

EPHEMERIDES

5 11.9

5 12.0

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

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
62896	2000 UC ₁₀₃		5 12.0 150°91	1°9/13.2	18		414145	2007 VB ₂₉₂		5 12.0 161°64	0°8/11.5	16	
4 11	15 41.53	-24 18.8	2.061	2.919	12.1	19.5	4 11	15 42.51	-17 42.3	1.852	2.725	12.5	22.6
4 21	15 34.99	-24 20.5	1.991	2.925	8.9	19.3	4 21	15 35.72	-17 13.7	1.786	2.731	8.9	22.3
5 1	15 26.58	-24 11.9	1.946	2.930	5.3	19.1	5 1	15 26.97	-16 38.4	1.745	2.737	4.7	22.1
5 11	15 17.12	-23 53.7	1.928	2.935	2.1	18.9	5 11	15 17.17	-15 59.4	1.732	2.741	0.8	21.8
5 21	15 7.61	-23 28.0	1.939	2.939	3.7	19.0	5 21	15 7.36	-15 20.5	1.747	2.746	4.3	22.1
5 31	14 59.01	-22 58.6	1.977	2.943	7.3	19.3	5 31	14 58.56	-14 46.1	1.789	2.749	8.4	22.3
6 10	14 52.14	-22 29.9	2.040	2.947	10.7	19.5	6 10	14 51.61	-14 20.0	1.855	2.752	12.1	22.6
6 20	14 47.48	-22 5.6	2.125	2.950	13.6	19.7	6 20	14 46.99	-14 4.7	1.943	2.754	15.2	22.8
36625	2000 QT ₁₅₈		5 12.0 93°23	3°4/ 9.4	18		147965	1994 PV ₁₄		5 12.0 233°43	5°8/16.9	18	
4 11	15 40.61	-11 10.1	1.990	2.869	11.6	19.4	4 11	15 41.64	-40 0.9	2.955	3.733	10.9	21.3
4 21	15 33.96	-9 57.7	1.952	2.899	8.2	19.2	4 21	15 34.99	-40 23.0	2.858	3.719	9.1	21.1
5 1	15 25.82	-8 45.2	1.940	2.928	4.9	19.1	5 1	15 26.59	-40 29.7	2.784	3.705	7.3	21.0
5 11	15 17.04	-7 37.8	1.957	2.956	3.5	19.0	5 11	15 17.15	-40 19.3	2.737	3.690	6.0	20.9
5 21	15 8.50	-6 40.2	2.001	2.984	5.7	19.2	5 21	15 7.50	-39 52.0	2.717	3.675	5.9	20.9
5 31	15 1.00	-5 56.2	2.073	3.011	8.9	19.5	5 31	14 58.51	-39 10.1	2.724	3.660	7.1	20.9
6 10	14 55.17	-5 27.7	2.169	3.037	11.8	19.7	6 10	14 50.95	-38 18.0	2.758	3.644	9.0	21.0
6 20	14 51.32	-5 14.9	2.286	3.063	14.2	19.9	6 20	14 45.35	-37 20.7	2.815	3.628	11.0	21.1
83124	2001 QO ₂₅₀		5 12.0 222°54	2°5/13.6	18		105264	2000 QE ₁₈		5 12.0 152°51	1°3/11.1	17	
4 11	15 40.76	-26 14.1	2.464	3.310	10.8	19.9	4 11	15 40.26	-15 42.9	2.143	3.017	11.1	20.1
4 21	15 34.35	-26 30.0	2.378	3.303	8.1	19.7	4 21	15 33.90	-15 12.4	2.079	3.025	7.8	19.9
5 1	15 26.24	-26 36.4	2.318	3.296	5.1	19.5	5 1	15 25.92	-14 37.7	2.041	3.032	4.2	19.7
5 11	15 17.10	-26 33.1	2.286	3.288	2.7	19.4	5 11	15 17.09	-14 1.8	2.030	3.038	1.3	19.5
5 21	15 7.77	-26 21.1	2.282	3.279	3.6	19.4	5 21	15 8.26	-13 27.8	2.048	3.044	4.1	19.7
5 31	14 59.12	-26 2.9	2.307	3.271	6.6	19.6	5 31	15 0.28	-12 59.4	2.094	3.050	7.7	20.0
6 10	14 51.90	-25 42.1	2.358	3.262	9.6	19.8	6 10	14 53.87	-12 39.4	2.165	3.055	10.9	20.2
6 20	14 46.63	-25 22.5	2.432	3.253	12.2	19.9	6 20	14 49.43	-12 29.4	2.258	3.060	13.6	20.4
69112	2003 DO ₄		5 12.0 322°93	10°5/ 5.2	18		243842	2000 VZ ₃₀		5 12.0 237°60	0°7/12.7	17	
4 11	15 37.62	+ 4 38.2	1.499	2.377	14.7	18.7	4 11	15 36.86	-23 14.0	2.566	3.425	10.0	20.4
4 21	15 32.56	+ 6 5.3	1.445	2.369	12.3	18.5	4 21	15 31.44	-22 32.4	2.480	3.416	7.2	20.2
5 1	15 25.38	+ 7 17.9	1.413	2.361	10.7	18.4	5 1	15 24.60	-21 41.1	2.419	3.406	4.0	19.9
5 11	15 17.02	+ 8 7.1	1.404	2.354	10.8	18.4	5 11	15 16.97	-20 42.4	2.387	3.396	0.9	19.7
5 21	15 8.56	+ 8 27.4	1.418	2.347	12.7	18.5	5 21	15 9.27	-19 39.5	2.385	3.386	3.0	19.8
5 31	15 1.13	+ 8 16.4	1.453	2.340	15.3	18.6	5 31	15 2.23	-18 36.6	2.411	3.375	6.3	20.0
6 10	14 55.62	+ 7 36.1	1.507	2.334	18.1	18.8	6 10	14 56.47	-17 38.2	2.464	3.365	9.3	20.2
6 20	14 52.55	+ 6 30.8	1.577	2.328	20.6	18.9	6 20	14 52.41	-16 47.5	2.540	3.354	12.0	20.4
106138	2000 TO ₄₃		5 12.0 231°35	2°1/13.3	18		437769	2015 AD ₁₇₈		5 12.0 344°59	2°5/10.9	17	
4 11	15 41.36	-24 22.8	2.498	3.348	10.5	20.0	4 11	15 37.92	-13 25.3	1.343	2.242	14.7	20.2
4 21	15 34.77	-24 49.1	2.413	3.341	7.8	19.8	4 21	15 33.12	-13 6.3	1.277	2.233	10.5	19.9
5 1	15 26.46	-25 7.8	2.353	3.333	4.8	19.6	5 1	15 25.84	-12 44.9	1.232	2.226	5.8	19.7
5 11	15 17.13	-25 18.4	2.322	3.325	2.3	19.4	5 11	15 17.10	-12 24.9	1.212	2.220	2.5	19.4
5 21	15 7.56	-25 21.5	2.319	3.317	3.5	19.5	5 21	15 8.14	-12 10.6	1.216	2.214	6.0	19.6
5 31	14 58.64	-25 18.9	2.346	3.309	6.5	19.6	5 31	15 0.30	-12 5.9	1.244	2.209	10.8	19.9
6 10	14 51.12	-25 13.7	2.398	3.300	9.5	19.8	6 10	14 54.64	-12 13.9	1.293	2.205	15.2	20.1
6 20	14 45.51	-25 9.0	2.474	3.291	12.2	20.0	6 20	14 51.78	-12 35.2	1.361	2.202	18.9	20.3
115994	2003 WP ₆₈		5 12.0 111°82	0°2/11.9	17		145831	1998 VB ₅₇		5 12.0 220°21	4°5/14.7	17	
4 11	15 41.46	-19 14.5	1.548	2.430	14.1	20.4	4 11	15 44.92	-31 34.7	2.184	3.011	12.7	20.7
4 21	15 35.28	-18 50.7	1.486	2.435	10.0	20.1	4 21	15 37.63	-31 56.7	2.094	3.001	9.9	20.5
5 1	15 26.84	-18 18.1	1.448	2.440	5.4	19.9	5 1	15 28.15	-32 4.3	2.028	2.990	7.0	20.3
5 11	15 17.15	-17 39.6	1.435	2.445	0.5	19.5	5 11	15 17.32	-31 55.6	1.988	2.978	4.7	20.2
5 21	15 7.44	-16 59.6	1.448	2.449	4.5	19.8	5 21	15 6.18	-31 31.5	1.977	2.966	5.2	20.2
5 31	14 58.91	-16 23.1	1.487	2.454	9.2	20.1	5 31	14 55.88	-30 55.0	1.994	2.952	7.8	20.3
6 10	14 52.50	-15 55.2	1.550	2.459	13.3	20.4	6 10	14 47.39	-30 11.9	2.036	2.938	10.9	20.5
6 20	14 48.73	-15 38.7	1.632	2.463	16.8	20.6	6 20	14 41.32	-29 27.8	2.101	2.923	13.8	20.6
79091	1979 OB ₁₁		5 12.0 182°80	1°5/13.0	17		347812	2002 MW ₃		5 12.0 329°05	11°0/ 5.1	16	
4 11	15 41.64	-24 22.4	1.821	2.685	13.2	19.8	4 11	15 35.68	+ 1 14.2	1.229	2.126	15.9	19.2
4 21	15 35.25	-23 57.1	1.749	2.686	9.6	19.6	4 21	15 32.08	+ 2 41.0	1.134	2.076	13.1	18.9
5 1	15 26.78	-23 18.9	1.700	2.686	5.6	19.3	5 1	15 25.64	+ 4 0.8	1.060	2.026	11.2	18.7
5 11	15 17.15	-22 29.6	1.678	2.685	1.8	19.1	5 11	15 17.12	+ 5 2.0	1.007	1.977	11.5	18.5
5 21	15 7.46	-21 33.1	1.683	2.685	3.9	19.2	5 21	15 7.69	+ 5 33.8	0.975	1.928	14.2	18.5
5 31	14 58.81	-20 35.0	1.716	2.684	8.1	19.5	5 31	14 58.87	+ 5 28.3	0.962	1.881	18.3	18.5
6 10	14 52.08	-19 41.3	1.773	2.682	11.9	19.7	6 10	14 52.12	+ 4 43.5	0.966	1.835	22.7	18.6
6 20	14 47.78	-18 56.6	1.852	2.680	15.2	19.9	6 20	14 48.47	+ 3 22.0	0.983	1.792	26.8	18.7
185486	2007 EP ₇₅		5 12.0 332°53	2°3/ 8.9	18		456082	2006 BF ₇₁		5 12.0 163°86	0°1/12.0	16	
4 11	15 29.83	- 8 18.3	4.057	4.933	6.3	19.9	4 11	15 44.55	-19 5.1	1.590	2.466	14.1	22.5
4 21	15 26.06	- 7 37.8	3.987	4.930	4.5	19.8	4 21	15 37.50	-18 56.5	1.525	2.470	10.1	22.2
5 1	15 21.56	- 6 58.1	3.944	4.927	2.9	19.6	5 1	15 28.07	-18 40.1	1.483	2.474	5.5	22.0
5 11	15 16.66	- 6 21.4	3.930	4.924	2.4	19.6	5 11	15 17.31	-18 17.5	1.467	2.477	0.5	21.6
5 21	15 11.75	- 5 49.4	3.946	4.921	3.5	19.7	5 21	15 6.46	-17 52.1	1.479	2.480	4.5	21.9
5 31	15 7.18	- 5 23.9	3.990	4.919	5.3	19.8	5 31	14 56.80	-17 28.3	1.516	2.482	9.1	22.2
6 10	15 3.30	- 5 6.0	4.059	4.916	7.0	19.9	6 10	14 49.32	-17 10.6	1.578	2.483	13.3	22.4
6 20	15 0.34	- 4 56.2	4.152	4.913	8.5	20.0	6 20	14 44.58	-17 2.2	1.659	2.485	16.8	22.7
480647	2015 NU ₂₁		5 12.0 309°86	0°0/11.9	16		497096	2004 BW ₁		5 12.0 271°61	1°0/11.4	18	C
4 11	15 36.												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
90174	2003 AK ₁₉		5 12.0 236°66	0°5/11.7	18	R	288980	2004 TG ₄₉		5 12.0 153°20	0°1/11.9	16	
4 11	15 39.99	-19 3.0	1.718	2.597	13.1	19.7	4 11	15 44.10	-18 56.0	1.704	2.577	13.5	21.6
4 21	15 34.18	-18 27.8	1.645	2.592	9.3	19.5	4 21	15 37.02	-18 41.0	1.640	2.585	9.6	21.4
5 1	15 26.26	-17 43.6	1.595	2.587	5.0	19.2	5 1	15 27.77	-18 18.3	1.601	2.592	5.2	21.1
5 11	15 17.14	-16 53.7	1.572	2.582	0.6	18.9	5 11	15 17.33	-17 50.2	1.588	2.598	0.5	20.8
5 21	15 7.91	-16 2.7	1.576	2.577	4.4	19.1	5 21	15 6.86	-17 20.1	1.603	2.604	4.3	21.1
5 31	14 59.66	-15 15.9	1.607	2.571	8.8	19.4	5 31	14 57.53	-16 52.3	1.645	2.609	8.7	21.4
6 10	14 53.29	-14 38.2	1.661	2.565	12.8	19.6	6 10	14 50.24	-16 31.0	1.711	2.613	12.6	21.6
6 20	14 49.35	-14 12.7	1.735	2.560	16.2	19.8	6 20	14 45.50	-16 19.3	1.797	2.617	15.9	21.8
390630	2002 CC ₂₂₇		5 12.0 20°67	8°9/6.3	17		183739	2003 YF ₁₁₇		5 12.0 207°09	2°3/10.7	17	
4 11	15 35.36	+ 3 43.6	1.708	2.585	13.2	19.9	4 11	15 42.21	-13 0.2	1.962	2.838	11.8	21.6
4 21	15 30.63	+ 4 51.4	1.668	2.594	10.8	19.8	4 21	15 35.53	-12 33.4	1.887	2.833	8.4	21.4
5 1	15 24.21	+ 5 45.2	1.652	2.603	9.2	19.7	5 1	15 26.95	-12 4.3	1.836	2.827	4.7	21.2
5 11	15 16.95	+ 6 18.9	1.659	2.614	9.1	19.7	5 11	15 17.26	-11 36.0	1.814	2.820	2.3	21.0
5 21	15 9.76	+ 6 28.9	1.691	2.625	10.6	19.8	5 21	15 7.42	-11 11.8	1.819	2.812	5.0	21.2
5 31	15 3.54	+ 6 14.0	1.745	2.636	12.9	20.0	5 31	14 58.44	-10 55.2	1.852	2.804	8.8	21.4
6 10	14 58.98	+ 5 36.3	1.819	2.649	15.3	20.2	6 10	14 51.15	-10 48.7	1.910	2.795	12.3	21.6
6 20	14 56.47	+ 4 39.2	1.911	2.662	17.5	20.3	6 20	14 46.05	-10 53.6	1.988	2.786	15.4	21.8
431971	2008 UJ ₁₃₈		5 12.0 172°68	0°3/11.8	17		230106	2001 AZ ₈		5 12.0 172°56	6°1/7.5	17	
4 11	15 39.54	-18 27.2	2.057	2.930	11.5	21.6	4 11	15 38.99	- 0 5.6	2.307	3.173	10.7	20.9
4 21	15 33.55	-18 9.9	1.986	2.931	8.1	21.4	4 21	15 32.90	+ 0 47.3	2.249	3.177	8.3	20.7
5 1	15 25.82	-17 46.4	1.941	2.932	4.4	21.2	5 1	15 25.38	+ 1 32.7	2.218	3.179	6.5	20.6
5 11	15 17.11	-17 18.9	1.923	2.933	0.4	20.8	5 11	15 17.10	+ 2 6.2	2.213	3.181	6.2	20.6
5 21	15 8.34	-16 50.4	1.933	2.934	3.7	21.1	5 21	15 8.83	+ 2 24.7	2.236	3.183	7.7	20.7
5 31	15 0.42	-16 24.3	1.971	2.934	7.6	21.4	5 31	15 1.30	+ 2 26.2	2.285	3.184	10.0	20.9
6 10	14 54.09	-16 4.1	2.033	2.934	11.0	21.6	6 10	14 55.14	+ 2 11.0	2.357	3.184	12.3	21.0
6 20	14 49.83	-15 52.1	2.118	2.934	13.9	21.8	6 20	14 50.74	+ 1 40.4	2.449	3.184	14.4	21.2
508056	2015 BF ₅₃₇		5 12.0 22°90	1°7/10.9	17		317971	2003 YC ₇₈		5 12.0 167°57	2°7/10.6	17	
4 11	15 37.41	-16 13.5	1.646	2.535	13.0	21.2	4 11	15 42.52	-11 49.6	1.772	2.652	12.7	21.0
4 21	15 32.29	-15 29.5	1.586	2.539	9.2	20.9	4 21	15 35.82	-11 27.7	1.708	2.655	9.0	20.8
5 1	15 25.20	-14 39.5	1.549	2.542	4.9	20.7	5 1	15 27.10	-11 5.2	1.668	2.658	5.1	20.6
5 11	15 17.06	-13 48.0	1.538	2.547	1.7	20.5	5 11	15 17.28	-10 45.1	1.655	2.660	2.7	20.4
5 21	15 8.90	-12 59.7	1.554	2.551	4.9	20.7	5 21	15 7.39	-10 30.8	1.670	2.662	5.4	20.6
5 31	15 1.78	-12 19.9	1.595	2.557	9.1	21.0	5 31	14 58.51	-10 25.3	1.711	2.664	9.3	20.8
6 10	14 56.51	-11 52.2	1.659	2.562	12.9	21.2	6 10	14 51.48	-10 30.7	1.776	2.665	13.0	21.0
6 20	14 53.55	-11 38.6	1.743	2.568	16.1	21.4	6 20	14 46.81	-10 47.5	1.862	2.665	16.1	21.2
371618	2006 XY ₆₂		5 12.0 97°21	2°3/13.6	18		123785	2001 BP ₁₇		5 12.0 242°14	1°6/13.1	18	
4 11	15 43.29	-26 21.6	1.869	2.724	13.3	21.4	4 11	15 40.76	-24 0.7	2.174	3.032	11.6	20.6
4 21	15 36.18	-26 3.7	1.818	2.748	9.7	21.2	4 21	15 34.56	-23 52.1	2.084	3.017	8.5	20.4
5 1	15 27.16	-25 32.4	1.791	2.772	5.9	21.0	5 1	15 26.46	-23 33.3	2.019	3.003	5.0	20.1
5 11	15 17.23	-24 49.2	1.791	2.796	2.5	20.9	5 11	15 17.22	-23 5.0	1.981	2.988	1.8	19.9
5 21	15 7.49	-23 57.9	1.818	2.819	3.9	21.0	5 21	15 7.76	-22 29.5	1.971	2.972	3.6	20.0
5 31	14 58.96	-23 4.0	1.873	2.841	7.5	21.3	5 31	14 59.04	-21 50.6	1.990	2.956	7.3	20.2
6 10	14 52.42	-22 13.0	1.954	2.863	11.0	21.5	6 10	14 51.90	-21 13.0	2.034	2.940	10.8	20.4
6 20	14 48.25	-21 29.4	2.056	2.884	13.9	21.8	6 20	14 46.88	-20 40.7	2.101	2.923	13.8	20.5
382366	2013 TP ₉₈		5 12.0 274°83	1°5/11.2	17		388687	2007 UT ₉₂		5 12.0 196°22	0°5/12.4	17	
4 11	15 40.12	-15 28.7	1.712	2.595	12.9	20.9	4 11	15 38.74	-21 4.5	2.231	3.097	11.0	21.8
4 21	15 34.36	-15 6.0	1.633	2.582	9.2	20.6	4 21	15 32.94	-20 48.5	2.156	3.096	7.9	21.6
5 1	15 26.43	-14 38.6	1.577	2.570	5.0	20.4	5 1	15 25.49	-20 24.7	2.106	3.095	4.3	21.4
5 11	15 17.20	-14 9.3	1.548	2.557	1.5	20.1	5 11	15 17.13	-19 54.8	2.084	3.093	0.8	21.1
5 21	15 7.72	-13 41.9	1.546	2.544	4.9	20.3	5 21	15 8.68	-19 21.6	2.090	3.091	3.3	21.3
5 31	14 59.13	-13 20.5	1.569	2.531	9.3	20.5	5 31	15 1.01	-18 48.5	2.124	3.089	6.9	21.5
6 10	14 52.38	-13 8.8	1.617	2.517	13.3	20.7	6 10	14 54.82	-18 19.4	2.184	3.087	10.2	21.7
6 20	14 48.07	-13 8.9	1.684	2.504	16.8	20.9	6 20	14 50.57	-17 57.0	2.265	3.085	13.1	21.9
257243	2009 EU ₂₁		5 12.0 155°33	14°4/1.6	18		491843	2013 AK ₅₇		5 12.0 67°60	5°2/16.0	18	
4 11	15 42.42	+ 7 5.8	1.183	2.061	17.8	20.5	4 11	15 39.87	-35 12.4	2.287	3.105	12.5	20.6
4 21	15 36.19	+ 10 6.8	1.151	2.066	15.5	20.3	4 21	15 33.84	-35 26.2	2.219	3.115	9.9	20.4
5 1	15 27.39	+ 12 46.1	1.141	2.071	14.5	20.3	5 1	15 26.00	-35 23.6	2.175	3.125	7.4	20.3
5 11	15 17.27	+ 14 48.3	1.152	2.075	15.2	20.3	5 11	15 17.17	-35 3.9	2.157	3.136	5.5	20.2
5 21	15 7.26	+ 16 4.4	1.185	2.079	17.4	20.5	5 21	15 8.32	-34 28.5	2.165	3.146	5.5	20.2
5 31	14 58.74	+ 16 32.3	1.236	2.082	20.1	20.7	5 31	15 0.41	-33 41.3	2.200	3.157	7.3	20.3
6 10	14 52.71	+ 16 16.5	1.302	2.084	22.6	20.8	6 10	14 54.19	-32 47.8	2.261	3.167	9.8	20.5
6 20	14 49.63	+ 15 25.0	1.380	2.086	24.9	21.0	6 20	14 50.15	-31 53.5	2.344	3.178	12.2	20.7
304596	2006 VJ ₆₅		5 12.0 245°98	0°7/11.5	18		32941	1995 UY ₄		5 12.0 216°71	2°2/13.6	18	
4 11	15 38.43	-16 41.3	2.571	3.440	9.6	21.0	4 11	15 40.06	-25 44.3	2.624	3.470	10.2	20.4
4 21	15 32.60	-16 28.1	2.482	3.425	6.8	20.8	4 21	15 33.80	-25 56.9	2.539	3.464	7.6	20.2
5 1	15 25.29	-16 10.9	2.419	3.409	3.7	20.5	5 1	15 25.95	-26 0.8	2.479	3.457	4.7	20.0
5 11	15 17.10	-15 51.4	2.384	3.393	0.7	20.3	5 11	15 17.18	-25 55.9	2.447	3.450	2.4	19.8
5 21	15 8.73	-15 31.9	2.379	3.377	3.4	20.5	5 21	15 8.24	-25 43.3	2.445	3.443	3.3	19.9
5 31	15 0.93	-15 14.8	2.402	3.360	6.7	20.6	5 31	14 59.93	-25 25.4	2.471	3.435	6.2	20.0
6 10	14 54.37	-15 2.7	2.451	3.343	9.7	20.8	6 10	14 52.96	-25 5.6	2.524	3.427	9.0	20.2
6 20	14 49.49	-14 57.4	2.523	3.326	12.4	21.0	6 20	14 47.79	-24 47.1	2.600	3.419	11.6	20.4
516881	2011 JK ₃₂		5 12.0 295°68	2°0/10.9	17		108751	2001 OE ₄₃		5 12.0 236°01	0°9/12.8	18	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
427928	2005 <i>VQ</i> ₁		5 12.0 114°05'	2°8/10.6	18		174513	2003 <i>BO</i> ₈₁		5 12.0 90°23'	4°7/15.6	17	
4 11	15 43.19	-9 46.8	2.062	2.935	11.5	21.2	4 11	15 40.44	-33 48.3	2.247	3.072	12.5	20.1
4 21	15 35.93	-9 39.6	2.010	2.953	8.2	21.0	4 21	15 34.24	-33 56.2	2.181	3.083	9.8	20.0
5 1	15 27.02	-9 34.0	1.984	2.971	4.8	20.9	5 1	15 26.23	-33 47.9	2.137	3.094	7.1	19.8
5 11	15 17.28	-9 32.2	1.985	2.988	2.8	20.8	5 11	15 17.25	-33 23.2	2.120	3.105	5.0	19.7
5 21	15 7.61	-9 36.4	2.016	3.005	5.0	20.9	5 21	15 8.27	-32 44.0	2.130	3.116	5.1	19.7
5 31	14 58.91	-9 48.0	2.074	3.021	8.3	21.2	5 31	15 0.24	-31 54.2	2.167	3.127	7.2	19.9
6 10	14 51.88	-10 8.0	2.157	3.036	11.4	21.4	6 10	14 53.93	-30 59.5	2.229	3.137	9.9	20.1
6 20	14 46.92	-10 36.5	2.262	3.051	14.0	21.6	6 20	14 49.79	-30 5.3	2.315	3.148	12.4	20.3
471553	2012 <i>NM</i>		5 12.0 288°92'	0°8/11.5	16		120323	2004 <i>MQ</i> ₂		5 12.0 223°67'	0°6/11.6	18	
4 11	15 39.17	-19 40.9	1.807	2.685	12.6	22.0	4 11	15 40.38	-17 57.3	2.220	3.089	10.9	20.9
4 21	15 33.77	-18 43.1	1.706	2.654	9.1	21.7	4 21	15 34.16	-17 30.0	2.136	3.079	7.8	20.6
5 1	15 26.19	-17 32.7	1.630	2.622	4.9	21.4	5 1	15 26.21	-16 56.4	2.077	3.068	4.2	20.4
5 11	15 17.22	-16 13.3	1.580	2.590	0.8	21.0	5 11	15 17.26	-16 18.9	2.047	3.056	0.7	20.1
5 21	15 7.88	-14 50.4	1.558	2.558	4.6	21.2	5 21	15 8.15	-15 40.6	2.045	3.044	3.7	20.3
5 31	14 59.27	-13 31.1	1.563	2.525	9.3	21.4	5 31	14 59.77	-15 5.3	2.072	3.031	7.5	20.5
6 10	14 52.40	-12 22.2	1.593	2.492	13.6	21.6	6 10	14 52.88	-14 36.5	2.124	3.018	10.9	20.7
6 20	14 47.91	-11 28.4	1.642	2.459	17.3	21.7	6 20	14 47.96	-14 17.0	2.198	3.004	13.8	20.9
116422	2003 <i>YJ</i> ₁₄₉		5 12.0 181°51'	2°6/13.7	18		227103	2005 <i>NX</i> ₂₄		5 12.0 232°66'	0°5/11.7	18	
4 11	15 42.11	-26 20.0	2.426	3.270	11.0	20.5	4 11	15 40.74	-18 49.3	2.062	2.932	11.6	21.3
4 21	15 35.33	-26 41.0	2.348	3.271	8.2	20.3	4 21	15 34.54	-18 12.0	1.976	2.919	8.3	21.1
5 1	15 26.80	-26 52.4	2.295	3.271	5.2	20.1	5 1	15 26.47	-17 26.6	1.915	2.906	4.4	20.8
5 11	15 17.27	-26 53.7	2.270	3.271	2.8	19.9	5 11	15 17.30	-16 35.9	1.882	2.891	0.6	20.5
5 21	15 7.59	-26 46.0	2.274	3.271	3.7	20.0	5 21	15 7.94	-15 43.6	1.877	2.877	4.0	20.7
5 31	14 58.65	-26 31.6	2.307	3.270	6.6	20.2	5 31	14 59.36	-14 54.6	1.901	2.861	8.0	20.9
6 10	14 51.21	-26 14.2	2.366	3.269	9.6	20.4	6 10	14 52.39	-14 13.4	1.949	2.845	11.7	21.1
6 20	14 45.78	-25 57.5	2.448	3.267	12.2	20.5	6 20	14 47.55	-13 43.0	2.019	2.828	14.8	21.3
217834	2001 <i>KB</i> ₃₄		5 12.0 308°67'	2°8/10.7	17		411669	2011 <i>WA</i> ₈₀		5 12.0 351°52'	0°3/11.9	17	
4 11	15 38.98	-13 36.5	1.378	2.274	14.6	20.3	4 11	15 39.13	-20 42.1	1.224	2.118	16.2	20.4
4 21	15 34.03	-13 4.3	1.297	2.252	10.5	20.0	4 21	15 34.18	-19 52.5	1.162	2.116	11.6	20.2
5 1	15 26.48	-12 27.7	1.238	2.231	5.9	19.7	5 1	15 26.51	-18 48.5	1.120	2.114	6.2	19.9
5 11	15 17.26	-11 51.1	1.204	2.210	2.8	19.4	5 11	15 17.30	-17 35.1	1.102	2.112	0.6	19.4
5 21	15 7.61	-11 19.8	1.194	2.190	6.3	19.6	5 21	15 8.00	-16 19.6	1.109	2.111	5.3	19.8
5 31	14 58.93	-10 59.2	1.208	2.170	11.3	19.8	5 31	15 0.05	-15 10.8	1.139	2.110	10.8	20.1
6 10	14 52.40	-10 53.3	1.243	2.151	16.0	20.0	6 10	14 54.58	-14 16.2	1.190	2.110	15.6	20.4
6 20	14 48.75	-11 3.9	1.296	2.132	20.0	20.2	6 20	14 52.15	-13 39.8	1.260	2.110	19.6	20.6
303397	2004 <i>XZ</i> ₁₀₁		5 12.0 99°56'	3°9/10.2	18		330523	2007 <i>TJ</i> ₁₅₆		5 12.0 194°29'	0°4/12.6	18	
4 11	15 45.26	-9 4.6	1.605	2.485	13.8	20.9	4 11	15 33.20	-21 42.1	3.983	4.838	6.8	21.4
4 21	15 37.62	-8 38.8	1.563	2.509	9.8	20.7	4 21	15 28.51	-21 20.5	3.901	4.836	4.9	21.3
5 1	15 27.96	-8 15.5	1.546	2.533	5.9	20.5	5 1	15 22.96	-20 54.0	3.846	4.833	2.7	21.1
5 11	15 17.37	-7 58.6	1.555	2.556	3.9	20.5	5 11	15 16.96	-20 23.8	3.821	4.830	0.6	20.9
5 21	15 7.00	-7 51.2	1.592	2.579	6.4	20.7	5 21	15 10.92	-19 51.5	3.826	4.827	2.0	21.1
5 31	14 57.94	-7 55.6	1.655	2.601	10.1	20.9	5 31	15 5.29	-19 19.1	3.861	4.823	4.2	21.2
6 10	14 51.00	-8 12.6	1.741	2.622	13.5	21.2	6 10	15 0.44	-18 48.7	3.923	4.820	6.3	21.4
6 20	14 46.56	-8 41.5	1.846	2.643	16.4	21.4	6 20	14 56.65	-18 21.9	4.010	4.816	8.1	21.5
381876	2010 <i>AQ</i> ₅₄		5 12.0 170°52'	0°2/11.9	18		129918	1999 <i>TP</i> ₁₁₅		5 12.0 247°68'	0°5/12.4	18	
4 11	15 40.03	-18 39.6	2.048	2.920	11.6	20.9	4 11	15 41.69	-21 28.2	1.734	2.607	13.3	20.5
4 21	15 33.93	-18 25.4	1.978	2.922	8.2	20.7	4 21	15 35.56	-21 0.6	1.650	2.593	9.6	20.2
5 1	15 26.06	-18 5.0	1.933	2.924	4.4	20.5	5 1	15 27.16	-20 21.7	1.589	2.579	5.4	19.9
5 11	15 17.21	-17 40.3	1.915	2.925	0.4	20.1	5 11	15 17.38	-19 33.6	1.555	2.564	0.8	19.5
5 21	15 8.28	-17 14.2	1.925	2.926	3.7	20.4	5 21	15 7.34	-18 40.3	1.548	2.549	4.2	19.8
5 31	15 0.20	-16 50.0	1.963	2.926	7.5	20.6	5 31	14 58.24	-17 47.5	1.567	2.534	8.8	20.0
6 10	14 53.74	-16 31.4	2.026	2.927	11.0	20.9	6 10	14 51.06	-17 1.1	1.611	2.518	13.0	20.2
6 20	14 49.38	-16 20.6	2.110	2.927	14.0	21.1	6 20	14 46.43	-16 25.4	1.675	2.502	16.6	20.4
380911	2006 <i>DA</i> ₂₁₇		5 12.0 186°35'	1°4/11.1	18		496357	2013 <i>QW</i> ₇₀		5 12.0 336°41'	7°6/15.1	16	
4 11	15 40.02	-14 56.2	2.277	3.149	10.6	21.3	4 11	15 39.39	-32 16.0	1.173	2.042	18.6	20.9
4 21	15 33.76	-14 32.7	2.204	3.149	7.5	21.1	4 21	15 35.10	-33 7.7	1.100	2.028	14.8	20.6
5 1	15 25.92	-14 5.8	2.158	3.148	4.0	20.9	5 1	15 27.40	-33 37.9	1.045	2.014	10.9	20.3
5 11	15 17.21	-13 38.2	2.139	3.147	1.4	20.7	5 11	15 17.43	-33 42.1	1.011	2.001	7.9	20.1
5 21	15 8.42	-13 12.6	2.150	3.145	4.0	20.9	5 21	15 6.86	-33 19.5	0.998	1.990	8.3	20.1
5 31	15 0.39	-12 51.9	2.188	3.143	7.4	21.1	5 31	14 57.63	-32 35.3	1.008	1.979	11.8	20.2
6 10	14 53.79	-12 38.9	2.252	3.140	10.6	21.3	6 10	14 51.33	-31 39.2	1.037	1.970	16.1	20.4
6 20	14 49.08	-12 35.0	2.338	3.137	13.3	21.5	6 20	14 48.83	-30 41.7	1.084	1.963	20.2	20.6
9394	Manosque		5 12.0 327°27'	1°8/13.1	18		66446	1999 <i>NF</i> ₆₁		5 12.0 298°58'	3°6/14.5	18	
4 11	15 39.80	-23 42.1	1.740	2.611	13.4	17.8	4 11	15 39.11	-29 59.0	1.687	2.542	14.5	18.7
4 21	15 34.15	-23 40.7	1.667	2.607	9.8	17.5	4 21	15 33.91	-29 30.4	1.597	2.524	11.1	18.4
5 1	15 26.33	-23 27.9	1.617	2.604	5.8	17.3	5 1	15 26.33	-28 41.6	1.529	2.505	7.3	18.1
5 11	15 17.26	-23 4.9	1.593	2.600	2.1	17.0	5 11	15 17.30	-27 33.2	1.486	2.487	3.9	17.9
5 21	15 8.02	-22 34.2	1.595	2.597	4.1	17.2	5 21	15 8.01	-26 9.0	1.469	2.469	4.8	17.9
5 31	14 59.76	-22 0.2	1.624	2.594	8.2	17.4	5 31	14 59.72	-24 36.3	1.479	2.451	8.7	18.1
6 10	14 53.42	-21 28.3	1.676	2.591	12.1	17.6	6 10	14 53.48	-23 4.1	1.512	2.433	12.8	18.3
6 20	14 49.55	-21 2.6	1.749	2.589	15.5	17.8	6 20	14 49.92	-21 40.2	1.567	2.415	16.5	18.5
56955	2000 <i>ST</i> ₁₄		5 12.0 42°37'	9°6/ 6.4	18		487573	2014 <i>WZ</i> ₃₉₁		5 12.0 9			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
386483	2008 YN ₁₇₀		5 12.0 194°55	5°6/16.6	17		117272	2004 TJ ₁₀₉		5 12.1 173°73	2°2/10.9	18	
4 11	15 42.10	-37 50.5	2.469	3.267	12.3	21.8	4 11	15 41.94	-11 48.4	2.117	2.991	11.2	20.2
4 21	15 35.46	-37 59.5	2.386	3.265	10.0	21.6	4 21	15 35.22	-11 42.9	2.049	2.993	8.0	20.0
5 1	15 26.94	-37 50.9	2.325	3.263	7.7	21.4	5 1	15 26.78	-11 37.2	2.006	2.995	4.5	19.8
5 11	15 17.35	-37 23.6	2.291	3.260	6.0	21.3	5 11	15 17.36	-11 33.6	1.990	2.996	2.2	19.6
5 21	15 7.66	-36 38.8	2.284	3.257	5.8	21.3	5 21	15 7.87	-11 34.0	2.004	2.997	4.6	19.8
5 31	14 58.86	-35 40.0	2.304	3.253	7.4	21.4	5 31	14 59.19	-11 40.5	2.045	2.998	8.1	20.0
6 10	14 51.74	-34 33.2	2.350	3.249	9.8	21.6	6 10	14 52.08	-11 54.6	2.112	2.998	11.3	20.2
6 20	14 46.82	-33 24.3	2.419	3.245	12.1	21.7	6 20	14 47.00	-12 16.9	2.200	2.997	14.1	20.4
507034	2008 UW ₁₃₇		5 12.1 262°29	1°2/11.1	17		438976	2010 NY ₅₄		5 12.1 310°93	2°3/10.6	16	
4 11	15 37.91	-18 19.3	1.922	2.801	11.9	21.4	4 11	15 37.05	-13 26.4	1.911	2.796	11.7	21.2
4 21	15 32.56	-17 14.6	1.844	2.792	8.4	21.1	4 21	15 32.16	-12 56.0	1.816	2.767	8.3	20.9
5 1	15 25.40	-16 0.7	1.791	2.783	4.5	20.9	5 1	15 25.32	-12 22.1	1.746	2.738	4.7	20.6
5 11	15 17.21	-14 42.0	1.765	2.774	1.2	20.6	5 11	15 17.24	-11 48.2	1.702	2.708	2.3	20.4
5 21	15 8.93	-13 24.1	1.767	2.765	4.5	20.8	5 21	15 8.81	-11 18.0	1.685	2.679	5.1	20.5
5 31	15 1.50	-12 13.0	1.797	2.755	8.5	21.1	5 31	15 1.03	-10 55.5	1.694	2.651	9.1	20.7
6 10	14 55.71	-11 13.9	1.851	2.746	12.2	21.3	6 10	14 54.78	-10 44.1	1.727	2.622	12.9	20.8
6 20	14 52.04	-10 29.9	1.926	2.736	15.3	21.5	6 20	14 50.67	-10 45.4	1.780	2.594	16.3	21.0
503023	2015 FM ₁₂₁		5 12.1 134°78	6°0/15.2	18		308416	2005 SZ ₁₁₃		5 12.1 220°70	0°4/12.3	17	
4 11	15 45.15	-33 53.1	1.969	2.793	14.0	20.7	4 11	15 41.08	-20 44.3	1.918	2.788	12.4	21.8
4 21	15 38.00	-34 41.4	1.897	2.797	11.1	20.5	4 21	15 34.90	-20 25.9	1.840	2.782	8.9	21.5
5 1	15 28.48	-35 13.2	1.849	2.801	8.3	20.3	5 1	15 26.71	-19 58.6	1.786	2.776	4.9	21.3
5 11	15 17.52	-35 25.8	1.826	2.805	6.2	20.2	5 11	15 17.37	-19 24.2	1.759	2.769	0.7	21.0
5 21	15 6.32	-35 19.1	1.829	2.809	6.4	20.2	5 21	15 7.87	-18 46.1	1.760	2.761	3.8	21.2
5 31	14 56.16	-34 56.2	1.860	2.813	8.7	20.4	5 31	14 59.26	-18 8.6	1.788	2.754	8.0	21.4
6 10	14 48.08	-34 23.1	1.914	2.816	11.5	20.6	6 10	14 52.39	-17 36.1	1.841	2.746	11.8	21.6
6 20	14 42.67	-33 46.2	1.990	2.819	14.2	20.8	6 20	14 47.81	-17 12.2	1.915	2.738	15.0	21.8
518678	2008 UZ ₉₄		5 12.1 190°67	3°4/15.1	18		25091	Sanchez-Claudio		5 12.1 274°82	4°8/14.8	18	
4 11	15 48.01	-33 10.9	2.636	3.442	11.3	22.9	4 11	15 41.93	-31 30.1	2.002	2.839	13.3	19.1
4 21	15 39.31	-32 33.1	2.543	3.441	8.8	22.7	4 21	15 35.77	-31 54.3	1.910	2.823	10.4	18.9
5 1	15 28.88	-31 38.0	2.477	3.438	6.0	22.5	5 1	15 27.33	-32 3.5	1.842	2.806	7.4	18.7
5 11	15 17.54	-30 26.4	2.441	3.434	3.7	22.4	5 11	15 17.44	-31 56.0	1.799	2.790	5.1	18.5
5 21	15 6.25	-29 1.2	2.436	3.428	4.0	22.4	5 21	15 7.18	-31 32.4	1.783	2.773	5.5	18.5
5 31	14 55.91	-27 27.7	2.462	3.421	6.5	22.5	5 31	14 57.74	-30 55.9	1.794	2.756	8.2	18.6
6 10	14 47.27	-25 52.7	2.518	3.412	9.4	22.7	6 10	14 50.15	-30 12.3	1.829	2.739	11.6	18.8
6 20	14 40.77	-24 22.3	2.599	3.402	12.0	22.9	6 20	14 45.07	-29 27.8	1.886	2.722	14.7	19.0
417013	2005 UO ₄₄		5 12.1 9°52	2°7/10.2	17		320597	2008 BY ₃₇		5 12.1 88°63	4°2/9.7	18	
4 11	15 37.41	-15 30.0	1.497	2.391	13.8	20.3	4 11	15 41.73	-9 52.2	1.566	2.453	13.7	20.7
4 21	15 32.47	-14 12.8	1.437	2.391	9.7	20.0	4 21	15 35.25	-9 0.2	1.523	2.473	9.7	20.5
5 1	15 25.41	-12 48.2	1.399	2.392	5.3	19.8	5 1	15 26.78	-8 9.4	1.504	2.491	5.9	20.3
5 11	15 17.21	-11 22.9	1.387	2.394	2.8	19.6	5 11	15 17.36	-7 25.1	1.510	2.510	4.2	20.3
5 21	15 9.01	-10 4.2	1.402	2.395	6.0	19.8	5 21	15 8.12	-6 52.1	1.543	2.529	6.7	20.5
5 31	15 1.91	-8 59.1	1.441	2.397	10.4	20.1	5 31	15 0.11	-6 33.9	1.602	2.547	10.4	20.7
6 10	14 56.80	-8 12.3	1.503	2.400	14.4	20.3	6 10	14 54.12	-6 31.9	1.682	2.565	13.9	21.0
6 20	14 54.15	-7 45.5	1.583	2.402	17.7	20.5	6 20	14 50.55	-6 45.6	1.782	2.582	16.8	21.2
301023	2008 SN ₆₇		5 12.1 272°84	0°1/12.0	17		422244	2014 SX ₅₅		5 12.1 140°85	3°2/10.4	16	
4 11	15 42.95	-19 48.3	1.390	2.274	15.3	21.4	4 11	15 42.54	-11 57.1	1.542	2.429	13.9	21.1
4 21	15 37.02	-19 26.4	1.304	2.253	11.1	21.1	4 21	15 36.05	-11 20.6	1.484	2.434	9.9	20.8
5 1	15 28.21	-18 53.1	1.240	2.232	6.1	20.8	5 1	15 27.34	-10 42.8	1.449	2.440	5.7	20.6
5 11	15 17.52	-18 10.7	1.200	2.210	0.6	20.3	5 11	15 17.43	-10 8.0	1.440	2.445	3.2	20.5
5 21	15 6.29	-17 23.5	1.186	2.187	5.1	20.6	5 21	15 7.51	-9 40.8	1.458	2.450	6.1	20.6
5 31	14 56.09	-16 38.0	1.196	2.165	10.7	20.8	5 31	14 58.76	-9 25.1	1.501	2.454	10.3	20.9
6 10	14 48.23	-16 1.0	1.229	2.142	15.7	21.1	6 10	14 52.09	-9 23.4	1.566	2.458	14.2	21.1
6 20	14 43.49	-15 37.4	1.280	2.119	20.0	21.3	6 20	14 48.00	-9 36.0	1.651	2.462	17.5	21.4
522950	2016 PO ₁₁₃		5 12.1 294°01	4°9/8.3	16		310071	2010 KR ₅₉		5 12.1 22°24	0°1/12.6	18	
4 11	15 36.00	-4 49.5	2.227	3.107	10.5	21.2	4 11	15 21.75	-20 20.5	17.148	18.005	1.7	20.4
4 21	15 30.96	-4 0.0	2.159	3.100	7.8	21.0	4 21	15 20.15	-20 18.1	17.090	18.026	1.2	20.3
5 1	15 24.45	-3 14.4	2.116	3.093	5.5	20.8	5 1	15 18.40	-20 14.9	17.060	18.047	0.7	20.3
5 11	15 17.13	-2 36.8	2.100	3.086	5.0	20.8	5 11	15 16.57	-20 11.2	17.059	18.068	0.1	20.2
5 21	15 9.72	-2 10.9	2.111	3.079	6.7	20.9	5 21	15 14.73	-20 7.1	17.088	18.089	0.5	20.2
5 31	15 2.99	-1 59.2	2.148	3.072	9.3	21.0	5 31	15 12.97	-20 3.0	17.146	18.110	1.0	20.3
6 10	14 57.58	-2 2.8	2.209	3.065	12.0	21.2	6 10	15 11.35	-19 59.2	17.233	18.131	1.5	20.4
6 20	14 53.92	-2 21.1	2.289	3.058	14.4	21.3	6 20	15 9.94	-19 55.9	17.345	18.152	2.0	20.4
198062	2004 RH ₃₂₂		5 12.1 329°01	0°7/12.4	17		83658	2001 TZ ₁₄		5 12.1 190°86	0°5/11.7	18	
4 11	15 34.80	-21 56.8	1.215	2.113	16.0	19.0	4 11	15 39.71	-16 38.3	2.319	3.190	10.5	19.9
4 21	15 31.48	-21 29.2	1.128	2.083	11.7	18.7	4 21	15 33.60	-16 37.4	2.246	3.189	7.4	19.7
5 1	15 25.31	-20 45.5	1.061	2.055	6.6	18.3	5 1	15 25.90	-16 32.9	2.198	3.188	4.0	19.5
5 11	15 17.24	-19 48.1	1.017	2.027	1.1	17.8	5 11	15 17.30	-16 26.3	2.178	3.187	0.6	19.2
5 21	15 8.61	-18 42.4	0.997	2.001	5.2	18.0	5 21	15 8.60	-16 19.3	2.187	3.186	3.5	19.4
5 31	15 0.98	-17 36.8	0.998	1.976	11.0	18.3	5 31	15 0.61	-16 14.4	2.224	3.185	7.0	19.7
6 10	14 55.73	-16 40.2	1.020	1.952	16.4	18.5	6 10	14 54.03	-16 13.9	2.286	3.183	10.1	19.9
6 20	14 53.68	-15 58.9	1.059	1.930	21.1	18.7	6 20	14 49.31	-16 19.3	2.372	3.181	12.8	20.0
510384	2011 UC ₅₅		5 12.1 311°34	0°2/12.2	17		160555	1998 RB ₁		5 12.1 253°15	4°2/14.6	18	
4 11	15 36.31												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
342827	2008 <i>XL</i> ₃₅		5 12.1 319°67	0°7/12.4	17		89399	2001 <i>VM</i> ₁₂₀		5 12.1 197°97	0°6/11.7	18	
4 11	15 39.89	-20 7.4	1.731	2.608	13.1	20.8	4 11	15 44.27	-17 24.4	1.703	2.578	13.4	19.8
4 21	15 34.27	-20 11.0	1.655	2.600	9.4	20.6	4 21	15 37.32	-17 12.2	1.631	2.576	9.5	19.5
5 1	15 26.47	-20 7.1	1.603	2.593	5.2	20.3	5 1	15 28.10	-16 53.9	1.582	2.573	5.1	19.3
5 11	15 17.37	-19 56.8	1.576	2.586	0.9	20.0	5 11	15 17.55	-16 31.5	1.560	2.569	0.7	18.9
5 21	15 8.05	-19 42.3	1.577	2.579	4.0	20.2	5 21	15 6.82	-16 8.1	1.565	2.565	4.5	19.2
5 31	14 59.64	-19 27.2	1.603	2.572	8.4	20.5	5 31	14 57.13	-15 48.0	1.597	2.560	9.0	19.5
6 10	14 53.10	-19 15.6	1.653	2.566	12.4	20.7	6 10	14 49.44	-15 34.8	1.654	2.555	13.1	19.7
6 20	14 49.01	-19 10.6	1.724	2.560	15.8	20.9	6 20	14 44.34	-15 31.3	1.730	2.548	16.5	19.9
512972	2017 <i>TM</i> ₁₀		5 12.1 218°10	3°3/14.3	18		195085	2002 <i>CM</i> ₁₀₉		5 12.1 2°01	4°5/9.7	17	
4 11	15 42.31	-29 2.2	2.222	3.062	12.0	22.2	4 11	15 36.12	-10 14.3	1.296	2.199	14.7	19.4
4 21	15 35.70	-29 6.1	2.135	3.053	9.2	22.0	4 21	15 31.82	-9 25.4	1.240	2.198	10.6	19.1
5 1	15 27.15	-28 56.8	2.073	3.045	6.1	21.8	5 1	15 25.19	-8 36.8	1.206	2.197	6.5	18.9
5 11	15 17.44	-28 34.0	2.038	3.036	3.6	21.6	5 11	15 17.26	-7 54.7	1.196	2.197	4.6	18.8
5 21	15 7.53	-27 59.2	2.031	3.026	4.2	21.6	5 21	15 9.26	-7 24.9	1.209	2.199	7.5	19.0
5 31	14 58.43	-27 16.3	2.051	3.016	7.2	21.8	5 31	15 2.42	-7 11.9	1.246	2.202	11.7	19.2
6 10	14 51.00	-26 30.3	2.098	3.005	10.4	22.0	6 10	14 57.72	-7 17.5	1.303	2.205	15.8	19.5
6 20	14 45.77	-25 46.5	2.168	2.993	13.3	22.1	6 20	14 55.68	-7 41.2	1.378	2.210	19.2	19.7
507536	2012 <i>XU</i> ₃₃		5 12.1 346°97	1°4/13.1	17		430757	2004 <i>RU</i> ₅₂		5 12.1 276°97	2°6/10.5	17	
4 11	15 37.48	-24 17.7	1.988	2.854	12.1	20.7	4 11	15 39.45	-13 18.7	1.814	2.698	12.3	21.4
4 21	15 32.26	-23 47.8	1.914	2.853	8.8	20.5	4 21	15 33.88	-12 38.7	1.728	2.678	8.8	21.1
5 1	15 25.25	-23 6.0	1.865	2.851	5.1	20.3	5 1	15 26.26	-11 54.8	1.666	2.657	5.0	20.8
5 11	15 17.25	-22 14.5	1.842	2.850	1.6	20.0	5 11	15 17.38	-11 10.8	1.631	2.637	2.6	20.6
5 21	15 9.18	-21 17.1	1.847	2.849	3.5	20.1	5 21	15 8.20	-10 31.4	1.623	2.616	5.5	20.8
5 31	15 2.00	-20 18.8	1.878	2.848	7.4	20.4	5 31	14 59.80	-10 1.0	1.641	2.595	9.6	21.0
6 10	14 56.46	-19 25.0	1.935	2.847	10.9	20.6	6 10	14 53.08	-9 43.2	1.682	2.573	13.4	21.2
6 20	14 53.04	-18 39.7	2.014	2.846	14.0	20.8	6 20	14 48.65	-9 39.7	1.744	2.552	16.8	21.3
240969	2006 <i>JH</i> ₁₀		5 12.1 260°44	0°4/12.3	18		327791	2006 <i>UU</i> ₂₂₇		5 12.1 229°95	4°7/9.0	17	
4 11	15 41.27	-19 37.3	2.306	3.170	10.8	20.6	4 11	15 39.49	-9 17.9	1.648	2.536	13.0	20.9
4 21	15 34.92	-19 38.8	2.209	3.148	7.8	20.4	4 21	15 33.84	-8 9.2	1.583	2.532	9.4	20.6
5 1	15 26.74	-19 34.5	2.137	3.126	4.3	20.1	5 1	15 26.17	-6 59.9	1.542	2.528	6.0	20.4
5 11	15 17.41	-19 25.1	2.093	3.103	0.6	19.8	5 11	15 17.36	-5 56.5	1.527	2.524	4.8	20.3
5 21	15 7.75	-19 12.3	2.078	3.079	3.4	20.0	5 21	15 8.47	-5 4.9	1.538	2.519	7.3	20.5
5 31	14 58.69	-18 58.8	2.092	3.055	7.2	20.2	5 31	15 0.56	-4 29.8	1.575	2.514	11.0	20.7
6 10	14 51.05	-18 47.6	2.131	3.031	10.6	20.3	6 10	14 54.50	-4 13.8	1.634	2.510	14.6	20.9
6 20	14 45.39	-18 41.6	2.193	3.006	13.7	20.5	6 20	14 50.79	-4 16.9	1.711	2.505	17.6	21.1
200242	1999 <i>VB</i> ₁₁₄		5 12.1 292°86	2°0/13.5	18		71900	2000 <i>WU</i> ₁₈		5 12.1 348°94	2°0/13.2	17	
4 11	15 39.97	-26 28.5	1.775	2.639	13.5	19.7	4 11	15 39.75	-25 18.0	1.312	2.193	16.2	18.1
4 21	15 33.72	-25 48.7	1.679	2.615	10.0	19.5	4 21	15 34.62	-24 47.4	1.245	2.190	11.9	17.8
5 1	15 26.23	-24 51.5	1.607	2.591	6.1	19.2	5 1	15 26.79	-23 58.5	1.200	2.188	7.0	17.5
5 11	15 17.36	-23 38.7	1.561	2.567	2.3	18.9	5 11	15 17.43	-22 54.0	1.178	2.186	2.4	17.2
5 21	15 8.18	-22 14.7	1.541	2.543	4.1	18.9	5 21	15 7.94	-21 39.8	1.181	2.184	4.8	17.4
5 31	14 59.88	-20 46.5	1.549	2.520	8.5	19.1	5 31	14 59.79	-20 24.1	1.209	2.183	9.8	17.6
6 10	14 53.45	-19 22.0	1.581	2.496	12.7	19.3	6 10	14 54.09	-19 15.9	1.258	2.183	14.5	17.9
6 20	14 49.53	-18 8.0	1.634	2.472	16.4	19.5	6 20	14 51.41	-18 21.3	1.327	2.183	18.5	18.2
486696	2013 <i>WD</i> ₆₄		5 12.1 50°84	12°1/12.3	17		261996	2006 <i>QB</i> ₄₃		5 12.1 245°69	1°9/10.9	18	R
4 11	15 58.65	+ 8 50.4	0.918	1.784	22.7	20.6	4 11	15 41.67	-14 47.1	1.866	2.744	12.3	21.3
4 21	15 48.40	+ 7 56.6	0.873	1.795	18.4	20.3	4 21	15 35.41	-14 12.1	1.780	2.728	8.7	21.0
5 1	15 34.30	+ 6 25.2	0.846	1.806	14.3	20.1	5 1	15 27.07	-13 32.2	1.719	2.711	4.8	20.8
5 11	15 18.13	+ 4 13.0	0.842	1.817	12.1	20.1	5 11	15 17.46	-12 50.8	1.686	2.693	1.9	20.5
5 21	15 2.16	+ 1 25.9	0.861	1.830	13.4	20.2	5 21	15 7.58	-12 11.8	1.679	2.675	5.0	20.7
5 31	14 48.54	- 1 43.5	0.904	1.842	17.1	20.4	5 31	14 58.51	-11 39.8	1.700	2.656	9.2	20.9
6 10	14 38.72	- 5 1.5	0.968	1.855	21.2	20.7	6 10	14 51.16	-11 18.5	1.745	2.636	13.0	21.1
6 20	14 33.20	- 8 17.0	1.050	1.868	24.8	21.0	6 20	14 46.12	-11 10.1	1.811	2.616	16.4	21.3
29913	1999 <i>JO</i> ₁₂		5 12.1 214°09	4°3/8.8	18		176499	2001 <i>YC</i>		5 12.1 175°98	1°6/10.7	18	
4 11	15 37.74	- 4 48.4	2.511	3.383	9.7	18.7	4 11	15 37.43	-13 6.3	2.966	3.835	8.5	21.4
4 21	15 32.06	- 4 13.5	2.440	3.378	7.2	18.5	4 21	15 31.67	-12 41.3	2.894	3.837	6.0	21.2
5 1	15 25.02	- 3 42.3	2.396	3.372	5.0	18.4	5 1	15 24.76	-12 14.9	2.850	3.839	3.3	21.0
5 11	15 17.23	- 3 18.3	2.379	3.366	4.3	18.3	5 11	15 17.22	-11 49.1	2.835	3.840	1.6	20.9
5 21	15 9.36	- 3 4.1	2.391	3.360	5.9	18.4	5 21	15 9.66	-11 26.1	2.850	3.841	3.5	21.0
5 31	15 2.12	- 3 1.8	2.430	3.353	8.4	18.5	5 31	15 2.65	-11 8.1	2.893	3.842	6.2	21.2
6 10	14 56.09	- 3 12.0	2.493	3.346	10.9	18.7	6 10	14 56.72	-10 56.9	2.963	3.842	8.7	21.4
6 20	14 51.69	- 3 34.4	2.577	3.339	13.2	18.8	6 20	14 52.22	-10 53.5	3.057	3.841	10.8	21.5
6187	Kagura		5 12.1 223°21	0°0/12.0	18		369973	1996 <i>SE</i> ₁		5 12.1 190°50	1°0/12.8	17	
4 11	15 37.54	-19 9.2	2.743	3.608	9.2	18.4	4 11	15 41.44	-22 42.5	2.559	3.411	10.2	22.8
4 21	15 31.92	-18 53.2	2.659	3.599	6.6	18.2	4 21	15 34.75	-22 31.0	2.477	3.410	7.4	22.6
5 1	15 24.96	-18 31.9	2.601	3.591	3.6	18.0	5 1	15 26.51	-22 11.3	2.422	3.408	4.2	22.4
5 11	15 17.22	-18 6.7	2.572	3.582	0.3	17.7	5 11	15 17.41	-21 44.6	2.396	3.404	1.2	22.1
5 21	15 9.38	-17 40.0	2.572	3.572	2.9	17.9	5 21	15 8.21	-21 13.0	2.400	3.401	3.0	22.3
5 31	15 2.11	-17 14.2	2.601	3.563	6.0	18.1	5 31	14 59.71	-20 39.7	2.433	3.396	6.3	22.5
6 10	14 56.01	-16 52.2	2.656	3.553	8.9	18.3	6 10	14 52.59	-20 8.2	2.492	3.390	9.3	22.7
6 20	14 51.49	-16 36.2	2.735	3.542	11.4	18.4	6 20	14 47.30	-19 41.6	2.575	3.384	12.0	22.8
76830	2000 <i>SA</i> ₁₈₂		5 12.1 172°42	4°5/19.0	18		334725	2003 <i>KN</i> ₅		5 12.1 334°62	11		

EPHEMERIDES

5 12.1

5 12.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
155295	2005 <i>XN</i> ₇₇		5 12.1 297°88	7°0/ 9.0	18		409319	2004 <i>TU</i> ₂₆₃		5 12.1 187°93	0°1/12.2	16	
4 11	15 42.02	- 0 50.8	1.649	2.526	13.6	19.5	4 11	15 43.48	-20 23.2	1.830	2.699	12.9	22.9
4 21	15 35.77	- 0 30.1	1.576	2.512	10.6	19.3	4 21	15 36.63	-19 55.2	1.757	2.699	9.2	22.7
5 1	15 27.31	- 0 19.8	1.526	2.497	7.9	19.1	5 1	15 27.69	-19 17.6	1.708	2.698	5.0	22.4
5 11	15 17.51	- 0 24.9	1.501	2.483	7.0	19.0	5 11	15 17.56	-18 33.1	1.687	2.696	0.5	22.1
5 21	15 7.44	- 0 48.4	1.501	2.468	8.9	19.0	5 21	15 7.34	-17 45.3	1.693	2.694	4.0	22.4
5 31	14 58.27	- 1 31.6	1.527	2.454	12.2	19.2	5 31	14 58.13	-16 59.5	1.727	2.691	8.4	22.6
6 10	14 50.97	- 2 33.0	1.575	2.440	15.5	19.4	6 10	14 50.82	-16 20.5	1.785	2.687	12.2	22.8
6 20	14 46.15	- 3 49.9	1.641	2.427	18.6	19.6	6 20	14 45.93	-15 51.9	1.865	2.682	15.5	23.0
470170	2006 <i>UO</i> ₁₉₇		5 12.1 220°97	0°6/11.5	16		344805	2004 <i>BR</i> ₃₆		5 12.1 146°30	5°5/16.2	18	
4 11	15 37.15	-18 17.2	2.645	3.513	9.4	22.4	4 11	15 41.79	-36 11.0	2.279	3.090	12.7	21.2
4 21	15 31.67	-17 38.1	2.563	3.505	6.7	22.2	4 21	15 35.34	-36 24.0	2.204	3.094	10.3	21.0
5 1	15 24.83	-16 53.0	2.506	3.497	3.6	22.0	5 1	15 26.95	-36 19.6	2.153	3.099	7.7	20.9
5 11	15 17.25	-16 4.5	2.478	3.488	0.6	21.7	5 11	15 17.49	-35 56.8	2.127	3.103	5.8	20.8
5 21	15 9.59	-15 15.7	2.480	3.479	3.2	21.9	5 21	15 7.95	-35 17.0	2.128	3.107	5.8	20.8
5 31	15 2.53	-14 30.0	2.511	3.469	6.4	22.1	5 31	14 59.36	-34 23.9	2.156	3.110	7.6	20.9
6 10	14 56.68	-13 50.8	2.567	3.459	9.4	22.3	6 10	14 52.54	-33 23.6	2.210	3.114	10.1	21.0
6 20	14 52.44	-13 20.3	2.647	3.448	11.9	22.4	6 20	14 47.99	-32 22.1	2.286	3.117	12.6	21.2
2578	Saint-Exupéry		5 12.1 203°61	0°4/11.8	18		6615	Plutarchos		5 12.1 15°47	2°0/11.3	18	
4 11	15 39.69	-17 8.3	2.411	3.280	10.2	16.6	4 11	15 39.54	-15 59.1	0.989	1.898	17.7	16.9
4 21	15 33.58	-17 7.6	2.334	3.277	7.2	16.4	4 21	15 34.83	-15 31.5	0.939	1.901	12.6	16.6
5 1	15 25.92	-17 3.1	2.284	3.274	3.9	16.2	5 1	15 27.03	-14 57.0	0.909	1.904	6.8	16.3
5 11	15 17.36	-16 56.0	2.261	3.271	0.5	15.9	5 11	15 17.50	-14 20.6	0.900	1.909	2.0	16.0
5 21	15 8.69	-16 48.2	2.268	3.268	3.3	16.2	5 21	15 7.92	-13 48.6	0.913	1.914	6.5	16.3
5 31	15 0.70	-16 42.0	2.303	3.264	6.7	16.4	5 31	14 59.94	-13 27.4	0.948	1.921	12.2	16.6
6 10	14 54.06	-16 39.6	2.364	3.260	9.8	16.6	6 10	14 54.80	-13 21.2	1.002	1.928	17.2	16.9
6 20	14 49.23	-16 42.9	2.447	3.256	12.5	16.8	6 20	14 53.05	-13 31.6	1.073	1.936	21.4	17.2
470129	2006 <i>UA</i> ₂₇		5 12.1 187°43	0°0/12.1	16		321866	2010 <i>RH</i> ₁₆₀		5 12.1 180°56	0°6/11.7	17	
4 11	15 37.76	-19 26.9	2.759	3.622	9.2	23.1	4 11	15 42.17	-18 23.4	1.952	2.823	12.1	22.0
4 21	15 32.04	-19 5.7	2.682	3.621	6.6	22.9	4 21	15 35.56	-17 52.8	1.881	2.825	8.6	21.8
5 1	15 25.01	-18 38.9	2.631	3.620	3.5	22.7	5 1	15 27.05	-17 14.9	1.835	2.826	4.6	21.6
5 11	15 17.27	-18 8.2	2.609	3.619	0.3	22.5	5 11	15 17.50	-16 32.7	1.816	2.826	0.7	21.3
5 21	15 9.47	-17 36.1	2.617	3.617	2.9	22.7	5 21	15 7.89	-15 49.7	1.826	2.825	4.0	21.5
5 31	15 2.29	-17 5.2	2.653	3.615	6.0	22.9	5 31	14 59.20	-15 10.5	1.863	2.824	8.1	21.8
6 10	14 56.29	-16 38.4	2.716	3.612	8.8	23.1	6 10	14 52.26	-14 39.1	1.926	2.823	11.7	22.0
6 20	14 51.86	-16 17.9	2.803	3.609	11.2	23.2	6 20	14 47.55	-14 18.2	2.009	2.820	14.8	22.2
222584	2001 <i>WR</i> ₃₅		5 12.1 152°61	2°4/10.7	17		277397	2005 <i>UN</i> ₁₅₆		5 12.1 293°57	0°5/12.4	17	
4 11	15 41.80	-12 0.5	2.021	2.897	11.6	20.7	4 11	15 40.64	-20 16.8	1.591	2.471	13.9	20.9
4 21	15 35.17	-11 42.5	1.958	2.903	8.2	20.5	4 21	15 35.05	-20 10.4	1.509	2.456	10.0	20.6
5 1	15 26.78	-11 23.9	1.920	2.909	4.6	20.3	5 1	15 27.04	-19 54.9	1.450	2.441	5.6	20.3
5 11	15 17.45	-11 7.4	1.910	2.915	2.4	20.2	5 11	15 17.52	-19 31.8	1.416	2.426	0.9	19.9
5 21	15 8.10	-10 55.6	1.928	2.920	4.8	20.4	5 21	15 7.65	-19 4.1	1.408	2.410	4.4	20.1
5 31	14 59.63	-10 51.1	1.973	2.925	8.4	20.6	5 31	14 58.71	-18 36.4	1.426	2.396	9.2	20.4
6 10	14 52.81	-10 55.7	2.044	2.929	11.6	20.8	6 10	14 51.80	-18 13.8	1.467	2.381	13.6	20.6
6 20	14 48.07	-11 10.2	2.135	2.933	14.4	21.0	6 20	14 47.57	-18 0.1	1.527	2.366	17.4	20.8
280127	2002 <i>KJ</i> ₅		5 12.1 4°49	4°4/10.3	17		507307	2011 <i>OO</i> ₆₀		5 12.1 230°19	1°3/13.8	17	
4 11	15 39.85	- 7 48.0	1.422	2.316	14.3	19.7	4 11	15 31.41	-26 4.2	4.497	5.339	6.4	21.4
4 21	15 34.35	- 7 41.4	1.364	2.315	10.4	19.5	4 21	15 27.27	-25 49.9	4.412	5.335	4.7	21.3
5 1	15 26.55	- 7 39.7	1.328	2.316	6.4	19.2	5 1	15 22.36	-25 29.9	4.354	5.331	2.9	21.1
5 11	15 17.44	- 7 46.7	1.316	2.317	4.4	19.1	5 11	15 17.04	-25 4.8	4.324	5.328	1.4	21.0
5 21	15 8.22	- 8 4.8	1.330	2.319	6.9	19.3	5 21	15 11.69	-24 36.0	4.325	5.324	1.9	21.0
5 31	15 0.12	- 8 35.7	1.367	2.322	11.0	19.5	5 31	15 6.69	-24 5.1	4.355	5.320	3.7	21.2
6 10	14 54.12	- 9 19.3	1.427	2.326	14.9	19.7	6 10	15 2.38	-23 34.1	4.413	5.316	5.5	21.3
6 20	14 50.76	-10 14.4	1.506	2.331	18.2	20.0	6 20	14 59.01	-23 4.7	4.496	5.312	7.1	21.4
466282	2013 <i>PP</i> ₁₆		5 12.1 316°19	1°9/13.0	17		501231	2013 <i>VS</i> ₃		5 12.1 181°88	4°8/ 8.3	17	
4 11	15 39.41	-23 29.4	1.352	2.236	15.6	21.3	4 11	15 38.81	- 5 41.5	2.248	3.124	10.6	22.4
4 21	15 34.53	-23 22.8	1.273	2.220	11.5	21.0	4 21	15 32.91	- 4 37.9	2.185	3.124	7.8	22.2
5 1	15 26.88	-23 2.0	1.216	2.205	6.7	20.6	5 1	15 25.53	- 3 37.0	2.148	3.125	5.5	22.1
5 11	15 17.49	-22 28.2	1.182	2.190	2.2	20.3	5 11	15 17.36	- 2 43.7	2.139	3.125	4.9	22.0
5 21	15 7.69	-21 44.7	1.172	2.175	4.8	20.4	5 21	15 9.16	- 2 1.9	2.158	3.124	6.6	22.1
5 31	14 59.00	-20 57.8	1.187	2.161	10.0	20.7	5 31	15 1.72	- 1 34.8	2.203	3.123	9.3	22.3
6 10	14 52.66	-20 14.9	1.223	2.148	14.8	20.9	6 10	14 55.66	- 1 23.7	2.272	3.121	12.0	22.5
6 20	14 49.39	-19 41.8	1.278	2.135	19.0	21.1	6 20	14 51.39	- 1 28.3	2.362	3.118	14.4	22.6
180245	2003 <i>UN</i> ₂₅₉		5 12.1 233°28	1°6/11.1	17		47253	1999 <i>VN</i> ₆₅		5 12.1 92°61	0°1/12.1	18	
4 11	15 42.21	-15 40.9	1.906	2.781	12.2	21.1	4 11	15 43.18	-19 10.6	1.567	2.445	14.2	19.4
4 21	15 35.75	-15 6.8	1.822	2.768	8.7	20.8	4 21	15 36.48	-18 55.6	1.514	2.461	10.0	19.2
5 1	15 27.25	-14 27.1	1.762	2.753	4.7	20.5	5 1	15 27.59	-18 32.6	1.485	2.476	5.4	19.0
5 11	15 17.51	-13 45.0	1.730	2.738	1.6	20.3	5 11	15 17.56	-18 4.1	1.481	2.491	0.5	18.6
5 21	15 7.54	-13 4.4	1.726	2.722	4.7	20.5	5 21	15 7.61	-17 33.7	1.505	2.506	4.3	19.0
5 31	14 58.39	-12 29.7	1.749	2.706	8.9	20.7	5 31	14 58.93	-17 6.3	1.554	2.521	8.9	19.3
6 10	14 50.96	-12 5.0	1.797	2.689	12.7	20.9	6 10	14 52.39	-16 45.9	1.627	2.535	12.8	19.5
6 20	14 45.82	-11 52.4	1.866	2.671	16.0	21.1	6 20	14 48.47	-16 35.4	1.720	2.549	16.1	19.8
291839	2006 <i>MJ</i> ₄		5 12.1 314°21	7°2/ 8.1	17		168545	1999 <i>VE</i> ₁₆₉		5 12.1 217°1			

EPHEMERIDES

5 12.1

5 12.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
470890	2009 <i>BE</i> ₁₄₃		5 12.1 270°61	6°5/ 7.5 18			3317	Paris		5 12.1 309°92	6°8/ 1.8 18		
4 11	15 37.64	- 0 20.2	2.071	2.944	11.4	21.4	4 11	15 30.97	+16 0.6	4.072	4.875	7.7	15.3
4 21	15 32.22	+ 0 32.0	2.008	2.939	8.9	21.3	4 21	15 26.99	+16 47.8	4.021	4.867	7.0	15.3
5 1	15 25.22	+ 1 16.3	1.970	2.934	7.0	21.1	5 1	15 22.23	+17 24.1	3.995	4.858	6.8	15.2
5 11	15 17.33	+ 1 47.9	1.959	2.929	6.7	21.1	5 11	15 17.06	+17 47.1	3.993	4.849	7.0	15.3
5 21	15 9.38	+ 2 3.1	1.973	2.924	8.3	21.2	5 21	15 11.87	+17 55.2	4.015	4.841	7.6	15.3
5 31	15 2.18	+ 2 0.0	2.013	2.919	10.8	21.3	5 31	15 7.04	+17 47.8	4.060	4.832	8.5	15.3
6 10	14 56.43	+ 1 38.5	2.075	2.914	13.3	21.5	6 10	15 2.91	+17 25.6	4.126	4.824	9.5	15.4
6 20	14 52.56	+ 1 0.4	2.156	2.909	15.7	21.6	6 20	14 59.75	+16 49.9	4.209	4.815	10.4	15.5
285699	2000 <i>SN</i> ₂₀₁		5 12.1 234°41	0°1/12.2 18			171359	2006 <i>KU</i> ₁₀₄		5 12.1 273°46	0°4/11.8 17		
4 11	15 38.08	-19 39.0	2.560	3.425	9.8	21.5	4 11	15 38.47	-18 47.0	1.964	2.841	11.8	20.9
4 21	15 32.43	-19 23.2	2.475	3.415	7.0	21.3	4 21	15 33.05	-18 16.7	1.885	2.831	8.4	20.6
5 1	15 25.31	-19 1.4	2.416	3.405	3.8	21.0	5 1	15 25.77	-17 39.0	1.830	2.821	4.5	20.4
5 11	15 17.35	-18 35.1	2.385	3.395	0.4	20.7	5 11	15 17.43	-16 56.4	1.802	2.811	0.6	20.0
5 21	15 9.25	-18 6.7	2.383	3.384	3.1	20.9	5 21	15 8.92	-16 12.6	1.801	2.801	3.9	20.3
5 31	15 1.77	-17 39.0	2.410	3.373	6.4	21.1	5 31	15 1.22	-15 32.1	1.827	2.791	8.0	20.5
6 10	14 55.54	-17 15.1	2.463	3.361	9.4	21.3	6 10	14 55.12	-14 59.0	1.878	2.781	11.6	20.7
6 20	14 51.01	-16 57.4	2.539	3.350	12.0	21.5	6 20	14 51.16	-14 36.3	1.950	2.771	14.8	20.9
173004	2006 <i>OH</i> ₁₄		5 12.1 236°91	1°3/11.2 17			291316	2006 <i>BE</i> ₁₆₇		5 12.1 311°85	6°0/ 3.1 18		
4 11	15 38.22	-15 51.0	2.171	3.048	10.8	20.6	4 11	15 30.42	+11 37.6	4.125	4.950	7.2	20.4
4 21	15 32.67	-15 23.3	2.096	3.043	7.7	20.4	4 21	15 26.58	+12 27.5	4.073	4.945	6.4	20.3
5 1	15 25.48	-14 51.3	2.046	3.037	4.1	20.1	5 1	15 22.01	+13 8.4	4.046	4.940	6.0	20.3
5 11	15 17.37	-14 17.8	2.023	3.032	1.3	19.9	5 11	15 17.04	+13 37.7	4.045	4.935	6.1	20.3
5 21	15 9.15	-13 45.8	2.029	3.026	4.0	20.1	5 21	15 12.06	+13 53.9	4.070	4.929	6.8	20.3
5 31	15 1.67	-13 18.9	2.062	3.020	7.6	20.3	5 31	15 7.42	+13 56.1	4.119	4.925	7.8	20.4
6 10	14 55.64	-12 59.9	2.120	3.015	10.9	20.5	6 10	15 3.45	+13 44.6	4.189	4.920	8.9	20.5
6 20	14 51.53	-12 50.7	2.200	3.009	13.7	20.7	6 20	15 0.42	+13 20.6	4.278	4.915	9.9	20.6
300969	2008 <i>EJ</i> ₁₉		5 12.1 143°74	4°8/15.6 17			353877	2012 <i>WD</i> ₂₄		5 12.1 134°09	0°4/11.8 18		
4 11	15 41.44	-34 11.0	2.452	3.269	11.8	21.1	4 11	15 38.58	-18 12.7	2.375	3.244	10.3	21.3
4 21	15 34.99	-34 33.0	2.378	3.274	9.4	21.0	4 21	15 32.75	-17 53.0	2.309	3.252	7.3	21.1
5 1	15 26.75	-34 40.3	2.327	3.278	6.9	20.8	5 1	15 25.46	-17 28.1	2.268	3.259	3.9	20.9
5 11	15 17.50	-34 32.1	2.303	3.283	5.1	20.7	5 11	15 17.39	-17 0.1	2.256	3.266	0.5	20.6
5 21	15 8.14	-34 9.1	2.306	3.287	5.2	20.7	5 21	15 9.31	-16 31.6	2.273	3.273	3.3	20.9
5 31	14 59.61	-33 34.4	2.337	3.292	7.1	20.9	5 31	15 1.98	-16 5.5	2.318	3.279	6.7	21.1
6 10	14 52.67	-32 52.8	2.393	3.295	9.5	21.0	6 10	14 56.03	-15 44.9	2.388	3.286	9.7	21.3
6 20	14 47.83	-32 9.3	2.473	3.299	11.9	21.2	6 20	14 51.86	-15 31.7	2.481	3.292	12.3	21.5
67778	2000 <i>UT</i> ₈₁		5 12.1 273°60	3°2/10.2 18			237972	2002 <i>RN</i> ₂₁₈		5 12.1 177°37	3°2/ 9.9 18		
4 11	15 40.83	-13 29.2	1.526	2.415	13.9	19.9	4 11	15 38.51	-10 0.2	2.142	3.022	10.8	20.3
4 21	15 35.21	-12 33.4	1.443	2.395	9.9	19.6	4 21	15 32.81	- 9 24.5	2.077	3.023	7.8	20.1
5 1	15 27.15	-11 31.5	1.382	2.374	5.7	19.3	5 1	15 25.54	- 8 49.1	2.036	3.023	4.7	19.9
5 11	15 17.57	-10 28.9	1.348	2.353	3.2	19.1	5 11	15 17.41	- 8 17.7	2.023	3.023	3.2	19.9
5 21	15 7.61	- 9 31.8	1.339	2.331	6.5	19.3	5 21	15 9.23	- 7 53.4	2.038	3.024	5.3	20.0
5 31	14 58.58	- 8 46.6	1.355	2.309	11.1	19.5	5 31	15 1.82	- 7 39.0	2.080	3.024	8.5	20.2
6 10	14 51.55	- 8 18.2	1.394	2.287	15.5	19.7	6 10	14 55.86	- 7 36.4	2.146	3.023	11.5	20.4
6 20	14 47.21	- 8 8.5	1.450	2.265	19.3	19.9	6 20	14 51.78	- 7 45.9	2.233	3.023	14.1	20.5
202341	2005 <i>EC</i> ₁₂₂		5 12.1 259°22	1°6/13.1 17			92478	2000 <i>LA</i> ₈		5 12.1 302°71	2°9/13.5 18		
4 11	15 39.72	-23 49.8	2.051	2.914	12.0	20.9	4 11	15 40.44	-25 53.0	1.262	2.142	16.7	18.4
4 21	15 33.95	-23 40.8	1.967	2.904	8.8	20.7	4 21	15 35.58	-25 42.5	1.177	2.121	12.6	18.0
5 1	15 26.28	-23 21.4	1.908	2.893	5.2	20.4	5 1	15 27.64	-25 13.3	1.113	2.099	7.7	17.7
5 11	15 17.47	-22 52.6	1.876	2.883	1.8	20.2	5 11	15 17.65	-24 25.5	1.072	2.078	3.2	17.4
5 21	15 8.47	-22 16.8	1.871	2.873	3.6	20.3	5 21	15 7.11	-23 22.8	1.055	2.058	5.3	17.4
5 31	15 0.27	-21 38.2	1.894	2.862	7.4	20.5	5 31	14 57.71	-22 13.0	1.061	2.037	10.7	17.6
6 10	14 53.70	-21 1.4	1.942	2.851	11.0	20.7	6 10	14 50.89	-21 5.9	1.088	2.017	15.9	17.9
6 20	14 49.30	-20 30.4	2.011	2.840	14.1	20.9	6 20	14 47.45	-20 9.6	1.134	1.998	20.5	18.1
463134	2011 <i>WJ</i> ₅₅		5 12.1 138°22	0°9/11.6 16			489342	2006 <i>UQ</i> ₂₉		5 12.1 153°66	0°4/12.4 16		
4 11	15 44.69	-17 3.2	1.727	2.601	13.3	22.5	4 11	15 42.80	-20 35.8	1.966	2.833	12.3	22.8
4 21	15 37.43	-16 44.6	1.668	2.613	9.4	22.3	4 21	15 36.00	-20 20.5	1.900	2.840	8.8	22.6
5 1	15 28.09	-16 20.1	1.634	2.625	5.0	22.1	5 1	15 27.31	-19 56.9	1.858	2.847	4.8	22.3
5 11	15 17.64	-15 52.5	1.626	2.636	0.9	21.8	5 11	15 17.59	-19 27.0	1.844	2.854	0.7	22.0
5 21	15 7.23	-15 25.2	1.647	2.646	4.4	22.1	5 21	15 7.85	-18 53.6	1.859	2.860	3.7	22.3
5 31	14 57.97	-15 2.3	1.695	2.656	8.7	22.4	5 31	14 59.09	-18 20.9	1.901	2.865	7.7	22.5
6 10	14 50.72	-14 47.2	1.767	2.665	12.5	22.6	6 10	14 52.10	-17 53.0	1.968	2.870	11.2	22.8
6 20	14 45.97	-14 42.2	1.859	2.673	15.7	22.8	6 20	14 47.36	-17 33.0	2.056	2.874	14.3	23.0
317880	2003 <i>UP</i> ₁₁₅		5 12.1 158°84	2°3/13.5 16			211129	2002 <i>GN</i> ₅₂		5 12.1 325°85	0°1/12.1 17		
4 11	15 43.92	-25 56.4	1.893	2.748	13.2	22.2	4 11	15 40.85	-18 37.1	1.274	2.166	15.8	20.0
4 21	15 36.92	-25 47.5	1.824	2.754	9.7	21.9	4 21	15 35.57	-18 34.0	1.204	2.157	11.3	19.7
5 1	15 27.84	-25 25.6	1.779	2.761	5.9	21.7	5 1	15 27.47	-18 22.7	1.155	2.148	6.2	19.4
5 11	15 17.62	-24 51.5	1.761	2.766	2.6	21.5	5 11	15 17.63	-18 5.2	1.130	2.140	0.6	18.9
5 21	15 7.36	-24 8.0	1.770	2.771	4.0	21.6	5 21	15 7.46	-17 45.0	1.130	2.132	5.1	19.2
5 31	14 58.16	-23 20.1	1.808	2.775	7.8	21.9	5 31	14 58.50	-17 27.1	1.153	2.125	10.5	19.5
6 10	14 50.91	-22 33.5	1.870	2.778	11.4	22.1	6 10	14 51.98	-17 16.5	1.197	2.119	15.4	19.8
6 20	14 46.11	-21 53.1	1.954	2.781	14.5	22.3	6 20	14 48.58	-17 16.8	1.260	2.113	19.5	20.0
161757	2006 <i>TH</i>												

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
505343	2013 AG ₁₂₈	5 12.1 122°81 3°6/15.1 17					435866	2008 YX ₂₆	5 12.1 115°08 1°9/13.7 17				
4 11	15 40.36	-31 36.8	2.704	3.528	10.6	22.2	4 11	15 40.18	-26 51.8	2.298	3.147	11.4	21.2
4 21	15 33.98	-31 43.7	2.637	3.542	8.2	22.0	4 21	15 33.89	-26 15.5	2.236	3.163	8.4	21.0
5 1	15 26.12	-31 38.2	2.594	3.556	5.7	21.9	5 1	15 26.07	-25 26.8	2.198	3.179	5.0	20.8
5 11	15 17.48	-31 20.2	2.579	3.569	3.8	21.8	5 11	15 17.49	-24 27.9	2.189	3.194	2.1	20.7
5 21	15 8.83	-30 51.3	2.592	3.581	4.0	21.8	5 21	15 9.02	-23 22.5	2.209	3.209	3.3	20.8
5 31	15 0.96	-30 14.6	2.634	3.594	6.1	22.0	5 31	15 1.47	-22 15.4	2.257	3.224	6.5	21.0
6 10	14 54.49	-29 34.1	2.702	3.606	8.5	22.1	6 10	14 55.48	-21 11.8	2.332	3.238	9.5	21.2
6 20	14 49.85	-28 53.8	2.795	3.617	10.8	22.3	6 20	14 51.45	-20 15.6	2.430	3.252	12.2	21.4
520269	2014 EM ₁₃₆	5 12.1 343°20 1°4/11.2 17					504365	2007 UT ₁₀₈	5 12.1 105°58 0°5/11.7 17				
4 11	15 36.36	-16 30.4	1.871	2.755	11.9	20.7	4 11	15 38.07	-19 28.1	2.248	3.118	10.8	21.4
4 21	15 31.56	-15 52.7	1.800	2.750	8.4	20.5	4 21	15 32.40	-18 36.0	2.188	3.131	7.6	21.2
5 1	15 24.97	-15 9.3	1.753	2.745	4.5	20.2	5 1	15 25.27	-17 36.8	2.153	3.144	4.0	21.0
5 11	15 17.37	-14 23.7	1.732	2.741	1.4	20.0	5 11	15 17.42	-16 33.7	2.147	3.157	0.6	20.8
5 21	15 9.67	-13 40.1	1.739	2.737	4.4	20.2	5 21	15 9.64	-15 31.0	2.170	3.169	3.5	21.0
5 31	15 2.81	-13 2.8	1.772	2.734	8.4	20.4	5 31	15 2.70	-14 33.1	2.221	3.182	7.0	21.3
6 10	14 57.56	-12 35.6	1.829	2.731	12.0	20.6	6 10	14 57.22	-13 44.0	2.298	3.194	10.1	21.5
6 20	14 54.40	-12 20.5	1.906	2.728	15.0	20.8	6 20	14 53.56	-13 6.0	2.397	3.205	12.7	21.7
230270	2001 XE ₂₀	5 12.1 199°92 1°7/13.3 17					504582	2008 TT ₁₃₈	5 12.1 161°91 0°5/11.7 17				
4 11	15 42.14	-24 36.3	2.418	3.267	10.9	21.9	4 11	15 39.16	-19 5.3	2.296	3.164	10.6	22.7
4 21	15 35.41	-24 28.7	2.334	3.263	8.0	21.7	4 21	15 33.21	-18 22.9	2.226	3.169	7.5	22.5
5 1	15 26.98	-24 11.3	2.275	3.258	4.7	21.5	5 1	15 25.75	-17 33.6	2.183	3.173	4.0	22.3
5 11	15 17.57	-23 44.9	2.245	3.252	1.9	21.2	5 11	15 17.48	-16 40.3	2.168	3.177	0.6	22.0
5 21	15 8.04	-23 11.6	2.245	3.245	3.3	21.3	5 21	15 9.22	-15 46.5	2.182	3.181	3.5	22.2
5 31	14 59.24	-22 34.7	2.273	3.237	6.6	21.5	5 31	15 1.74	-14 56.6	2.224	3.184	7.0	22.5
6 10	14 51.92	-21 58.4	2.327	3.229	9.8	21.7	6 10	14 55.71	-14 14.2	2.292	3.187	10.2	22.7
6 20	14 46.57	-21 26.4	2.405	3.220	12.5	21.9	6 20	14 51.53	-13 41.8	2.383	3.189	12.9	22.9
414790	2010 RE ₁₀₆	5 12.1 59°00 2°9/10.4 17					99380	2001 YB ₈₇	5 12.1 212°97 3°3/10.5 18				
4 11	15 39.78	-14 20.6	1.431	2.324	14.3	20.7	4 11	15 43.63	-11 4.8	1.614	2.497	13.6	19.1
4 21	15 34.25	-13 19.6	1.375	2.329	10.1	20.5	4 21	15 36.96	-10 39.2	1.544	2.493	9.7	18.9
5 1	15 26.48	-12 13.4	1.343	2.335	5.6	20.2	5 1	15 28.01	-10 13.4	1.498	2.488	5.7	18.6
5 11	15 17.52	-11 8.2	1.335	2.341	3.0	20.1	5 11	15 17.72	-9 50.9	1.478	2.482	3.3	18.4
5 21	15 8.58	-10 10.3	1.353	2.347	6.2	20.3	5 21	15 7.26	-9 35.8	1.485	2.476	6.1	18.6
5 31	15 0.85	-9 25.7	1.396	2.353	10.6	20.6	5 31	14 57.81	-9 31.3	1.517	2.470	10.3	18.8
6 10	14 55.24	-8 58.2	1.461	2.359	14.6	20.8	6 10	14 50.38	-9 39.7	1.573	2.463	14.3	19.0
6 20	14 52.23	-8 48.8	1.544	2.366	18.0	21.0	6 20	14 45.54	-10 1.3	1.648	2.456	17.6	19.3
378686	2008 JW ₂₆	5 12.1 309°40 0°3/11.8 18					290294	2005 SV ₁₆₉	5 12.1 215°43 1°6/13.4 18				
4 11	15 32.33	-16 47.1	4.137	5.002	6.4	21.0	4 11	15 38.31	-24 58.6	2.737	3.586	9.7	22.1
4 21	15 27.96	-16 44.7	4.055	4.997	4.5	20.8	4 21	15 32.58	-24 51.2	2.652	3.580	7.2	21.9
5 1	15 22.78	-16 40.3	4.001	4.991	2.4	20.7	5 1	15 25.43	-24 35.1	2.593	3.574	4.3	21.7
5 11	15 17.15	-16 34.7	3.977	4.986	0.4	20.5	5 11	15 17.46	-24 11.1	2.562	3.567	1.8	21.5
5 21	15 11.46	-16 29.1	3.982	4.981	2.1	20.6	5 21	15 9.39	-23 41.0	2.560	3.560	3.0	21.6
5 31	15 6.11	-16 24.6	4.017	4.976	4.2	20.8	5 31	15 1.92	-23 7.6	2.587	3.553	5.8	21.8
6 10	15 1.46	-16 22.6	4.079	4.971	6.2	20.9	6 10	14 55.69	-22 34.5	2.641	3.545	8.7	21.9
6 20	14 57.79	-16 24.0	4.165	4.966	7.9	21.0	6 20	14 51.13	-22 4.8	2.718	3.537	11.1	22.1
251847	1999 TD ₂₉₈	5 12.1 229°39 4°2/14.3 17					483652	2005 CZ ₃₇	5 12.1 221°85 5°7/21.5 17				
4 11	15 44.46	-29 17.6	1.774	2.621	14.3	21.0	4 11	15 37.47	-52 48.7	4.901	5.567	8.2	21.4
4 21	15 37.73	-29 34.4	1.691	2.613	10.9	20.8	4 21	15 31.77	-53 3.7	4.812	5.563	7.4	21.3
5 1	15 28.51	-29 35.6	1.632	2.604	7.3	20.6	5 1	15 24.90	-53 5.4	4.743	5.559	6.6	21.2
5 11	15 17.74	-29 20.1	1.598	2.595	4.5	20.4	5 11	15 17.40	-52 52.9	4.698	5.555	6.0	21.2
5 21	15 6.67	-28 49.2	1.590	2.586	5.2	20.4	5 21	15 9.86	-52 26.3	4.677	5.551	5.7	21.1
5 31	14 56.61	-28 7.1	1.610	2.576	8.7	20.6	5 31	15 2.85	-51 46.9	4.682	5.547	5.9	21.1
6 10	14 48.66	-27 20.6	1.653	2.566	12.4	20.8	6 10	14 56.91	-50 57.3	4.712	5.543	6.5	21.2
6 20	14 43.48	-26 36.1	1.718	2.555	15.8	21.0	6 20	14 52.39	-50 0.5	4.765	5.539	7.4	21.2
152226	Saracole	5 12.1 216°89 1°3/13.2 18					179366	2001 XC ₂₁₄	5 12.1 164°45 0°8/11.3 18				
4 11	15 38.48	-23 39.9	2.763	3.616	9.6	20.5	4 11	15 37.21	-16 30.1	3.095	3.960	8.3	21.4
4 21	15 32.67	-23 36.1	2.678	3.609	7.0	20.3	4 21	15 31.53	-16 1.1	3.025	3.966	5.8	21.3
5 1	15 25.45	-23 24.6	2.619	3.602	4.1	20.1	5 1	15 24.75	-15 28.6	2.982	3.972	3.1	21.1
5 11	15 17.43	-23 6.3	2.588	3.595	1.5	19.9	5 11	15 17.39	-14 54.7	2.968	3.977	0.8	20.9
5 21	15 9.27	-22 42.7	2.586	3.587	2.9	20.0	5 21	15 10.03	-14 21.6	2.984	3.981	2.9	21.1
5 31	15 1.71	-22 16.4	2.614	3.579	5.8	20.2	5 31	15 3.22	-13 51.7	3.030	3.985	5.6	21.3
6 10	14 55.36	-21 50.7	2.668	3.571	8.6	20.4	6 10	14 57.46	-13 27.4	3.103	3.988	8.1	21.4
6 20	14 50.65	-21 28.3	2.745	3.562	11.1	20.5	6 20	14 53.08	-13 10.0	3.199	3.991	10.2	21.6
121257	1999 RQ ₉₁	5 12.1 151°19 4°8/15.1 18					65384	2002 PC ₁₃₆	5 12.1 340°31 0°4/11.9 18				
4 11	15 44.27	-32 28.6	2.214	3.039	12.6	19.9	4 11	15 37.45	-18 10.8	1.109	2.013	16.6	18.6
4 21	15 37.15	-32 58.8	2.142	3.045	9.9	19.7	4 21	15 33.44	-18 2.6	1.041	2.000	12.0	18.3
5 1	15 28.00	-33 14.5	2.093	3.051	7.1	19.5	5 1	15 26.46	-17 45.5	0.993	1.988	6.5	18.0
5 11	15 17.69	-33 13.9	2.071	3.057	5.0	19.4	5 11	15 17.60	-17 22.4	0.967	1.977	0.7	17.5
5 21	15 7.23	-32 57.9	2.077	3.062	5.3	19.5	5 21	15 8.35	-16 57.8	0.964	1.967	5.5	17.8
5 31	14 57.70	-32 29.6	2.110	3.067	7.6	19.6	5 31	15 0.35	-16 37.5	0.982	1.959	11.3	18.1
6 10	14 49.97	-31 54.1	2.169	3.071	10.3	19.8	6 10	14 54.94	-16 27.1	1.021	1.952	16.5	18.4
6 20	14 44.58	-31 17.0	2.250	3.075	12.9	20.0	6 20	14 52.85	-16 29.8	1.076	1.946	20.9	18.6
126924	2002 EJ ₁₃₅	5 12.1 346°03 2°7/10.4 17					355172	2006 WZ ₁₂	5 12.1 217°68 2°9/10.1 16				
4 11	15 35.67	-15 14.5	1.395	2.294	14.2	19.4	4 11	15 38.51	-9 1.5	2.552	3.425	9.6	21.4
4 21	15 31.53	-14 10.7	1.329	2.286	10.1	19.2	4 21	15 32.68	-8 43.1	2.477	3.420	6.9	21.3
5 1	15 25												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
179636	2002 <i>PK</i> ₁₁₁		5 12.1 133°49	3°4/13.9	17		177379	2004 <i>BD</i> ₅₈		5 12.1 339°36	5°2/ 9.0	17	
4 11	15 44.15	-27 17.0	1.668	2.525	14.5	20.1	4 11	15 39.29	- 8 37.5	1.495	2.388	13.8	20.0
4 21	15 37.42	-27 29.3	1.601	2.530	10.9	19.9	4 21	15 33.90	- 7 29.6	1.436	2.387	10.1	19.7
5 1	15 28.28	-27 26.9	1.557	2.536	7.0	19.7	5 1	15 26.36	- 6 22.4	1.400	2.386	6.5	19.5
5 11	15 17.77	-27 9.6	1.539	2.541	3.7	19.5	5 11	15 17.62	- 5 22.8	1.389	2.385	5.3	19.4
5 21	15 7.15	-26 39.5	1.548	2.546	4.8	19.6	5 21	15 8.82	- 4 36.9	1.403	2.384	7.8	19.6
5 31	14 57.71	-26 1.4	1.582	2.551	8.6	19.8	5 31	15 1.10	- 4 9.5	1.442	2.383	11.7	19.8
6 10	14 50.47	-25 21.6	1.641	2.555	12.4	20.1	6 10	14 55.36	- 4 2.6	1.502	2.382	15.3	20.0
6 20	14 45.98	-24 45.9	1.720	2.560	15.7	20.3	6 20	14 52.11	- 4 15.4	1.580	2.382	18.5	20.2
437393	2013 <i>WA</i> ₅₇		5 12.1 68°83	6°3/11.8	17		303785	2005 <i>RM</i> ₃₃		5 12.1 193°30	5°2/ 7.2	17	
4 11	15 57.41	- 1 42.7	0.996	1.877	20.1	20.2	4 11	15 36.39	+ 0 51.6	3.015	3.875	8.6	21.2
4 21	15 47.86	- 2 48.2	0.938	1.880	15.1	19.9	4 21	15 30.99	+ 1 36.4	2.952	3.873	6.8	21.1
5 1	15 34.36	- 4 15.6	0.901	1.884	9.7	19.6	5 1	15 24.50	+ 2 15.0	2.915	3.870	5.5	21.0
5 11	15 18.41	- 6 5.1	0.887	1.887	6.3	19.4	5 11	15 17.43	+ 2 43.9	2.906	3.867	5.3	21.0
5 21	15 2.14	- 8 12.1	0.899	1.891	9.0	19.6	5 21	15 10.32	+ 3 0.9	2.924	3.864	6.4	21.1
5 31	14 47.77	-10 29.1	0.936	1.894	14.3	19.9	5 31	15 3.74	+ 3 4.4	2.970	3.860	8.2	21.2
6 10	14 36.96	-12 49.5	0.995	1.898	19.4	20.2	6 10	14 58.15	+ 2 54.4	3.040	3.855	10.1	21.3
6 20	14 30.43	-15 8.3	1.071	1.901	23.7	20.5	6 20	14 53.90	+ 2 31.5	3.130	3.850	11.9	21.4
149626	2004 <i>EG</i> ₄₃		5 12.1 318°14	5°3/ 8.1	18		384853	2012 <i>SA</i> ₁₉		5 12.1 67°88	5°7/15.4	18	
4 11	15 36.04	- 5 59.8	1.901	2.788	11.6	19.3	4 11	15 46.10	-33 48.4	2.060	2.880	13.6	20.4
4 21	15 31.29	- 4 51.6	1.834	2.779	8.7	19.1	4 21	15 38.50	-34 39.8	2.008	2.905	10.7	20.3
5 1	15 24.84	- 3 45.9	1.791	2.770	6.1	19.0	5 1	15 28.76	-35 14.7	1.980	2.931	7.9	20.2
5 11	15 17.42	- 2 48.3	1.774	2.761	5.5	18.9	5 11	15 17.87	-35 30.9	1.978	2.956	6.0	20.1
5 21	15 9.91	- 2 4.1	1.783	2.753	7.5	19.0	5 21	15 6.97	-35 28.7	2.004	2.982	6.1	20.2
5 31	15 3.17	- 1 37.0	1.818	2.745	10.5	19.2	5 31	14 57.21	-35 11.6	2.056	3.007	8.1	20.3
6 10	14 57.94	- 1 28.6	1.875	2.737	13.6	19.3	6 10	14 49.49	-34 45.2	2.133	3.032	10.6	20.5
6 20	14 54.70	- 1 38.5	1.951	2.730	16.3	19.5	6 20	14 44.30	-34 15.1	2.232	3.057	13.0	20.7
371123	2005 <i>WQ</i> ₃₀		5 12.1 138°67	0°1/12.2	17		158605	2002 <i>XZ</i> ₇₉		5 12.1 135°68	0°7/11.8	18	
4 11	15 42.15	-19 14.8	2.001	2.870	12.0	21.6	4 11	15 46.31	-17 7.3	1.555	2.432	14.4	20.8
4 21	15 35.55	-19 7.5	1.937	2.879	8.5	21.4	4 21	15 38.83	-16 58.7	1.498	2.444	10.2	20.6
5 1	15 27.10	-18 53.7	1.897	2.887	4.6	21.2	5 1	15 29.00	-16 44.1	1.464	2.455	5.5	20.3
5 11	15 17.67	-18 34.9	1.885	2.895	0.5	20.9	5 11	15 17.89	-16 25.8	1.456	2.465	0.8	20.0
5 21	15 8.20	-18 13.8	1.901	2.902	3.6	21.2	5 21	15 6.80	-16 7.0	1.475	2.475	4.7	20.3
5 31	14 59.67	-17 53.6	1.945	2.909	7.5	21.4	5 31	14 56.98	-15 51.7	1.521	2.485	9.3	20.6
6 10	14 52.85	-17 37.9	2.014	2.916	11.0	21.6	6 10	14 49.40	-15 43.7	1.590	2.493	13.4	20.9
6 20	14 48.21	-17 29.3	2.104	2.922	14.0	21.8	6 20	14 44.58	-15 45.3	1.680	2.501	16.8	21.1
31268	Welty		5 12.1 100°69	4°1/ 9.9	18		335744	2007 <i>EQ</i> ₁₆		5 12.1 4°48	2°3/11.0	17	R
4 11	15 41.86	- 7 41.4	1.821	2.701	12.4	18.0	4 11	15 37.54	-14 25.9	1.270	2.171	15.2	20.0
4 21	15 35.31	- 7 17.7	1.769	2.714	9.0	17.8	4 21	15 33.01	-13 59.9	1.213	2.171	10.8	19.8
5 1	15 26.95	- 6 57.3	1.742	2.727	5.6	17.6	5 1	15 26.00	-13 29.9	1.177	2.171	5.9	19.5
5 11	15 17.65	- 6 44.0	1.741	2.739	4.1	17.6	5 11	15 17.59	-13 0.4	1.165	2.173	2.3	19.3
5 21	15 8.42	- 6 40.4	1.768	2.751	6.2	17.7	5 21	15 9.08	-12 36.3	1.176	2.175	5.9	19.5
5 31	15 0.19	- 6 48.7	1.821	2.763	9.5	17.9	5 31	15 1.80	-12 22.2	1.212	2.179	10.7	19.8
6 10	14 53.73	- 7 9.3	1.897	2.775	12.8	18.2	6 10	14 56.76	-12 21.3	1.268	2.184	15.1	20.0
6 20	14 49.48	- 7 41.6	1.994	2.787	15.5	18.4	6 20	14 54.52	-12 34.7	1.342	2.189	18.8	20.3
370992	2005 <i>TH</i> ₄₀		5 12.1 113°42	1°7/11.1	17		391735	2008 <i>CD</i> ₁₉₂		5 12.1 142°77	4°1/ 8.4	18	
4 11	15 40.83	-15 14.6	1.752	2.634	12.7	20.9	4 11	15 36.70	- 4 13.9	2.837	3.706	8.8	22.2
4 21	15 34.75	-14 46.0	1.692	2.641	9.0	20.7	4 21	15 31.20	- 3 27.3	2.782	3.716	6.6	22.1
5 1	15 26.72	-14 13.2	1.655	2.647	4.9	20.4	5 1	15 24.60	- 2 44.6	2.753	3.726	4.7	22.0
5 11	15 17.64	-13 39.7	1.645	2.654	1.7	20.2	5 11	15 17.44	- 2 8.9	2.754	3.736	4.2	21.9
5 21	15 8.54	-13 9.1	1.663	2.660	4.7	20.4	5 21	15 10.30	- 1 43.0	2.782	3.745	5.6	22.0
5 31	15 0.45	-12 45.5	1.706	2.666	8.8	20.7	5 31	15 3.77	- 1 28.6	2.839	3.753	7.7	22.2
6 10	14 54.21	-12 31.9	1.774	2.672	12.5	20.9	6 10	14 58.32	- 1 26.5	2.920	3.761	9.8	22.3
6 20	14 50.27	-12 30.0	1.862	2.678	15.6	21.1	6 20	14 54.28	- 1 36.3	3.022	3.769	11.7	22.5
246876	1994 <i>XH</i> ₂		5 12.1 287°00	3°6/ 9.2	16		259622	2003 <i>WU</i> ₂		5 12.1 138°56	0°3/12.3	17	
4 11	15 36.35	- 9 20.9	2.228	3.110	10.4	20.9	4 11	15 43.98	-20 13.8	1.875	2.742	12.7	21.5
4 21	15 31.40	- 8 26.4	2.144	3.090	7.5	20.6	4 21	15 36.91	-20 0.3	1.813	2.754	9.1	21.3
5 1	15 24.89	- 7 31.2	2.086	3.071	4.8	20.4	5 1	15 27.86	-19 38.7	1.777	2.766	5.0	21.1
5 11	15 17.46	- 6 39.4	2.055	3.052	3.7	20.3	5 11	15 17.78	-19 10.8	1.767	2.777	0.7	20.8
5 21	15 9.86	- 5 55.5	2.052	3.032	5.8	20.4	5 21	15 7.71	-18 39.8	1.786	2.787	3.8	21.0
5 31	15 2.87	- 5 23.0	2.075	3.013	8.9	20.6	5 31	14 58.71	-18 9.8	1.832	2.796	7.9	21.3
6 10	14 57.20	- 5 4.4	2.123	2.994	11.9	20.7	6 10	14 51.59	-17 44.8	1.903	2.805	11.5	21.5
6 20	14 53.30	- 5 0.5	2.191	2.974	14.6	20.9	6 20	14 46.82	-17 27.9	1.995	2.814	14.6	21.8
214194	2005 <i>EX</i> ₂₈		5 12.1 35°18	5°5/ 9.1	17		184623	2005 <i>RS</i> ₂₆		5 12.1 220°42	5°6/15.9	18	
4 11	15 39.90	- 8 0.8	1.375	2.270	14.6	20.0	4 11	15 43.13	-37 3.7	2.720	3.515	11.3	20.9
4 21	15 34.42	- 6 59.1	1.322	2.273	10.7	19.8	4 21	15 36.31	-37 43.4	2.632	3.508	9.3	20.7
5 1	15 26.65	- 5 59.8	1.291	2.277	7.0	19.6	5 1	15 27.62	-38 9.0	2.568	3.501	7.2	20.6
5 11	15 17.64	- 5 9.8	1.285	2.280	5.6	19.5	5 11	15 17.77	-38 18.3	2.530	3.494	5.8	20.5
5 21	15 8.61	- 4 35.0	1.303	2.284	8.2	19.6	5 21	15 7.66	-38 11.1	2.520	3.486	5.8	20.5
5 31	15 0.79	- 4 19.6	1.345	2.288	12.1	19.9	5 31	14 58.21	-37 49.5	2.537	3.479	7.3	20.6
6 10	14 55.11	- 4 24.8	1.407	2.293	15.9	20.1	6 10	14 50.27	-37 17.7	2.581	3.470	9.4	20.7
6 20	14 52.07	- 4 49.4	1.488	2.297	19.1	20.3	6 20	14 44.38	-36 40.5	2.647	3.462	11.5	20.8
207857	2007 <i>VR</i> ₉₀		5 12.1 151°08	0°2/11.9	18		519677	2012 <i>Y7</i> ₁₁					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
427970	2005 YC ₁₁₈		5 12.1 168°55	0°9/11.5 17			164268	Hajmási		5 12.1 118°31	1°6/12.9 18		
4 11	15 40.97	-16 38.6	2.217	3.087	10.9	22.8	4 11	15 45.12	-23 10.7	1.590	2.458	14.6	21.2
4 21	15 34.59	-16 15.9	2.147	3.091	7.7	22.6	4 21	15 38.04	-23 7.2	1.532	2.471	10.6	21.0
5 1	15 26.57	-15 48.6	2.104	3.094	4.1	22.3	5 1	15 28.60	-22 51.8	1.498	2.484	6.1	20.7
5 11	15 17.67	-15 19.1	2.088	3.097	0.9	22.1	5 11	15 17.91	-22 25.8	1.488	2.496	1.9	20.5
5 21	15 8.72	-14 50.2	2.102	3.100	3.8	22.3	5 21	15 7.24	-21 52.4	1.506	2.508	4.2	20.7
5 31	15 0.58	-14 25.2	2.143	3.102	7.3	22.5	5 31	14 57.86	-21 16.7	1.551	2.520	8.6	21.0
6 10	14 53.94	-14 7.0	2.210	3.103	10.6	22.8	6 10	14 50.72	-20 44.3	1.619	2.531	12.7	21.2
6 20	14 49.25	-13 57.6	2.299	3.104	13.3	22.9	6 20	14 46.32	-20 19.6	1.707	2.541	16.0	21.5
69480	1996 XL ₁₉		5 12.1 142°56	0°4/12.4 18			469912	2005 YN ₇₇		5 12.1 227°50	6°3/ 8.7 17		
4 11	15 43.41	-20 43.8	1.791	2.660	13.1	20.5	4 11	15 41.46	- 1 19.3	1.888	2.761	12.4	21.2
4 21	15 36.60	-20 23.6	1.728	2.670	9.4	20.2	4 21	15 35.14	- 0 47.7	1.824	2.757	9.5	21.0
5 1	15 27.74	-19 54.3	1.690	2.679	5.1	20.0	5 1	15 26.97	- 0 24.5	1.783	2.752	7.1	20.9
5 11	15 17.79	-19 18.0	1.678	2.687	0.7	19.7	5 11	15 17.75	- 0 14.2	1.768	2.748	6.4	20.8
5 21	15 7.84	-18 38.3	1.694	2.695	3.9	20.0	5 21	15 8.44	- 0 19.8	1.781	2.743	8.1	20.9
5 31	14 58.97	-18 0.0	1.737	2.702	8.2	20.2	5 31	14 59.98	- 0 42.9	1.818	2.738	11.0	21.1
6 10	14 52.05	-17 27.7	1.804	2.709	12.0	20.5	6 10	14 53.19	- 1 22.8	1.879	2.733	13.9	21.2
6 20	14 47.55	-17 4.6	1.893	2.715	15.1	20.7	6 20	14 48.55	- 2 17.6	1.959	2.728	16.5	21.4
490679	2010 KO ₅₃		5 12.1 249°58	0°8/11.4 16 R			124708	2001 SU ₁₄₉		5 12.1 300°32	2°2/13.2 17		
4 11	15 36.89	-17 38.2	2.706	3.574	9.2	22.3	4 11	15 41.68	-24 0.6	1.263	2.146	16.6	19.7
4 21	15 31.59	-16 58.2	2.615	3.558	6.5	22.1	4 21	15 36.40	-23 54.5	1.187	2.133	12.2	19.4
5 1	15 24.94	-16 12.6	2.551	3.542	3.5	21.9	5 1	15 28.10	-23 32.9	1.132	2.120	7.2	19.0
5 11	15 17.51	-15 23.9	2.516	3.525	0.8	21.7	5 11	15 17.89	-22 56.4	1.100	2.108	2.5	18.7
5 21	15 9.95	-14 35.0	2.510	3.508	3.3	21.8	5 21	15 7.27	-22 8.8	1.092	2.096	5.1	18.8
5 31	15 2.95	-13 49.5	2.533	3.490	6.4	22.0	5 31	14 57.89	-21 17.0	1.108	2.084	10.5	19.1
6 10	14 57.09	-13 10.6	2.582	3.472	9.4	22.2	6 10	14 51.07	-20 29.3	1.146	2.072	15.5	19.3
6 20	14 52.79	-12 40.5	2.654	3.454	11.9	22.3	6 20	14 47.56	-19 52.1	1.201	2.061	19.8	19.6
200441	2000 UF ₁₀₈		5 12.1 146°95	2°3/ 9.3 18			520310	2014 FV ₇₅		5 12.1 332°70	4°3/ 9.7 18		
4 11	15 32.85	- 7 56.1	4.112	4.981	6.3	22.0	4 11	15 38.64	- 6 2.9	2.065	2.944	11.2	20.5
4 21	15 28.29	- 7 23.1	4.051	4.991	4.6	21.9	4 21	15 33.05	- 5 44.4	1.997	2.940	8.2	20.3
5 1	15 22.98	- 6 51.3	4.018	5.000	2.9	21.8	5 1	15 25.81	- 5 30.3	1.954	2.936	5.4	20.1
5 11	15 17.30	- 6 22.6	4.015	5.008	2.3	21.8	5 11	15 17.64	- 5 23.7	1.938	2.932	4.3	20.1
5 21	15 11.63	- 5 58.6	4.041	5.017	3.4	21.9	5 21	15 9.36	- 5 27.3	1.949	2.929	6.1	20.2
5 31	15 6.34	- 5 40.9	4.096	5.025	5.1	22.0	5 31	15 1.84	- 5 42.6	1.987	2.925	9.1	20.3
6 10	15 1.76	- 5 30.3	4.178	5.033	6.8	22.1	6 10	14 55.78	- 6 10.1	2.048	2.922	12.1	20.5
6 20	14 58.14	- 5 27.2	4.283	5.040	8.4	22.2	6 20	14 51.66	- 6 49.1	2.130	2.919	14.8	20.7
265669	2005 UB ₅₀		5 12.1 107°84	0°9/11.4 17			31009	1996 CP		5 12.1 180°26	0°9/11.5 18		
4 11	15 39.89	-19 43.1	1.787	2.663	12.8	20.2	4 11	15 39.58	-15 4.6	2.564	3.433	9.7	18.9
4 21	15 34.02	-18 30.5	1.726	2.673	9.0	20.0	4 21	15 33.49	-15 2.7	2.491	3.433	6.8	18.7
5 1	15 26.30	-17 7.8	1.691	2.683	4.8	19.8	5 1	15 25.97	-14 58.6	2.444	3.434	3.7	18.5
5 11	15 17.65	-15 40.1	1.683	2.692	1.0	19.5	5 11	15 17.65	-14 53.7	2.425	3.434	1.0	18.3
5 21	15 9.08	-14 13.9	1.703	2.701	4.4	19.8	5 21	15 9.25	-14 49.7	2.436	3.434	3.4	18.4
5 31	15 1.59	-12 55.8	1.750	2.710	8.5	20.1	5 31	15 1.49	-14 48.6	2.475	3.433	6.5	18.6
6 10	14 55.90	-11 51.0	1.821	2.719	12.2	20.3	6 10	14 54.98	-14 52.0	2.541	3.433	9.4	18.8
6 20	14 52.46	-11 2.5	1.914	2.727	15.3	20.5	6 20	14 50.17	-15 1.4	2.630	3.432	11.9	19.0
171585	1999 VG ₁₀₄		5 12.1 265°23	0°3/12.4 18			134664	1999 VE ₁₄₄		5 12.1 214°74	1°9/13.2 17		
4 11	15 34.11	-21 3.2	3.304	4.164	7.9	20.5	4 11	15 43.88	-24 18.5	1.985	2.841	12.6	21.0
4 21	15 29.45	-20 36.6	3.213	4.151	5.7	20.3	4 21	15 37.05	-24 14.8	1.901	2.833	9.3	20.8
5 1	15 23.72	-20 4.2	3.150	4.138	3.1	20.1	5 1	15 28.10	-24 0.1	1.841	2.825	5.5	20.5
5 11	15 17.39	-19 27.5	3.116	4.125	0.5	19.8	5 11	15 17.89	-23 34.7	1.809	2.816	2.1	20.3
5 21	15 10.98	-18 48.7	3.111	4.112	2.4	20.0	5 21	15 7.45	-23 1.0	1.805	2.806	3.8	20.4
5 31	15 5.02	-18 10.2	3.135	4.099	5.0	20.2	5 31	14 57.88	-22 23.1	1.829	2.795	7.8	20.6
6 10	14 59.98	-17 34.7	3.187	4.086	7.5	20.3	6 10	14 50.11	-21 46.1	1.878	2.784	11.5	20.8
6 20	14 56.22	-17 4.3	3.262	4.072	9.7	20.5	6 20	14 44.72	-21 14.4	1.949	2.772	14.7	21.0
125968	2001 YR ₁₁		5 12.1 350°40	4°8/14.6 17			307355	2002 RL ₂₀₃		5 12.1 199°80	0°9/12.7 17		
4 11	15 39.15	-29 32.2	1.110	1.990	18.5	18.8	4 11	15 43.08	-21 46.3	1.968	2.831	12.4	21.5
4 21	15 34.81	-29 29.2	1.045	1.985	14.2	18.5	4 21	15 36.40	-21 37.7	1.890	2.828	8.9	21.2
5 1	15 27.25	-29 2.1	1.000	1.981	9.4	18.2	5 1	15 27.71	-21 19.9	1.837	2.824	5.1	21.0
5 11	15 17.77	-28 10.6	0.975	1.977	5.3	18.0	5 11	15 17.85	-20 54.2	1.811	2.820	1.2	20.7
5 21	15 8.05	-26 59.4	0.973	1.974	6.2	18.0	5 21	15 7.82	-20 23.2	1.813	2.815	3.7	20.9
5 31	14 59.85	-25 37.7	0.994	1.973	10.8	18.2	5 31	14 58.68	-19 50.9	1.844	2.810	7.8	21.1
6 10	14 54.53	-24 17.2	1.035	1.972	15.7	18.5	6 10	14 51.32	-19 21.8	1.899	2.804	11.5	21.3
6 20	14 52.73	-23 7.0	1.094	1.972	20.0	18.8	6 20	14 46.26	-18 59.4	1.976	2.797	14.6	21.5
198686	2005 CY ₁₂		5 12.1 135°15	2°6/10.5 17			416896	2005 QM ₁₅₆		5 12.1 234°08	5°0/15.7 17		
4 11	15 39.35	-12 5.8	1.963	2.844	11.6	20.5	4 11	15 42.68	-34 4.2	1.914	2.743	14.1	21.1
4 21	15 33.59	-11 37.7	1.898	2.845	8.2	20.3	4 21	15 36.37	-33 52.6	1.829	2.735	11.2	20.9
5 1	15 26.10	-11 8.4	1.857	2.847	4.7	20.1	5 1	15 27.77	-33 20.8	1.766	2.726	8.0	20.7
5 11	15 17.65	-10 41.3	1.844	2.849	2.6	20.0	5 11	15 17.85	-32 28.1	1.728	2.717	5.4	20.5
5 21	15 9.14	-10 19.8	1.859	2.851	5.0	20.1	5 21	15 7.77	-31 17.0	1.717	2.708	5.5	20.5
5 31	15 1.48	-10 6.8	1.900	2.852	8.6	20.4	5 31	14 58.74	-29 53.5	1.733	2.698	8.3	20.6
6 10	14 55.41	-10 4.4	1.965	2.854	11.9	20.6	6 10	14 51.73	-28 25.6	1.775	2.689	11.6	20.8
6 20	14 51.40	-10 13.4	2.051	2.855	14.7	20.8	6 20	14 47.30	-27 1.2	1.838	2.678	14.8	21.0
427937	2005 VG ₉₇		5 12.1 161°46	0°1/12.0 17			178274	2031 T-2		5 12.1 169°86	1°6/13.1 18		
4 11	15 40.48	-20 52.6	2										

EPHEMERIDES

5 12.1

5 12.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
26104	1990 <i>VV</i> ₁		5 12.1 210°76	1°4/11.1	18		86217	1999 <i>TB</i> ₃₅		5 12.2 116°29	11°6/14.9	18	R
4 11	15 40.70	-16 56.1	2.084	2.957	11.4	18.5	4 11	16 0.33	-36 46.4	1.205	2.031	20.9	18.0
4 21	15 34.55	-16 3.0	2.006	2.951	8.1	18.2	4 21	15 50.77	-39 9.2	1.150	2.042	17.4	17.8
5 1	15 26.64	-15 3.0	1.952	2.943	4.4	18.0	5 1	15 36.44	-41 8.3	1.115	2.053	13.9	17.6
5 11	15 17.73	-13 59.7	1.927	2.936	1.4	17.8	5 11	15 18.85	-42 30.9	1.103	2.064	11.8	17.5
5 21	15 8.73	-12 57.9	1.931	2.927	4.3	17.9	5 21	15 0.44	-43 10.2	1.114	2.074	12.1	17.5
5 31	15 0.53	-12 2.3	1.963	2.918	8.1	18.2	5 31	14 44.04	-43 9.4	1.148	2.084	14.5	17.7
6 10	14 53.90	-11 17.2	2.020	2.908	11.6	18.4	6 10	14 31.76	-42 41.0	1.203	2.093	17.7	17.9
6 20	14 49.33	-10 45.2	2.098	2.898	14.6	18.5	6 20	14 24.56	-41 59.4	1.274	2.102	20.8	18.2
230292	2001 <i>YJ</i> ₆₅		5 12.1 129°45	0°3/12.5	18		187018	2004 <i>YC</i> ₂₅		5 12.2 281°84	2°5/9.0	18	
4 11	15 34.67	-20 30.4	3.773	4.629	7.1	22.3	4 11	15 30.98	-6 15.4	4.248	5.118	6.1	20.7
4 21	15 29.66	-20 17.3	3.706	4.642	5.1	22.2	4 21	15 27.04	-5 50.0	4.176	5.114	4.5	20.5
5 1	15 23.77	-19 59.9	3.666	4.654	2.8	22.1	5 1	15 22.38	-5 26.5	4.132	5.110	3.0	20.4
5 11	15 17.43	-19 39.4	3.656	4.665	0.5	21.9	5 11	15 17.33	-5 6.6	4.116	5.106	2.5	20.4
5 21	15 11.09	-19 17.3	3.676	4.677	2.1	22.0	5 21	15 12.24	-4 51.8	4.130	5.102	3.5	20.5
5 31	15 5.20	-18 55.3	3.726	4.688	4.4	22.2	5 31	15 7.48	-4 43.4	4.172	5.098	5.1	20.6
6 10	15 0.16	-18 35.4	3.803	4.699	6.5	22.4	6 10	15 3.37	-4 42.0	4.240	5.094	6.8	20.7
6 20	14 56.25	-18 19.2	3.904	4.710	8.3	22.5	6 20	15 0.15	-4 47.9	4.332	5.090	8.3	20.8
348436	2005 <i>QE</i> ₅₄		5 12.1 82°19	7°2/17.6	18		55335	2001 <i>SO</i> ₁₂₃		5 12.2 188°25	2°8/9.8	18	
4 11	15 43.42	-41 2.1	2.313	3.096	13.4	20.4	4 11	15 37.33	-11 12.2	2.448	3.325	9.8	19.4
4 21	15 36.69	-41 38.4	2.246	3.108	11.2	20.2	4 21	15 31.92	-10 19.9	2.379	3.324	7.0	19.2
5 1	15 27.86	-41 55.2	2.202	3.120	9.1	20.1	5 1	15 25.14	-9 26.4	2.336	3.323	4.1	19.0
5 11	15 17.86	-41 50.4	2.182	3.132	7.5	20.0	5 11	15 17.63	-8 35.4	2.322	3.322	2.8	18.9
5 21	15 7.77	-41 24.4	2.188	3.144	7.3	20.0	5 21	15 10.08	-7 50.4	2.336	3.321	4.8	19.1
5 31	14 58.71	-40 40.7	2.220	3.156	8.5	20.1	5 31	15 3.20	-7 14.8	2.378	3.319	7.7	19.2
6 10	14 51.57	-39 45.3	2.277	3.168	10.4	20.3	6 10	14 57.57	-6 50.7	2.445	3.317	10.5	19.4
6 20	14 46.86	-38 44.7	2.356	3.180	12.5	20.4	6 20	14 53.59	-6 39.2	2.533	3.314	12.9	19.6
505808	2015 <i>BP</i> ₄₀₅		5 12.1 275°52	4°9/9.1	17		399227	2014 <i>GN</i> ₄₅		5 12.2 39°14	2°7/13.4	17	
4 11	15 39.19	-7 24.4	1.727	2.613	12.6	21.8	4 11	15 43.56	-23 53.0	1.910	2.770	12.9	19.7
4 21	15 33.67	-6 31.4	1.663	2.610	9.3	21.6	4 21	15 36.81	-24 41.2	1.849	2.781	9.5	19.5
5 1	15 26.22	-5 40.7	1.623	2.607	6.1	21.4	5 1	15 27.97	-25 20.7	1.812	2.793	5.8	19.3
5 11	15 17.69	-4 57.7	1.610	2.604	5.0	21.3	5 11	15 17.94	-25 50.2	1.802	2.805	2.9	19.1
5 21	15 9.08	-4 27.0	1.622	2.601	7.2	21.5	5 21	15 7.77	-26 9.7	1.819	2.818	4.2	19.2
5 31	15 1.39	-4 12.3	1.660	2.597	10.7	21.6	5 31	14 58.58	-26 21.2	1.864	2.831	7.6	19.5
6 10	14 55.44	-4 14.9	1.720	2.594	14.0	21.8	6 10	14 51.27	-26 28.2	1.934	2.844	11.0	19.7
6 20	14 51.74	-4 34.2	1.799	2.591	16.9	22.0	6 20	14 46.36	-26 34.4	2.026	2.857	13.9	19.9
42850	1999 <i>RS</i> ₅₀		5 12.1 207°91	1°1/11.5	18		344486	2002 <i>QU</i> ₁₆		5 12.2 310°85	1°4/11.2	17	
4 11	15 43.08	-16 24.4	1.964	2.836	12.0	19.6	4 11	15 37.20	-17 35.5	1.681	2.567	12.9	20.5
4 21	15 36.37	-16 0.8	1.886	2.830	8.5	19.3	4 21	15 32.54	-16 45.2	1.596	2.548	9.2	20.3
5 1	15 27.69	-15 32.0	1.832	2.823	4.6	19.1	5 1	15 25.77	-15 45.7	1.535	2.528	5.0	20.0
5 11	15 17.86	-15 0.5	1.807	2.816	1.1	18.8	5 11	15 17.71	-14 41.2	1.500	2.509	1.4	19.7
5 21	15 7.86	-14 29.5	1.810	2.808	4.3	19.0	5 21	15 9.39	-13 37.2	1.491	2.490	4.9	19.9
5 31	14 58.72	-14 2.9	1.840	2.799	8.3	19.2	5 31	15 1.91	-12 39.7	1.508	2.472	9.4	20.1
6 10	14 51.28	-13 44.2	1.895	2.789	12.0	19.4	6 10	14 56.20	-11 54.3	1.548	2.454	13.5	20.3
6 20	14 46.09	-13 35.8	1.972	2.779	15.2	19.6	6 20	14 52.87	-11 24.2	1.608	2.436	17.1	20.5
513070	2017 <i>WH</i> ₂₀		5 12.1 246°09	1°7/11.3	18		135453	2001 <i>VR</i> ₃₄		5 12.2 215°06	0°4/11.8	18	
4 11	15 43.93	-12 50.9	2.005	2.877	11.8	21.4	4 11	15 38.00	-18 5.6	2.760	3.625	9.2	20.2
4 21	15 37.04	-12 57.7	1.920	2.864	8.4	21.2	4 21	15 32.36	-17 39.7	2.676	3.617	6.5	20.0
5 1	15 28.11	-13 4.1	1.860	2.850	4.7	20.9	5 1	15 25.39	-17 8.8	2.619	3.609	3.5	19.8
5 11	15 17.92	-13 11.7	1.828	2.836	1.7	20.7	5 11	15 17.67	-16 34.8	2.591	3.601	0.5	19.6
5 21	15 7.42	-13 22.1	1.825	2.821	4.5	20.9	5 21	15 9.85	-16 0.1	2.592	3.592	3.0	19.8
5 31	14 57.66	-13 37.1	1.850	2.807	8.4	21.1	5 31	15 2.61	-15 27.8	2.623	3.582	6.1	19.9
6 10	14 49.54	-13 58.4	1.900	2.791	12.1	21.3	6 10	14 56.52	-15 0.5	2.679	3.572	9.0	20.1
6 20	14 43.65	-14 27.1	1.971	2.776	15.3	21.4	6 20	14 51.99	-14 40.3	2.759	3.562	11.4	20.3
314141	2005 <i>ED</i> ₁₉₈		5 12.1 143°05	1°2/12.8	17		314197	2005 <i>KX</i>		5 12.2 351°95	4°8/9.8	17	
4 11	15 43.95	-22 40.0	1.805	2.670	13.3	21.4	4 11	15 37.57	-10 33.0	1.177	2.082	15.7	20.8
4 21	15 37.03	-22 25.9	1.742	2.680	9.6	21.2	4 21	15 33.22	-9 41.4	1.118	2.077	11.4	20.5
5 1	15 28.02	-22 1.0	1.702	2.689	5.4	20.9	5 1	15 26.25	-8 49.1	1.081	2.072	6.9	20.3
5 11	15 17.89	-21 27.1	1.689	2.697	1.4	20.7	5 11	15 17.77	-8 3.1	1.067	2.069	4.8	20.1
5 21	15 7.76	-20 47.4	1.704	2.705	3.8	20.9	5 21	15 9.13	-7 30.1	1.075	2.066	7.9	20.3
5 31	14 58.72	-20 6.8	1.746	2.713	8.0	21.1	5 31	15 1.73	-7 15.2	1.106	2.065	12.6	20.5
6 10	14 51.66	-19 30.3	1.813	2.720	11.8	21.4	6 10	14 56.68	-7 20.8	1.157	2.064	17.0	20.8
6 20	14 47.05	-19 1.9	1.901	2.726	15.0	21.6	6 20	14 54.56	-7 46.2	1.224	2.065	20.7	21.0
502431	2015 <i>BX</i> ₂₆₈		5 12.1 245°46	0°6/12.5	17		421433	2014 <i>DR</i> ₁₃		5 12.2 6°96	9°6/5.6	18	
4 11	15 41.45	-21 36.7	1.824	2.694	12.9	21.6	4 11	15 36.86	+ 6 46.7	1.843	2.707	13.1	19.6
4 21	15 35.43	-21 11.8	1.740	2.682	9.3	21.4	4 21	15 31.87	+ 7 52.8	1.796	2.707	11.0	19.4
5 1	15 27.27	-20 36.1	1.681	2.670	5.2	21.1	5 1	15 25.20	+ 8 43.7	1.772	2.709	9.7	19.3
5 11	15 17.83	-19 51.9	1.648	2.657	0.9	20.8	5 11	15 17.65	+ 9 13.3	1.772	2.710	9.8	19.3
5 21	15 8.16	-19 2.6	1.642	2.644	3.9	21.0	5 21	15 10.09	+ 9 18.2	1.795	2.712	11.2	19.4
5 31	14 59.37	-18 13.5	1.664	2.631	8.3	21.2	5 31	15 3.41	+ 8 57.3	1.842	2.715	13.2	19.6
6 10	14 52.42	-17 30.0	1.710	2.617	12.3	21.4	6 10	14 58.31	+ 8 12.6	1.908	2.718	15.4	19.7
6 20	14 47.86	-16 56.2	1.777	2.603	15.8	21.6	6 20	14 55.21	+ 7 8.0	1.991	2.721	17.5	19.9
488914	2005 <i>TE</i> ₁₇₀		5 12.2 226°82	0°1/12.0	17		167454	2003 <i>XC</i> ₃₇		5 12.2 130°64	0°1/12.1		

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5 12.2

5 12.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
394201	2006 SV ₉₁		5 12.2 154°46'	1.8/13.4	17		497835	2006 UE ₃₈		5 12.2 176°40'	0.2/12.0	17	
4 11	15 39.89	-24 15.2	2.341	3.197	10.9	21.4	4 11	15 42.34	-19 14.1	2.000	2.868	12.0	23.0
4 21	15 33.92	-24 18.7	2.267	3.199	8.0	21.2	4 21	15 35.78	-18 48.8	1.929	2.871	8.5	22.8
5 1	15 26.31	-24 13.2	2.219	3.201	4.8	21.0	5 1	15 27.37	-18 16.1	1.883	2.873	4.6	22.6
5 11	15 17.78	-23 59.4	2.198	3.204	2.0	20.8	5 11	15 17.92	-17 38.2	1.864	2.874	0.5	22.2
5 21	15 9.15	-23 39.1	2.205	3.206	3.3	20.9	5 21	15 8.40	-16 58.6	1.874	2.874	3.8	22.5
5 31	15 1.27	-23 15.1	2.241	3.208	6.5	21.1	5 31	14 59.79	-16 21.6	1.911	2.874	7.8	22.8
6 10	14 54.85	-22 51.3	2.302	3.209	9.6	21.3	6 10	14 52.89	-15 51.0	1.974	2.874	11.3	23.0
6 20	14 50.36	-22 30.8	2.386	3.211	12.3	21.5	6 20	14 48.16	-15 29.8	2.058	2.872	14.4	23.2
382411	1997 EP ₈		5 12.2 67°23'	5.0/8.4	18		253801	2003 XP ₂₃		5 12.2 298°92'	0.9/12.7	17	
4 11	15 36.89	-4 43.8	2.134	3.014	10.9	20.4	4 11	15 40.36	-22 36.7	1.384	2.267	15.4	20.7
4 21	15 31.69	-3 49.2	2.081	3.022	8.1	20.3	4 21	15 35.42	-22 6.0	1.292	2.239	11.3	20.4
5 1	15 25.04	-2 59.1	2.053	3.029	5.7	20.1	5 1	15 27.65	-21 19.5	1.221	2.211	6.5	20.0
5 11	15 17.64	-2 18.1	2.052	3.037	5.1	20.1	5 11	15 17.98	-20 18.9	1.174	2.184	1.3	19.6
5 21	15 10.25	-1 49.7	2.077	3.044	6.8	20.2	5 21	15 7.74	-19 9.2	1.153	2.156	4.9	19.8
5 31	15 3.64	-1 36.4	2.129	3.052	9.5	20.4	5 31	14 58.44	-17 58.2	1.156	2.128	10.5	20.0
6 10	14 58.43	-1 38.9	2.204	3.060	12.1	20.6	6 10	14 51.42	-16 54.6	1.180	2.101	15.6	20.2
6 20	14 55.00	-1 56.3	2.299	3.067	14.4	20.8	6 20	14 47.48	-16 5.0	1.224	2.074	20.1	20.4
106874	2000 YD ₃₃		5 12.2 155°44'	1.0/13.1	18		310223	2011 SC ₂₁₇		5 12.2 320°34'	0.9/12.7	16	
4 11	15 37.61	-24 3.9	2.843	3.695	9.3	20.4	4 11	15 37.95	-21 33.7	1.658	2.537	13.4	20.9
4 21	15 32.01	-23 33.2	2.769	3.701	6.8	20.3	4 21	15 33.22	-21 22.0	1.571	2.517	9.8	20.6
5 1	15 25.16	-22 54.0	2.722	3.706	3.9	20.1	5 1	15 26.23	-20 59.9	1.508	2.498	5.5	20.3
5 11	15 17.66	-22 8.0	2.704	3.712	1.2	19.9	5 11	15 17.82	-20 29.1	1.470	2.479	1.2	20.0
5 21	15 10.16	-21 18.0	2.716	3.717	2.7	20.0	5 21	15 9.07	-19 52.6	1.458	2.461	4.1	20.1
5 31	15 3.32	-20 27.3	2.756	3.722	5.5	20.2	5 31	15 1.16	-19 15.3	1.471	2.443	8.7	20.4
6 10	14 57.67	-19 39.5	2.824	3.726	8.2	20.4	6 10	14 55.12	-18 42.6	1.507	2.425	13.0	20.6
6 20	14 53.56	-18 57.4	2.916	3.730	10.6	20.6	6 20	14 51.59	-18 18.7	1.564	2.409	16.7	20.8
425895	2011 FT ₅₉		5 12.2 28°24'	0.4/12.4	17		410477	2008 DW ₁₁		5 12.2 129°61'	1.1/11.5	17	
4 11	15 39.47	-20 39.9	1.551	2.433	14.1	20.9	4 11	15 43.38	-16 34.8	1.826	2.701	12.7	22.1
4 21	15 34.12	-20 18.1	1.490	2.438	10.1	20.6	4 21	15 36.51	-16 8.8	1.769	2.714	8.9	21.9
5 1	15 26.57	-19 46.3	1.452	2.443	5.5	20.4	5 1	15 27.73	-15 37.6	1.736	2.727	4.8	21.7
5 11	15 17.81	-19 7.2	1.439	2.449	0.8	20.1	5 11	15 17.96	-15 4.2	1.731	2.740	1.2	21.4
5 21	15 9.02	-18 25.3	1.452	2.455	4.2	20.3	5 21	15 8.23	-14 32.1	1.753	2.752	4.3	21.7
5 31	15 1.34	-17 45.6	1.491	2.461	8.8	20.6	5 31	14 59.57	-14 5.3	1.803	2.763	8.4	22.0
6 10	14 55.71	-17 13.3	1.552	2.468	12.9	20.9	6 10	14 52.77	-13 47.2	1.877	2.774	12.0	22.2
6 20	14 52.61	-16 51.8	1.634	2.475	16.3	21.1	6 20	14 48.28	-13 39.6	1.972	2.784	15.0	22.4
465635	2009 KA ₁₃		5 12.2 288°66'	2.1/11.1	17		231446	2007 GE ₇₅		5 12.2 329°63'	6.1/9.8	17	
4 11	15 40.99	-14 56.6	1.474	2.363	14.2	21.6	4 11	15 41.46	-3 52.3	1.460	2.347	14.4	19.5
4 21	15 35.45	-14 28.2	1.398	2.350	10.2	21.3	4 21	15 35.72	-3 40.7	1.390	2.335	10.9	19.2
5 1	15 27.45	-13 54.7	1.345	2.337	5.6	21.0	5 1	15 27.58	-3 38.0	1.344	2.324	7.5	19.0
5 11	15 17.93	-13 19.7	1.316	2.324	2.1	20.8	5 11	15 17.97	-3 48.8	1.321	2.314	6.1	18.9
5 21	15 8.10	-12 48.1	1.314	2.312	5.6	21.0	5 21	15 8.09	-4 15.9	1.324	2.304	8.3	19.0
5 31	14 59.27	-12 24.6	1.336	2.299	10.4	21.2	5 31	14 59.21	-5 0.6	1.350	2.295	12.0	19.2
6 10	14 52.53	-12 13.3	1.380	2.286	14.8	21.4	6 10	14 52.38	-6 1.8	1.399	2.286	15.9	19.4
6 20	14 48.54	-12 16.3	1.443	2.274	18.6	21.6	6 20	14 48.23	-7 16.8	1.466	2.278	19.2	19.6
292919	2006 VV ₆₂		5 12.2 177°00'	1.0/11.5	18		28917	Zacollins		5 12.2 181°21'	1.1/11.3	18	
4 11	15 39.85	-14 42.4	2.743	3.609	9.2	21.1	4 11	15 37.87	-15 46.7	2.691	3.560	9.2	19.8
4 21	15 33.63	-14 41.4	2.669	3.610	6.5	20.9	4 21	15 32.26	-15 20.4	2.618	3.561	6.5	19.6
5 1	15 26.07	-14 38.4	2.622	3.612	3.5	20.7	5 1	15 25.34	-14 50.7	2.571	3.561	3.5	19.4
5 11	15 17.77	-14 35.0	2.604	3.612	1.0	20.5	5 11	15 17.72	-14 19.9	2.553	3.561	1.1	19.3
5 21	15 9.39	-14 32.5	2.616	3.613	3.2	20.7	5 21	15 10.05	-13 50.3	2.564	3.561	3.3	19.4
5 31	15 1.60	-14 32.7	2.656	3.613	6.2	20.9	5 31	15 2.99	-13 24.7	2.604	3.560	6.4	19.6
6 10	14 55.01	-14 37.4	2.724	3.613	9.0	21.1	6 10	14 57.11	-13 5.5	2.670	3.559	9.1	19.8
6 20	14 50.00	-14 47.6	2.815	3.612	11.3	21.2	6 20	14 52.80	-12 54.2	2.759	3.557	11.5	20.0
302467	2002 EB ₁₄₃		5 12.2 117°07'	2.2/10.4	17		156261	2001 VD ₂₁		5 12.2 169°53'	0.1/12.2	17	
4 11	15 37.15	-12 13.3	2.530	3.405	9.5	21.2	4 11	15 42.08	-19 30.9	2.135	3.001	11.4	21.4
4 21	15 31.72	-11 37.7	2.470	3.415	6.7	21.0	4 21	15 35.52	-19 16.3	2.065	3.005	8.2	21.2
5 1	15 25.02	-11 1.1	2.436	3.425	3.8	20.9	5 1	15 27.21	-18 54.8	2.019	3.008	4.4	21.0
5 11	15 17.66	-10 26.4	2.431	3.435	2.2	20.8	5 11	15 17.92	-18 28.4	2.001	3.011	0.5	20.7
5 21	15 10.31	-9 56.3	2.455	3.444	4.2	20.9	5 21	15 8.57	-17 59.6	2.012	3.013	3.5	20.9
5 31	15 3.64	-9 33.6	2.506	3.454	7.0	21.1	5 31	15 0.07	-17 32.0	2.051	3.015	7.3	21.2
6 10	14 58.20	-9 20.0	2.583	3.463	9.7	21.3	6 10	14 53.16	-17 9.1	2.116	3.016	10.7	21.4
6 20	14 54.35	-9 16.4	2.682	3.472	12.0	21.5	6 20	14 48.33	-16 53.6	2.203	3.016	13.6	21.6
406361	2007 RQ ₂₀₀		5 12.2 119°56'	0.5/11.9	16		491311	2011 WM ₅₁		5 12.2 218°18'	1.2/13.2	16	
4 11	15 42.77	-19 5.7	1.536	2.416	14.3	21.7	4 11	15 37.66	-24 26.0	2.654	3.507	9.9	22.5
4 21	15 36.41	-18 30.2	1.477	2.425	10.1	21.4	4 21	15 32.20	-23 57.0	2.570	3.502	7.2	22.3
5 1	15 27.78	-17 45.6	1.442	2.434	5.5	21.2	5 1	15 25.35	-23 18.7	2.512	3.496	4.2	22.1
5 11	15 17.96	-16 55.6	1.432	2.442	0.7	20.8	5 11	15 17.73	-22 32.4	2.482	3.490	1.4	21.9
5 21	15 8.15	-16 5.0	1.449	2.450	4.6	21.1	5 21	15 10.03	-21 41.1	2.482	3.483	2.9	22.0
5 31	14 59.56	-15 19.6	1.492	2.457	9.2	21.4	5 31	15 2.98	-20 48.3	2.510	3.477	5.9	22.2
6 10	14 53.13	-14 44.5	1.558	2.465	13.4	21.7	6 10	14 57.17	-19 58.0	2.565	3.470	8.9	22.3
6 20	14 49.32	-14 22.6	1.644	2.472	16.8	21.9	6 20	14 53.03	-19 13.5	2.644	3.462	11.4	22.5
40279	1999 JD ₃₅		5 12.2 254°67'	0.1/12.1	18 R		11254	Konkohekisui		5 12.2 118°87'	3.3/10.2	18	
4 11	15 41.80	-20 39.6	1.593	2.470</									

EPHEMERIDES

5 12.2

5 12.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
498751	2008 <i>UF</i> ₆		5 12.2 139°71	5°2/15.8 17			397790	2008 <i>JR</i> ₂₉		5 12.2 324°22	0°9/11.1 18		
4 11	15 44.38	-34 55.4	2.325	3.136	12.5	21.8	4 11	15 31.41	-14 13.9	4.201	5.070	6.2	21.3
4 21	15 37.26	-35 20.3	2.255	3.147	10.0	21.6	4 21	15 27.41	-13 57.9	4.124	5.068	4.3	21.2
5 1	15 28.19	-35 29.2	2.208	3.156	7.4	21.5	5 1	15 22.64	-13 40.6	4.075	5.065	2.4	21.0
5 11	15 18.03	-35 20.7	2.188	3.165	5.5	21.3	5 11	15 17.47	-13 23.5	4.055	5.063	0.9	20.9
5 21	15 7.79	-34 55.9	2.195	3.174	5.6	21.4	5 21	15 12.26	-13 7.7	4.065	5.060	2.3	21.0
5 31	14 58.49	-34 18.0	2.230	3.183	7.5	21.5	5 31	15 7.38	-12 54.8	4.104	5.058	4.3	21.2
6 10	14 50.96	-33 32.5	2.290	3.190	10.0	21.7	6 10	15 3.17	-12 46.0	4.171	5.056	6.2	21.3
6 20	14 45.70	-32 45.0	2.373	3.198	12.4	21.8	6 20	14 59.90	-12 42.0	4.261	5.054	7.9	21.4
509810	2008 <i>VD</i> ₁₄		5 12.2 252°12	2°7/10.7 18			433590	2013 <i>YT</i> ₄₅		5 12.2 296°71	1°2/11.5 17		
4 11	15 43.16	-9 54.4	2.245	3.115	10.8	21.6	4 11	15 40.79	-15 8.4	1.914	2.792	12.0	21.4
4 21	15 36.37	-9 49.4	2.154	3.095	7.8	21.4	4 21	15 34.79	-15 3.3	1.844	2.791	8.5	21.1
5 1	15 27.76	-9 45.7	2.088	3.074	4.6	21.1	5 1	15 26.91	-14 55.4	1.799	2.790	4.6	20.9
5 11	15 18.01	-9 45.5	2.050	3.053	2.7	21.0	5 11	15 17.93	-14 46.5	1.780	2.789	1.2	20.7
5 21	15 7.95	-9 50.8	2.042	3.032	4.9	21.1	5 21	15 8.83	-14 39.1	1.789	2.788	4.2	20.9
5 31	14 58.50	-10 3.4	2.062	3.010	8.3	21.2	5 31	15 0.58	-14 35.8	1.825	2.787	8.2	21.1
6 10	14 50.47	-10 24.6	2.108	2.987	11.6	21.4	6 10	14 54.01	-14 39.2	1.886	2.786	11.7	21.3
6 20	14 44.41	-10 55.0	2.176	2.964	14.5	21.6	6 20	14 49.62	-14 50.7	1.967	2.785	14.8	21.5
463702	2014 <i>PU</i> ₄₁		5 12.2 187°21	5°1/ 9.4 16			364149	2006 <i>FT</i> ₃₆		5 12.2 73°47	14°7/16.6 16		
4 11	15 42.75	-7 36.8	1.605	2.489	13.6	21.7	4 11	16 1.02	-45 55.1	1.424	2.195	20.8	20.5
4 21	15 36.33	-6 45.0	1.543	2.489	9.9	21.5	4 21	15 51.72	-48 38.8	1.369	2.205	18.4	20.3
5 1	15 27.77	-5 55.5	1.504	2.488	6.5	21.3	5 1	15 37.31	-50 54.0	1.333	2.216	16.3	20.2
5 11	15 18.00	-5 14.0	1.492	2.487	5.1	21.2	5 11	15 19.13	-52 27.4	1.319	2.226	14.9	20.2
5 21	15 8.15	-4 45.3	1.506	2.486	7.5	21.3	5 21	14 59.67	-53 11.4	1.327	2.236	14.9	20.2
5 31	14 59.36	-4 33.1	1.545	2.484	11.2	21.5	5 31	14 42.01	-53 8.4	1.357	2.247	16.0	20.3
6 10	14 52.53	-4 38.8	1.606	2.482	14.8	21.7	6 10	14 28.61	-52 30.6	1.406	2.257	17.9	20.4
6 20	14 48.20	-5 1.7	1.686	2.479	17.9	21.9	6 20	14 20.63	-51 33.1	1.471	2.267	19.9	20.6
364691	2007 <i>UB</i> ₄		5 12.2 252°01	1°3/11.6 17			281626	2008 <i>UT</i> ₂₈₃		5 12.2 50°80	0°3/12.0 17		
4 11	15 44.38	-15 31.2	1.621	2.500	13.7	21.2	4 11	15 41.36	-17 30.4	1.867	2.743	12.4	20.8
4 21	15 37.80	-15 23.3	1.538	2.486	9.8	21.0	4 21	15 35.26	-17 31.0	1.797	2.743	8.8	20.6
5 1	15 28.75	-15 11.1	1.479	2.470	5.4	20.7	5 1	15 27.18	-17 26.8	1.752	2.743	4.8	20.3
5 11	15 18.13	-14 56.9	1.446	2.455	1.3	20.3	5 11	15 17.97	-17 19.2	1.734	2.743	0.5	20.0
5 21	15 7.11	-14 43.7	1.439	2.438	4.9	20.5	5 21	15 8.62	-17 10.4	1.743	2.744	3.9	20.3
5 31	14 57.00	-14 35.0	1.459	2.422	9.7	20.8	5 31	15 0.17	-17 3.4	1.779	2.744	8.0	20.5
6 10	14 48.91	-14 34.4	1.502	2.405	14.1	21.0	6 10	14 53.47	-17 1.2	1.839	2.744	11.7	20.7
6 20	14 43.53	-14 44.2	1.565	2.387	17.8	21.2	6 20	14 49.04	-17 6.0	1.920	2.745	14.9	20.9
377422	2004 <i>TR</i> ₁₄₆		5 12.2 166°66	0°2/12.3 17			311936	2007 <i>CN</i> ₃₃		5 12.2 251°47	4°2/ 8.9 18		
4 11	15 40.04	-20 50.5	1.908	2.779	12.3	20.9	4 11	15 36.47	-6 2.7	2.397	3.275	9.9	20.7
4 21	15 34.24	-20 18.8	1.838	2.781	8.8	20.6	4 21	15 31.37	-5 19.0	2.332	3.273	7.3	20.5
5 1	15 26.57	-19 37.8	1.792	2.782	4.8	20.4	5 1	15 24.91	-4 38.2	2.292	3.271	5.0	20.4
5 11	15 17.87	-18 50.2	1.773	2.783	0.6	20.1	5 11	15 17.72	-4 4.1	2.280	3.269	4.2	20.3
5 21	15 7.11	-17 59.8	1.782	2.784	3.7	20.3	5 21	15 10.48	-3 39.7	2.295	3.268	5.9	20.4
5 31	15 1.27	-17 11.6	1.818	2.784	7.8	20.6	5 31	15 3.88	-3 27.5	2.338	3.266	8.5	20.6
6 10	14 55.16	-16 30.2	1.879	2.785	11.5	20.8	6 10	14 58.51	-3 28.5	2.404	3.264	11.0	20.8
6 20	14 51.24	-15 58.9	1.961	2.785	14.6	21.0	6 20	14 54.78	-3 42.5	2.491	3.262	13.3	20.9
72746	2001 <i>FN</i> ₁₂₀		5 12.2 315°93	0°7/12.5 17			317458	2002 <i>RJ</i> ₁₈		5 12.2 306°03	3°1/10.6 17		
4 11	15 40.33	-20 7.7	1.757	2.633	13.0	19.2	4 11	15 39.66	-13 32.1	1.349	2.245	14.8	20.6
4 21	15 34.73	-20 10.6	1.680	2.625	9.4	18.9	4 21	15 34.86	-12 51.6	1.262	2.217	10.7	20.3
5 1	15 26.98	-20 6.0	1.627	2.617	5.2	18.7	5 1	15 27.35	-12 5.6	1.197	2.189	6.1	20.0
5 11	15 17.93	-19 55.1	1.600	2.609	1.0	18.4	5 11	15 18.02	-11 18.8	1.156	2.162	3.1	19.7
5 21	15 8.65	-19 40.1	1.599	2.602	3.9	18.6	5 21	15 8.12	-10 37.4	1.139	2.135	6.7	19.8
5 31	15 0.24	-19 24.5	1.625	2.594	8.3	18.8	5 31	14 59.11	-10 7.7	1.146	2.108	11.8	20.0
6 10	14 53.68	-19 12.3	1.675	2.588	12.3	19.0	6 10	14 52.26	-9 54.4	1.174	2.082	16.7	20.2
6 20	14 49.53	-19 6.7	1.745	2.581	15.7	19.2	6 20	14 48.37	-9 59.8	1.219	2.056	21.0	20.4
338794	2003 <i>UD</i> ₃₄₈		5 12.2 304°07	2°9/10.4 17			457655	2009 <i>CJ</i> ₃₈		5 12.2 115°22	2°5/13.4 16		
4 11	15 38.09	-13 12.7	1.697	2.585	12.7	20.8	4 11	15 45.37	-24 36.1	1.486	2.354	15.4	21.9
4 21	15 33.13	-12 25.8	1.618	2.570	9.1	20.5	4 21	15 38.52	-24 44.4	1.426	2.363	11.3	21.6
5 1	15 26.11	-11 34.8	1.563	2.554	5.2	20.2	5 1	15 29.08	-24 39.4	1.387	2.372	6.8	21.4
5 11	15 17.84	-10 44.4	1.534	2.539	2.9	20.1	5 11	15 18.18	-24 21.1	1.374	2.380	2.8	21.2
5 21	15 9.35	-9 59.5	1.531	2.524	5.7	20.2	5 21	15 7.22	-23 52.5	1.386	2.388	4.6	21.3
5 31	15 1.69	-9 25.2	1.554	2.509	9.9	20.4	5 31	14 57.57	-23 18.5	1.425	2.395	9.1	21.6
6 10	14 55.77	-9 5.1	1.599	2.494	13.8	20.6	6 10	14 50.32	-22 45.7	1.486	2.403	13.3	21.8
6 20	14 52.18	-9 0.7	1.664	2.480	17.1	20.8	6 20	14 46.02	-22 19.2	1.568	2.410	16.8	22.1
380172	2000 <i>RF</i> ₉₆		5 12.2 305°23	2°2/13.7 17			377437	2004 <i>TH</i> ₂₇₃		5 12.2 221°38	0°9/12.8 18		
4 11	15 38.86	-27 19.8	1.544	2.412	14.9	19.7	4 11	15 39.99	-22 48.0	1.917	2.785	12.5	20.7
4 21	15 34.08	-26 28.9	1.451	2.388	11.1	19.4	4 21	15 34.28	-22 20.1	1.842	2.782	9.0	20.5
5 1	15 26.79	-25 16.4	1.380	2.364	6.8	19.1	5 1	15 26.64	-21 41.3	1.792	2.779	5.1	20.2
5 11	15 17.93	-23 44.4	1.334	2.340	2.6	18.8	5 11	15 17.92	-20 53.5	1.768	2.777	1.2	19.9
5 21	15 8.72	-21 58.7	1.314	2.317	4.4	18.8	5 21	15 9.10	-20 0.7	1.771	2.774	3.6	20.1
5 31	15 0.51	-20 8.3	1.320	2.294	9.3	19.0	5 31	15 1.18	-19 7.9	1.802	2.770	7.7	20.3
6 10	14 54.41	-18 23.6	1.350	2.271	14.0	19.2	6 10	14 54.99	-18 20.2	1.858	2.767	11.4	20.6
6 20	14 51.09	-16 52.8	1.399	2.248	18.1	19.4	6 20	14 51.04	-17 41.7	1.935	2.764	14.6	20.8
1105	<i>Fragaria</i>		5 12.2 258°17	4°8/ 8.7 18			216785	2006 <i>RF</i> ₃₆		5 12.2 271°10			

EPHEMERIDES

5 12.2

5 12.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
424458	2008 <i>CO</i> ₉₈		5 12.2 113°24	0°5/12.5 17			505825	2015 <i>BF</i> ₄₅₇		5 12.2 275°68	11°0/ 3.1 18		
4 11	15 43.50	-21 3.3	1.703	2.574	13.6	22.1	4 11	15 39.81	+ 8 46.4	1.810	2.664	13.7	21.1
4 21	15 36.78	-20 44.9	1.646	2.588	9.7	21.9	4 21	15 34.27	+10 24.2	1.741	2.641	12.0	20.9
5 1	15 27.97	-20 16.8	1.612	2.601	5.4	21.7	5 1	15 26.74	+11 47.8	1.695	2.617	11.1	20.8
5 11	15 18.07	-19 41.5	1.605	2.614	0.9	21.4	5 11	15 17.99	+12 48.7	1.673	2.593	11.5	20.8
5 21	15 8.21	-19 2.6	1.625	2.627	4.0	21.6	5 21	15 8.97	+13 20.8	1.674	2.569	13.1	20.8
5 31	14 59.52	-18 24.9	1.672	2.640	8.3	21.9	5 31	15 0.71	+13 21.3	1.697	2.544	15.4	20.9
6 10	14 52.85	-17 53.2	1.743	2.651	12.1	22.2	6 10	14 54.10	+12 51.1	1.738	2.519	17.8	21.0
6 20	14 48.67	-17 30.9	1.836	2.663	15.3	22.4	6 20	14 49.71	+11 54.1	1.795	2.493	20.1	21.2
102316	1999 <i>TN</i> ₁₀₀		5 12.2 293°82	5°1/ 9.2 18			499641	2010 <i>VS</i> ₃₂		5 12.2 305°76	2°5/11.0 17		
4 11	15 39.85	- 9 33.0	1.422	2.316	14.3	19.9	4 11	15 40.20	-14 31.2	1.324	2.219	15.1	21.2
4 21	15 34.78	- 8 28.5	1.341	2.294	10.5	19.6	4 21	15 35.29	-14 1.0	1.241	2.196	10.9	20.9
5 1	15 27.20	- 7 21.8	1.283	2.271	6.7	19.3	5 1	15 27.61	-13 25.0	1.179	2.172	6.1	20.5
5 11	15 18.02	- 6 19.7	1.250	2.248	5.2	19.2	5 11	15 18.10	-12 47.6	1.141	2.149	2.5	20.2
5 21	15 8.44	- 5 29.4	1.241	2.225	8.1	19.3	5 21	15 8.06	-12 14.1	1.128	2.126	6.2	20.4
5 31	14 59.77	- 4 57.1	1.256	2.203	12.5	19.5	5 31	14 58.97	-11 50.2	1.138	2.103	11.5	20.6
6 10	14 53.14	- 4 46.3	1.292	2.180	16.8	19.6	6 10	14 52.11	-11 40.7	1.169	2.081	16.4	20.8
6 20	14 49.27	- 4 57.4	1.345	2.158	20.6	19.8	6 20	14 48.27	-11 47.8	1.217	2.059	20.7	21.0
379974	2012 <i>SH</i> ₂₈		5 12.2 269°05	4°1/16.8 18			378680	2008 <i>HX</i> ₆₂		5 12.2 255°04	2°2/ 9.5 18		
4 11	15 37.27	-39 19.8	4.417	5.186	7.7	21.1	4 11	15 31.41	- 7 16.0	4.411	5.281	5.9	20.6
4 21	15 31.72	-39 52.1	4.328	5.182	6.4	21.0	4 21	15 27.38	- 6 57.1	4.338	5.277	4.3	20.5
5 1	15 25.07	-40 14.7	4.264	5.178	5.2	20.9	5 1	15 22.65	- 6 39.8	4.292	5.273	2.8	20.4
5 11	15 17.78	-40 26.6	4.227	5.174	4.3	20.9	5 11	15 17.54	- 6 25.4	4.275	5.269	2.2	20.3
5 21	15 10.32	-40 27.8	4.219	5.170	4.2	20.9	5 21	15 12.39	- 6 15.5	4.288	5.265	3.2	20.4
5 31	15 3.25	-40 19.5	4.238	5.167	5.0	20.9	5 31	15 7.55	- 6 10.9	4.329	5.261	4.8	20.5
6 10	14 57.03	-40 3.8	4.285	5.163	6.2	21.0	6 10	15 3.33	- 6 12.6	4.397	5.256	6.4	20.6
6 20	14 52.02	-39 43.2	4.356	5.159	7.5	21.1	6 20	14 59.99	- 6 20.7	4.488	5.252	7.9	20.7
182922	2002 <i>EW</i> ₁₅₄		5 12.2 86°91	0°8/11.6 17			210709	2000 <i>SH</i> ₁₉₀		5 12.2 237°09	2°6/13.9 18		
4 11	15 37.73	-17 4.9	2.330	3.203	10.3	21.0	4 11	15 40.64	-26 54.0	2.499	3.343	10.7	20.5
4 21	15 32.31	-16 40.9	2.266	3.211	7.3	20.8	4 21	15 34.55	-27 6.0	2.411	3.334	8.1	20.3
5 1	15 25.44	-16 12.5	2.228	3.219	3.9	20.6	5 1	15 26.78	-27 8.1	2.349	3.324	5.2	20.1
5 11	15 17.81	-15 42.0	2.218	3.228	0.8	20.4	5 11	15 18.00	-27 0.3	2.314	3.314	2.8	19.9
5 21	15 10.17	-15 12.2	2.237	3.236	3.4	20.6	5 21	15 9.00	-26 43.5	2.307	3.304	3.6	20.0
5 31	15 3.27	-14 46.2	2.283	3.244	6.8	20.9	5 31	15 0.65	-26 20.4	2.329	3.294	6.4	20.1
6 10	14 57.73	-14 26.8	2.355	3.252	9.8	21.1	6 10	14 53.70	-25 54.7	2.377	3.283	9.4	20.3
6 20	14 53.95	-14 15.5	2.448	3.260	12.4	21.3	6 20	14 48.64	-25 30.2	2.448	3.272	12.1	20.4
400528	2008 <i>SM</i> ₃₀₉		5 12.2 157°63	0°6/11.4 18			437709	2014 <i>DF</i> ₈₅		5 12.2 222°32	4°5/ 8.6 17		
4 11	15 33.68	-16 13.2	4.048	4.912	6.5	22.6	4 11	15 37.24	- 5 46.1	2.295	3.173	10.3	21.3
4 21	15 28.99	-15 51.1	3.977	4.918	4.6	22.5	4 21	15 31.99	- 4 53.8	2.229	3.169	7.6	21.1
5 1	15 23.51	-15 26.7	3.934	4.924	2.4	22.3	5 1	15 25.30	- 4 4.4	2.188	3.166	5.3	20.9
5 11	15 17.60	-15 1.4	3.921	4.929	0.6	22.1	5 11	15 17.83	- 3 22.1	2.175	3.162	4.6	20.9
5 21	15 11.69	-14 36.7	3.937	4.935	2.3	22.3	5 21	15 10.29	- 2 50.6	2.189	3.159	6.3	21.0
5 31	15 6.16	-14 14.5	3.984	4.940	4.4	22.5	5 31	15 3.43	- 2 32.5	2.229	3.155	9.0	21.1
6 10	15 1.38	-13 56.1	4.058	4.944	6.3	22.6	6 10	14 57.86	- 2 29.1	2.294	3.151	11.6	21.3
6 20	14 57.62	-13 42.7	4.156	4.949	8.0	22.7	6 20	14 54.01	- 2 40.1	2.379	3.146	14.0	21.5
228628	2002 <i>CS</i> ₁₈₅		5 12.2 23°00	0°1/12.1 17			514871	2008 <i>GT</i> ₁₄₁		5 12.2 294°47	3°4/ 7.6 18		
4 11	15 39.92	-18 37.0	1.406	2.295	14.8	20.2	4 11	15 30.63	- 1 28.3	4.332	5.197	6.1	21.3
4 21	15 34.63	-18 29.6	1.350	2.301	10.5	19.9	4 21	15 26.84	- 0 55.1	4.265	5.193	4.7	21.2
5 1	15 26.97	-18 14.5	1.316	2.308	5.7	19.7	5 1	15 22.36	- 0 25.7	4.226	5.189	3.6	21.1
5 11	15 17.99	-17 54.4	1.306	2.316	0.6	19.3	5 11	15 17.51	- 0 1.8	4.215	5.185	3.4	21.1
5 21	15 8.96	-17 32.7	1.322	2.324	4.5	19.6	5 21	15 12.63	+ 0 14.9	4.232	5.181	4.3	21.2
5 31	15 1.15	-17 14.0	1.362	2.333	9.3	19.9	5 31	15 8.06	+ 0 23.3	4.277	5.178	5.7	21.3
6 10	14 55.53	-17 2.4	1.424	2.343	13.6	20.2	6 10	15 4.12	+ 0 23.0	4.347	5.174	7.1	21.4
6 20	14 52.61	-17 0.6	1.506	2.353	17.2	20.5	6 20	15 1.05	+ 0 13.9	4.439	5.170	8.5	21.5
109740	2001 <i>RY</i> ₆₃		5 12.2 171°93	2°9/ 9.7 17			346211	2007 <i>YF</i> ₁₀		5 12.2 112°11	1°4/11.1 17		
4 11	15 40.26	-12 8.6	2.319	3.192	10.4	20.8	4 11	15 38.96	-14 34.9	2.576	3.446	9.6	21.8
4 21	15 34.05	-10 59.9	2.253	3.197	7.4	20.6	4 21	15 32.98	-14 7.2	2.521	3.465	6.7	21.6
5 1	15 26.37	- 9 48.6	2.213	3.200	4.3	20.4	5 1	15 25.74	-13 37.2	2.493	3.483	3.7	21.4
5 11	15 17.93	- 8 39.3	2.202	3.203	2.9	20.3	5 11	15 17.87	-13 7.2	2.494	3.501	1.4	21.3
5 21	15 9.48	- 7 36.4	2.221	3.205	5.1	20.5	5 21	15 10.06	-12 39.9	2.524	3.519	3.6	21.5
5 31	15 1.81	- 6 44.0	2.268	3.207	8.1	20.7	5 31	15 2.97	-12 17.7	2.582	3.536	6.5	21.7
6 10	14 55.53	- 6 5.1	2.340	3.207	11.0	20.9	6 10	14 57.16	-12 2.8	2.667	3.553	9.2	21.9
6 20	14 51.06	- 5 40.6	2.433	3.207	13.5	21.0	6 20	14 52.97	-11 56.3	2.774	3.569	11.5	22.1
305556	2008 <i>UG</i> ₂₇₀		5 12.2 53°45	2°7/10.9 16			5510	1988 <i>RF</i> ₇		5 12.2 273°37	3°8/10.3 18		
4 11	15 41.87	-14 43.6	1.199	2.096	16.2	20.9	4 11	15 43.78	-11 8.7	1.479	2.365	14.4	17.0
4 21	15 36.18	-13 58.8	1.148	2.104	11.4	20.6	4 21	15 37.66	-10 31.0	1.390	2.340	10.5	16.7
5 1	15 27.84	-13 8.7	1.120	2.113	6.3	20.4	5 1	15 28.85	- 9 51.0	1.324	2.314	6.2	16.4
5 11	15 18.09	-12 19.2	1.115	2.122	2.7	20.2	5 11	15 18.25	- 9 13.5	1.284	2.287	3.9	16.2
5 21	15 8.37	-11 36.5	1.134	2.131	6.4	20.4	5 21	15 7.09	- 8 43.8	1.269	2.260	7.0	16.3
5 31	15 0.11	-11 6.5	1.176	2.141	11.3	20.7	5 31	14 56.78	- 8 27.1	1.280	2.233	11.7	16.5
6 10	14 54.34	-10 52.9	1.240	2.150	15.8	21.0	6 10	14 48.55	- 8 26.8	1.312	2.205	16.3	16.7
6 20	14 51.57	-10 56.6	1.321	2.160	19.6	21.3	6 20	14 43.19	- 8 44.2	1.362	2.176	20.3	16.9
140946	2001 <i>VO</i> ₉₄		5 12.2 255°35	3°5/ 8.8 18			243089	2007 <i>QN</i>					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
225604	2000 YO ₄₁		5 12.2 169°57'	3°8/ 9.9	18		131079	2000 YG ₁₁₀		5 12.2 180°11'	7°0/ 7.9	18	
4 11	15 40.73	- 8 9.8	2.003	2.881	11.5	19.9	4 11	15 41.44	+ 2 28.6	2.165	3.025	11.6	19.9
4 21	15 34.62	- 7 41.2	1.939	2.883	8.4	19.7	4 21	15 34.99	+ 3 5.3	2.106	3.025	9.2	19.7
5 1	15 26.78	- 7 14.8	1.900	2.884	5.3	19.5	5 1	15 26.95	+ 3 31.7	2.072	3.026	7.4	19.6
5 11	15 18.00	- 6 54.3	1.888	2.886	3.8	19.4	5 11	15 18.05	+ 3 43.5	2.064	3.026	7.1	19.6
5 21	15 9.15	- 6 42.6	1.903	2.887	5.9	19.6	5 21	15 9.13	+ 3 38.0	2.084	3.026	8.4	19.7
5 31	15 1.14	- 6 42.2	1.946	2.887	9.1	19.8	5 31	15 0.99	+ 3 14.4	2.129	3.025	10.7	19.8
6 10	14 54.70	- 6 54.2	2.012	2.888	12.2	20.0	6 10	14 54.33	+ 2 33.5	2.197	3.024	13.1	20.0
6 20	14 50.30	- 7 18.4	2.099	2.888	14.9	20.1	6 20	14 49.58	+ 1 37.8	2.285	3.023	15.3	20.1
67829	2000 VP ₄₉		5 12.2 251°89'	0°4/12.4	18		278266	2007 FV ₃₀		5 12.2 178°74'	3°6/14.1	17	
4 11	15 43.20	-20 59.1	1.690	2.562	13.6	19.3	4 11	15 44.17	-27 37.4	1.894	2.744	13.4	20.9
4 21	15 36.97	-20 37.7	1.603	2.545	9.9	19.0	4 21	15 37.47	-28 3.2	1.820	2.744	10.1	20.6
5 1	15 28.33	-20 5.5	1.539	2.528	5.5	18.7	5 1	15 28.52	-28 16.3	1.770	2.745	6.6	20.4
5 11	15 18.18	-19 24.4	1.502	2.511	0.8	18.3	5 11	15 18.24	-28 15.8	1.746	2.745	3.8	20.3
5 21	15 7.69	-18 38.1	1.491	2.493	4.2	18.5	5 21	15 7.74	-28 2.5	1.749	2.745	4.7	20.3
5 31	14 58.10	-17 52.0	1.507	2.475	9.0	18.8	5 31	14 58.21	-27 39.9	1.779	2.745	8.0	20.5
6 10	14 50.48	-17 11.8	1.547	2.456	13.4	19.0	6 10	14 50.62	-27 13.2	1.833	2.744	11.5	20.7
6 20	14 45.50	-16 41.9	1.608	2.436	17.1	19.2	6 20	14 45.55	-26 47.5	1.910	2.744	14.6	20.9
521395	2015 MN ₁₄₃		5 12.2 326°29'	2°8/14.3	16		174769	2003 WK ₄₃		5 12.2 40°18'	0°6/12.5	17	
4 11	15 37.70	-28 12.0	2.102	2.955	12.1	21.2	4 11	15 43.12	-19 45.6	1.369	2.253	15.4	19.9
4 21	15 32.64	-27 54.6	2.021	2.948	9.1	21.0	4 21	15 37.07	-19 49.5	1.309	2.257	11.1	19.6
5 1	15 25.78	-27 23.2	1.964	2.941	5.8	20.8	5 1	15 28.40	-19 44.8	1.271	2.262	6.1	19.4
5 11	15 17.89	-26 38.9	1.933	2.935	3.0	20.6	5 11	15 18.22	-19 32.8	1.257	2.267	1.0	19.0
5 21	15 9.88	-25 44.6	1.929	2.928	3.8	20.6	5 21	15 7.93	-19 16.5	1.269	2.272	4.6	19.3
5 31	15 2.68	-24 45.0	1.952	2.922	7.1	20.8	5 31	14 58.92	-19 0.4	1.306	2.277	9.6	19.6
6 10	14 57.08	-23 45.5	2.001	2.917	10.4	21.0	6 10	14 52.29	-18 49.3	1.365	2.283	14.1	19.9
6 20	14 53.56	-22 51.3	2.072	2.911	13.4	21.2	6 20	14 48.61	-18 46.6	1.443	2.289	17.8	20.1
274821	2009 OW ₂		5 12.2 253°17'	1°1/11.6	17		138752	2000 SP ₂₅₉		5 12.2 132°79'	0°1/12.2	17	
4 11	15 42.15	-16 40.0	1.859	2.734	12.4	21.4	4 11	15 40.90	-17 55.4	2.361	3.227	10.5	19.8
4 21	15 36.00	-16 15.4	1.771	2.717	8.9	21.1	4 21	15 34.64	-18 6.7	2.290	3.231	7.5	19.6
5 1	15 27.72	-15 44.7	1.708	2.699	4.8	20.8	5 1	15 26.79	-18 14.1	2.245	3.234	4.1	19.4
5 11	15 18.13	-15 10.7	1.672	2.681	1.1	20.5	5 11	15 18.05	-18 18.2	2.228	3.237	0.5	19.1
5 21	15 8.23	-14 36.7	1.664	2.663	4.5	20.7	5 21	15 9.19	-18 20.6	2.240	3.241	3.2	19.3
5 31	14 59.11	-14 7.1	1.682	2.644	8.8	20.9	5 31	15 1.05	-18 23.0	2.280	3.244	6.6	19.5
6 10	14 51.72	-13 45.9	1.725	2.624	12.7	21.1	6 10	14 54.31	-18 27.8	2.346	3.247	9.7	19.7
6 20	14 46.67	-13 35.7	1.789	2.604	16.2	21.3	6 20	14 49.43	-18 36.7	2.435	3.250	12.4	19.9
56996	2000 SP ₃₀₇		5 12.2 117°04'	2°1/14.4	18		354813	2005 WC ₂₁		5 12.2 330°65'	2°7/13.6	16	
4 11	15 35.91	-28 20.0	3.487	4.321	8.2	19.6	4 11	15 39.85	-26 11.1	1.123	2.010	17.9	20.3
4 21	15 30.74	-28 13.1	3.417	4.333	6.2	19.4	4 21	15 35.36	-25 46.6	1.055	2.001	13.3	20.0
5 1	15 24.52	-27 57.9	3.372	4.344	4.0	19.3	5 1	15 27.72	-25 0.4	1.006	1.993	8.1	19.7
5 11	15 17.77	-27 35.0	3.356	4.355	2.3	19.2	5 11	15 18.17	-23 54.5	0.979	1.986	3.1	19.4
5 21	15 11.01	-27 6.0	3.370	4.366	2.7	19.2	5 21	15 8.33	-22 34.9	0.975	1.979	5.3	19.5
5 31	15 4.77	-26 33.1	3.413	4.377	4.6	19.4	5 31	14 59.91	-21 11.4	0.994	1.973	10.8	19.7
6 10	14 59.52	-25 59.0	3.483	4.387	6.8	19.5	6 10	14 54.27	-19 55.0	1.033	1.967	16.1	20.0
6 20	14 55.57	-25 26.2	3.577	4.398	8.7	19.7	6 20	14 52.06	-18 53.4	1.091	1.962	20.6	20.3
295337	2008 HB ₉		5 12.2 253°15'	3°7/ 6.2	18		479005	2012 XF ₁₄₄		5 12.2 19°61'	0°2/12.1	17	
4 11	15 30.47	- 0 0.3	4.528	5.389	5.9	20.9	4 11	15 37.12	-23 21.1	1.782	2.657	12.9	19.9
4 21	15 26.72	+ 0 58.5	4.461	5.383	4.7	20.8	4 21	15 32.22	-21 46.1	1.717	2.662	9.2	19.7
5 1	15 22.30	+ 1 53.7	4.423	5.377	3.8	20.7	5 1	15 25.51	-19 56.2	1.677	2.667	5.0	19.5
5 11	15 17.53	+ 2 42.8	4.413	5.370	3.8	20.7	5 11	15 17.90	-17 57.5	1.664	2.673	0.5	19.1
5 21	15 12.73	+ 3 24.0	4.433	5.364	4.7	20.8	5 21	15 10.37	-15 57.7	1.679	2.680	4.0	19.4
5 31	15 8.22	+ 3 55.7	4.479	5.358	5.9	20.9	5 31	15 3.87	-14 5.4	1.722	2.688	8.3	19.7
6 10	15 4.31	+ 4 17.1	4.551	5.351	7.2	21.0	6 10	14 59.11	-12 27.6	1.790	2.695	12.0	19.9
6 20	15 1.22	+ 4 28.4	4.643	5.345	8.5	21.1	6 20	14 56.51	-11 8.5	1.880	2.704	15.2	20.2
506692	2006 TO ₈₈		5 12.2 148°16'	0°3/11.9	18		331610	2001 XK ₂₄₅		5 12.2 281°11'	5°5/16.9	18	
4 11	15 37.65	-19 13.2	2.911	3.773	8.8	23.1	4 11	15 43.36	-38 0.2	1.742	2.558	15.8	20.3
4 21	15 32.02	-18 32.6	2.843	3.783	6.2	22.9	4 21	15 37.06	-37 1.2	1.652	2.549	12.7	20.1
5 1	15 25.23	-17 46.5	2.803	3.792	3.3	22.8	5 1	15 28.30	-35 32.4	1.584	2.539	9.2	19.8
5 11	15 17.85	-16 57.2	2.791	3.801	0.4	22.5	5 11	15 18.22	-33 34.1	1.542	2.529	6.2	19.6
5 21	15 10.50	-16 7.6	2.810	3.809	2.8	22.7	5 21	15 8.13	-31 11.7	1.527	2.519	5.9	19.6
5 31	15 3.76	-15 20.8	2.858	3.817	5.7	22.9	5 31	14 59.35	-28 35.6	1.540	2.509	8.7	19.7
6 10	14 58.16	-14 39.8	2.932	3.824	8.3	23.1	6 10	14 52.88	-25 58.5	1.580	2.499	12.4	19.9
6 20	14 54.02	-14 6.6	3.031	3.831	10.6	23.3	6 20	14 49.21	-23 31.6	1.643	2.489	16.0	20.1
44835	1999 TS ₂₅₉		5 12.2 43°50'	1°5/11.5	18		133472	2003 SQ ₂₄₉		5 12.2 238°71'	1°9/10.9	18	
4 11	15 41.24	-16 30.3	1.298	2.191	15.5	18.8	4 11	15 38.98	-14 53.7	2.030	2.909	11.4	19.7
4 21	15 35.64	-16 1.3	1.246	2.200	11.0	18.6	4 21	15 33.47	-14 12.5	1.956	2.903	8.1	19.4
5 1	15 27.54	-15 26.0	1.216	2.209	5.9	18.3	5 1	15 26.22	-13 27.0	1.906	2.897	4.4	19.2
5 11	15 18.11	-14 48.4	1.210	2.219	1.5	18.0	5 11	15 17.99	-12 40.6	1.884	2.891	1.9	19.0
5 21	15 8.70	-14 13.6	1.229	2.229	5.4	18.3	5 21	15 9.65	-11 57.4	1.889	2.884	4.5	19.2
5 31	15 0.63	-13 47.0	1.272	2.240	10.3	18.6	5 31	15 2.09	-11 21.4	1.922	2.878	8.2	19.4
6 10	14 54.91	-13 32.5	1.337	2.251	14.7	18.9	6 10	14 56.06	-10 55.9	1.979	2.871	11.7	19.6
6 20	14 52.04	-13 31.9	1.421	2.262	18.3	19.2	6 20	14 52.03	-10 42.6	2.057	2.864	14.6	19.8
205575	2001 TC ₃₆		5 12.2 175°16'	2°5/13.7	18		371089	2005 UJ ₄₄₃		5 12.2 140°72'	2°3/13.9	17	
4 11	15 46.												

EPHEMERIDES

5 12.2

5 12.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
479880	2014 <i>HF</i> ₆		5 12.2 72°68	0°6/11.8	17		470406	2007 <i>UN</i> ₉₁		5 12.2 249°13	0°0/12.2	16	
4 11	15 37.79	-18 24.3	2.171	3.045	10.9	21.4	4 11	15 40.46	-18 42.9	2.202	3.070	11.0	22.1
4 21	15 32.46	-17 50.2	2.108	3.053	7.7	21.2	4 21	15 34.54	-18 38.3	2.118	3.060	7.9	21.9
5 1	15 25.59	-17 10.0	2.070	3.062	4.1	21.0	5 1	15 26.85	-18 28.2	2.060	3.050	4.3	21.7
5 11	15 17.92	-16 26.6	2.060	3.070	0.6	20.7	5 11	15 18.12	-18 13.9	2.030	3.039	0.5	21.3
5 21	15 10.25	-15 43.5	2.079	3.079	3.5	21.0	5 21	15 9.18	-17 57.5	2.027	3.029	3.4	21.6
5 31	15 3.39	-15 4.4	2.124	3.087	7.1	21.2	5 31	15 0.93	-17 41.9	2.053	3.018	7.2	21.8
6 10	14 57.99	-14 32.8	2.195	3.096	10.3	21.4	6 10	14 54.15	-17 30.2	2.104	3.006	10.6	22.0
6 20	14 54.44	-14 10.8	2.288	3.104	13.0	21.6	6 20	14 49.36	-17 24.8	2.177	2.995	13.6	22.2
292826	2006 <i>UW</i> ₂₇₂		5 12.2 342°13	2°4/13.9	17		356926	2012 <i>RM</i> ₁₃		5 12.2 178°34	5°2/15.9	18	
4 11	15 37.97	-26 59.4	1.952	2.811	12.6	20.2	4 11	15 43.42	-34 58.7	2.347	3.159	12.4	21.0
4 21	15 32.93	-26 38.7	1.876	2.807	9.4	20.0	4 21	15 36.71	-35 18.9	2.268	3.160	9.9	20.8
5 1	15 25.99	-26 4.1	1.823	2.803	5.8	19.8	5 1	15 28.05	-35 23.3	2.212	3.161	7.4	20.7
5 11	15 17.97	-25 17.0	1.796	2.800	2.7	19.6	5 11	15 18.25	-35 10.6	2.183	3.162	5.5	20.5
5 21	15 9.85	-24 20.7	1.796	2.797	3.8	19.7	5 21	15 8.31	-34 41.5	2.181	3.162	5.5	20.5
5 31	15 2.62	-23 20.4	1.823	2.794	7.4	19.9	5 31	14 59.22	-33 59.4	2.207	3.161	7.4	20.7
6 10	14 57.08	-22 21.8	1.874	2.791	10.9	20.1	6 10	14 51.85	-33 9.8	2.258	3.161	10.0	20.8
6 20	14 53.73	-21 29.9	1.948	2.789	14.0	20.3	6 20	14 46.71	-32 18.2	2.332	3.160	12.5	21.0
27611	2001 <i>KB</i> ₁₇		5 12.2 59°56	1°6/10.9	18		213392	2001 <i>UY</i> ₁₆₁		5 12.2 182°84	1°8/10.9	18	
4 11	15 38.12	-17 51.2	1.833	2.714	12.3	19.2	4 11	15 39.35	-12 15.0	2.713	3.581	9.2	21.1
4 21	15 32.87	-16 37.2	1.773	2.722	8.6	19.0	4 21	15 33.36	-12 1.6	2.640	3.582	6.5	20.9
5 1	15 25.86	-15 15.2	1.737	2.730	4.6	18.8	5 1	15 26.06	-11 47.5	2.593	3.582	3.7	20.7
5 11	15 17.96	-13 50.4	1.729	2.738	1.6	18.6	5 11	15 18.04	-11 34.7	2.576	3.581	1.8	20.5
5 21	15 10.10	-12 29.0	1.749	2.746	4.6	18.8	5 21	15 9.94	-11 25.1	2.588	3.581	3.7	20.7
5 31	15 3.22	-11 17.0	1.796	2.754	8.5	19.1	5 31	15 2.44	-11 20.6	2.629	3.579	6.6	20.9
6 10	14 58.02	-10 19.1	1.866	2.762	12.1	19.3	6 10	14 56.10	-11 22.9	2.696	3.578	9.3	21.0
6 20	14 54.93	-9 37.6	1.958	2.771	15.1	19.5	6 20	14 51.34	-11 32.6	2.786	3.576	11.6	21.2
410088	2007 <i>EJ</i>		5 12.2 132°60	0°5/11.8	18		508165	2015 <i>FT</i> ₂₀₃		5 12.2 240°86	3°0/14.1	18	
4 11	15 44.21	-17 16.6	2.945	3.797	9.0	23.8	4 11	15 41.54	-27 29.5	1.929	2.781	13.0	20.4
4 21	15 36.53	-16 56.4	2.887	3.822	6.4	23.7	4 21	15 35.57	-27 30.2	1.850	2.777	9.8	20.2
5 1	15 27.64	-16 32.3	2.858	3.846	3.4	23.5	5 1	15 27.50	-27 17.4	1.795	2.773	6.3	20.0
5 11	15 18.17	-16 5.7	2.859	3.868	0.6	23.3	5 11	15 18.21	-26 51.2	1.766	2.768	3.3	19.8
5 21	15 8.79	-15 39.0	2.892	3.889	2.9	23.6	5 21	15 8.73	-26 13.8	1.764	2.763	4.2	19.8
5 31	15 0.15	-15 14.5	2.955	3.910	5.8	23.8	5 31	15 0.17	-25 29.5	1.789	2.759	7.7	20.0
6 10	14 52.79	-14 54.6	3.047	3.928	8.3	24.0	6 10	14 53.42	-24 44.1	1.839	2.754	11.3	20.2
6 20	14 47.03	-14 40.9	3.162	3.946	10.5	24.1	6 20	14 49.06	-24 2.7	1.911	2.749	14.4	20.4
477680	2010 <i>RV</i> ₄		5 12.2 244°86	0°8/11.6	18		7616	Sadako		5 12.2 221°90	0°2/12.4	18	
4 11	15 37.85	-16 36.6	2.560	3.430	9.6	22.0	4 11	15 38.22	-21 9.4	2.415	3.280	10.3	17.2
4 21	15 32.44	-16 17.8	2.478	3.421	6.8	21.8	4 21	15 32.76	-20 32.2	2.335	3.274	7.4	17.0
5 1	15 25.61	-15 54.9	2.421	3.412	3.7	21.5	5 1	15 25.81	-19 46.7	2.279	3.268	4.1	16.7
5 11	15 17.97	-15 30.0	2.393	3.402	0.8	21.3	5 11	15 18.02	-18 55.2	2.252	3.262	0.5	16.4
5 21	15 10.19	-15 5.5	2.393	3.392	3.3	21.5	5 21	15 10.14	-18 1.1	2.254	3.256	3.1	16.6
5 31	15 2.99	-14 44.1	2.422	3.382	6.5	21.7	5 31	15 2.95	-17 8.5	2.285	3.249	6.6	16.9
6 10	14 57.01	-14 28.2	2.477	3.372	9.5	21.8	6 10	14 57.10	-16 21.3	2.341	3.242	9.7	17.0
6 20	14 52.67	-14 19.8	2.554	3.361	12.1	22.0	6 20	14 53.02	-15 42.6	2.420	3.235	12.5	17.2
405943	2006 <i>RU</i> ₅₇		5 12.2 265°20	0°3/12.5	17		232266	2002 <i>QM</i> ₃₈		5 12.2 323°21	2°7/13.5	17	
4 11	15 35.23	-20 22.7	3.447	4.305	7.7	22.2	4 11	15 39.41	-24 33.9	1.557	2.432	14.5	19.8
4 21	15 30.36	-20 11.9	3.351	4.288	5.5	22.0	4 21	15 34.58	-24 47.7	1.471	2.411	10.8	19.5
5 1	15 24.41	-19 56.4	3.283	4.270	3.1	21.8	5 1	15 27.21	-24 49.6	1.406	2.391	6.6	19.2
5 11	15 17.83	-19 37.2	3.243	4.253	0.5	21.6	5 11	15 18.20	-24 39.2	1.366	2.372	2.9	19.0
5 21	15 11.13	-19 15.8	3.233	4.235	2.3	21.7	5 21	15 8.72	-24 18.2	1.352	2.354	4.6	19.0
5 31	15 4.83	-18 54.3	3.253	4.216	4.9	21.9	5 31	15 0.12	-23 50.8	1.362	2.336	9.1	19.2
6 10	14 59.39	-18 34.7	3.299	4.198	7.3	22.0	6 10	14 53.58	-23 22.6	1.395	2.319	13.4	19.4
6 20	14 55.19	-18 19.0	3.370	4.180	9.4	22.2	6 20	14 49.83	-22 59.0	1.447	2.302	17.3	19.6
387125	2012 <i>TK</i> ₁₈₄		5 12.2 210°45	0°7/12.8	17		111782	2002 <i>CK</i> ₁₇₆		5 12.2 232°69	0°5/11.9	18	
4 11	15 39.76	-22 28.8	2.303	3.164	10.9	21.8	4 11	15 38.42	-17 48.1	2.565	3.432	9.7	20.9
4 21	15 33.92	-22 1.6	2.222	3.159	7.9	21.6	4 21	15 32.86	-17 29.3	2.482	3.424	6.9	20.7
5 1	15 26.45	-21 25.2	2.167	3.154	4.5	21.4	5 1	15 25.86	-17 5.6	2.424	3.414	3.7	20.4
5 11	15 18.06	-20 41.4	2.139	3.148	1.0	21.1	5 11	15 18.03	-16 39.0	2.395	3.405	0.5	20.2
5 21	15 9.56	-19 53.3	2.140	3.142	3.2	21.3	5 21	15 10.07	-16 11.8	2.395	3.395	3.2	20.4
5 31	15 1.81	-19 4.9	2.170	3.136	6.8	21.5	5 31	15 2.70	-15 46.8	2.423	3.385	6.5	20.6
6 10	14 55.50	-18 20.6	2.225	3.129	10.0	21.7	6 10	14 56.57	-15 26.8	2.478	3.374	9.5	20.7
6 20	14 51.10	-17 43.6	2.303	3.122	12.9	21.8	6 20	14 52.09	-15 13.8	2.555	3.364	12.1	20.9
519984	2013 <i>TY</i> ₁₆₇		5 12.2 130°66	1°8/11.2	17		455941	2005 <i>UU</i> ₄₂₂		5 12.2 107°02	0°2/12.1	18	
4 11	15 40.56	-14 56.8	1.774	2.655	12.6	21.8	4 11	15 44.30	-20 26.8	1.395	2.275	15.4	21.9
4 21	15 34.75	-14 27.4	1.709	2.657	8.9	21.6	4 21	15 37.69	-19 43.6	1.341	2.289	11.0	21.6
5 1	15 26.97	-13 54.0	1.668	2.659	4.9	21.3	5 1	15 28.64	-18 48.9	1.311	2.302	5.9	21.4
5 11	15 18.12	-13 20.0	1.653	2.661	1.8	21.1	5 11	15 18.33	-17 46.9	1.305	2.315	0.6	21.0
5 21	15 9.19	-12 49.2	1.666	2.663	4.8	21.3	5 21	15 8.12	-16 43.6	1.326	2.327	4.7	21.4
5 31	15 1.20	-12 25.6	1.704	2.664	8.8	21.6	5 31	14 59.33	-15 46.1	1.372	2.340	9.7	21.7
6 10	14 55.00	-12 12.2	1.767	2.666	12.5	21.8	6 10	14 52.91	-15 0.4	1.441	2.351	14.0	21.9
6 20	14 51.08	-12 10.6	1.850	2.667	15.6	22.0	6 20	14 49.33	-14 29.7	1.529	2.363	17.6	22.2
432815	2011 <i>GX</i> ₇₂		5 12.2 329°46	2°1/10.9	17		97068	1999 <i>VT</i> ₂₁		5 12.2 276°			

EPHEMERIDES

5 12.2

5 12.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
141188	2001 <i>XH</i> ₁₇₆		5 12.2 165°09	1°4/13.5	18		292382	2006 <i>SA</i> ₂₆₂		5 12.2 229°55	2°2/10.3	16	
4 11	15 38.83	-24 59.9	2.924	3.770	9.3	21.0	4 11	15 37.50	-13 3.2	2.517	3.392	9.6	21.2
4 21	15 32.97	-24 43.2	2.848	3.775	6.8	20.9	4 21	15 32.19	-12 12.8	2.437	3.383	6.8	21.0
5 1	15 25.84	-24 18.0	2.798	3.779	4.1	20.7	5 1	15 25.50	-11 19.6	2.384	3.373	3.9	20.8
5 11	15 18.03	-23 45.6	2.777	3.783	1.6	20.5	5 11	15 18.03	-10 26.9	2.360	3.364	2.3	20.7
5 21	15 10.19	-23 7.9	2.786	3.787	2.7	20.6	5 21	15 10.46	-9 38.3	2.364	3.354	4.3	20.8
5 31	15 2.97	-22 27.9	2.824	3.790	5.4	20.8	5 31	15 3.50	-8 57.4	2.397	3.343	7.4	21.0
6 10	14 56.93	-21 49.0	2.889	3.792	8.0	21.0	6 10	14 57.75	-8 26.8	2.454	3.333	10.2	21.1
6 20	14 52.44	-21 14.0	2.978	3.794	10.3	21.1	6 20	14 53.62	-8 8.0	2.534	3.322	12.7	21.3
406571	2008 <i>AH</i> ₇		5 12.2 249°23	1°5/13.9	17		19280	1996 <i>AV</i>		5 12.2 74°37	3°6/14.9	18	
4 11	15 35.13	-26 39.8	3.755	4.593	7.6	21.8	4 11	15 39.51	-30 36.4	2.308	3.145	11.7	18.4
4 21	15 30.24	-26 23.1	3.656	4.577	5.6	21.7	4 21	15 33.86	-30 36.9	2.233	3.147	9.0	18.2
5 1	15 24.34	-25 58.9	3.584	4.561	3.5	21.5	5 1	15 26.48	-30 23.7	2.182	3.149	6.1	18.1
5 11	15 17.87	-25 28.0	3.541	4.544	1.7	21.3	5 11	15 18.14	-29 57.0	2.157	3.152	3.9	17.9
5 21	15 11.29	-24 51.8	3.528	4.527	2.3	21.4	5 21	15 9.71	-29 18.8	2.160	3.154	4.2	17.9
5 31	15 5.13	-24 12.4	3.544	4.510	4.4	21.5	5 31	15 2.10	-28 32.6	2.190	3.156	6.7	18.1
6 10	14 59.81	-23 32.7	3.589	4.492	6.6	21.6	6 10	14 56.03	-27 43.6	2.246	3.158	9.6	18.3
6 20	14 55.69	-22 54.9	3.658	4.474	8.6	21.8	6 20	14 51.99	-26 56.4	2.325	3.161	12.3	18.5
359	Georgia		5 12.2 266°17	2°8/13.8	18	R	488998	2005 <i>UR</i> ₄₆₈		5 12.2 234°93	1°5/13.3	18	
4 11	15 42.17	-26 9.4	2.013	2.867	12.5	13.4	4 11	15 39.99	-23 33.3	2.744	3.595	9.7	22.0
4 21	15 36.07	-26 22.0	1.924	2.852	9.4	13.2	4 21	15 34.00	-23 40.8	2.655	3.584	7.1	21.8
5 1	15 27.84	-26 23.3	1.858	2.837	6.0	12.9	5 1	15 26.52	-23 41.1	2.591	3.573	4.2	21.6
5 11	15 18.28	-26 12.9	1.819	2.822	3.0	12.7	5 11	15 18.15	-23 34.6	2.555	3.562	1.7	21.4
5 21	15 8.38	-25 52.0	1.807	2.806	4.1	12.8	5 21	15 9.59	-23 22.4	2.549	3.550	2.9	21.5
5 31	14 59.24	-25 24.1	1.822	2.790	7.7	12.9	5 31	15 1.58	-23 6.8	2.572	3.538	5.9	21.7
6 10	14 51.82	-24 53.9	1.863	2.774	11.3	13.1	6 10	14 54.79	-22 50.7	2.622	3.525	8.7	21.8
6 20	14 46.73	-24 26.2	1.925	2.758	14.5	13.3	6 20	14 49.66	-22 36.8	2.695	3.512	11.3	22.0
169348	2001 <i>TG</i> ₂₃₈		5 12.2 167°85	1°5/11.1	18		466162	2012 <i>JO</i> ₃		5 12.2 247°96	0°7/12.5	17	
4 11	15 39.54	-13 10.8	2.780	3.648	9.0	20.8	4 11	15 44.84	-19 10.3	1.702	2.574	13.6	21.5
4 21	15 33.46	-12 56.5	2.710	3.652	6.4	20.7	4 21	15 38.13	-19 31.9	1.626	2.568	9.8	21.2
5 1	15 26.11	-12 40.9	2.667	3.656	3.5	20.5	5 1	15 29.03	-19 47.7	1.573	2.562	5.5	21.0
5 11	15 18.07	-12 25.9	2.653	3.659	1.5	20.3	5 11	15 18.45	-19 58.0	1.547	2.556	1.0	20.6
5 21	15 9.98	-12 13.5	2.668	3.662	3.5	20.5	5 21	15 7.56	-20 3.7	1.548	2.550	4.1	20.9
5 31	15 2.49	-12 5.5	2.713	3.664	6.4	20.7	5 31	14 57.60	-20 7.5	1.575	2.543	8.6	21.1
6 10	14 56.17	-12 3.8	2.784	3.666	9.0	20.9	6 10	14 49.65	-20 12.8	1.627	2.537	12.7	21.3
6 20	14 51.38	-12 9.2	2.878	3.668	11.3	21.0	6 20	14 44.33	-20 22.7	1.700	2.530	16.2	21.5
28038	Nicoleodzer		5 12.2 119°15	1°3/12.9	18		300892	Taichung		5 12.2 53°20	0°7/11.8	17	
4 11	15 45.25	-22 40.0	1.687	2.553	14.0	19.9	4 11	15 38.44	-17 36.4	2.040	2.916	11.4	21.0
4 21	15 38.13	-22 28.9	1.630	2.568	10.1	19.7	4 21	15 33.05	-17 13.3	1.979	2.925	8.1	20.8
5 1	15 28.82	-22 6.7	1.597	2.584	5.7	19.4	5 1	15 26.01	-16 44.9	1.943	2.934	4.3	20.6
5 11	15 18.37	-21 35.1	1.590	2.598	1.5	19.2	5 11	15 18.10	-16 13.8	1.933	2.943	0.7	20.3
5 21	15 7.97	-20 57.6	1.610	2.612	4.0	19.4	5 21	15 10.17	-15 43.1	1.952	2.952	3.7	20.6
5 31	14 58.80	-20 19.1	1.657	2.626	8.3	19.7	5 31	15 3.10	-15 16.3	1.997	2.961	7.4	20.8
6 10	14 51.73	-19 44.8	1.729	2.638	12.1	19.9	6 10	14 57.57	-14 56.6	2.068	2.971	10.7	21.0
6 20	14 47.26	-19 18.8	1.822	2.651	15.4	20.2	6 20	14 54.01	-14 45.9	2.160	2.980	13.6	21.2
62748	2000 <i>UV</i> ₃		5 12.2 349°33	3°5/13.9	18		472547	2015 <i>DN</i> ₃₂		5 12.2 280°49	5°9/8.6	18	
4 11	15 42.30	-26 42.9	1.989	2.841	12.7	18.8	4 11	15 39.70	-4 19.3	1.785	2.667	12.5	20.4
4 21	15 36.15	-27 24.1	1.913	2.839	9.6	18.6	4 21	15 34.22	-3 27.9	1.712	2.653	9.5	20.2
5 1	15 27.87	-27 55.0	1.861	2.836	6.3	18.4	5 1	15 26.79	-2 41.2	1.663	2.640	6.8	20.0
5 11	15 18.29	-28 14.1	1.835	2.834	3.7	18.2	5 11	15 18.21	-2 4.7	1.640	2.626	6.0	19.9
5 21	15 8.43	-28 21.6	1.837	2.832	4.5	18.3	5 21	15 9.41	-1 43.0	1.643	2.612	8.0	20.0
5 31	14 59.40	-28 19.6	1.865	2.831	7.7	18.5	5 31	15 1.42	-1 39.4	1.671	2.599	11.2	20.2
6 10	14 52.14	-28 12.3	1.918	2.830	11.0	18.7	6 10	14 55.09	-1 54.6	1.721	2.585	14.5	20.4
6 20	14 47.25	-28 3.9	1.993	2.829	14.0	18.9	6 20	14 50.97	-2 27.6	1.789	2.571	17.4	20.5
348987	2006 <i>UY</i> ₁₇₃		5 12.2 180°28	4°0/15.5	17		299500	2006 <i>BX</i> ₂₃₂		5 12.2 164°03	1°8/11.3	16	
4 11	15 41.12	-33 2.7	2.646	3.464	11.0	21.7	4 11	15 45.18	-14 57.3	1.643	2.520	13.7	21.8
4 21	15 34.87	-33 10.1	2.565	3.465	8.6	21.5	4 21	15 38.17	-14 34.4	1.579	2.525	9.7	21.5
5 1	15 26.98	-33 3.9	2.509	3.465	6.2	21.4	5 1	15 28.93	-14 7.2	1.539	2.530	5.3	21.3
5 11	15 18.18	-32 43.8	2.480	3.466	4.3	21.3	5 11	15 18.44	-13 39.1	1.525	2.534	1.8	21.1
5 21	15 9.28	-32 11.1	2.479	3.465	4.4	21.3	5 21	15 7.88	-13 13.8	1.539	2.537	5.0	21.3
5 31	15 1.11	-31 28.9	2.506	3.465	6.4	21.4	5 31	14 58.42	-12 55.2	1.580	2.539	9.4	21.5
6 10	14 54.37	-30 41.6	2.559	3.464	8.9	21.5	6 10	14 51.02	-12 46.6	1.644	2.541	13.3	21.8
6 20	14 49.54	-29 53.9	2.637	3.462	11.3	21.7	6 20	14 46.20	-12 49.7	1.728	2.542	16.7	22.0
347313	2011 <i>QB</i> ₄₆		5 12.2 287°10	0°2/12.5	18		457666	2009 <i>DQ</i> ₁₉		5 12.2 90°90	3°1/10.9	18	
4 11	15 31.80	-20 8.2	4.229	5.089	6.4	21.1	4 11	15 47.59	-11 4.9	1.499	2.379	14.6	21.6
4 21	15 27.78	-19 51.8	4.144	5.082	4.5	20.9	4 21	15 39.70	-10 51.6	1.459	2.406	10.4	21.4
5 1	15 22.97	-19 31.6	4.087	5.075	2.5	20.8	5 1	15 29.62	-10 39.1	1.443	2.432	5.9	21.2
5 11	15 17.74	-19 8.8	4.058	5.068	0.4	20.5	5 11	15 18.50	-10 30.4	1.453	2.458	3.1	21.1
5 21	15 12.44	-18 44.7	4.060	5.061	1.9	20.7	5 21	15 7.62	-10 28.6	1.490	2.483	5.8	21.3
5 31	15 7.49	-18 20.9	4.090	5.054	4.0	20.8	5 31	14 58.16	-10 35.9	1.553	2.508	9.9	21.6
6 10	15 3.22	-17 59.2	4.149	5.047	5.9	21.0	6 10	14 50.98	-10 53.6	1.639	2.532	13.6	21.9
6 20	14 59.90	-17 41.0	4.232	5.040	7.6	21.1	6 20	14 46.49	-11 21.7	1.745	2.555	16.7	22.1
420457	2012 <i>DM</i> ₇₂		5 12.2 157°37	2°4/13.7	17		475000	2005 <i>TC</i> ₁₅₅		5 12.2 337°12	3°8/9.0	18	
4 11													

EPHEMERIDES

5 12.2

5 12.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
356815	2011 <i>UT</i> ₃₇₉		5 12.2 178°63	0°1/12.4 16			262261	2006 <i>SG</i> ₃₃₀		5 12.3 3°81	1°4/12.8 17		
4 11	15 37.81	-20 2.1	2.654	3.517	9.5	21.9	4 11	15 43.56	-21 5.6	1.434	2.313	15.2	20.3
4 21	15 32.37	-19 41.7	2.579	3.518	6.8	21.7	4 21	15 37.48	-21 23.0	1.368	2.313	11.0	20.1
5 1	15 25.59	-19 15.4	2.530	3.519	3.7	21.5	5 1	15 28.75	-21 31.4	1.324	2.313	6.3	19.8
5 11	15 18.07	-18 44.8	2.509	3.519	0.5	21.2	5 11	15 18.46	-21 30.9	1.305	2.313	1.7	19.5
5 21	15 10.49	-18 12.3	2.518	3.519	2.8	21.4	5 21	15 7.92	-21 23.6	1.311	2.314	4.5	19.7
5 31	15 3.53	-17 40.8	2.555	3.519	6.0	21.6	5 31	14 58.57	-21 13.2	1.342	2.314	9.4	20.0
6 10	14 57.79	-17 13.3	2.618	3.518	8.9	21.8	6 10	14 51.53	-21 4.7	1.396	2.316	13.8	20.2
6 20	14 53.65	-16 52.1	2.705	3.518	11.3	22.0	6 20	14 47.43	-21 2.0	1.470	2.317	17.5	20.5
307054	2001 <i>YG</i> ₇₁		5 12.2 240°17	1°5/11.3 18			439335	2012 <i>WM</i> ₃₅		5 12.3 225°07	0°4/12.6 17		
4 11	15 42.27	-14 53.5	2.186	3.056	11.0	21.5	4 11	15 38.95	-22 2.1	2.422	3.283	10.4	21.6
4 21	15 35.88	-14 33.3	2.096	3.039	7.9	21.3	4 21	15 33.33	-21 25.7	2.337	3.275	7.5	21.4
5 1	15 27.66	-14 9.4	2.032	3.022	4.3	21.0	5 1	15 26.18	-20 40.2	2.278	3.266	4.2	21.1
5 11	15 18.32	-13 44.2	1.996	3.004	1.5	20.8	5 11	15 18.16	-19 47.8	2.248	3.257	0.7	20.9
5 21	15 8.71	-13 20.6	1.989	2.985	4.2	20.9	5 21	15 10.03	-18 51.9	2.247	3.248	3.1	21.0
5 31	14 59.77	-13 1.6	2.010	2.966	7.9	21.1	5 31	15 2.58	-17 56.5	2.274	3.239	6.6	21.2
6 10	14 52.29	-12 50.3	2.056	2.946	11.4	21.3	6 10	14 56.49	-17 6.0	2.327	3.229	9.8	21.4
6 20	14 46.84	-12 48.4	2.124	2.925	14.4	21.5	6 20	14 52.20	-16 23.6	2.403	3.219	12.5	21.6
507039	2008 <i>US</i> ₁₉₆		5 12.2 283°69	2°1/10.9 17			198556	2004 <i>XE</i> ₁₄₅		5 12.3 181°85	3°8/ 9.5 18		
4 11	15 39.07	-14 54.9	1.813	2.696	12.3	21.9	4 11	15 40.44	- 6 49.3	2.453	3.323	10.0	20.5
4 21	15 33.82	-14 11.5	1.734	2.683	8.8	21.6	4 21	15 34.23	- 6 14.9	2.386	3.324	7.3	20.3
5 1	15 26.59	-13 22.9	1.679	2.670	4.9	21.4	5 1	15 26.61	- 5 42.9	2.344	3.324	4.8	20.2
5 11	15 18.19	-12 33.0	1.650	2.657	2.1	21.2	5 11	15 18.20	- 5 16.7	2.331	3.324	3.8	20.1
5 21	15 9.59	-11 46.4	1.649	2.644	5.0	21.3	5 21	15 9.75	- 4 59.1	2.347	3.323	5.5	20.2
5 31	15 1.81	-11 8.0	1.674	2.632	9.1	21.5	5 31	15 1.97	- 4 52.2	2.391	3.322	8.2	20.4
6 10	14 55.71	-10 41.5	1.722	2.619	12.9	21.7	6 10	14 55.48	- 4 57.0	2.459	3.320	10.8	20.5
6 20	14 51.83	-10 28.9	1.791	2.606	16.1	21.9	6 20	14 50.69	- 5 13.4	2.550	3.317	13.1	20.7
265012	2003 <i>FM</i> ₁₀₃		5 12.3 24°35	2°2/13.3 17			296356	2009 <i>FE</i> ₂₃		5 12.3 330°62	0°7/12.5 16		
4 11	15 41.04	-23 27.8	1.349	2.230	15.8	20.2	4 11	15 39.28	-18 55.2	1.531	2.417	14.0	19.9
4 21	15 35.68	-23 37.3	1.293	2.237	11.6	19.9	4 21	15 34.57	-19 18.9	1.441	2.390	10.2	19.6
5 1	15 27.73	-23 34.2	1.257	2.245	6.8	19.7	5 1	15 27.31	-19 37.6	1.372	2.364	5.8	19.3
5 11	15 18.32	-23 19.1	1.246	2.254	2.5	19.4	5 11	15 18.32	-19 51.7	1.329	2.338	1.1	18.9
5 21	15 8.83	-22 55.2	1.260	2.263	4.6	19.6	5 21	15 8.74	-20 2.1	1.310	2.314	4.4	19.1
5 31	15 0.65	-22 27.4	1.298	2.273	9.3	19.9	5 31	14 59.91	-20 11.3	1.317	2.290	9.4	19.3
6 10	14 54.84	-22 1.9	1.358	2.283	13.6	20.1	6 10	14 53.05	-20 22.9	1.346	2.268	14.0	19.5
6 20	14 51.96	-21 43.2	1.437	2.294	17.3	20.4	6 20	14 48.96	-20 39.7	1.394	2.247	18.0	19.7
391385	2006 <i>WR</i> ₁₃₈		5 12.3 134°49	2°9/10.4 18			319	Leona		5 12.3 175°46	2°4/ 9.8 18 R		
4 11	15 39.60	- 9 4.0	2.416	3.289	10.0	20.7	4 11	15 35.57	-10 6.5	3.264	4.135	7.8	16.3
4 21	15 33.65	- 8 49.1	2.353	3.295	7.2	20.6	4 21	15 30.54	- 9 24.4	3.195	4.137	5.5	16.2
5 1	15 26.28	- 8 35.9	2.315	3.301	4.4	20.4	5 1	15 24.52	- 8 42.1	3.153	4.138	3.4	16.0
5 11	15 18.16	- 8 26.8	2.306	3.306	2.9	20.3	5 11	15 17.97	- 8 2.4	3.141	4.140	2.4	15.9
5 21	15 9.99	- 8 23.9	2.325	3.311	4.7	20.4	5 21	15 11.40	- 7 27.6	3.158	4.140	3.9	16.0
5 31	15 2.52	- 8 28.8	2.372	3.317	7.5	20.6	5 31	15 5.30	- 7 0.0	3.204	4.141	6.1	16.2
6 10	14 56.36	- 8 42.6	2.445	3.322	10.3	20.8	6 10	15 0.13	- 6 41.0	3.276	4.141	8.3	16.3
6 20	14 51.90	- 9 5.4	2.539	3.326	12.7	21.0	6 20	14 56.19	- 6 31.3	3.371	4.141	10.2	16.5
363364	2002 <i>SC</i> ₄₄		5 12.3 280°00	0°9/11.8 17			206641	2003 <i>XJ</i> ₈		5 12.3 73°72	10°1/22.7 18		
4 11	15 41.64	-17 48.0	1.591	2.473	13.8	21.3	4 11	15 49.10	-51 28.5	2.066	2.787	16.7	19.1
4 21	15 36.03	-17 20.8	1.504	2.453	9.9	21.0	4 21	15 41.07	-51 32.7	2.008	2.810	14.7	19.0
5 1	15 27.98	-16 45.2	1.441	2.433	5.4	20.7	5 1	15 30.43	-51 6.8	1.969	2.833	12.6	18.9
5 11	15 18.38	-16 4.3	1.403	2.412	1.0	20.3	5 11	15 18.62	-50 8.3	1.951	2.856	10.9	18.8
5 21	15 8.36	-15 22.2	1.391	2.391	4.8	20.5	5 21	15 7.18	-48 39.3	1.957	2.879	10.1	18.8
5 31	14 59.22	-14 44.4	1.404	2.370	9.7	20.7	5 31	14 57.52	-46 46.1	1.987	2.902	10.5	18.9
6 10	14 52.05	-14 16.0	1.441	2.349	14.2	21.0	6 10	14 50.55	-44 38.7	2.043	2.924	11.9	19.0
6 20	14 47.54	-14 0.5	1.497	2.328	18.0	21.1	6 20	14 46.65	-42 27.4	2.122	2.946	13.6	19.2
288398	2004 <i>CU</i> ₁₂₅		5 12.3 59°32	4°3/ 9.8 17			217215	2002 <i>UN</i> ₇₄		5 12.3 313°42	3°0/10.5 18		
4 11	15 40.30	-10 30.2	1.493	2.384	13.9	20.8	4 11	15 38.80	-14 25.7	1.395	2.291	14.5	19.8
4 21	15 34.77	- 9 30.7	1.438	2.389	10.0	20.5	4 21	15 34.06	-13 26.9	1.323	2.278	10.3	19.6
5 1	15 27.09	- 8 30.7	1.406	2.394	6.1	20.3	5 1	15 26.89	-12 21.2	1.273	2.265	5.8	19.3
5 11	15 18.25	- 7 36.2	1.399	2.399	4.3	20.2	5 11	15 18.26	-11 14.7	1.247	2.253	3.0	19.1
5 21	15 9.40	- 6 53.1	1.418	2.405	7.0	20.4	5 21	15 9.38	-10 14.1	1.247	2.242	6.4	19.2
5 31	15 1.68	- 6 25.8	1.461	2.410	10.9	20.6	5 31	15 1.54	- 9 26.2	1.271	2.231	11.1	19.5
6 10	14 55.96	- 6 16.6	1.526	2.415	14.7	20.9	6 10	14 55.79	- 8 56.0	1.316	2.220	15.5	19.7
6 20	14 52.73	- 6 25.4	1.610	2.421	17.9	21.1	6 20	14 52.75	- 8 45.1	1.379	2.209	19.3	19.9
75448	1999 <i>XV</i> ₁₃₅		5 12.3 237°57	9°6/ 5.7 18			111765	2002 <i>CF</i> ₁₃₆		5 12.3 114°98	3°3/ 9.6 18		
4 11	15 42.52	+11 46.2	2.279	3.106	12.2	18.9	4 11	15 37.35	- 9 17.5	2.433	3.309	9.8	20.0
4 21	15 35.84	+12 28.6	2.215	3.094	10.7	18.8	4 21	15 32.02	- 8 28.7	2.375	3.319	7.1	19.8
5 1	15 27.53	+12 54.7	2.174	3.082	9.7	18.7	5 1	15 25.38	- 7 40.7	2.344	3.329	4.4	19.6
5 11	15 18.31	+12 59.7	2.159	3.070	9.7	18.6	5 11	15 18.07	- 6 57.1	2.341	3.338	3.3	19.6
5 21	15 8.98	+12 40.8	2.168	3.057	10.8	18.7	5 21	15 10.78	- 6 21.1	2.366	3.347	5.1	19.7
5 31	15 0.39	+11 57.7	2.202	3.043	12.5	18.8	5 31	15 4.18	- 5 55.6	2.419	3.356	7.8	19.9
6 10	14 53.24	+10 52.7	2.257	3.030	14.5	18.9	6 10	14 58.84	- 5 42.1	2.497	3.365	10.4	20.1
6 20	14 47.98	+ 9 29.5	2.331	3.016	16.3	19.0	6 20	14 55.12	- 5 40.8	2.595	3.374	12.7	20.3
422323	2014 <i>SV</i> ₁₉₉		5 12.3 241°19	1°4/12.8 17			483336	2016 <i>QC</i> _{71</}					

EPHEMERIDES

5 12.3

5 12.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
183234	2002 <i>TC</i> ₇₃		5 12.3 263°88	4°6/14.6	18		181293	2006 <i>PB</i> ₁₂		5 12.3 221°94	0°5/11.9	17	R
4 11	15 44.08	-29 50.7	1.678	2.527	14.8	20.4	4 11	15 42.95	-18 34.9	2.009	2.877	11.9	21.4
4 21	15 37.87	-30 10.3	1.594	2.516	11.5	20.1	4 21	15 36.48	-18 5.7	1.925	2.867	8.5	21.2
5 1	15 29.03	-30 13.6	1.532	2.504	7.8	19.9	5 1	15 28.03	-17 28.9	1.866	2.856	4.7	20.9
5 11	15 18.52	-29 58.9	1.495	2.491	4.9	19.7	5 11	15 18.43	-16 47.1	1.834	2.844	0.7	20.6
5 21	15 7.61	-29 27.3	1.484	2.479	5.5	19.7	5 21	15 8.61	-16 3.6	1.831	2.832	3.9	20.8
5 31	14 57.71	-28 43.3	1.499	2.467	9.0	19.8	5 31	14 59.59	-15 23.1	1.856	2.818	8.0	21.1
6 10	14 49.98	-27 53.9	1.537	2.454	12.9	20.0	6 10	14 52.24	-14 49.6	1.906	2.804	11.8	21.3
6 20	14 45.14	-27 6.2	1.596	2.441	16.4	20.2	6 20	14 47.09	-14 26.4	1.978	2.789	15.0	21.4
348860	2006 <i>SU</i> ₁₃₀		5 12.3 131°91	4°8/16.5	18		96326	1997 <i>EN</i> ₁₁		5 12.3 78°05	7°1/ 8.5	18	
4 11	15 42.66	-36 44.5	2.921	3.715	10.7	21.7	4 11	15 41.53	- 0 2.5	1.780	2.653	13.0	18.7
4 21	15 35.84	-37 0.9	2.851	3.729	8.6	21.5	4 21	15 35.23	+ 0 41.6	1.740	2.671	10.1	18.6
5 1	15 27.49	-37 3.2	2.806	3.744	6.5	21.4	5 1	15 27.19	+ 1 15.2	1.723	2.688	7.7	18.5
5 11	15 18.32	-36 50.5	2.788	3.757	5.0	21.3	5 11	15 18.31	+ 1 33.4	1.732	2.706	7.2	18.5
5 21	15 9.12	-36 23.7	2.798	3.771	4.9	21.3	5 21	15 9.56	+ 1 33.3	1.767	2.723	8.7	18.6
5 31	15 0.69	-35 45.8	2.836	3.783	6.3	21.4	5 31	15 1.85	+ 1 14.1	1.827	2.740	11.3	18.8
6 10	14 53.69	-35 0.8	2.901	3.796	8.3	21.6	6 10	14 55.89	+ 0 37.0	1.909	2.757	14.0	19.0
6 20	14 48.54	-34 13.4	2.990	3.807	10.3	21.7	6 20	14 52.08	- 0 15.2	2.010	2.774	16.3	19.2
198322	2004 <i>TT</i> ₃₄₉		5 12.3 265°21	1°8/11.0	17		114955	2003 <i>QF</i> ₅₇		5 12.3 261°19	0°9/11.7	18	
4 11	15 40.42	-15 10.6	1.997	2.874	11.6	20.6	4 11	15 40.45	-16 51.4	1.962	2.838	11.9	20.0
4 21	15 34.72	-14 30.9	1.906	2.853	8.3	20.4	4 21	15 34.73	-16 32.1	1.881	2.827	8.5	19.8
5 1	15 27.10	-13 45.8	1.841	2.832	4.6	20.1	5 1	15 27.10	-16 7.6	1.825	2.816	4.6	19.6
5 11	15 18.29	-12 58.7	1.802	2.810	1.8	19.8	5 11	15 18.33	-15 40.2	1.796	2.805	1.0	19.3
5 21	15 9.20	-12 13.5	1.792	2.788	4.7	20.0	5 21	15 9.34	-15 12.9	1.794	2.794	4.1	19.5
5 31	15 0.81	-11 34.9	1.809	2.765	8.6	20.2	5 31	15 1.13	-14 49.5	1.819	2.782	8.1	19.7
6 10	14 53.96	-11 6.7	1.850	2.742	12.3	20.4	6 10	14 54.52	-14 33.3	1.869	2.771	11.8	19.9
6 20	14 49.23	-10 51.1	1.912	2.719	15.6	20.5	6 20	14 50.07	-14 26.7	1.940	2.759	14.9	20.1
207026	2004 <i>VV</i> ₅₇		5 12.3 221°90	1°3/11.7	17		216551	2001 <i>TA</i> ₁₈₄		5 12.3 257°26	0°3/11.9	18	
4 11	15 44.75	-15 37.0	1.621	2.499	13.8	20.2	4 11	15 31.60	-18 7.6	4.312	5.176	6.2	20.7
4 21	15 38.08	-15 27.7	1.546	2.493	9.8	20.0	4 21	15 27.65	-17 43.0	4.231	5.171	4.3	20.6
5 1	15 29.02	-15 14.0	1.495	2.487	5.4	19.7	5 1	15 22.95	-17 15.4	4.177	5.166	2.3	20.4
5 11	15 18.52	-14 58.4	1.471	2.480	1.3	19.4	5 11	15 17.84	-16 46.0	4.152	5.162	0.3	20.2
5 21	15 7.75	-14 43.8	1.473	2.472	4.8	19.6	5 21	15 12.70	-16 16.5	4.157	5.157	2.0	20.4
5 31	14 57.98	-14 34.0	1.501	2.465	9.5	19.9	5 31	15 7.89	-15 48.5	4.192	5.152	4.0	20.5
6 10	14 50.25	-14 32.2	1.554	2.456	13.7	20.1	6 10	15 3.74	-15 23.7	4.254	5.147	5.9	20.7
6 20	14 45.19	-14 40.6	1.626	2.448	17.2	20.3	6 20	15 0.52	-15 3.3	4.341	5.142	7.6	20.8
334758	2003 <i>RP</i> ₁₄		5 12.3 241°56	2°7/14.1	18		325806	2010 <i>RT</i> ₁₀₃		5 12.3 232°91	0°1/12.2	17	
4 11	15 40.84	-27 42.7	2.039	2.889	12.5	21.0	4 11	15 43.36	-19 52.2	1.922	2.790	12.4	22.0
4 21	15 35.02	-27 27.9	1.956	2.882	9.4	20.8	4 21	15 36.89	-19 26.5	1.835	2.777	9.0	21.7
5 1	15 27.24	-26 59.1	1.897	2.875	6.0	20.6	5 1	15 28.32	-18 51.9	1.773	2.762	4.9	21.5
5 11	15 18.32	-26 17.0	1.864	2.867	3.0	20.3	5 11	15 18.47	-18 10.5	1.738	2.748	0.6	21.1
5 21	15 9.23	-25 24.5	1.860	2.859	3.9	20.4	5 21	15 8.36	-17 25.8	1.731	2.732	3.9	21.3
5 31	15 1.01	-24 26.3	1.882	2.851	7.4	20.6	5 31	14 59.06	-16 42.6	1.751	2.716	8.2	21.6
6 10	14 54.49	-23 28.3	1.930	2.843	10.9	20.8	6 10	14 51.51	-16 5.6	1.797	2.699	12.2	21.8
6 20	14 50.22	-22 35.6	2.000	2.835	14.0	21.0	6 20	14 46.29	-15 38.4	1.864	2.681	15.5	21.9
330303	2006 <i>TW</i> ₇₄		5 12.3 291°43	0°6/12.8	18		192356	1995 <i>UB</i> ₁₂		5 12.3 143°59	0°6/12.6	17	
4 11	15 35.66	-21 26.9	3.071	3.930	8.5	21.2	4 11	15 41.23	-21 4.2	1.963	2.831	12.2	21.3
4 21	15 30.86	-21 14.0	2.972	3.908	6.1	21.0	4 21	15 35.19	-20 48.4	1.894	2.835	8.8	21.0
5 1	15 24.82	-20 55.2	2.899	3.885	3.5	20.8	5 1	15 27.28	-20 24.1	1.850	2.839	4.9	20.8
5 11	15 18.05	-20 31.4	2.854	3.863	0.8	20.5	5 11	15 18.34	-19 53.1	1.833	2.843	0.9	20.5
5 21	15 11.10	-20 4.6	2.839	3.841	2.5	20.7	5 21	15 9.34	-19 18.4	1.844	2.846	3.6	20.7
5 31	15 4.60	-19 36.9	2.852	3.818	5.4	20.8	5 31	15 1.23	-18 44.2	1.882	2.850	7.5	21.0
6 10	14 59.07	-19 11.2	2.893	3.795	8.0	21.0	6 10	14 54.83	-18 14.7	1.945	2.853	11.1	21.2
6 20	14 54.93	-18 49.7	2.957	3.773	10.4	21.1	6 20	14 50.62	-17 52.8	2.030	2.856	14.1	21.4
193575	2001 <i>BF</i>		5 12.3 52°41	5°2/ 9.6	17		430659	2003 <i>SH</i> ₃₆₀		5 12.3 318°71	7°4/ 6.8	18	
4 11	15 40.61	- 5 33.0	1.716	2.599	12.9	19.4	4 11	15 36.50	- 3 54.4	1.565	2.457	13.4	20.6
4 21	15 34.77	- 5 1.5	1.662	2.606	9.5	19.2	4 21	15 32.17	- 2 16.2	1.496	2.441	10.3	20.4
5 1	15 27.03	- 4 35.4	1.633	2.614	6.4	19.0	5 1	15 25.79	- 0 41.1	1.451	2.425	7.9	20.2
5 11	15 18.30	- 4 19.2	1.629	2.622	5.2	19.0	5 11	15 18.19	+ 0 42.2	1.431	2.409	7.7	20.1
5 21	15 9.56	- 4 16.0	1.652	2.630	7.2	19.1	5 21	15 10.38	+ 1 46.0	1.435	2.394	10.0	20.2
5 31	15 1.81	- 4 27.8	1.699	2.638	10.4	19.3	5 31	15 3.44	+ 2 24.9	1.462	2.380	13.3	20.4
6 10	14 55.84	- 4 54.7	1.770	2.646	13.6	19.5	6 10	14 58.27	+ 2 37.0	1.510	2.366	16.6	20.6
6 20	14 52.11	- 5 35.2	1.860	2.655	16.4	19.7	6 20	14 55.41	+ 2 23.9	1.574	2.353	19.5	20.7
502018	2015 <i>AZ</i> ₇₅		5 12.3 249°06	1°5/11.4	17		498529	2008 <i>FA</i> ₅₅		5 12.3 233°57	1°5/13.1	17	
4 11	15 41.42	-16 13.3	1.721	2.602	13.0	21.9	4 11	15 44.07	-22 26.5	1.857	2.720	13.0	21.1
4 21	15 35.60	-15 39.0	1.644	2.592	9.3	21.7	4 21	15 37.51	-22 35.2	1.775	2.711	9.5	20.8
5 1	15 27.62	-14 58.6	1.591	2.582	5.1	21.4	5 1	15 28.71	-22 34.9	1.716	2.702	5.6	20.6
5 11	15 18.38	-14 15.4	1.564	2.573	1.5	21.1	5 11	15 18.53	-22 25.7	1.685	2.693	1.8	20.3
5 21	15 8.92	-13 33.8	1.564	2.562	4.8	21.3	5 21	15 8.05	-22 9.3	1.681	2.683	3.9	20.4
5 31	15 0.36	-12 58.7	1.591	2.552	9.2	21.6	5 31	14 58.43	-21 49.3	1.704	2.672	8.1	20.7
6 10	14 53.64	-12 34.1	1.641	2.541	13.2	21.8	6 10	14 50.67	-21 30.0	1.752	2.662	12.0	20.9
6 20	14 49.34	-12 22.4	1.711	2.530	16.6	22.0	6 20	14 45.39	-21 15.6	1.821	2.651	15.4	21.1
477613	2010 <i>KE</i> ₁₂₁		5 12.3 210°35	8°1/20.0	18		96895	1999 <i>TY</i>					

EPHEMERIDES

5 12.3

5 12.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
315386	2007 VY ₈₆		5 12.3 192°94	2°6/13.9	16		136571	1981 EL ₈		5 12.3 143°03	5°8/17.2	18	
4 11	15 43.88	-26 50.0	1.693	2.551	14.3	21.4	4 11	15 43.67	-39 47.0	2.826	3.604	11.4	20.7
4 21	15 37.45	-26 31.8	1.618	2.550	10.7	21.2	4 21	15 36.74	-40 13.3	2.752	3.613	9.4	20.6
5 1	15 28.66	-25 57.7	1.567	2.548	6.6	20.9	5 1	15 28.10	-40 23.6	2.702	3.623	7.5	20.5
5 11	15 18.52	-25 8.9	1.542	2.546	2.9	20.7	5 11	15 18.49	-40 16.4	2.678	3.632	6.1	20.4
5 21	15 8.25	-24 8.9	1.543	2.544	4.3	20.8	5 21	15 8.79	-39 52.4	2.681	3.640	5.9	20.4
5 31	14 59.09	-23 4.1	1.571	2.541	8.4	21.0	5 31	14 59.88	-39 14.2	2.711	3.648	7.1	20.5
6 10	14 52.04	-22 1.6	1.623	2.538	12.4	21.2	6 10	14 52.53	-38 26.4	2.768	3.656	8.9	20.6
6 20	14 47.66	-21 7.3	1.697	2.535	15.9	21.4	6 20	14 47.19	-37 34.1	2.848	3.663	10.8	20.8
132602	2002 KB ₅		5 12.3 349°94	0°6/11.9	17		209467	2004 GW ₅₂		5 12.3 150°05	0°4/11.9	17	
4 11	15 37.88	-19 0.1	1.494	2.383	14.1	19.4	4 11	15 39.25	-18 1.3	2.192	3.063	10.9	20.7
4 21	15 33.28	-18 25.0	1.426	2.378	10.1	19.1	4 21	15 33.65	-17 44.3	2.121	3.065	7.8	20.5
5 1	15 26.42	-17 40.5	1.381	2.374	5.5	18.8	5 1	15 26.42	-17 21.9	2.075	3.066	4.2	20.3
5 11	15 18.27	-16 50.3	1.361	2.370	0.8	18.5	5 11	15 18.30	-16 56.3	2.057	3.067	0.6	20.0
5 21	15 9.97	-15 59.4	1.365	2.367	4.6	18.7	5 21	15 10.09	-16 30.1	2.067	3.068	3.5	20.2
5 31	15 2.70	-15 13.8	1.395	2.365	9.3	19.0	5 31	15 2.63	-16 6.5	2.105	3.069	7.1	20.5
6 10	14 57.44	-14 38.6	1.448	2.364	13.6	19.3	6 10	14 56.64	-15 48.5	2.168	3.070	10.4	20.7
6 20	14 54.73	-14 17.1	1.519	2.363	17.2	19.5	6 20	14 52.55	-15 38.4	2.253	3.071	13.2	20.9
165306	2000 US ₂₃		5 12.3 157°30	1°5/10.4	18		45526	2000 CG ₄		5 12.3 222°98	1°2/11.5	18	R
4 11	15 33.52	-11 59.6	4.103	4.971	6.4	21.5	4 11	15 42.70	-16 40.5	1.987	2.859	11.9	20.0
4 21	15 28.97	-11 27.8	4.036	4.977	4.5	21.4	4 21	15 36.32	-16 8.7	1.905	2.849	8.5	19.8
5 1	15 23.65	-10 55.4	3.996	4.983	2.6	21.3	5 1	15 27.98	-15 31.0	1.848	2.838	4.6	19.5
5 11	15 17.94	-10 24.1	3.986	4.989	1.5	21.2	5 11	15 18.49	-14 50.1	1.818	2.827	1.2	19.2
5 21	15 12.22	-9 55.8	4.007	4.995	2.8	21.3	5 21	15 8.79	-14 9.7	1.816	2.814	4.3	19.4
5 31	15 6.88	-9 31.9	4.057	5.000	4.7	21.4	5 31	14 59.89	-13 34.1	1.842	2.801	8.3	19.6
6 10	15 2.26	-9 13.9	4.133	5.005	6.6	21.6	6 10	14 52.64	-13 7.1	1.893	2.788	12.0	19.8
6 20	14 58.61	-9 2.4	4.234	5.010	8.2	21.7	6 20	14 47.58	-12 51.2	1.966	2.774	15.2	20.0
188068	2001 WL ₄₇		5 12.3 222°22	5°4/ 8.2	17		516315	2016 YR ₁₁		5 12.3 156°74	0°5/12.8	18	
4 11	15 40.34	- 4 36.1	2.100	2.974	11.2	21.4	4 11	15 34.98	-21 19.0	3.847	4.701	7.1	23.0
4 21	15 34.44	- 3 31.6	2.027	2.965	8.5	21.2	4 21	15 30.10	-21 7.5	3.773	4.706	5.1	22.9
5 1	15 26.86	- 2 30.4	1.981	2.955	6.1	21.0	5 1	15 24.32	-20 51.6	3.725	4.711	2.8	22.7
5 11	15 18.32	- 1 37.6	1.961	2.944	5.5	21.0	5 11	15 18.06	-20 32.1	3.707	4.716	0.6	22.5
5 21	15 9.65	- 0 58.0	1.970	2.934	7.4	21.0	5 21	15 11.77	-20 10.4	3.719	4.721	2.0	22.7
5 31	15 1.70	- 0 34.7	2.004	2.922	10.2	21.2	5 31	15 5.90	-19 48.5	3.761	4.725	4.3	22.8
6 10	14 55.22	- 0 29.1	2.062	2.910	13.1	21.4	6 10	15 0.84	-19 28.1	3.830	4.729	6.4	23.0
6 20	14 50.66	- 0 40.8	2.139	2.897	15.6	21.5	6 20	14 56.90	-19 10.8	3.924	4.733	8.2	23.1
317513	2002 TT ₇₂		5 12.3 288°90	3°8/14.3	18		176716	2002 QO ₇₅		5 12.3 85°74	0°7/12.6	17	
4 11	15 42.23	-28 23.6	1.543	2.404	15.3	20.4	4 11	15 43.24	-20 55.3	1.523	2.400	14.6	20.4
4 21	15 36.70	-28 25.0	1.458	2.388	11.7	20.1	4 21	15 37.00	-20 44.0	1.464	2.409	10.5	20.2
5 1	15 28.47	-28 9.0	1.394	2.372	7.6	19.8	5 1	15 28.41	-20 22.7	1.428	2.418	5.8	20.0
5 11	15 18.52	-27 35.0	1.355	2.356	4.2	19.6	5 11	15 18.53	-19 53.5	1.417	2.427	1.0	19.6
5 21	15 8.16	-26 45.2	1.341	2.340	5.1	19.6	5 21	15 8.62	-19 20.0	1.433	2.436	4.2	19.9
5 31	14 58.82	-25 45.5	1.352	2.324	9.3	19.8	5 31	14 59.93	-18 47.3	1.474	2.445	8.9	20.2
6 10	14 51.72	-24 43.9	1.386	2.308	13.6	20.0	6 10	14 53.43	-18 20.5	1.539	2.453	13.0	20.4
6 20	14 47.58	-23 47.8	1.440	2.293	17.5	20.2	6 20	14 49.61	-18 3.1	1.623	2.462	16.5	20.7
81940	2000 OW ₃₃		5 12.3 232°20	3°6/ 9.3	18		230976	2005 AG ₂₈		5 12.3 131°97	4°1/15.3	17	
4 11	15 37.37	- 9 7.8	2.321	3.199	10.2	19.5	4 11	15 44.07	-32 10.1	2.416	3.238	11.8	21.3
4 21	15 32.20	- 8 12.3	2.250	3.194	7.4	19.3	4 21	15 37.04	-32 23.3	2.349	3.252	9.2	21.1
5 1	15 25.59	- 7 16.8	2.204	3.188	4.7	19.1	5 1	15 28.25	-32 22.5	2.306	3.266	6.4	21.0
5 11	15 18.17	- 6 25.4	2.187	3.183	3.6	19.1	5 11	15 18.51	-32 7.1	2.291	3.279	4.4	20.9
5 21	15 10.68	- 5 42.2	2.197	3.177	5.5	19.2	5 21	15 8.75	-31 38.5	2.304	3.292	4.6	20.9
5 31	15 3.84	- 5 10.3	2.234	3.170	8.4	19.3	5 31	14 59.88	-31 0.3	2.344	3.304	6.8	21.1
6 10	14 58.28	- 4 51.9	2.296	3.164	11.2	19.5	6 10	14 52.65	-30 17.2	2.412	3.315	9.4	21.2
6 20	14 54.43	- 4 47.4	2.379	3.158	13.7	19.7	6 20	14 47.53	-29 34.2	2.502	3.326	11.8	21.4
389727	2011 SY ₈₁		5 12.3 349°22	0°4/11.9	17		471281	2011 FT ₉₇		5 12.3 243°28	4°1/ 8.9	18	
4 11	15 38.19	-18 38.4	1.868	2.747	12.2	21.1	4 11	15 40.18	- 9 4.1	2.194	3.069	10.8	21.0
4 21	15 33.14	-18 12.1	1.797	2.744	8.7	20.9	4 21	15 34.36	- 7 53.0	2.109	3.052	7.9	20.8
5 1	15 26.22	-17 38.7	1.750	2.742	4.7	20.6	5 1	15 26.86	- 6 40.3	2.050	3.033	5.1	20.6
5 11	15 18.26	-17 1.0	1.730	2.740	0.6	20.3	5 11	15 18.37	- 5 31.0	2.020	3.014	4.1	20.5
5 21	15 10.18	-16 22.6	1.737	2.738	3.9	20.5	5 21	15 9.68	- 4 30.3	2.018	2.994	6.2	20.6
5 31	15 2.96	-15 47.7	1.770	2.737	8.0	20.8	5 31	15 1.65	- 3 42.6	2.043	2.973	9.4	20.7
6 10	14 57.39	-15 20.4	1.827	2.736	11.6	21.0	6 10	14 55.00	- 3 10.7	2.092	2.952	12.5	20.9
6 20	14 53.97	-15 3.2	1.906	2.735	14.8	21.2	6 20	14 50.25	- 2 55.6	2.162	2.930	15.2	21.0
509328	2006 WX ₁₆₇		5 12.3 235°08	1°0/11.6	18		107465	2001 DN ₂₈		5 12.3 7°84	1°8/13.2	18	
4 11	15 39.38	-15 35.8	2.547	3.416	9.7	22.3	4 11	15 41.09	-22 47.7	1.618	2.492	14.0	18.7
4 21	15 33.62	-15 22.8	2.463	3.406	6.9	22.1	4 21	15 35.52	-22 59.3	1.551	2.492	10.3	18.5
5 1	15 26.38	-15 6.7	2.405	3.395	3.8	21.9	5 1	15 27.66	-23 0.7	1.506	2.493	6.0	18.2
5 11	15 18.29	-14 49.4	2.375	3.384	1.0	21.7	5 11	15 18.46	-22 52.4	1.487	2.495	2.1	18.0
5 21	15 10.03	-14 32.8	2.375	3.373	3.4	21.8	5 21	15 9.08	-22 36.7	1.494	2.497	4.1	18.1
5 31	15 2.35	-14 19.6	2.403	3.361	6.7	22.0	5 31	15 0.74	-22 17.3	1.527	2.499	8.4	18.4
6 10	14 55.91	-14 11.9	2.457	3.349	9.7	22.2	6 10	14 54.43	-21 59.0	1.583	2.502	12.4	18.6
6 20	14 51.14	-14 11.3	2.533	3.337	12.3	22.4	6 20	14 50.71	-21 46.0	1.659	2.505	15.9	18.9
303829	2005 SO ₁₂₃		5 12.3 258°31	0°8/12.9	17		336480	2008 VF ₄₇		5 12.3 209°46	0°2/12.2	18	
4 11	15 38.48	-22 12.1</											

EPHEMERIDES

5 12.3

5 12.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
306085	2010 <i>GM</i> ₁₅₆		5 12.3	2°82	2°8/11.4	17	101950	1999 <i>RB</i> ₂₉		5 12.3	169°55	9°5/22.1	18
4 11	15 42.29	-12 26.4	1.047	1.952	17.4	20.2	4 11	15 52.51	-57 12.7	3.257	3.892	12.5	20.7
4 21	15 37.09	-12 27.7	0.992	1.950	12.5	19.9	4 21	15 43.66	-58 12.0	3.180	3.895	11.5	20.6
5 1	15 28.78	-12 29.1	0.956	1.950	7.0	19.6	5 1	15 32.17	-58 50.8	3.121	3.899	10.6	20.5
5 11	15 18.61	-12 34.2	0.943	1.950	2.9	19.3	5 11	15 19.02	-59 5.0	3.085	3.901	9.8	20.4
5 21	15 8.20	-12 46.1	0.952	1.952	6.6	19.5	5 21	15 5.51	-58 53.4	3.070	3.904	9.5	20.4
5 31	14 59.25	-13 7.6	0.983	1.954	12.1	19.8	5 31	14 53.03	-58 17.5	3.079	3.906	9.7	20.4
6 10	14 53.07	-13 40.7	1.034	1.957	17.1	20.1	6 10	14 42.75	-57 22.1	3.111	3.907	10.4	20.5
6 20	14 50.30	-14 25.3	1.102	1.961	21.3	20.4	6 20	14 35.33	-56 13.5	3.163	3.908	11.3	20.6
375760	2009 <i>ST</i> ₁₁₀		5 12.3	155°40	8°4/3.9	17	437509	2013 <i>YQ</i> ₈₀		5 12.3	210°04	1°6/13.3	17
4 11	15 39.91	+ 9 45.2	2.611	3.444	10.7	22.4	4 11	15 40.99	-24 1.0	2.114	2.973	11.8	21.7
4 21	15 33.76	+11 14.0	2.571	3.454	9.3	22.4	4 21	15 35.05	-23 51.6	2.037	2.970	8.7	21.5
5 1	15 26.35	+12 29.7	2.558	3.464	8.5	22.3	5 1	15 27.27	-23 32.1	1.983	2.967	5.1	21.3
5 11	15 18.31	+13 27.3	2.570	3.473	8.7	22.3	5 11	15 18.44	-23 3.4	1.957	2.964	1.8	21.0
5 21	15 10.30	+14 3.5	2.609	3.481	9.8	22.4	5 21	15 9.47	-22 28.0	1.958	2.960	3.4	21.1
5 31	15 2.99	+14 17.2	2.671	3.488	11.3	22.5	5 31	15 1.31	-21 49.9	1.988	2.956	7.1	21.4
6 10	14 56.91	+14 9.4	2.754	3.495	12.9	22.7	6 10	14 54.75	-21 13.4	2.042	2.952	10.5	21.6
6 20	14 52.43	+13 42.7	2.855	3.501	14.3	22.8	6 20	14 50.30	-20 42.6	2.119	2.948	13.5	21.8
299681	2006 <i>QN</i> ₇₄		5 12.3	197°67	4°6/8.0	18	114343	2002 <i>XY</i> ₇₀		5 12.3	103°92	0°8/11.9	18
4 11	15 37.64	- 2 56.6	2.825	3.691	9.0	22.0	4 11	15 43.82	-17 6.9	1.771	2.645	13.0	19.8
4 21	15 32.17	- 2 4.9	2.757	3.688	6.8	21.8	4 21	15 37.05	-16 52.1	1.717	2.662	9.2	19.6
5 1	15 25.52	- 1 17.3	2.716	3.684	5.1	21.7	5 1	15 28.30	-16 32.1	1.688	2.678	4.9	19.4
5 11	15 18.22	- 0 37.3	2.703	3.679	4.7	21.7	5 11	15 18.55	-16 9.2	1.685	2.694	0.9	19.1
5 21	15 10.86	- 0 7.9	2.718	3.674	6.0	21.8	5 21	15 8.85	-15 46.5	1.710	2.710	4.1	19.4
5 31	15 4.04	+ 0 8.8	2.761	3.669	8.1	21.9	5 31	15 0.26	-15 27.8	1.762	2.726	8.3	19.7
6 10	14 58.30	+ 0 12.0	2.828	3.663	10.3	22.0	6 10	14 53.57	-15 16.2	1.839	2.741	11.9	19.9
6 20	14 53.98	+ 0 2.1	2.917	3.656	12.3	22.2	6 20	14 49.23	-15 13.7	1.936	2.755	15.0	20.2
393395	2000 <i>SP</i> ₅₃		5 12.3	255°11	4°9/7.9	16	99629	2002 <i>GR</i> ₉₆		5 12.3	77°75	1°6/13.0	18
4 11	15 36.91	- 5 17.3	2.378	3.254	10.0	21.3	4 11	15 45.27	-22 21.8	1.393	2.269	15.7	19.9
4 21	15 31.89	- 4 4.5	2.303	3.242	7.5	21.1	4 21	15 38.60	-22 26.3	1.340	2.283	11.4	19.6
5 1	15 25.45	- 2 53.7	2.255	3.230	5.4	21.0	5 1	15 29.34	-22 19.2	1.310	2.298	6.5	19.4
5 11	15 18.21	- 1 49.8	2.235	3.217	5.0	20.9	5 11	15 18.69	-22 1.6	1.304	2.312	1.9	19.1
5 21	15 10.86	- 0 57.3	2.242	3.204	6.7	21.0	5 21	15 8.06	-21 36.6	1.323	2.326	4.5	19.3
5 31	15 4.11	- 0 19.5	2.276	3.191	9.3	21.1	5 31	14 58.83	-21 9.3	1.368	2.341	9.2	19.6
6 10	14 58.58	+ 0 1.6	2.333	3.178	11.9	21.3	6 10	14 52.05	-20 45.4	1.436	2.355	13.5	19.9
6 20	14 54.70	+ 0 6.2	2.411	3.164	14.2	21.4	6 20	14 48.23	-20 29.2	1.524	2.369	17.1	20.2
54392	2000 <i>KH</i> ₇₀		5 12.3	261°08	0°4/12.6	18	29206	1991 <i>PX</i> ₁₀		5 12.3	259°68	4°4/9.5	17
4 11	15 39.54	-20 43.5	2.169	3.036	11.2	20.0	4 11	15 42.29	-11 16.6	1.540	2.427	13.9	18.9
4 21	15 34.00	-20 26.3	2.085	3.025	8.1	19.8	4 21	15 36.50	-10 2.9	1.459	2.408	10.1	18.6
5 1	15 26.70	-20 1.2	2.026	3.014	4.5	19.5	5 1	15 28.30	- 8 44.4	1.401	2.389	6.2	18.3
5 11	15 18.37	-19 30.0	1.994	3.003	0.7	19.2	5 11	15 18.59	- 7 27.8	1.369	2.369	4.5	18.1
5 21	15 9.84	-18 55.3	1.990	2.992	3.4	19.4	5 21	15 8.54	- 6 20.3	1.363	2.349	7.4	18.3
5 31	15 2.03	-18 20.9	2.014	2.980	7.2	19.6	5 31	14 59.41	- 5 28.7	1.383	2.328	11.7	18.5
6 10	14 55.69	-17 50.7	2.063	2.969	10.6	19.8	6 10	14 52.25	- 4 57.3	1.424	2.306	15.9	18.6
6 20	14 51.35	-17 27.7	2.134	2.957	13.6	20.0	6 20	14 47.73	- 4 47.6	1.483	2.284	19.6	18.8
20560	1999 <i>RX</i> ₁₁₈		5 12.3	199°58	2°9/9.8	18	61848	2000 <i>QG</i> ₂₀₂		5 12.3	225°38	0°8/11.7	18
4 11	15 39.47	-11 7.7	2.480	3.353	9.8	18.9	4 11	15 38.79	-16 42.9	2.435	3.305	10.1	19.7
4 21	15 33.62	-10 10.0	2.406	3.349	7.0	18.8	4 21	15 33.25	-16 22.3	2.356	3.299	7.1	19.5
5 1	15 26.36	- 9 10.6	2.358	3.344	4.2	18.6	5 1	15 26.22	-15 57.4	2.303	3.293	3.9	19.3
5 11	15 18.33	- 8 13.4	2.339	3.338	2.9	18.5	5 11	15 18.33	-15 30.4	2.278	3.287	0.9	19.0
5 21	15 10.22	- 7 22.2	2.349	3.332	4.9	18.6	5 21	15 10.33	-15 3.8	2.282	3.281	3.4	19.2
5 31	15 2.76	- 6 40.6	2.387	3.326	7.8	18.8	5 31	15 2.97	-14 40.5	2.314	3.274	6.8	19.4
6 10	14 56.57	- 6 11.0	2.451	3.318	10.6	18.9	6 10	14 56.89	-14 23.2	2.371	3.267	9.8	19.6
6 20	14 52.05	- 5 54.5	2.536	3.311	13.0	19.1	6 20	14 52.54	-14 13.8	2.451	3.260	12.5	19.8
15083	Tianhuili		5 12.3	270°75	2°2/11.0	18	414183	2008 <i>CS</i> ₆₅		5 12.3	76°67	0°2/12.4	18
4 11	15 41.34	-14 13.8	1.770	2.651	12.7	18.3	4 11	15 43.44	-20 28.0	1.484	2.363	14.8	21.5
4 21	15 35.60	-13 42.2	1.684	2.632	9.1	18.0	4 21	15 37.04	-20 2.1	1.435	2.381	10.5	21.2
5 1	15 27.72	-13 6.3	1.623	2.614	5.1	17.8	5 1	15 28.38	-19 26.2	1.409	2.400	5.7	21.0
5 11	15 18.50	-12 29.7	1.588	2.595	2.2	17.5	5 11	15 18.58	-18 43.5	1.409	2.418	0.7	20.7
5 21	15 8.96	-11 56.3	1.581	2.576	5.1	17.7	5 21	15 8.90	-17 58.7	1.434	2.437	4.3	21.0
5 31	15 0.20	-11 30.5	1.599	2.557	9.4	17.9	5 31	15 0.55	-17 17.3	1.486	2.455	8.9	21.3
6 10	14 53.19	-11 16.0	1.641	2.538	13.4	18.1	6 10	14 54.43	-16 44.5	1.560	2.473	13.0	21.6
6 20	14 48.55	-11 14.6	1.703	2.518	16.9	18.3	6 20	14 50.96	-16 23.1	1.655	2.491	16.4	21.9
330385	2006 <i>XP</i> ₁₇		5 12.3	117°42	2°0/11.3	18	323683	2005 <i>EZ</i> ₃₃₀		5 12.3	21°08	4°9/14.7	17
4 11	15 43.83	-13 23.4	1.809	2.685	12.7	20.6	4 11	15 43.25	-29 32.2	1.353	2.216	16.9	20.3
4 21	15 37.04	-13 12.2	1.752	2.697	9.0	20.4	4 21	15 37.55	-29 51.3	1.289	2.219	13.0	20.0
5 1	15 28.31	-12 59.3	1.719	2.709	5.0	20.2	5 1	15 28.96	-29 51.3	1.246	2.221	8.7	19.8
5 11	15 18.55	-12 47.3	1.713	2.720	2.0	20.0	5 11	15 18.67	-29 30.9	1.226	2.224	5.3	19.6
5 21	15 8.78	-12 38.8	1.735	2.731	4.7	20.2	5 21	15 8.18	-28 52.4	1.230	2.228	5.9	19.7
5 31	15 0.04	-12 36.6	1.783	2.741	8.6	20.4	5 31	14 59.07	-28 2.1	1.259	2.232	9.8	19.9
6 10	14 53.13	-12 42.7	1.857	2.752	12.2	20.7	6 10	14 52.54	-27 8.3	1.310	2.236	14.0	20.1
6 20	14 48.53	-12 58.1	1.951	2.761	15.2	20.9	6 20	14 49.22	-26 18.9	1.380	2.241	17.7	20.4
142413	2002 <i>SR</i> ₃₀		5 12.3	257°70	4°4/9.7	18	87583	2000 <i>RD</i> ₂₀		5 12.3			

EPHEMERIDES

5 12.3

5 12.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
313097	2000 VR ₄₀		5 12.3 217°10		2°1/13.6 17		19542	Lindperkins		5 12.3 282°52		2°1/11.2 17	
4 11	15 44.36	-25 26.6	1.801	2.659	13.6	21.5	4 11	15 42.01	-15 20.3	1.409	2.298	14.7	18.4
4 21	15 37.77	-25 9.9	1.719	2.652	10.1	21.2	4 21	15 36.39	-14 45.7	1.340	2.292	10.5	18.1
5 1	15 28.90	-24 39.2	1.661	2.644	6.1	21.0	5 1	15 28.26	-14 5.2	1.293	2.285	5.8	17.8
5 11	15 18.66	-23 55.6	1.629	2.635	2.4	20.7	5 11	15 18.62	-13 23.0	1.271	2.279	2.1	17.6
5 21	15 8.20	-23 2.2	1.624	2.626	4.0	20.8	5 21	15 8.76	-12 44.3	1.274	2.272	5.6	17.8
5 31	14 58.72	-22 4.6	1.647	2.616	8.2	21.0	5 31	15 0.00	-12 14.5	1.302	2.266	10.5	18.0
6 10	14 51.21	-21 9.3	1.694	2.606	12.2	21.3	6 10	14 53.44	-11 58.0	1.352	2.260	15.0	18.3
6 20	14 46.26	-20 21.7	1.763	2.595	15.7	21.5	6 20	14 49.68	-11 56.6	1.421	2.254	18.7	18.5
67758	2000 UF ₅₅		5 12.3 284°52		2°6/10.7 18		200926	2002 AS ₁₃₂		5 12.3 29°22		1°9/13.2 17	
4 11	15 40.79	-15 42.1	1.439	2.329	14.5	18.6	4 11	15 42.39	-23 44.2	1.245	2.128	16.7	20.1
4 21	15 35.61	-14 38.1	1.356	2.309	10.4	18.3	4 21	15 36.91	-23 33.8	1.186	2.132	12.2	19.8
5 1	15 27.89	-13 24.4	1.295	2.288	5.8	18.0	5 1	15 28.59	-23 8.2	1.147	2.136	7.1	19.6
5 11	15 18.56	-12 6.5	1.260	2.267	2.7	17.8	5 11	15 18.66	-22 29.3	1.132	2.140	2.3	19.3
5 21	15 8.83	-10 51.9	1.250	2.245	6.2	17.9	5 21	15 8.61	-21 41.6	1.142	2.145	4.8	19.5
5 31	15 0.06	-9 48.2	1.264	2.224	11.2	18.1	5 31	14 59.99	-20 52.0	1.175	2.151	9.9	19.8
6 10	14 53.38	-9 1.6	1.301	2.203	15.8	18.3	6 10	14 53.93	-20 8.2	1.230	2.156	14.7	20.0
6 20	14 49.49	-8 35.4	1.355	2.181	19.8	18.5	6 20	14 51.02	-19 35.4	1.303	2.162	18.6	20.3
308388	2005 SN ₂₂		5 12.3 226°21		0°2/12.5 18		407725	2011 UZ ₃₀₇		5 12.3 228°65		3°4/14.2 14 C	
4 11	15 39.23	-19 40.1	2.708	3.568	9.5	21.5	4 11	15 46.09	-28 6.2	1.737	2.587	14.4	22.4
4 21	15 33.49	-19 32.6	2.622	3.560	6.8	21.3	4 21	15 39.23	-28 3.4	1.651	2.575	10.9	22.1
5 1	15 26.34	-19 19.7	2.563	3.551	3.7	21.0	5 1	15 29.82	-27 44.4	1.587	2.563	7.1	21.9
5 11	15 18.36	-19 2.6	2.532	3.541	0.5	20.8	5 11	15 18.82	-27 8.8	1.548	2.550	3.7	21.6
5 21	15 10.23	-18 43.2	2.530	3.532	2.8	21.0	5 21	15 7.47	-26 19.0	1.537	2.536	4.7	21.7
5 31	15 2.67	-18 24.0	2.558	3.521	6.0	21.1	5 31	14 57.13	-25 20.2	1.553	2.522	8.7	21.9
6 10	14 56.29	-18 7.4	2.611	3.511	8.9	21.3	6 10	14 48.91	-24 20.0	1.594	2.507	12.8	22.1
6 20	14 51.53	-17 55.9	2.689	3.500	11.4	21.5	6 20	14 43.49	-23 25.0	1.655	2.491	16.4	22.3
407749	2011 WG ₁₃		5 12.3 264°76		2°8/11.0 16		131734	2001 YK ₁₁₁		5 12.3 151°60		2°0/13.2 18	
4 11	15 45.09	-12 38.2	1.517	2.399	14.3	21.2	4 11	15 46.64	-22 44.5	1.527	2.395	15.0	19.6
4 21	15 38.68	-12 16.4	1.430	2.378	10.3	20.9	4 21	15 39.64	-23 4.4	1.461	2.399	11.0	19.3
5 1	15 29.60	-11 52.2	1.366	2.356	5.9	20.6	5 1	15 30.01	-23 13.8	1.417	2.403	6.5	19.1
5 11	15 18.77	-11 29.1	1.328	2.334	2.8	20.4	5 11	15 18.83	-23 12.4	1.399	2.406	2.3	18.8
5 21	15 7.41	-11 11.2	1.316	2.311	6.1	20.5	5 21	15 7.45	-23 1.9	1.407	2.409	4.5	18.9
5 31	14 56.91	-11 2.8	1.329	2.288	10.9	20.7	5 31	14 57.26	-22 46.1	1.441	2.411	9.1	19.2
6 10	14 48.50	-11 7.0	1.365	2.264	15.5	20.9	6 10	14 49.40	-22 30.6	1.499	2.414	13.3	19.5
6 20	14 42.93	-11 25.5	1.420	2.239	19.4	21.1	6 20	14 44.47	-22 19.7	1.577	2.416	16.9	19.7
491243	2011 UB ₂₀₉		5 12.3 261°28		1°9/13.7 18		137000	1998 SH ₇₈		5 12.3 259°76		2°0/13.4 17	
4 11	15 40.45	-25 21.7	2.452	3.302	10.7	22.0	4 11	15 42.44	-24 36.3	1.662	2.529	14.1	20.2
4 21	15 34.62	-25 17.3	2.354	3.282	8.0	21.8	4 21	15 36.58	-24 24.1	1.582	2.519	10.4	20.0
5 1	15 27.07	-25 3.1	2.282	3.262	4.9	21.6	5 1	15 28.33	-23 58.4	1.525	2.510	6.2	19.7
5 11	15 18.46	-24 39.4	2.236	3.241	2.2	21.4	5 11	15 18.64	-23 20.2	1.493	2.500	2.3	19.4
5 21	15 9.59	-24 8.0	2.220	3.220	3.3	21.4	5 21	15 8.67	-22 32.8	1.487	2.490	4.2	19.5
5 31	15 1.32	-23 32.0	2.232	3.199	6.5	21.6	5 31	14 59.70	-21 41.6	1.508	2.480	8.6	19.8
6 10	14 54.40	-22 55.6	2.270	3.177	9.7	21.7	6 10	14 52.76	-20 53.0	1.553	2.469	12.8	20.0
6 20	14 49.38	-22 22.4	2.331	3.155	12.6	21.9	6 20	14 48.47	-20 12.5	1.618	2.459	16.4	20.2
298722	2004 FT ₇₃		5 12.3 323°00		3°4/13.5 14 C		407746	2011 VO ₂₁		5 12.3 245°41		1°2/11.7 16	
4 11	15 40.50	-24 11.9	1.024	1.920	18.5	20.8	4 11	15 45.47	-16 5.2	1.628	2.504	13.8	22.0
4 21	15 36.44	-24 35.8	0.949	1.900	13.9	20.5	4 21	15 38.80	-15 51.3	1.543	2.489	9.9	21.8
5 1	15 28.81	-24 44.8	0.892	1.881	8.6	20.1	5 1	15 29.61	-15 32.1	1.481	2.472	5.5	21.5
5 11	15 18.71	-24 37.3	0.857	1.863	3.7	19.8	5 11	15 18.81	-15 9.9	1.446	2.455	1.3	21.1
5 21	15 7.84	-24 14.8	0.842	1.846	6.0	19.8	5 21	15 7.59	-14 48.0	1.438	2.438	4.9	21.3
5 31	14 58.22	-23 43.3	0.849	1.830	11.8	20.1	5 31	14 57.27	-14 30.5	1.457	2.420	9.7	21.6
6 10	14 51.57	-23 11.4	0.876	1.815	17.5	20.3	6 10	14 48.97	-14 21.6	1.499	2.401	14.1	21.8
6 20	14 48.85	-22 46.9	0.918	1.802	22.4	20.6	6 20	14 43.39	-14 23.7	1.560	2.381	17.9	22.0
153890	2001 XL ₁₈₈		5 12.3 15°74		5°6/16.2 18 R		244297	2002 FD ₄		5 12.3 80°69		4°8/10.1 18	
4 11	15 40.21	-34 25.0	1.471	2.318	16.7	18.8	4 11	15 43.73	-8 45.4	1.379	2.269	15.0	19.9
4 21	15 35.18	-34 6.9	1.405	2.321	13.2	18.5	4 21	15 37.31	-8 5.2	1.333	2.283	10.8	19.7
5 1	15 27.56	-33 23.6	1.359	2.324	9.4	18.3	5 1	15 28.58	-7 27.8	1.310	2.297	6.7	19.5
5 11	15 18.51	-32 15.4	1.337	2.328	6.2	18.1	5 11	15 18.66	-6 58.6	1.311	2.311	4.8	19.4
5 21	15 9.44	-30 46.7	1.339	2.333	6.1	18.2	5 21	15 8.83	-6 42.0	1.338	2.324	7.3	19.6
5 31	15 1.71	-29 6.2	1.366	2.339	9.2	18.3	5 31	15 0.32	-6 41.2	1.389	2.338	11.3	19.9
6 10	14 56.38	-27 24.3	1.417	2.345	13.0	18.6	6 10	14 54.05	-6 56.9	1.461	2.352	15.1	20.1
6 20	14 53.95	-25 50.1	1.488	2.351	16.5	18.8	6 20	14 50.49	-7 27.9	1.553	2.366	18.3	20.4
328919	2010 UX ₃₅		5 12.3 113°30		1°3/11.6 17		105838	2000 SZ ₁₅₂		5 12.3 220°20		0°3/12.5 18	
4 11	15 43.76	-15 58.3	1.748	2.624	13.0	21.9	4 11	15 38.80	-20 22.0	2.815	3.674	9.2	20.9
4 21	15 37.04	-15 36.7	1.693	2.639	9.2	21.7	4 21	15 33.15	-20 5.6	2.728	3.665	6.6	20.7
5 1	15 28.34	-15 10.7	1.662	2.653	5.0	21.4	5 1	15 26.15	-19 43.3	2.668	3.656	3.7	20.5
5 11	15 18.60	-14 43.0	1.658	2.667	1.3	21.2	5 11	15 18.39	-19 16.4	2.637	3.646	0.6	20.2
5 21	15 8.91	-14 17.2	1.682	2.680	4.4	21.5	5 21	15 10.49	-18 46.9	2.635	3.636	2.7	20.4
5 31	15 0.30	-13 57.0	1.732	2.693	8.5	21.7	5 31	15 3.15	-18 17.7	2.662	3.626	5.8	20.6
6 10	14 53.61	-13 45.4	1.806	2.706	12.2	22.0	6 10	14 56.94	-17 51.4	2.716	3.615	8.6	20.8
6 20	14 49.28	-13 44.2	1.901	2.718	15.3	22.2	6 20	14 52.29	-17 30.6	2.794	3.604	11.1	20.9
506880	2008 AM ₄₆		5 12.3 66°13		2°5/14.3 17		230090	2000 WA ₁₅₇		5 12.3 72°26		0°2/12.2 17	
4 11	15 39.42	-27 58.											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
499606	2010 <i>TK</i> ₁₆₈		5 12.3 256°89	1.7°/13.2	17		432396	2009 <i>XE</i> ₁₂		5 12.3 42°19	1.3°/11.8	15	
4 11	15 45.05	-23 11.5	1.788	2.650	13.5	22.2	4 11	15 43.49	-14 23.5	1.460	2.346	14.5	20.6
4 21	15 38.49	-23 13.7	1.694	2.629	10.0	21.9	4 21	15 37.18	-14 35.6	1.410	2.360	10.3	20.4
5 1	15 29.45	-23 5.4	1.623	2.608	5.9	21.6	5 1	15 28.55	-14 45.7	1.382	2.374	5.6	20.1
5 11	15 18.80	-22 46.4	1.579	2.586	2.0	21.3	5 11	15 18.69	-14 55.5	1.380	2.389	1.4	19.9
5 21	15 7.67	-22 18.7	1.562	2.564	4.1	21.4	5 21	15 8.83	-15 6.9	1.404	2.405	4.8	20.2
5 31	14 57.33	-21 46.4	1.572	2.541	8.6	21.6	5 31	15 0.21	-15 22.2	1.454	2.421	9.3	20.5
6 10	14 48.90	-21 15.0	1.607	2.517	12.8	21.8	6 10	14 53.77	-15 43.5	1.526	2.437	13.3	20.7
6 20	14 43.12	-20 49.3	1.663	2.493	16.5	22.0	6 20	14 50.02	-16 11.7	1.618	2.454	16.7	21.0
70844	1999 <i>VN</i> ₁₀₅		5 12.3 263°53	0°1/12.3	18		428857	2008 <i>UC</i> ₁₁₄		5 12.3 219°49	1°0/12.9	17	
4 11	15 41.19	-19 4.3	1.922	2.795	12.2	20.1	4 11	15 40.32	-22 57.5	1.970	2.836	12.3	21.5
4 21	15 35.36	-18 57.1	1.844	2.787	8.8	19.9	4 21	15 34.66	-22 31.5	1.895	2.834	8.9	21.3
5 1	15 27.55	-18 43.3	1.789	2.779	4.8	19.6	5 1	15 27.13	-21 54.7	1.844	2.831	5.1	21.0
5 11	15 18.56	-18 24.5	1.762	2.771	0.6	19.3	5 11	15 18.53	-21 9.2	1.820	2.829	1.3	20.7
5 21	15 9.36	-18 3.3	1.762	2.764	3.7	19.5	5 21	15 9.82	-20 18.5	1.824	2.826	3.5	20.9
5 31	15 0.96	-17 43.0	1.789	2.756	7.9	19.7	5 31	15 1.98	-19 27.5	1.855	2.823	7.5	21.1
6 10	14 54.25	-17 27.5	1.840	2.748	11.6	19.9	6 10	14 55.82	-18 41.1	1.910	2.821	11.1	21.3
6 20	14 49.76	-17 19.5	1.913	2.739	14.8	20.1	6 20	14 51.83	-18 3.3	1.988	2.818	14.2	21.5
6221	Ducentesima		5 12.3 13°64	1°0/11.7	18	R	47982	2000 <i>WQ</i> ₁₈₇		5 12.3 351°32	7°5/16.8	18	
4 11	15 37.87	-16 49.4	1.985	2.865	11.6	17.4	4 11	15 42.32	-38 14.2	1.943	2.753	14.7	18.6
4 21	15 32.82	-16 25.2	1.919	2.867	8.2	17.2	4 21	15 36.56	-39 0.1	1.866	2.749	12.2	18.4
5 1	15 26.07	-15 56.1	1.878	2.869	4.4	16.9	5 1	15 28.38	-39 26.7	1.811	2.746	9.6	18.2
5 11	15 18.38	-15 24.8	1.863	2.872	1.0	16.7	5 11	15 18.69	-39 30.8	1.780	2.744	7.8	18.1
5 21	15 10.62	-14 54.6	1.875	2.875	3.9	16.9	5 21	15 8.69	-39 12.3	1.774	2.742	7.7	18.1
5 31	15 3.67	-14 29.1	1.914	2.878	7.7	17.2	5 31	14 59.68	-38 34.3	1.792	2.740	9.3	18.2
6 10	14 58.26	-14 11.4	1.978	2.882	11.1	17.4	6 10	14 52.73	-37 43.4	1.835	2.739	11.8	18.3
6 20	14 54.85	-14 3.3	2.062	2.886	14.0	17.6	6 20	14 48.49	-36 46.8	1.898	2.739	14.4	18.5
163723	2003 <i>HA</i> ₃₉		5 12.3 310°31	1°4/12.9	17		501195	2013 <i>TX</i> ₁₂₃		5 12.3 195°91	0°7/12.8	17	
4 11	15 42.57	-21 14.3	1.244	2.131	16.4	19.6	4 11	15 42.23	-21 44.4	2.315	3.173	11.0	23.7
4 21	15 37.34	-21 22.7	1.168	2.117	12.0	19.3	4 21	15 35.80	-21 27.1	2.235	3.170	7.9	23.5
5 1	15 29.05	-21 20.4	1.113	2.103	6.9	19.0	5 1	15 27.68	-21 1.6	2.180	3.167	4.5	23.3
5 11	15 18.77	-21 7.8	1.080	2.089	1.7	18.6	5 11	15 18.60	-20 29.2	2.154	3.163	1.0	23.0
5 21	15 7.95	-20 47.6	1.072	2.076	5.0	18.8	5 21	15 9.39	-19 52.6	2.156	3.158	3.2	23.2
5 31	14 58.29	-20 24.7	1.088	2.063	10.6	19.0	5 31	15 0.93	-19 15.4	2.187	3.153	6.8	23.4
6 10	14 51.16	-20 5.7	1.125	2.051	15.7	19.3	6 10	14 53.94	-18 41.5	2.245	3.146	10.1	23.6
6 20	14 47.38	-19 55.4	1.179	2.039	20.1	19.5	6 20	14 48.91	-18 14.1	2.325	3.140	12.9	23.8
163177	2002 <i>CM</i> ₂₄₂		5 12.3 146°58	3°8/14.7	18		404956	1998 <i>BN</i> ₉		5 12.3 160°11	4°3/14.9	17	
4 11	15 45.67	-29 42.2	1.673	2.520	15.0	20.4	4 11	15 46.19	-30 47.8	1.783	2.622	14.5	21.7
4 21	15 38.77	-29 34.8	1.606	2.528	11.4	20.1	4 21	15 39.11	-30 50.7	1.712	2.628	11.2	21.5
5 1	15 29.44	-29 9.4	1.561	2.535	7.5	19.9	5 1	15 29.64	-30 36.1	1.664	2.633	7.6	21.3
5 11	15 18.78	-28 26.2	1.542	2.541	4.2	19.7	5 11	15 18.83	-30 3.3	1.642	2.638	4.7	21.1
5 21	15 8.07	-27 28.5	1.550	2.547	4.9	19.8	5 21	15 7.92	-29 14.7	1.647	2.642	5.1	21.1
5 31	14 58.61	-26 22.6	1.584	2.553	8.5	20.0	5 31	14 58.19	-28 15.9	1.679	2.645	8.3	21.3
6 10	14 51.40	-25 16.2	1.642	2.558	12.3	20.3	6 10	14 50.62	-27 14.2	1.735	2.648	11.9	21.5
6 20	14 46.97	-24 16.0	1.722	2.563	15.6	20.5	6 20	14 45.77	-26 16.2	1.813	2.650	15.1	21.7
372523	2009 <i>SN</i> ₃₄₂		5 12.3 49°28	3°9/ 9.9	18		338492	2003 <i>KC</i> ₃₁		5 12.3 316°61	6°4/ 7.7	12	C
4 11	15 39.65	-12 13.0	1.433	2.327	14.3	20.3	4 11	15 36.51	- 8 35.9	1.416	2.315	14.0	21.6
4 21	15 34.37	-11 3.4	1.386	2.339	10.1	20.1	4 21	15 32.59	- 6 51.9	1.331	2.284	10.5	21.3
5 1	15 26.97	- 9 51.7	1.361	2.351	6.0	19.9	5 1	15 26.29	- 5 2.7	1.269	2.254	7.2	21.0
5 11	15 18.48	- 8 44.6	1.362	2.364	3.9	19.8	5 11	15 18.46	- 3 17.6	1.232	2.224	6.6	20.9
5 21	15 10.08	- 7 48.4	1.388	2.377	6.7	20.0	5 21	15 10.19	- 1 46.5	1.220	2.195	9.5	21.0
5 31	15 2.89	- 7 8.5	1.438	2.391	10.8	20.3	5 31	15 2.74	- 0 38.1	1.230	2.166	13.7	21.1
6 10	14 57.73	- 6 47.5	1.511	2.404	14.5	20.5	6 10	14 57.21	+ 0 2.5	1.261	2.138	17.9	21.3
6 20	14 55.03	- 6 45.3	1.601	2.418	17.7	20.8	6 20	14 54.30	+ 0 14.5	1.307	2.111	21.6	21.5
214715	Silvanofuso		5 12.3 168°13	3°7/ 9.3	18		18151	Licchelli		5 12.3 149°60	0°4/11.9	18	
4 11	15 37.80	- 8 14.9	2.416	3.292	9.9	20.6	4 11	15 38.70	-17 38.8	3.122	3.982	8.4	20.1
4 21	15 32.46	- 7 22.3	2.351	3.294	7.2	20.5	4 21	15 32.87	-17 18.9	3.054	3.993	5.9	19.9
5 1	15 25.77	- 6 30.8	2.314	3.296	4.7	20.3	5 1	15 25.92	-16 55.1	3.014	4.003	3.2	19.7
5 11	15 18.35	- 5 44.3	2.304	3.298	3.7	20.3	5 11	15 18.39	-16 29.3	3.003	4.013	0.5	19.5
5 21	15 10.90	- 5 6.4	2.322	3.299	5.5	20.4	5 21	15 10.85	-16 3.2	3.023	4.022	2.6	19.7
5 31	15 4.12	- 4 39.7	2.367	3.300	8.1	20.5	5 31	15 3.88	-15 39.2	3.072	4.031	5.4	19.9
6 10	14 58.59	- 4 26.1	2.437	3.301	10.8	20.7	6 10	14 57.96	-15 19.4	3.148	4.039	7.8	20.1
6 20	14 54.69	- 4 25.7	2.528	3.302	13.1	20.9	6 20	14 53.43	-15 5.5	3.248	4.046	10.0	20.2
420736	2012 <i>TM</i>		5 12.3 324°03	0°2/12.6	18		175894	1999 <i>XK</i> ₅₄		5 12.3 150°95	1°0/11.7	18	
4 11	15 32.91	-19 55.2	3.979	4.838	6.7	20.8	4 11	15 43.51	-17 5.8	1.899	2.771	12.4	21.2
4 21	15 28.70	-19 47.4	3.897	4.834	4.8	20.7	4 21	15 36.84	-16 37.7	1.835	2.779	8.8	21.0
5 1	15 23.64	-19 36.0	3.843	4.830	2.6	20.5	5 1	15 28.26	-16 3.8	1.796	2.787	4.7	20.8
5 11	15 18.11	-19 21.9	3.817	4.826	0.4	20.3	5 11	15 18.67	-15 27.1	1.785	2.794	1.0	20.5
5 21	15 12.51	-19 6.4	3.821	4.823	1.9	20.5	5 21	15 9.05	-14 51.1	1.801	2.801	4.1	20.8
5 31	15 7.27	-18 51.0	3.854	4.819	4.2	20.6	5 31	15 0.41	-14 19.9	1.846	2.807	8.1	21.0
6 10	15 2.77	-18 37.4	3.915	4.815	6.2	20.8	6 10	14 53.55	-13 57.0	1.914	2.812	11.7	21.3
6 20	14 59.29	-18 27.0	4.000	4.812	8.0	20.9	6 20	14 48.92	-13 44.7	2.004	2.817	14.8	21.5
73431	2002 <i>LU</i> ₅₅		5 12.3 315°55	7°1/ 6.7	18		159384	1998 <i>HO</i> ₁₄₇		5 12.3 21°03	4°6/ 9.		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
475808	2006 YU ₁₈		5 12.3 178°59	6°7/18.6 18			397029	2005 UN ₁₂		5 12.3 258°13	3°9/14.9 18		
4 11	15 43.52	-44 4.0	2.953	3.704	11.5	21.9	4 11	15 41.42	-31 5.4	2.532	3.359	11.1	21.1
4 21	15 36.77	-44 27.8	2.871	3.705	9.9	21.8	4 21	15 35.38	-31 25.1	2.438	3.345	8.7	21.0
5 1	15 28.24	-44 34.2	2.810	3.706	8.2	21.7	5 1	15 27.56	-31 32.8	2.369	3.331	6.1	20.8
5 11	15 18.68	-44 21.4	2.775	3.706	7.0	21.6	5 11	15 18.64	-31 27.5	2.327	3.317	4.1	20.6
5 21	15 9.00	-43 49.6	2.766	3.706	6.7	21.6	5 21	15 9.44	-31 9.8	2.313	3.303	4.4	20.6
5 31	15 0.11	-43 1.5	2.783	3.706	7.5	21.6	5 31	15 0.87	-30 42.2	2.327	3.288	6.7	20.7
6 10	14 52.79	-42 1.7	2.827	3.705	9.0	21.7	6 10	14 53.71	-30 8.9	2.367	3.273	9.4	20.9
6 20	14 47.52	-40 55.8	2.893	3.704	10.7	21.8	6 20	14 48.52	-29 34.3	2.430	3.258	12.0	21.0
395093	2009 KR ₁₃		5 12.3 295°82	4°0/ 8.8 18			26144	1994 PG ₇		5 12.3 147°86	3°1/14.2 18		
4 11	15 36.92	- 9 56.6	2.151	3.033	10.7	20.9	4 11	15 42.28	-27 27.2	1.936	2.788	13.1	19.7
4 21	15 32.17	- 8 38.1	2.061	3.008	7.8	20.7	4 21	15 36.19	-27 32.5	1.863	2.789	9.8	19.5
5 1	15 25.78	- 7 16.5	1.997	2.982	5.0	20.5	5 1	15 28.03	-27 24.6	1.814	2.791	6.3	19.3
5 11	15 18.40	- 5 57.2	1.961	2.956	4.1	20.4	5 11	15 18.69	-27 3.7	1.791	2.793	3.4	19.1
5 21	15 10.80	- 4 45.8	1.952	2.930	6.2	20.5	5 21	15 9.21	-26 31.8	1.795	2.794	4.2	19.2
5 31	15 3.79	- 3 47.3	1.971	2.905	9.5	20.6	5 31	15 0.67	-25 53.0	1.826	2.795	7.6	19.4
6 10	14 58.11	- 3 5.3	2.013	2.879	12.6	20.8	6 10	14 53.96	-25 12.7	1.882	2.797	11.0	19.6
6 20	14 54.26	- 2 41.1	2.075	2.853	15.4	20.9	6 20	14 49.60	-24 35.9	1.960	2.798	14.1	19.8
476420	2008 DP ₃₂		5 12.3 28°45	7°0/ 6.8 17			500760	2013 BX ₂₀		5 12.3 140°47	3°9/ 9.0 17		
4 11	15 36.69	+ 0 36.2	2.098	2.971	11.3	20.9	4 11	15 38.33	- 4 25.8	2.939	3.804	8.7	22.4
4 21	15 31.82	+ 1 45.7	2.046	2.974	9.0	20.7	4 21	15 32.61	- 3 51.6	2.883	3.816	6.5	22.3
5 1	15 25.48	+ 2 46.7	2.019	2.978	7.3	20.6	5 1	15 25.79	- 3 21.2	2.855	3.828	4.5	22.2
5 11	15 18.36	+ 3 33.8	2.018	2.981	7.1	20.6	5 11	15 18.42	- 2 57.3	2.855	3.839	3.9	22.2
5 21	15 11.23	+ 4 3.1	2.043	2.985	8.6	20.7	5 21	15 11.06	- 2 42.1	2.884	3.850	5.2	22.3
5 31	15 4.85	+ 4 12.5	2.093	2.989	10.9	20.9	5 31	15 4.29	- 2 37.3	2.941	3.860	7.3	22.4
6 10	14 59.84	+ 4 2.1	2.164	2.994	13.2	21.0	6 10	14 58.57	- 2 43.2	3.023	3.870	9.4	22.6
6 20	14 56.61	+ 3 33.9	2.254	2.998	15.3	21.2	6 20	14 54.25	- 2 59.6	3.127	3.879	11.3	22.7
479717	2014 DJ ₁₂₉		5 12.3 355°71	7°0/16.4 16			271797	2004 TJ ₆₁		5 12.3 262°49	6°0/ 7.5 18		
4 11	15 44.32	-37 37.1	2.090	2.896	13.9	21.3	4 11	15 39.27	- 4 49.7	1.944	2.823	11.8	20.9
4 21	15 37.87	-38 28.3	2.014	2.895	11.5	21.1	4 21	15 33.93	- 3 24.2	1.867	2.806	8.9	20.7
5 1	15 29.07	-39 1.7	1.960	2.894	9.1	21.0	5 1	15 26.78	- 2 0.6	1.814	2.788	6.6	20.5
5 11	15 18.81	-39 14.4	1.930	2.894	7.3	20.9	5 11	15 18.56	- 0 45.3	1.789	2.770	6.2	20.5
5 21	15 8.23	-39 5.7	1.927	2.894	7.2	20.9	5 21	15 10.13	+ 0 15.6	1.790	2.751	8.2	20.5
5 31	14 58.58	-38 38.6	1.949	2.894	8.9	21.0	5 31	15 2.41	+ 0 57.4	1.817	2.732	11.2	20.7
6 10	14 50.90	-37 58.7	1.995	2.894	11.3	21.1	6 10	14 56.21	+ 1 18.0	1.866	2.713	14.3	20.8
6 20	14 45.81	-37 12.7	2.063	2.894	13.8	21.3	6 20	14 52.04	+ 1 17.6	1.934	2.694	17.0	21.0
276502	2003 QW ₆₀		5 12.3 278°18	5°6/ 8.5 17			243621	1999 RN ₁₅		5 12.3 213°12	8°7/20.0 18		
4 11	15 39.18	- 5 17.1	1.899	2.780	11.9	20.5	4 11	15 49.24	-52 8.2	3.157	3.839	12.1	21.3
4 21	15 33.90	- 4 16.7	1.822	2.763	9.0	20.3	4 21	15 41.24	-53 2.5	3.067	3.831	10.9	21.2
5 1	15 26.77	- 3 19.1	1.768	2.746	6.4	20.1	5 1	15 30.90	-53 37.8	2.998	3.824	9.8	21.1
5 11	15 18.53	- 2 29.9	1.742	2.728	5.7	20.0	5 11	15 19.06	-53 50.7	2.952	3.815	9.0	21.1
5 21	15 10.07	- 1 54.0	1.741	2.711	7.7	20.1	5 21	15 6.82	-53 39.8	2.930	3.807	8.7	21.0
5 31	15 2.32	- 1 35.3	1.766	2.693	10.8	20.3	5 31	14 55.39	-53 6.5	2.932	3.797	9.1	21.0
6 10	14 56.12	- 1 35.1	1.814	2.675	14.0	20.4	6 10	14 45.79	-52 15.3	2.959	3.788	10.0	21.1
6 20	14 52.00	- 1 53.2	1.880	2.657	16.8	20.6	6 20	14 38.71	-51 12.1	3.007	3.778	11.3	21.2
443664	2015 FX ₃₁₅		5 12.3 194°29	3°1/10.5 17			23021	1999 WR ₃		5 12.3 229°92	1°4/11.4 18		
4 11	15 40.74	-10 16.8	1.972	2.851	11.7	20.4	4 11	15 40.51	-15 20.1	2.140	3.014	11.1	18.7
4 21	15 34.87	- 9 53.6	1.905	2.851	8.4	20.2	4 21	15 34.70	-14 54.6	2.061	3.006	7.9	18.5
5 1	15 27.22	- 9 31.0	1.863	2.850	5.0	19.9	5 1	15 27.16	-14 25.2	2.008	2.998	4.3	18.3
5 11	15 18.58	- 9 12.3	1.847	2.850	3.1	19.8	5 11	15 18.61	-13 54.4	1.982	2.990	1.4	18.1
5 21	15 9.83	- 9 0.4	1.859	2.849	5.3	20.0	5 21	15 9.91	-13 25.4	1.984	2.981	4.1	18.2
5 31	15 1.91	- 8 57.9	1.898	2.848	8.7	20.2	5 31	15 1.92	-13 1.6	2.014	2.972	7.7	18.4
6 10	14 55.55	- 9 6.4	1.961	2.847	12.0	20.4	6 10	14 55.41	-12 45.9	2.069	2.963	11.1	18.6
6 20	14 51.26	- 9 26.1	2.045	2.846	14.9	20.6	6 20	14 50.87	-12 40.0	2.145	2.954	14.0	18.8
397100	2005 UD ₄₆₇		5 12.3 259°14	1°6/13.7 16			98366	2000 TJ ₁₁		5 12.3 118°16	0°4/12.5 18		
4 11	15 38.20	-26 9.4	2.437	3.289	10.7	20.9	4 11	15 45.96	-20 10.7	1.669	2.539	13.9	20.4
4 21	15 32.93	-25 31.9	2.351	3.280	7.9	20.7	4 21	15 38.77	-20 0.5	1.613	2.555	9.9	20.2
5 1	15 26.12	-24 42.4	2.290	3.272	4.8	20.5	5 1	15 29.39	-19 41.7	1.581	2.570	5.5	20.0
5 11	15 18.45	-23 42.9	2.257	3.263	1.9	20.3	5 11	15 18.87	-19 16.2	1.576	2.585	0.8	19.7
5 21	15 10.68	-22 36.6	2.253	3.254	3.1	20.3	5 21	15 8.38	-18 47.3	1.598	2.600	4.0	20.0
5 31	15 3.62	-21 28.0	2.277	3.245	6.3	20.5	5 31	14 59.11	-18 19.4	1.647	2.614	8.4	20.3
6 10	14 57.92	-20 22.1	2.327	3.237	9.4	20.7	6 10	14 51.94	-17 56.8	1.720	2.627	12.3	20.5
6 20	14 54.02	-19 23.1	2.401	3.228	12.2	20.9	6 20	14 47.34	-17 42.9	1.814	2.640	15.5	20.8
499439	2010 CW ₂₄₄		5 12.3 229°15	1°6/13.3 17			64543	2001 VK ₁₂₀		5 12.3 333°22	1°2/11.9 17		
4 11	15 43.47	-23 52.4	2.167	3.021	11.8	22.7	4 11	15 41.43	-15 54.5	1.106	2.007	16.9	18.0
4 21	15 36.93	-23 49.8	2.077	3.009	8.7	22.5	4 21	15 36.66	-15 57.9	1.038	1.995	12.2	17.7
5 1	15 28.43	-23 37.2	2.013	2.996	5.2	22.2	5 1	15 28.75	-15 56.8	0.990	1.984	6.7	17.4
5 11	15 18.74	-23 15.3	1.976	2.982	1.9	22.0	5 11	15 18.83	-15 53.6	0.965	1.974	1.3	17.0
5 21	15 8.77	-22 46.1	1.967	2.968	3.5	22.1	5 21	15 8.43	-15 51.6	0.962	1.965	5.7	17.2
5 31	14 59.55	-22 12.9	1.987	2.954	7.2	22.3	5 31	14 59.28	-15 54.8	0.982	1.956	11.6	17.5
6 10	14 51.92	-21 40.3	2.032	2.938	10.8	22.5	6 10	14 52.78	-16 7.3	1.021	1.949	16.8	17.8
6 20	14 46.45	-21 12.4	2.100	2.922	13.8	22.6	6 20	14 49.72	-16 31.2	1.078	1.943	21.3	18.0
172493	2003 SB ₁₅₁		5 12.3 262°55	1°9/11.5 18			377867	2006 BE ₂₈₄		5 12.3 287°92	1°8/14.5 18		
4 11	15 44.												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
290558	2005 <i>UE</i> ₁₀₇		5 12.3 128°11	1°0/11.7 18			401783	2014 <i>FA</i> ₁₃		5 12.3 41°47	3°0/10.4 17		
4 11	15 39.34	-15 14.8	2.495	3.365	9.9	20.6	4 11	15 38.70	-10 37.5	2.011	2.892	11.3	20.4
4 21	15 33.61	-15 8.6	2.427	3.370	7.0	20.4	4 21	15 33.37	-10 7.8	1.951	2.898	8.1	20.2
5 1	15 26.46	-15 0.0	2.384	3.374	3.8	20.2	5 1	15 26.40	-9 38.5	1.915	2.903	4.8	20.0
5 11	15 18.53	-14 50.5	2.369	3.378	1.0	20.0	5 11	15 18.55	-9 12.9	1.907	2.909	3.0	19.9
5 21	15 10.53	-14 42.1	2.383	3.382	3.4	20.2	5 21	15 10.67	-8 54.2	1.926	2.915	5.2	20.1
5 31	15 3.19	-14 37.0	2.426	3.386	6.5	20.4	5 31	15 3.60	-8 45.1	1.971	2.922	8.5	20.3
6 10	14 57.11	-14 36.9	2.494	3.389	9.5	20.6	6 10	14 58.03	-8 47.2	2.041	2.928	11.6	20.5
6 20	14 52.72	-14 43.3	2.586	3.393	12.0	20.7	6 20	14 54.40	-9 0.8	2.131	2.935	14.3	20.7
176590	2002 <i>CB</i> ₁₆₂		5 12.3 170°41	6°3/17.3 18			176598	2002 <i>CJ</i> ₂₈₁		5 12.3 227°93	2°5/14.4 18		
4 11	15 43.36	-39 56.9	2.617	3.399	12.1	20.0	4 11	15 39.99	-28 2.9	2.727	3.564	10.1	21.1
4 21	15 36.79	-40 26.9	2.538	3.401	10.1	19.8	4 21	15 34.17	-27 58.3	2.636	3.555	7.7	20.9
5 1	15 28.33	-40 40.1	2.481	3.402	8.1	19.7	5 1	15 26.84	-27 43.1	2.571	3.544	5.0	20.7
5 11	15 18.76	-40 34.6	2.450	3.404	6.6	19.6	5 11	15 18.62	-27 17.7	2.534	3.534	2.7	20.5
5 21	15 9.02	-40 10.7	2.445	3.405	6.4	19.6	5 21	15 10.25	-26 43.6	2.525	3.523	3.3	20.6
5 31	15 0.08	-39 31.1	2.467	3.406	7.6	19.7	5 31	15 2.48	-26 3.9	2.546	3.512	5.9	20.7
6 10	14 52.78	-38 40.9	2.515	3.406	9.5	19.8	6 10	14 55.98	-25 22.5	2.593	3.500	8.7	20.9
6 20	14 47.62	-37 45.6	2.586	3.407	11.6	19.9	6 20	14 51.21	-24 43.0	2.664	3.488	11.2	21.0
262908	2007 <i>CU</i> ₅₀		5 12.3 9°36	8°2/ 6.9 17			31266	Tournefort		5 12.3 17°77	0°9/11.8 18		
4 11	15 37.62	- 3 0.3	1.405	2.299	14.5	19.6	4 11	15 39.13	-16 29.4	2.002	2.879	11.6	18.3
4 21	15 33.06	- 1 18.8	1.356	2.300	11.2	19.4	4 21	15 33.77	-16 12.8	1.934	2.881	8.2	18.1
5 1	15 26.37	+ 0 15.8	1.329	2.302	8.7	19.2	5 1	15 26.67	-15 51.9	1.891	2.882	4.4	17.9
5 11	15 18.53	+ 1 34.0	1.327	2.304	8.4	19.2	5 11	15 18.60	-15 29.0	1.875	2.884	1.0	17.6
5 21	15 10.66	+ 2 28.7	1.348	2.306	10.6	19.3	5 21	15 10.45	-15 7.1	1.887	2.886	3.9	17.8
5 31	15 3.88	+ 2 55.6	1.392	2.309	13.8	19.5	5 31	15 3.10	-14 49.2	1.925	2.889	7.7	18.1
6 10	14 59.06	+ 2 54.5	1.455	2.313	17.0	19.7	6 10	14 57.30	-14 38.4	1.988	2.891	11.1	18.3
6 20	14 56.67	+ 2 28.4	1.535	2.317	19.8	19.9	6 20	14 53.52	-14 36.3	2.072	2.894	14.0	18.5
466593	2014 <i>UT</i> ₁₂₄		5 12.3 136°81	2°9/14.2 17			188896	2006 <i>XX</i> ₆₈		5 12.3 175°13	2°2/10.6 17		
4 11	15 45.36	-27 46.4	1.917	2.763	13.4	22.0	4 11	15 41.22	-15 5.1	2.082	2.955	11.4	20.4
4 21	15 38.27	-27 39.0	1.852	2.776	10.0	21.8	4 21	15 35.12	-14 0.0	2.013	2.958	8.0	20.2
5 1	15 29.12	-27 17.3	1.811	2.788	6.3	21.6	5 1	15 27.35	-12 49.6	1.970	2.960	4.5	20.0
5 11	15 18.85	-26 41.9	1.797	2.799	3.2	21.4	5 11	15 18.69	-11 38.4	1.956	2.962	2.2	19.9
5 21	15 8.59	-25 55.6	1.811	2.810	4.1	21.5	5 21	15 10.00	-10 31.5	1.970	2.962	4.7	20.0
5 31	14 59.44	-25 3.6	1.852	2.820	7.6	21.7	5 31	15 2.16	-9 33.8	2.012	2.963	8.3	20.3
6 10	14 52.24	-24 11.8	1.919	2.830	11.1	22.0	6 10	14 55.87	-8 48.8	2.079	2.962	11.6	20.5
6 20	14 47.48	-23 25.3	2.008	2.838	14.1	22.2	6 20	14 51.56	-8 18.6	2.168	2.962	14.4	20.6
250392	2003 <i>UZ</i> ₁₅₂		5 12.3 233°06	0°9/11.8 17			14172	Amanolivere		5 12.3 265°61	1°7/13.3 18		
4 11	15 43.27	-17 36.7	1.781	2.655	12.9	20.9	4 11	15 43.26	-23 34.3	1.721	2.587	13.7	18.6
4 21	15 37.01	-17 7.3	1.699	2.644	9.3	20.7	4 21	15 37.26	-23 30.3	1.633	2.570	10.1	18.4
5 1	15 28.57	-16 30.5	1.642	2.633	5.1	20.4	5 1	15 28.84	-23 14.7	1.568	2.554	6.0	18.1
5 11	15 18.81	-15 49.3	1.612	2.621	1.0	20.1	5 11	15 18.90	-22 47.9	1.529	2.537	2.1	17.8
5 21	15 8.79	-15 7.6	1.609	2.609	4.4	20.3	5 21	15 8.56	-22 12.6	1.517	2.520	4.1	17.9
5 31	14 59.66	-14 30.2	1.633	2.596	8.8	20.5	5 31	14 59.09	-21 33.2	1.532	2.502	8.6	18.1
6 10	14 52.35	-14 1.6	1.681	2.582	12.9	20.7	6 10	14 51.57	-20 55.6	1.570	2.484	12.8	18.3
6 20	14 47.47	-13 44.6	1.750	2.568	16.3	20.9	6 20	14 46.67	-20 24.8	1.629	2.467	16.5	18.5
391690	2008 <i>AJ</i> ₉₄		5 12.3 14°07	0°1/12.3 17			501220	2013 <i>UB</i> ₆		5 12.4 166°65	1°6/13.4 18		
4 11	15 38.84	-19 2.4	1.898	2.775	12.1	20.9	4 11	15 43.75	-23 38.1	2.269	3.120	11.4	21.8
4 21	15 33.65	-18 49.7	1.832	2.777	8.7	20.7	4 21	15 36.96	-23 42.7	2.195	3.125	8.3	21.6
5 1	15 26.62	-18 30.4	1.789	2.780	4.7	20.5	5 1	15 28.40	-23 38.5	2.147	3.129	4.9	21.4
5 11	15 18.57	-18 6.6	1.773	2.783	0.6	20.2	5 11	15 18.83	-23 25.9	2.126	3.133	1.9	21.1
5 21	15 10.42	-17 41.2	1.784	2.786	3.7	20.4	5 21	15 9.16	-23 6.6	2.135	3.136	3.3	21.3
5 31	15 3.14	-17 17.9	1.821	2.790	7.6	20.7	5 31	15 0.28	-22 43.7	2.172	3.138	6.7	21.5
6 10	14 57.50	-17 0.1	1.883	2.794	11.2	20.9	6 10	14 52.98	-22 21.1	2.235	3.140	10.0	21.7
6 20	14 53.98	-16 50.3	1.966	2.798	14.3	21.1	6 20	14 47.73	-22 2.0	2.321	3.141	12.7	21.9
389821	2011 <i>WX</i> ₁₄₉		5 12.3 281°34	4°0/14.8 18			175895	1999 <i>XJ</i> ₁₂₂		5 12.4 162°04	4°3/15.3 18		
4 11	15 41.62	-30 11.4	2.239	3.076	12.1	21.0	4 11	15 45.46	-32 3.8	1.948	2.779	13.8	20.8
4 21	15 35.70	-30 35.3	2.152	3.065	9.4	20.8	4 21	15 38.48	-31 57.8	1.875	2.785	10.7	20.6
5 1	15 27.83	-30 46.8	2.088	3.054	6.5	20.6	5 1	15 29.31	-31 34.0	1.825	2.790	7.4	20.4
5 11	15 18.73	-30 44.6	2.051	3.043	4.3	20.5	5 11	15 18.94	-30 52.3	1.802	2.795	4.7	20.2
5 21	15 9.35	-30 29.4	2.041	3.033	4.7	20.5	5 21	15 8.51	-29 55.1	1.805	2.799	5.0	20.2
5 31	15 0.68	-30 4.0	2.058	3.022	7.3	20.6	5 31	14 59.18	-28 47.9	1.836	2.802	7.8	20.4
6 10	14 53.60	-29 32.9	2.101	3.011	10.3	20.8	6 10	14 51.85	-27 37.8	1.893	2.805	11.1	20.6
6 20	14 48.69	-29 0.9	2.166	3.000	13.1	20.9	6 20	14 47.05	-26 31.5	1.972	2.807	14.2	20.8
520272	2014 <i>ED</i> ₁₆₃		5 12.3 327°81	1°4/13.4 17			463894	2014 <i>UA</i> ₉₉		5 12.4 323°29	6°0/ 9.7 17		
4 11	15 39.04	-24 18.4	2.087	2.949	11.8	21.4	4 11	15 40.73	- 7 9.1	1.225	2.124	15.8	20.2
4 21	15 33.72	-23 53.0	2.012	2.948	8.6	21.2	4 21	15 35.81	- 6 26.3	1.159	2.112	11.7	20.0
5 1	15 26.64	-23 16.4	1.962	2.947	5.1	20.9	5 1	15 28.16	- 5 47.4	1.113	2.100	7.7	19.7
5 11	15 18.58	-22 30.5	1.938	2.946	1.7	20.7	5 11	15 18.83	- 5 19.0	1.091	2.088	6.1	19.6
5 21	15 10.43	-21 38.7	1.942	2.945	3.3	20.8	5 21	15 9.17	- 5 6.9	1.092	2.077	8.8	19.7
5 31	15 3.11	-20 45.4	1.974	2.944	7.0	21.0	5 31	15 0.63	- 5 15.2	1.115	2.067	13.2	19.9
6 10	14 57.35	-19 55.7	2.030	2.943	10.5	21.2	6 10	14 54.41	- 5 44.7	1.159	2.058	17.5	20.1
6 20	14 53.64	-19 13.5	2.109	2.942	13.4	21.4	6 20	14 51.18	- 6 33.8	1.219	2.049	21.3	20.3
94765	2001 <i>XQ</i> ₁₀₀		5 12.3 166°79	3°4/14.4 18			434526	2005 <i>SZ</i> ₂₁₉		5 12.4 225°28			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
123198	2000 <i>UF</i> ₂₀		5 12.4 83°95	1.8°/11.1	18		141274	2001 <i>YY</i> ₄₂		5 12.4 359°09	0.2°/12.3	17	
4 11	15 41.90	-15 48.2	1.833	2.710	12.5	20.1	4 11	15 38.78	-18 39.8	1.852	2.730	12.3	19.7
4 21	15 35.60	-14 57.9	1.788	2.735	8.8	19.9	4 21	15 33.71	-18 28.2	1.782	2.729	8.8	19.4
5 1	15 27.57	-14 3.2	1.768	2.759	4.8	19.7	5 1	15 26.73	-18 10.3	1.737	2.728	4.8	19.2
5 11	15 18.74	-13 8.4	1.775	2.783	1.8	19.6	5 11	15 18.68	-17 48.1	1.718	2.727	0.6	18.9
5 21	15 10.07	-12 18.0	1.810	2.807	4.6	19.8	5 21	15 10.49	-17 24.5	1.725	2.727	3.8	19.1
5 31	15 2.48	-11 36.5	1.873	2.830	8.3	20.1	5 31	15 3.15	-17 3.2	1.759	2.728	7.8	19.4
6 10	14 56.66	-11 6.8	1.959	2.853	11.7	20.3	6 10	14 57.48	-16 47.7	1.817	2.729	11.5	19.6
6 20	14 52.99	-10 50.4	2.066	2.875	14.5	20.6	6 20	14 53.99	-16 40.4	1.896	2.730	14.7	19.8
471913	2013 <i>CM</i> ₂₀₀		5 12.4 150°99	1.7°/13.8	17		268936	2007 <i>DV</i> ₂₁		5 12.4 123°38	1.0°/12.9	17	
4 11	15 40.07	-25 14.4	2.862	3.706	9.5	22.6	4 11	15 44.14	-22 10.7	2.009	2.869	12.3	21.6
4 21	15 34.07	-25 14.9	2.789	3.713	7.0	22.4	4 21	15 37.28	-22 1.7	1.949	2.885	8.9	21.5
5 1	15 26.73	-25 7.3	2.741	3.720	4.3	22.2	5 1	15 28.57	-21 43.7	1.914	2.900	5.0	21.2
5 11	15 18.65	-24 52.2	2.723	3.727	1.9	22.1	5 11	15 18.90	-21 18.1	1.906	2.914	1.3	21.0
5 21	15 10.52	-24 31.0	2.733	3.733	2.8	22.1	5 21	15 9.25	-20 47.6	1.926	2.928	3.4	21.2
5 31	15 3.01	-24 6.2	2.773	3.739	5.5	22.3	5 31	15 0.58	-20 16.1	1.974	2.941	7.2	21.4
6 10	14 56.70	-23 40.9	2.840	3.744	8.1	22.5	6 10	14 53.68	-19 47.8	2.048	2.954	10.7	21.7
6 20	14 52.01	-23 18.0	2.930	3.750	10.4	22.7	6 20	14 48.99	-19 25.9	2.144	2.967	13.6	21.9
503068	2015 <i>FW</i> ₂₁₂		5 12.4 105°65	2.9°/10.7	17		11565	1993 <i>FD</i> ₅₁		5 12.4 232°38	0.2°/12.5	18	
4 11	15 42.34	-10 1.5	2.101	2.974	11.3	21.4	4 11	15 41.57	-20 12.3	2.321	3.183	10.8	19.7
4 21	15 35.82	-9 43.7	2.048	2.991	8.1	21.2	4 21	15 35.47	-19 52.3	2.232	3.170	7.8	19.5
5 1	15 27.70	-9 27.0	2.021	3.007	4.8	21.0	5 1	15 27.65	-19 24.9	2.168	3.156	4.3	19.3
5 11	15 18.77	-9 14.3	2.021	3.023	2.9	20.9	5 11	15 18.81	-18 51.7	2.132	3.142	0.6	18.9
5 21	15 9.88	-9 7.9	2.050	3.039	4.9	21.1	5 21	15 9.76	-18 15.5	2.125	3.127	3.3	19.1
5 31	15 1.87	-9 9.8	2.106	3.055	8.1	21.3	5 31	15 1.36	-17 39.7	2.147	3.112	6.9	19.3
6 10	14 55.41	-9 21.2	2.188	3.070	11.1	21.5	6 10	14 54.38	-17 8.2	2.195	3.095	10.3	19.5
6 20	14 50.92	-9 42.2	2.290	3.084	13.7	21.7	6 20	14 49.31	-16 43.9	2.265	3.079	13.2	19.7
408868	2001 <i>SY</i> ₃₂₄		5 12.4 274°37	1.4°/12.9	16		356500	2011 <i>SO</i> ₃₁		5 12.4 197°35	3.3°/15.0	18	
4 11	15 46.15	-21 21.3	1.461	2.335	15.3	21.6	4 11	15 41.55	-30 58.8	2.977	3.797	9.8	22.1
4 21	15 39.84	-21 32.4	1.369	2.312	11.3	21.3	4 21	15 35.23	-31 10.2	2.890	3.794	7.6	21.9
5 1	15 30.54	-21 34.1	1.299	2.288	6.5	21.0	5 1	15 27.43	-31 10.8	2.828	3.790	5.3	21.8
5 11	15 19.17	-21 25.9	1.255	2.263	1.7	20.6	5 11	15 18.78	-31 0.2	2.795	3.785	3.5	21.7
5 21	15 7.08	-21 9.7	1.236	2.238	4.7	20.7	5 21	15 9.98	-30 39.2	2.791	3.780	3.7	21.7
5 31	14 55.86	-20 49.4	1.242	2.213	10.1	20.9	5 31	15 1.76	-30 10.3	2.815	3.775	5.8	21.8
6 10	14 46.91	-20 30.9	1.271	2.188	15.1	21.2	6 10	14 54.78	-29 37.0	2.867	3.769	8.1	21.9
6 20	14 41.12	-20 19.5	1.319	2.162	19.4	21.4	6 20	14 49.49	-29 2.9	2.943	3.763	10.4	22.1
430930	2005 <i>TP</i> ₁₉₄		5 12.4 115°11	2.0°/10.9	17		480662	2015 <i>OA</i> ₄₀		5 12.4 214°98	1.3°/13.5	18	
4 11	15 40.23	-17 0.9	1.748	2.629	12.8	21.2	4 11	15 37.52	-24 7.8	2.981	3.831	9.0	22.0
4 21	15 34.65	-15 44.1	1.685	2.634	9.0	20.9	4 21	15 32.28	-23 56.9	2.898	3.827	6.6	21.8
5 1	15 27.18	-14 19.3	1.647	2.639	4.9	20.7	5 1	15 25.78	-23 38.6	2.841	3.823	3.9	21.6
5 11	15 18.71	-12 52.2	1.636	2.643	2.0	20.5	5 11	15 18.58	-23 13.6	2.812	3.818	1.5	21.5
5 21	15 10.26	-11 29.2	1.653	2.648	5.0	20.7	5 21	15 11.28	-22 44.0	2.812	3.813	2.6	21.5
5 31	15 2.80	-10 17.0	1.696	2.653	9.1	21.0	5 31	15 4.51	-22 12.1	2.841	3.808	5.3	21.7
6 10	14 57.14	-9 20.1	1.764	2.657	12.8	21.2	6 10	14 58.83	-21 41.0	2.898	3.803	7.9	21.9
6 20	14 53.71	-8 40.8	1.851	2.662	15.9	21.4	6 20	14 54.63	-21 13.4	2.978	3.798	10.2	22.0
45939	2001 <i>AE</i> ₇		5 12.4 60°65	5.4°/9.6	18		184242	2004 <i>RL</i> ₂₄₄		5 12.4 4°64	2.5°/10.6	17	
4 11	15 41.86	-7 55.8	1.395	2.286	14.7	19.0	4 11	15 37.28	-12 29.4	2.081	2.963	11.0	20.4
4 21	15 36.13	-7 2.1	1.343	2.292	10.8	18.8	4 21	15 32.40	-11 51.9	2.015	2.963	7.8	20.2
5 1	15 28.10	-6 11.2	1.313	2.298	7.0	18.6	5 1	15 25.93	-11 12.7	1.974	2.963	4.5	20.0
5 11	15 18.83	-5 29.5	1.308	2.304	5.4	18.5	5 11	15 18.60	-10 35.4	1.960	2.964	2.5	19.9
5 21	15 9.55	-5 2.4	1.328	2.311	7.9	18.7	5 21	15 11.19	-10 3.5	1.973	2.965	4.8	20.0
5 31	15 1.46	-4 53.4	1.371	2.317	11.8	18.9	5 31	15 4.53	-9 40.3	2.013	2.966	8.1	20.2
6 10	14 55.51	-5 3.8	1.436	2.323	15.5	19.2	6 10	14 59.29	-9 28.1	2.077	2.968	11.3	20.4
6 20	14 52.19	-5 32.1	1.519	2.330	18.7	19.4	6 20	14 55.91	-9 27.9	2.162	2.970	14.0	20.6
213341	2001 <i>SR</i> ₂₄₅		5 12.4 236°86	2.5°/13.9	18		380647	2004 <i>XC</i> ₁₆₃		5 12.4 213°71	1.9°/11.0	18	
4 11	15 42.51	-25 53.1	2.431	3.276	11.0	20.8	4 11	15 42.25	-12 5.9	2.651	3.515	9.5	21.4
4 21	15 36.17	-26 13.3	2.343	3.266	8.2	20.6	4 21	15 35.71	-11 51.2	2.566	3.506	6.8	21.2
5 1	15 28.05	-26 24.5	2.280	3.257	5.2	20.4	5 1	15 27.70	-11 35.6	2.508	3.495	3.9	21.0
5 11	15 18.84	-26 26.3	2.245	3.247	2.7	20.2	5 11	15 18.82	-11 21.2	2.479	3.484	1.9	20.8
5 21	15 9.37	-26 19.4	2.238	3.236	3.6	20.2	5 21	15 9.78	-11 9.9	2.480	3.473	3.9	20.9
5 31	15 0.53	-26 6.1	2.260	3.226	6.6	20.4	5 31	15 1.31	-11 4.1	2.511	3.460	6.9	21.1
6 10	14 53.12	-25 49.8	2.309	3.215	9.6	20.6	6 10	14 54.05	-11 5.2	2.568	3.447	9.8	21.3
6 20	14 47.67	-25 34.3	2.380	3.204	12.4	20.7	6 20	14 48.45	-11 14.4	2.647	3.433	12.3	21.4
477724	2010 <i>SC</i> ₂₂		5 12.4 252°62	2.9°/14.4	18		38141	1999 <i>JN</i> ₅₉		5 12.4 322°48	4.7°/10.0	18	
4 11	15 40.71	-28 0.0	2.552	3.391	10.7	21.2	4 11	15 39.52	-10 57.4	1.208	2.110	15.7	18.0
4 21	15 34.84	-28 14.4	2.463	3.381	8.1	21.0	4 21	15 35.02	-10 3.4	1.140	2.097	11.4	17.7
5 1	15 27.30	-28 18.5	2.399	3.371	5.3	20.8	5 1	15 27.78	-9 7.0	1.093	2.083	7.0	17.4
5 11	15 18.75	-28 12.2	2.362	3.361	3.1	20.6	5 11	15 18.85	-8 15.3	1.069	2.071	4.7	17.2
5 21	15 9.97	-27 56.3	2.354	3.350	3.7	20.6	5 21	15 9.58	-7 35.2	1.068	2.059	7.9	17.4
5 31	15 1.81	-27 33.3	2.374	3.339	6.3	20.8	5 31	15 1.44	-7 12.9	1.090	2.048	12.7	17.6
6 10	14 55.00	-27 7.0	2.420	3.328	9.2	20.9	6 10	14 55.62	-7 11.6	1.131	2.038	17.3	17.8
6 20	14 50.05	-26 41.0	2.490	3.317	11.8	21.1	6 20	14 52.81	-7 31.4	1.189	2.028	21.3	18.1
349435	2008 <i>AJ</i> ₁₃₅		5 12.4 14°34	4.0°/14.3	17		494382	2016 <i>UU</i> ₄₅		5 12.4 26			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
178314	1994 <i>TD</i> ₉		5 12.4 324°23	1°3/11.7	17		395553	2011 <i>UC</i> ₁₉₄		5 12.4 177°96	3°5/9.6	18	
4 11	15 39.11	-17 25.5	1.308	2.203	15.3	19.8	4 11	15 38.66	-6 9.5	2.834	3.701	8.9	21.5
4 21	15 34.67	-16 51.9	1.233	2.188	11.0	19.5	4 21	15 33.01	-5 42.4	2.766	3.703	6.5	21.3
5 1	15 27.58	-16 9.3	1.180	2.173	6.0	19.2	5 1	15 26.17	-5 18.2	2.725	3.704	4.4	21.2
5 11	15 18.83	-15 21.6	1.150	2.160	1.4	18.9	5 11	15 18.68	-4 59.4	2.713	3.704	3.5	21.1
5 21	15 9.72	-14 34.5	1.145	2.147	5.4	19.1	5 21	15 11.14	-4 48.2	2.730	3.705	4.9	21.2
5 31	15 1.68	-13 54.5	1.164	2.134	10.7	19.3	5 31	15 4.15	-4 46.3	2.775	3.704	7.2	21.4
6 10	14 55.86	-13 27.2	1.203	2.123	15.5	19.6	6 10	14 58.24	-4 54.5	2.845	3.704	9.6	21.5
6 20	14 52.97	-13 15.8	1.261	2.112	19.6	19.8	6 20	14 53.78	-5 12.7	2.937	3.703	11.6	21.7
173100	2007 <i>TF</i> ₂₆₃		5 12.4 257°68	1°2/11.6	17		213234	2000 <i>WD</i> ₁₃₉		5 12.4 281°06	1°0/11.8	18	
4 11	15 42.22	-18 4.5	1.538	2.420	14.2	20.5	4 11	15 40.79	-15 5.0	2.254	3.125	10.7	19.6
4 21	15 36.55	-17 17.6	1.460	2.408	10.1	20.2	4 21	15 34.98	-15 6.1	2.166	3.110	7.7	19.4
5 1	15 28.47	-16 20.8	1.405	2.397	5.5	19.9	5 1	15 27.45	-15 5.0	2.104	3.094	4.2	19.1
5 11	15 18.93	-15 18.2	1.376	2.385	1.3	19.6	5 11	15 18.85	-15 3.1	2.070	3.079	1.1	18.9
5 21	15 9.13	-14 15.5	1.373	2.373	5.0	19.8	5 21	15 9.99	-15 2.2	2.064	3.063	3.7	19.1
5 31	15 0.33	-13 19.4	1.396	2.361	9.9	20.0	5 31	15 1.73	-15 4.3	2.086	3.047	7.3	19.2
6 10	14 53.58	-12 35.6	1.442	2.348	14.3	20.3	6 10	14 54.85	-15 11.6	2.133	3.032	10.7	19.4
6 20	14 49.51	-12 7.6	1.507	2.336	18.0	20.5	6 20	14 49.87	-15 25.6	2.203	3.016	13.6	19.6
64936	2001 <i>YS</i> ₁₁₄		5 12.4 330°47	1°2/11.7	17		37389	2001 <i>WR</i> ₃₈		5 12.4 104°09	3°2/10.4	17	
4 11	15 40.33	-14 44.9	2.052	2.928	11.4	19.1	4 11	15 41.64	-11 30.1	1.821	2.701	12.4	19.4
4 21	15 34.68	-14 45.8	1.978	2.923	8.1	18.9	4 21	15 35.55	-10 44.8	1.768	2.715	8.8	19.2
5 1	15 27.26	-14 44.6	1.928	2.919	4.4	18.6	5 1	15 27.67	-9 58.8	1.740	2.728	5.2	19.0
5 11	15 18.79	-14 43.0	1.906	2.915	1.2	18.4	5 11	15 18.86	-9 16.3	1.739	2.741	3.2	18.9
5 21	15 10.14	-14 42.9	1.911	2.910	3.9	18.6	5 21	15 10.11	-8 41.6	1.765	2.754	5.6	19.1
5 31	15 2.23	-14 46.5	1.944	2.907	7.7	18.8	5 31	15 2.34	-8 18.2	1.817	2.767	9.1	19.3
6 10	14 55.84	-14 55.9	2.001	2.903	11.1	19.0	6 10	14 56.31	-8 8.2	1.894	2.779	12.4	19.5
6 20	14 51.47	-15 12.4	2.081	2.900	14.1	19.2	6 20	14 52.44	-8 11.9	1.990	2.791	15.2	19.8
72505	2001 <i>DP</i> ₆₉		5 12.4 93°59	1°1/11.8	18		103139	1999 <i>XS</i> ₂₀₅		5 12.4 172°59	0°8/12.9	18	
4 11	15 44.07	-17 35.3	1.552	2.431	14.2	19.9	4 11	15 42.23	-21 28.8	2.608	3.462	10.0	20.7
4 21	15 37.50	-17 0.9	1.502	2.449	10.0	19.7	4 21	15 35.72	-21 25.3	2.533	3.465	7.2	20.5
5 1	15 28.77	-16 19.5	1.475	2.467	5.4	19.4	5 1	15 27.72	-21 15.1	2.483	3.468	4.1	20.3
5 11	15 18.96	-15 34.9	1.475	2.484	1.1	19.2	5 11	15 18.88	-20 59.2	2.462	3.471	1.0	20.1
5 21	15 9.25	-14 52.0	1.501	2.501	4.6	19.5	5 21	15 9.95	-20 39.3	2.471	3.473	2.8	20.3
5 31	15 0.79	-14 15.7	1.554	2.518	9.1	19.8	5 31	15 1.69	-20 18.1	2.509	3.474	6.1	20.5
6 10	14 54.46	-13 50.0	1.629	2.534	13.0	20.0	6 10	14 54.75	-19 58.6	2.574	3.475	9.0	20.7
6 20	14 50.67	-13 37.1	1.725	2.551	16.2	20.3	6 20	14 49.57	-19 43.3	2.662	3.475	11.5	20.8
26201	Sayonisaha		5 12.4 40°22	3°2/10.5	18		507600	2013 <i>CJ</i> ₁₃		5 12.4 171°93	3°7/9.1	18	
4 11	15 40.22	-14 10.2	1.362	2.257	14.8	19.0	4 11	15 37.92	-5 17.1	2.961	3.828	8.6	22.2
4 21	15 35.04	-13 6.4	1.309	2.263	10.5	18.7	4 21	15 32.44	-4 39.4	2.897	3.831	6.4	22.0
5 1	15 27.55	-11 57.5	1.278	2.270	5.9	18.5	5 1	15 25.84	-4 4.7	2.859	3.834	4.4	21.9
5 11	15 18.82	-10 50.2	1.272	2.278	3.2	18.3	5 11	15 18.64	-3 35.9	2.850	3.836	3.7	21.8
5 21	15 10.11	-9 51.2	1.292	2.286	6.3	18.5	5 21	15 11.42	-3 15.4	2.870	3.838	5.1	21.9
5 31	15 2.62	-9 6.6	1.335	2.294	10.8	18.8	5 31	15 4.72	-3 4.8	2.917	3.840	7.2	22.1
6 10	14 57.29	-8 40.0	1.400	2.303	14.9	19.1	6 10	14 59.06	-3 5.2	2.991	3.841	9.4	22.2
6 20	14 54.59	-8 32.4	1.483	2.311	18.3	19.3	6 20	14 54.76	-3 16.4	3.086	3.841	11.3	22.4
55413	2001 <i>TA</i> ₉		5 12.4 244°09	2°2/14.2	18		70318	1999 <i>RE</i> ₁₄₅		5 12.4 168°19	2°3/13.8	18	
4 11	15 39.83	-27 20.0	2.379	3.225	11.1	18.8	4 11	15 44.05	-26 8.7	1.704	2.563	14.2	19.5
4 21	15 34.25	-27 0.4	2.292	3.216	8.3	18.6	4 21	15 37.66	-25 49.5	1.633	2.566	10.5	19.3
5 1	15 26.99	-26 28.6	2.229	3.206	5.2	18.4	5 1	15 28.99	-25 15.3	1.586	2.568	6.4	19.0
5 11	15 18.78	-25 45.6	2.193	3.196	2.5	18.2	5 11	15 19.04	-24 27.6	1.564	2.570	2.7	18.8
5 21	15 10.41	-24 53.9	2.186	3.186	3.4	18.2	5 21	15 8.98	-23 30.0	1.569	2.571	4.1	18.9
5 31	15 2.75	-23 57.6	2.207	3.176	6.5	18.4	5 31	15 0.04	-22 28.7	1.601	2.572	8.2	19.1
6 10	14 56.52	-23 1.7	2.254	3.165	9.6	18.6	6 10	14 53.16	-21 30.2	1.658	2.573	12.2	19.4
6 20	14 52.21	-22 10.3	2.324	3.154	12.4	18.8	6 20	14 48.89	-20 40.2	1.735	2.573	15.6	19.6
111616	2002 <i>AV</i> ₁₁₁		5 12.4 121°53	1°7/11.6	18		222735	2002 <i>AV</i> ₁₈₇		5 12.4 141°43	6°2/8.1	17	
4 11	15 44.10	-15 28.6	1.444	2.329	14.7	19.6	4 11	15 41.85	-0 34.1	2.197	3.061	11.2	21.0
4 21	15 37.84	-15 6.1	1.384	2.333	10.5	19.3	4 21	15 35.43	+0 18.9	2.147	3.074	8.7	20.9
5 1	15 29.13	-14 38.8	1.346	2.337	5.7	19.0	5 1	15 27.52	+1 4.1	2.123	3.085	6.7	20.8
5 11	15 19.04	-14 10.0	1.333	2.341	1.7	18.8	5 11	15 18.85	+1 37.0	2.126	3.096	6.3	20.8
5 21	15 8.85	-13 43.9	1.346	2.345	5.2	19.0	5 21	15 10.23	+1 54.5	2.156	3.106	7.7	20.9
5 31	14 59.86	-13 25.1	1.384	2.349	9.9	19.3	5 31	15 2.43	+1 55.0	2.212	3.116	10.0	21.0
6 10	14 53.08	-13 17.2	1.445	2.352	14.2	19.6	6 10	14 56.08	+1 38.5	2.292	3.125	12.4	21.2
6 20	14 49.07	-13 21.7	1.525	2.355	17.8	19.8	6 20	14 51.58	+1 6.9	2.391	3.133	14.6	21.4
57017	2000 <i>TC</i> ₄₂		5 12.4 235°53	4°9/8.5	18		53359	1999 <i>JM</i> ₇₄		5 12.4 155°26	2°1/11.1	18	
4 11	15 38.16	-3 51.4	2.413	3.285	10.1	19.3	4 11	15 40.79	-11 51.9	2.335	3.207	10.4	18.9
4 21	15 32.86	-3 4.8	2.343	3.278	7.6	19.2	4 21	15 34.76	-11 42.1	2.267	3.210	7.4	18.7
5 1	15 26.16	-2 22.4	2.298	3.271	5.5	19.0	5 1	15 27.22	-11 32.1	2.225	3.213	4.2	18.5
5 11	15 18.68	-1 48.1	2.281	3.263	4.9	19.0	5 11	15 18.83	-11 24.0	2.211	3.216	2.1	18.4
5 21	15 11.09	-1 25.3	2.292	3.256	6.5	19.1	5 21	15 10.36	-11 19.8	2.225	3.219	4.2	18.6
5 31	15 4.11	-1 16.1	2.329	3.248	8.9	19.2	5 31	15 2.59	-11 21.5	2.268	3.221	7.3	18.8
6 10	14 58.36	-1 21.4	2.390	3.240	11.4	19.3	6 10	14 56.17	-11 30.6	2.336	3.223	10.3	18.9
6 20	14 54.25	-1 40.8	2.472	3.232	13.7	19.5	6 20	14 51.55	-11 47.8	2.426	3.225	12.9	19.1
54634	2000 <i>SA</i> ₁₃₂		5 12.4 295°67	2°4/15.6	18		4471	Graculus		5 12.4 217°20	5°8/16.4	18	R
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
240100	2002 <i>CE</i> ₁₃₁		5 12.4 176°81	3°4/15.1	17		491374	2012 <i>BL</i> ₇₅		5 12.4 238°68	22°0/25.9	18	
4 11	15 40.56	-30 55.1	2.571	3.400	10.9	20.7	4 11	15 45.52	+23 58.6	1.105	1.924	22.9	20.9
4 21	15 34.68	-30 56.9	2.491	3.401	8.4	20.5	4 21	15 39.40	+26 34.1	1.079	1.919	22.1	20.8
5 1	15 27.20	-30 46.1	2.437	3.401	5.8	20.4	5 1	15 30.19	+28 26.9	1.068	1.914	22.1	20.8
5 11	15 18.83	-30 22.7	2.409	3.402	3.7	20.2	5 11	15 19.26	+29 23.7	1.073	1.908	22.9	20.8
5 21	15 10.35	-29 48.3	2.409	3.402	4.0	20.2	5 21	15 8.28	+29 19.2	1.091	1.902	24.3	20.9
5 31	15 2.59	-29 6.1	2.438	3.402	6.3	20.4	5 31	14 58.90	+28 15.5	1.122	1.896	26.0	21.0
6 10	14 56.23	-28 20.5	2.493	3.402	8.9	20.5	6 10	14 52.33	+26 21.6	1.165	1.889	27.7	21.1
6 20	14 51.74	-27 35.8	2.572	3.402	11.4	20.7	6 20	14 49.13	+23 49.1	1.216	1.882	29.4	21.3
498480	2008 <i>CA</i> ₈₄		5 12.4 181°56	1°8/11.3	17		20325	Julianoey		5 12.4 242°48	3°1/10.8	18	
4 11	15 42.48	-15 52.0	1.755	2.633	12.9	22.4	4 11	15 43.30	-11 44.8	1.611	2.495	13.6	17.0
4 21	15 36.38	-15 7.7	1.687	2.634	9.2	22.2	4 21	15 37.20	-11 17.8	1.540	2.488	9.8	16.8
5 1	15 28.24	-14 17.5	1.643	2.634	5.0	21.9	5 1	15 28.83	-10 49.7	1.492	2.481	5.7	16.5
5 11	15 18.96	-13 25.6	1.626	2.634	1.8	21.7	5 11	15 19.11	-10 24.3	1.470	2.474	3.1	16.3
5 21	15 9.60	-12 36.5	1.637	2.634	4.8	21.9	5 21	15 9.16	-10 5.6	1.474	2.467	5.9	16.5
5 31	15 1.20	-11 55.3	1.674	2.633	9.0	22.1	5 31	15 0.17	-9 57.2	1.504	2.460	10.1	16.7
6 10	14 54.64	-11 25.9	1.735	2.631	12.8	22.4	6 10	14 53.12	-10 1.6	1.557	2.452	14.1	16.9
6 20	14 50.42	-11 10.2	1.816	2.630	16.0	22.6	6 20	14 48.60	-10 19.4	1.629	2.444	17.5	17.1
499418	2010 <i>CU</i> ₅₈		5 12.4 111°31	6°4/7.8	17		491075	2011 <i>RZ</i> ₈		5 12.4 308°02	0°4/12.6	16	
4 11	15 39.80	-1 32.3	2.022	2.895	11.7	21.3	4 11	15 39.40	-20 33.0	1.911	2.784	12.2	21.6
4 21	15 34.09	-0 25.1	1.975	2.907	9.0	21.1	4 21	15 34.25	-20 15.6	1.830	2.774	8.8	21.3
5 1	15 26.83	+0 34.8	1.953	2.918	6.9	21.0	5 1	15 27.15	-19 49.8	1.774	2.763	4.9	21.1
5 11	15 18.78	+1 21.9	1.957	2.929	6.5	21.0	5 11	15 18.90	-19 17.3	1.744	2.753	0.8	20.7
5 21	15 10.77	+1 52.4	1.988	2.940	8.1	21.1	5 21	15 10.43	-18 41.5	1.741	2.743	3.6	20.9
5 31	15 3.62	+2 3.9	2.044	2.951	10.6	21.3	5 31	15 2.75	-18 6.4	1.764	2.734	7.8	21.2
6 10	14 57.97	+1 56.6	2.122	2.961	13.1	21.5	6 10	14 56.70	-17 36.4	1.813	2.724	11.5	21.4
6 20	14 54.22	+1 32.2	2.220	2.971	15.3	21.6	6 20	14 52.84	-17 14.8	1.882	2.715	14.8	21.6
203980	2003 <i>SH</i> ₂₃₂		5 12.4 215°76	2°4/10.6	18		497486	2006 <i>AA</i> ₆		5 12.4 119°50	7°4/7.3	17	
4 11	15 40.00	-12 36.6	2.336	3.209	10.3	20.7	4 11	15 41.26	+2 19.5	2.065	2.928	11.9	21.4
4 21	15 34.26	-11 56.8	2.258	3.202	7.4	20.5	4 21	15 35.08	+3 22.5	2.023	2.942	9.5	21.3
5 1	15 26.98	-11 14.7	2.206	3.194	4.2	20.3	5 1	15 27.37	+4 14.7	2.005	2.957	7.8	21.2
5 11	15 18.82	-10 33.6	2.182	3.187	2.4	20.2	5 11	15 18.91	+4 51.2	2.013	2.971	7.6	21.2
5 21	15 10.53	-9 57.0	2.187	3.178	4.5	20.3	5 21	15 10.52	+5 8.5	2.048	2.984	8.9	21.3
5 31	15 2.90	-9 28.1	2.220	3.169	7.7	20.5	5 31	15 3.00	+5 5.5	2.108	2.997	11.1	21.5
6 10	14 56.61	-9 9.3	2.279	3.160	10.8	20.7	6 10	14 57.01	+4 42.9	2.189	3.010	13.4	21.7
6 20	14 52.09	-9 2.0	2.358	3.150	13.4	20.8	6 20	14 52.92	+4 3.4	2.290	3.022	15.4	21.8
40832	1999 <i>TH</i> ₉₅		5 12.4 299°72	3°1/10.9	18		308469	2005 <i>TP</i> ₇		5 12.4 202°62	0°6/11.9	18	
4 11	15 41.77	-11 4.8	1.675	2.559	13.1	18.6	4 11	15 38.41	-17 27.6	2.865	3.729	8.9	22.0
4 21	15 36.24	-10 48.4	1.585	2.534	9.5	18.3	4 21	15 32.94	-17 5.4	2.785	3.725	6.3	21.9
5 1	15 28.39	-10 31.8	1.519	2.508	5.6	18.1	5 1	15 26.21	-16 39.0	2.731	3.720	3.4	21.7
5 11	15 19.02	-10 18.6	1.478	2.482	3.1	17.8	5 11	15 18.78	-16 10.1	2.706	3.716	0.6	21.4
5 21	15 9.17	-10 12.0	1.463	2.457	5.8	17.9	5 21	15 11.25	-15 41.2	2.711	3.710	2.9	21.6
5 31	15 0.03	-10 15.4	1.475	2.432	10.1	18.1	5 31	15 4.27	-15 14.6	2.745	3.705	5.9	21.8
6 10	14 52.66	-10 31.1	1.509	2.406	14.3	18.3	6 10	14 58.38	-14 52.9	2.805	3.699	8.6	22.0
6 20	14 47.78	-10 59.7	1.562	2.381	17.9	18.5	6 20	14 53.97	-14 37.9	2.889	3.693	10.9	22.1
475021	2005 <i>UA</i> ₁₅		5 12.4 256°03	1°2/13.1	16		231859	2000 <i>SM</i> ₁₆₇		5 12.4 235°59	4°9/15.5	18	
4 11	15 41.93	-21 29.1	2.384	3.241	10.7	21.2	4 11	15 45.90	-33 42.1	2.390	3.203	12.2	21.6
4 21	15 35.74	-21 50.3	2.302	3.236	7.8	21.0	4 21	15 38.87	-34 5.8	2.292	3.187	9.7	21.4
5 1	15 27.85	-22 5.6	2.246	3.231	4.5	20.8	5 1	15 29.73	-34 14.9	2.218	3.170	7.1	21.2
5 11	15 18.93	-22 14.9	2.218	3.226	1.5	20.6	5 11	15 19.24	-34 7.6	2.171	3.153	5.2	21.0
5 21	15 9.80	-22 19.1	2.219	3.221	3.1	20.7	5 21	15 8.38	-33 44.1	2.151	3.134	5.3	21.0
5 31	15 1.31	-22 20.1	2.249	3.216	6.5	20.9	5 31	14 58.22	-33 7.1	2.160	3.115	7.5	21.1
6 10	14 54.21	-22 20.6	2.304	3.210	9.7	21.1	6 10	14 49.69	-32 21.6	2.195	3.096	10.3	21.2
6 20	14 49.01	-22 23.1	2.383	3.205	12.4	21.3	6 20	14 43.42	-31 33.5	2.252	3.075	13.0	21.4
361121	2006 <i>FD</i> ₄₄		5 12.4 354°94	5°1/10.6	17		368093	2013 <i>AN</i> ₂₉		5 12.4 325°52	2°9/10.6	18	
4 11	15 41.44	-8 44.1	1.091	1.995	16.9	19.9	4 11	15 39.64	-11 1.1	2.008	2.888	11.4	20.4
4 21	15 36.51	-8 23.3	1.034	1.990	12.3	19.6	4 21	15 34.19	-10 36.3	1.939	2.886	8.2	20.2
5 1	15 28.65	-8 6.6	0.997	1.987	7.6	19.3	5 1	15 27.03	-10 11.4	1.895	2.884	4.8	20.0
5 11	15 19.04	-7 59.4	0.983	1.985	5.1	19.2	5 11	15 18.89	-9 49.6	1.878	2.881	2.9	19.9
5 21	15 9.19	-8 6.1	0.991	1.984	8.0	19.3	5 21	15 10.64	-9 33.9	1.888	2.879	5.1	20.0
5 31	15 0.67	-8 29.7	1.021	1.984	12.9	19.6	5 31	15 3.15	-9 27.2	1.925	2.877	8.5	20.2
6 10	14 54.74	-9 10.4	1.071	1.984	17.5	19.9	6 10	14 57.17	-9 31.2	1.986	2.875	11.8	20.4
6 20	14 52.02	-10 6.6	1.137	1.986	21.4	20.1	6 20	14 53.18	-9 46.4	2.068	2.874	14.6	20.6
215629	2003 <i>SA</i> ₂₈₉		5 12.4 118°93	0°7/12.0	16		347010	2010 <i>DC</i> ₃₇		5 12.4 277°74	2°0/13.6	17	
4 11	15 45.33	-16 57.8	1.605	2.481	14.0	20.5	4 11	15 41.65	-24 25.8	1.910	2.771	12.8	21.4
4 21	15 38.52	-16 50.9	1.546	2.491	10.0	20.3	4 21	15 35.91	-24 27.2	1.830	2.764	9.5	21.1
5 1	15 29.46	-16 38.6	1.510	2.501	5.4	20.0	5 1	15 28.10	-24 17.7	1.774	2.757	5.7	20.9
5 11	15 19.14	-16 23.0	1.501	2.510	0.9	19.7	5 11	15 19.03	-23 57.8	1.744	2.750	2.3	20.7
5 21	15 8.78	-16 7.2	1.518	2.519	4.4	20.0	5 21	15 9.74	-23 29.7	1.741	2.743	3.8	20.7
5 31	14 59.57	-15 54.9	1.562	2.528	8.9	20.3	5 31	15 1.28	-22 57.3	1.765	2.736	7.6	21.0
6 10	14 52.45	-15 49.4	1.630	2.537	12.9	20.5	6 10	14 54.57	-22 25.4	1.814	2.728	11.4	21.2
6 20	14 47.94	-15 52.9	1.718	2.545	16.3	20.8	6 20	14 50.19	-21 58.4	1.884	2.721	14.6	21.4
480465	2015 <i>LS</i> ₇		5 12.4 276°62	4°4/8.9	16		188257	2002 <i>XM</i> ₁₁₇		5 12.4 340°97	1°6/10.		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
381428	2008 <i>OJ</i> ₂₂		5 12.4 206°88	8°5/17.7	17		88816	2001 <i>SE</i> ₁₅₁		5 12.4 307°95	1°6/11.6	17	
4 11	15 47.96	-42 25.2	2.121	2.896	14.7	21.2	4 11	15 40.20	-17 54.6	1.166	2.065	16.5	19.5
4 21	15 40.76	-43 17.1	2.040	2.893	12.6	21.0	4 21	15 35.88	-17 8.9	1.086	2.043	11.9	19.2
5 1	15 30.91	-43 48.0	1.980	2.889	10.4	20.9	5 1	15 28.52	-16 10.6	1.027	2.021	6.6	18.8
5 11	15 19.40	-43 54.1	1.944	2.886	8.8	20.7	5 11	15 19.15	-15 4.4	0.991	2.000	1.6	18.4
5 21	15 7.51	-43 34.1	1.934	2.882	8.6	20.7	5 21	15 9.21	-13 57.6	0.977	1.979	6.1	18.6
5 31	14 56.65	-42 51.2	1.948	2.878	9.8	20.8	5 31	15 0.36	-12 58.9	0.987	1.959	12.0	18.9
6 10	14 47.97	-41 52.0	1.987	2.873	11.9	20.9	6 10	14 54.00	-12 16.1	1.017	1.939	17.4	19.1
6 20	14 42.18	-40 44.5	2.047	2.869	14.2	21.0	6 20	14 50.93	-11 53.5	1.063	1.920	22.0	19.3
507495	2012 <i>UB</i> ₇₁		5 12.4 341°51	2°2/13.3	17		72555	2001 <i>EM</i> ₄		5 12.4 67°69	2°1/13.6	18	
4 11	15 42.63	-22 43.8	1.673	2.543	13.8	20.7	4 11	15 42.87	-24 11.3	1.794	2.657	13.4	19.4
4 21	15 36.86	-23 12.6	1.599	2.538	10.2	20.5	4 21	15 36.73	-24 19.5	1.732	2.667	9.8	19.2
5 1	15 28.73	-23 32.7	1.548	2.533	6.1	20.2	5 1	15 28.50	-24 16.9	1.694	2.678	5.9	18.9
5 11	15 19.13	-23 43.5	1.522	2.529	2.4	20.0	5 11	15 19.11	-24 3.9	1.682	2.688	2.4	18.7
5 21	15 9.21	-23 46.0	1.523	2.524	4.2	20.1	5 21	15 9.65	-23 42.8	1.697	2.699	3.9	18.9
5 31	15 0.23	-23 42.9	1.549	2.521	8.4	20.3	5 31	15 1.23	-23 17.5	1.739	2.710	7.7	19.1
6 10	14 53.22	-23 38.4	1.599	2.518	12.4	20.6	6 10	14 54.71	-22 52.6	1.805	2.720	11.4	19.4
6 20	14 48.83	-23 36.4	1.670	2.515	15.8	20.8	6 20	14 50.61	-22 32.4	1.892	2.731	14.5	19.6
212593	2006 <i>SF</i> ₂₀₆		5 12.4 191°87	0°7/12.9	17		389060	2008 <i>VE</i> ₇₉		5 12.4 233°33	2°3/14.3	17	
4 11	15 40.12	-21 19.6	2.322	3.184	10.8	21.2	4 11	15 42.19	-27 57.4	2.580	3.417	10.7	21.8
4 21	15 34.43	-21 10.0	2.246	3.183	7.8	21.0	4 21	15 35.91	-27 35.3	2.482	3.401	8.0	21.6
5 1	15 27.13	-20 53.2	2.196	3.183	4.4	20.8	5 1	15 27.98	-27 0.9	2.409	3.384	5.1	21.4
5 11	15 18.91	-20 30.3	2.173	3.182	1.0	20.5	5 11	15 19.06	-26 14.8	2.365	3.367	2.5	21.2
5 21	15 10.58	-20 3.8	2.178	3.181	3.1	20.7	5 21	15 9.96	-25 19.4	2.349	3.349	3.3	21.2
5 31	15 2.96	-19 36.7	2.212	3.179	6.6	20.9	5 31	15 1.50	-24 18.7	2.364	3.330	6.3	21.4
6 10	14 56.75	-19 12.5	2.271	3.178	9.8	21.1	6 10	14 54.41	-23 17.4	2.405	3.311	9.3	21.5
6 20	14 52.40	-18 53.9	2.353	3.176	12.5	21.3	6 20	14 49.19	-22 20.1	2.470	3.290	12.1	21.7
268369	2005 <i>TE</i> ₁₃₆		5 12.4 126°91	2°2/10.9	17		521209	2015 <i>FF</i> ₄₁₄		5 12.4 324°63	4°0/9.4	17	
4 11	15 42.19	-13 49.7	1.989	2.864	11.8	22.1	4 11	15 37.97	-9 12.5	2.034	2.917	11.2	21.5
4 21	15 35.89	-13 8.1	1.932	2.877	8.3	21.9	4 21	15 32.96	-8 10.9	1.969	2.915	8.1	21.3
5 1	15 27.88	-12 23.6	1.900	2.890	4.7	21.7	5 1	15 26.35	-7 9.4	1.929	2.914	5.2	21.1
5 11	15 19.01	-11 40.0	1.896	2.902	2.2	21.6	5 11	15 18.86	-6 12.9	1.916	2.912	4.1	21.0
5 21	15 10.16	-11 1.2	1.920	2.914	4.7	21.7	5 21	15 11.30	-5 25.9	1.930	2.911	6.1	21.1
5 31	15 2.24	-10 30.8	1.972	2.925	8.2	22.0	5 31	15 4.49	-4 52.3	1.971	2.909	9.2	21.3
6 10	14 55.96	-10 11.5	2.048	2.936	11.5	22.2	6 10	14 59.13	-4 34.1	2.035	2.908	12.2	21.5
6 20	14 51.73	-10 4.3	2.145	2.947	14.3	22.4	6 20	14 55.65	-4 31.6	2.119	2.907	14.9	21.7
517588	2014 <i>WA</i> ₈₃		5 12.4 23°50	2°0/11.6	16		474141	1995 <i>XF</i> ₄		5 12.4 237°10	1°4/11.2	18	
4 11	15 44.02	-13 46.6	1.395	2.282	15.0	20.9	4 11	15 38.88	-14 33.0	2.813	3.680	9.0	22.8
4 21	15 37.94	-13 43.8	1.333	2.284	10.7	20.7	4 21	15 33.36	-14 3.7	2.723	3.665	6.4	22.6
5 1	15 29.31	-13 39.1	1.294	2.286	5.9	20.4	5 1	15 26.51	-13 31.5	2.661	3.650	3.5	22.4
5 11	15 19.20	-13 35.2	1.280	2.288	2.0	20.2	5 11	15 18.89	-12 58.5	2.627	3.634	1.4	22.2
5 21	15 8.93	-13 34.9	1.291	2.291	5.4	20.4	5 21	15 11.11	-12 27.4	2.622	3.617	3.5	22.3
5 31	14 59.83	-13 41.3	1.328	2.293	10.1	20.7	5 31	15 3.83	-12 0.7	2.647	3.600	6.4	22.5
6 10	14 52.98	-13 56.9	1.386	2.296	14.5	20.9	6 10	14 57.64	-11 40.9	2.698	3.583	9.2	22.6
6 20	14 48.97	-14 22.7	1.464	2.299	18.1	21.2	6 20	14 52.94	-11 29.4	2.771	3.565	11.6	22.8
393093	2013 <i>AY</i> ₁₁₇		5 12.4 238°14	3°5/9.9	18		431509	2007 <i>TD</i> ₁₇₇		5 12.4 279°41	2°5/10.6	17	
4 11	15 39.20	-7 39.2	2.447	3.319	9.9	20.8	4 11	15 38.97	-13 13.7	1.983	2.864	11.5	21.0
4 21	15 33.66	-7 12.7	2.371	3.312	7.2	20.6	4 21	15 33.79	-12 28.1	1.910	2.857	8.2	20.8
5 1	15 26.67	-6 48.4	2.322	3.304	4.7	20.4	5 1	15 26.86	-11 39.3	1.861	2.850	4.7	20.5
5 11	15 18.87	-6 29.1	2.301	3.296	3.5	20.3	5 11	15 18.93	-10 51.3	1.838	2.843	2.6	20.4
5 21	15 10.94	-6 17.4	2.307	3.288	5.2	20.4	5 21	15 10.87	-10 8.4	1.844	2.836	5.0	20.5
5 31	15 3.61	-6 15.5	2.342	3.280	7.9	20.6	5 31	15 3.56	-9 34.6	1.876	2.829	8.6	20.7
6 10	14 57.51	-6 24.4	2.401	3.272	10.7	20.7	6 10	14 57.77	-9 12.9	1.932	2.822	12.0	20.9
6 20	14 53.07	-6 44.3	2.482	3.263	13.1	20.9	6 20	14 53.98	-9 4.6	2.008	2.815	14.9	21.1
133892	Benkhaldoun		5 12.4 172°63	6°7/16.6	17		129873	1999 <i>RH</i> ₂₁₄		5 12.4 245°77	2°3/13.8	18	
4 11	15 48.26	-38 23.0	2.341	3.130	13.1	21.0	4 11	15 44.31	-25 48.5	1.799	2.656	13.7	21.0
4 21	15 40.61	-39 10.3	2.263	3.133	10.8	20.8	4 21	15 38.03	-25 34.5	1.710	2.641	10.2	20.7
5 1	15 30.70	-39 40.4	2.208	3.136	8.6	20.7	5 1	15 29.39	-25 6.4	1.644	2.626	6.3	20.5
5 11	15 19.39	-39 50.4	2.178	3.138	6.9	20.6	5 11	15 19.28	-24 24.7	1.604	2.610	2.6	20.2
5 21	15 7.79	-39 39.8	2.176	3.139	6.8	20.6	5 21	15 8.82	-23 32.2	1.591	2.593	4.1	20.2
5 31	14 57.09	-39 11.2	2.201	3.140	8.3	20.7	5 31	14 59.25	-22 34.3	1.606	2.576	8.3	20.5
6 10	14 48.28	-38 30.1	2.251	3.140	10.6	20.8	6 10	14 51.61	-21 37.6	1.645	2.558	12.4	20.7
6 20	14 41.97	-37 43.0	2.323	3.140	12.8	21.0	6 20	14 46.56	-20 48.0	1.705	2.540	16.0	20.9
54511	2000 <i>PX</i> ₁₀		5 12.4 294°02	1°0/12.9	18		338298	2002 <i>UY</i> ₆₆		5 12.4 189°46	1°3/11.5	17	
4 11	15 41.81	-20 49.8	2.110	2.975	11.6	18.4	4 11	15 40.23	-15 29.9	2.353	3.223	10.4	22.1
4 21	15 35.87	-21 6.1	2.029	2.967	8.4	18.2	4 21	15 34.45	-15 5.8	2.280	3.223	7.3	21.9
5 1	15 28.04	-21 16.2	1.973	2.960	4.8	17.9	5 1	15 27.14	-14 38.2	2.232	3.222	4.0	21.7
5 11	15 19.06	-21 20.4	1.944	2.952	1.3	17.7	5 11	15 18.98	-14 9.5	2.212	3.220	1.3	21.4
5 21	15 9.82	-21 19.8	1.942	2.945	3.4	17.8	5 21	15 10.72	-13 42.3	2.221	3.218	3.7	21.6
5 31	15 1.29	-21 16.7	1.969	2.937	7.2	18.0	5 31	15 3.14	-13 19.7	2.258	3.216	7.0	21.8
6 10	14 54.32	-21 14.2	2.021	2.930	10.6	18.2	6 10	14 56.91	-13 4.2	2.321	3.214	10.1	22.0
6 20	14 49.44	-21 15.2	2.095	2.923	13.7	18.4	6 20	14 52.47	-12 57.5	2.406	3.211	12.8	22.2
373538	2001 <i>TA</i> ₁₈₁		5 12.4 211°89	0°8/12.9	17		244166	2001 <i>XA</i> ₄₇		5 12.4 2			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
161168	2002 <i>TQ</i> ₃₃		5 12.4 288°48	1°1/11.9	17		460471	2014 <i>SR</i> ₂₆₅		5 12.4 206°08	0°2/12.5	17	
4 11	15 43.23	-16 20.4	1.534	2.416	14.2	20.4	4 11	15 45.96	-19 13.4	1.677	2.548	13.8	21.5
4 21	15 37.56	-16 9.3	1.445	2.394	10.2	20.2	4 21	15 39.18	-19 13.4	1.602	2.544	10.0	21.3
5 1	15 29.29	-15 52.8	1.379	2.371	5.7	19.8	5 1	15 30.01	-19 6.0	1.551	2.540	5.5	21.0
5 11	15 19.29	-15 33.0	1.338	2.347	1.2	19.5	5 11	15 19.40	-18 52.6	1.526	2.536	0.8	20.7
5 21	15 8.75	-15 13.3	1.323	2.324	4.9	19.7	5 21	15 8.52	-18 35.6	1.529	2.531	4.1	20.9
5 31	14 59.03	-14 58.1	1.334	2.301	10.0	19.9	5 31	14 58.64	-18 18.7	1.558	2.526	8.7	21.2
6 10	14 51.32	-14 51.4	1.367	2.278	14.6	20.1	6 10	14 50.79	-18 6.2	1.611	2.520	12.9	21.4
6 20	14 46.40	-14 56.1	1.420	2.255	18.6	20.3	6 20	14 45.58	-18 1.4	1.685	2.513	16.4	21.6
295087	2008 <i>EF</i> ₁₄₄		5 12.4 306°49	1°1/13.2	16		286336	2001 <i>XW</i> ₂₈		5 12.4 117°27	0°6/12.8	18	
4 11	15 38.83	-22 49.4	2.204	3.068	11.2	21.1	4 11	15 45.02	-22 27.4	1.551	2.422	14.7	20.3
4 21	15 33.67	-22 36.5	2.123	3.060	8.2	20.9	4 21	15 38.36	-21 46.6	1.494	2.436	10.6	20.1
5 1	15 26.80	-22 14.6	2.067	3.053	4.7	20.7	5 1	15 29.42	-20 53.1	1.460	2.449	5.9	19.8
5 11	15 18.95	-21 45.2	2.038	3.046	1.4	20.5	5 11	15 19.30	-19 50.2	1.452	2.462	1.1	19.5
5 21	15 10.94	-21 10.6	2.036	3.039	3.2	20.6	5 21	15 9.25	-18 43.4	1.471	2.474	4.1	19.8
5 31	15 3.63	-20 34.6	2.062	3.032	6.8	20.8	5 31	15 0.48	-17 39.7	1.517	2.486	8.8	20.1
6 10	14 57.77	-20 1.2	2.114	3.025	10.1	21.0	6 10	14 53.91	-16 45.0	1.586	2.497	12.9	20.3
6 20	14 53.84	-19 33.7	2.187	3.019	13.1	21.2	6 20	14 50.00	-16 3.6	1.676	2.508	16.3	20.6
158085	2000 <i>VU</i> ₃₀		5 12.4 168°06	1°1/11.5	18		274238	2008 <i>NF</i> ₁		5 12.4 184°31	10°0/1.9	17	
4 11	15 40.84	-17 38.9	2.234	3.103	10.9	20.5	4 11	15 40.81	+14 59.9	2.553	3.363	11.6	21.3
4 21	15 34.89	-16 46.9	2.164	3.107	7.7	20.3	4 21	15 34.72	+16 33.6	2.510	3.364	10.5	21.2
5 1	15 27.38	-15 48.5	2.120	3.110	4.2	20.1	5 1	15 27.25	+17 51.1	2.492	3.363	10.0	21.2
5 11	15 19.02	-14 47.1	2.104	3.113	1.1	19.8	5 11	15 19.04	+18 46.9	2.498	3.362	10.3	21.2
5 21	15 10.63	-13 47.0	2.118	3.115	3.8	20.1	5 21	15 10.80	+19 17.7	2.528	3.361	11.3	21.2
5 31	15 3.04	-12 52.4	2.159	3.117	7.3	20.3	5 31	15 3.23	+19 22.7	2.580	3.358	12.7	21.3
6 10	14 56.90	-12 7.4	2.227	3.119	10.5	20.5	6 10	14 56.93	+19 3.5	2.652	3.355	14.1	21.4
6 20	14 52.63	-11 34.1	2.316	3.120	13.3	20.7	6 20	14 52.29	+18 23.2	2.739	3.350	15.4	21.6
100790	1998 <i>FQ</i> ₇₄		5 12.4 120°21	4°5/8.9	18		325137	2008 <i>EL</i> ₁₄₉		5 12.4 241°07	0°9/11.8	17	
4 11	15 38.24	-6 2.2	2.267	3.144	10.4	20.0	4 11	15 41.27	-19 2.8	1.658	2.537	13.5	20.6
4 21	15 32.98	-5 9.6	2.209	3.149	7.7	19.9	4 21	15 35.74	-18 10.1	1.586	2.533	9.6	20.4
5 1	15 26.31	-4 20.0	2.175	3.153	5.3	19.7	5 1	15 28.06	-17 7.5	1.538	2.529	5.2	20.1
5 11	15 18.88	-3 37.8	2.169	3.158	4.5	19.7	5 11	15 19.15	-15 59.0	1.516	2.525	1.0	19.8
5 21	15 11.43	-3 6.4	2.191	3.162	6.2	19.8	5 21	15 10.12	-14 50.2	1.521	2.521	4.5	20.0
5 31	15 4.69	-2 48.4	2.239	3.167	8.8	20.0	5 31	15 2.08	-13 47.7	1.552	2.517	9.0	20.3
6 10	14 59.26	-2 45.0	2.311	3.171	11.4	20.1	6 10	14 55.94	-12 57.0	1.607	2.513	13.1	20.5
6 20	14 55.54	-2 55.6	2.404	3.175	13.7	20.3	6 20	14 52.23	-12 21.2	1.682	2.508	16.6	20.7
402377	2005 <i>XJ</i> ₇₅		5 12.4 16°91	4°8/14.7	17		119589	2001 <i>VK</i> ₁₁₃		5 12.4 65°06	1°1/12.9	18	
4 11	15 43.30	-29 6.1	1.162	2.036	18.4	20.8	4 11	15 45.02	-20 32.0	1.586	2.459	14.3	19.1
4 21	15 38.08	-29 17.2	1.102	2.037	14.1	20.6	4 21	15 38.42	-20 49.1	1.531	2.474	10.3	18.9
5 1	15 29.65	-29 6.7	1.061	2.040	9.3	20.3	5 1	15 29.51	-20 58.2	1.500	2.488	5.8	18.6
5 11	15 19.33	-28 33.8	1.042	2.043	5.3	20.1	5 11	15 19.34	-20 59.8	1.494	2.503	1.4	18.4
5 21	15 8.80	-27 42.0	1.046	2.047	6.1	20.1	5 21	15 9.12	-20 55.8	1.514	2.517	4.0	18.6
5 31	14 59.82	-26 39.1	1.074	2.051	10.5	20.4	5 31	15 0.10	-20 49.4	1.561	2.532	8.4	18.9
6 10	14 53.69	-25 35.3	1.122	2.056	15.1	20.7	6 10	14 53.22	-20 44.9	1.632	2.547	12.4	19.1
6 20	14 51.05	-24 39.0	1.189	2.061	19.2	20.9	6 20	14 48.98	-20 45.3	1.723	2.562	15.7	19.4
131730	2001 <i>YE</i> ₉₂		5 12.4 210°56	2°8/13.9	18		92981	2000 <i>RH</i> ₆₉		5 12.4 245°20	2°0/11.0	18	
4 11	15 45.98	-26 37.3	1.733	2.587	14.2	19.6	4 11	15 41.68	-14 3.1	2.185	3.057	11.0	20.7
4 21	15 39.24	-26 33.8	1.653	2.581	10.7	19.3	4 21	15 35.72	-13 25.1	2.096	3.039	7.9	20.5
5 1	15 30.05	-26 15.8	1.596	2.575	6.7	19.1	5 1	15 27.98	-12 43.2	2.032	3.021	4.4	20.2
5 11	15 19.38	-25 43.3	1.565	2.569	3.1	18.8	5 11	15 19.16	-12 0.5	1.996	3.002	2.0	20.0
5 21	15 8.45	-24 58.8	1.561	2.562	4.4	18.9	5 21	15 10.10	-11 20.7	1.988	2.982	4.5	20.2
5 31	14 58.54	-24 7.7	1.584	2.554	8.4	19.1	5 31	15 1.68	-10 47.6	2.009	2.962	8.1	20.3
6 10	14 50.72	-23 16.5	1.632	2.546	12.5	19.3	6 10	14 54.68	-10 24.4	2.055	2.942	11.5	20.5
6 20	14 45.61	-22 31.2	1.700	2.537	16.0	19.5	6 20	14 49.64	-10 13.0	2.122	2.920	14.5	20.7
247962	2003 <i>YZ</i> ₁₃₀		5 12.4 89°80	3°3/14.8	17		259328	2003 <i>FG</i> ₉₄		5 12.4 17°84	1°0/11.9	17	
4 11	15 43.18	-29 19.5	2.150	2.989	12.4	20.7	4 11	15 41.17	-15 7.2	2.036	2.911	11.5	20.1
4 21	15 36.65	-29 18.2	2.093	3.010	9.4	20.5	4 21	15 35.35	-15 13.9	1.968	2.913	8.2	19.9
5 1	15 28.35	-29 3.3	2.060	3.031	6.2	20.4	5 1	15 27.75	-15 18.5	1.925	2.915	4.5	19.6
5 11	15 19.15	-28 35.3	2.054	3.052	3.6	20.2	5 11	15 19.13	-15 22.3	1.909	2.918	1.0	19.4
5 21	15 10.00	-27 56.7	2.076	3.073	4.0	20.3	5 21	15 10.38	-15 27.0	1.920	2.920	3.8	19.6
5 31	15 1.85	-27 11.5	2.126	3.093	6.8	20.5	5 31	15 2.41	-15 34.6	1.959	2.923	7.5	19.8
6 10	14 55.42	-26 25.0	2.201	3.113	9.8	20.7	6 10	14 55.99	-15 47.0	2.023	2.927	10.9	20.0
6 20	14 51.14	-25 41.8	2.299	3.132	12.5	20.9	6 20	14 51.62	-16 5.6	2.109	2.930	13.8	20.2
146838	2002 <i>AR</i> ₄₃		5 12.4 170°15	5°0/8.0	18		111147	2001 <i>VW</i> ₉₉		5 12.4 107°99	5°9/8.3	18	
4 11	15 38.49	-0 15.7	2.927	3.786	8.9	21.7	4 11	15 42.61	-1 57.1	2.138	3.005	11.4	20.3
4 21	15 32.90	+0 25.6	2.867	3.790	6.9	21.6	4 21	15 35.97	-0 55.3	2.101	3.030	8.7	20.2
5 1	15 26.19	+1 0.8	2.833	3.793	5.4	21.5	5 1	15 27.88	-0 0.9	2.090	3.055	6.5	20.1
5 11	15 18.88	+1 26.8	2.828	3.796	5.1	21.5	5 11	15 19.13	+0 41.5	2.106	3.080	6.0	20.1
5 21	15 11.54	+1 41.2	2.851	3.798	6.2	21.6	5 21	15 10.52	+1 8.5	2.149	3.103	7.5	20.3
5 31	15 4.76	+1 42.8	2.901	3.800	8.1	21.7	5 31	15 2.84	+1 18.4	2.219	3.126	9.9	20.4
6 10	14 59.01	+1 31.2	2.975	3.801	10.1	21.8	6 10	14 56.67	+1 11.3	2.312	3.148	12.3	20.6
6 20	14 54.65	+1 7.3	3.071	3.802	11.9	22.0	6 20	14 52.38	+0 48.8	2.425	3.169	14.3	20.8
28066	1998 <i>QA</i> ₁₁		5 12.4 329°12	6°4/14.5	18		84848	2003 <i>AP</i> ₃₁		5			

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5 12.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
373606	2002 <i>CF</i> ₂₇₁		5 12.4 195°39	1.7°/11.3	18		251884	1999 <i>VF</i> ₇₇		5 12.5 214°39	1.0°/11.9	17	
4 11	15 42.13	-14 18.5	2.236	3.106	10.8	21.5	4 11	15 43.73	-17 17.2	1.934	2.804	12.2	22.3
4 21	15 35.90	-13 51.3	2.160	3.103	7.7	21.3	4 21	15 37.33	-16 49.0	1.855	2.797	8.8	22.1
5 1	15 28.01	-13 21.1	2.111	3.100	4.3	21.1	5 1	15 28.93	-16 14.3	1.800	2.790	4.8	21.8
5 11	15 19.18	-12 50.5	2.090	3.097	1.7	20.9	5 11	15 19.34	-15 36.0	1.772	2.781	1.0	21.5
5 21	15 10.23	-12 22.6	2.097	3.093	4.1	21.0	5 21	15 9.54	-14 57.5	1.773	2.772	4.1	21.7
5 31	15 2.00	-12 0.5	2.133	3.088	7.6	21.2	5 31	15 0.58	-14 23.2	1.801	2.763	8.3	22.0
6 10	14 55.22	-11 46.7	2.193	3.083	10.8	21.4	6 10	14 53.31	-13 57.0	1.854	2.752	12.0	22.2
6 20	14 50.34	-11 42.9	2.276	3.077	13.6	21.6	6 20	14 48.29	-13 41.5	1.928	2.741	15.2	22.4
173726	2001 <i>QJ</i> ₂₀₉		5 12.4 279°35	5.7°/16.3	18		89084	2001 <i>TQ</i> ₁₇₁		5 12.5 233°68	6.7°/ 7.3	17	
4 11	15 42.68	-35 32.9	2.100	2.917	13.5	20.3	4 11	15 40.00	- 3 31.9	1.840	2.720	12.3	19.9
4 21	15 36.74	-35 51.9	2.019	2.913	10.9	20.1	4 21	15 34.60	- 2 0.7	1.776	2.713	9.5	19.7
5 1	15 28.65	-35 53.4	1.960	2.908	8.2	19.9	5 1	15 27.38	+ 0 33.3	1.736	2.706	7.2	19.6
5 11	15 19.27	-35 35.6	1.926	2.904	6.1	19.8	5 11	15 19.13	+ 0 42.8	1.723	2.699	6.9	19.5
5 21	15 9.67	-34 59.5	1.918	2.900	6.0	19.8	5 21	15 10.76	+ 1 41.7	1.736	2.692	8.8	19.6
5 31	15 0.97	-34 8.9	1.937	2.895	8.0	19.9	5 31	15 3.21	+ 2 19.1	1.773	2.684	11.7	19.8
6 10	14 54.10	-33 10.0	1.981	2.891	10.8	20.1	6 10	14 57.27	+ 2 33.6	1.833	2.676	14.7	20.0
6 20	14 49.63	-32 9.2	2.047	2.887	13.5	20.2	6 20	14 53.41	+ 2 26.4	1.911	2.668	17.3	20.1
99468	2002 <i>CE</i> ₁₀₃		5 12.4 284°85	0.2°/12.5	18		192665	1999 <i>RS</i> ₁₈₁		5 12.5 194°11	0.6°/12.8	17	R
4 11	15 41.86	-19 23.5	1.772	2.647	13.0	19.5	4 11	15 41.92	-21 13.8	2.080	2.944	11.8	20.9
4 21	15 36.21	-19 16.3	1.692	2.636	9.4	19.3	4 21	15 35.93	-20 58.6	2.004	2.943	8.5	20.6
5 1	15 28.39	-19 1.7	1.635	2.625	5.2	19.0	5 1	15 28.10	-20 35.0	1.954	2.941	4.8	20.4
5 11	15 19.25	-18 41.3	1.605	2.615	0.7	18.6	5 11	15 19.23	-20 4.8	1.930	2.939	0.9	20.1
5 21	15 9.82	-18 17.9	1.601	2.604	3.9	18.9	5 21	15 10.22	-19 30.6	1.935	2.937	3.4	20.3
5 31	15 1.23	-17 55.4	1.624	2.593	8.3	19.1	5 31	15 2.02	-18 56.4	1.967	2.935	7.2	20.5
6 10	14 54.43	-17 37.8	1.671	2.583	12.3	19.3	6 10	14 55.42	-18 26.1	2.025	2.932	10.7	20.7
6 20	14 50.04	-17 28.3	1.739	2.572	15.8	19.5	6 20	14 50.91	-18 3.1	2.105	2.929	13.7	20.9
290461	2005 <i>TL</i> ₁₆₈		5 12.4 336°97	5.4°/14.4	16		55516	2001 <i>VE</i> ₂₄		5 12.5 100°92	0.3°/12.7	18	
4 11	15 45.81	-29 45.1	1.898	2.738	13.8	19.8	4 11	15 40.40	-20 16.2	2.335	3.199	10.7	19.6
4 21	15 39.29	-30 58.9	1.816	2.729	10.8	19.6	4 21	15 34.57	-20 2.0	2.274	3.212	7.6	19.5
5 1	15 30.24	-32 1.6	1.758	2.721	7.7	19.3	5 1	15 27.24	-19 41.4	2.237	3.225	4.2	19.3
5 11	15 19.50	-32 49.4	1.725	2.713	5.5	19.2	5 11	15 19.11	-19 16.0	2.229	3.238	0.7	19.0
5 21	15 8.22	-33 20.6	1.720	2.706	6.0	19.2	5 21	15 10.98	-18 48.3	2.249	3.251	3.0	19.2
5 31	14 57.71	-33 36.0	1.741	2.699	8.7	19.4	5 31	15 3.62	-18 21.5	2.297	3.263	6.4	19.5
6 10	14 49.12	-33 39.9	1.786	2.693	11.9	19.5	6 10	14 57.67	-17 58.6	2.371	3.276	9.5	19.7
6 20	14 43.22	-33 37.5	1.853	2.687	14.9	19.7	6 20	14 53.54	-17 42.1	2.468	3.288	12.1	19.9
257899	2000 <i>TR</i> ₂₇		5 12.4 244°78	0.5°/13.2	18		157618	2005 <i>WX</i> ₈₀		5 12.5 341°13	0.1°/12.4	17	
4 11	15 32.37	-22 11.3	4.646	5.498	6.0	20.5	4 11	15 41.36	-19 1.0	1.539	2.421	14.1	20.2
4 21	15 28.41	-21 56.5	4.560	5.492	4.3	20.4	4 21	15 36.03	-18 50.5	1.469	2.417	10.2	19.9
5 1	15 23.72	-21 37.5	4.501	5.486	2.5	20.2	5 1	15 28.36	-18 32.0	1.422	2.413	5.6	19.6
5 11	15 18.63	-21 15.2	4.472	5.480	0.7	20.1	5 11	15 19.29	-18 7.9	1.400	2.410	0.7	19.3
5 21	15 13.49	-20 50.9	4.472	5.474	1.7	20.2	5 21	15 10.01	-17 41.4	1.404	2.407	4.3	19.5
5 31	15 8.66	-20 26.0	4.502	5.468	3.6	20.3	5 31	15 1.74	-17 17.2	1.433	2.404	9.0	19.8
6 10	15 4.45	-20 2.2	4.559	5.462	5.3	20.4	6 10	14 55.50	-16 59.7	1.485	2.402	13.3	20.0
6 20	15 1.12	-19 40.9	4.642	5.455	6.9	20.5	6 20	14 51.87	-16 52.0	1.557	2.400	16.9	20.3
333899	1999 <i>RQ</i> ₂₁		5 12.4 192°44	0.1°/12.4	18		98022	2000 <i>QC</i> ₂₄₆		5 12.5 171°71	2.5°/11.0	16	
4 11	15 41.93	-19 10.3	2.467	3.327	10.3	21.3	4 11	15 45.10	-12 55.1	1.879	2.752	12.4	20.6
4 21	15 35.67	-18 54.1	2.388	3.325	7.4	21.1	4 21	15 38.21	-12 22.3	1.813	2.756	8.9	20.4
5 1	15 27.86	-18 31.9	2.335	3.323	4.0	20.9	5 1	15 29.36	-11 47.1	1.771	2.760	5.1	20.2
5 11	15 19.17	-18 5.6	2.310	3.320	0.5	20.6	5 11	15 19.42	-11 13.1	1.757	2.762	2.5	20.0
5 21	15 10.36	-17 37.3	2.315	3.316	3.1	20.8	5 21	15 9.40	-10 44.0	1.771	2.764	5.0	20.2
5 31	15 2.22	-17 10.1	2.349	3.312	6.5	21.0	5 31	15 0.32	-10 23.4	1.812	2.765	8.9	20.4
6 10	14 55.42	-16 47.2	2.409	3.307	9.6	21.2	6 10	14 53.02	-10 14.0	1.878	2.766	12.4	20.6
6 20	14 50.42	-16 30.8	2.492	3.301	12.3	21.4	6 20	14 47.97	-10 16.7	1.965	2.765	15.4	20.8
469005	2015 <i>AG</i> ₂₀₆		5 12.4 198°92	2.2°/11.2	17		227450	2005 <i>WA</i> ₆₂		5 12.5 119°15	0.1°/12.4	18	
4 11	15 43.61	-13 12.1	1.977	2.850	11.9	21.9	4 11	15 43.92	-18 41.0	1.962	2.830	12.2	21.1
4 21	15 37.14	-12 47.1	1.903	2.847	8.5	21.7	4 21	15 37.30	-18 33.9	1.902	2.843	8.7	20.9
5 1	15 28.77	-12 19.8	1.855	2.844	4.8	21.4	5 1	15 28.82	-18 20.9	1.866	2.855	4.8	20.6
5 11	15 19.30	-11 53.2	1.834	2.840	2.2	21.2	5 11	15 19.35	-18 3.4	1.857	2.867	0.6	20.3
5 21	15 9.68	-11 30.5	1.840	2.835	4.7	21.4	5 21	15 9.85	-17 44.2	1.877	2.879	3.6	20.6
5 31	15 0.88	-11 15.0	1.875	2.830	8.5	21.6	5 31	15 1.30	-17 26.4	1.925	2.890	7.5	20.9
6 10	14 53.71	-11 9.2	1.934	2.824	12.0	21.8	6 10	14 54.49	-17 13.3	1.997	2.901	11.0	21.1
6 20	14 48.70	-11 14.4	2.014	2.818	15.0	22.0	6 20	14 49.86	-17 7.4	2.091	2.912	14.0	21.3
353518	2011 <i>SZ</i> ₁₂₁		5 12.4 218°98	0.6°/11.9	18		159770	2003 <i>HJ</i> ₄₇		5 12.5 296°06	3.5°/10.8	18	
4 11	15 39.39	-17 23.0	2.513	3.380	9.9	22.2	4 11	15 44.02	- 9 41.7	1.736	2.615	13.0	19.0
4 21	15 33.87	-17 1.3	2.433	3.374	7.0	22.0	4 21	15 38.01	- 9 30.4	1.636	2.581	9.5	18.8
5 1	15 26.88	-16 35.0	2.379	3.368	3.8	21.8	5 1	15 29.58	- 9 20.6	1.560	2.547	5.8	18.5
5 11	15 19.06	-16 6.1	2.353	3.362	0.7	21.5	5 11	15 19.50	- 9 15.5	1.510	2.513	3.5	18.2
5 21	15 11.12	-15 37.0	2.356	3.356	3.2	21.7	5 21	15 8.77	- 9 18.4	1.487	2.478	6.1	18.3
5 31	15 3.78	-15 10.7	2.387	3.349	6.5	21.9	5 31	14 58.63	- 9 32.0	1.490	2.444	10.4	18.5
6 10	14 57.70	-14 50.0	2.445	3.342	9.5	22.1	6 10	14 50.19	- 9 58.2	1.516	2.409	14.6	18.6
6 20	14 53.29	-14 36.9	2.525	3.334	12.1	22.3	6 20	14 44.22	-10 37.4	1.562	2.374	18.3	18.8
57343	2001 <i>QH</i> ₂₆₉		5 12.5 150°60	6.5°/17.3	18		37						

EPHEMERIDES

5 12.5

5 12.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
505249	2012 <i>UT</i> ₁₂₂		5 12.5 133°18	1°0/13.3 17			380594	2004 <i>RA</i> ₃₄₁		5 12.5 222°46	4°3/ 9.9 17		
4 11	15 40.57	-23 6.0	2.399	3.255	10.7	22.3	4 11	15 42.92	-5 52.3	2.167	3.037	11.1	21.3
4 21	15 34.72	-22 48.6	2.330	3.264	7.8	22.2	4 21	15 36.55	-5 27.5	2.091	3.028	8.3	21.1
5 1	15 27.35	-22 22.6	2.287	3.272	4.5	22.0	5 1	15 28.46	-5 6.5	2.041	3.020	5.5	20.9
5 11	15 19.17	-21 49.5	2.272	3.280	1.3	21.7	5 11	15 19.36	-4 52.7	2.018	3.010	4.4	20.8
5 21	15 10.95	-21 12.0	2.285	3.288	2.9	21.9	5 21	15 10.08	-4 48.8	2.023	3.000	6.1	20.9
5 31	15 3.48	-20 33.5	2.327	3.295	6.3	22.1	5 31	15 1.49	-4 57.0	2.055	2.990	9.1	21.1
6 10	14 57.42	-19 57.7	2.395	3.302	9.3	22.3	6 10	14 54.35	-5 17.9	2.112	2.979	12.1	21.2
6 20	14 53.18	-19 27.8	2.486	3.309	11.9	22.5	6 20	14 49.15	-5 51.0	2.190	2.968	14.7	21.4
431529	2007 <i>TC</i> ₂₈₇		5 12.5 290°44	1°7/13.2 16			378290	2007 <i>EF</i> ₁₃₆		5 12.5 243°85	10°3/ 1.9 18		
4 11	15 44.23	-21 46.6	1.875	2.739	12.9	20.8	4 11	15 40.33	+9 0.0	2.101	2.946	12.4	20.8
4 21	15 38.04	-22 15.5	1.784	2.720	9.5	20.6	4 21	15 34.77	+11 4.2	2.040	2.930	10.9	20.7
5 1	15 29.53	-22 37.6	1.717	2.702	5.6	20.3	5 1	15 27.51	+12 55.9	2.004	2.914	10.3	20.6
5 11	15 19.49	-22 52.4	1.676	2.683	2.0	20.0	5 11	15 19.24	+14 27.1	1.993	2.897	10.8	20.6
5 21	15 8.96	-23 0.1	1.663	2.665	3.9	20.1	5 21	15 10.79	+15 31.7	2.007	2.880	12.2	20.6
5 31	14 59.12	-23 3.0	1.677	2.646	8.1	20.3	5 31	15 3.01	+16 6.6	2.044	2.862	14.2	20.7
6 10	14 51.04	-23 4.5	1.716	2.628	12.0	20.5	6 10	14 56.66	+16 12.4	2.099	2.844	16.2	20.9
6 20	14 45.42	-23 8.2	1.775	2.609	15.5	20.7	6 20	14 52.23	+15 51.9	2.170	2.825	18.1	21.0
112295	2002 <i>LA</i> ₃₇		5 12.5 314°93	0°9/11.9 18			184758	2005 <i>SN</i> ₂₅₇		5 12.5 149°47	1°4/13.4 18		
4 11	15 39.18	-19 42.9	1.285	2.178	15.6	19.5	4 11	15 41.40	-22 59.9	2.587	3.439	10.2	20.6
4 21	15 34.96	-18 52.4	1.205	2.158	11.3	19.2	4 21	15 35.31	-23 10.2	2.513	3.443	7.4	20.4
5 1	15 28.00	-17 47.6	1.145	2.139	6.2	18.8	5 1	15 27.71	-23 13.6	2.465	3.448	4.4	20.2
5 11	15 19.29	-16 33.1	1.110	2.120	1.0	18.4	5 11	15 19.26	-23 10.2	2.445	3.452	1.6	20.0
5 21	15 10.15	-15 15.6	1.099	2.101	5.3	18.7	5 21	15 10.70	-23 1.5	2.454	3.456	2.9	20.1
5 31	15 2.05	-14 4.2	1.111	2.083	10.9	18.9	5 31	15 2.78	-22 49.6	2.492	3.459	5.9	20.3
6 10	14 56.22	-13 6.6	1.145	2.066	15.9	19.1	6 10	14 56.17	-22 37.5	2.557	3.463	8.8	20.5
6 20	14 53.39	-12 27.9	1.196	2.050	20.3	19.4	6 20	14 51.31	-22 27.7	2.644	3.466	11.3	20.7
377784	2005 <i>YL</i> ₂₆₃		5 12.5 143°22	1°7/13.5 17			1649	Fabre		5 12.5 67°39	5°4/ 8.6 18		
4 11	15 42.91	-23 52.7	1.866	2.727	13.0	21.8	4 11	15 38.64	-3 57.4	2.085	2.962	11.2	16.6
4 21	15 36.83	-23 49.1	1.795	2.730	9.6	21.6	4 21	15 33.43	-3 3.0	2.028	2.966	8.5	16.5
5 1	15 28.68	-23 34.6	1.749	2.733	5.7	21.4	5 1	15 26.69	-2 13.8	1.997	2.970	6.1	16.3
5 11	15 19.36	-23 10.2	1.729	2.736	2.0	21.1	5 11	15 19.12	-1 34.3	1.992	2.974	5.5	16.3
5 21	15 9.90	-22 38.5	1.736	2.738	3.7	21.2	5 21	15 11.53	-1 8.3	2.013	2.978	7.1	16.4
5 31	15 1.39	-22 3.6	1.770	2.740	7.6	21.5	5 31	15 4.69	-0 58.2	2.061	2.983	9.8	16.6
6 10	14 54.71	-21 30.6	1.829	2.742	11.3	21.7	6 10	14 59.27	-1 4.6	2.131	2.987	12.4	16.8
6 20	14 50.37	-21 3.5	1.909	2.744	14.5	21.9	6 20	14 55.68	-1 26.5	2.221	2.991	14.8	16.9
201673	2003 <i>UK</i> ₇₇		5 12.5 119°67	1°5/13.6 18			168557	1999 <i>XF</i> ₆		5 12.5 240°44	0°0/12.5 18		
4 11	15 41.12	-25 35.8	2.087	2.942	12.1	20.2	4 11	15 35.44	-19 32.8	3.771	4.628	7.1	21.0
4 21	15 35.28	-24 54.8	2.019	2.950	8.9	20.0	4 21	15 30.75	-19 14.6	3.679	4.615	5.1	20.9
5 1	15 27.70	-24 1.1	1.976	2.959	5.2	19.8	5 1	15 25.11	-18 52.3	3.614	4.602	2.8	20.7
5 11	15 19.22	-22 57.1	1.960	2.967	1.8	19.5	5 11	15 18.92	-18 27.0	3.579	4.588	0.4	20.5
5 21	15 10.76	-21 47.0	1.972	2.975	3.3	19.7	5 21	15 12.64	-18 0.4	3.573	4.575	2.1	20.6
5 31	15 3.22	-20 36.2	2.013	2.983	6.9	19.9	5 31	15 6.73	-17 34.3	3.598	4.561	4.5	20.8
6 10	14 57.31	-19 30.4	2.079	2.990	10.3	20.1	6 10	15 1.60	-17 10.8	3.649	4.547	6.7	20.9
6 20	14 53.47	-18 33.7	2.168	2.997	13.2	20.3	6 20	14 57.57	-16 51.5	3.726	4.532	8.6	21.0
209434	2004 <i>FP</i> ₆₃		5 12.5 59°78	5°1/ 8.6 18			499888	2011 <i>FD</i> ₁₀₂		5 12.5 135°80	5°6/16.3 17		
4 11	15 38.16	-5 53.4	2.018	2.899	11.3	19.7	4 11	15 45.33	-35 1.1	1.930	2.750	14.4	21.8
4 21	15 33.11	-4 46.8	1.963	2.905	8.4	19.6	4 21	15 38.67	-35 11.0	1.860	2.757	11.4	21.7
5 1	15 26.50	-3 43.5	1.933	2.911	5.9	19.4	5 1	15 29.74	-35 1.6	1.811	2.764	8.4	21.5
5 11	15 19.07	-2 48.8	1.930	2.917	5.2	19.4	5 11	15 19.53	-34 31.6	1.788	2.771	6.0	21.3
5 21	15 11.63	-2 7.2	1.954	2.923	7.0	19.5	5 21	15 9.23	-33 43.0	1.791	2.777	5.9	21.4
5 31	15 4.98	-1 41.7	2.003	2.929	9.8	19.7	5 31	15 0.05	-32 40.7	1.821	2.783	8.2	21.5
6 10	14 59.79	-1 33.4	2.075	2.936	12.5	19.9	6 10	14 52.92	-31 31.9	1.876	2.788	11.2	21.7
6 20	14 56.45	-1 41.9	2.167	2.942	15.0	20.1	6 20	14 48.39	-30 23.9	1.953	2.793	14.1	21.9
502800	2015 <i>DP</i> ₁₀₇		5 12.5 32°17	8°4/ 8.4 17			522864	2016 <i>NC</i> ₈₈		5 12.5 238°63	0°3/12.7 17		
4 11	15 42.34	+2 21.8	1.651	2.522	14.0	20.2	4 11	15 40.57	-20 35.6	2.168	3.034	11.3	22.3
4 21	15 36.36	+3 3.0	1.599	2.525	11.2	20.0	4 21	15 34.97	-20 17.0	2.088	3.028	8.1	22.1
5 1	15 28.38	+3 31.1	1.569	2.528	9.0	19.9	5 1	15 27.62	-19 50.7	2.033	3.021	4.5	21.8
5 11	15 19.32	+3 40.5	1.564	2.531	8.5	19.9	5 11	15 19.27	-19 18.4	2.005	3.014	0.7	21.5
5 21	15 10.22	+3 27.9	1.584	2.534	10.0	20.0	5 21	15 10.75	-18 43.1	2.005	3.007	3.3	21.7
5 31	15 2.12	+2 52.7	1.627	2.537	12.6	20.1	5 31	15 2.95	-18 8.2	2.033	3.000	7.1	21.9
6 10	14 55.85	+1 56.9	1.692	2.541	15.4	20.3	6 10	14 56.64	-17 37.9	2.087	2.993	10.5	22.1
6 20	14 51.91	+0 44.1	1.776	2.545	18.0	20.5	6 20	14 52.30	-17 14.9	2.162	2.986	13.4	22.3
206995	2004 <i>TB</i> ₂₀₃		5 12.5 345°08	0°9/12.9 17			283538	2001 <i>TB</i> ₂₃₄		5 12.5 254°61	0°0/12.5 18		
4 11	15 40.69	-23 27.8	1.217	2.105	16.7	19.5	4 11	15 32.60	-19 17.2	4.404	5.263	6.1	20.6
4 21	15 36.02	-22 43.9	1.152	2.101	12.2	19.3	4 21	15 28.63	-18 59.9	4.321	5.258	4.4	20.5
5 1	15 28.52	-21 42.3	1.106	2.097	7.0	18.9	5 1	15 23.91	-18 39.3	4.266	5.254	2.4	20.3
5 11	15 19.37	-20 26.6	1.085	2.094	1.5	18.6	5 11	15 18.78	-18 16.6	4.240	5.250	0.3	20.1
5 21	15 10.02	-19 4.0	1.087	2.091	4.8	18.8	5 21	15 13.60	-17 53.0	4.245	5.246	1.8	20.3
5 31	15 1.99	-17 43.9	1.113	2.089	10.3	19.1	5 31	15 8.74	-17 30.2	4.278	5.242	3.8	20.4
6 10	14 56.47	-16 35.3	1.160	2.088	15.3	19.4	6 10	15 4.52	-17 9.7	4.339	5.237	5.7	20.5
6 20	14 54.03	-15 43.7	1.226	2.087	19.5	19.6	6 20	15 1.21	-16 52.7	4.425	5.233	7.3	20.7
85358	1995 <i>WJ</i> ₁₂		5 12.5 18°29	4°5/10.7 17			68789	2002 <i>FD</i> ₁₇		5 12.5 88°04	4°3/ 9.7		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
6967	1991 VJ_3		5 12.5 151°98	0°1/12.4	18		222566	2001 VR_{84}		5 12.5 304°57	7°5/15.3	18	
4 11	15 46.85	-18 52.2	1.644	2.514	14.0	17.8	4 11	15 46.50	-33 47.2	1.566	2.402	16.4	19.5
4 21	15 39.76	-18 44.0	1.580	2.522	10.1	17.6	4 21	15 40.42	-34 54.4	1.481	2.387	13.3	19.2
5 1	15 30.35	-18 28.3	1.539	2.529	5.5	17.3	5 1	15 31.20	-35 44.7	1.417	2.372	10.1	19.0
5 11	15 19.63	-18 7.1	1.525	2.535	0.7	17.0	5 11	15 19.81	-36 12.8	1.377	2.357	7.8	18.8
5 21	15 8.81	-17 43.4	1.539	2.541	4.1	17.2	5 21	15 7.69	-36 16.6	1.362	2.343	8.0	18.8
5 31	14 59.12	-17 21.2	1.579	2.546	8.7	17.5	5 31	14 56.52	-35 58.3	1.371	2.329	10.7	18.9
6 10	14 51.53	-17 4.9	1.643	2.550	12.8	17.8	6 10	14 47.80	-35 24.9	1.402	2.315	14.2	19.1
6 20	14 46.59	-16 57.5	1.728	2.554	16.2	18.0	6 20	14 42.43	-34 44.8	1.453	2.302	17.6	19.2
160068	2000 CS_{10}		5 12.5 217°48	4°4/15.9	18		184988	2006 FF_{12}		5 12.5 327°25	2°9/ 8.7	18	
4 11	15 43.42	-34 4.3	2.481	3.295	11.8	20.2	4 11	15 31.76	- 5 9.7	4.142	5.011	6.3	19.7
4 21	15 37.00	-34 3.5	2.391	3.286	9.3	20.0	4 21	15 28.05	- 4 31.5	4.072	5.007	4.7	19.6
5 1	15 28.75	-33 47.3	2.324	3.277	6.8	19.8	5 1	15 23.60	- 3 55.5	4.030	5.004	3.3	19.4
5 11	15 19.43	-33 15.0	2.284	3.268	4.7	19.7	5 11	15 18.77	- 3 23.8	4.017	5.001	2.9	19.4
5 21	15 9.92	-32 28.0	2.271	3.258	4.7	19.7	5 21	15 13.89	- 2 58.0	4.033	4.998	3.9	19.5
5 31	15 1.17	-31 29.9	2.288	3.248	6.8	19.8	5 31	15 9.33	- 2 39.7	4.076	4.995	5.4	19.6
6 10	14 53.98	-30 26.3	2.330	3.237	9.5	19.9	6 10	15 5.42	- 2 29.7	4.145	4.992	7.1	19.7
6 20	14 48.85	-29 22.6	2.396	3.225	12.1	20.1	6 20	15 2.41	- 2 28.3	4.237	4.989	8.5	19.8
249470	2009 JA_{13}		5 12.5 67°85	1°5/11.6	17		214872	2007 QV_6		5 12.5 196°77	3°7/10.2	16	
4 11	15 40.99	-13 49.4	2.147	3.021	11.1	20.3	4 11	15 43.71	-11 10.5	1.733	2.613	13.0	21.4
4 21	15 35.15	-13 44.6	2.082	3.027	7.9	20.2	4 21	15 37.41	-10 15.6	1.665	2.611	9.4	21.2
5 1	15 27.67	-13 38.3	2.042	3.032	4.3	19.9	5 1	15 29.04	- 9 18.8	1.621	2.608	5.6	21.0
5 11	15 19.28	-13 32.4	2.030	3.038	1.5	19.8	5 11	15 19.49	- 8 25.2	1.603	2.604	3.7	20.9
5 21	15 10.81	-13 29.0	2.045	3.043	3.9	19.9	5 21	15 9.81	- 7 39.9	1.613	2.601	6.2	21.0
5 31	15 3.10	-13 30.1	2.089	3.049	7.4	20.2	5 31	15 1.07	- 7 7.5	1.649	2.596	10.0	21.2
6 10	14 56.86	-13 37.8	2.157	3.054	10.6	20.4	6 10	14 54.16	- 6 50.9	1.708	2.591	13.7	21.4
6 20	14 52.53	-13 52.8	2.247	3.060	13.4	20.6	6 20	14 49.60	- 6 50.6	1.787	2.585	16.8	21.6
91049	1998 FN_{32}		5 12.5 20°33	9°4/16.9	18		334375	2002 AR_{121}		5 12.5 62°25	8°2/17.7	17	
4 11	15 46.79	-38 49.2	1.532	2.349	17.6	17.8	4 11	15 45.93	-39 52.7	1.765	2.569	16.2	20.1
4 21	15 40.58	-40 4.7	1.468	2.353	14.7	17.6	4 21	15 39.53	-40 29.6	1.696	2.574	13.5	19.9
5 1	15 31.18	-40 57.1	1.424	2.358	11.9	17.4	5 1	15 30.40	-40 43.1	1.648	2.579	10.7	19.7
5 11	15 19.77	-41 21.1	1.402	2.363	9.8	17.3	5 11	15 19.68	-40 30.0	1.622	2.583	8.7	19.6
5 21	15 7.95	-41 15.0	1.404	2.368	9.6	17.3	5 21	15 8.74	-39 50.7	1.621	2.588	8.3	19.6
5 31	14 57.47	-40 42.6	1.429	2.375	11.4	17.5	5 31	14 59.06	-38 50.0	1.645	2.594	9.9	19.7
6 10	14 49.71	-39 52.5	1.475	2.382	14.0	17.6	6 10	14 51.79	-37 36.3	1.692	2.599	12.5	19.9
6 20	14 45.42	-38 54.3	1.542	2.389	16.8	17.8	6 20	14 47.52	-36 18.5	1.760	2.604	15.2	20.0
353820	2012 TC_{315}		5 12.5 135°39	2°6/10.2	18		79626	1998 RQ_{66}		5 12.5 197°07	0°1/12.5	18	
4 11	15 39.49	- 9 35.8	2.890	3.757	8.8	21.9	4 11	15 42.57	-20 19.0	1.652	2.527	13.7	18.9
4 21	15 33.66	- 9 1.7	2.833	3.772	6.3	21.7	4 21	15 36.76	-19 48.5	1.583	2.527	9.9	18.7
5 1	15 26.69	- 8 28.2	2.803	3.787	3.8	21.6	5 1	15 28.74	-19 8.1	1.536	2.526	5.5	18.4
5 11	15 19.15	- 7 58.1	2.802	3.801	2.7	21.5	5 11	15 19.46	-18 20.7	1.516	2.525	0.7	18.0
5 21	15 11.63	- 7 33.6	2.831	3.814	4.2	21.6	5 21	15 10.03	-17 30.5	1.522	2.524	4.1	18.3
5 31	15 4.72	- 7 16.8	2.888	3.827	6.6	21.8	5 31	15 1.63	-16 43.1	1.554	2.523	8.7	18.6
6 10	14 58.90	- 7 9.1	2.971	3.839	8.9	22.0	6 10	14 55.18	-16 3.8	1.611	2.522	12.7	18.8
6 20	14 54.51	- 7 10.7	3.077	3.851	11.0	22.2	6 20	14 51.24	-15 36.1	1.687	2.521	16.2	19.0
501325	2013 XD_3		5 12.5 206°72	2°2/14.2	17		501353	2013 YC_{25}		5 12.5 214°64	0°8/11.9	17	
4 11	15 42.20	-27 39.5	2.076	2.924	12.5	21.3	4 11	15 42.59	-16 50.7	2.252	3.118	10.9	22.6
4 21	15 36.21	-27 3.3	1.995	2.920	9.3	21.0	4 21	15 36.35	-16 31.4	2.170	3.111	7.8	22.4
5 1	15 28.32	-26 12.2	1.938	2.916	5.8	20.8	5 1	15 28.39	-16 7.4	2.113	3.103	4.3	22.2
5 11	15 19.38	-25 7.7	1.908	2.912	2.6	20.6	5 11	15 19.42	-15 40.6	2.085	3.094	0.9	21.9
5 21	15 10.33	-23 53.9	1.906	2.908	3.6	20.7	5 21	15 10.26	-15 13.8	2.085	3.085	3.6	22.1
5 31	15 2.18	-22 36.3	1.933	2.903	7.1	20.9	5 31	15 1.80	-14 50.1	2.114	3.075	7.3	22.3
6 10	14 55.71	-21 21.3	1.985	2.897	10.7	21.1	6 10	14 54.77	-14 32.7	2.168	3.065	10.6	22.5
6 20	14 51.42	-20 14.3	2.060	2.892	13.7	21.3	6 20	14 49.68	-14 23.5	2.245	3.054	13.5	22.7
323302	2003 UF_{29}		5 12.5 165°35	0°4/12.7	17		9156	Malanin		5 12.5 267°35	4°0/14.3	18	
4 11	15 45.15	-20 45.1	1.912	2.776	12.7	21.9	4 11	15 45.92	-27 51.3	1.434	2.295	16.2	17.8
4 21	15 38.33	-20 29.8	1.843	2.781	9.1	21.7	4 21	15 39.90	-28 1.7	1.349	2.280	12.4	17.5
5 1	15 29.50	-20 5.8	1.798	2.785	5.1	21.4	5 1	15 30.84	-27 55.1	1.285	2.263	8.1	17.2
5 11	15 19.54	-19 35.0	1.780	2.789	0.9	21.1	5 11	15 19.78	-27 29.8	1.245	2.247	4.4	16.9
5 21	15 9.48	-19 0.4	1.790	2.793	3.6	21.3	5 21	15 8.15	-26 47.6	1.230	2.230	5.4	16.9
5 31	15 0.38	-18 26.2	1.829	2.795	7.8	21.6	5 31	14 57.59	-25 54.2	1.240	2.213	9.9	17.1
6 10	14 53.09	-17 56.7	1.892	2.797	11.5	21.8	6 10	14 49.48	-24 57.9	1.273	2.196	14.5	17.3
6 20	14 48.12	-17 35.4	1.977	2.799	14.6	22.0	6 20	14 44.62	-24 6.7	1.325	2.178	18.7	17.6
352587	2008 ER_{11}		5 12.5 75°43	3°1/14.3	17		35774	1999 JL_9		5 12.5 46°27	6°9/10.0	18	
4 11	15 42.98	-27 19.0	2.256	3.099	11.7	21.2	4 11	15 44.92	- 1 18.6	1.507	2.385	14.7	17.8
4 21	15 36.68	-27 46.6	2.188	3.108	8.9	21.1	4 21	15 38.32	- 1 6.7	1.458	2.394	11.2	17.6
5 1	15 28.56	-28 3.7	2.144	3.117	5.8	20.9	5 1	15 29.53	- 1 6.3	1.431	2.404	8.1	17.5
5 11	15 19.42	-28 9.6	2.128	3.126	3.4	20.7	5 11	15 19.57	- 1 21.5	1.429	2.414	6.9	17.4
5 21	15 10.14	-28 5.2	2.139	3.135	4.0	20.8	5 21	15 9.60	- 1 54.3	1.452	2.425	8.6	17.5
5 31	15 1.66	-27 53.0	2.179	3.145	6.7	21.0	5 31	15 0.81	- 2 44.6	1.501	2.436	11.8	17.7
6 10	14 54.76	-27 36.8	2.244	3.154	9.7	21.2	6 10	14 54.07	- 3 50.4	1.571	2.447	15.1	18.0
6 20	14 49.94	-27 20.6	2.331	3.163	12.4	21.4	6 20	14 49.90	- 5 8.2	1.660	2.458	17.9	18.2
137513	1999 VY_{35}		5 12.5 162°10	0°2/12.4	17		499312	2009 WH_{75}		5 12.5 176°84	1°2/11.7	17	
4 11	15 44.13												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
174573	2003 <i>OM</i> ₂₂		5 12.5 241 ^o .71	2 ^o .2/11.1	18		303735	2005 <i>QV</i> ₆₄		5 12.5 172 ^o .39	3 ^o .1/14.7	17	
4 11	15 44.08	-14 30.3	1.933	2.805	12.2	20.6	4 11	15 41.83	-28 39.6	2.479	3.316	11.0	20.9
4 21	15 37.72	-13 47.8	1.844	2.787	8.7	20.3	4 21	15 35.80	-28 53.1	2.402	3.317	8.4	20.7
5 1	15 29.28	-13 0.1	1.779	2.768	4.9	20.1	5 1	15 28.11	-28 55.7	2.348	3.318	5.6	20.5
5 11	15 19.56	-12 10.8	1.742	2.749	2.2	19.9	5 11	15 19.44	-28 47.0	2.322	3.319	3.3	20.4
5 21	15 9.52	-11 24.2	1.733	2.728	4.9	20.0	5 21	15 10.62	-28 28.2	2.324	3.320	3.8	20.4
5 31	15 0.21	-10 45.0	1.752	2.706	9.0	20.2	5 31	15 2.50	-28 2.1	2.355	3.320	6.3	20.6
6 10	14 52.55	-10 17.2	1.795	2.684	12.8	20.4	6 10	14 55.80	-27 32.6	2.411	3.321	9.2	20.7
6 20	14 47.13	-10 2.9	1.859	2.661	16.1	20.5	6 20	14 51.02	-27 3.6	2.491	3.321	11.7	20.9
68692	2002 <i>CV</i> ₁₆₇		5 12.5 348 ^o .94	9 ^o .2/ 7.4	18		350300	2012 <i>UJ</i> ₃₁		5 12.5 314 ^o .54	1 ^o .3/12.9	17	
4 11	15 39.67	+ 2 2.4	1.489	2.370	14.6	18.7	4 11	15 46.15	-18 50.9	1.595	2.468	14.2	19.6
4 21	15 34.72	+ 3 6.2	1.435	2.365	11.8	18.5	4 21	15 39.90	-19 44.0	1.503	2.445	10.5	19.3
5 1	15 27.64	+ 3 57.1	1.402	2.361	9.7	18.3	5 1	15 30.85	-20 35.0	1.434	2.422	6.1	19.0
5 11	15 19.35	+ 4 27.7	1.393	2.358	9.4	18.3	5 11	15 19.85	-21 22.1	1.391	2.399	1.7	18.6
5 21	15 10.93	+ 4 33.3	1.407	2.355	11.1	18.4	5 21	15 8.09	-22 4.3	1.374	2.377	4.4	18.8
5 31	15 3.52	+ 4 11.8	1.443	2.353	13.9	18.6	5 31	14 57.02	-22 41.8	1.385	2.355	9.3	19.0
6 10	14 58.00	+ 3 25.2	1.499	2.352	16.9	18.7	6 10	14 47.95	-23 17.0	1.419	2.334	13.8	19.2
6 20	14 54.91	+ 2 17.3	1.572	2.351	19.6	18.9	6 20	14 41.78	-23 52.7	1.473	2.314	17.8	19.4
181141	2005 <i>QN</i> ₁₇₁		5 12.5 256 ^o .59	3 ^o .3/14.9	18		117446	2005 <i>AV</i> ₄₅		5 12.5 328 ^o .19	1 ^o .4/10.9	18	
4 11	15 40.92	-29 53.4	2.416	3.251	11.3	20.3	4 11	15 32.95	-12 16.2	3.985	4.854	6.5	19.3
4 21	15 35.25	-29 56.3	2.328	3.242	8.7	20.1	4 21	15 28.96	-11 57.1	3.908	4.850	4.6	19.2
5 1	15 27.84	-29 46.7	2.263	3.231	5.9	19.9	5 1	15 24.16	-11 37.6	3.859	4.847	2.6	19.0
5 11	15 19.38	-29 24.3	2.225	3.221	3.6	19.7	5 11	15 18.92	-11 19.0	3.838	4.843	1.4	18.9
5 21	15 10.71	-28 50.7	2.216	3.211	4.0	19.7	5 21	15 13.62	-11 2.9	3.847	4.839	2.7	19.0
5 31	15 2.72	-28 9.2	2.234	3.200	6.6	19.9	5 31	15 8.67	-10 50.8	3.885	4.835	4.7	19.2
6 10	14 56.17	-27 24.2	2.278	3.189	9.5	20.0	6 10	15 4.40	-10 43.8	3.950	4.832	6.6	19.3
6 20	14 51.58	-26 40.3	2.345	3.179	12.2	20.2	6 20	15 1.10	-10 42.6	4.038	4.828	8.3	19.4
349362	2007 <i>VC</i> ₁₉₇		5 12.5 75 ^o .42	1 ^o .4/13.5	14 C		206623	2003 <i>WA</i> ₁₄₁		5 12.5 275 ^o .50	4 ^o .6/ 9.9	18	
4 11	15 41.39	-23 57.7	2.180	3.037	11.6	21.4	4 11	15 43.53	- 5 27.2	2.132	3.001	11.3	19.8
4 21	15 35.37	-23 42.5	2.127	3.060	8.4	21.2	4 21	15 37.24	- 5 6.5	2.037	2.974	8.5	19.6
5 1	15 27.75	-23 17.6	2.099	3.083	4.9	21.1	5 1	15 29.03	- 4 49.9	1.967	2.945	5.8	19.4
5 11	15 19.35	-22 44.8	2.098	3.105	1.7	20.9	5 11	15 19.59	- 4 41.0	1.925	2.917	4.6	19.2
5 21	15 11.01	-22 7.0	2.125	3.128	3.1	21.0	5 21	15 9.76	- 4 42.5	1.910	2.888	6.4	19.3
5 31	15 3.59	-21 27.9	2.181	3.150	6.5	21.3	5 31	15 0.48	- 4 56.9	1.923	2.858	9.6	19.4
6 10	14 57.74	-20 51.7	2.262	3.172	9.6	21.5	6 10	14 52.60	- 5 24.8	1.960	2.828	12.8	19.6
6 20	14 53.84	-20 21.5	2.366	3.194	12.3	21.7	6 20	14 46.72	- 6 5.9	2.018	2.798	15.8	19.7
342858	2008 <i>YF</i> ₁₈		5 12.5 74 ^o .66	0 ^o .2/12.3	17		518574	2007 <i>HP</i> ₉₉		5 12.5 336 ^o .29	3 ^o .0/11.1	17	
4 11	15 40.89	-18 49.2	1.972	2.844	12.0	21.5	4 11	15 42.84	-11 2.1	1.665	2.548	13.2	20.2
4 21	15 35.21	-18 31.3	1.910	2.853	8.5	21.3	4 21	15 36.93	-10 52.3	1.598	2.545	9.5	20.0
5 1	15 27.76	-18 7.0	1.873	2.863	4.7	21.0	5 1	15 28.88	-10 43.1	1.554	2.543	5.6	19.7
5 11	15 19.36	-17 38.6	1.862	2.872	0.6	20.8	5 11	15 19.56	-10 37.7	1.536	2.541	3.0	19.6
5 21	15 10.92	-17 9.1	1.879	2.881	3.5	21.0	5 21	15 10.06	-10 38.8	1.545	2.539	5.5	19.7
5 31	15 3.35	-16 42.3	1.923	2.890	7.4	21.3	5 31	15 1.48	-10 48.8	1.579	2.537	9.5	19.9
6 10	14 57.41	-16 21.4	1.992	2.899	10.9	21.5	6 10	14 54.77	-11 9.2	1.637	2.536	13.3	20.2
6 20	14 53.55	-16 8.9	2.083	2.909	13.8	21.7	6 20	14 50.46	-11 40.2	1.715	2.535	16.6	20.4
235917	2005 <i>EW</i> ₄₅		5 12.5 120 ^o .21	8 ^o .6/18.1	18		465905	2010 <i>VY</i> ₅₄		5 12.5 313 ^o .59	1 ^o .8/11.7	17	
4 11	15 47.22	-42 49.0	2.079	2.854	15.0	20.2	4 11	15 41.03	-15 52.8	1.276	2.171	15.6	20.8
4 21	15 40.34	-43 40.2	2.005	2.857	12.8	20.0	4 21	15 36.40	-15 29.9	1.196	2.151	11.3	20.4
5 1	15 30.86	-44 9.7	1.952	2.860	10.6	19.9	5 1	15 28.94	-15 0.4	1.137	2.130	6.3	20.1
5 11	15 19.79	-44 13.9	1.923	2.863	9.0	19.8	5 11	15 19.60	-14 28.0	1.102	2.111	1.8	19.8
5 21	15 8.43	-43 52.0	1.918	2.866	8.7	19.8	5 21	15 9.72	-13 57.4	1.090	2.091	5.7	19.9
5 31	14 58.15	-43 7.2	1.938	2.868	9.8	19.9	5 31	15 0.81	-13 34.4	1.102	2.073	11.2	20.2
6 10	14 50.08	-42 6.6	1.982	2.871	11.8	20.0	6 10	14 54.19	-13 23.9	1.135	2.055	16.2	20.4
6 20	14 44.87	-40 58.1	2.048	2.874	14.0	20.1	6 20	14 50.65	-13 28.7	1.185	2.037	20.5	20.6
250888	2005 <i>VJ</i> ₃₀		5 12.5 279 ^o .72	2 ^o .0/11.2	18		108108	2001 <i>FA</i> ₁₉₂		5 12.5 296 ^o .95	0 ^o .4/12.7	17	
4 11	15 40.63	-12 17.0	2.378	3.250	10.2	20.8	4 11	15 43.61	-19 26.3	1.459	2.340	14.9	20.0
4 21	15 34.99	-12 5.8	2.285	3.228	7.3	20.6	4 21	15 38.13	-19 30.1	1.371	2.318	10.9	19.7
5 1	15 27.70	-11 53.8	2.217	3.205	4.2	20.3	5 1	15 29.86	-19 26.1	1.305	2.296	6.2	19.4
5 11	15 19.38	-11 43.2	2.177	3.183	2.0	20.1	5 11	15 19.73	-19 15.3	1.264	2.274	1.0	18.9
5 21	15 10.78	-11 36.1	2.166	3.160	4.2	20.3	5 21	15 8.98	-18 59.8	1.248	2.252	4.5	19.1
5 31	15 2.71	-11 34.8	2.183	3.137	7.5	20.4	5 31	14 59.09	-18 44.0	1.257	2.230	9.8	19.4
6 10	14 55.88	-11 41.2	2.225	3.114	10.7	20.6	6 10	14 51.35	-18 32.7	1.289	2.208	14.7	19.6
6 20	14 50.83	-11 56.2	2.289	3.091	13.5	20.7	6 20	14 46.56	-18 30.0	1.339	2.187	18.9	19.8
507848	2014 <i>GV</i> ₆		5 12.5 51 ^o .25	10 ^o .7/17.8	17		259459	2003 <i>SY</i> ₉₅		5 12.5 213 ^o .27	2 ^o .1/13.7	17	
4 11	15 54.75	-46 2.2	2.077	2.824	15.9	20.7	4 11	15 45.62	-25 12.7	1.940	2.792	13.0	21.9
4 21	15 46.21	-47 54.7	2.017	2.837	13.9	20.6	4 21	15 38.89	-25 5.1	1.855	2.785	9.7	21.7
5 1	15 34.37	-49 24.6	1.978	2.852	12.1	20.5	5 1	15 29.96	-24 45.2	1.795	2.777	5.9	21.5
5 11	15 20.30	-50 25.3	1.963	2.866	10.9	20.4	5 11	15 19.72	-24 13.5	1.762	2.768	2.4	21.2
5 21	15 5.56	-50 53.5	1.972	2.880	10.7	20.4	5 21	15 9.21	-23 32.4	1.757	2.759	3.8	21.3
5 31	14 51.93	-50 51.2	2.005	2.895	11.6	20.5	5 31	14 59.59	-22 46.6	1.780	2.748	7.7	21.5
6 10	14 40.92	-50 25.2	2.061	2.910	13.0	20.7	6 10	14 51.79	-22 1.5	1.827	2.738	11.5	21.7
6 20	14 33.41	-49 44.4	2.136	2.925	14.7	20.8	6						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
394969	2008 YG ₁₆₃		5 12.5 316°06	1.6/11.5	17		138729	2000 SB ₁₈₇		5 12.5 168°03	1.9/14.4	18	
4 11	15 40.34	-15 2.3	1.981	2.859	11.7	21.8	4 11	15 39.94	-27 40.6	3.075	3.909	9.2	20.4
4 21	15 34.87	-14 34.7	1.912	2.858	8.3	21.6	4 21	15 34.12	-27 17.5	2.996	3.913	6.9	20.3
5 1	15 27.64	-14 3.5	1.867	2.858	4.6	21.3	5 1	15 27.07	-26 44.7	2.943	3.917	4.3	20.1
5 11	15 19.41	-13 31.6	1.850	2.858	1.7	21.1	5 11	15 19.35	-26 3.2	2.919	3.921	2.1	19.9
5 21	15 11.07	-13 2.3	1.860	2.857	4.3	21.3	5 21	15 11.61	-25 15.1	2.924	3.924	2.7	20.0
5 31	15 3.52	-12 39.2	1.897	2.857	8.0	21.5	5 31	15 4.47	-24 23.5	2.960	3.926	5.1	20.2
6 10	14 57.54	-12 25.2	1.958	2.857	11.4	21.7	6 10	14 58.48	-23 32.2	3.023	3.928	7.6	20.3
6 20	14 53.59	-12 21.8	2.040	2.857	14.4	21.9	6 20	14 53.99	-22 44.2	3.110	3.930	9.9	20.5
89038	2001 TL ₁₀₉		5 12.5 213°95	0.4/12.9	18		486677	2013 TH ₃₂		5 12.5 194°90	0.5/11.8	18	
4 11	15 39.57	-22 7.5	2.436	3.296	10.4	19.8	4 11	15 32.12	-16 51.0	4.642	5.505	5.8	21.4
4 21	15 34.12	-21 30.0	2.355	3.291	7.5	19.6	4 21	15 28.30	-16 24.4	4.564	5.504	4.1	21.3
5 1	15 27.16	-20 43.5	2.300	3.286	4.2	19.4	5 1	15 23.79	-15 55.3	4.514	5.503	2.2	21.1
5 11	15 19.35	-19 50.4	2.272	3.281	0.8	19.1	5 11	15 18.92	-15 25.3	4.493	5.502	0.5	21.0
5 21	15 11.45	-18 53.9	2.274	3.276	3.0	19.3	5 21	15 14.01	-14 55.8	4.502	5.501	1.9	21.1
5 31	15 4.23	-17 58.2	2.304	3.271	6.4	19.5	5 31	15 9.41	-14 28.2	4.541	5.499	3.8	21.2
6 10	14 58.34	-17 7.3	2.361	3.265	9.5	19.7	6 10	15 5.41	-14 4.1	4.607	5.498	5.5	21.4
6 20	14 54.20	-16 24.7	2.440	3.259	12.3	19.8	6 20	15 2.25	-13 44.5	4.698	5.497	7.1	21.5
410740	2009 CM ₅₂		5 12.5 60°53	2.1/13.5	16		324466	2006 UT ₄₂		5 12.5 31°75	0.3/12.6	17	
4 11	15 44.85	-23 48.7	1.309	2.186	16.5	21.8	4 11	15 45.15	-18 22.8	1.442	2.322	15.0	20.4
4 21	15 38.83	-23 46.8	1.253	2.196	12.1	21.5	4 21	15 38.93	-18 41.1	1.379	2.325	10.8	20.1
5 1	15 30.06	-23 30.9	1.219	2.205	7.1	21.3	5 1	15 30.12	-18 53.5	1.339	2.329	6.0	19.8
5 11	15 19.75	-23 2.0	1.208	2.215	2.5	21.0	5 11	15 19.79	-19 0.6	1.323	2.333	0.9	19.5
5 21	15 9.37	-22 24.1	1.222	2.226	4.6	21.2	5 21	15 9.24	-19 4.2	1.334	2.337	4.3	19.8
5 31	15 0.39	-21 43.2	1.261	2.236	9.5	21.5	5 31	14 59.85	-19 7.2	1.370	2.342	9.3	20.0
6 10	14 53.94	-21 6.3	1.322	2.246	14.0	21.8	6 10	14 52.73	-19 13.4	1.429	2.347	13.6	20.3
6 20	14 50.56	-20 38.4	1.402	2.257	17.8	22.0	6 20	14 48.48	-19 25.6	1.507	2.352	17.3	20.6
147760	2005 QH ₈		5 12.5 184°20	4.3/ 8.9	18		363539	2003 UD ₃₂₈		5 12.5 298°55	1°0/11.9	17	
4 11	15 38.62	- 5 2.3	2.534	3.404	9.7	20.6	4 11	15 41.14	-19 23.1	1.354	2.242	15.3	21.3
4 21	15 33.29	- 4 17.1	2.469	3.405	7.2	20.5	4 21	15 36.30	-18 32.0	1.275	2.227	11.1	21.0
5 1	15 26.64	- 3 35.3	2.429	3.404	5.1	20.3	5 1	15 28.80	-17 27.8	1.219	2.211	6.1	20.6
5 11	15 19.29	- 3 0.5	2.418	3.404	4.4	20.3	5 11	15 19.63	-16 15.0	1.186	2.196	1.1	20.2
5 21	15 11.87	-2 35.8	2.435	3.403	5.9	20.4	5 21	15 10.09	-15 0.2	1.179	2.181	5.2	20.5
5 31	15 5.05	-2 23.4	2.479	3.402	8.3	20.5	5 31	15 1.61	-13 51.8	1.196	2.166	10.5	20.7
6 10	14 59.41	-2 24.1	2.547	3.401	10.7	20.7	6 10	14 55.35	-12 56.9	1.235	2.151	15.4	21.0
6 20	14 55.34	-2 37.7	2.636	3.399	12.9	20.8	6 20	14 52.00	-12 20.1	1.292	2.137	19.6	21.2
156357	2001 XZ ₂₀₈		5 12.5 119°88	1°5/11.5	18		202713	2007 GP ₆₄		5 12.5 166°86	0°3/12.4	16	
4 11	15 42.96	-15 54.4	2.066	2.936	11.6	21.0	4 11	15 45.35	-20 5.9	1.506	2.381	14.8	22.0
4 21	15 36.52	-15 16.0	2.010	2.953	8.2	20.8	4 21	15 38.91	-19 27.3	1.440	2.385	10.6	21.8
5 1	15 28.44	-14 33.2	1.980	2.970	4.5	20.6	5 1	15 30.04	-18 37.6	1.397	2.387	5.8	21.5
5 11	15 19.52	-13 49.3	1.978	2.986	1.5	20.5	5 11	15 19.78	-17 40.5	1.380	2.390	0.8	21.1
5 21	15 10.66	-13 8.2	2.005	3.002	4.1	20.7	5 21	15 9.42	-16 41.3	1.390	2.392	4.5	21.4
5 31	15 2.73	-12 33.5	2.059	3.017	7.6	20.9	5 31	15 0.26	-15 46.4	1.425	2.393	9.4	21.7
6 10	14 56.39	-12 8.2	2.139	3.031	10.9	21.1	6 10	14 53.30	-15 1.8	1.484	2.394	13.7	21.9
6 20	14 52.07	-11 53.9	2.240	3.045	13.6	21.4	6 20	14 49.10	-14 31.1	1.563	2.394	17.4	22.2
242900	2006 KM ₁₁₁		5 12.5 221°42	0°4/12.8	18		184833	2005 UA ₁₀		5 12.5 220°60	2°9/ 9.7	18	
4 11	15 43.55	-19 25.5	2.407	3.265	10.6	21.2	4 11	15 37.88	- 9 18.0	2.912	3.782	8.6	21.4
4 21	15 37.06	-19 32.8	2.320	3.256	7.6	21.0	4 21	15 32.70	- 8 30.5	2.833	3.772	6.2	21.2
5 1	15 28.85	-19 35.0	2.260	3.247	4.3	20.8	5 1	15 26.33	- 7 42.9	2.780	3.763	3.9	21.1
5 11	15 19.61	-19 32.7	2.228	3.238	0.8	20.5	5 11	15 19.28	- 6 58.3	2.757	3.753	3.0	21.0
5 21	15 10.12	-19 27.2	2.226	3.228	3.1	20.7	5 21	15 12.14	- 6 19.7	2.762	3.743	4.5	21.1
5 31	15 1.26	-19 20.9	2.252	3.217	6.6	20.9	5 31	15 5.49	- 5 49.6	2.796	3.732	6.9	21.2
6 10	14 53.77	-19 16.3	2.305	3.206	9.9	21.1	6 10	14 59.86	- 5 30.0	2.856	3.720	9.4	21.4
6 20	14 48.17	-19 15.8	2.380	3.195	12.7	21.3	6 20	14 55.60	- 5 21.4	2.938	3.709	11.5	21.5
222645	2001 XE ₁₆₀		5 12.5 213°86	0°9/11.9	17		372932	2011 BL ₃₅		5 12.5 123°92	3°2/10.6	17	
4 11	15 42.42	-17 26.8	2.024	2.894	11.8	20.6	4 11	15 42.36	-11 26.4	1.783	2.663	12.6	21.8
4 21	15 36.40	-16 59.8	1.946	2.889	8.4	20.3	4 21	15 36.37	-10 46.6	1.724	2.670	9.0	21.6
5 1	15 28.52	-16 26.7	1.893	2.883	4.6	20.1	5 1	15 28.49	-10 6.0	1.689	2.677	5.3	21.4
5 11	15 19.56	-15 50.2	1.867	2.877	0.9	19.8	5 11	15 19.57	- 9 28.7	1.680	2.683	3.2	21.3
5 21	15 10.42	-15 13.6	1.870	2.870	3.9	20.0	5 21	15 10.61	- 8 58.8	1.699	2.690	5.6	21.4
5 31	15 2.07	-14 40.8	1.900	2.863	7.8	20.2	5 31	15 2.61	- 8 39.9	1.744	2.696	9.3	21.7
6 10	14 55.32	-14 15.6	1.955	2.856	11.4	20.4	6 10	14 56.36	- 8 34.1	1.812	2.701	12.7	21.9
6 20	14 50.66	-14 0.3	2.032	2.848	14.5	20.6	6 20	14 52.32	- 8 41.9	1.901	2.707	15.7	22.1
65541	Kasbek		5 12.5 74°32	2°9/10.4	18		508408	2016 GM ₂₅₇		5 12.5 253°18	5°4/ 9.8	17	
4 11	15 41.01	-10 29.8	2.312	3.184	10.4	19.0	4 11	15 44.53	- 3 49.4	1.913	2.783	12.4	21.2
4 21	15 34.87	- 9 51.1	2.275	3.217	7.4	18.9	4 21	15 38.02	- 3 28.1	1.834	2.769	9.4	20.9
5 1	15 27.42	- 9 13.3	2.264	3.250	4.4	18.7	5 1	15 29.49	- 3 13.0	1.779	2.754	6.6	20.7
5 11	15 19.39	- 8 39.5	2.282	3.282	2.9	18.7	5 11	15 19.73	- 3 8.2	1.750	2.739	5.4	20.6
5 21	15 11.50	- 8 12.6	2.328	3.315	4.7	18.8	5 21	15 9.68	- 3 16.6	1.749	2.723	7.2	20.7
5 31	15 4.47	- 7 55.0	2.402	3.346	7.5	19.1	5 31	15 0.36	- 3 40.0	1.775	2.708	10.4	20.9
6 10	14 58.83	- 7 47.9	2.501	3.378	10.1	19.3	6 10	14 52.67	- 4 18.5	1.824	2.691	13.7	21.0
6 20	14 54.91	- 7 51.5	2.622	3.409	12.3	19.5	6 20	14 47.19	- 5 10.7	1.893	2.675	16.6	21.2
20672	1999 UU ₅₀		5 12.5 44°22	4°2/ 9.9	18		50506	2000 DV ₉₉		5 12.5 293°78	1°5/13.1	18	
4 11	15 39.73	-11 24.2											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
123167	2000 TY ₅₃		5 12.5 281°39	4°0/10.1	16		331615	2002 AQ ₃₈		5 12.5 213°81	5°4/ 8.5	18	
4 11	15 42.78	- 9 27.2	1.881	2.759	12.2	20.8	4 11	15 42.40	- 2 8.8	2.393	3.256	10.5	21.8
4 21	15 36.98	- 8 47.5	1.784	2.728	9.0	20.5	4 21	15 36.11	- 1 21.8	2.319	3.247	8.1	21.7
5 1	15 29.04	- 8 7.1	1.712	2.697	5.6	20.3	5 1	15 28.30	- 0 40.1	2.271	3.237	6.0	21.5
5 11	15 19.69	- 7 30.2	1.666	2.665	4.0	20.1	5 11	15 19.59	- 0 7.9	2.250	3.226	5.5	21.5
5 21	15 9.87	- 7 1.4	1.647	2.633	6.3	20.2	5 21	15 10.75	+ 0 11.6	2.257	3.215	7.0	21.5
5 31	15 0.65	- 6 44.6	1.655	2.600	10.1	20.3	5 31	15 2.53	+ 0 16.2	2.292	3.203	9.4	21.7
6 10	14 53.00	- 6 42.5	1.686	2.567	13.9	20.5	6 10	14 55.61	+ 0 5.2	2.351	3.190	12.0	21.8
6 20	14 47.58	- 6 56.2	1.737	2.533	17.3	20.6	6 20	14 50.43	- 0 20.6	2.430	3.176	14.3	21.9
384423	2009 WE ₂₆₃		5 12.5 64°75	1°2/11.9	17		52511	1996 GH ₁₂		5 12.5 4°39	2°3/ 9.8	18	
4 11	15 42.92	-15 48.0	1.691	2.571	13.2	21.0	4 11	15 32.78	- 7 38.9	4.024	4.894	6.4	19.1
4 21	15 36.90	-15 38.3	1.633	2.580	9.4	20.7	4 21	15 28.85	- 7 14.7	3.955	4.894	4.7	18.9
5 1	15 28.83	-15 24.8	1.599	2.590	5.1	20.5	5 1	15 24.15	- 6 51.9	3.913	4.894	3.0	18.8
5 11	15 19.63	-15 9.8	1.590	2.599	1.3	20.3	5 11	15 19.03	- 6 32.3	3.901	4.895	2.3	18.8
5 21	15 10.38	-14 56.2	1.609	2.609	4.3	20.5	5 21	15 13.87	- 6 17.5	3.917	4.895	3.4	18.8
5 31	15 2.15	-14 47.3	1.654	2.619	8.5	20.8	5 31	15 9.05	- 6 8.7	3.961	4.896	5.1	19.0
6 10	14 55.80	-14 45.8	1.722	2.629	12.3	21.0	6 10	15 4.92	- 6 6.7	4.032	4.896	6.9	19.1
6 20	14 51.83	-14 53.5	1.811	2.639	15.5	21.2	6 20	15 1.71	- 6 12.0	4.126	4.897	8.4	19.2
189563	2000 SG ₂₂₂		5 12.5 281°40	7°3/ 6.8	18		211992	2005 AV ₆₁		5 12.5 199°00	1°6/10.4	18	
4 11	15 40.82	- 1 50.4	1.885	2.760	12.3	19.9	4 11	15 32.33	-10 5.7	4.666	5.533	5.7	20.8
4 21	15 35.48	- 0 21.6	1.798	2.730	9.7	19.7	4 21	15 28.45	- 9 46.0	4.592	5.532	4.0	20.7
5 1	15 28.16	+ 1 4.0	1.735	2.699	7.7	19.5	5 1	15 23.91	- 9 26.7	4.546	5.531	2.4	20.6
5 11	15 19.57	+ 2 18.9	1.698	2.669	7.5	19.4	5 11	15 19.00	- 9 9.2	4.529	5.530	1.6	20.5
5 21	15 10.61	+ 3 16.6	1.688	2.637	9.5	19.5	5 21	15 14.05	- 8 54.6	4.542	5.528	2.6	20.6
5 31	15 2.26	+ 3 52.0	1.702	2.605	12.5	19.6	5 31	15 9.39	- 8 44.3	4.584	5.527	4.3	20.7
6 10	14 55.42	+ 4 3.1	1.737	2.573	15.7	19.7	6 10	15 5.32	- 8 39.0	4.653	5.525	5.9	20.8
6 20	14 50.72	+ 3 50.7	1.791	2.541	18.5	19.8	6 20	15 2.05	- 8 39.3	4.746	5.524	7.3	20.9
72550	2001 EJ ₁		5 12.5 43°39	3°3/11.0	17		29185	Reich		5 12.5 114°60	1°9/13.8	18	
4 11	15 42.52	-10 22.7	1.589	2.475	13.6	18.5	4 11	15 44.20	-24 14.1	2.597	3.440	10.4	18.5
4 21	15 36.64	-10 10.2	1.538	2.486	9.8	18.2	4 21	15 37.33	-24 35.3	2.533	3.457	7.6	18.4
5 1	15 28.68	- 9 59.2	1.510	2.498	5.7	18.0	5 1	15 28.92	-24 48.8	2.495	3.473	4.7	18.2
5 11	15 19.62	- 9 53.0	1.507	2.511	3.3	17.9	5 11	15 19.68	-24 54.4	2.485	3.489	2.1	18.0
5 21	15 10.54	- 9 54.4	1.530	2.524	5.7	18.1	5 21	15 10.37	-24 53.0	2.505	3.505	3.1	18.1
5 31	15 2.55	-10 5.6	1.579	2.537	9.6	18.3	5 31	15 1.80	-24 46.9	2.555	3.520	5.9	18.3
6 10	14 56.48	-10 27.6	1.651	2.550	13.2	18.6	6 10	14 54.61	-24 38.8	2.631	3.535	8.7	18.5
6 20	14 52.81	-11 0.2	1.743	2.564	16.3	18.8	6 20	14 49.25	-24 31.7	2.731	3.549	11.1	18.7
519991	2013 TW ₁₆₈		5 12.5 256°36	0°1/12.5	17		144871	2004 NN ₁		5 12.5 292°23	0°7/12.0	18	
4 11	15 43.40	-18 50.7	1.875	2.745	12.6	22.4	4 11	15 39.22	-17 35.2	2.198	3.071	10.9	20.5
4 21	15 37.38	-18 39.1	1.788	2.730	9.1	22.2	4 21	15 34.15	-17 10.5	2.106	3.050	7.8	20.3
5 1	15 29.22	-18 20.5	1.726	2.715	5.1	21.9	5 1	15 27.35	-16 39.9	2.039	3.029	4.3	20.0
5 11	15 19.72	-17 56.7	1.690	2.699	0.7	21.5	5 11	15 19.49	-16 5.9	1.999	3.009	0.8	19.7
5 21	15 9.88	-17 30.2	1.681	2.683	3.9	21.7	5 21	15 11.36	-15 31.2	1.987	2.988	3.6	19.9
5 31	15 0.80	-17 5.1	1.700	2.667	8.2	22.0	5 31	15 3.82	-14 59.7	2.003	2.967	7.4	20.1
6 10	14 53.44	-16 45.4	1.744	2.651	12.2	22.2	6 10	14 57.66	-14 34.6	2.044	2.947	10.9	20.3
6 20	14 48.41	-16 34.1	1.808	2.634	15.6	22.3	6 20	14 53.38	-14 18.7	2.106	2.926	13.9	20.4
168198	2006 JR ₁₇		5 12.5 257°81	1°1/11.8	18		259285	2003 EV ₁₈		5 12.5 70°74	4°7/15.0	17	
4 11	15 41.58	-16 12.8	2.251	3.119	10.8	21.2	4 11	15 45.93	-30 1.2	1.607	2.455	15.4	20.2
4 21	15 35.78	-15 51.6	2.158	3.100	7.8	21.0	4 21	15 39.37	-30 24.3	1.550	2.470	11.9	20.0
5 1	15 28.22	-15 25.8	2.091	3.081	4.3	20.7	5 1	15 30.31	-30 30.2	1.515	2.485	8.0	19.8
5 11	15 19.58	-14 57.7	2.052	3.061	1.1	20.5	5 11	15 19.87	-30 18.0	1.505	2.500	5.0	19.7
5 21	15 10.65	-14 29.9	2.042	3.041	3.8	20.6	5 21	15 9.39	-29 49.6	1.521	2.516	5.4	19.8
5 31	15 2.33	-14 5.8	2.059	3.020	7.5	20.8	5 31	15 0.17	-29 10.0	1.562	2.531	8.6	20.0
6 10	14 55.38	-13 48.5	2.102	2.999	10.9	21.0	6 10	14 53.26	-28 26.2	1.627	2.546	12.2	20.2
6 20	14 50.34	-13 40.2	2.167	2.977	13.9	21.1	6 20	14 49.17	-27 44.6	1.713	2.561	15.4	20.5
275451	2011 CR ₇₃		5 12.5 114°48	3°7/10.4	17		336171	2008 RO ₃₉		5 12.5 336°44	7°8/15.5	17	
4 11	15 42.43	- 9 42.3	1.798	2.678	12.6	20.8	4 11	15 43.87	-33 19.4	1.408	2.257	17.2	20.0
4 21	15 36.41	- 9 6.0	1.740	2.686	9.1	20.6	4 21	15 38.74	-34 28.3	1.331	2.244	13.9	19.8
5 1	15 28.51	- 8 30.7	1.707	2.693	5.5	20.4	5 1	15 30.43	-35 19.3	1.274	2.232	10.6	19.5
5 11	15 19.60	- 8 0.5	1.700	2.700	3.7	20.3	5 11	15 19.94	-35 47.1	1.239	2.221	8.1	19.4
5 21	15 10.66	- 7 39.2	1.720	2.707	5.9	20.4	5 21	15 8.78	-35 49.7	1.227	2.211	8.3	19.3
5 31	15 2.65	- 7 29.6	1.766	2.714	9.4	20.6	5 31	14 58.69	-35 29.9	1.239	2.202	11.0	19.5
6 10	14 56.38	- 7 33.5	1.836	2.721	12.8	20.8	6 10	14 51.19	-34 55.2	1.272	2.194	14.6	19.6
6 20	14 52.31	- 7 50.7	1.926	2.728	15.7	21.1	6 20	14 47.15	-34 14.3	1.324	2.187	18.2	19.8
129185	Jonburroughs		5 12.5 315°30	0°1/12.5	17		50024	2000 AZ ₄₀		5 12.5 126°12	0°9/13.1	18	
4 11	15 40.96	-19 6.3	1.294	2.185	15.7	19.7	4 11	15 45.28	-21 38.9	1.759	2.625	13.5	18.9
4 21	15 36.47	-18 56.3	1.209	2.161	11.4	19.4	4 21	15 38.61	-21 32.2	1.697	2.635	9.8	18.7
5 1	15 29.08	-18 36.8	1.145	2.137	6.4	19.0	5 1	15 29.80	-21 16.0	1.658	2.645	5.6	18.5
5 11	15 19.73	-18 9.8	1.104	2.114	0.9	18.6	5 11	15 19.81	-20 51.9	1.646	2.655	1.3	18.2
5 21	15 9.74	-17 39.1	1.087	2.091	4.9	18.8	5 21	15 9.76	-20 22.6	1.661	2.664	3.7	18.4
5 31	15 0.68	-17 10.2	1.094	2.069	10.6	19.0	5 31	15 0.78	-19 52.5	1.704	2.673	8.0	18.7
6 10	14 53.91	-16 49.3	1.122	2.048	15.8	19.3	6 10	14 53.76	-19 26.2	1.771	2.682	11.8	18.9
6 20	14 50.28	-16 40.5	1.168	2.028	20.3	19.5	6 20	14 49.21	-19 7.2	1.859	2.690	15.0	19.1
215449	2002 OW ₈		5 12.5 222°91	3°4/10.5	17		280646	2005 BD ₃		5 12.5 165°03	3°3/10.4	18	
4 11	15 42.65	-11 58.0	1.729	2.61									

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5 12.5

5 12.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
310542	2001 <i>DW</i> ₂₅		5 12.5 108°69	1.8/11.6	18		510371	2011 <i>UH</i> ₉		5 12.6 213°92	0.8/13.2	18	
4 11	15 44.78	-15 11.5	1.602	2.481	13.9	20.7	4 11	15 41.84	-21 31.7	3.028	3.877	8.9	22.5
4 21	15 38.27	-14 42.4	1.547	2.494	9.8	20.5	4 21	15 35.62	-21 38.3	2.939	3.868	6.5	22.3
5 1	15 29.60	-14 9.1	1.516	2.506	5.4	20.2	5 1	15 28.04	-21 39.5	2.876	3.859	3.7	22.1
5 11	15 19.79	-13 35.2	1.511	2.519	1.9	20.0	5 11	15 19.64	-21 35.6	2.842	3.850	1.1	21.9
5 21	15 9.99	-13 4.7	1.533	2.531	4.9	20.3	5 21	15 11.07	-21 27.8	2.838	3.840	2.5	22.0
5 31	15 1.34	-12 41.8	1.581	2.543	9.2	20.5	5 31	15 2.98	-21 17.9	2.864	3.829	5.4	22.1
6 10	14 54.72	-12 29.6	1.652	2.554	13.0	20.8	6 10	14 55.98	-21 8.3	2.918	3.818	8.1	22.3
6 20	14 50.60	-12 29.7	1.744	2.565	16.3	21.0	6 20	14 50.48	-21 1.1	2.996	3.807	10.4	22.4
425533	2010 <i>OO</i> ₉₆		5 12.5 189°99	5.9/ 8.9	17		374291	2005 <i>QS</i> ₁₄₈		5 12.6 256°61	0.4/12.8	17	
4 11	15 44.23	- 2 22.7	2.045	2.911	11.9	21.5	4 11	15 45.22	-19 51.0	1.945	2.809	12.5	21.7
4 21	15 37.57	- 1 40.2	1.979	2.910	9.1	21.3	4 21	15 38.76	-19 51.6	1.851	2.789	9.1	21.5
5 1	15 29.15	- 1 4.2	1.939	2.908	6.7	21.2	5 1	15 30.08	-19 45.2	1.781	2.768	5.1	21.2
5 11	15 19.74	- 0 39.1	1.926	2.906	5.9	21.1	5 11	15 19.95	-19 32.5	1.738	2.747	0.9	20.8
5 21	15 10.23	- 0 28.6	1.940	2.903	7.6	21.2	5 21	15 9.38	-19 15.6	1.723	2.725	3.7	21.0
5 31	15 1.52	- 0 34.4	1.981	2.899	10.3	21.4	5 31	14 59.49	-18 57.7	1.735	2.703	8.1	21.2
6 10	14 54.36	- 0 56.8	2.045	2.894	13.1	21.5	6 10	14 51.28	-18 42.7	1.773	2.680	12.0	21.4
6 20	14 49.25	- 1 34.2	2.129	2.889	15.6	21.7	6 20	14 45.42	-18 34.1	1.832	2.656	15.5	21.6
391705	2008 <i>BS</i> ₄₈		5 12.5 44°02	9.3/ 5.9	17		241719	2000 <i>UN</i> ₄₁		5 12.6 160°14	0.4/12.2	18	
4 11	15 38.94	+ 8 0.6	2.041	2.893	12.5	20.6	4 11	15 38.82	-19 22.0	2.693	3.556	9.5	20.4
4 21	15 33.73	+ 9 5.3	1.999	2.900	10.6	20.5	4 21	15 33.45	-18 37.6	2.621	3.560	6.7	20.3
5 1	15 26.98	+ 9 55.0	1.981	2.908	9.4	20.4	5 1	15 26.80	-17 46.9	2.575	3.564	3.7	20.1
5 11	15 19.45	+10 24.1	1.987	2.915	9.5	20.4	5 11	15 19.47	-16 52.6	2.558	3.568	0.6	19.8
5 21	15 11.93	+10 29.8	2.017	2.923	10.6	20.5	5 21	15 12.12	-15 57.8	2.571	3.571	2.9	20.0
5 31	15 5.22	+10 11.4	2.070	2.932	12.4	20.7	5 31	15 5.39	-15 6.2	2.612	3.574	6.0	20.2
6 10	14 59.97	+ 9 30.7	2.143	2.940	14.4	20.8	6 10	14 59.84	-14 21.0	2.680	3.577	8.8	20.4
6 20	14 56.55	+ 8 31.2	2.235	2.948	16.2	21.0	6 20	14 55.84	-13 44.5	2.772	3.579	11.2	20.6
190375	1999 <i>RY</i> ₉₈		5 12.5 260°09	10.1/16.3	18		346144	2007 <i>VT</i> ₂₃₆		5 12.6 129°78	0.1/12.6	18	
4 11	15 54.07	-43 9.5	2.046	2.811	15.5	20.0	4 11	15 40.29	-20 33.0	2.175	3.041	11.2	21.1
4 21	15 45.96	-44 52.7	1.959	2.800	13.5	19.8	4 21	15 34.78	-20 2.6	2.106	3.046	8.1	20.9
5 1	15 34.48	-46 17.1	1.894	2.788	11.6	19.6	5 1	15 27.63	-19 24.3	2.061	3.050	4.5	20.7
5 11	15 20.54	-47 15.5	1.852	2.777	10.3	19.5	5 11	15 19.59	-18 40.6	2.044	3.054	0.6	20.4
5 21	15 5.59	-47 43.6	1.836	2.765	10.3	19.5	5 21	15 11.49	-17 54.7	2.056	3.058	3.2	20.6
5 31	14 51.40	-47 41.8	1.845	2.753	11.5	19.5	5 31	15 4.17	-17 10.9	2.095	3.062	6.9	20.8
6 10	14 39.59	-47 16.2	1.877	2.741	13.5	19.6	6 10	14 58.34	-16 32.9	2.159	3.065	10.2	21.1
6 20	14 31.21	-46 35.5	1.929	2.729	15.7	19.8	6 20	14 54.41	-16 3.6	2.246	3.069	13.0	21.3
477644	2010 <i>MP</i> ₇₇		5 12.5 274°88	0.8/11.9	18		356307	2010 <i>GO</i> ₁₂₄		5 12.6 341°11	3.5/11.3	17	
4 11	15 38.90	-17 30.5	2.424	3.293	10.1	21.4	4 11	15 43.14	-11 57.2	1.136	2.036	16.7	20.4
4 21	15 33.77	-16 58.5	2.332	3.274	7.2	21.1	4 21	15 38.00	-11 40.7	1.074	2.030	12.1	20.1
5 1	15 27.09	-16 20.7	2.265	3.255	4.0	20.9	5 1	15 29.88	-11 23.8	1.032	2.024	7.0	19.8
5 11	15 19.48	-15 39.6	2.227	3.236	0.9	20.6	5 11	15 19.93	-11 11.0	1.013	2.020	3.5	19.6
5 21	15 11.65	-14 58.3	2.217	3.216	3.4	20.8	5 21	15 9.64	-11 6.5	1.018	2.016	6.8	19.8
5 31	15 4.39	-14 20.2	2.235	3.197	6.9	21.0	5 31	15 0.62	-11 14.4	1.045	2.012	12.0	20.0
6 10	14 58.36	-13 48.7	2.279	3.177	10.1	21.1	6 10	14 54.16	-11 36.8	1.092	2.010	16.9	20.3
6 20	14 54.06	-13 26.3	2.345	3.157	12.9	21.3	6 20	14 50.94	-12 13.7	1.156	2.008	21.0	20.6
326667	2002 <i>UZ</i> ₃		5 12.5 231°93	2.0/11.7	17		319194	2005 <i>YR</i> ₁₅₆		5 12.6 254°39	1.7/11.5	17	
4 11	15 46.83	-12 19.5	1.826	2.697	12.8	20.2	4 11	15 41.91	-15 19.1	1.874	2.751	12.3	21.3
4 21	15 39.83	-12 26.8	1.746	2.689	9.2	20.0	4 21	15 36.25	-14 46.6	1.794	2.740	8.8	21.1
5 1	15 30.60	-12 34.4	1.691	2.680	5.2	19.7	5 1	15 28.60	-14 9.3	1.738	2.728	4.9	20.8
5 11	15 19.98	-12 43.8	1.663	2.670	2.1	19.5	5 11	15 19.74	-13 30.4	1.709	2.717	1.8	20.6
5 21	15 9.03	-12 56.8	1.663	2.660	4.7	19.6	5 21	15 10.65	-12 53.8	1.707	2.705	4.6	20.7
5 31	14 58.90	-13 15.1	1.691	2.650	8.9	19.9	5 31	15 2.33	-12 23.6	1.732	2.693	8.6	20.9
6 10	14 50.57	-13 40.5	1.743	2.639	12.8	20.1	6 10	14 55.67	-12 3.4	1.781	2.680	12.4	21.1
6 20	14 44.66	-14 13.6	1.816	2.628	16.1	20.3	6 20	14 51.22	-11 55.3	1.851	2.668	15.6	21.3
219540	2001 <i>QD</i> ₂₄₈		5 12.5 202°66	2.4/10.9	17		378312	2007 <i>FY</i> ₄₃		5 12.6 258°26	3.0/14.2	18	
4 11	15 41.95	-13 52.5	1.995	2.870	11.7	20.8	4 11	15 45.49	-27 0.5	2.063	2.908	12.6	20.8
4 21	15 36.06	-13 3.9	1.922	2.867	8.4	20.6	4 21	15 38.99	-27 12.5	1.964	2.886	9.6	20.6
5 1	15 28.38	-12 11.4	1.874	2.864	4.8	20.4	5 1	15 30.23	-27 12.7	1.888	2.864	6.2	20.3
5 11	15 19.67	-11 19.0	1.854	2.859	2.4	20.2	5 11	15 19.98	-27 0.2	1.839	2.840	3.3	20.1
5 21	15 10.84	-10 31.0	1.862	2.855	4.9	20.3	5 21	15 9.27	-26 36.0	1.818	2.817	4.2	20.1
5 31	15 2.82	- 9 51.8	1.897	2.850	8.5	20.5	5 31	14 59.22	-26 3.3	1.825	2.793	7.7	20.3
6 10	14 56.36	- 9 24.6	1.956	2.844	12.0	20.7	6 10	14 50.86	-25 27.2	1.857	2.768	11.4	20.5
6 20	14 51.97	- 9 10.9	2.036	2.838	14.9	20.9	6 20	14 44.88	-24 52.9	1.911	2.742	14.7	20.6
146114	2000 <i>QU</i> ₂₀₈		5 12.5 142°25	6.4/17.1	18		142794	2002 <i>UZ</i> ₁₉		5 12.6 284°27	1.4/13.3	17	
4 11	15 47.43	-40 10.0	2.770	3.541	11.7	20.2	4 11	15 43.71	-22 46.5	1.580	2.452	14.5	20.3
4 21	15 39.98	-41 0.7	2.696	3.550	9.8	20.0	4 21	15 38.12	-22 39.9	1.489	2.430	10.7	20.0
5 1	15 30.57	-41 35.7	2.645	3.558	8.0	19.9	5 1	15 29.90	-22 21.5	1.420	2.407	6.3	19.7
5 11	15 19.98	-41 52.5	2.620	3.566	6.6	19.9	5 11	15 19.95	-21 51.8	1.377	2.385	1.9	19.3
5 21	15 9.14	-41 50.6	2.622	3.573	6.5	19.9	5 21	15 9.45	-21 13.6	1.359	2.362	4.3	19.4
5 31	14 59.05	-41 32.1	2.652	3.581	7.6	19.9	5 31	14 59.79	-20 32.0	1.367	2.340	9.2	19.6
6 10	14 50.57	-41 1.2	2.707	3.587	9.3	20.1	6 10	14 52.18	-19 53.3	1.398	2.317	13.8	19.8
6 20	14 44.25	-40 23.3	2.786	3.594	11.2	20.2	6 20	14 47.38	-19 22.9	1.449	2.294	17.8	20.0
471034	2009 <i>TG</i> ₈		5 12.6 91°49	3.5/10.5	16		331780 </						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
37484	2174 T_{-1}		5 12.6 122°83	1°5/11.7 18			417983	2007 TY_{217}		5 12.6 292°80	2°6/13.5 17		
4 11	15 45.97	-16 27.8	1.661	2.536	13.7	19.6	4 11	15 45.90	-23 2.0	1.385	2.259	15.9	20.8
4 21	15 39.04	-15 49.4	1.607	2.552	9.7	19.4	4 21	15 40.05	-23 31.0	1.302	2.242	11.9	20.5
5 1	15 30.03	-15 5.2	1.577	2.568	5.3	19.2	5 1	15 31.15	-23 49.9	1.240	2.226	7.2	20.2
5 11	15 19.93	-14 19.1	1.574	2.583	1.6	18.9	5 11	15 20.17	-23 57.3	1.202	2.209	2.9	19.9
5 21	15 9.89	-13 35.5	1.598	2.597	4.6	19.2	5 21	15 8.54	-23 53.9	1.190	2.193	4.9	20.0
5 31	15 1.03	-12 59.4	1.649	2.611	8.9	19.5	5 31	14 57.87	-23 43.1	1.202	2.176	10.0	20.2
6 10	14 54.18	-12 34.3	1.724	2.623	12.7	19.7	6 10	14 49.59	-23 30.7	1.237	2.160	14.8	20.5
6 20	14 49.80	-12 22.1	1.819	2.636	15.9	20.0	6 20	14 44.56	-23 22.1	1.290	2.144	19.0	20.7
464763	2003 TD_6		5 12.6 277°99	4°6/14.4 17			205237	2000 QQ_{160}		5 12.6 306°29	1°5/13.4 17		
4 11	15 46.92	-27 56.9	1.516	2.372	15.8	21.3	4 11	15 41.80	-24 8.9	1.291	2.173	16.4	19.8
4 21	15 40.71	-28 35.3	1.430	2.356	12.2	21.1	4 21	15 37.02	-23 36.6	1.214	2.160	12.1	19.5
5 1	15 31.47	-28 59.9	1.365	2.340	8.2	20.8	5 1	15 29.36	-22 46.4	1.158	2.147	7.1	19.2
5 11	15 20.19	-29 7.8	1.325	2.323	4.9	20.6	5 11	15 19.91	-21 40.8	1.126	2.134	2.0	18.8
5 21	15 8.25	-28 58.5	1.310	2.307	5.8	20.6	5 21	15 10.07	-20 25.3	1.118	2.122	4.7	19.0
5 31	14 57.24	-28 35.6	1.320	2.290	9.7	20.7	5 31	15 1.40	-19 8.6	1.134	2.110	10.1	19.2
6 10	14 48.58	-28 5.6	1.353	2.273	14.1	20.9	6 10	14 55.14	-17 59.8	1.172	2.099	15.1	19.5
6 20	14 43.11	-27 35.6	1.406	2.256	18.0	21.1	6 20	14 52.01	-17 5.5	1.228	2.088	19.5	19.7
239984	2001 RH_{126}		5 12.6 216°09	4°8/ 8.3 18			123202	2000 UG_{25}		5 12.6 296°51	2°1/11.5 17		
4 11	15 39.04	- 3 16.6	2.635	3.501	9.5	21.5	4 11	15 42.60	-14 11.4	1.652	2.534	13.4	20.2
4 21	15 33.65	- 2 22.2	2.563	3.494	7.3	21.3	4 21	15 37.20	-13 50.5	1.557	2.505	9.7	19.9
5 1	15 26.96	- 1 31.7	2.517	3.486	5.4	21.2	5 1	15 29.38	-13 25.7	1.485	2.476	5.5	19.6
5 11	15 19.53	- 0 49.1	2.500	3.477	4.9	21.1	5 11	15 19.92	-13 0.1	1.439	2.446	2.1	19.3
5 21	15 11.99	- 0 17.6	2.510	3.469	6.3	21.2	5 21	15 9.91	-12 37.3	1.419	2.417	5.2	19.4
5 31	15 5.01	+ 0 0.4	2.547	3.459	8.6	21.3	5 31	15 0.56	-12 21.7	1.424	2.387	9.9	19.6
6 10	14 59.14	+ 0 4.0	2.609	3.449	10.9	21.5	6 10	14 53.01	-12 16.9	1.453	2.358	14.3	19.8
6 20	14 54.80	- 0 6.6	2.692	3.439	13.0	21.6	6 20	14 48.01	-12 25.1	1.501	2.328	18.2	20.0
522697	2016 LH_{59}		5 12.6 349°53	0°3/12.4 17			203412	2001 XO_{188}		5 12.6 84°31	5°7/ 9.9 18		
4 11	15 39.47	-20 18.9	1.378	2.266	15.1	20.9	4 11	15 44.74	- 6 49.7	1.370	2.257	15.2	19.9
4 21	15 35.00	-19 39.8	1.310	2.261	10.9	20.6	4 21	15 38.46	- 6 3.8	1.322	2.268	11.2	19.7
5 1	15 28.07	-18 48.8	1.265	2.257	6.0	20.3	5 1	15 29.83	- 5 22.7	1.297	2.280	7.4	19.5
5 11	15 19.69	-17 49.8	1.244	2.253	0.8	20.0	5 11	15 19.94	- 4 52.4	1.296	2.291	5.7	19.4
5 21	15 11.12	-16 48.6	1.247	2.251	4.6	20.2	5 21	15 10.09	- 4 37.5	1.320	2.302	8.0	19.6
5 31	15 3.66	-15 52.2	1.275	2.248	9.6	20.5	5 31	15 1.51	- 4 40.8	1.368	2.314	11.8	19.8
6 10	14 58.34	-15 6.8	1.325	2.247	14.2	20.8	6 10	14 55.15	- 5 2.6	1.438	2.325	15.6	20.1
6 20	14 55.75	-14 36.4	1.394	2.246	18.0	21.0	6 20	14 51.49	- 5 41.0	1.526	2.336	18.7	20.3
5898	1985 KE		5 12.6 204°87	0°1/12.5 18			130991	2000 WC_{158}		5 12.6 114°62	0°2/12.7 18		
4 11	15 40.46	-19 41.1	2.437	3.300	10.3	18.2	4 11	15 45.54	-19 2.5	2.364	3.220	10.8	19.8
4 21	15 34.82	-19 15.3	2.358	3.297	7.4	18.0	4 21	15 38.29	-19 3.1	2.309	3.244	7.7	19.6
5 1	15 27.65	-18 42.8	2.304	3.293	4.1	17.8	5 1	15 29.49	-18 58.4	2.280	3.267	4.3	19.4
5 11	15 19.62	-18 5.8	2.279	3.288	0.5	17.5	5 11	15 19.90	-18 49.5	2.279	3.289	0.6	19.2
5 21	15 11.48	-17 27.0	2.282	3.283	3.0	17.7	5 21	15 10.35	-18 38.1	2.308	3.310	3.0	19.4
5 31	15 3.99	-16 49.7	2.314	3.278	6.5	17.9	5 31	15 1.65	-18 26.8	2.367	3.331	6.4	19.7
6 10	14 57.81	-16 17.5	2.371	3.273	9.6	18.1	6 10	14 54.47	-18 18.2	2.452	3.351	9.4	19.9
6 20	14 53.38	-15 52.8	2.452	3.267	12.3	18.3	6 20	14 49.21	-18 14.6	2.560	3.370	12.0	20.1
87424	2000 QY_{99}		5 12.6 195°35	0°4/12.3 18			280623	2004 XZ_{93}		5 12.6 105°96	2°8/10.9 18		
4 11	15 43.43	-17 48.3	2.068	2.935	11.7	19.7	4 11	15 43.15	-10 42.4	2.023	2.897	11.6	20.9
4 21	15 37.15	-17 37.3	1.992	2.933	8.4	19.5	4 21	15 36.79	-10 24.7	1.968	2.911	8.3	20.7
5 1	15 29.03	-17 21.0	1.942	2.931	4.6	19.3	5 1	15 28.74	-10 7.8	1.937	2.924	4.9	20.5
5 11	15 19.82	-17 1.0	1.919	2.929	0.7	19.0	5 11	15 19.81	- 9 54.2	1.934	2.937	2.8	20.4
5 21	15 10.45	-16 40.0	1.924	2.926	3.6	19.2	5 21	15 10.86	- 9 46.7	1.959	2.950	4.9	20.5
5 31	15 1.86	-16 21.2	1.958	2.922	7.5	19.4	5 31	15 2.80	- 9 47.3	2.011	2.962	8.2	20.7
6 10	14 54.86	-16 7.7	2.016	2.919	11.0	19.6	6 10	14 56.32	- 9 57.4	2.087	2.975	11.4	21.0
6 20	14 49.96	-16 1.8	2.096	2.914	14.0	19.8	6 20	14 51.87	-10 17.3	2.185	2.987	14.1	21.2
15344	1994 PA_2		5 12.6 243°98	2°2/13.6 18			502752	2015 DV_{50}		5 12.6 60°10	1°3/13.2 17		
4 11	15 46.87	-24 20.7	1.649	2.510	14.5	18.6	4 11	15 44.78	-21 5.0	1.688	2.557	13.8	20.8
4 21	15 40.30	-24 23.0	1.561	2.495	10.8	18.3	4 21	15 38.40	-21 23.7	1.628	2.568	10.0	20.6
5 1	15 31.08	-24 12.9	1.497	2.480	6.6	18.0	5 1	15 29.81	-21 34.5	1.592	2.579	5.7	20.3
5 11	15 20.14	-23 50.1	1.458	2.464	2.6	17.8	5 11	15 19.97	-21 37.6	1.582	2.591	1.6	20.1
5 21	15 8.72	-23 16.8	1.446	2.448	4.3	17.8	5 21	15 10.02	-21 34.7	1.599	2.602	3.8	20.3
5 31	14 58.23	-22 37.6	1.460	2.431	8.9	18.1	5 31	15 1.14	-21 28.8	1.643	2.614	8.1	20.5
6 10	14 49.84	-21 58.9	1.499	2.414	13.3	18.3	6 10	14 54.25	-21 23.9	1.710	2.626	11.9	20.8
6 20	14 44.29	-21 26.3	1.557	2.395	17.1	18.5	6 20	14 49.90	-21 23.2	1.799	2.637	15.1	21.0
283334	1998 VY_{13}		5 12.6 261°95	0°8/13.2 17			85868	1999 BZ_9		5 12.6 94°05	0°2/12.7 18		
4 11	15 41.24	-23 31.4	2.193	3.051	11.5	20.3	4 11	15 43.31	-19 57.3	1.665	2.539	13.7	19.3
4 21	15 35.65	-22 50.9	2.097	3.032	8.4	20.1	4 21	15 37.37	-19 42.2	1.600	2.544	9.8	19.1
5 1	15 28.24	-21 58.5	2.026	3.012	4.9	19.8	5 1	15 29.25	-19 18.7	1.559	2.549	5.5	18.8
5 11	15 19.73	-20 56.3	1.983	2.992	1.2	19.5	5 11	15 19.89	-18 48.9	1.544	2.554	0.8	18.5
5 21	15 10.98	-19 48.1	1.969	2.971	3.3	19.7	5 21	15 10.43	-18 16.2	1.555	2.558	3.9	18.8
5 31	15 2.91	-18 38.9	1.982	2.951	7.1	19.9	5 31	15 1.99	-17 45.1	1.593	2.563	8.4	19.0
6 10	14 56.32	-17 34.2	2.022	2.929	10.7	20.0	6 10	14 55.51	-17 20.3	1.655	2.568	12.4	19.3
6 20	14 51.74	-16 38.5	2.084	2.908	13.9	20.2	6 20	14 51.51	-17 4.7	1.737	2.572	15.7	19.5
254196	2004 RM_{46}		5 12.6 330°64	5°4/15.5 16			430796	2004 VV_{37}		5 12.6 262°50	0°1/12.6 17		
4 1													

EPHEMERIDES

5 12.6

5 12.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
286426	2001 YE ₁₆₀		5 12.6 193°56	2°2/14.3	18		417632	2006 WU ₁₈₄		5 12.6 57°22	2°0/13.7	18	
4 11	15 42.42	-26 52.1	3.093	3.925	9.2	21.5	4 11	15 45.19	-25 0.1	1.412	2.282	15.9	20.8
4 21	15 36.06	-27 3.4	3.007	3.923	6.9	21.4	4 21	15 38.74	-24 40.9	1.372	2.311	11.6	20.6
5 1	15 28.32	-27 6.5	2.947	3.919	4.4	21.2	5 1	15 29.94	-24 6.9	1.354	2.339	6.8	20.4
5 11	15 19.77	-27 1.4	2.916	3.916	2.4	21.1	5 11	15 20.02	-23 20.8	1.361	2.368	2.5	20.2
5 21	15 11.07	-26 48.9	2.914	3.911	2.9	21.1	5 21	15 10.33	-22 27.4	1.394	2.397	4.2	20.4
5 31	15 2.89	-26 30.9	2.942	3.907	5.3	21.2	5 31	15 2.13	-21 33.4	1.452	2.426	8.6	20.7
6 10	14 55.84	-26 10.5	2.998	3.901	7.8	21.4	6 10	14 56.29	-20 45.2	1.533	2.455	12.6	21.0
6 20	14 50.34	-25 50.4	3.079	3.895	10.0	21.5	6 20	14 53.20	-20 7.3	1.635	2.484	15.9	21.3
381572	2008 UU ₁₁₀		5 12.6 248°30	2°5/14.0	17		463416	2013 HT ₈₆		5 12.6 313°17	2°9/13.7	17	
4 11	15 43.17	-25 48.0	1.983	2.837	12.7	21.6	4 11	15 44.48	-24 3.3	1.259	2.138	16.9	21.3
4 21	15 37.22	-25 52.8	1.901	2.829	9.5	21.4	4 21	15 39.18	-24 26.8	1.183	2.126	12.6	21.1
5 1	15 29.20	-25 46.1	1.843	2.822	5.9	21.1	5 1	15 30.72	-24 37.5	1.129	2.114	7.8	20.7
5 11	15 19.91	-25 27.9	1.811	2.815	2.8	20.9	5 11	15 20.19	-24 34.4	1.097	2.103	3.3	20.4
5 21	15 10.36	-25 0.2	1.806	2.807	3.8	21.0	5 21	15 9.09	-24 18.7	1.089	2.092	5.2	20.5
5 31	15 1.63	-24 26.6	1.829	2.799	7.4	21.2	5 31	14 59.13	-23 55.1	1.105	2.081	10.3	20.8
6 10	14 54.61	-23 52.2	1.877	2.791	11.0	21.4	6 10	14 51.75	-23 30.6	1.142	2.071	15.3	21.0
6 20	14 49.89	-23 21.3	1.946	2.783	14.2	21.6	6 20	14 47.76	-23 11.3	1.197	2.062	19.6	21.2
128627	Ottmarsheim		5 12.6 309°59	1°2/13.5	18		430909	2005 SM ₁₇₃		5 12.6 292°55	2°2/11.1	17	
4 11	15 39.02	-23 33.2	2.130	2.992	11.6	19.6	4 11	15 41.09	-16 1.5	1.646	2.529	13.3	21.0
4 21	15 34.11	-23 14.8	2.043	2.979	8.5	19.4	4 21	15 35.77	-14 59.4	1.579	2.528	9.5	20.7
5 1	15 27.42	-22 46.2	1.981	2.967	5.0	19.2	5 1	15 28.38	-13 50.3	1.536	2.527	5.3	20.5
5 11	15 19.66	-22 8.9	1.946	2.954	1.6	18.9	5 11	15 19.83	-12 39.3	1.519	2.527	2.2	20.3
5 21	15 11.69	-21 25.6	1.939	2.942	3.2	19.0	5 21	15 11.17	-11 32.4	1.529	2.526	5.2	20.5
5 31	15 4.41	-20 40.5	1.958	2.930	7.0	19.2	5 31	15 3.50	-10 35.7	1.565	2.525	9.4	20.7
6 10	14 58.61	-19 58.1	2.003	2.918	10.5	19.4	6 10	14 57.67	-9 53.7	1.625	2.524	13.3	20.9
6 20	14 54.79	-19 22.3	2.070	2.906	13.5	19.6	6 20	14 54.20	-9 28.6	1.704	2.524	16.6	21.2
290725	2005 UG ₄₄₃		5 12.6 177°64	4°3/15.3	18		152483	2005 WV ₅₉		5 12.6 216°15	6°9/ 5.9	18	
4 11	15 45.35	-32 23.3	2.762	3.573	10.7	20.9	4 11	15 38.48	+ 6 38.4	2.887	3.729	9.5	20.5
4 21	15 38.42	-33 6.1	2.680	3.574	8.5	20.8	4 21	15 33.19	+ 7 30.9	2.825	3.722	8.0	20.4
5 1	15 29.74	-33 37.8	2.623	3.575	6.2	20.6	5 1	15 26.72	+ 8 13.6	2.787	3.715	7.0	20.3
5 11	15 19.99	-33 56.5	2.594	3.576	4.5	20.5	5 11	15 19.59	+ 8 42.8	2.777	3.707	7.0	20.3
5 21	15 9.97	-34 2.0	2.594	3.576	4.7	20.5	5 21	15 12.39	+ 8 55.9	2.793	3.699	8.0	20.3
5 31	15 0.58	-33 56.1	2.623	3.576	6.5	20.7	5 31	15 5.70	+ 8 51.6	2.834	3.691	9.6	20.4
6 10	14 52.56	-33 42.1	2.678	3.576	8.8	20.8	6 10	15 0.04	+ 8 30.4	2.898	3.682	11.3	20.5
6 20	14 46.45	-33 24.1	2.757	3.575	11.0	21.0	6 20	14 55.77	+ 7 53.9	2.981	3.673	12.9	20.7
497371	2005 UV ₃₁₉		5 12.6 212°62	1°3/13.3	17		259314	2003 FB ₃₆		5 12.6 1°56	5°8/ 8.0	18	
4 11	15 44.62	-22 29.8	2.074	2.931	12.1	22.5	4 11	15 36.75	- 6 13.6	1.797	2.685	12.1	19.9
4 21	15 38.13	-22 30.1	1.992	2.925	8.9	22.3	4 21	15 32.48	- 4 44.9	1.740	2.684	9.1	19.8
5 1	15 29.65	-22 21.7	1.935	2.919	5.2	22.1	5 1	15 26.49	- 3 18.7	1.706	2.684	6.5	19.6
5 11	15 19.98	-22 5.2	1.904	2.912	1.6	21.8	5 11	15 19.56	- 2 1.7	1.699	2.684	5.9	19.6
5 21	15 10.06	-21 42.4	1.902	2.905	3.4	21.9	5 21	15 12.57	- 1 0.0	1.717	2.685	7.9	19.7
5 31	15 0.91	-21 16.9	1.928	2.897	7.3	22.2	5 31	15 6.40	- 0 18.0	1.761	2.686	10.9	19.9
6 10	14 53.41	-20 52.6	1.980	2.888	10.9	22.4	6 10	15 1.76	+ 0 2.7	1.826	2.688	13.9	20.0
6 20	14 48.12	-20 33.4	2.054	2.879	14.0	22.6	6 20	14 59.10	+ 0 2.7	1.910	2.691	16.5	20.2
291557	2006 FC ₂		5 12.6 294°64	5°4/ 4.4	18		302299	2001 YV ₈₃		5 12.6 22°31	6°5/ 9.3	17	
4 11	15 32.30	+ 8 53.8	4.215	5.047	6.9	20.2	4 11	15 40.58	- 0 45.8	1.833	2.708	12.6	19.7
4 21	15 28.55	+ 9 43.9	4.158	5.042	6.0	20.1	4 21	15 35.12	- 0 19.8	1.781	2.714	9.7	19.6
5 1	15 24.07	+10 26.3	4.128	5.037	5.5	20.0	5 1	15 27.91	- 0 3.5	1.751	2.721	7.3	19.4
5 11	15 19.19	+10 58.5	4.124	5.032	5.6	20.0	5 11	15 19.76	- 0 1.0	1.750	2.728	6.6	19.4
5 21	15 14.27	+11 18.8	4.146	5.027	6.3	20.1	5 21	15 11.58	- 0 14.7	1.773	2.736	8.0	19.5
5 31	15 9.66	+11 26.3	4.194	5.022	7.3	20.1	5 31	15 4.28	- 0 45.6	1.820	2.745	10.7	19.7
6 10	15 5.70	+11 21.0	4.264	5.017	8.4	20.2	6 10	14 58.60	- 1 32.4	1.891	2.754	13.4	19.9
6 20	15 2.62	+11 3.8	4.353	5.012	9.5	20.3	6 20	14 54.96	- 2 32.9	1.981	2.763	15.9	20.1
353507	2011 SW ₉₇		5 12.6 224°13	3°3/14.8	16		433743	2015 AA ₂₄₀		5 12.6 299°14	3°5/14.2	17	
4 11	15 43.17	-29 0.6	2.482	3.315	11.1	21.3	4 11	15 43.93	-26 20.6	1.589	2.452	14.9	19.8
4 21	15 36.95	-29 20.9	2.396	3.309	8.6	21.1	4 21	15 38.44	-26 42.7	1.498	2.430	11.3	19.5
5 1	15 28.96	-29 30.2	2.334	3.302	5.8	20.9	5 1	15 30.22	-26 51.9	1.429	2.408	7.3	19.2
5 11	15 19.88	-29 28.0	2.300	3.296	3.6	20.7	5 11	15 20.14	-26 46.9	1.384	2.386	3.8	19.0
5 21	15 10.56	-29 14.8	2.294	3.288	4.0	20.8	5 21	15 9.45	-26 28.3	1.365	2.365	4.9	19.0
5 31	15 1.89	-28 53.3	2.317	3.281	6.5	20.9	5 31	14 59.58	-25 59.9	1.371	2.343	9.1	19.1
6 10	14 54.65	-28 27.1	2.365	3.274	9.4	21.1	6 10	14 51.81	-25 27.7	1.400	2.322	13.5	19.3
6 20	14 49.37	-28 0.5	2.437	3.266	12.0	21.2	6 20	14 46.95	-24 58.1	1.449	2.302	17.4	19.5
306296	2011 SD ₄₄		5 12.6 310°02	0°2/12.7	17		499262	2009 VE ₂₉		5 12.6 201°82	1°4/13.4	17	
4 11	15 40.10	-20 16.6	1.933	2.805	12.2	21.3	4 11	15 46.05	-22 13.6	2.182	3.035	11.7	22.5
4 21	15 34.97	-19 58.2	1.854	2.796	8.8	21.1	4 21	15 39.11	-22 29.0	2.100	3.031	8.6	22.3
5 1	15 27.93	-19 31.5	1.799	2.788	4.9	20.8	5 1	15 30.21	-22 36.9	2.044	3.027	5.1	22.1
5 11	15 19.74	-18 58.8	1.770	2.779	0.8	20.5	5 11	15 20.11	-22 37.4	2.015	3.022	1.7	21.8
5 21	15 11.35	-18 23.0	1.768	2.771	3.5	20.7	5 21	15 9.76	-22 31.4	2.015	3.016	3.4	21.9
5 31	15 3.72	-17 48.3	1.793	2.763	7.6	20.9	5 31	15 0.15	-22 21.6	2.043	3.010	7.0	22.2
6 10	14 57.71	-17 18.9	1.843	2.755	11.4	21.1	6 10	14 52.13	-22 11.3	2.098	3.004	10.5	22.4
6 20	14 53.84	-16 58.0	1.914	2.747	14.6	21.3	6 20	14 46.27	-22 4.0	2.175	2.996	13.5	22.5
400160	2006 VH ₈₁		5 12.6 134°74	1°1/13.7	18		474853	2005 SL ₉₀		5 12.6 207°48	2°1/14.3	18	
4 11	15 40.41	-25 29.											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
144172	2004 <i>BK</i> ₁₁₀		5 12.6 85°99	8°8/ 8.5 17			389834	2012 <i>JG</i> ₄₆		5 12.6 291°14	3°4/10.7 18		
4 11	15 44.35	+ 2 48.1	1.583	2.452	14.6	19.6	4 11	15 42.74	-11 35.7	1.693	2.575	13.1	20.1
4 21	15 38.03	+ 3 32.3	1.532	2.456	11.7	19.4	4 21	15 37.27	-11 0.1	1.598	2.545	9.6	19.8
5 1	15 29.61	+ 4 2.6	1.504	2.460	9.4	19.3	5 1	15 29.46	-10 22.0	1.526	2.514	5.7	19.5
5 11	15 20.03	+ 4 12.8	1.499	2.464	8.9	19.2	5 11	15 20.06	- 9 45.6	1.480	2.483	3.4	19.3
5 21	15 10.41	+ 3 59.7	1.519	2.468	10.4	19.3	5 21	15 10.13	- 9 15.4	1.460	2.452	6.1	19.3
5 31	15 1.85	+ 3 22.6	1.563	2.472	13.1	19.5	5 31	15 0.85	- 8 56.0	1.466	2.421	10.4	19.5
6 10	14 55.23	+ 2 23.9	1.628	2.476	16.0	19.7	6 10	14 53.29	- 8 50.8	1.495	2.389	14.6	19.7
6 20	14 51.05	+ 1 7.6	1.711	2.480	18.6	19.9	6 20	14 48.20	- 9 1.4	1.543	2.357	18.3	19.8
512521	2016 <i>RL</i> ₃₂		5 12.6 227°64	1°2/11.6 18			351881	2006 <i>SH</i> ₁₃₉		5 12.6 218°55	2°6/10.5 18		
4 11	15 39.43	-15 27.9	2.641	3.508	9.5	21.8	4 11	15 39.99	-10 11.5	2.728	3.596	9.2	22.0
4 21	15 34.04	-15 0.5	2.558	3.500	6.7	21.6	4 21	15 34.39	- 9 41.8	2.648	3.588	6.6	21.8
5 1	15 27.27	-14 29.6	2.502	3.491	3.7	21.4	5 1	15 27.45	- 9 12.1	2.594	3.578	4.0	21.6
5 11	15 19.71	-13 57.5	2.474	3.482	1.2	21.2	5 11	15 19.75	- 8 45.1	2.568	3.569	2.6	21.5
5 21	15 12.00	-13 26.8	2.475	3.472	3.4	21.3	5 21	15 11.92	- 8 23.1	2.572	3.559	4.3	21.6
5 31	15 4.85	-13 0.3	2.504	3.462	6.5	21.5	5 31	15 4.62	- 8 8.7	2.605	3.548	7.0	21.7
6 10	14 58.85	-12 40.6	2.560	3.452	9.4	21.7	6 10	14 58.42	- 8 3.2	2.663	3.537	9.6	21.9
6 20	14 54.43	-12 29.1	2.638	3.441	11.9	21.8	6 20	14 53.73	- 8 7.6	2.743	3.526	12.0	22.1
83072	2001 <i>QT</i> ₂₁₅		5 12.6 256°38	5°5/ 8.3 18			59847	1999 <i>RT</i> ₇₁		5 12.6 272°91	0°6/12.2 18		
4 11	15 38.83	- 4 13.3	2.150	3.026	11.0	19.6	4 11	15 39.95	-17 22.2	2.344	3.212	10.4	19.6
4 21	15 33.78	- 3 7.3	2.083	3.020	8.3	19.4	4 21	15 34.63	-17 5.4	2.257	3.198	7.5	19.4
5 1	15 27.18	- 2 5.0	2.041	3.014	6.1	19.2	5 1	15 27.70	-16 43.7	2.195	3.184	4.1	19.2
5 11	15 19.70	- 1 11.7	2.026	3.007	5.6	19.2	5 11	15 19.80	-16 19.2	2.161	3.170	0.8	18.9
5 21	15 12.10	- 0 31.6	2.038	3.001	7.2	19.3	5 21	15 11.67	-15 54.3	2.155	3.156	3.3	19.1
5 31	15 5.19	- 0 7.9	2.076	2.994	9.9	19.4	5 31	15 4.14	-15 31.9	2.177	3.141	6.9	19.3
6 10	14 59.62	- 0 1.8	2.136	2.988	12.6	19.6	6 10	14 57.91	-15 15.0	2.225	3.127	10.1	19.5
6 20	14 55.84	- 0 12.7	2.217	2.981	15.0	19.7	6 20	14 53.47	-15 5.8	2.295	3.112	13.0	19.6
131300	2001 <i>FF</i> ₁₃₁		5 12.6 346°87	2°5/11.1 17			459869	2014 <i>AQ</i> ₄		5 12.6 197°33	3°3/14.9 17		
4 11	15 40.69	-13 13.6	1.798	2.680	12.4	19.9	4 11	15 43.60	-29 49.1	2.351	3.183	11.7	22.3
4 21	15 35.38	-12 39.5	1.731	2.679	8.9	19.6	4 21	15 37.30	-29 48.5	2.268	3.181	9.0	22.1
5 1	15 28.15	-12 3.0	1.688	2.677	5.1	19.4	5 1	15 29.18	-29 34.9	2.209	3.178	6.0	21.9
5 11	15 19.84	-11 27.6	1.671	2.676	2.5	19.2	5 11	15 20.01	-29 8.0	2.178	3.174	3.6	21.7
5 21	15 11.39	-10 57.4	1.681	2.676	5.0	19.4	5 21	15 10.67	-28 29.6	2.174	3.170	4.0	21.8
5 31	15 3.79	-10 36.1	1.717	2.675	8.9	19.6	5 31	15 2.09	-27 43.4	2.199	3.166	6.7	21.9
6 10	14 57.88	-10 26.5	1.776	2.674	12.5	19.8	6 10	14 55.06	-26 54.3	2.250	3.161	9.7	22.1
6 20	14 54.15	-10 29.5	1.856	2.674	15.6	20.0	6 20	14 50.08	-26 7.1	2.325	3.155	12.4	22.3
285956	2001 <i>RQ</i> ₃₇		5 12.6 223°43	4°0/15.5 18			474729	2005 <i>ML</i> ₃₃		5 12.6 288°86	6°0/ 8.3 16		
4 11	15 42.73	-31 45.5	2.402	3.227	11.7	21.0	4 11	15 39.22	- 2 13.7	2.101	2.975	11.3	21.0
4 21	15 36.71	-31 52.7	2.315	3.221	9.2	20.8	4 21	15 34.14	- 1 21.6	2.030	2.963	8.7	20.8
5 1	15 28.87	-31 46.2	2.253	3.214	6.4	20.6	5 1	15 27.43	- 0 35.3	1.983	2.952	6.6	20.6
5 11	15 19.94	-31 25.3	2.217	3.208	4.3	20.4	5 11	15 19.77	+ 0 0.3	1.963	2.940	6.1	20.6
5 21	15 10.81	-30 51.5	2.210	3.201	4.4	20.4	5 21	15 11.94	+ 0 21.4	1.969	2.929	7.7	20.7
5 31	15 2.40	-30 8.0	2.230	3.193	6.8	20.6	5 31	15 4.77	+ 0 25.4	2.000	2.917	10.3	20.8
6 10	14 55.51	-29 19.6	2.276	3.186	9.6	20.7	6 10	14 58.97	+ 0 11.7	2.055	2.906	13.0	20.9
6 20	14 50.65	-28 31.3	2.345	3.178	12.2	20.9	6 20	14 55.01	- 0 18.6	2.128	2.894	15.5	21.1
355190	2006 <i>WN</i> ₁₈₀		5 12.6 207°29	0°3/12.3 17			356782	2011 <i>UJ</i> ₃₀₂		5 12.6 224°07	4°6/16.1 17		
4 11	15 39.82	-18 38.2	2.838	3.698	9.1	22.6	4 11	15 42.57	-34 15.1	2.509	3.323	11.6	21.1
4 21	15 34.24	-18 15.1	2.755	3.692	6.5	22.4	4 21	15 36.58	-34 28.2	2.424	3.318	9.3	20.9
5 1	15 27.36	-17 46.9	2.698	3.686	3.6	22.2	5 1	15 28.80	-34 26.9	2.361	3.312	6.8	20.8
5 11	15 19.73	-17 15.4	2.670	3.679	0.5	22.0	5 11	15 19.96	-34 10.1	2.325	3.307	4.9	20.6
5 21	15 11.98	-16 42.9	2.671	3.672	2.8	22.1	5 21	15 10.92	-33 38.9	2.317	3.301	4.9	20.6
5 31	15 4.77	-16 12.0	2.702	3.665	5.8	22.3	5 31	15 2.59	-32 56.2	2.336	3.295	6.8	20.7
6 10	14 58.68	-15 45.6	2.760	3.657	8.6	22.5	6 10	14 55.75	-32 6.9	2.382	3.289	9.3	20.9
6 20	14 54.09	-15 25.6	2.841	3.648	11.0	22.7	6 20	14 50.93	-31 16.1	2.450	3.283	11.8	21.0
269595	2010 <i>AZ</i> ₇₉		5 12.6 59°69	2°8/10.9 18			283432	2000 <i>TH</i> ₄₁		5 12.6 212°52	2°9/14.5 18		
4 11	15 41.38	-12 6.5	1.808	2.689	12.4	20.3	4 11	15 42.57	-27 48.7	2.500	3.338	10.9	20.8
4 21	15 35.80	-11 37.0	1.747	2.694	8.9	20.1	4 21	15 36.50	-28 3.4	2.417	3.334	8.3	20.6
5 1	15 28.34	-11 6.5	1.711	2.700	5.1	19.9	5 1	15 28.74	-28 7.9	2.358	3.330	5.4	20.4
5 11	15 19.86	-10 38.6	1.702	2.706	2.8	19.7	5 11	15 19.96	-28 1.8	2.327	3.326	3.1	20.3
5 21	15 11.32	-10 16.8	1.719	2.712	5.1	19.9	5 21	15 10.98	-27 46.2	2.325	3.321	3.6	20.3
5 31	15 3.67	-10 4.3	1.762	2.718	8.8	20.1	5 31	15 2.64	-27 23.5	2.350	3.317	6.3	20.4
6 10	14 57.72	-10 3.2	1.829	2.725	12.3	20.3	6 10	14 55.71	-26 57.5	2.402	3.312	9.2	20.6
6 20	14 53.92	-10 14.1	1.917	2.731	15.3	20.5	6 20	14 50.66	-26 32.0	2.478	3.306	11.8	20.8
156353	2001 <i>XC</i> ₁₈₉		5 12.6 121°65	1°1/11.9 18			496855	1999 <i>VD</i> ₁₁₆		5 12.6 277°66	1°3/11.9 17		
4 11	15 43.61	-16 27.3	2.020	2.889	11.8	20.8	4 11	15 43.43	-17 7.8	1.584	2.464	13.9	21.8
4 21	15 37.18	-16 0.6	1.962	2.904	8.4	20.7	4 21	15 37.86	-16 37.2	1.496	2.443	10.1	21.5
5 1	15 29.02	-15 29.4	1.929	2.918	4.6	20.5	5 1	15 29.80	-15 58.7	1.431	2.422	5.6	21.2
5 11	15 19.96	-14 56.4	1.923	2.932	1.2	20.2	5 11	15 20.14	-15 15.4	1.391	2.400	1.4	20.8
5 21	15 10.90	-14 24.8	1.946	2.945	3.9	20.4	5 21	15 10.00	-14 31.7	1.378	2.378	4.9	21.0
5 31	15 2.76	-13 58.2	1.997	2.958	7.6	20.7	5 31	15 0.69	-13 53.3	1.390	2.356	9.8	21.2
6 10	14 56.26	-13 39.5	2.072	2.970	11.0	20.9	6 10	14 53.32	-13 25.2	1.425	2.334	14.3	21.4
6 20	14 51.83	-13 30.5	2.170	2.982	13.8	21.1	6 20	14 48.61	-13 10.6	1.480	2.311	18.2	21.6
411788	2012 <i>CU</i> ₁₇		5 12.6 120°71	0°7/12.2 16			5121	Numazawa		5			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
72601	2001 <i>FH</i> ₁₃		5 12.6 145°22	0°8/12.1	18		54550	2000 <i>QA</i> ₈₇		5 12.6 82°51	3°9/15.4	18	
4 11	15 41.74	-17 25.2	1.988	2.860	11.9	19.9	4 11	15 41.86	-31 5.0	2.196	3.030	12.4	18.9
4 21	15 36.01	-17 3.3	1.919	2.862	8.5	19.7	4 21	15 36.16	-31 7.1	2.122	3.033	9.6	18.7
5 1	15 28.48	-16 36.0	1.875	2.865	4.6	19.5	5 1	15 28.60	-30 54.7	2.071	3.036	6.6	18.5
5 11	15 19.93	-16 5.6	1.857	2.867	0.9	19.2	5 11	15 19.98	-30 27.9	2.046	3.039	4.2	18.3
5 21	15 11.27	-15 35.4	1.868	2.869	3.7	19.4	5 21	15 11.25	-29 48.3	2.048	3.042	4.4	18.4
5 31	15 3.43	-15 8.9	1.906	2.871	7.6	19.6	5 31	15 3.35	-29 0.1	2.078	3.045	6.9	18.5
6 10	14 57.19	-14 49.6	1.968	2.873	11.1	19.9	6 10	14 57.09	-28 8.4	2.133	3.048	9.9	18.7
6 20	14 53.03	-14 39.5	2.053	2.874	14.1	20.1	6 20	14 52.94	-27 18.5	2.211	3.051	12.6	18.9
358324	2006 <i>VT</i> ₆		5 12.6 210°70	0°5/13.0	18		367882	2011 <i>SP</i> ₃₆		5 12.6 313°68	0°1/12.6	16	
4 11	15 40.01	-21 47.4	2.904	3.757	9.1	22.2	4 11	15 41.12	-18 28.2	1.839	2.714	12.5	20.3
4 21	15 34.39	-21 22.7	2.817	3.750	6.6	22.0	4 21	15 35.93	-18 28.5	1.753	2.698	9.1	20.1
5 1	15 27.46	-20 51.0	2.757	3.742	3.7	21.8	5 1	15 28.64	-18 23.2	1.691	2.681	5.1	19.8
5 11	15 19.79	-20 13.8	2.725	3.734	0.8	21.6	5 11	15 20.01	-18 13.4	1.656	2.665	0.7	19.4
5 21	15 12.00	-19 33.4	2.723	3.725	2.5	21.7	5 21	15 11.03	-18 1.6	1.647	2.649	3.8	19.7
5 31	15 4.75	-18 52.7	2.751	3.716	5.5	21.9	5 31	15 2.77	-17 50.6	1.664	2.634	8.1	19.9
6 10	14 58.61	-18 14.9	2.805	3.707	8.3	22.1	6 10	14 56.17	-17 44.2	1.706	2.619	12.0	20.1
6 20	14 53.98	-17 42.7	2.884	3.697	10.7	22.2	6 20	14 51.85	-17 44.8	1.768	2.605	15.5	20.3
245915	2006 <i>QB</i> ₁₆₂		5 12.6 257°32	1°1/11.9	18		372561	2009 <i>UM</i> ₁₇		5 12.6 113°21	0°4/12.3	17	
4 11	15 40.68	-16 5.1	2.221	3.092	10.8	20.8	4 11	15 43.64	-19 2.0	2.181	3.043	11.4	22.3
4 21	15 35.20	-15 44.3	2.139	3.082	7.8	20.5	4 21	15 37.07	-18 26.5	2.126	3.065	8.1	22.1
5 1	15 28.04	-15 19.4	2.081	3.071	4.3	20.3	5 1	15 28.94	-17 44.4	2.098	3.086	4.4	21.9
5 11	15 19.88	-14 52.5	2.052	3.061	1.2	20.1	5 11	15 20.02	-16 58.7	2.097	3.107	0.7	21.7
5 21	15 11.52	-14 26.6	2.051	3.050	3.7	20.2	5 21	15 11.18	-16 12.9	2.126	3.127	3.4	21.9
5 31	15 3.81	-14 4.7	2.077	3.039	7.3	20.4	5 31	15 3.26	-15 30.8	2.183	3.146	6.9	22.2
6 10	14 57.48	-13 49.7	2.128	3.028	10.7	20.6	6 10	14 56.90	-14 56.1	2.266	3.164	10.1	22.4
6 20	14 53.03	-13 43.6	2.202	3.016	13.5	20.8	6 20	14 52.49	-14 30.8	2.371	3.182	12.8	22.6
34274	2000 <i>QM</i> ₁₃₅		5 12.6 19°40	10°4/ 6.4	17		222614	2001 <i>XE</i> ₇₀		5 12.6 115°40	1°9/11.5	17	
4 11	15 41.22	+ 5 48.6	1.593	2.459	14.6	18.5	4 11	15 43.87	-14 4.9	1.833	2.708	12.6	20.5
4 21	15 35.83	+ 7 3.5	1.546	2.461	12.2	18.3	4 21	15 37.56	-13 43.5	1.774	2.719	8.9	20.3
5 1	15 28.43	+ 8 2.4	1.521	2.463	10.6	18.2	5 1	15 29.34	-13 19.5	1.739	2.729	5.0	20.1
5 11	15 19.94	+ 8 37.9	1.520	2.465	10.6	18.2	5 11	15 20.09	-12 55.9	1.732	2.739	1.9	19.9
5 21	15 11.40	+ 8 45.4	1.541	2.467	12.1	18.3	5 21	15 10.80	-12 35.8	1.751	2.749	4.5	20.1
5 31	15 3.87	+ 8 24.0	1.585	2.469	14.4	18.5	5 31	15 2.47	-12 22.5	1.798	2.758	8.4	20.4
6 10	14 58.16	+ 7 36.0	1.648	2.472	16.9	18.6	6 10	14 55.89	-12 18.3	1.869	2.767	12.0	20.6
6 20	14 54.77	+ 6 25.9	1.728	2.475	19.2	18.8	6 20	14 51.55	-12 24.6	1.961	2.776	15.0	20.8
6791	1991 <i>UC</i> ₂		5 12.6 156°50	0°1/12.7	18		109833	2001 <i>RM</i> ₁₂₁		5 12.6 273°68	1°6/11.6	18	
4 11	15 44.54	-20 17.9	1.847	2.713	12.9	19.3	4 11	15 40.45	-15 0.3	2.101	2.975	11.2	20.2
4 21	15 38.12	-19 53.3	1.779	2.719	9.3	19.0	4 21	15 35.11	-14 35.0	2.021	2.966	8.0	20.0
5 1	15 29.68	-19 20.0	1.736	2.724	5.2	18.8	5 1	15 28.03	-14 6.1	1.966	2.956	4.5	19.7
5 11	15 20.12	-18 40.3	1.719	2.729	0.8	18.5	5 11	15 19.92	-13 36.2	1.938	2.946	1.6	19.5
5 21	15 10.46	-17 57.9	1.731	2.733	3.7	18.7	5 21	15 11.61	-13 8.5	1.938	2.936	4.1	19.6
5 31	15 1.78	-17 17.3	1.770	2.737	7.9	19.0	5 31	15 3.98	-12 46.3	1.965	2.926	7.8	19.9
6 10	14 54.92	-16 43.2	1.833	2.740	11.7	19.2	6 10	14 57.79	-12 32.6	2.017	2.915	11.2	20.0
6 20	14 50.39	-16 18.7	1.918	2.743	14.9	19.4	6 20	14 53.55	-12 28.9	2.090	2.905	14.1	20.2
152270	2005 <i>SC</i> ₂₀₉		5 12.6 218°56	3°2/ 9.9	18		237115	2008 <i>TB</i> ₁₆₄		5 12.6 211°58	4°8/ 9.3	18	
4 11	15 38.74	- 8 16.2	2.730	3.600	9.1	20.7	4 11	15 41.96	- 4 28.1	2.306	3.174	10.6	21.2
4 21	15 33.49	- 7 37.2	2.654	3.593	6.6	20.5	4 21	15 35.97	- 3 49.8	2.234	3.168	8.0	21.0
5 1	15 26.97	- 6 59.3	2.604	3.586	4.3	20.3	5 1	15 28.42	- 3 15.7	2.187	3.161	5.6	20.9
5 11	15 19.73	- 6 25.5	2.583	3.578	3.3	20.3	5 11	15 19.98	- 2 49.5	2.168	3.154	4.8	20.8
5 21	15 12.39	- 5 58.5	2.591	3.571	4.8	20.3	5 21	15 11.40	- 2 34.3	2.177	3.146	6.4	20.9
5 31	15 5.57	- 5 40.8	2.626	3.563	7.3	20.5	5 31	15 3.47	- 2 32.5	2.213	3.138	9.0	21.0
6 10	14 59.83	- 5 33.7	2.687	3.554	9.8	20.6	6 10	14 56.86	- 2 44.6	2.273	3.130	11.7	21.2
6 20	14 55.56	- 5 37.6	2.770	3.545	12.0	20.8	6 20	14 52.04	- 3 10.1	2.354	3.121	14.1	21.3
247853	2003 <i>TN</i> ₁₈		5 12.6 208°36	0°2/12.8	17		295837	2008 <i>VC</i> ₃		5 12.6 233°20	2°4/14.4	18	
4 11	15 45.14	-20 45.1	2.004	2.866	12.3	21.3	4 11	15 42.75	-27 29.4	2.206	3.050	11.9	20.9
4 21	15 38.55	-20 20.2	1.922	2.859	8.9	21.1	4 21	15 36.81	-27 9.5	2.117	3.040	9.0	20.6
5 1	15 29.95	-19 46.2	1.865	2.852	5.0	20.8	5 1	15 29.00	-26 36.3	2.052	3.029	5.7	20.4
5 11	15 20.17	-19 5.2	1.835	2.844	0.8	20.5	5 11	15 20.07	-25 50.6	2.014	3.018	2.7	20.2
5 21	15 10.17	-18 20.3	1.833	2.836	3.6	20.7	5 21	15 10.94	-24 55.1	2.005	3.006	3.5	20.2
5 31	15 0.99	-17 36.0	1.860	2.826	7.7	21.0	5 31	15 2.57	-23 54.3	2.024	2.994	6.9	20.4
6 10	14 53.51	-16 57.2	1.912	2.816	11.4	21.2	6 10	14 55.77	-22 53.8	2.069	2.982	10.3	20.6
6 20	14 48.26	-16 27.3	1.986	2.805	14.6	21.4	6 20	14 51.06	-21 58.5	2.137	2.969	13.3	20.8
37367	2001 <i>VC</i>		5 12.6 259°88	3°6/11.4	17		83314	2001 <i>RP</i> ₁₁₅		5 12.6 3°71	1°7/11.6	17	
4 11	15 52.55	- 8 23.0	1.757	2.620	13.6	19.4	4 11	15 40.35	-14 56.3	1.968	2.846	11.7	19.3
4 21	15 44.41	- 8 32.7	1.656	2.593	10.1	19.1	4 21	15 35.05	-14 30.1	1.899	2.846	8.4	19.0
5 1	15 33.52	- 8 46.9	1.580	2.564	6.2	18.8	5 1	15 27.99	-14 0.4	1.855	2.846	4.6	18.8
5 11	15 20.72	- 9 7.9	1.532	2.534	3.6	18.6	5 11	15 19.93	-13 30.1	1.838	2.846	1.7	18.6
5 21	15 7.15	- 9 37.4	1.513	2.504	6.0	18.7	5 21	15 11.74	-13 2.6	1.848	2.846	4.2	18.8
5 31	14 54.19	-10 16.4	1.522	2.472	10.4	18.8	5 31	15 4.35	-12 41.4	1.885	2.847	8.0	19.0
6 10	14 43.09	-11 5.6	1.556	2.439	14.8	19.0	6 10	14 58.50	-12 29.1	1.946	2.847	11.4	19.2
6 20	14 34.70	-12 4.5	1.611	2.406	18.5	19.2	6 20	14 54.67	-12 27.3	2.029	2.848	14.4	19.4
462556	2009 <i>CJ</i> ₆₀		5 12.6 158°79	0°7/12.9	16		355222	2007 <i>BT</i> ₄					

EPHEMERIDES

5 12.6

5 12.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
365470	2010 <i>PS</i> ₈		5 12.6 286°97	3°9/10.6	17		432687	2011 <i>BT</i> ₅₅		5 12.6 246°22	5°2/16.1	17	
4 11	15 42.90	-11 56.7	1.419	2.308	14.7	21.0	4 11	15 46.26	-34 15.7	1.973	2.793	14.1	21.7
4 21	15 37.65	-11 8.8	1.337	2.288	10.7	20.7	4 21	15 39.77	-34 16.0	1.877	2.777	11.2	21.5
5 1	15 29.79	-10 17.2	1.278	2.268	6.4	20.4	5 1	15 30.86	-33 57.2	1.804	2.761	8.2	21.3
5 11	15 20.23	-9 27.3	1.244	2.248	3.9	20.2	5 11	15 20.43	-33 17.5	1.757	2.743	5.7	21.1
5 21	15 10.21	-8 45.3	1.235	2.227	6.8	20.3	5 21	15 9.63	-32 18.4	1.736	2.725	5.6	21.0
5 31	15 1.08	-8 17.1	1.249	2.207	11.5	20.5	5 31	14 59.72	-31 4.7	1.743	2.707	8.3	21.1
6 10	14 54.02	-8 6.4	1.286	2.186	16.1	20.7	6 10	14 51.77	-29 43.9	1.774	2.688	11.6	21.3
6 20	14 49.76	-8 14.6	1.340	2.166	20.0	20.9	6 20	14 46.45	-28 24.0	1.828	2.668	14.9	21.5
301869	1995 <i>VZ</i> ₂		5 12.6 213°42	0°1/12.7	18		299262	2005 <i>NT</i> ₅₁		5 12.6 235°50	0°1/12.6	18	R
4 11	15 40.46	-19 35.0	2.882	3.739	9.1	22.4	4 11	15 40.14	-19 43.0	2.600	3.461	9.8	21.2
4 21	15 34.76	-19 20.1	2.796	3.731	6.5	22.2	4 21	15 34.68	-19 16.7	2.512	3.449	7.1	21.0
5 1	15 27.72	-18 59.9	2.736	3.723	3.6	22.0	5 1	15 27.75	-18 43.9	2.450	3.437	3.9	20.8
5 11	15 19.91	-18 35.7	2.704	3.714	0.5	21.7	5 11	15 19.96	-18 6.5	2.416	3.425	0.5	20.5
5 21	15 11.96	-18 9.5	2.703	3.705	2.6	21.9	5 21	15 12.02	-17 27.2	2.411	3.413	2.9	20.7
5 31	15 4.53	-17 43.8	2.731	3.695	5.7	22.1	5 31	15 4.63	-16 49.1	2.435	3.400	6.2	20.9
6 10	14 58.20	-17 21.3	2.786	3.685	8.4	22.2	6 10	14 58.46	-16 15.5	2.486	3.387	9.2	21.0
6 20	14 53.38	-17 4.0	2.864	3.674	10.9	22.4	6 20	14 53.93	-15 49.1	2.559	3.373	11.9	21.2
377825	2006 <i>BW</i> ₉₉		5 12.6 91°18	1°2/12.1	15		189856	2003 <i>GV</i> ₃₅		5 12.6 320°60	5°3/10.5	18	
4 11	15 45.94	-14 42.7	1.838	2.709	12.7	21.2	4 11	15 42.78	-6 23.3	1.424	2.312	14.7	19.2
4 21	15 39.04	-14 49.8	1.782	2.725	9.1	21.0	4 21	15 37.53	-6 7.9	1.347	2.294	11.0	18.9
5 1	15 30.18	-14 54.6	1.751	2.741	5.0	20.8	5 1	15 29.73	-5 58.4	1.293	2.277	7.2	18.7
5 11	15 20.26	-14 58.7	1.747	2.756	1.3	20.6	5 11	15 20.28	-5 59.5	1.262	2.260	5.3	18.5
5 21	15 10.32	-15 3.8	1.771	2.771	4.0	20.8	5 21	15 10.38	-6 14.7	1.257	2.244	7.7	18.6
5 31	15 1.38	-15 12.0	1.823	2.787	8.0	21.1	5 31	15 1.37	-6 46.2	1.275	2.228	11.8	18.8
6 10	14 54.26	-15 25.4	1.899	2.801	11.6	21.3	6 10	14 54.38	-7 34.3	1.315	2.213	15.9	19.0
6 20	14 49.45	-15 45.3	1.997	2.816	14.6	21.6	6 20	14 50.14	-8 37.2	1.373	2.199	19.6	19.2
437571	2014 <i>AL</i> ₁₈		5 12.6 173°63	1°1/11.9	17		304320	2006 <i>SF</i> ₁₇₁		5 12.6 150°69	0°1/12.7	17	
4 11	15 42.01	-16 1.3	2.326	3.193	10.6	21.6	4 11	15 40.63	-19 55.5	2.319	3.183	10.7	21.3
4 21	15 36.02	-15 40.4	2.254	3.195	7.5	21.4	4 21	15 35.08	-19 33.8	2.247	3.186	7.7	21.1
5 1	15 28.46	-15 15.6	2.208	3.197	4.1	21.2	5 1	15 27.97	-19 5.5	2.201	3.189	4.3	20.9
5 11	15 20.02	-14 49.3	2.190	3.198	1.1	21.0	5 11	15 20.00	-18 32.5	2.183	3.192	0.6	20.6
5 21	15 11.48	-14 24.1	2.200	3.199	3.5	21.2	5 21	15 11.94	-17 57.5	2.193	3.195	3.1	20.8
5 31	15 3.65	-14 2.8	2.239	3.200	7.0	21.4	5 31	15 4.59	-17 24.0	2.231	3.198	6.6	21.1
6 10	14 57.19	-13 48.1	2.304	3.200	10.1	21.6	6 10	14 58.62	-16 55.4	2.295	3.200	9.7	21.3
6 20	14 52.55	-13 41.7	2.391	3.200	12.8	21.8	6 20	14 54.47	-16 34.0	2.381	3.202	12.5	21.5
111488	2001 <i>YT</i> ₄₅		5 12.6 282°10	2°6/11.1	18		34426	2000 <i>SS</i> ₂₂		5 12.6 101°49	0°8/12.1	18	R
4 11	15 41.31	-10 48.9	2.166	3.040	11.0	19.4	4 11	15 40.37	-17 2.6	2.358	3.226	10.4	19.3
4 21	15 35.68	-10 37.2	2.088	3.031	7.9	19.2	4 21	15 34.80	-16 39.9	2.295	3.237	7.4	19.1
5 1	15 28.36	-10 26.0	2.035	3.022	4.7	18.9	5 1	15 27.78	-16 12.9	2.259	3.248	4.0	18.9
5 11	15 20.02	-10 17.8	2.009	3.013	2.6	18.8	5 11	15 19.98	-15 43.9	2.250	3.259	0.9	18.7
5 21	15 11.48	-10 14.9	2.012	3.004	4.6	18.9	5 21	15 12.15	-15 15.6	2.270	3.270	3.3	18.9
5 31	15 3.60	-10 19.5	2.041	2.995	8.0	19.1	5 31	15 5.04	-14 50.9	2.318	3.280	6.6	19.1
6 10	14 57.11	-10 32.9	2.096	2.986	11.2	19.3	6 10	14 59.28	-14 32.4	2.391	3.291	9.6	19.3
6 20	14 52.51	-10 55.8	2.172	2.977	14.0	19.5	6 20	14 55.26	-14 21.9	2.487	3.301	12.2	19.5
141821	2002 <i>NN</i> ₅₁		5 12.6 321°27	1°4/13.2	18		161418	2003 <i>UL</i> ₂₆₇		5 12.6 284°65	0°2/12.5	17	
4 11	15 41.70	-20 58.4	1.193	2.085	16.7	19.2	4 11	15 40.87	-19 46.5	1.901	2.774	12.3	20.0
4 21	15 37.42	-21 12.2	1.110	2.061	12.4	18.8	4 21	15 35.60	-19 15.6	1.825	2.768	8.9	19.8
5 1	15 29.97	-21 16.2	1.047	2.038	7.2	18.5	5 1	15 28.40	-18 36.3	1.772	2.761	4.9	19.6
5 11	15 20.31	-21 10.4	1.006	2.015	1.9	18.1	5 11	15 20.08	-17 51.1	1.746	2.755	0.7	19.2
5 21	15 9.87	-20 56.9	0.989	1.994	5.0	18.2	5 21	15 11.58	-17 3.9	1.747	2.749	3.7	19.5
5 31	15 0.39	-20 40.3	0.994	1.973	10.8	18.4	5 31	15 3.89	-16 19.4	1.775	2.743	7.8	19.7
6 10	14 53.41	-20 26.8	1.020	1.954	16.2	18.7	6 10	14 57.84	-15 42.1	1.828	2.737	11.6	19.9
6 20	14 49.85	-20 21.7	1.063	1.935	20.9	18.9	6 20	14 53.96	-15 15.0	1.902	2.731	14.8	20.1
44131	1998 <i>HG</i> ₅₃		5 12.6 313°05	0°1/12.6	18		63840	2001 <i>RS</i> ₇₆		5 12.6 181°16	1°2/11.9	18	
4 11	15 40.85	-20 9.3	1.278	2.168	15.9	17.6	4 11	15 44.02	-15 47.4	2.075	2.944	11.6	20.0
4 21	15 36.53	-19 41.9	1.194	2.146	11.6	17.3	4 21	15 37.64	-15 30.1	2.003	2.945	8.3	19.8
5 1	15 29.33	-19 1.8	1.132	2.124	6.5	16.9	5 1	15 29.45	-15 8.9	1.956	2.945	4.6	19.6
5 11	15 20.21	-18 11.6	1.093	2.102	0.9	16.5	5 11	15 20.23	-14 46.1	1.937	2.945	1.3	19.4
5 21	15 10.52	-17 16.7	1.078	2.081	4.9	16.7	5 21	15 10.86	-14 24.3	1.946	2.945	3.9	19.5
5 31	15 1.81	-16 24.3	1.086	2.061	10.6	16.9	5 31	15 2.29	-14 6.8	1.983	2.944	7.7	19.8
6 10	14 55.40	-15 41.8	1.115	2.041	15.8	17.1	6 10	14 55.29	-13 56.3	2.045	2.942	11.1	20.0
6 20	14 52.11	-15 14.3	1.162	2.023	20.3	17.4	6 20	14 50.35	-13 54.7	2.129	2.940	14.0	20.2
246285	2007 <i>TK</i> ₆₇		5 12.6 153°87	3°6/ 9.8	18		278926	2008 <i>TM</i> ₁₈₅		5 12.6 217°79	1°7/11.5	18	
4 11	15 39.78	-9 23.9	2.234	3.110	10.6	20.8	4 11	15 41.77	-14 54.9	2.146	3.018	11.1	21.2
4 21	15 34.42	-8 27.4	2.171	3.114	7.7	20.6	4 21	15 36.02	-14 24.9	2.069	3.013	8.0	21.0
5 1	15 27.57	-7 31.1	2.134	3.117	4.9	20.4	5 1	15 28.56	-13 51.2	2.018	3.007	4.4	20.8
5 11	15 19.92	-6 39.2	2.124	3.120	3.7	20.4	5 11	15 20.11	-13 16.6	1.993	3.001	1.7	20.6
5 21	15 12.22	-5 55.8	2.142	3.123	5.5	20.5	5 21	15 11.49	-12 44.4	1.997	2.994	4.1	20.8
5 31	15 5.23	-5 24.2	2.187	3.126	8.4	20.7	5 31	15 3.59	-12 18.0	2.029	2.988	7.7	21.0
6 10	14 59.59	-5 6.2	2.257	3.129	11.2	20.8	6 10	14 57.13	-12 0.3	2.086	2.981	11.0	21.2
6 20	14 55.70	-5 2.3	2.347	3.131	13.7	21.0	6 20	14 52.61	-11 53.1	2.164	2.973	13.9	21.3
137199	1999 <i>KX</i> ₄		5 12.6 24°26	38°4/20.0	18		302841	2003 <i>FC</i> ₆₃					

EPHEMERIDES

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5 12.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
24948	Babote		5 12.6 358°63	0°5/12.9	18		506322	2017 OH ₉		5 12.7 282°93	4°6/14.9	17	
4 11	15 39.87	-22 31.7	1.683	2.557	13.6	18.1	4 11	15 45.21	-29 36.0	1.422	2.280	16.5	20.7
4 21	15 35.04	-21 48.4	1.613	2.556	9.8	17.8	4 21	15 39.68	-29 43.7	1.337	2.264	12.8	20.5
5 1	15 28.13	-20 52.5	1.567	2.555	5.6	17.6	5 1	15 31.13	-29 32.2	1.273	2.248	8.7	20.2
5 11	15 20.05	-19 47.5	1.546	2.555	1.1	17.2	5 11	15 20.58	-28 59.7	1.233	2.232	5.1	19.9
5 21	15 11.86	-18 38.4	1.551	2.555	3.8	17.4	5 21	15 9.49	-28 8.0	1.217	2.216	5.7	19.9
5 31	15 4.63	-17 31.6	1.583	2.555	8.2	17.7	5 31	14 59.47	-27 3.4	1.225	2.200	9.8	20.1
6 10	14 59.24	-16 33.1	1.639	2.556	12.2	17.9	6 10	14 51.89	-25 54.9	1.257	2.183	14.4	20.3
6 20	14 56.19	-15 47.1	1.715	2.557	15.6	18.2	6 20	14 47.56	-24 51.3	1.307	2.167	18.5	20.5
88175	2000 XL ₃₁		5 12.7 184°08	2°8/14.7	18		306348	2011 SG ₁₆₈		5 12.7 184°26	2°8/14.6	17	
4 11	15 42.10	-28 11.7	2.600	3.436	10.6	19.2	4 11	15 42.64	-27 50.7	2.588	3.424	10.6	21.2
4 21	15 36.15	-28 23.7	2.520	3.436	8.1	19.1	4 21	15 36.56	-28 3.2	2.508	3.425	8.1	21.0
5 1	15 28.61	-28 25.3	2.465	3.435	5.3	18.9	5 1	15 28.87	-28 5.6	2.453	3.424	5.3	20.9
5 11	15 20.13	-28 16.6	2.437	3.435	3.1	18.7	5 11	15 20.22	-27 57.8	2.425	3.424	3.0	20.7
5 21	15 11.49	-27 58.6	2.438	3.434	3.5	18.8	5 21	15 11.41	-27 40.8	2.426	3.423	3.5	20.7
5 31	15 3.50	-27 33.9	2.467	3.434	6.0	18.9	5 31	15 3.25	-27 17.2	2.456	3.422	6.1	20.9
6 10	14 56.84	-27 6.0	2.523	3.433	8.8	19.1	6 10	14 56.43	-26 50.5	2.512	3.421	8.8	21.1
6 20	14 52.00	-26 38.8	2.602	3.431	11.3	19.3	6 20	14 51.44	-26 24.5	2.591	3.419	11.4	21.2
117447	2005 AX ₄₆		5 12.7 268°22	6°4/ 2.1	18		292685	2006 UL ₉₄		5 12.7 269°02	1°4/11.9	17	
4 11	15 33.08	+17 16.7	4.503	5.291	7.3	19.1	4 11	15 44.15	-15 51.7	1.607	2.486	13.8	20.8
4 21	15 29.17	+18 0.8	4.456	5.287	6.7	19.1	4 21	15 38.33	-15 35.0	1.528	2.474	9.9	20.5
5 1	15 24.54	+18 34.6	4.434	5.283	6.4	19.0	5 1	15 30.13	-15 13.2	1.472	2.463	5.5	20.2
5 11	15 19.54	+18 55.8	4.436	5.279	6.6	19.0	5 11	15 20.43	-14 49.2	1.442	2.450	1.5	19.9
5 21	15 14.51	+19 3.2	4.462	5.275	7.1	19.1	5 21	15 10.37	-14 26.4	1.438	2.438	4.7	20.1
5 31	15 9.79	+18 56.2	4.510	5.270	7.9	19.1	5 31	15 1.19	-14 8.9	1.460	2.426	9.4	20.4
6 10	15 5.70	+18 35.4	4.580	5.266	8.7	19.2	6 10	14 53.96	-14 0.6	1.505	2.413	13.7	20.6
6 20	15 2.48	+18 2.2	4.667	5.262	9.5	19.3	6 20	14 49.32	-14 3.6	1.570	2.401	17.3	20.8
385590	2004 XV ₁₁₅		5 12.7 109°07	0°2/12.5	17		425617	2010 VL ₅₂		5 12.7 228°89	0°9/12.2	17	
4 11	15 44.50	-18 0.4	2.098	2.963	11.7	21.5	4 11	15 45.02	-17 22.1	1.912	2.780	12.4	22.1
4 21	15 37.88	-17 57.3	2.040	2.979	8.3	21.3	4 21	15 38.65	-16 59.8	1.828	2.769	9.0	21.8
5 1	15 29.54	-17 49.2	2.007	2.995	4.6	21.1	5 1	15 30.18	-16 31.3	1.768	2.757	5.0	21.6
5 11	15 20.27	-17 37.6	2.001	3.011	0.6	20.8	5 11	15 20.43	-15 58.9	1.736	2.745	1.0	21.2
5 21	15 10.99	-17 24.7	2.024	3.026	3.3	21.1	5 21	15 10.38	-15 25.9	1.731	2.732	4.0	21.4
5 31	15 2.59	-17 13.2	2.075	3.041	7.1	21.3	5 31	15 1.12	-14 56.3	1.754	2.718	8.3	21.7
6 10	14 55.80	-17 5.9	2.152	3.055	10.4	21.6	6 10	14 53.55	-14 34.1	1.802	2.704	12.1	21.9
6 20	14 51.07	-17 4.9	2.251	3.069	13.2	21.8	6 20	14 48.27	-14 21.9	1.871	2.689	15.5	22.1
261791	2006 BM ₁₆₈		5 12.7 291°68	2°2/ 9.8	18		168910	2000 XC ₅₂		5 12.7 212°27	2°2/13.9	17	
4 11	15 32.69	- 8 16.1	4.267	5.136	6.1	20.6	4 11	15 47.25	-25 19.0	1.999	2.847	12.9	21.3
4 21	15 28.93	- 7 45.2	4.193	5.131	4.4	20.5	4 21	15 40.27	-25 18.8	1.913	2.839	9.6	21.1
5 1	15 24.44	- 7 15.2	4.146	5.127	2.9	20.3	5 1	15 31.10	-25 7.0	1.851	2.830	5.9	20.9
5 11	15 19.54	- 6 47.8	4.128	5.122	2.2	20.3	5 11	15 20.56	-24 43.6	1.816	2.821	2.5	20.6
5 21	15 14.60	- 6 24.8	4.139	5.118	3.2	20.3	5 21	15 9.73	-24 10.6	1.809	2.811	3.8	20.7
5 31	15 9.96	- 6 7.6	4.179	5.113	4.9	20.5	5 31	14 59.72	-23 31.8	1.831	2.800	7.6	20.9
6 10	15 5.94	- 5 57.1	4.245	5.109	6.6	20.6	6 10	14 51.51	-22 52.6	1.878	2.788	11.3	21.1
6 20	15 2.81	- 5 53.8	4.334	5.104	8.1	20.7	6 20	14 45.70	-22 17.9	1.947	2.775	14.6	21.3
157345	2004 TS ₆₅		5 12.7 285°23	0°3/12.5	18		341134	2007 MK ₂₀		5 12.7 318°62	9°8/ 6.5	17	
4 11	15 43.02	-18 8.2	1.740	2.615	13.1	20.1	4 11	15 39.58	+ 2 25.2	1.508	2.387	14.5	20.1
4 21	15 37.41	-18 0.6	1.658	2.602	9.5	19.8	4 21	15 35.04	+ 3 44.8	1.440	2.369	11.9	19.9
5 1	15 29.56	-17 46.8	1.599	2.589	5.3	19.5	5 1	15 28.28	+ 4 53.3	1.395	2.351	10.1	19.7
5 11	15 20.31	-17 28.5	1.566	2.576	0.8	19.2	5 11	15 20.16	+ 5 41.9	1.372	2.333	10.0	19.7
5 21	15 10.71	-17 8.4	1.560	2.563	4.0	19.4	5 21	15 11.73	+ 6 4.4	1.373	2.316	11.9	19.7
5 31	15 1.92	-16 50.3	1.581	2.550	8.5	19.6	5 31	15 4.15	+ 5 57.4	1.396	2.299	14.7	19.9
6 10	14 54.93	-16 38.1	1.625	2.537	12.6	19.8	6 10	14 58.39	+ 5 21.4	1.437	2.283	17.8	20.0
6 20	14 50.37	-16 34.6	1.690	2.524	16.2	20.0	6 20	14 55.07	+ 4 20.2	1.496	2.268	20.6	20.2
140478	2001 TN ₁₃₈		5 12.7 131°21	0°9/12.1	18		115358	2003 SY ₂₄₉		5 12.7 139°35	1°3/11.8	18	R
4 11	15 45.27	-16 26.4	2.148	3.012	11.5	20.1	4 11	15 43.71	-17 55.0	1.617	2.495	13.8	19.8
4 21	15 38.37	-16 10.7	2.088	3.028	8.1	19.9	4 21	15 37.76	-17 3.4	1.554	2.500	9.9	19.6
5 1	15 29.79	-15 50.8	2.055	3.043	4.5	19.7	5 1	15 29.65	-16 3.4	1.514	2.505	5.4	19.3
5 11	15 20.32	-15 29.0	2.049	3.058	1.0	19.4	5 11	15 20.34	-14 59.4	1.501	2.510	1.4	19.1
5 21	15 10.84	-15 7.7	2.072	3.072	3.6	19.7	5 21	15 10.97	-13 57.1	1.514	2.514	4.6	19.3
5 31	15 2.25	-14 50.0	2.124	3.086	7.2	19.9	5 31	15 2.68	-13 2.4	1.554	2.519	9.1	19.6
6 10	14 55.25	-14 38.6	2.202	3.098	10.5	20.1	6 10	14 56.36	-12 20.2	1.618	2.523	13.1	19.8
6 20	14 50.27	-14 35.0	2.302	3.110	13.2	20.3	6 20	14 52.50	-11 53.0	1.701	2.526	16.5	20.1
270463	2002 CE ₂₇₈		5 12.7 175°94	1°2/11.7	17		418958	2009 FZ ₇₀		5 12.7 345°72	0°1/12.7	17	
4 11	15 42.68	-16 16.8	2.556	3.418	9.9	22.0	4 11	15 38.22	-20 11.3	1.051	1.954	17.4	20.3
4 21	15 36.38	-15 37.4	2.483	3.421	7.1	21.8	4 21	15 34.91	-19 50.9	0.985	1.943	12.7	20.0
5 1	15 28.66	-14 53.6	2.436	3.424	3.9	21.6	5 1	15 28.53	-19 17.4	0.939	1.933	7.1	19.6
5 11	15 20.16	-14 8.0	2.418	3.426	1.2	21.4	5 11	15 20.21	-18 34.2	0.914	1.924	1.1	19.2
5 21	15 11.60	-13 23.7	2.430	3.427	3.5	21.5	5 21	15 11.49	-17 47.1	0.912	1.917	5.2	19.4
5 31	15 3.70	-12 44.1	2.471	3.427	6.6	21.7	5 31	15 4.02	-17 3.6	0.931	1.911	11.1	19.7
6 10	14 57.09	-12 12.1	2.538	3.426	9.6	21.9	6 10	14 59.17	-16 31.2	0.969	1.907	16.5	20.0
6 20	14 52.17	-11 49.6	2.629	3.425	12.1	22.1	6 20	14 57.64	-16 14.3	1.024	1.904	21.0	20.3
111665	2002 BC ₅		5 12.7 28°50	7°8/17.4	17		182318	2001 OE ₉₁		5 12.7 298°91	4°9/10.2	18	
4 11	15 46.94	-40 54.5</											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
266408	2007 <i>FR</i> ₁₆		5 12.7 95°86	2.4/11.2	17		206525	2003 <i>UN</i> ₁₅₉		5 12.7 33°69	0.1/12.7	17	
4 11	15 43.04	-13 57.3	1.719	2.598	13.0	21.7	4 11	15 46.09	-18 3.8	1.388	2.269	15.5	19.6
4 21	15 37.09	-13 15.7	1.664	2.610	9.3	21.5	4 21	15 39.91	-18 18.7	1.325	2.272	11.2	19.4
5 1	15 29.20	-12 31.0	1.633	2.622	5.2	21.3	5 1	15 31.05	-18 27.6	1.285	2.275	6.2	19.1
5 11	15 20.27	-11 47.3	1.628	2.634	2.4	21.1	5 11	15 20.59	-18 31.6	1.269	2.279	0.9	18.8
5 21	15 11.35	-11 9.0	1.650	2.645	5.0	21.3	5 21	15 9.89	-18 32.6	1.279	2.282	4.4	19.0
5 31	15 3.44	-10 40.2	1.699	2.657	9.0	21.6	5 31	15 0.38	-18 33.8	1.314	2.286	9.5	19.3
6 10	14 57.35	-10 23.8	1.771	2.668	12.6	21.8	6 10	14 53.19	-18 39.0	1.371	2.291	14.0	19.6
6 20	14 53.54	-10 20.8	1.863	2.679	15.6	22.0	6 20	14 48.95	-18 51.1	1.448	2.295	17.7	19.8
211084	2002 <i>EY</i> ₃₄		5 12.7 32°59	1.8/13.3	18		258377	2001 <i>XB</i> ₂₁		5 12.7 177°34	5.8/17.6	18	
4 11	15 46.61	-21 31.4	1.304	2.183	16.4	19.4	4 11	15 43.55	-38 53.2	2.498	3.288	12.4	20.5
4 21	15 40.48	-21 57.4	1.242	2.186	12.0	19.1	4 21	15 37.41	-39 3.4	2.417	3.288	10.2	20.4
5 1	15 31.43	-22 13.8	1.202	2.190	7.0	18.8	5 1	15 29.41	-38 55.9	2.358	3.289	7.9	20.2
5 11	15 20.63	-22 20.1	1.186	2.194	2.2	18.5	5 11	15 20.34	-38 29.7	2.325	3.289	6.2	20.1
5 21	15 9.55	-22 17.8	1.195	2.199	4.6	18.7	5 21	15 11.13	-37 45.7	2.319	3.289	5.9	20.1
5 31	14 59.76	-22 10.8	1.228	2.204	9.7	19.0	5 31	15 2.76	-36 47.4	2.340	3.289	7.3	20.2
6 10	14 52.50	-22 4.4	1.284	2.209	14.3	19.3	6 10	14 56.01	-35 40.5	2.386	3.289	9.5	20.3
6 20	14 48.43	-22 3.0	1.358	2.214	18.2	19.5	6 20	14 51.39	-34 30.7	2.456	3.289	11.8	20.5
310971	2003 <i>UG</i> ₂₀₄		5 12.7 96°53	1.0/12.1	18		362641	2011 <i>SJ</i> ₁₈₄		5 12.7 76°42	1.1/12.2	17	
4 11	15 45.08	-17 48.4	1.556	2.434	14.3	20.9	4 11	15 46.28	-16 26.3	1.337	2.221	15.7	20.7
4 21	15 38.72	-17 16.2	1.503	2.449	10.2	20.7	4 21	15 40.00	-16 20.0	1.279	2.228	11.3	20.5
5 1	15 30.15	-16 36.8	1.473	2.463	5.6	20.4	5 1	15 31.06	-16 8.3	1.243	2.234	6.2	20.2
5 11	15 20.41	-15 53.9	1.468	2.478	1.1	20.2	5 11	15 20.59	-15 53.8	1.232	2.241	1.3	19.9
5 21	15 10.71	-15 12.0	1.491	2.492	4.4	20.4	5 21	15 9.97	-15 39.9	1.246	2.248	4.9	20.2
5 31	15 2.20	-14 36.1	1.539	2.506	8.9	20.7	5 31	15 0.64	-15 30.7	1.284	2.254	10.0	20.5
6 10	14 55.77	-14 10.4	1.611	2.519	12.9	21.0	6 10	14 53.68	-15 29.9	1.345	2.261	14.4	20.7
6 20	14 51.90	-13 57.1	1.703	2.533	16.2	21.3	6 20	14 49.69	-15 39.6	1.425	2.268	18.2	21.0
329039	2011 <i>AG</i> ₄₁		5 12.7 277°75	1.2/12.1	17		295153	2008 <i>FX</i> ₅₇		5 12.7 333°20	2.2/9.6	18	
4 11	15 44.51	-16 8.4	1.667	2.544	13.5	20.8	4 11	15 32.87	-9 30.4	4.103	4.972	6.3	19.9
4 21	15 38.65	-15 58.2	1.578	2.524	9.8	20.5	4 21	15 29.09	-8 41.4	4.031	4.971	4.6	19.8
5 1	15 30.37	-15 43.1	1.513	2.503	5.5	20.2	5 1	15 24.56	-7 52.5	3.987	4.969	2.9	19.7
5 11	15 20.50	-15 25.4	1.473	2.483	1.3	19.9	5 11	15 19.63	-7 5.9	3.972	4.968	2.2	19.6
5 21	15 10.14	-15 8.0	1.461	2.462	4.6	20.1	5 21	15 14.66	-6 23.8	3.987	4.966	3.3	19.7
5 31	15 0.54	-14 54.6	1.474	2.441	9.3	20.3	5 31	15 10.02	-5 47.9	4.031	4.965	5.1	19.8
6 10	14 52.80	-14 49.1	1.511	2.419	13.6	20.5	6 10	15 6.04	-5 19.6	4.101	4.963	6.8	20.0
6 20	14 47.64	-14 54.0	1.568	2.398	17.4	20.7	6 20	15 2.98	-4 59.8	4.195	4.962	8.4	20.1
233509	2007 <i>EB</i> ₁₆₁		5 12.7 73°10	5.3/15.1	18		498674	2008 <i>SM</i> ₁₈₅		5 12.7 145°99	5.7/15.9	17	
4 11	15 47.58	-29 55.6	1.271	2.132	18.0	19.8	4 11	15 47.39	-34 4.7	2.089	2.906	13.5	20.7
4 21	15 41.38	-30 17.9	1.210	2.137	13.9	19.6	4 21	15 40.46	-34 48.5	2.016	2.910	10.9	20.5
5 1	15 31.99	-30 19.8	1.169	2.143	9.4	19.3	5 1	15 31.24	-35 16.5	1.965	2.914	8.1	20.4
5 11	15 20.72	-29 59.5	1.151	2.149	5.7	19.1	5 11	15 20.62	-35 26.4	1.939	2.918	6.0	20.2
5 21	15 9.21	-29 19.1	1.157	2.155	6.2	19.2	5 21	15 9.72	-35 18.0	1.941	2.922	6.1	20.2
5 31	14 59.21	-28 25.4	1.187	2.160	10.1	19.4	5 31	14 59.73	-34 54.2	1.970	2.925	8.1	20.4
6 10	14 52.01	-27 27.8	1.239	2.166	14.5	19.7	6 10	14 51.65	-34 20.4	2.023	2.928	10.9	20.5
6 20	14 48.25	-26 34.7	1.309	2.172	18.3	19.9	6 20	14 46.08	-33 42.8	2.099	2.931	13.5	20.7
53499	2000 <i>AT</i> ₈₇		5 12.7 245°69	2.5/14.0	18		61954	2000 <i>RB</i> ₁₈		5 12.7 232°83	1.6/11.4	18	
4 11	15 45.72	-25 59.0	1.404	2.272	16.2	19.1	4 11	15 39.31	-15 49.9	2.297	3.170	10.5	19.9
4 21	15 39.83	-25 41.9	1.328	2.265	12.1	18.8	4 21	15 34.19	-15 3.7	2.222	3.166	7.5	19.7
5 1	15 31.09	-25 7.5	1.274	2.257	7.4	18.5	5 1	15 27.56	-14 12.7	2.173	3.163	4.1	19.5
5 11	15 20.59	-24 16.4	1.243	2.250	3.0	18.2	5 11	15 20.08	-13 20.3	2.151	3.159	1.6	19.3
5 21	15 9.76	-23 13.0	1.239	2.242	4.6	18.3	5 21	15 12.49	-12 30.2	2.158	3.155	3.9	19.4
5 31	15 0.11	-22 4.4	1.259	2.234	9.5	18.6	5 31	15 5.57	-11 46.3	2.193	3.151	7.2	19.6
6 10	14 52.87	-20 59.3	1.302	2.225	14.2	18.8	6 10	14 59.96	-11 11.8	2.253	3.147	10.4	19.8
6 20	14 48.72	-20 4.7	1.364	2.217	18.3	19.0	6 20	14 56.11	-10 48.6	2.335	3.143	13.1	20.0
144235	2004 <i>CP</i> ₅₈		5 12.7 211°45	1.7/11.7	17		35365	Cooney		5 12.7 136°62	0.9/12.2	16	
4 11	15 45.09	-14 41.0	1.885	2.757	12.5	20.7	4 11	15 44.56	-19 7.7	1.519	2.397	14.6	19.7
4 21	15 38.65	-14 20.9	1.809	2.752	8.9	20.5	4 21	15 38.51	-18 20.4	1.456	2.402	10.4	19.5
5 1	15 30.16	-13 57.4	1.756	2.746	5.0	20.2	5 1	15 30.13	-17 23.1	1.417	2.407	5.7	19.2
5 11	15 20.45	-13 33.0	1.731	2.739	1.8	20.0	5 11	15 20.46	-16 20.0	1.403	2.413	1.0	18.9
5 21	15 10.50	-13 11.0	1.734	2.732	4.5	20.2	5 21	15 10.72	-15 17.0	1.416	2.417	4.6	19.2
5 31	15 1.38	-12 54.7	1.764	2.724	8.5	20.4	5 31	15 2.13	-14 20.4	1.455	2.422	9.3	19.5
6 10	14 53.97	-12 47.1	1.818	2.716	12.3	20.6	6 10	14 55.67	-13 35.8	1.517	2.426	13.5	19.7
6 20	14 48.83	-12 50.0	1.894	2.707	15.5	20.8	6 20	14 51.83	-13 6.2	1.598	2.430	17.0	19.9
141093	2001 <i>XS</i> ₄₄		5 12.7 197°94	0.2/12.8	18		499295	2009 <i>WR</i> ₈		5 12.7 73°19	2.0/14.1	18	
4 11	15 42.34	-18 49.4	2.428	3.289	10.4	19.9	4 11	15 43.94	-26 55.5	1.723	2.579	14.2	20.8
4 21	15 36.35	-18 55.4	2.351	3.288	7.5	19.7	4 21	15 37.74	-26 11.9	1.671	2.602	10.4	20.7
5 1	15 28.76	-18 56.7	2.299	3.286	4.2	19.5	5 1	15 29.53	-25 12.9	1.643	2.625	6.3	20.5
5 11	15 20.24	-18 54.4	2.275	3.285	0.7	19.2	5 11	15 20.36	-24 1.6	1.641	2.647	2.5	20.3
5 21	15 11.55	-18 49.7	2.280	3.283	2.9	19.4	5 21	15 11.33	-22 43.2	1.667	2.670	3.7	20.4
5 31	15 3.49	-18 44.9	2.314	3.281	6.4	19.6	5 31	15 3.53	-21 24.6	1.719	2.692	7.6	20.7
6 10	14 56.76	-18 42.3	2.374	3.279	9.5	19.8	6 10	14 57.72	-20 12.5	1.797	2.714	11.3	20.9
6 20	14 51.83	-18 44.1	2.457	3.276	12.2	20.0	6 20	14 54.29	-19 11.7	1.896	2.736	14.4	21.2
465228	2007 <i>RO</i> ₁₇₉		5 12.7 201°78	0.5/12.4	16		403778	2011 <i>QU</i> ₃₅					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
424697	2008 SS ₃₆		5 12.7 29°53'	5°3'/15.4	17		394540	2007 UL ₇		5 12.7 166°39'	1°2'/13.5	18	
4 11	15 45.05	-31 16.6	1.655	2.499	15.3	20.5	4 11	15 48.14	-27 58.8	1.251	2.117	17.8	20.3
4 21	15 39.10	-31 47.7	1.587	2.502	12.0	20.3	4 21	15 41.51	-26 16.2	1.183	2.120	13.2	20.1
5 1	15 30.60	-32 1.8	1.540	2.506	8.4	20.1	5 1	15 31.93	-24 5.3	1.137	2.123	7.7	19.8
5 11	15 20.56	-31 57.0	1.518	2.509	5.7	20.0	5 11	15 20.77	-21 32.4	1.117	2.125	2.0	19.4
5 21	15 10.27	-31 34.2	1.521	2.513	5.9	20.0	5 21	15 9.65	-18 49.7	1.123	2.127	4.8	19.6
5 31	15 1.08	-30 57.7	1.550	2.518	8.8	20.2	5 31	15 0.16	-16 12.6	1.156	2.128	10.5	19.9
6 10	14 54.08	-30 14.4	1.602	2.522	12.3	20.4	6 10	14 53.41	-13 54.7	1.212	2.129	15.6	20.2
6 20	14 49.91	-29 31.1	1.675	2.527	15.5	20.6	6 20	14 49.90	-12 4.0	1.288	2.129	19.8	20.5
267442	2002 CQ ₂₇₂		5 12.7 1°11'	7°8'/15.1	18		386478	2008 YU ₁₂₄		5 12.7 204°89'	0°6'/12.3	17	
4 11	15 45.41	-31 40.5	1.303	2.160	17.8	18.8	4 11	15 41.91	-17 27.1	2.175	3.043	11.2	22.0
4 21	15 40.13	-33 9.9	1.238	2.157	14.3	18.5	4 21	15 36.18	-17 10.5	2.100	3.041	8.0	21.8
5 1	15 31.53	-34 22.5	1.194	2.156	10.7	18.3	5 1	15 28.73	-16 48.8	2.049	3.039	4.4	21.6
5 11	15 20.73	-35 12.3	1.171	2.156	8.1	18.2	5 11	15 20.31	-16 24.1	2.027	3.036	0.8	21.3
5 21	15 9.32	-35 36.6	1.172	2.157	8.4	18.2	5 21	15 11.72	-15 59.2	2.032	3.033	3.5	21.5
5 31	14 59.15	-35 37.6	1.196	2.160	11.2	18.4	5 31	15 3.86	-15 37.0	2.066	3.030	7.1	21.7
6 10	14 51.72	-35 22.5	1.241	2.164	14.8	18.6	6 10	14 57.45	-15 20.8	2.124	3.027	10.5	21.9
6 20	14 47.88	-34 59.8	1.304	2.168	18.3	18.8	6 20	14 52.97	-15 12.6	2.205	3.024	13.4	22.1
36965	2000 SU ₂₈₉		5 12.7 354°48'	2°1'/13.8	18		422204	2014 RP ₄₆		5 12.7 127°28'	3°8'/10.4	18	
4 11	15 41.56	-24 44.6	1.483	2.356	15.1	18.6	4 11	15 43.95	-11 34.9	1.570	2.454	13.9	21.4
4 21	15 36.63	-24 32.1	1.414	2.354	11.2	18.3	4 21	15 37.93	-10 36.0	1.514	2.461	10.0	21.2
5 1	15 29.23	-24 5.3	1.366	2.351	6.7	18.0	5 1	15 29.78	-9 35.2	1.480	2.468	6.0	21.0
5 11	15 20.36	-23 25.4	1.343	2.350	2.5	17.8	5 11	15 20.46	-8 38.4	1.473	2.475	3.8	20.9
5 21	15 11.28	-22 36.5	1.345	2.349	4.2	17.9	5 21	15 11.10	-7 51.2	1.492	2.482	6.4	21.0
5 31	15 3.28	-21 44.4	1.372	2.349	8.8	18.1	5 31	15 2.83	-7 18.1	1.537	2.488	10.3	21.3
6 10	14 57.42	-20 55.9	1.422	2.349	13.1	18.4	6 10	14 56.53	-7 2.0	1.604	2.494	14.0	21.5
6 20	14 54.29	-20 16.5	1.493	2.349	16.8	18.6	6 20	14 52.67	-7 3.0	1.691	2.500	17.2	21.7
513439	2008 UQ ₃₄₂		5 12.7 153°17'	1°0'/11.5	18		102327	1999 TG ₁₀₉		5 12.7 172°66'	2°5'/10.2	18	
4 11	15 35.96	-14 22.6	3.976	4.838	6.7	22.7	4 11	15 38.59	-12 35.1	2.714	3.584	9.1	19.7
4 21	15 31.28	-14 2.7	3.905	4.844	4.7	22.6	4 21	15 33.45	-11 29.3	2.644	3.586	6.5	19.5
5 1	15 25.78	-13 41.3	3.863	4.851	2.6	22.4	5 1	15 27.08	-10 21.1	2.602	3.588	3.9	19.3
5 11	15 19.84	-13 19.9	3.850	4.857	1.0	22.3	5 11	15 20.06	-9 14.2	2.588	3.589	2.5	19.2
5 21	15 13.86	-13 0.1	3.867	4.863	2.4	22.4	5 21	15 13.00	-8 12.4	2.604	3.590	4.2	19.3
5 31	15 8.26	-12 43.2	3.914	4.869	4.5	22.6	5 31	15 6.53	-7 19.3	2.648	3.591	6.9	19.5
6 10	15 3.40	-12 30.8	3.988	4.874	6.4	22.7	6 10	15 1.16	-6 37.4	2.719	3.592	9.5	19.7
6 20	14 59.55	-12 23.7	4.086	4.879	8.2	22.9	6 20	14 57.27	-6 8.0	2.811	3.592	11.8	19.8
426292	2012 TA ₇₄		5 12.7 238°44'	2°7'/8.5	17		106634	2000 WY ₁₃₁		5 12.7 175°05'	2°4'/10.6	18	
4 11	15 32.24	-5 15.5	4.563	5.428	5.8	21.0	4 11	15 40.22	-9 15.3	3.268	4.130	8.0	20.8
4 21	15 28.60	-4 27.4	4.493	5.426	4.3	20.9	4 21	15 34.44	-8 56.3	3.197	4.133	5.8	20.7
5 1	15 24.29	-3 41.1	4.452	5.424	3.1	20.8	5 1	15 27.59	-8 38.2	3.152	4.135	3.5	20.5
5 11	15 19.62	-2 58.6	4.440	5.422	2.8	20.8	5 11	15 20.14	-8 23.0	3.138	4.137	2.4	20.4
5 21	15 14.92	-2 21.7	4.457	5.419	3.7	20.9	5 21	15 12.63	-8 12.3	3.153	4.138	3.7	20.5
5 31	15 10.50	-1 52.0	4.503	5.417	5.1	21.0	5 31	15 5.59	-8 7.7	3.198	4.139	5.9	20.7
6 10	15 6.67	-1 30.4	4.574	5.415	6.6	21.1	6 10	14 59.50	-8 10.3	3.269	4.139	8.2	20.8
6 20	15 3.64	-1 17.3	4.669	5.413	7.9	21.2	6 20	14 54.68	-8 20.5	3.364	4.139	10.1	21.0
277133	2005 GG ₂₂₇		5 12.7 177°30'	0°5'/12.9	17		29172	1990 QL ₄		5 12.7 342°08'	4°7'/15.6	18	
4 11	15 46.03	-20 31.9	1.932	2.794	12.6	21.8	4 11	15 43.79	-32 10.3	2.138	2.966	12.9	17.7
4 21	15 39.30	-20 21.9	1.859	2.796	9.1	21.6	4 21	15 37.81	-32 36.3	2.061	2.966	10.1	17.5
5 1	15 30.52	-20 3.9	1.811	2.798	5.2	21.4	5 1	15 29.76	-32 47.8	2.006	2.965	7.3	17.3
5 11	15 20.55	-19 39.3	1.790	2.799	1.0	21.0	5 11	15 20.48	-32 43.5	1.978	2.965	5.0	17.2
5 21	15 10.42	-19 10.7	1.797	2.799	3.5	21.2	5 21	15 10.95	-32 24.1	1.976	2.965	5.2	17.2
5 31	15 1.18	-18 41.9	1.831	2.799	7.7	21.5	5 31	15 2.24	-31 52.8	2.001	2.964	7.5	17.3
6 10	14 53.72	-18 17.3	1.891	2.798	11.4	21.7	6 10	14 55.25	-31 14.6	2.052	2.964	10.4	17.5
6 20	14 48.57	-18 0.0	1.973	2.796	14.6	21.9	6 20	14 50.55	-30 35.0	2.124	2.964	13.1	17.7
184003	2004 EH ₈₂		5 12.7 135°88'	0°6'/12.4	17		184800	2005 TV ₉₈		5 12.7 298°56'	2°7'/10.6	16	
4 11	15 46.15	-17 24.7	1.883	2.750	12.7	20.9	4 11	15 38.53	-13 10.2	2.137	3.016	10.9	20.7
4 21	15 39.29	-17 15.9	1.821	2.761	9.0	20.7	4 21	15 33.77	-12 12.2	2.060	3.007	7.8	20.5
5 1	15 30.46	-17 2.0	1.783	2.772	5.0	20.5	5 1	15 27.41	-11 10.6	2.009	2.998	4.6	20.3
5 11	15 20.53	-16 44.7	1.773	2.782	0.8	20.2	5 11	15 20.12	-10 9.6	1.985	2.989	2.7	20.2
5 21	15 10.54	-16 26.7	1.790	2.792	3.8	20.4	5 21	15 12.69	-9 13.8	1.989	2.980	4.9	20.3
5 31	15 1.52	-16 11.3	1.836	2.801	7.9	20.7	5 31	15 5.93	-8 27.6	2.020	2.971	8.2	20.5
6 10	14 54.30	-16 1.6	1.906	2.809	11.5	20.9	6 10	15 0.54	-7 54.0	2.075	2.963	11.4	20.6
6 20	14 49.37	-15 59.9	1.997	2.817	14.5	21.2	6 20	14 56.96	-7 34.5	2.152	2.954	14.2	20.8
435569	2008 RK ₆₈		5 12.7 232°05'	3°7'/14.9	17		186106	2001 TW ₅₆		5 12.7 150°12'	0°9'/11.5	18	
4 11	15 46.52	-30 8.8	2.506	3.329	11.4	22.0	4 11	15 32.93	-14 47.4	4.507	5.372	5.9	20.6
4 21	15 39.60	-30 30.6	2.408	3.314	8.8	21.8	4 21	15 29.12	-14 22.4	4.433	5.373	4.2	20.5
5 1	15 30.73	-30 40.9	2.335	3.298	6.1	21.6	5 1	15 24.60	-13 55.9	4.386	5.374	2.3	20.3
5 11	15 20.61	-30 38.3	2.289	3.281	3.9	21.4	5 11	15 19.71	-13 29.2	4.368	5.375	0.9	20.2
5 21	15 10.12	-30 23.2	2.272	3.264	4.3	21.4	5 21	15 14.78	-13 3.9	4.380	5.376	2.1	20.3
5 31	15 0.23	-29 57.8	2.284	3.246	6.8	21.6	5 31	15 10.15	-12 41.4	4.422	5.377	4.0	20.4
6 10	14 51.80	-29 26.5	2.323	3.227	9.7	21.7	6 10	15 6.14	-12 22.9	4.491	5.379	5.7	20.6
6 20	14 45.43	-28 53.8	2.385	3.208	12.4	21.9	6 20	15 2.98	-12 9.5	4.584	5.380	7.3	20.7
504201	2006 TE ₁₂₃		5 12.7 42°74'	1°8'/11.0	17		384271	2009 HU ₇₄		5 12.7 95°03'	7°2'/7.5	18	
4 11	15 40.35	-19 37.3	1.794	2.67									

EPHEMERIDES

5 12.7

5 12.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
222824	2002 <i>DP</i> ₇		5 12.7 147°41'	7.6/7.7	17		394004	2005 <i>UD</i> ₅₃₀		5 12.7 260°45'	1.7/13.5	18	
4 11	15 44.34	+ 5 42.9	2.350	3.192	11.4	21.2	4 11	15 46.93	-21 49.3	2.481	3.328	10.7	21.0
4 21	15 37.58	+ 6 26.9	2.302	3.204	9.4	21.1	4 21	15 39.85	-22 32.3	2.388	3.315	7.9	20.8
5 1	15 29.37	+ 6 59.0	2.278	3.214	7.9	21.0	5 1	15 30.89	-23 10.4	2.321	3.302	4.8	20.5
5 11	15 20.42	+ 7 14.8	2.282	3.224	7.7	21.0	5 11	15 20.70	-23 42.7	2.283	3.288	1.9	20.3
5 21	15 11.49	+ 7 12.2	2.312	3.234	8.8	21.1	5 21	15 10.11	-24 8.6	2.274	3.275	3.2	20.4
5 31	15 3.34	+ 6 50.5	2.367	3.242	10.6	21.2	5 31	15 0.03	-24 29.1	2.296	3.261	6.5	20.6
6 10	14 56.58	+ 6 11.1	2.446	3.250	12.6	21.4	6 10	14 51.31	-24 46.3	2.345	3.248	9.7	20.7
6 20	14 51.61	+ 5 16.5	2.545	3.257	14.5	21.5	6 20	14 44.54	-25 2.8	2.417	3.234	12.4	20.9
408807	2000 <i>SU</i> ₂₄₈		5 12.7 249°97'	4.3/10.1	17		204935	2008 <i>UZ</i> ₁₀₈		5 12.7 163°90'	0.3/12.9	17	
4 11	15 43.98	-10 29.4	1.644	2.526	13.4	21.3	4 11	15 41.86	-22 1.4	2.420	3.276	10.6	21.7
4 21	15 38.15	-9 28.3	1.565	2.511	9.8	21.0	4 21	15 35.95	-21 17.4	2.346	3.281	7.6	21.5
5 1	15 30.06	-8 24.7	1.509	2.495	6.1	20.8	5 1	15 28.54	-20 24.5	2.299	3.285	4.3	21.3
5 11	15 20.55	-7 24.4	1.480	2.479	4.3	20.6	5 11	15 20.32	-19 25.2	2.280	3.289	0.8	21.0
5 21	15 10.73	-6 33.3	1.477	2.463	6.9	20.7	5 21	15 12.07	-18 23.1	2.290	3.293	2.9	21.2
5 31	15 1.74	-5 56.8	1.499	2.446	10.9	20.9	5 31	15 4.55	-17 22.6	2.330	3.296	6.4	21.4
6 10	14 54.60	-5 38.3	1.545	2.429	14.8	21.1	6 10	14 58.41	-16 27.9	2.396	3.298	9.5	21.6
6 20	14 49.93	-5 38.6	1.609	2.411	18.2	21.3	6 20	14 54.06	-15 42.2	2.485	3.300	12.2	21.8
37549	1981 <i>ET</i> ₃₀		5 12.7 41°41'	4.3/10.4	18		413390	2004 <i>RG</i> ₉₆		5 12.7 310°91'	2.1/11.6	17	
4 11	15 42.61	-11 45.7	1.323	2.216	15.3	19.0	4 11	15 40.40	-17 42.6	1.126	2.026	16.8	20.9
4 21	15 37.32	-10 41.5	1.267	2.219	11.0	18.7	4 21	15 36.64	-16 47.0	1.039	1.996	12.2	20.5
5 1	15 29.58	-9 34.9	1.234	2.223	6.6	18.5	5 1	15 29.72	-15 36.5	0.972	1.966	6.9	20.1
5 11	15 20.47	-8 32.8	1.225	2.227	4.3	18.4	5 11	15 20.58	-14 16.4	0.928	1.936	2.1	19.7
5 21	15 11.27	-7 41.8	1.241	2.231	7.1	18.5	5 21	15 10.64	-12 54.8	0.906	1.907	6.5	19.9
5 31	15 3.28	-7 7.8	1.280	2.236	11.5	18.8	5 31	15 1.62	-11 42.0	0.906	1.879	12.7	20.1
6 10	14 57.49	-6 53.5	1.341	2.240	15.6	19.0	6 10	14 55.08	-10 47.4	0.926	1.851	18.4	20.3
6 20	14 54.43	-6 59.1	1.420	2.245	19.1	19.3	6 20	14 51.94	-10 16.1	0.962	1.824	23.4	20.5
29082	1978 <i>VG</i> ₉		5 12.7 254°26'	0.2/12.8	16		292995	2006 <i>WD</i> ₉		5 12.7 83°34'	1.1/11.9	18	
4 11	15 47.96	-18 52.0	1.591	2.462	14.4	19.0	4 11	15 42.91	-19 32.7	1.593	2.471	14.0	20.3
4 21	15 41.35	-18 56.5	1.503	2.445	10.5	18.7	4 21	15 37.16	-18 24.2	1.538	2.484	10.0	20.1
5 1	15 32.01	-18 54.1	1.438	2.426	6.0	18.4	5 1	15 29.34	-17 5.5	1.506	2.497	5.4	19.8
5 11	15 20.87	-18 45.7	1.398	2.408	0.9	18.0	5 11	15 20.44	-15 42.0	1.501	2.510	1.2	19.6
5 21	15 9.15	-18 33.2	1.386	2.389	4.3	18.2	5 21	15 11.61	-14 20.2	1.523	2.523	4.5	19.8
5 31	14 58.26	-18 20.4	1.399	2.369	9.4	18.4	5 31	15 3.92	-13 7.3	1.571	2.536	8.9	20.1
6 10	14 49.44	-18 11.7	1.437	2.348	14.0	18.6	6 10	14 58.21	-12 8.6	1.643	2.549	12.8	20.4
6 20	14 43.48	-18 10.9	1.494	2.328	17.9	18.8	6 20	14 54.92	-11 26.8	1.735	2.562	16.1	20.6
198375	2004 <i>VG</i> ₂₃		5 12.7 212°12'	0.7/12.2	18		131678	2001 <i>XV</i> ₁₈₆		5 12.7 98°55'	0.1/12.6	18	
4 11	15 42.64	-17 49.9	2.340	3.204	10.7	21.8	4 11	15 46.98	-19 35.8	1.464	2.339	15.2	20.1
4 21	15 36.64	-17 22.3	2.257	3.197	7.6	21.6	4 21	15 40.25	-19 14.4	1.412	2.356	10.9	19.9
5 1	15 28.99	-16 48.9	2.200	3.189	4.2	21.4	5 1	15 31.12	-18 44.0	1.382	2.372	6.0	19.6
5 11	15 20.39	-16 12.1	2.172	3.181	0.8	21.1	5 11	15 20.71	-18 7.4	1.378	2.388	0.9	19.3
5 21	15 11.61	-15 34.7	2.172	3.172	3.4	21.3	5 21	15 10.34	-17 28.9	1.400	2.403	4.3	19.6
5 31	15 3.50	-15 0.2	2.201	3.163	6.9	21.5	5 31	15 1.28	-16 53.7	1.449	2.419	9.0	19.9
6 10	14 56.75	-14 32.0	2.255	3.153	10.2	21.7	6 10	14 54.49	-16 26.8	1.520	2.433	13.2	20.2
6 20	14 51.85	-14 12.5	2.332	3.143	13.0	21.9	6 20	14 50.46	-16 11.1	1.611	2.448	16.7	20.5
48930	1998 <i>PW</i>		5 12.7 252°91'	2.3/13.9	17		106230	2000 <i>UB</i> ₄₁		5 12.7 130°74'	0.2/12.9	18	
4 11	15 46.01	-25 20.1	1.884	2.737	13.3	20.7	4 11	15 39.94	-21 28.1	2.753	3.609	9.5	19.4
4 21	15 39.66	-25 21.3	1.790	2.719	10.0	20.5	4 21	15 34.41	-20 46.9	2.686	3.620	6.8	19.2
5 1	15 30.95	-25 10.3	1.720	2.700	6.2	20.2	5 1	15 27.63	-19 58.6	2.645	3.632	3.8	19.1
5 11	15 20.70	-24 47.1	1.675	2.680	2.7	19.9	5 11	15 20.20	-19 5.4	2.633	3.643	0.6	18.8
5 21	15 10.00	-24 13.5	1.659	2.660	4.0	20.0	5 21	15 12.77	-18 10.4	2.651	3.653	2.6	19.0
5 31	15 0.06	-23 33.4	1.669	2.640	8.0	20.2	5 31	15 6.00	-17 17.2	2.698	3.664	5.6	19.2
6 10	14 51.93	-22 52.6	1.705	2.618	12.0	20.4	6 10	15 0.41	-16 29.1	2.772	3.674	8.4	19.4
6 20	14 46.31	-22 16.4	1.762	2.597	15.6	20.6	6 20	14 56.37	-15 48.7	2.870	3.683	10.8	19.6
232191	2002 <i>FK</i> ₂₅		5 12.7 355°80'	9.1/9.1	17		314122	2005 <i>ET</i> ₁₅₁		5 12.7 137°27'	0.3/12.6	18	
4 11	15 40.99	+ 1 8.7	1.290	2.177	16.0	18.9	4 11	15 46.77	-18 40.5	1.830	2.696	13.0	21.3
4 21	15 36.25	+ 1 43.4	1.235	2.172	12.7	18.7	4 21	15 39.80	-18 25.5	1.769	2.709	9.3	21.1
5 1	15 29.05	+ 2 3.3	1.200	2.168	10.0	18.5	5 1	15 30.79	-18 3.7	1.732	2.720	5.2	20.9
5 11	15 20.41	+ 2 1.4	1.188	2.165	9.2	18.5	5 11	15 20.67	-17 37.2	1.722	2.732	0.8	20.6
5 21	15 11.58	+ 1 34.2	1.198	2.163	10.9	18.6	5 21	15 10.51	-17 9.1	1.740	2.742	3.8	20.8
5 31	15 3.84	+ 0 40.9	1.231	2.163	14.1	18.7	5 31	15 1.37	-16 43.3	1.786	2.752	8.0	21.1
6 10	14 58.25	+ 0 35.3	1.283	2.163	17.5	18.9	6 10	14 54.11	-16 23.6	1.856	2.761	11.7	21.4
6 20	14 55.36	- 2 9.6	1.353	2.165	20.5	19.2	6 20	14 49.21	-16 12.6	1.948	2.769	14.8	21.6
489751	2007 <i>YK</i> ₄₉		5 12.7 145°46'	1.7/11.3	17		367110	2006 <i>RB</i> ₈₉		5 12.7 325°56'	0.4/12.9	17	
4 11	15 40.72	-13 17.7	2.858	3.722	8.9	22.6	4 11	15 39.74	-20 56.6	1.174	2.069	16.7	20.8
4 21	15 34.90	-12 50.9	2.794	3.733	6.3	22.5	4 21	15 36.00	-20 35.9	1.095	2.048	12.2	20.5
5 1	15 27.88	-12 22.6	2.757	3.744	3.6	22.3	5 1	15 29.25	-20 1.5	1.036	2.028	7.0	20.1
5 11	15 20.22	-11 55.1	2.749	3.754	1.7	22.2	5 11	15 20.50	-19 15.8	1.000	2.009	1.2	19.7
5 21	15 12.54	-11 30.5	2.770	3.764	3.4	22.3	5 21	15 11.17	-18 23.9	0.986	1.991	4.9	19.9
5 31	15 5.45	-11 11.1	2.821	3.773	6.1	22.5	5 31	15 2.89	-17 33.2	0.995	1.974	10.8	20.1
6 10	14 59.47	-10 58.7	2.898	3.782	8.7	22.7	6 10	14 57.05	-16 51.8	1.025	1.958	16.2	20.4
6 20	14 54.95	-10 54.4	2.998	3.790	10.9	22.9	6 20	14 54.47	-16 24.9	1.071	1.943	20.8	20.6
247822	2003 <i>SH</i> ₁₈₀		5 12.7 243°73'	2.5/14.1	17		125770	2001 <i>XA</i> ₁₃₈					

EPHEMERIDES

5 12.7

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
61651	2000 QW ₁₁₁		5 12.7 115°11	5°1/ 8.0 18			20136	Eisenhart		5 12.7 325°03	22°4/ 6.1 18	R	
4 11	15 39.47	- 1 12.6	2.759	3.620	9.3	19.7	4 11	15 52.53	+25 15.7	1.040	1.849	24.6	17.5
4 21	15 33.96	- 0 14.6	2.715	3.639	7.2	19.6	4 21	15 45.09	+26 23.5	1.001	1.843	23.3	17.3
5 1	15 27.34	+ 0 37.4	2.697	3.658	5.6	19.5	5 1	15 34.14	+26 44.0	0.976	1.837	22.5	17.2
5 11	15 20.16	+ 1 19.6	2.707	3.676	5.2	19.5	5 11	15 21.23	+26 5.1	0.965	1.832	22.5	17.2
5 21	15 13.03	+ 1 49.5	2.746	3.694	6.4	19.6	5 21	15 8.25	+24 22.7	0.971	1.827	23.4	17.2
5 31	15 6.51	+ 2 5.1	2.811	3.711	8.3	19.8	5 31	14 57.09	+21 41.7	0.992	1.822	25.0	17.3
6 10	15 1.10	+ 2 6.4	2.900	3.728	10.3	19.9	6 10	14 49.09	+18 15.1	1.028	1.818	27.0	17.5
6 20	14 57.12	+ 1 54.2	3.010	3.744	12.0	20.1	6 20	14 44.83	+14 18.8	1.078	1.815	29.0	17.6
274684	2008 UX ₂₄		5 12.7	6°47 6°8/ 7.7 17			205070	1999 RP ₁₀₄		5 12.7 198°96	0°3/13.1 18		
4 11	15 39.49	- 5 0.7	1.627	2.514	13.3	20.2	4 11	15 35.85	-21 2.7	4.468	5.317	6.3	21.6
4 21	15 34.74	- 3 21.6	1.572	2.514	10.1	20.0	4 21	15 31.23	-20 43.0	4.382	5.312	4.5	21.4
5 1	15 28.04	- 1 46.1	1.540	2.515	7.5	19.9	5 1	15 25.82	-20 19.1	4.322	5.307	2.5	21.3
5 11	15 20.29	- 0 22.3	1.534	2.515	7.0	19.8	5 11	15 19.98	-19 52.2	4.293	5.302	0.5	21.1
5 21	15 12.45	+ 0 43.0	1.553	2.516	9.0	20.0	5 21	15 14.08	-19 23.5	4.294	5.296	1.7	21.2
5 31	15 5.55	+ 1 24.8	1.597	2.517	12.1	20.2	5 31	15 8.50	-18 54.8	4.325	5.290	3.7	21.3
6 10	15 0.36	+ 1 42.0	1.661	2.519	15.3	20.4	6 10	15 3.60	-18 27.8	4.385	5.284	5.6	21.5
6 20	14 57.38	+ 1 36.0	1.743	2.521	18.0	20.5	6 20	14 59.63	-18 3.9	4.470	5.277	7.3	21.6
338194	2002 RM ₂₆₁		5 12.7 176°36	0°4/12.4 17			313117	2000 YE ₄₀		5 12.7 91°45	3°4/11.0 18		
4 11	15 41.24	-19 9.0	2.254	3.120	10.9	21.8	4 11	15 46.33	-11 23.4	1.527	2.407	14.3	20.8
4 21	15 35.64	-18 36.1	2.181	3.121	7.8	21.6	4 21	15 39.58	-10 48.2	1.481	2.427	10.3	20.6
5 1	15 28.44	-17 56.3	2.133	3.122	4.3	21.4	5 1	15 30.68	-10 13.0	1.459	2.447	6.0	20.4
5 11	15 20.35	-17 12.3	2.113	3.122	0.7	21.1	5 11	15 20.70	- 9 42.1	1.463	2.467	3.4	20.3
5 21	15 12.16	-16 27.3	2.121	3.123	3.3	21.3	5 21	15 10.81	- 9 19.6	1.494	2.486	5.9	20.5
5 31	15 4.69	-15 45.3	2.158	3.123	6.9	21.6	5 31	15 2.16	- 9 8.8	1.550	2.505	9.9	20.8
6 10	14 58.64	-15 9.7	2.220	3.123	10.1	21.8	6 10	14 55.60	- 9 11.6	1.629	2.523	13.6	21.1
6 20	14 54.44	-14 43.2	2.305	3.122	12.9	21.9	6 20	14 51.57	- 9 27.8	1.728	2.542	16.7	21.3
352466	2008 AL ₁₁₁		5 12.7 156°50	3°0/10.4 17			298751	2004 HC ₉		5 12.7 309°16	3°3/11.4 16		
4 11	15 40.13	- 9 34.1	2.563	3.433	9.6	21.5	4 11	15 42.98	-13 19.5	1.125	2.025	16.8	20.5
4 21	15 34.62	- 8 59.3	2.498	3.438	7.0	21.3	4 21	15 38.43	-12 52.6	1.048	2.004	12.3	20.1
5 1	15 27.79	- 8 25.2	2.459	3.443	4.3	21.1	5 1	15 30.69	-12 21.6	0.990	1.982	7.1	19.8
5 11	15 20.25	- 7 54.8	2.448	3.447	3.0	21.0	5 11	15 20.78	-11 51.5	0.954	1.961	3.3	19.5
5 21	15 12.65	- 7 30.6	2.466	3.451	4.6	21.1	5 21	15 10.15	-11 27.8	0.942	1.941	6.9	19.6
5 31	15 5.66	- 7 15.1	2.512	3.454	7.3	21.3	5 31	15 0.54	-11 16.6	0.951	1.921	12.6	19.9
6 10	14 59.86	- 7 9.8	2.583	3.458	9.9	21.5	6 10	14 53.44	-11 22.1	0.981	1.902	18.0	20.1
6 20	14 55.63	- 7 15.0	2.676	3.461	12.2	21.7	6 20	14 49.75	-11 45.8	1.026	1.883	22.6	20.3
311207	2004 XY ₁₆₁		5 12.7 174°48	0°1/12.7 18			499375	2010 AZ ₄₃		5 12.7 208°09	9°8/ 4.0 18		
4 11	15 48.83	-18 20.0	1.826	2.689	13.2	20.8	4 11	15 44.88	+17 2.3	2.712	3.501	11.5	22.0
4 21	15 41.45	-18 27.9	1.754	2.692	9.5	20.6	4 21	15 37.98	+17 57.0	2.655	3.493	10.4	21.9
5 1	15 31.82	-18 30.1	1.707	2.694	5.3	20.4	5 1	15 29.66	+18 34.9	2.622	3.484	9.9	21.8
5 11	15 20.86	-18 27.6	1.687	2.696	0.8	20.0	5 11	15 20.56	+18 51.5	2.613	3.475	10.0	21.8
5 21	15 9.69	-18 22.0	1.695	2.697	3.8	20.3	5 21	15 11.38	+18 44.4	2.629	3.464	10.9	21.9
5 31	14 59.47	-18 16.3	1.731	2.697	8.1	20.5	5 31	15 2.84	+18 13.3	2.668	3.453	12.1	22.0
6 10	14 51.16	-18 13.9	1.792	2.697	12.0	20.7	6 10	14 55.55	+17 20.2	2.728	3.441	13.6	22.0
6 20	14 45.34	-18 17.5	1.875	2.696	15.3	21.0	6 20	14 49.93	+16 8.4	2.806	3.428	14.9	22.1
135103	2001 QV ₈₄		5 12.7 212°38	3°8/15.2 18			437284	2013 AG ₁₀₃		5 12.7 221°49	4°6/ 9.1 17		
4 11	15 44.06	-30 19.1	2.365	3.194	11.7	20.1	4 11	15 40.21	- 3 56.5	2.536	3.403	9.8	21.6
4 21	15 37.85	-30 37.1	2.281	3.190	9.1	19.9	4 21	15 34.76	- 3 17.0	2.464	3.396	7.4	21.5
5 1	15 29.77	-30 42.8	2.222	3.186	6.3	19.7	5 1	15 27.93	- 2 41.6	2.417	3.389	5.3	21.3
5 11	15 20.56	-30 35.2	2.189	3.182	4.1	19.6	5 11	15 20.31	- 2 13.9	2.398	3.382	4.7	21.2
5 21	15 11.11	-30 15.3	2.184	3.177	4.3	19.6	5 21	15 12.58	- 1 56.8	2.408	3.374	6.1	21.3
5 31	15 2.37	-29 45.9	2.207	3.172	6.8	19.7	5 31	15 5.41	- 1 52.1	2.444	3.366	8.4	21.5
6 10	14 55.15	-29 11.4	2.256	3.166	9.7	19.9	6 10	14 59.40	- 2 0.9	2.504	3.358	10.9	21.6
6 20	14 50.00	-28 36.5	2.328	3.161	12.3	20.1	6 20	14 54.96	- 2 22.5	2.586	3.349	13.1	21.8
522781	2016 NL ₇₇		5 12.7 177°71	4°7/ 9.1 18			370149	2001 XO ₁₅₁		5 12.7 119°84	0°6/13.1 17		
4 11	15 40.21	- 3 42.7	2.482	3.349	10.0	21.8	4 11	15 44.70	-21 50.6	2.065	2.923	12.1	21.9
4 21	15 34.72	- 3 1.5	2.418	3.350	7.6	21.7	4 21	15 38.14	-21 27.3	2.005	2.940	8.7	21.7
5 1	15 27.87	- 2 24.8	2.380	3.351	5.5	21.6	5 1	15 29.82	-20 55.2	1.970	2.956	4.9	21.5
5 11	15 20.27	- 1 56.3	2.369	3.351	4.8	21.5	5 11	15 20.59	-20 16.2	1.963	2.972	1.1	21.3
5 21	15 12.59	- 1 38.9	2.386	3.352	6.2	21.6	5 21	15 11.38	-19 33.7	1.985	2.988	3.2	21.5
5 31	15 5.54	- 1 34.4	2.431	3.352	8.5	21.7	5 31	15 3.11	-18 51.8	2.034	3.002	7.0	21.7
6 10	14 59.68	- 1 43.5	2.499	3.351	10.9	21.9	6 10	14 56.51	-18 14.8	2.109	3.017	10.4	22.0
6 20	14 55.43	- 2 5.5	2.589	3.351	13.1	22.1	6 20	14 52.01	-17 45.7	2.207	3.030	13.2	22.2
17187	1999 VM ₇₂		5 12.7 257°84	3°9/10.5 18			125204	2001 UE ₁₄₄		5 12.7 29°10	3°0/10.8 18		
4 11	15 44.12	- 9 36.7	1.771	2.649	12.8	18.0	4 11	15 40.57	-14 45.7	1.448	2.338	14.3	19.3
4 21	15 38.18	- 9 1.0	1.689	2.633	9.4	17.8	4 21	15 35.72	-13 35.1	1.391	2.343	10.2	19.0
5 1	15 30.08	- 8 25.5	1.631	2.617	5.8	17.5	5 1	15 28.68	-12 18.7	1.358	2.349	5.8	18.8
5 11	15 20.63	- 7 54.4	1.600	2.600	3.9	17.4	5 11	15 20.43	-11 2.8	1.349	2.355	3.0	18.6
5 21	15 10.83	- 7 31.8	1.595	2.583	6.2	17.5	5 21	15 12.14	- 9 54.5	1.367	2.361	6.0	18.8
5 31	15 1.79	- 7 21.4	1.616	2.565	10.1	17.6	5 31	15 4.95	- 9 0.1	1.409	2.368	10.3	19.1
6 10	14 54.47	- 7 25.4	1.661	2.547	13.8	17.8	6 10	14 59.76	- 8 23.8	1.473	2.375	14.3	19.3
6 20	14 49.47	- 7 44.3	1.725	2.529	17.1	18.0	6 20	14 57.04	- 8 6.7	1.556	2.383	17.6	19.6
393818	2005 SF ₁₆		5 12.7 120°54	3°6/15.2 16			519332	2011 FE ₁₅₉		5 12.7 37°89	3°0/13.8 17		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
465331	2007 VY ₇₅		5 12.7 252°63	0°5/12.5 17			490228	2008 VS ₆₉		5 12.7 187°11	0°7/13.2 17		
4 11	15 46.73	-17 44.8	1.672	2.544	13.8	21.9	4 11	15 43.24	-21 16.6	2.339	3.196	10.9	22.2
4 21	15 40.32	-17 37.9	1.585	2.527	10.0	21.7	4 21	15 37.11	-21 8.0	2.261	3.195	7.9	22.0
5 1	15 31.42	-17 24.7	1.521	2.510	5.6	21.4	5 1	15 29.32	-20 52.2	2.209	3.194	4.5	21.7
5 11	15 20.89	-17 6.8	1.483	2.492	0.9	21.0	5 11	15 20.56	-20 30.3	2.184	3.193	1.0	21.5
5 21	15 9.87	-16 47.0	1.472	2.474	4.3	21.2	5 21	15 11.65	-20 4.4	2.189	3.192	3.0	21.6
5 31	14 59.66	-16 29.2	1.488	2.455	9.1	21.4	5 31	15 3.44	-19 37.8	2.222	3.189	6.5	21.8
6 10	14 51.39	-16 17.5	1.528	2.436	13.5	21.6	6 10	14 56.65	-19 13.7	2.281	3.187	9.7	22.0
6 20	14 45.76	-16 15.1	1.588	2.416	17.3	21.8	6 20	14 51.75	-18 55.2	2.362	3.184	12.5	22.2
410230	2007 TH ₈		5 12.7 209°90	0°9/12.2 16			211582	2003 SL ₁₈₁		5 12.7 330°09	2°2/13.8 17		
4 11	15 44.91	-18 38.7	1.681	2.554	13.6	21.7	4 11	15 40.06	-24 24.2	1.133	2.023	17.5	19.5
4 21	15 38.78	-17 57.7	1.606	2.550	9.8	21.5	4 21	15 36.36	-24 12.0	1.058	2.007	13.1	19.2
5 1	15 30.41	-17 7.7	1.555	2.545	5.4	21.2	5 1	15 29.53	-23 42.0	1.002	1.991	7.9	18.9
5 11	15 20.71	-16 12.0	1.531	2.540	1.0	20.9	5 11	15 20.65	-22 55.2	0.969	1.976	2.8	18.5
5 21	15 10.81	-15 15.6	1.533	2.534	4.3	21.1	5 21	15 11.22	-21 56.4	0.957	1.963	4.9	18.6
5 31	15 1.87	-14 24.1	1.562	2.528	8.9	21.4	5 31	15 2.97	-20 53.4	0.969	1.950	10.6	18.9
6 10	14 54.85	-13 42.8	1.615	2.521	13.0	21.6	6 10	14 57.32	-19 55.9	1.000	1.939	16.0	19.1
6 20	14 50.33	-13 15.0	1.689	2.514	16.5	21.8	6 20	14 55.05	-19 10.9	1.049	1.928	20.6	19.4
86305	1999 VN ₆₆		5 12.7 244°55	0°6/12.2 18			194709	2001 XB ₂₃₉		5 12.7 236°94	3°1/14.5 17		
4 11	15 39.52	-17 49.2	2.664	3.528	9.5	20.0	4 11	15 47.23	-27 49.3	1.713	2.562	14.6	20.5
4 21	15 34.32	-17 21.1	2.577	3.517	6.8	19.8	4 21	15 40.74	-27 39.9	1.624	2.549	11.1	20.3
5 1	15 27.72	-16 48.0	2.516	3.505	3.7	19.6	5 1	15 31.66	-27 14.2	1.558	2.535	7.1	20.0
5 11	15 20.31	-16 11.9	2.483	3.493	0.7	19.3	5 11	15 20.95	-26 31.8	1.518	2.521	3.6	19.8
5 21	15 12.73	-15 35.4	2.480	3.480	3.0	19.5	5 21	15 9.83	-25 35.5	1.504	2.505	4.5	19.8
5 31	15 5.69	-15 1.5	2.505	3.468	6.2	19.7	5 31	14 59.66	-24 30.8	1.518	2.489	8.6	20.0
6 10	14 59.79	-14 33.1	2.556	3.455	9.1	19.8	6 10	14 51.58	-23 25.5	1.556	2.473	12.8	20.2
6 20	14 55.46	-14 12.4	2.631	3.442	11.7	20.0	6 20	14 46.27	-22 26.4	1.615	2.456	16.5	20.4
177225	2003 UN ₂₁₈		5 12.7 213°70	1°7/11.7 17			70711	Arlinbartels		5 12.7 156°73	1°5/11.8 18		
4 11	15 45.29	-15 9.2	1.893	2.764	12.4	20.7	4 11	15 45.54	-15 32.0	1.952	2.820	12.2	19.9
4 21	15 38.88	-14 41.1	1.815	2.757	8.9	20.5	4 21	15 38.87	-15 3.9	1.886	2.828	8.7	19.7
5 1	15 30.42	-14 8.5	1.761	2.750	5.0	20.2	5 1	15 30.32	-14 31.5	1.846	2.835	4.8	19.5
5 11	15 20.72	-13 34.4	1.734	2.742	1.8	20.0	5 11	15 20.73	-13 57.8	1.833	2.841	1.6	19.3
5 21	15 10.79	-13 2.4	1.735	2.733	4.5	20.2	5 21	15 11.07	-13 26.2	1.849	2.847	4.2	19.5
5 31	15 1.67	-12 36.4	1.764	2.724	8.5	20.4	5 31	15 2.31	-13 0.4	1.892	2.852	8.1	19.7
6 10	14 54.25	-12 19.9	1.817	2.714	12.3	20.6	6 10	14 55.25	-12 43.4	1.960	2.856	11.6	19.9
6 20	14 49.10	-12 14.7	1.891	2.703	15.5	20.8	6 20	14 50.37	-12 37.0	2.050	2.860	14.6	20.2
72100	2000 YA ₅₁		5 12.7 238°02	4°6/10.2 18			17482	1991 PY ₁₄		5 12.7 226°91	4°7/16.0 18		
4 11	15 44.64	- 8 28.3	1.718	2.595	13.1	20.1	4 11	15 45.57	-33 36.4	2.204	3.023	12.9	18.4
4 21	15 38.56	- 7 43.2	1.642	2.585	9.7	19.9	4 21	15 39.15	-33 43.1	2.114	3.013	10.2	18.2
5 1	15 30.30	- 6 59.0	1.590	2.573	6.2	19.6	5 1	15 30.62	-33 33.5	2.047	3.003	7.4	18.0
5 11	15 20.71	- 6 20.6	1.564	2.561	4.6	19.5	5 11	15 20.79	-33 6.3	2.006	2.992	5.1	17.8
5 21	15 10.85	- 5 52.9	1.565	2.549	6.8	19.6	5 21	15 10.69	-32 22.8	1.993	2.981	5.1	17.8
5 31	15 1.82	- 5 39.5	1.592	2.536	10.5	19.8	5 31	15 1.39	-31 26.8	2.007	2.970	7.5	17.9
6 10	14 54.56	- 5 42.6	1.641	2.522	14.2	20.0	6 10	14 53.82	-30 24.4	2.047	2.958	10.5	18.1
6 20	14 49.69	- 6 1.9	1.710	2.509	17.5	20.2	6 20	14 48.56	-29 21.8	2.109	2.945	13.3	18.2
469787	2005 QF ₁₈₁		5 12.7 225°16	3°7/ 9.3 18			63714	2001 QF ₂₀₈		5 12.7 179°21	3°0/11.2 16		
4 11	15 39.05	- 6 15.8	2.880	3.746	8.8	21.8	4 11	15 46.72	-12 28.2	1.599	2.477	14.0	20.7
4 21	15 33.83	- 5 28.3	2.801	3.736	6.5	21.6	4 21	15 40.08	-11 55.7	1.534	2.479	10.1	20.4
5 1	15 27.40	- 4 42.6	2.749	3.725	4.5	21.4	5 1	15 31.14	-11 21.1	1.491	2.480	5.8	20.2
5 11	15 20.27	- 4 2.0	2.725	3.713	3.8	21.4	5 11	15 20.87	-10 48.4	1.475	2.480	3.0	20.0
5 21	15 13.01	- 3 29.3	2.730	3.701	5.2	21.5	5 21	15 10.43	-10 22.0	1.486	2.480	5.7	20.2
5 31	15 6.23	- 3 7.1	2.763	3.688	7.4	21.6	5 31	15 1.02	-10 5.7	1.522	2.479	9.9	20.4
6 10	15 0.46	- 2 56.6	2.821	3.676	9.8	21.7	6 10	14 53.63	-10 2.4	1.582	2.478	13.9	20.7
6 20	14 56.08	- 2 58.1	2.902	3.662	11.9	21.9	6 20	14 48.82	-10 12.9	1.662	2.476	17.2	20.9
62126	2000 RW ₁₀₄		5 12.7 222°47	4°7/16.5 18			104082	2000 EQ ₃₀		5 12.7 95°77	4°2/10.2 18		
4 11	15 43.03	-35 4.0	2.586	3.393	11.5	19.5	4 11	15 42.18	- 7 7.1	2.018	2.892	11.6	19.6
4 21	15 37.06	-35 13.3	2.498	3.387	9.2	19.4	4 21	15 36.34	- 6 33.5	1.963	2.903	8.5	19.5
5 1	15 29.34	-35 7.8	2.434	3.381	6.9	19.2	5 1	15 28.86	- 6 3.1	1.933	2.914	5.6	19.3
5 11	15 20.56	-34 46.7	2.396	3.375	5.0	19.1	5 11	15 20.51	- 5 39.8	1.930	2.924	4.2	19.2
5 21	15 11.59	-34 10.9	2.386	3.368	4.9	19.0	5 21	15 12.14	- 5 26.5	1.954	2.935	6.0	19.4
5 31	15 3.32	-33 23.6	2.403	3.361	6.7	19.1	5 31	15 4.60	- 5 25.5	2.005	2.945	8.9	19.6
6 10	14 56.50	-32 29.5	2.447	3.354	9.1	19.3	6 10	14 58.57	- 5 37.5	2.080	2.955	11.9	19.8
6 20	14 51.66	-31 33.7	2.514	3.346	11.5	19.4	6 20	14 54.49	- 6 2.0	2.175	2.965	14.4	20.0
502905	2015 EP ₁₀		5 12.7 82°58	2°1/13.8 17			67548	2000 SL ₄₇		5 12.7 169°92	1°5/15.0 18		
4 11	15 44.55	-24 12.8	1.731	2.593	13.9	21.3	4 11	15 33.89	-28 25.8	5.072	5.897	6.0	20.1
4 21	15 38.51	-24 16.7	1.664	2.599	10.2	21.0	4 21	15 29.83	-28 14.6	4.989	5.899	4.5	20.0
5 1	15 30.25	-24 9.2	1.621	2.604	6.2	20.8	5 1	15 25.08	-27 57.5	4.932	5.901	3.0	19.9
5 11	15 20.70	-23 50.9	1.603	2.610	2.4	20.6	5 11	15 19.95	-27 35.2	4.904	5.902	1.7	19.8
5 21	15 11.00	-23 24.2	1.612	2.615	3.9	20.7	5 21	15 14.78	-27 8.7	4.907	5.903	1.9	19.8
5 31	15 2.31	-22 53.4	1.648	2.621	7.9	20.9	5 31	15 9.91	-26 39.3	4.938	5.905	3.3	19.9
6 10	14 55.57	-22 23.5	1.708	2.626	11.7	21.2	6 10	15 5.65	-26 8.9	4.998	5.906	4.8	20.1
6 20	14 51.33	-21 59.0	1.789	2.632	15.0	21.4	6 20	15 2.24	-25 39.1	5.084	5.907	6.2	20.2
102158	1999 RC ₂₀₉		5 12.7 216°72	2°0/13.9 17			214585	2006 QM ₆₂		5 12.7 283°79	1°7/11.9 17		
4 11	15 45.32	-25 1											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
127730	2003 <i>EF</i> ₅₂	5 12.7 267°09		6°3/ 8.9 18			429590	2011 <i>EY</i> ₅₃	5 12.7 334°57		7°5/ 8.3 18		
4 11	15 42.09	- 4 5.2	1.730	2.609	13.0	19.8	4 11	15 37.44	- 5 13.6	1.308	2.207	14.9	20.1
4 21	15 36.64	- 3 8.3	1.664	2.603	9.9	19.6	4 21	15 33.89	- 3 55.7	1.238	2.188	11.4	19.9
5 1	15 29.19	- 2 16.5	1.622	2.596	7.2	19.4	5 1	15 27.93	- 2 40.9	1.190	2.170	8.4	19.6
5 11	15 20.59	- 1 35.8	1.605	2.590	6.3	19.4	5 11	15 20.45	- 1 38.0	1.164	2.152	7.6	19.5
5 21	15 11.80	- 1 10.9	1.614	2.583	8.2	19.5	5 21	15 12.61	- 0 54.9	1.162	2.136	10.0	19.6
5 31	15 3.86	- 1 5.1	1.648	2.576	11.3	19.6	5 31	15 5.68	- 0 37.1	1.181	2.121	13.8	19.8
6 10	14 57.61	- 1 18.9	1.704	2.570	14.5	19.8	6 10	15 0.74	- 0 46.4	1.220	2.107	17.7	20.0
6 20	14 53.58	- 1 50.9	1.778	2.563	17.4	20.0	6 20	14 58.46	- 1 20.9	1.275	2.095	21.2	20.2
343548	2010 <i>FM</i> ₂₂	5 12.7 48°58		4°2/10.0 17			70872	1999 <i>VP</i> ₁₅₇	5 12.7 139°68		1°2/11.9 18		
4 11	15 40.63	- 8 55.4	1.843	2.725	12.2	20.5	4 11	15 44.01	-18 25.4	1.671	2.546	13.6	19.0
4 21	15 35.42	- 8 4.4	1.784	2.729	8.9	20.3	4 21	15 38.03	-17 29.5	1.607	2.552	9.7	18.8
5 1	15 28.43	- 7 14.5	1.750	2.734	5.7	20.2	5 1	15 29.95	-16 24.8	1.568	2.558	5.3	18.6
5 11	15 20.47	- 6 30.7	1.741	2.738	4.2	20.1	5 11	15 20.73	-15 15.6	1.555	2.564	1.3	18.3
5 21	15 12.44	- 5 57.1	1.759	2.743	6.2	20.2	5 21	15 11.45	-14 7.8	1.569	2.569	4.5	18.5
5 31	15 5.25	- 5 37.2	1.804	2.748	9.5	20.4	5 31	15 3.23	-13 7.3	1.610	2.574	8.8	18.8
6 10	14 59.67	- 5 32.7	1.871	2.753	12.7	20.6	6 10	14 56.92	-12 19.4	1.675	2.579	12.8	19.0
6 20	14 56.14	- 5 43.3	1.958	2.758	15.5	20.8	6 20	14 53.02	-11 46.6	1.760	2.583	16.1	19.3
345647	2006 <i>TV</i> ₄	5 12.7 100°54		4°5/ 8.8 17			129674	1998 <i>RQ</i> ₃₆	5 12.8 267°37		2°7/10.7 17		
4 11	15 39.96	- 4 35.9	2.574	3.441	9.7	21.4	4 11	15 40.83	-13 24.8	2.021	2.898	11.5	20.3
4 21	15 34.41	- 3 36.4	2.531	3.464	7.2	21.2	4 21	15 35.63	-12 27.8	1.937	2.882	8.3	20.1
5 1	15 27.66	- 2 41.1	2.514	3.485	5.2	21.1	5 1	15 28.63	-11 26.3	1.878	2.867	4.8	19.9
5 11	15 20.34	- 1 53.8	2.525	3.507	4.6	21.1	5 11	15 20.55	-10 24.6	1.847	2.851	2.7	19.7
5 21	15 13.08	- 1 17.8	2.565	3.528	5.9	21.3	5 21	15 12.23	- 9 27.6	1.843	2.834	5.1	19.8
5 31	15 6.50	- 0 55.1	2.632	3.549	8.1	21.4	5 31	15 4.59	- 8 40.1	1.866	2.818	8.7	20.0
6 10	15 1.11	- 0 46.4	2.723	3.569	10.3	21.6	6 10	14 58.42	- 8 5.7	1.913	2.801	12.2	20.2
6 20	14 57.23	- 0 51.2	2.835	3.589	12.3	21.8	6 20	14 54.23	- 7 46.2	1.981	2.785	15.2	20.4
391353	2006 <i>UB</i> ₂₅₆	5 12.7 117°92		0°6/13.1 17			343994	2011 <i>PT</i> ₁₄	5 12.8 238°17		0°6/13.6 18		
4 11	15 43.47	-20 6.6	2.640	3.493	9.9	21.4	4 11	15 34.07	-22 28.0	4.628	5.476	6.1	20.8
4 21	15 37.06	-20 16.4	2.575	3.507	7.1	21.2	4 21	15 30.03	-22 20.1	4.543	5.471	4.4	20.7
5 1	15 29.21	-20 21.1	2.536	3.521	4.0	21.0	5 1	15 25.24	-22 8.1	4.484	5.467	2.6	20.5
5 11	15 20.58	-20 21.2	2.526	3.535	0.9	20.8	5 11	15 20.02	-21 52.7	4.455	5.463	0.8	20.4
5 21	15 11.89	-20 18.1	2.546	3.549	2.7	21.0	5 21	15 14.74	-21 35.1	4.456	5.458	1.6	20.4
5 31	15 3.86	-20 13.7	2.595	3.562	5.8	21.2	5 31	15 9.76	-21 16.5	4.486	5.454	3.5	20.6
6 10	14 57.12	-20 10.3	2.671	3.574	8.6	21.4	6 10	15 5.39	-20 58.6	4.544	5.449	5.3	20.7
6 20	14 52.08	-20 10.0	2.770	3.587	11.0	21.6	6 20	15 1.91	-20 42.6	4.628	5.445	6.9	20.8
281120	2007 <i>BN</i> ₅₀	5 12.7 100°04		7°0/ 9.5 16			270880	2002 <i>TC</i> ₁₉₀	5 12.8 211°14		5°0/15.9 17		
4 11	15 44.96	- 0 45.8	1.691	2.562	13.7	20.4	4 11	15 48.18	-33 53.8	2.211	3.023	13.0	21.9
4 21	15 38.60	- 0 13.3	1.637	2.568	10.6	20.2	4 21	15 41.07	-34 9.2	2.121	3.016	10.4	21.7
5 1	15 30.22	+ 0 9.0	1.606	2.574	7.9	20.0	5 1	15 31.73	-34 8.4	2.055	3.007	7.6	21.5
5 11	15 20.74	+ 0 16.4	1.601	2.579	7.0	20.0	5 11	15 21.03	-33 49.7	2.015	2.998	5.4	21.3
5 21	15 11.20	+ 0 5.8	1.621	2.585	8.6	20.1	5 21	15 10.01	-33 13.8	2.002	2.988	5.4	21.3
5 31	15 2.65	- 0 23.7	1.666	2.590	11.5	20.3	5 31	14 59.82	-32 24.2	2.018	2.977	7.7	21.4
6 10	14 55.93	- 1 11.0	1.734	2.596	14.5	20.5	6 10	14 51.43	-31 27.0	2.059	2.966	10.6	21.6
6 20	14 51.52	- 2 13.3	1.820	2.601	17.2	20.7	6 20	14 45.45	-30 28.6	2.123	2.953	13.4	21.8
147778	2005 <i>QM</i> ₁₀₄	5 12.7 92°87		4°0/ 9.6 18			113564	2002 <i>TC</i> ₃₅	5 12.8 273°75		0°6/12.3 18		
4 11	15 39.05	- 8 6.3	2.247	3.123	10.5	20.0	4 11	15 41.01	-18 35.0	2.031	2.902	11.7	19.5
4 21	15 34.04	- 7 9.9	2.185	3.126	7.7	19.8	4 21	15 35.78	-18 1.6	1.948	2.891	8.4	19.2
5 1	15 27.59	- 6 14.9	2.148	3.129	5.1	19.7	5 1	15 28.73	-17 20.9	1.889	2.879	4.7	19.0
5 11	15 20.35	- 5 25.4	2.139	3.133	4.0	19.6	5 11	15 20.57	-16 35.4	1.858	2.867	0.8	18.7
5 21	15 13.05	- 4 45.4	2.158	3.136	5.7	19.7	5 21	15 12.19	-15 49.0	1.854	2.855	3.7	18.9
5 31	15 6.42	- 4 17.9	2.203	3.139	8.5	19.9	5 31	15 4.52	-15 6.0	1.877	2.843	7.6	19.1
6 10	15 1.10	- 4 4.5	2.272	3.142	11.3	20.1	6 10	14 58.36	-14 30.5	1.925	2.831	11.3	19.3
6 20	14 57.49	- 4 5.4	2.362	3.145	13.7	20.2	6 20	14 54.23	-14 5.4	1.995	2.819	14.4	19.5
383313	2006 <i>HZ</i> ₇₀	5 12.7 350°75		4°8/10.7 17			47967	2000 <i>SL</i> ₂₉₈	5 12.8 338°74		0°7/13.5 18		
4 11	15 41.68	- 7 18.1	1.477	2.366	14.2	19.6	4 11	15 34.37	-22 42.0	3.824	4.676	7.2	18.6
4 21	15 36.65	- 7 0.8	1.413	2.361	10.5	19.4	4 21	15 30.37	-22 24.7	3.741	4.671	5.2	18.4
5 1	15 29.32	- 6 48.3	1.371	2.356	6.8	19.2	5 1	15 25.46	-22 2.2	3.684	4.667	3.0	18.3
5 11	15 20.63	- 6 44.9	1.353	2.352	4.8	19.0	5 11	15 20.06	-21 35.5	3.655	4.663	0.9	18.1
5 21	15 11.70	- 6 53.7	1.360	2.349	7.0	19.1	5 21	15 14.59	-21 6.2	3.657	4.660	1.9	18.2
5 31	15 3.73	- 7 16.9	1.392	2.346	10.9	19.4	5 31	15 9.48	-20 36.2	3.687	4.656	4.1	18.3
6 10	14 57.69	- 7 54.8	1.446	2.345	14.7	19.6	6 10	15 5.14	-20 7.6	3.745	4.652	6.2	18.5
6 20	14 54.19	- 8 46.1	1.518	2.344	18.0	19.8	6 20	15 1.86	-19 42.3	3.827	4.649	8.1	18.6
102631	1999 <i>VR</i> ₃₁	5 12.7 35°33		0°3/12.9 17			201859	2003 <i>YJ</i> ₁₃₀	5 12.8 235°20		4°7/16.3 18		
4 11	15 41.05	-22 1.0	1.700	2.573	13.5	19.3	4 11	15 44.92	-34 36.1	2.408	3.219	12.2	20.8
4 21	15 35.94	-21 15.6	1.636	2.578	9.7	19.1	4 21	15 38.59	-34 39.0	2.313	3.206	9.7	20.6
5 1	15 28.80	-20 18.5	1.594	2.583	5.5	18.8	5 1	15 30.30	-34 25.9	2.241	3.192	7.1	20.4
5 11	15 20.54	-19 13.3	1.579	2.588	0.9	18.5	5 11	15 20.81	-33 55.8	2.195	3.178	5.1	20.2
5 21	15 12.21	-18 5.2	1.590	2.594	3.7	18.7	5 21	15 11.06	-33 9.8	2.178	3.163	5.0	20.2
5 31	15 4.89	-17 0.2	1.628	2.600	8.1	19.0	5 31	15 2.03	-32 11.4	2.188	3.148	7.1	20.3
6 10	14 59.40	-16 4.2	1.690	2.606	12.0	19.2	6 10	14 54.59	-31 6.3	2.224	3.133	9.8	20.5
6 20	14 56.22	-15 20.9	1.773	2.612	15.3	19.5	6 20	14 49.29	-30 0.3	2.284	3.116	12.5	20.6
189006	1993 <i>VG</i> ₇	5 12.7 298°58		0°2/12.6 17			361104						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
27826	1993 WQ		5 12.8 187°90	0°2/12.9 18			506783	2007 AL ₁₅		5 12.8 169°83	7°4/ 4.8 18		
4 11	15 45.10	-19 49.9	2.266	3.123	11.2	18.3	4 11	15 40.02	+13 26.5	3.378	4.183	9.1	22.2
4 21	15 38.51	-19 40.6	2.187	3.122	8.1	18.1	4 21	15 34.32	+14 14.6	3.331	4.188	8.1	22.1
5 1	15 30.17	-19 24.8	2.135	3.121	4.5	17.9	5 1	15 27.63	+14 50.5	3.309	4.192	7.5	22.1
5 11	15 20.79	-19 3.7	2.110	3.119	0.8	17.6	5 11	15 20.41	+15 11.2	3.313	4.196	7.6	22.1
5 21	15 11.25	-18 39.7	2.114	3.117	3.1	17.8	5 21	15 13.18	+15 14.9	3.343	4.199	8.3	22.1
5 31	15 2.43	-18 15.8	2.147	3.114	6.8	18.0	5 31	15 6.44	+15 1.1	3.397	4.201	9.4	22.2
6 10	14 55.11	-17 55.4	2.207	3.110	10.2	18.2	6 10	15 0.64	+14 30.7	3.473	4.203	10.6	22.3
6 20	14 49.76	-17 41.2	2.289	3.105	13.0	18.4	6 20	14 56.09	+13 46.0	3.569	4.204	11.8	22.4
405327	2003 UT ₂₃₉		5 12.8 172°66	1°0/12.1 17			284622	2007 VN ₄₇		5 12.8 183°53	1°6/14.0 17		
4 11	15 45.71	-17 8.6	1.989	2.855	12.2	22.3	4 11	15 41.53	-25 45.8	2.209	3.061	11.7	21.1
4 21	15 39.04	-16 38.2	1.919	2.859	8.7	22.1	4 21	15 36.01	-25 13.4	2.132	3.061	8.6	20.9
5 1	15 30.47	-16 2.0	1.874	2.862	4.8	21.9	5 1	15 28.78	-24 29.0	2.080	3.061	5.2	20.7
5 11	15 20.84	-15 22.7	1.856	2.865	1.1	21.6	5 11	15 20.60	-23 34.3	2.054	3.061	2.0	20.4
5 21	15 11.09	-14 43.8	1.867	2.867	3.9	21.8	5 21	15 12.32	-22 32.8	2.057	3.060	3.1	20.5
5 31	15 2.22	-14 9.5	1.905	2.867	7.9	22.0	5 31	15 4.83	-21 29.1	2.089	3.060	6.6	20.7
6 10	14 55.02	-13 43.3	1.969	2.868	11.4	22.3	6 10	14 58.84	-20 28.5	2.146	3.059	9.9	20.9
6 20	14 50.00	-13 27.6	2.055	2.867	14.5	22.5	6 20	14 54.83	-19 35.3	2.226	3.058	12.8	21.1
509549	2008 AO ₁₂₇		5 12.8 212°18	5°4/17.2 17			202454	2005 YX ₁₇₃		5 12.8 68°00	6°9/ 9.9 18		
4 11	15 44.20	-37 41.2	2.561	3.354	12.0	21.6	4 11	15 46.27	- 4 54.5	1.239	2.128	16.4	19.8
4 21	15 37.98	-37 49.5	2.473	3.349	9.8	21.4	4 21	15 39.87	- 4 3.7	1.202	2.146	12.2	19.6
5 1	15 29.91	-37 41.2	2.408	3.344	7.5	21.3	5 1	15 31.02	- 3 21.1	1.186	2.166	8.4	19.4
5 11	15 20.76	-37 15.2	2.369	3.338	5.8	21.2	5 11	15 20.92	- 2 53.4	1.194	2.185	6.9	19.4
5 21	15 11.41	-36 32.2	2.357	3.332	5.6	21.1	5 21	15 10.98	- 2 45.1	1.226	2.204	9.1	19.6
5 31	15 2.83	-35 35.7	2.373	3.326	7.1	21.2	5 31	15 2.48	- 2 58.1	1.281	2.223	12.7	19.8
6 10	14 55.81	-34 30.9	2.415	3.319	9.4	21.3	6 10	14 56.37	- 3 31.3	1.357	2.243	16.3	20.1
6 20	14 50.86	-33 23.7	2.481	3.312	11.7	21.5	6 20	14 53.09	- 4 21.6	1.450	2.262	19.4	20.4
21207	1994 PH ₂₉		5 12.8 338°40	1°4/12.0 18 R			358014	2006 DC ₁₄₄		5 12.8 271°87	0°9/13.2 17		
4 11	15 42.34	-15 54.3	1.741	2.620	13.0	18.2	4 11	15 45.93	-21 19.8	1.471	2.345	15.2	21.2
4 21	15 36.90	-15 35.1	1.672	2.618	9.3	17.9	4 21	15 40.13	-21 11.9	1.385	2.327	11.2	20.9
5 1	15 29.40	-15 11.5	1.626	2.616	5.1	17.7	5 1	15 31.53	-20 53.0	1.321	2.309	6.5	20.6
5 11	15 20.69	-14 46.1	1.606	2.614	1.4	17.4	5 11	15 21.06	-20 24.0	1.281	2.290	1.4	20.2
5 21	15 11.78	-14 22.4	1.612	2.613	4.3	17.6	5 21	15 10.03	-19 48.2	1.268	2.272	4.4	20.4
5 31	15 3.76	-14 4.1	1.645	2.611	8.5	17.9	5 31	14 59.91	-19 10.7	1.279	2.252	9.6	20.6
6 10	14 57.49	-13 54.4	1.702	2.610	12.4	18.1	6 10	14 51.98	-18 37.9	1.314	2.233	14.4	20.9
6 20	14 53.53	-13 55.1	1.779	2.609	15.7	18.3	6 20	14 47.03	-18 14.8	1.367	2.213	18.6	21.1
309878	2009 DP ₁₂₁		5 12.8 173°70	2°4/14.1 17			467285	2016 EO ₁₉₄		5 12.8 19°77	1°9/11.9 17		
4 11	15 48.41	-25 27.3	1.888	2.736	13.5	21.3	4 11	15 42.99	-15 12.4	1.210	2.105	16.2	20.3
4 21	15 41.23	-25 30.7	1.814	2.740	10.0	21.1	4 21	15 37.94	-14 54.9	1.155	2.109	11.6	20.0
5 1	15 31.80	-25 22.0	1.764	2.743	6.2	20.9	5 1	15 30.16	-14 32.9	1.122	2.114	6.5	19.8
5 11	15 21.05	-25 1.4	1.740	2.745	2.7	20.7	5 11	15 20.82	-14 10.2	1.111	2.120	2.0	19.5
5 21	15 10.10	-24 30.8	1.745	2.746	3.9	20.8	5 21	15 11.33	-13 51.3	1.125	2.126	5.5	19.7
5 31	15 0.13	-23 54.5	1.777	2.747	7.7	21.0	5 31	15 3.13	-13 40.6	1.162	2.133	10.6	20.0
6 10	14 52.10	-23 17.8	1.835	2.747	11.4	21.2	6 10	14 57.33	-13 41.7	1.220	2.141	15.2	20.3
6 20	14 46.58	-22 45.7	1.915	2.746	14.7	21.4	6 20	14 54.52	-13 55.7	1.296	2.150	19.0	20.6
6883	Hiuchigatake		5 12.8 201°41	0°4/12.5 18 R			302305	2001 YN ₁₂₁		5 12.8 198°73	3°5/14.7 16		
4 11	15 40.49	-18 9.9	2.826	3.686	9.2	18.7	4 11	15 47.98	-28 17.6	1.709	2.556	14.7	21.2
4 21	15 34.95	-17 51.8	2.745	3.682	6.5	18.5	4 21	15 41.23	-28 18.2	1.631	2.553	11.2	21.0
5 1	15 28.09	-17 29.1	2.690	3.678	3.6	18.3	5 1	15 31.93	-28 2.9	1.576	2.550	7.3	20.8
5 11	15 20.48	-17 3.6	2.664	3.673	0.6	18.1	5 11	15 21.10	-27 31.2	1.546	2.547	3.9	20.5
5 21	15 12.75	-16 37.3	2.667	3.668	2.7	18.2	5 21	15 9.99	-26 45.5	1.543	2.542	4.6	20.6
5 31	15 5.54	-16 12.6	2.700	3.663	5.8	18.4	5 31	14 59.94	-25 51.0	1.567	2.537	8.4	20.8
6 10	14 59.45	-15 52.2	2.759	3.657	8.5	18.6	6 10	14 52.02	-24 54.8	1.615	2.532	12.4	21.0
6 20	14 54.86	-15 37.9	2.841	3.651	10.9	18.8	6 20	14 46.88	-24 3.6	1.684	2.526	15.9	21.2
391753	2008 DX ₈₈		5 12.8 273°89	6°1/ 7.4 17			22204	6121 P-L		5 12.8 170°35	0°0/12.8 18		
4 11	15 38.82	- 1 3.2	2.333	3.202	10.5	20.9	4 11	15 40.40	-19 41.0	2.868	3.724	9.1	20.0
4 21	15 33.96	+ 0 4.4	2.259	3.187	8.3	20.8	4 21	15 34.85	-19 22.3	2.792	3.727	6.5	19.8
5 1	15 27.62	+ 1 6.6	2.211	3.172	6.5	20.6	5 1	15 28.02	-18 58.3	2.743	3.730	3.6	19.6
5 11	15 20.41	+ 1 58.5	2.189	3.157	6.3	20.6	5 11	15 20.49	-18 30.5	2.723	3.732	0.6	19.3
5 21	15 13.04	+ 2 35.8	2.194	3.142	7.7	20.6	5 21	15 12.88	-18 1.1	2.732	3.734	2.5	19.5
5 31	15 6.24	+ 2 55.7	2.225	3.127	10.0	20.8	5 31	15 5.84	-17 32.6	2.771	3.736	5.5	19.7
6 10	15 0.64	+ 2 57.3	2.278	3.112	12.5	20.9	6 10	14 59.90	-17 7.7	2.836	3.737	8.2	19.9
6 20	14 56.69	+ 2 41.4	2.351	3.097	14.7	21.0	6 20	14 55.45	-16 48.4	2.925	3.738	10.6	20.1
10927	Vaucluse		5 12.8 186°11	2°2/14.1 18			31236	1998 CC ₄		5 12.8 198°75	4°1/15.9 18		
4 11	15 45.65	-25 10.8	2.093	2.942	12.3	18.8	4 11	15 43.31	-32 34.6	2.469	3.289	11.6	18.9
4 21	15 39.12	-25 18.4	2.016	2.942	9.2	18.6	4 21	15 37.30	-32 39.9	2.386	3.287	9.1	18.7
5 1	15 30.59	-25 15.7	1.962	2.941	5.7	18.4	5 1	15 29.53	-32 31.2	2.326	3.284	6.5	18.5
5 11	15 20.87	-25 2.5	1.936	2.940	2.6	18.2	5 11	15 20.73	-32 8.1	2.294	3.282	4.4	18.4
5 21	15 10.94	-24 40.6	1.938	2.939	3.6	18.2	5 21	15 11.76	-31 31.9	2.289	3.279	4.4	18.4
5 31	15 1.81	-24 13.3	1.968	2.937	7.1	18.4	5 31	15 3.51	-30 45.9	2.312	3.276	6.6	18.5
6 10	14 54.36	-23 45.1	2.023	2.935	10.5	18.6	6 10	14 56.75	-29 55.0	2.362	3.272	9.3	18.7
6 20	14 49.14	-23 20.0	2.101	2.932	13.5	18.8	6 20	14 51.98	-29 4.0	2.434	3.268	11.8	18.8
522871	2016 NS ₈₉		5 12.8 226°95	0°3/12.5 16			138733	2000 SB ₁₉₅		5 12.8 190°57	1°3/13.8 17		
4 11	15 41.06	-18 16.3	2.6										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
90826	Xuzhihong		5 12.8 123°80	4.4/ 9.4	18		24856	2006 HW ₆₆		5 12.8 7°28	1.8/11.9	17	
4 11	15 40.99	- 9 57.0	1.877	2.758	12.1	19.4	4 11	15 40.72	-17 11.6	1.086	1.988	17.1	20.1
4 21	15 35.66	- 8 32.2	1.818	2.762	8.8	19.2	4 21	15 36.56	-16 29.1	1.031	1.988	12.3	19.8
5 1	15 28.59	- 7 6.4	1.783	2.767	5.6	19.0	5 1	15 29.51	-15 37.3	0.996	1.989	6.8	19.5
5 11	15 20.59	- 5 45.9	1.776	2.771	4.4	19.0	5 11	15 20.77	-14 41.7	0.983	1.992	1.9	19.2
5 21	15 12.55	- 4 36.4	1.796	2.776	6.6	19.1	5 21	15 11.84	-13 49.5	0.993	1.995	5.8	19.4
5 31	15 5.37	- 3 43.0	1.843	2.780	9.8	19.3	5 31	15 4.28	-13 7.9	1.025	1.999	11.3	19.8
6 10	14 59.78	- 3 8.3	1.913	2.784	13.0	19.5	6 10	14 59.25	-12 42.6	1.077	2.004	16.2	20.0
6 20	14 56.20	- 2 52.5	2.002	2.788	15.7	19.7	6 20	14 57.34	-12 35.5	1.146	2.010	20.3	20.3
300113	2006 UV ₃₃₁		5 12.8 183°70	3.1/10.3	17		100768	1998 FN ₂₇		5 12.8 34°27	5.4/ 8.6	18	
4 11	15 39.78	-10 55.6	2.246	3.121	10.6	21.8	4 11	15 38.67	- 6 34.7	1.911	2.793	11.8	19.5
4 21	15 34.63	-10 3.5	2.178	3.121	7.6	21.6	4 21	15 33.98	- 5 12.1	1.857	2.800	8.8	19.3
5 1	15 27.99	- 9 10.4	2.135	3.121	4.7	21.4	5 1	15 27.66	- 3 52.1	1.828	2.806	6.2	19.1
5 11	15 20.50	- 8 20.2	2.121	3.121	3.1	21.3	5 11	15 20.48	- 2 40.7	1.826	2.813	5.4	19.1
5 21	15 12.94	- 7 36.9	2.134	3.121	5.0	21.4	5 21	15 13.27	- 1 43.5	1.850	2.820	7.3	19.2
5 31	15 6.04	- 7 3.9	2.175	3.120	8.1	21.6	5 31	15 6.86	- 1 4.1	1.900	2.827	10.2	19.4
6 10	15 0.47	- 6 43.4	2.240	3.120	11.0	21.8	6 10	15 1.94	- 0 44.2	1.972	2.835	13.0	19.6
6 20	14 56.65	- 6 36.3	2.326	3.119	13.6	22.0	6 20	14 58.92	- 0 43.2	2.064	2.842	15.5	19.8
129133	2004 YZ ₃₁		5 12.8 10°64	5.0/ 6.6	18		126896	2002 EB ₁₀₆		5 12.8 16°49	1.2/12.0	18	
4 11	15 34.59	+ 6 51.3	4.117	4.954	7.0	19.3	4 11	15 41.41	-14 44.0	2.205	3.077	10.9	19.4
4 21	15 30.40	+ 7 18.8	4.061	4.954	5.9	19.2	4 21	15 35.89	-14 39.5	2.135	3.078	7.8	19.2
5 1	15 25.46	+ 7 38.8	4.030	4.955	5.1	19.1	5 1	15 28.74	-14 32.9	2.089	3.079	4.3	19.0
5 11	15 20.11	+ 7 49.4	4.026	4.955	5.1	19.1	5 11	15 20.65	-14 25.9	2.072	3.080	1.3	18.8
5 21	15 14.74	+ 7 49.1	4.050	4.956	5.8	19.2	5 21	15 12.42	-14 20.6	2.082	3.081	3.6	19.0
5 31	15 9.70	+ 7 37.3	4.099	4.957	6.9	19.3	5 31	15 4.88	-14 19.2	2.120	3.083	7.1	19.2
6 10	15 5.34	+ 7 14.4	4.172	4.958	8.1	19.3	6 10	14 58.73	-14 23.6	2.183	3.085	10.3	19.4
6 20	15 1.90	+ 6 41.1	4.266	4.959	9.3	19.4	6 20	14 54.44	-14 35.1	2.268	3.086	13.1	19.6
490848	2010 XO ₃₇		5 12.8 235°27	11°0/19.9	18		174804	2003 WJ ₁₉₂		5 12.8 246°96	3.7/14.7	18	
4 11	15 53.50	-45 34.2	1.369	2.156	20.8	20.8	4 11	15 46.51	-28 16.8	1.694	2.544	14.7	20.6
4 21	15 46.40	-45 37.6	1.284	2.146	18.0	20.5	4 21	15 40.31	-28 24.7	1.610	2.533	11.3	20.3
5 1	15 35.28	-45 3.0	1.216	2.135	14.8	20.3	5 1	15 31.53	-28 17.2	1.548	2.522	7.4	20.1
5 11	15 21.65	-43 43.3	1.168	2.123	12.0	20.1	5 11	15 21.11	-27 53.4	1.510	2.511	4.1	19.9
5 21	15 7.67	-41 38.4	1.144	2.111	11.0	20.0	5 21	15 10.27	-27 15.0	1.500	2.499	4.8	19.9
5 31	14 55.56	-38 57.5	1.143	2.098	12.6	20.0	5 31	15 0.37	-26 26.7	1.515	2.487	8.6	20.1
6 10	14 46.97	-35 58.1	1.165	2.085	15.9	20.2	6 10	14 52.56	-25 35.4	1.555	2.475	12.6	20.3
6 20	14 42.56	-32 58.6	1.209	2.071	19.6	20.4	6 20	14 47.53	-24 47.8	1.616	2.462	16.2	20.5
215225	2000 WP ₁₄₀		5 12.8 123°54	0.7/12.4	18		133752	2003 WE ₂₃		5 12.8 230°15	1.2/12.0	18	R
4 11	15 47.39	-17 36.8	1.746	2.615	13.4	21.1	4 11	15 42.31	-15 59.5	2.114	2.984	11.3	20.2
4 21	15 40.35	-17 19.2	1.690	2.631	9.6	20.9	4 21	15 36.64	-15 37.8	2.036	2.979	8.1	20.0
5 1	15 31.23	-16 55.6	1.657	2.646	5.3	20.6	5 1	15 29.21	-15 11.8	1.983	2.973	4.5	19.7
5 11	15 21.00	-16 28.4	1.651	2.661	1.0	20.4	5 11	15 20.74	-14 44.0	1.958	2.966	1.3	19.5
5 21	15 10.76	-16 1.0	1.673	2.675	4.0	20.6	5 21	15 12.07	-14 17.4	1.961	2.960	3.8	19.7
5 31	15 1.61	-15 37.2	1.723	2.688	8.2	20.9	5 31	15 4.11	-13 55.2	1.991	2.953	7.5	19.9
6 10	14 54.42	-15 20.8	1.797	2.701	12.0	21.2	6 10	14 57.62	-13 40.4	2.046	2.947	11.0	20.1
6 20	14 49.65	-15 13.8	1.891	2.713	15.2	21.4	6 20	14 53.10	-13 34.8	2.123	2.940	13.9	20.3
152435	2005 UJ ₄₃₉		5 12.8 158°31	3.7/15.9	18		490332	2009 BE ₁₈₅		5 12.8 190°68	18°9/ 1.1	18	
4 11	15 42.27	-32 49.0	2.816	3.630	10.5	20.6	4 11	15 50.71	+22 57.4	1.360	2.158	20.4	21.4
4 21	15 36.34	-32 50.0	2.737	3.635	8.2	20.5	4 21	15 43.25	+24 54.3	1.328	2.158	19.3	21.4
5 1	15 28.91	-32 38.4	2.684	3.639	5.9	20.3	5 1	15 33.03	+26 15.1	1.313	2.157	18.9	21.3
5 11	15 20.65	-32 14.0	2.657	3.644	4.0	20.2	5 11	15 21.31	+26 49.4	1.317	2.155	19.3	21.3
5 21	15 12.30	-31 38.2	2.659	3.647	4.0	20.2	5 21	15 9.58	+26 32.7	1.337	2.152	20.4	21.4
5 31	15 4.61	-30 54.1	2.689	3.651	5.9	20.3	5 31	14 59.28	+25 26.9	1.374	2.148	22.0	21.5
6 10	14 58.24	-30 5.7	2.746	3.654	8.2	20.5	6 10	14 51.51	+23 39.5	1.425	2.143	23.7	21.6
6 20	14 53.60	-29 17.2	2.827	3.657	10.5	20.6	6 20	14 46.80	+21 20.6	1.488	2.138	25.3	21.8
143455	2003 BL ₈₃		5 12.8 100°17	5.3/ 9.3	18		154530	2003 FH ₁₁₅		5 12.8 8°18	8.7/ 9.3	18	
4 11	15 41.38	- 2 23.8	2.253	3.120	10.9	19.8	4 11	15 43.29	+ 1 13.7	1.386	2.266	15.5	18.8
4 21	15 35.68	- 1 49.5	2.199	3.129	8.3	19.7	4 21	15 37.82	+ 1 46.3	1.334	2.267	12.3	18.6
5 1	15 28.52	- 1 21.7	2.170	3.138	6.1	19.5	5 1	15 30.00	+ 2 4.5	1.303	2.269	9.6	18.5
5 11	15 20.59	- 1 4.0	2.168	3.148	5.4	19.5	5 11	15 20.86	+ 2 2.4	1.296	2.271	8.8	18.4
5 21	15 12.63	- 0 59.1	2.193	3.157	6.7	19.6	5 21	15 11.60	+ 1 36.6	1.312	2.274	10.4	18.5
5 31	15 5.40	- 1 8.3	2.245	3.166	9.1	19.8	5 31	15 3.45	+ 0 46.9	1.350	2.278	13.4	18.7
6 10	14 59.52	- 1 31.7	2.320	3.175	11.6	19.9	6 10	14 57.38	- 0 24.0	1.410	2.283	16.6	18.9
6 20	14 55.38	- 2 7.9	2.417	3.184	13.8	20.1	6 20	14 53.93	- 1 51.6	1.487	2.288	19.5	19.1
335557	2006 BQ ₁₉₃		5 12.8 288°85	0.2/12.5	18		4701	Milani		5 12.8 204°01	1.5/11.8	18	
4 11	15 34.15	-18 19.9	4.151	5.010	6.5	21.3	4 11	15 42.95	-15 13.2	2.201	3.069	11.0	17.9
4 21	15 30.16	-18 2.0	4.069	5.006	4.6	21.1	4 21	15 37.02	-14 48.7	2.124	3.065	7.9	17.7
5 1	15 25.36	-17 41.2	4.014	5.002	2.5	21.0	5 1	15 29.39	-14 20.7	2.073	3.061	4.4	17.5
5 11	15 20.11	-17 18.5	3.988	4.997	0.4	20.8	5 11	15 20.76	-13 51.5	2.049	3.057	1.5	17.3
5 21	15 14.80	-16 55.4	3.992	4.993	1.9	20.9	5 21	15 11.98	-13 24.1	2.054	3.052	3.9	17.4
5 31	15 9.81	-16 33.4	4.025	4.989	4.0	21.1	5 31	15 3.89	-13 1.8	2.087	3.047	7.4	17.7
6 10	15 5.50	-16 14.3	4.086	4.985	6.0	21.2	6 10	14 57.23	-12 47.2	2.145	3.041	10.7	17.8
6 20	15 2.14	-15 59.2	4.171	4.980	7.7	21.3	6 20	14 52.48	-12 42.0	2.225	3.035	13.6	18.0
93354	2000 SL ₂₅₆		5 12.8 174°98	0.9/12.2	18		3769	Arthur Miller		5 12.8 130°15	0.3/12.7	18	
4 11	15 43.82	-16 46.8</											

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5 12.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
333645	2008 <i>RM</i> ₂		5 12.8 292°36	0°5/12.5 17			182851	2002 <i>CO</i> ₉₆		5 12.8 115°11	0°7/12.2 18		
4 11	15 42.02	-19 11.3	1.705	2.581	13.3	21.3	4 11	15 40.92	-17 1.7	2.573	3.437	9.8	21.4
4 21	15 36.93	-18 40.6	1.618	2.562	9.7	21.0	4 21	15 35.29	-16 41.4	2.510	3.449	7.0	21.2
5 1	15 29.59	-18 0.7	1.554	2.544	5.4	20.7	5 1	15 28.31	-16 17.3	2.473	3.462	3.8	21.0
5 11	15 20.82	-17 14.2	1.516	2.525	0.9	20.4	5 11	15 20.62	-15 51.2	2.465	3.474	0.8	20.8
5 21	15 11.68	-16 25.4	1.504	2.507	4.1	20.6	5 21	15 12.89	-15 25.6	2.486	3.486	3.0	21.0
5 31	15 3.31	-15 39.5	1.519	2.488	8.8	20.8	5 31	15 5.83	-15 3.1	2.536	3.498	6.1	21.2
6 10	14 56.73	-15 1.8	1.557	2.470	13.0	21.0	6 10	15 0.01	-14 46.1	2.611	3.510	9.0	21.4
6 20	14 52.58	-14 36.0	1.615	2.451	16.7	21.2	6 20	14 55.80	-14 36.1	2.710	3.521	11.4	21.6
48254	2001 <i>UE</i> ₈₃		5 12.8 267°66	0°9/13.7 18			372577	2009 <i>UP</i> ₉₁		5 12.8 185°29	2°3/11.1 18		
4 11	15 37.96	-22 18.0	4.438	5.279	6.4	19.7	4 11	15 43.24	-13 2.8	2.265	3.133	10.8	22.0
4 21	15 32.87	-22 35.9	4.347	5.272	4.7	19.6	4 21	15 37.13	-12 24.0	2.192	3.133	7.7	21.8
5 1	15 26.89	-22 50.0	4.284	5.264	2.8	19.5	5 1	15 29.42	-11 42.7	2.145	3.133	4.5	21.6
5 11	15 20.38	-23 0.7	4.250	5.256	1.1	19.3	5 11	15 20.79	-11 2.3	2.127	3.132	2.3	21.5
5 21	15 13.75	-23 8.3	4.247	5.248	1.8	19.4	5 21	15 12.06	-10 26.1	2.137	3.130	4.4	21.6
5 31	15 7.39	-23 13.8	4.275	5.241	3.7	19.5	5 31	15 4.03	-9 57.5	2.175	3.127	7.7	21.8
6 10	15 1.71	-23 18.4	4.330	5.233	5.6	19.6	6 10	14 57.40	-9 38.9	2.239	3.125	10.8	22.0
6 20	14 57.00	-23 23.4	4.412	5.225	7.3	19.7	6 20	14 52.62	-9 31.7	2.325	3.121	13.5	22.2
125212	2001 <i>UE</i> ₁₅₀		5 12.8 178°73	0°2/12.7 18			179425	2002 <i>AO</i> ₄₈		5 12.8 168°80	0°3/12.5 18		
4 11	15 43.09	-19 53.2	1.713	2.586	13.4	19.8	4 11	15 40.63	-18 32.1	2.752	3.612	9.4	21.8
4 21	15 37.50	-19 24.7	1.644	2.587	9.7	19.6	4 21	15 35.08	-18 9.6	2.678	3.615	6.7	21.6
5 1	15 29.78	-18 47.3	1.597	2.587	5.4	19.3	5 1	15 28.20	-17 42.3	2.630	3.618	3.7	21.4
5 11	15 20.83	-18 3.6	1.577	2.587	0.8	19.0	5 11	15 20.61	-17 11.8	2.611	3.620	0.6	21.2
5 21	15 11.73	-17 17.7	1.584	2.587	3.9	19.2	5 21	15 12.93	-16 40.6	2.621	3.623	2.7	21.4
5 31	15 3.57	-16 34.8	1.617	2.587	8.3	19.5	5 31	15 5.83	-16 11.4	2.660	3.624	5.8	21.6
6 10	14 57.27	-15 59.5	1.674	2.587	12.3	19.7	6 10	14 59.89	-15 46.7	2.726	3.626	8.6	21.8
6 20	14 53.34	-15 35.1	1.752	2.587	15.6	19.9	6 20	14 55.48	-15 28.7	2.816	3.627	11.0	21.9
506956	2008 <i>NX</i> ₁		5 12.8 293°80	3°8/15.2 17			42664	1998 <i>FG</i> ₁₄₃		5 12.8 358°89	2°7/11.0 18		
4 11	15 43.06	-30 10.7	1.685	2.535	14.8	21.0	4 11	15 41.03	-14 27.1	1.674	2.558	13.1	19.1
4 21	15 37.91	-29 50.6	1.590	2.512	11.5	20.7	4 21	15 35.98	-13 28.6	1.609	2.557	9.4	18.9
5 1	15 30.24	-29 10.7	1.516	2.490	7.7	20.4	5 1	15 28.92	-12 25.1	1.567	2.557	5.4	18.7
5 11	15 20.93	-28 10.8	1.468	2.468	4.3	20.2	5 11	15 20.73	-11 21.7	1.551	2.557	2.7	18.5
5 21	15 11.18	-26 54.0	1.445	2.445	4.7	20.1	5 21	15 12.41	-10 23.9	1.562	2.557	5.4	18.6
5 31	15 2.31	-25 26.8	1.448	2.423	8.6	20.3	5 31	15 5.01	-9 37.2	1.599	2.557	9.4	18.9
6 10	14 55.46	-23 57.9	1.476	2.400	12.8	20.5	6 10	14 59.38	-9 5.3	1.658	2.557	13.2	19.1
6 20	14 51.33	-22 35.6	1.525	2.378	16.6	20.7	6 20	14 56.02	-8 49.7	1.738	2.558	16.4	19.3
348796	2006 <i>QX</i> ₂₆		5 12.8 300°25	5°5/15.1 18			480730	2016 <i>NK</i> ₁		5 12.8 314°25	8°0/6.9 16		
4 11	15 45.30	-30 10.7	1.412	2.269	16.7	20.7	4 11	15 39.46	-4 50.3	1.450	2.342	14.3	20.7
4 21	15 40.17	-30 38.5	1.318	2.242	13.2	20.4	4 21	15 35.45	-3 4.0	1.357	2.302	11.1	20.4
5 1	15 31.84	-30 48.6	1.244	2.216	9.2	20.1	5 1	15 28.97	-1 15.4	1.288	2.263	8.5	20.1
5 11	15 21.23	-30 37.8	1.194	2.190	5.9	19.9	5 11	15 20.78	+ 0 25.6	1.242	2.224	8.3	20.0
5 21	15 9.76	-30 5.6	1.167	2.164	6.4	19.8	5 21	15 11.96	+ 1 49.1	1.221	2.185	10.9	20.0
5 31	14 59.15	-29 16.5	1.164	2.138	10.3	19.9	5 31	15 3.77	+ 2 46.4	1.223	2.146	14.8	20.1
6 10	14 50.96	-28 18.9	1.184	2.112	14.9	20.1	6 10	14 57.38	+ 3 13.0	1.243	2.108	18.9	20.3
6 20	14 46.16	-27 22.0	1.222	2.087	19.2	20.3	6 20	14 53.62	+ 3 8.9	1.279	2.070	22.6	20.4
179456	2002 <i>AF</i> ₁₇₂		5 12.8 305°42	5°0/9.4 17			112186	2002 <i>JJ</i> ₁₀₂		5 12.8 242°65	1°3/12.2 18		
4 11	15 39.88	-4 41.1	2.149	3.023	11.0	20.0	4 11	15 46.89	-15 11.7	1.604	2.480	14.0	19.7
4 21	15 34.82	-4 0.0	2.080	3.017	8.3	19.8	4 21	15 40.47	-15 12.5	1.529	2.473	10.1	19.4
5 1	15 28.16	-3 23.2	2.035	3.010	5.9	19.6	5 1	15 31.58	-15 10.3	1.476	2.466	5.7	19.2
5 11	15 20.60	-2 54.9	2.017	3.004	5.0	19.5	5 11	15 21.16	-15 6.9	1.449	2.458	1.4	18.9
5 21	15 12.88	-2 38.4	2.026	2.998	6.6	19.6	5 21	15 10.37	-15 4.5	1.450	2.451	4.6	19.0
5 31	15 5.83	-2 36.0	2.061	2.991	9.3	19.8	5 31	15 0.51	-15 6.3	1.476	2.443	9.2	19.3
6 10	15 0.11	-2 48.6	2.120	2.985	12.1	19.9	6 10	14 52.64	-15 15.0	1.526	2.434	13.5	19.5
6 20	14 56.19	-3 15.4	2.199	2.980	14.6	20.1	6 20	14 47.44	-15 32.5	1.596	2.426	17.1	19.7
61363	2000 <i>PT</i> ₁₉		5 12.8 282°98	4°2/14.4 18			79749	1998 <i>SG</i> ₁₆₀		5 12.8 289°71	1°1/12.3 18		
4 11	15 47.63	-26 52.7	1.430	2.292	16.3	19.3	4 11	15 45.06	-15 55.6	1.542	2.422	14.3	19.5
4 21	15 41.68	-27 27.8	1.344	2.274	12.5	19.0	4 21	15 39.23	-15 52.6	1.468	2.414	10.3	19.2
5 1	15 32.60	-27 49.5	1.279	2.257	8.2	18.7	5 1	15 30.91	-15 45.5	1.416	2.407	5.7	18.9
5 11	15 21.34	-27 55.1	1.238	2.239	4.6	18.4	5 11	15 21.06	-15 36.4	1.390	2.399	1.3	18.6
5 21	15 9.34	-27 44.2	1.222	2.221	5.6	18.4	5 21	15 10.85	-15 27.9	1.389	2.391	4.6	18.8
5 31	14 58.28	-27 20.6	1.230	2.203	9.9	18.6	5 31	15 1.57	-15 23.5	1.415	2.384	9.3	19.1
6 10	14 49.61	-26 51.1	1.261	2.186	14.5	18.8	6 10	14 54.32	-15 26.6	1.463	2.376	13.7	19.3
6 20	14 44.26	-26 22.8	1.312	2.168	18.7	19.0	6 20	14 49.76	-15 39.2	1.532	2.369	17.4	19.5
308564	2005 <i>UV</i> ₃₅₀		5 12.8 318°19	1°8/14.2 17			137911	2000 <i>AB</i> ₂₄₆		5 12.8 308°80	1°4/13.3 18		
4 11	15 40.04	-25 58.4	2.100	2.955	12.0	19.9	4 11	15 49.31	-21 36.8	1.392	2.264	16.0	21.0
4 21	15 35.12	-25 29.8	2.018	2.948	8.9	19.7	4 21	15 43.58	-21 43.3	1.265	2.206	12.2	20.6
5 1	15 28.40	-24 48.5	1.960	2.941	5.5	19.4	5 1	15 34.18	-21 39.2	1.160	2.147	7.3	20.1
5 11	15 20.64	-23 56.0	1.928	2.934	2.2	19.2	5 11	15 21.70	-21 23.1	1.078	2.087	2.0	19.6
5 21	15 12.72	-22 55.9	1.924	2.927	3.3	19.3	5 21	15 7.34	-20 55.2	1.022	2.026	5.2	19.6
5 31	15 5.55	-21 53.0	1.948	2.921	6.9	19.5	5 31	14 52.94	-20 19.5	0.990	1.963	11.7	19.8
6 10	14 59.91	-20 52.6	1.997	2.915	10.3	19.7	6 10	14 40.46	-19 43.5	0.981	1.900	18.2	19.9
6 20	14 56.29	-19 59.4	2.069	2.909	13.4	19.9	6 20	14 31.43	-19 15.2	0.989	1.836	24.0	20.0
3447	Burckhalter		5 12.8 70°03	17°1/17.3 18			203291	2001 <i>SJ</i> ₇₂		5 12.8			

EPHEMERIDES

5 12.8

5 12.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
198302	2004 <i>TW</i> ₃₂₄		5 12.8 166°65	2°1/14.1	17		191859	2004 <i>WJ</i> ₇		5 12.8 198°46	1°7/13.9	18	
4 11	15 45.32	-25 6.4	2.255	3.101	11.7	21.4	4 11	15 43.11	-24 54.7	1.906	2.764	13.0	19.9
4 21	15 38.77	-25 12.3	2.180	3.105	8.7	21.2	4 21	15 37.44	-24 37.0	1.832	2.764	9.6	19.7
5 1	15 30.40	-25 8.3	2.130	3.108	5.3	21.0	5 1	15 29.76	-24 7.0	1.781	2.763	5.8	19.4
5 11	15 20.98	-24 54.8	2.107	3.112	2.4	20.8	5 11	15 20.90	-23 26.1	1.756	2.762	2.2	19.2
5 21	15 11.39	-24 33.3	2.113	3.114	3.3	20.9	5 21	15 11.88	-22 37.6	1.758	2.762	3.5	19.3
5 31	15 2.58	-24 7.0	2.147	3.116	6.6	21.1	5 31	15 3.75	-21 46.3	1.788	2.761	7.4	19.5
6 10	14 55.33	-23 39.9	2.208	3.118	9.8	21.3	6 10	14 57.36	-20 57.6	1.843	2.759	11.1	19.7
6 20	14 50.13	-23 15.8	2.291	3.119	12.7	21.5	6 20	14 53.24	-20 16.1	1.919	2.758	14.3	19.9
460846	2014 <i>WH</i> ₉₉		5 12.8 309°80	3°7/11.1	17		307176	2002 <i>EF</i> ₅₇		5 12.8 110°80	3°7/14.8	16	
4 11	15 42.28	-12 49.4	1.199	2.097	16.1	20.9	4 11	15 49.12	-28 24.7	1.593	2.442	15.5	21.5
4 21	15 37.86	-12 9.8	1.119	2.074	11.8	20.5	4 21	15 41.98	-28 30.1	1.535	2.458	11.7	21.3
5 1	15 30.46	-11 25.7	1.059	2.051	7.0	20.2	5 1	15 32.33	-28 18.9	1.499	2.474	7.6	21.1
5 11	15 21.04	-10 42.5	1.023	2.028	3.7	19.9	5 11	15 21.29	-27 51.1	1.489	2.489	4.1	20.9
5 21	15 10.96	-10 6.7	1.009	2.006	7.0	20.1	5 21	15 10.23	-27 9.4	1.505	2.504	4.7	21.0
5 31	15 1.83	-9 44.8	1.019	1.985	12.4	20.3	5 31	15 0.48	-26 19.5	1.547	2.518	8.4	21.2
6 10	14 55.03	-9 41.2	1.048	1.964	17.5	20.5	6 10	14 53.06	-25 28.6	1.614	2.532	12.3	21.5
6 20	14 51.41	-9 57.5	1.093	1.944	22.0	20.7	6 20	14 48.49	-24 43.0	1.701	2.546	15.6	21.7
4582	Hank		5 12.8 358°72	8°4/ 9.1	18		36281	2000 <i>CN</i> ₈₅		5 12.8 345°85	1°6/11.8	18	
4 11	15 41.93	+ 0 7.7	1.407	2.291	15.1	16.1	4 11	15 41.85	-15 15.8	1.931	2.807	12.0	18.9
4 21	15 36.88	+ 0 48.3	1.352	2.288	11.9	15.9	4 21	15 36.42	-14 51.9	1.862	2.807	8.6	18.7
5 1	15 29.53	+ 1 16.4	1.319	2.287	9.3	15.7	5 1	15 29.15	-14 24.2	1.816	2.806	4.8	18.4
5 11	15 20.86	+ 1 25.6	1.308	2.286	8.4	15.7	5 11	15 20.81	-13 55.6	1.798	2.806	1.6	18.2
5 21	15 12.03	+ 1 12.1	1.321	2.286	10.2	15.8	5 21	15 12.33	-13 29.3	1.806	2.805	4.1	18.4
5 31	15 4.24	+ 0 34.7	1.357	2.286	13.2	15.9	5 31	15 4.64	-13 8.8	1.842	2.805	8.0	18.6
6 10	14 58.45	- 0 24.7	1.414	2.288	16.5	16.1	6 10	14 58.53	-12 57.0	1.902	2.805	11.5	18.8
6 20	14 55.21	- 1 42.1	1.488	2.290	19.5	16.3	6 20	14 54.51	-12 55.6	1.983	2.805	14.6	19.0
523151	2016 <i>TR</i> ₈		5 12.8 266°90	0°2/12.7	18		504564	2008 <i>TB</i> ₁₀		5 12.8 231°64	3°6/10.6	17	
4 11	15 41.82	-18 8.8	2.388	3.251	10.5	21.5	4 11	15 43.16	- 9 1.2	2.035	2.909	11.6	21.4
4 21	15 36.26	-18 3.5	2.298	3.237	7.5	21.3	4 21	15 37.30	- 8 32.1	1.960	2.902	8.5	21.2
5 1	15 29.03	-17 53.5	2.233	3.221	4.2	21.1	5 1	15 29.64	- 8 4.2	1.910	2.894	5.3	20.9
5 11	15 20.79	-17 40.1	2.197	3.206	0.6	20.8	5 11	15 20.90	- 7 41.0	1.887	2.887	3.6	20.8
5 21	15 12.28	-17 25.2	2.188	3.191	3.1	20.9	5 21	15 11.97	- 7 25.8	1.892	2.879	5.6	20.9
5 31	15 4.33	-17 11.4	2.209	3.175	6.6	21.1	5 31	15 3.74	- 7 21.3	1.924	2.870	8.9	21.1
6 10	14 57.66	-17 1.4	2.255	3.159	9.9	21.3	6 10	14 57.01	- 7 28.9	1.979	2.862	12.1	21.3
6 20	14 52.79	-16 57.4	2.323	3.143	12.8	21.5	6 20	14 52.29	- 7 48.9	2.056	2.853	15.0	21.5
438368	2006 <i>SM</i> ₃₄₆		5 12.8 344°29	0°6/12.4	17		304683	2006 <i>WW</i> ₁₂₀		5 12.8 251°53	2°6/11.1	17	
4 11	15 39.56	-19 46.3	1.892	2.766	12.3	20.3	4 11	15 41.68	-10 26.9	2.361	3.231	10.3	20.4
4 21	15 34.83	-18 56.4	1.818	2.763	8.8	20.1	4 21	15 36.07	-10 10.8	2.282	3.222	7.5	20.2
5 1	15 28.27	-17 57.2	1.769	2.759	4.9	19.9	5 1	15 28.89	- 9 55.3	2.228	3.213	4.5	20.0
5 11	15 20.66	-16 52.4	1.747	2.757	0.8	19.5	5 11	15 20.79	- 9 42.8	2.202	3.204	2.6	19.8
5 21	15 12.93	-15 46.8	1.752	2.754	3.7	19.8	5 21	15 12.49	- 9 35.6	2.204	3.195	4.5	19.9
5 31	15 6.00	-14 45.8	1.784	2.752	7.8	20.0	5 31	15 4.78	- 9 35.8	2.234	3.186	7.5	20.1
6 10	15 0.67	-13 54.5	1.840	2.750	11.5	20.2	6 10	14 58.34	- 9 44.8	2.290	3.176	10.5	20.3
6 20	14 57.42	-13 15.8	1.918	2.748	14.7	20.4	6 20	14 53.64	-10 3.3	2.367	3.166	13.2	20.4
59754	1999 <i>LR</i> ₃₁		5 12.8 289°47	4°3/10.8	18		337863	2001 <i>VJ</i> ₁₃₂		5 12.8 205°47	2°6/ 9.1	18	
4 11	15 44.54	-10 16.3	1.457	2.343	14.6	19.3	4 11	15 32.93	- 4 3.9	4.950	5.812	5.5	21.5
4 21	15 39.11	- 9 40.6	1.370	2.318	10.7	19.0	4 21	15 29.20	- 3 38.6	4.880	5.809	4.1	21.4
5 1	15 31.02	- 9 3.9	1.305	2.293	6.6	18.7	5 1	15 24.85	- 3 15.6	4.836	5.806	3.0	21.3
5 11	15 21.13	- 8 31.4	1.265	2.267	4.3	18.5	5 11	15 20.15	- 2 56.6	4.822	5.803	2.6	21.3
5 21	15 10.64	- 8 8.0	1.250	2.242	7.0	18.6	5 21	15 15.41	- 2 42.7	4.837	5.800	3.4	21.4
5 31	15 0.92	- 7 58.8	1.260	2.216	11.6	18.7	5 31	15 10.93	- 2 35.1	4.880	5.797	4.7	21.5
6 10	14 53.21	- 8 6.5	1.291	2.190	16.1	18.9	6 10	15 6.98	- 2 34.1	4.949	5.794	6.0	21.6
6 20	14 48.28	- 8 31.8	1.340	2.164	20.1	19.1	6 20	15 3.78	- 2 40.1	5.042	5.790	7.3	21.7
346195	2007 <i>XC</i> ₂₄		5 12.8 189°14	3°1/10.9	17		383184	2005 <i>WA</i> ₁₈₃		5 12.8 234°00	11°7/10.9	18	
4 11	15 42.62	- 9 22.1	2.170	3.042	11.0	21.0	4 11	15 58.22	+ 7 1.9	1.172	2.027	19.6	20.5
4 21	15 36.77	- 9 6.6	2.101	3.042	8.0	20.8	4 21	15 49.28	+ 7 3.3	1.107	2.020	16.1	20.2
5 1	15 29.26	- 8 52.6	2.057	3.041	4.9	20.6	5 1	15 36.79	+ 6 38.1	1.061	2.012	13.0	20.0
5 11	15 20.82	- 8 42.9	2.040	3.041	3.1	20.5	5 11	15 22.06	+ 5 39.0	1.038	2.005	11.7	19.9
5 21	15 12.23	- 8 39.8	2.051	3.040	4.9	20.6	5 21	15 6.84	+ 4 4.1	1.039	1.996	13.1	20.0
5 31	15 4.34	- 8 45.4	2.090	3.040	8.1	20.8	5 31	14 53.05	+ 1 57.4	1.065	1.988	16.6	20.1
6 10	14 57.87	- 9 0.7	2.153	3.039	11.1	21.0	6 10	14 42.20	- 0 32.5	1.112	1.979	20.5	20.3
6 20	14 53.27	- 9 26.0	2.238	3.038	13.8	21.2	6 20	14 35.08	- 3 15.7	1.176	1.969	24.1	20.6
76007	2000 <i>DT</i> ₂₂		5 12.8 299°60	0°7/13.2	18		95032	2002 <i>AW</i> ₂₆		5 12.8 228°16	2°9/11.3	18	
4 11	15 42.21	-21 26.7	1.925	2.791	12.5	19.7	4 11	15 46.82	-12 7.4	1.776	2.649	13.0	19.6
4 21	15 36.78	-21 13.9	1.849	2.788	9.1	19.5	4 21	15 40.24	-11 39.0	1.695	2.637	9.5	19.4
5 1	15 29.39	-20 52.2	1.797	2.784	5.2	19.2	5 1	15 31.42	-11 8.7	1.638	2.625	5.6	19.1
5 11	15 20.84	-20 23.3	1.771	2.780	1.2	18.9	5 11	15 21.21	-10 40.0	1.608	2.612	2.9	18.9
5 21	15 12.09	-19 50.1	1.773	2.777	3.4	19.1	5 21	15 10.66	-10 16.7	1.605	2.599	5.4	19.0
5 31	15 4.15	-19 16.6	1.802	2.774	7.5	19.3	5 31	15 0.92	-10 2.6	1.629	2.585	9.5	19.2
6 10	14 57.86	-18 47.0	1.856	2.770	11.2	19.5	6 10	14 52.96	-10 0.3	1.678	2.570	13.4	19.5
6 20	14 53.76	-18 24.8	1.931	2.767	14.4	19.7	6 20	14 47.43	-10 11.0	1.746	2.554	16.8	19.6
196563	2003 <i>QU</i> ₁₉		5 12.8 208°84	4°1/ 9.9	18		78993	2003 <i>UK</i> ₂₀₈					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
442482	2011 <i>UH</i> ₃₄₇		5 12.8 229°47'	3°4/ 9.9	18		219813	2002 <i>AQ</i> ₁₉₇		5 12.8 183°01'	3°1/11.1	17	
4 11	15 39.51	- 9 32.5	2.386	3.259	10.1	21.3	4 11	15 45.69	- 9 17.9	2.117	2.984	11.5	20.2
4 21	15 34.45	- 8 37.6	2.313	3.254	7.4	21.1	4 21	15 39.01	- 9 6.7	2.047	2.985	8.3	20.0
5 1	15 27.96	- 7 42.5	2.266	3.249	4.7	20.9	5 1	15 30.56	- 8 57.4	2.001	2.985	5.1	19.8
5 11	15 20.65	- 6 51.0	2.246	3.243	3.5	20.8	5 11	15 21.08	- 8 52.3	1.984	2.985	3.1	19.7
5 21	15 13.23	- 6 7.1	2.255	3.237	5.2	20.9	5 21	15 11.44	- 8 53.7	1.994	2.984	5.0	19.8
5 31	15 6.41	- 5 33.9	2.292	3.231	8.0	21.1	5 31	15 2.55	- 9 3.6	2.033	2.983	8.3	20.0
6 10	15 0.82	- 5 13.6	2.353	3.225	10.8	21.3	6 10	14 55.17	- 9 22.9	2.097	2.981	11.5	20.2
6 20	14 56.87	- 5 6.7	2.435	3.219	13.3	21.4	6 20	14 49.81	- 9 51.7	2.183	2.978	14.2	20.4
371513	2006 <i>UP</i> ₈₂		5 12.8 297°09'	3°3/14.1	18		216387	2008 <i>CQ</i> ₅₉		5 12.8 319°46'	4°5/ 9.8	16	
4 11	15 46.12	-25 38.3	1.477	2.342	15.6	20.8	4 11	15 38.75	- 9 22.7	1.754	2.641	12.4	20.1
4 21	15 40.69	-25 55.1	1.374	2.308	12.0	20.4	4 21	15 34.54	- 8 25.8	1.664	2.612	9.2	19.8
5 1	15 32.17	-25 58.6	1.293	2.274	7.7	20.1	5 1	15 28.30	- 7 27.3	1.598	2.583	6.0	19.5
5 11	15 21.39	-25 47.1	1.236	2.240	3.7	19.8	5 11	15 20.76	- 6 32.7	1.557	2.555	4.5	19.4
5 21	15 9.63	-25 21.0	1.203	2.205	5.0	19.7	5 21	15 12.81	- 5 47.5	1.543	2.527	6.8	19.5
5 31	14 58.53	-24 44.3	1.196	2.171	9.9	19.9	5 31	15 5.49	- 5 16.7	1.553	2.500	10.5	19.6
6 10	14 49.60	-24 4.3	1.211	2.136	15.0	20.1	6 10	14 59.73	- 5 3.5	1.585	2.473	14.3	19.8
6 20	14 43.87	-23 28.1	1.245	2.101	19.5	20.3	6 20	14 56.15	- 5 8.7	1.637	2.447	17.6	19.9
48137	2001 <i>FS</i> ₁₄₃		5 12.8 232°31'	1°4/12.1	18		300006	2006 <i>UY</i> ₄₂		5 12.8 89°97'	0°1/12.9	17	
4 11	15 46.14	-15 7.2	1.767	2.639	13.1	19.3	4 11	15 42.71	-18 49.7	2.238	3.102	11.1	20.6
4 21	15 39.77	-14 58.5	1.688	2.631	9.5	19.1	4 21	15 36.86	-18 52.1	2.170	3.108	8.0	20.4
5 1	15 31.16	-14 46.4	1.633	2.623	5.3	18.8	5 1	15 29.34	-18 49.4	2.127	3.115	4.4	20.2
5 11	15 21.17	-14 33.1	1.605	2.614	1.5	18.5	5 11	15 20.89	-18 42.9	2.112	3.121	0.7	19.9
5 21	15 10.86	-14 21.2	1.604	2.604	4.4	18.7	5 21	15 12.32	-18 34.2	2.125	3.128	3.0	20.1
5 31	15 1.37	-14 14.0	1.630	2.595	8.7	18.9	5 31	15 4.48	-18 25.8	2.166	3.134	6.6	20.4
6 10	14 53.70	-14 14.4	1.681	2.585	12.7	19.1	6 10	14 58.08	-18 20.4	2.233	3.141	9.8	20.6
6 20	14 48.45	-14 24.2	1.752	2.574	16.2	19.3	6 20	14 53.57	-18 20.1	2.322	3.147	12.6	20.8
62005	2000 <i>RP</i> ₃₈		5 12.8 211°70'	0°2/12.9	18		66794	1999 <i>TP</i> ₂₃₇		5 12.8 216°84'	3°4/15.3	18	
4 11	15 47.42	-19 13.3	1.706	2.573	13.8	18.7	4 11	15 44.13	-30 27.3	2.173	3.006	12.5	19.4
4 21	15 40.79	-19 14.9	1.629	2.569	10.0	18.5	4 21	15 38.10	-30 11.0	2.087	3.000	9.6	19.2
5 1	15 31.76	-19 9.6	1.576	2.564	5.6	18.2	5 1	15 30.13	-29 39.2	2.026	2.994	6.5	19.0
5 11	15 21.27	-18 58.3	1.549	2.559	1.0	17.8	5 11	15 21.02	-28 52.4	1.990	2.988	3.8	18.8
5 21	15 10.45	-18 43.4	1.550	2.553	3.9	18.0	5 21	15 11.73	-27 53.0	1.983	2.981	4.0	18.8
5 31	15 0.55	-18 28.4	1.577	2.546	8.5	18.3	5 31	15 3.26	-26 45.8	2.004	2.973	7.0	19.0
6 10	14 52.61	-18 17.3	1.629	2.540	12.6	18.5	6 10	14 56.44	-25 36.9	2.051	2.966	10.2	19.2
6 20	14 47.26	-18 13.5	1.701	2.533	16.2	18.7	6 20	14 51.80	-24 31.9	2.121	2.958	13.2	19.4
53245	1999 <i>CH</i> ₁₅₂		5 12.8 212°49'	0°4/13.1	18		129192	2005 <i>MQ</i> ₃₂		5 12.8 299°53'	3°2/11.0	17	
4 11	15 42.17	-20 56.5	2.434	3.291	10.5	20.6	4 11	15 42.06	- 9 45.7	2.003	2.879	11.6	19.7
4 21	15 36.43	-20 40.5	2.351	3.286	7.6	20.4	4 21	15 36.66	- 9 30.6	1.919	2.862	8.5	19.5
5 1	15 29.10	-20 17.4	2.294	3.280	4.3	20.2	5 1	15 29.37	- 9 16.7	1.859	2.845	5.2	19.2
5 11	15 20.84	-19 48.7	2.265	3.274	0.9	19.9	5 11	15 20.92	- 9 7.0	1.826	2.828	3.2	19.1
5 21	15 12.40	-19 16.6	2.265	3.268	2.9	20.0	5 21	15 12.15	- 9 4.2	1.820	2.811	5.2	19.2
5 31	15 4.60	-18 44.4	2.293	3.261	6.3	20.3	5 31	15 4.01	- 9 10.8	1.841	2.794	8.7	19.4
6 10	14 58.12	-18 15.6	2.348	3.254	9.5	20.4	6 10	14 57.33	- 9 28.1	1.886	2.777	12.2	19.5
6 20	14 53.43	-17 52.9	2.425	3.246	12.3	20.6	6 20	14 52.67	- 9 56.5	1.951	2.761	15.2	19.7
93672	2000 <i>UY</i> ₁₁₂		5 12.8 305°35'	2°4/11.3	17		350731	2001 <i>XT</i> ₂₂₁		5 12.8 195°25'	0°6/12.4	17	
4 11	15 40.66	-15 56.6	1.560	2.446	13.8	19.1	4 11	15 42.51	-16 34.2	2.793	3.652	9.3	22.1
4 21	15 36.13	-14 58.3	1.473	2.423	9.9	18.8	4 21	15 36.48	-16 29.6	2.713	3.649	6.6	21.9
5 1	15 29.26	-13 51.0	1.408	2.399	5.6	18.5	5 1	15 29.08	-16 21.8	2.658	3.646	3.7	21.7
5 11	15 20.89	-12 39.7	1.369	2.376	2.4	18.2	5 11	15 20.87	-16 12.2	2.633	3.643	0.7	21.4
5 21	15 12.09	-11 30.7	1.356	2.353	5.5	18.4	5 21	15 12.51	-16 2.4	2.638	3.639	2.8	21.6
5 31	15 4.08	-10 31.0	1.368	2.331	10.2	18.6	5 31	15 4.69	-15 54.4	2.672	3.634	5.9	21.8
6 10	14 57.92	- 9 46.2	1.402	2.308	14.6	18.8	6 10	14 58.01	-15 50.1	2.733	3.629	8.7	22.0
6 20	14 54.28	- 9 19.6	1.455	2.287	18.4	19.0	6 20	14 52.87	-15 51.1	2.817	3.624	11.1	22.1
314107	2005 <i>EQ</i> ₈₀		5 12.8 170°89'	1°9/11.7	17		352569	2008 <i>DT</i> ₁₈		5 12.8 177°28'	2°8/14.9	18	
4 11	15 45.41	-15 27.4	1.716	2.590	13.3	21.6	4 11	15 42.45	-28 48.1	2.505	3.340	11.0	21.4
4 21	15 39.12	-14 47.5	1.649	2.593	9.5	21.4	4 21	15 36.66	-28 45.4	2.426	3.341	8.4	21.2
5 1	15 30.71	-14 2.4	1.606	2.596	5.3	21.1	5 1	15 29.24	-28 31.2	2.371	3.342	5.5	21.0
5 11	15 21.09	-13 16.0	1.590	2.598	2.0	20.9	5 11	15 20.90	-28 5.6	2.344	3.342	3.1	20.9
5 21	15 11.34	-12 32.6	1.601	2.599	4.8	21.1	5 21	15 12.42	-27 30.6	2.345	3.342	3.5	20.9
5 31	15 2.57	-11 57.1	1.639	2.600	9.0	21.4	5 31	15 4.63	-26 49.2	2.374	3.342	6.1	21.1
6 10	14 55.67	-11 33.2	1.701	2.600	12.8	21.6	6 10	14 58.23	-26 5.9	2.429	3.342	9.0	21.3
6 20	14 51.17	-11 22.7	1.783	2.600	16.1	21.8	6 20	14 53.68	-25 24.6	2.509	3.342	11.5	21.4
501500	2014 <i>DZ</i> ₃₀		5 12.8 118°61'	4°0/ 9.7	17		118251	1998 <i>BF</i> ₁₈		5 12.8 121°54'	0°7/13.3	18	
4 11	15 40.33	- 8 20.9	2.222	3.096	10.7	21.8	4 11	15 45.31	-21 32.5	2.011	2.870	12.3	20.3
4 21	15 35.03	- 7 24.3	2.163	3.104	7.8	21.6	4 21	15 38.80	-21 20.6	1.949	2.884	8.9	20.2
5 1	15 28.26	- 6 29.1	2.130	3.111	5.1	21.4	5 1	15 30.44	-21 0.2	1.912	2.898	5.1	19.9
5 11	15 20.70	- 5 39.4	2.124	3.118	4.0	21.4	5 11	15 21.08	-20 32.9	1.902	2.911	1.2	19.7
5 21	15 13.11	- 4 59.2	2.146	3.125	5.7	21.5	5 21	15 11.68	-20 1.5	1.920	2.924	3.2	19.9
5 31	15 6.24	- 4 31.5	2.195	3.132	8.5	21.7	5 31	15 3.21	-19 29.8	1.967	2.936	7.1	20.1
6 10	15 0.71	- 4 17.8	2.269	3.139	11.3	21.9	6 10	14 56.43	-19 1.9	2.038	2.948	10.6	20.4
6 20	14 56.92	- 4 18.4	2.363	3.145	13.7	22.0	6 20	14 51.82	-18 40.8	2.132	2.959	13.5	20.6
436027	2009 <i>HP</i> ₇₉		5 12.8 95°30'	5°1/ 9.1	17		185172	2006 <					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
4922	Leshin		5 12.8 244°78	0°2/12.7	18		311251	2005 EU ₂₁		5 12.8 133°94	1°3/13.5	18	
4 11	15 43.19	-20 18.7	2.164	3.025	11.5	18.3	4 11	15 47.48	-22 48.9	1.728	2.588	13.9	20.9
4 21	15 37.39	-19 39.3	2.072	3.009	8.3	18.1	4 21	15 40.66	-22 39.3	1.665	2.599	10.2	20.7
5 1	15 29.76	-18 50.8	2.005	2.993	4.7	17.8	5 1	15 31.61	-22 18.8	1.625	2.610	5.9	20.5
5 11	15 21.00	-17 55.5	1.966	2.976	0.7	17.5	5 11	15 21.31	-21 48.8	1.612	2.620	1.7	20.2
5 21	15 11.99	-16 57.2	1.956	2.958	3.4	17.6	5 21	15 10.94	-21 12.5	1.626	2.629	3.7	20.4
5 31	15 3.64	-16 0.7	1.974	2.940	7.3	17.9	5 31	15 1.66	-20 34.5	1.667	2.638	8.0	20.7
6 10	14 56.76	-15 10.7	2.017	2.921	11.0	18.0	6 10	14 54.39	-20 0.1	1.733	2.647	11.9	20.9
6 20	14 51.90	-14 30.7	2.083	2.901	14.1	18.2	6 20	14 49.67	-19 33.4	1.820	2.655	15.2	21.2
162401	2000 DK ₃₃		5 12.8 84°06	1°2/12.0	17		475713	2006 VN ₁₇₃		5 12.8 146°29	2°3/11.4	17	
4 11	15 42.52	-16 40.8	1.955	2.827	12.0	20.2	4 11	15 42.28	-11 4.6	2.366	3.235	10.4	21.9
4 21	15 36.78	-16 9.7	1.898	2.842	8.6	20.0	4 21	15 36.46	-10 54.9	2.297	3.238	7.4	21.7
5 1	15 29.30	-15 33.8	1.867	2.856	4.7	19.8	5 1	15 29.12	-10 45.6	2.254	3.240	4.4	21.5
5 11	15 20.92	-14 56.2	1.862	2.870	1.3	19.6	5 11	15 20.93	-10 38.9	2.239	3.243	2.3	21.4
5 21	15 12.52	-14 20.2	1.885	2.885	3.9	19.8	5 21	15 12.62	-10 36.7	2.253	3.246	4.2	21.5
5 31	15 5.02	-13 49.9	1.935	2.899	7.6	20.1	5 31	15 4.96	-10 40.9	2.294	3.248	7.2	21.7
6 10	14 59.13	-13 28.1	2.010	2.913	11.0	20.3	6 10	14 58.61	-10 52.8	2.361	3.250	10.2	21.9
6 20	14 55.29	-13 16.7	2.106	2.926	13.9	20.5	6 20	14 53.99	-11 12.8	2.450	3.252	12.7	22.1
293255	2007 CF ₁₂		5 12.8 103°07	0°3/12.7	17		225859	2001 XC ₁₈₂		5 12.8 244°09	0°8/12.3	18	
4 11	15 45.65	-18 29.5	1.795	2.664	13.1	21.6	4 11	15 43.74	-18 6.5	2.070	2.936	11.7	20.3
4 21	15 39.18	-18 17.0	1.738	2.679	9.4	21.4	4 21	15 37.87	-17 34.2	1.981	2.921	8.5	20.1
5 1	15 30.70	-17 57.1	1.705	2.694	5.2	21.1	5 1	15 30.07	-16 54.8	1.917	2.905	4.7	19.8
5 11	15 21.14	-17 35.0	1.698	2.708	0.8	20.8	5 11	15 21.10	-16 10.8	1.880	2.889	0.9	19.5
5 21	15 11.55	-17 10.6	1.719	2.722	3.7	21.1	5 21	15 11.84	-15 25.7	1.871	2.872	3.7	19.7
5 31	15 2.98	-16 48.6	1.768	2.736	7.9	21.4	5 31	15 3.25	-14 43.8	1.890	2.855	7.7	19.9
6 10	14 56.26	-16 32.7	1.840	2.749	11.6	21.6	6 10	14 56.19	-14 9.4	1.935	2.837	11.4	20.1
6 20	14 51.86	-16 25.1	1.934	2.762	14.7	21.9	6 20	14 51.21	-13 45.3	2.001	2.818	14.6	20.3
127210	2002 HE ₁₁		5 12.8 80°84	6°5/ 9.7	18		40255	1999 CN ₄		5 12.8 73°78	6°7/15.9	18	
4 11	15 45.76	- 1 13.0	1.793	2.660	13.2	19.4	4 11	15 50.02	-32 41.2	1.355	2.200	18.0	19.1
4 21	15 39.00	- 0 39.2	1.755	2.685	10.1	19.2	4 21	15 43.30	-33 26.3	1.299	2.212	14.2	18.9
5 1	15 30.47	- 0 15.0	1.741	2.708	7.5	19.1	5 1	15 33.40	-33 50.2	1.262	2.224	10.2	18.7
5 11	15 21.09	- 0 4.7	1.753	2.732	6.5	19.1	5 11	15 21.62	-33 49.3	1.249	2.237	7.2	18.6
5 21	15 11.83	- 0 10.6	1.792	2.756	8.0	19.2	5 21	15 9.64	-33 24.6	1.259	2.249	7.2	18.6
5 31	15 3.64	- 0 33.6	1.856	2.779	10.6	19.4	5 31	14 59.17	-32 41.5	1.294	2.261	10.2	18.8
6 10	14 57.23	- 1 12.5	1.943	2.801	13.4	19.7	6 10	14 51.51	-31 49.4	1.351	2.274	13.9	19.0
6 20	14 52.97	- 2 4.7	2.050	2.824	15.7	19.9	6 20	14 47.30	-30 57.1	1.428	2.286	17.3	19.3
109872	2001 RL ₁₅₁		5 12.8 240°88	3°2/14.2	18		486717	2014 BU ₅₄		5 12.8 172°31	17°4/ 1.6	18	
4 11	15 48.39	-25 31.5	1.831	2.681	13.8	19.9	4 11	15 49.16	+20 11.1	1.410	2.220	19.2	21.4
4 21	15 41.60	-26 9.2	1.748	2.674	10.4	19.7	4 21	15 42.07	+22 14.2	1.380	2.224	17.9	21.3
5 1	15 32.33	-26 36.8	1.688	2.665	6.7	19.5	5 1	15 32.44	+23 44.6	1.369	2.227	17.4	21.2
5 11	15 21.44	-26 52.8	1.655	2.657	3.5	19.3	5 11	15 21.45	+24 32.1	1.377	2.229	17.8	21.3
5 21	15 10.08	-26 56.8	1.649	2.648	4.5	19.3	5 21	15 10.48	+24 32.3	1.404	2.231	19.0	21.3
5 31	14 59.53	-26 51.5	1.670	2.639	8.2	19.5	5 31	15 0.86	+23 46.5	1.448	2.231	20.6	21.5
6 10	14 50.91	-26 41.1	1.716	2.630	12.0	19.7	6 10	14 53.59	+22 21.4	1.506	2.231	22.4	21.6
6 20	14 44.93	-26 30.7	1.783	2.620	15.3	19.9	6 20	14 49.18	+20 25.9	1.577	2.230	24.0	21.8
26468	lanchan		5 12.8 154°73	2°7/11.1	17		471829	2012 XT ₅₆		5 12.8 287°64	1°2/12.1	17	
4 11	15 43.86	-13 40.2	1.741	2.619	13.0	19.3	4 11	15 41.78	-15 51.6	2.029	2.902	11.6	21.5
4 21	15 37.96	-12 49.6	1.678	2.623	9.3	19.0	4 21	15 36.39	-15 32.1	1.955	2.898	8.3	21.2
5 1	15 30.06	-11 55.3	1.638	2.627	5.4	18.8	5 1	15 29.19	-15 8.5	1.905	2.895	4.6	21.0
5 11	15 21.05	-11 1.9	1.625	2.630	2.7	18.6	5 11	15 20.96	-14 43.5	1.882	2.891	1.3	20.8
5 21	15 11.94	-10 14.3	1.640	2.634	5.3	18.8	5 21	15 12.54	-14 19.8	1.888	2.887	3.9	20.9
5 31	15 3.78	- 9 37.1	1.680	2.636	9.2	19.0	5 31	15 4.85	-14 0.7	1.920	2.884	7.6	21.2
6 10	14 57.40	- 9 13.6	1.744	2.639	12.9	19.3	6 10	14 58.66	-13 49.2	1.977	2.881	11.1	21.4
6 20	14 53.30	- 9 5.1	1.829	2.641	16.0	19.5	6 20	14 54.49	-13 47.0	2.055	2.877	14.1	21.6
318233	2004 RO ₂₃₃		5 12.8 226°96	0°6/12.4	17		472076	2013 YL ₉₅		5 12.8 154°29	3°6/10.5	17	
4 11	15 43.40	-18 4.2	2.038	2.906	11.8	21.8	4 11	15 41.98	- 8 49.2	2.111	2.985	11.2	21.4
4 21	15 37.57	-17 41.5	1.958	2.899	8.5	21.6	4 21	15 36.36	- 8 15.1	2.046	2.987	8.2	21.2
5 1	15 29.86	-17 12.6	1.903	2.892	4.7	21.3	5 1	15 29.10	- 7 42.5	2.007	2.990	5.2	21.0
5 11	15 21.03	-16 39.6	1.874	2.884	0.9	21.0	5 11	15 20.93	- 7 14.8	1.994	2.992	3.6	20.9
5 21	15 11.97	-16 5.7	1.874	2.876	3.6	21.2	5 21	15 12.66	- 6 55.4	2.009	2.994	5.4	21.0
5 31	15 3.65	-15 34.7	1.902	2.867	7.6	21.4	5 31	15 5.13	- 6 46.7	2.051	2.996	8.5	21.2
6 10	14 56.89	-15 10.3	1.954	2.859	11.2	21.6	6 10	14 59.02	- 6 50.3	2.117	2.997	11.5	21.4
6 20	14 52.20	-14 55.1	2.028	2.849	14.3	21.8	6 20	14 54.80	- 7 6.0	2.204	2.999	14.2	21.6
160559	1998 RS ₅₅		5 12.8 277°96	3°4/14.9	17		7237	Vickyhamilton		5 12.8 267°84	1°3/13.7	18	
4 11	15 43.91	-28 26.6	1.962	2.808	13.2	19.7	4 11	15 43.17	-25 1.6	1.859	2.718	13.2	17.2
4 21	15 38.26	-28 34.6	1.872	2.793	10.1	19.4	4 21	15 37.69	-24 17.5	1.768	2.701	9.8	16.9
5 1	15 30.39	-28 29.0	1.805	2.778	6.7	19.2	5 1	15 30.06	-23 18.1	1.700	2.684	5.8	16.7
5 11	15 21.13	-28 9.3	1.764	2.764	3.8	19.0	5 11	15 21.10	-22 5.7	1.659	2.667	1.8	16.4
5 21	15 11.48	-27 36.9	1.750	2.749	4.3	19.0	5 21	15 11.86	-20 44.8	1.646	2.650	3.6	16.4
5 31	15 2.60	-26 55.6	1.763	2.734	7.6	19.2	5 31	15 3.43	-19 22.0	1.660	2.632	7.9	16.7
6 10	14 55.44	-26 10.8	1.801	2.719	11.2	19.3	6 10	14 56.76	-18 4.3	1.699	2.614	12.0	16.9
6 20	14 50.67	-25 28.3	1.860	2.704	14.5	19.5	6 20	14 52.44	-16 57.5	1.760	2.596	15.5	17.1
374468	2005 XJ ₈₃		5 12.8 185°24	2°0/14.2	17		58762	1998 FJ ₂₄		5 12.8 235°50	7°7/17.3	18	
4 11	15 45.46	-25 43.3											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
260698	2005 <i>JC</i> ₁₁₈		5 12.8 282°66	4.5/10.6	18		42588	1997 <i>GU</i> ₁₅		5 12.8 307°51	4.0/10.7	18	
4 11	15 44.13	- 9 7.0	1.553	2.436	14.0	20.4	4 11	15 43.58	-13 3.6	1.271	2.164	15.7	19.5
4 21	15 38.59	- 8 31.9	1.475	2.421	10.3	20.1	4 21	15 38.42	-11 56.0	1.208	2.161	11.4	19.2
5 1	15 30.65	- 7 57.7	1.421	2.407	6.5	19.9	5 1	15 30.61	-10 43.2	1.167	2.158	6.7	18.9
5 11	15 21.22	- 7 29.4	1.392	2.392	4.5	19.7	5 11	15 21.23	- 9 32.2	1.150	2.154	4.0	18.7
5 21	15 11.40	- 7 11.5	1.388	2.377	6.8	19.8	5 21	15 11.63	- 8 30.8	1.158	2.151	7.1	18.9
5 31	15 2.42	- 7 7.8	1.410	2.362	10.9	20.0	5 31	15 3.21	- 7 45.9	1.189	2.148	11.8	19.2
6 10	14 55.35	- 7 20.3	1.453	2.347	15.0	20.2	6 10	14 57.08	- 7 21.7	1.241	2.146	16.3	19.4
6 20	14 50.85	- 7 49.0	1.516	2.333	18.5	20.4	6 20	14 53.83	- 7 18.9	1.311	2.143	20.1	19.6
193648	2001 <i>DT</i> ₃₀		5 12.8 103°03	7.3/ 7.9	17 R		35127	1992 <i>EQ</i> ₂₆		5 12.8 103°18	2.4/11.6	18	
4 11	15 42.08	+ 0 47.8	1.953	2.819	12.3	19.6	4 11	15 45.82	-14 37.3	1.422	2.305	15.0	18.8
4 21	15 36.42	+ 1 50.3	1.905	2.829	9.8	19.5	4 21	15 39.72	-13 59.9	1.365	2.314	10.7	18.6
5 1	15 29.11	+ 2 43.1	1.882	2.839	7.8	19.4	5 1	15 31.18	-13 18.0	1.332	2.322	6.1	18.3
5 11	15 20.94	+ 3 20.9	1.884	2.848	7.4	19.4	5 11	15 21.31	-12 36.3	1.323	2.330	2.5	18.1
5 21	15 12.76	+ 3 39.9	1.912	2.858	8.8	19.5	5 21	15 11.35	-11 59.6	1.340	2.338	5.5	18.3
5 31	15 5.43	+ 3 38.4	1.965	2.867	11.2	19.6	5 31	15 2.60	-11 33.0	1.382	2.346	10.0	18.6
6 10	14 59.63	+ 3 17.1	2.039	2.876	13.6	19.8	6 10	14 56.04	-11 19.8	1.447	2.354	14.2	18.9
6 20	14 55.77	+ 2 38.2	2.133	2.885	15.8	20.0	6 20	14 52.20	-11 21.3	1.531	2.361	17.7	19.1
31102	1997 <i>NP</i> ₂		5 12.8 355°94	2.7/11.4	18		231533	2008 <i>SR</i> ₁₂₈		5 12.8 61°00	2.5/14.3	17	
4 11	15 39.21	-16 44.1	1.003	1.911	17.6	17.5	4 11	15 44.42	-25 34.3	1.864	2.720	13.3	20.9
4 21	15 35.76	-15 41.0	0.946	1.906	12.7	17.2	4 21	15 38.54	-25 43.2	1.792	2.721	10.0	20.7
5 1	15 29.28	-14 26.9	0.908	1.903	7.1	16.9	5 1	15 30.52	-25 40.5	1.742	2.722	6.2	20.5
5 11	15 21.00	-13 9.3	0.892	1.900	2.7	16.6	5 11	15 21.21	-25 26.3	1.719	2.723	2.9	20.3
5 21	15 12.47	-11 57.4	0.898	1.899	6.6	16.9	5 21	15 11.69	-25 2.5	1.723	2.724	3.9	20.3
5 31	15 5.29	-11 0.6	0.926	1.899	12.3	17.2	5 31	15 3.06	-24 32.8	1.753	2.725	7.5	20.5
6 10	15 0.72	-10 25.2	0.973	1.901	17.4	17.5	6 10	14 56.25	-24 2.3	1.808	2.727	11.2	20.8
6 20	14 59.38	-10 13.0	1.036	1.903	21.7	17.7	6 20	14 51.82	-23 35.5	1.885	2.728	14.4	21.0
188847	Rhipheus		5 12.8 85°74	0°0/12.9	18		430752	2004 <i>PR</i> ₂₇		5 12.8 305°54	0°9/12.4	17	
4 11	15 34.15	-19 43.3	4.308	5.164	6.3	20.9	4 11	15 43.88	-16 35.9	1.520	2.402	14.3	20.2
4 21	15 30.20	-19 22.3	4.234	5.169	4.5	20.8	4 21	15 38.73	-16 32.7	1.428	2.375	10.4	19.9
5 1	15 25.49	-18 57.8	4.187	5.174	2.5	20.7	5 1	15 30.94	-16 24.5	1.358	2.349	5.9	19.6
5 11	15 20.38	-18 31.1	4.169	5.178	0.4	20.5	5 11	15 21.32	-16 13.3	1.313	2.322	1.2	19.2
5 21	15 15.22	-18 3.4	4.181	5.183	1.7	20.6	5 21	15 11.05	-16 1.6	1.293	2.295	4.6	19.4
5 31	15 10.40	-17 36.6	4.222	5.188	3.8	20.8	5 31	15 1.48	-15 53.5	1.298	2.269	9.8	19.6
6 10	15 6.24	-17 12.3	4.291	5.192	5.7	20.9	6 10	14 53.85	-15 52.8	1.326	2.243	14.5	19.8
6 20	15 3.00	-16 51.7	4.385	5.197	7.3	21.0	6 20	14 49.00	-16 2.3	1.373	2.218	18.6	20.0
1123	Shapleya		5 12.8 198°34	2°0/11.9	18		360356	2001 <i>XV</i> ₂₂₉		5 12.8 186°09	1°9/11.9	16	
4 11	15 47.92	-14 11.1	1.699	2.571	13.6	15.6	4 11	15 48.15	-14 12.8	1.749	2.620	13.3	21.9
4 21	15 41.09	-13 52.9	1.626	2.568	9.8	15.3	4 21	15 41.18	-13 57.7	1.678	2.620	9.6	21.6
5 1	15 31.95	-13 31.4	1.576	2.565	5.5	15.1	5 1	15 31.98	-13 39.7	1.631	2.619	5.4	21.4
5 11	15 21.42	-13 9.7	1.553	2.561	2.1	14.8	5 11	15 21.46	-13 21.5	1.611	2.618	1.9	21.2
5 21	15 10.64	-12 50.9	1.558	2.556	4.8	15.0	5 21	15 10.71	-13 5.9	1.618	2.616	4.7	21.3
5 31	15 0.79	-12 38.7	1.590	2.551	9.2	15.3	5 31	15 0.90	-12 56.3	1.653	2.614	8.9	21.6
6 10	14 52.86	-12 36.1	1.645	2.545	13.2	15.5	6 10	14 52.99	-12 55.6	1.712	2.611	12.8	21.8
6 20	14 47.47	-12 44.6	1.721	2.538	16.6	15.7	6 20	14 47.54	-13 5.3	1.792	2.607	16.1	22.0
508839	2002 <i>AR</i> ₉₈		5 12.8 151°75	7°1/20.4	18		29318	1994 <i>PH</i> ₁₄		5 12.8 157°69	0°4/12.6	18	
4 11	15 47.84	-47 47.3	3.116	3.833	11.6	22.6	4 11	15 47.83	-19 11.4	1.868	2.730	13.0	19.5
4 21	15 40.54	-48 5.8	3.039	3.842	10.1	22.5	4 21	15 40.76	-18 42.7	1.802	2.739	9.3	19.3
5 1	15 31.43	-48 5.7	2.982	3.850	8.7	22.4	5 1	15 31.65	-18 6.1	1.760	2.748	5.2	19.1
5 11	15 21.32	-47 45.2	2.950	3.859	7.5	22.3	5 11	15 21.40	-17 24.2	1.745	2.755	0.8	18.7
5 21	15 11.15	-47 4.6	2.944	3.866	7.1	22.3	5 21	15 11.08	-16 40.7	1.760	2.761	3.7	19.0
5 31	15 1.86	-46 6.5	2.965	3.873	7.6	22.3	5 31	15 1.76	-16 0.3	1.801	2.767	8.0	19.2
6 10	14 54.21	-44 55.9	3.011	3.880	8.8	22.4	6 10	14 54.28	-15 27.2	1.869	2.772	11.7	19.5
6 20	14 48.67	-43 38.4	3.081	3.886	10.3	22.5	6 20	14 49.16	-15 4.4	1.957	2.775	14.9	19.7
189930	Jeanneherbert		5 12.8 185°38	1°0/12.1	18		198637	2005 <i>AN</i> ₅₇		5 12.8 176°77	3°4/14.9	18	
4 11	15 42.10	-17 26.3	2.237	3.104	11.0	20.5	4 11	15 46.71	-28 46.9	2.325	3.156	11.9	20.7
4 21	15 36.45	-16 50.5	2.163	3.104	7.8	20.3	4 21	15 39.93	-29 11.5	2.246	3.158	9.1	20.6
5 1	15 29.18	-16 9.1	2.114	3.103	4.3	20.1	5 1	15 31.22	-29 24.8	2.191	3.159	6.1	20.4
5 11	15 20.98	-15 24.8	2.094	3.103	1.1	19.8	5 11	15 21.35	-29 25.7	2.164	3.160	3.7	20.2
5 21	15 12.68	-14 41.0	2.102	3.102	3.5	20.0	5 21	15 11.24	-29 14.9	2.166	3.160	4.1	20.2
5 31	15 5.08	-14 1.5	2.138	3.100	7.1	20.2	5 31	15 1.87	-28 55.0	2.195	3.160	6.8	20.4
6 10	14 58.89	-13 29.7	2.199	3.098	10.3	20.4	6 10	14 54.08	-28 30.2	2.251	3.160	9.7	20.6
6 20	14 54.56	-13 7.9	2.283	3.096	13.1	20.6	6 20	14 48.41	-28 4.9	2.330	3.159	12.4	20.8
301649	2010 <i>EL</i> ₁₀₇		5 12.8 35°07	3°1/11.2	14 C		287893	2003 <i>SX</i> ₃₄₉		5 12.8 19°34	4°3/14.5	17	
4 11	15 43.55	-14 59.6	1.188	2.083	16.4	21.0	4 11	15 47.09	-26 21.0	1.265	2.136	17.4	19.7
4 21	15 38.44	-13 59.0	1.133	2.087	11.8	20.7	4 21	15 41.32	-27 3.7	1.203	2.138	13.2	19.4
5 1	15 30.60	-12 51.7	1.099	2.091	6.7	20.4	5 1	15 32.42	-27 31.9	1.162	2.141	8.6	19.2
5 11	15 21.22	-11 44.4	1.089	2.096	3.1	20.2	5 11	15 21.56	-27 43.2	1.143	2.145	4.7	19.0
5 21	15 11.72	-10 44.6	1.103	2.100	6.5	20.4	5 21	15 10.34	-27 38.0	1.149	2.149	5.6	19.0
5 31	15 3.54	- 9 59.4	1.140	2.106	11.5	20.7	5 31	15 0.43	-27 20.7	1.179	2.154	10.0	19.3
6 10	14 57.80	- 9 33.3	1.198	2.111	16.1	21.0	6 10	14 53.20	-26 58.4	1.230	2.159	14.4	19.5
6 20	14 55.03	- 9 27.5	1.273	2.117	19.9	21.2	6 20	14 49.34	-26 37.7	1.300	2.165	18.3	19.8
19844	2000 <i>ST</i> ₃₁₇		5 12.8 288°34	3°9/ 6.6	18		300145	2006 <i>VO</i> ₆₃		5 12.9 159°05			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
244702	2003 <i>QQ</i> ₂₃		5 12.9 320°40	14.8°/28.9	17		22325	1991 <i>RE</i> ₁₉		5 12.9 273°87	4.4°/15.1	18	
4 11	15 37.25	+ 5 30.2	1.148	2.038	17.3	19.3	4 11	15 46.35	-29 19.6	1.612	2.462	15.3	18.0
4 21	15 34.16	+ 8 55.4	1.090	2.014	15.4	19.1	4 21	15 40.52	-29 35.7	1.526	2.447	11.9	17.8
5 1	15 28.41	+12 10.0	1.055	1.990	14.9	18.9	5 1	15 31.94	-29 35.4	1.461	2.433	8.1	17.5
5 11	15 20.94	+14 55.3	1.041	1.967	16.2	18.9	5 11	15 21.54	-29 17.1	1.420	2.418	4.8	17.3
5 21	15 13.04	+16 56.6	1.047	1.945	18.8	19.0	5 21	15 10.62	-28 41.9	1.405	2.403	5.3	17.3
5 31	15 6.09	+18 5.7	1.070	1.924	22.0	19.1	5 31	15 0.63	-27 54.4	1.416	2.388	9.0	17.5
6 10	15 1.32	+18 23.0	1.107	1.904	25.0	19.3	6 10	14 52.81	-27 1.9	1.450	2.373	13.1	17.7
6 20	14 59.42	+17 54.5	1.154	1.885	27.7	19.4	6 20	14 47.93	-26 11.8	1.505	2.358	16.9	17.8
94420	2001 <i>TO</i> ₃₃		5 12.9 115°38	3.8°/14.8	18		62509	2000 <i>SH</i> ₂₃₇		5 12.9 261°95	0.3°/12.7	18	
4 11	15 48.14	-28 11.8	1.458	2.315	16.3	19.5	4 11	15 43.48	-19 0.0	1.858	2.728	12.7	20.6
4 21	15 41.65	-28 18.3	1.395	2.322	12.4	19.3	4 21	15 37.89	-18 38.2	1.775	2.716	9.2	20.3
5 1	15 32.41	-28 7.3	1.353	2.329	8.0	19.1	5 1	15 30.21	-18 8.7	1.715	2.704	5.1	20.1
5 11	15 21.55	-27 38.6	1.335	2.337	4.3	18.9	5 11	15 21.24	-17 33.8	1.683	2.692	0.8	19.7
5 21	15 10.53	-26 54.9	1.343	2.344	5.0	18.9	5 21	15 11.98	-16 56.8	1.677	2.680	3.8	19.9
5 31	15 0.80	-26 2.3	1.377	2.350	9.0	19.2	5 31	15 3.47	-16 22.0	1.699	2.667	8.1	20.1
6 10	14 53.53	-25 8.8	1.433	2.357	13.2	19.4	6 10	14 56.65	-15 53.8	1.744	2.654	12.0	20.4
6 20	14 49.28	-24 21.0	1.510	2.363	16.8	19.7	6 20	14 52.11	-15 35.3	1.811	2.642	15.4	20.5
158452	2002 <i>CF</i> ₁₂₇		5 12.9 348°03	9.5°/18.1	17		297667	2001 <i>UJ</i> ₇₉		5 12.9 257°12	1.3°/13.6	18	
4 11	15 39.41	-38 26.0	1.234	2.078	19.5	18.9	4 11	15 44.51	-21 57.6	2.305	3.159	11.2	20.9
4 21	15 36.26	-39 4.2	1.161	2.065	16.3	18.7	4 21	15 38.39	-22 14.6	2.216	3.147	8.2	20.7
5 1	15 29.80	-39 13.8	1.105	2.054	12.9	18.4	5 1	15 30.42	-22 25.0	2.151	3.134	4.9	20.5
5 11	15 21.18	-38 50.1	1.070	2.045	10.2	18.3	5 11	15 21.29	-22 28.9	2.114	3.122	1.6	20.2
5 21	15 12.03	-37 53.1	1.055	2.037	9.6	18.2	5 21	15 11.82	-22 27.1	2.106	3.109	3.1	20.3
5 31	15 4.20	-36 29.0	1.062	2.030	11.7	18.3	5 31	15 2.94	-22 21.9	2.126	3.095	6.6	20.5
6 10	14 59.17	-34 49.6	1.089	2.026	15.2	18.5	6 10	14 55.47	-22 16.2	2.172	3.082	10.0	20.7
6 20	14 57.71	-33 7.3	1.135	2.023	18.8	18.7	6 20	14 49.97	-22 12.9	2.241	3.069	12.9	20.8
106462	2000 <i>WP</i> ₄		5 12.9 281°93	4.1°/15.5	18		331920	2004 <i>RH</i> ₁₉₉		5 12.9 252°95	1.4°/13.9	18	
4 11	15 43.25	-31 2.3	2.259	3.089	12.2	19.6	4 11	15 43.48	-25 9.0	2.050	2.904	12.4	20.3
4 21	15 37.58	-31 19.8	2.173	3.082	9.5	19.4	4 21	15 37.79	-24 32.2	1.958	2.889	9.2	20.1
5 1	15 29.98	-31 24.2	2.111	3.074	6.7	19.2	5 1	15 30.12	-23 41.9	1.890	2.873	5.5	19.8
5 11	15 21.17	-31 14.4	2.075	3.066	4.4	19.0	5 11	15 21.24	-22 39.9	1.850	2.857	1.9	19.5
5 21	15 12.08	-30 51.3	2.066	3.058	4.6	19.0	5 21	15 12.10	-21 29.8	1.837	2.840	3.3	19.6
5 31	15 3.70	-30 17.9	2.084	3.050	7.0	19.1	5 31	15 3.71	-20 17.2	1.852	2.824	7.3	19.8
6 10	14 56.87	-29 39.0	2.128	3.043	10.0	19.3	6 10	14 56.93	-19 8.1	1.894	2.807	11.1	20.0
6 20	14 52.15	-28 59.4	2.195	3.035	12.7	19.5	6 20	14 52.32	-18 7.8	1.957	2.789	14.3	20.2
360748	2004 <i>VA</i> ₇₁		5 12.9 236°83	0.1°/12.9	17		474593	2004 <i>PU</i> ₆₂		5 12.9 243°79	2.5°/15.0	18	
4 11	15 48.61	-18 31.5	1.648	2.516	14.1	20.6	4 11	15 42.37	-28 51.4	3.121	3.946	9.3	22.6
4 21	15 41.88	-18 38.8	1.565	2.505	10.3	20.3	4 21	15 36.52	-28 53.5	3.018	3.927	7.1	22.4
5 1	15 32.58	-18 40.0	1.506	2.494	5.8	20.0	5 1	15 29.25	-28 46.2	2.941	3.908	4.8	22.2
5 11	15 21.61	-18 35.9	1.473	2.482	1.0	19.7	5 11	15 21.10	-28 29.3	2.892	3.888	2.8	22.0
5 21	15 10.17	-18 28.4	1.466	2.469	4.1	19.9	5 21	15 12.71	-28 3.9	2.872	3.868	3.1	22.0
5 31	14 59.60	-18 20.6	1.487	2.456	8.9	20.1	5 31	15 4.77	-27 32.1	2.882	3.848	5.3	22.2
6 10	14 51.04	-18 16.7	1.532	2.443	13.3	20.3	6 10	14 57.90	-26 57.2	2.919	3.826	7.8	22.3
6 20	14 45.21	-18 19.8	1.597	2.429	17.0	20.5	6 20	14 52.56	-26 22.4	2.981	3.805	10.1	22.4
31342	1998 <i>MU</i> ₃₁		5 12.9 297°74	5.0°/6.6	18		412837	2014 <i>PP</i> ₄₉		5 12.9 351°68	5.7°/10.2	16	
4 11	15 34.93	+ 7 19.6	4.247	5.080	6.9	17.6	4 11	15 40.37	-10 34.9	0.986	1.896	17.6	20.7
4 21	15 30.76	+ 7 46.1	4.184	5.074	5.8	17.5	4 21	15 36.64	- 9 29.9	0.931	1.890	12.9	20.4
5 1	15 25.84	+ 8 5.1	4.147	5.069	5.1	17.4	5 1	15 29.86	- 8 23.2	0.895	1.886	8.1	20.1
5 11	15 20.51	+ 8 14.8	4.137	5.063	5.1	17.4	5 11	15 21.23	- 7 23.8	0.880	1.882	5.7	20.0
5 21	15 15.13	+ 8 13.8	4.154	5.058	5.7	17.5	5 21	15 12.30	- 6 40.4	0.887	1.879	8.8	20.1
5 31	15 10.06	+ 8 1.4	4.198	5.052	6.8	17.5	5 31	15 4.71	- 6 19.6	0.915	1.878	13.8	20.4
6 10	15 5.64	+ 7 37.8	4.265	5.047	8.0	17.6	6 10	14 59.73	- 6 24.1	0.960	1.878	18.6	20.6
6 20	15 2.12	+ 7 4.0	4.353	5.042	9.1	17.7	6 20	14 58.01	- 6 52.5	1.022	1.879	22.7	20.9
230082	2000 <i>WO</i> ₄₂		5 12.9 225°11	0.1°/12.8	18		93225	2000 <i>SE</i> ₁₄₂		5 12.9 161°75	1.1°/13.8	18	R
4 11	15 43.30	-20 18.5	2.120	2.982	11.6	21.2	4 11	15 43.94	-24 28.6	2.188	3.039	11.8	19.5
4 21	15 37.51	-19 45.6	2.036	2.974	8.4	21.0	4 21	15 37.84	-23 51.7	2.115	3.044	8.6	19.3
5 1	15 29.88	-19 4.2	1.978	2.965	4.7	20.7	5 1	15 30.01	-23 3.4	2.066	3.049	5.1	19.1
5 11	15 21.17	-18 16.6	1.946	2.956	0.7	20.4	5 11	15 21.23	-22 5.9	2.045	3.053	1.6	18.9
5 21	15 12.26	-17 26.3	1.944	2.946	3.3	20.6	5 21	15 12.38	-21 2.7	2.053	3.057	3.1	19.0
5 31	15 4.07	-16 37.6	1.969	2.936	7.3	20.8	5 31	15 4.37	-19 58.9	2.090	3.060	6.7	19.2
6 10	14 57.39	-15 55.1	2.020	2.926	10.8	21.0	6 10	14 57.92	-18 59.5	2.153	3.063	10.1	19.4
6 20	14 52.74	-15 22.0	2.093	2.915	13.9	21.2	6 20	14 53.48	-18 8.5	2.239	3.065	13.0	19.6
380926	2006 <i>HA</i>		5 12.9 8°53	4.6°/11.8	18		44571	1999 <i>FQ</i> ₁₅		5 12.9 115°19	4.2°/9.9	18	
4 11	15 51.36	- 4 3.5	1.637	2.503	14.3	19.3	4 11	15 41.08	- 7 40.2	2.134	3.008	11.1	19.5
4 21	15 43.60	- 4 43.7	1.569	2.504	10.7	19.0	4 21	15 35.72	- 6 52.4	2.074	3.014	8.1	19.3
5 1	15 33.41	- 5 34.5	1.525	2.505	6.9	18.8	5 1	15 28.80	- 6 6.7	2.039	3.019	5.4	19.2
5 11	15 21.75	- 6 37.1	1.508	2.506	4.6	18.7	5 11	15 21.04	- 5 27.2	2.031	3.025	4.2	19.1
5 21	15 9.81	- 7 50.7	1.520	2.508	6.4	18.8	5 21	15 13.21	- 4 57.6	2.051	3.030	5.9	19.2
5 31	14 58.87	- 9 13.7	1.558	2.511	10.1	19.0	5 31	15 6.12	- 4 40.6	2.097	3.035	8.7	19.4
6 10	14 49.97	-10 43.6	1.622	2.513	13.8	19.2	6 10	15 0.42	- 4 37.5	2.167	3.040	11.6	19.6
6 20	14 43.73	-12 18.2	1.708	2.516	17.1	19.5	6 20	14 56.53	- 4 48.3	2.258	3.045	14.1	19.8
319378	2006 <i>DS</i> ₁₃₈		5 12.9 313°51	1.7°/10.7	18		300046						

EPHEMERIDES

5 12.9

5 12.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
84053	2002 <i>PS</i> ₇₁		5 12.9 217°74	4°5/ 9.4 17			98147	2000 <i>SR</i> ₆₄		5 12.9 128°74	2°5/11.6 18		
4 11	15 44.15	- 7 23.7	2.196	3.064	11.1	19.8	4 11	15 46.20	-14 0.1	1.539	2.419	14.3	19.3
4 21	15 37.99	- 6 17.9	2.117	3.053	8.2	19.6	4 21	15 39.93	-13 27.9	1.480	2.426	10.3	19.0
5 1	15 30.13	- 5 12.6	2.064	3.042	5.6	19.4	5 1	15 31.36	-12 52.3	1.443	2.433	5.8	18.8
5 11	15 21.27	- 4 12.7	2.039	3.030	4.6	19.4	5 11	15 21.50	-12 17.3	1.432	2.439	2.5	18.6
5 21	15 12.21	- 3 22.7	2.043	3.016	6.4	19.4	5 21	15 11.53	-11 47.2	1.448	2.445	5.3	18.8
5 31	15 3.81	- 2 46.7	2.074	3.002	9.4	19.6	5 31	15 2.66	-11 26.3	1.489	2.451	9.6	19.0
6 10	14 56.80	- 2 26.7	2.129	2.987	12.3	19.8	6 10	14 55.84	-11 17.7	1.554	2.457	13.6	19.3
6 20	14 51.68	- 2 23.1	2.205	2.972	15.0	19.9	6 20	14 51.61	-11 22.5	1.638	2.462	17.0	19.5
312876	2011 <i>UY</i> ₁₇₇		5 12.9 264°75	0°9/12.3 16			170513	2003 <i>WW</i> ₅₄		5 12.9 269°29	2°6/14.4 18		
4 11	15 42.58	-15 39.9	2.307	3.174	10.7	20.8	4 11	15 43.99	-26 9.6	1.953	2.806	12.9	20.0
4 21	15 36.89	-15 39.3	2.227	3.167	7.7	20.6	4 21	15 38.24	-26 15.2	1.876	2.803	9.7	19.7
5 1	15 29.54	-15 36.0	2.171	3.160	4.3	20.4	5 1	15 30.42	-26 9.0	1.822	2.801	6.1	19.5
5 11	15 21.19	-15 31.5	2.144	3.153	1.0	20.1	5 11	15 21.36	-25 51.1	1.795	2.798	3.0	19.3
5 21	15 12.62	-15 27.5	2.145	3.146	3.3	20.3	5 21	15 12.05	-25 23.5	1.794	2.796	3.8	19.4
5 31	15 4.65	-15 26.3	2.174	3.138	6.9	20.5	5 31	15 3.57	-24 49.8	1.821	2.793	7.3	19.6
6 10	14 58.02	-15 29.8	2.229	3.131	10.1	20.7	6 10	14 56.81	-24 15.0	1.872	2.790	10.9	19.8
6 20	14 53.22	-15 39.6	2.306	3.124	12.9	20.8	6 20	14 52.35	-23 43.8	1.946	2.788	14.0	20.0
211655	2003 <i>UT</i> ₂₄₆		5 12.9 187°01	0°8/12.3 18			19451	1998 <i>FP</i> ₁₂₅		5 12.9 334°26	3°0/10.8 18		
4 11	15 42.75	-17 5.8	2.531	3.393	10.0	21.2	4 11	15 39.99	-15 39.5	1.533	2.421	13.8	17.6
4 21	15 36.82	-16 42.5	2.454	3.392	7.2	21.0	4 21	15 35.57	-14 15.3	1.463	2.414	9.9	17.4
5 1	15 29.41	-16 14.8	2.403	3.391	4.0	20.8	5 1	15 28.98	-12 42.4	1.417	2.408	5.7	17.1
5 11	15 21.16	-15 44.7	2.381	3.390	0.9	20.6	5 11	15 21.12	-11 7.5	1.396	2.401	3.0	16.9
5 21	15 12.79	-15 14.6	2.387	3.388	3.1	20.8	5 21	15 13.09	- 9 38.4	1.401	2.396	5.9	17.1
5 31	15 5.03	-14 47.6	2.423	3.385	6.4	21.0	5 31	15 6.00	- 8 22.8	1.432	2.390	10.2	17.3
6 10	14 58.53	-14 26.3	2.485	3.382	9.4	21.1	6 10	15 0.77	- 7 26.1	1.485	2.386	14.3	17.6
6 20	14 53.72	-14 12.6	2.570	3.378	12.0	21.3	6 20	14 57.94	- 6 50.5	1.557	2.381	17.8	17.8
124624	2001 <i>SG</i> ₅₆		5 12.9 260°27	3°9/10.9 16			391326	2006 <i>TC</i> ₁₁₅		5 12.9 71°62	5°4/ 9.4 17		
4 11	15 45.98	-11 26.9	1.516	2.397	14.4	20.2	4 11	15 41.36	- 3 7.9	2.148	3.018	11.2	21.1
4 21	15 40.09	-10 42.6	1.433	2.380	10.5	19.9	4 21	15 35.83	- 2 26.6	2.101	3.034	8.5	20.9
5 1	15 31.66	- 9 55.6	1.374	2.362	6.4	19.6	5 1	15 28.83	- 1 51.6	2.080	3.050	6.2	20.8
5 11	15 21.56	- 9 11.0	1.340	2.343	3.9	19.4	5 11	15 21.08	- 1 26.8	2.085	3.067	5.4	20.8
5 21	15 11.00	- 8 34.1	1.332	2.324	6.6	19.6	5 21	15 13.35	- 1 15.2	2.117	3.083	6.8	20.9
5 31	15 1.29	- 8 10.3	1.350	2.305	11.1	19.8	5 31	15 6.40	- 1 18.2	2.175	3.099	9.2	21.1
6 10	14 53.58	- 8 2.9	1.389	2.285	15.4	20.0	6 10	15 0.84	- 1 36.0	2.257	3.116	11.7	21.3
6 20	14 48.57	- 8 13.0	1.447	2.265	19.2	20.2	6 20	14 57.06	- 2 7.1	2.360	3.132	14.0	21.4
125206	2001 <i>UQ</i> ₁₄₈		5 12.9 8°36	1°2/12.2 17			501811	2014 <i>WU</i> ₅₄		5 12.9 96°86	1°0/12.3 17		
4 11	15 41.45	-19 39.9	1.106	2.003	17.2	18.9	4 11	15 45.65	-17 55.8	1.789	2.659	13.1	21.5
4 21	15 37.22	-18 39.3	1.049	2.004	12.4	18.7	4 21	15 39.14	-17 16.6	1.739	2.681	9.3	21.3
5 1	15 30.09	-17 24.6	1.012	2.005	6.9	18.3	5 1	15 30.74	-16 30.8	1.713	2.702	5.1	21.1
5 11	15 21.29	-16 2.1	0.997	2.007	1.4	18.0	5 11	15 21.39	-15 42.1	1.714	2.723	1.1	20.8
5 21	15 12.32	-14 40.4	1.006	2.009	5.5	18.3	5 21	15 12.11	-14 54.8	1.743	2.744	4.0	21.1
5 31	15 4.72	-13 29.2	1.038	2.013	11.1	18.6	5 31	15 3.92	-14 13.5	1.800	2.764	8.0	21.3
6 10	14 59.65	-12 35.7	1.090	2.017	16.1	18.9	6 10	14 57.58	-13 42.0	1.880	2.784	11.6	21.6
6 20	14 57.68	-12 3.4	1.160	2.022	20.3	19.2	6 20	14 53.49	-13 22.3	1.982	2.803	14.6	21.8
201718	2003 <i>UL</i> ₁₈₆		5 12.9 195°53	1°7/14.0 18			50229	2000 <i>AQ</i> ₂₄₂		5 12.9 193°21	2°9/11.4 18		
4 11	15 43.63	-24 36.4	2.145	2.997	11.9	20.9	4 11	15 47.89	-12 35.3	1.667	2.541	13.7	18.9
4 21	15 37.77	-24 28.1	2.067	2.996	8.8	20.7	4 21	15 41.12	-12 2.7	1.597	2.540	9.9	18.7
5 1	15 30.07	-24 9.4	2.013	2.995	5.4	20.4	5 1	15 32.05	-11 27.8	1.550	2.538	5.8	18.4
5 11	15 21.28	-23 41.2	1.987	2.993	2.1	20.2	5 11	15 21.63	-10 54.3	1.530	2.535	2.9	18.2
5 21	15 12.32	-23 5.9	1.988	2.991	3.2	20.3	5 21	15 10.98	-10 26.6	1.537	2.531	5.5	18.4
5 31	15 4.11	-22 27.2	2.018	2.989	6.8	20.5	5 31	15 1.30	-10 8.5	1.570	2.527	9.7	18.6
6 10	14 57.47	-21 49.7	2.072	2.986	10.2	20.7	6 10	14 53.55	-10 2.9	1.627	2.522	13.6	18.9
6 20	14 52.90	-21 17.1	2.150	2.984	13.2	20.9	6 20	14 48.34	-10 10.9	1.704	2.516	17.0	19.1
395575	2011 <i>UP</i> ₂₅₁		5 12.9 249°12	2°5/11.4 18			309641	2008 <i>CC</i> ₁₉₂		5 12.9 223°53	0°6/12.4 17		
4 11	15 43.09	-10 10.6	2.417	3.284	10.2	20.7	4 11	15 40.45	-18 19.8	2.351	3.217	10.5	21.1
4 21	15 37.15	-10 9.2	2.339	3.278	7.4	20.5	4 21	15 35.30	-17 47.4	2.275	3.215	7.5	20.9
5 1	15 29.65	-10 9.1	2.286	3.272	4.4	20.3	5 1	15 28.61	-17 9.0	2.224	3.213	4.2	20.6
5 11	15 21.22	-10 12.3	2.262	3.265	2.5	20.3	5 11	15 21.07	-16 27.2	2.201	3.210	0.8	20.4
5 21	15 12.59	-10 20.3	2.266	3.259	4.2	20.2	5 21	15 13.39	-15 45.0	2.206	3.208	3.2	20.6
5 31	15 4.55	-10 34.6	2.299	3.252	7.2	20.4	5 31	15 6.36	-15 6.2	2.240	3.205	6.6	20.8
6 10	14 57.77	-10 56.2	2.357	3.245	10.2	20.6	6 10	15 0.64	-14 33.9	2.299	3.202	9.8	21.0
6 20	14 52.71	-11 25.5	2.438	3.239	12.8	20.7	6 20	14 56.65	-14 10.5	2.381	3.200	12.5	21.2
490275	2008 <i>YT</i> ₄₈		5 12.9 62°51	1°8/11.8 15			224323	2005 <i>UK</i> ₄₃		5 12.9 135°04	5°2/15.0 18		
4 11	15 43.50	-14 23.5	1.855	2.730	12.5	21.7	4 11	15 52.93	-30 28.3	1.965	2.789	14.0	20.6
4 21	15 37.55	-14 2.4	1.808	2.753	8.8	21.5	4 21	15 44.87	-31 36.7	1.894	2.797	11.0	20.4
5 1	15 29.84	-13 38.9	1.786	2.775	4.9	21.3	5 1	15 34.25	-32 32.1	1.846	2.805	7.8	20.2
5 11	15 21.23	-13 15.9	1.790	2.798	1.8	21.1	5 11	15 22.01	-33 11.0	1.826	2.812	5.5	20.1
5 21	15 12.68	-12 56.4	1.822	2.821	4.2	21.3	5 21	15 9.36	-33 31.8	1.834	2.820	5.8	20.1
5 31	15 5.10	-12 43.4	1.881	2.843	7.9	21.6	5 31	14 57.65	-33 36.5	1.869	2.826	8.4	20.3
6 10	14 59.22	-12 39.2	1.964	2.866	11.3	21.8	6 10	14 47.99	-33 29.8	1.930	2.833	11.4	20.5
6 20	14 55.44	-12 44.7	2.068	2.889	14.1	22.1	6 20	14 41.07	-33 17.6	2.013	2.839	14.2	20.7
304749	2006 <i>YZ</i> ₁₇		5 12.9 205°09	1°3/12.1 17			343822						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
479890	2014 <i>HK</i> ₂₂		5 12.9 64°03	0°8/13.2	17		187524	2006 <i>UD</i> ₃₄		5 12.9 78°59	0°3/12.7	17	
4 11	15 46.44	-19 8.7	2.183	3.040	11.5	20.8	4 11	15 45.92	-18 37.8	1.540	2.416	14.5	21.1
4 21	15 39.68	-19 43.3	2.117	3.051	8.4	20.6	4 21	15 39.75	-18 25.5	1.485	2.429	10.4	20.8
5 1	15 31.11	-20 13.5	2.077	3.063	4.8	20.4	5 1	15 31.27	-18 5.9	1.452	2.441	5.8	20.6
5 11	15 21.48	-20 39.0	2.065	3.074	1.2	20.2	5 11	15 21.52	-17 41.4	1.445	2.454	0.9	20.3
5 21	15 11.69	-21 0.1	2.082	3.085	3.1	20.4	5 21	15 11.72	-17 15.5	1.464	2.467	4.1	20.6
5 31	15 2.67	-21 18.3	2.128	3.097	6.7	20.6	5 31	15 3.06	-16 52.5	1.509	2.479	8.7	20.9
6 10	14 55.21	-21 35.6	2.200	3.108	9.9	20.8	6 10	14 56.50	-16 36.5	1.577	2.492	12.7	21.1
6 20	14 49.80	-21 54.3	2.295	3.120	12.7	21.0	6 20	14 52.54	-16 30.1	1.666	2.505	16.1	21.4
468150	2014 <i>WZ</i> ₆₂		5 12.9 112°02	0°1/12.9	17		511202	2013 <i>YU</i> ₁₄₂		5 12.9 269°00	7°2/18.3	18	
4 11	15 45.27	-20 37.0	1.670	2.539	13.9	21.8	4 11	15 48.14	-40 57.3	2.003	2.790	15.1	21.0
4 21	15 39.15	-20 4.3	1.609	2.550	10.0	21.6	4 21	15 41.66	-40 50.6	1.898	2.766	12.7	20.8
5 1	15 30.88	-19 21.7	1.572	2.560	5.6	21.4	5 1	15 32.55	-40 19.0	1.814	2.743	10.0	20.5
5 11	15 21.44	-18 32.4	1.561	2.570	0.9	21.1	5 11	15 21.76	-39 19.5	1.753	2.718	7.8	20.3
5 21	15 11.94	-17 40.7	1.577	2.580	3.8	21.3	5 21	15 10.58	-37 52.7	1.719	2.693	7.3	20.3
5 31	15 3.53	-16 52.2	1.620	2.590	8.3	21.6	5 31	15 0.37	-36 3.8	1.712	2.668	9.1	20.3
6 10	14 57.07	-16 11.8	1.686	2.599	12.2	21.8	6 10	14 52.30	-34 2.3	1.730	2.642	12.0	20.4
6 20	14 53.07	-15 42.9	1.774	2.608	15.5	22.1	6 20	14 47.04	-31 58.5	1.772	2.616	15.1	20.6
483346	2016 <i>QF</i> ₇₈		5 12.9 306°21	5°0/ 9.0	18		417609	2006 <i>WD</i> ₂₁		5 12.9 225°57	2°0/11.7	17	
4 11	15 39.60	- 9 45.8	1.728	2.615	12.6	20.8	4 11	15 44.71	-14 49.9	1.821	2.695	12.7	21.4
4 21	15 35.21	- 8 15.6	1.644	2.592	9.3	20.6	4 21	15 38.76	-14 17.6	1.744	2.688	9.2	21.2
5 1	15 28.80	- 6 41.4	1.585	2.569	6.2	20.3	5 1	15 30.74	-13 41.1	1.692	2.681	5.2	20.9
5 11	15 21.13	- 5 10.2	1.551	2.546	5.1	20.2	5 11	15 21.46	-13 3.4	1.665	2.673	2.0	20.7
5 21	15 13.13	- 3 49.5	1.544	2.523	7.5	20.3	5 21	15 11.93	-12 28.7	1.667	2.665	4.6	20.8
5 31	15 5.84	- 2 45.9	1.563	2.501	11.1	20.5	5 31	15 3.22	-12 0.9	1.695	2.656	8.7	21.1
6 10	15 0.14	- 2 3.5	1.603	2.479	14.8	20.6	6 10	14 56.23	-11 43.7	1.747	2.647	12.6	21.3
6 20	14 56.64	- 1 43.6	1.662	2.458	18.0	20.8	6 20	14 51.51	-11 38.7	1.820	2.638	15.8	21.5
416013	2002 <i>CU</i> ₆₇		5 12.9 146°26	7°4/ 8.3	17		133962	2004 <i>TT</i> ₁₃₆		5 12.9 183°34	3°3/14.9	18	
4 11	15 43.80	+ 1 36.5	1.989	2.851	12.4	21.0	4 11	15 45.92	-28 43.0	2.168	3.004	12.4	21.0
4 21	15 37.73	+ 2 29.6	1.936	2.857	9.9	20.9	4 21	15 39.51	-28 52.2	2.089	3.004	9.5	20.8
5 1	15 29.97	+ 3 12.6	1.908	2.862	7.9	20.7	5 1	15 31.11	-28 48.8	2.034	3.004	6.3	20.6
5 11	15 21.29	+ 3 40.3	1.905	2.868	7.5	20.7	5 11	15 21.52	-28 32.3	2.006	3.004	3.6	20.4
5 21	15 12.56	+ 3 49.4	1.928	2.873	8.8	20.8	5 21	15 11.73	-28 4.1	2.006	3.003	4.0	20.5
5 31	15 4.66	+ 3 38.4	1.976	2.878	11.2	21.0	5 31	15 2.73	-27 27.8	2.033	3.002	7.0	20.6
6 10	14 58.30	+ 3 8.1	2.047	2.882	13.6	21.1	6 10	14 55.39	-26 48.2	2.087	3.000	10.2	20.8
6 20	14 53.92	+ 2 20.9	2.137	2.886	15.9	21.3	6 20	14 50.26	-26 10.2	2.163	2.998	13.1	21.0
153433	2001 <i>QR</i> ₂₁₈		5 12.9 194°07	2°8/10.9	17		364890	2008 <i>EF</i> ₆₂		5 12.9 153°82	2°4/10.9	17	
4 11	15 43.94	-11 40.3	2.231	3.099	10.9	21.5	4 11	15 39.95	-12 53.0	2.469	3.340	9.9	21.5
4 21	15 37.81	-10 55.9	2.157	3.097	7.9	21.3	4 21	15 34.81	-12 3.2	2.401	3.343	7.1	21.3
5 1	15 30.03	-10 9.8	2.109	3.094	4.7	21.1	5 1	15 28.31	-11 11.2	2.360	3.347	4.1	21.2
5 11	15 21.31	- 9 25.6	2.089	3.091	2.8	20.9	5 11	15 21.06	-10 20.4	2.346	3.350	2.4	21.0
5 21	15 12.45	- 8 47.1	2.097	3.086	4.8	21.1	5 21	15 13.74	- 9 34.4	2.361	3.352	4.2	21.2
5 31	15 4.29	- 8 17.6	2.133	3.081	8.0	21.3	5 31	15 7.05	- 8 56.5	2.405	3.355	7.1	21.4
6 10	14 57.53	- 7 59.6	2.195	3.075	11.2	21.4	6 10	15 1.57	- 8 29.0	2.473	3.357	9.9	21.5
6 20	14 52.63	- 7 54.0	2.278	3.069	13.9	21.6	6 20	14 57.69	- 8 13.2	2.564	3.360	12.4	21.7
523218	2016 <i>WF</i> ₁₁		5 12.9 184°26	5°5/17.5	18		395222	2010 <i>LE</i> ₅₃		5 12.9 274°96	2°1/14.5	17	
4 11	15 44.35	-38 13.9	2.633	3.422	11.8	21.1	4 11	15 41.13	-26 43.2	2.338	3.185	11.3	20.9
4 21	15 38.23	-38 26.8	2.550	3.422	9.7	20.9	4 21	15 35.94	-26 25.5	2.252	3.176	8.5	20.7
5 1	15 30.31	-38 23.4	2.490	3.422	7.5	20.8	5 1	15 29.06	-25 56.1	2.190	3.168	5.3	20.4
5 11	15 21.36	-38 2.7	2.456	3.421	5.9	20.7	5 11	15 21.19	-25 16.2	2.156	3.160	2.5	20.2
5 21	15 12.24	-37 25.4	2.449	3.421	5.6	20.7	5 21	15 13.14	-24 28.1	2.149	3.151	3.2	20.3
5 31	15 3.87	-36 34.6	2.469	3.420	7.0	20.7	5 31	15 5.75	-23 35.7	2.171	3.143	6.3	20.5
6 10	14 57.01	-35 35.3	2.516	3.418	9.1	20.9	6 10	14 59.76	-22 43.9	2.218	3.134	9.5	20.6
6 20	14 52.17	-34 32.9	2.586	3.417	11.3	21.0	6 20	14 55.65	-21 56.7	2.289	3.126	12.4	20.8
441390	2008 <i>FK</i> ₂₄		5 12.9 320°64	2°2/11.5	16		376327	2011 <i>GM</i> ₆₁		5 12.9 122°45	4°6/10.2	17	
4 11	15 40.75	-12 34.4	2.156	3.030	11.0	21.2	4 11	15 44.43	- 5 58.6	1.982	2.853	12.0	21.3
4 21	15 35.65	-12 17.3	2.079	3.023	7.9	21.0	4 21	15 38.21	- 5 26.7	1.926	2.863	8.9	21.1
5 1	15 28.88	-11 59.1	2.028	3.016	4.6	20.7	5 1	15 30.25	- 4 59.1	1.895	2.873	6.0	20.9
5 11	15 21.13	-11 42.5	2.004	3.009	2.2	20.6	5 11	15 21.37	- 4 39.7	1.891	2.883	4.7	20.9
5 21	15 13.19	-11 29.9	2.007	3.003	4.3	20.7	5 21	15 12.45	- 4 31.3	1.914	2.892	6.3	21.0
5 31	15 5.89	-11 24.0	2.038	2.996	7.7	20.9	5 31	15 4.38	- 4 36.0	1.964	2.901	9.3	21.2
6 10	14 59.95	-11 26.7	2.093	2.990	10.9	21.1	6 10	14 57.88	- 4 54.2	2.037	2.910	12.2	21.4
6 20	14 55.86	-11 38.9	2.170	2.984	13.7	21.2	6 20	14 53.40	- 5 25.0	2.132	2.918	14.8	21.6
143766	2003 <i>WZ</i> ₃₃		5 12.9 337°01	2°6/14.1	17		191797	2004 <i>TQ</i> ₂₀₃		5 12.9 251°62	0°3/13.1	18	
4 11	15 41.41	-25 1.8	1.178	2.063	17.4	19.1	4 11	15 43.74	-20 58.3	2.053	2.915	12.0	20.8
4 21	15 37.45	-24 57.7	1.106	2.051	13.0	18.8	4 21	15 38.01	-20 36.5	1.964	2.901	8.7	20.6
5 1	15 30.42	-24 36.6	1.054	2.040	8.0	18.5	5 1	15 30.32	-20 5.8	1.899	2.886	5.0	20.3
5 11	15 21.42	-23 58.9	1.023	2.030	3.2	18.2	5 11	15 21.41	-19 28.0	1.861	2.870	1.0	20.0
5 21	15 11.94	-23 8.7	1.016	2.021	4.9	18.3	5 21	15 12.21	-18 46.1	1.851	2.854	3.3	20.1
5 31	15 3.64	-22 13.0	1.032	2.013	10.2	18.5	5 31	15 3.68	-18 4.2	1.869	2.838	7.4	20.4
6 10	14 57.89	-21 20.7	1.069	2.006	15.3	18.8	6 10	14 56.71	-17 26.9	1.912	2.822	11.1	20.6
6 20	14 55.42	-20 38.7	1.123	2.001	19.7	19.0	6 20	14 51.86	-16 57.8	1.977	2.805	14.4	20.7
377791	2006 <i>AW</i> ₂₀		5 12.9 182°03	5°2/ 9.8	17		168520 </						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
134407	1998 <i>BV</i> ₉		5 12.9 186°80	1.5/11.8	18	R	352015	2006 <i>VP</i> ₇		5 12.9 148°46	0.2/12.7	18	
4 11	15 41.84	-14 55.3	2.365	3.233	10.4	20.4	4 11	15 41.74	-18 26.4	2.779	3.637	9.4	21.8
4 21	15 36.27	-14 26.4	2.291	3.232	7.4	20.2	4 21	15 36.01	-18 12.1	2.709	3.645	6.7	21.7
5 1	15 29.18	-13 54.3	2.243	3.232	4.2	20.0	5 1	15 28.97	-17 53.4	2.666	3.653	3.7	21.5
5 11	15 21.23	-13 21.5	2.223	3.231	1.6	19.8	5 11	15 21.21	-17 31.7	2.651	3.660	0.6	21.2
5 21	15 13.15	-12 51.0	2.232	3.230	3.7	19.9	5 21	15 13.38	-17 9.1	2.665	3.667	2.6	21.4
5 31	15 5.72	-12 25.7	2.269	3.228	7.0	20.1	5 31	15 6.14	-16 47.9	2.709	3.673	5.7	21.6
6 10	14 59.59	-12 8.3	2.332	3.226	10.0	20.3	6 10	15 0.04	-16 30.6	2.779	3.680	8.4	21.8
6 20	14 55.20	-12 0.3	2.416	3.224	12.7	20.5	6 20	14 55.49	-16 19.0	2.873	3.685	10.8	22.0
10154	Tanuki		5 12.9 153°51	1.4/12.2	18		107545	2001 <i>DB</i> ₇₁		5 12.9 105°95	2°3/11.4	17	
4 11	15 47.12	-16 30.9	1.603	2.478	14.1	18.3	4 11	15 43.16	-13 46.8	2.029	2.901	11.7	20.1
4 21	15 40.60	-16 3.3	1.540	2.483	10.1	18.1	4 21	15 37.28	-13 4.9	1.973	2.916	8.3	19.9
5 1	15 31.78	-15 29.8	1.499	2.489	5.6	17.8	5 1	15 29.74	-12 20.5	1.943	2.931	4.7	19.7
5 11	15 21.66	-14 53.6	1.485	2.494	1.5	17.5	5 11	15 21.33	-11 37.1	1.939	2.945	2.3	19.5
5 21	15 11.39	-14 18.9	1.498	2.498	4.5	17.8	5 21	15 12.93	-10 58.5	1.964	2.959	4.5	19.7
5 31	15 2.20	-13 50.2	1.536	2.502	9.1	18.0	5 31	15 5.38	-10 28.3	2.017	2.973	7.9	19.9
6 10	14 55.04	-13 31.5	1.599	2.505	13.1	18.3	6 10	14 59.38	-10 9.0	2.093	2.986	11.1	20.2
6 20	14 50.45	-13 24.9	1.682	2.508	16.6	18.5	6 20	14 55.34	-10 1.6	2.192	2.999	13.8	20.4
416184	2002 <i>SR</i> ₇₂		5 12.9 183°90	0.4/12.6	17		268345	2005 <i>SK</i> ₂₁₂		5 12.9 51°76	2°5/14.1	17	
4 11	15 46.28	-18 13.4	2.009	2.872	12.2	22.3	4 11	15 46.34	-24 12.5	1.588	2.451	14.8	20.8
4 21	15 39.72	-17 57.3	1.934	2.873	8.8	22.1	4 21	15 40.27	-24 32.5	1.523	2.457	11.0	20.6
5 1	15 31.21	-17 35.1	1.885	2.873	4.9	21.9	5 1	15 31.71	-24 41.3	1.481	2.463	6.8	20.3
5 11	15 21.57	-17 8.8	1.862	2.872	0.8	21.6	5 11	15 21.68	-24 38.5	1.463	2.469	2.9	20.1
5 21	15 11.74	-16 41.1	1.869	2.871	3.6	21.8	5 21	15 11.43	-24 25.7	1.473	2.475	4.2	20.2
5 31	15 2.73	-16 15.6	1.903	2.869	7.6	22.0	5 31	15 2.25	-24 6.8	1.507	2.481	8.4	20.4
6 10	14 55.37	-15 55.9	1.962	2.866	11.2	22.2	6 10	14 55.19	-23 46.9	1.566	2.488	12.4	20.7
6 20	14 50.18	-15 44.5	2.044	2.863	14.3	22.4	6 20	14 50.86	-23 30.8	1.645	2.495	15.8	20.9
503163	2015 <i>GK</i> ₃₇		5 12.9 195°06	3°3/10.8	17		139677	2001 <i>QB</i> ₂₀₅		5 12.9 236°42	3°1/15.2	18	
4 11	15 42.28	-10 35.4	2.003	2.879	11.7	21.1	4 11	15 43.20	-29 24.5	2.281	3.117	11.9	20.1
4 21	15 36.78	-9 56.0	1.935	2.878	8.4	20.9	4 21	15 37.53	-29 20.0	2.196	3.111	9.1	19.9
5 1	15 29.54	-9 16.3	1.892	2.877	5.1	20.7	5 1	15 30.01	-29 2.2	2.134	3.104	6.1	19.7
5 11	15 21.30	-8 40.1	1.875	2.877	3.3	20.6	5 11	15 21.40	-28 31.4	2.100	3.097	3.5	19.5
5 21	15 12.93	-8 11.2	1.887	2.875	5.3	20.7	5 21	15 12.58	-27 49.3	2.093	3.090	3.8	19.5
5 31	15 5.30	-7 52.8	1.924	2.874	8.6	20.9	5 31	15 4.48	-26 59.9	2.113	3.083	6.6	19.7
6 10	14 59.18	-7 46.9	1.986	2.873	11.9	21.1	6 10	14 57.89	-26 8.0	2.160	3.076	9.8	19.8
6 20	14 55.04	-7 54.0	2.069	2.872	14.7	21.3	6 20	14 53.34	-25 18.7	2.230	3.068	12.6	20.0
391115	2005 <i>VL</i> ₅₀		5 12.9 269°20	2°6/14.4	17		276471	2003 <i>KL</i> ₃		5 12.9 57°69	7°0/9.8	17	
4 11	15 44.06	-26 4.4	2.361	3.204	11.3	20.3	4 11	15 45.59	-0 43.7	1.672	2.543	13.8	20.3
4 21	15 38.11	-26 28.8	2.276	3.197	8.5	20.1	4 21	15 39.35	-0 17.9	1.616	2.546	10.7	20.1
5 1	15 30.35	-26 44.3	2.215	3.190	5.5	19.9	5 1	15 31.03	-0 2.5	1.582	2.550	8.0	20.0
5 11	15 21.44	-26 50.2	2.183	3.184	2.9	19.7	5 11	15 21.56	-0 2.2	1.574	2.554	7.0	19.9
5 21	15 12.25	-26 47.2	2.178	3.177	3.6	19.7	5 21	15 11.98	-0 19.8	1.592	2.558	8.6	20.0
5 31	15 3.68	-26 37.3	2.201	3.170	6.5	19.9	5 31	15 3.37	-0 56.1	1.634	2.562	11.5	20.2
6 10	14 56.52	-26 24.1	2.251	3.163	9.6	20.1	6 10	14 56.59	-1 49.6	1.699	2.566	14.5	20.4
6 20	14 51.33	-26 11.0	2.323	3.156	12.3	20.3	6 20	14 52.14	-2 57.5	1.783	2.570	17.3	20.6
470115	2006 <i>TH</i> ₁₁₇		5 12.9 102°88	4°1/10.1	17		384007	2008 <i>UX</i> ₅₂		5 12.9 199°78	0°2/13.0	17	
4 11	15 41.23	-6 52.2	2.230	3.103	10.8	21.9	4 11	15 42.70	-20 48.3	2.040	2.904	12.0	21.5
4 21	15 35.83	-6 17.1	2.169	3.108	7.9	21.7	4 21	15 37.16	-20 20.3	1.965	2.903	8.7	21.3
5 1	15 28.93	-5 44.9	2.133	3.113	5.3	21.5	5 1	15 29.79	-19 43.8	1.914	2.902	4.9	21.0
5 11	15 21.20	-5 19.3	2.125	3.118	4.1	21.5	5 11	15 21.38	-19 0.9	1.891	2.900	0.9	20.7
5 21	15 13.40	-5 3.1	2.143	3.123	5.7	21.6	5 21	15 12.81	-18 15.1	1.895	2.898	3.3	20.9
5 31	15 6.28	-4 58.5	2.189	3.127	8.4	21.8	5 31	15 5.02	-17 30.7	1.927	2.897	7.2	21.2
6 10	15 0.50	-5 6.5	2.259	3.132	11.2	21.9	6 10	14 58.79	-16 52.1	1.985	2.895	10.8	21.4
6 20	14 56.47	-5 26.8	2.350	3.137	13.6	22.1	6 20	14 54.62	-16 22.4	2.064	2.893	13.8	21.6
241514	2009 <i>DX</i> ₆₉		5 12.9 223°72	5°5/8.5	18		86893	2000 <i>HK</i> ₃₃		5 12.9 279°88	0°3/13.1	18	R
4 11	15 40.47	-3 32.5	2.242	3.112	10.8	20.7	4 11	15 44.03	-20 46.7	1.688	2.559	13.7	19.4
4 21	15 35.32	-2 29.4	2.175	3.108	8.3	20.5	4 21	15 38.62	-20 27.9	1.602	2.543	10.0	19.1
5 1	15 28.67	-1 30.5	2.134	3.104	6.1	20.4	5 1	15 30.85	-19 59.1	1.538	2.527	5.7	18.8
5 11	15 21.16	-0 40.8	2.120	3.099	5.6	20.3	5 11	15 21.58	-19 22.1	1.501	2.510	1.1	18.4
5 21	15 13.53	-0 4.2	2.133	3.094	7.1	20.4	5 21	15 11.90	-18 40.4	1.490	2.493	3.9	18.6
5 31	15 6.55	+0 16.3	2.172	3.089	9.6	20.6	5 31	15 3.02	-17 58.9	1.505	2.477	8.6	18.8
6 10	15 0.85	+0 19.7	2.235	3.084	12.2	20.7	6 10	14 55.99	-17 23.1	1.544	2.460	12.9	19.1
6 20	14 56.87	+0 6.9	2.317	3.079	14.5	20.9	6 20	14 51.49	-16 57.2	1.603	2.443	16.6	19.3
133240	2003 <i>QU</i> ₁₁₀		5 12.9 286°44	4°1/14.4	18		156343	2001 <i>XE</i> ₁₆₃		5 12.9 177°68	2°4/11.6	17	
4 11	15 47.84	-26 35.9	1.456	2.317	16.1	19.7	4 11	15 44.45	-13 4.1	1.893	2.767	12.3	20.8
4 21	15 42.00	-27 10.3	1.367	2.297	12.3	19.4	4 21	15 38.45	-12 39.1	1.825	2.768	8.9	20.6
5 1	15 33.06	-27 31.9	1.299	2.277	8.1	19.1	5 1	15 30.54	-12 12.1	1.780	2.768	5.1	20.4
5 11	15 21.95	-27 38.0	1.256	2.257	4.5	18.9	5 11	15 21.51	-11 46.4	1.763	2.769	2.4	20.2
5 21	15 10.04	-27 28.3	1.237	2.237	5.4	18.9	5 21	15 12.32	-11 25.0	1.773	2.769	4.7	20.4
5 31	14 58.98	-27 6.3	1.243	2.217	9.8	19.0	5 31	15 3.96	-11 11.4	1.810	2.769	8.5	20.6
6 10	14 50.26	-26 38.4	1.272	2.196	14.4	19.2	6 10	14 57.24	-11 7.7	1.872	2.768	12.0	20.8
6 20	14 44.77	-26 11.8	1.320	2.176	18.6	19.4	6 20	14 52.69	-11 15.3	1.954	2.768	15.0	21.0
103001	1999 <i>XW</i> ₉₅		5 12.9 201°52	6°0/18.7	18		121556	1999 <i>VX</i> ₄₁		5 12.9 271°33	1°2/13.		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
476389	2008 CG ₁₂₇		5 12.9 346°85	5°6/ 8.8	17		267397	2002 AT ₁₆		5 12.9 58°77	9°2/ 8.8	18	
4 11	15 39.50	- 4 10.9	2.033	2.910	11.5	20.9	4 11	15 45.23	+ 3 34.4	1.538	2.405	15.0	20.0
4 21	15 34.77	- 3 12.2	1.970	2.907	8.7	20.7	4 21	15 38.99	+ 4 23.8	1.505	2.426	12.1	19.8
5 1	15 28.43	- 2 18.2	1.932	2.905	6.4	20.5	5 1	15 30.77	+ 4 57.4	1.494	2.447	9.8	19.8
5 11	15 21.18	- 1 33.7	1.920	2.903	5.7	20.5	5 11	15 21.57	+ 5 9.5	1.507	2.468	9.3	19.8
5 21	15 13.81	- 1 2.9	1.934	2.901	7.3	20.6	5 21	15 12.51	+ 4 57.4	1.544	2.489	10.6	19.9
5 31	15 7.14	- 0 48.7	1.974	2.899	9.9	20.7	5 31	15 4.63	+ 4 21.2	1.605	2.511	13.0	20.1
6 10	15 1.86	- 0 52.0	2.037	2.898	12.7	20.9	6 10	14 58.70	+ 3 23.8	1.686	2.532	15.6	20.3
6 20	14 58.41	- 1 11.8	2.119	2.897	15.2	21.1	6 20	14 55.13	+ 2 9.8	1.786	2.554	17.9	20.5
263332	2008 CS ₇₃		5 12.9 25°68	6°3/ 8.9	17		501888	2014 WB ₄₂₀		5 12.9 102°58	7°7/ 8.6	18	
4 11	15 39.95	- 2 54.2	1.816	2.695	12.5	19.4	4 11	15 45.59	+ 2 50.1	1.945	2.801	12.8	21.0
4 21	15 35.16	- 2 0.7	1.766	2.703	9.6	19.2	4 21	15 38.96	+ 3 39.6	1.906	2.822	10.2	20.9
5 1	15 28.65	- 1 14.3	1.740	2.711	7.1	19.1	5 1	15 30.67	+ 4 16.9	1.891	2.842	8.3	20.8
5 11	15 21.22	- 0 40.3	1.739	2.720	6.4	19.1	5 11	15 21.56	+ 4 37.4	1.903	2.862	7.8	20.8
5 21	15 13.75	- 0 22.4	1.764	2.729	7.9	19.2	5 21	15 12.55	+ 4 38.2	1.940	2.881	9.1	20.9
5 31	15 7.13	- 0 22.8	1.813	2.739	10.6	19.4	5 31	15 4.49	+ 4 18.8	2.002	2.900	11.2	21.1
6 10	15 2.05	- 0 41.5	1.885	2.750	13.4	19.6	6 10	14 58.07	+ 3 40.7	2.087	2.918	13.6	21.3
6 20	14 58.96	- 1 16.6	1.976	2.761	15.9	19.7	6 20	14 53.67	+ 2 47.0	2.191	2.936	15.7	21.5
370948	2005 SQ ₄₄		5 12.9 111°58	0°1/12.9	17		489083	2006 AZ ₉₃		5 12.9 93°81	6°5/21.9	18	
4 11	15 45.32	-20 24.7	1.946	2.809	12.5	21.6	4 11	15 44.25	-54 15.9	4.602	5.249	8.9	20.9
4 21	15 38.94	-19 55.2	1.889	2.826	9.0	21.4	4 21	15 37.98	-54 56.3	4.520	5.251	8.1	20.8
5 1	15 30.73	-19 17.4	1.855	2.843	5.0	21.2	5 1	15 30.21	-55 23.0	4.458	5.253	7.3	20.8
5 11	15 21.56	-18 34.1	1.849	2.859	0.8	21.0	5 11	15 21.51	-55 34.2	4.419	5.254	6.8	20.7
5 21	15 12.40	-17 48.8	1.872	2.875	3.4	21.2	5 21	15 12.58	-55 29.4	4.404	5.256	6.5	20.7
5 31	15 4.21	-17 6.1	1.922	2.890	7.3	21.5	5 31	15 4.14	-55 9.6	4.413	5.257	6.7	20.7
6 10	14 57.75	-16 30.0	1.997	2.905	10.8	21.7	6 10	14 56.85	-54 37.3	4.446	5.259	7.2	20.8
6 20	14 53.44	-16 3.4	2.094	2.919	13.8	21.9	6 20	14 51.18	-53 55.8	4.501	5.260	8.0	20.8
296492	2009 JS ₁		5 12.9 88°95	5°6/ 9.0	18		188965	2007 YY ₅₆		5 12.9 324°44	2°6/10.4	18	
4 11	15 47.43	-16 16.9	1.042	1.938	18.2	19.8	4 11	15 36.36	- 6 16.4	3.838	4.700	6.9	19.3
4 21	15 41.24	-13 12.8	0.999	1.954	12.9	19.5	4 21	15 31.96	- 6 7.3	3.760	4.693	5.1	19.2
5 1	15 32.20	- 9 55.8	0.980	1.970	7.7	19.3	5 1	15 26.69	- 6 0.7	3.709	4.686	3.4	19.0
5 11	15 21.79	- 6 43.5	0.985	1.985	5.8	19.2	5 11	15 20.93	- 5 58.0	3.687	4.679	2.6	19.0
5 21	15 11.64	- 3 53.7	1.016	2.001	9.5	19.5	5 21	15 15.07	- 6 0.6	3.694	4.672	3.6	19.0
5 31	15 3.24	- 1 39.9	1.071	2.016	14.4	19.8	5 31	15 9.54	- 6 9.4	3.729	4.665	5.4	19.1
6 10	14 57.59	- 0 7.4	1.146	2.031	18.8	20.1	6 10	15 4.73	- 6 25.0	3.791	4.658	7.2	19.3
6 20	14 55.07	+ 0 45.7	1.237	2.045	22.4	20.4	6 20	15 0.91	- 6 47.3	3.877	4.652	8.9	19.4
224519	2005 WH ₇₂		5 12.9 230°33	6°2/ 9.2	18		184298	2005 ES ₆₀		5 12.9 38°61	1°7/13.7	17	
4 11	15 45.04	- 1 36.4	2.033	2.897	12.0	20.9	4 11	15 44.82	-23 11.7	1.246	2.127	16.9	20.0
4 21	15 38.82	- 0 55.7	1.959	2.887	9.3	20.7	4 21	15 39.51	-23 3.8	1.192	2.137	12.4	19.8
5 1	15 30.76	- 0 22.0	1.910	2.876	7.0	20.5	5 1	15 31.40	-22 41.9	1.159	2.147	7.3	19.5
5 11	15 21.60	+ 0 0.1	1.887	2.864	6.3	20.4	5 11	15 21.72	-22 8.1	1.149	2.157	2.3	19.2
5 21	15 12.20	+ 0 7.1	1.891	2.853	7.8	20.5	5 21	15 11.92	-21 26.5	1.164	2.169	4.4	19.4
5 31	15 3.51	- 0 3.1	1.921	2.840	10.5	20.7	5 31	15 3.50	-20 43.6	1.202	2.180	9.5	19.7
6 10	14 56.31	- 0 30.8	1.975	2.827	13.4	20.8	6 10	14 57.58	-20 6.2	1.263	2.193	14.1	20.0
6 20	14 51.12	- 1 14.2	2.048	2.814	16.0	21.0	6 20	14 54.69	-19 39.2	1.342	2.205	17.9	20.3
338553	2003 SK ₅₃		5 12.9 320°21	3°3/10.7	16		164664	1996 TH ₁₇		5 12.9 106°58	4°4/15.4	18	
4 11	15 39.18	-16 2.5	1.362	2.256	14.8	21.2	4 11	15 49.45	-30 15.4	1.619	2.461	15.6	20.6
4 21	15 35.67	-14 39.2	1.262	2.216	10.8	20.8	4 21	15 42.45	-30 23.9	1.561	2.478	12.0	20.4
5 1	15 29.49	-13 0.9	1.184	2.176	6.3	20.4	5 1	15 32.90	-30 14.5	1.524	2.493	8.1	20.2
5 11	15 21.44	-11 13.9	1.130	2.136	3.3	20.1	5 11	15 21.96	-29 46.6	1.512	2.509	4.8	20.0
5 21	15 12.67	- 9 27.1	1.101	2.097	6.8	20.2	5 21	15 10.96	-29 2.9	1.527	2.524	5.1	20.1
5 31	15 4.58	- 7 51.4	1.096	2.058	12.2	20.4	5 31	15 1.26	-28 9.0	1.568	2.538	8.4	20.3
6 10	14 58.45	- 6 36.0	1.112	2.021	17.3	20.6	6 10	14 53.88	-27 12.5	1.633	2.552	12.1	20.5
6 20	14 55.16	- 5 46.0	1.144	1.984	21.9	20.7	6 20	14 49.35	-26 20.1	1.719	2.566	15.4	20.8
20076	1994 BH ₁		5 12.9 59°58	5°8/15.7	18		471892	2013 AY ₁₆₂		5 12.9 223°51	6°3/ 7.4	18	
4 11	15 48.21	-31 20.7	1.442	2.289	16.9	18.1	4 11	15 39.76	+ 0 18.2	2.455	3.317	10.3	21.6
4 21	15 42.03	-31 54.4	1.377	2.294	13.3	17.9	4 21	15 34.75	+ 1 25.7	2.391	3.312	8.2	21.5
5 1	15 32.90	-32 9.1	1.333	2.299	9.4	17.7	5 1	15 28.37	+ 2 26.6	2.352	3.307	6.6	21.4
5 11	15 21.96	-32 2.2	1.312	2.305	6.2	17.5	5 11	15 21.22	+ 3 16.3	2.340	3.301	6.4	21.3
5 21	15 10.73	-31 34.6	1.317	2.310	6.4	17.5	5 21	15 13.95	+ 3 50.9	2.355	3.296	7.7	21.4
5 31	15 0.78	-30 51.6	1.345	2.316	9.6	17.7	5 31	15 7.26	+ 4 8.2	2.395	3.290	9.8	21.5
6 10	14 53.36	-30 1.4	1.397	2.321	13.4	17.9	6 10	15 1.74	+ 4 7.6	2.459	3.284	12.0	21.7
6 20	14 49.15	-29 12.0	1.468	2.327	16.9	18.2	6 20	14 57.78	+ 3 50.3	2.542	3.277	14.0	21.8
301168	2008 YT ₆₅		5 12.9 292°42	4°8/15.8	16		498168	2007 TY ₁₇₉		5 12.9 141°01	1°9/11.1	18	
4 11	15 44.79	-32 16.0	2.137	2.964	12.9	20.7	4 11	15 41.22	-12 50.6	3.118	3.979	8.4	22.8
4 21	15 38.92	-32 44.2	2.055	2.959	10.2	20.5	4 21	15 35.46	-12 7.1	3.057	3.994	6.0	22.7
5 1	15 30.94	-32 58.0	1.996	2.954	7.4	20.3	5 1	15 28.63	-11 22.2	3.024	4.009	3.5	22.6
5 11	15 21.64	-32 56.1	1.963	2.949	5.2	20.1	5 11	15 21.25	-10 38.4	3.020	4.023	1.9	22.5
5 21	15 12.02	-32 38.7	1.956	2.944	5.2	20.1	5 21	15 13.87	- 9 58.3	3.046	4.036	3.4	22.6
5 31	15 3.17	-32 8.8	1.976	2.940	7.5	20.3	5 31	15 7.04	- 9 24.4	3.102	4.049	5.8	22.8
6 10	14 56.01	-31 31.5	2.021	2.935	10.4	20.4	6 10	15 1.23	- 8 58.4	3.184	4.061	8.2	22.9
6 20	14 51.13	-30 52.2	2.089	2.930	13.2	20.6	6 20	14 56.75	- 8 41.5	3.291	4.072	10.2	23.1
436545	2011 GZ ₄₈		5 12.9 104°96	6°0/15.9	17		506479	2003 HB ₅₇		5 12.9 1°91	0°2/10.6	17	
4 11	15 51.31	-33											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
59891	1999 <i>RF</i> ₁₃₅		5 12.9 209°38	7.4/5.2	18		132425	2002 <i>GJ</i> ₁₄₇		5 12.9 202°80	5°0/8.8	18	
4 11	15 39.37	+ 7 10.2	2.783	3.623	9.9	19.4	4 11	15 42.39	- 4 18.5	2.465	3.329	10.2	20.2
4 21	15 34.34	+ 8 23.0	2.725	3.618	8.4	19.3	4 21	15 36.63	- 3 15.2	2.394	3.324	7.7	20.1
5 1	15 28.09	+ 9 25.9	2.692	3.613	7.5	19.2	5 1	15 29.43	- 2 15.1	2.349	3.318	5.6	19.9
5 11	15 21.17	+10 14.2	2.686	3.608	7.6	19.2	5 11	15 21.41	- 1 22.5	2.331	3.312	5.0	19.9
5 21	15 14.15	+10 44.8	2.705	3.602	8.6	19.2	5 21	15 13.26	- 0 41.3	2.343	3.305	6.5	19.9
5 31	15 7.65	+10 56.1	2.749	3.595	10.2	19.3	5 31	15 5.71	- 0 14.5	2.381	3.297	8.9	20.1
6 10	15 2.19	+10 48.4	2.815	3.589	11.9	19.4	6 10	14 59.37	- 0 3.3	2.444	3.288	11.4	20.2
6 20	14 58.13	+10 23.2	2.900	3.582	13.4	19.6	6 20	14 54.67	- 0 7.4	2.527	3.279	13.6	20.4
305781	2009 <i>DE</i> ₅₀		5 12.9 66°17	0°7/12.6	18		166457	2002 <i>PR</i> ₈₀		5 12.9 284°84	4°1/10.5	17	
4 11	15 46.48	-18 45.7	1.299	2.182	16.2	21.3	4 11	15 43.17	- 8 9.1	1.958	2.832	11.9	20.1
4 21	15 40.38	-18 14.2	1.254	2.202	11.6	21.1	4 21	15 37.70	- 7 37.1	1.868	2.809	8.8	19.9
5 1	15 31.73	-17 34.0	1.230	2.221	6.4	20.9	5 1	15 30.27	- 7 6.6	1.803	2.786	5.7	19.7
5 11	15 21.76	-16 48.8	1.231	2.240	1.1	20.6	5 11	15 21.57	- 6 41.4	1.765	2.762	4.1	19.5
5 21	15 11.87	-16 4.2	1.257	2.260	4.6	20.9	5 21	15 12.49	- 6 25.3	1.754	2.738	6.1	19.6
5 31	15 3.40	-15 25.9	1.307	2.279	9.6	21.2	5 31	15 4.01	- 6 21.4	1.769	2.715	9.6	19.7
6 10	14 57.33	-14 58.8	1.380	2.299	13.9	21.5	6 10	14 56.99	- 6 31.5	1.807	2.691	13.0	19.9
6 20	14 54.10	-14 45.4	1.473	2.318	17.5	21.8	6 20	14 52.06	- 6 55.9	1.866	2.666	16.1	20.1
430483	2001 <i>SE</i> ₂₄₅		5 12.9 150°38	3°8/15.2	15		239341	2007 <i>RM</i> ₁₀₇		5 12.9 177°92	0°7/12.1	18	
4 11	15 49.27	-29 55.3	2.306	3.129	12.2	22.5	4 11	15 36.55	-15 56.6	4.320	5.177	6.3	22.3
4 21	15 41.85	-30 20.2	2.234	3.140	9.4	22.4	4 21	15 32.01	-15 35.0	4.242	5.178	4.5	22.2
5 1	15 32.45	-30 32.5	2.186	3.150	6.4	22.2	5 1	15 26.70	-15 11.2	4.192	5.179	2.5	22.1
5 11	15 21.90	-30 31.2	2.166	3.159	4.1	22.0	5 11	15 20.95	-14 46.6	4.172	5.180	0.7	21.9
5 21	15 11.18	-30 16.9	2.175	3.167	4.3	22.1	5 21	15 15.15	-14 22.7	4.182	5.180	2.0	22.0
5 31	15 1.30	-29 52.6	2.212	3.175	6.8	22.2	5 31	15 9.68	-14 1.0	4.222	5.180	4.0	22.2
6 10	14 53.10	-29 22.9	2.275	3.182	9.7	22.4	6 10	15 4.88	-13 43.0	4.290	5.180	5.9	22.3
6 20	14 47.12	-28 52.4	2.362	3.188	12.4	22.6	6 20	15 1.01	-13 29.6	4.382	5.180	7.6	22.4
29078	1975 <i>SX</i> ₁		5 12.9 138°32	2°3/11.1	18		231913	2000 <i>YH</i> ₁₃₈		5 12.9 177°03	2°7/9.5	18	
4 11	15 40.60	-13 55.6	2.166	3.041	11.0	18.4	4 11	15 36.09	- 5 8.1	4.441	5.300	6.1	22.2
4 21	15 35.51	-13 3.4	2.098	3.042	7.8	18.2	4 21	15 31.65	- 4 37.8	4.372	5.302	4.6	22.1
5 1	15 28.84	-12 7.9	2.055	3.043	4.5	18.0	5 1	15 26.48	- 4 9.6	4.331	5.303	3.2	22.0
5 11	15 21.30	-11 12.9	2.040	3.045	2.3	17.8	5 11	15 20.92	- 3 45.4	4.319	5.304	2.7	22.0
5 21	15 13.67	-10 22.4	2.052	3.046	4.4	18.0	5 21	15 15.31	- 3 26.7	4.337	5.305	3.6	22.0
5 31	15 6.75	- 9 40.4	2.092	3.047	7.7	18.2	5 31	15 10.01	- 3 14.5	4.384	5.305	5.0	22.2
6 10	15 1.20	- 9 10.0	2.157	3.048	10.9	18.4	6 10	15 5.34	- 3 9.8	4.457	5.305	6.6	22.3
6 20	14 57.46	- 8 52.4	2.243	3.049	13.6	18.6	6 20	15 1.54	- 3 12.5	4.554	5.305	8.0	22.4
129947	1999 <i>TB</i> ₁₉₅		5 12.9 281°80	0°8/13.4	18		490120	2008 <i>UK</i> ₇₇		5 12.9 196°39	0°5/13.3	17	
4 11	15 44.32	-21 50.6	1.942	2.804	12.6	20.8	4 11	15 44.13	-20 46.7	2.172	3.031	11.5	22.0
4 21	15 38.73	-21 37.9	1.841	2.777	9.3	20.6	4 21	15 38.17	-20 39.2	2.094	3.030	8.4	21.8
5 1	15 30.94	-21 15.5	1.764	2.750	5.4	20.3	5 1	15 30.41	-20 24.4	2.042	3.028	4.8	21.6
5 11	15 21.69	-20 44.5	1.713	2.722	1.3	19.9	5 11	15 21.59	-20 3.6	2.016	3.025	1.0	21.3
5 21	15 11.94	-20 7.4	1.691	2.694	3.5	20.0	5 21	15 12.58	-19 39.1	2.020	3.023	3.1	21.4
5 31	15 2.80	-19 28.2	1.695	2.666	7.9	20.2	5 31	15 4.28	-19 14.1	2.051	3.020	6.8	21.7
6 10	14 55.26	-18 51.9	1.724	2.637	11.9	20.4	6 10	14 57.48	-18 52.1	2.107	3.017	10.3	21.9
6 20	14 50.01	-18 23.0	1.774	2.609	15.5	20.6	6 20	14 52.69	-18 36.1	2.186	3.014	13.2	22.1
365421	2010 <i>JP</i> ₁₇		5 12.9 249°29	3°0/15.3	17		399906	2005 <i>XR</i> ₅		5 12.9 242°69	1°5/12.3	17	
4 11	15 47.66	-31 33.9	1.731	2.567	15.0	20.4	4 11	15 48.38	-15 51.6	1.538	2.413	14.6	21.4
4 21	15 41.23	-30 22.9	1.636	2.552	11.6	20.1	4 21	15 41.95	-15 36.3	1.456	2.400	10.6	21.1
5 1	15 32.30	-28 46.4	1.564	2.537	7.5	19.8	5 1	15 32.86	-15 15.7	1.396	2.386	6.0	20.8
5 11	15 21.89	-26 46.2	1.519	2.521	3.7	19.6	5 11	15 22.04	-14 52.5	1.363	2.372	1.6	20.5
5 21	15 11.26	-24 28.4	1.502	2.505	4.1	19.6	5 21	15 10.73	-14 30.0	1.356	2.357	4.8	20.6
5 31	15 1.71	-22 3.5	1.514	2.488	8.4	19.8	5 31	15 0.31	-14 12.7	1.375	2.341	9.8	20.9
6 10	14 54.30	-19 43.2	1.553	2.470	12.8	20.0	6 10	14 51.97	-14 4.5	1.417	2.325	14.4	21.1
6 20	14 49.61	-17 37.2	1.614	2.452	16.6	20.2	6 20	14 46.44	-14 8.1	1.478	2.308	18.3	21.3
222742	2002 <i>BL</i> ₅		5 12.9 144°91	4°6/15.4	17		45123	1999 <i>XH</i> ₈₈		5 12.9 324°80	3°2/14.9	18	R
4 11	15 50.96	-31 18.2	2.246	3.063	12.7	21.1	4 11	15 42.02	-28 26.6	1.694	2.550	14.4	17.6
4 21	15 43.19	-32 2.3	2.175	3.074	9.9	21.0	4 21	15 37.22	-28 10.1	1.613	2.541	11.0	17.3
5 1	15 33.27	-32 33.2	2.127	3.084	7.1	20.8	5 1	15 30.09	-27 36.7	1.555	2.532	7.1	17.1
5 11	15 22.05	-32 48.9	2.107	3.094	4.9	20.7	5 11	15 21.56	-26 47.1	1.520	2.523	3.7	16.9
5 21	15 10.58	-32 49.0	2.116	3.103	5.0	20.7	5 21	15 12.74	-25 44.6	1.512	2.514	4.2	16.9
5 31	14 59.96	-32 36.2	2.153	3.111	7.3	20.9	5 31	15 4.84	-24 35.0	1.530	2.506	8.0	17.1
6 10	14 51.14	-32 15.0	2.216	3.119	10.1	21.0	6 10	14 58.87	-23 26.0	1.572	2.498	12.0	17.3
6 20	14 44.67	-31 50.6	2.302	3.126	12.7	21.2	6 20	14 55.42	-22 23.7	1.635	2.491	15.6	17.5
467973	2012 <i>KT</i> ₅₀		5 12.9 296°76	3°1/10.8	18		131256	2001 <i>FA</i> ₂₅		5 12.9 330°85	8°1/7.1	18	
4 11	15 41.57	-15 8.0	1.592	2.476	13.6	19.9	4 11	15 38.22	- 3 19.0	1.483	2.374	14.0	18.7
4 21	15 36.92	-13 50.7	1.503	2.453	9.9	19.6	4 21	15 34.46	- 1 38.0	1.415	2.357	11.0	18.5
5 1	15 29.96	-12 23.7	1.439	2.429	5.7	19.3	5 1	15 28.54	- 0 0.8	1.370	2.341	8.6	18.3
5 11	15 21.52	-10 53.1	1.400	2.405	3.1	19.0	5 11	15 21.31	+ 1 23.4	1.349	2.326	8.3	18.3
5 21	15 12.68	- 9 26.1	1.387	2.381	6.0	19.2	5 21	15 13.78	+ 2 26.4	1.352	2.312	10.4	18.3
5 31	15 4.60	- 8 10.8	1.400	2.358	10.5	19.4	5 31	15 7.09	+ 3 2.6	1.378	2.298	13.7	18.5
6 10	14 58.33	- 7 13.2	1.436	2.334	14.8	19.6	6 10	15 2.17	+ 3 10.4	1.423	2.286	17.1	18.7
6 20	14 54.53	- 6 36.5	1.490	2.311	18.6	19.7	6 20	14 59.60	+ 2 51.4	1.485	2.274	20.1	18.8
270296	2001 <i>VH</i> ₁₁₇		5 12.9 100°19	1°5/13.9	18		200988	2002 <i>CC</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
250398	2003 <i>UL</i> ₁₈₂		5 12.9 212°73	0°2/13.1	17		335550	2006 <i>BX</i> ₁₂₃		5 12.9 299°19	2°5/11.5	17	
4 11	15 46.67	-20 32.7	1.913	2.774	12.8	22.4	4 11	15 42.26	-13 51.4	1.700	2.582	13.1	20.6
4 21	15 40.23	-20 11.5	1.831	2.767	9.3	22.1	4 21	15 37.29	-13 16.2	1.617	2.564	9.5	20.3
5 1	15 31.67	-19 41.4	1.773	2.760	5.3	21.9	5 1	15 30.14	-12 36.8	1.556	2.546	5.5	20.0
5 11	15 21.82	-19 4.1	1.742	2.751	0.9	21.6	5 11	15 21.60	-11 57.2	1.522	2.528	2.5	19.8
5 21	15 11.69	-18 22.9	1.739	2.743	3.5	21.7	5 21	15 12.69	-11 21.8	1.514	2.511	5.2	19.9
5 31	15 2.38	-17 42.3	1.764	2.733	7.8	22.0	5 31	15 4.52	-10 55.1	1.531	2.493	9.4	20.1
6 10	14 54.81	-17 7.0	1.815	2.723	11.7	22.2	6 10	14 58.06	-10 40.7	1.572	2.476	13.4	20.3
6 20	14 49.56	-16 40.6	1.886	2.712	15.1	22.4	6 20	14 53.95	-10 40.4	1.632	2.459	17.0	20.5
391084	2005 <i>UD</i> ₂₃₀		5 12.9 147°93	1°5/11.7	17		153155	2000 <i>SO</i> ₂₉₈		5 12.9 343°94	0°2/12.6	18	
4 11	15 39.80	-15 56.0	2.461	3.330	10.0	21.5	4 11	15 34.52	-18 53.3	4.003	4.861	6.7	19.3
4 21	15 34.81	-15 9.5	2.390	3.332	7.1	21.3	4 21	15 30.67	-18 23.4	3.923	4.859	4.8	19.1
5 1	15 28.42	-14 18.7	2.345	3.334	4.0	21.1	5 1	15 26.01	-17 49.9	3.870	4.857	2.6	19.0
5 11	15 21.26	-13 26.7	2.328	3.335	1.5	20.9	5 11	15 20.89	-17 14.2	3.846	4.855	0.5	18.7
5 21	15 14.03	-12 37.0	2.340	3.337	3.6	21.1	5 21	15 15.71	-16 38.0	3.852	4.853	1.9	18.9
5 31	15 7.42	-11 53.1	2.380	3.339	6.7	21.3	5 31	15 10.88	-16 3.5	3.887	4.851	4.1	19.1
6 10	15 2.04	-11 18.1	2.446	3.340	9.6	21.5	6 10	15 6.75	-15 32.4	3.949	4.850	6.1	19.2
6 20	14 58.26	-10 53.6	2.534	3.342	12.2	21.7	6 20	15 3.59	-15 6.3	4.037	4.848	7.9	19.3
513063	2017 <i>WU</i> ₁₇		5 12.9 274°29	1°1/13.6	18		134541	1999 <i>RD</i> ₉₆		5 12.9 233°95	6°8/15.6	18	
4 11	15 43.50	-22 31.9	1.898	2.761	12.8	20.8	4 11	15 51.78	-33 9.5	1.690	2.516	15.8	19.7
4 21	15 38.00	-22 22.3	1.819	2.755	9.4	20.5	4 21	15 44.70	-34 13.9	1.609	2.510	12.7	19.5
5 1	15 30.43	-22 3.0	1.763	2.748	5.5	20.3	5 1	15 34.57	-35 2.2	1.550	2.503	9.5	19.3
5 11	15 21.62	-21 35.1	1.733	2.741	1.6	20.0	5 11	15 22.38	-35 29.7	1.516	2.497	7.1	19.1
5 21	15 12.54	-21 1.4	1.730	2.734	3.4	20.1	5 21	15 9.53	-35 34.4	1.507	2.489	7.2	19.1
5 31	15 4.25	-20 25.8	1.755	2.728	7.5	20.3	5 31	14 57.64	-35 18.7	1.524	2.482	9.8	19.2
6 10	14 57.66	-19 53.2	1.804	2.721	11.3	20.6	6 10	14 48.09	-34 49.3	1.565	2.475	13.2	19.4
6 20	14 53.31	-19 27.4	1.875	2.714	14.6	20.8	6 20	14 41.72	-34 13.9	1.626	2.467	16.4	19.6
272650	2005 <i>WV</i> ₁₄₄		5 12.9 124°95	0°9/13.5	17 R		501197	2013 <i>TL</i> ₁₂₄		5 12.9 220°19	0°3/13.1	17	
4 11	15 45.74	-22 12.0	2.050	2.906	12.2	21.9	4 11	15 45.28	-20 46.1	2.443	3.295	10.7	24.0
4 21	15 39.27	-21 58.1	1.987	2.920	8.9	21.7	4 21	15 38.90	-20 24.2	2.351	3.283	7.8	23.8
5 1	15 30.98	-21 35.3	1.948	2.933	5.1	21.5	5 1	15 30.83	-19 54.8	2.285	3.270	4.4	23.6
5 11	15 21.69	-21 5.1	1.937	2.946	1.3	21.3	5 11	15 21.72	-19 19.2	2.247	3.257	0.8	23.3
5 21	15 12.35	-20 30.4	1.955	2.958	3.2	21.4	5 21	15 12.38	-18 40.0	2.240	3.242	2.9	23.4
5 31	15 3.91	-19 55.0	2.000	2.970	6.9	21.7	5 31	15 3.63	-18 0.7	2.261	3.227	6.5	23.6
6 10	14 57.14	-19 23.1	2.071	2.981	10.4	21.9	6 10	14 56.23	-17 25.1	2.309	3.211	9.8	23.8
6 20	14 52.50	-18 58.0	2.164	2.992	13.3	22.1	6 20	14 50.69	-16 56.3	2.380	3.194	12.7	24.0
313414	2002 <i>PN</i> ₁₇₇		5 12.9 345°73	5°4/10.4	17		100527	1997 <i>CB</i> ₁₀		5 12.9 203°02	0°4/13.2	17	
4 11	15 41.77	- 9 10.0	1.213	2.112	15.9	20.3	4 11	15 46.78	-20 51.2	1.948	2.807	12.7	21.3
4 21	15 37.37	- 8 20.9	1.152	2.105	11.7	20.0	4 21	15 40.28	-20 32.9	1.867	2.803	9.2	21.1
5 1	15 30.30	- 7 33.0	1.112	2.099	7.5	19.8	5 1	15 31.71	-20 5.8	1.812	2.798	5.3	20.9
5 11	15 21.61	- 6 53.0	1.094	2.094	5.4	19.6	5 11	15 21.88	-19 31.4	1.783	2.792	1.0	20.5
5 21	15 12.63	- 6 27.2	1.100	2.090	8.0	19.8	5 21	15 11.80	-18 52.9	1.783	2.786	3.4	20.7
5 31	15 4.75	- 6 20.2	1.128	2.087	12.4	20.0	5 31	15 2.55	-18 14.5	1.810	2.779	7.6	21.0
6 10	14 59.13	- 6 34.0	1.177	2.084	16.7	20.2	6 10	14 55.02	-17 40.8	1.863	2.771	11.4	21.2
6 20	14 56.40	- 7 7.2	1.242	2.082	20.5	20.5	6 20	14 49.77	-17 15.4	1.938	2.763	14.7	21.4
34653	2000 <i>WJ</i> ₁₄₄		5 12.9 7°93	9°6/ 7.5	18		128437	2004 <i>NQ</i> ₇		5 12.9 335°78	23°2/22.7	18	
4 11	15 41.05	+ 1 55.8	1.444	2.324	15.0	17.8	4 11	15 41.90	+22 59.6	0.984	1.822	23.7	18.7
4 21	15 36.36	+ 3 13.0	1.396	2.325	12.2	17.6	4 21	15 37.86	+26 3.9	0.962	1.815	23.2	18.6
5 1	15 29.51	+ 4 17.1	1.369	2.326	10.1	17.5	5 1	15 30.69	+28 22.9	0.955	1.809	23.4	18.6
5 11	15 21.46	+ 5 0.1	1.365	2.328	9.8	17.4	5 11	15 21.71	+29 42.2	0.961	1.803	24.4	18.6
5 21	15 13.31	+ 5 16.8	1.384	2.331	11.4	17.5	5 21	15 12.57	+29 55.7	0.980	1.799	25.9	18.7
5 31	15 6.16	+ 5 5.0	1.426	2.334	14.2	17.7	5 31	15 4.91	+29 5.1	1.011	1.795	27.6	18.8
6 10	15 0.92	+ 4 26.4	1.486	2.338	17.0	17.9	6 10	14 59.95	+27 19.4	1.051	1.791	29.3	19.0
6 20	14 58.09	+ 3 25.3	1.564	2.343	19.6	18.1	6 20	14 58.26	+24 50.7	1.098	1.789	30.9	19.1
202051	2004 <i>RW</i> ₁₇₇		5 12.9 245°96	6°9/17.3	18		133068	<i>Lisaschulze</i>		5 12.9 298°56	3°1/14.1	17	
4 11	15 48.39	-38 43.6	2.128	2.922	14.1	21.6	4 11	15 47.12	-24 12.1	1.309	2.182	16.7	19.7
4 21	15 41.80	-39 12.8	2.034	2.907	11.7	21.4	4 21	15 41.71	-24 42.2	1.225	2.164	12.7	19.4
5 1	15 32.72	-39 23.0	1.962	2.893	9.3	21.2	5 1	15 33.06	-25 0.6	1.163	2.146	7.9	19.0
5 11	15 22.03	-39 11.0	1.914	2.878	7.4	21.0	5 11	15 22.17	-25 5.7	1.124	2.129	3.6	18.7
5 21	15 10.88	-38 36.4	1.892	2.862	7.1	21.0	5 21	15 10.49	-24 57.6	1.109	2.112	5.1	18.8
5 31	15 0.55	-37 42.4	1.897	2.847	8.8	21.1	5 31	14 59.76	-24 40.2	1.118	2.095	10.2	19.0
6 10	14 52.16	-36 35.6	1.926	2.830	11.4	21.2	6 10	14 51.50	-24 20.0	1.149	2.078	15.2	19.2
6 20	14 46.41	-35 23.5	1.978	2.814	14.1	21.3	6 20	14 46.65	-24 3.4	1.198	2.062	19.6	19.5
431005	2005 <i>YF</i> ₆₈		5 12.9 207°04	3°3/15.2	17		305388	2008 <i>CL</i> ₄₅		5 12.9 226°67	2°2/11.2	18	
4 11	15 45.95	-29 22.0	2.165	2.999	12.5	22.0	4 11	15 41.10	-11 57.6	2.674	3.540	9.4	21.4
4 21	15 39.64	-29 20.6	2.081	2.995	9.6	21.8	4 21	15 35.72	-11 29.5	2.592	3.532	6.8	21.2
5 1	15 31.31	-29 5.5	2.020	2.989	6.4	21.6	5 1	15 28.97	-11 0.4	2.536	3.522	4.0	21.0
5 11	15 21.77	-28 36.4	1.986	2.984	3.7	21.4	5 11	15 21.42	-10 32.7	2.509	3.513	2.2	20.9
5 21	15 12.00	-27 55.1	1.980	2.978	4.0	21.4	5 21	15 13.71	-10 8.8	2.511	3.503	3.9	21.0
5 31	15 3.02	-27 5.7	2.002	2.971	7.0	21.6	5 31	15 6.51	- 9 51.4	2.541	3.493	6.7	21.1
6 10	14 55.69	-26 13.5	2.050	2.964	10.3	21.8	6 10	15 0.42	- 9 42.3	2.597	3.482	9.5	21.3
6 20	14 50.57	-25 23.9	2.120	2.956	13.3	22.0	6 20	14 55.85	- 9 42.4	2.676	3.471	11.9	21.5
198165	2004 <i>TZ</i> ₇₅		5 12.9 269°68	2°9/10.7	18		259114	2					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
427329	2014 WQ ₃₁₆		5 12.9 282°37	4°0/ 9.1 16			319773	2006 UM ₂₆₄		5 12.9 315°28	2°0/13.8 17		
4 11	15 38.24	- 2 41.3	3.254	4.114	8.1	21.5	4 11	15 43.65	-23 16.9	1.310	2.190	16.3	20.8
4 21	15 33.52	- 2 11.6	3.165	4.092	6.2	21.3	4 21	15 39.06	-23 19.8	1.229	2.172	12.2	20.5
5 1	15 27.70	- 1 45.9	3.103	4.069	4.6	21.2	5 1	15 31.51	-23 9.6	1.168	2.155	7.4	20.1
5 11	15 21.23	- 1 26.7	3.068	4.047	4.1	21.1	5 11	15 21.95	-22 46.5	1.130	2.137	2.6	19.8
5 21	15 14.58	- 1 16.1	3.063	4.024	5.2	21.2	5 21	15 11.78	-22 13.2	1.116	2.121	4.5	19.9
5 31	15 8.29	- 1 15.9	3.084	4.001	7.1	21.3	5 31	15 2.58	-21 35.3	1.126	2.105	9.9	20.1
6 10	15 2.83	- 1 26.5	3.131	3.978	9.1	21.4	6 10	14 55.71	-20 59.7	1.158	2.090	14.9	20.3
6 20	14 58.56	- 1 48.0	3.200	3.955	11.0	21.5	6 20	14 52.01	-20 32.5	1.208	2.075	19.3	20.6
361570	2007 RM ₉₈		5 12.9 291°78	1°4/13.5 18			325914	2010 UD ₈₀		5 12.9 17°31	4°7/15.4 17		
4 11	15 47.51	-20 56.0	1.372	2.247	15.9	20.5	4 11	15 45.38	-29 49.8	1.403	2.260	16.7	20.3
4 21	15 41.91	-21 14.6	1.281	2.223	11.9	20.2	4 21	15 40.03	-30 1.1	1.337	2.262	12.9	20.1
5 1	15 33.18	-21 24.8	1.212	2.199	7.0	19.8	5 1	15 31.86	-29 53.2	1.291	2.264	8.7	19.8
5 11	15 22.22	-21 26.1	1.166	2.175	2.0	19.5	5 11	15 21.98	-29 25.3	1.269	2.267	5.2	19.6
5 21	15 10.40	-21 19.7	1.146	2.150	4.6	19.6	5 21	15 11.83	-28 39.9	1.271	2.270	5.5	19.6
5 31	14 59.36	-21 9.1	1.150	2.126	10.1	19.8	5 31	15 2.93	-27 43.2	1.298	2.274	9.2	19.9
6 10	14 50.60	-20 59.8	1.177	2.102	15.3	20.0	6 10	14 56.44	-26 43.6	1.347	2.277	13.4	20.1
6 20	14 45.09	-20 56.7	1.222	2.078	19.8	20.2	6 20	14 53.01	-25 48.7	1.417	2.282	17.1	20.4
425606	2010 UM ₇₀		5 12.9 212°43	0°8/12.4 17			9151	1979 MQ ₈		5 12.9 167°81	2°2/11.7 18		
4 11	15 45.72	-18 9.8	2.062	2.925	11.9	22.5	4 11	15 45.71	-14 12.7	1.849	2.721	12.7	19.7
4 21	15 39.42	-17 33.3	1.979	2.918	8.6	22.3	4 21	15 39.45	-13 39.1	1.782	2.724	9.1	19.4
5 1	15 31.20	-16 49.5	1.921	2.909	4.8	22.0	5 1	15 31.22	-13 2.0	1.739	2.727	5.2	19.2
5 11	15 21.83	-16 1.3	1.891	2.900	1.0	21.8	5 11	15 21.86	-12 25.0	1.723	2.730	2.2	19.0
5 21	15 12.23	-15 12.2	1.890	2.890	3.7	21.9	5 21	15 12.36	-11 51.8	1.735	2.732	4.6	19.2
5 31	15 3.38	-14 26.8	1.916	2.880	7.7	22.2	5 31	15 3.75	-11 26.3	1.774	2.734	8.5	19.4
6 10	14 56.09	-13 49.3	1.968	2.868	11.3	22.4	6 10	14 56.85	-11 11.5	1.838	2.735	12.2	19.6
6 20	14 50.92	-13 22.7	2.042	2.856	14.5	22.5	6 20	14 52.19	-11 8.8	1.922	2.735	15.3	19.8
471745	2012 UN ₅₄		5 12.9 283°12	0°9/13.6 17			176471	2001 XA ₁₄₉		5 12.9 236°18	0°8/13.6 18		
4 11	15 42.23	-23 27.9	1.927	2.790	12.6	21.1	4 11	15 41.61	-23 11.2	2.420	3.274	10.7	20.4
4 21	15 37.11	-22 52.4	1.841	2.776	9.3	20.9	4 21	15 36.29	-22 42.1	2.335	3.267	7.8	20.2
5 1	15 29.98	-22 4.7	1.778	2.763	5.4	20.6	5 1	15 29.38	-22 3.6	2.275	3.259	4.6	19.9
5 11	15 21.63	-21 6.8	1.741	2.750	1.4	20.3	5 11	15 21.55	-21 17.6	2.243	3.251	1.3	19.7
5 21	15 13.02	-20 2.7	1.733	2.737	3.4	20.4	5 21	15 13.56	-20 26.9	2.239	3.243	2.8	19.8
5 31	15 5.16	-18 57.8	1.751	2.723	7.5	20.6	5 31	15 6.20	-19 35.3	2.264	3.234	6.2	20.0
6 10	14 58.95	-17 58.0	1.794	2.710	11.4	20.8	6 10	15 0.15	-18 47.1	2.315	3.226	9.4	20.2
6 20	14 54.92	-17 8.0	1.859	2.697	14.8	21.0	6 20	14 55.87	-18 5.8	2.390	3.217	12.2	20.4
153635	2001 TU ₇₀		5 12.9 130°71	1°3/13.7 18			253193	2002 XU ₄₅		5 12.9 84°81	7°8/18.6 18		
4 11	15 48.62	-22 0.2	2.116	2.966	12.2	20.5	4 11	15 51.37	-40 40.3	1.089	1.920	22.4	19.5
4 21	15 41.37	-22 14.5	2.051	2.981	8.9	20.3	4 21	15 44.83	-39 45.3	1.032	1.932	18.2	19.2
5 1	15 32.22	-22 21.2	2.012	2.995	5.2	20.1	5 1	15 34.56	-38 7.5	0.991	1.944	13.5	19.0
5 11	15 21.99	-22 20.3	2.001	3.008	1.7	19.9	5 11	15 22.40	-35 46.7	0.971	1.957	9.2	18.8
5 21	15 11.65	-22 13.3	2.018	3.021	3.2	20.0	5 21	15 10.52	-32 52.1	0.975	1.969	8.0	18.8
5 31	15 2.20	-22 2.9	2.064	3.033	6.8	20.3	5 31	15 0.89	-29 41.7	1.004	1.981	11.0	19.0
6 10	14 54.43	-21 52.6	2.136	3.045	10.2	20.5	6 10	14 54.72	-26 36.2	1.056	1.993	15.5	19.3
6 20	14 48.85	-21 45.4	2.231	3.056	13.1	20.7	6 20	14 52.38	-23 51.3	1.128	2.005	19.7	19.6
108941	2001 PH ₂₆		5 12.9 160°33	1°7/11.9 17			408858	2001 SD ₂₂₃		5 12.9 221°94	2°7/11.3 16		
4 11	15 45.31	-14 45.7	2.142	3.008	11.4	20.6	4 11	15 46.43	-14 19.1	1.670	2.545	13.6	22.2
4 21	15 38.92	-14 17.4	2.075	3.015	8.2	20.5	4 21	15 40.27	-13 26.2	1.593	2.537	9.8	22.0
5 1	15 30.82	-13 45.9	2.033	3.021	4.6	20.2	5 1	15 31.83	-12 27.6	1.539	2.528	5.7	21.7
5 11	15 21.75	-13 13.8	2.019	3.026	1.7	20.0	5 11	15 21.99	-11 28.0	1.512	2.518	2.7	21.5
5 21	15 12.60	-12 44.3	2.034	3.031	4.0	20.2	5 21	15 11.87	-10 32.9	1.512	2.507	5.4	21.6
5 31	15 4.22	-12 20.6	2.076	3.035	7.5	20.4	5 31	15 2.64	- 9 47.9	1.539	2.496	9.8	21.9
6 10	14 57.36	-12 5.4	2.144	3.039	10.8	20.6	6 10	14 55.28	- 9 17.2	1.589	2.484	13.8	22.1
6 20	14 52.47	-12 0.2	2.235	3.042	13.6	20.8	6 20	14 50.41	- 9 2.8	1.659	2.472	17.3	22.3
186078	2001 SL ₂₂₇		5 12.9 264°08	1°4/12.2 17			427182	2014 VF ₉		5 12.9 172°27	1°1/12.3 17		
4 11	15 43.96	-16 39.8	1.730	2.606	13.2	21.0	4 11	15 46.41	-16 58.8	1.965	2.830	12.3	23.2
4 21	15 38.47	-16 7.9	1.650	2.595	9.5	20.8	4 21	15 39.91	-16 32.2	1.895	2.834	8.8	22.9
5 1	15 30.80	-15 29.7	1.595	2.584	5.3	20.5	5 1	15 31.46	-16 0.0	1.849	2.837	4.9	22.7
5 11	15 21.78	-14 48.2	1.565	2.573	1.5	20.2	5 11	15 21.92	-15 25.0	1.830	2.839	1.2	22.5
5 21	15 12.45	-14 7.7	1.562	2.562	4.4	20.4	5 21	15 12.23	-14 50.4	1.840	2.841	3.8	22.6
5 31	15 3.94	-13 32.8	1.585	2.551	8.8	20.6	5 31	15 3.39	-14 20.1	1.878	2.842	7.8	22.9
6 10	14 57.20	-13 7.8	1.632	2.540	12.8	20.8	6 10	14 56.22	-13 57.7	1.941	2.842	11.4	23.1
6 20	14 52.82	-12 55.2	1.700	2.528	16.3	21.0	6 20	14 51.23	-13 45.5	2.025	2.842	14.5	23.3
57517	2001 SV ₂₈₅		5 12.9 215°30	7°1/ 8.0 18			471628	2012 TS ₂₈		5 12.9 307°13	6°2/14.8 16		
4 11	15 44.08	+ 0 45.6	2.072	2.933	12.0	19.6	4 11	15 48.69	-30 12.3	1.606	2.450	15.7	20.7
4 21	15 38.11	+ 1 45.8	2.005	2.926	9.5	19.5	4 21	15 42.87	-31 21.6	1.504	2.419	12.5	20.4
5 1	15 30.41	+ 2 37.8	1.963	2.919	7.6	19.3	5 1	15 33.85	-32 19.8	1.423	2.387	9.1	20.2
5 11	15 21.70	+ 3 16.3	1.946	2.911	7.2	19.3	5 11	15 22.42	-33 1.6	1.367	2.356	6.5	19.9
5 21	15 12.82	+ 3 37.1	1.957	2.902	8.7	19.4	5 21	15 9.84	-33 23.9	1.336	2.326	7.0	19.9
5 31	15 4.64	+ 3 37.9	1.992	2.893	11.1	19.5	5 31	14 57.79	-33 27.0	1.331	2.295	10.3	20.0
6 10	14 57.91	+ 3 18.7	2.050	2.884	13.7	19.6	6 10	14 47.86	-33 16.0	1.348	2.265	14.3	20.1
6 20	14 53.12	+ 2 41.5	2.128	2.874	16.0	19.8	6 20	14 41.16	-32 58.1	1.384	2.235	18.2	20.3
54614	2000 RL ₈₄		5 12.9 216°43	1°8/10.3 18			38214	1999 MA ₈		5 12.9 338°47	1°1/12.5 18		
4 11	15												

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5 12.9

5 12.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
477183	2009 <i>FH</i> ₆₅		5 12.9 295°83	4.3/15.4	16		288224	2003 <i>YV</i> ₅₉		5 12.9 151°31	0.2/13.1	17	R
4 11	15 44.72	-30 23.9	2.085	2.919	12.9	21.1	4 11	15 47.44	-20 13.4	1.936	2.796	12.7	22.1
4 21	15 39.00	-30 51.1	1.999	2.910	10.1	20.9	4 21	15 40.67	-19 57.0	1.869	2.805	9.2	21.9
5 1	15 31.13	-31 5.3	1.936	2.900	7.1	20.7	5 1	15 31.91	-19 32.6	1.827	2.813	5.2	21.7
5 11	15 21.90	-31 5.0	1.898	2.890	4.6	20.5	5 11	15 22.02	-19 2.2	1.812	2.821	0.9	21.4
5 21	15 12.29	-30 50.5	1.888	2.881	4.8	20.5	5 21	15 12.04	-18 28.7	1.825	2.828	3.4	21.6
5 31	15 3.39	-30 24.7	1.905	2.871	7.5	20.6	5 31	15 2.98	-17 56.0	1.866	2.835	7.5	21.9
6 10	14 56.17	-29 52.5	1.946	2.862	10.6	20.8	6 10	14 55.69	-17 28.5	1.933	2.840	11.1	22.1
6 20	14 51.25	-29 18.9	2.010	2.853	13.6	21.0	6 20	14 50.66	-17 9.0	2.021	2.845	14.2	22.3
70904	1999 <i>VB</i> ₁₈₄		5 12.9 213°41	1°0/12.3	18		475621	2006 <i>UN</i> ₁₇₃		5 12.9 206°23	0°8/12.4	17	
4 11	15 43.29	-17 6.5	2.232	3.097	11.0	20.8	4 11	15 41.74	-16 48.5	2.675	3.536	9.6	22.5
4 21	15 37.55	-16 35.9	2.152	3.091	7.9	20.6	4 21	15 36.22	-16 27.7	2.594	3.532	6.8	22.3
5 1	15 30.13	-16 0.0	2.097	3.085	4.4	20.3	5 1	15 29.31	-16 2.8	2.539	3.527	3.8	22.1
5 11	15 21.71	-15 21.1	2.070	3.079	1.1	20.1	5 11	15 21.59	-15 36.0	2.513	3.522	0.9	21.9
5 21	15 13.10	-14 42.6	2.072	3.072	3.5	20.3	5 21	15 13.72	-15 9.3	2.516	3.516	3.0	22.0
5 31	15 5.17	-14 8.1	2.101	3.065	7.1	20.5	5 31	15 6.40	-14 45.5	2.547	3.510	6.1	22.2
6 10	14 58.63	-13 40.8	2.157	3.057	10.5	20.7	6 10	15 0.22	-14 27.0	2.606	3.504	9.0	22.4
6 20	14 53.97	-13 23.1	2.234	3.049	13.4	20.8	6 20	14 55.61	-14 15.7	2.687	3.497	11.5	22.6
174748	2003 <i>UX</i> ₂₆₄		5 12.9 112°31	2°7/11.7	18		513097	2017 <i>WM</i> ₂₃		5 12.9 34°55	5°9/9.2	18	
4 11	15 48.34	-11 51.0	1.688	2.561	13.6	20.2	4 11	15 41.37	-2 45.6	2.007	2.879	11.8	21.0
4 21	15 41.37	-11 37.4	1.634	2.576	9.8	20.0	4 21	15 36.18	-1 58.9	1.949	2.882	9.0	20.9
5 1	15 32.29	-11 23.7	1.604	2.591	5.7	19.7	5 1	15 29.34	-1 18.7	1.915	2.885	6.7	20.7
5 11	15 22.07	-11 12.7	1.600	2.605	2.7	19.6	5 11	15 21.60	-0 49.6	1.908	2.888	5.9	20.7
5 21	15 11.81	-11 7.2	1.624	2.619	5.1	19.8	5 21	15 13.76	-0 35.0	1.926	2.891	7.4	20.8
5 31	15 2.63	-11 9.7	1.674	2.633	9.0	20.0	5 31	15 6.67	-0 37.0	1.971	2.895	10.0	20.9
6 10	14 55.38	-11 21.9	1.749	2.646	12.7	20.3	6 10	15 1.02	-0 55.8	2.038	2.898	12.7	21.1
6 20	14 50.57	-11 44.2	1.844	2.659	15.8	20.5	6 20	14 57.26	-1 29.8	2.125	2.902	15.2	21.3
355828	2008 <i>TZ</i> ₁₆₂		5 12.9 102°71	0°7/12.7	16		164280	2004 <i>XX</i> ₅₈		5 12.9 212°04	2°0/14.1	16	
4 11	15 47.83	-17 51.7	1.338	2.219	15.9	21.1	4 11	15 48.58	-24 49.0	1.863	2.713	13.5	21.8
4 21	15 41.62	-17 38.9	1.278	2.225	11.5	20.9	4 21	15 41.83	-24 46.1	1.779	2.706	10.1	21.6
5 1	15 32.68	-17 18.7	1.240	2.231	6.4	20.6	5 1	15 32.74	-24 31.3	1.718	2.699	6.2	21.3
5 11	15 22.15	-16 53.8	1.227	2.236	1.2	20.3	5 11	15 22.20	-24 4.7	1.685	2.690	2.5	21.1
5 21	15 11.44	-16 28.0	1.239	2.242	4.6	20.5	5 21	15 11.31	-23 28.5	1.679	2.681	3.7	21.1
5 31	15 1.98	-16 6.3	1.276	2.248	9.8	20.8	5 31	15 1.29	-22 47.3	1.700	2.672	7.8	21.3
6 10	14 54.90	-15 53.1	1.335	2.253	14.3	21.1	6 10	14 53.15	-22 6.4	1.747	2.661	11.8	21.6
6 20	14 50.79	-15 51.3	1.413	2.259	18.2	21.4	6 20	14 47.52	-21 31.1	1.816	2.650	15.2	21.8
335617	2006 <i>FQ</i> ₄₂		5 12.9 211°90	1°0/13.6	18		422603	2014 <i>TJ</i> ₇₁		5 12.9 201°08	1°6/12.1	17	
4 11	15 45.60	-21 48.1	2.309	3.161	11.2	21.2	4 11	15 46.81	-15 25.2	1.865	2.734	12.7	22.3
4 21	15 39.27	-21 53.1	2.224	3.155	8.2	21.0	4 21	15 40.36	-14 59.5	1.790	2.731	9.2	22.1
5 1	15 31.14	-21 51.0	2.165	3.148	4.8	20.8	5 1	15 31.82	-14 29.2	1.738	2.727	5.2	21.8
5 11	15 21.90	-21 42.3	2.134	3.142	1.4	20.5	5 11	15 22.03	-13 57.3	1.714	2.722	1.7	21.6
5 21	15 12.40	-21 28.4	2.131	3.134	3.0	20.6	5 21	15 12.01	-13 27.3	1.717	2.716	4.3	21.7
5 31	15 3.54	-21 11.9	2.157	3.127	6.6	20.8	5 31	15 2.82	-13 2.9	1.748	2.710	8.4	22.0
6 10	14 56.12	-20 56.3	2.210	3.118	9.9	21.0	6 10	14 55.35	-12 47.6	1.804	2.704	12.2	22.2
6 20	14 50.66	-20 44.5	2.285	3.110	12.8	21.2	6 20	14 50.17	-12 43.3	1.880	2.696	15.5	22.4
255823	2006 <i>SB</i> ₇₁		5 12.9 106°02	3°2/11.1	17		508207	2015 <i>FV</i> ₃₉₆		5 12.9 240°99	2°4/14.5	17	
4 11	15 44.02	-13 21.8	1.592	2.474	13.8	20.6	4 11	15 44.31	-26 18.9	2.038	2.888	12.6	21.4
4 21	15 38.44	-12 24.1	1.532	2.479	9.9	20.3	4 21	15 38.58	-26 17.0	1.957	2.882	9.5	21.2
5 1	15 30.72	-11 22.7	1.496	2.485	5.8	20.1	5 1	15 30.84	-26 3.2	1.899	2.877	6.0	21.0
5 11	15 21.82	-10 22.9	1.486	2.490	3.2	20.0	5 11	15 21.88	-25 37.8	1.867	2.871	2.8	20.7
5 21	15 12.82	-9 30.4	1.502	2.495	5.7	20.1	5 21	15 12.66	-25 2.9	1.863	2.865	3.6	20.8
5 31	15 4.84	-8 50.4	1.543	2.501	9.8	20.4	5 31	15 4.21	-24 22.4	1.887	2.859	7.1	21.0
6 10	14 58.76	-8 26.1	1.608	2.506	13.6	20.6	6 10	14 57.42	-23 41.4	1.936	2.853	10.6	21.2
6 20	14 55.08	-8 18.6	1.692	2.510	16.8	20.8	6 20	14 52.83	-23 4.4	2.006	2.847	13.7	21.4
79184	1993 <i>KO</i> ₃		5 12.9 216°33	2°0/11.7	18		499060	2009 <i>DT</i> ₁₁₉		5 12.9 21°91	2°0/13.9	17	
4 11	15 45.88	-13 55.1	2.147	3.012	11.4	20.1	4 11	15 44.30	-23 8.7	1.135	2.021	17.7	20.8
4 21	15 39.49	-13 28.0	2.064	3.003	8.2	19.8	4 21	15 39.50	-23 12.2	1.080	2.027	13.1	20.6
5 1	15 31.27	-12 57.8	2.006	2.993	4.7	19.6	5 1	15 31.66	-23 1.5	1.045	2.033	7.8	20.3
5 11	15 21.92	-12 27.4	1.976	2.983	2.0	19.4	5 11	15 22.03	-22 37.8	1.033	2.040	2.6	20.0
5 21	15 12.33	-11 59.8	1.975	2.971	4.2	19.5	5 21	15 12.18	-22 4.9	1.043	2.048	4.6	20.2
5 31	15 3.40	-11 38.3	2.002	2.959	7.9	19.7	5 31	15 3.75	-21 29.2	1.077	2.057	10.0	20.5
6 10	14 55.95	-11 25.7	2.055	2.946	11.3	19.9	6 10	14 57.97	-20 57.7	1.132	2.067	14.8	20.8
6 20	14 50.51	-11 23.6	2.129	2.933	14.3	20.1	6 20	14 55.45	-20 35.7	1.205	2.078	18.9	21.1
41668	2000 <i>TP</i> ₂₅		5 12.9 132°14	0°2/12.9	18		488556	2001 <i>UP</i> ₁₂₇		5 12.9 159°70	1°3/11.8	18	
4 11	15 49.19	-18 20.9	1.740	2.604	13.7	19.0	4 11	15 41.45	-14 59.2	2.841	3.703	9.1	22.4
4 21	15 42.07	-18 19.6	1.678	2.617	9.8	18.8	4 21	15 35.87	-14 28.6	2.771	3.709	6.5	22.3
5 1	15 32.74	-18 12.1	1.641	2.629	5.5	18.5	5 1	15 29.05	-13 55.2	2.728	3.715	3.6	22.1
5 11	15 22.16	-18 0.0	1.630	2.640	0.9	18.2	5 11	15 21.56	-13 21.3	2.714	3.721	1.4	21.9
5 21	15 11.48	-17 45.5	1.648	2.651	3.7	18.5	5 21	15 14.00	-12 49.4	2.729	3.726	3.1	22.1
5 31	15 1.85	-17 32.2	1.692	2.661	8.1	18.7	5 31	15 7.00	-12 22.0	2.773	3.730	6.0	22.2
6 10	14 54.20	-17 23.7	1.761	2.670	12.0	19.0	6 10	15 1.10	-12 1.3	2.844	3.734	8.6	22.4
6 20	14 49.04	-17 22.4	1.852	2.679	15.2	19.2	6 20	14 56.65	-11 48.6	2.938	3.738	10.9	22.6
396293	2014 <i>DD</i> ₂₀		5 12.9 41°72	4°8/15.8	17		439095	2011 <i>ST</i> ₆					

EPHEMERIDES

5 12.9

5 13.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
222644	2001 <i>XT</i> ₁₅₆		5 12.9 175°80	2°0/11.6 17			142193	2002 <i>RU</i> ₅₂		5 12.9 265°87	0°7/12.7 17		
4 11	15 45.20	-12 58.6	2.354	3.217	10.6	22.1	4 11	15 46.09	-17 54.0	1.701	2.573	13.6	21.2
4 21	15 38.78	-12 33.9	2.282	3.220	7.6	21.9	4 21	15 40.23	-17 38.3	1.612	2.554	9.9	20.9
5 1	15 30.77	-12 7.5	2.236	3.223	4.4	21.7	5 1	15 31.96	-17 15.6	1.547	2.536	5.6	20.6
5 11	15 21.86	-11 41.9	2.219	3.224	2.1	21.5	5 11	15 22.12	-16 48.0	1.507	2.517	1.0	20.3
5 21	15 12.83	-11 19.9	2.231	3.225	4.0	21.7	5 21	15 11.80	-16 18.7	1.494	2.497	4.1	20.4
5 31	15 4.48	-11 4.0	2.271	3.225	7.2	21.9	5 31	15 2.22	-15 52.1	1.508	2.477	8.9	20.7
6 10	14 57.49	-10 56.4	2.337	3.225	10.3	22.0	6 10	14 54.47	-15 32.5	1.546	2.457	13.2	20.9
6 20	14 52.31	-10 58.1	2.426	3.224	12.9	22.2	6 20	14 49.26	-15 23.3	1.604	2.436	17.0	21.1
131538	2001 <i>UH</i> ₁₂₃		5 12.9 173°68	1°2/12.3 18			330026	2005 <i>UV</i> ₁₂₉		5 13.0 313°77	0°2/13.1 17		
4 11	15 46.27	-18 15.7	1.531	2.407	14.6	19.6	4 11	15 42.56	-21 10.7	1.506	2.384	14.6	20.1
4 21	15 40.25	-17 31.0	1.464	2.409	10.5	19.3	4 21	15 37.82	-20 40.1	1.427	2.372	10.7	19.8
5 1	15 31.85	-16 37.2	1.420	2.410	5.8	19.0	5 1	15 30.62	-19 57.5	1.371	2.360	6.1	19.5
5 11	15 22.05	-15 38.3	1.402	2.411	1.4	18.7	5 11	15 21.89	-19 5.6	1.339	2.349	1.1	19.2
5 21	15 12.09	-14 39.8	1.410	2.411	4.6	19.0	5 21	15 12.79	-18 9.1	1.333	2.337	4.1	19.3
5 31	15 3.20	-13 48.0	1.444	2.412	9.3	19.2	5 31	15 4.63	-17 14.4	1.352	2.327	9.0	19.6
6 10	14 56.39	-13 8.1	1.502	2.412	13.6	19.5	6 10	14 58.47	-16 27.8	1.394	2.317	13.6	19.8
6 20	14 52.22	-12 43.1	1.579	2.411	17.2	19.7	6 20	14 54.98	-15 53.7	1.456	2.307	17.4	20.0
107244	2001 <i>BQ</i> ₅₈		5 12.9 67°02	5°4/10.3 18			426326	2012 <i>US</i> ₁₃₇		5 13.0 254°99	3°3/ 7.8 17		
4 11	15 44.92	- 7 40.5	1.440	2.326	14.7	19.2	4 11	15 33.78	- 2 23.9	4.501	5.360	6.0	21.6
4 21	15 39.24	- 6 52.1	1.385	2.331	10.9	19.0	4 21	15 30.11	- 1 28.8	4.432	5.356	4.6	21.5
5 1	15 31.25	- 6 6.8	1.353	2.336	7.1	18.8	5 1	15 25.76	- 0 36.3	4.391	5.352	3.6	21.4
5 11	15 21.95	- 5 30.6	1.345	2.342	5.4	18.7	5 11	15 21.03	+ 0 11.1	4.379	5.348	3.4	21.4
5 21	15 12.54	- 5 8.4	1.363	2.347	7.6	18.9	5 21	15 16.25	+ 0 51.6	4.396	5.343	4.2	21.4
5 31	15 4.23	- 5 3.6	1.405	2.353	11.3	19.1	5 31	15 11.74	+ 1 23.4	4.440	5.339	5.5	21.5
6 10	14 57.97	- 5 17.2	1.468	2.358	15.1	19.3	6 10	15 7.82	+ 1 45.9	4.511	5.335	6.9	21.6
6 20	14 54.28	- 5 47.9	1.550	2.364	18.3	19.6	6 20	15 4.71	+ 1 58.7	4.603	5.330	8.2	21.7
276127	2002 <i>GL</i> ₁₀₂		5 12.9 78°21	5°3/15.7 17			147926	2006 <i>VJ</i> ₉₄		5 13.0 213°08	0°2/12.8 18		
4 11	15 48.86	-31 32.0	1.790	2.623	14.8	20.4	4 11	15 42.71	-18 6.4	2.718	3.575	9.6	21.0
4 21	15 42.11	-32 13.7	1.728	2.636	11.6	20.2	4 21	15 36.95	-17 59.1	2.634	3.569	6.9	20.8
5 1	15 32.90	-32 39.3	1.688	2.649	8.2	20.0	5 1	15 29.76	-17 47.4	2.575	3.562	3.9	20.6
5 11	15 22.24	-32 46.7	1.673	2.662	5.7	19.9	5 11	15 21.72	-17 32.8	2.546	3.555	0.6	20.3
5 21	15 11.37	-32 36.4	1.685	2.675	5.8	19.9	5 21	15 13.50	-17 17.0	2.545	3.548	2.7	20.5
5 31	15 1.59	-32 11.8	1.723	2.688	8.3	20.1	5 31	15 5.79	-17 2.2	2.574	3.540	5.9	20.7
6 10	14 53.93	-31 39.3	1.786	2.701	11.5	20.3	6 10	14 59.24	-16 50.8	2.630	3.532	8.8	20.8
6 20	14 48.99	-31 4.8	1.869	2.713	14.4	20.5	6 20	14 54.26	-16 44.7	2.709	3.523	11.3	21.0
320504	2007 <i>XS</i> ₂₀		5 12.9 161°98	1°0/12.5 17			256776	2008 <i>CF</i> ₅		5 13.0 44°71	1°4/13.7 17		
4 11	15 47.50	-16 55.5	1.872	2.738	12.8	21.9	4 11	15 45.10	-23 19.9	1.411	2.284	15.7	20.5
4 21	15 40.78	-16 36.3	1.805	2.744	9.2	21.7	4 21	15 39.64	-23 2.8	1.348	2.289	11.5	20.3
5 1	15 32.01	-16 11.9	1.761	2.749	5.1	21.5	5 1	15 31.59	-22 32.2	1.308	2.294	6.8	20.0
5 11	15 22.08	-15 44.5	1.745	2.754	1.2	21.2	5 11	15 22.04	-21 50.1	1.292	2.300	2.0	19.7
5 21	15 12.01	-15 17.3	1.757	2.758	3.9	21.4	5 21	15 12.33	-21 0.8	1.301	2.305	4.1	19.9
5 31	15 2.85	-14 54.0	1.797	2.762	8.0	21.6	5 31	15 3.81	-20 10.6	1.335	2.311	8.9	20.1
6 10	14 55.47	-14 38.0	1.861	2.764	11.7	21.9	6 10	14 57.54	-19 26.2	1.392	2.317	13.4	20.4
6 20	14 50.39	-14 31.6	1.947	2.766	14.9	22.1	6 20	14 54.11	-18 52.3	1.469	2.323	17.1	20.7
219730	2001 <i>XE</i> ₁₄₀		5 12.9 281°92	1°5/12.2 17			161401	2003 <i>UT</i> ₁₆₆		5 13.0 288°86	0°5/13.3 18		
4 11	15 44.72	-15 50.6	1.720	2.596	13.3	19.8	4 11	15 44.30	-20 3.5	1.883	2.749	12.7	19.9
4 21	15 39.20	-15 32.1	1.631	2.575	9.6	19.5	4 21	15 38.66	-20 4.3	1.805	2.743	9.2	19.7
5 1	15 31.37	-15 8.5	1.565	2.555	5.5	19.3	5 1	15 30.94	-19 58.1	1.750	2.738	5.3	19.4
5 11	15 22.01	-14 42.5	1.526	2.534	1.6	18.9	5 11	15 21.94	-19 46.1	1.723	2.732	1.1	19.1
5 21	15 12.18	-14 17.5	1.513	2.513	4.5	19.1	5 21	15 12.66	-19 30.2	1.722	2.726	3.4	19.3
5 31	15 3.06	-13 57.5	1.526	2.492	9.0	19.3	5 31	15 4.15	-19 13.8	1.749	2.720	7.6	19.5
6 10	14 55.69	-13 46.3	1.563	2.471	13.2	19.5	6 10	14 57.31	-19 0.6	1.800	2.715	11.4	19.7
6 20	14 50.76	-13 46.3	1.620	2.450	16.9	19.7	6 20	14 52.74	-18 53.6	1.872	2.709	14.7	19.9
232358	2002 <i>XW</i> ₄₉		5 12.9 242°00	2°8/11.4 18			58923	1998 <i>KJ</i> ₆₂		5 13.0 49°64	1°0/12.1 18		
4 11	15 43.98	-10 3.6	2.200	3.068	11.0	20.2	4 11	15 41.39	-20 40.6	1.926	2.795	12.3	18.7
4 21	15 38.08	- 9 54.1	2.123	3.063	8.0	20.0	4 21	15 36.20	-19 8.7	1.867	2.809	8.8	18.5
5 1	15 30.47	- 9 45.7	2.072	3.056	4.9	19.8	5 1	15 29.34	-17 26.4	1.834	2.823	4.8	18.3
5 11	15 21.83	- 9 41.0	2.048	3.050	2.8	19.7	5 11	15 21.64	-15 39.3	1.829	2.838	1.1	18.0
5 21	15 12.99	- 9 42.0	2.052	3.044	4.6	19.8	5 21	15 13.99	-13 54.2	1.853	2.853	3.9	18.3
5 31	15 4.78	- 9 50.6	2.084	3.037	7.9	20.0	5 31	15 7.28	-12 18.1	1.904	2.868	7.8	18.5
6 10	14 57.95	-10 8.1	2.141	3.031	11.0	20.1	6 10	15 2.18	-10 56.4	1.982	2.883	11.2	18.8
6 20	14 53.00	-10 34.7	2.220	3.024	13.8	20.3	6 20	14 59.06	- 9 52.1	2.081	2.898	14.1	19.0
249	<i>llse</i>		5 12.9 235°29	5°5/16.0 18			291255	2006 <i>BZ</i> ₅₅		5 13.0 41°35	4°7/ 6.3 18		
4 11	15 49.77	-33 34.0	1.959	2.778	14.2	15.8	4 11	15 34.00	+ 5 5.3	4.240	5.082	6.7	20.1
4 21	15 42.92	-33 59.0	1.866	2.764	11.4	15.6	4 21	15 30.30	+ 5 50.0	4.185	5.084	5.6	20.0
5 1	15 33.50	-34 7.2	1.796	2.750	8.4	15.4	5 1	15 25.87	+ 6 28.5	4.157	5.087	4.8	19.9
5 11	15 22.38	-33 55.9	1.751	2.735	5.9	15.2	5 11	15 21.06	+ 6 58.3	4.155	5.089	4.8	19.9
5 21	15 10.75	-33 25.1	1.732	2.719	5.9	15.2	5 21	15 16.20	+ 7 17.8	4.181	5.091	5.5	20.0
5 31	14 59.95	-32 38.4	1.741	2.703	8.5	15.3	5 31	15 11.66	+ 7 26.2	4.233	5.094	6.6	20.1
6 10	14 51.11	-31 42.4	1.775	2.686	11.8	15.4	6 10	15 7.74	+ 7 23.1	4.309	5.096	7.8	20.2
6 20	14 44.99	-30 44.3	1.831	2.669	14.9	15.6	6 20	15 4.69	+ 7 9.3	4.405	5.099	9.0	20.3
219842	2002 <i>CY</i> ₁₄₅		5 12.9 160°96	0°2/13.2 17			292123	2006 <i>RA</i> ₆₈	</				