.843	2.843	2.9	20.6	5 1	14 40.33	-20 31.6	1.730	2.735	2.1	20.5
5 11	14 32.49	-5 46.8	1.851	2.837	5.5	20.7	5 11	14 29.97	-20 6.2	1.731	2.731	3.8	20.6
5 21	14 25.83	-4 52.4	1.886	2.832	9.0	20.9	5 21	14 20.50	-19 37.3	1.759	2.726	7.8	20.9
5 31	14 20.63	-4 13.6	1.946	2.826	12.3	21.1	5 31	14 12.83	-19 10.0	1.812	2.721	11.6	21.1
6 10	14 17.36	-3 52.0	2.025	2.820	15.2	21.3	6 10	14 7.58	-18 48.9	1.887	2.716	14.9	21.3
64429	2001 VF ₉		5 2.4 141°07'	2.9/29.7	18		326296	1998 SC ₄₄		5 2.4 245°26'	0.8/2.9	18	
4 1	15 0.30	-6 9.5	2.644	3.514	9.3	19.9	4 1	15 4.05	-19 24.1	1.943	2.802	12.6	21.5
4 11	14 54.57	-5 38.6	2.583	3.523	6.6	19.7	4 11	14 57.95	-19 4.1	1.852	2.786	9.2	21.3
4 21	14 47.59	-5 8.3	2.549	3.531	4.1	19.5	4 21	14 49.76	-18 32.7	1.785	2.769	5.3	21.0
5 1	14 39.94	-4 41.8	2.544	3.540	3.0	19.5	5 1	14 40.25	-17 51.8	1.746	2.752	1.2	20.7
5 11	14 32.29	-4 22.1	2.568	3.547	4.7	19.6	5 11	14 30.44	-17 5.4	1.734	2.734	3.7	20.8
5 21	14 25.28	-4 11.3	2.620	3.555	7.3	19.8	5 21	14 21.38	-16 18.3	1.750	2.716	8.0	21.0
5 31	14 19.43	-4 11.0	2.697	3.562	9.8	20.0	5 31	14 13.98	-15 36.2	1.791	2.697	11.9	21.2
6 10	14 15.13	-4 21.4	2.797	3.569	12.0	20.1	6 10	14 8.88	-15 3.5	1.854	2.677	15.3	21.4
161087	2002 OS ₈		5 2.4 224°33'	0.7/2.9	18		393142	2013 BO ₅₅		5 2.4 325°22'	9.5/22.4	18	
4 1	15 1.11	-19 21.6	2.169	3.027	11.4	20.3	4 1	14 58.87	+14 34.3	2.325	3.165	11.4	20.5
4 11	14 55.56	-18 59.0	2.088	3.022	8.3	20.1	4 11	14 53.74	+15 47.9	2.281	3.164	10.1	20.4
4 21	14 48.30	-18 26.4	2.033	3.017	4.7	19.8	4 21	14 47.21	+16 46.4	2.261	3.163	9.5	20.4
5 1	14 40.04	-17 46.1	2.005	3.011	1.0	19.6	5 1	14 39.92	+17 24.2	2.265	3.161	9.9	20.4
5 11	14 31.65	-17 1.8	2.005	3.006	3.2	19.7	5 11	14 32.63	+17 37.7	2.293	3.160	11.0	20.5
5 21	14 23.97	-16 17.7	2.033	3.000	7.0	19.9	5 21	14 26.04	+17 26.3	2.344	3.159	12.6	20.6
5 31	14 17.77	-15 38.5	2.087	2.993	10.5	20.1	5 31	14 20.76	+16 51.3	2.414	3.158	14.3	20.7
6 10	14 13.53	-15 7.8	2.164	2.987	13.4	20.3	6 10	14 17.19	+15 55.9	2.501	3.157	15.8	20.8
294328	2007 VP ₆₂		5 2.4 296°53'	0.0/2.2	18		173311	1999 VJ ₃₉		5 2.4 112°31'	1.9/1.2	18	
4 1	15 1.33	-16 19.3	1.931	2.801	12.1	20.9	4 1	15 6.48	-11 26.5	1.776	2.648	12.9	20.4
4 11	14 55.98	-16 10.1	1.844	2.785	8.7	20.6	4 11	14 59.38	-11 6.3	1.723	2.666	9.1	20.2
4 21	14 48.66	-15 53.3	1.782	2.770	4.8	20.4	4 21	14 50.35	-10 42.7	1.696	2.684	5.0	20.0
5 1	14 40.10	-15 31.0	1.747	2.754	0.6	20.0	5 1	14 40.31	-10 18.8	1.696	2.701	1.9	19.8
5 11	14 31.27	-15 6.4	1.739	2.739	3.7	20.2	5 11	14 30.36	-9 58.9	1.723	2.717	4.7	20.1
5 21	14 23.14	-14 43.6	1.758	2.724	7.9	20.5	5 21	14 21.49	-9 46.3	1.778	2.734	8.7	20.3
5 31	14 16.59	-14 26.6	1.802	2.709	11.8	20.7	5 31	14 14.51	-9 43.7	1.858	2.749	12.3	20.6
6 10	14 12.23	-14 18.6	1.866	2.694	15.1	20.8	6 10	14 9.88	-9 52.4	1.958	2.764	15.2	20.8
281593	2008 UJ ₁₅₆		5 2.4 223°07'	0.6/1.9	18		338463	2003 FX ₆₀		5 2.4 185°70'	1.2/3.2	18	
4 1	15 2.36	-14 37.2	2.188	3.054	11.1	21.5	4 1	15 2.45	-19 4.6	2.278	3.133	11.1	20.7
4 11	14 56.43	-14 20.1	2.108	3.047	7.9	21.3	4 11	14 56.46	-19 14.9	2.201	3.133	8.1	20.5
4 21	14 48.78	-13 57.2	2.053	3.040	4.3	21.1	4 21	14 48.80	-19 17.7	2.150	3.133	4.7	20.2
5 1	14 40.11	-13 30.8	2.025	3.032	0.7	20.8	5 1	14 40.13	-19 13.5	2.127	3.132	1.4	20.0
5 11	14 31.28	-13 4.3	2.027	3.024	3.6	21.0	5 11	14 31.33	-19 4.5	2.132	3.132	3.1	20.1
5 21	14 23.14	-12 41.1	2.056	3.016	7.4	21.2	5 21	14 23.22	-18 53.5	2.166	3.132	6.6	20.4
5 31	14 16.44	-12 24.7	2.111	3.007	10.8	21.4	5 31	14 16.54	-18 43.8	2.225	3.132	9.9	20.6
6 10	14 11.70	-12 17.5	2.188	2.999	13.7	21.6	6 10	14 11.80	-18 38.5	2.308	3.132	12.7	20.7
22568	1998 HR ₃₄		5 2.4 278°25'	2.1/1.1	18		262749	2006 XU ₅₅		5 2.4 169°06'	6.8/26.8	17	
4 1	15 3.71	-12 21.6	1.597	2.477	13.7	18.7	4 1	15 2.91	+3 4.3	2.101	2.969	11.4	21.6
4 11	14 58.06	-11 46.9	1.507	2.453	9.8	18.4	4 11	14 56.67	+4 8.5	2.047	2.973	8.9	21.4
4 21	14 49.99	-11 5.0	1.440	2.429	5.5	18.1	4 21	14 48.84	+5 5.1	2.018	2.976	7.1	21.3
5 1	14 40.28	-10 20.1	1.399	2.405	2.1	17.8	5 1	14 40.14	+5 48.3	2.016	2.979	6.9	21.3
5 11	14 30.12	-9 37.8	1.385	2.380	5.5	17.9	5 11	14 31.44	+6 13.6	2.042	2.982	8.6	21.4
5 21	14 20.75	-9 3.9	1.397	2.355	10.3	18.1	5 21	14 23.55	+6 19.1	2.092	2.984	11.0	21.6
5 31	14 13.26	-8 43.5	1.431	2.330	14.8	18.3	5 31	14 17.16	+6 4.6	2.165	2.985	13.5	21.7
6 10	14 8.40	-8 39.4	1.485	2.304	18.7	18.5	6 10	14 12.70	+5 32.0	2.257	2.985	15.7	21.9
146245	2000 XV ₁₈		5 2.4 193°08'	5.1/7.4	18		462574	2009 DB ₁₂₉		5 2.4 355°49'	2.2/1.3	17	
4 1	15 1.77	-34 27.1	2.618	3.408	11.8	20.0	4 1	15 1.27	-12 17.9	1.157	2.056	16.3	20.5
4 11	14 55.98	-34 36.6	2.534	3.407	9.6	19.8	4 11	14 56.67	-11 56.1	1.097	2.052	11.6	20.2
4 21	14 48.51	-34 29.7	2.472	3.406	7.3	19.7	4 21	14 49.29	-11 27.9	1.057	2.049	6.4	19.9
5 1	14 40.07	-34 5.5	2.436	3.404	5.6	19.5	5 1	14 40.22	-10 58.3	1.041	2.047	2.2	19.6
5 11	14 31.51	-33 25.6	2.428	3.403	5.3	19.5	5 11	14 30.94	-10 33.4	1.048	2.046	6.1	19.8
5 21	14 23.65	-32 33.6	2.447	3.401	6.7	19.6	5 21	14 22.93	-10 19.0	1.077	2.045	11.4	20.1
5 31	14 17.21	-31 34.5	2.493	3.399	9.0	19.7	5 31	14 17.34	-10 19.3	1.127	2.046	16.2	20.4
6 10	14 12.71	-30 34.1	2.562	3.396	11.3	19.9	6 10	14 14.85	-10 36.1	1.195	2.048	20.3	20.7
167645	2004 DU ₂₉		5 2.4 189°00'	4.6/28.1	18		136887	1998 HQ ₉		5 2.4 307°29'	5.4/28.4	18	
4 1	14 59.53	-2 46.5	2.310	3.185	10.2	20.4	4 1	15 0.93					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
69625	1998 <i>FG</i> ₅₈		5 2.4 284°13	3°8/ 4.3 18			293627	2007 <i>MN</i> ₁₉		5 2.4 306°71	2°4/ 3.7 17		
4 1	15 5.75	-24 1.6	1.506	2.362	15.7	18.3	4 1	15 1.78	-22 15.7	1.224	2.102	17.1	20.3
4 11	14 59.81	-24 27.2	1.422	2.349	12.0	18.0	4 11	14 57.39	-22 3.8	1.139	2.080	12.8	19.9
4 21	14 51.08	-24 37.7	1.360	2.335	7.8	17.8	4 21	14 49.94	-21 32.2	1.074	2.058	7.8	19.6
5 1	14 40.46	-24 31.9	1.322	2.322	4.2	17.5	5 1	14 40.37	-20 41.9	1.032	2.037	2.9	19.2
5 11	14 29.36	-24 11.5	1.310	2.308	5.1	17.5	5 11	14 30.20	-19 38.1	1.014	2.016	5.0	19.3
5 21	14 19.20	-23 41.2	1.323	2.294	9.4	17.7	5 21	14 21.06	-18 29.2	1.018	1.995	10.7	19.5
5 31	14 11.28	-23 7.9	1.360	2.281	13.8	17.9	5 31	14 14.39	-17 25.5	1.044	1.975	16.1	19.7
6 10	14 6.41	-22 38.8	1.416	2.267	17.8	18.2	6 10	14 11.09	-16 35.3	1.088	1.956	20.8	20.0
155803	2000 <i>UL</i> ₁₀₈		5 2.4 193°65	3°2/29.7 18			229213	2004 <i>VF</i> ₆₅		5 2.4 255°72	2°5/30.7 18		
4 1	15 2.04	- 7 14.8	2.241	3.113	10.6	21.0	4 1	15 1.90	-10 11.0	1.924	2.802	11.8	20.3
4 11	14 56.08	- 6 32.3	2.170	3.111	7.6	20.8	4 11	14 56.28	- 9 39.0	1.848	2.793	8.4	20.0
4 21	14 48.55	- 5 49.1	2.125	3.109	4.6	20.6	4 21	14 48.80	- 9 3.8	1.797	2.785	4.8	19.8
5 1	14 40.13	- 5 9.1	2.109	3.106	3.2	20.5	5 1	14 40.20	- 8 29.2	1.773	2.776	2.5	19.6
5 11	14 31.63	- 4 36.5	2.121	3.103	5.3	20.6	5 11	14 31.44	- 7 59.7	1.776	2.767	5.1	19.8
5 21	14 23.84	- 4 14.5	2.161	3.099	8.4	20.8	5 21	14 23.43	- 7 39.2	1.806	2.758	8.9	20.0
5 31	14 17.43	- 4 5.3	2.226	3.094	11.4	21.0	5 31	14 17.00	- 7 30.6	1.860	2.748	12.4	20.2
6 10	14 12.86	- 4 9.7	2.311	3.089	14.0	21.2	6 10	14 12.69	- 7 35.4	1.935	2.739	15.5	20.4
370194	2002 <i>CQ</i> ₂₂₀		5 2.4 131°62	5°5/ 6.8 18			9700	<i>Paech</i>		5 2.4 230°40	3°4/ 4.4 18		
4 1	15 7.87	-32 59.0	2.293	3.088	13.1	21.2	4 1	15 7.97	-24 27.3	1.638	2.485	15.1	18.3
4 11	15 0.43	-33 28.6	2.224	3.103	10.5	21.1	4 11	15 1.21	-24 39.4	1.553	2.475	11.5	18.0
4 21	14 51.00	-33 40.9	2.178	3.117	7.9	20.9	4 21	14 51.78	-24 35.9	1.490	2.464	7.4	17.8
5 1	14 40.44	-33 34.4	2.159	3.131	5.9	20.8	5 1	14 40.60	-24 15.8	1.453	2.453	3.8	17.5
5 11	14 29.79	-33 10.4	2.168	3.144	5.7	20.8	5 11	14 29.02	-23 41.7	1.443	2.440	4.8	17.5
5 21	14 20.08	-32 32.6	2.204	3.156	7.5	21.0	5 21	14 18.40	-22 58.6	1.459	2.427	8.9	17.7
5 31	14 12.15	-31 46.8	2.267	3.168	9.9	21.1	5 31	14 9.93	-22 13.9	1.499	2.414	13.2	18.0
6 10	14 6.53	-30 59.3	2.353	3.180	12.4	21.3	6 10	14 4.37	-21 34.5	1.560	2.400	17.0	18.2
185067	2006 <i>RW</i> ₄₃		5 2.4 101°47	0°7/ 1.8 17			250295	2003 <i>QR</i> ₄		5 2.4 319°23	2°8/ 4.1 17		
4 1	15 0.21	-14 44.8	2.347	3.213	10.4	21.1	4 1	15 0.96	-23 43.7	1.255	2.129	17.0	19.9
4 11	14 54.67	-14 15.6	2.287	3.227	7.3	20.9	4 11	14 56.62	-23 27.6	1.177	2.116	12.8	19.6
4 21	14 47.72	-13 41.0	2.252	3.240	3.9	20.7	4 21	14 49.40	-22 50.6	1.120	2.102	8.0	19.3
5 1	14 40.02	-13 3.7	2.245	3.252	0.8	20.5	5 1	14 40.31	-21 53.7	1.086	2.090	3.4	19.0
5 11	14 32.34	-12 27.5	2.268	3.265	3.4	20.7	5 11	14 30.82	-20 42.9	1.076	2.077	4.9	19.1
5 21	14 25.40	-11 55.6	2.318	3.277	6.7	20.9	5 21	14 22.48	-19 26.9	1.089	2.066	10.1	19.3
5 31	14 19.79	-11 31.3	2.395	3.290	9.7	21.1	5 31	14 16.56	-18 15.8	1.124	2.055	15.2	19.6
6 10	14 15.92	-11 16.4	2.494	3.302	12.3	21.3	6 10	14 13.83	-17 18.2	1.177	2.045	19.6	19.8
28085	1998 <i>QO</i> ₉₈		5 2.4 71°14	6°0/27.8 18			269970	2000 <i>SH</i> ₃₅₉		5 2.4 266°88	7°8/ 6.7 18		
4 1	15 6.02	- 8 49.1	1.250	2.141	15.9	17.6	4 1	15 9.00	-35 11.0	1.979	2.771	15.0	21.1
4 11	14 59.14	- 6 9.5	1.228	2.178	11.2	17.4	4 11	15 2.05	-36 13.6	1.882	2.753	12.5	20.9
4 21	14 50.13	- 3 30.6	1.231	2.215	7.1	17.3	4 21	14 52.35	-36 58.1	1.806	2.734	10.0	20.7
5 1	14 40.29	- 1 5.9	1.260	2.251	6.2	17.3	5 1	14 40.69	-37 19.9	1.755	2.714	8.1	20.6
5 11	14 30.99	+ 0 52.7	1.316	2.287	9.2	17.6	5 11	14 28.35	-37 17.3	1.730	2.695	8.0	20.5
5 21	14 23.31	+ 2 18.8	1.397	2.322	13.1	17.9	5 21	14 16.72	-36 52.5	1.731	2.675	9.8	20.6
5 31	14 18.00	+ 3 11.3	1.498	2.357	16.5	18.2	5 31	14 7.09	-36 11.7	1.757	2.655	12.5	20.7
6 10	14 15.33	+ 3 33.2	1.617	2.390	19.2	18.5	6 10	14 0.36	-35 23.3	1.803	2.634	15.4	20.8
23976	1999 <i>DZ</i> ₆		5 2.4 49°38	4°6/30.2 18			423832	2006 <i>OO</i> ₇		5 2.4 247°20	1°1/ 1.6 17		
4 1	15 5.81	- 4 4.5	1.518	2.401	14.1	16.9	4 1	15 3.94	-14 35.4	1.826	2.697	12.7	22.1
4 11	14 59.19	- 3 55.8	1.467	2.411	10.3	16.7	4 11	14 57.94	-14 1.2	1.740	2.682	9.1	21.9
4 21	14 50.38	- 3 51.7	1.439	2.422	6.4	16.5	4 21	14 49.82	-13 18.6	1.677	2.665	5.0	21.6
5 1	14 40.36	- 3 56.2	1.436	2.433	4.6	16.4	5 1	14 40.35	-12 31.2	1.642	2.648	1.2	21.3
5 11	14 30.37	- 4 12.6	1.460	2.444	7.0	16.6	5 11	14 30.59	-11 43.9	1.634	2.631	4.5	21.5
5 21	14 21.56	- 4 42.2	1.509	2.455	10.7	16.8	5 21	14 21.61	-11 2.0	1.654	2.613	8.9	21.7
5 31	14 14.81	- 5 25.2	1.581	2.467	14.4	17.1	5 31	14 14.34	-10 30.4	1.698	2.595	12.9	21.9
6 10	14 10.64	- 6 20.2	1.672	2.479	17.4	17.3	6 10	14 9.42	-10 12.3	1.762	2.576	16.4	22.1
267199	2000 <i>SH</i> ₂₉		5 2.4 291°10	0°0/ 2.3 17			180136	2003 <i>FX</i> ₁₀₂		5 2.4 263°26	3°7/28.7 16		
4 1	15 1.73	-17 48.1	1.692	2.565	13.4	20.3	4 1	14 58.15	- 6 12.9	2.389	3.266	9.8	20.2
4 11	14 56.61	-17 17.8	1.598	2.539	9.8	20.0	4 11	14 53.32	- 5 10.0	2.311	3.253	7.1	20.0
4 21	14 49.20	-16 35.3	1.526	2.514	5.5	19.7	4 21	14 47.07	- 4 6.0	2.259	3.241	4.6	19.8
5 1	14 40.25	-15 43.4	1.481	2.488	0.7	19.3	5 1	14 39.99	- 3 5.6	2.235	3.227	3.7	19.7
5 11	14 30.89	-14 47.1	1.462	2.462	4.2	19.5	5 11	14 32.79	- 2 13.5	2.240	3.214	5.7	19.8
5 21	14 22.26	-13 52.6	1.469	2.436	9.1	19.7	5 21	14 26.17	- 1 33.5	2.272	3.201	8.5	20.0
5 31	14 15.41	-13 6.4	1.500	2.410	13.5	19.9	5 31	14 20.75	- 1 8.3	2.328	3.187	11.3	20.2
6 10	14 11.07	-12 33.4	1.552	2.385	17.4	20.1	6 10	14 16.97	- 0 58.6	2.405	3.174	13.8	20.3
491877	2013 <i>BJ</i> ₂₁		5 2.4 203°52	3°3/29.4 18			323308	2003 <i>UH</i> ₈₁		5 2.4 175°23	2°1/30.6 16		
4 1	15 0.37	- 4 54.2	2.662	3.531	9.2	21.7	4 1	15 4.12	-11 22.6	2.299	3.164	10.6	22.6
4 11	14 54.71	- 4 25.1	2.590	3.528	6.7	21.5	4 11	14 57.50	-10 33.8	2.229	3.168	7.5	22.4
4 21	14 47.75	- 3 57.4	2.544	3.524	4.3	21.3	4 21	14 49.32	- 9 40.8	2.185	3.171	4.2	22.2
5 1	14 40.05	- 3 34.1	2.527	3.520	3.3	21.3	5 1	14 40.27	- 8 47.3	2.170	3.174	2.1	22.0
5 11	14 32.27	- 3 18.2	2.539	3.515	5.0	21.4	5 11	14 31.19	- 7 58.0	2.186	3.175	4.4	22.2
5 21	14 25.06	- 3 11.8	2.579	3.510	7.6	21.5	5 21	14 22.86	- 7 16.7	2.229	3.175	7.8	22.4
5 31	14 18.99	- 3 16.4	2.644	3.505	10.1	21.7	5 31	14 15.97	- 6 46.8	2.299	3.174	10.9	22.6
6 10	14 14.46	- 3 32.3	2.731	3.499	12.3	21.8	6 10	14 10.95	- 6 29.7	2.391	3.173	13.5	22.8
483562	2004 <i>BB</i> ₂₇		5 2.4 193°65	17°7/18.9 18			301113	2008 <i>WP</i> ₂₃		5 2.4 186°99	0°5/		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
109594	2001 QD ₂₈₁		5 2.4 215°28	3°7/29.7	18		64701	2001 XT ₈₆		5 2.4 233°66	4°0/29.8	17	
4 1	15 1.93	- 4 45.3	2.227	3.100	10.6	19.7	4 1	15 5.11	- 7 23.8	1.734	2.612	12.9	19.0
4 11	14 56.03	- 4 22.1	2.158	3.098	7.7	19.5	4 11	14 58.78	- 6 34.9	1.656	2.600	9.3	18.8
4 21	14 48.55	- 4 0.8	2.114	3.095	4.9	19.3	4 21	14 50.28	- 5 43.8	1.602	2.586	5.7	18.5
5 1	14 40.18	- 3 45.0	2.098	3.092	3.7	19.2	5 1	14 40.43	- 4 56.1	1.575	2.573	4.0	18.4
5 11	14 31.71	- 3 37.9	2.111	3.090	5.6	19.3	5 11	14 30.33	- 4 17.5	1.575	2.558	6.6	18.5
5 21	14 23.95	- 3 41.7	2.151	3.087	8.6	19.5	5 21	14 21.08	- 3 52.8	1.601	2.543	10.6	18.7
5 31	14 17.56	- 3 57.5	2.215	3.084	11.5	19.7	5 31	14 13.61	- 3 45.0	1.651	2.527	14.4	18.9
6 10	14 13.01	- 4 25.4	2.301	3.080	14.0	19.9	6 10	14 8.56	- 3 55.0	1.720	2.510	17.6	19.1
49681	1999 TN ₂₅		5 2.4 122°25	1°0/ 3.2	18		417841	2007 GT ₇₆		5 2.4 313°50	0°6/ 2.2	18	
4 1	15 3.01	-19 45.3	2.058	2.915	12.1	18.4	4 1	15 6.22	-12 47.8	1.583	2.459	14.0	19.8
4 11	14 56.93	-19 34.3	1.992	2.924	8.7	18.2	4 11	14 59.90	-13 13.7	1.502	2.446	10.1	19.6
4 21	14 49.08	-19 13.4	1.950	2.933	5.0	18.0	4 21	14 51.06	-13 37.1	1.444	2.432	5.6	19.3
5 1	14 40.24	-18 44.5	1.936	2.942	1.4	17.8	5 1	14 40.54	-13 58.9	1.412	2.419	0.8	18.9
5 11	14 31.37	-18 10.9	1.950	2.950	3.3	17.9	5 11	14 29.60	-14 20.8	1.407	2.406	4.5	19.1
5 21	14 23.36	-17 36.8	1.991	2.958	7.1	18.2	5 21	14 19.51	-14 44.9	1.428	2.394	9.4	19.4
5 31	14 16.96	-17 6.6	2.059	2.966	10.5	18.4	5 31	14 11.42	-15 13.6	1.473	2.382	13.8	19.6
6 10	14 12.64	-16 43.8	2.148	2.974	13.4	18.6	6 10	14 6.07	-15 49.2	1.538	2.371	17.5	19.8
133746	Tonyferro		5 2.4 242°84	0°4/ 2.7	18		297833	2002 AG ₁₉₀		5 2.4 103°02	0°0/ 2.3	17	
4 1	15 2.19	-17 42.1	2.114	2.976	11.6	20.5	4 1	15 0.44	-17 0.4	2.408	3.268	10.4	21.6
4 11	14 56.44	-17 30.8	2.032	2.968	8.4	20.3	4 11	14 54.86	-16 39.3	2.345	3.281	7.4	21.5
4 21	14 48.88	-17 11.2	1.974	2.960	4.7	20.0	4 21	14 47.87	-16 11.5	2.307	3.293	4.0	21.3
5 1	14 40.23	-16 45.3	1.944	2.951	0.8	19.7	5 1	14 40.13	-15 39.3	2.298	3.306	0.5	21.0
5 11	14 31.39	-16 16.1	1.942	2.943	3.4	19.9	5 11	14 32.38	-15 5.7	2.318	3.318	3.0	21.2
5 21	14 23.27	-15 47.5	1.968	2.934	7.3	20.1	5 21	14 25.36	-14 34.4	2.366	3.329	6.4	21.5
5 31	14 16.64	-15 23.6	2.020	2.924	10.8	20.3	5 31	14 19.65	-14 8.5	2.441	3.341	9.4	21.7
6 10	14 12.04	-15 7.7	2.093	2.915	13.8	20.5	6 10	14 15.68	-13 50.5	2.538	3.352	11.9	21.9
71820	2000 UF ₂₄		5 2.4 108°54	2°4/30.9	18		368952	2007 AZ		5 2.4 75°50	0°0/ 2.3	17	
4 1	15 6.03	-10 58.3	1.607	2.485	13.7	19.6	4 1	15 3.16	-17 18.4	1.611	2.485	13.9	21.2
4 11	14 59.23	-10 24.1	1.556	2.501	9.7	19.4	4 11	14 57.34	-16 52.5	1.554	2.496	10.0	21.0
4 21	14 50.36	- 9 46.0	1.530	2.518	5.4	19.2	4 21	14 49.41	-16 16.5	1.520	2.507	5.5	20.7
5 1	14 40.40	- 9 8.9	1.530	2.534	2.4	19.0	5 1	14 40.33	-15 33.8	1.511	2.518	0.7	20.4
5 11	14 30.54	- 8 37.6	1.557	2.549	5.4	19.2	5 11	14 31.26	-14 49.5	1.530	2.530	4.1	20.7
5 21	14 21.85	- 8 16.5	1.610	2.564	9.5	19.5	5 21	14 23.29	-14 9.1	1.574	2.541	8.6	21.0
5 31	14 15.17	- 8 8.4	1.687	2.579	13.3	19.8	5 31	14 17.28	-13 37.7	1.642	2.552	12.5	21.3
6 10	14 10.99	- 8 14.4	1.783	2.593	16.4	20.0	6 10	14 13.73	-13 18.5	1.731	2.564	15.9	21.5
75499	1999 XP ₁₈₄		5 2.4 83°48	3°7/ 4.8	18		143135	2002 XY ₃₇		5 2.4 203°43	4°6/ 6.4	18	
4 1	15 5.79	-25 31.0	1.554	2.404	15.6	19.2	4 1	15 2.95	-31 19.5	2.428	3.235	12.1	20.4
4 11	14 59.42	-25 39.0	1.494	2.417	11.8	19.0	4 11	14 56.94	-31 28.7	2.342	3.232	9.6	20.2
4 21	14 50.62	-25 29.4	1.456	2.429	7.7	18.8	4 21	14 49.16	-31 22.3	2.280	3.229	7.0	20.1
5 1	14 40.44	-25 2.5	1.443	2.442	4.2	18.6	5 1	14 40.31	-30 59.4	2.245	3.226	4.9	19.9
5 11	14 30.23	-24 22.1	1.456	2.454	4.8	18.7	5 11	14 31.30	-30 22.0	2.237	3.222	4.8	19.9
5 21	14 21.26	-23 34.2	1.495	2.466	8.6	18.9	5 21	14 23.01	-29 33.8	2.258	3.218	6.8	20.0
5 31	14 14.53	-22 46.1	1.558	2.478	12.5	19.2	5 31	14 16.23	-28 39.9	2.304	3.213	9.5	20.2
6 10	14 10.59	-22 4.5	1.642	2.490	15.9	19.4	6 10	14 11.46	-27 46.2	2.374	3.208	12.0	20.3
32289	2000 QR ₄		5 2.4 67°92	3°6/29.1	18		288920	2004 SG ₁₄		5 2.4 227°44	1°8/ 1.4	16	
4 1	14 58.40	- 7 9.3	2.175	3.055	10.5	18.8	4 1	15 7.19	-11 49.7	1.661	2.534	13.6	20.9
4 11	14 53.53	- 6 7.3	2.112	3.056	7.5	18.6	4 11	15 0.40	-11 35.3	1.582	2.525	9.7	20.6
4 21	14 47.18	- 5 4.2	2.074	3.058	4.7	18.4	4 21	14 51.24	-11 16.5	1.528	2.515	5.4	20.4
5 1	14 40.01	- 4 5.1	2.064	3.059	3.6	18.3	5 1	14 40.59	-10 56.2	1.499	2.505	1.8	20.1
5 11	14 32.82	- 3 14.8	2.082	3.061	5.7	18.5	5 11	14 29.65	-10 38.7	1.499	2.494	5.1	20.3
5 21	14 26.33	- 2 37.2	2.127	3.062	8.7	18.7	5 21	14 19.62	-10 28.0	1.525	2.483	9.6	20.5
5 31	14 21.17	- 2 14.7	2.196	3.064	11.6	18.8	5 31	14 11.54	-10 27.5	1.575	2.471	13.8	20.7
6 10	14 17.78	- 2 8.0	2.285	3.065	14.1	19.0	6 10	14 6.08	-10 39.4	1.645	2.458	17.4	20.9
452573	2005 DU ₁		5 2.4 31°43	10°0/ 1.6	18		173143	1995 SY ₆₆		5 2.4 129°02	0°0/ 2.5	17	
4 1	15 17.85	+ 8 42.5	1.030	1.900	20.2	18.9	4 1	15 0.55	-17 15.8	2.593	3.450	9.8	22.0
4 11	15 8.26	+ 7 46.6	0.991	1.918	15.9	18.7	4 11	14 54.87	-16 53.1	2.528	3.462	7.0	21.8
4 21	14 55.44	+ 6 23.2	0.973	1.937	11.9	18.5	4 21	14 47.86	-16 23.8	2.488	3.473	3.9	21.6
5 1	14 41.03	+ 4 30.0	0.978	1.957	10.0	18.5	5 1	14 40.14	-15 50.0	2.477	3.484	0.5	21.4
5 11	14 27.04	+ 2 11.0	1.008	1.978	11.5	18.6	5 11	14 32.43	-15 14.8	2.496	3.495	2.8	21.6
5 21	14 15.20	- 0 25.0	1.063	2.001	15.0	18.9	5 21	14 25.37	-14 41.5	2.543	3.505	6.0	21.8
5 31	14 6.65	- 3 8.7	1.140	2.024	18.8	19.2	5 31	14 19.56	-14 13.2	2.617	3.515	8.9	22.0
6 10	14 1.85	- 5 52.7	1.235	2.048	22.0	19.5	6 10	14 15.37	-13 52.4	2.714	3.524	11.3	22.2
147265	2002 YP ₈		5 2.4 97°67	1°7/ 1.3	18		184531	2005 QC ₂₅		5 2.4 213°86	0°5/ 1.9	18	
4 1	15 3.82	-12 53.0	1.712	2.588	13.1	19.6	4 1	14 59.64	-15 9.0	2.836	3.696	9.0	21.4
4 11	14 57.61	-12 17.2	1.659	2.603	9.2	19.4	4 11	14 54.23	-14 46.1	2.753	3.690	6.4	21.2
4 21	14 49.46	-11 36.0	1.629	2.618	5.0	19.2	4 21	14 47.55	-14 18.0	2.696	3.682	3.5	21.0
5 1	14 40.30	-10 53.4	1.627	2.633	1.7	19.0	5 1	14 40.12	-13 46.9	2.668	3.675	0.6	20.8
5 11	14 31.20	-10 14.7	1.652	2.647	4.7	19.2	5 11	14 32.59	-13 15.5	2.670	3.667	2.9	21.0
5 21	14 23.17	- 9 44.3	1.704	2.661	8.8	19.5	5 21	14 25.58	-12 46.6	2.700	3.659	5.9	21.1
5 31	14 16.98	- 9 25.7	1.779	2.675	12.5	19.7	5 31	14 19.64	-12 23.2	2.758	3.650	8.7	21.3
6 10	14 13.12	- 9 20.6	1.875	2.689	15.5	20.0	6 10	14 15.19	-12 7.3	2.839	3.641	11.1	21.5
219441	2000 UH ₈₀		5 2.4 170°47	0°3/ 2.2	17		390134	2012 VG ₇₁		5 2.4 104°55	0°8/ 1.7	17	
4 1	15 3.20	-15 41.0	2.574	3.430	10.0	21.3							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
116688	2004 CC ₈₀		5 2.4 292°44	0°2/ 2.3 18			1288	Santa		5 2.4 236°52	3°7/ 5.5 18	R	
4 1	15 3.43	-16 9.2	1.550	2.427	14.2	19.3	4 1	15 2.02	-27 56.8	2.182	3.012	12.5	16.2
4 11	14 58.02	-15 57.3	1.462	2.406	10.3	19.0	4 11	14 56.40	-27 55.4	2.098	3.007	9.7	16.0
4 21	14 50.09	-15 35.9	1.396	2.384	5.7	18.7	4 21	14 48.92	-27 38.7	2.038	3.002	6.6	15.8
5 1	14 40.47	-15 7.5	1.356	2.363	0.7	18.3	5 1	14 40.32	-27 6.9	2.004	2.997	4.1	15.7
5 11	14 30.38	-14 36.3	1.341	2.341	4.5	18.5	5 11	14 31.56	-26 22.3	1.998	2.991	4.2	15.7
5 21	14 21.10	-14 7.6	1.352	2.320	9.6	18.7	5 21	14 23.56	-25 29.6	2.019	2.986	7.0	15.8
5 31	14 13.79	-13 46.8	1.386	2.299	14.2	18.9	5 31	14 17.14	-24 34.4	2.066	2.981	10.1	16.0
6 10	14 9.21	-13 38.1	1.440	2.277	18.2	19.1	6 10	14 12.82	-23 42.3	2.136	2.975	13.0	16.2
1769	Carlostorres		5 2.4 253°41	1°2/ 3.2 18			380888	2006 DS ₄₂		5 2.4 203°15	3°4/ 5.1 17		
4 1	15 5.73	-19 58.5	1.477	2.345	15.3	16.9	4 1	15 4.28	-26 35.0	2.169	3.000	12.5	21.9
4 11	14 59.73	-19 43.9	1.394	2.332	11.2	16.7	4 11	14 58.01	-26 42.5	2.086	2.997	9.6	21.7
4 21	14 51.04	-19 15.0	1.334	2.318	6.5	16.3	4 21	14 49.81	-26 35.9	2.027	2.994	6.4	21.5
5 1	14 40.59	-18 33.5	1.298	2.304	1.7	16.0	5 1	14 40.44	-26 15.2	1.995	2.990	3.8	21.3
5 11	14 29.74	-17 44.0	1.289	2.290	4.4	16.1	5 11	14 30.88	-25 42.4	1.991	2.985	4.2	21.3
5 21	14 19.88	-16 53.2	1.305	2.275	9.6	16.4	5 21	14 22.10	-25 1.6	2.015	2.981	7.1	21.5
5 31	14 12.22	-16 8.3	1.344	2.260	14.4	16.6	5 31	14 14.93	-24 18.1	2.064	2.976	10.3	21.7
6 10	14 7.51	-15 35.5	1.403	2.244	18.4	16.8	6 10	14 9.94	-23 37.4	2.137	2.970	13.2	21.9
106526	2000 WN ₅₆		5 2.4 159°10	0°0/ 2.3 18			306083	2010 GX ₁₄₂		5 2.4 323°20	4°0/ 30.2 16		
4 1	15 5.47	-17 29.0	1.817	2.681	13.1	20.7	4 1	15 1.98	-9 41.6	1.182	2.081	16.0	20.7
4 11	14 58.87	-17 1.7	1.750	2.687	9.4	20.5	4 11	14 57.23	-8 50.1	1.117	2.072	11.5	20.4
4 21	14 50.24	-16 24.7	1.707	2.693	5.2	20.2	4 21	14 49.70	-7 53.3	1.073	2.063	6.7	20.1
5 1	14 40.46	-15 40.6	1.691	2.698	0.7	19.9	5 1	14 40.44	-6 58.5	1.053	2.055	4.0	19.9
5 11	14 30.64	-14 54.4	1.703	2.703	3.9	20.2	5 11	14 30.92	-6 13.9	1.056	2.047	7.5	20.1
5 21	14 21.80	-14 11.1	1.743	2.707	8.2	20.4	5 21	14 22.58	-5 46.3	1.082	2.040	12.6	20.4
5 31	14 14.80	-13 35.6	1.808	2.710	12.0	20.7	5 31	14 16.62	-5 39.9	1.128	2.034	17.3	20.6
6 10	14 10.17	-13 11.6	1.893	2.713	15.2	20.9	6 10	14 13.74	-5 55.4	1.190	2.028	21.3	20.9
467311	1998 TR ₃₆		5 2.4 179°93	0°2/ 2.6 17			297639	2001 TA ₁₄₈		5 2.4 235°44	1°3/ 1.3 18		
4 1	15 4.09	-17 54.3	2.038	2.898	12.0	22.2	4 1	15 0.97	-12 12.7	2.691	3.555	9.3	21.9
4 11	14 57.77	-17 28.9	1.964	2.900	8.6	22.0	4 11	14 55.27	-11 48.7	2.602	3.541	6.6	21.7
4 21	14 49.61	-16 54.2	1.915	2.900	4.8	21.7	4 21	14 48.18	-11 21.1	2.539	3.526	3.6	21.5
5 1	14 40.39	-16 12.6	1.894	2.901	0.7	21.4	5 1	14 40.24	-10 52.1	2.506	3.511	1.3	21.3
5 11	14 31.08	-15 28.3	1.901	2.900	3.5	21.6	5 11	14 32.14	-10 24.8	2.502	3.495	3.5	21.4
5 21	14 22.60	-14 45.9	1.936	2.900	7.5	21.9	5 21	14 24.55	-10 2.1	2.526	3.479	6.6	21.6
5 31	14 15.74	-14 9.9	1.997	2.898	11.1	22.1	5 31	14 18.08	-9 46.6	2.578	3.462	9.5	21.8
6 10	14 11.02	-13 43.8	2.079	2.896	14.1	22.3	6 10	14 13.20	-9 40.0	2.652	3.445	12.0	21.9
401871	2000 WA ₄₄		5 2.4 178°72	2°8/ 30.3 16			504786	2010 AB ₆		5 2.4 217°29	1°0/ 3.3 17		
4 1	15 5.72	-8 25.5	2.213	3.079	11.0	22.6	4 1	15 3.08	-20 29.0	2.244	3.095	11.4	22.6
4 11	14 58.72	-7 48.3	2.143	3.082	7.8	22.4	4 11	14 57.03	-20 8.2	2.158	3.087	8.3	22.4
4 21	14 50.05	-7 9.5	2.100	3.084	4.6	22.2	4 21	14 49.23	-19 36.8	2.096	3.078	4.9	22.2
5 1	14 40.44	-6 32.9	2.085	3.085	2.8	22.0	5 1	14 40.38	-18 56.5	2.063	3.069	1.4	21.9
5 11	14 30.78	-6 2.4	2.100	3.085	5.0	22.2	5 11	14 31.35	-18 10.7	2.058	3.059	3.2	22.0
5 21	14 21.89	-5 41.4	2.143	3.084	8.3	22.4	5 21	14 23.02	-17 23.8	2.082	3.048	6.9	22.2
5 31	14 14.51	-5 32.2	2.212	3.082	11.4	22.6	5 31	14 16.15	-16 40.6	2.132	3.037	10.3	22.4
6 10	14 9.10	-5 35.6	2.302	3.079	14.1	22.8	6 10	14 11.27	-16 5.1	2.205	3.025	13.3	22.6
213176	2000 SK ₁₂₀		5 2.4 241°56	0°9/ 3.2 18			452649	2005 UN ₁₈₅		5 2.4 140°90	1°3/ 1.8 15		
4 1	15 2.33	-18 46.0	2.637	3.487	9.9	21.1	4 1	15 7.73	-13 7.5	1.425	2.303	15.1	21.8
4 11	14 56.32	-18 49.7	2.545	3.474	7.2	20.9	4 11	15 0.91	-12 57.1	1.363	2.308	10.8	21.6
4 21	14 48.78	-18 46.5	2.479	3.461	4.2	20.6	4 21	14 51.54	-12 40.6	1.325	2.313	5.9	21.3
5 1	14 40.29	-18 37.3	2.441	3.447	1.1	20.4	5 1	14 40.67	-12 21.5	1.311	2.318	1.4	21.0
5 11	14 31.59	-18 24.1	2.434	3.433	2.8	20.5	5 11	14 29.71	-12 4.0	1.324	2.322	5.1	21.3
5 21	14 23.42	-18 9.3	2.455	3.419	6.1	20.7	5 21	14 19.96	-11 52.7	1.363	2.326	10.0	21.6
5 31	14 16.45	-17 56.0	2.503	3.405	9.1	20.9	5 31	14 12.51	-11 51.5	1.425	2.330	14.4	21.8
6 10	14 11.18	-17 47.0	2.574	3.390	11.8	21.0	6 10	14 7.94	-12 2.6	1.506	2.333	18.0	22.1
140176	2001 SA ₁₉₂		5 2.4 156°58	3°5/ 5.3 18			202195	2004 XS ₆₄		5 2.4 88°35	6°0/ 6.6 18		
4 1	15 3.01	-27 10.2	2.333	3.160	11.8	20.5	4 1	15 7.09	-31 33.0	1.474	2.305	17.3	20.2
4 11	14 56.96	-27 22.4	2.256	3.163	9.1	20.3	4 11	15 0.56	-31 40.1	1.416	2.320	13.7	20.0
4 21	14 49.17	-27 21.4	2.202	3.166	6.2	20.1	4 21	14 51.34	-31 22.6	1.379	2.336	9.8	19.8
5 1	14 40.35	-27 7.1	2.176	3.168	3.8	19.9	5 1	14 40.64	-30 39.7	1.365	2.351	6.7	19.6
5 11	14 31.39	-26 41.2	2.178	3.171	4.1	20.0	5 11	14 29.97	-29 35.5	1.377	2.366	6.4	19.7
5 21	14 23.18	-26 7.4	2.208	3.173	6.6	20.1	5 21	14 20.75	-28 18.2	1.413	2.381	9.3	19.9
5 31	14 16.47	-25 30.3	2.264	3.175	9.5	20.3	5 31	14 14.03	-26 57.5	1.473	2.396	12.9	20.1
6 10	14 11.77	-24 54.8	2.343	3.176	12.2	20.5	6 10	14 10.36	-25 42.7	1.555	2.410	16.2	20.3
102340	1999 TE ₁₁₆		5 2.4 157°05	1°3/ 3.4 18			34639	2000 WG ₁		5 2.4 279°83	2°2/ 1.3 18		
4 1	15 5.64	-20 46.6	1.953	2.805	12.8	20.5	4 1	15 6.66	-9 32.1	1.788	2.661	12.8	18.1
4 11	14 58.92	-20 30.8	1.883	2.813	9.3	20.3	4 11	15 0.06	-9 35.7	1.697	2.639	9.3	17.9
4 21	14 50.25	-20 3.2	1.838	2.820	5.4	20.1	4 21	14 51.14	-9 38.5	1.631	2.618	5.2	17.6
5 1	14 40.48	-19 25.8	1.820	2.826	1.7	19.9	5 1	14 40.67	-9 43.1	1.591	2.596	2.2	17.3
5 11	14 30.66	-18 42.3	1.831	2.831	3.5	20.0	5 11	14 29.74	-9 52.1	1.580	2.574	5.1	17.5
5 21	14 21.77	-17 57.8	1.870	2.836	7.5	20.3	5 21	14 19.50	-10 8.1	1.595	2.551	9.4	17.7
5 31	14 14.66	-17 17.3	1.934	2.840	11.1	20.5	5 31	14 11.02	-10 33.3	1.635	2.529	13.5	17.9
6 10	14 9.83	-16 45.3	2.020	2.844	14.2	20.7	6 10	14 5.00	-11 8.8	1.695	2.506	17.0	18.0
17752	1998 DM ₄		5 2.4 157°47	1°1/ 3.3 18			175694	1995 ST ₅₁		5 2.4 274°24	1°1/ 3.3 17		
4 1	15 3.03	-20 34.7	2.039	2.895	12.2	18.7	4 1	15 1.14	-19				

EPHEMERIDES

5 2.5

5 2.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
377594	2005 <i>QM</i> ₄₅		5 2.5 293°13	5°7/ 5.3 17			24567	6790 <i>P-L</i>		5 2.5 303°25	2°3/ 1.2 18		
4 1	15 6.12	-28 8.0	1.600	2.439	15.8	21.6	4 1	15 2.38	-12 3.4	1.424	2.311	14.5	19.0
4 11	15 0.24	-28 51.3	1.507	2.419	12.5	21.4	4 11	14 57.41	-11 33.9	1.340	2.289	10.5	18.7
4 21	14 51.50	-29 18.1	1.437	2.399	8.9	21.1	4 21	14 49.84	-10 57.5	1.278	2.268	5.8	18.4
5 1	14 40.75	-29 25.1	1.390	2.379	6.1	20.9	5 1	14 40.55	-10 18.8	1.241	2.246	2.3	18.1
5 11	14 29.34	-29 12.3	1.369	2.359	6.4	20.8	5 11	14 30.80	-9 43.8	1.229	2.225	5.8	18.2
5 21	14 18.75	-28 43.4	1.373	2.339	9.6	21.0	5 21	14 21.91	-9 18.2	1.241	2.204	10.9	18.5
5 31	14 10.33	-28 5.3	1.400	2.319	13.6	21.1	5 31	14 15.06	-9 6.9	1.276	2.183	15.6	18.7
6 10	14 4.98	-27 26.2	1.448	2.300	17.4	21.3	6 10	14 11.03	-9 12.6	1.328	2.163	19.6	18.9
141468	2002 <i>CL</i> ₁₆₁		5 2.5 124°74	0°6/ 2.1 18			380635	2004 <i>XR</i> ₉		5 2.5 207°63	2°7/ 5.0 18		
4 1	15 6.59	-15 23.3	1.586	2.458	14.2	20.6	4 1	15 2.61	-26 43.2	2.392	3.220	11.6	20.9
4 11	14 59.85	-15 2.3	1.527	2.469	10.1	20.3	4 11	14 56.66	-26 18.2	2.304	3.215	8.8	20.7
4 21	14 50.86	-14 33.1	1.492	2.480	5.5	20.1	4 21	14 49.03	-25 38.5	2.240	3.208	5.8	20.5
5 1	14 40.63	-13 58.9	1.483	2.491	0.8	19.8	5 1	14 40.42	-24 45.1	2.204	3.202	3.1	20.4
5 11	14 30.40	-13 24.7	1.502	2.501	4.4	20.1	5 11	14 31.70	-23 41.5	2.197	3.194	3.5	20.4
5 21	14 21.33	-12 55.3	1.547	2.510	9.0	20.4	5 21	14 23.70	-22 32.5	2.219	3.186	6.4	20.5
5 31	14 14.35	-12 35.2	1.615	2.520	13.1	20.6	5 31	14 17.14	-21 23.7	2.268	3.178	9.6	20.7
6 10	14 9.97	-12 27.3	1.704	2.528	16.4	20.9	6 10	14 12.51	-20 20.6	2.340	3.169	12.4	20.9
313696	2003 <i>TY</i> ₁₅		5 2.5 154°29	2°3/30.8 16			241191	2007 <i>RM</i> ₃₁₇		5 2.5 80°50	0°7/ 1.9 17		
4 1	15 4.96	-10 59.0	1.923	2.795	12.1	22.1	4 1	15 0.71	-15 16.5	1.993	2.864	11.8	21.3
4 11	14 58.36	-10 18.0	1.861	2.803	8.6	21.9	4 11	14 55.41	-14 44.7	1.923	2.865	8.4	21.1
4 21	14 49.94	-9 33.2	1.824	2.811	4.8	21.7	4 21	14 48.37	-14 5.8	1.878	2.866	4.5	20.8
5 1	14 40.51	-8 48.7	1.815	2.818	2.3	21.5	5 1	14 40.34	-13 22.9	1.859	2.867	0.8	20.6
5 11	14 31.09	-8 9.3	1.834	2.825	4.9	21.7	5 11	14 32.23	-12 40.4	1.869	2.867	3.8	20.8
5 21	14 22.58	-7 39.1	1.880	2.830	8.7	21.9	5 21	14 24.91	-12 2.7	1.906	2.868	7.7	21.0
5 31	14 15.77	-7 21.2	1.952	2.835	12.1	22.1	5 31	14 19.13	-11 33.9	1.968	2.869	11.2	21.3
6 10	14 11.12	-7 17.0	2.044	2.840	15.0	22.4	6 10	14 15.38	-11 16.5	2.051	2.870	14.2	21.5
377959	2006 <i>JK</i> ₆₁		5 2.5 23°33	0°3/ 2.2 17			249473	2009 <i>KS</i> ₁₀		5 2.5 54°88	4°9/27.5 17		
4 1	14 59.00	-18 5.7	1.509	2.390	14.3	20.3	4 1	14 57.74	-4 0.7	2.131	3.013	10.6	20.6
4 11	14 54.54	-17 12.6	1.450	2.396	10.2	20.1	4 11	14 53.09	-2 32.5	2.077	3.019	7.8	20.4
4 21	14 47.98	-16 6.9	1.414	2.403	5.5	19.8	4 21	14 47.01	-1 5.5	2.049	3.025	5.5	20.3
5 1	14 40.26	-14 53.5	1.404	2.411	0.7	19.5	5 1	14 40.16	+ 0 13.9	2.048	3.032	5.1	20.3
5 11	14 32.55	-13 39.7	1.420	2.420	4.3	19.8	5 11	14 33.32	+ 1 20.0	2.075	3.038	7.0	20.4
5 21	14 25.90	-12 32.9	1.461	2.429	9.0	20.1	5 21	14 27.20	+ 2 8.8	2.128	3.044	9.7	20.6
5 31	14 21.17	-11 39.0	1.525	2.439	13.1	20.3	5 31	14 22.42	+ 2 38.3	2.205	3.051	12.4	20.8
6 10	14 18.86	-11 1.8	1.609	2.449	16.5	20.6	6 10	14 19.38	+ 2 48.6	2.300	3.057	14.7	21.0
205741	2002 <i>AA</i> ₂₀₃		5 2.5 114°96	1°4/ 1.5 18			239817	1998 <i>BZ</i> ₃₃		5 2.5 72°75	4°0/ 5.0 18		
4 1	15 4.61	-15 2.6	1.522	2.399	14.4	20.7	4 1	15 6.79	-26 19.3	1.381	2.234	17.0	20.3
4 11	14 58.44	-14 10.8	1.466	2.411	10.2	20.5	4 11	15 0.30	-26 19.4	1.331	2.254	12.9	20.1
4 21	14 50.08	-13 9.7	1.433	2.422	5.5	20.2	4 21	14 51.20	-25 59.0	1.301	2.274	8.4	19.9
5 1	14 40.53	-12 4.5	1.427	2.433	1.4	20.0	5 1	14 40.70	-25 18.9	1.296	2.294	4.5	19.8
5 11	14 31.03	-11 2.2	1.447	2.444	5.0	20.3	5 11	14 30.31	-24 24.4	1.316	2.314	5.1	19.8
5 21	14 22.72	-10 9.3	1.494	2.454	9.5	20.5	5 21	14 21.41	-23 23.0	1.362	2.334	9.0	20.1
5 31	14 16.48	-9 30.6	1.563	2.464	13.6	20.8	5 31	14 14.99	-22 23.3	1.430	2.354	13.1	20.4
6 10	14 12.81	-9 8.9	1.653	2.474	17.0	21.1	6 10	14 11.57	-21 32.6	1.519	2.374	16.6	20.7
277385	2005 <i>UO</i> ₁₀₁		5 2.5 96°35	2°0/30.9 18			339476	2005 <i>EA</i> ₂₉₅		5 2.5 111°58	1°5/ 1.4 18		
4 1	15 3.03	-12 22.8	1.846	2.721	12.4	21.0	4 1	15 1.25	-12 46.8	1.998	2.872	11.6	20.1
4 11	14 56.95	-11 35.1	1.796	2.740	8.7	20.9	4 11	14 55.77	-12 18.7	1.929	2.873	8.2	19.9
4 21	14 49.12	-10 42.6	1.770	2.758	4.7	20.7	4 21	14 48.57	-11 45.7	1.886	2.874	4.5	19.7
5 1	14 40.41	-9 49.9	1.772	2.777	2.0	20.5	5 1	14 40.37	-11 11.2	1.870	2.875	1.5	19.4
5 11	14 31.80	-9 2.1	1.802	2.795	4.7	20.7	5 11	14 32.10	-10 39.3	1.881	2.877	4.2	19.6
5 21	14 24.19	-8 23.8	1.859	2.812	8.5	21.0	5 21	14 24.62	-10 13.7	1.920	2.878	8.0	19.9
5 31	14 18.29	-7 58.2	1.940	2.830	11.9	21.2	5 31	14 18.67	-9 57.8	1.983	2.879	11.4	20.1
6 10	14 14.52	-7 46.9	2.042	2.847	14.7	21.4	6 10	14 14.74	-9 53.5	2.068	2.880	14.3	20.3
255728	2006 <i>QH</i> ₁₃₂		5 2.5 284°57	3°7/30.3 18			425738	2011 <i>BQ</i> ₉₀		5 2.5 83°16	1°6/ 3.7 17		
4 1	15 3.85	-8 27.3	1.513	2.398	14.0	20.1	4 1	15 2.85	-21 45.5	1.692	2.553	14.0	21.4
4 11	14 58.27	-7 52.4	1.432	2.380	10.1	19.8	4 11	14 57.21	-21 24.9	1.626	2.559	10.3	21.2
4 21	14 50.23	-7 14.9	1.374	2.362	6.0	19.5	4 21	14 49.46	-20 50.2	1.583	2.565	6.1	20.9
5 1	14 40.59	-6 39.9	1.342	2.343	3.7	19.3	5 1	14 40.49	-20 3.6	1.565	2.570	2.1	20.7
5 11	14 30.58	-6 13.3	1.336	2.325	6.6	19.5	5 11	14 31.47	-19 10.1	1.575	2.576	3.8	20.8
5 21	14 21.43	-6 0.0	1.354	2.307	11.1	19.7	5 21	14 23.47	-18 15.5	1.611	2.582	8.0	21.1
5 31	14 14.25	-6 3.1	1.395	2.288	15.4	19.9	5 31	14 17.38	-17 26.2	1.672	2.588	12.0	21.3
6 10	14 9.75	-6 23.9	1.454	2.270	19.2	20.1	6 10	14 13.74	-16 47.1	1.753	2.594	15.3	21.5
497449	2005 <i>YN</i> ₂₃		5 2.5 208°04	1°3/ 3.6 17			13886	2312 <i>T-1</i>		5 2.5 173°67	0°1/ 2.6 18		
4 1	15 3.53	-21 29.9	2.496	3.338	10.7	23.2	4 1	15 1.83	-17 12.9	2.156	3.019	11.4	18.5
4 11	14 57.23	-21 9.6	2.407	3.331	7.9	23.0	4 11	14 56.13	-16 56.3	2.083	3.020	8.1	18.3
4 21	14 49.32	-20 38.9	2.344	3.323	4.7	22.8	4 21	14 48.75	-16 32.0	2.035	3.020	4.5	18.0
5 1	14 40.46	-19 59.2	2.309	3.314	1.6	22.5	5 1	14 40.40	-16 2.1	2.014	3.021	0.6	17.7
5 11	14 31.45	-19 13.6	2.304	3.304	3.0	22.6	5 11	14 31.96	-15 30.0	2.022	3.022	3.3	18.0
5 21	14 23.08	-18 26.0	2.329	3.294	6.3	22.8	5 21	14 24.26	-14 59.6	2.057	3.022	7.0	18.2
5 31	14 16.05	-17 40.9	2.380	3.282	9.5	23.0	5 31	14 18.02	-14 34.6	2.118	3.022	10.4	18.4
6 10	14 10.86	-17 2.2	2.455	3.270	12.3	23.2	6 10	14 13.75	-14 18.1	2.202	3.022	13.3	18.6
489330	2006 <i>TX</i> ₇₄		5 2.5 176°25	0°3/ 2.2 16			426365	2013 <i>NV</i> ₁₉		5 2.5 202°46	2°0/ 4.1 17		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
206786	2004 <i>CP</i> ₁₂₅		5 2.5 126°23	2°3/30.4	17		499348	2009 <i>WU</i> ₂₅₀		5 2.5 199°26	1°4/ 3.8	17	
4 1	14 59.96	-10 42.6	2.180	3.055	10.7	20.6	4 1	15 3.44	-22 22.8	2.587	3.426	10.5	22.9
4 11	14 54.68	-9 54.4	2.117	3.061	7.6	20.4	4 11	14 57.12	-22 0.4	2.500	3.421	7.7	22.7
4 21	14 47.90	-9 2.8	2.079	3.066	4.3	20.2	4 21	14 49.26	-21 27.3	2.438	3.416	4.7	22.5
5 1	14 40.29	-8 12.0	2.068	3.071	2.3	20.1	5 1	14 40.49	-20 44.8	2.406	3.409	1.7	22.3
5 11	14 32.66	-7 26.3	2.087	3.076	4.6	20.2	5 11	14 31.61	-19 56.0	2.403	3.402	2.9	22.4
5 21	14 25.77	-6 49.8	2.132	3.080	7.9	20.4	5 21	14 23.38	-19 5.0	2.429	3.395	6.1	22.6
5 31	14 20.25	-6 25.3	2.202	3.085	11.0	20.6	5 31	14 16.45	-18 16.0	2.483	3.386	9.1	22.7
6 10	14 16.55	-6 14.1	2.294	3.089	13.6	20.8	6 10	14 11.31	-17 33.1	2.561	3.376	11.8	22.9
427479	2001 <i>XG</i> ₆₁		5 2.5 193°59	3°9/29.5	17		468394	2016 <i>GN</i> ₁₁₉		5 2.5 272°69	3°9/29.8	17	
4 1	15 3.60	-5 8.7	2.147	3.019	11.0	21.8	4 1	15 2.89	-7 51.5	1.703	2.585	12.9	21.6
4 11	14 57.32	-4 31.3	2.078	3.017	8.0	21.6	4 11	14 57.37	-7 1.2	1.620	2.566	9.3	21.3
4 21	14 49.39	-3 55.0	2.034	3.015	5.1	21.5	4 21	14 49.66	-6 8.0	1.561	2.546	5.7	21.1
5 1	14 40.49	-3 23.9	2.019	3.012	3.9	21.4	5 1	14 40.57	-5 17.3	1.528	2.526	3.9	20.9
5 11	14 31.51	-3 2.2	2.031	3.009	5.9	21.5	5 11	14 31.15	-4 35.4	1.521	2.506	6.6	21.0
5 21	14 23.27	-2 52.5	2.071	3.005	9.0	21.7	5 21	14 22.51	-4 7.2	1.541	2.485	10.7	21.2
5 31	14 16.49	-2 56.6	2.136	3.000	12.0	21.9	5 31	14 15.59	-3 56.3	1.583	2.464	14.6	21.4
6 10	14 11.65	-3 14.6	2.221	2.995	14.6	22.0	6 10	14 11.07	-4 3.8	1.644	2.443	18.0	21.6
209569	2004 <i>XN</i> ₃₂		5 2.5 133°18	0°8/ 3.0	18		402641	2006 <i>TV</i> ₁₁₉		5 2.5 180°29	5°0/27.2	18	
4 1	15 5.96	-19 40.9	1.672	2.534	14.1	21.0	4 1	14 58.85	+ 0 9.8	2.619	3.489	9.3	21.2
4 11	14 59.37	-19 15.3	1.610	2.545	10.2	20.8	4 11	14 53.70	+ 1 10.7	2.559	3.490	7.1	21.1
4 21	14 50.61	-18 37.3	1.571	2.556	5.8	20.6	4 21	14 47.31	+ 2 7.5	2.524	3.490	5.4	21.0
5 1	14 40.65	-17 49.6	1.559	2.566	1.3	20.3	5 1	14 40.24	+ 2 55.7	2.518	3.490	5.1	20.9
5 11	14 30.69	-16 57.3	1.574	2.575	3.9	20.5	5 11	14 33.14	+ 3 31.5	2.540	3.490	6.6	21.0
5 21	14 21.85	-16 6.4	1.617	2.584	8.3	20.8	5 21	14 26.63	+ 3 52.6	2.589	3.490	8.8	21.2
5 31	14 15.03	-15 22.8	1.683	2.592	12.3	21.0	5 31	14 21.23	+ 3 57.9	2.661	3.489	11.0	21.3
6 10	14 10.73	-14 50.7	1.771	2.600	15.7	21.3	6 10	14 17.34	+ 3 47.8	2.754	3.488	13.0	21.5
112349	2002 <i>NA</i> ₁₁		5 2.5 343°85	1°0/ 1.9	17		477200	2009 <i>HU</i> ₆₄		5 2.5 310°49	4°4/28.1	16	
4 1	15 0.17	-15 29.2	1.180	2.075	16.3	19.2	4 1	14 57.25	-7 17.1	1.940	2.826	11.3	20.8
4 11	14 56.02	-14 59.4	1.114	2.067	11.7	18.9	4 11	14 53.08	-5 43.5	1.857	2.804	8.2	20.6
4 21	14 49.12	-14 18.1	1.068	2.060	6.4	18.6	4 21	14 47.19	-4 5.4	1.800	2.783	5.3	20.3
5 1	14 40.48	-13 30.0	1.046	2.053	1.1	18.2	5 1	14 40.25	-2 29.7	1.770	2.762	4.6	20.2
5 11	14 31.58	-12 42.1	1.047	2.047	5.4	18.5	5 11	14 33.10	-1 3.8	1.768	2.741	7.0	20.3
5 21	14 23.86	-12 2.0	1.071	2.043	11.0	18.8	5 21	14 26.61	+ 0 5.9	1.792	2.721	10.4	20.5
5 31	14 18.51	-11 35.9	1.116	2.039	16.0	19.1	5 31	14 21.53	+ 0 55.2	1.838	2.701	13.7	20.7
6 10	14 16.23	-11 27.5	1.178	2.037	20.1	19.3	6 10	14 18.39	+ 1 22.6	1.904	2.681	16.6	20.8
100668	1997 <i>WH</i> ₄₄		5 2.5 81°76	2°7/ 1.0	18		115621	2003 <i>UX</i> ₁₁₆		5 2.5 226°12	1°7/ 1.3	18	
4 1	15 6.96	-10 39.5	1.398	2.280	15.1	19.8	4 1	15 2.50	-11 34.1	2.036	2.909	11.5	19.6
4 11	15 0.14	-10 10.4	1.354	2.301	10.6	19.5	4 11	14 56.69	-11 14.5	1.963	2.906	8.2	19.4
4 21	14 51.01	-9 38.0	1.333	2.321	5.9	19.3	4 21	14 49.12	-10 51.4	1.914	2.902	4.5	19.1
5 1	14 40.70	-9 7.1	1.337	2.342	2.7	19.2	5 1	14 40.49	-10 27.7	1.893	2.898	1.7	18.9
5 11	14 30.55	-8 43.0	1.368	2.362	5.8	19.4	5 11	14 31.74	-10 7.1	1.900	2.895	4.3	19.1
5 21	14 21.78	-8 29.9	1.424	2.382	10.2	19.7	5 21	14 23.74	-9 52.8	1.935	2.891	8.1	19.3
5 31	14 15.27	-8 30.3	1.503	2.401	14.2	20.0	5 31	14 17.25	-9 47.7	1.994	2.887	11.5	19.5
6 10	14 11.49	-8 45.1	1.601	2.420	17.5	20.3	6 10	14 12.79	-9 53.4	2.074	2.882	14.4	19.7
499533	2010 <i>RF</i> ₇₆		5 2.5 303°42	0°4/ 2.7	17		139849	2001 <i>RM</i> ₅₄		5 2.5 222°31	3°3/29.2	18	
4 1	15 1.13	-19 33.4	1.306	2.189	16.0	21.2	4 1	14 59.21	-7 5.0	2.407	3.282	9.8	20.9
4 11	14 56.84	-18 51.7	1.216	2.161	11.7	20.9	4 11	14 54.11	-6 6.0	2.334	3.276	7.1	20.7
4 21	14 49.69	-17 51.2	1.146	2.134	6.7	20.5	4 21	14 47.61	-5 5.6	2.287	3.270	4.4	20.6
5 1	14 40.58	-16 35.0	1.100	2.107	1.1	20.1	5 1	14 40.30	-4 8.4	2.268	3.263	3.4	20.5
5 11	14 30.88	-15 10.4	1.078	2.080	5.0	20.3	5 11	14 32.91	-3 18.9	2.278	3.256	5.3	20.6
5 21	14 22.08	-13 46.9	1.081	2.053	10.8	20.5	5 21	14 26.12	-2 40.6	2.316	3.249	8.2	20.8
5 31	14 15.52	-12 34.6	1.105	2.027	16.2	20.7	5 31	14 20.55	-2 16.1	2.378	3.241	11.0	20.9
6 10	14 12.07	-11 41.0	1.147	2.001	20.9	20.9	6 10	14 16.63	-2 6.3	2.461	3.234	13.4	21.1
180158	2003 <i>GT</i> ₅₃		5 2.5 309°86	3°5/29.4	17		281041	2006 <i>HV</i> ₄₆		5 2.5 117°52	1°1/ 1.8	18	
4 1	14 58.32	-7 39.3	2.026	2.909	11.1	19.9	4 1	15 4.03	-12 43.2	1.990	2.859	11.8	20.5
4 11	14 53.75	-6 45.6	1.947	2.894	8.0	19.7	4 11	14 57.76	-12 37.0	1.924	2.865	8.4	20.3
4 21	14 47.52	-5 49.7	1.893	2.878	4.9	19.5	4 21	14 49.68	-12 26.9	1.884	2.871	4.6	20.1
5 1	14 40.27	-4 56.6	1.866	2.863	3.6	19.4	5 1	14 40.57	-12 15.2	1.870	2.877	1.2	19.8
5 11	14 32.84	-4 11.5	1.866	2.848	5.9	19.5	5 11	14 31.39	-12 4.9	1.886	2.883	4.0	20.0
5 21	14 26.07	-3 38.6	1.892	2.833	9.2	19.7	5 21	14 23.06	-11 59.0	1.928	2.888	7.8	20.3
5 31	14 20.68	-3 20.9	1.942	2.819	12.5	19.8	5 31	14 16.34	-12 0.1	1.996	2.894	11.3	20.5
6 10	14 17.20	-3 19.6	2.012	2.805	15.3	20.0	6 10	14 11.73	-12 10.0	2.086	2.899	14.2	20.7
417690	2007 <i>BG</i> ₄₂		5 2.5 54°38	0°6/ 2.9	17		153750	2001 <i>UD</i> ₁₆₈		5 2.5 171°75	3°8/ 5.5	17	
4 1	15 3.23	-18 40.1	1.486	2.361	14.8	21.0	4 1	15 6.63	-28 15.3	2.424	3.239	11.8	20.5
4 11	14 57.56	-18 20.5	1.433	2.375	10.7	20.7	4 11	14 59.55	-28 29.5	2.344	3.243	9.2	20.3
4 21	14 49.66	-17 49.2	1.403	2.389	6.0	20.5	4 21	14 50.66	-28 29.9	2.289	3.247	6.4	20.1
5 1	14 40.53	-17 9.1	1.397	2.404	1.1	20.2	5 1	14 40.70	-28 16.0	2.261	3.250	4.1	20.0
5 11	14 31.45	-16 25.7	1.418	2.419	4.1	20.4	5 11	14 30.60	-27 49.5	2.262	3.252	4.3	20.0
5 21	14 23.57	-15 44.9	1.464	2.434	8.7	20.8	5 21	14 21.27	-27 13.8	2.292	3.253	6.7	20.2
5 31	14 17.79	-15 12.0	1.534	2.450	12.9	21.0	5 31	14 13.48	-26 33.8	2.349	3.254	9.5	20.3
6 10	14 14.61	-14 51.0	1.623	2.465	16.3	21.3	6 10	14 7.77	-25 54.6	2.429	3.254	12.1	20.5
497617	2006 <i>QP</i> ₃₅		5 2.5 284°47	3°0/ 4.1	17		479779	2014 <i>EB</i> ₃₆		5 2.5 341°98	1°3/ 1.5	17	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
100863	1998 HQ ₅₄		5 2.5 19°61	4.1/ 4.6	17		304681	2006 WV ₁₀₉		5 2.5 126°75	3.2/29.8	18	
4 1	15 3.58	-24 12.0	1.180	2.053	18.0	19.2	4 1	15 0.69	-5 49.3	2.436	3.308	9.9	20.9
4 11	14 58.55	-24 34.1	1.122	2.057	13.6	18.9	4 11	14 55.09	-5 22.3	2.374	3.314	7.1	20.7
4 21	14 50.53	-24 37.1	1.084	2.063	8.8	18.6	4 21	14 48.11	-4 56.3	2.337	3.319	4.4	20.5
5 1	14 40.70	-24 20.6	1.069	2.069	4.6	18.4	5 1	14 40.39	-4 34.7	2.329	3.325	3.2	20.5
5 11	14 30.71	-23 48.6	1.077	2.076	5.5	18.5	5 11	14 32.64	-4 20.5	2.350	3.330	5.0	20.6
5 21	14 22.12	-23 7.8	1.108	2.084	10.0	18.8	5 21	14 25.55	-4 15.8	2.398	3.335	7.7	20.8
5 31	14 16.19	-22 26.9	1.160	2.093	14.6	19.0	5 31	14 19.70	-4 22.1	2.471	3.340	10.4	20.9
6 10	14 13.57	-21 53.4	1.231	2.103	18.6	19.3	6 10	14 15.51	-4 39.6	2.566	3.345	12.8	21.1
52278	1988 SG ₃		5 2.5 272°61	3.3/27.7	18		239235	2006 SM ₁₆₄		5 2.5 272°46	0.7/ 3.1	17	
4 1	14 54.38	+ 1 26.8	4.354	5.216	6.1	19.4	4 1	14 59.61	-20 38.0	2.103	2.962	11.7	20.6
4 11	14 50.21	+ 1 48.8	4.283	5.209	4.7	19.2	4 11	14 54.64	-19 52.0	2.024	2.958	8.5	20.4
4 21	14 45.31	+ 2 7.3	4.240	5.203	3.5	19.2	4 21	14 48.00	-18 53.7	1.969	2.953	4.9	20.1
5 1	14 40.01	+ 2 20.3	4.226	5.196	3.3	19.1	5 1	14 40.38	-17 46.2	1.942	2.949	1.1	19.9
5 11	14 34.68	+ 2 26.2	4.241	5.190	4.2	19.2	5 11	14 32.67	-16 34.4	1.943	2.944	3.3	20.0
5 21	14 29.64	+ 2 24.0	4.284	5.183	5.6	19.3	5 21	14 25.72	-15 24.0	1.973	2.940	7.1	20.2
5 31	14 25.24	+ 2 13.2	4.352	5.176	7.1	19.4	5 31	14 20.23	-14 20.6	2.027	2.935	10.6	20.4
6 10	14 21.72	+ 1 53.8	4.443	5.170	8.5	19.5	6 10	14 16.70	-13 28.5	2.104	2.931	13.6	20.6
498002	2007 EA ₆₇		5 2.5 16°87	3.5/30.3	17		436645	2011 QV ₂₆		5 2.5 251°85	1.8/30.8	16	
4 1	15 0.29	- 9 52.9	1.379	2.273	14.5	20.8	4 1	15 0.19	-12 2.5	2.410	3.280	10.0	21.4
4 11	14 55.60	- 9 3.9	1.324	2.277	10.3	20.6	4 11	14 54.91	-11 15.3	2.321	3.263	7.1	21.2
4 21	14 48.66	- 8 11.2	1.292	2.281	5.9	20.3	4 21	14 48.12	-10 22.8	2.258	3.245	4.0	21.0
5 1	14 40.45	- 7 21.1	1.284	2.286	3.5	20.2	5 1	14 40.40	- 9 28.7	2.223	3.227	1.8	20.8
5 11	14 32.21	- 6 40.3	1.301	2.292	6.5	20.4	5 11	14 32.51	- 8 37.3	2.218	3.209	4.2	20.9
5 21	14 25.08	- 6 14.0	1.342	2.299	10.8	20.6	5 21	14 25.18	- 7 52.7	2.241	3.190	7.5	21.1
5 31	14 19.98	- 6 5.5	1.405	2.306	14.8	20.9	5 31	14 19.08	- 7 18.4	2.289	3.171	10.6	21.3
6 10	14 17.45	- 6 15.3	1.486	2.314	18.2	21.1	6 10	14 14.69	- 6 56.6	2.359	3.152	13.4	21.4
190045	2004 RC ₁₂₄		5 2.5 175°25	4.9/ 6.8	17		522917	2016 PS ₁₀₈		5 2.5 180°92	2.2/30.7	17	
4 1	15 4.66	-32 24.6	2.285	3.088	12.9	21.0	4 1	15 0.94	- 8 54.8	2.550	3.419	9.6	21.9
4 11	14 58.27	-32 25.1	2.204	3.090	10.3	20.8	4 11	14 55.27	- 8 35.2	2.479	3.419	6.8	21.8
4 21	14 50.00	-32 7.7	2.146	3.092	7.5	20.7	4 21	14 48.23	- 8 14.6	2.434	3.419	3.9	21.6
5 1	14 40.63	-31 31.9	2.114	3.093	5.3	20.5	5 1	14 40.41	- 7 55.6	2.418	3.419	2.2	21.4
5 11	14 31.15	-30 40.0	2.110	3.094	5.1	20.5	5 11	14 32.52	- 7 41.1	2.430	3.419	4.1	21.6
5 21	14 22.52	-29 36.5	2.134	3.094	7.1	20.6	5 21	14 25.24	- 7 33.4	2.472	3.419	7.0	21.8
5 31	14 15.55	-28 27.8	2.184	3.094	9.9	20.8	5 31	14 19.15	- 7 34.2	2.539	3.418	9.8	21.9
6 10	14 10.76	-27 20.5	2.258	3.093	12.5	21.0	6 10	14 14.69	- 7 44.6	2.628	3.417	12.2	22.1
505322	2012 XC ₁₄₉		5 2.5 21°24	1.9/ 4.5	17		306338	2011 SH ₁₂₉		5 2.5 209°48	0.6/ 1.9	17	
4 1	14 59.19	-25 57.6	1.988	2.834	12.9	20.2	4 1	15 0.06	-14 42.8	2.788	3.648	9.1	22.1
4 11	14 54.38	-24 50.3	1.913	2.836	9.6	20.0	4 11	14 54.61	-14 18.2	2.706	3.643	6.5	22.0
4 21	14 47.83	-23 24.9	1.863	2.839	5.9	19.8	4 21	14 47.86	-13 48.5	2.650	3.637	3.5	21.8
5 1	14 40.34	-21 44.7	1.839	2.842	2.4	19.6	5 1	14 40.37	-13 16.0	2.623	3.630	0.7	21.5
5 11	14 32.87	-19 56.4	1.845	2.846	3.4	19.6	5 11	14 32.77	-12 43.6	2.626	3.623	3.0	21.7
5 21	14 26.28	-18 7.7	1.879	2.850	7.1	19.9	5 21	14 25.70	-12 14.2	2.658	3.616	6.1	21.9
5 31	14 21.30	-16 26.3	1.939	2.854	10.7	20.1	5 31	14 19.73	-11 50.7	2.717	3.608	8.8	22.1
6 10	14 18.37	-14 58.2	2.021	2.858	13.8	20.3	6 10	14 15.27	-11 35.1	2.798	3.600	11.3	22.2
141688	2002 JE ₁₃₃		5 2.5 301°02	2.0/ 3.5	17		507059	2008 VD ₇₀		5 2.5 245°84	1.8/ 3.9	17	
4 1	15 4.00	-20 31.3	1.382	2.255	15.8	20.0	4 1	15 2.23	-22 17.1	2.049	2.901	12.3	21.8
4 11	14 58.82	-20 37.7	1.296	2.235	11.8	19.7	4 11	14 56.65	-22 4.6	1.966	2.893	9.1	21.6
4 21	14 50.78	-20 30.4	1.231	2.215	7.1	19.4	4 21	14 49.17	-21 39.7	1.906	2.885	5.5	21.4
5 1	14 40.78	-20 9.8	1.191	2.196	2.5	19.1	5 1	14 40.55	-21 3.8	1.874	2.878	2.2	21.1
5 11	14 30.20	-19 39.2	1.175	2.176	4.7	19.1	5 11	14 31.73	-20 20.2	1.869	2.869	3.5	21.2
5 21	14 20.54	-19 4.3	1.184	2.157	9.9	19.4	5 21	14 23.67	-19 33.6	1.892	2.861	7.2	21.4
5 31	14 13.13	-18 32.1	1.214	2.139	14.9	19.6	5 31	14 17.20	-18 49.2	1.940	2.853	10.8	21.6
6 10	14 8.83	-18 9.2	1.264	2.120	19.2	19.8	6 10	14 12.85	-18 11.9	2.011	2.844	13.9	21.8
203409	2001 XX ₁₈₂		5 2.5 116°96	2.1/ 1.2	18		501268	2013 WG ₁₄		5 2.5 134°95	2.7/30.3	17	
4 1	15 6.28	-12 24.3	1.585	2.462	14.0	21.0	4 1	15 1.11	-10 2.3	1.987	2.865	11.5	21.9
4 11	14 59.55	-11 44.2	1.532	2.477	9.9	20.7	4 11	14 55.65	- 9 14.1	1.924	2.869	8.2	21.7
4 21	14 50.70	-10 58.4	1.504	2.492	5.4	20.5	4 21	14 48.52	- 8 22.7	1.886	2.873	4.7	21.5
5 1	14 40.72	-10 11.9	1.501	2.506	2.1	20.3	5 1	14 40.45	- 7 32.6	1.875	2.876	2.7	21.3
5 11	14 30.81	- 9 30.2	1.526	2.520	5.2	20.6	5 11	14 32.36	- 6 48.9	1.892	2.880	5.1	21.5
5 21	14 22.09	- 8 58.3	1.577	2.533	9.5	20.8	5 21	14 25.07	- 6 15.5	1.936	2.884	8.6	21.7
5 31	14 15.41	- 8 39.8	1.652	2.546	13.4	21.1	5 31	14 19.30	- 5 55.5	2.004	2.887	11.9	21.9
6 10	14 11.25	- 8 36.2	1.746	2.558	16.6	21.3	6 10	14 15.51	- 5 49.9	2.093	2.890	14.7	22.1
95531	2002 EN ₇₅		5 2.5 157°07	2.0/30.9	18		507959	2015 BE ₃₃		5 2.5 236°67	0.2/ 2.3	17	
4 1	15 4.90	-13 7.8	1.841	2.712	12.6	20.5	4 1	15 4.60	-16 15.2	1.958	2.822	12.3	22.3
4 11	14 58.42	-12 8.5	1.778	2.720	8.9	20.3	4 11	14 58.41	-15 55.2	1.871	2.809	8.8	22.1
4 21	14 50.05	-11 2.3	1.740	2.728	4.9	20.1	4 21	14 50.19	-15 27.0	1.809	2.796	4.9	21.8
5 1	14 40.64	- 9 54.4	1.730	2.734	2.0	19.9	5 1	14 40.69	-14 52.8	1.774	2.782	0.6	21.5
5 11	14 31.24	- 8 50.8	1.748	2.740	4.9	20.1	5 11	14 30.93	-14 16.6	1.768	2.767	3.8	21.7
5 21	14 22.81	- 7 56.9	1.794	2.746	8.9	20.4	5 21	14 21.91	-13 42.7	1.789	2.752	8.1	21.9
5 31	14 16.15	- 7 17.1	1.864	2.750	12.5	20.6	5 31	14 14.51	-13 15.8	1.835	2.736	11.9	22.1
6 10	14 11.73	- 6 53.5	1.955	2.754	15.5	20.8	6 10	14 9.36	-12 59.1	1.903	2.720	15.2	22.3
189567	2000 SW ₃₁₀		5 2.5 285°81	9.1/ 8.3	18		337964	2002 AO ₁₉₇		5 2.5 129°18	0.0/ 2.4	18	
4 1	15 6.47	-38 52.4	1.842	2.62									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
363218	2001 VM ₇₅		5 2.5 85°24	2.3/ 4.6	18		57585	2001 TG ₇₀		5 2.5 109°86	1.5/ 1.1	18	
4 1	15 9.42	-28 0.7	1.553	2.390	16.3	20.1	4 1	15 0.84	-11 56.8	2.465	3.332	9.9	19.4
4 11	15 1.56	-26 25.9	1.509	2.427	12.1	19.9	4 11	14 55.15	-11 25.5	2.408	3.348	7.0	19.2
4 21	14 51.61	-24 28.0	1.488	2.462	7.4	19.8	4 21	14 48.13	-10 51.0	2.377	3.364	3.8	19.1
5 1	14 40.82	-22 13.3	1.494	2.497	3.0	19.6	5 1	14 40.41	-10 16.2	2.374	3.379	1.5	18.9
5 11	14 30.55	-19 52.3	1.530	2.531	4.0	19.7	5 11	14 32.73	-9 44.5	2.401	3.394	3.7	19.1
5 21	14 21.90	-17 36.7	1.595	2.564	8.3	20.0	5 21	14 25.76	-9 18.9	2.456	3.409	6.8	19.3
5 31	14 15.60	-15 36.1	1.686	2.596	12.2	20.3	5 31	14 20.05	-9 1.8	2.537	3.423	9.6	19.5
6 10	14 11.98	-13 56.9	1.799	2.628	15.5	20.6	6 10	14 16.00	-8 54.7	2.640	3.437	12.0	19.7
345594	2006 SV ₈₂		5 2.5 131°35	1.7/ 3.9	18		177867	2005 QV ₃₁		5 2.5 237°12	1.4/ 3.8	18	
4 1	15 2.99	-21 30.7	2.451	3.295	10.8	21.2	4 1	15 0.58	-21 45.0	2.583	3.428	10.3	21.0
4 11	14 56.85	-21 38.1	2.379	3.303	8.0	21.0	4 11	14 55.16	-21 29.9	2.493	3.418	7.6	20.8
4 21	14 49.14	-21 36.4	2.333	3.310	4.8	20.8	4 21	14 48.25	-21 4.9	2.429	3.408	4.5	20.6
5 1	14 40.54	-21 26.4	2.314	3.317	2.0	20.7	5 1	14 40.44	-20 31.4	2.393	3.397	1.7	20.4
5 11	14 31.86	-21 10.0	2.325	3.324	3.0	20.7	5 11	14 32.48	-19 52.2	2.386	3.386	2.9	20.4
5 21	14 23.88	-20 50.4	2.364	3.331	6.1	21.0	5 21	14 25.10	-19 10.7	2.407	3.374	6.0	20.6
5 31	14 17.26	-20 30.9	2.430	3.337	9.1	21.2	5 31	14 18.94	-18 31.0	2.456	3.363	9.0	20.8
6 10	14 12.48	-20 15.0	2.519	3.343	11.7	21.3	6 10	14 14.47	-17 56.8	2.527	3.351	11.7	21.0
21986	Alexanduribe		5 2.5 224°68	0.1/ 2.4	18		91260	1999 CK ₈₇		5 2.5 127°72	0.3/ 2.7	18	
4 1	15 6.43	-15 46.2	1.773	2.639	13.2	18.6	4 1	15 7.79	-17 50.8	1.654	2.517	14.2	19.7
4 11	14 59.85	-15 41.4	1.693	2.632	9.5	18.4	4 11	15 0.67	-17 32.5	1.595	2.532	10.2	19.5
4 21	14 51.03	-15 29.0	1.637	2.624	5.3	18.1	4 21	14 51.36	-17 3.8	1.561	2.546	5.6	19.2
5 1	14 40.81	-15 11.1	1.608	2.616	0.7	17.7	5 1	14 40.85	-16 27.5	1.553	2.560	0.9	18.9
5 11	14 30.31	-14 51.1	1.607	2.607	4.0	18.0	5 11	14 30.37	-15 48.1	1.573	2.573	4.0	19.2
5 21	14 20.68	-14 32.9	1.633	2.597	8.6	18.2	5 21	14 21.06	-15 10.9	1.620	2.585	8.5	19.5
5 31	14 12.89	-14 20.8	1.683	2.587	12.6	18.4	5 31	14 13.83	-14 41.1	1.691	2.597	12.5	19.8
6 10	14 7.59	-14 18.0	1.755	2.577	16.1	18.6	6 10	14 9.18	-14 22.2	1.783	2.608	15.8	20.0
111937	2002 GG ₄₁		5 2.5 20°79	1.9/ 3.7	18		520068	2013 WQ ₁₁₂		5 2.5 172°63	0.4/ 2.2	17	
4 1	15 2.53	-21 51.2	1.253	2.130	16.8	19.1	4 1	15 3.35	-15 0.7	1.954	2.823	12.1	21.3
4 11	14 57.60	-21 32.2	1.192	2.133	12.4	18.9	4 11	14 57.39	-14 50.9	1.883	2.823	8.6	21.1
4 21	14 49.93	-20 55.2	1.152	2.136	7.4	18.6	4 21	14 49.55	-14 34.9	1.837	2.824	4.7	20.9
5 1	14 40.66	-20 3.0	1.135	2.140	2.5	18.3	5 1	14 40.62	-14 15.0	1.817	2.824	0.7	20.6
5 11	14 31.27	-19 1.8	1.143	2.145	4.6	18.4	5 11	14 31.56	-13 54.5	1.826	2.825	3.8	20.8
5 21	14 23.20	-17 59.9	1.174	2.150	9.7	18.7	5 21	14 23.33	-13 37.0	1.862	2.825	7.8	21.1
5 31	14 17.55	-17 5.6	1.228	2.155	14.5	19.0	5 31	14 16.71	-13 26.0	1.922	2.825	11.4	21.3
6 10	14 14.94	-16 25.2	1.300	2.161	18.5	19.3	6 10	14 12.25	-13 24.1	2.005	2.825	14.4	21.5
329366	2001 UZ ₁₃₅		5 2.5 253°78	1.4/ 1.7	17		368955	2007 AH ₂₅		5 2.5 102°59	1.6/ 3.7	17	
4 1	15 5.45	-12 1.9	1.807	2.679	12.7	20.6	4 1	15 4.14	-22 6.3	1.789	2.645	13.6	21.1
4 11	14 59.11	-11 57.6	1.727	2.669	9.1	20.3	4 11	14 57.99	-21 41.0	1.729	2.660	10.0	20.9
4 21	14 50.61	-11 49.7	1.671	2.659	5.0	20.1	4 21	14 49.85	-21 1.9	1.693	2.674	5.9	20.6
5 1	14 40.76	-11 40.6	1.642	2.648	1.5	19.8	5 1	14 40.65	-20 11.6	1.684	2.688	2.0	20.4
5 11	14 30.63	-11 33.5	1.641	2.638	4.5	20.0	5 11	14 31.49	-19 14.8	1.702	2.702	3.6	20.6
5 21	14 21.31	-11 31.5	1.667	2.627	8.8	20.2	5 21	14 23.39	-18 17.5	1.747	2.716	7.7	20.8
5 31	14 13.73	-11 37.8	1.717	2.616	12.7	20.4	5 31	14 17.16	-17 25.6	1.817	2.730	11.4	21.1
6 10	14 8.54	-11 54.1	1.788	2.605	16.1	20.6	6 10	14 13.28	-16 43.9	1.909	2.743	14.5	21.3
54970	2001 PE ₃₈		5 2.5 83°92	10.1/ 26.8	18		102887	1999 XM ₄		5 2.5 174°51	0.8/ 1.9	17	
4 1	15 6.58	+10 19.0	1.649	2.506	14.5	19.0	4 1	15 4.54	-15 21.7	2.031	2.895	11.9	20.1
4 11	14 59.61	+11 6.9	1.611	2.520	12.1	18.9	4 11	14 58.13	-14 44.9	1.959	2.898	8.5	19.9
4 21	14 50.66	+11 37.1	1.596	2.533	10.4	18.8	4 21	14 49.92	-14 0.5	1.913	2.901	4.6	19.6
5 1	14 40.73	+11 43.2	1.606	2.546	10.3	18.8	5 1	14 40.68	-13 11.8	1.895	2.902	0.9	19.3
5 11	14 30.96	+11 22.1	1.639	2.559	11.7	18.9	5 11	14 31.38	-12 23.3	1.906	2.904	3.9	19.6
5 21	14 22.38	+10 34.4	1.696	2.572	14.0	19.1	5 21	14 22.92	-11 39.8	1.945	2.904	7.8	19.8
5 31	14 15.76	+9 23.5	1.774	2.584	16.3	19.3	5 31	14 16.07	-11 5.5	2.009	2.904	11.4	20.0
6 10	14 11.54	+7 54.3	1.869	2.597	18.5	19.5	6 10	14 11.34	-10 43.1	2.095	2.903	14.3	20.2
338366	2002 XJ ₉₉		5 2.5 146°34	3.4/ 29.5	18		155332	2006 BA ₁₅₇		5 2.5 281°26	1.2/ 30.6	18	
4 1	15 1.86	-4 27.5	2.631	3.498	9.4	21.5	4 1	14 53.20	-10 6.1	4.408	5.275	5.9	20.4
4 11	14 55.80	-3 58.9	2.571	3.508	6.8	21.4	4 11	14 49.43	-9 42.3	4.325	5.265	4.2	20.3
4 21	14 48.47	-3 32.2	2.538	3.516	4.4	21.2	4 21	14 44.93	-9 17.2	4.269	5.255	2.3	20.1
5 1	14 40.45	-3 10.5	2.533	3.525	3.4	21.2	5 1	14 40.02	-8 52.5	4.242	5.245	1.2	20.0
5 11	14 32.44	-2 56.6	2.558	3.533	5.0	21.3	5 11	14 35.06	-8 29.9	4.246	5.235	2.5	20.1
5 21	14 25.07	-2 52.5	2.611	3.541	7.5	21.5	5 21	14 30.39	-8 11.2	4.278	5.225	4.4	20.2
5 31	14 18.88	-2 59.3	2.689	3.548	10.0	21.6	5 31	14 26.32	-7 57.5	4.338	5.214	6.1	20.4
6 10	14 14.28	-3 17.1	2.790	3.554	12.2	21.8	6 10	14 23.11	-7 50.0	4.422	5.204	7.7	20.5
153986	2002 AT ₁₃₉		5 2.5 111°93	2.0/ 30.9	18		216407	2008 FP ₁₉		5 2.5 258°32	2.3/ 30.4	18	
4 1	15 3.60	-11 47.4	1.942	2.815	12.0	20.9	4 1	14 59.21	-9 39.3	2.445	3.318	9.8	20.7
4 11	14 57.35	-11 6.7	1.889	2.831	8.4	20.7	4 11	14 54.16	-9 2.7	2.366	3.309	7.0	20.5
4 21	14 49.41	-10 22.0	1.860	2.848	4.6	20.5	4 21	14 47.70	-8 23.7	2.314	3.300	4.0	20.3
5 1	14 40.57	-9 37.2	1.859	2.863	2.0	20.4	5 1	14 40.40	-7 45.5	2.289	3.291	2.3	20.1
5 11	14 31.81	-8 57.1	1.886	2.879	4.6	20.6	5 11	14 32.98	-7 12.0	2.293	3.281	4.4	20.3
5 21	14 23.98	-8 25.6	1.941	2.894	8.3	20.8	5 21	14 26.13	-6 46.3	2.325	3.272	7.4	20.4
5 31	14 17.80	-8 5.9	2.020	2.908	11.6	21.1	5 31	14 20.48	-6 31.0	2.382	3.262	10.4	20.6
6 10	14 13.70	-7 59.2	2.120	2.922	14.4	21.3	6 10	14 16.47	-6 27.3	2.461	3.252	12.9	20.8
476357	2008 BX ₂₂		5 2.5 359°71	6.1/ 6.9	16		295442	2008 LU ₁₆		5 2.5 314°67	5.2/ 29.4	17	
4 1	15 2.71	-32 37.5	2.001	2.814	14.1	20.7	4 1						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
302325	2002 AX ₇₅		5 2.5 37°75	4.8/ 5.4	17		292247	2006 SW ₇₇		5 2.5 100°87	2°1/30.9	17	
4 1	15 4.37	-27 14.6	1.243	2.104	18.1	20.1	4 1	15 1.23	-10 13.4	2.165	3.039	10.9	20.5
4 11	14 59.05	-27 21.2	1.184	2.110	13.9	19.9	4 11	14 55.71	-9 51.5	2.096	3.039	7.7	20.3
4 21	14 50.80	-27 4.8	1.145	2.118	9.3	19.6	4 21	14 48.59	-9 27.4	2.053	3.040	4.3	20.1
5 1	14 40.81	-26 25.2	1.128	2.125	5.4	19.4	5 1	14 40.55	-9 4.1	2.037	3.040	2.1	19.9
5 11	14 30.73	-25 27.4	1.136	2.133	5.8	19.5	5 11	14 32.43	-8 45.1	2.049	3.041	4.4	20.1
5 21	14 22.09	-24 19.7	1.167	2.142	9.8	19.7	5 21	14 25.03	-8 33.3	2.088	3.041	7.8	20.3
5 31	14 16.07	-23 12.1	1.220	2.151	14.2	20.0	5 31	14 19.02	-8 31.0	2.153	3.041	10.9	20.5
6 10	14 13.30	-22 13.5	1.292	2.160	18.1	20.3	6 10	14 14.88	-8 39.4	2.239	3.042	13.7	20.7
3417	Tamblyn		5 2.5 10°93	6°8/29.8	18		387439	2013 WU ₅₅		5 2.5 83°40	2°0/ 1.4	18	
4 1	15 0.97	-2 51.3	0.965	1.875	17.7	15.8	4 1	15 5.12	-10 4.2	1.851	2.724	12.4	20.2
4 11	14 56.71	-2 28.8	0.921	1.878	13.1	15.6	4 11	14 58.70	-10 3.5	1.784	2.727	8.8	19.9
4 21	14 49.52	-2 14.4	0.897	1.883	8.7	15.3	4 21	14 50.32	-10 1.2	1.742	2.729	4.9	19.7
5 1	14 40.64	-2 15.3	0.894	1.890	6.9	15.3	5 1	14 40.79	-10 0.0	1.727	2.732	2.0	19.5
5 11	14 31.76	-2 36.8	0.913	1.899	9.6	15.4	5 11	14 31.14	-10 2.6	1.740	2.734	4.6	19.7
5 21	14 24.37	-3 20.0	0.952	1.909	14.0	15.7	5 21	14 22.38	-10 11.5	1.780	2.737	8.6	19.9
5 31	14 19.63	-4 23.5	1.009	1.921	18.3	16.0	5 31	14 15.34	-10 28.7	1.844	2.739	12.2	20.1
6 10	14 18.11	-5 43.7	1.083	1.935	22.0	16.3	6 10	14 10.56	-10 55.3	1.930	2.742	15.2	20.4
374397	2005 VN ₅₈		5 2.5 306°45	2°9/ 4.3	17		192371	1996 AD ₁₂		5 2.5 182°36	5°0/ 6.9	18	
4 1	15 3.72	-23 17.8	1.607	2.465	14.8	20.5	4 1	15 5.79	-33 2.8	2.576	3.368	11.9	21.4
4 11	14 58.22	-23 26.7	1.528	2.457	11.1	20.3	4 11	14 59.02	-33 22.4	2.492	3.369	9.6	21.3
4 21	14 50.27	-23 20.9	1.472	2.450	7.0	20.0	4 21	14 50.46	-33 26.4	2.431	3.369	7.2	21.1
5 1	14 40.76	-23 0.6	1.440	2.442	3.3	19.8	5 1	14 40.81	-33 13.5	2.397	3.369	5.4	21.0
5 11	14 30.95	-22 28.6	1.435	2.434	4.4	19.8	5 11	14 30.99	-32 44.9	2.391	3.368	5.2	21.0
5 21	14 22.07	-21 50.2	1.455	2.427	8.6	20.0	5 21	14 21.88	-32 3.8	2.413	3.366	6.8	21.1
5 31	14 15.23	-21 11.9	1.499	2.420	12.8	20.3	5 31	14 14.28	-31 15.3	2.462	3.364	9.2	21.2
6 10	14 11.10	-20 39.7	1.563	2.413	16.4	20.5	6 10	14 8.72	-30 24.9	2.534	3.361	11.6	21.4
47059	1998 XX ₂₀		5 2.5 260°61	5°0/ 6.8	18		426810	2013 TD ₁₃₉		5 2.5 275°84	6°0/27.6	18	
4 1	15 2.92	-32 31.2	2.284	3.090	12.8	18.7	4 1	15 2.35	-2 17.0	1.838	2.717	12.2	20.9
4 11	14 57.22	-32 31.1	2.185	3.073	10.3	18.5	4 11	14 56.92	-1 3.9	1.752	2.691	9.2	20.7
4 21	14 49.56	-32 13.0	2.109	3.056	7.6	18.3	4 21	14 49.46	+ 0 8.4	1.690	2.664	6.7	20.5
5 1	14 40.66	-31 35.8	2.059	3.039	5.4	18.1	5 1	14 40.69	+ 1 13.0	1.655	2.637	6.2	20.4
5 11	14 31.50	-30 41.5	2.037	3.021	5.2	18.1	5 11	14 31.58	+ 2 3.1	1.647	2.610	8.4	20.4
5 21	14 23.04	-29 34.4	2.041	3.003	7.3	18.2	5 21	14 23.14	+ 2 33.7	1.664	2.582	11.8	20.6
5 31	14 16.15	-28 20.9	2.072	2.985	10.2	18.3	5 31	14 16.26	+ 2 42.0	1.703	2.554	15.2	20.7
6 10	14 11.44	-27 7.8	2.126	2.966	13.0	18.5	6 10	14 11.58	+ 2 28.3	1.761	2.525	18.2	20.9
508452	2016 MX ₁		5 2.5 271°51	4°1/29.8	17		41790	2000 WY ₁		5 2.5 328°59	1°3/ 1.6	18	
4 1	15 2.87	-6 33.1	1.747	2.628	12.6	21.2	4 1	15 2.40	-13 21.6	1.755	2.632	12.8	19.3
4 11	14 57.26	-5 52.9	1.672	2.617	9.2	20.9	4 11	14 56.89	-12 58.5	1.686	2.630	9.1	19.0
4 21	14 49.60	-5 12.2	1.620	2.605	5.7	20.7	4 21	14 49.37	-12 29.4	1.640	2.629	5.0	18.8
5 1	14 40.67	-4 36.2	1.595	2.593	4.1	20.6	5 1	14 40.67	-11 58.0	1.621	2.627	1.4	18.5
5 11	14 31.52	-4 9.9	1.597	2.580	6.5	20.7	5 11	14 31.83	-11 28.5	1.629	2.626	4.5	18.7
5 21	14 23.18	-3 57.4	1.625	2.568	10.3	20.9	5 21	14 23.88	-11 5.2	1.663	2.624	8.7	19.0
5 31	14 16.54	-4 1.1	1.675	2.556	14.0	21.1	5 31	14 17.66	-10 51.8	1.721	2.623	12.5	19.2
6 10	14 12.21	-4 21.2	1.745	2.543	17.1	21.2	6 10	14 13.73	-10 50.7	1.799	2.622	15.7	19.4
505600	2014 DE ₄₈		5 2.5 19°71	4°6/28.2	17		247141	2000 WD ₁₅₃		5 2.5 271°40	2°9/ 5.4	18	
4 1	14 57.72	-5 14.8	1.997	2.881	11.1	20.7	4 1	15 0.79	-27 39.5	2.520	3.346	11.1	20.8
4 11	14 53.24	-3 56.1	1.939	2.884	8.1	20.5	4 11	14 55.49	-27 14.0	2.415	3.323	8.6	20.6
4 21	14 47.21	-2 37.6	1.907	2.887	5.4	20.3	4 21	14 48.54	-26 33.5	2.334	3.299	5.8	20.4
5 1	14 40.34	-1 25.6	1.902	2.891	4.7	20.3	5 1	14 40.57	-25 38.7	2.280	3.275	3.3	20.2
5 11	14 33.45	-0 26.0	1.924	2.894	6.8	20.4	5 11	14 32.38	-24 32.4	2.255	3.251	3.5	20.2
5 21	14 27.32	+ 0 17.2	1.972	2.898	9.8	20.6	5 21	14 24.76	-23 19.2	2.259	3.227	6.3	20.3
5 31	14 22.59	+ 0 41.5	2.043	2.903	12.7	20.8	5 31	14 18.45	-22 4.8	2.290	3.202	9.4	20.4
6 10	14 19.69	+ 0 47.1	2.133	2.907	15.2	21.0	6 10	14 13.96	-20 54.7	2.345	3.177	12.2	20.6
499629	2010 UU ₈₇		5 2.5 261°24	1°9/ 1.2	17		172361	2002 XK ₅₁		5 2.5 229°37	4°5/28.7	17	
4 1	15 4.45	-12 47.4	1.734	2.609	13.0	21.7	4 1	15 2.17	-1 21.8	2.499	3.366	9.8	20.6
4 11	14 58.57	-12 8.2	1.645	2.588	9.4	21.5	4 11	14 56.23	-0 48.9	2.423	3.356	7.4	20.4
4 21	14 50.42	-11 21.4	1.579	2.567	5.2	21.2	4 21	14 48.85	-0 19.6	2.373	3.345	5.2	20.2
5 1	14 40.80	-10 31.3	1.540	2.545	1.9	20.9	5 1	14 40.62	+ 0 2.3	2.351	3.334	4.5	20.2
5 11	14 30.80	-9 43.2	1.528	2.523	5.1	21.1	5 11	14 32.26	+ 0 13.5	2.358	3.322	6.1	20.2
5 21	14 21.55	-9 2.9	1.543	2.500	9.7	21.3	5 21	14 24.48	+ 0 12.0	2.392	3.310	8.7	20.4
5 31	14 14.05	-8 35.3	1.581	2.476	13.9	21.5	5 31	14 17.91	-0 3.1	2.451	3.298	11.2	20.5
6 10	14 9.02	-8 23.2	1.640	2.452	17.5	21.6	6 10	14 13.01	-0 31.5	2.531	3.285	13.5	20.7
471762	2012 UP ₁₁₃		5 2.5 292°21	1°5/ 3.5	17		468098	2013 VW ₅		5 2.5 212°59	0°4/ 2.9	17	
4 1	15 2.92	-20 11.8	1.830	2.691	13.1	21.4	4 1	15 3.29	-22 52.7	2.102	2.949	12.2	21.9
4 11	14 57.50	-20 10.6	1.735	2.669	9.7	21.2	4 11	14 57.25	-21 15.3	2.015	2.943	8.9	21.7
4 21	14 49.86	-19 58.3	1.664	2.647	5.8	20.9	4 21	14 49.46	-19 19.9	1.955	2.937	5.1	21.4
5 1	14 40.74	-19 35.8	1.620	2.625	1.9	20.6	5 1	14 40.70	-17 11.5	1.924	2.931	0.9	21.1
5 11	14 31.20	-19 6.1	1.602	2.603	3.8	20.7	5 11	14 31.91	-14 57.8	1.924	2.924	3.5	21.3
5 21	14 22.35	-18 33.4	1.611	2.581	8.1	20.9	5 21	14 23.98	-12 47.7	1.955	2.916	7.6	21.5
5 31	14 15.20	-18 3.2	1.644	2.559	12.3	21.1	5 31	14 17.65	-10 49.4	2.013	2.909	11.3	21.7
6 10	14 10.45	-17 40.3	1.698	2.537	15.9	21.2	6 10	14 13.39	-9 8.7	2.094	2.900	14.4	21.9
472212	2014 EM ₂₉		5 2.5 199°20	1°0/ 1.6	17		127176	2002 GC ₁₅₉		5 2.5 185°44	5°7/ 6.3	17	
4 1	15 0.81	-13 39.8	2.398	3.264	10.2	21.6	4 1	15 7.28	-31 18.				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
468942	2015 <i>AL</i> ₁₅		5 2.5 12 ^h 38	5 ^m 7/ 5.1 17			512959	2017 <i>SZ</i> ₂₆		5 2.5 131 ^h 40	0 ^m 5/ 2.9 17		
4 1	15 8.95	-27 3.9	1.573	2.413	16.0	20.3	4 1	15 3.27	-18 24.7	1.909	2.772	12.6	22.0
4 11	15 2.19	-28 12.9	1.502	2.414	12.5	20.0	4 11	14 57.42	-18 8.7	1.840	2.776	9.1	21.8
4 21	14 52.60	-29 6.8	1.453	2.415	8.9	19.8	4 21	14 49.66	-17 43.0	1.795	2.780	5.1	21.5
5 1	14 41.16	-29 41.8	1.429	2.417	6.1	19.7	5 1	14 40.80	-17 10.0	1.778	2.785	1.0	21.2
5 11	14 29.30	-29 57.2	1.431	2.419	6.4	19.7	5 11	14 31.87	-16 33.6	1.788	2.789	3.5	21.4
5 21	14 18.50	-29 55.9	1.459	2.422	9.5	19.9	5 21	14 23.81	-15 58.1	1.825	2.793	7.6	21.7
5 31	14 10.03	-29 44.1	1.510	2.425	13.1	20.1	5 31	14 17.43	-15 28.3	1.888	2.796	11.2	21.9
6 10	14 4.65	-29 29.1	1.581	2.428	16.4	20.3	6 10	14 13.26	-15 7.5	1.972	2.800	14.4	22.1
145309	2005 <i>LE</i> ₁		5 2.5 307 ^h 48	2 ^m 9/30.8 17			67873	2000 <i>WL</i> ₃₄		5 2.5 184 ^h 09	1 ^m 2/ 1.6 16		
4 1	15 1.84	-11 13.4	1.384	2.275	14.7	20.0	4 1	15 4.57	-15 6.8	1.844	2.712	12.7	19.8
4 11	14 57.11	-10 34.6	1.303	2.254	10.6	19.7	4 11	14 58.36	-14 18.6	1.772	2.713	9.0	19.6
4 21	14 49.81	-9 49.1	1.244	2.233	6.0	19.4	4 21	14 50.19	-13 21.7	1.725	2.713	4.9	19.4
5 1	14 40.79	-9 2.3	1.209	2.213	2.9	19.1	5 1	14 40.88	-12 20.2	1.706	2.713	1.2	19.1
5 11	14 31.33	-8 20.9	1.199	2.193	6.3	19.3	5 11	14 31.48	-11 19.9	1.715	2.711	4.4	19.3
5 21	14 22.76	-7 51.2	1.213	2.173	11.3	19.5	5 21	14 22.99	-10 26.3	1.751	2.709	8.6	19.6
5 31	14 16.25	-7 38.0	1.248	2.154	16.0	19.7	5 31	14 16.23	-9 44.4	1.812	2.707	12.3	19.8
6 10	14 12.58	-7 43.8	1.302	2.136	20.0	19.9	6 10	14 11.75	-9 17.1	1.893	2.703	15.5	20.0
215972	2005 <i>QM</i> ₉₀		5 2.5 137 ^h 84	4 ^m 7/27.8 18			128806	2004 <i>RS</i> ₂₅₀		5 2.5 185 ^h 74	5 ^m 0/ 6.2 17		
4 1	14 58.64	-2 26.4	2.393	3.269	9.9	20.6	4 1	15 6.95	-30 59.1	2.272	3.079	12.8	20.4
4 11	14 53.69	-1 20.2	2.335	3.273	7.3	20.5	4 11	15 0.09	-31 29.8	2.190	3.079	10.2	20.2
4 21	14 47.43	-0 16.6	2.303	3.276	5.2	20.3	4 21	14 51.19	-31 44.8	2.131	3.078	7.5	20.0
5 1	14 40.44	+ 0 39.5	2.299	3.280	4.8	20.3	5 1	14 41.03	-31 42.7	2.099	3.077	5.4	19.9
5 11	14 33.43	+ 1 23.8	2.323	3.283	6.5	20.4	5 11	14 30.62	-31 24.3	2.094	3.076	5.3	19.9
5 21	14 27.07	+ 1 53.2	2.373	3.286	8.9	20.6	5 21	14 20.99	-30 52.9	2.117	3.074	7.4	20.0
5 31	14 21.91	+ 2 6.4	2.447	3.290	11.4	20.7	5 31	14 13.03	-30 13.7	2.166	3.072	10.1	20.2
6 10	14 18.37	+ 2 3.4	2.541	3.293	13.5	20.9	6 10	14 7.34	-29 32.8	2.238	3.069	12.8	20.3
229197	2004 <i>TV</i> ₃₄₆		5 2.5 201 ^h 77	2 ^m 0/ 4.0 18			23207	2000 <i>SL</i> ₂₇₉		5 2.5 190 ^h 52	0 ^m 8/ 3.4 18		
4 1	15 2.91	-22 49.3	2.006	2.856	12.6	20.4	4 1	15 0.43	-20 7.1	3.014	3.858	9.0	20.0
4 11	14 57.17	-22 34.7	1.928	2.854	9.4	20.2	4 11	14 54.88	-19 52.1	2.931	3.857	6.5	19.9
4 21	14 49.51	-22 7.1	1.874	2.852	5.7	20.0	4 21	14 48.09	-19 29.7	2.874	3.855	3.8	19.7
5 1	14 40.73	-21 27.8	1.846	2.850	2.3	19.8	5 1	14 40.60	-19 1.1	2.847	3.852	1.1	19.5
5 11	14 31.80	-20 40.6	1.847	2.847	3.5	19.8	5 11	14 33.02	-18 28.9	2.849	3.849	2.4	19.6
5 21	14 23.70	-19 50.3	1.875	2.844	7.2	20.1	5 21	14 25.96	-17 55.7	2.881	3.846	5.3	19.8
5 31	14 17.23	-19 2.4	1.929	2.842	10.8	20.3	5 31	14 19.95	-17 24.7	2.940	3.842	7.9	19.9
6 10	14 12.95	-18 21.8	2.004	2.838	13.9	20.5	6 10	14 15.40	-16 58.7	3.024	3.838	10.2	20.1
311254	2005 <i>EW</i> ₃₈		5 2.5 108 ^h 99	4 ^m 6/29.5 18			211262	2002 <i>RE</i> ₃₆		5 2.5 225 ^h 25	5 ^m 6/ 7.1 18		
4 1	15 5.28	-6 0.6	1.613	2.494	13.5	20.8	4 1	15 4.34	-33 24.0	2.259	3.058	13.1	20.7
4 11	14 58.28	-5 5.8	1.565	2.509	9.7	20.6	4 11	14 58.28	-33 42.6	2.172	3.053	10.6	20.5
4 21	14 50.35	-4 12.1	1.541	2.524	6.1	20.4	4 21	14 50.22	-33 43.5	2.107	3.047	8.1	20.3
5 1	14 40.84	-3 25.4	1.544	2.539	4.6	20.4	5 1	14 40.91	-33 25.4	2.069	3.041	6.0	20.2
5 11	14 31.43	-2 51.5	1.573	2.553	7.0	20.5	5 11	14 31.36	-32 49.3	2.057	3.035	5.8	20.1
5 21	14 23.14	-2 33.8	1.628	2.567	10.6	20.8	5 21	14 22.59	-31 59.3	2.072	3.029	7.6	20.2
5 31	14 16.79	-2 34.1	1.706	2.580	14.1	21.0	5 31	14 15.47	-31 1.1	2.113	3.022	10.2	20.4
6 10	14 12.84	-2 51.7	1.803	2.593	16.9	21.2	6 10	14 10.59	-30 1.5	2.177	3.016	12.8	20.5
98570	2000 <i>WR</i> ₂₃		5 2.5 219 ^h 56	4 ^m 5/29.4 17			22924	<i>Deshpande</i>		5 2.5 124 ^h 47	4 ^m 7/28.6 18		
4 1	15 4.24	-6 30.9	1.695	2.575	13.0	19.9	4 1	15 2.13	-2 42.6	2.187	3.060	10.8	18.6
4 11	14 58.26	-5 33.1	1.625	2.569	9.4	19.6	4 11	14 56.22	-1 48.4	2.136	3.073	8.0	18.4
4 21	14 50.18	-4 34.2	1.579	2.562	5.9	19.4	4 21	14 48.85	-0 57.5	2.111	3.086	5.5	18.3
5 1	14 40.85	-3 40.3	1.560	2.555	4.5	19.3	5 1	14 40.70	-0 14.7	2.114	3.098	4.8	18.3
5 11	14 31.35	-2 57.4	1.568	2.548	7.0	19.4	5 11	14 32.60	+ 0 15.9	2.145	3.110	6.6	18.4
5 21	14 22.76	-2 30.4	1.601	2.540	10.8	19.6	5 21	14 25.30	+ 0 31.8	2.202	3.122	9.2	18.6
5 31	14 15.97	-2 21.8	1.658	2.531	14.4	19.8	5 31	14 19.40	+ 0 31.8	2.283	3.133	11.9	18.8
6 10	14 11.55	-2 32.0	1.733	2.523	17.6	20.0	6 10	14 15.32	+ 0 16.6	2.384	3.144	14.1	19.0
281490	2008 <i>SR</i> ₂₆₈		5 2.5 135 ^h 14	2 ^m 4/ 1.0 17			51621	2001 <i>HR</i> ₃₆		5 2.5 341 ^h 28	3 ^m 3/ 4.9 18		
4 1	15 5.13	-8 37.5	2.005	2.876	11.7	20.1	4 1	15 1.47	-25 57.9	1.398	2.260	16.4	18.6
4 11	14 58.58	-8 31.3	1.940	2.881	8.4	19.9	4 11	14 56.84	-25 33.6	1.326	2.255	12.5	18.3
4 21	14 50.23	-8 24.6	1.900	2.886	4.8	19.7	4 21	14 49.63	-24 47.2	1.274	2.251	8.0	18.1
5 1	14 40.85	-8 20.2	1.887	2.890	2.4	19.6	5 1	14 40.83	-23 40.6	1.246	2.247	3.9	17.8
5 11	14 31.40	-8 20.9	1.903	2.894	4.8	19.7	5 11	14 31.85	-22 19.4	1.243	2.244	4.7	17.8
5 21	14 22.78	-8 29.0	1.946	2.898	8.3	19.9	5 21	14 24.00	-20 52.7	1.265	2.241	9.1	18.1
5 31	14 15.76	-8 46.2	2.015	2.902	11.7	20.1	5 31	14 18.40	-19 30.2	1.310	2.239	13.6	18.3
6 10	14 10.84	-9 13.0	2.105	2.905	14.5	20.3	6 10	14 15.68	-18 20.1	1.374	2.237	17.6	18.6
176396	2001 <i>UG</i> ₁₂₆		5 2.5 135 ^h 33	5 ^m 1/27.4 18			390077	2012 <i>UC</i> ₁₂₈		5 2.5 130 ^h 78	3 ^m 7/ 5.9 17		
4 1	14 59.27	-0 42.4	2.432	3.305	9.9	20.3	4 1	15 4.14	-29 10.4	2.595	3.407	11.2	22.0
4 11	14 54.12	+ 0 24.5	2.378	3.312	7.4	20.1	4 11	14 57.72	-29 22.1	2.523	3.419	8.8	21.9
4 21	14 47.66	+ 1 27.5	2.351	3.319	5.5	20.0	4 21	14 49.73	-29 20.3	2.476	3.431	6.2	21.7
5 1	14 40.51	+ 2 21.6	2.351	3.326	5.2	20.0	5 1	14 40.83	-29 4.9	2.457	3.443	4.1	21.6
5 11	14 33.37	+ 3 2.6	2.379	3.332	6.8	20.1	5 11	14 31.88	-28 37.8	2.466	3.454	4.1	21.6
5 21	14 26.88	+ 3 28.0	2.433	3.339	9.1	20.3	5 21	14 23.66	-28 2.1	2.503	3.465	6.2	21.8
5 31	14 21.61	+ 3 36.6	2.512	3.345	11.4	20.4	5 31	14 16.86	-27 22.4	2.568	3.475	8.7	21.9
6 10	14 17.92	+ 3 29.1	2.610	3.350	13.5	20.6	6 10	14 11.93	-26 43.3	2.656	3.485	11.0	22.1
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
496480	2014 <i>SP</i> ₂₇₈		5 2.5 138°61	2°0/ 4.0 16			344470	2002 <i>PQ</i> ₄		5 2.6 325°31	1°3/ 1.5 17		
4 1	15 5.08	-23 7.9	1.676	2.531	14.4	21.3	4 1	14 58.93	-15 33.6	1.628	2.511	13.3	20.1
4 11	14 58.93	-22 42.0	1.609	2.538	10.7	21.0	4 11	14 54.67	-14 37.3	1.551	2.498	9.5	19.9
4 21	14 50.58	-22 0.0	1.565	2.545	6.5	20.8	4 21	14 48.33	-13 29.9	1.497	2.487	5.2	19.6
5 1	14 40.96	-21 4.3	1.547	2.551	2.5	20.6	5 1	14 40.73	-12 16.4	1.469	2.475	1.3	19.3
5 11	14 31.30	-20 0.1	1.556	2.557	3.9	20.7	5 11	14 32.92	-11 3.9	1.467	2.464	4.8	19.5
5 21	14 22.73	-18 53.9	1.592	2.563	8.1	20.9	5 21	14 25.97	-9 59.2	1.491	2.454	9.3	19.7
5 31	14 16.17	-17 53.1	1.653	2.568	12.1	21.2	5 31	14 20.76	-9 8.3	1.538	2.444	13.4	20.0
6 10	14 12.14	-17 3.1	1.734	2.573	15.6	21.4	6 10	14 17.89	-8 34.9	1.604	2.435	17.0	20.2
177143	2003 <i>QV</i> ₅₄		5 2.5 263°79	1°9/ 1.3 18			226986	2004 <i>XC</i> ₄₀		5 2.6 148°80	1°7/ 1.3 17		
4 1	15 4.97	-12 57.5	1.667	2.543	13.4	20.9	4 1	15 3.18	-11 46.9	2.056	2.927	11.5	20.4
4 11	14 59.09	-12 20.9	1.578	2.522	9.7	20.6	4 11	14 57.21	-11 22.9	1.990	2.931	8.1	20.2
4 21	14 50.84	-11 36.5	1.512	2.500	5.4	20.3	4 21	14 49.53	-10 55.1	1.948	2.936	4.5	20.0
5 1	14 41.03	-10 48.4	1.472	2.478	1.9	20.0	5 1	14 40.88	-10 26.7	1.935	2.940	1.7	19.8
5 11	14 30.81	-10 2.3	1.460	2.455	5.2	20.2	5 11	14 32.17	-10 1.5	1.949	2.944	4.3	20.0
5 21	14 21.35	-9 23.7	1.474	2.432	9.9	20.4	5 21	14 24.25	-9 42.8	1.991	2.947	7.9	20.2
5 31	14 13.72	-8 57.8	1.511	2.408	14.2	20.6	5 31	14 17.86	-9 33.5	2.059	2.950	11.2	20.4
6 10	14 8.65	-8 47.6	1.568	2.384	18.0	20.8	6 10	14 13.47	-9 35.2	2.147	2.953	14.1	20.6
124653	2001 <i>SO</i> ₇₂		5 2.5 133°19	2°7/30.4 17			170443	2003 <i>UF</i> ₁₄₅		5 2.6 255°01	0°0/ 2.4 18		
4 1	15 3.10	-9 59.7	2.011	2.885	11.6	20.0	4 1	15 5.86	-16 45.2	1.716	2.583	13.6	20.5
4 11	14 57.07	-9 10.1	1.953	2.896	8.2	19.8	4 11	14 59.71	-16 31.7	1.628	2.567	9.8	20.2
4 21	14 49.38	-8 17.5	1.921	2.907	4.7	19.6	4 21	14 51.20	-16 8.8	1.563	2.550	5.5	19.9
5 1	14 40.81	-7 26.6	1.916	2.917	2.7	19.5	5 1	14 41.14	-15 38.6	1.525	2.532	0.8	19.6
5 11	14 32.25	-6 42.2	1.939	2.927	5.1	19.7	5 11	14 30.68	-15 5.0	1.514	2.514	4.1	19.8
5 21	14 24.56	-6 8.3	1.990	2.937	8.5	19.9	5 21	14 21.02	-14 33.0	1.530	2.496	8.9	20.0
5 31	14 18.43	-5 47.6	2.065	2.945	11.7	20.1	5 31	14 13.20	-14 7.8	1.570	2.477	13.2	20.2
6 10	14 14.30	-5 41.3	2.162	2.954	14.4	20.3	6 10	14 7.95	-13 53.5	1.630	2.457	16.9	20.4
48086	2001 <i>FV</i> ₄₁		5 2.5 335°15	1°3/ 1.7 17			124732	2001 <i>SY</i> ₁₇₈		5 2.6 165°79	3°6/30.2 18		
4 1	15 2.17	-14 40.4	1.376	2.263	15.0	19.7	4 1	15 5.33	-9 13.7	1.616	2.495	13.6	20.3
4 11	14 57.23	-14 5.1	1.308	2.258	10.7	19.4	4 11	14 59.06	-8 16.9	1.554	2.499	9.7	20.1
4 21	14 49.82	-13 20.3	1.263	2.253	5.9	19.1	4 21	14 50.66	-7 16.8	1.517	2.503	5.7	19.9
5 1	14 40.89	-12 30.5	1.242	2.249	1.4	18.8	5 1	14 41.04	-6 19.1	1.506	2.506	3.6	19.7
5 11	14 31.77	-11 42.3	1.246	2.245	5.2	19.1	5 11	14 31.37	-5 30.4	1.521	2.508	6.3	19.9
5 21	14 23.71	-11 2.1	1.275	2.241	10.2	19.3	5 21	14 22.73	-4 55.7	1.563	2.510	10.4	20.1
5 31	14 17.79	-10 35.4	1.325	2.238	14.7	19.6	5 31	14 16.03	-4 38.3	1.628	2.511	14.1	20.4
6 10	14 14.64	-10 25.3	1.394	2.235	18.5	19.8	6 10	14 11.80	-4 39.0	1.712	2.512	17.3	20.6
8248	Gurzuf		5 2.5 194°93	0°6/ 2.1 18			157740	2006 <i>BP</i> ₁₉₉		5 2.6 290°58	0°2/ 2.9 18		
4 1	15 5.17	-16 10.5	1.771	2.639	13.2	18.6	4 1	14 53.95	-17 46.3	4.360	5.211	6.3	20.7
4 11	14 58.93	-15 33.7	1.697	2.637	9.4	18.4	4 11	14 50.06	-17 32.2	4.274	5.205	4.5	20.5
4 21	14 50.59	-14 47.4	1.648	2.635	5.2	18.1	4 21	14 45.41	-17 14.0	4.216	5.200	2.5	20.4
5 1	14 40.99	-13 55.0	1.625	2.632	0.8	17.8	5 1	14 40.32	-16 52.9	4.187	5.194	0.5	20.2
5 11	14 31.26	-13 1.8	1.630	2.628	4.2	18.0	5 11	14 35.18	-16 30.5	4.188	5.188	1.7	20.3
5 21	14 22.45	-12 13.5	1.662	2.624	8.6	18.3	5 21	14 30.34	-16 8.4	4.219	5.183	3.8	20.5
5 31	14 15.46	-11 35.2	1.719	2.620	12.6	18.5	5 31	14 26.14	-15 48.3	4.277	5.177	5.7	20.6
6 10	14 10.86	-11 10.3	1.796	2.614	15.9	18.7	6 10	14 22.84	-15 32.0	4.360	5.171	7.4	20.7
486688	2013 <i>UL</i> ₁		5 2.5 153°58	13°1/21.6 18			238425	2004 <i>GM</i> ₅		5 2.6 20°98	5°0/28.2 18		
4 1	15 6.59	+7 45.4	1.254	2.131	16.8	21.6	4 1	14 58.94	-3 48.1	1.981	2.863	11.3	20.0
4 11	15 0.23	+10 52.5	1.221	2.140	14.3	21.5	4 11	14 54.20	-2 39.2	1.923	2.865	8.3	19.8
4 21	14 51.34	+13 42.1	1.212	2.147	13.1	21.4	4 21	14 47.87	-1 32.1	1.890	2.867	5.7	19.6
5 1	14 41.09	+15 58.2	1.227	2.154	14.0	21.5	5 1	14 40.66	-0 32.6	1.883	2.870	5.1	19.6
5 11	14 30.94	+17 30.3	1.265	2.160	16.3	21.7	5 11	14 33.42	+0 13.7	1.904	2.872	7.1	19.7
5 21	14 22.19	+18 15.5	1.321	2.165	19.1	21.9	5 21	14 26.94	+0 43.4	1.950	2.875	10.0	19.9
5 31	14 15.82	+18 17.1	1.394	2.169	21.7	22.1	5 31	14 21.89	+0 54.6	2.020	2.878	12.9	20.1
6 10	14 12.35	+17 42.4	1.480	2.172	23.9	22.3	6 10	14 18.72	+0 47.6	2.108	2.881	15.3	20.3
499971	2011 <i>KM</i> ₂₅		5 2.5 356°00	1°4/ 3.2 17			216904	2009 <i>HP</i> ₉₅		5 2.6 346°80	0°3/ 2.4 17		
4 1	15 3.59	-18 4.3	1.471	2.347	14.9	20.4	4 1	15 0.61	-16 50.9	1.166	2.059	16.6	19.8
4 11	14 58.25	-18 27.2	1.402	2.343	10.9	20.2	4 11	14 56.51	-16 25.1	1.100	2.052	12.0	19.5
4 21	14 50.40	-18 41.1	1.355	2.341	6.3	19.9	4 21	14 49.60	-15 46.1	1.055	2.045	6.7	19.2
5 1	14 40.99	-18 46.4	1.333	2.339	1.8	19.6	5 1	14 40.93	-14 58.2	1.033	2.040	0.9	18.8
5 11	14 31.31	-18 45.6	1.336	2.338	4.2	19.7	5 11	14 31.98	-14 8.3	1.034	2.036	5.1	19.0
5 21	14 22.64	-18 42.4	1.364	2.337	9.0	20.0	5 21	14 24.24	-13 24.2	1.058	2.032	10.8	19.3
5 31	14 16.07	-18 41.3	1.416	2.338	13.3	20.3	5 31	14 18.90	-12 52.6	1.103	2.030	15.8	19.6
6 10	14 12.29	-18 46.4	1.487	2.339	17.0	20.5	6 10	14 16.67	-12 38.0	1.165	2.028	20.0	19.9
243637	Frosinone		5 2.5 219°09	3°0/ 4.8 17			89965	2002 <i>RX</i> ₇		5 2.6 125°84	1°6/ 1.3 18		
4 1	15 4.92	-25 35.9	1.770	2.614	14.3	20.7	4 1	15 1.53	-12 34.7	2.028	2.901	11.5	19.4
4 11	14 58.93	-25 18.8	1.688	2.609	10.8	20.5	4 11	14 56.08	-12 3.0	1.960	2.903	8.1	19.1
4 21	14 50.68	-24 44.1	1.629	2.603	7.0	20.3	4 21	14 48.93	-11 26.5	1.918	2.906	4.5	18.9
5 1	14 41.03	-23 52.7	1.596	2.596	3.5	20.0	5 1	14 40.82	-10 48.7	1.902	2.908	1.6	18.7
5 11	14 31.17	-22 48.8	1.590	2.589	4.2	20.1	5 11	14 32.64	-10 13.8	1.915	2.910	4.2	18.9
5 21	14 22.25	-21 38.7	1.611	2.582	8.1	20.3	5 21	14 25.23	-9 45.8	1.955	2.912	7.9	19.1
5 31	14 15.27	-20 30.0	1.657	2.575	12.0	20.5	5 31	14 19.32	-9 27.7	2.020	2.914	11.3	19.3
6 10	14 10.82	-19 29.6	1.725	2.566	15.5	20.7	6 10	14 15.40	-9 21.5	2.106	2.916	14.2	19.5
312168	2007 <i>UP</i> ₉₆		5 2.6 108°60	0°4/ 2.9 18			178227	2006 <i>WF</i>					

EPHEMERIDES

5 2.6

5 2.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
431068	2006 <i>BP</i> ₂₃₂		5 2.6 164°07	3°5/29.9	17		353993	2000 <i>SU</i> ₁₈		5 2.6 185°05	0°0/ 2.5	17	
4 1	15 3.12	- 6 41.6	2.092	2.966	11.2	21.8	4 1	14 59.81	-17 11.4	3.091	3.943	8.6	22.2
4 11	14 57.12	- 6 2.8	2.029	2.970	8.0	21.6	4 11	14 54.42	-16 41.3	3.011	3.943	6.1	22.0
4 21	14 49.47	- 5 24.0	1.990	2.973	4.9	21.4	4 21	14 47.89	-16 5.1	2.957	3.942	3.4	21.9
5 1	14 40.90	- 4 49.5	1.979	2.976	3.5	21.3	5 1	14 40.70	-15 24.9	2.934	3.941	0.4	21.6
5 11	14 32.28	- 4 23.2	1.997	2.978	5.6	21.4	5 11	14 33.47	-14 43.3	2.940	3.939	2.5	21.8
5 21	14 24.44	- 4 8.4	2.041	2.981	8.8	21.6	5 21	14 26.73	-14 3.5	2.976	3.937	5.3	22.0
5 31	14 18.07	- 4 6.8	2.110	2.982	11.8	21.8	5 31	14 21.00	-13 28.3	3.040	3.934	7.9	22.1
6 10	14 13.65	- 4 18.8	2.200	2.984	14.5	22.0	6 10	14 16.64	-13 0.1	3.128	3.931	10.2	22.3
389645	2011 <i>LH</i> ₁₉		5 2.6 266°74	2°5/ 4.9	18		27242	1999 <i>TN</i> ₂₁₉		5 2.6 110°81	6°3/ 6.4	18	
4 1	15 0.77	-25 37.4	2.210	3.050	12.0	20.4	4 1	15 9.83	-31 9.3	1.675	2.495	16.1	19.4
4 11	14 55.62	-25 15.2	2.124	3.041	9.1	20.2	4 11	15 2.65	-31 51.7	1.610	2.506	12.8	19.2
4 21	14 48.73	-24 38.4	2.061	3.033	5.8	19.9	4 21	14 52.83	-32 13.8	1.567	2.517	9.4	19.0
5 1	14 40.81	-23 48.3	2.025	3.025	3.0	19.7	5 1	14 41.40	-32 13.2	1.548	2.528	6.8	18.9
5 11	14 32.72	-22 48.4	2.017	3.016	3.5	19.8	5 11	14 29.80	-31 51.0	1.555	2.539	6.7	18.9
5 21	14 25.35	-21 43.6	2.037	3.007	6.7	19.9	5 21	14 19.40	-31 12.1	1.589	2.549	9.1	19.0
5 31	14 19.45	-20 39.8	2.083	2.999	10.0	20.1	5 31	14 11.33	-30 24.3	1.646	2.559	12.3	19.3
6 10	14 15.53	-19 42.2	2.152	2.990	13.0	20.3	6 10	14 6.24	-29 35.8	1.724	2.569	15.4	19.5
425694	2011 <i>AZ</i> ₆₆		5 2.6 232°92	1°7/ 1.4	17		216053	2006 <i>PD</i> ₁₀		5 2.6 205°38	2°9/30.3	17	
4 1	15 4.16	-12 42.8	1.956	2.826	12.0	21.7	4 1	15 4.28	- 9 27.7	1.977	2.850	11.8	21.2
4 11	14 58.14	-12 8.8	1.873	2.815	8.6	21.5	4 11	14 58.12	- 8 38.7	1.903	2.845	8.4	20.9
4 21	14 50.18	-11 29.0	1.815	2.803	4.7	21.2	4 21	14 50.12	- 7 46.4	1.854	2.839	4.9	20.7
5 1	14 41.01	-10 46.9	1.785	2.790	1.7	21.0	5 1	14 41.03	- 6 55.4	1.832	2.833	3.0	20.6
5 11	14 31.62	-10 7.0	1.782	2.777	4.5	21.2	5 11	14 31.80	- 6 10.6	1.839	2.826	5.4	20.7
5 21	14 22.96	- 9 33.8	1.808	2.764	8.5	21.4	5 21	14 23.35	- 5 36.6	1.873	2.819	9.0	20.9
5 31	14 15.90	- 9 11.2	1.858	2.749	12.2	21.6	5 31	14 16.48	- 5 16.5	1.932	2.810	12.5	21.1
6 10	14 11.00	- 9 1.7	1.928	2.735	15.4	21.8	6 10	14 11.71	- 5 11.7	2.011	2.801	15.4	21.3
484714	2008 <i>WM</i> ₁₂		5 2.6 235°22	3°2/ 1.9	18		429717	2011 <i>JZ</i> ₂₆		5 2.6 201°24	4°7/28.9	18	
4 1	15 19.12	- 6 19.8	1.112	1.990	18.5	21.1	4 1	15 3.35	- 1 39.2	2.287	3.155	10.6	21.4
4 11	15 10.27	- 7 5.0	1.040	1.983	13.6	20.8	4 11	14 57.21	- 1 4.9	2.218	3.152	7.9	21.2
4 21	14 57.52	- 7 58.0	0.989	1.976	7.9	20.4	4 21	14 49.53	- 0 34.4	2.175	3.148	5.5	21.0
5 1	14 42.07	- 8 59.8	0.963	1.968	3.3	20.1	5 1	14 40.94	- 0 11.9	2.160	3.144	4.8	21.0
5 11	14 25.90	-10 10.4	0.963	1.959	7.0	20.3	5 11	14 32.27	- 0 0.8	2.173	3.140	6.4	21.1
5 21	14 11.14	-11 28.3	0.989	1.951	13.0	20.6	5 21	14 24.28	- 0 3.3	2.214	3.135	9.1	21.2
5 31	13 59.53	-12 52.5	1.036	1.941	18.5	20.9	5 31	14 17.63	- 0 20.1	2.278	3.130	11.8	21.4
6 10	13 52.03	-14 22.3	1.101	1.932	23.1	21.1	6 10	14 12.80	- 0 50.7	2.364	3.124	14.2	21.5
338201	2002 <i>RX</i> ₂₇₈		5 2.6 45°26	3°4/29.5	18		390278	2012 <i>YH</i> ₁		5 2.6 322°98	5°1/ 7.0	18	
4 1	14 59.18	-10 28.7	1.815	2.699	12.1	20.3	4 1	14 59.85	-32 16.2	1.966	2.786	14.0	19.6
4 11	14 54.48	- 8 59.7	1.757	2.705	8.6	20.1	4 11	14 55.32	-32 5.5	1.875	2.772	11.3	19.4
4 21	14 48.06	- 7 25.8	1.724	2.711	5.0	19.9	4 21	14 48.72	-31 33.8	1.805	2.758	8.3	19.2
5 1	14 40.71	- 5 53.7	1.718	2.717	3.5	19.8	5 1	14 40.84	-30 40.8	1.761	2.744	5.7	19.0
5 11	14 33.36	- 4 30.9	1.740	2.724	6.0	19.9	5 11	14 32.74	-29 29.5	1.742	2.731	5.4	18.9
5 21	14 26.89	- 3 23.2	1.788	2.730	9.6	20.2	5 21	14 25.44	-28 5.5	1.750	2.718	7.7	19.0
5 31	14 21.99	- 2 34.7	1.859	2.737	12.9	20.4	5 31	14 19.86	-26 36.6	1.783	2.706	11.0	19.2
6 10	14 19.11	- 2 6.3	1.950	2.744	15.7	20.6	6 10	14 16.60	-25 10.9	1.839	2.695	14.1	19.4
158268	2001 <i>TJ</i> ₁₉₉		5 2.6 287°90	2°8/ 1.3	17		311237	2005 <i>CG</i> ₂₃		5 2.6 69°60	4°9/29.9	18	
4 1	15 6.68	-10 16.1	1.332	2.218	15.5	20.4	4 1	15 5.97	- 6 4.0	1.351	2.239	15.1	20.2
4 11	15 0.88	-10 0.7	1.247	2.195	11.2	20.1	4 11	14 59.60	- 5 18.6	1.311	2.258	10.9	20.0
4 21	14 52.13	- 9 41.7	1.183	2.172	6.4	19.7	4 21	14 50.95	- 4 35.1	1.293	2.278	6.8	19.9
5 1	14 41.32	- 9 23.1	1.144	2.149	2.8	19.4	5 1	14 41.13	- 3 59.9	1.301	2.297	4.9	19.8
5 11	14 29.86	- 9 10.4	1.130	2.125	6.4	19.6	5 11	14 31.49	- 3 38.6	1.333	2.317	7.5	20.0
5 21	14 19.27	- 9 8.2	1.140	2.102	11.7	19.8	5 21	14 23.20	- 3 34.5	1.390	2.337	11.4	20.3
5 31	14 10.93	- 9 20.4	1.172	2.078	16.7	20.0	5 31	14 17.14	- 3 48.5	1.469	2.356	15.2	20.5
6 10	14 5.73	- 9 49.0	1.221	2.055	21.1	20.2	6 10	14 13.76	- 4 19.5	1.566	2.376	18.3	20.8
108721	2001 <i>OZ</i> ₂₃		5 2.6 273°87	4°4/28.9	17		183277	2002 <i>TV</i> ₂₆₁		5 2.6 274°96	0°2/ 2.5	17	
4 1	15 1.44	- 3 55.4	2.156	3.031	10.8	19.8	4 1	15 5.51	-15 39.7	1.641	2.513	13.8	20.9
4 11	14 56.06	- 3 11.0	2.072	3.011	8.0	19.5	4 11	14 59.59	-15 33.8	1.554	2.495	10.0	20.6
4 21	14 48.99	- 2 27.9	2.014	2.992	5.4	19.3	4 21	14 51.22	-15 19.9	1.489	2.477	5.6	20.3
5 1	14 40.86	- 1 50.6	1.983	2.972	4.5	19.2	5 1	14 41.22	-15 0.1	1.451	2.458	0.8	19.9
5 11	14 32.52	- 1 23.7	1.979	2.952	6.4	19.3	5 11	14 30.79	-14 38.0	1.439	2.439	4.3	20.1
5 21	14 24.77	- 1 10.4	2.003	2.932	9.5	19.5	5 21	14 21.14	-14 18.1	1.454	2.420	9.2	20.3
5 31	14 18.36	- 1 12.7	2.050	2.912	12.5	19.6	5 31	14 13.39	-14 5.2	1.492	2.401	13.6	20.6
6 10	14 13.84	- 1 30.8	2.117	2.891	15.3	19.8	6 10	14 8.28	-14 2.8	1.551	2.382	17.4	20.8
237368	1994 <i>UA</i> ₇		5 2.6 150°01	1°2/ 3.5	17		410368	2007 <i>VQ</i> ₁₄₅		5 2.6 224°53	1°0/ 3.1	16	
4 1	15 3.28	-20 25.4	2.145	2.998	11.8	21.8	4 1	15 7.56	-18 16.7	1.706	2.568	13.9	21.5
4 11	14 57.33	-20 14.9	2.073	3.003	8.6	21.6	4 11	15 0.91	-18 22.4	1.627	2.561	10.2	21.3
4 21	14 49.64	-19 54.3	2.026	3.007	5.0	21.3	4 21	14 51.87	-18 18.5	1.570	2.554	5.8	21.0
5 1	14 40.94	-19 25.2	2.006	3.011	1.6	21.1	5 1	14 41.30	-18 6.1	1.540	2.546	1.4	20.7
5 11	14 32.17	-18 50.8	2.015	3.015	3.2	21.2	5 11	14 30.42	-17 48.0	1.538	2.538	3.9	20.8
5 21	14 24.18	-18 15.2	2.051	3.019	6.8	21.5	5 21	14 20.44	-17 28.4	1.562	2.530	8.5	21.1
5 31	14 17.72	-17 42.7	2.114	3.023	10.2	21.7	5 31	14 12.40	-17 12.2	1.611	2.521	12.7	21.3
6 10	14 13.28	-17 17.1	2.199	3.026	13.1	21.9	6 10	14 7.00	-17 3.6	1.680	2.511	16.3	21.5
300980	2008 <i>ED</i> ₁₀₈		5 2.6 80°86	6°1/25.5	17		416147	2002 <i>QW</i> ₁₄₇		5 2.6 3			

EPHEMERIDES

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
497105	2004 CH ₈		5 2.6 134 ^o 37	7.0/25.7	17		1599	Giomus		5 2.6 183 ^o 25	0 ^o /2.5	18	
4 1	15 1.26	+ 6 49.3	2.482	3.338	10.3	22.0	4 1	15 1.22	-16 20.9	2.720	3.576	9.5	16.7
4 11	14 55.53	+ 7 53.7	2.439	3.350	8.4	21.9	4 11	14 55.59	-16 7.7	2.642	3.576	6.8	16.5
4 21	14 48.50	+ 8 48.6	2.421	3.362	7.1	21.9	4 21	14 48.62	-15 48.8	2.591	3.576	3.7	16.3
5 1	14 40.81	+ 9 29.1	2.430	3.373	7.1	21.9	5 1	14 40.87	-15 26.0	2.569	3.576	0.5	16.0
5 11	14 33.17	+ 9 51.9	2.467	3.383	8.4	22.0	5 11	14 33.04	-15 1.8	2.576	3.575	2.8	16.2
5 21	14 26.22	+ 9 55.4	2.528	3.394	10.3	22.1	5 21	14 25.77	-14 39.1	2.612	3.574	5.9	16.4
5 31	14 20.52	+ 9 40.2	2.612	3.403	12.2	22.3	5 31	14 19.64	-14 20.6	2.674	3.572	8.7	16.6
6 10	14 16.43	+ 9 8.2	2.715	3.413	13.9	22.4	6 10	14 15.09	-14 8.6	2.761	3.571	11.2	16.8
146145	2000 SQ ₆₃		5 2.6 226 ^o 50	1 ^o 9/30.6	18		292979	2006 VA ₁₅₀		5 2.6 170 ^o 85	1 ^o 8/30.7	18	
4 1	14 59.23	-11 41.9	2.447	3.318	9.9	20.2	4 1	14 59.92	-10 44.6	2.777	3.644	9.0	21.8
4 11	14 54.27	-10 49.4	2.370	3.313	7.0	20.0	4 11	14 54.58	-10 6.2	2.707	3.647	6.3	21.7
4 21	14 47.91	-9 52.4	2.320	3.307	3.9	19.8	4 21	14 48.02	-9 25.2	2.663	3.649	3.6	21.5
5 1	14 40.75	-8 54.7	2.298	3.301	2.0	19.6	5 1	14 40.79	-8 44.4	2.649	3.652	1.8	21.4
5 11	14 33.50	-8 0.7	2.305	3.295	4.1	19.8	5 11	14 33.51	-8 7.2	2.664	3.653	3.7	21.5
5 21	14 26.85	-7 14.3	2.340	3.289	7.3	20.0	5 21	14 26.80	-7 36.5	2.708	3.655	6.5	21.7
5 31	14 21.39	-6 38.8	2.400	3.282	10.2	20.1	5 31	14 21.17	-7 14.6	2.778	3.656	9.1	21.8
6 10	14 17.57	-6 16.0	2.483	3.275	12.8	20.3	6 10	14 17.00	-7 3.0	2.870	3.657	11.4	22.0
311165	2004 TO ₁₅₁		5 2.6 226 ^o 91	0 ^o /2.4	16		152161	2005 NH ₉₆		5 2.6 217 ^o 00	0 ^o 1/2.4	18	
4 1	15 5.58	-17 36.2	1.643	2.511	14.0	22.4	4 1	15 0.70	-16 29.4	2.711	3.568	9.5	21.4
4 11	14 59.51	-17 4.9	1.564	2.503	10.1	22.1	4 11	14 55.26	-16 6.3	2.626	3.560	6.8	21.2
4 21	14 51.09	-16 21.9	1.508	2.494	5.7	21.8	4 21	14 48.46	-15 37.0	2.567	3.553	3.7	21.0
5 1	14 41.21	-15 30.3	1.478	2.485	0.8	21.5	5 1	14 40.86	-15 3.5	2.538	3.545	0.5	20.7
5 11	14 31.07	-14 35.5	1.475	2.475	4.2	21.7	5 11	14 33.13	-14 28.6	2.537	3.536	2.8	20.9
5 21	14 21.87	-13 43.7	1.499	2.465	9.0	21.9	5 21	14 25.94	-13 55.6	2.566	3.528	6.0	21.1
5 31	14 14.61	-13 1.0	1.547	2.454	13.3	22.2	5 31	14 19.88	-13 27.5	2.621	3.518	8.9	21.2
6 10	14 9.96	-12 31.7	1.615	2.443	17.0	22.4	6 10	14 15.39	-13 7.0	2.700	3.509	11.4	21.4
102260	1999 TM ₃₃		5 2.6 155 ^o 66	2 ^o /3.9	18		165145	2000 QV ₁₀		5 2.6 284 ^o 19	2 ^o 2/3.8	17	
4 1	15 7.10	-21 31.1	1.760	2.613	13.9	20.2	4 1	15 5.58	-21 31.3	1.444	2.310	15.7	20.8
4 11	15 0.43	-21 34.9	1.690	2.618	10.3	20.0	4 11	15 0.09	-21 30.6	1.352	2.287	11.8	20.5
4 21	14 51.51	-21 26.3	1.643	2.622	6.2	19.8	4 21	14 51.73	-21 14.8	1.282	2.264	7.2	20.1
5 1	14 41.26	-21 6.1	1.623	2.627	2.4	19.5	5 1	14 41.36	-20 43.9	1.236	2.241	2.7	19.8
5 11	14 30.86	-20 37.4	1.630	2.630	3.9	19.6	5 11	14 30.36	-20 1.6	1.216	2.217	4.6	19.9
5 21	14 21.47	-20 4.9	1.664	2.634	8.0	19.9	5 21	14 20.20	-19 13.9	1.220	2.193	9.8	20.1
5 31	14 14.03	-19 34.0	1.724	2.636	11.9	20.1	5 31	14 12.23	-18 28.7	1.247	2.169	14.7	20.3
6 10	14 9.13	-19 9.8	1.804	2.639	15.2	20.3	6 10	14 7.35	-17 53.0	1.294	2.145	19.1	20.5
341790	2007 WG ₅₉		5 2.6 81 ^o 76	4 ^o 4/29.3	17		222321	2000 TP ₄₇		5 2.6 139 ^o 57	0 ^o 7/2.0	17	
4 1	15 1.86	-3 8.0	2.117	2.992	11.0	20.6	4 1	15 4.62	-14 26.5	2.180	3.042	11.3	21.2
4 11	14 56.23	-2 35.7	2.056	2.994	8.1	20.4	4 11	14 58.17	-14 8.3	2.116	3.053	8.0	21.0
4 21	14 49.01	-2 6.7	2.019	2.997	5.4	20.3	4 21	14 50.08	-13 44.6	2.077	3.064	4.4	20.8
5 1	14 40.91	-1 45.0	2.010	3.000	4.5	20.2	5 1	14 41.08	-13 18.0	2.067	3.074	0.8	20.6
5 11	14 32.76	-1 34.2	2.029	3.002	6.3	20.3	5 11	14 32.06	-12 51.8	2.086	3.083	3.5	20.8
5 21	14 25.35	-1 36.6	2.074	3.005	9.1	20.5	5 21	14 23.85	-12 29.3	2.133	3.092	7.2	21.0
5 31	14 19.36	-1 53.1	2.143	3.008	12.0	20.7	5 31	14 17.14	-12 13.8	2.205	3.101	10.4	21.2
6 10	14 15.25	-2 23.1	2.233	3.010	14.5	20.9	6 10	14 12.39	-12 7.4	2.300	3.109	13.2	21.4
249302	Ajoie		5 2.6 186 ^o 27	1 ^o 4/30.6	18		504640	2008 WG ₁₂₃		5 2.6 160 ^o 22	0 ^o 5/2.3	17	
4 1	14 55.90	-9 48.4	4.231	5.093	6.2	22.3	4 1	15 3.49	-14 48.9	2.001	2.868	11.9	21.6
4 11	14 51.42	-9 19.8	4.155	5.093	4.4	22.2	4 11	14 57.59	-14 40.3	1.930	2.869	8.5	21.4
4 21	14 46.19	-8 49.9	4.106	5.091	2.5	22.1	4 21	14 49.86	-14 25.8	1.883	2.870	4.7	21.2
5 1	14 40.52	-8 20.5	4.088	5.090	1.4	22.0	5 1	14 41.06	-14 7.7	1.864	2.871	0.7	20.9
5 11	14 34.82	-7 53.7	4.101	5.088	2.7	22.1	5 11	14 32.13	-13 49.2	1.873	2.872	3.7	21.1
5 21	14 29.45	-7 31.1	4.142	5.086	4.6	22.2	5 21	14 24.00	-13 33.7	1.909	2.873	7.6	21.3
5 31	14 24.75	-7 14.2	4.212	5.083	6.4	22.3	5 31	14 17.43	-13 24.4	1.970	2.873	11.1	21.6
6 10	14 20.98	-7 4.0	4.305	5.080	8.0	22.5	6 10	14 12.96	-13 23.9	2.053	2.874	14.1	21.8
304431	2006 TY ₈₈		5 2.6 182 ^o 91	0 ^o 7/3.2	17		507806	2014 DF ₄		5 2.6 143 ^o 34	6 ^o 2/8.2	17	
4 1	15 0.12	-20 6.4	2.439	3.292	10.5	21.3	4 1	15 4.14	-36 18.5	2.293	3.077	13.4	21.3
4 11	14 54.94	-19 32.6	2.362	3.292	7.6	21.1	4 11	14 58.16	-36 34.7	2.214	3.080	11.1	21.2
4 21	14 48.29	-18 49.0	2.310	3.292	4.4	20.9	4 21	14 50.22	-36 31.5	2.157	3.083	8.7	21.0
5 1	14 40.82	-17 58.0	2.286	3.292	1.0	20.6	5 1	14 41.11	-36 7.4	2.124	3.086	6.8	20.9
5 11	14 33.28	-17 3.5	2.291	3.292	2.8	20.8	5 11	14 31.87	-35 23.9	2.119	3.088	6.3	20.9
5 21	14 26.39	-16 9.7	2.325	3.291	6.2	21.0	5 21	14 23.48	-34 25.2	2.140	3.091	7.7	21.0
5 31	14 20.79	-15 20.8	2.385	3.290	9.3	21.2	5 31	14 16.78	-33 17.4	2.186	3.094	10.0	21.1
6 10	14 16.90	-14 40.5	2.468	3.290	12.0	21.4	6 10	14 12.32	-32 7.6	2.256	3.096	12.4	21.3
25700	2000 AA ₁₂₈		5 2.6 315 ^o 64	9 ^o 4/23.9	18		330659	2008 GG ₂		5 2.6 11 ^o 32	5 ^o 7/9.3	18	
4 1	14 59.79	+ 8 3.3	1.860	2.728	12.6	17.4	4 1	13 11.00	-18 12.5	0.153	1.148	13.4	19.9
4 11	14 54.97	+ 9 35.9	1.807	2.722	10.6	17.2	4 11	13 43.53	-4 34.9	0.146	1.147	6.3	19.5
4 21	14 48.40	+ 10 56.7	1.779	2.717	9.4	17.1	4 21	14 12.68	+ 8 42.1	0.156	1.152	18.2	20.1
5 1	14 40.84	+ 11 57.8	1.775	2.711	9.7	17.1	5 1	14 36.34	+ 18 10.3	0.180	1.163	28.4	20.8
5 11	14 33.20	+ 12 33.4	1.795	2.706	11.4	17.2	5 11	14 54.81	+ 23 24.2	0.215	1.179	34.6	21.3
5 21	14 26.36	+ 12 41.4	1.838	2.701	13.6	17.4	5 21	15 9.28	+ 25 25.8	0.255	1.201	37.9	21.9
5 31	14 21.06	+ 12 22.3	1.901	2.696	16.0	17.5	5 31	15 21.51	+ 25 14.5	0.300	1.227	39.4	22.3
6 10	14 17.78	+ 11 39.2	1.980	2.691	18.0	17.7	6 10	15 32.94	+ 23 34.9	0.348	1.258	39.9	22.7
279355	2010 AL ₂₆		5 2.6 144 ^o 88	1 ^o 9/1.0	17		323435						

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
64674	2001 <i>XH</i> ₆₆		5 2.6 261°20		3°0/30.8	17	510587	2012 <i>SU</i> ₁₅		5 2.6 252°28		1°8/ 4.1	17
4 1	15 5.56	-10 18.1	1.538	2.419	14.1	18.3	4 1	15 2.70	-22 34.6	2.188	3.035	11.8	21.8
4 11	14 59.66	-9 40.5	1.457	2.403	10.1	18.0	4 11	14 57.10	-22 21.0	2.096	3.021	8.8	21.6
4 21	14 51.28	-8 57.9	1.398	2.386	5.8	17.7	4 21	14 49.66	-21 55.4	2.029	3.007	5.4	21.4
5 1	14 41.29	-8 15.3	1.366	2.369	3.0	17.5	5 1	14 41.08	-21 18.8	1.989	2.992	2.2	21.1
5 11	14 30.92	-7 38.7	1.360	2.352	6.1	17.6	5 11	14 32.25	-20 34.3	1.977	2.977	3.3	21.2
5 21	14 21.42	-7 13.4	1.379	2.334	10.7	17.8	5 21	14 24.08	-19 46.2	1.993	2.962	6.9	21.4
5 31	14 13.89	-7 3.5	1.421	2.316	15.1	18.0	5 31	14 17.38	-18 59.8	2.035	2.947	10.4	21.6
6 10	14 9.06	-7 11.0	1.482	2.297	18.9	18.2	6 10	14 12.71	-18 19.8	2.100	2.931	13.5	21.7
42140	2001 <i>BM</i> ₃₁		5 2.6 275°24		7°3/26.4	18	215693	2003 <i>YC</i> ₆₉		5 2.6 145°29		4°1/29.9	18
4 1	15 0.90	+ 2 29.8	1.886	2.762	12.1	19.1	4 1	15 5.18	- 6 41.3	1.745	2.622	12.8	20.8
4 11	14 55.77	+ 3 45.0	1.823	2.754	9.5	18.9	4 11	14 58.85	- 5 55.1	1.687	2.629	9.3	20.6
4 21	14 48.87	+ 4 53.5	1.785	2.746	7.6	18.8	4 21	14 50.56	- 5 8.8	1.653	2.636	5.7	20.4
5 1	14 40.93	+ 5 48.2	1.773	2.738	7.6	18.8	5 1	14 41.19	- 4 27.8	1.646	2.643	4.1	20.3
5 11	14 32.88	+ 6 23.4	1.787	2.730	9.4	18.9	5 11	14 31.80	- 3 57.1	1.666	2.649	6.4	20.4
5 21	14 25.60	+ 6 36.1	1.824	2.722	12.0	19.0	5 21	14 23.38	- 3 40.5	1.713	2.654	10.0	20.6
5 31	14 19.85	+ 6 25.7	1.883	2.714	14.8	19.2	5 31	14 16.76	- 3 39.9	1.783	2.659	13.4	20.9
6 10	14 16.13	+ 5 54.0	1.961	2.706	17.2	19.3	6 10	14 12.43	- 3 55.3	1.872	2.664	16.4	21.1
500114	2012 <i>BW</i> ₁₁₄		5 2.6 140°7.3		5°0/ 5.9	17	178038	2006 <i>RH</i> ₆₆		5 2.6 238°13		3°2/30.4	18
4 1	15 6.43	-29 13.9	1.618	2.453	15.9	22.1	4 1	15 5.32	- 8 30.4	1.886	2.759	12.2	21.0
4 11	15 0.25	-29 21.9	1.547	2.456	12.4	21.8	4 11	14 59.08	- 7 54.0	1.803	2.745	8.8	20.8
4 21	14 51.55	-29 9.3	1.498	2.460	8.7	21.6	4 21	14 50.80	- 7 15.2	1.746	2.731	5.2	20.5
5 1	14 41.32	-28 35.4	1.472	2.463	5.5	21.4	5 1	14 41.24	- 6 38.5	1.716	2.716	3.2	20.4
5 11	14 30.92	-27 43.3	1.473	2.466	5.6	21.5	5 11	14 31.42	- 6 8.5	1.714	2.701	5.7	20.5
5 21	14 21.66	-26 39.4	1.500	2.469	8.7	21.6	5 21	14 22.34	- 5 49.3	1.738	2.685	9.5	20.7
5 31	14 14.62	-25 32.1	1.551	2.472	12.4	21.9	5 31	14 14.90	- 5 43.9	1.787	2.668	13.2	20.9
6 10	14 10.41	-24 29.6	1.623	2.474	15.8	22.1	6 10	14 9.71	- 5 53.4	1.856	2.651	16.4	21.0
70512	1999 <i>TM</i> ₁₀₃		5 2.6 296°61		4°7/ 5.1	18	177404	2004 <i>BC</i> ₁₁₀		5 2.6 151°64		1°8/ 1.5	18
4 1	15 5.61	-26 7.3	1.454	2.307	16.3	18.5	4 1	15 7.28	-10 57.3	1.900	2.767	12.4	20.2
4 11	15 0.11	-26 33.8	1.371	2.293	12.7	18.2	4 11	15 0.29	-10 45.9	1.835	2.775	8.8	20.0
4 21	14 51.72	-26 42.8	1.308	2.279	8.6	18.0	4 21	14 51.35	-10 31.8	1.795	2.782	4.9	19.8
5 1	14 41.37	-26 32.3	1.269	2.265	5.1	17.7	5 1	14 41.30	-10 17.6	1.783	2.788	1.9	19.6
5 11	14 30.49	-26 4.1	1.255	2.252	5.6	17.7	5 11	14 31.19	-10 6.8	1.800	2.794	4.5	19.8
5 21	14 20.58	-25 23.2	1.266	2.238	9.6	17.9	5 21	14 22.00	-10 2.3	1.844	2.799	8.4	20.0
5 31	14 12.97	-24 37.6	1.299	2.225	14.0	18.1	5 31	14 14.55	-10 6.6	1.913	2.804	12.0	20.3
6 10	14 8.49	-23 55.6	1.352	2.212	18.0	18.3	6 10	14 9.36	-10 21.1	2.003	2.808	15.0	20.5
328445	2008 <i>TD</i> ₇₁		5 2.6 117°63		1°7/30.5	17	468189	2015 <i>AX</i> ₁₈₁		5 2.6 267°55		0°4/ 2.9	17
4 1	14 56.39	-10 22.2	3.254	4.122	7.7	21.3	4 1	15 4.94	-17 55.4	1.781	2.646	13.3	21.4
4 11	14 51.95	-9 41.5	3.188	4.129	5.5	21.1	4 11	14 59.08	-17 42.9	1.689	2.626	9.7	21.2
4 21	14 46.54	-8 58.8	3.149	4.135	3.1	21.0	4 21	14 50.94	-17 20.1	1.621	2.606	5.5	20.9
5 1	14 40.60	-8 16.9	3.140	4.141	1.7	20.9	5 1	14 41.28	-16 48.9	1.579	2.586	1.0	20.5
5 11	14 34.66	-7 38.4	3.160	4.148	3.3	21.0	5 11	14 31.20	-16 13.0	1.564	2.565	3.9	20.7
5 21	14 29.16	-7 6.0	3.208	4.154	5.7	21.2	5 21	14 21.85	-15 37.3	1.576	2.543	8.5	20.9
5 31	14 24.55	-6 41.5	3.284	4.160	7.9	21.3	5 31	14 14.26	-15 7.2	1.612	2.522	12.8	21.1
6 10	14 21.13	-6 26.2	3.382	4.166	9.9	21.5	6 10	14 9.14	-14 47.0	1.670	2.500	16.4	21.3
358060	2006 <i>HR</i> ₄₉		5 2.6 337°11		10°3/26.4	17	304630	2006 <i>VR</i> ₁₄₀		5 2.6 162°02		0°8/ 1.9	17
4 1	14 49.15	- 2 44.7	0.743	1.678	18.3	19.2	4 1	15 0.47	-14 19.4	2.503	3.368	9.9	21.9
4 11	14 49.40	- 1 21.1	0.660	1.629	14.3	18.8	4 11	14 55.13	-13 52.8	2.432	3.370	7.0	21.7
4 21	14 46.37	+ 0 8.0	0.593	1.581	10.9	18.3	4 21	14 48.40	-13 21.2	2.386	3.373	3.8	21.5
5 1	14 40.70	+ 1 27.6	0.544	1.536	10.8	18.1	5 1	14 40.90	-12 47.0	2.368	3.375	0.9	21.3
5 11	14 33.84	+ 2 20.1	0.510	1.494	14.9	18.0	5 11	14 33.32	-12 13.7	2.380	3.377	3.3	21.4
5 21	14 27.67	+ 2 30.1	0.491	1.456	20.8	18.1	5 21	14 26.37	-11 44.4	2.420	3.379	6.5	21.7
5 31	14 24.22	+ 1 48.4	0.484	1.422	26.8	18.2	5 31	14 20.64	-11 22.0	2.486	3.380	9.4	21.8
6 10	14 25.01	+ 0 14.8	0.486	1.393	32.3	18.3	6 10	14 16.55	-11 8.6	2.574	3.382	12.0	22.0
88138	2000 <i>WD</i> ₁₇₂		5 2.6 197°96		6°1/27.6	18	159	<i>Aemilia</i>		5 2.6 101°22		2°8/30.1	18
4 1	15 4.39	+ 3 16.1	2.345	3.205	10.7	20.1	4 1	15 0.44	- 8 20.9	2.296	3.170	10.3	13.1
4 11	14 57.94	+ 3 59.1	2.280	3.202	8.3	19.9	4 11	14 55.12	- 7 39.4	2.237	3.180	7.3	12.9
4 21	14 49.95	+ 4 34.8	2.240	3.198	6.5	19.8	4 21	14 48.39	- 6 56.8	2.205	3.190	4.3	12.7
5 1	14 41.10	+ 4 58.8	2.228	3.193	6.2	19.7	5 1	14 40.89	- 6 17.0	2.200	3.199	2.8	12.7
5 11	14 32.17	+ 5 7.4	2.244	3.188	7.7	19.8	5 11	14 33.39	- 5 43.8	2.224	3.209	4.8	12.8
5 21	14 23.92	+ 4 59.0	2.287	3.182	10.0	20.0	5 21	14 26.61	- 5 20.3	2.275	3.218	7.8	13.0
5 31	14 17.02	+ 4 33.6	2.353	3.176	12.4	20.1	5 31	14 21.12	- 5 8.6	2.351	3.228	10.6	13.2
6 10	14 11.92	+ 3 52.7	2.439	3.169	14.6	20.3	6 10	14 17.35	- 5 9.4	2.449	3.237	13.0	13.4
214928	<i>Carrara</i>		5 2.6 206°82		1°4/ 3.6	17	410331	2007 <i>UR</i> ₄₇		5 2.6 224°21		2°6/30.6	16
4 1	15 4.22	-21 26.4	1.513	2.379	15.1	20.9	4 1	15 4.60	-11 21.9	1.905	2.777	12.2	21.6
4 11	14 58.65	-20 59.3	1.442	2.378	11.1	20.7	4 11	14 58.52	-10 23.1	1.824	2.766	8.7	21.4
4 21	14 50.66	-20 16.3	1.394	2.377	6.5	20.4	4 21	14 50.46	- 9 18.0	1.768	2.754	5.0	21.2
5 1	14 41.21	-19 20.0	1.371	2.376	2.0	20.1	5 1	14 41.20	- 8 11.6	1.739	2.742	2.6	21.0
5 11	14 31.61	-18 16.1	1.374	2.376	4.1	20.2	5 11	14 31.73	- 7 9.9	1.739	2.728	5.3	21.1
5 21	14 23.09	-17 11.9	1.403	2.375	8.9	20.5	5 21	14 23.04	- 6 18.4	1.766	2.714	9.3	21.3
5 31	14 16.68	-16 14.8	1.455	2.374	13.3	20.8	5 31	14 15.97	- 5 41.5	1.818	2.699	13.0	21.5
6 10	14 12.99	-15 30.5	1.527	2.373	17.0	21.0	6 10	14 11.10	- 5 21.4	1.889	2.683	16.2	21.7
172471	2003 <i>SW</i> ₄₆		5 2.6 183°27		0°1/ 2.7	16	351557	2005 <i>TN</i> ₁₄₈		5 2.6 47°04		1°2/ 3.4	

EPHEMERIDES

5 2.6

5 2.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
497517	2006 <i>BL</i> ₁₀₅		5 2.6 46°11	2.7/	4.4	17							
4 1	15 3.82	-23 26.9	1.736	2.590	14.1	21.8							
4 11	14 58.16	-23 28.9	1.667	2.593	10.5	21.5							
4 21	14 50.32	-23 16.6	1.620	2.597	6.6	21.3							
5 1	14 41.19	-22 51.0	1.599	2.601	3.1	21.1							
5 11	14 31.91	-22 15.2	1.605	2.605	4.0	21.2							
5 21	14 23.61	-21 34.4	1.637	2.609	7.9	21.4							
5 31	14 17.20	-20 54.6	1.693	2.613	11.7	21.6							
6 10	14 13.25	-20 21.1	1.771	2.617	15.0	21.9							
478231	2011 <i>UO</i> ₃₃₁		5 2.6 174°55	2°6/	4.9	16							
4 1	15 2.51	-25 7.5	2.742	3.570	10.2	21.9							
4 11	14 56.62	-25 16.6	2.661	3.572	7.8	21.7							
4 21	14 49.27	-25 15.4	2.606	3.573	5.1	21.6							
5 1	14 41.04	-25 4.1	2.578	3.574	2.8	21.4							
5 11	14 32.69	-24 44.5	2.579	3.575	3.2	21.4							
5 21	14 24.93	-24 19.2	2.610	3.575	5.7	21.6							
5 31	14 18.40	-23 51.9	2.667	3.575	8.4	21.8							
6 10	14 13.54	-23 26.2	2.748	3.575	10.8	21.9							
293885	2007 <i>RV</i> ₂₈₅		5 2.6 75°95	1°1/	1.6	17							
4 1	15 0.59	-15 27.1	2.075	2.945	11.4	20.3							
4 11	14 55.31	-14 30.5	2.021	2.963	8.0	20.2							
4 21	14 48.51	-13 26.7	1.993	2.981	4.3	20.0							
5 1	14 40.92	-12 20.0	1.992	2.999	1.1	19.7							
5 11	14 33.41	-11 15.9	2.020	3.017	3.8	20.0							
5 21	14 26.75	-10 19.1	2.076	3.034	7.4	20.2							
5 31	14 21.56	-9 33.5	2.156	3.052	10.6	20.5							
6 10	14 18.23	-9 1.5	2.259	3.070	13.3	20.7							
399406	2001 <i>TA</i> ₉₀		5 2.6 208°70	2°6/	4.2	16							
4 1	15 7.01	-23 23.4	1.589	2.443	15.1	21.5							
4 11	15 0.70	-23 17.0	1.512	2.439	11.4	21.2							
4 21	14 51.85	-22 54.3	1.458	2.435	7.1	21.0							
5 1	14 41.42	-22 16.2	1.428	2.431	3.1	20.7							
5 11	14 30.73	-21 26.5	1.426	2.426	4.3	20.8							
5 21	14 21.08	-20 31.6	1.449	2.421	8.7	21.0							
5 31	14 13.58	-19 38.9	1.497	2.415	13.0	21.3							
6 10	14 8.88	-18 55.0	1.565	2.408	16.7	21.5							
405759	2005 <i>YJ</i> ₁₄₉		5 2.6 313°49	3°3/	1.1	17							
4 1	15 4.45	-9 51.3	1.189	2.083	16.2	20.3							
4 11	14 59.40	-9 29.6	1.116	2.069	11.8	20.0							
4 21	14 51.37	-9 4.5	1.065	2.055	6.8	19.7							
5 1	14 41.38	-8 41.1	1.037	2.041	3.3	19.5							
5 11	14 30.93	-8 25.5	1.033	2.028	6.8	19.6							
5 21	14 21.56	-8 22.8	1.051	2.015	12.2	19.9							
5 31	14 14.61	-8 36.7	1.090	2.003	17.2	20.1							
6 10	14 10.89	-9 8.3	1.146	1.992	21.4	20.3							
417678	2007 <i>AO</i> ₂₀		5 2.6 126°99	2°3/	4.3	17							
4 1	15 7.20	-22 56.1	2.006	2.848	12.9	21.1							
4 11	15 0.25	-23 1.0	1.941	2.863	9.6	21.0							
4 21	14 51.35	-22 53.6	1.901	2.877	5.9	20.8							
5 1	14 41.35	-22 34.6	1.888	2.890	2.7	20.6							
5 11	14 31.32	-22 6.8	1.904	2.903	3.6	20.7							
5 21	14 22.24	-21 34.5	1.947	2.915	7.1	20.9							
5 31	14 14.94	-21 2.5	2.016	2.926	10.6	21.1							
6 10	14 9.92	-20 35.5	2.108	2.938	13.5	21.3							
147229	2002 <i>XF</i> ₄₃		5 2.6 85°26	7°9/	27.4	17							
4 1	15 3.94	+ 3 8.3	1.648	2.524	13.5	19.6							
4 11	14 58.00	+ 4 9.5	1.601	2.532	10.6	19.4							
4 21	14 50.12	+ 5 0.7	1.578	2.539	8.4	19.3							
5 1	14 41.18	+ 5 35.0	1.579	2.547	8.1	19.3							
5 11	14 32.27	+ 5 47.6	1.606	2.554	9.9	19.4							
5 21	14 24.39	+ 5 36.6	1.656	2.561	12.6	19.6							
5 31	14 18.33	+ 5 3.1	1.728	2.569	15.5	19.8							
6 10	14 14.57	+ 4 10.0	1.817	2.576	17.9	20.0							
513007	2017 <i>UK</i> ₄₆		5 2.6 272°62	3°3/	30.3	17							
4 1	15 3.34	-9 5.1	1.802	2.681	12.5	22.1							
4 11	14 57.82	-8 20.3	1.715	2.660	9.0	21.8							
4 21	14 50.20	-7 31.7	1.652	2.638	5.3	21.5							
5 1	14 41.22	-6 44.1	1.616	2.616	3.3	21.4							
5 11	14 31.90	-6 3.1	1.607	2.594	5.9	21.5							
5 21	14 23.28	-5 33.6	1.624	2.572	9.9	21.6							
5 31	14 16.29	-5 19.2	1.664	2.549	13.8	21.8							
6 10	14 11.59	-5 21.5	1.725	2.526	17.2	22.0							
269104	2007 <i>HN</i> ₈₆		5 2.6 331°51	3°5/	30.6	17							
4 1	15 2.37	-8 17.8	1.525	2.413	13.8	19.5							
4 11	14 57.28	-7 51.8	1.455	2.403	9.9	19.3							
4 21	14 49.93	-7 24.5	1.407	2.395	5.9	19.0							
5 1	14 41.17	-7 0.7	1.385	2.387	3.5	18.8							
5 11	14 32.19	-6 45.4	1.388	2.379	6.2	19.0							
5 21	14 24.11	-6 42.3	1.416	2.372	10.5	19.2							
5 31	14 17.93	-6 54.1	1.467	2.365	14.5	19.4							
6 10	14 14.28	-7 21.3	1.536	2.359	18.0	19.6							
229758	2007 <i>NG</i>		5 2.6 317°57	8°0/	27.3	18							
4 1	15 3.37	+ 4 19.2	1.716	2.589	13.2	19.9							
4 11	14 57.68	+ 5 8.4	1.656	2.584	10.5	19.7							
4 21	14 50.01	+ 5 47.1	1.619	2.578	8.5	19.6							
5 1	14 41.18	+ 6 8.9	1.608	2.573	8.2	19.6							
5 11	14 32.23	+ 6 9.0	1.621	2.567	9.9	19.6							
5 21	14 24.18	+ 5 46.0	1.658	2.563	12.7	19.8							
5 31	14 17.87	+ 5 0.5	1.717	2.558	15.5	20.0							
6 10	14 13.82	+ 3 55.6	1.794	2.553	18.1	20.1							
115801	Punahou		5 2.6 124°87	0°0/	2.6	18							
4 1	15 5.88	-17 45.4	1.737	2.602	13.5	21.5							
4 11	14 59.43	-17 17.1	1.677	2.614	9.7	21.2							
4 21	14 50.93	-16 38.7	1.640	2.626	5.4	21.0							
5 1	14 41.30	-15 53.3	1.631	2.638	0.8	20.7							
5 11	14 31.68	-15 5.7	1.649	2.649	3.8	21.0							
5 21	14 23.11	-14 21.4	1.694	2.660	8.2	21.2							
5 31	14 16.44	-13 45.4	1.764	2.670	12.0	21.5							
6 10	14 12.17	-13 21.2	1.855	2.680	15.2	21.7							

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
252979	2002 QE ₂₉		5 2.6 229°38	0°7/ 3.1 17			261240	2005 UP ₅₁		5 2.6 30°11	0°9/ 3.6 18		
4 1	15 5.97	-18 39.0	1.943	2.800	12.6	21.7	4 1	14 59.31	-22 46.3	2.268	3.119	11.3	19.6
4 11	14 59.62	-18 26.9	1.856	2.789	9.2	21.5	4 11	14 54.47	-21 37.2	2.192	3.120	8.3	19.5
4 21	14 51.16	-18 4.7	1.794	2.777	5.3	21.2	4 21	14 48.12	-20 14.3	2.141	3.122	4.8	19.2
5 1	14 41.38	-17 34.3	1.758	2.765	1.1	20.9	5 1	14 40.96	-18 41.1	2.118	3.124	1.3	19.0
5 11	14 31.31	-16 58.9	1.751	2.752	3.6	21.1	5 11	14 33.78	-17 3.4	2.125	3.126	3.0	19.1
5 21	14 21.99	-16 23.0	1.772	2.738	7.8	21.3	5 21	14 27.35	-15 27.6	2.160	3.128	6.5	19.3
5 31	14 14.36	-15 51.7	1.818	2.724	11.7	21.5	5 31	14 22.29	-13 59.6	2.223	3.130	9.8	19.6
6 10	14 9.03	-15 29.1	1.885	2.709	15.1	21.7	6 10	14 19.03	-12 44.3	2.309	3.133	12.7	19.7
248504	2005 UO ₄₈₁		5 2.6 239°29	6°9/25.6 18			151225	2001 YM ₉₉		5 2.6 205°49	0°2/ 2.5 17		
4 1	15 1.22	+ 8 40.5	2.720	3.568	9.7	20.7	4 1	15 0.81	-16 29.6	2.959	3.812	8.9	22.3
4 11	14 55.60	+ 9 27.1	2.653	3.556	8.1	20.5	4 11	14 55.29	-16 5.1	2.874	3.806	6.3	22.1
4 21	14 48.68	+10 4.2	2.611	3.545	7.0	20.5	4 21	14 48.52	-15 34.6	2.815	3.800	3.5	21.9
5 1	14 41.02	+10 27.6	2.597	3.532	7.1	20.4	5 1	14 41.02	-15 0.3	2.786	3.793	0.5	21.6
5 11	14 33.26	+10 34.1	2.609	3.520	8.3	20.5	5 11	14 33.42	-14 24.7	2.787	3.785	2.6	21.8
5 21	14 26.04	+10 22.6	2.647	3.507	10.0	20.6	5 21	14 26.32	-13 50.9	2.817	3.777	5.6	22.0
5 31	14 19.93	+ 9 53.2	2.707	3.494	11.9	20.7	5 31	14 20.26	-13 21.7	2.874	3.769	8.3	22.2
6 10	14 15.33	+ 9 7.6	2.787	3.481	13.7	20.8	6 10	14 15.64	-12 59.5	2.956	3.760	10.7	22.3
262738	2006 XN ₄₅		5 2.6 149°86	0°9/ 1.8 17			63555	2001 QD ₈		5 2.6 221°34	0°7/ 3.2 18		
4 1	15 0.65	-13 38.8	2.546	3.410	9.8	21.3	4 1	15 1.50	-19 20.1	2.264	3.121	11.1	19.8
4 11	14 55.26	-13 14.6	2.476	3.414	6.9	21.1	4 11	14 56.11	-18 58.4	2.184	3.117	8.1	19.6
4 21	14 48.51	-12 46.1	2.432	3.419	3.8	21.0	4 21	14 49.09	-18 27.4	2.129	3.113	4.6	19.4
5 1	14 40.99	-12 15.6	2.416	3.422	1.0	20.7	5 1	14 41.11	-17 49.0	2.102	3.109	1.1	19.1
5 11	14 33.42	-11 46.4	2.430	3.426	3.3	20.9	5 11	14 33.00	-17 6.8	2.103	3.104	3.0	19.3
5 21	14 26.47	-11 21.4	2.472	3.430	6.4	21.1	5 21	14 25.57	-16 24.8	2.132	3.100	6.7	19.5
5 31	14 20.72	-11 3.3	2.540	3.433	9.3	21.3	5 31	14 19.51	-15 47.3	2.188	3.095	10.0	19.7
6 10	14 16.58	-10 53.9	2.631	3.436	11.8	21.5	6 10	14 15.32	-15 17.8	2.265	3.090	12.9	19.9
29607	Jakehecla		5 2.6 105°54	0°7/ 2.9 18			351999	2006 UF ₂₀₈		5 2.6 120°92	0°0/ 2.7 17		
4 1	15 10.17	-17 32.8	1.445	2.313	15.6	18.6	4 1	15 3.15	-16 1.7	2.342	3.201	10.7	21.0
4 11	15 2.82	-17 36.4	1.391	2.329	11.3	18.3	4 11	14 57.18	-16 2.3	2.272	3.207	7.7	20.9
4 21	14 52.93	-17 29.7	1.360	2.345	6.3	18.1	4 21	14 49.64	-15 57.4	2.227	3.212	4.2	20.7
5 1	14 41.62	-17 14.6	1.354	2.361	1.2	17.8	5 1	14 41.19	-15 48.3	2.210	3.217	0.6	20.4
5 11	14 30.33	-16 54.8	1.375	2.376	4.2	18.1	5 11	14 32.65	-15 37.5	2.223	3.223	3.0	20.6
5 21	14 20.39	-16 35.3	1.422	2.391	9.1	18.4	5 21	14 24.80	-15 27.6	2.263	3.228	6.5	20.8
5 31	14 12.81	-16 21.0	1.493	2.405	13.4	18.7	5 31	14 18.32	-15 21.4	2.330	3.232	9.7	21.0
6 10	14 8.15	-16 16.0	1.584	2.419	16.9	18.9	6 10	14 13.66	-15 21.2	2.420	3.237	12.3	21.2
261915	2006 KM ₁₄		5 2.6 287°36	0°9/ 2.1 17			183872	2004 CT ₄₀		5 2.6 93°42	0°2/ 2.5 18		
4 1	15 5.04	-15 7.5	1.473	2.351	14.7	21.7	4 1	15 4.87	-17 14.5	1.610	2.481	14.1	20.9
4 11	14 59.61	-14 46.0	1.381	2.326	10.7	21.4	4 11	14 58.82	-16 42.6	1.554	2.495	10.1	20.7
4 21	14 51.48	-14 14.6	1.311	2.299	6.0	21.1	4 21	14 50.65	-16 0.4	1.521	2.508	5.5	20.5
5 1	14 41.47	-13 36.5	1.266	2.273	1.1	20.7	5 1	14 41.33	-15 11.7	1.514	2.522	0.8	20.1
5 11	14 30.84	-12 56.8	1.247	2.246	5.0	20.9	5 11	14 32.03	-14 22.0	1.535	2.535	4.1	20.4
5 21	14 20.99	-12 21.5	1.253	2.220	10.3	21.1	5 21	14 23.85	-13 36.9	1.581	2.548	8.6	20.7
5 31	14 13.18	-11 56.7	1.282	2.193	15.2	21.3	5 31	14 17.65	-13 1.6	1.651	2.560	12.5	21.0
6 10	14 8.24	-11 46.7	1.329	2.166	19.5	21.5	6 10	14 13.91	-12 39.3	1.742	2.573	15.8	21.2
320540	2008 AN ₂		5 2.6 110°28	5°7/27.8 18			157788	5020 T ₋₃		5 2.6 203°79	3°2/29.3 18		
4 1	15 0.86	+ 1 23.3	2.278	3.148	10.5	20.2	4 1	14 59.63	- 5 11.3	2.888	3.756	8.6	21.2
4 11	14 55.46	+ 2 9.7	2.221	3.151	8.1	20.1	4 11	14 54.42	- 4 29.0	2.814	3.751	6.3	21.0
4 21	14 48.63	+ 2 50.0	2.191	3.155	6.2	20.0	4 21	14 48.03	- 3 47.2	2.768	3.747	4.0	20.8
5 1	14 41.01	+ 3 19.5	2.187	3.158	5.8	20.0	5 1	14 40.96	- 3 9.4	2.750	3.741	3.2	20.8
5 11	14 33.38	+ 3 34.7	2.210	3.162	7.3	20.1	5 11	14 33.83	- 2 38.6	2.762	3.736	4.8	20.9
5 21	14 26.43	+ 3 33.7	2.259	3.165	9.7	20.2	5 21	14 27.18	- 2 17.4	2.801	3.729	7.2	21.0
5 31	14 20.79	+ 3 16.2	2.332	3.169	12.1	20.4	5 31	14 21.55	- 2 7.4	2.866	3.723	9.5	21.2
6 10	14 16.86	+ 2 43.4	2.424	3.172	14.2	20.5	6 10	14 17.31	- 2 9.1	2.954	3.716	11.6	21.3
205606	2001 UK ₁₀₃		5 2.6 146°77	1°0/ 1.9 18			25867	DeMuth		5 2.6 178°69	0°6/ 3.0 18		
4 1	15 5.64	-16 5.3	1.572	2.445	14.3	21.5	4 1	15 7.15	-18 54.1	1.724	2.584	13.8	19.1
4 11	14 59.45	-15 15.0	1.510	2.452	10.2	21.3	4 11	15 0.53	-18 30.9	1.652	2.586	10.0	18.9
4 21	14 51.03	-14 14.1	1.471	2.459	5.5	21.0	4 21	14 51.67	-17 56.1	1.603	2.587	5.7	18.6
5 1	14 41.36	-13 7.5	1.458	2.465	1.1	20.7	5 1	14 41.50	-17 12.1	1.581	2.588	1.1	18.3
5 11	14 31.66	-12 1.8	1.472	2.471	4.6	21.0	5 11	14 31.18	-16 23.5	1.587	2.588	3.9	18.5
5 21	14 23.06	-11 3.7	1.513	2.476	9.3	21.3	5 21	14 21.86	-15 36.1	1.620	2.587	8.4	18.8
5 31	14 16.50	-10 18.9	1.578	2.480	13.4	21.5	5 31	14 14.49	-14 55.7	1.678	2.586	12.4	19.0
6 10	14 12.49	- 9 50.5	1.662	2.484	16.8	21.8	6 10	14 9.64	-14 26.4	1.757	2.584	15.9	19.2
160405	2004 RO ₂₀₁		5 2.6 298°02	5°4/ 4.9 17			249487	2009 UP ₈₇		5 2.6 74°25	1°4/ 3.8 18		
4 1	15 6.84	-26 7.3	1.308	2.165	17.5	20.5	4 1	15 2.61	-22 49.2	1.727	2.585	13.9	20.0
4 11	15 1.57	-26 47.8	1.214	2.139	13.8	20.2	4 11	14 57.12	-21 59.7	1.669	2.601	10.2	19.8
4 21	14 52.91	-27 11.1	1.141	2.112	9.5	19.8	4 21	14 49.67	-20 54.6	1.635	2.616	6.0	19.6
5 1	14 41.71	-27 13.5	1.089	2.085	5.9	19.5	5 1	14 41.20	-19 37.7	1.626	2.632	1.9	19.4
5 11	14 29.52	-26 55.0	1.062	2.058	6.5	19.5	5 11	14 32.80	-18 15.3	1.646	2.647	3.6	19.5
5 21	14 18.14	-26 19.7	1.059	2.032	10.9	19.6	5 21	14 25.47	-16 54.8	1.692	2.663	7.7	19.8
5 31	14 9.27	-25 36.2	1.076	2.005	15.9	19.8	5 31	14 19.99	-15 42.9	1.763	2.678	11.5	20.1
6 10	14 4.02	-24 54.5	1.112	1.979	20.5	20.0	6 10	14 16.82	-14 44.6	1.856	2.693	14.7	20.3
79280	1995 SE ₃₂		5 2.6 285°18	1°0/ 1.8 18			176881	2002 UT ₄₄		5 2.6 226°37	4°6/29.4 18		
4 1	15 0.86	-14 33.4	2.158	3.027	11.1	19.5							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
317866	2003 UR ₂₈		5 2.6 177°02		2°0/ 4.1	16	495043	2010 XK ₄₂		5 2.6 115°14		2°6/ 4.7	17
4 1	15 6.83	-22 54.7	2.026	2.869	12.8	22.3	4 1	15 4.91	-25 8.7	1.879	2.722	13.6	21.2
4 11	15 0.09	-22 43.7	1.950	2.872	9.5	22.1	4 11	14 58.75	-24 47.4	1.815	2.735	10.2	21.0
4 21	14 51.36	-22 19.6	1.897	2.874	5.8	21.8	4 21	14 50.61	-24 10.3	1.774	2.747	6.5	20.8
5 1	14 41.46	-21 43.7	1.872	2.875	2.4	21.6	5 1	14 41.38	-23 19.1	1.759	2.760	3.1	20.6
5 11	14 31.42	-20 59.2	1.876	2.875	3.5	21.7	5 11	14 32.16	-22 18.2	1.772	2.772	3.8	20.7
5 21	14 22.26	-20 11.1	1.907	2.875	7.2	21.9	5 21	14 23.96	-21 13.6	1.813	2.783	7.3	20.9
5 31	14 14.83	-19 24.9	1.965	2.874	10.8	22.1	5 31	14 17.58	-20 11.8	1.879	2.794	10.9	21.2
6 10	14 9.66	-18 45.5	2.045	2.872	13.9	22.3	6 10	14 13.52	-19 18.3	1.967	2.805	14.0	21.4
350764	2002 AJ ₁₀₉		5 2.6 39°84		7°6/26.8	17	39045	2000 US ₉₃		5 2.6 25°66		4°1/ 5.2	18
4 1	15 0.80	+ 5 14.7	1.932	2.803	12.1	20.0	4 1	15 3.93	-26 30.7	1.293	2.154	17.5	17.9
4 11	14 55.55	+ 6 9.4	1.892	2.815	9.7	19.9	4 11	14 58.87	-26 25.2	1.230	2.158	13.4	17.7
4 21	14 48.72	+ 6 53.2	1.875	2.828	7.9	19.8	4 21	14 51.01	-25 57.5	1.187	2.161	8.8	17.4
5 1	14 41.07	+ 7 20.5	1.884	2.841	7.8	19.8	5 1	14 41.46	-25 8.2	1.167	2.166	4.7	17.2
5 11	14 33.48	+ 7 27.7	1.918	2.855	9.3	19.9	5 11	14 31.76	-24 2.6	1.171	2.170	5.2	17.3
5 21	14 26.77	+ 7 13.8	1.976	2.868	11.5	20.1	5 21	14 23.38	-22 49.2	1.199	2.176	9.5	17.5
5 31	14 21.56	+ 6 39.6	2.056	2.883	13.9	20.3	5 31	14 17.48	-21 37.9	1.250	2.181	14.0	17.8
6 10	14 18.28	+ 5 47.9	2.155	2.897	15.9	20.4	6 10	14 14.67	-20 36.9	1.320	2.187	17.9	18.0
512796	2016 UU ₈₂		5 2.6 269°11		0°0/ 2.5	18	268072	2004 RF ₇₃		5 2.6 270°80		1°6/ 1.5	18
4 1	15 1.31	-16 54.6	2.438	3.297	10.3	22.0	4 1	15 3.32	-12 58.1	1.882	2.755	12.3	21.0
4 11	14 55.98	-16 37.4	2.343	3.278	7.5	21.8	4 11	14 57.79	-12 27.1	1.794	2.737	8.8	20.8
4 21	14 49.06	-16 13.1	2.274	3.259	4.2	21.5	4 21	14 50.23	-11 49.8	1.730	2.718	4.9	20.5
5 1	14 41.14	-15 43.6	2.232	3.240	0.6	21.2	5 1	14 41.36	-11 9.7	1.692	2.698	1.6	20.2
5 11	14 32.98	-15 11.8	2.220	3.220	3.1	21.4	5 11	14 32.17	-10 31.3	1.683	2.679	4.6	20.4
5 21	14 25.36	-14 41.1	2.236	3.200	6.6	21.6	5 21	14 23.66	-9 59.3	1.700	2.659	8.8	20.6
5 31	14 18.96	-14 15.2	2.279	3.180	9.9	21.7	5 31	14 16.75	-9 37.9	1.741	2.639	12.6	20.8
6 10	14 14.31	-13 57.0	2.343	3.160	12.7	21.9	6 10	14 12.06	-9 29.7	1.804	2.618	16.0	20.9
37182	2000 WW ₄₉		5 2.6 250°53		7°1/24.7	18	160290	2003 BV ₈₂		5 2.6 14°19		6°7/29.5	18
4 1	15 0.28	+ 8 33.9	2.669	3.521	9.8	19.1	4 1	15 2.06	- 2 29.3	1.165	2.065	16.1	19.3
4 11	14 55.01	+ 9 37.1	2.600	3.504	8.2	19.0	4 11	14 57.33	- 1 54.9	1.119	2.070	12.0	19.0
4 21	14 48.42	+ 10 31.5	2.556	3.488	7.2	18.9	4 21	14 50.05	- 1 27.5	1.094	2.076	8.1	18.9
5 1	14 41.04	+ 11 12.1	2.539	3.471	7.4	18.9	5 1	14 41.31	- 1 14.0	1.091	2.083	6.7	18.8
5 11	14 33.54	+ 11 35.2	2.548	3.454	8.7	18.9	5 11	14 32.56	- 1 19.8	1.112	2.092	9.1	18.9
5 21	14 26.55	+ 11 38.9	2.582	3.436	10.5	19.0	5 21	14 25.11	- 1 46.9	1.154	2.102	13.1	19.2
5 31	14 20.66	+ 11 23.1	2.639	3.418	12.4	19.1	5 31	14 19.97	- 2 34.5	1.217	2.113	17.0	19.5
6 10	14 16.29	+ 10 49.3	2.714	3.400	14.2	19.2	6 10	14 17.69	- 3 39.8	1.296	2.125	20.3	19.7
246169	2007 RQ ₁₃		5 2.6 275°90		1°3/ 3.4	17	283734	2002 VT ₁₄₇		5 2.6 204°67		4°2/ 6.3	18
4 1	15 6.12	-20 9.2	1.531	2.396	15.0	20.8	4 1	15 3.88	-30 15.7	2.475	3.285	11.8	21.1
4 11	15 0.41	-19 58.1	1.436	2.372	11.1	20.5	4 11	14 57.88	-30 24.5	2.388	3.281	9.3	20.9
4 21	14 51.96	-19 33.0	1.364	2.347	6.6	20.1	4 21	14 50.14	-30 18.5	2.325	3.277	6.7	20.7
5 1	14 41.60	-18 54.8	1.316	2.322	1.9	19.8	5 1	14 41.33	-29 57.2	2.289	3.273	4.6	20.6
5 11	14 30.64	-18 7.6	1.295	2.297	4.3	19.9	5 11	14 32.35	-29 22.4	2.281	3.268	4.5	20.6
5 21	14 20.46	-17 17.6	1.300	2.271	9.5	20.1	5 21	14 24.04	-28 37.7	2.301	3.263	6.6	20.7
5 31	14 12.34	-16 32.1	1.327	2.244	14.4	20.3	5 31	14 17.17	-27 47.9	2.348	3.258	9.3	20.8
6 10	14 7.14	-15 57.6	1.375	2.218	18.6	20.5	6 10	14 12.27	-26 58.4	2.418	3.253	11.8	21.0
235918	2005 EH ₄₉		5 2.6 68°29		7°1/26.3	18	181488	2006 TM ₁₀₄		5 2.6 161°43		0°6/ 2.1	18
4 1	15 0.69	+ 0 59.1	1.824	2.704	12.3	20.1	4 1	15 0.66	-15 7.1	2.797	3.656	9.2	22.1
4 11	14 55.49	+ 2 38.2	1.789	2.723	9.4	20.0	4 11	14 55.19	-14 39.1	2.725	3.661	6.5	21.9
4 21	14 48.69	+ 4 9.6	1.779	2.743	7.4	19.9	4 21	14 48.49	-14 6.1	2.680	3.666	3.5	21.7
5 1	14 41.08	+ 5 25.9	1.796	2.762	7.4	19.9	5 1	14 41.09	-13 30.3	2.663	3.670	0.7	21.5
5 11	14 33.59	+ 6 21.3	1.838	2.781	9.2	20.1	5 11	14 33.65	-12 54.7	2.677	3.674	2.9	21.7
5 21	14 27.03	+ 6 52.9	1.905	2.801	11.7	20.2	5 21	14 26.77	-12 22.2	2.719	3.678	5.9	21.9
5 31	14 22.05	+ 7 0.5	1.993	2.820	14.2	20.5	5 31	14 21.01	-11 55.7	2.788	3.681	8.6	22.0
6 10	14 19.05	+ 6 46.5	2.099	2.839	16.4	20.7	6 10	14 16.73	-11 37.2	2.881	3.684	10.9	22.2
405484	2004 XP ₁₁		5 2.6 97°60		11°1/13.9	18	173091	2007 RU ₂₁₇		5 2.6 177°76		0°3/ 2.4	17
4 1	15 12.73	-48 47.1	1.694	2.415	19.7	20.0	4 1	15 1.80	-16 22.4	2.272	3.134	10.9	21.2
4 11	15 5.01	-48 47.5	1.631	2.434	17.3	19.9	4 11	14 56.28	-15 53.9	2.198	3.135	7.8	21.0
4 21	14 54.22	-48 11.2	1.585	2.453	14.7	19.8	4 21	14 49.19	-15 18.1	2.149	3.136	4.3	20.8
5 1	14 41.86	-46 54.5	1.559	2.472	12.4	19.7	5 1	14 41.19	-14 37.8	2.129	3.136	0.6	20.5
5 11	14 29.83	-44 59.9	1.556	2.491	11.2	19.6	5 11	14 33.11	-13 56.6	2.137	3.136	3.3	20.8
5 21	14 19.71	-42 36.6	1.578	2.509	11.5	19.7	5 21	14 25.72	-13 18.4	2.173	3.136	6.9	21.0
5 31	14 12.60	-39 58.0	1.625	2.526	13.2	19.8	5 31	14 19.70	-12 47.1	2.235	3.136	10.1	21.2
6 10	14 8.91	-37 18.5	1.696	2.543	15.5	20.0	6 10	14 15.51	-12 25.3	2.320	3.135	12.9	21.4
423582	2005 VE ₉₃		5 2.6 210°45		2°9/30.4	17	33759	1999 RR ₅₇		5 2.6 60°78		7°7/25.3	18
4 1	15 4.37	- 7 54.7	2.223	3.092	10.8	22.1	4 1	14 59.53	+ 6 42.7	2.178	3.043	11.2	18.1
4 11	14 58.14	- 7 21.3	2.146	3.085	7.8	21.9	4 11	14 54.57	+ 7 57.0	2.134	3.050	9.1	18.0
4 21	14 50.23	- 6 46.6	2.094	3.078	4.6	21.6	4 21	14 48.19	+ 9 1.0	2.115	3.058	7.9	17.9
5 1	14 41.33	- 6 14.4	2.071	3.070	3.0	21.5	5 1	14 41.04	+ 9 48.8	2.122	3.065	8.0	17.9
5 11	14 32.28	- 5 48.5	2.076	3.061	5.1	21.6	5 11	14 33.91	+ 10 16.3	2.154	3.072	9.4	18.0
5 21	14 23.90	- 5 32.1	2.110	3.052	8.3	21.8	5 21	14 27.51	+ 10 21.8	2.210	3.080	11.4	18.2
5 31	14 16.91	- 5 27.5	2.168	3.042	11.5	22.0	5 31	14 22.45	+ 10 5.9	2.288	3.088	13.5	18.3
6 10	14 11.83	- 5 35.6	2.248	3.032	14.2	22.2	6 10	14 19.11	+ 9 30.8	2.383	3.095	15.3	18.5
99323	2001 TE ₂₀₅		5 2.6 173°31		1°6/30.5	18	329390	2001 YP ₂		5 2.6 203°33		11°7/22.8	18
4 1	14 55.36	- 7 40.5											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
161992	1981 <i>EK</i> ₃₈		5 2.6 46°14	2.7/ 4.3	18		244578	2002 <i>XD</i> ₆		5 2.7 154°33	6°0/27.7	18	
4 1	15 5.04	-23 9.3	1.325	2.192	16.7	19.8	4 1	15 3.20	+3 46.1	2.394	3.255	10.4	20.8
4 11	14 59.55	-23 2.5	1.264	2.198	12.5	19.6	4 11	14 57.09	+4 22.1	2.338	3.259	8.2	20.7
4 21	14 51.35	-22 37.7	1.223	2.204	7.7	19.3	4 21	14 49.56	+4 50.4	2.307	3.264	6.4	20.6
5 1	14 41.53	-21 56.4	1.206	2.210	3.2	19.1	5 1	14 41.27	+5 6.6	2.304	3.268	6.1	20.6
5 11	14 31.60	-21 3.8	1.215	2.216	4.6	19.1	5 11	14 32.96	+5 7.9	2.328	3.271	7.5	20.6
5 21	14 22.95	-20 7.4	1.247	2.223	9.3	19.4	5 21	14 25.35	+4 53.0	2.378	3.275	9.7	20.8
5 31	14 16.71	-19 15.3	1.303	2.229	13.9	19.7	5 31	14 19.04	+4 22.2	2.453	3.278	11.9	20.9
6 10	14 13.49	-18 34.2	1.377	2.236	17.7	20.0	6 10	14 14.45	+3 37.0	2.547	3.281	13.9	21.1
83770	2001 <i>TB</i> ₁₆₄		5 2.6 232°40	0°6/ 2.1	17		385523	2004 <i>LL</i> ₁₄		5 2.7 3°59 13°8	24.9	17	
4 1	15 1.08	-15 15.5	2.316	3.181	10.6	20.6	4 1	15 7.26	+21 59.4	1.714	2.527	16.0	19.5
4 11	14 55.79	-14 47.1	2.237	3.175	7.6	20.4	4 11	15 0.41	+22 32.6	1.673	2.527	14.7	19.4
4 21	14 48.95	-14 12.4	2.183	3.169	4.1	20.2	4 21	14 51.51	+22 38.4	1.652	2.527	13.9	19.3
5 1	14 41.18	-13 33.9	2.156	3.163	0.8	19.9	5 1	14 41.54	+22 10.4	1.652	2.528	14.0	19.3
5 11	14 33.29	-12 55.4	2.159	3.157	3.4	20.1	5 11	14 31.69	+21 6.8	1.674	2.531	14.9	19.4
5 21	14 26.02	-12 20.4	2.189	3.151	6.9	20.3	5 21	14 23.01	+19 29.9	1.717	2.533	16.5	19.5
5 31	14 20.06	-11 52.6	2.246	3.144	10.1	20.5	5 31	14 16.32	+17 25.4	1.779	2.537	18.2	19.6
6 10	14 15.88	-11 34.6	2.324	3.137	12.9	20.7	6 10	14 12.07	+15 0.7	1.859	2.542	19.9	19.8
59860	1999 <i>RP</i> ₉₄		5 2.6 250°95	1°1/ 1.7	18		71814	2000 <i>UU</i> ₂		5 2.7 71°54	0°0/ 2.5	18	
4 1	15 0.53	-13 21.2	2.638	3.502	9.5	20.0	4 1	15 4.61	-18 11.0	1.385	2.262	15.6	19.0
4 11	14 55.28	-12 54.8	2.549	3.487	6.8	19.8	4 11	14 58.95	-17 33.0	1.331	2.274	11.2	18.8
4 21	14 48.64	-12 23.8	2.486	3.473	3.7	19.5	4 21	14 50.87	-16 42.2	1.298	2.286	6.2	18.5
5 1	14 41.14	-11 50.6	2.452	3.458	1.1	19.3	5 1	14 41.46	-15 42.9	1.290	2.298	0.9	18.2
5 11	14 33.48	-11 18.5	2.447	3.442	3.3	19.5	5 11	14 32.07	-14 41.8	1.308	2.310	4.4	18.5
5 21	14 26.32	-10 50.5	2.470	3.427	6.5	19.6	5 21	14 23.95	-13 46.2	1.352	2.322	9.4	18.8
5 31	14 20.27	-10 29.4	2.520	3.411	9.5	19.8	5 31	14 18.04	-13 2.4	1.418	2.334	13.7	19.1
6 10	14 15.80	-10 17.5	2.592	3.394	12.0	19.9	6 10	14 14.88	-12 34.1	1.504	2.346	17.4	19.4
205447	2001 <i>PW</i> ₆		5 2.6 225°41	1°9/ 3.9	16		416390	2003 <i>UD</i> ₃₅		5 2.7 266°48	1°3/ 3.5	17	
4 1	15 7.33	-22 4.5	1.698	2.551	14.4	21.1	4 1	15 4.08	-21 15.8	1.563	2.427	14.8	21.2
4 11	15 0.92	-21 50.0	1.613	2.542	10.7	20.8	4 11	14 58.72	-20 44.6	1.479	2.414	10.9	20.9
4 21	14 52.06	-21 20.6	1.551	2.531	6.5	20.6	4 21	14 50.90	-19 57.1	1.418	2.401	6.4	20.7
5 1	14 41.65	-20 37.5	1.516	2.520	2.3	20.3	5 1	14 41.50	-18 55.8	1.382	2.388	1.8	20.3
5 11	14 30.91	-19 44.8	1.507	2.508	4.0	20.4	5 11	14 31.77	-17 46.1	1.372	2.374	4.1	20.4
5 21	14 21.08	-18 48.5	1.526	2.496	8.5	20.6	5 21	14 22.97	-16 35.4	1.388	2.360	9.0	20.7
5 31	14 13.23	-17 55.7	1.569	2.482	12.8	20.8	5 31	14 16.19	-15 31.7	1.428	2.346	13.5	20.9
6 10	14 8.06	-17 12.3	1.633	2.469	16.5	21.0	6 10	14 12.12	-14 41.3	1.489	2.332	17.5	21.1
497068	2003 <i>UP</i> ₁₆₅		5 2.6 273°80	0°0/ 2.6	17		400021	2006 <i>PZ</i> ₁₀		5 2.7 245°67	0°2/ 2.3	17	
4 1	15 5.34	-17 44.5	1.673	2.540	13.8	22.3	4 1	14 56.90	-15 50.0	3.835	4.689	7.0	22.5
4 11	14 59.64	-17 11.1	1.573	2.512	10.1	22.0	4 11	14 52.37	-15 26.4	3.740	4.673	5.0	22.3
4 21	14 51.46	-16 24.8	1.498	2.484	5.7	21.7	4 21	14 46.91	-14 58.5	3.672	4.657	2.7	22.2
5 1	14 41.58	-15 28.3	1.448	2.455	0.8	21.3	5 1	14 40.91	-14 28.0	3.634	4.641	0.4	21.9
5 11	14 31.16	-14 26.8	1.425	2.425	4.3	21.5	5 11	14 34.80	-13 56.7	3.626	4.624	2.1	22.1
5 21	14 21.44	-13 26.9	1.429	2.395	9.4	21.7	5 21	14 29.03	-13 27.0	3.647	4.607	4.5	22.2
5 31	14 13.55	-12 35.5	1.457	2.364	14.0	21.9	5 31	14 23.99	-13 0.8	3.697	4.590	6.7	22.4
6 10	14 8.29	-11 58.2	1.505	2.333	18.0	22.1	6 10	14 20.01	-12 40.1	3.771	4.572	8.6	22.5
485421	2011 <i>QG</i>		5 2.6 240°95	2°9/ 7.8	17		508497	2016 <i>QY</i>		5 2.7 152°58	0°5/ 3.1	17	
4 1	14 55.29	-33 56.7	4.889	5.664	6.9	21.4	4 1	15 0.06	-19 33.6	2.462	3.317	10.4	21.4
4 11	14 51.13	-33 48.0	4.791	5.656	5.6	21.3	4 11	14 54.96	-18 57.2	2.388	3.320	7.5	21.2
4 21	14 46.18	-33 30.2	4.718	5.648	4.2	21.2	4 21	14 48.44	-18 11.6	2.339	3.322	4.3	21.0
5 1	14 40.78	-33 3.5	4.673	5.640	3.2	21.1	5 1	14 41.13	-17 19.4	2.318	3.325	0.9	20.8
5 11	14 35.33	-32 29.0	4.657	5.631	3.0	21.1	5 11	14 33.77	-16 24.3	2.327	3.327	2.8	20.9
5 21	14 30.19	-31 48.4	4.670	5.623	3.8	21.2	5 21	14 27.05	-15 30.5	2.363	3.330	6.2	21.2
5 31	14 25.73	-31 4.0	4.711	5.614	5.1	21.2	5 31	14 21.59	-14 42.2	2.427	3.332	9.2	21.4
6 10	14 22.21	-30 18.3	4.777	5.606	6.5	21.3	6 10	14 17.82	-14 2.7	2.513	3.334	11.9	21.5
59967	1999 <i>RP</i> ₂₄₀		5 2.7 254°40	6°4/26.5	18		213810	2003 <i>HG</i> ₄₂		5 2.7 31°59	5°9/27.6	18	
4 1	15 0.07	+4 20.3	2.440	3.305	10.1	18.7	4 1	14 59.49	-0 17.1	2.015	2.894	11.3	19.6
4 11	14 54.94	+5 15.1	2.376	3.297	8.1	18.5	4 11	14 54.68	+0 45.9	1.963	2.899	8.6	19.5
4 21	14 48.42	+6 2.6	2.337	3.289	6.6	18.4	4 21	14 48.32	+1 43.7	1.935	2.904	6.4	19.3
5 1	14 41.11	+6 38.1	2.325	3.282	6.5	18.4	5 1	14 41.11	+2 30.6	1.934	2.910	6.0	19.3
5 11	14 33.71	+6 57.7	2.339	3.274	7.9	18.5	5 11	14 33.89	+3 1.9	1.959	2.916	7.8	19.4
5 21	14 26.90	+6 59.6	2.379	3.266	10.0	18.6	5 21	14 27.44	+3 15.1	2.009	2.922	10.4	19.6
5 31	14 21.28	+6 43.4	2.442	3.258	12.3	18.7	5 31	14 22.39	+3 9.4	2.082	2.929	13.0	19.8
6 10	14 17.28	+6 10.5	2.525	3.250	14.3	18.9	6 10	14 19.18	+2 46.0	2.174	2.935	15.3	20.0
375861	2009 <i>VM</i> ₂₈		5 2.7 177°66	0°4/ 3.0	18		406377	2007 <i>RM</i> ₃₁₂		5 2.7 186°17	0°2/ 3.0	18	
4 1	15 3.36	-19 16.5	2.252	3.106	11.3	21.5	4 1	14 56.74	-18 1.7	4.054	4.902	6.8	22.2
4 11	14 57.42	-18 42.0	2.176	3.107	8.2	21.3	4 11	14 52.18	-17 42.2	3.972	4.901	4.9	22.1
4 21	14 49.83	-17 57.6	2.125	3.109	4.6	21.1	4 21	14 46.79	-17 17.9	3.917	4.900	2.7	21.9
5 1	14 41.31	-17 5.8	2.103	3.110	0.9	20.8	5 1	14 40.91	-16 50.3	3.892	4.899	0.5	21.7
5 11	14 32.71	-16 10.7	2.110	3.110	3.1	21.0	5 11	14 34.99	-16 21.1	3.897	4.897	1.9	21.8
5 21	14 24.85	-15 17.0	2.145	3.110	6.8	21.2	5 21	14 29.42	-15 52.4	3.932	4.895	4.1	22.0
5 31	14 18.44	-14 29.2	2.206	3.109	10.1	21.4	5 31	14 24.58	-15 26.2	3.995	4.893	6.1	22.1
6 10	14 13.94	-13 51.1	2.290	3.108	13.0	21.6	6 10	14 20.74	-15 4.3	4.083	4.891	7.9	22.3
130177	2000 <i>AH</i> ₃₆		5 2.7 143°28	0°5/									

EPHEMERIDES

5 2.7

5 2.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
238046	2003 <i>BR</i> ₁₉		5 2.7 11°64	4.3/30.6	18		502218	2015 <i>BZ</i> ₈₆		5 2.7 90°28	1.8/	1.4 17	
4 1	15 6.82	- 7 11.1	1.269	2.158	15.8	19.8	4 1	15 3.07	-12 30.9	1.756	2.633	12.8	21.4
4 11	15 0.80	- 6 45.2	1.210	2.158	11.5	19.6	4 11	14 57.54	-11 56.4	1.691	2.635	9.1	21.2
4 21	14 52.07	- 6 19.6	1.172	2.159	6.9	19.3	4 21	14 50.05	-11 16.4	1.650	2.638	5.0	20.9
5 1	14 41.71	- 6 0.0	1.159	2.159	4.3	19.2	5 1	14 41.43	-10 35.1	1.635	2.641	1.9	20.7
5 11	14 31.19	- 5 51.7	1.170	2.160	7.2	19.3	5 11	14 32.72	- 9 57.5	1.648	2.643	4.7	20.9
5 21	14 21.89	- 5 58.6	1.205	2.161	11.9	19.6	5 21	14 24.92	- 9 27.9	1.687	2.646	8.8	21.1
5 31	14 14.97	- 6 22.4	1.262	2.162	16.2	19.9	5 31	14 18.83	- 9 10.1	1.750	2.649	12.5	21.4
6 10	14 11.05	- 7 2.6	1.336	2.163	19.9	20.1	6 10	14 15.00	- 9 6.0	1.833	2.651	15.7	21.6
233807	2008 <i>UK</i> ₁₄₄		5 2.7 299°86	0°6/	2.2 17		295604	2008 <i>SO</i> ₁₇₇		5 2.7 141°41	0°8/	3.4 17	
4 1	15 2.22	-15 29.3	1.860	2.732	12.5	21.0	4 1	15 2.90	-19 55.8	2.075	2.932	12.0	21.0
4 11	14 56.92	-15 2.8	1.787	2.729	8.9	20.7	4 11	14 57.22	-19 31.3	2.005	2.937	8.7	20.8
4 21	14 49.71	-14 28.5	1.738	2.726	4.9	20.5	4 21	14 49.81	-18 56.3	1.959	2.942	5.0	20.6
5 1	14 41.36	-13 49.6	1.716	2.723	0.8	20.2	5 1	14 41.40	-18 13.1	1.940	2.946	1.3	20.4
5 11	14 32.86	-13 10.4	1.721	2.720	3.9	20.4	5 11	14 32.92	-17 25.7	1.950	2.951	3.2	20.5
5 21	14 25.17	-12 35.7	1.752	2.717	8.1	20.7	5 21	14 25.25	-16 38.8	1.987	2.955	7.0	20.8
5 31	14 19.11	-12 9.6	1.808	2.714	11.8	20.9	5 31	14 19.12	-15 57.0	2.050	2.959	10.5	21.0
6 10	14 15.22	-11 55.1	1.885	2.711	15.0	21.1	6 10	14 15.02	-15 24.2	2.135	2.963	13.4	21.2
513098	2017 <i>WO</i> ₂₃		5 2.7 148°15	5°0/27.5	17		13477	Utkin		5 2.7 256°79	2°5/	1.2 18	
4 1	14 59.20	- 1 35.9	2.408	3.282	9.9	21.5	4 1	15 6.01	-10 3.8	1.741	2.615	13.0	17.8
4 11	14 54.30	- 0 24.7	2.350	3.285	7.4	21.4	4 11	14 59.86	- 9 45.1	1.659	2.602	9.4	17.5
4 21	14 48.07	+ 0 43.5	2.318	3.288	5.4	21.3	4 21	14 51.47	- 9 23.6	1.601	2.588	5.4	17.2
5 1	14 41.12	+ 1 43.5	2.314	3.291	5.1	21.2	5 1	14 41.67	- 9 2.8	1.570	2.574	2.5	17.0
5 11	14 34.13	+ 2 30.9	2.338	3.294	6.7	21.3	5 11	14 31.54	- 8 46.9	1.567	2.560	5.3	17.2
5 21	14 27.78	+ 3 2.7	2.388	3.296	9.1	21.5	5 21	14 22.20	- 8 39.6	1.590	2.545	9.5	17.4
5 31	14 22.62	+ 3 17.5	2.462	3.299	11.5	21.7	5 31	14 14.62	- 8 43.8	1.637	2.531	13.5	17.6
6 10	14 19.05	+ 3 15.6	2.555	3.301	13.6	21.8	6 10	14 9.48	- 9 1.1	1.703	2.516	16.9	17.8
263885	2009 <i>EZ</i> ₂₆		5 2.7 303°65	0°7/	3.1 17		260962	2005 <i>SQ</i> ₄₂		5 2.7 154°96	0°9/	3.6 17	
4 1	15 4.83	-18 22.1	1.398	2.274	15.5	20.9	4 1	15 0.57	-20 25.5	2.684	3.532	9.9	21.3
4 11	14 59.44	-18 14.6	1.324	2.266	11.3	20.6	4 11	14 55.26	-20 4.4	2.609	3.536	7.2	21.2
4 21	14 51.39	-17 55.1	1.272	2.258	6.5	20.3	4 21	14 48.62	-19 34.7	2.560	3.541	4.2	21.0
5 1	14 41.63	-17 25.5	1.244	2.251	1.4	19.9	5 1	14 41.23	-18 58.2	2.539	3.544	1.2	20.7
5 11	14 31.53	-16 50.3	1.241	2.243	4.4	20.1	5 11	14 33.78	-18 17.9	2.547	3.548	2.6	20.9
5 21	14 22.47	-16 15.7	1.264	2.236	9.6	20.4	5 21	14 26.92	-17 37.2	2.584	3.551	5.7	21.1
5 31	14 15.62	-15 47.7	1.308	2.229	14.3	20.6	5 31	14 21.24	-16 59.6	2.648	3.554	8.5	21.3
6 10	14 11.70	-15 31.3	1.372	2.222	18.3	20.9	6 10	14 17.15	-16 28.2	2.736	3.557	11.0	21.4
213513	2002 <i>GS</i> ₁₂₂		5 2.7 301°88	0°9/	2.2 17		303955	2005 <i>YS</i> ₆₆		5 2.7 33°89	1°4/	1.9 17	
4 1	15 4.22	-14 54.2	1.351	2.235	15.4	20.1	4 1	15 4.03	-14 25.0	1.071	1.967	17.5	20.5
4 11	14 59.29	-14 37.8	1.261	2.208	11.2	19.8	4 11	14 59.02	-13 58.7	1.024	1.977	12.5	20.3
4 21	14 51.49	-14 11.9	1.192	2.182	6.3	19.5	4 21	14 51.13	-13 23.0	0.997	1.988	6.8	20.0
5 1	14 41.67	-13 39.4	1.148	2.155	1.1	19.0	5 1	14 41.62	-12 43.2	0.993	2.000	1.5	19.7
5 11	14 31.18	-13 5.5	1.129	2.129	5.2	19.2	5 11	14 32.11	-12 6.4	1.012	2.012	5.6	20.0
5 21	14 21.48	-12 36.4	1.133	2.103	10.8	19.5	5 21	14 24.10	-11 39.2	1.054	2.026	11.1	20.3
5 31	14 13.94	-12 18.3	1.159	2.077	16.0	19.7	5 31	14 18.71	-11 26.5	1.116	2.040	16.0	20.7
6 10	14 9.47	-12 15.4	1.203	2.051	20.5	19.9	6 10	14 16.49	-11 30.6	1.196	2.054	19.9	20.9
417909	2007 <i>RT</i> ₁₄₃		5 2.7 222°67	2°8/	4.5 14 C		280327	2003 <i>SE</i> ₃₅		5 2.7 126°11	0°8/	3.2 17	
4 1	15 7.37	-24 15.3	1.810	2.653	14.0	22.3	4 1	15 3.74	-18 51.7	2.011	2.869	12.2	21.4
4 11	15 0.89	-24 10.6	1.723	2.644	10.6	22.1	4 11	14 57.90	-18 41.5	1.941	2.874	8.9	21.2
4 21	14 52.06	-23 50.5	1.660	2.634	6.8	21.8	4 21	14 50.22	-18 22.1	1.896	2.879	5.1	21.0
5 1	14 41.72	-23 15.3	1.623	2.624	3.2	21.6	5 1	14 41.49	-17 55.2	1.877	2.884	1.2	20.7
5 11	14 31.07	-22 28.2	1.614	2.613	4.1	21.6	5 11	14 32.65	-17 24.2	1.887	2.888	3.3	20.9
5 21	14 21.28	-21 34.6	1.631	2.601	8.1	21.8	5 21	14 24.64	-16 53.3	1.925	2.893	7.2	21.2
5 31	14 13.40	-20 41.3	1.674	2.588	12.1	22.0	5 31	14 18.22	-16 26.7	1.987	2.897	10.7	21.4
6 10	14 8.09	-19 54.8	1.738	2.575	15.6	22.2	6 10	14 13.92	-16 7.8	2.072	2.901	13.7	21.6
346540	2008 <i>UK</i> ₂₈₂		5 2.7 261°72	1°6/	1.6 17		272462	2005 <i>UO</i> ₅₆		5 2.7 144°15	3°7/	5.2 16	
4 1	15 4.47	-11 32.4	2.041	2.910	11.6	21.5	4 1	15 8.49	-26 24.0	2.131	2.956	12.9	21.6
4 11	14 58.50	-11 19.0	1.954	2.895	8.3	21.2	4 11	15 1.33	-26 48.6	2.059	2.966	9.9	21.4
4 21	14 50.61	-11 2.2	1.892	2.879	4.7	21.0	4 21	14 52.15	-26 59.7	2.011	2.975	6.7	21.2
5 1	14 41.51	-10 44.5	1.857	2.862	1.7	20.7	5 1	14 41.78	-26 56.4	1.991	2.983	4.0	21.0
5 11	14 32.12	-10 29.4	1.851	2.846	4.3	20.9	5 11	14 31.25	-26 40.4	1.999	2.992	4.3	21.1
5 21	14 23.37	-10 20.0	1.872	2.829	8.2	21.1	5 21	14 21.59	-26 15.2	2.035	2.999	7.1	21.3
5 31	14 16.12	-10 19.3	1.918	2.812	11.8	21.3	5 31	14 13.67	-25 45.9	2.097	3.006	10.3	21.5
6 10	14 10.95	-10 29.0	1.986	2.795	14.9	21.5	6 10	14 8.05	-25 17.6	2.182	3.012	13.1	21.7
241871	2001 <i>UL</i> ₈		5 2.7 223°52	1°8/	3.7 17		69487	1997 <i>AZ</i> ₂		5 2.7 234°10	5°2/	6.1 18	
4 1	15 9.31	-20 0.6	2.108	2.952	12.3	21.8	4 1	15 8.62	-30 25.0	1.984	2.798	14.1	18.8
4 11	15 2.03	-20 26.8	2.019	2.943	9.1	21.6	4 11	15 1.86	-30 44.1	1.889	2.784	11.3	18.6
4 21	14 52.62	-20 44.7	1.955	2.933	5.5	21.3	4 21	14 52.68	-30 45.6	1.817	2.770	8.2	18.4
5 1	14 41.81	-20 54.1	1.919	2.923	2.1	21.1	5 1	14 41.89	-30 27.4	1.770	2.754	5.6	18.2
5 11	14 30.64	-20 55.9	1.912	2.912	3.5	21.2	5 11	14 30.66	-29 50.7	1.751	2.738	5.6	18.2
5 21	14 20.15	-20 52.8	1.934	2.900	7.3	21.4	5 21	14 20.22	-28 59.7	1.759	2.721	8.2	18.3
5 31	14 11.29	-20 48.5	1.983	2.888	11.0	21.6	5 31	14 11.64	-28 1.1	1.792	2.703	11.6	18.4
6 10	14 4.71	-20 46.8	2.054	2.875	14.1	21.8	6 10	14 5.66	-27 2.6	1.848	2.685	14.8	18.6
393085	2013 <i>AU</i> ₁₀₂		5 2.7 276°95	2°9/30.4	17		212467	2006 <i>QC</i> ₄₂		5 2.7 257°11	1°5/		

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
485563	2011 UQ ₁₆₄ 5 2.7 238°35' 2°2'/30.8 18						308268	2005 GF ₁₂₃ 5 2.7 197°60' 0°8'/ 2.1 18					
4 1	15 2.63	− 8 34.6	2.643	3.508	9.4	21.5	4 1	15 3.59	−13 29.5	2.395	3.256	10.4	21.0
4 11	14 56.80	− 8 18.1	2.557	3.495	6.8	21.3	4 11	14 57.58	−13 20.2	2.317	3.254	7.4	20.8
4 21	14 49.54	− 8 0.6	2.498	3.482	3.9	21.1	4 21	14 50.01	−13 6.9	2.266	3.252	4.1	20.6
5 1	14 41.41	− 7 44.8	2.468	3.469	2.2	20.9	5 1	14 41.51	−12 51.4	2.243	3.249	0.9	20.4
5 11	14 33.11	− 7 33.3	2.467	3.456	4.1	21.0	5 11	14 32.88	−12 36.4	2.249	3.246	3.4	20.5
5 21	14 25.32	− 7 28.3	2.495	3.442	7.0	21.2	5 21	14 24.87	−12 24.8	2.283	3.243	6.8	20.8
5 31	14 18.66	− 7 31.7	2.549	3.427	9.8	21.3	5 31	14 18.18	−12 19.0	2.344	3.239	9.9	20.9
6 10	14 13.60	− 7 44.5	2.626	3.412	12.3	21.5	6 10	14 13.26	−12 21.0	2.427	3.235	12.6	21.1
160204	2002 CT ₃₀ 5 2.7 217°81' 1°4'/ 3.6 18						429288	2010 CD ₁₄₆ 5 2.7 146°20' 1°3'/ 1.8 17					
4 1	15 8.22	−20 14.0	1.830	2.682	13.5	20.8	4 1	15 3.46	−13 12.5	2.081	2.949	11.5	21.3
4 11	15 1.45	−20 10.5	1.745	2.674	10.0	20.6	4 11	14 57.60	−12 48.1	2.014	2.954	8.2	21.1
4 21	14 52.39	−19 55.6	1.684	2.665	5.9	20.3	4 21	14 50.04	−12 18.7	1.971	2.959	4.5	20.9
5 1	14 41.85	−19 30.1	1.650	2.655	1.8	20.0	5 1	14 41.52	−11 47.4	1.957	2.963	1.3	20.7
5 11	14 30.99	−18 57.3	1.643	2.644	3.7	20.1	5 11	14 32.92	−11 18.0	1.971	2.967	3.9	20.9
5 21	14 20.96	−18 21.7	1.665	2.633	8.1	20.4	5 21	14 25.10	−10 54.1	2.012	2.971	7.6	21.1
5 31	14 12.78	−17 48.9	1.711	2.621	12.2	20.6	5 31	14 18.77	−10 38.8	2.079	2.975	11.0	21.3
6 10	14 7.12	−17 23.8	1.779	2.608	15.7	20.8	6 10	14 14.43	−10 34.1	2.167	2.978	13.8	21.5
438621	2007 XT ₅₇ 5 2.7 339°92' 5°6'/28.6 17						242956	2006 SE ₂₃ 5 2.7 246°76' 5°4'/27.9 18					
4 1	15 1.80	− 0 12.1	2.019	2.894	11.5	20.8	4 1	15 1.24	− 0 6.0	2.288	3.158	10.5	20.3
4 11	14 56.43	+ 0 25.4	1.956	2.891	8.7	20.7	4 11	14 55.92	+ 0 43.9	2.218	3.150	8.0	20.1
4 21	14 49.39	+ 0 57.3	1.917	2.888	6.3	20.5	4 21	14 49.09	+ 1 29.5	2.174	3.142	5.9	19.9
5 1	14 41.39	+ 1 18.8	1.905	2.886	5.7	20.5	5 1	14 41.38	+ 2 5.9	2.157	3.133	5.5	19.9
5 11	14 33.30	+ 1 26.0	1.920	2.883	7.4	20.6	5 11	14 33.55	+ 2 29.0	2.167	3.124	7.1	20.0
5 21	14 25.95	+ 1 17.0	1.960	2.881	10.1	20.7	5 21	14 26.35	+ 2 36.5	2.203	3.115	9.6	20.1
5 31	14 20.06	+ 0 51.3	2.024	2.879	12.9	20.9	5 31	14 20.41	+ 2 27.2	2.264	3.106	12.2	20.3
6 10	14 16.09	+ 0 10.1	2.107	2.878	15.4	21.1	6 10	14 16.21	+ 2 1.9	2.344	3.097	14.5	20.4
425994	2011 HE ₉₂ 5 2.7 120°29' 1°9'/ 1.4 17						58639	1997 WZ ₁₇ 5 2.7 66°27' 1°9'/ 3.7 18					
4 1	15 5.01	−11 6.1	1.975	2.845	11.9	21.2	4 1	15 10.12	−19 36.6	1.554	2.413	15.1	19.4
4 11	14 58.71	−10 48.4	1.914	2.855	8.5	21.0	4 11	15 2.71	−20 4.0	1.507	2.439	11.0	19.2
4 21	14 50.64	−10 27.8	1.878	2.865	4.7	20.8	4 21	14 52.95	−20 20.3	1.484	2.465	6.5	19.0
5 1	14 41.57	−10 7.2	1.869	2.874	1.9	20.6	5 1	14 41.94	−20 25.8	1.487	2.491	2.3	18.8
5 11	14 32.47	− 9 50.3	1.889	2.883	4.4	20.8	5 11	14 31.02	−20 23.0	1.516	2.517	4.0	19.0
5 21	14 24.23	− 9 40.1	1.936	2.892	8.1	21.0	5 21	14 21.41	−20 15.8	1.573	2.543	8.3	19.3
5 31	14 17.60	− 9 39.1	2.007	2.900	11.4	21.2	5 31	14 14.06	−20 9.1	1.653	2.568	12.2	19.6
6 10	14 13.06	− 9 48.5	2.101	2.908	14.3	21.4	6 10	14 9.45	−20 6.9	1.755	2.594	15.4	19.8
63401	2001 KK ₁₅ 5 2.7 285°09' 4°1'/30.3 18						360280	2000 UH ₁₆ 5 2.7 238°80' 5°4'/29.7 16					
4 1	15 4.77	− 7 2.5	1.568	2.450	13.7	18.9	4 1	15 11.92	− 0 21.9	1.996	2.854	12.3	20.4
4 11	14 59.15	− 6 29.5	1.489	2.435	10.0	18.6	4 11	15 3.91	− 0 4.8	1.908	2.835	9.4	20.2
4 21	14 51.18	− 5 55.8	1.434	2.419	6.1	18.4	4 21	14 53.71	+ 0 6.3	1.845	2.816	6.6	20.0
5 1	14 41.68	− 5 26.6	1.404	2.403	4.1	18.2	5 1	14 42.09	+ 0 7.0	1.811	2.795	5.5	19.9
5 11	14 31.83	− 5 7.1	1.400	2.387	6.7	18.3	5 11	14 30.09	− 0 6.1	1.805	2.774	7.3	19.9
5 21	14 22.82	− 5 1.7	1.422	2.371	10.9	18.5	5 21	14 18.80	− 0 34.9	1.828	2.751	10.6	20.1
5 31	14 15.70	− 5 12.9	1.465	2.355	15.0	18.7	5 31	14 9.17	− 1 19.4	1.875	2.728	14.0	20.2
6 10	14 11.14	− 5 41.0	1.528	2.340	18.6	18.9	6 10	14 1.86	− 2 18.3	1.944	2.703	16.9	20.4
467126	2016 EW ₇₄ 5 2.7 80°38' 3°4'/ 4.6 16						196754	2003 SM ₁₅₁ 5 2.7 199°54' 2°7'/30.6 18					
4 1	15 8.66	−23 40.0	1.427	2.284	16.4	21.4	4 1	15 2.96	− 8 48.1	2.164	3.036	10.9	20.6
4 11	15 2.05	−24 0.3	1.370	2.297	12.3	21.2	4 11	14 57.22	− 8 14.7	2.092	3.033	7.8	20.4
4 21	14 52.75	−24 4.5	1.333	2.309	7.8	21.0	4 21	14 49.83	− 7 39.5	2.046	3.031	4.6	20.2
5 1	14 41.89	−23 52.3	1.321	2.322	3.9	20.8	5 1	14 41.50	− 7 6.4	2.028	3.028	2.7	20.0
5 11	14 30.94	−23 26.9	1.335	2.335	4.8	20.9	5 11	14 33.05	− 6 39.1	2.038	3.025	4.9	20.2
5 21	14 21.30	−22 53.8	1.375	2.347	9.0	21.1	5 21	14 25.29	− 6 20.9	2.075	3.022	8.2	20.4
5 31	14 14.07	−22 20.2	1.437	2.360	13.1	21.4	5 31	14 18.94	− 6 14.3	2.137	3.018	11.3	20.5
6 10	14 9.85	−21 52.4	1.520	2.372	16.7	21.7	6 10	14 14.48	− 6 20.1	2.221	3.014	14.1	20.7
212001	2005 BX ₉ 5 2.7 247°46' 2°0'/ 3.9 18						375872	2009 VL ₄₆ 5 2.7 165°55' 1°6'/ 1.4 17					
4 1	15 6.19	−21 31.5	1.563	2.424	15.0	20.6	4 1	15 4.38	−11 55.6	2.294	3.158	10.7	22.6
4 11	15 0.29	−21 27.5	1.484	2.416	11.1	20.4	4 11	14 58.11	−11 26.9	2.225	3.164	7.6	22.4
4 21	14 51.85	−21 9.3	1.428	2.409	6.7	20.1	4 21	14 50.28	−10 54.4	2.182	3.169	4.2	22.2
5 1	14 41.78	−20 37.8	1.397	2.401	2.5	19.8	5 1	14 41.56	−10 21.1	2.168	3.173	1.6	22.0
5 11	14 31.39	−19 56.9	1.392	2.393	4.1	19.9	5 11	14 32.78	− 9 50.6	2.183	3.176	3.9	22.2
5 21	14 21.98	−19 12.3	1.413	2.385	8.8	20.1	5 21	14 24.72	− 9 26.3	2.226	3.179	7.3	22.4
5 31	14 14.65	−18 30.9	1.458	2.377	13.2	20.4	5 31	14 18.05	− 9 10.8	2.295	3.182	10.4	22.6
6 10	14 10.11	−17 58.4	1.523	2.368	17.0	20.6	6 10	14 13.23	− 9 5.9	2.386	3.183	13.1	22.8
99137	2001 FH ₁₀₁ 5 2.7 358°84' 7°7'/ 8.3 18						27854	1994 YG ₁ 5 2.7 90°38' 5°2'/29.4 18					
4 1	15 3.17	−35 37.7	1.639	2.450	16.8	19.1	4 1	15 5.01	− 3 44.3	1.657	2.537	13.3	18.4
4 11	14 58.26	−36 3.4	1.564	2.448	13.9	18.9	4 11	14 58.88	− 2 59.0	1.607	2.549	9.7	18.2
4 21	14 50.75	−36 4.5	1.510	2.447	10.8	18.7	4 21	14 50.78	− 2 17.3	1.582	2.561	6.5	18.0
5 1	14 41.62	−35 38.4	1.477	2.446	8.4	18.6	5 1	14 41.63	− 1 44.6	1.582	2.573	5.2	18.0
5 11	14 32.23	−34 46.7	1.469	2.446	7.8	18.5	5 11	14 32.52	− 1 25.9	1.609	2.585	7.3	18.1
5 21	14 23.93	−33 35.3	1.486	2.447	9.6	18.6	5 21	14 24.45	− 1 23.8	1.662	2.597	10.7	18.3
5 31	14 17.84	−32 13.2	1.525	2.448	12.5	18.8	5 31	14 18.22	− 1 39.2	1.736	2.608	14.0	18.6
6 10	14 14.63	−30 50.2	1.586	2.450	15.6	19.0	6 10	14 14.31	− 2 10.9	1.831	2.620	16.8	18.8
385900	2006 SL ₃₂₀ 5 2.7 69°52' 0°0'/ 2.6 17						508801	2000 SD ₇₂ 5 2.7 274°37' 0°5'/ 2.4 17					
4 1	15 3.10	−16 10.8	2.126	2.989	11.5	21.1	4 1	15 5.84	−15 21.0	2.045	2.907	11.9	21.8
4 11	14 57.35	−16 8.3	2.059	2.996	8.2	20.9	4						

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
123362	2000 <i>WM</i> ₂₈		5 2.7 168°27	5°4/28.8	17		430279	2013 <i>WW</i> ₅₅		5 2.7 267°39	2°4/ 4.6	18	
4 1	15 5.21	+ 0 10.8	2.151	3.017	11.2	20.0	4 1	15 3.62	-24 27.9	1.882	2.729	13.4	21.1
4 11	14 58.74	+ 0 45.1	2.090	3.020	8.5	19.8	4 11	14 58.21	-24 4.5	1.788	2.711	10.2	20.9
4 21	14 50.64	+ 1 13.6	2.055	3.023	6.2	19.6	4 21	14 50.64	-23 24.7	1.717	2.693	6.4	20.6
5 1	14 41.62	+ 1 31.9	2.047	3.025	5.5	19.6	5 1	14 41.67	-22 29.6	1.673	2.675	2.9	20.4
5 11	14 32.56	+ 1 36.7	2.066	3.027	7.1	19.7	5 11	14 32.39	-21 23.2	1.656	2.656	3.8	20.4
5 21	14 24.27	+ 1 26.1	2.113	3.029	9.7	19.9	5 21	14 23.85	-20 11.5	1.666	2.637	7.8	20.6
5 31	14 17.44	+ 0 59.9	2.183	3.030	12.4	20.0	5 31	14 17.04	-19 1.7	1.701	2.618	11.8	20.8
6 10	14 12.55	+ 0 19.4	2.274	3.031	14.8	20.2	6 10	14 12.59	-18 0.4	1.758	2.599	15.3	20.9
434027	2001 <i>SB</i> ₁₄₄		5 2.7 201°38	2°6/29.9	18		478253	2011 <i>UV</i> ₃₆₈		5 2.7 204°59	0°2/ 2.9	16	
4 1	15 0.16	- 9 4.6	2.621	3.491	9.3	21.7	4 1	15 1.26	-17 33.5	3.017	3.867	8.8	23.5
4 11	14 54.99	- 8 6.9	2.547	3.487	6.7	21.5	4 11	14 55.71	-17 18.6	2.932	3.862	6.4	23.4
4 21	14 48.52	- 7 6.7	2.499	3.483	4.0	21.4	4 21	14 48.92	-16 57.6	2.873	3.856	3.6	23.2
5 1	14 41.31	- 6 7.9	2.480	3.479	2.6	21.3	5 1	14 41.40	-16 32.2	2.843	3.850	0.6	22.9
5 11	14 34.03	- 5 14.6	2.491	3.474	4.5	21.4	5 11	14 33.77	-16 4.7	2.843	3.843	2.5	23.1
5 21	14 27.30	- 4 30.4	2.529	3.468	7.3	21.5	5 21	14 26.61	-15 37.6	2.873	3.836	5.4	23.3
5 31	14 21.69	- 3 58.1	2.594	3.463	10.0	21.7	5 31	14 20.48	-15 13.8	2.930	3.828	8.0	23.4
6 10	14 17.61	- 3 38.9	2.680	3.457	12.3	21.9	6 10	14 15.77	-14 55.7	3.011	3.820	10.4	23.6
292156	2006 <i>RN</i> ₁₀₃		5 2.7 123°38	0°3/ 2.4	17		330526	2007 <i>TL</i> ₂₄₅		5 2.7 238°23	0°8/ 1.7	18	
4 1	15 1.68	-16 1.0	2.769	3.625	9.4	22.6	4 1	14 57.32	-12 58.8	3.885	4.743	6.8	21.5
4 11	14 55.95	-15 35.2	2.708	3.641	6.6	22.5	4 11	14 52.71	-12 36.6	3.793	4.729	4.8	21.4
4 21	14 48.99	-15 3.9	2.672	3.658	3.6	22.3	4 21	14 47.19	-12 11.7	3.728	4.714	2.7	21.2
5 1	14 41.38	-14 29.5	2.666	3.673	0.5	22.1	5 1	14 41.15	-11 45.5	3.693	4.699	0.8	21.0
5 11	14 33.78	-13 54.7	2.690	3.689	2.7	22.3	5 11	14 35.00	-11 20.2	3.689	4.684	2.4	21.2
5 21	14 26.82	-13 22.7	2.743	3.703	5.7	22.5	5 21	14 29.18	-10 57.6	3.714	4.668	4.6	21.3
5 31	14 21.00	-12 56.2	2.823	3.718	8.4	22.7	5 31	14 24.07	-10 39.6	3.767	4.652	6.8	21.4
6 10	14 16.71	-12 37.2	2.926	3.732	10.7	22.9	6 10	14 20.00	-10 27.6	3.844	4.636	8.6	21.5
207306	2005 <i>GP</i> ₅₆		5 2.7 176°87	1°6/ 1.3	18		35324	Orlandi		5 2.7 331°86	12°2/ 8.5	18	
4 1	15 1.16	-12 56.0	2.194	3.064	10.9	20.9	4 1	15 8.87	-43 23.3	1.816	2.570	17.5	17.4
4 11	14 55.92	-12 11.4	2.123	3.065	7.7	20.7	4 11	15 3.11	-45 13.2	1.726	2.550	15.6	17.2
4 21	14 49.11	-11 21.4	2.078	3.066	4.3	20.5	4 21	14 53.96	-46 41.7	1.655	2.531	13.8	17.0
5 1	14 41.41	-10 29.9	2.061	3.066	1.6	20.3	5 1	14 42.23	-47 40.8	1.605	2.512	12.5	16.9
5 11	14 33.63	- 9 41.2	2.072	3.066	4.1	20.5	5 11	14 29.40	-48 5.8	1.577	2.495	12.2	16.8
5 21	14 26.56	- 8 59.7	2.111	3.066	7.5	20.7	5 21	14 17.24	-47 57.3	1.572	2.478	13.1	16.8
5 31	14 20.85	- 8 28.6	2.175	3.066	10.7	20.9	5 31	14 7.50	-47 21.0	1.587	2.462	14.9	16.9
6 10	14 16.96	- 8 10.2	2.261	3.066	13.5	21.1	6 10	14 1.34	-46 27.0	1.622	2.447	17.1	17.0
125831	2001 <i>XU</i> ₁₇₆		5 2.7 226°68	0°5/ 2.3	18		5257	1988 <i>RS</i> ₁₀		5 2.7 5°23	0°7/ 1.7	18	
4 1	15 3.84	-15 56.1	2.052	2.916	11.8	20.5	4 1	14 54.60	-13 2.4	4.131	4.993	6.4	19.0
4 11	14 58.04	-15 26.5	1.970	2.907	8.5	20.3	4 11	14 50.72	-12 41.2	4.055	4.993	4.5	18.8
4 21	14 50.39	-14 48.9	1.912	2.898	4.7	20.0	4 21	14 46.06	-12 17.5	4.006	4.993	2.5	18.7
5 1	14 41.61	-14 6.0	1.882	2.889	0.8	19.7	5 1	14 40.98	-11 53.1	3.987	4.993	0.7	18.5
5 11	14 32.63	-13 22.1	1.880	2.879	3.7	19.9	5 11	14 35.85	-11 29.7	3.998	4.993	2.2	18.7
5 21	14 24.36	-12 41.7	1.906	2.868	7.7	20.1	5 21	14 31.04	-11 9.0	4.038	4.994	4.2	18.8
5 31	14 17.62	-12 9.2	1.957	2.858	11.3	20.3	5 31	14 26.89	-10 52.6	4.105	4.994	6.2	18.9
6 10	14 12.94	-11 47.6	2.030	2.846	14.4	20.5	6 10	14 23.68	-10 41.8	4.196	4.994	7.9	19.1
374454	2005 <i>XK</i> ₁₄		5 2.7 202°85	2°0/ 1.1	17		87596	2000 <i>RG</i> ₃₁		5 2.7 280°21	0°2/ 2.9	18	
4 1	15 3.68	-11 30.3	2.248	3.115	10.8	22.4	4 1	15 0.02	-19 1.6	2.204	3.065	11.2	19.2
4 11	14 57.72	-10 50.6	2.171	3.110	7.7	22.2	4 11	14 55.21	-18 18.0	2.121	3.057	8.1	19.0
4 21	14 50.13	-10 6.8	2.119	3.105	4.3	22.0	4 21	14 48.78	-17 23.9	2.063	3.048	4.6	18.8
5 1	14 41.57	- 9 22.1	2.096	3.099	2.0	21.8	5 1	14 41.39	-16 22.3	2.033	3.040	0.8	18.5
5 11	14 32.88	- 8 41.0	2.101	3.093	4.3	21.9	5 11	14 33.87	-15 17.6	2.030	3.031	3.2	18.7
5 21	14 24.86	- 8 7.1	2.135	3.086	7.7	22.1	5 21	14 27.00	-14 15.0	2.056	3.023	6.9	18.9
5 31	14 18.22	- 7 43.7	2.194	3.078	11.0	22.3	5 31	14 21.50	-13 19.6	2.108	3.014	10.3	19.1
6 10	14 13.45	- 7 32.7	2.275	3.070	13.7	22.5	6 10	14 17.84	-12 35.0	2.182	3.006	13.3	19.3
10330	Durkheim		5 2.7 126°30	0°3/ 2.9	18		299734	2006 <i>RJ</i> ₅₈		5 2.7 251°30	0°1/ 2.8	17	
4 1	15 4.87	-18 16.0	1.906	2.766	12.7	18.3	4 1	15 1.52	-17 31.4	2.216	3.078	11.1	21.4
4 11	14 58.73	-17 50.1	1.842	2.777	9.1	18.1	4 11	14 56.27	-17 9.7	2.137	3.073	8.0	21.2
4 21	14 50.71	-17 14.3	1.803	2.788	5.1	17.8	4 21	14 49.37	-16 39.9	2.083	3.068	4.5	20.9
5 1	14 41.65	-16 31.6	1.791	2.798	0.9	17.5	5 1	14 41.48	-16 4.3	2.056	3.063	0.7	20.6
5 11	14 32.56	-15 46.2	1.807	2.808	3.5	17.8	5 11	14 33.46	-15 26.4	2.057	3.058	3.2	20.8
5 21	14 24.40	-15 3.0	1.850	2.817	7.5	18.0	5 21	14 26.09	-14 50.1	2.086	3.053	6.9	21.0
5 31	14 17.95	-14 26.8	1.919	2.826	11.2	18.3	5 31	14 20.10	-14 19.4	2.141	3.047	10.2	21.2
6 10	14 13.70	-14 0.9	2.010	2.835	14.2	18.5	6 10	14 15.99	-13 57.4	2.219	3.042	13.1	21.4
420773	2013 <i>GP</i> ₄₈		5 2.7 319°40	3°0/ 1.2	17		168915	2000 <i>YW</i> ₃₇		5 2.7 119°18	1°5/ 1.7	18	
4 1	15 4.20	-10 44.1	1.238	2.130	15.9	20.9	4 1	15 6.69	-13 47.7	1.747	2.616	13.2	20.9
4 11	14 59.20	-10 17.2	1.168	2.120	11.5	20.6	4 11	15 0.04	-13 6.4	1.693	2.633	9.4	20.7
4 21	14 51.40	- 9 45.4	1.120	2.109	6.5	20.3	4 21	14 51.44	-12 18.5	1.663	2.650	5.1	20.4
5 1	14 41.78	- 9 14.0	1.095	2.100	3.0	20.0	5 1	14 41.79	-11 28.4	1.660	2.666	1.6	20.2
5 11	14 31.80	- 8 49.3	1.094	2.090	6.4	20.2	5 11	14 32.22	-10 41.4	1.686	2.682	4.5	20.5
5 21	14 22.90	- 8 36.6	1.117	2.081	11.6	20.4	5 21	14 23.71	-10 2.4	1.738	2.696	8.6	20.7
5 31	14 16.33	- 8 40.1	1.161	2.073	16.4	20.7	5 31	14 17.06	- 9 35.3	1.815	2.711	12.3	21.0
6 10	14 12.82	- 9 1.1	1.222	2.065	20.5	20.9	6 10	14 12.75	- 9 22.1	1.913	2.724	15.4	21.2
15374	Teta		5 2.7 267°85	22°4/ 1.0	18		165314	2000 <i>UC</i> ₅₇		5 2.7 152°30	1°2/ 3.5	18	
4 1	1												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V		
9195	1992 <i>OF</i> ₉		5	2.7	319°37'	1.3/ 1.7	18	6946	1980 <i>RX</i> ₁		5	2.7	194°40'	2°8/30.8	18
4 1	15 0.18	-13 22.4	2.022	2.897	11.5	17.3	4 1	15 6.03	-10 42.1	1.708	2.583	13.2	17.5		
4 11	14 55.48	-12 57.0	1.940	2.883	8.2	17.1	4 11	14 59.80	-9 52.7	1.638	2.581	9.4	17.3		
4 21	14 49.02	-12 26.1	1.882	2.870	4.5	16.9	4 21	14 51.46	-8 58.4	1.592	2.579	5.4	17.0		
5 1	14 41.47	-11 52.8	1.851	2.858	1.3	16.6	5 1	14 41.85	-8 4.2	1.574	2.576	2.8	16.8		
5 11	14 33.71	-11 20.9	1.848	2.845	4.0	16.8	5 11	14 32.10	-7 16.2	1.582	2.573	5.6	17.0		
5 21	14 26.59	-10 54.6	1.871	2.833	7.9	17.0	5 21	14 23.27	-6 39.5	1.618	2.569	9.7	17.2		
5 31	14 20.90	-10 37.3	1.919	2.821	11.4	17.2	5 31	14 16.27	-6 17.8	1.676	2.564	13.6	17.4		
6 10	14 17.17	-10 31.4	1.988	2.810	14.5	17.4	6 10	14 11.67	-6 12.7	1.755	2.559	16.8	17.7		
378640	2008 <i>FC</i> ₁₃₃		5	2.7	306°15'	2°0/29.8	18	179517	2002 <i>CJ</i> ₁₅₇		5	2.7	47°01'	4°6/28.6	18
4 1	14 54.34	-6 31.6	4.105	4.973	6.3	21.0	4 1	14 59.82	-3 10.4	2.244	3.120	10.4	20.1		
4 11	14 50.55	-6 2.8	4.029	4.967	4.5	20.9	4 11	14 54.91	-2 16.1	2.183	3.122	7.7	19.9		
4 21	14 45.99	-5 34.2	3.980	4.961	2.8	20.8	4 21	14 48.56	-1 24.2	2.148	3.124	5.3	19.8		
5 1	14 41.01	-5 7.7	3.960	4.956	2.0	20.7	5 1	14 41.41	-0 39.4	2.140	3.125	4.6	19.7		
5 11	14 35.96	-4 45.3	3.970	4.950	3.2	20.8	5 11	14 34.21	-0 6.0	2.160	3.127	6.4	19.8		
5 21	14 31.23	-4 28.7	4.009	4.944	5.0	20.9	5 21	14 27.67	+ 0 13.2	2.205	3.130	9.0	20.0		
5 31	14 27.14	-4 19.0	4.074	4.938	6.8	21.0	5 31	14 22.40	+ 0 16.7	2.275	3.132	11.7	20.2		
6 10	14 23.96	-4 17.0	4.162	4.933	8.4	21.1	6 10	14 18.84	+ 0 4.8	2.365	3.134	14.0	20.3		
208228	2000 <i>SC</i> ₂₄₇		5	2.7	161°98'	1°9/ 1.4	18	497362	2005 <i>UU</i> ₂₄₈		5	2.7	217°98'	0°6/ 2.2	17
4 1	15 6.34	-12 47.1	1.795	2.665	12.9	21.1	4 1	15 4.09	-15 41.2	2.080	2.944	11.7	22.7		
4 11	14 59.88	-12 6.2	1.729	2.671	9.2	20.8	4 11	14 58.21	-15 9.2	1.999	2.936	8.4	22.5		
4 21	14 51.42	-11 19.3	1.689	2.676	5.1	20.6	4 21	14 50.51	-14 29.4	1.942	2.928	4.6	22.3		
5 1	14 41.82	-10 30.6	1.675	2.681	1.9	20.4	5 1	14 41.71	-13 44.6	1.913	2.920	0.8	22.0		
5 11	14 32.15	-9 45.5	1.690	2.684	4.7	20.6	5 11	14 32.73	-12 59.2	1.913	2.911	3.7	22.2		
5 21	14 23.43	-9 8.6	1.731	2.688	8.8	20.8	5 21	14 24.45	-12 17.7	1.940	2.902	7.6	22.4		
5 31	14 16.50	-8 43.8	1.797	2.690	12.5	21.1	5 31	14 17.69	-11 44.2	1.993	2.892	11.2	22.6		
6 10	14 11.89	-8 33.3	1.884	2.692	15.7	21.3	6 10	14 12.96	-11 22.0	2.068	2.882	14.3	22.8		
433693	2014 <i>WB</i> ₁₄₀		5	2.7	352°71'	0°1/ 2.8	17	363010	1960 <i>SA</i> ₁		5	2.7	152°14'	0°8/ 1.9	18
4 1	15 0.98	-17 59.1	1.218	2.107	16.4	20.4	4 1	15 0.10	-14 35.4	3.037	3.894	8.6	22.3		
4 11	14 56.90	-17 33.3	1.153	2.101	11.9	20.1	4 11	14 54.80	-13 58.2	2.967	3.903	6.0	22.1		
4 21	14 50.11	-16 53.4	1.108	2.097	6.7	19.8	4 21	14 48.39	-13 16.4	2.925	3.911	3.3	21.9		
5 1	14 41.65	-16 3.3	1.087	2.094	1.1	19.4	5 1	14 41.38	-12 32.4	2.913	3.919	0.8	21.7		
5 11	14 32.93	-15 9.9	1.089	2.092	4.7	19.7	5 11	14 34.35	-11 49.4	2.930	3.926	2.8	21.9		
5 21	14 25.38	-14 20.6	1.115	2.091	10.2	20.0	5 21	14 27.85	-11 10.2	2.977	3.933	5.6	22.1		
5 31	14 20.14	-13 42.7	1.163	2.090	15.1	20.3	5 31	14 22.36	-10 37.5	3.051	3.939	8.1	22.3		
6 10	14 17.88	-13 20.8	1.228	2.091	19.2	20.5	6 10	14 18.23	-10 13.2	3.148	3.945	10.2	22.4		
240776	2005 <i>SW</i> ₈₂		5	2.7	303°45'	1°9/ 4.1	17	315339	2007 <i>TQ</i> ₄₄₁		5	2.7	4°15'	4°2/ 4.7	17
4 1	15 2.24	-21 33.2	2.083	2.936	12.1	20.6	4 1	15 7.52	-23 58.3	1.301	2.164	17.3	20.0		
4 11	14 57.04	-21 36.4	1.994	2.921	9.0	20.3	4 11	15 1.72	-24 35.6	1.234	2.163	13.2	19.7		
4 21	14 49.93	-21 29.1	1.928	2.907	5.5	20.1	4 21	14 52.88	-24 56.7	1.187	2.163	8.6	19.4		
5 1	14 41.62	-21 11.9	1.890	2.893	2.2	19.8	5 1	14 42.09	-24 59.9	1.164	2.163	4.7	19.2		
5 11	14 33.01	-20 47.3	1.879	2.879	3.4	19.9	5 11	14 30.93	-24 46.9	1.166	2.164	5.5	19.3		
5 21	14 25.04	-20 18.9	1.895	2.865	7.1	20.1	5 21	14 21.00	-24 22.9	1.191	2.165	9.8	19.5		
5 31	14 18.56	-19 51.3	1.936	2.852	10.6	20.3	5 31	14 13.62	-23 55.3	1.239	2.167	14.3	19.8		
6 10	14 14.17	-19 28.7	2.000	2.839	13.8	20.5	6 10	14 9.55	-23 31.7	1.306	2.169	18.3	20.0		
431406	2007 <i>GP</i> ₅₁		5	2.7	322°93'	9°5/26.6	18	361092	2006 <i>BN</i> ₂₇₄		5	2.7	287°00'	1°0/ 3.3	17
4 1	15 2.92	+ 5 46.8	1.505	2.383	14.5	20.0	4 1	15 5.12	-19 21.9	1.378	2.252	15.8	21.1		
4 11	14 57.83	+ 6 47.0	1.441	2.368	11.8	19.8	4 11	14 59.87	-19 8.8	1.297	2.237	11.7	20.8		
4 21	14 50.46	+ 7 34.9	1.399	2.354	9.9	19.6	4 21	14 51.84	-18 41.5	1.237	2.223	6.8	20.5		
5 1	14 41.70	+ 8 2.2	1.381	2.341	9.8	19.6	5 1	14 41.94	-18 2.0	1.201	2.208	1.6	20.1		
5 11	14 32.70	+ 8 3.0	1.386	2.328	11.6	19.7	5 11	14 31.58	-17 15.1	1.191	2.193	4.5	20.3		
5 21	14 24.62	+ 7 35.0	1.413	2.315	14.5	19.8	5 21	14 22.19	-16 27.7	1.205	2.179	9.8	20.5		
5 31	14 18.42	+ 6 39.6	1.460	2.304	17.6	20.0	5 31	14 15.04	-15 47.0	1.242	2.164	14.8	20.8		
6 10	14 14.75	+ 5 20.8	1.524	2.293	20.4	20.1	6 10	14 10.91	-15 19.0	1.298	2.150	19.0	21.0		
439150	2011 <i>UG</i> ₁₆₃		5	2.7	265°91'	1°9/ 4.5	16	202870	2008 <i>UF</i> ₆₂		5	2.7	205°44'	1°2/ 3.5	17
4 1	15 0.78	-23 55.2	2.389	3.230	11.1	21.3	4 1	15 4.68	-19 27.4	2.028	2.884	12.3	20.8		
4 11	14 55.75	-23 28.3	2.297	3.218	8.3	21.1	4 11	14 58.71	-19 28.5	1.951	2.882	9.0	20.6		
4 21	14 49.11	-22 48.6	2.230	3.205	5.2	20.9	4 21	14 50.82	-19 20.4	1.899	2.880	5.3	20.3		
5 1	14 41.49	-21 57.8	2.190	3.192	2.3	20.7	5 1	14 41.77	-19 4.1	1.873	2.878	1.6	20.1		
5 11	14 33.70	-20 59.1	2.179	3.179	3.0	20.7	5 11	14 32.53	-18 42.5	1.875	2.876	3.3	20.2		
5 21	14 26.52	-19 57.2	2.196	3.166	6.3	20.9	5 21	14 24.05	-18 19.1	1.905	2.874	7.2	20.4		
5 31	14 20.66	-18 57.1	2.240	3.153	9.5	21.1	5 31	14 17.16	-17 58.2	1.961	2.872	10.8	20.6		
6 10	14 16.61	-18 3.7	2.307	3.140	12.4	21.2	6 10	14 12.43	-17 43.5	2.039	2.869	13.9	20.8		
89868	2002 <i>CO</i> ₁₄₁		5	2.7	351°69'	2°5/ 4.9	18	322328	2011 <i>GT</i> ₇₈		5	2.7	285°26'	1°7/ 1.4	17
4 1	15 0.43	-24 51.6	2.101	2.946	12.3	18.7	4 1	15 1.72	-13 41.8	1.810	2.686	12.5	21.0		
4 11	14 55.64	-24 35.0	2.023	2.944	9.3	18.5	4 11	14 56.67	-12 53.8	1.737	2.681	8.9	20.7		
4 21	14 49.08	-24 4.5	1.968	2.942	5.9	18.3	4 21	14 49.70	-11 58.4	1.689	2.677	4.9	20.5		
5 1	14 41.49	-23 21.4	1.940	2.941	2.9	18.1	5 1	14 41.60	-11 0.0	1.667	2.672	1.7	20.3		
5 11	14 33.76	-22 29.1	1.940	2.939	3.5	18.1	5 11	14 33.35	-10 4.3	1.672	2.668	4.6	20.4		
5 21	14 26.79	-21 32.6	1.966	2.938	6.7	18.3	5 21	14 25.91	-9 16.7	1.704	2.663	8.7	20.7		
5 31	14 21.31	-20 37.5	2.019	2.938	10.1	18.5	5 31	14 20.10	-8 41.7	1.760	2.659	12.4	20.9		
6 10	14 17.84	-19 48.7	2.093	2.937	13.1	18.7	6 10	14 16.47	-8 21.7	1.836	2.654	15.6	21.1		
200639	2001 <i>SU</i> ₂₃₈		5	2.7	213°43'	1°0/ 2.2	16	366861	2005 <i>SE</i> ₇₆		5	2.7	122°54'	3°7/29.4	15
4 1	15 6.76	-14 47.5	1.452	2.329	15.0	21.3	4 1	15 3.52	-7 26.5	2.124	2.996	11.1	21.9		
4 11	15 0.71	-14 24.5	1.383	2.326	10.8	21.0	4 11	14 57.48	-6 13.2	2.074	3.014	8.0	21.7		
4 21	14 52.11	-13 52.9	1.336	2.324	6.0	20.7	4 21	14 49.93	-4 59.1	2.050	3.031	4.9	21.6		
5 1	14 41.95	-13 16.2	1.314	2.321	1.2	20.4	5 1	14 41.61	-3 49.7	2.054	3.048	3.8	21.5		
5 11	14 31.56	-12 39.7	1.319	2.318	4.8	20.6	5 11	14 33.37	-2 50.3	2.087	3.065	5.8	21.7		
5 21	14 22.24	-12 9.1	1.349	2.315	9.8	20.9	5 21	14 25.97	-2 4.8	2.148	3.080	8.8	21.9		
5 31	14 15.08	-11 49.4	1.401	2.311	14.3	21.2	5 31	14 20.04							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
178931	2001 <i>QJ</i> ₅₄	5 2.7 304°53	2°0/ 1.5 17				295908	2008 <i>WN</i> ₉₆	5 2.7 221°94	4°1/30.2 17			
4 1	15 2.73	-12 54.5	1.459	2.344	14.4	20.1	4 1	15 6.59	-7 44.0	1.560	2.440	13.9	21.4
4 11	14 57.99	-12 19.9	1.374	2.323	10.4	19.8	4 11	15 0.43	-6 54.6	1.489	2.433	10.1	21.1
4 21	14 50.73	-11 37.3	1.312	2.301	5.8	19.5	4 21	14 51.92	-6 3.0	1.442	2.426	6.2	20.9
5 1	14 41.78	-10 51.0	1.274	2.280	2.1	19.2	5 1	14 41.97	-5 15.1	1.420	2.419	4.2	20.8
5 11	14 32.38	-10 7.3	1.262	2.259	5.5	19.3	5 11	14 31.79	-4 37.3	1.425	2.411	6.8	20.9
5 21	14 23.79	-9 32.4	1.274	2.238	10.5	19.5	5 21	14 22.57	-4 14.4	1.456	2.402	11.0	21.1
5 31	14 17.16	-9 11.6	1.308	2.218	15.1	19.8	5 31	14 15.31	-4 9.4	1.509	2.393	15.0	21.3
6 10	14 13.26	-9 7.9	1.361	2.198	19.2	20.0	6 10	14 10.65	-4 23.0	1.581	2.384	18.4	21.5
107435	2001 <i>DL</i> ₁₅	5 2.7 30°97	2°1/ 3.6 18				333417	2003 <i>AR</i> ₇₂	5 2.7 8°74	27°2/10.0 17			
4 1	15 5.98	-19 1.9	0.983	1.874	19.1	18.6	4 1	14 51.47	-69 21.6	0.937	1.603	35.4	18.8
4 11	15 0.64	-19 32.1	0.946	1.894	14.0	18.4	4 11	14 55.32	-72 30.7	0.913	1.609	34.6	18.8
4 21	14 52.15	-19 48.0	0.928	1.915	8.2	18.1	4 21	14 51.94	-74 38.8	0.894	1.618	33.7	18.7
5 1	14 41.95	-19 50.4	0.932	1.938	2.7	17.9	5 1	14 42.11	-75 35.7	0.880	1.632	32.5	18.7
5 11	14 31.88	-19 43.2	0.959	1.962	5.0	18.1	5 11	14 30.87	-75 16.2	0.871	1.649	31.2	18.6
5 21	14 23.57	-19 32.5	1.008	1.987	10.4	18.5	5 21	14 24.28	-73 42.1	0.868	1.670	29.7	18.6
5 31	14 18.17	-19 24.8	1.077	2.013	15.2	18.8	5 31	14 25.48	-71 2.6	0.875	1.695	28.3	18.6
6 10	14 16.20	-19 24.9	1.164	2.040	19.2	19.2	6 10	14 33.78	-67 32.3	0.892	1.723	27.2	18.7
111768	2002 <i>CY</i> ₁₄₄	5 2.7 117°79	0°6/ 2.3 18				95518	2002 <i>EF</i> ₆₁	5 2.7 284°48	6°3/25.7 18			
4 1	15 7.12	-16 36.9	1.659	2.526	13.9	20.5	4 1	14 58.56	+ 1 32.9	2.318	3.192	10.2	19.4
4 11	15 0.47	-15 54.7	1.604	2.543	9.9	20.3	4 11	14 54.08	+ 3 4.0	2.248	3.177	8.1	19.2
4 21	14 51.74	-15 2.7	1.573	2.560	5.4	20.1	4 21	14 48.17	+ 4 31.3	2.204	3.163	6.5	19.1
5 1	14 41.89	-14 5.1	1.569	2.576	0.9	19.8	5 1	14 41.40	+ 5 48.3	2.187	3.148	6.6	19.1
5 11	14 32.12	-13 7.8	1.592	2.591	4.2	20.1	5 11	14 34.49	+ 6 49.5	2.197	3.134	8.2	19.2
5 21	14 23.49	-12 16.7	1.642	2.606	8.6	20.3	5 21	14 28.15	+ 7 31.3	2.232	3.119	10.6	19.3
5 31	14 16.84	-11 36.9	1.717	2.620	12.5	20.6	5 31	14 22.99	+ 7 51.9	2.290	3.105	13.0	19.4
6 10	14 12.65	-11 11.2	1.813	2.634	15.7	20.9	6 10	14 19.47	+ 7 52.1	2.366	3.090	15.1	19.6
66295	1999 <i>JC</i> ₂₉	5 2.7 311°23	3°3/ 4.9 18 R				407775	2011 <i>WY</i> ₁₁₆	5 2.7 112°76	0°7/ 2.2 18			
4 1	15 2.11	-25 48.5	1.299	2.164	17.2	18.3	4 1	15 6.91	-16 2.3	1.611	2.481	14.1	21.9
4 11	14 57.88	-25 22.4	1.217	2.149	13.1	18.0	4 11	15 0.39	-15 24.5	1.557	2.497	10.1	21.7
4 21	14 50.78	-24 32.1	1.156	2.134	8.5	17.6	4 21	14 51.73	-14 37.5	1.525	2.512	5.5	21.5
5 1	14 41.80	-23 18.8	1.117	2.119	4.0	17.3	5 1	14 41.92	-13 45.5	1.520	2.528	1.0	21.2
5 11	14 32.40	-21 48.5	1.103	2.105	4.9	17.3	5 11	14 32.17	-12 54.0	1.543	2.542	4.3	21.5
5 21	14 24.08	-20 11.0	1.113	2.091	9.8	17.6	5 21	14 23.56	-12 8.9	1.592	2.556	8.8	21.7
5 31	14 18.12	-18 37.7	1.145	2.078	14.8	17.8	5 31	14 16.96	-11 35.0	1.665	2.570	12.7	22.0
6 10	14 15.29	-17 18.4	1.197	2.066	19.2	18.0	6 10	14 12.87	-11 15.0	1.759	2.583	16.0	22.3
58930	1998 <i>MK</i> ₃₁	5 2.7 331°60	2°2/ 1.5 17				122567	2000 <i>RX</i> ₇	5 2.7 230°10	0°1/ 2.7 18			
4 1	15 0.21	-12 18.9	1.373	2.265	14.7	18.7	4 1	15 4.60	-16 42.7	2.278	3.135	11.1	21.1
4 11	14 56.23	-11 51.5	1.293	2.245	10.6	18.4	4 11	14 58.53	-16 23.5	2.189	3.122	8.0	20.8
4 21	14 49.77	-11 17.3	1.236	2.226	5.9	18.1	4 21	14 50.71	-15 56.7	2.124	3.109	4.5	20.6
5 1	14 41.65	-10 40.9	1.203	2.208	2.2	17.8	5 1	14 41.80	-15 24.4	2.088	3.095	0.7	20.3
5 11	14 33.12	-10 8.3	1.194	2.191	5.6	17.9	5 11	14 32.65	-14 49.8	2.081	3.081	3.3	20.5
5 21	14 25.45	-9 45.2	1.208	2.175	10.6	18.2	5 21	14 24.11	-14 16.7	2.102	3.066	7.0	20.7
5 31	14 19.78	-9 36.3	1.245	2.160	15.2	18.4	5 31	14 16.96	-13 49.1	2.150	3.050	10.5	20.8
6 10	14 16.85	-9 44.1	1.299	2.147	19.2	18.6	6 10	14 11.73	-13 30.0	2.220	3.034	13.4	21.0
492227	2013 <i>TJ</i> ₄₂	5 2.7 115°20	5°6/ 3.7 17				289348	2005 <i>BO</i> ₁₃	5 2.7 51°15	6°1/29.1 18			
4 1	15 28.19	-20 41.1	1.156	2.004	20.1	20.9	4 1	15 4.01	- 4 20.7	1.340	2.231	15.0	20.0
4 11	15 17.24	-22 55.4	1.096	2.017	15.2	20.7	4 11	14 58.61	- 3 15.2	1.291	2.238	11.1	19.8
4 21	15 1.87	-25 0.9	1.058	2.030	10.0	20.4	4 21	14 50.86	- 2 12.2	1.264	2.245	7.4	19.6
5 1	14 43.49	-26 47.1	1.047	2.043	5.9	20.2	5 1	14 41.81	- 1 19.8	1.262	2.253	6.2	19.5
5 11	14 24.45	-28 7.0	1.063	2.055	7.3	20.3	5 11	14 32.75	- 0 45.1	1.284	2.261	8.7	19.7
5 21	14 7.24	-29 0.4	1.106	2.067	12.1	20.6	5 21	14 24.89	- 0 32.0	1.329	2.268	12.5	19.9
5 31	13 53.78	-29 34.6	1.172	2.078	16.8	20.9	5 31	14 19.15	- 0 41.7	1.396	2.277	16.2	20.2
6 10	13 45.00	-29 59.5	1.258	2.088	20.7	21.2	6 10	14 16.08	- 1 12.6	1.479	2.285	19.3	20.4
287334	2002 <i>TF</i> ₃₁₆	5 2.7 275°88	6°8/26.5 18				53418	1999 <i>PY</i> ₃	5 2.7 307°62	5°9/22.2 18			
4 1	15 0.63	+ 1 54.5	2.058	2.932	11.3	20.2	4 1	14 54.21	+13 46.2	4.073	4.904	7.1	18.6
4 11	14 55.70	+ 3 10.6	1.989	2.919	8.9	20.0	4 11	14 50.49	+14 43.9	4.022	4.897	6.3	18.6
4 21	14 49.11	+ 4 21.3	1.944	2.905	7.1	19.9	4 21	14 46.00	+15 33.2	3.995	4.891	5.9	18.5
5 1	14 41.53	+ 5 20.2	1.926	2.892	7.0	19.8	5 1	14 41.08	+16 11.1	3.996	4.885	6.2	18.5
5 11	14 33.78	+ 6 1.8	1.934	2.878	8.8	19.9	5 11	14 36.12	+16 35.5	4.021	4.878	6.9	18.6
5 21	14 26.69	+ 6 22.7	1.967	2.864	11.3	20.1	5 21	14 31.48	+16 45.5	4.071	4.872	8.0	18.6
5 31	14 20.98	+ 6 21.7	2.022	2.850	14.0	20.2	5 31	14 27.50	+16 41.0	4.143	4.866	9.1	18.7
6 10	14 17.14	+ 6 0.0	2.096	2.837	16.4	20.4	6 10	14 24.46	+16 22.9	4.233	4.860	10.1	18.8
165455	2000 <i>YU</i> ₁₁₉	5 2.7 144°01	0°9/ 3.4 18				68886	2002 <i>JX</i> ₇₁	5 2.7 264°09	4°6/29.0 18			
4 1	15 7.45	-19 40.4	1.844	2.699	13.3	20.9	4 1	15 3.11	- 3 43.4	2.125	2.998	11.1	19.5
4 11	15 0.70	-19 22.6	1.778	2.709	9.7	20.6	4 11	14 57.53	- 2 55.4	2.040	2.978	8.2	19.3
4 21	14 51.89	-18 53.5	1.737	2.719	5.6	20.4	4 21	14 50.19	- 2 8.6	1.980	2.957	5.6	19.1
5 1	14 41.93	-18 15.5	1.722	2.729	1.4	20.1	5 1	14 41.74	- 1 27.8	1.947	2.936	4.7	19.0
5 11	14 31.93	-17 32.5	1.736	2.737	3.5	20.3	5 11	14 33.02	- 0 57.8	1.942	2.914	6.6	19.1
5 21	14 22.91	-16 49.6	1.778	2.745	7.7	20.6	5 21	14 24.90	- 0 42.0	1.964	2.892	9.7	19.2
5 31	14 15.75	-16 12.1	1.845	2.753	11.5	20.8	5 31	14 18.14	- 0 42.5	2.010	2.870	12.8	19.4
6 10	14 10.95	-15 44.1	1.933	2.760	14.7	21.1	6 10	14 13.31	- 0 59.4	2.075	2.847	15.6	19.5
423562	2005 <i>UB</i> ₄₃₁	5 2.7 55°20	1°7/ 3.9 17				406385	2007 <i>ST</i> ₆	5 2.7 227°75	3°5/30.5 16			
4 1	15 3.47	-22 0.6	1.647	2.508	14.3	21.3	4 1	15 7.00	- 8 7.4	1.806	2.679	12.7	21.7
4 11	14 58.11	-21 39.5	1.581	2.513	10.6	21.1	4 11	15 0.54	- 7 28.0	1.727	2.668	9.2	21.4
4 21	14 50.56	-21 3.8	1.537	2.519	6.3	20.8	4 21	14 51.94	- 6 46.4	1.671	2.656	5.5	21.2
5 1	14 41.74	-20 15.8	1.519	2.524	2.2	20.6	5 1	14 42.00	- 6 7.3	1.643	2.643	3.5	21.0
5 11	14 32.84	-19 20.3	1.528	2.530	3.8	20.7	5 11	14 31.79	- 5 35.9	1.643	2.629	6.0	21.1
5 21	14 24.95	-18 23.6	1.562	2.535	8.1	21.0	5 21	14 22.36	- 5 16.2	1.669	2.615	9.9	21.3
5 31	14 18.98	-17 32.3	1.621	2.541	12.1	21.2	5 31	14 14.66	- 5 11.4	1.719	2.600	13.7	21.5
6 10	14 15.49	-16 51.4	1.70										

EPHEMERIDES

5 2.7

5 2.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
199074	2005 XQ ₆₃		5	2.7	46° 94	1.8/ 1.9 16	27151	1998 YT ₃		5	2.7	12° 83	1.3/ 1.7 18
4 1	15 7.09	-12 36.9	1.194	2.082	16.7	20.1	4 1	15 1.73	-13 44.0	1.999	2.871	11.7	17.6
4 11	15 1.19	-12 24.8	1.140	2.089	11.9	19.8	4 11	14 56.53	-13 10.6	1.929	2.871	8.3	17.4
4 21	14 52.46	-12 6.8	1.107	2.097	6.6	19.5	4 21	14 49.60	-12 31.4	1.884	2.872	4.6	17.2
5 1	14 42.07	-11 47.0	1.098	2.104	1.9	19.2	5 1	14 41.67	-11 49.6	1.866	2.872	1.3	16.9
5 11	14 31.59	-11 30.5	1.113	2.112	5.6	19.5	5 11	14 33.63	-11 9.8	1.875	2.872	4.0	17.1
5 21	14 22.48	-11 22.3	1.152	2.120	10.8	19.8	5 21	14 26.34	-10 36.1	1.912	2.872	7.8	17.4
5 31	14 15.89	-11 26.1	1.213	2.129	15.5	20.1	5 31	14 20.56	-10 12.2	1.973	2.873	11.3	17.6
6 10	14 12.42	-11 43.9	1.291	2.137	19.4	20.4	6 10	14 16.76	-10 0.2	2.056	2.873	14.2	17.8
434428	2005 NQ ₃		5	2.7	303° 20	8° 6/ 24.8 17	473735	2016 CG ₂₅₆		5	2.7	46° 57	5° 4/ 30.1 17
4 1	15 0.38	+ 7 44.7	2.029	2.893	11.9	20.4	4 1	15 6.27	- 4 48.0	1.298	2.188	15.5	20.8
4 11	14 55.55	+ 9 0.3	1.967	2.880	9.9	20.2	4 11	15 0.35	- 4 13.2	1.247	2.194	11.4	20.6
4 21	14 49.05	+10 5.3	1.929	2.868	8.7	20.1	4 21	14 51.90	- 3 41.7	1.218	2.201	7.3	20.4
5 1	14 41.56	+10 53.0	1.916	2.855	8.9	20.1	5 1	14 42.02	- 3 19.6	1.213	2.208	5.4	20.3
5 11	14 33.93	+11 18.3	1.927	2.843	10.4	20.2	5 11	14 32.10	- 3 12.4	1.232	2.216	7.9	20.4
5 21	14 26.99	+11 18.9	1.962	2.831	12.7	20.3	5 21	14 23.44	- 3 23.2	1.275	2.223	12.1	20.7
5 31	14 21.45	+10 55.1	2.018	2.819	15.0	20.4	5 31	14 17.05	- 3 52.4	1.340	2.232	16.0	20.9
6 10	14 17.81	+10 9.3	2.091	2.807	17.1	20.5	6 10	14 13.49	- 4 38.8	1.422	2.240	19.4	21.2
196847	2003 SM ₂₅₈		5	2.7	138° 46	0° 6/ 2.3 18	54571	2000 QG ₁₅₅		5	2.7	142° 32	4° 8/ 27.1 18
4 1	15 2.75	-15 46.8	2.180	3.043	11.2	20.6	4 1	14 59.96	+ 0 33.0	2.879	3.744	8.8	19.5
4 11	14 57.09	-15 14.4	2.113	3.051	8.0	20.4	4 11	14 54.72	+ 1 42.1	2.828	3.755	6.7	19.3
4 21	14 49.83	-14 34.9	2.071	3.057	4.4	20.2	4 21	14 48.39	+ 2 47.0	2.805	3.766	5.1	19.2
5 1	14 41.68	-13 51.5	2.057	3.064	0.8	19.9	5 1	14 41.48	+ 3 43.3	2.809	3.777	5.0	19.2
5 11	14 33.47	-13 8.1	2.072	3.070	3.4	20.1	5 11	14 34.58	+ 4 27.6	2.843	3.787	6.3	19.3
5 21	14 26.02	-12 28.8	2.114	3.076	7.1	20.4	5 21	14 28.24	+ 4 57.5	2.903	3.797	8.2	19.5
5 31	14 20.01	-11 57.4	2.183	3.082	10.3	20.6	5 31	14 22.92	+ 5 12.1	2.988	3.806	10.2	19.6
6 10	14 15.89	-11 36.4	2.273	3.088	13.1	20.8	6 10	14 18.98	+ 5 11.8	3.094	3.814	12.0	19.8
74721	1999 RH ₁₆₇		5	2.7	230° 45	0° 0/ 2.7 18	107646	2001 EG ₂₀		5	2.7	8° 04	0° 9/ 2.2 17
4 1	15 7.04	-16 50.2	2.122	2.977	11.8	20.9	4 1	15 2.05	-15 55.6	1.225	2.115	16.2	19.3
4 11	15 0.43	-16 30.2	2.029	2.962	8.6	20.7	4 11	14 57.60	-15 21.4	1.166	2.116	11.6	19.1
4 21	14 51.85	-16 1.8	1.961	2.945	4.8	20.4	4 21	14 50.50	-14 35.7	1.127	2.117	6.4	18.8
5 1	14 42.00	-15 27.0	1.921	2.928	0.7	20.1	5 1	14 41.82	-13 43.4	1.112	2.119	1.1	18.4
5 11	14 31.84	-14 49.3	1.910	2.910	3.5	20.3	5 11	14 32.99	-12 51.6	1.121	2.122	5.1	18.7
5 21	14 22.33	-14 13.0	1.928	2.891	7.6	20.5	5 21	14 25.37	-12 7.7	1.154	2.125	10.4	19.0
5 31	14 14.35	-13 42.4	1.972	2.871	11.3	20.7	5 31	14 20.05	-11 37.5	1.208	2.130	15.1	19.3
6 10	14 8.50	-13 21.2	2.039	2.850	14.5	20.8	6 10	14 17.65	-11 24.6	1.280	2.135	19.1	19.6
465106	2006 VF ₁₇		5	2.7	268° 35	0° 4/ 3.0 17	157626	2005 WP ₁₄₃		5	2.8	235° 41	0° 0/ 2.7 17
4 1	15 5.51	-18 12.2	1.710	2.575	13.7	22.0	4 1	15 3.84	-17 27.5	1.798	2.665	13.0	20.7
4 11	14 59.78	-17 56.1	1.618	2.555	10.0	21.7	4 11	14 58.29	-17 4.8	1.724	2.662	9.4	20.4
4 21	14 51.68	-17 28.9	1.550	2.536	5.8	21.4	4 21	14 50.69	-16 32.3	1.673	2.659	5.3	20.2
5 1	14 41.99	-16 52.4	1.509	2.515	1.1	21.1	5 1	14 41.85	-15 52.9	1.649	2.656	0.8	19.8
5 11	14 31.87	-16 10.9	1.494	2.495	3.9	21.2	5 11	14 32.84	-15 10.8	1.652	2.653	3.7	20.1
5 21	14 22.50	-15 29.7	1.505	2.474	8.7	21.4	5 21	14 24.68	-14 31.2	1.682	2.650	8.1	20.3
5 31	14 14.94	-14 54.5	1.541	2.453	13.1	21.7	5 31	14 18.24	-13 58.8	1.736	2.646	12.0	20.5
6 10	14 9.94	-14 30.2	1.598	2.432	16.9	21.8	6 10	14 14.11	-13 37.4	1.812	2.643	15.3	20.7
337775	2001 UK ₁₆₆		5	2.7	232° 50	0° 4/ 3.5 18	478575	2012 TQ ₇₉		5	2.8	320° 00	3° 7/ 7.4 18
4 1	14 54.39	-19 19.5	4.591	5.436	6.1	21.3	4 1	14 58.61	-33 11.7	3.965	4.748	8.2	20.7
4 11	14 50.58	-19 0.2	4.505	5.432	4.4	21.1	4 11	14 53.83	-33 32.9	3.871	4.739	6.7	20.6
4 21	14 46.05	-18 36.3	4.447	5.428	2.5	21.0	4 21	14 47.96	-33 44.1	3.801	4.731	5.1	20.5
5 1	14 41.11	-18 8.9	4.418	5.424	0.7	20.8	5 1	14 41.44	-33 44.8	3.758	4.723	3.9	20.4
5 11	14 36.13	-17 39.8	4.419	5.420	1.6	20.9	5 11	14 34.76	-33 35.9	3.744	4.716	3.8	20.4
5 21	14 31.43	-17 10.5	4.450	5.416	3.5	21.0	5 21	14 28.43	-33 18.7	3.758	4.708	4.8	20.4
5 31	14 27.34	-16 43.0	4.509	5.412	5.4	21.2	5 31	14 22.92	-32 55.8	3.799	4.700	6.3	20.5
6 10	14 24.11	-16 18.8	4.593	5.407	7.0	21.3	6 10	14 18.62	-32 29.9	3.865	4.693	7.9	20.7
355188	2006 WM ₁₅₈		5	2.7	149° 56	2° 4/ 5.4 18	23348	6046 P-L		5	2.8	236° 46	4° 5/ 5.9 18
4 1	15 1.81	-26 43.3	2.910	3.731	9.9	22.1	4 1	15 7.37	-29 19.0	2.262	3.075	12.6	19.8
4 11	14 56.18	-26 26.6	2.834	3.739	7.6	22.0	4 11	15 0.80	-29 44.8	2.167	3.062	10.0	19.6
4 21	14 49.25	-25 58.5	2.783	3.747	5.0	21.8	4 21	14 52.14	-29 56.2	2.095	3.049	7.2	19.4
5 1	14 41.60	-25 19.8	2.760	3.755	2.8	21.7	5 1	14 42.10	-29 51.6	2.050	3.035	4.9	19.2
5 11	14 33.92	-24 33.2	2.766	3.762	3.0	21.7	5 11	14 31.68	-29 31.8	2.034	3.021	4.9	19.2
5 21	14 26.84	-23 42.0	2.802	3.769	5.3	21.9	5 21	14 21.90	-29 0.0	2.045	3.006	7.3	19.3
5 31	14 20.93	-22 50.4	2.865	3.775	7.8	22.0	5 31	14 13.71	-28 21.2	2.082	2.991	10.3	19.4
6 10	14 16.59	-22 2.2	2.953	3.781	10.1	22.2	6 10	14 7.75	-27 41.4	2.142	2.975	13.2	19.6
71024	1999 XU ₆₀		5	2.7	261° 41	0° 0/ 2.8 18	240801	2005 YN ₆₂		5	2.8	68° 21	1° 1/ 2.2 18
4 1	15 2.36	-18 2.9	1.986	2.850	12.1	19.8	4 1	15 6.65	-14 46.5	1.271	2.154	16.2	21.0
4 11	14 57.12	-17 31.1	1.903	2.839	8.8	19.6	4 11	15 0.75	-14 22.9	1.216	2.163	11.6	20.7
4 21	14 50.00	-16 49.1	1.843	2.829	4.9	19.3	4 21	14 52.19	-13 50.3	1.183	2.172	6.4	20.4
5 1	14 41.73	-15 59.6	1.811	2.818	0.8	19.0	5 1	14 42.09	-13 13.0	1.174	2.181	1.3	20.1
5 11	14 33.25	-15 7.1	1.807	2.808	3.5	19.2	5 11	14 31.94	-12 37.0	1.191	2.191	5.1	20.4
5 21	14 25.50	-14 16.7	1.830	2.797	7.6	19.4	5 21	14 23.11	-12 8.2	1.231	2.200	10.2	20.7
5 31	14 19.27	-13 33.5	1.878	2.786	11.3	19.6	5 31	14 16.68	-11 51.7	1.294	2.209	14.8	21.0
6 10	14 15.15	-13 1.2	1.948	2.775	14.6	19.8	6 10	14 13.23	-11 50.1	1.375	2.219	18.6	21.3
199415	2006 CY ₄₃		5	2.7	102° 85	4° 5/ 28.9 18	45289	2000 AY ₂₉		5	2.8	180° 95	2° 0/ 4.3 18 R
4 1	15 2.01	- 4 54.6	1.982	2.860	11.5	19.9	4 1	15 3.87	-22 34.6	2.109	2.956	12.2	19.6
4 11	14 56.59	- 3 50.4	1.930	2.871	8.4	19.7	4 11	14 58.12	-22 28.8	2.032	2.956	9.1	19.4
4 21	14 49.55	- 2 47.5	1.903	2.882	5.6	19.5	4 21	14 50.53	-22 11.3	1.979	2.956	5.6	19.2
5 1	14 41.65	- 1 51.5	1.903	2.892	4.6	19.5	5 1	14 41.85	-21 43.1	1.954	2.956	2.4	19.0
5 11	14 33.77	- 1 7.6	1.930	2.903	6.6	19.6	5 11	14 33.01	-21 7.2	1.956	2.956	3.3	19.0
5 21	14 26.71	- 0 39.1	1.983	2.913	9.6	19.8	5 21	14 24.94	-20 27.8	1.986	2.956	6.8	19.3
5 31	14 21.15	- 0 28.0	2.060	2.923	12.5	20.0	5 31	14 18.42	-19 49.8	2.041	2.955	10.3	19.5
6 10	14 17.51	- 0 33.8	2.157	2.933	15.0	20.2	6 10	14 13.98	-19				

EPHEMERIDES

5 2.8

5 2.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
174508	2003 BS ₆₃		5 2.8 148°72'	2°1'	4.8 18		501847	2014 WB ₁₈₄		5 2.8 85°20'	8°8'	9.6 17	
4 1	15 3.81	-24 24.1	2.927	3.753	9.7	21.8	4 1	15 8.39	-39 24.1	1.724	2.505	17.3	21.1
4 11	14 57.60	-24 24.2	2.853	3.763	7.3	21.7	4 11	15 2.05	-39 57.9	1.657	2.515	14.6	20.9
4 21	14 50.06	-24 14.6	2.804	3.773	4.7	21.5	4 21	14 52.98	-40 5.1	1.609	2.524	11.8	20.8
5 1	14 41.77	-23 56.0	2.784	3.783	2.4	21.4	5 1	14 42.26	-39 42.3	1.583	2.533	9.6	20.6
5 11	14 33.41	-23 30.3	2.794	3.792	2.8	21.4	5 11	14 31.38	-38 50.7	1.581	2.543	8.8	20.6
5 21	14 25.65	-23 0.3	2.834	3.800	5.3	21.6	5 21	14 21.77	-37 36.2	1.604	2.552	10.1	20.7
5 31	14 19.07	-22 29.4	2.901	3.808	7.8	21.8	5 31	14 14.56	-36 8.1	1.651	2.561	12.5	20.9
6 10	14 14.07	-22 1.0	2.993	3.815	10.1	21.9	6 10	14 10.39	-34 37.0	1.719	2.570	15.1	21.1
413424	2004 WL		5 2.8 253°77'	2°6'	1.2 16		141075	2001 XT ₂₂		5 2.8 158°69'	1°1'	1.9 18	
4 1	15 6.95	-11 3.2	1.624	2.499	13.7	21.6	4 1	15 3.06	-12 31.0	2.476	3.339	10.1	20.0
4 11	15 0.83	-10 29.6	1.539	2.482	9.9	21.4	4 11	14 57.22	-12 21.1	2.404	3.342	7.2	19.9
4 21	14 52.29	-9 50.6	1.477	2.464	5.7	21.1	4 21	14 49.93	-12 7.9	2.359	3.345	3.9	19.6
5 1	14 42.14	-9 10.6	1.442	2.446	2.6	20.8	5 1	14 41.79	-11 53.5	2.341	3.348	1.1	19.4
5 11	14 31.58	-8 35.1	1.434	2.427	5.6	21.0	5 11	14 33.56	-11 40.5	2.354	3.350	3.4	19.6
5 21	14 21.83	-8 9.0	1.451	2.408	10.2	21.2	5 21	14 25.95	-11 31.5	2.394	3.352	6.6	19.8
5 31	14 13.96	-7 56.7	1.492	2.388	14.5	21.4	5 31	14 19.60	-11 28.6	2.461	3.354	9.6	20.0
6 10	14 8.70	-8 0.4	1.553	2.367	18.2	21.6	6 10	14 14.94	-11 33.6	2.551	3.356	12.1	20.2
506451	2001 UG ₁₃₃		5 2.8 163°86'	0°3'	3.1 18		10763	Hlawka		5 2.8 193°36'	3°2'	30.1 18	
4 1	15 1.78	-18 24.8	2.918	3.766	9.2	23.1	4 1	15 2.28	-5 53.1	2.503	3.372	9.8	18.0
4 11	14 56.13	-18 3.0	2.843	3.771	6.6	23.0	4 11	14 56.64	-5 25.0	2.433	3.370	7.1	17.8
4 21	14 49.24	-17 34.4	2.794	3.777	3.7	22.8	4 21	14 49.59	-4 57.6	2.388	3.369	4.4	17.6
5 1	14 41.66	-17 0.8	2.775	3.781	0.7	22.5	5 1	14 41.74	-4 34.2	2.372	3.367	3.2	17.5
5 11	14 34.02	-16 24.8	2.785	3.786	2.5	22.7	5 11	14 33.80	-4 18.0	2.384	3.365	4.9	17.6
5 21	14 26.94	-15 49.6	2.825	3.789	5.4	22.9	5 21	14 26.45	-4 11.1	2.424	3.362	7.6	17.8
5 31	14 20.95	-15 18.0	2.893	3.793	8.1	23.1	5 31	14 20.30	-4 15.2	2.490	3.359	10.3	18.0
6 10	14 16.43	-14 52.7	2.984	3.795	10.4	23.2	6 10	14 15.78	-4 30.7	2.578	3.356	12.7	18.1
10317	1990 SA ₁₅		5 2.8 168°94'	1°4'	3.8 18		301799	2010 RW ₇₀		5 2.8 219°82'	2°3'	1.1 17	
4 1	15 6.86	-21 38.4	1.721	2.576	14.1	17.9	4 1	15 5.29	-11 42.3	1.867	2.738	12.4	21.9
4 11	15 0.51	-21 10.0	1.650	2.580	10.4	17.7	4 11	14 59.28	-10 59.3	1.789	2.730	8.9	21.6
4 21	14 51.95	-20 27.0	1.602	2.583	6.2	17.5	4 21	14 51.26	-10 10.8	1.735	2.722	5.0	21.4
5 1	14 42.08	-19 31.9	1.580	2.585	1.9	17.2	5 1	14 42.01	-9 21.0	1.709	2.713	2.3	21.2
5 11	14 32.09	-18 29.6	1.586	2.587	3.7	17.3	5 11	14 32.55	-8 35.2	1.711	2.704	5.0	21.3
5 21	14 23.13	-17 26.7	1.619	2.589	8.1	17.6	5 21	14 23.88	-7 58.1	1.740	2.693	9.0	21.6
5 31	14 16.11	-16 29.8	1.677	2.590	12.2	17.8	5 31	14 16.87	-7 33.8	1.793	2.683	12.7	21.8
6 10	14 11.60	-15 44.2	1.756	2.590	15.6	18.0	6 10	14 12.09	-7 24.4	1.867	2.672	15.9	22.0
214479	2005 TB ₇₃		5 2.8 286°22'	2°6'	1.0 18 R		276948	2004 TL ₂₇₉		5 2.8 183°46'	0°0'	2.6 17	
4 1	15 4.14	-7 50.4	2.241	3.110	10.7	19.5	4 1	15 3.12	-18 5.2	2.015	2.876	12.1	20.8
4 11	14 58.27	-7 43.5	2.151	3.090	7.8	19.3	4 11	14 57.57	-17 29.0	1.941	2.877	8.7	20.6
4 21	14 50.64	-7 36.8	2.086	3.071	4.6	19.0	4 21	14 50.23	-16 42.9	1.891	2.877	4.9	20.4
5 1	14 41.90	-7 32.8	2.050	3.051	2.6	18.9	5 1	14 41.84	-15 49.9	1.869	2.876	0.7	20.1
5 11	14 32.86	-7 34.3	2.041	3.031	4.6	19.0	5 11	14 33.35	-14 54.5	1.875	2.876	3.4	20.3
5 21	14 24.37	-7 43.5	2.061	3.011	8.0	19.1	5 21	14 25.64	-14 2.0	1.909	2.875	7.4	20.5
5 31	14 17.20	-8 2.0	2.106	2.991	11.3	19.3	5 31	14 19.49	-13 17.1	1.968	2.874	11.0	20.7
6 10	14 11.91	-8 30.7	2.173	2.972	14.2	19.5	6 10	14 15.39	-12 43.4	2.049	2.872	14.1	20.9
141260	2001 YL ₂₁		5 2.8 123°72'	0°0'	2.7 18		80388	1999 XO ₁₆₈		5 2.8 99°78'	2°8'	4.6 18	
4 1	15 4.07	-15 59.0	2.515	3.369	10.2	20.3	4 1	15 7.59	-23 58.9	1.643	2.492	15.0	19.3
4 11	14 57.90	-15 59.2	2.447	3.380	7.3	20.1	4 11	15 1.08	-23 58.8	1.583	2.507	11.2	19.1
4 21	14 50.27	-15 54.0	2.406	3.390	4.1	19.9	4 21	14 52.27	-23 43.0	1.546	2.521	7.0	18.9
5 1	14 41.82	-15 45.0	2.394	3.401	0.6	19.7	5 1	14 42.15	-23 12.6	1.534	2.535	3.3	18.7
5 11	14 33.31	-15 34.4	2.411	3.411	2.8	19.9	5 11	14 32.00	-22 31.4	1.549	2.549	4.1	18.8
5 21	14 25.47	-15 24.6	2.456	3.420	6.1	20.1	5 21	14 23.01	-21 45.1	1.591	2.562	8.1	19.0
5 31	14 18.91	-15 18.3	2.529	3.430	9.1	20.3	5 31	14 16.11	-21 0.3	1.657	2.575	11.9	19.3
6 10	14 14.08	-15 17.5	2.625	3.439	11.6	20.5	6 10	14 11.84	-20 22.6	1.744	2.588	15.2	19.5
507147	2009 WL ₂₀₅		5 2.8 82°62'	1°1'	4.1 17		11587	1994 UH ₂		5 2.8 222°96'	0°4'	2.3 18	
4 1	14 59.08	-21 44.0	3.145	3.986	8.8	22.1	4 1	15 1.20	-15 14.9	2.843	3.699	9.1	18.8
4 11	14 54.12	-21 25.8	3.084	4.006	6.4	21.9	4 11	14 55.82	-14 53.8	2.756	3.690	6.5	18.6
4 21	14 48.09	-21 0.0	3.048	4.025	3.8	21.8	4 21	14 49.15	-14 27.6	2.696	3.681	3.6	18.4
5 1	14 41.49	-20 28.0	3.041	4.045	1.4	21.6	5 1	14 41.69	-13 58.2	2.664	3.671	0.6	18.2
5 11	14 34.91	-19 52.3	3.064	4.064	2.2	21.7	5 11	14 34.09	-13 28.3	2.662	3.661	2.8	18.3
5 21	14 28.87	-19 15.6	3.116	4.083	4.8	21.9	5 21	14 26.98	-13 0.7	2.690	3.650	5.8	18.5
5 31	14 23.83	-18 40.9	3.195	4.103	7.2	22.1	5 31	14 20.92	-12 38.2	2.744	3.639	8.6	18.7
6 10	14 20.13	-18 10.8	3.298	4.121	9.2	22.3	6 10	14 16.34	-12 23.1	2.822	3.628	11.1	18.8
213782	2003 EV ₅₉		5 2.8 23°87'	0°7'	2.4 18		255754	2006 RT ₂₇		5 2.8 241°84'	3°5'	30.6 17	
4 1	15 7.05	-12 18.1	2.001	2.866	12.0	19.2	4 1	15 6.05	-7 53.6	1.752	2.627	12.9	21.1
4 11	15 0.40	-12 44.7	1.931	2.869	8.6	19.0	4 11	14 59.94	-7 20.2	1.674	2.616	9.3	20.8
4 21	14 51.81	-13 9.2	1.886	2.872	4.8	18.8	4 21	14 51.69	-6 45.4	1.621	2.605	5.6	20.6
5 1	14 42.08	-13 32.4	1.869	2.876	0.9	18.5	5 1	14 42.09	-6 13.6	1.594	2.594	3.5	20.4
5 11	14 32.17	-13 55.6	1.881	2.881	3.6	18.7	5 11	14 32.22	-5 49.8	1.594	2.582	6.0	20.5
5 21	14 23.05	-14 20.4	1.921	2.885	7.5	19.0	5 21	14 23.15	-5 37.8	1.621	2.569	9.9	20.7
5 31	14 15.54	-14 48.4	1.987	2.890	11.1	19.2	5 31	14 15.82	-5 40.3	1.671	2.557	13.7	20.9
6 10	14 10.21	-15 21.3	2.075	2.895	14.0	19.4	6 10	14 10.86	-5 58.2	1.742	2.544	17.0	21.1
29474	1997 UT ₈		5 2.8 263°58'	0°7'	2.2 18		131103	2001 AS ₂₆		5 2.8 215°87'	0°9'	2.1 18	
4 1	15 3.16	-16 28.0	1.797	2.667	12.9	18.7	4 1	15 5.06	-13 42.9	2.473	3.331	10.3	20.4

EPHEMERIDES

Table with columns for year (2020), alpha_2000, delta_2000, delta, r, beta, V, and similar columns. It contains multiple star ephemeris entries such as 413437, 11362, 487011, 62287, 300068, 349364, 331766, 188087, 414147, 105571, 67751, 240787, 395089, 234444, 435037, 205530, 323423, and 58929.

EPHEMERIDES

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
331490	1999 <i>GB</i> ₁₆		5 2.8 46°93'	4.1/29.5	18		514551	2017 <i>VP</i> ₃₃		5 2.8 202°12'	5.3/28.3	17	
4 1	15 1.05	-10 44.2	1.462	2.352	14.1	19.6	4 1	15 3.17	+ 2 1.9	2.533	3.394	9.9	21.1
4 11	14 56.38	- 9 1.7	1.413	2.363	10.0	19.4	4 11	14 57.27	+ 2 34.3	2.467	3.391	7.7	21.0
4 21	14 49.65	- 7 13.4	1.387	2.374	5.9	19.2	4 21	14 49.99	+ 3 0.6	2.427	3.388	5.8	20.8
5 1	14 41.81	- 5 28.3	1.387	2.386	4.1	19.1	5 1	14 41.92	+ 3 16.8	2.414	3.385	5.4	20.8
5 11	14 34.03	- 3 55.7	1.414	2.398	7.0	19.3	5 11	14 33.77	+ 3 20.2	2.430	3.381	6.8	20.9
5 21	14 27.34	- 2 43.0	1.465	2.411	11.0	19.5	5 21	14 26.22	+ 3 9.2	2.472	3.378	9.0	21.0
5 31	14 22.55	- 1 54.1	1.538	2.424	14.7	19.8	5 31	14 19.86	+ 2 43.5	2.539	3.373	11.3	21.2
6 10	14 20.12	- 1 29.7	1.630	2.437	17.8	20.0	6 10	14 15.13	+ 2 4.3	2.627	3.369	13.4	21.3
436359	2010 <i>KE</i> ₂		5 2.8 250°22'	5.3/26.6	18		202992	1999 <i>VG</i> ₁₃₅		5 2.8 189°90'	0.6/ 3.7	17	
4 1	14 59.98	+ 2 8.7	2.855	3.718	8.9	21.3	4 1	14 57.22	-19 59.4	4.381	5.220	6.5	22.6
4 11	14 54.96	+ 3 13.4	2.775	3.699	7.0	21.2	4 11	14 52.67	-19 43.0	4.295	5.218	4.7	22.5
4 21	14 48.70	+ 4 14.2	2.722	3.679	5.6	21.1	4 21	14 47.31	-19 21.6	4.237	5.216	2.8	22.3
5 1	14 41.68	+ 5 6.5	2.697	3.659	5.5	21.0	5 1	14 41.51	-18 56.1	4.208	5.214	0.8	22.1
5 11	14 34.53	+ 5 46.4	2.700	3.639	6.8	21.1	5 11	14 35.64	-18 28.3	4.210	5.211	1.7	22.2
5 21	14 27.81	+ 6 11.3	2.730	3.618	8.9	21.2	5 21	14 30.10	-17 59.8	4.242	5.207	3.7	22.4
5 31	14 22.07	+ 6 19.9	2.784	3.596	11.0	21.3	5 31	14 25.23	-17 32.7	4.302	5.204	5.6	22.5
6 10	14 17.72	+ 6 12.5	2.858	3.574	12.9	21.4	6 10	14 21.30	-17 8.8	4.388	5.200	7.3	22.6
67545	2000 <i>ST</i> ₃₅		5 2.8 231°21'	0.4/ 3.1	18		112641	2002 <i>PC</i> ₈₂		5 2.8 190°69'	0.8/ 2.2	17	
4 1	15 1.96	-18 5.2	2.440	3.295	10.5	20.2	4 1	15 5.59	-15 25.4	2.107	2.968	11.7	20.8
4 11	14 56.58	-17 49.4	2.357	3.289	7.6	20.0	4 11	14 59.31	-14 50.4	2.030	2.967	8.4	20.6
4 21	14 49.67	-17 25.9	2.299	3.283	4.3	19.8	4 21	14 51.25	-14 7.9	1.979	2.965	4.6	20.3
5 1	14 41.84	-16 56.6	2.270	3.276	0.8	19.5	5 1	14 42.12	-13 20.8	1.955	2.962	0.9	20.1
5 11	14 33.85	-16 24.4	2.269	3.270	2.9	19.6	5 11	14 32.86	-12 33.7	1.961	2.959	3.7	20.3
5 21	14 26.45	-15 52.7	2.296	3.263	6.3	19.9	5 21	14 24.36	-11 50.9	1.994	2.955	7.6	20.5
5 31	14 20.30	-15 25.1	2.350	3.256	9.5	20.0	5 31	14 17.38	-11 16.6	2.054	2.950	11.1	20.7
6 10	14 15.90	-15 4.6	2.427	3.248	12.2	20.2	6 10	14 12.45	-10 53.7	2.135	2.944	14.1	20.9
380803	2005 <i>WK</i> ₁₇₇		5 2.8 261°60'	0.6/ 2.4	17		24173	<i>SLAS</i>		5 2.8 130°55'	4.0/ 6.2	18	
4 1	15 4.59	-15 13.6	1.839	2.707	12.7	21.3	4 1	15 5.41	-29 16.4	2.206	3.024	12.8	19.4
4 11	14 58.91	-14 58.0	1.757	2.697	9.2	21.1	4 11	14 59.23	-29 19.4	2.134	3.033	10.0	19.2
4 21	14 51.14	-14 35.3	1.700	2.687	5.1	20.8	4 21	14 51.21	-29 6.6	2.085	3.043	7.0	19.0
5 1	14 42.08	-14 7.8	1.670	2.677	0.9	20.5	5 1	14 42.11	-28 37.9	2.063	3.052	4.5	18.9
5 11	14 32.74	-13 39.4	1.666	2.666	3.9	20.7	5 11	14 32.93	-27 55.9	2.069	3.060	4.4	18.9
5 21	14 24.16	-13 14.4	1.690	2.656	8.2	20.9	5 21	14 24.60	-27 4.8	2.102	3.068	6.8	19.1
5 31	14 17.25	-12 56.9	1.739	2.645	12.2	21.1	5 31	14 17.89	-26 10.5	2.162	3.076	9.7	19.3
6 10	14 12.62	-12 49.9	1.808	2.634	15.5	21.3	6 10	14 13.32	-25 18.6	2.244	3.084	12.5	19.4
222648	2001 <i>XX</i> ₁₇₃		5 2.8 133°18'	2.8/30.7	17		371134	2005 <i>WR</i> ₁₀₄		5 2.8 168°11'	4.5/29.4	16	
4 1	15 4.43	- 9 29.0	1.980	2.852	11.8	20.8	4 1	15 5.63	- 2 43.0	2.186	3.053	11.1	21.3
4 11	14 58.42	- 8 48.9	1.920	2.862	8.4	20.6	4 11	14 59.17	- 2 8.0	2.123	3.057	8.2	21.1
4 21	14 50.68	- 8 6.4	1.886	2.871	4.9	20.4	4 21	14 51.09	- 1 36.3	2.086	3.061	5.5	21.0
5 1	14 41.99	- 7 25.9	1.878	2.880	2.8	20.3	5 1	14 42.10	- 1 12.2	2.076	3.064	4.6	20.9
5 11	14 33.28	- 6 51.8	1.899	2.888	5.0	20.4	5 11	14 33.05	- 0 59.1	2.095	3.066	6.3	21.0
5 21	14 25.41	- 6 27.8	1.947	2.896	8.5	20.6	5 21	14 24.75	- 0 59.2	2.141	3.068	9.1	21.2
5 31	14 19.11	- 6 16.3	2.020	2.904	11.8	20.9	5 31	14 17.89	- 1 13.6	2.212	3.070	11.9	21.4
6 10	14 14.84	- 6 18.3	2.113	2.911	14.5	21.1	6 10	14 12.93	- 1 41.6	2.304	3.071	14.4	21.6
497219	2004 <i>XG</i> ₁₃₁		5 2.8 137°74'	1.7/ 1.4	17		502729	2015 <i>DC</i> ₃₃		5 2.8 154°70'	1.6/ 1.6	17	
4 1	15 5.25	-10 50.9	2.555	3.415	9.9	22.2	4 1	15 4.46	-12 18.1	2.024	2.892	11.7	21.6
4 11	14 58.67	-10 30.4	2.494	3.430	7.0	22.1	4 11	14 58.51	-11 52.7	1.956	2.896	8.3	21.3
4 21	14 50.70	-10 7.5	2.460	3.445	3.9	21.9	4 21	14 50.79	-11 23.0	1.914	2.900	4.6	21.1
5 1	14 41.99	- 9 44.9	2.455	3.459	1.7	21.8	5 1	14 42.06	-10 52.2	1.899	2.904	1.6	20.9
5 11	14 33.29	- 9 25.3	2.480	3.472	3.7	21.9	5 11	14 33.23	-10 24.2	1.912	2.907	4.2	21.1
5 21	14 25.28	- 9 11.3	2.534	3.485	6.7	22.1	5 21	14 25.20	-10 2.6	1.953	2.910	7.9	21.3
5 31	14 18.55	- 9 4.9	2.614	3.497	9.5	22.3	5 31	14 18.71	- 9 50.3	2.018	2.913	11.3	21.5
6 10	14 13.51	- 9 7.3	2.718	3.508	11.8	22.5	6 10	14 14.25	- 9 49.2	2.105	2.915	14.2	21.7
153481	2001 <i>RY</i> ₆₈		5 2.8 214°06'	3.6/ 5.5	18		51977	2001 <i>RF</i> ₁₂₀		5 2.8 160°18'	1.4/ 3.9	18	
4 1	15 7.12	-27 28.5	2.251	3.072	12.4	21.2	4 1	15 4.49	-20 27.7	2.420	3.266	10.9	19.4
4 11	15 0.57	-27 35.7	2.160	3.064	9.7	21.0	4 11	14 58.40	-20 33.2	2.345	3.269	8.0	19.2
4 21	14 52.03	-27 28.5	2.094	3.055	6.6	20.8	4 21	14 50.70	-20 30.1	2.294	3.272	4.8	19.0
5 1	14 42.24	-27 6.5	2.054	3.046	4.0	20.6	5 1	14 42.04	-20 19.4	2.271	3.275	1.7	18.8
5 11	14 32.17	-26 31.5	2.043	3.036	4.2	20.6	5 11	14 33.25	-20 3.2	2.278	3.278	2.9	18.9
5 21	14 22.81	-25 47.5	2.060	3.025	7.0	20.8	5 21	14 25.12	-19 44.4	2.313	3.281	6.2	19.1
5 31	14 15.01	-24 59.7	2.103	3.014	10.1	21.0	5 31	14 18.34	-19 26.3	2.374	3.283	9.3	19.3
6 10	14 9.39	-24 14.0	2.170	3.002	13.1	21.1	6 10	14 13.41	-19 12.4	2.459	3.285	11.9	19.5
50308	2000 <i>CK</i> ₃₉		5 2.8 88°79'	1.7/ 1.7	18		502292	2015 <i>BY</i> ₁₄₁		5 2.8 76°91'	0.4/ 3.1	17	
4 1	15 5.46	-13 14.5	1.590	2.467	13.9	19.3	4 1	15 6.43	-17 16.1	1.732	2.597	13.6	21.1
4 11	14 59.47	-12 38.0	1.536	2.480	9.9	19.0	4 11	15 0.10	-17 14.8	1.676	2.613	9.8	20.9
4 21	14 51.37	-11 55.2	1.505	2.493	5.4	18.8	4 21	14 51.72	-17 5.1	1.643	2.628	5.5	20.7
5 1	14 42.12	-11 10.6	1.501	2.507	1.8	18.6	5 1	14 42.20	-16 48.7	1.637	2.644	1.0	20.4
5 11	14 32.89	-10 29.8	1.523	2.520	4.8	18.8	5 11	14 32.65	-16 29.2	1.658	2.659	3.6	20.7
5 21	14 24.74	- 9 57.6	1.571	2.533	9.1	19.1	5 21	14 24.14	-16 10.6	1.706	2.675	7.9	21.0
5 31	14 18.54	- 9 37.9	1.643	2.546	13.0	19.4	5 31	14 17.51	-15 56.9	1.779	2.690	11.6	21.2
6 10	14 14.79	- 9 32.5	1.735	2.558	16.2	19.6	6 10	14 13.26	-15 51.3	1.872	2.706	14.8	21.4
311196	2004 <i>XO</i> ₇₆		5 2.8 155°35'	1.1/ 3.7	18		496494	2014 <i>TD</i> ₆₆		5 2.8 205°42'	0.5/ 3.2	16	
4 1	15 7.23	-21 14.6	1.866	2.717	13.4	21.2	4 1	15 6.46	-19 4.1	1.872	2.729	13.0	21.8
4 11	15 0.63	-20 41.9	1.798	2.726	9.8	21.0	4 11	15 0.21	-18 36.6	1.792	2.725	9.5	21.6
4 21	14 52.00	-19 55.9	1.753	2.734	5.7	20.8	4 21	14 51.86	-17 57.6	1.736	2.720	5.4	21.3
5 1	14 42.22	-18 59.2	1.735	2.741	1.6	20.5	5 1	14 42.23	-17 9.5	1.707	2.714	1.1	21.0
5 11	14 32.40	-17 56.6	1.746	2.747	3.5	20.6	5 11	14 32.40	-16 16.9	1.706	2.707	3.6	21.2
5 21	14 23.55	-16 54.3	1.784	2.753	7.6	20.9	5 21	14 23.40	-15 25.2	1.733	2.700	7.9	21.4
5 31	14 16.53	-15 58.2	1.849	2.758	11.4	21.1	5 31	14 16.15	-14 40.0	1.785	2.692	11.9	21.6
6 10	14 11.86	-15 13.1	1.935	2.762	14.6								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
11825	1982 UW_1		5 2.8 262°18		1.7/ 1.1 18		98842	2001 AQ_{22}		5 2.8 201°19		6°1/27.5 18	
4 1	14 59.87	-12 29.6	2.517	3.385	9.7	17.5	4 1	15 2.70	+ 0 45.7	2.138	3.008	11.1	20.0
4 11	14 55.06	-11 38.6	2.430	3.370	6.9	17.3	4 11	14 57.16	+ 1 50.8	2.076	3.006	8.6	19.9
4 21	14 48.84	-10 42.2	2.369	3.355	3.9	17.1	4 21	14 50.03	+ 2 50.9	2.038	3.003	6.6	19.7
5 1	14 41.76	- 9 44.0	2.336	3.340	1.7	16.9	5 1	14 41.97	+ 3 40.2	2.028	2.999	6.2	19.7
5 11	14 34.53	- 8 48.3	2.332	3.324	3.9	17.0	5 11	14 33.83	+ 4 13.9	2.045	2.996	7.9	19.8
5 21	14 27.82	- 7 59.1	2.357	3.309	7.1	17.2	5 21	14 26.39	+ 4 29.2	2.087	2.992	10.4	19.9
5 31	14 22.24	- 7 19.9	2.407	3.293	10.1	17.3	5 31	14 20.33	+ 4 25.2	2.153	2.987	13.0	20.1
6 10	14 18.26	- 6 53.0	2.480	3.277	12.7	17.5	6 10	14 16.12	+ 4 3.1	2.237	2.982	15.3	20.3
57591	2001 TM_{76}		5 2.8 150°97		0°7/ 2.1 18		504092	2006 DO_{28}		5 2.8 17°61		1°9/ 3.9 17	
4 1	15 2.07	-14 19.7	2.708	3.566	9.4	20.2	4 1	15 4.30	-20 54.5	1.638	2.501	14.3	20.9
4 11	14 56.44	-13 56.3	2.638	3.574	6.7	20.1	4 11	14 58.89	-21 1.1	1.570	2.503	10.6	20.6
4 21	14 49.51	-13 28.4	2.595	3.581	3.7	19.9	4 21	14 51.21	-20 55.6	1.525	2.506	6.4	20.4
5 1	14 41.86	-12 58.2	2.581	3.588	0.8	19.7	5 1	14 42.17	-20 38.9	1.505	2.509	2.4	20.2
5 11	14 34.16	-12 28.5	2.597	3.594	3.0	19.9	5 11	14 32.94	-20 14.5	1.511	2.513	3.8	20.3
5 21	14 27.05	-12 2.4	2.641	3.600	6.0	20.1	5 21	14 24.68	-19 46.7	1.544	2.517	8.1	20.5
5 31	14 21.09	-11 42.3	2.713	3.606	8.8	20.2	5 31	14 18.34	-19 21.1	1.600	2.521	12.1	20.8
6 10	14 16.67	-11 30.2	2.807	3.611	11.2	20.4	6 10	14 14.53	-19 2.4	1.677	2.526	15.5	21.0
461485	2002 SB_{25}		5 2.8 174°89		0°6/ 3.3 17		299850	2006 ST_{244}		5 2.8 203°05		1°4/ 1.6 17	
4 1	15 5.96	-19 12.7	2.041	2.895	12.3	21.8	4 1	15 1.69	-12 50.8	2.290	3.158	10.6	21.2
4 11	14 59.64	-18 48.1	1.967	2.898	8.9	21.6	4 11	14 56.42	-12 20.0	2.216	3.156	7.5	21.0
4 21	14 51.45	-18 13.2	1.917	2.900	5.1	21.4	4 21	14 49.61	-11 44.7	2.168	3.155	4.2	20.8
5 1	14 42.16	-17 30.1	1.895	2.901	1.1	21.1	5 1	14 41.91	-11 7.8	2.148	3.153	1.4	20.5
5 11	14 32.76	-16 43.0	1.901	2.902	3.3	21.2	5 11	14 34.11	-10 33.2	2.156	3.151	3.7	20.7
5 21	14 24.19	-15 56.6	1.936	2.903	7.3	21.5	5 21	14 26.94	-10 4.2	2.192	3.149	7.2	20.9
5 31	14 17.23	-15 15.8	1.997	2.902	10.9	21.7	5 31	14 21.08	- 9 43.9	2.253	3.147	10.3	21.1
6 10	14 12.41	-14 44.4	2.079	2.901	13.9	21.9	6 10	14 16.99	- 9 34.4	2.337	3.145	13.0	21.3
17080	1999 HE_9		5 2.8 226°12		0°5/ 2.3 18		255644	2006 QH_{14}		5 2.8 346°35		3°5/ 4.3 17	
4 1	15 0.89	-16 37.5	2.405	3.266	10.4	18.5	4 1	15 4.10	-21 48.9	1.138	2.019	17.9	20.0
4 11	14 55.82	-15 51.0	2.323	3.260	7.4	18.3	4 11	14 59.69	-22 22.2	1.070	2.010	13.6	19.7
4 21	14 49.26	-14 56.4	2.267	3.253	4.1	18.1	4 21	14 52.09	-22 40.5	1.021	2.003	8.6	19.4
5 1	14 41.83	-13 56.8	2.239	3.246	0.7	17.8	5 1	14 42.35	-22 42.7	0.993	1.996	4.0	19.2
5 11	14 34.28	-12 56.6	2.241	3.239	3.2	18.0	5 11	14 32.11	-22 31.1	0.989	1.991	5.3	19.2
5 21	14 27.34	-12 0.2	2.271	3.232	6.7	18.2	5 21	14 23.05	-22 10.9	1.008	1.987	10.4	19.5
5 31	14 21.65	-11 11.8	2.327	3.224	9.9	18.4	5 31	14 16.62	-21 49.7	1.047	1.984	15.5	19.7
6 10	14 17.67	-10 34.3	2.405	3.217	12.6	18.6	6 10	14 13.67	-21 34.6	1.104	1.982	19.8	20.0
468822	2012 TJ_{23}		5 2.8 259°03		0°6/ 3.3 17		390622	2001 YR_{131}		5 2.8 139°52		5°2/28.2 18	
4 1	15 2.24	-19 50.4	2.027	2.885	12.1	21.5	4 1	15 3.06	+ 2 39.3	2.729	3.586	9.4	21.5
4 11	14 57.08	-19 18.0	1.944	2.877	8.9	21.2	4 11	14 57.05	+ 3 11.8	2.675	3.596	7.3	21.3
4 21	14 50.08	-18 34.1	1.886	2.869	5.1	21.0	4 21	14 49.83	+ 3 38.0	2.647	3.606	5.6	21.3
5 1	14 41.97	-17 41.3	1.854	2.861	1.2	20.7	5 1	14 41.95	+ 3 54.4	2.648	3.615	5.2	21.2
5 11	14 33.67	-16 43.9	1.851	2.852	3.3	20.8	5 11	14 34.08	+ 3 58.4	2.677	3.624	6.5	21.3
5 21	14 26.09	-15 47.1	1.875	2.844	7.3	21.1	5 21	14 26.83	+ 3 48.9	2.733	3.633	8.4	21.5
5 31	14 20.04	-14 56.4	1.924	2.835	10.9	21.3	5 31	14 20.71	+ 3 25.7	2.814	3.641	10.5	21.6
6 10	14 16.04	-14 15.9	1.995	2.826	14.1	21.5	6 10	14 16.10	+ 2 50.0	2.916	3.648	12.4	21.8
206311	2003 HO_{42}		5 2.8 318°85		0°2/ 2.9 17		312109	2007 TV_{159}		5 2.8 191°59		0°6/ 3.3 16	
4 1	15 1.28	-19 27.2	1.185	2.072	16.9	19.7	4 1	15 6.16	-20 0.9	1.847	2.703	13.2	21.1
4 11	14 57.47	-18 43.5	1.108	2.056	12.4	19.4	4 11	14 59.99	-19 23.2	1.770	2.702	9.7	20.8
4 21	14 50.75	-17 40.6	1.051	2.040	7.1	19.1	4 21	14 51.75	-18 32.6	1.717	2.700	5.6	20.6
5 1	14 42.12	-16 22.8	1.018	2.025	1.2	18.6	5 1	14 42.27	-17 32.0	1.691	2.697	1.2	20.3
5 11	14 33.03	-14 58.3	1.008	2.010	4.9	18.8	5 11	14 32.64	-16 26.4	1.693	2.694	3.6	20.4
5 21	14 25.01	-13 37.4	1.021	1.996	10.8	19.1	5 21	14 23.91	-15 22.1	1.723	2.691	7.9	20.7
5 31	14 19.37	-12 30.0	1.055	1.983	16.2	19.4	5 31	14 16.95	-14 25.3	1.778	2.686	11.8	20.9
6 10	14 16.89	-11 42.8	1.106	1.971	20.7	19.6	6 10	14 12.33	-13 40.6	1.855	2.681	15.2	21.1
510727	2012 VR_{92}		5 2.8 202°45		1°0/ 1.9 17		131667	2001 XW_{168}		5 2.8 163°14		1°5/ 1.6 17	
4 1	15 2.01	-14 2.6	2.461	3.324	10.1	22.3	4 1	15 4.87	-12 38.6	2.107	2.973	11.4	20.5
4 11	14 56.57	-13 31.6	2.383	3.321	7.2	22.1	4 11	14 58.75	-12 8.0	2.039	2.978	8.1	20.3
4 21	14 49.67	-12 55.4	2.331	3.317	4.0	21.9	4 21	14 50.94	-11 32.8	1.996	2.982	4.5	20.1
5 1	14 41.91	-12 16.6	2.307	3.313	1.0	21.7	5 1	14 42.14	-10 56.0	1.981	2.986	1.6	19.9
5 11	14 34.03	-11 38.8	2.312	3.309	3.4	21.8	5 11	14 33.27	-10 21.9	1.994	2.990	4.0	20.0
5 21	14 26.76	-11 5.4	2.346	3.305	6.7	22.1	5 21	14 25.17	- 9 54.0	2.036	2.992	7.7	20.3
5 31	14 20.71	-10 39.6	2.406	3.300	9.7	22.2	5 31	14 18.57	- 9 35.6	2.103	2.995	11.0	20.5
6 10	14 16.34	-10 23.5	2.488	3.294	12.4	22.4	6 10	14 13.94	- 9 28.6	2.191	2.997	13.9	20.7
345626	2006 SO_{283}		5 2.8 173°08		0°1/ 2.7 18		131223	2001 DQ_{91}		5 2.8 333°52		4°6/29.4 18	
4 1	15 4.45	-15 9.4	2.893	3.743	9.2	21.1	4 1	14 59.22	- 8 1.9	1.500	2.393	13.6	19.0
4 11	14 58.12	-15 11.1	2.815	3.746	6.6	20.9	4 11	14 55.34	- 6 51.1	1.428	2.379	9.9	18.7
4 21	14 50.47	-15 8.7	2.764	3.748	3.6	20.7	4 21	14 49.29	- 5 36.3	1.380	2.366	6.2	18.4
5 1	14 42.03	-15 3.3	2.743	3.750	0.5	20.5	5 1	14 41.91	- 4 24.8	1.357	2.354	4.6	18.3
5 11	14 33.49	-14 56.7	2.753	3.752	2.6	20.7	5 11	14 34.28	- 3 24.5	1.358	2.342	7.3	18.4
5 21	14 25.49	-14 51.1	2.792	3.753	5.6	20.9	5 21	14 27.50	- 2 41.7	1.384	2.332	11.4	18.6
5 31	14 18.60	-14 48.4	2.858	3.754	8.3	21.0	5 31	14 22.50	- 2 20.3	1.431	2.322	15.3	18.9
6 10	14 13.23	-14 50.7	2.949	3.754	10.7	21.2	6 10	14 19.90	- 2 21.1	1.497	2.313	18.7	19.1
388301	2006 SG_{147}		5 2.8 65°01		0°4/ 2.5 17		246180	2007 RC_{45}		5 2.8 308°16		1°6/ 1.8 17	
4 1	15 1.53	-16											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
348809	2006 <i>QW</i> ₁₆₀		5 2.8 181°34	0°7/ 2.2 17			4388	Jürgenstock		5 2.8 168°54	1°7/ 1.1 18		
4 1	15 1.77	-14 56.4	2.525	3.386	10.0	21.7	4 1	15 6.00	-15 30.5	2.108	2.968	11.7	18.1
4 11	14 56.37	-14 26.3	2.450	3.386	7.1	21.5	4 11	14 59.51	-13 56.8	2.037	2.974	8.3	17.9
4 21	14 49.56	-13 50.5	2.400	3.386	3.9	21.3	4 21	14 51.34	-12 13.2	1.993	2.979	4.5	17.7
5 1	14 41.93	-13 11.6	2.380	3.386	0.8	21.1	5 1	14 42.25	-10 25.3	1.979	2.983	1.7	17.5
5 11	14 34.22	-12 33.1	2.388	3.386	3.1	21.3	5 11	14 33.17	-8 40.6	1.995	2.987	4.4	17.7
5 21	14 27.11	-11 58.3	2.425	3.385	6.4	21.5	5 21	14 24.93	-7 5.8	2.040	2.989	8.2	17.9
5 31	14 21.20	-11 30.4	2.488	3.384	9.4	21.6	5 31	14 18.26	-5 46.5	2.112	2.991	11.5	18.1
6 10	14 16.94	-11 11.7	2.575	3.383	11.9	21.8	6 10	14 13.59	-4 45.6	2.206	2.991	14.4	18.3
65518	4838 <i>P-L</i>		5 2.8 87°78	0°4/ 3.1 18			410431	2008 <i>BT</i> ₁₉		5 2.8 148°81	1°6/ 1.7 16		
4 1	15 9.34	-18 12.7	1.397	2.266	15.9	19.1	4 1	15 6.62	-13 10.0	1.940	2.805	12.3	22.3
4 11	15 2.47	-17 54.0	1.350	2.288	11.5	18.9	4 11	15 0.09	-12 31.8	1.877	2.816	8.7	22.1
4 21	14 53.13	-17 23.4	1.324	2.310	6.4	18.6	4 21	14 51.72	-11 48.0	1.839	2.825	4.8	21.9
5 1	14 42.49	-16 44.1	1.324	2.331	1.2	18.3	5 1	14 42.32	-11 2.2	1.828	2.834	1.6	21.7
5 11	14 31.98	-16 1.8	1.351	2.352	4.2	18.6	5 11	14 32.89	-10 19.3	1.847	2.842	4.3	21.9
5 21	14 22.85	-15 22.5	1.403	2.373	9.1	18.9	5 21	14 24.36	-9 43.6	1.892	2.849	8.2	22.1
5 31	14 16.08	-14 51.8	1.478	2.393	13.3	19.2	5 31	14 17.50	-9 18.7	1.964	2.856	11.7	22.4
6 10	14 12.15	-14 33.6	1.574	2.413	16.9	19.5	6 10	14 12.80	-9 6.6	2.056	2.862	14.6	22.6
522896	2016 <i>PC</i> ₁₀₄		5 2.8 90°93	1°3/ 1.8 17			437098	2012 <i>UE</i> ₉₇		5 2.8 263°79	2°9/ 5.0 17		
4 1	15 2.18	-13 9.6	2.156	3.025	11.1	21.6	4 1	15 3.82	-25 8.7	2.034	2.874	12.8	21.3
4 11	14 56.80	-12 41.0	2.093	3.033	7.9	21.4	4 11	14 58.35	-25 7.3	1.950	2.867	9.8	21.1
4 21	14 49.84	-12 7.7	2.054	3.041	4.3	21.2	4 21	14 50.89	-24 51.8	1.889	2.860	6.4	20.9
5 1	14 41.99	-11 32.8	2.043	3.048	1.3	21.0	5 1	14 42.21	-24 22.7	1.854	2.853	3.4	20.6
5 11	14 34.10	-11 0.2	2.060	3.056	3.8	21.1	5 11	14 33.28	-23 42.8	1.847	2.845	3.8	20.7
5 21	14 26.94	-10 33.4	2.104	3.064	7.3	21.4	5 21	14 25.09	-22 56.5	1.867	2.838	7.1	20.8
5 31	14 21.19	-10 15.3	2.174	3.071	10.5	21.6	5 31	14 18.52	-22 9.3	1.913	2.831	10.6	21.0
6 10	14 17.29	-10 7.9	2.266	3.079	13.2	21.8	6 10	14 14.13	-21 26.8	1.981	2.823	13.7	21.2
324237	2006 <i>BJ</i> ₁₂₈		5 2.8 231°97	1°7/29.9 17			237240	2008 <i>WM</i> ₃₅		5 2.8 256°20	0°3/ 2.6 18		
4 1	14 54.09	-7 20.8	4.626	5.492	5.7	21.3	4 1	15 3.86	-15 54.5	1.981	2.846	12.1	20.8
4 11	14 50.44	-6 49.8	4.550	5.487	4.1	21.2	4 11	14 58.30	-15 38.7	1.901	2.839	8.7	20.6
4 21	14 46.11	-6 18.5	4.501	5.483	2.5	21.0	4 21	14 50.84	-15 15.6	1.845	2.831	4.9	20.3
5 1	14 41.41	-5 48.8	4.482	5.478	1.7	21.0	5 1	14 42.21	-14 47.5	1.817	2.824	0.8	20.0
5 11	14 36.66	-5 22.4	4.493	5.474	2.8	21.0	5 11	14 33.36	-14 18.1	1.816	2.817	3.6	20.2
5 21	14 32.19	-5 1.0	4.532	5.469	4.4	21.2	5 21	14 25.23	-13 51.3	1.843	2.809	7.6	20.4
5 31	14 28.27	-4 45.7	4.599	5.464	6.0	21.3	5 31	14 18.64	-13 31.0	1.895	2.801	11.3	20.6
6 10	14 25.17	-4 37.2	4.689	5.459	7.5	21.4	6 10	14 14.17	-13 20.3	1.968	2.793	14.5	20.8
286351	2001 <i>XW</i> ₁₂₅		5 2.8 164°30	0°0/ 2.8 17			43495	2001 <i>CJ</i> ₇		5 2.8 222°65	1°6/ 1.7 18		
4 1	15 1.05	-18 23.4	2.455	3.311	10.4	20.8	4 1	15 6.59	-13 1.2	1.959	2.824	12.2	19.8
4 11	14 55.89	-17 43.3	2.381	3.314	7.5	20.6	4 11	15 0.27	-12 28.5	1.875	2.814	8.8	19.6
4 21	14 49.31	-16 54.6	2.332	3.316	4.2	20.4	4 21	14 51.96	-11 49.6	1.816	2.803	4.9	19.3
5 1	14 41.91	-16 0.1	2.311	3.318	0.7	20.1	5 1	14 42.39	-11 8.1	1.785	2.791	1.6	19.1
5 11	14 34.46	-15 3.7	2.319	3.320	2.9	20.3	5 11	14 32.56	-10 28.3	1.783	2.778	4.4	19.3
5 21	14 27.64	-14 9.7	2.356	3.321	6.3	20.6	5 21	14 23.47	-9 54.8	1.808	2.765	8.4	19.5
5 31	14 22.07	-13 22.1	2.420	3.323	9.3	20.7	5 31	14 15.98	-9 31.5	1.858	2.751	12.2	19.7
6 10	14 18.19	-12 44.0	2.507	3.324	12.0	20.9	6 10	14 10.68	-9 21.0	1.929	2.736	15.4	19.9
174652	2003 <i>SJ</i> ₁₉₀		5 2.8 215°87	2°6/ 1.3 18			176379	2001 <i>TP</i> ₂₄₀		5 2.8 185°61	1°9/ 4.5 17		
4 1	15 7.43	-10 2.1	1.754	2.626	13.1	20.2	4 1	15 4.07	-22 39.0	2.570	3.407	10.6	20.9
4 11	15 0.99	-9 39.0	1.679	2.620	9.4	19.9	4 11	14 58.12	-22 43.8	2.489	3.407	7.9	20.7
4 21	14 52.37	-9 13.0	1.628	2.614	5.4	19.7	4 21	14 50.61	-22 39.1	2.433	3.407	4.9	20.5
5 1	14 42.41	-8 47.9	1.604	2.608	2.6	19.5	5 1	14 42.17	-22 25.5	2.404	3.406	2.3	20.3
5 11	14 32.21	-8 27.8	1.608	2.601	5.2	19.6	5 11	14 33.57	-22 4.9	2.405	3.405	3.0	20.4
5 21	14 22.86	-8 16.7	1.638	2.593	9.3	19.9	5 21	14 25.57	-21 40.3	2.435	3.403	5.9	20.6
5 31	14 15.30	-8 17.4	1.693	2.585	13.2	20.1	5 31	14 18.85	-21 15.3	2.492	3.401	8.8	20.7
6 10	14 10.15	-8 31.3	1.768	2.577	16.5	20.3	6 10	14 13.89	-20 53.4	2.572	3.399	11.4	20.9
71433	2000 <i>AE</i> ₂₀₃		5 2.8 73°09	5°2/ 7.4 18			212702	2007 <i>QQ</i> ₁₁		5 2.8 194°98	1°1/ 2.1 16		
4 1	15 3.82	-32 52.1	1.996	2.806	14.2	18.0	4 1	15 6.79	-14 59.1	1.847	2.712	12.8	22.1
4 11	14 58.34	-32 44.4	1.923	2.813	11.4	17.9	4 11	15 0.44	-14 22.1	1.772	2.710	9.2	21.8
4 21	14 50.83	-32 16.2	1.871	2.819	8.3	17.7	4 21	14 52.04	-13 36.9	1.721	2.707	5.1	21.6
5 1	14 42.15	-31 27.3	1.845	2.826	5.8	17.5	5 1	14 42.40	-12 47.1	1.697	2.704	1.2	21.3
5 11	14 33.41	-30 21.1	1.846	2.833	5.4	17.5	5 11	14 32.59	-11 57.6	1.702	2.700	4.2	21.5
5 21	14 25.61	-29 3.2	1.873	2.839	7.5	17.7	5 21	14 23.64	-11 13.8	1.734	2.695	8.4	21.7
5 31	14 19.60	-27 41.3	1.926	2.846	10.4	17.9	5 31	14 16.43	-10 40.2	1.791	2.689	12.3	21.9
6 10	14 15.90	-26 22.6	2.002	2.853	13.3	18.1	6 10	14 11.52	-10 19.8	1.869	2.683	15.6	22.2
231497	2008 <i>QU</i> ₃₃		5 2.8 268°10	1°7/ 1.6 18			184986	2006 <i>DW</i> ₁₄₃		5 2.8 214°12	0°3/ 3.4 18		
4 1	15 3.06	-13 14.7	1.877	2.750	12.3	20.7	4 1	14 54.89	-18 24.6	4.822	5.667	5.8	21.2
4 11	14 57.81	-12 35.5	1.794	2.737	8.8	20.5	4 11	14 51.03	-18 11.8	4.737	5.664	4.2	21.1
4 21	14 50.59	-11 49.6	1.736	2.724	4.9	20.2	4 21	14 46.47	-17 55.1	4.679	5.661	2.4	21.0
5 1	14 42.16	-11 0.7	1.705	2.711	1.7	19.9	5 1	14 41.52	-17 35.5	4.651	5.657	0.6	20.8
5 11	14 33.47	-10 13.9	1.702	2.698	4.5	20.1	5 11	14 36.51	-17 14.5	4.653	5.654	1.5	20.9
5 21	14 25.50	-9 34.1	1.725	2.684	8.6	20.3	5 21	14 31.77	-16 53.4	4.685	5.650	3.4	21.0
5 31	14 19.11	-9 5.8	1.772	2.671	12.4	20.5	5 31	14 27.61	-16 33.9	4.745	5.646	5.1	21.2
6 10	14 14.88	-8 51.4	1.840	2.657	15.7	20.7	6 10	14 24.26	-16 17.4	4.830	5.643	6.7	21.3
69781	1998 <i>QL</i> ₅₉		5 2.8 350°90	4°7/ 5.1 18			133710	2003 <i>UJ</i> ₂₄₇		5 2.8 173°81			

EPHEMERIDES

5 2.8

5 2.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
110060	2001 <i>SM</i> ₁₀₇		5 2.8 237°02	3°0/ 4.9 18			338593	2003 <i>SH</i> ₁₅₀		5 2.8 216°96	0°3/ 2.6 18		
4 1	15 7.17	-25 4.3	2.122	2.955	12.7	19.9	4 1	15 5.03	-15 32.8	2.438	3.293	10.5	21.5
4 11	15 0.79	-25 12.3	2.028	2.941	9.7	19.7	4 11	14 58.87	-15 22.8	2.351	3.284	7.5	21.3
4 21	14 52.31	-25 7.1	1.957	2.927	6.4	19.5	4 21	14 51.08	-15 7.1	2.291	3.275	4.2	21.1
5 1	14 42.47	-24 48.5	1.914	2.912	3.4	19.3	5 1	14 42.29	-14 47.4	2.259	3.266	0.7	20.8
5 11	14 32.26	-24 18.2	1.899	2.896	3.9	19.3	5 11	14 33.30	-14 26.3	2.257	3.256	3.1	20.9
5 21	14 22.72	-23 40.2	1.912	2.880	7.2	19.4	5 21	14 24.89	-14 7.0	2.283	3.246	6.6	21.1
5 31	14 14.77	-22 59.8	1.951	2.863	10.7	19.6	5 31	14 17.76	-13 52.3	2.336	3.235	9.8	21.3
6 10	14 9.08	-22 22.4	2.012	2.846	13.9	19.8	6 10	14 12.44	-13 45.0	2.412	3.223	12.6	21.5
37210	2000 <i>WW</i> ₁₁₃		5 2.8 210°80	3°6/ 6.1 18			320580	2008 <i>AZ</i> ₁₂₈		5 2.8 9°24	4°2/ 5.4 17		
4 1	15 5.24	-29 9.4	2.358	3.173	12.1	19.8	4 1	15 4.02	-26 21.3	1.312	2.172	17.3	20.2
4 11	14 59.17	-28 58.1	2.268	3.167	9.5	19.6	4 11	14 59.26	-26 24.6	1.246	2.173	13.3	19.9
4 21	14 51.28	-28 31.0	2.201	3.160	6.6	19.4	4 21	14 51.70	-26 6.8	1.200	2.174	8.8	19.7
5 1	14 42.29	-27 48.1	2.162	3.152	4.1	19.2	5 1	14 42.40	-25 28.0	1.178	2.176	4.9	19.5
5 11	14 33.11	-26 52.1	2.151	3.144	4.1	19.2	5 11	14 32.87	-24 32.5	1.179	2.178	5.2	19.5
5 21	14 24.64	-25 47.6	2.168	3.135	6.6	19.4	5 21	14 24.56	-23 28.1	1.204	2.182	9.3	19.7
5 31	14 17.67	-24 40.3	2.212	3.125	9.6	19.5	5 31	14 18.65	-22 24.0	1.252	2.185	13.8	20.0
6 10	14 12.72	-23 36.2	2.280	3.115	12.4	19.7	6 10	14 15.82	-21 28.5	1.319	2.190	17.7	20.2
378746	2008 <i>RR</i> ₆₉		5 2.8 148°17	0°7/ 2.3 17			386570	2009 <i>DG</i> ₁₂₉		5 2.8 339°28	1°9/ 4.2 17		
4 1	15 3.29	-15 57.0	2.072	2.936	11.7	21.5	4 1	15 2.62	-21 28.2	1.913	2.769	12.8	20.7
4 11	14 57.69	-15 17.2	2.004	2.941	8.3	21.3	4 11	14 57.54	-21 30.3	1.835	2.764	9.5	20.5
4 21	14 50.40	-14 29.7	1.960	2.947	4.6	21.1	4 21	14 50.49	-21 21.1	1.780	2.759	5.8	20.2
5 1	14 42.14	-13 37.8	1.944	2.951	0.9	20.8	5 1	14 42.21	-21 1.6	1.751	2.755	2.3	20.0
5 11	14 33.83	-12 46.0	1.957	2.956	3.6	21.1	5 11	14 33.70	-20 34.6	1.749	2.750	3.5	20.0
5 21	14 26.29	-11 59.1	1.997	2.960	7.4	21.3	5 21	14 25.94	-20 4.3	1.774	2.747	7.3	20.3
5 31	14 20.26	-11 21.2	2.063	2.964	10.8	21.5	5 31	14 19.81	-19 35.4	1.824	2.743	11.0	20.5
6 10	14 16.20	-10 55.1	2.151	2.967	13.7	21.7	6 10	14 15.88	-19 12.5	1.895	2.740	14.2	20.7
390087	2012 <i>UC</i> ₁₅₂		5 2.8 141°75	1°7/ 1.4 17			502715	2015 <i>DF</i> ₂₅		5 2.8 191°06	2°1/ 1.2 17		
4 1	15 3.67	-10 29.8	2.458	3.322	10.1	21.6	4 1	15 4.02	-11 14.7	2.030	2.901	11.6	22.3
4 11	14 57.72	-10 13.8	2.392	3.329	7.2	21.4	4 11	14 58.28	-10 39.3	1.959	2.900	8.3	22.0
4 21	14 50.33	-9 55.8	2.351	3.337	4.0	21.2	4 21	14 50.78	-9 59.9	1.913	2.899	4.7	21.8
5 1	14 42.13	-9 38.3	2.339	3.343	1.8	21.1	5 1	14 42.25	-9 20.3	1.894	2.898	2.1	21.6
5 11	14 33.88	-9 24.1	2.357	3.350	3.8	21.2	5 11	14 33.59	-8 44.8	1.903	2.896	4.5	21.8
5 21	14 26.27	-9 15.5	2.403	3.356	6.9	21.4	5 21	14 25.67	-8 17.3	1.940	2.894	8.2	22.0
5 31	14 19.93	-9 14.7	2.474	3.362	9.8	21.6	5 31	14 19.26	-8 0.8	2.001	2.891	11.6	22.2
6 10	14 15.28	-9 22.7	2.569	3.367	12.2	21.8	6 10	14 14.86	-7 57.2	2.084	2.889	14.5	22.4
425728	2011 <i>BN</i> ₇₆		5 2.8 309°65	1°6/ 1.7 17			30893	1993 <i>FD</i> ₁₉		5 2.8 10°34	6°3/ 29.3 18		
4 1	15 1.85	-14 20.0	1.547	2.429	13.9	20.9	4 1	15 3.49	-5 31.5	1.150	2.049	16.3	17.7
4 11	14 57.33	-13 36.4	1.466	2.413	10.0	20.6	4 11	14 58.77	-4 22.4	1.098	2.050	12.0	17.5
4 21	14 50.50	-12 43.3	1.407	2.396	5.6	20.3	4 21	14 51.35	-3 14.0	1.067	2.051	7.9	17.3
5 1	14 42.19	-11 45.1	1.374	2.380	1.7	20.0	5 1	14 42.35	-2 15.4	1.059	2.053	6.3	17.2
5 11	14 33.55	-10 48.2	1.367	2.365	5.0	20.2	5 11	14 33.23	-1 35.3	1.073	2.055	9.2	17.3
5 21	14 25.72	-9 59.2	1.384	2.349	9.7	20.4	5 21	14 25.37	-1 19.0	1.110	2.058	13.5	17.6
5 31	14 19.73	-9 23.6	1.425	2.334	14.1	20.6	5 31	14 19.87	-1 28.3	1.167	2.062	17.7	17.8
6 10	14 16.27	-9 5.1	1.485	2.320	17.9	20.8	6 10	14 17.33	-2 1.3	1.240	2.066	21.3	18.1
478130	2011 <i>US</i> ₁₂₀		5 2.8 247°67	0°3/ 3.1 16			353542	2011 <i>SF</i> ₁₇₅		5 2.8 124°68	0°4/ 3.3 18		
4 1	15 1.75	-18 8.8	2.433	3.288	10.5	22.1	4 1	15 2.56	-18 10.8	2.688	3.538	9.8	21.7
4 11	14 56.53	-17 45.9	2.346	3.278	7.6	21.9	4 11	14 56.87	-17 59.6	2.620	3.550	7.0	21.6
4 21	14 49.77	-17 14.8	2.284	3.267	4.3	21.6	4 21	14 49.85	-17 41.8	2.579	3.561	4.0	21.4
5 1	14 42.06	-16 37.6	2.250	3.257	0.8	21.4	5 1	14 42.10	-17 18.8	2.566	3.572	0.9	21.2
5 11	14 34.18	-15 57.6	2.245	3.246	2.9	21.5	5 11	14 34.30	-16 53.4	2.582	3.583	2.6	21.3
5 21	14 26.86	-15 18.4	2.268	3.235	6.4	21.7	5 21	14 27.11	-16 28.3	2.628	3.594	5.6	21.5
5 31	14 20.79	-14 44.0	2.318	3.223	9.6	21.9	5 31	14 21.11	-16 6.5	2.700	3.604	8.4	21.7
6 10	14 16.45	-14 17.4	2.390	3.212	12.4	22.1	6 10	14 16.70	-15 50.5	2.796	3.614	10.9	21.9
303320	2004 <i>TF</i> ₈₀		5 2.8 353°19	5°6/ 5.3 17			497536	2006 <i>CF</i> ₂		5 2.8 125°47	1°7/ 1.6 17		
4 1	15 7.08	-25 49.1	1.168	2.033	18.7	20.1	4 1	15 4.13	-12 17.4	1.866	2.739	12.4	21.7
4 11	15 1.92	-26 38.2	1.102	2.030	14.5	19.9	4 11	14 58.47	-11 49.6	1.800	2.742	8.8	21.5
4 21	14 53.42	-27 8.5	1.055	2.027	10.0	19.6	4 21	14 50.92	-11 17.1	1.758	2.745	4.9	21.2
5 1	14 42.68	-27 16.9	1.029	2.025	6.1	19.4	5 1	14 42.28	-10 43.4	1.742	2.748	1.8	21.0
5 11	14 31.43	-27 4.3	1.027	2.024	6.5	19.4	5 11	14 33.53	-10 13.0	1.755	2.751	4.4	21.2
5 21	14 21.47	-26 36.1	1.048	2.023	10.6	19.6	5 21	14 25.61	-9 49.8	1.794	2.753	8.3	21.4
5 31	14 14.30	-26 1.3	1.089	2.023	15.3	19.9	5 31	14 19.33	-9 37.0	1.858	2.756	11.9	21.7
6 10	14 10.75	-25 28.9	1.149	2.024	19.4	20.1	6 10	14 15.20	-9 36.4	1.942	2.758	15.0	21.9
23254	Chikatoshi		5 2.8 153°84	0°1/ 2.8 18			513119	2017 <i>WK</i> ₂₇		5 2.8 244°59	2°2/ 1.4 17		
4 1	15 5.08	-16 23.3	2.192	3.050	11.4	18.7	4 1	15 6.66	-9 33.5	2.216	3.079	11.0	22.0
4 11	14 58.92	-16 8.8	2.122	3.056	8.2	18.5	4 11	15 0.21	-9 21.3	2.126	3.063	8.0	21.7
4 21	14 51.08	-15 47.4	2.077	3.062	4.6	18.3	4 21	14 51.92	-9 7.5	2.061	3.046	4.6	21.5
5 1	14 42.27	-15 21.3	2.060	3.067	0.7	18.0	5 1	14 42.45	-8 54.7	2.025	3.028	2.2	21.3
5 11	14 33.36	-14 53.6	2.072	3.072	3.2	18.2	5 11	14 32.68	-8 45.8	2.018	3.010	4.4	21.4
5 21	14 25.20	-14 27.8	2.112	3.077	6.9	18.5	5 21	14 23.49	-8 43.6	2.039	2.992	8.0	21.6
5 31	14 18.51	-14 7.6	2.178	3.081	10.2	18.7	5 31	14 15.70	-8 50.3	2.087	2.972	11.4	21.8
6 10	14 13.78	-13 55.6	2.267	3.084	13.1	18.9	6 10	14 9.86	-9 7.2	2.156	2.953	14.3	21.9
462108	2007 <i>RC</i> ₂₄		5 2.8 204°20	1°4/ 1.8 16			232782	2004 <i>PT</i> ₁₁₁		5 2.9 190°49	1°4/ 1.5 18		
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EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
437120	2012 <i>UW</i> ₁₃₅		5 2.9 132°07'	4.9/27.9	17		366066	2012 <i>CV</i> ₃₅		5 2.9 237°09'	3.9/29.9	16	
4 1	15 1.47	-0 14.3	2.604	3.470	9.5	21.6	4 1	15 5.97	-7 50.9	1.854	2.727	12.4	22.0
4 11	14 56.02	+0 44.9	2.553	3.483	7.2	21.5	4 11	14 59.95	-6 52.9	1.771	2.712	9.0	21.7
4 21	14 49.35	+1 39.8	2.529	3.495	5.4	21.4	4 21	14 51.87	-5 51.7	1.714	2.697	5.6	21.5
5 1	14 42.02	+2 26.1	2.533	3.506	5.0	21.4	5 1	14 42.50	-4 52.8	1.683	2.680	3.9	21.3
5 11	14 34.71	+3 0.1	2.565	3.517	6.4	21.5	5 11	14 32.83	-4 2.4	1.681	2.663	6.3	21.4
5 21	14 28.02	+3 19.7	2.624	3.528	8.6	21.6	5 21	14 23.90	-3 25.3	1.705	2.646	10.1	21.6
5 31	14 22.48	+3 23.9	2.707	3.539	10.7	21.8	5 31	14 16.59	-3 5.1	1.752	2.627	13.7	21.8
6 10	14 18.45	+3 13.4	2.810	3.548	12.7	21.9	6 10	14 11.52	-3 3.0	1.820	2.608	16.9	22.0
362006	2008 <i>UR</i> ₃₆₉		5 2.9 151°85'	2.6/4.6	16		22319	1991 <i>PX</i> ₆		5 2.9 308°97'	0.0/2.7	18 R	
4 1	15 8.92	-23 47.0	1.624	2.473	15.1	21.9	4 1	15 4.21	-16 51.5	1.346	2.227	15.6	18.4
4 11	15 2.27	-23 39.8	1.556	2.480	11.4	21.6	4 11	14 59.50	-16 40.9	1.262	2.207	11.5	18.1
4 21	14 53.19	-23 16.4	1.510	2.486	7.1	21.4	4 21	14 51.98	-16 19.2	1.199	2.187	6.5	17.8
5 1	14 42.66	-22 37.8	1.490	2.492	3.2	21.2	5 1	14 42.55	-15 48.7	1.160	2.167	1.1	17.4
5 11	14 31.99	-21 48.1	1.497	2.497	4.1	21.2	5 11	14 32.54	-15 14.3	1.146	2.148	4.6	17.6
5 21	14 22.44	-20 53.6	1.530	2.502	8.3	21.5	5 21	14 23.40	-14 42.0	1.156	2.129	10.2	17.8
5 31	14 15.01	-20 1.4	1.588	2.506	12.4	21.7	5 31	14 16.44	-14 18.1	1.188	2.111	15.2	18.0
6 10	14 10.32	-19 17.7	1.667	2.509	15.9	22.0	6 10	14 12.49	-14 7.6	1.238	2.094	19.5	18.3
476642	2008 <i>SW</i> ₂₅₇		5 2.9 109°75'	1.7/4.7	18		474431	2003 <i>FT</i> ₁₃₀		5 2.9 359°85'	5.3/4.7	16	
4 1	15 0.67	-23 9.6	3.447	4.276	8.3	21.7	4 1	15 12.10	-24 55.7	1.729	2.566	14.9	19.8
4 11	14 55.36	-23 14.4	3.375	4.289	6.2	21.6	4 11	15 4.90	-26 32.3	1.653	2.564	11.6	19.5
4 21	14 48.98	-23 11.9	3.330	4.301	3.9	21.4	4 21	14 54.92	-27 58.9	1.600	2.562	8.2	19.3
5 1	14 42.00	-23 2.7	3.314	4.313	1.9	21.3	5 1	14 43.01	-29 10.7	1.573	2.562	5.6	19.2
5 11	14 34.96	-22 48.3	3.327	4.326	2.3	21.4	5 11	14 30.50	-30 5.0	1.575	2.562	6.0	19.2
5 21	14 28.38	-22 30.6	3.370	4.337	4.5	21.5	5 21	14 18.80	-30 42.3	1.603	2.563	9.0	19.4
5 31	14 22.74	-22 12.1	3.441	4.349	6.7	21.7	5 31	14 9.17	-31 6.4	1.656	2.565	12.5	19.6
6 10	14 18.37	-21 55.4	3.537	4.361	8.7	21.8	6 10	14 2.47	-31 23.3	1.730	2.568	15.6	19.8
467507	2007 <i>CT</i> ₂₈		5 2.9 143°04'	0.4/3.2	17		292568	2006 <i>TT</i> ₇₆		5 2.9 99°70'	2.5/5.6	17	
4 1	15 5.90	-18 41.1	2.004	2.860	12.4	21.9	4 1	15 2.63	-27 13.1	2.573	3.396	11.0	20.7
4 11	14 59.63	-18 16.5	1.937	2.869	9.0	21.7	4 11	14 56.97	-26 38.9	2.509	3.416	8.3	20.5
4 21	14 51.54	-17 42.1	1.895	2.878	5.1	21.5	4 21	14 49.92	-25 51.3	2.470	3.436	5.5	20.4
5 1	14 42.41	-17 0.3	1.880	2.887	1.0	21.2	5 1	14 42.15	-24 52.0	2.459	3.455	2.9	20.2
5 11	14 33.22	-16 15.4	1.894	2.895	3.3	21.4	5 11	14 34.44	-23 44.8	2.476	3.474	3.1	20.3
5 21	14 24.90	-15 32.0	1.935	2.902	7.2	21.7	5 21	14 27.49	-22 34.2	2.524	3.493	5.6	20.5
5 31	14 18.22	-14 54.6	2.003	2.909	10.8	21.9	5 31	14 21.87	-21 25.4	2.598	3.511	8.4	20.7
6 10	14 13.68	-14 26.9	2.092	2.916	13.8	22.1	6 10	14 17.97	-20 22.7	2.697	3.529	10.8	20.9
19162	Wambsganss		5 2.9 213°37'	1.0/3.7	18		101294	1998 <i>SW</i> ₁₂₆		5 2.9 226°07'	3.4/29.6	18	
4 1	15 3.92	-20 15.9	2.085	2.939	12.1	18.4	4 1	15 2.37	-6 26.3	2.477	3.346	9.9	20.9
4 11	14 58.30	-19 56.3	2.005	2.935	8.8	18.1	4 11	14 56.90	-5 33.4	2.397	3.334	7.2	20.7
4 21	14 50.86	-19 25.9	1.949	2.931	5.2	17.9	4 21	14 49.98	-4 39.5	2.342	3.323	4.6	20.6
5 1	14 42.31	-18 46.7	1.921	2.927	1.5	17.6	5 1	14 42.18	-3 48.8	2.317	3.310	3.5	20.5
5 11	14 33.59	-18 2.2	1.921	2.922	3.2	17.8	5 11	14 34.23	-3 5.6	2.320	3.298	5.3	20.6
5 21	14 25.59	-17 17.0	1.948	2.917	7.0	18.0	5 21	14 26.83	-2 33.3	2.351	3.284	8.1	20.7
5 31	14 19.12	-16 36.0	2.001	2.912	10.6	18.2	5 31	14 20.61	-2 14.2	2.408	3.270	10.9	20.9
6 10	14 14.71	-16 3.2	2.077	2.907	13.7	18.4	6 10	14 16.03	-2 9.3	2.485	3.256	13.3	21.0
244774	2003 <i>SZ</i> ₁₄₆		5 2.9 248°96'	1.6/3.9	17		383634	2007 <i>RH</i> ₁₇₀		5 2.9 165°49'	2.8/30.3	17	
4 1	15 5.69	-22 10.7	1.692	2.547	14.3	20.0	4 1	15 2.17	-8 24.9	2.445	3.313	10.0	22.0
4 11	15 0.05	-21 42.7	1.605	2.535	10.6	19.7	4 11	14 56.68	-7 37.5	2.378	3.317	7.1	21.8
4 21	14 52.04	-20 58.8	1.541	2.522	6.4	19.4	4 21	14 49.81	-6 48.5	2.338	3.321	4.3	21.6
5 1	14 42.52	-20 0.8	1.503	2.508	2.2	19.1	5 1	14 42.15	-6 1.8	2.326	3.324	2.8	21.5
5 11	14 32.66	-18 53.6	1.492	2.494	3.8	19.2	5 11	14 34.44	-5 21.3	2.343	3.327	4.7	21.7
5 21	14 23.66	-17 43.9	1.508	2.480	8.4	19.4	5 21	14 27.35	-4 50.4	2.388	3.329	7.6	21.8
5 31	14 16.56	-16 39.3	1.548	2.465	12.7	19.7	5 31	14 21.50	-4 31.3	2.458	3.331	10.3	22.0
6 10	14 12.02	-15 46.1	1.610	2.450	16.5	19.9	6 10	14 17.29	-4 24.9	2.551	3.333	12.7	22.2
355171	2006 <i>WQ</i> ₁₁		5 2.9 218°53'	1.5/4.4	18		381508	2008 <i>SA</i> ₁₅₂		5 2.9 226°55'	1.5/1.8	18	
4 1	15 2.48	-22 36.7	2.831	3.667	9.8	21.8	4 1	15 5.97	-11 38.3	2.200	3.063	11.1	20.3
4 11	14 56.92	-22 23.3	2.739	3.658	7.3	21.6	4 11	14 59.69	-11 28.6	2.117	3.054	8.0	20.1
4 21	14 49.97	-22 0.4	2.674	3.649	4.5	21.4	4 21	14 51.63	-11 15.8	2.060	3.045	4.5	19.9
5 1	14 42.17	-21 29.1	2.636	3.639	1.9	21.2	5 1	14 42.46	-11 2.3	2.030	3.036	1.5	19.6
5 11	14 34.21	-20 51.8	2.629	3.629	2.6	21.3	5 11	14 33.06	-10 50.9	2.030	3.026	3.9	19.8
5 21	14 26.77	-20 11.6	2.650	3.618	5.5	21.5	5 21	14 24.30	-10 44.4	2.058	3.015	7.6	20.0
5 31	14 20.44	-19 32.2	2.699	3.607	8.3	21.6	5 31	14 16.95	-10 45.4	2.111	3.004	10.9	20.2
6 10	14 15.69	-18 57.1	2.772	3.596	10.8	21.8	6 10	14 11.56	-10 55.5	2.187	2.993	13.9	20.4
52751	1998 <i>KR</i> ₃₇		5 2.9 297°53'	7.1/27.9	18		400297	2007 <i>TQ</i> ₁₂₄		5 2.9 213°74'	0.4/2.3	17	
4 1	15 5.31	+6 43.5	2.233	3.087	11.4	17.9	4 1	14 57.54	-14 40.8	4.299	5.151	6.4	22.7
4 11	14 59.04	+7 7.6	2.170	3.082	9.2	17.7	4 11	14 53.00	-14 22.2	4.210	5.142	4.5	22.6
4 21	14 51.16	+7 21.0	2.130	3.078	7.5	17.6	4 21	14 47.64	-14 0.5	4.148	5.133	2.5	22.4
5 1	14 42.36	+7 19.1	2.118	3.073	7.2	17.6	5 1	14 41.81	-13 37.0	4.117	5.124	0.5	22.2
5 11	14 33.46	+6 59.4	2.132	3.069	8.5	17.7	5 11	14 35.90	-13 13.5	4.117	5.115	1.9	22.4
5 21	14 25.28	+6 21.2	2.172	3.064	10.6	17.8	5 21	14 30.29	-12 51.6	4.146	5.105	4.0	22.5
5 31	14 18.49	+5 25.5	2.236	3.060	13.0	17.9	5 31	14 25.34	-12 33.0	4.204	5.094	6.0	22.6
6 10	14 13.56	+4 14.9	2.320	3.056	15.1	18.1	6 10	14 21.32	-12 19.2	4.286	5.084	7.7	22.7
521326	2015 <i>KB</i> ₁₇₂		5 2.9 304°08'	5.4/6.9	16		253690	2003 <					

EPHEMERIDES

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
340410	2006 <i>EV</i> ₇₂		5 2.9 343°86	0°2/ 3.0 17			205512	2001 <i>RN</i> ₁₄₉		5 2.9 228°66	0°4/ 3.2 18		
4 1	15 1.95	-17 13.9	1.474	2.354	14.6	20.5	4 1	15 2.59	-18 32.7	2.371	3.225	10.8	21.0
4 11	14 57.51	-17 5.7	1.401	2.345	10.6	20.3	4 11	14 57.20	-18 11.3	2.287	3.218	7.8	20.8
4 21	14 50.67	-16 47.3	1.349	2.337	6.0	20.0	4 21	14 50.22	-17 41.5	2.228	3.211	4.5	20.6
5 1	14 42.32	-16 21.2	1.322	2.329	1.1	19.6	5 1	14 42.28	-17 5.1	2.197	3.203	0.9	20.3
5 11	14 33.67	-15 51.9	1.321	2.323	4.1	19.8	5 11	14 34.16	-16 25.5	2.194	3.196	2.9	20.4
5 21	14 25.93	-15 24.4	1.344	2.318	9.0	20.1	5 21	14 26.66	-15 46.5	2.221	3.187	6.4	20.6
5 31	14 20.16	-15 4.1	1.390	2.313	13.4	20.3	5 31	14 20.45	-15 11.9	2.273	3.179	9.7	20.8
6 10	14 17.02	-14 54.9	1.455	2.309	17.2	20.5	6 10	14 16.03	-14 45.2	2.348	3.171	12.5	21.0
166125	2002 <i>CT</i> ₂₂₇		5 2.9 15°24	3°0/ 4.8 18			172000	2001 <i>UO</i> ₂₂		5 2.9 254°32	2°1/ 4.8 18		
4 1	15 4.46	-24 41.8	1.299	2.165	17.1	19.5	4 1	15 2.32	-24 21.8	2.281	3.121	11.7	19.9
4 11	14 59.56	-24 23.4	1.234	2.166	12.9	19.2	4 11	14 57.13	-24 0.9	2.193	3.112	8.8	19.7
4 21	14 51.88	-23 44.1	1.189	2.167	8.2	18.9	4 21	14 50.23	-23 26.8	2.128	3.102	5.6	19.4
5 1	14 42.52	-22 45.5	1.167	2.169	3.7	18.7	5 1	14 42.28	-22 40.8	2.091	3.092	2.6	19.2
5 11	14 32.96	-21 33.7	1.170	2.171	4.6	18.7	5 11	14 34.15	-21 46.2	2.082	3.082	3.2	19.3
5 21	14 24.65	-20 17.4	1.197	2.174	9.4	19.0	5 21	14 26.66	-20 47.6	2.101	3.072	6.5	19.4
5 31	14 18.73	-19 6.2	1.246	2.177	14.0	19.3	5 31	14 20.57	-19 50.2	2.147	3.062	9.8	19.6
6 10	14 15.84	-18 7.8	1.315	2.180	18.0	19.5	6 10	14 16.39	-18 59.1	2.215	3.052	12.7	19.8
4722	Agelaos		5 2.9 205°88	0°8/ 1.7 18			507193	2010 <i>RF</i> ₁₅₄		5 2.9 286°97	3°9/ 4.9 17		
4 1	14 55.00	-11 58.7	4.888	5.746	5.5	17.7	4 1	15 6.80	-25 1.2	1.495	2.348	16.0	21.7
4 11	14 51.12	-11 43.8	4.808	5.744	3.9	17.6	4 11	15 1.40	-25 15.1	1.402	2.326	12.3	21.4
4 21	14 46.57	-11 27.4	4.755	5.741	2.2	17.4	4 21	14 53.12	-25 11.9	1.331	2.304	8.2	21.1
5 1	14 41.66	-11 10.6	4.733	5.738	0.8	17.3	5 1	14 42.80	-24 50.4	1.283	2.282	4.4	20.8
5 11	14 36.69	-10 54.9	4.740	5.735	1.9	17.4	5 11	14 31.81	-24 12.7	1.261	2.260	5.0	20.8
5 21	14 31.97	-10 41.7	4.777	5.732	3.7	17.5	5 21	14 21.63	-23 24.0	1.264	2.238	9.4	21.0
5 31	14 27.81	-10 32.0	4.842	5.728	5.4	17.7	5 31	14 13.61	-22 32.5	1.290	2.215	14.0	21.2
6 10	14 24.43	-10 26.9	4.932	5.725	6.8	17.8	6 10	14 8.65	-21 46.3	1.335	2.193	18.2	21.4
118399	1999 <i>RM</i> ₆₁		5 2.9 237°59	8°7/ 10.4 18			72049	2000 <i>YH</i> ₇		5 2.9 161°47	3°3/ 5.0 17		
4 1	15 9.13	-44 34.9	2.598	3.316	13.6	20.0	4 1	15 7.58	-25 7.5	1.657	2.502	15.0	19.8
4 11	15 2.40	-45 31.3	2.509	3.309	12.0	19.8	4 11	15 1.39	-25 7.2	1.585	2.505	11.4	19.6
4 21	14 53.36	-46 7.9	2.440	3.303	10.4	19.7	4 21	14 52.78	-24 50.2	1.535	2.508	7.4	19.4
5 1	14 42.77	-46 20.9	2.394	3.297	9.1	19.6	5 1	14 42.70	-24 16.9	1.511	2.510	3.8	19.1
5 11	14 31.75	-46 9.1	2.373	3.290	8.7	19.6	5 11	14 32.42	-23 30.7	1.513	2.512	4.4	19.2
5 21	14 21.43	-45 34.7	2.377	3.283	9.3	19.6	5 21	14 23.18	-22 37.5	1.541	2.514	8.2	19.4
5 31	14 12.86	-44 42.7	2.405	3.276	10.6	19.7	5 31	14 15.99	-21 44.5	1.594	2.515	12.2	19.6
6 10	14 6.76	-43 40.1	2.456	3.269	12.3	19.8	6 10	14 11.50	-20 58.3	1.669	2.516	15.7	19.9
118354	1999 <i>CY</i> ₁₄₉		5 2.9 46°55	5°9/ 28.4 18			382952	2004 <i>VA</i> ₁₃		5 2.9 260°25	5°0/ 29.1 18		
4 1	15 2.17	- 4 20.4	1.592	2.479	13.3	19.3	4 1	15 6.05	- 1 47.8	2.190	3.056	11.1	21.1
4 11	14 57.23	- 2 55.4	1.538	2.482	9.9	19.1	4 11	14 59.84	- 1 9.2	2.100	3.031	8.4	20.9
4 21	14 50.31	- 1 31.6	1.508	2.486	6.8	18.9	4 21	14 51.79	- 0 33.5	2.034	3.007	5.9	20.7
5 1	14 42.26	- 0 17.0	1.503	2.490	6.0	18.8	5 1	14 42.56	- 0 5.4	1.997	2.981	5.1	20.6
5 11	14 34.16	+ 0 41.1	1.524	2.494	8.3	19.0	5 11	14 33.00	+ 0 10.9	1.987	2.955	6.9	20.7
5 21	14 27.01	+ 1 18.0	1.570	2.499	11.6	19.2	5 21	14 23.99	+ 0 12.3	2.005	2.928	9.8	20.8
5 31	14 21.64	+ 1 31.6	1.637	2.503	15.0	19.4	5 31	14 16.32	+ 0 2.4	2.047	2.900	12.9	20.9
6 10	14 18.53	+ 1 23.0	1.722	2.508	17.8	19.6	6 10	14 10.59	- 0 33.2	2.110	2.872	15.6	21.1
428791	2008 <i>SS</i> ₂₈₇		5 2.9 236°90	1°8/ 1.5 17			405407	2004 <i>RJ</i> ₂₃		5 2.9 228°66	1°2/ 2.1 17		
4 1	15 4.14	-11 47.9	2.194	3.061	11.0	21.4	4 1	15 7.76	-14 41.1	1.844	2.708	12.9	22.4
4 11	14 58.39	-11 17.4	2.109	3.049	7.9	21.2	4 11	15 1.35	-14 6.3	1.758	2.695	9.3	22.1
4 21	14 50.92	-10 42.5	2.050	3.036	4.5	21.0	4 21	14 52.74	-13 23.0	1.695	2.681	5.2	21.8
5 1	14 42.37	-10 6.4	2.019	3.023	1.8	20.7	5 1	14 42.73	-12 34.8	1.660	2.666	1.3	21.5
5 11	14 33.60	- 9 33.0	2.016	3.010	4.2	20.9	5 11	14 32.39	-11 46.4	1.653	2.651	4.3	21.7
5 21	14 25.45	- 9 6.1	2.041	2.996	7.8	21.1	5 21	14 22.80	-11 3.1	1.674	2.634	8.7	21.9
5 31	14 18.67	- 8 48.8	2.091	2.982	11.2	21.3	5 31	14 14.94	-10 30.0	1.719	2.616	12.8	22.1
6 10	14 13.80	- 8 43.2	2.164	2.967	14.1	21.4	6 10	14 9.45	-10 10.3	1.785	2.598	16.2	22.3
378335	2007 <i>HS</i> ₉		5 2.9 57°10	1°0/ 2.2 17			98949	2001 <i>CM</i> ₂₇		5 2.9 140°56	3°8/ 30.2 18		
4 1	15 3.50	-15 8.0	1.719	2.592	13.2	21.0	4 1	15 5.07	- 5 24.8	2.101	2.971	11.3	19.4
4 11	14 58.19	-14 32.1	1.652	2.594	9.4	20.8	4 11	14 58.94	- 4 54.4	2.040	2.978	8.2	19.2
4 21	14 50.87	-13 48.1	1.609	2.596	5.2	20.5	4 21	14 51.16	- 4 25.4	2.004	2.984	5.2	19.0
5 1	14 42.36	-12 59.7	1.592	2.599	1.2	20.3	5 1	14 42.45	- 4 1.9	1.996	2.991	3.8	18.9
5 11	14 33.73	-12 12.2	1.602	2.601	4.2	20.5	5 11	14 33.70	- 3 47.3	2.016	2.997	5.6	19.1
5 21	14 26.01	-11 31.0	1.639	2.603	8.5	20.7	5 21	14 25.72	- 3 44.1	2.064	3.003	8.7	19.3
5 31	14 20.04	-11 0.5	1.699	2.606	12.4	21.0	5 31	14 19.21	- 3 53.8	2.136	3.008	11.7	19.5
6 10	14 16.35	-10 43.5	1.780	2.608	15.7	21.2	6 10	14 14.63	- 4 16.2	2.228	3.013	14.3	19.6
135292	2001 <i>SE</i> ₁₆₃		5 2.9 60°73	1°9/ 1.6 18			391683	2008 <i>AC</i> ₆₀		5 2.9 92°54	1°1/ 3.8 17		
4 1	15 7.24	-14 7.7	1.487	2.363	14.7	18.7	4 1	15 2.60	-20 43.6	2.299	3.149	11.2	21.7
4 11	15 0.60	-13 8.4	1.458	2.401	10.3	18.5	4 11	14 57.14	-20 24.0	2.234	3.162	8.2	21.5
4 21	14 51.99	-12 2.7	1.452	2.440	5.6	18.3	4 21	14 50.14	-19 54.6	2.194	3.174	4.8	21.3
5 1	14 42.50	-10 56.7	1.473	2.478	1.9	18.1	5 1	14 42.29	-19 17.5	2.182	3.187	1.5	21.1
5 11	14 33.35	- 9 57.1	1.520	2.516	4.9	18.4	5 11	14 34.41	-18 36.0	2.198	3.200	2.8	21.2
5 21	14 25.58	- 9 9.5	1.594	2.554	9.1	18.8	5 21	14 27.27	-17 54.2	2.243	3.212	6.2	21.5
5 31	14 19.89	- 8 37.2	1.691	2.591	12.8	19.1	5 31	14 21.52	-17 16.0	2.313	3.224	9.3	21.7
6 10	14 16.65	- 8 21.6	1.808	2.628	15.8	19.3	6 10	14 17.58	-16 45.1	2.407	3.237	12.0	21.9
235242	2003 <i>SL</i> ₃₀₂		5 2.9 118°97	3°1/ 5.5 17			437209	2012 <i>WH</i> ₁₁		5 2.9 257°68	2°9/ 30.9 1		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
499536	2010 RW ₈₈		5 2.9 244°59	2°0/ 4.3 17			175854	1999 UX ₄₃		5 2.9 152°69	2°6/ 4.6 18		
4 1	15 8.10	-22 36.2	1.964	2.807	13.1	23.0	4 1	15 8.39	-23 10.3	1.753	2.600	14.3	20.5
4 11	15 1.68	-22 28.1	1.866	2.788	9.9	22.7	4 11	15 1.85	-23 17.2	1.682	2.605	10.7	20.3
4 21	14 52.99	-22 6.7	1.791	2.768	6.1	22.5	4 21	14 53.02	-23 10.2	1.634	2.609	6.7	20.1
5 1	14 42.80	-21 32.4	1.744	2.747	2.5	22.2	5 1	14 42.79	-22 49.9	1.612	2.614	3.1	19.8
5 11	14 32.16	-20 48.3	1.725	2.725	3.6	22.2	5 11	14 32.37	-22 19.0	1.618	2.617	4.0	19.9
5 21	14 22.20	-19 59.0	1.734	2.703	7.7	22.4	5 21	14 22.94	-21 42.5	1.650	2.621	7.9	20.1
5 31	14 13.93	-19 10.6	1.768	2.679	11.7	22.6	5 31	14 15.46	-21 6.2	1.707	2.624	11.7	20.4
6 10	14 8.05	-18 28.9	1.825	2.655	15.2	22.8	6 10	14 10.55	-20 35.7	1.786	2.627	15.1	20.6
321364	2009 NP		5 2.9 271°29	1°1/ 3.7 17			106581	2000 WK ₁₀₀		5 2.9 200°90	3°1/ 5.1 18		
4 1	15 5.23	-20 37.0	1.745	2.604	13.8	20.9	4 1	15 7.08	-25 47.5	1.757	2.598	14.5	20.1
4 11	14 59.77	-20 12.6	1.650	2.583	10.2	20.6	4 11	15 0.98	-25 33.0	1.677	2.595	11.1	19.9
4 21	14 51.98	-19 34.3	1.579	2.561	6.0	20.3	4 21	14 52.57	-25 1.0	1.620	2.592	7.2	19.6
5 1	14 42.64	-18 43.7	1.534	2.540	1.7	20.0	5 1	14 42.72	-24 12.2	1.589	2.589	3.6	19.4
5 11	14 32.85	-17 45.3	1.516	2.517	3.7	20.1	5 11	14 32.65	-23 10.5	1.585	2.585	4.1	19.4
5 21	14 23.79	-16 45.1	1.524	2.495	8.4	20.3	5 21	14 23.53	-22 2.2	1.608	2.580	8.0	19.7
5 31	14 16.51	-15 50.1	1.557	2.472	12.8	20.5	5 31	14 16.35	-20 55.0	1.656	2.575	11.9	19.9
6 10	14 11.72	-15 6.0	1.611	2.449	16.6	20.7	6 10	14 11.75	-19 55.7	1.726	2.570	15.4	20.1
428259	2007 CA ₆		5 2.9 130°32	5°7/28.1 18			427768	2004 TR ₂₀₂		5 2.9 101°99	0°7/ 3.3 17		
4 1	15 5.45	+ 0 6.1	2.168	3.033	11.2	22.1	4 1	15 8.45	-16 52.1	1.917	2.774	12.8	20.8
4 11	14 59.05	+ 1 10.0	2.122	3.051	8.5	21.9	4 11	15 1.65	-17 12.4	1.850	2.782	9.3	20.6
4 21	14 51.14	+ 2 8.4	2.102	3.067	6.3	21.8	4 21	14 52.81	-17 26.1	1.807	2.790	5.3	20.3
5 1	14 42.45	+ 2 55.9	2.110	3.083	5.8	21.8	5 1	14 42.75	-17 33.7	1.792	2.798	1.2	20.1
5 11	14 33.82	+ 3 28.2	2.145	3.099	7.4	22.0	5 11	14 32.54	-17 37.2	1.805	2.806	3.4	20.3
5 21	14 26.02	+ 3 43.1	2.207	3.113	9.9	22.1	5 21	14 23.21	-17 39.2	1.846	2.814	7.4	20.5
5 31	14 19.68	+ 3 40.1	2.293	3.127	12.4	22.3	5 31	14 15.62	-17 43.0	1.913	2.822	11.1	20.8
6 10	14 15.20	+ 3 20.4	2.398	3.140	14.5	22.5	6 10	14 10.34	-17 51.5	2.001	2.829	14.2	21.0
285074	2011 KO ₂₈		5 2.9 318°55	1°7/ 1.8 17			389287	2009 HR ₉₆		5 2.9 323°25	1°5/ 1.7 17		
4 1	15 3.06	-12 28.4	1.652	2.532	13.3	20.1	4 1	15 1.33	-12 49.7	2.102	2.974	11.2	20.9
4 11	14 58.12	-12 8.6	1.573	2.519	9.6	19.8	4 11	14 56.42	-12 20.1	2.027	2.969	8.0	20.7
4 21	14 51.00	-11 43.6	1.518	2.506	5.4	19.5	4 21	14 49.84	-11 45.6	1.977	2.964	4.5	20.4
5 1	14 42.47	-11 16.7	1.488	2.493	1.8	19.3	5 1	14 42.28	-11 9.5	1.954	2.960	1.5	20.2
5 11	14 33.63	-10 52.5	1.484	2.481	4.7	19.4	5 11	14 34.56	-10 35.7	1.960	2.956	4.0	20.4
5 21	14 25.56	-10 35.4	1.505	2.470	9.2	19.7	5 21	14 27.52	-10 8.1	1.992	2.952	7.6	20.6
5 31	14 19.25	-10 29.0	1.551	2.458	13.3	19.9	5 31	14 21.85	-9 49.8	2.049	2.948	10.9	20.8
6 10	14 15.34	-10 35.6	1.615	2.448	16.8	20.1	6 10	14 18.07	-9 43.0	2.128	2.944	13.8	21.0
12307	1991 UA		5 2.9 217°32	0°5/ 3.6 18			497007	2003 AO ₂₂		5 2.9 81°00	1°6/ 3.9 18		
4 1	14 58.06	-19 7.7	4.033	4.875	7.0	19.9	4 1	15 8.07	-20 49.2	1.656	2.513	14.5	21.2
4 11	14 53.46	-18 52.7	3.942	4.867	5.0	19.7	4 11	15 1.43	-20 43.5	1.605	2.536	10.6	21.0
4 21	14 47.97	-18 32.5	3.878	4.858	2.9	19.6	4 21	14 52.65	-20 25.3	1.578	2.558	6.3	20.8
5 1	14 41.96	-18 8.4	3.844	4.850	0.8	19.4	5 1	14 42.71	-19 56.6	1.576	2.581	2.1	20.6
5 11	14 35.86	-17 41.9	3.840	4.840	1.8	19.5	5 11	14 32.84	-19 21.3	1.602	2.603	3.6	20.7
5 21	14 30.08	-17 15.0	3.865	4.831	4.0	19.6	5 21	14 24.15	-18 44.7	1.654	2.625	7.8	21.0
5 31	14 25.02	-16 49.9	3.919	4.821	6.1	19.8	5 31	14 17.48	-18 12.2	1.731	2.647	11.7	21.3
6 10	14 20.99	-16 28.4	3.999	4.811	8.0	19.9	6 10	14 13.33	-17 48.1	1.829	2.668	14.9	21.6
311388	2005 TW ₁₄		5 2.9 248°40	1°5/ 1.6 18			404612	2014 GB ₈		5 2.9 304°63	3°1/29.9 18		
4 1	15 4.15	-10 25.4	2.919	3.776	8.9	21.1	4 1	14 59.75	-9 3.1	2.218	3.094	10.5	21.0
4 11	14 58.11	-10 15.2	2.822	3.756	6.4	20.9	4 11	14 55.17	-7 58.5	2.147	3.091	7.5	20.8
4 21	14 50.70	-10 3.2	2.751	3.735	3.6	20.7	4 21	14 49.09	-6 51.0	2.102	3.087	4.5	20.6
5 1	14 42.41	-9 51.2	2.710	3.714	1.5	20.5	5 1	14 42.15	-5 45.2	2.085	3.083	3.1	20.5
5 11	14 33.89	-9 41.6	2.699	3.692	3.4	20.6	5 11	14 35.11	-4 46.4	2.095	3.079	5.2	20.6
5 21	14 25.78	-9 36.4	2.718	3.669	6.3	20.8	5 21	14 28.71	-3 58.9	2.133	3.076	8.3	20.8
5 31	14 18.67	-9 37.5	2.764	3.646	9.0	20.9	5 31	14 23.57	-3 25.8	2.196	3.072	11.3	20.9
6 10	14 13.04	-9 46.4	2.833	3.623	11.4	21.1	6 10	14 20.15	-3 8.3	2.279	3.069	13.9	21.1
305506	2008 EL ₁₁₆		5 2.9 111°82	1°3/ 1.7 18			119626	2001 WD ₉₁		5 2.9 127°51	0°6/ 3.2 18		
4 1	15 1.29	-13 4.3	2.521	3.386	9.8	21.7	4 1	15 7.59	-17 10.7	1.791	2.653	13.3	19.4
4 11	14 56.05	-12 31.4	2.458	3.396	7.0	21.5	4 11	15 1.18	-17 19.0	1.722	2.657	9.7	19.1
4 21	14 49.49	-11 54.3	2.420	3.406	3.8	21.3	4 21	14 52.61	-17 19.5	1.677	2.661	5.5	18.9
5 1	14 42.20	-11 16.1	2.411	3.416	1.3	21.2	5 1	14 42.74	-17 13.4	1.658	2.664	1.2	18.6
5 11	14 34.88	-10 40.0	2.431	3.426	3.4	21.3	5 11	14 32.69	-17 3.3	1.667	2.668	3.6	18.8
5 21	14 28.19	-10 9.3	2.479	3.436	6.5	21.5	5 21	14 23.54	-16 52.8	1.703	2.672	7.9	19.0
5 31	14 22.70	-9 46.7	2.553	3.446	9.3	21.7	5 31	14 16.21	-16 45.8	1.764	2.675	11.7	19.3
6 10	14 18.79	-9 33.8	2.650	3.455	11.7	21.9	6 10	14 11.29	-16 45.6	1.846	2.678	15.0	19.5
245233	2004 XF ₁₂₆		5 2.9 212°42	5°3/27.9 18			204162	2004 BX ₁₅		5 2.9 58°44	2°5/ 4.8 17		
4 1	15 4.15	+ 0 53.1	2.530	3.390	9.9	21.2	4 1	15 4.48	-23 40.6	1.902	2.749	13.3	19.9
4 11	14 58.14	+ 1 43.5	2.457	3.382	7.7	21.0	4 11	14 58.81	-23 42.7	1.840	2.762	10.0	19.7
4 21	14 50.70	+ 2 29.4	2.410	3.373	5.8	20.9	4 21	14 51.21	-23 31.6	1.802	2.776	6.3	19.5
5 1	14 42.41	+ 3 6.3	2.391	3.363	5.4	20.9	5 1	14 42.50	-23 8.3	1.789	2.790	3.0	19.3
5 11	14 33.98	+ 3 30.4	2.401	3.352	6.9	20.9	5 11	14 33.74	-22 35.8	1.804	2.804	3.7	19.4
5 21	14 26.12	+ 3 39.5	2.438	3.341	9.2	21.1	5 21	14 25.89	-21 58.8	1.846	2.818	7.1	19.6
5 31	14 19.46	+ 3 32.5	2.499	3.329	11.6	21.2	5 31	14 19.77	-21 22.5	1.913	2.832	10.5	19.8
6 10	14 14.43	+ 3 10.1	2.581	3.317	13.7	21.4	6 10	14 15.88	-20 51.5	2.002	2.847	13.6	20.1
351989	2006 UF ₁₇₉		5 2.9 152°43	2°1/30.9 18			382949	2004 UA ₅		5 2.9 224°68	5°3/ 7.6 18		
4 1	15 1.89	-9 27.3	2.670	3.535	9.3	21.4	4 1	15 6.					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
379638	2011 <i>DG</i> ₃₁		5 2.9 328°23	4.5/ 5.4	17		496209	2011 <i>SQ</i> ₂₆₉		5 2.9 212°66	2.4/30.5	17	
4 1	15 5.16	-26 1.8	1.531	2.382	15.8	20.5	4 1	15 0.91	-9 41.2	2.646	3.513	9.3	22.1
4 11	15 0.04	-26 29.7	1.452	2.373	12.2	20.2	4 11	14 55.82	-8 50.8	2.568	3.507	6.7	21.9
4 21	14 52.26	-26 41.1	1.394	2.363	8.3	20.0	4 21	14 49.41	-7 57.6	2.517	3.501	3.9	21.7
5 1	14 42.71	-26 34.6	1.359	2.355	5.0	19.7	5 1	14 42.24	-7 5.1	2.494	3.495	2.4	21.6
5 11	14 32.72	-26 11.9	1.350	2.346	5.3	19.7	5 11	14 34.96	-6 17.5	2.501	3.488	4.2	21.7
5 21	14 23.65	-25 37.5	1.365	2.339	8.9	19.9	5 21	14 28.21	-5 37.9	2.536	3.480	7.1	21.8
5 31	14 16.70	-24 58.6	1.404	2.332	13.0	20.1	5 31	14 22.56	-5 9.1	2.597	3.473	9.8	22.0
6 10	14 12.63	-24 22.4	1.463	2.325	16.7	20.4	6 10	14 18.42	-4 52.6	2.681	3.464	12.2	22.2
11515	Oshijyo		5 2.9 159°67	3.1/30.1	18 R		312194	2007 <i>VG</i> ₁₄₈		5 2.9 67°52	5.0/30.2	17	
4 1	15 1.53	-6 26.5	2.530	3.399	9.6	17.8	4 1	15 6.68	-5 17.2	1.423	2.308	14.7	20.3
4 11	14 56.24	-5 49.6	2.464	3.402	7.0	17.6	4 11	15 0.69	-4 39.2	1.371	2.316	10.8	20.1
4 21	14 49.62	-5 12.9	2.424	3.405	4.3	17.5	4 21	14 52.36	-4 3.4	1.341	2.324	6.9	19.9
5 1	14 42.25	-4 39.9	2.412	3.408	3.1	17.4	5 1	14 42.72	-3 35.8	1.336	2.332	5.0	19.8
5 11	14 34.81	-4 13.9	2.429	3.410	4.8	17.5	5 11	14 33.04	-3 21.7	1.357	2.340	7.4	19.9
5 21	14 27.96	-3 57.6	2.474	3.412	7.5	17.7	5 21	14 24.50	-3 24.2	1.401	2.348	11.3	20.2
5 31	14 22.28	-3 52.6	2.544	3.414	10.1	17.8	5 31	14 18.05	-3 44.6	1.468	2.357	15.1	20.4
6 10	14 18.17	-3 59.5	2.636	3.416	12.4	18.0	6 10	14 14.25	-4 21.7	1.554	2.365	18.3	20.7
458861	2011 <i>UF</i> ₁₀₁		5 2.9 192°40	2.5/ 1.1	16		215110	1997 <i>NO</i> ₅		5 2.9 242°10	3.2/28.0	18	
4 1	15 6.10	-12 37.0	1.591	2.467	13.9	22.4	4 1	14 56.53	+2 18.4	4.650	5.504	5.9	20.2
4 11	15 0.23	-11 37.0	1.522	2.466	10.0	22.1	4 11	14 52.24	+2 36.4	4.578	5.498	4.5	20.1
4 21	14 52.11	-10 29.3	1.477	2.465	5.6	21.9	4 21	14 47.27	+2 50.7	4.534	5.492	3.5	20.0
5 1	14 42.66	-9 19.6	1.459	2.463	2.5	21.7	5 1	14 41.90	+2 59.5	4.519	5.486	3.3	20.0
5 11	14 33.06	-8 14.8	1.467	2.461	5.5	21.8	5 11	14 36.48	+3 1.4	4.534	5.479	4.1	20.0
5 21	14 24.44	-7 21.6	1.502	2.458	9.9	22.1	5 21	14 31.34	+2 55.5	4.576	5.473	5.4	20.1
5 31	14 17.74	-6 44.6	1.560	2.455	14.0	22.3	5 31	14 26.78	+2 41.5	4.644	5.466	6.7	20.2
6 10	14 13.55	-6 26.2	1.637	2.451	17.4	22.5	6 10	14 23.04	+2 19.3	4.735	5.460	8.0	20.3
98153	2000 <i>SY</i> ₆₈		5 2.9 316°94	0.5/ 3.7	18		9288	Santos-Sanz		5 2.9 281°59	1.0/ 3.5	17	
4 1	14 55.80	-19 12.4	4.352	5.196	6.4	19.3	4 1	15 6.96	-19 25.4	1.374	2.245	16.0	18.8
4 11	14 51.81	-19 3.7	4.268	5.194	4.7	19.1	4 11	15 1.62	-19 13.2	1.284	2.223	11.9	18.5
4 21	14 47.05	-18 50.5	4.212	5.192	2.7	19.0	4 21	14 53.33	-18 46.5	1.216	2.201	7.0	18.2
5 1	14 41.83	-18 33.8	4.185	5.190	0.8	18.8	5 1	14 42.95	-18 6.7	1.171	2.178	1.8	17.8
5 11	14 36.55	-18 15.0	4.187	5.189	1.6	18.9	5 11	14 31.90	-17 18.4	1.152	2.155	4.5	17.9
5 21	14 31.57	-17 55.8	4.220	5.187	3.7	19.0	5 21	14 21.69	-16 28.5	1.158	2.131	10.1	18.1
5 31	14 27.24	-17 37.9	4.280	5.185	5.6	19.2	5 31	14 13.71	-15 44.8	1.186	2.108	15.3	18.3
6 10	14 23.82	-17 22.9	4.365	5.184	7.2	19.3	6 10	14 8.87	-15 13.9	1.232	2.085	19.8	18.5
38635	2000 <i>LB</i> ₂₁		5 2.9 253°47	1.2/ 2.1	17		147320	2003 <i>BZ</i> ₁₂		5 2.9 134°85	5.6/ 7.5	18	
4 1	15 5.29	-15 55.6	1.554	2.429	14.3	19.3	4 1	15 9.48	-33 27.0	2.149	2.944	13.8	21.2
4 11	14 59.87	-15 4.3	1.474	2.416	10.3	19.0	4 11	15 2.41	-33 43.4	2.079	2.957	11.2	21.0
4 21	14 52.04	-14 1.1	1.416	2.404	5.8	18.7	4 21	14 53.25	-33 41.0	2.032	2.971	8.4	20.9
5 1	14 42.67	-12 50.4	1.384	2.391	1.3	18.4	5 1	14 42.88	-33 18.3	2.010	2.983	6.1	20.8
5 11	14 32.98	-11 39.2	1.379	2.377	4.8	18.6	5 11	14 32.42	-32 37.4	2.016	2.995	5.7	20.8
5 21	14 24.18	-10 34.9	1.399	2.363	9.7	18.8	5 21	14 22.92	-31 42.8	2.049	3.006	7.6	20.9
5 31	14 17.33	-9 44.1	1.443	2.349	14.2	19.1	5 31	14 15.28	-30 41.0	2.108	3.017	10.2	21.1
6 10	14 13.10	-9 10.9	1.506	2.335	18.0	19.3	6 10	14 10.02	-29 39.0	2.190	3.027	12.8	21.3
216898	2009 <i>HJ</i> ₈₄		5 2.9 236°25	2.9/28.7	18		507458	2012 <i>TV</i> ₁₄₂		5 2.9 263°42	4.6/28.9	17	
4 1	14 55.84	-0 56.5	4.367	5.229	6.1	20.3	4 1	15 2.57	-4 21.6	2.094	2.969	11.1	21.4
4 11	14 51.78	-0 33.6	4.298	5.227	4.6	20.2	4 11	14 57.37	-3 22.1	2.013	2.952	8.3	21.1
4 21	14 47.01	-0 13.4	4.256	5.225	3.3	20.1	4 21	14 50.44	-2 22.8	1.957	2.935	5.6	20.9
5 1	14 41.83	+0 2.4	4.243	5.222	2.9	20.0	5 1	14 42.44	-1 29.1	1.929	2.917	4.7	20.9
5 11	14 36.60	+0 12.1	4.260	5.220	3.8	20.1	5 11	14 34.20	-0 46.1	1.928	2.900	6.7	20.9
5 21	14 31.67	+0 14.5	4.305	5.218	5.3	20.2	5 21	14 26.58	-0 17.9	1.953	2.882	9.7	21.1
5 31	14 27.35	+0 9.0	4.375	5.215	6.8	20.3	5 31	14 20.32	-0 6.8	2.002	2.863	12.8	21.2
6 10	14 23.90	-0 4.5	4.469	5.213	8.2	20.4	6 10	14 15.95	-0 13.4	2.071	2.845	15.6	21.4
313661	2003 <i>SJ</i> ₁₈₈		5 2.9 154°36	0.4/ 3.2	18		313685	2003 <i>SP</i> ₃₂₈		5 2.9 237°22	4.0/ 5.4	17	
4 1	15 5.84	-19 36.4	1.691	2.553	14.0	20.9	4 1	15 7.95	-26 42.4	1.726	2.564	14.9	21.2
4 11	14 59.96	-18 54.8	1.622	2.557	10.2	20.6	4 11	15 1.83	-26 50.6	1.641	2.554	11.5	20.9
4 21	14 51.92	-18 0.0	1.578	2.562	5.8	20.4	4 21	14 53.19	-26 41.6	1.577	2.545	7.8	20.7
5 1	14 42.64	-16 55.4	1.559	2.566	1.1	20.1	5 1	14 42.90	-26 14.7	1.539	2.534	4.5	20.4
5 11	14 33.26	-15 47.0	1.568	2.569	3.7	20.3	5 11	14 32.23	-25 32.1	1.527	2.524	4.8	20.4
5 21	14 24.88	-14 41.5	1.604	2.573	8.3	20.6	5 21	14 22.43	-24 39.3	1.542	2.513	8.3	20.6
5 31	14 18.39	-13 45.2	1.664	2.575	12.3	20.8	5 31	14 14.63	-23 43.5	1.581	2.501	12.3	20.8
6 10	14 14.35	-13 2.5	1.745	2.578	15.7	21.0	6 10	14 9.54	-22 52.1	1.642	2.490	15.9	21.0
179618	2002 <i>PY</i> ₂₈		5 2.9 251°15	0.4/ 2.6	17		128667	2004 <i>RL</i> ₅₉		5 2.9 268°48	4.3/30.2	16	
4 1	15 5.98	-16 27.0	1.822	2.687	13.0	21.5	4 1	15 5.55	-8 33.4	1.454	2.338	14.5	20.7
4 11	15 0.16	-15 57.6	1.733	2.671	9.4	21.3	4 11	15 0.18	-7 33.1	1.376	2.322	10.6	20.4
4 21	14 52.14	-15 18.5	1.668	2.654	5.3	21.0	4 21	14 52.29	-6 28.0	1.321	2.306	6.5	20.1
5 1	14 42.70	-14 32.4	1.629	2.636	0.9	20.6	5 1	14 42.77	-5 25.0	1.291	2.290	4.3	19.9
5 11	14 32.90	-13 44.1	1.618	2.618	4.0	20.8	5 11	14 32.85	-4 31.7	1.286	2.273	7.2	20.1
5 21	14 23.82	-12 58.8	1.634	2.600	8.5	21.0	5 21	14 23.81	-3 54.6	1.307	2.256	11.7	20.3
5 31	14 16.44	-12 22.0	1.675	2.581	12.6	21.2	5 31	14 16.78	-3 38.0	1.349	2.239	16.0	20.5
6 10	14 11.42	-11 57.5	1.737	2.561	16.2	21.4	6 10	14 12.46	-3 43.1	1.408	2.222	19.8	20.7
162486	2000 <i>PN</i> ₁₄		5 2.9 289°38	5.0/ 5.8	17		219720	2001 <i>XV</i> ₁₀₉		5 2.9 216°31	3.9/30.2	18	
4 1	15 6.09	-28 0.6	1.395	2.243</									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
344872	2004 JA ₃₉		5 2.9 131°34	6°2/27.7	18		140143	2001 SF ₁₅₉		5 2.9 203°76	2°9/ 5.3	18	
4 1	15 4.25	+ 5 36.1	2.576	3.428	10.1	20.6	4 1	15 4.54	-25 39.1	2.428	3.256	11.4	20.0
4 11	14 58.08	+ 6 10.7	2.526	3.439	8.0	20.5	4 11	14 58.70	-25 47.4	2.344	3.254	8.7	19.8
4 21	14 50.61	+ 6 36.6	2.501	3.449	6.5	20.4	4 21	14 51.16	-25 43.9	2.285	3.251	5.8	19.6
5 1	14 42.45	+ 6 49.9	2.504	3.459	6.3	20.4	5 1	14 42.58	-25 28.6	2.252	3.248	3.3	19.4
5 11	14 34.31	+ 6 48.2	2.535	3.469	7.4	20.5	5 11	14 33.81	-25 3.4	2.249	3.245	3.5	19.5
5 21	14 26.83	+ 6 30.6	2.592	3.478	9.3	20.6	5 21	14 25.66	-24 31.6	2.273	3.242	6.2	19.6
5 31	14 20.58	+ 5 57.5	2.673	3.487	11.4	20.7	5 31	14 18.89	-23 57.3	2.325	3.238	9.2	19.8
6 10	14 15.93	+ 5 10.7	2.774	3.495	13.2	20.9	6 10	14 14.01	-23 25.2	2.399	3.234	11.9	20.0
26084	1981 EK ₁₇		5 2.9 310°99	1°2/ 2.1	18 R		133537	Mariomotta		5 2.9 0°87	4°7/ 3.7	17	
4 1	15 2.29	-16 3.5	1.446	2.328	14.7	18.3	4 1	15 20.39	-19 22.0	1.294	2.149	17.9	18.8
4 11	14 57.83	-15 11.6	1.369	2.315	10.6	18.0	4 11	15 11.73	-21 28.2	1.221	2.147	13.6	18.5
4 21	14 50.96	-14 7.2	1.314	2.303	5.9	17.7	4 21	14 59.24	-23 30.6	1.171	2.147	8.8	18.2
5 1	14 42.55	-12 55.1	1.284	2.291	1.3	17.3	5 1	14 43.98	-25 21.2	1.148	2.146	4.9	18.0
5 11	14 33.83	-11 42.9	1.280	2.280	4.9	17.5	5 11	14 27.80	-26 53.6	1.152	2.147	6.4	18.1
5 21	14 26.03	-10 38.4	1.301	2.269	9.9	17.8	5 21	14 12.74	-28 5.7	1.183	2.148	11.0	18.3
5 31	14 20.21	-9 48.2	1.344	2.258	14.5	18.0	5 31	14 0.60	-29 0.8	1.238	2.150	15.6	18.6
6 10	14 17.04	-9 16.7	1.406	2.248	18.4	18.2	6 10	13 52.43	-29 46.0	1.312	2.152	19.6	18.8
497527	2006 BU ₁₈₆		5 2.9 69°53	8°4/ 9.2	17		172434	2003 QG ₂₄		5 2.9 221°02	1°9/ 1.6	16	
4 1	15 10.35	-38 13.5	1.800	2.581	16.6	20.8	4 1	15 5.72	-13 34.3	1.726	2.598	13.2	21.0
4 11	15 3.49	-39 0.5	1.743	2.602	13.9	20.7	4 11	14 59.93	-12 44.1	1.649	2.591	9.5	20.8
4 21	14 54.02	-39 23.0	1.707	2.623	11.2	20.5	4 21	14 51.99	-11 45.7	1.597	2.584	5.3	20.5
5 1	14 43.03	-39 17.8	1.693	2.644	9.0	20.5	5 1	14 42.74	-10 43.8	1.571	2.576	1.9	20.3
5 11	14 31.95	-38 46.0	1.704	2.665	8.4	20.5	5 11	14 33.26	-9 44.5	1.572	2.568	4.9	20.4
5 21	14 22.13	-37 52.9	1.741	2.686	9.6	20.6	5 21	14 24.63	-8 53.7	1.600	2.559	9.2	20.7
5 31	14 14.63	-36 46.6	1.801	2.707	11.8	20.8	5 31	14 17.78	-8 16.4	1.653	2.550	13.2	20.9
6 10	14 10.05	-35 36.4	1.883	2.727	14.3	21.0	6 10	14 13.30	-7 55.4	1.725	2.540	16.6	21.1
160847	2001 BD ₆₈		5 2.9 190°70	17°6/11.3	18		520034	2013 VG ₂₈		5 2.9 253°58	2°2/ 4.8	18	
4 1	15 22.76	-48 55.5	1.298	2.034	24.0	19.1	4 1	15 4.63	-24 42.9	2.024	2.864	12.9	21.2
4 11	15 15.18	-51 17.9	1.232	2.033	21.9	19.0	4 11	14 59.09	-24 13.4	1.928	2.848	9.8	20.9
4 21	15 2.03	-53 6.8	1.181	2.033	19.8	18.8	4 21	14 51.53	-23 27.9	1.857	2.831	6.2	20.7
5 1	14 44.50	-54 7.4	1.148	2.032	18.2	18.7	5 1	14 42.67	-22 27.7	1.812	2.814	2.8	20.4
5 11	14 25.37	-54 11.2	1.133	2.030	17.6	18.6	5 11	14 33.51	-21 16.8	1.795	2.796	3.5	20.4
5 21	14 8.05	-53 20.4	1.137	2.029	18.2	18.7	5 21	14 25.07	-20 1.1	1.806	2.778	7.3	20.6
5 31	13 55.35	-51 48.1	1.159	2.026	19.7	18.7	5 31	14 18.23	-18 47.3	1.844	2.759	11.1	20.8
6 10	13 48.58	-49 53.5	1.198	2.024	21.9	18.9	6 10	14 13.59	-17 41.9	1.903	2.740	14.4	21.0
369977	1997 JC ₁₁		5 2.9 204°88	6°2/22.1	18		471260	2011 CR ₆₇		5 2.9 26°62	7°8/27.4	17	
4 1	14 57.10	+19 38.7	4.557	5.351	7.0	20.4	4 1	15 2.39	+ 0 28.1	1.491	2.377	14.1	20.2
4 11	14 52.66	+20 10.7	4.513	5.350	6.4	20.3	4 11	14 57.54	+ 1 50.4	1.442	2.381	10.9	20.1
4 21	14 47.50	+20 32.7	4.494	5.350	6.2	20.3	4 21	14 50.61	+ 3 5.5	1.417	2.386	8.4	19.9
5 1	14 41.96	+20 42.4	4.499	5.349	6.3	20.3	5 1	14 42.50	+ 4 5.0	1.416	2.390	8.0	19.9
5 11	14 36.41	+20 38.5	4.530	5.348	6.9	20.3	5 11	14 34.36	+ 4 42.1	1.440	2.396	10.0	20.0
5 21	14 31.19	+20 20.8	4.584	5.347	7.7	20.4	5 21	14 27.23	+ 4 53.6	1.486	2.402	13.1	20.2
5 31	14 26.64	+19 49.8	4.660	5.346	8.6	20.5	5 31	14 21.96	+ 4 39.3	1.553	2.408	16.2	20.4
6 10	14 22.98	+19 6.8	4.754	5.345	9.4	20.5	6 10	14 19.05	+ 4 1.9	1.637	2.414	18.9	20.6
23654	1997 CC ₂₆		5 2.9 160°12	0°5/ 3.3	18 R		373598	2002 CG ₁₄₉		5 2.9 105°42	6°9/27.6	17	
4 1	15 7.89	-18 24.1	1.924	2.779	12.8	19.9	4 1	15 3.71	+ 1 6.2	1.832	2.706	12.5	20.4
4 11	15 1.25	-18 8.2	1.854	2.785	9.3	19.7	4 11	14 58.15	+ 2 16.0	1.782	2.714	9.6	20.3
4 21	14 52.61	-17 42.6	1.808	2.791	5.3	19.5	4 21	14 50.83	+ 3 18.9	1.758	2.722	7.4	20.1
5 1	14 42.81	-17 9.4	1.790	2.796	1.1	19.2	5 1	14 42.54	+ 4 8.3	1.759	2.730	7.0	20.1
5 11	14 32.89	-16 32.4	1.800	2.801	3.4	19.3	5 11	14 34.25	+ 4 39.0	1.786	2.738	8.8	20.2
5 21	14 23.86	-15 56.2	1.838	2.805	7.5	19.6	5 21	14 26.83	+ 4 48.6	1.838	2.745	11.4	20.4
5 31	14 16.57	-15 25.3	1.901	2.808	11.3	19.8	5 31	14 21.02	+ 4 36.7	1.911	2.753	14.2	20.6
6 10	14 11.56	-15 3.6	1.987	2.811	14.4	20.0	6 10	14 17.29	+ 4 5.3	2.004	2.760	16.6	20.8
504762	2009 WL ₉₂		5 2.9 278°93	5°1/ 6.8	17		356601	2011 TG ₁₀		5 2.9 174°21	3°5/ 6.2	18	
4 1	15 4.75	-31 5.9	1.773	2.597	15.1	21.8	4 1	15 3.91	-29 0.2	2.750	3.561	10.7	21.6
4 11	14 59.47	-31 0.5	1.688	2.589	12.1	21.5	4 11	14 58.11	-29 7.8	2.668	3.562	8.4	21.5
4 21	14 51.82	-30 33.5	1.625	2.581	8.7	21.3	4 21	14 50.78	-29 2.9	2.609	3.564	5.9	21.3
5 1	14 42.69	-29 44.4	1.586	2.573	5.8	21.1	5 1	14 42.55	-28 45.2	2.578	3.565	3.9	21.2
5 11	14 33.28	-28 36.2	1.573	2.565	5.4	21.1	5 11	14 34.17	-28 16.6	2.576	3.566	3.8	21.2
5 21	14 24.79	-27 15.2	1.586	2.557	8.2	21.2	5 21	14 26.39	-27 39.8	2.602	3.566	5.8	21.3
5 31	14 18.25	-25 49.9	1.624	2.549	11.8	21.4	5 31	14 19.87	-26 59.2	2.656	3.567	8.3	21.5
6 10	14 14.30	-24 28.8	1.684	2.540	15.2	21.6	6 10	14 15.06	-26 18.9	2.733	3.567	10.6	21.6
341335	2007 TZ ₃₅		5 2.9 194°01	2°1/ 4.8	18		522910	2016 PN ₁₀₇		5 2.9 246°61	7°3/26.3	17	
4 1	15 5.06	-23 54.6	2.794	3.622	10.1	22.2	4 1	15 1.77	+ 5 19.6	2.210	3.074	11.1	21.4
4 11	14 58.85	-23 54.9	2.707	3.619	7.6	22.0	4 11	14 56.62	+ 6 24.2	2.152	3.070	9.0	21.2
4 21	14 51.16	-23 45.4	2.646	3.616	4.9	21.8	4 21	14 49.95	+ 7 20.3	2.118	3.066	7.5	21.1
5 1	14 42.57	-23 26.5	2.613	3.612	2.4	21.6	5 1	14 42.41	+ 8 2.0	2.110	3.062	7.4	21.1
5 11	14 33.82	-23 0.1	2.609	3.607	2.9	21.7	5 11	14 34.78	+ 8 25.2	2.128	3.058	8.9	21.2
5 21	14 25.62	-22 29.2	2.635	3.602	5.6	21.8	5 21	14 27.82	+ 8 27.9	2.171	3.054	11.0	21.3
5 31	14 18.62	-21 57.3	2.689	3.597	8.3	22.0	5 31	14 22.16	+ 8 9.9	2.237	3.050	13.3	21.4
6 10	14 13.28	-21 28.0	2.767	3.590	10.8	22.2	6 10	14 18.26	+ 7 33.2	2.320	3.046	15.4	21.6
87886	2000 SJ ₂₈₅		5 2.9 118°60	0°6/ 3.4	18		45178	1999 XW ₁₄₃		5 2.9 245°93	2°2/ 4.5	18	
4 1	15 4.38	-20 23.5	2.025	2.879	12								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
305420	2008 <i>CP</i> ₁₃₃		5 2.9 22°23	2.6/30.7	17		439749	2015 <i>FG</i> ₃₀₅		5 2.9 304°54	5.4/28.2	18	
4 1	15 0.96	- 9 40.2	2.121	2.996	11.0	20.7	4 1	15 0.52	- 2 57.2	1.986	2.865	11.4	20.9
4 11	14 56.11	- 8 58.8	2.055	2.998	7.8	20.5	4 11	14 55.94	- 1 46.1	1.916	2.855	8.6	20.7
4 21	14 49.69	- 8 14.9	2.014	3.000	4.6	20.3	4 21	14 49.67	- 0 36.5	1.871	2.846	6.1	20.5
5 1	14 42.37	- 7 32.6	2.001	3.002	2.6	20.2	5 1	14 42.40	+ 0 25.4	1.853	2.836	5.5	20.4
5 11	14 34.97	- 6 56.2	2.015	3.005	4.7	20.3	5 11	14 34.97	+ 1 13.8	1.861	2.827	7.4	20.5
5 21	14 28.26	- 6 29.1	2.057	3.007	8.0	20.5	5 21	14 28.20	+ 1 44.8	1.895	2.817	10.4	20.7
5 31	14 22.90	- 6 14.2	2.122	3.010	11.1	20.7	5 31	14 22.83	+ 1 56.3	1.951	2.808	13.3	20.9
6 10	14 19.36	- 6 12.5	2.209	3.013	13.8	20.9	6 10	14 19.36	+ 1 48.4	2.027	2.799	15.9	21.0
438624	2007 <i>YY</i> ₂₃		5 2.9 261°58	4.2/ 6.5	18		291495	2006 <i>DA</i> ₁₃₁		5 2.9 252°59	1.7/30.3	18	
4 1	15 3.66	-30 1.7	2.249	3.066	12.6	20.6	4 1	14 54.88	- 7 20.4	4.595	5.459	5.7	20.9
4 11	14 58.28	-30 3.7	2.162	3.059	10.0	20.4	4 11	14 51.14	- 6 56.3	4.517	5.454	4.1	20.7
4 21	14 51.02	-29 49.7	2.098	3.052	7.1	20.3	4 21	14 46.72	- 6 32.2	4.467	5.449	2.5	20.6
5 1	14 42.61	-29 19.2	2.059	3.045	4.7	20.1	5 1	14 41.90	- 6 9.7	4.446	5.444	1.7	20.5
5 11	14 33.98	-28 34.5	2.048	3.038	4.6	20.1	5 11	14 37.03	- 5 50.4	4.456	5.438	2.7	20.6
5 21	14 26.04	-27 39.6	2.065	3.031	6.9	20.2	5 21	14 32.43	- 5 35.7	4.494	5.433	4.4	20.7
5 31	14 19.62	-26 40.3	2.107	3.024	9.8	20.4	5 31	14 28.39	- 5 26.9	4.559	5.428	6.0	20.8
6 10	14 15.27	-25 42.6	2.172	3.017	12.6	20.5	6 10	14 25.17	- 5 24.5	4.648	5.422	7.5	20.9
216156	2006 <i>SF</i> ₃₂₃		5 2.9 309°67	3.8/30.6	17		235853	2005 <i>AJ</i> ₂₈		5 2.9 145°59	9.0/22.7	17	
4 1	15 2.58	-10 20.5	1.342	2.234	15.0	21.2	4 1	15 3.83	+16 8.1	2.652	3.472	10.8	21.1
4 11	14 58.24	- 9 22.6	1.265	2.215	10.9	20.9	4 11	14 57.79	+17 26.5	2.620	3.484	9.6	21.0
4 21	14 51.32	- 8 17.6	1.209	2.197	6.4	20.6	4 21	14 50.48	+18 30.0	2.612	3.496	9.1	21.0
5 1	14 42.69	- 7 12.3	1.177	2.179	3.8	20.4	5 1	14 42.51	+19 13.5	2.629	3.507	9.3	21.0
5 11	14 33.63	- 6 14.8	1.170	2.161	6.9	20.5	5 11	14 34.57	+19 34.2	2.671	3.518	10.3	21.1
5 21	14 25.46	- 5 32.3	1.186	2.144	11.8	20.7	5 21	14 27.32	+19 31.6	2.736	3.528	11.7	21.2
5 31	14 19.35	- 5 10.2	1.224	2.128	16.4	21.0	5 31	14 21.29	+19 7.0	2.822	3.537	13.1	21.4
6 10	14 16.03	- 5 10.4	1.279	2.112	20.3	21.2	6 10	14 16.85	+18 23.4	2.924	3.545	14.3	21.5
417479	2006 <i>RC</i> ₄₀		5 2.9 205°85	4.9/28.6	16		499045	2009 <i>DO</i> ₆₄		5 2.9 18°04	4.0/30.9	17	
4 1	15 4.96	- 3 33.5	2.190	3.059	11.0	22.2	4 1	15 4.83	- 8 30.2	1.155	2.052	16.5	20.8
4 11	14 58.95	- 2 22.1	2.118	3.052	8.2	22.0	4 11	14 59.87	- 8 0.8	1.103	2.055	11.9	20.5
4 21	14 51.29	- 1 11.4	2.072	3.045	5.7	21.9	4 21	14 52.16	- 7 30.3	1.072	2.060	7.0	20.2
5 1	14 42.65	- 0 7.2	2.053	3.037	5.0	21.8	5 1	14 42.82	- 7 4.5	1.063	2.065	4.0	20.1
5 11	14 33.87	+ 0 45.2	2.064	3.029	6.8	21.9	5 11	14 33.36	- 6 49.7	1.078	2.071	7.0	20.3
5 21	14 25.76	+ 1 21.8	2.101	3.019	9.7	22.0	5 21	14 25.19	- 6 50.1	1.116	2.078	11.8	20.5
5 31	14 19.02	+ 1 40.6	2.162	3.009	12.6	22.2	5 31	14 19.42	- 7 7.9	1.175	2.086	16.3	20.8
6 10	14 14.16	+ 1 41.3	2.244	2.997	15.1	22.4	6 10	14 16.67	- 7 42.9	1.250	2.095	20.1	21.1
4715	1989 <i>TS</i> ₁		5 2.9 247°73	3.2/ 7.5	18 R		70193	1999 <i>RY</i> ₁₃		5 2.9 176°23	1.6/ 1.8	18	
4 1	14 58.78	-32 52.7	4.447	5.226	7.4	17.1	4 1	15 6.72	-13 15.8	1.976	2.841	12.1	20.4
4 11	14 54.06	-33 8.8	4.355	5.223	6.0	17.0	4 11	15 0.36	-12 37.6	1.905	2.843	8.7	20.2
4 21	14 48.40	-33 15.9	4.289	5.220	4.6	16.8	4 21	14 52.13	-11 53.5	1.859	2.845	4.8	19.9
5 1	14 42.18	-33 13.9	4.250	5.216	3.5	16.8	5 1	14 42.81	-11 7.0	1.841	2.847	1.6	19.7
5 11	14 35.83	-33 3.4	4.240	5.213	3.3	16.7	5 11	14 33.38	-10 22.9	1.852	2.847	4.2	19.9
5 21	14 29.80	-32 45.8	4.258	5.209	4.2	16.8	5 21	14 24.77	- 9 45.6	1.890	2.847	8.1	20.1
5 31	14 24.51	-32 23.3	4.304	5.206	5.6	16.9	5 31	14 17.77	- 9 18.8	1.954	2.847	11.7	20.3
6 10	14 20.26	-31 58.4	4.376	5.203	7.1	17.0	6 10	14 12.90	- 9 5.0	2.038	2.845	14.7	20.5
225642	2001 <i>FY</i> ₈₉		5 2.9 267°92	3.1/29.6	16		22466	1997 <i>BA</i> ₃		5 2.9 128°24	0.9/ 3.6	18	
4 1	14 59.15	- 7 44.8	2.548	3.421	9.5	20.9	4 1	15 8.05	-19 45.1	1.824	2.678	13.5	19.1
4 11	14 54.64	- 6 42.1	2.473	3.414	6.8	20.7	4 11	15 1.41	-19 26.2	1.761	2.692	9.8	18.9
4 21	14 48.83	- 5 37.4	2.424	3.407	4.2	20.6	4 21	14 52.73	-18 55.9	1.723	2.705	5.7	18.7
5 1	14 42.25	- 4 35.2	2.404	3.399	3.2	20.5	5 1	14 42.91	-18 16.7	1.712	2.718	1.5	18.4
5 11	14 35.56	- 3 39.8	2.413	3.392	4.9	20.6	5 11	14 33.06	-17 32.7	1.729	2.730	3.4	18.6
5 21	14 29.41	- 2 55.0	2.449	3.385	7.7	20.7	5 21	14 24.22	-16 49.1	1.773	2.742	7.6	18.9
5 31	14 24.34	- 2 23.3	2.510	3.377	10.3	20.9	5 31	14 17.22	-16 11.0	1.843	2.753	11.4	19.1
6 10	14 20.78	- 2 5.9	2.592	3.370	12.7	21.1	6 10	14 12.59	-15 42.6	1.934	2.764	14.5	19.4
249541	Steinem		5 2.9 325°73	4.0/ 6.3	18		243748	2000 <i>QJ</i> ₉₉		5 2.9 235°74	6.1/25.5	18	
4 1	15 2.17	-28 57.4	2.018	2.847	13.4	19.9	4 1	15 0.59	+ 4 29.1	2.764	3.623	9.3	20.9
4 11	14 57.34	-28 49.4	1.934	2.841	10.5	19.7	4 11	14 55.60	+ 5 46.9	2.694	3.609	7.5	20.8
4 21	14 50.54	-28 24.0	1.873	2.834	7.3	19.5	4 21	14 49.36	+ 6 59.2	2.649	3.595	6.3	20.7
5 1	14 42.54	-27 41.5	1.837	2.828	4.5	19.3	5 1	14 42.36	+ 8 0.9	2.633	3.581	6.4	20.7
5 11	14 34.33	-26 44.8	1.828	2.822	4.4	19.3	5 11	14 35.23	+ 8 47.7	2.644	3.566	7.7	20.7
5 21	14 26.88	-25 39.0	1.845	2.817	7.2	19.4	5 21	14 28.58	+ 9 17.1	2.681	3.551	9.6	20.8
5 31	14 21.06	-24 30.9	1.888	2.811	10.5	19.6	5 31	14 22.95	+ 9 28.0	2.741	3.535	11.6	20.9
6 10	14 17.42	-23 26.8	1.954	2.806	13.5	19.8	6 10	14 18.74	+ 9 21.1	2.820	3.519	13.4	21.1
230404	2002 <i>JW</i> ₁₃₀		5 2.9 156°32	1.6/ 1.8	18		427996	2006 <i>BF</i> ₂₄		5 2.9 95°24	0.1/ 3.0	18	
4 1	15 5.81	-11 31.5	2.110	2.975	11.4	20.2	4 1	15 7.19	-17 41.7	2.081	2.935	12.1	22.4
4 11	14 59.61	-11 18.0	2.041	2.979	8.2	20.0	4 11	15 0.42	-17 16.5	2.032	2.964	8.6	22.2
4 21	14 51.67	-11 1.4	1.997	2.983	4.6	19.8	4 21	14 52.02	-16 43.2	2.009	2.992	4.8	22.0
5 1	14 42.72	-10 44.3	1.981	2.987	1.6	19.6	5 1	14 42.79	-16 4.4	2.013	3.020	0.8	21.8
5 11	14 33.65	-10 30.0	1.994	2.990	4.0	19.7	5 11	14 33.67	-15 24.1	2.047	3.048	3.2	22.0
5 21	14 25.33	-10 21.2	2.035	2.993	7.6	20.0	5 21	14 25.51	-14 46.5	2.109	3.074	6.9	22.3
5 31	14 18.51	-10 20.5	2.101	2.996	10.9	20.2	5 31	14 18.99	-14 15.5	2.197	3.100	10.1	22.5
6 10	14 13.67	-10 29.4	2.189	2.998	13.8	20.4	6 10	14 14.50	-13 53.7	2.307	3.125	12.9	22.7
480180	2015 <i>FW</i> ₃₂₂		5 2.9 338°21	2.0/ 2.1	17		59957	1999 <i>RH</i> ₂₃₁		5 2.9 231°77	3.0/30		

EPHEMERIDES

5 2.9

5 2.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
203369	2001 <i>WD</i> ₁₀		5 2.9 125°52	2°3/ 1.3 18			431796	2008 <i>QR</i> ₁₈		5 2.9 180°65	0°4/ 3.3 17		
4 1	15 8.17	-12 17.2	1.719	2.589	13.4	21.0	4 1	15 4.81	-18 36.0	2.360	3.211	10.9	22.3
4 11	15 1.42	-11 22.8	1.666	2.607	9.5	20.8	4 11	14 58.83	-18 15.0	2.283	3.212	7.9	22.1
4 21	14 52.69	-10 22.8	1.637	2.624	5.3	20.6	4 21	14 51.25	-17 45.5	2.230	3.213	4.5	21.9
5 1	14 42.91	-9 22.5	1.636	2.640	2.3	20.4	5 1	14 42.72	-17 9.6	2.206	3.213	1.0	21.6
5 11	14 33.18	-8 27.8	1.662	2.655	5.0	20.6	5 11	14 34.06	-16 30.4	2.211	3.212	2.9	21.8
5 21	14 24.54	-7 43.9	1.716	2.670	9.0	20.9	5 21	14 26.07	-15 51.8	2.245	3.211	6.4	22.0
5 31	14 17.78	-7 14.5	1.794	2.684	12.7	21.2	5 31	14 19.45	-15 17.8	2.306	3.210	9.7	22.2
6 10	14 13.36	-7 1.0	1.892	2.697	15.7	21.4	6 10	14 14.66	-14 51.5	2.389	3.208	12.4	22.4
35963	1999 <i>LL</i> ₁₁		5 2.9 190°86	4°2/29.1 18			128872	2004 <i>SK</i> ₃₈		5 2.9 147°71	4°0/29.8 17		
4 1	15 2.76	-7 5.3	2.038	2.913	11.4	18.8	4 1	15 3.45	-6 39.6	1.905	2.782	12.0	19.7
4 11	14 57.45	-5 42.6	1.971	2.912	8.2	18.6	4 11	14 58.03	-5 45.8	1.842	2.784	8.7	19.5
4 21	14 50.48	-4 17.8	1.930	2.911	5.3	18.4	4 21	14 50.85	-4 51.5	1.805	2.787	5.5	19.4
5 1	14 42.56	-2 57.0	1.917	2.910	4.2	18.3	5 1	14 42.65	-4 2.0	1.794	2.789	4.0	19.3
5 11	14 34.54	-1 46.5	1.932	2.908	6.3	18.4	5 11	14 34.37	-3 22.4	1.810	2.791	6.1	19.4
5 21	14 27.26	-0 51.2	1.974	2.905	9.5	18.6	5 21	14 26.89	-2 56.7	1.853	2.793	9.4	19.6
5 31	14 21.42	-0 14.3	2.040	2.902	12.6	18.8	5 31	14 20.95	-2 47.0	1.919	2.795	12.7	19.8
6 10	14 17.48	+0 3.5	2.126	2.899	15.2	19.0	6 10	14 17.04	-2 53.8	2.005	2.797	15.4	20.0
115615	2003 <i>UC</i> ₁₁₂		5 2.9 278°75	1°5/ 1.9 18			64046	2001 <i>SR</i> ₂₄₀		5 2.9 245°97	1°3/ 1.9 18		
4 1	15 3.93	-12 41.9	1.907	2.779	12.2	19.6	4 1	15 4.58	-11 46.3	2.354	3.217	10.5	18.8
4 11	14 58.50	-12 19.2	1.833	2.774	8.7	19.3	4 11	14 58.73	-11 38.1	2.270	3.207	7.5	18.6
4 21	14 51.17	-11 51.6	1.783	2.770	4.9	19.1	4 21	14 51.24	-11 27.1	2.211	3.197	4.2	18.3
5 1	14 42.69	-11 22.3	1.759	2.765	1.6	18.8	5 1	14 42.73	-11 15.3	2.180	3.186	1.4	18.1
5 11	14 34.01	-10 55.3	1.764	2.761	4.2	19.0	5 11	14 34.00	-11 5.5	2.179	3.175	3.6	18.2
5 21	14 26.08	-10 34.4	1.795	2.756	8.2	19.2	5 21	14 25.84	-11 0.1	2.206	3.164	7.1	18.4
5 31	14 19.72	-10 23.0	1.850	2.751	11.8	19.5	5 31	14 18.96	-11 1.4	2.259	3.153	10.3	18.6
6 10	14 15.49	-10 23.2	1.927	2.747	14.9	19.7	6 10	14 13.88	-11 11.3	2.334	3.141	13.0	18.8
291279	2006 <i>BQ</i> ₁₁₃		5 2.9 327°99	1°9/ 2.1 17			175088	2004 <i>HK</i> ₃₇		5 2.9 295°98	6°1/27.9 16		
4 1	15 2.15	-13 23.3	1.054	1.955	17.3	20.0	4 1	15 1.98	+0 34.4	2.065	2.938	11.3	20.0
4 11	14 58.57	-13 3.3	0.980	1.935	12.6	19.6	4 11	14 57.01	+1 28.0	1.989	2.920	8.8	19.8
4 21	14 51.82	-12 34.3	0.925	1.916	7.1	19.3	4 21	14 50.33	+2 16.9	1.936	2.903	6.7	19.7
5 1	14 42.85	-12 0.8	0.892	1.898	2.0	18.9	5 1	14 42.58	+2 55.3	1.911	2.885	6.2	19.6
5 11	14 33.24	-11 29.8	0.881	1.882	6.1	19.1	5 11	14 34.61	+3 18.5	1.912	2.868	7.9	19.7
5 21	14 24.66	-11 8.2	0.891	1.866	12.1	19.3	5 21	14 27.24	+3 23.6	1.938	2.851	10.7	19.8
5 31	14 18.62	-11 2.3	0.921	1.852	17.7	19.6	5 31	14 21.24	+3 9.3	1.986	2.833	13.5	19.9
6 10	14 16.02	-11 15.4	0.967	1.839	22.5	19.8	6 10	14 17.12	+2 36.8	2.054	2.816	16.0	20.1
144528	2004 <i>EF</i> ₈₁		5 2.9 295°12	5°8/28.1 18			277309	2005 <i>SZ</i> ₁₆₉		5 2.9 178°59	1°9/ 4.4 17		
4 1	15 1.90	-0 0.6	2.105	2.978	11.2	18.9	4 1	15 6.39	-22 48.4	2.076	2.918	12.5	22.1
4 11	14 56.79	+0 55.1	2.043	2.976	8.5	18.7	4 11	15 0.21	-22 38.0	1.998	2.920	9.4	21.9
4 21	14 50.10	+1 45.9	2.007	2.974	6.4	18.6	4 21	14 52.12	-22 15.2	1.945	2.921	5.8	21.6
5 1	14 42.50	+2 26.4	1.997	2.972	5.9	18.5	5 1	14 42.88	-21 41.1	1.919	2.921	2.4	21.4
5 11	14 34.81	+2 52.2	2.013	2.971	7.5	18.6	5 11	14 33.47	-20 59.0	1.921	2.921	3.3	21.5
5 21	14 27.81	+3 0.7	2.056	2.969	10.1	18.8	5 21	14 24.86	-20 13.4	1.951	2.921	6.9	21.7
5 31	14 22.17	+2 51.1	2.121	2.967	12.8	18.9	5 31	14 17.86	-19 29.4	2.007	2.920	10.4	21.9
6 10	14 18.36	+2 24.4	2.206	2.966	15.1	19.1	6 10	14 13.02	-18 51.9	2.086	2.919	13.5	22.1
501332	2013 <i>XK</i> ₁₂		5 2.9 210°81	1°1/ 2.2 17			215989	2005 <i>SK</i> ₈₅		5 2.9 305°39	3°0/30.0 18		
4 1	15 5.40	-13 14.5	2.050	2.915	11.7	21.6	4 1	14 59.89	-9 37.2	2.155	3.031	10.8	20.3
4 11	14 59.46	-12 59.6	1.973	2.912	8.4	21.4	4 11	14 55.41	-8 29.9	2.081	3.024	7.7	20.0
4 21	14 51.67	-12 39.9	1.922	2.908	4.7	21.1	4 21	14 49.37	-7 18.7	2.033	3.018	4.6	19.8
5 1	14 42.78	-12 18.0	1.898	2.904	1.2	20.9	5 1	14 42.42	-6 8.6	2.012	3.011	3.1	19.7
5 11	14 33.69	-11 57.2	1.902	2.900	3.8	21.1	5 11	14 35.35	-5 5.1	2.019	3.004	5.2	19.8
5 21	14 25.32	-11 41.0	1.934	2.896	7.7	21.3	5 21	14 28.91	-4 13.0	2.053	2.998	8.4	20.0
5 31	14 18.46	-11 32.5	1.992	2.891	11.2	21.5	5 31	14 23.76	-3 35.6	2.112	2.991	11.5	20.2
6 10	14 13.65	-11 33.7	2.071	2.886	14.2	21.7	6 10	14 20.38	-3 14.6	2.192	2.985	14.2	20.4
215153	1999 <i>VX</i> ₁₉₃		5 2.9 232°65	0°6/ 3.4 18			412075	2013 <i>EU</i> ₁₂₀		5 2.9 272°24	0°2/ 3.1 16		
4 1	15 8.09	-17 24.6	2.421	3.267	10.8	20.9	4 1	15 6.17	-18 49.6	1.502	2.371	15.0	21.0
4 11	15 1.32	-17 35.5	2.326	3.253	7.9	20.7	4 11	15 0.83	-18 16.7	1.412	2.350	11.1	20.7
4 21	14 52.73	-17 40.2	2.257	3.239	4.6	20.4	4 21	14 52.83	-17 29.1	1.344	2.330	6.4	20.4
5 1	14 42.97	-17 39.4	2.217	3.224	1.1	20.1	5 1	14 43.04	-16 29.6	1.302	2.309	1.2	20.0
5 11	14 32.88	-17 34.8	2.207	3.208	2.9	20.3	5 11	14 32.73	-15 23.8	1.286	2.287	4.3	20.1
5 21	14 23.33	-17 28.7	2.227	3.192	6.6	20.5	5 21	14 23.25	-14 19.3	1.295	2.266	9.6	20.4
5 31	14 15.11	-17 24.2	2.273	3.175	9.9	20.6	5 31	14 15.80	-13 23.8	1.328	2.244	14.5	20.6
6 10	14 8.80	-17 24.2	2.343	3.158	12.8	20.8	6 10	14 11.18	-12 43.2	1.380	2.222	18.6	20.8
206239	2002 <i>WR</i> ₁₉		5 2.9 182°60	0°3/ 2.7 18			319480	2006 <i>QO</i> ₁		5 2.9 307°91	5°7/29.9 17		
4 1	15 3.37	-16 7.2	2.401	3.259	10.5	21.2	4 1	15 5.02	-5 10.0	1.306	2.197	15.4	20.4
4 11	14 57.76	-15 47.4	2.325	3.259	7.6	21.0	4 11	15 0.19	-4 28.5	1.225	2.173	11.5	20.1
4 21	14 50.63	-15 21.3	2.274	3.259	4.2	20.8	4 21	14 52.56	-3 47.6	1.165	2.149	7.5	19.8
5 1	14 42.60	-14 51.0	2.252	3.259	0.7	20.5	5 1	14 43.01	-3 14.1	1.130	2.125	5.7	19.7
5 11	14 34.45	-14 19.6	2.258	3.258	3.0	20.7	5 11	14 32.86	-2 55.4	1.118	2.102	8.4	19.7
5 21	14 26.93	-13 50.6	2.293	3.257	6.5	21.0	5 21	14 23.54	-2 56.5	1.129	2.080	13.0	19.9
5 31	14 20.69	-13 27.1	2.355	3.256	9.6	21.2	5 31	14 16.35	-3 20.0	1.161	2.057	17.6	20.1
6 10	14 16.20	-13 11.8	2.438	3.255	12.3	21.3	6 10	14 12.13	-4 5.4	1.209	2.036	21.6	20.3
337018	1995 <i>FU</i> ₁		5 2.9 327°34	3°4/27.5 18			341258	2007 <i>RM</i> ₂₃₃		5 2.9 184°58	5°0/27.9 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
356968	2012 <i>XP</i> ₁₄₄		5 2.9 141°51	1°6/ 4.5 18			84551	2002 <i>UP</i> ₃₃		5 2.9 146°18	0°5/ 3.4 18		
4 1	15 2.65	-22 41.8	2.630	3.468	10.3	21.4	4 1	15 3.34	-18 48.4	2.302	3.156	11.1	20.0
4 11	14 57.17	-22 27.2	2.556	3.475	7.7	21.2	4 11	14 57.82	-18 27.7	2.230	3.161	8.0	19.8
4 21	14 50.27	-22 2.8	2.507	3.482	4.7	21.0	4 21	14 50.71	-17 58.5	2.183	3.165	4.6	19.6
5 1	14 42.57	-21 29.7	2.486	3.489	2.0	20.8	5 1	14 42.69	-17 22.7	2.163	3.170	1.0	19.3
5 11	14 34.80	-20 50.9	2.494	3.495	2.7	20.9	5 11	14 34.58	-16 43.9	2.173	3.174	2.9	19.5
5 21	14 27.66	-20 9.7	2.532	3.501	5.6	21.1	5 21	14 27.15	-16 5.8	2.210	3.178	6.4	19.7
5 31	14 21.73	-19 30.1	2.596	3.507	8.5	21.3	5 31	14 21.09	-15 32.3	2.274	3.182	9.6	19.9
6 10	14 17.46	-18 55.4	2.684	3.512	11.0	21.5	6 10	14 16.85	-15 6.7	2.360	3.185	12.4	20.1
180331	2003 <i>YN</i> ₂₁		5 2.9 200°15	7°8/ 8.9 17			297552	2001 <i>QF</i> ₂₃₁		5 2.9 216°80	5°1/ 6.3 16		
4 1	15 8.89	-37 42.5	1.801	2.587	16.4	20.6	4 1	15 9.45	-29 54.6	1.680	2.505	15.8	21.7
4 11	15 2.66	-38 2.7	1.720	2.585	13.8	20.4	4 11	15 3.07	-29 58.1	1.596	2.499	12.5	21.4
4 21	14 53.76	-37 57.8	1.659	2.583	10.9	20.2	4 21	14 54.03	-29 40.5	1.533	2.491	8.8	21.2
5 1	14 43.19	-37 24.8	1.621	2.581	8.6	20.1	5 1	14 43.28	-29 0.5	1.494	2.484	5.7	21.0
5 11	14 32.32	-36 25.0	1.608	2.578	7.9	20.0	5 11	14 32.15	-28 0.8	1.482	2.475	5.5	21.0
5 21	14 22.54	-35 4.0	1.621	2.575	9.4	20.1	5 21	14 22.03	-26 47.5	1.497	2.466	8.7	21.1
5 31	14 14.98	-33 30.8	1.658	2.572	12.2	20.3	5 31	14 14.06	-25 29.6	1.536	2.457	12.5	21.3
6 10	14 10.33	-31 55.9	1.717	2.569	15.1	20.5	6 10	14 8.97	-24 16.1	1.596	2.447	16.1	21.5
460150	2014 <i>PR</i> ₆₅		5 2.9 239°28	1°7/ 4.1 16			17816	1998 <i>FY</i> ₁₁₃		5 2.9 224°91	1°3/ 4.2 18		
4 1	15 7.68	-22 6.2	1.598	2.454	15.0	22.2	4 1	15 2.14	-21 59.4	2.490	3.333	10.7	18.5
4 11	15 1.75	-21 43.6	1.513	2.443	11.2	21.9	4 11	14 56.95	-21 35.1	2.404	3.328	7.9	18.3
4 21	14 53.27	-21 4.8	1.450	2.430	6.8	21.6	4 21	14 50.24	-21 0.1	2.344	3.322	4.8	18.1
5 1	14 43.12	-20 11.3	1.413	2.418	2.3	21.3	5 1	14 42.63	-20 16.3	2.311	3.316	1.7	17.8
5 11	14 32.58	-19 7.8	1.402	2.404	4.0	21.4	5 11	14 34.86	-19 26.8	2.308	3.309	2.7	17.9
5 21	14 22.95	-18 1.4	1.418	2.390	8.8	21.6	5 21	14 27.69	-18 35.5	2.333	3.303	6.0	18.1
5 31	14 15.35	-16 59.7	1.458	2.376	13.3	21.9	5 31	14 21.77	-17 47.0	2.384	3.296	9.1	18.3
6 10	14 10.52	-16 9.5	1.518	2.361	17.2	22.1	6 10	14 17.57	-17 5.1	2.460	3.289	11.8	18.5
332630	2008 <i>TT</i> ₁₅₇		5 2.9 205°24	5°9/27.1 18			59653	1999 <i>JZ</i> ₉₂		5 2.9 289°13	8°3/27.0 18		
4 1	15 3.09	+ 2 1.5	2.456	3.318	10.2	21.4	4 1	15 4.55	+ 3 51.1	1.719	2.591	13.3	19.0
4 11	14 57.50	+ 3 8.8	2.389	3.312	7.9	21.3	4 11	14 59.19	+ 4 54.8	1.646	2.573	10.7	18.8
4 21	14 50.48	+ 4 11.0	2.349	3.306	6.3	21.1	4 21	14 51.72	+ 5 50.1	1.596	2.554	8.7	18.6
5 1	14 42.63	+ 5 2.9	2.336	3.300	6.1	21.1	5 1	14 42.90	+ 6 29.6	1.571	2.535	8.4	18.6
5 11	14 34.67	+ 5 40.0	2.351	3.293	7.5	21.2	5 11	14 33.79	+ 6 47.2	1.571	2.516	10.3	18.6
5 21	14 27.30	+ 6 0.0	2.392	3.285	9.8	21.3	5 21	14 25.41	+ 6 39.7	1.595	2.497	13.2	18.8
5 31	14 21.13	+ 6 1.7	2.457	3.277	12.1	21.5	5 31	14 18.70	+ 6 7.1	1.639	2.479	16.2	18.9
6 10	14 16.61	+ 5 46.0	2.542	3.268	14.2	21.6	6 10	14 14.29	+ 5 11.7	1.702	2.460	19.0	19.1
504712	2009 <i>SO</i> ₁₈₇		5 2.9 264°45	3°0/30.7 17			346274	2008 <i>GS</i> ₉₉		5 2.9 307°92	1°4/30.8 16		
4 1	15 4.46	-10 15.6	1.846	2.721	12.4	21.8	4 1	14 54.98	-10 31.3	4.003	4.868	6.5	21.2
4 11	14 59.06	-9 24.0	1.759	2.702	9.0	21.6	4 11	14 51.37	-9 51.6	3.920	4.858	4.6	21.1
4 21	14 51.61	-8 27.0	1.697	2.683	5.3	21.3	4 21	14 46.96	-9 9.9	3.863	4.848	2.6	20.9
5 1	14 42.84	-7 29.7	1.661	2.663	3.0	21.1	5 1	14 42.08	-8 28.4	3.836	4.838	1.4	20.8
5 11	14 33.74	-6 37.8	1.653	2.643	5.5	21.2	5 11	14 37.14	-7 49.4	3.839	4.828	2.7	20.9
5 21	14 25.31	-5 56.6	1.671	2.622	9.5	21.4	5 21	14 32.50	-7 14.9	3.871	4.818	4.7	21.1
5 31	14 18.46	-5 30.2	1.714	2.601	13.3	21.6	5 31	14 28.51	-6 46.9	3.930	4.808	6.7	21.2
6 10	14 13.82	-5 20.8	1.776	2.580	16.7	21.8	6 10	14 25.46	-6 26.6	4.013	4.799	8.4	21.3
439142	2011 <i>UV</i> ₂₈		5 2.9 213°15	1°3/ 4.4 16			167467	2003 <i>YB</i> ₂₇		5 2.9 88°20	3°4/ 5.9 18		
4 1	15 1.57	-23 2.0	2.745	3.582	10.0	21.5	4 1	15 3.94	-27 33.3	2.063	2.894	13.1	19.6
4 11	14 56.40	-22 25.4	2.657	3.576	7.4	21.3	4 11	14 58.49	-27 21.3	1.992	2.901	10.0	19.5
4 21	14 49.87	-21 38.0	2.594	3.570	4.5	21.1	4 21	14 51.18	-26 53.2	1.943	2.909	6.8	19.3
5 1	14 42.54	-20 41.5	2.560	3.564	1.7	20.9	5 1	14 42.79	-26 10.0	1.921	2.916	3.9	19.1
5 11	14 35.10	-19 39.2	2.556	3.557	2.5	21.0	5 11	14 34.32	-25 15.0	1.926	2.923	3.9	19.1
5 21	14 28.22	-18 35.4	2.581	3.550	5.5	21.2	5 21	14 26.70	-24 13.5	1.959	2.930	6.8	19.3
5 31	14 22.48	-17 34.4	2.634	3.543	8.4	21.3	5 31	14 20.69	-23 11.5	2.017	2.937	10.0	19.5
6 10	14 18.31	-16 40.1	2.710	3.535	11.0	21.5	6 10	14 16.82	-22 14.8	2.098	2.944	13.0	19.7
308114	2004 <i>XZ</i> ₂₇		5 2.9 128°26	3°2/ 5.2 18			39333	2002 <i>AM</i> ₁₀		5 2.9 94°70	3°7/30.7 18		
4 1	15 7.64	-25 37.4	1.558	2.406	15.7	20.6	4 1	15 6.86	-9 36.8	1.432	2.315	14.8	19.4
4 11	15 1.60	-25 25.2	1.491	2.412	11.9	20.4	4 11	15 0.86	-8 42.1	1.381	2.327	10.6	19.2
4 21	14 53.08	-24 54.2	1.445	2.418	7.7	20.2	4 21	14 52.57	-7 44.3	1.354	2.340	6.2	19.0
5 1	14 43.08	-24 5.5	1.425	2.425	3.9	19.9	5 1	14 43.02	-6 49.6	1.351	2.353	3.7	18.9
5 11	14 32.95	-23 3.8	1.430	2.430	4.4	20.0	5 11	14 33.49	-6 4.7	1.375	2.365	6.4	19.1
5 21	14 23.96	-21 56.1	1.462	2.436	8.4	20.2	5 21	14 25.14	-5 34.7	1.424	2.377	10.6	19.3
5 31	14 17.14	-20 50.6	1.518	2.441	12.5	20.5	5 31	14 18.89	-5 22.7	1.495	2.389	14.5	19.6
6 10	14 13.08	-19 54.3	1.595	2.446	16.1	20.7	6 10	14 15.25	-5 28.9	1.585	2.400	17.8	19.8
356934	2012 <i>TB</i> ₁₅		5 2.9 285°43	1°9/ 5.3 18			323413	2004 <i>CE</i> ₁₁₉		5 2.9 124°92	3°6/30.5 17		
4 1	14 59.96	-25 6.3	4.369	5.184	7.0	20.1	4 1	15 6.19	-8 18.1	1.708	2.584	13.1	21.1
4 11	14 54.91	-25 26.2	4.276	5.178	5.3	20.0	4 11	15 0.14	-7 30.6	1.651	2.593	9.4	20.9
4 21	14 48.93	-25 39.9	4.210	5.172	3.6	19.8	4 21	14 52.10	-6 41.5	1.618	2.602	5.7	20.7
5 1	14 42.39	-25 47.5	4.174	5.166	2.1	19.7	5 1	14 42.95	-5 56.2	1.612	2.611	3.6	20.6
5 11	14 35.71	-25 49.7	4.167	5.161	2.3	19.7	5 11	14 33.76	-5 19.9	1.632	2.619	6.0	20.7
5 21	14 29.31	-25 47.6	4.191	5.155	3.8	19.8	5 21	14 25.53	-4 56.8	1.679	2.627	9.7	21.0
5 31	14 23.60	-25 42.9	4.243	5.149	5.6	19.9	5 31	14 19.10	-4 49.2	1.750	2.635	13.2	21.2
6 10	14 18.91	-25 37.6	4.320	5.143	7.2	20.1	6 10	14 14.96	-4 57.7	1.840	2.642	16.2	21.4
197870	<i>Erkman</i>		5 2.9 206°91	5°8/ 7.5 18			390143	2012 <i>VK</i> ₈₄		5 2.9 156°47	1°3/ 4.1 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
509098	2005 <i>UE</i> ₄₄₃		5 2.9 255°67	1.5/ 4.2	18		29585	Johnhale		5 2.9 123°51	0.8/ 2.3	18	
4 1	15 5.03	-23 8.3	1.989	2.835	12.9	22.0	4 1	15 3.06	-14 15.6	2.466	3.327	10.2	19.3
4 11	14 59.48	-22 26.9	1.892	2.816	9.6	21.8	4 11	14 57.48	-13 52.4	2.401	3.337	7.2	19.1
4 21	14 51.87	-21 29.5	1.818	2.796	5.9	21.5	4 21	14 50.48	-13 24.4	2.362	3.347	4.0	19.0
5 1	14 42.94	-20 18.1	1.772	2.776	2.1	21.2	5 1	14 42.70	-12 54.1	2.351	3.357	0.9	18.7
5 11	14 33.69	-18 57.3	1.753	2.755	3.4	21.2	5 11	14 34.88	-12 24.6	2.369	3.367	3.1	18.9
5 21	14 25.14	-17 33.8	1.763	2.734	7.5	21.5	5 21	14 27.71	-11 59.0	2.416	3.376	6.4	19.1
5 31	14 18.18	-16 14.7	1.799	2.712	11.5	21.6	5 31	14 21.79	-11 40.2	2.489	3.386	9.3	19.3
6 10	14 13.46	-15 6.2	1.857	2.690	14.9	21.8	6 10	14 17.54	-11 29.9	2.584	3.395	11.9	19.5
308421	2005 <i>SZ</i> ₁₂₆		5 2.9 174°85	0°1/ 2.9	18		149932	2005 <i>SC</i> ₁₆₆		5 2.9 195°12	1°8/ 1.4	18	
4 1	15 1.71	-16 49.4	2.853	3.705	9.2	22.5	4 1	15 2.06	-10 47.1	2.608	3.473	9.5	20.6
4 11	14 56.41	-16 26.1	2.776	3.707	6.6	22.4	4 11	14 56.75	-10 20.9	2.534	3.472	6.8	20.4
4 21	14 49.86	-15 56.9	2.725	3.709	3.7	22.2	4 21	14 50.10	-9 52.1	2.485	3.470	3.9	20.2
5 1	14 42.58	-15 23.7	2.703	3.710	0.6	21.9	5 1	14 42.65	-9 23.5	2.465	3.468	1.8	20.1
5 11	14 35.21	-14 49.2	2.711	3.711	2.5	22.1	5 11	14 35.10	-8 58.1	2.473	3.466	3.7	20.2
5 21	14 28.37	-14 16.5	2.747	3.711	5.5	22.3	5 21	14 28.09	-8 38.7	2.511	3.464	6.6	20.4
5 31	14 22.60	-13 48.4	2.811	3.711	8.3	22.5	5 31	14 22.21	-8 27.4	2.574	3.461	9.4	20.6
6 10	14 18.29	-13 27.3	2.899	3.711	10.7	22.6	6 10	14 17.89	-8 25.8	2.660	3.458	11.9	20.7
58919	1998 <i>KF</i> ₅₅		5 2.9 311°08	1°3/ 1.8	18		101997	1999 <i>RU</i> ₇₅		5 2.9 160°99	0°1/ 2.9	18	
4 1	14 59.73	-16 18.2	1.970	2.842	11.9	18.8	4 1	15 6.17	-18 0.5	1.743	2.606	13.6	19.8
4 11	14 55.59	-15 5.8	1.877	2.819	8.5	18.5	4 11	15 0.25	-17 19.4	1.674	2.610	9.8	19.5
4 21	14 49.65	-13 41.4	1.808	2.796	4.7	18.2	4 21	14 52.24	-16 27.1	1.628	2.614	5.5	19.3
5 1	14 42.56	-12 9.6	1.767	2.774	1.3	17.9	5 1	14 43.02	-15 27.0	1.610	2.617	0.9	19.0
5 11	14 35.22	-10 37.1	1.754	2.751	4.2	18.1	5 11	14 33.68	-14 24.8	1.619	2.620	3.8	19.2
5 21	14 28.49	-9 10.8	1.769	2.730	8.3	18.3	5 21	14 25.29	-13 26.7	1.655	2.622	8.2	19.5
5 31	14 23.17	-7 57.3	1.808	2.708	12.1	18.5	5 31	14 18.72	-12 38.2	1.716	2.624	12.2	19.7
6 10	14 19.85	-7 0.5	1.868	2.687	15.4	18.7	6 10	14 14.51	-12 3.3	1.798	2.626	15.5	19.9
194231	2001 <i>TW</i> ₁₅₄		5 2.9 102°73	4°9/ 30.1	18		103029	1999 <i>XL</i> ₁₁₄		5 2.9 247°33	6°9/ 7.7	18	
4 1	15 8.19	-6 18.8	1.445	2.326	14.8	20.1	4 1	15 9.74	-34 47.0	1.894	2.690	15.4	19.7
4 11	15 1.75	-5 24.3	1.398	2.341	10.7	19.8	4 11	15 3.34	-35 12.9	1.797	2.674	12.7	19.5
4 21	14 53.04	-4 30.7	1.374	2.356	6.7	19.7	4 21	14 54.28	-35 17.6	1.722	2.657	9.9	19.2
5 1	14 43.10	-3 44.4	1.375	2.371	4.9	19.6	5 1	14 43.40	-34 57.7	1.671	2.640	7.5	19.1
5 11	14 33.22	-3 11.6	1.402	2.385	7.3	19.8	5 11	14 31.99	-34 13.6	1.645	2.622	7.1	19.0
5 21	14 24.56	-2 56.3	1.455	2.399	11.2	20.0	5 21	14 21.39	-33 9.6	1.646	2.604	9.1	19.1
5 31	14 18.01	-3 0.1	1.529	2.412	14.9	20.3	5 31	14 12.81	-31 53.3	1.672	2.585	12.2	19.2
6 10	14 14.08	-3 22.2	1.622	2.426	18.0	20.5	6 10	14 7.06	-30 34.4	1.720	2.566	15.4	19.4
31273	1998 <i>FY</i> ₂₃		5 2.9 92°31	4°3/ 29.1	18		140972	2001 <i>VF</i> ₁₂₀		5 2.9 155°98	0°6/ 2.5	18	
4 1	15 1.30	-4 53.0	2.192	3.067	10.7	18.9	4 1	15 4.27	-14 6.8	2.431	3.290	10.4	20.0
4 11	14 56.30	-3 50.5	2.136	3.075	7.8	18.7	4 11	14 58.43	-14 0.4	2.358	3.293	7.4	19.8
4 21	14 49.84	-2 49.0	2.105	3.083	5.2	18.6	4 21	14 51.07	-13 49.7	2.311	3.296	4.1	19.6
5 1	14 42.58	-1 53.7	2.103	3.092	4.3	18.5	5 1	14 42.82	-13 36.5	2.292	3.299	0.8	19.3
5 11	14 35.29	-1 9.3	2.128	3.100	6.1	18.7	5 11	14 34.46	-13 23.3	2.303	3.302	3.1	19.5
5 21	14 28.71	-0 38.9	2.179	3.108	8.8	18.9	5 21	14 26.72	-13 12.9	2.342	3.304	6.4	19.7
5 31	14 23.43	-0 24.5	2.255	3.116	11.6	19.0	5 31	14 20.25	-13 7.5	2.407	3.306	9.5	19.9
6 10	14 19.89	-0 26.1	2.350	3.124	13.9	19.2	6 10	14 15.52	-13 9.3	2.495	3.308	12.1	20.1
245482	2005 <i>OP</i> ₃		5 2.9 254°35	6°8/ 26.8	18		399412	2001 <i>TX</i> ₂₅₈		5 2.9 231°19	2°8/ 1.3	16	
4 1	15 3.28	+6 1.3	2.430	3.285	10.5	20.3	4 1	15 8.42	-10 29.9	1.661	2.533	13.6	22.1
4 11	14 57.72	+6 48.9	2.359	3.272	8.5	20.1	4 11	15 2.09	-9 55.1	1.581	2.522	9.9	21.8
4 21	14 50.67	+7 28.2	2.313	3.259	7.1	20.0	4 21	14 53.42	-9 15.7	1.525	2.511	5.7	21.6
5 1	14 42.74	+7 54.1	2.295	3.246	7.0	20.0	5 1	14 43.25	-8 36.3	1.495	2.499	2.8	21.4
5 11	14 34.65	+8 3.1	2.302	3.232	8.3	20.0	5 11	14 32.73	-8 2.1	1.493	2.486	5.5	21.5
5 21	14 27.14	+7 53.5	2.336	3.218	10.4	20.1	5 21	14 23.04	-7 38.0	1.517	2.472	9.9	21.7
5 31	14 20.83	+7 25.3	2.392	3.204	12.6	20.3	5 31	14 15.22	-7 27.7	1.565	2.458	14.0	21.9
6 10	14 16.19	+6 40.1	2.468	3.189	14.6	20.4	6 10	14 9.94	-7 33.0	1.632	2.443	17.6	22.1
407760	2011 <i>WH</i> ₆₃		5 2.9 152°08	0°4/ 2.8	16		262762	2006 <i>XP</i> ₆₄		5 2.9 102°02	2°1/ 1.6	17	
4 1	15 8.68	-16 9.6	1.703	2.567	13.8	22.3	4 1	15 6.71	-11 46.4	1.752	2.624	13.1	21.3
4 11	15 2.07	-15 50.1	1.637	2.574	9.9	22.1	4 11	15 0.45	-11 10.8	1.699	2.640	9.3	21.1
4 21	14 53.27	-15 21.9	1.595	2.580	5.6	21.8	4 21	14 52.25	-10 31.0	1.670	2.656	5.2	20.9
5 1	14 43.17	-14 48.0	1.579	2.586	0.9	21.5	5 1	14 43.02	-9 51.2	1.668	2.672	2.1	20.7
5 11	14 32.96	-14 12.6	1.591	2.591	3.9	21.7	5 11	14 33.80	-9 16.1	1.693	2.688	4.7	20.9
5 21	14 23.74	-13 40.8	1.630	2.596	8.4	22.0	5 21	14 25.59	-8 49.9	1.746	2.703	8.7	21.2
5 31	14 16.45	-13 16.9	1.694	2.601	12.4	22.3	5 31	14 19.18	-8 35.7	1.822	2.718	12.2	21.4
6 10	14 11.64	-13 4.3	1.778	2.604	15.8	22.5	6 10	14 15.03	-8 34.9	1.919	2.733	15.3	21.6
330991	2009 <i>UU</i> ₂₅		5 2.9 319°74	4°4/ 28.5	17		88576	2001 <i>QA</i> ₂₄₉		5 2.9 256°54	2°3/ 1.3	18	
4 1	15 1.50	-13 25.1	1.491	2.377	14.1	20.0	4 1	15 5.11	-11 33.2	1.901	2.772	12.2	20.1
4 11	14 57.14	-10 38.7	1.417	2.366	10.1	19.7	4 11	14 59.51	-10 52.6	1.814	2.755	8.8	19.9
4 21	14 50.59	-7 35.5	1.369	2.357	6.0	19.4	4 21	14 51.90	-10 6.5	1.752	2.738	5.1	19.6
5 1	14 42.73	-4 27.9	1.350	2.347	4.6	19.3	5 1	14 42.99	-9 18.9	1.716	2.720	2.3	19.4
5 11	14 34.72	-1 31.1	1.359	2.338	8.0	19.5	5 11	14 33.76	-8 34.9	1.709	2.702	4.9	19.5
5 21	14 27.66	+1 1.6	1.395	2.329	12.4	19.7	5 21	14 25.20	-7 59.3	1.728	2.683	8.9	19.7
5 31	14 22.45	+3 1.7	1.454	2.321	16.4	19.9	5 31	14 18.19	-7 36.1	1.772	2.664	12.7	19.9
6 10	14 19.68	+4 26.6	1.531	2.313	19.8	20.1	6 10	14 13.37	-7 27.5	1.836	2.645	16.0	20.1
135998	2002 <i>VM</i> ₂₉		5 2.9 145°60	0°8/ 2.4	18		450790	2007 <i>TM</i> ₂₃₅		5 2.9 216°50	0°2/ 2.7	16	
4 1	15 5.17	-13 31.6											

EPHEMERIDES

5 2.9

5 3.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
278668	2008 <i>RS</i> ₈₇		5 2.9 129°53	0.4/ 2.4	18		409762	2006 <i>DA</i> ₁₀₀		5 2.9 313°99	5.4/ 5.2	17	
4 1	14 58.11	-15 57.7	3.668	4.521	7.3	21.2	4 1	15 7.57	-25 14.2	1.225	2.088	18.1	21.0
4 11	14 53.60	-15 18.7	3.600	4.532	5.2	21.1	4 11	15 2.67	-26 5.9	1.142	2.070	14.2	20.7
4 21	14 48.21	-14 35.2	3.559	4.543	2.9	20.9	4 21	14 54.34	-26 41.7	1.079	2.052	9.8	20.4
5 1	14 42.34	-13 49.4	3.547	4.554	0.5	20.7	5 1	14 43.51	-26 57.7	1.038	2.034	6.0	20.1
5 11	14 36.46	-13 3.7	3.566	4.565	2.2	20.9	5 11	14 31.77	-26 53.6	1.020	2.017	6.5	20.1
5 21	14 30.99	-12 20.8	3.615	4.575	4.5	21.1	5 21	14 20.97	-26 33.2	1.025	2.000	10.8	20.2
5 31	14 26.33	-11 43.0	3.692	4.585	6.7	21.2	5 31	14 12.76	-26 4.6	1.051	1.984	15.7	20.5
6 10	14 22.75	-11 12.0	3.793	4.595	8.6	21.4	6 10	14 8.23	-25 36.9	1.095	1.969	20.2	20.7
289710	2005 <i>HX</i> ₆		5 2.9 341°68	1.6/ 1.9	17		303879	2005 <i>TV</i> ₄₁		5 2.9 260°87	1.9/ 4.8	16	
4 1	15 2.76	-15 28.6	1.340	2.226	15.4	20.5	4 1	15 2.12	-24 19.8	2.415	3.253	11.2	20.9
4 11	14 58.31	-14 31.4	1.273	2.222	11.1	20.2	4 11	14 57.08	-23 53.2	2.322	3.240	8.4	20.7
4 21	14 51.37	-13 22.0	1.228	2.218	6.1	20.0	4 21	14 50.42	-23 13.8	2.254	3.227	5.3	20.4
5 1	14 42.90	-12 6.3	1.208	2.214	1.7	19.7	5 1	14 42.77	-22 22.8	2.213	3.214	2.4	20.2
5 11	14 34.22	-10 52.7	1.212	2.211	5.2	19.9	5 11	14 34.92	-21 23.8	2.200	3.201	3.0	20.2
5 21	14 26.59	-9 49.2	1.241	2.209	10.3	20.1	5 21	14 27.66	-20 21.0	2.216	3.188	6.2	20.4
5 31	14 21.06	-9 2.3	1.292	2.206	14.9	20.4	5 31	14 21.69	-19 19.7	2.259	3.174	9.4	20.6
6 10	14 18.28	-8 35.6	1.361	2.205	18.8	20.6	6 10	14 17.53	-18 24.7	2.325	3.160	12.2	20.8
73347	2002 <i>JS</i> ₁₂₃		5 2.9 113°70	5.1/ 29.9	18		97299	1999 <i>XB</i> ₁₈₁		5 2.9 103°79	3.4/ 5.7	18	
4 1	15 6.89	-5 1.1	1.540	2.421	14.1	19.1	4 1	15 7.13	-26 48.7	2.137	2.963	12.8	19.3
4 11	15 0.83	-4 11.1	1.486	2.428	10.3	18.8	4 11	15 0.69	-26 54.4	2.073	2.981	9.8	19.1
4 21	14 52.57	-3 23.0	1.455	2.436	6.7	18.7	4 21	14 52.41	-26 45.8	2.034	2.998	6.6	18.9
5 1	14 43.08	-2 43.0	1.450	2.443	5.2	18.6	5 1	14 43.10	-26 23.1	2.021	3.015	3.8	18.8
5 11	14 33.55	-2 16.7	1.470	2.450	7.4	18.7	5 11	14 33.74	-25 48.9	2.036	3.032	4.0	18.8
5 21	14 25.07	-2 7.6	1.516	2.457	11.1	18.9	5 21	14 25.27	-25 7.6	2.079	3.048	6.7	19.0
5 31	14 18.54	-2 17.3	1.584	2.463	14.7	19.2	5 31	14 18.46	-24 24.4	2.149	3.064	9.8	19.2
6 10	14 14.51	-2 44.9	1.671	2.470	17.7	19.4	6 10	14 13.80	-23 44.5	2.241	3.079	12.5	19.4
62705	2000 <i>TY</i> ₃₆		5 2.9 314°49	0.7/ 2.5	18		191087	2002 <i>CK</i> ₂₈₁		5 2.9 324°43	5.4/ 29.2	18	
4 1	15 1.99	-15 26.1	2.067	2.934	11.6	19.5	4 1	15 2.91	-4 31.9	1.645	2.529	13.1	20.0
4 11	14 57.08	-14 59.4	1.990	2.929	8.3	19.3	4 11	14 58.00	-3 30.3	1.581	2.524	9.7	19.7
4 21	14 50.43	-14 25.7	1.937	2.923	4.6	19.1	4 21	14 51.05	-2 29.7	1.540	2.519	6.5	19.5
5 1	14 42.74	-13 47.9	1.911	2.918	0.9	18.8	5 1	14 42.88	-1 36.8	1.524	2.515	5.4	19.5
5 11	14 34.87	-13 9.8	1.913	2.913	3.5	19.0	5 11	14 34.55	-0 57.9	1.535	2.511	7.6	19.6
5 21	14 27.68	-12 35.6	1.943	2.908	7.3	19.2	5 21	14 27.07	-0 37.2	1.570	2.507	11.1	19.8
5 31	14 21.91	-12 9.2	1.997	2.903	10.8	19.4	5 31	14 21.30	-0 36.8	1.627	2.503	14.6	20.0
6 10	14 18.07	-11 53.4	2.073	2.898	13.8	19.6	6 10	14 17.81	-0 56.1	1.703	2.499	17.6	20.2
341271	2007 <i>RL</i> ₂₇₁		5 2.9 9°39	2.7/ 1.6	18		10070	Liuzongli		5 2.9 22°67	1.8/ 3.9	18	
4 1	15 6.37	-7 41.2	1.809	2.683	12.6	19.5	4 1	15 6.19	-20 23.8	1.178	2.056	17.6	17.1
4 11	15 0.33	-7 47.3	1.743	2.684	9.1	19.3	4 11	15 1.13	-20 23.7	1.118	2.060	13.0	16.9
4 21	14 52.30	-7 54.5	1.700	2.685	5.4	19.0	4 21	14 53.10	-20 8.1	1.079	2.064	7.7	16.6
5 1	14 43.06	-8 5.3	1.685	2.687	2.8	18.9	5 1	14 43.24	-19 38.6	1.063	2.069	2.5	16.3
5 11	14 33.65	-8 22.3	1.697	2.690	5.0	19.0	5 11	14 33.16	-19 0.4	1.071	2.074	4.5	16.4
5 21	14 25.07	-8 47.0	1.735	2.692	8.7	19.2	5 21	14 24.39	-18 20.5	1.102	2.080	9.9	16.7
5 31	14 18.18	-9 20.5	1.799	2.696	12.3	19.5	5 31	14 18.18	-17 46.4	1.154	2.086	14.8	17.0
6 10	14 13.54	-10 3.2	1.883	2.699	15.4	19.7	6 10	14 15.19	-17 24.0	1.225	2.093	19.0	17.3
352041	2006 <i>VU</i> ₉₇		5 2.9 196°07	1.5/ 4.4	16		54406	2000 <i>LR</i> ₄		5 2.9 202°83	3.7/ 30.1	18	
4 1	15 2.91	-22 24.8	2.709	3.546	10.1	22.7	4 1	15 3.99	-8 22.2	1.826	2.703	12.4	18.5
4 11	14 57.42	-22 11.6	2.625	3.544	7.5	22.5	4 11	14 58.61	-7 20.4	1.758	2.701	8.9	18.3
4 21	14 50.51	-21 48.8	2.566	3.541	4.6	22.3	4 21	14 51.33	-6 15.8	1.715	2.699	5.5	18.1
5 1	14 42.75	-21 17.6	2.535	3.538	1.9	22.1	5 1	14 42.94	-5 14.2	1.699	2.697	3.8	18.0
5 11	14 34.86	-20 40.6	2.534	3.535	2.6	22.1	5 11	14 34.41	-4 21.5	1.710	2.694	6.1	18.1
5 21	14 27.52	-20 1.0	2.562	3.531	5.6	22.3	5 21	14 26.69	-3 42.5	1.747	2.692	9.7	18.3
5 31	14 21.35	-19 22.5	2.617	3.527	8.4	22.5	5 31	14 20.58	-3 20.4	1.808	2.689	13.1	18.5
6 10	14 16.81	-18 48.8	2.696	3.523	11.0	22.7	6 10	14 16.61	-3 16.1	1.889	2.685	16.1	18.7
34754	2001 <i>QG</i> ₁₁₁		5 2.9 147°89	1.2/ 3.9	18		416700	2005 <i>AR</i> ₃₄		5 2.9 103°91	9.1/ 25.4	17	
4 1	15 5.64	-21 47.4	2.053	2.900	12.5	18.5	4 1	15 3.66	+9 14.0	1.966	2.822	12.6	20.5
4 11	14 59.63	-21 11.9	1.983	2.909	9.2	18.3	4 11	14 58.15	+10 26.2	1.920	2.826	10.5	20.3
4 21	14 51.80	-20 23.8	1.937	2.917	5.4	18.1	4 21	14 50.97	+11 25.2	1.898	2.830	9.3	20.3
5 1	14 42.96	-19 25.5	1.919	2.924	1.7	17.9	5 1	14 42.87	+12 4.2	1.901	2.835	9.4	20.3
5 11	14 34.07	-18 21.7	1.929	2.931	3.1	18.0	5 11	14 34.74	+12 19.2	1.928	2.839	10.7	20.4
5 21	14 26.03	-17 17.8	1.968	2.937	6.9	18.2	5 21	14 27.43	+12 8.9	1.979	2.843	12.8	20.5
5 31	14 19.59	-16 19.4	2.033	2.943	10.5	18.4	5 31	14 21.64	+11 34.4	2.051	2.847	14.9	20.7
6 10	14 15.25	-15 31.0	2.120	2.949	13.5	18.7	6 10	14 17.81	+10 39.3	2.140	2.850	16.9	20.8
183689	2003 <i>YV</i> ₁₇		5 2.9 196°71	1.0/ 2.2	16		499276	2009 <i>VH</i> ₆₆		5 3.0 179°68	1.9/ 4.5	17	
4 1	15 6.89	-14 42.6	1.982	2.844	12.2	21.7	4 1	15 4.84	-23 17.0	1.902	2.750	13.3	21.4
4 11	15 0.70	-14 9.6	1.905	2.841	8.8	21.5	4 11	14 59.30	-22 53.6	1.827	2.751	9.9	21.1
4 21	14 52.48	-13 29.3	1.852	2.838	4.9	21.2	4 21	14 51.75	-22 15.8	1.774	2.751	6.1	20.9
5 1	14 43.10	-12 44.9	1.827	2.834	1.2	20.9	5 1	14 43.01	-21 25.5	1.748	2.751	2.5	20.7
5 11	14 33.53	-12 1.0	1.831	2.829	3.9	21.1	5 11	14 34.12	-20 26.7	1.750	2.751	3.4	20.7
5 21	14 24.73	-11 22.0	1.863	2.823	8.0	21.4	5 21	14 26.08	-19 25.3	1.779	2.751	7.3	21.0
5 31	14 17.54	-10 52.3	1.919	2.817	11.6	21.6	5 31	14 19.73	-18 27.3	1.833	2.751	11.0	21.2
6 10	14 12.51	-10 34.6	1.998	2.810	14.8	21.8	6 10	14 15.63	-17 38.2	1.909	2.750	14.3	21.4
150857	2001 <i>SF</i> ₁₂₀		5 2.9 193°70	4.6/ 6.3	17 R		111798	2002 <i>CW</i> ₂₄₂		5 3.0 90°91	6.0/ 26.6	18	
4 1</													