

EPHEMERIDES

4 26.9

4 27.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
344357	2001 <i>WP</i> ₉₀		4 26.9 131°03	1.6°/28.5	17		141362	2002 <i>AP</i> ₃₇		4 27.0 279°15	4.5°/22.9	18	
3 22	14 42.94	-20 12.9	2.612	3.408	11.5	21.4	3 22	14 40.84	-1 40.3	2.245	3.085	11.7	19.9
4 1	14 37.84	-20 13.1	2.530	3.418	9.0	21.2	4 1	14 36.43	-0 56.3	2.169	3.083	9.0	19.7
4 11	14 31.11	-20 3.4	2.473	3.427	6.0	21.0	4 11	14 30.30	-0 12.8	2.118	3.081	6.3	19.6
4 21	14 23.27	-19 44.7	2.443	3.437	3.0	20.8	4 21	14 23.00	+0 25.8	2.094	3.079	4.5	19.4
5 1	14 15.03	-19 18.9	2.442	3.446	1.8	20.7	5 1	14 15.26	+0 54.9	2.098	3.077	5.4	19.5
5 11	14 7.15	-18 49.3	2.471	3.454	4.5	20.9	5 11	14 7.89	+1 11.0	2.128	3.074	7.9	19.6
5 21	14 0.30	-18 19.4	2.527	3.463	7.5	21.1	5 21	14 1.57	+1 12.1	2.184	3.072	10.7	19.8
5 31	13 54.98	-17 52.9	2.608	3.471	10.2	21.3	5 31	13 56.85	+0 57.8	2.262	3.070	13.3	20.0
141741	2002 <i>LP</i> ₃₆		4 26.9 294°60	8.7°/3.3	18		388412	2006 <i>WL</i> ₁₀₄		4 27.0 52°87	3.0°/24.5	17	
3 22	14 43.44	-35 33.7	1.585	2.347	19.2	19.3	3 22	14 41.85	-5 32.7	2.281	3.117	11.7	21.2
4 1	14 40.11	-36 2.0	1.479	2.323	16.6	19.1	4 1	14 37.16	-5 9.4	2.205	3.119	8.8	21.0
4 11	14 33.59	-36 3.5	1.391	2.299	13.6	18.8	4 11	14 30.75	-4 44.6	2.153	3.121	5.8	20.8
4 21	14 24.51	-35 32.6	1.322	2.275	10.6	18.6	4 21	14 23.16	-4 21.6	2.128	3.123	3.2	20.6
5 1	14 14.09	-34 27.2	1.277	2.251	8.8	18.4	5 1	14 15.15	-4 4.0	2.132	3.125	3.8	20.7
5 11	14 3.95	-32 51.2	1.256	2.227	9.5	18.4	5 11	14 7.51	-3 55.0	2.163	3.127	6.7	20.9
5 21	13 55.60	-30 54.3	1.258	2.203	12.5	18.5	5 21	14 0.94	-3 56.6	2.221	3.129	9.7	21.0
5 31	13 50.18	-28 49.5	1.283	2.179	16.3	18.6	5 31	13 55.98	-4 10.0	2.301	3.131	12.5	21.2
105523	2000 <i>RC</i> ₂₆		4 26.9 189°75	0.5°/27.4	16		279775	1999 <i>TO</i> ₇₉		4 27.0 231°25	1.2°/25.9	17	
3 22	14 45.96	-17 50.7	1.864	2.681	14.7	20.8	3 22	14 42.01	-12 43.2	2.019	2.851	13.1	21.7
4 1	14 40.80	-17 24.3	1.778	2.680	11.3	20.6	4 1	14 37.62	-12 8.5	1.934	2.846	10.0	21.4
4 11	14 33.32	-16 44.6	1.715	2.679	7.4	20.3	4 11	14 31.20	-11 25.1	1.872	2.841	6.3	21.2
4 21	14 24.19	-15 53.6	1.678	2.677	3.0	20.1	4 21	14 23.38	-10 36.4	1.836	2.836	2.4	21.0
5 1	14 14.40	-14 55.7	1.669	2.674	1.7	20.0	5 1	14 15.00	-9 46.9	1.829	2.831	2.5	20.9
5 11	14 5.08	-13 56.9	1.687	2.671	6.2	20.3	5 11	14 6.99	-9 1.9	1.849	2.826	6.4	21.2
5 21	13 57.19	-13 3.3	1.732	2.667	10.4	20.5	5 21	14 0.18	-8 25.8	1.895	2.821	10.2	21.4
5 31	13 51.44	-12 20.3	1.801	2.662	14.0	20.7	5 31	13 55.22	-8 2.1	1.964	2.815	13.5	21.6
461500	2003 <i>BC</i> ₈₇		4 26.9 342°19	5.0°/23.2	17		271870	2004 <i>TP</i> ₃₃₂		4 27.0 237°83	0.4°/27.4	17	
3 22	14 40.80	-4 54.6	1.551	2.409	15.1	21.0	3 22	14 42.37	-17 27.7	2.059	2.878	13.4	21.3
4 1	14 37.13	-3 48.6	1.480	2.405	11.5	20.8	4 1	14 37.94	-17 1.3	1.967	2.870	10.3	21.1
4 11	14 31.07	-2 38.4	1.432	2.402	7.8	20.5	4 11	14 31.45	-16 22.9	1.898	2.862	6.7	20.9
4 21	14 23.34	-1 31.1	1.408	2.399	5.2	20.4	4 21	14 23.50	-15 34.5	1.854	2.853	2.7	20.6
5 1	14 14.98	-0 34.5	1.410	2.397	6.3	20.4	5 1	14 14.92	-14 40.1	1.839	2.845	1.6	20.5
5 11	14 7.13	+0 4.9	1.437	2.395	9.9	20.6	5 11	14 6.70	-13 45.0	1.852	2.836	5.7	20.8
5 21	14 0.78	+0 23.2	1.487	2.393	13.7	20.8	5 21	13 59.67	-12 54.6	1.891	2.826	9.6	21.0
5 31	13 56.63	+0 19.5	1.556	2.392	17.1	21.1	5 31	13 54.52	-12 13.5	1.954	2.817	13.0	21.2
29435	Mordell		4 26.9 285°97	0.1°/27.0	17		168530	1999 <i>UU</i> ₃₃		4 27.0 237°21	0.1°/27.0	18	
3 22	14 42.98	-17 24.3	1.423	2.262	17.2	19.0	3 22	14 37.26	-15 11.6	3.671	4.479	8.2	21.2
4 1	14 39.52	-16 48.9	1.322	2.237	13.4	18.7	4 1	14 33.20	-14 55.8	3.570	4.469	6.3	21.0
4 11	14 33.08	-15 54.8	1.243	2.212	8.8	18.4	4 11	14 28.03	-14 34.6	3.495	4.458	4.0	20.8
4 21	14 24.28	-14 44.4	1.186	2.187	3.4	18.0	4 21	14 22.11	-14 9.2	3.448	4.447	1.5	20.6
5 1	14 14.26	-13 23.2	1.155	2.161	2.3	17.8	5 1	14 15.87	-13 41.7	3.431	4.437	1.0	20.6
5 11	14 4.49	-12 0.4	1.149	2.135	8.1	18.1	5 11	14 9.81	-13 14.3	3.445	4.426	3.5	20.8
5 21	13 56.33	-10 45.7	1.167	2.109	13.6	18.3	5 21	14 4.35	-12 49.3	3.487	4.414	5.9	20.9
5 31	13 50.84	-9 47.5	1.205	2.083	18.4	18.5	5 31	13 59.87	-12 28.9	3.555	4.403	8.1	21.0
399630	2004 <i>OH</i> ₃		4 27.0 270°36	5.7°/30.5	16		436607	2011 <i>KH</i> ₂₆		4 27.0 227°85	0.7°/27.7	18	
3 22	14 47.88	-28 1.3	1.653	2.440	17.5	21.5	3 22	14 42.09	-18 9.2	2.246	3.058	12.6	21.8
4 1	14 43.29	-28 26.0	1.542	2.414	14.6	21.3	4 1	14 37.57	-17 48.0	2.152	3.051	9.8	21.6
4 11	14 35.57	-28 31.0	1.450	2.386	11.0	21.0	4 11	14 31.14	-17 15.6	2.082	3.044	6.4	21.4
4 21	14 25.28	-28 12.5	1.381	2.358	7.5	20.7	4 21	14 23.36	-16 33.7	2.038	3.037	2.7	21.1
5 1	14 13.57	-27 29.7	1.337	2.329	5.7	20.5	5 1	14 15.03	-15 45.5	2.023	3.029	1.5	21.0
5 11	14 1.95	-26 26.4	1.319	2.300	8.0	20.6	5 11	14 7.03	-14 55.7	2.037	3.021	5.3	21.3
5 21	13 51.91	-25 10.5	1.326	2.270	12.1	20.7	5 21	14 0.12	-14 9.0	2.077	3.013	8.9	21.5
5 31	13 44.61	-23 52.4	1.355	2.239	16.4	20.9	5 31	13 54.94	-13 29.9	2.142	3.004	12.1	21.7
299755	Ericmontellese		4 27.0 206°86	1.6°/25.4	17		506774	2006 <i>WW</i> ₂₀₄		4 27.0 123°73	3.3°/30.9	17	
3 22	14 39.54	-11 53.2	2.304	3.135	11.7	21.8	3 22	14 41.20	-28 20.6	2.674	3.438	12.1	22.1
4 1	14 35.45	-11 4.2	2.221	3.134	8.8	21.6	4 1	14 36.57	-28 0.9	2.590	3.449	9.8	22.0
4 11	14 29.67	-10 7.5	2.163	3.133	5.6	21.4	4 11	14 30.31	-27 25.9	2.528	3.460	7.2	21.8
4 21	14 22.75	-9 6.8	2.132	3.131	2.3	21.2	4 21	14 22.99	-26 36.2	2.493	3.470	4.6	21.7
5 1	14 15.40	-8 6.9	2.129	3.130	2.6	21.2	5 1	14 15.32	-25 34.2	2.486	3.480	3.3	21.6
5 11	14 8.41	-7 12.7	2.155	3.128	6.0	21.4	5 11	14 8.07	-24 24.2	2.509	3.489	4.7	21.7
5 21	14 2.44	-6 28.2	2.208	3.126	9.3	21.6	5 21	14 1.87	-23 11.3	2.559	3.499	7.2	21.9
5 31	13 58.04	-5 56.5	2.284	3.125	12.2	21.8	5 31	13 57.22	-22 0.9	2.636	3.508	9.7	22.1
123529	2000 <i>XA</i> ₁₃		4 27.0 238°36	6.5°/2.6	18		60916	2000 <i>JL</i> ₃₇		4 27.0 188°02	1.6°/28.3	18	
3 22	14 46.98	-34 25.3	2.358	3.088	14.4	20.1	3 22	14 46.22	-21 1.7	1.771	2.581	15.6	18.9
4 1	14 41.66	-34 58.0	2.250	3.074	12.3	19.9	4 1	14 41.18	-20 36.4	1.685	2.581	12.2	18.6
4 11	14 33.97	-35 12.6	2.163	3.059	10.0	19.7	4 11	14 33.65	-19 54.3	1.621	2.580	8.2	18.4
4 21	14 24.51	-35 6.5	2.099	3.044	7.8	19.6	4 21	14 24.37	-18 56.9	1.582	2.578	3.8	18.1
5 1	14 14.17	-34 38.4	2.062	3.028	6.6	19.5	5 1	14 14.39	-17 48.5	1.571	2.576	2.1	18.0
5 11	14 4.08	-33 51.0	2.052	3.012	7.2	19.5	5 11	14 4.91	-16 35.8	1.588	2.573	6.3	18.2
5 21	13 55.24	-32 49.2	2.068	2.995	9.4	19.6	5 21	13 56.98	-15 26.3	1.630	2.570	10.6	18.5
5 31	13 48.47	-31 40.3	2.109	2.977	12.0	19.7	5 31	13 51.33	-14 26.6	1.696	2.566	14.4	18.7
274775	2008 <i>UH</i> ₃₆₁		4 27.0 278°69	6.9°/21.8	18		505091	2011 <i>UT</i> ₃₉₇		4 27.0 142°70	2.4°/24.7	18	

EPHEMERIDES

4 27.0

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
386860	2011 <i>BD</i> ₁₃		4 27.0 233°78	14°7/	5.2 15		397276	2006 <i>RO</i> ₉₂		4 27.0 351°14	2°1/24.9	17	
3 22	14 54.63	-42 37.6	1.386	2.107	23.2	21.7	3 22	14 38.52	-11 55.4	2.032	2.871	12.8	20.4
4 1	14 49.94	-44 30.6	1.303	2.100	21.0	21.5	4 1	14 34.91	-10 50.4	1.952	2.870	9.6	20.2
4 11	14 40.67	-45 56.2	1.235	2.094	18.5	21.3	4 11	14 29.45	-9 36.0	1.897	2.868	6.0	20.0
4 21	14 27.50	-46 43.2	1.185	2.086	16.2	21.1	4 21	14 22.73	-8 17.1	1.868	2.867	2.6	19.7
5 1	14 12.17	-46 42.6	1.154	2.079	14.9	21.0	5 1	14 15.55	-6 59.6	1.867	2.867	3.2	19.8
5 11	13 57.22	-45 54.1	1.144	2.071	15.0	21.0	5 11	14 8.77	-5 50.1	1.894	2.866	6.8	20.0
5 21	13 45.01	-44 26.5	1.154	2.062	16.7	21.1	5 21	14 3.13	-4 53.4	1.947	2.865	10.3	20.2
5 31	13 37.17	-42 35.2	1.183	2.054	19.2	21.2	5 31	13 59.21	-4 13.0	2.022	2.865	13.4	20.4
338295	2002 <i>US</i> ₄₅		4 27.0 110°34	0°2/26.9	18		191101	2002 <i>EO</i> ₁₄		4 27.0 101°81	7°9/	3.3 17	
3 22	14 45.61	-13 30.1	2.337	3.152	12.1	20.9	3 22	14 47.41	-35 29.8	1.946	2.684	16.8	20.4
4 1	14 39.96	-13 33.6	2.263	3.165	9.2	20.7	4 1	14 42.34	-36 19.8	1.864	2.690	14.4	20.2
4 11	14 32.51	-13 30.9	2.214	3.179	5.8	20.5	4 11	14 34.55	-36 48.6	1.801	2.695	11.8	20.0
4 21	14 23.85	-13 23.7	2.192	3.192	2.2	20.3	4 21	14 24.78	-36 52.4	1.760	2.700	9.3	19.9
5 1	14 14.79	-13 14.1	2.200	3.205	1.5	20.2	5 1	14 14.16	-36 29.9	1.744	2.705	8.0	19.8
5 11	14 6.15	-13 5.0	2.236	3.217	5.1	20.5	5 11	14 4.03	-35 44.5	1.754	2.710	8.5	19.9
5 21	13 58.68	-12 59.3	2.301	3.229	8.5	20.7	5 21	13 55.56	-34 42.6	1.788	2.715	10.6	20.0
5 31	13 52.91	-12 59.3	2.389	3.241	11.3	20.9	5 31	13 49.57	-33 32.7	1.845	2.720	13.1	20.2
53188	1999 <i>CM</i> ₄₉		4 27.0 354°81	6°0/23.5	18		473120	2015 <i>HL</i> ₁₇₉		4 27.0 8°43	5°7/23.1	17	
3 22	14 42.37	-1 48.3	1.351	2.214	16.5	18.3	3 22	14 43.25	+ 0 55.3	1.853	2.698	13.6	20.3
4 1	14 38.67	-1 10.1	1.284	2.210	12.8	18.0	4 1	14 38.58	+ 1 26.3	1.785	2.699	10.6	20.1
4 11	14 32.24	-0 33.0	1.238	2.207	8.9	17.8	4 11	14 31.82	+ 1 53.6	1.740	2.700	7.6	19.9
4 21	14 23.87	-0 3.9	1.216	2.205	6.2	17.6	4 21	14 23.64	+ 2 12.1	1.720	2.701	5.8	19.8
5 1	14 14.76	+ 0 10.4	1.217	2.203	7.2	17.7	5 1	14 14.95	+ 2 17.2	1.727	2.703	6.6	19.8
5 11	14 6.23	+ 0 5.3	1.242	2.203	10.8	17.9	5 11	14 6.75	+ 2 5.8	1.760	2.706	9.3	20.0
5 21	13 59.43	-0 21.0	1.289	2.203	14.8	18.1	5 21	13 59.88	+ 1 37.4	1.817	2.708	12.4	20.2
5 31	13 55.14	-1 7.5	1.356	2.204	18.5	18.3	5 31	13 54.96	+ 0 52.6	1.895	2.712	15.2	20.4
501505	2014 <i>DP</i> ₄₉		4 27.0 96°13	4°1/22.9	17		343143	2009 <i>FP</i> ₄₁		4 27.0 61°10	1°0/27.7	17	
3 22	14 39.64	- 3 31.2	2.296	3.137	11.4	21.5	3 22	14 46.76	-15 39.6	2.109	2.922	13.3	20.5
4 1	14 35.44	- 2 32.3	2.228	3.143	8.7	21.3	4 1	14 41.13	-16 6.4	2.031	2.931	10.2	20.3
4 11	14 29.63	- 1 32.2	2.185	3.150	5.9	21.2	4 11	14 33.42	-16 26.1	1.977	2.939	6.7	20.1
4 21	14 22.75	- 0 35.7	2.169	3.156	4.1	21.1	4 21	14 24.26	-16 39.1	1.950	2.948	2.9	19.9
5 1	14 15.52	+ 0 12.3	2.181	3.162	5.0	21.1	5 1	14 14.53	-16 46.5	1.951	2.956	1.7	19.8
5 11	14 8.69	+ 0 47.6	2.221	3.168	7.6	21.3	5 11	14 5.24	-16 50.9	1.981	2.965	5.4	20.1
5 21	14 2.89	+ 1 7.8	2.285	3.174	10.3	21.5	5 21	13 57.21	-16 55.0	2.038	2.974	9.0	20.3
5 31	13 58.61	+ 1 12.1	2.372	3.180	12.8	21.6	5 31	13 51.12	-17 2.1	2.119	2.983	12.1	20.5
271746	2004 <i>RT</i> ₃₂₅		4 27.0 248°57	3°1/29.5	18		518663	2008 <i>SU</i> ₃₁₂		4 27.0 221°50	1°6/25.6	17	
3 22	14 45.58	-24 10.8	2.310	3.093	13.2	21.3	3 22	14 41.89	-11 39.6	1.985	2.820	13.2	21.6
4 1	14 40.43	-24 18.6	2.199	3.074	10.7	21.1	4 1	14 37.53	-11 2.3	1.904	2.818	10.0	21.4
4 11	14 33.12	-24 13.0	2.111	3.054	7.6	20.9	4 11	14 31.17	-10 17.2	1.845	2.816	6.3	21.2
4 21	14 24.20	-23 53.2	2.049	3.034	4.5	20.7	4 21	14 23.41	-9 27.8	1.813	2.813	2.6	20.9
5 1	14 14.50	-23 20.4	2.015	3.013	3.1	20.5	5 1	14 15.10	-8 39.0	1.809	2.811	2.8	20.9
5 11	14 4.98	-22 38.0	2.009	2.991	5.5	20.6	5 11	14 7.20	-7 56.0	1.833	2.808	6.6	21.2
5 21	13 56.56	-21 50.9	2.031	2.969	8.9	20.8	5 21	14 0.52	-7 23.1	1.882	2.806	10.3	21.4
5 31	13 49.99	-21 4.6	2.078	2.947	12.1	21.0	5 31	13 55.69	-7 3.3	1.954	2.803	13.6	21.6
83172	2001 <i>QG</i> ₂₈₄		4 27.0 82°45	3°0/24.1	18		505331	2013 <i>AQ</i> ₁₄		4 27.0 137°63	4°3/	2.3 18	
3 22	14 40.51	- 7 33.6	2.158	2.997	12.1	19.3	3 22	14 43.66	-32 22.5	3.166	3.895	11.1	22.6
4 1	14 36.14	- 6 34.9	2.096	3.013	9.1	19.1	4 1	14 38.27	-32 32.6	3.081	3.908	9.3	22.5
4 11	14 30.07	- 5 32.2	2.059	3.028	5.8	18.9	4 11	14 31.35	-32 28.8	3.018	3.922	7.2	22.4
4 21	14 22.91	- 4 30.3	2.049	3.044	3.3	18.8	4 21	14 23.42	-32 10.4	2.981	3.935	5.3	22.3
5 1	14 15.44	- 3 34.3	2.068	3.060	4.0	18.9	5 1	14 15.12	-31 38.2	2.973	3.947	4.3	22.2
5 11	14 8.45	- 2 49.0	2.114	3.075	7.0	19.1	5 11	14 7.18	-30 55.0	2.993	3.959	4.9	22.3
5 21	14 2.60	- 2 17.4	2.186	3.090	10.0	19.3	5 21	14 0.19	-30 4.6	3.042	3.970	6.7	22.4
5 31	13 58.39	- 2 1.2	2.280	3.105	12.7	19.5	5 31	13 54.65	-29 11.3	3.117	3.981	8.6	22.6
499232	2009 <i>UJ</i> ₁₁₈		4 27.0 157°96	0°4/26.7	17		396109	2013 <i>CK</i> ₁₅₀		4 27.0 185°80	1°0/28.1	17	
3 22	14 43.70	-15 6.1	2.060	2.882	13.3	22.0	3 22	14 40.82	-18 39.4	2.904	3.704	10.4	21.9
4 1	14 38.80	-14 35.4	1.981	2.887	10.1	22.0	4 1	14 36.17	-18 32.4	2.813	3.704	8.0	21.8
4 11	14 31.91	-13 54.9	1.925	2.892	6.4	21.8	4 11	14 30.05	-18 17.1	2.746	3.704	5.3	21.6
4 21	14 23.66	-13 7.2	1.896	2.896	2.4	21.6	4 21	14 22.94	-17 54.5	2.707	3.703	2.4	21.4
5 1	14 14.92	-12 16.6	1.895	2.900	1.8	21.5	5 1	14 15.43	-17 26.6	2.697	3.702	1.3	21.3
5 11	14 6.63	-11 28.2	1.922	2.903	5.9	21.8	5 11	14 8.19	-16 56.4	2.717	3.700	4.1	21.5
5 21	13 59.59	-10 46.8	1.976	2.906	9.6	22.0	5 21	14 1.80	-16 27.0	2.765	3.699	7.0	21.7
5 31	13 54.42	-10 16.1	2.054	2.908	12.8	22.2	5 31	13 56.75	-16 1.6	2.838	3.697	9.5	21.8
368192	2000 <i>UU</i> ₂₄		4 27.0 172°86	1°3/25.7	17		281251	2007 <i>NT</i>		4 27.0 269°73	0°1/27.1	18	
3 22	14 42.43	-12 56.1	2.406	3.228	11.6	21.6	3 22	14 42.33	-16 29.6	2.117	2.937	13.0	21.3
4 1	14 37.55	-12 4.9	2.324	3.231	8.8	21.4	4 1	14 37.99	-16 3.8	2.012	2.916	10.1	21.1
4 11	14 30.98	-11 5.6	2.266	3.234	5.5	21.2	4 11	14 31.57	-15 26.7	1.929	2.895	6.5	20.8
4 21	14 23.28	-10 1.6	2.236	3.236	2.2	20.9	4 21	14 23.62	-14 40.1	1.873	2.873	2.6	20.5
5 1	14 15.19	- 8 57.4	2.236	3.238	2.4	21.0	5 1	14 14.94	-13 47.8	1.846	2.851	1.7	20.4
5 11	14 7.47	- 7 58.0	2.265	3.239	5.7	21.2	5 11	14 6.49	-12 54.9	1.846	2.829	5.9	20.7
5 21	14 0.81	- 7 7.7	2.322	3.239	9.0	21.4	5 21	13 59.13	-12 6.6	1.873	2.806	9.8	20.8
5 31	13 55.72	- 6 29.6	2.403	3.239	11.8	21.6	5 31	13 53.60	-11 27.7	1.924	2.783	13.3	21.0
99988	1981 <i>ET</i> ₃₃		4 27.0 301°52	1°6/28.4	18		338809	2003 <i>WT</i> ₁₄		4 27.0 84°55	1		

EPHEMERIDES

4 27.0

4 27.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
247811	2003 SY ₁₂₁		4 27.0 218°38'	3°5'/29.6	17		8411	Celso		4 27.0 294°11'	2°7'/25.2	17	
3 22	14 46.71	-24 34.5	1.849	2.643	15.7	21.6	3 22	14 42.59	-10 34.6	1.429	2.282	16.4	18.4
4 1	14 41.68	-24 38.7	1.755	2.636	12.6	21.4	4 1	14 39.01	-9 51.5	1.341	2.265	12.5	18.2
4 11	14 34.09	-24 25.9	1.682	2.629	9.0	21.1	4 11	14 32.64	-8 57.8	1.275	2.248	8.0	17.9
4 21	14 24.62	-23 55.3	1.634	2.621	5.3	20.9	4 21	14 24.14	-7 58.4	1.232	2.231	3.6	17.5
5 1	14 14.31	-23 8.8	1.613	2.613	3.6	20.8	5 1	14 14.65	-7 0.4	1.214	2.215	4.2	17.5
5 11	14 4.39	-22 11.4	1.619	2.604	6.3	20.9	5 11	14 5.52	-6 11.7	1.222	2.198	9.1	17.8
5 21	13 55.94	-21 10.0	1.652	2.594	10.2	21.1	5 21	13 57.99	-5 38.8	1.252	2.182	13.9	18.0
5 31	13 49.81	-20 12.0	1.707	2.584	13.9	21.3	5 31	13 52.99	-5 25.6	1.302	2.165	18.2	18.2
175916	2000 CQ ₄₈		4 27.0 76°19'	3°8'/24.0	18		371042	2005 UM ₁₆₂		4 27.0 188°10'	2°6'/24.4	17	
3 22	14 43.40	-8 36.4	1.549	2.399	15.5	20.1	3 22	14 43.60	-7 49.5	2.513	3.338	11.1	22.7
4 1	14 38.87	-7 19.8	1.497	2.419	11.6	19.9	4 1	14 38.37	-7 0.6	2.428	3.337	8.4	22.5
4 11	14 32.02	-5 56.6	1.467	2.438	7.4	19.7	4 11	14 31.51	-6 7.4	2.369	3.336	5.4	22.3
4 21	14 23.71	-4 33.9	1.462	2.458	4.1	19.5	4 21	14 23.52	-5 13.5	2.338	3.334	2.9	22.2
5 1	14 15.01	-3 19.9	1.484	2.477	5.1	19.7	5 1	14 15.12	-4 23.4	2.337	3.330	3.5	22.2
5 11	14 7.06	-2 21.5	1.533	2.497	8.8	19.9	5 11	14 7.05	-3 41.1	2.366	3.327	6.3	22.4
5 21	14 0.74	-1 42.8	1.605	2.516	12.6	20.2	5 21	13 59.98	-3 9.9	2.421	3.322	9.3	22.5
5 31	13 56.62	-1 25.4	1.698	2.535	15.8	20.4	5 31	13 54.42	-2 51.8	2.500	3.317	12.0	22.7
377455	2004 VG ₅₇		4 27.0 153°31'	4°2'/1.1	17		223275	2003 GH ₄₁		4 27.0 37°12'	0°1'/27.1	17	
3 22	14 44.54	-28 59.8	2.300	3.065	13.8	21.3	3 22	14 48.74	-12 41.0	1.544	2.379	16.3	19.9
4 1	14 39.46	-28 57.5	2.214	3.072	11.3	21.2	4 1	14 43.30	-13 11.1	1.474	2.386	12.5	19.7
4 11	14 32.35	-28 38.0	2.149	3.078	8.4	21.0	4 11	14 35.13	-13 35.3	1.426	2.394	8.0	19.4
4 21	14 23.86	-28 0.8	2.110	3.084	5.6	20.8	4 21	14 25.01	-13 54.1	1.402	2.402	3.1	19.1
5 1	14 14.86	-27 7.9	2.098	3.089	4.2	20.7	5 1	14 14.14	-14 9.1	1.405	2.410	2.0	19.1
5 11	14 6.32	-26 3.7	2.115	3.094	5.6	20.8	5 11	14 3.88	-14 23.3	1.434	2.419	6.9	19.4
5 21	13 59.04	-24 54.0	2.159	3.098	8.4	21.0	5 21	13 55.35	-14 39.7	1.489	2.428	11.4	19.7
5 31	13 53.65	-23 45.4	2.228	3.102	11.2	21.2	5 31	13 49.37	-15 1.2	1.566	2.438	15.2	19.9
370100	2001 TD ₇₄		4 27.0 176°75'	0°6'/27.5	17		250884	2005 UQ ₅₀₈		4 27.0 210°40'	2°8'/29.5	16	
3 22	14 47.14	-16 22.5	2.296	3.102	12.6	21.2	3 22	14 43.76	-23 16.0	2.675	3.457	11.7	21.0
4 1	14 41.30	-16 23.3	2.209	3.105	9.7	21.0	4 1	14 38.64	-23 37.2	2.580	3.454	9.3	20.9
4 11	14 33.49	-16 15.7	2.146	3.107	6.3	20.8	4 11	14 31.78	-23 47.9	2.508	3.451	6.6	20.7
4 21	14 24.30	-16 0.6	2.110	3.108	2.6	20.6	4 21	14 23.67	-23 47.9	2.463	3.448	3.9	20.5
5 1	14 14.56	-15 40.4	2.103	3.108	1.5	20.5	5 1	14 15.01	-23 37.9	2.447	3.444	2.8	20.4
5 11	14 5.19	-15 18.4	2.126	3.108	5.2	20.7	5 11	14 6.61	-23 20.3	2.460	3.441	4.7	20.5
5 21	13 56.99	-14 58.3	2.176	3.108	8.7	20.9	5 21	13 59.18	-22 58.5	2.501	3.437	7.5	20.7
5 31	13 50.60	-14 43.5	2.251	3.106	11.8	21.1	5 31	13 53.30	-22 36.4	2.567	3.434	10.2	20.9
231924	2001 CL ₃₇		4 27.0 227°17'	3°8'/23.7	18		34032	2000 OC ₂₇		4 27.0 144°53'	4°9'/22.4	18	
3 22	14 41.84	-5 18.0	2.061	2.902	12.5	20.4	3 22	14 42.88	-2 6.9	2.134	2.973	12.3	18.9
4 1	14 37.40	-4 26.4	1.981	2.897	9.5	20.2	4 1	14 37.99	-0 57.0	2.069	2.982	9.4	18.8
4 11	14 31.05	-3 31.6	1.925	2.892	6.3	20.0	4 11	14 31.30	+0 13.4	2.029	2.990	6.6	18.6
4 21	14 23.38	-2 38.6	1.896	2.888	4.0	19.9	4 21	14 23.44	+1 18.5	2.016	2.998	4.9	18.5
5 1	14 15.18	-1 52.6	1.894	2.882	4.8	19.9	5 1	14 15.20	+2 12.7	2.031	3.006	5.9	18.6
5 11	14 7.37	-1 18.5	1.920	2.877	7.9	20.1	5 11	14 7.44	+2 51.4	2.073	3.013	8.5	18.8
5 21	14 0.70	-0 59.4	1.971	2.872	11.1	20.3	5 21	14 0.84	+3 12.2	2.141	3.020	11.3	19.0
5 31	13 55.80	-0 56.8	2.044	2.866	14.1	20.4	5 31	13 55.96	+3 14.7	2.230	3.026	13.9	19.1
88453	2001 QF ₆₁		4 27.0 153°60'	11°2'/7.1	18		459648	2013 JL ₄₂		4 27.0 2°23'	6°7'/22.3	17	
3 22	14 59.56	-47 0.3	2.212	2.846	17.6	20.6	3 22	14 36.77	-5 47.9	1.072	1.956	18.3	20.5
4 1	14 52.00	-48 19.7	2.130	2.858	16.0	20.5	4 1	14 34.91	-4 8.9	1.015	1.954	13.9	20.2
4 11	14 40.98	-49 14.6	2.066	2.869	14.2	20.4	4 11	14 30.07	-2 21.6	0.977	1.953	9.5	19.9
4 21	14 27.34	-49 38.4	2.022	2.879	12.5	20.3	4 21	14 23.12	-0 37.7	0.961	1.953	6.7	19.8
5 1	14 12.53	-49 27.0	2.001	2.888	11.4	20.2	5 1	14 15.40	+0 49.7	0.968	1.955	8.4	19.9
5 11	13 58.31	-48 41.9	2.004	2.895	11.3	20.2	5 11	14 8.41	+1 50.3	0.996	1.958	12.7	20.1
5 21	13 46.21	-47 29.5	2.031	2.902	12.2	20.3	5 21	14 3.34	+2 18.8	1.044	1.962	17.1	20.4
5 31	13 37.28	-45 59.8	2.081	2.908	13.7	20.4	5 31	14 0.99	+2 15.2	1.108	1.967	21.0	20.6
422370	2014 SN ₂₅₀		4 27.0 221°08'	0°7'/26.6	16		341278	2007 RL ₂₈₄		4 27.0 251°09'	0°2'/27.2	17	
3 22	14 47.91	-13 27.7	1.802	2.627	14.7	21.4	3 22	14 42.39	-15 44.0	2.143	2.964	12.9	21.7
4 1	14 42.49	-13 14.3	1.710	2.618	11.3	21.2	4 1	14 37.89	-15 30.3	2.052	2.957	9.9	21.5
4 11	14 34.56	-12 52.0	1.642	2.609	7.3	20.9	4 11	14 31.42	-15 7.3	1.986	2.951	6.4	21.2
4 21	14 24.80	-12 22.9	1.599	2.599	2.7	20.6	4 21	14 23.55	-14 36.8	1.945	2.945	2.5	21.0
5 1	14 14.22	-11 50.8	1.584	2.589	2.2	20.5	5 1	14 15.09	-14 2.0	1.933	2.938	1.6	20.9
5 11	14 4.00	-11 20.6	1.597	2.578	6.9	20.8	5 11	14 6.97	-13 27.2	1.948	2.932	5.6	21.1
5 21	13 55.21	-10 57.2	1.636	2.566	11.2	21.0	5 21	13 59.98	-12 56.7	1.991	2.925	9.3	21.3
5 31	13 48.65	-10 44.5	1.698	2.553	15.0	21.2	5 31	13 54.78	-12 34.2	2.057	2.918	12.5	21.5
62706	2000 TD ₃₈		4 27.0 231°25'	1°7'/28.2	18		472733	2015 FP ₇₇		4 27.0 204°85'	1°8'/25.2	17	
3 22	14 48.05	-18 34.4	2.154	2.956	13.5	19.5	3 22	14 40.16	-11 9.6	2.367	3.197	11.5	21.1
4 1	14 42.33	-18 54.9	2.055	2.946	10.5	19.3	4 1	14 35.92	-10 18.4	2.282	3.194	8.7	20.9
4 11	14 34.36	-19 6.2	1.979	2.935	7.1	19.0	4 11	14 30.01	-9 20.0	2.222	3.191	5.5	20.7
4 21	14 24.71	-19 8.1	1.929	2.924	3.5	18.8	4 21	14 22.97	-8 18.1	2.189	3.188	2.4	20.5
5 1	14 14.27	-19 1.6	1.908	2.912	2.1	18.7	5 1	14 15.50	-7 17.6	2.186	3.185	2.8	20.5
5 11	14 4.08	-18 49.6	1.917	2.900	5.6	18.9	5 11	14 8.37	-6 23.2	2.211	3.182	6.0	20.7
5 21	13 55.08	-18 35.8	1.952	2.888	9.3	19.1	5 21	14 2.24	-5 38.9	2.263	3.178	9.3	20.9
5 31	13 48.05	-18 24.5	2.012	2.875	12.7	19.3	5 31	13 57.64	-5 7.6	2.338	3.174	12.1	21.1
192560	1998 VT		4 27.0 274°75'	18°5'/23.9	18		195577	2002 JU ₉₉		4 27.0 156°80'	3°6'/24.4	18	
3 22	15 13.82	+24 11.5	1.110	1.895	24.4	19.2	3 22	14 45.86					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
451012	2008 UK ₉₈		4 27.0 98°82	7.7/24.2	18		170116	2002 XA ₁₁₀		4 27.0 105°61	3.3/30.3	18	
3 22	14 58.62	+ 5 53.3	1.486	2.312	17.3	20.3	3 22	14 41.94	-26 26.5	2.246	3.028	13.6	20.3
4 1	14 50.49	+ 5 55.8	1.430	2.329	13.8	20.1	4 1	14 37.49	-26 17.8	2.162	3.034	10.9	20.2
4 11	14 39.48	+ 5 46.7	1.396	2.345	10.2	19.9	4 11	14 31.11	-25 53.0	2.101	3.041	7.9	20.0
4 21	14 26.58	+ 5 20.5	1.387	2.361	7.9	19.8	4 21	14 23.41	-25 12.5	2.065	3.047	4.9	19.8
5 1	14 13.21	+ 4 34.0	1.405	2.376	8.4	19.9	5 1	14 15.24	-24 18.7	2.057	3.054	3.3	19.7
5 11	14 0.83	+ 3 27.2	1.450	2.391	11.3	20.1	5 11	14 7.50	-23 16.3	2.077	3.060	5.2	19.8
5 21	13 50.58	+ 2 3.3	1.520	2.406	14.7	20.3	5 21	14 0.98	-22 11.0	2.123	3.066	8.3	20.0
5 31	13 43.18	+ 0 26.2	1.611	2.420	17.8	20.6	5 31	13 56.27	-21 8.8	2.195	3.072	11.2	20.2
430443	2000 PW ₂₈		4 27.0 267°86	16°5/7.9	18		464601	2016 CN ₁₂₃		4 27.0 317°83	1°5/26.0	17	
3 22	15 5.54	-59 28.5	2.294	2.818	19.2	20.8	3 22	14 39.71	-14 24.6	1.270	2.129	17.7	20.8
4 1	14 59.26	-61 42.5	2.190	2.794	18.5	20.7	4 1	14 37.11	-13 37.9	1.187	2.113	13.6	20.5
4 11	14 47.56	-63 34.5	2.100	2.770	17.8	20.6	4 11	14 31.56	-12 34.4	1.123	2.098	8.7	20.2
4 21	14 30.62	-64 54.2	2.026	2.746	17.1	20.4	4 21	14 23.78	-11 18.8	1.083	2.084	3.3	19.8
5 1	14 10.01	-65 31.6	1.968	2.721	16.6	20.3	5 1	14 14.95	-9 59.0	1.066	2.070	3.3	19.7
5 11	13 48.79	-65 22.0	1.928	2.696	16.5	20.3	5 11	14 6.58	-8 45.2	1.073	2.057	8.9	20.0
5 21	13 30.30	-64 28.3	1.906	2.670	16.9	20.2	5 21	13 59.95	-7 46.2	1.103	2.044	14.2	20.3
5 31	13 17.02	-63 0.4	1.901	2.644	17.7	20.2	5 31	13 56.03	-7 8.4	1.151	2.032	18.9	20.5
36934	2000 SG ₂₂₆		4 27.0 304°33	7°3/22.8	17		37834	1998 BG ₄₁		4 27.0 187°10	4°2/23.7	18	
3 22	14 44.62	-0 39.4	1.309	2.171	17.1	18.3	3 22	14 45.29	-5 37.8	1.832	2.672	13.9	19.5
4 1	14 40.97	+ 0 12.2	1.216	2.141	13.5	18.0	4 1	14 40.22	-4 36.9	1.756	2.672	10.6	19.3
4 11	14 34.18	+ 1 4.6	1.144	2.110	9.8	17.7	4 11	14 32.94	-3 31.7	1.704	2.671	7.0	19.1
4 21	14 24.86	+ 1 49.6	1.094	2.079	7.4	17.4	4 21	14 24.14	-2 28.1	1.678	2.670	4.4	18.9
5 1	14 14.15	+ 2 17.8	1.067	2.049	8.7	17.4	5 1	14 14.77	-1 32.6	1.680	2.668	5.4	19.0
5 11	14 3.61	+ 2 21.8	1.064	2.019	12.8	17.5	5 11	14 5.87	-0 51.0	1.709	2.665	8.7	19.2
5 21	13 54.70	+ 1 57.9	1.081	1.989	17.5	17.7	5 21	13 58.35	-0 26.8	1.763	2.662	12.3	19.4
5 31	13 48.57	+ 1 6.2	1.116	1.960	21.9	17.9	5 31	13 52.88	-0 21.6	1.838	2.658	15.5	19.6
499381	2010 AU ₇₂		4 27.0 136°89	0°9/26.2	17		219526	2001 QE ₁₁₇		4 27.0 208°01	2°5/29.2	18	
3 22	14 44.33	-12 31.2	2.285	3.106	12.2	22.3	3 22	14 45.41	-23 7.7	2.271	3.059	13.3	21.0
4 1	14 39.04	-12 8.3	2.211	3.117	9.2	22.1	4 1	14 40.19	-23 2.1	2.173	3.053	10.5	20.8
4 11	14 31.96	-11 38.8	2.161	3.128	5.8	21.9	4 11	14 32.90	-22 42.7	2.099	3.047	7.4	20.6
4 21	14 23.71	-11 5.3	2.138	3.138	2.2	21.7	4 21	14 24.14	-22 9.7	2.050	3.039	4.1	20.3
5 1	14 15.05	-10 31.3	2.145	3.148	2.0	21.7	5 1	14 14.75	-21 25.2	2.030	3.031	2.6	20.2
5 11	14 6.83	-10 0.7	2.180	3.157	5.6	21.9	5 11	14 5.68	-20 33.4	2.039	3.023	5.3	20.4
5 21	13 59.76	-9 36.9	2.243	3.166	8.9	22.2	5 21	13 57.80	-19 39.7	2.075	3.013	8.7	20.6
5 31	13 54.38	-9 22.6	2.329	3.174	11.8	22.4	5 31	13 51.76	-18 49.5	2.136	3.003	11.9	20.8
225827	2001 XB ₃₈		4 27.0 230°02	0°5/26.7	18		299466	2006 BG ₁₀₆		4 27.0 153°44	1°9/25.7	18	
3 22	14 47.77	-12 28.7	2.141	2.958	13.0	20.4	3 22	14 47.49	-11 30.5	1.675	2.509	15.3	21.6
4 1	14 42.04	-12 31.1	2.044	2.947	10.0	20.1	4 1	14 42.07	-10 54.9	1.602	2.516	11.6	21.3
4 11	14 34.13	-12 27.5	1.970	2.936	6.4	19.9	4 11	14 34.19	-10 10.7	1.553	2.523	7.3	21.1
4 21	14 24.63	-12 19.6	1.924	2.924	2.4	19.6	4 21	14 24.63	-9 22.0	1.529	2.529	3.0	20.8
5 1	14 14.39	-12 9.7	1.907	2.912	1.9	19.6	5 1	14 14.47	-8 34.3	1.532	2.534	3.2	20.9
5 11	14 4.42	-12 1.0	1.919	2.898	6.0	19.8	5 11	14 4.90	-7 53.6	1.563	2.539	7.5	21.1
5 21	13 55.64	-11 56.7	1.958	2.885	9.8	20.0	5 21	13 56.93	-7 24.6	1.619	2.543	11.7	21.4
5 31	13 48.75	-11 59.7	2.021	2.871	13.2	20.2	5 31	13 51.26	-7 10.5	1.697	2.547	15.3	21.6
282648	2005 UM ₆₀		4 27.0 254°04	3°3/24.8	17		153058	2000 QA ₁₅₂		4 27.0 254°85	3°8/23.4	18	
3 22	14 46.40	-9 1.2	1.575	2.418	15.6	21.2	3 22	14 40.84	-7 43.6	1.912	2.756	13.2	20.3
4 1	14 41.73	-8 12.2	1.482	2.400	12.0	20.9	4 1	14 36.86	-6 23.7	1.826	2.745	10.0	20.0
4 11	14 34.30	-7 14.2	1.410	2.381	7.8	20.6	4 11	14 30.84	-4 56.0	1.764	2.734	6.6	19.8
4 21	14 24.79	-6 12.2	1.363	2.361	3.9	20.3	4 21	14 23.36	-3 26.5	1.729	2.723	4.0	19.6
5 1	14 14.26	-5 13.2	1.343	2.340	4.7	20.3	5 1	14 15.28	-2 2.8	1.722	2.712	5.1	19.7
5 11	14 4.04	-4 24.7	1.349	2.319	9.2	20.5	5 11	14 7.56	-0 51.8	1.742	2.700	8.5	19.8
5 21	13 55.32	-3 52.6	1.379	2.297	13.8	20.7	5 21	14 1.05	+ 0 1.2	1.787	2.688	12.1	20.0
5 31	13 49.04	-3 40.3	1.430	2.275	17.9	20.9	5 31	13 56.41	+ 0 33.6	1.854	2.676	15.3	20.2
35328	1997 EH ₁₅		4 27.0 24°00	6°2/1.5	17		496644	2016 AV ₉₅		4 27.0 324°85	6°6/22.9	18	
3 22	14 46.78	-30 16.9	2.122	2.882	15.0	19.2	3 22	14 42.42	-2 53.7	1.265	2.132	17.2	19.9
4 1	14 41.58	-31 18.4	2.038	2.886	12.5	19.0	4 1	14 38.98	-1 49.1	1.195	2.123	13.3	19.6
4 11	14 33.97	-32 4.4	1.976	2.890	9.8	18.8	4 11	14 32.62	-0 42.0	1.145	2.115	9.3	19.3
4 21	14 24.60	-32 31.8	1.937	2.895	7.4	18.7	4 21	14 24.13	+ 0 19.1	1.119	2.108	6.7	19.2
5 1	14 14.41	-32 39.6	1.925	2.900	6.2	18.6	5 1	14 14.76	+ 1 4.9	1.116	2.100	8.0	19.2
5 11	14 4.57	-32 29.6	1.940	2.905	7.2	18.7	5 11	14 5.96	+ 1 28.0	1.136	2.094	11.9	19.4
5 21	13 56.10	-32 6.4	1.980	2.910	9.5	18.8	5 21	13 58.96	+ 1 25.2	1.177	2.088	16.2	19.6
5 31	13 49.80	-31 35.9	2.044	2.916	12.2	19.0	5 31	13 54.63	+ 0 56.6	1.236	2.082	20.0	19.9
410703	2009 AN ₁₂		4 27.0 266°58	7°1/22.1	16		89037	2001 TZ ₁₀₇		4 27.0 126°87	3°1/24.9	18	
3 22	14 45.37	+ 0 2.8	1.517	2.369	15.7	21.2	3 22	14 46.89	-8 41.4	1.611	2.453	15.4	19.1
4 1	14 40.89	+ 1 10.1	1.435	2.353	12.3	21.0	4 1	14 41.60	-7 57.5	1.547	2.464	11.7	18.9
4 11	14 33.72	+ 2 17.5	1.376	2.337	9.0	20.7	4 11	14 33.87	-7 7.6	1.504	2.475	7.4	18.7
4 21	14 24.54	+ 3 17.0	1.340	2.321	7.2	20.6	4 21	14 24.49	-6 16.8	1.487	2.485	3.6	18.5
5 1	14 14.45	+ 4 0.1	1.330	2.304	8.5	20.6	5 1	14 14.58	-5 31.2	1.497	2.495	4.3	18.5
5 11	14 4.77	+ 4 20.3	1.344	2.287	11.9	20.8	5 11	14 5.33	-4 56.6	1.534	2.504	8.3	18.8
5 21	13 56.63	+ 4 14.8	1.381	2.270	15.7	20.9	5 21	13 57.72	-4 36.8	1.595	2.513	12.3	19.0
5 31	13 50.93	+ 3 43.9	1.436	2.253	19.2	21.1	5 31	13 52.42	-4 33.9	1.678	2.521	15.7	19.3
262903	2007 CC ₄₆		4 27.0 304°52	8°8/2.9	18 R		112744	2002 PG ₁₃₂		4 27.0 233°69	0°3/27.3	18	
3 22	14 44.58	-34 49.2	1.665	2.425									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
391741	2008 CS ₂₀₂		4 27.0 134°35'	3°6/30.6	17		433449	2013 TK ₁₄₅		4 27.1 195°69'	3°5/23.9	17	
3 22	14 44.20	-27 8.5	2.752	3.515	11.8	22.3	3 22	14 45.89	-3 25.8	2.502	3.327	11.1	22.0
4 1	14 38.89	-27 26.5	2.667	3.525	9.6	22.2	4 1	14 40.14	-2 55.7	2.417	3.324	8.5	21.8
4 11	14 31.88	-27 31.8	2.605	3.534	7.1	22.0	4 11	14 32.67	-2 25.0	2.358	3.320	5.7	21.6
4 21	14 23.70	-27 24.0	2.570	3.544	4.7	21.9	4 21	14 24.04	-1 57.4	2.326	3.315	3.6	21.5
5 1	14 15.08	-27 4.0	2.563	3.552	3.6	21.8	5 1	14 14.94	-1 36.4	2.324	3.310	4.3	21.5
5 11	14 6.79	-26 34.4	2.585	3.561	4.9	21.9	5 11	14 6.16	-1 25.1	2.351	3.304	6.9	21.7
5 21	13 59.54	-25 59.1	2.634	3.569	7.2	22.1	5 21	13 58.40	-1 25.5	2.405	3.297	9.7	21.8
5 31	13 53.85	-25 22.5	2.710	3.577	9.7	22.3	5 31	13 52.20	-1 38.4	2.483	3.290	12.3	22.0
299977	2006 TA ₁₁₂		4 27.0 140°60'	3°8/23.5	17		237273	2008 WV ₁₃₀		4 27.1 242°05'	0°9/27.8	17	
3 22	14 42.09	-2 24.4	2.468	3.302	11.0	21.1	3 22	14 42.49	-18 26.0	2.129	2.942	13.2	21.4
4 1	14 37.22	-1 50.6	2.396	3.307	8.4	21.0	4 1	14 38.05	-18 7.8	2.035	2.934	10.2	21.1
4 11	14 30.76	-1 17.2	2.349	3.312	5.7	20.8	4 11	14 31.58	-17 37.7	1.964	2.926	6.7	20.9
4 21	14 23.26	-0 47.9	2.330	3.317	3.9	20.7	4 21	14 23.67	-16 57.4	1.920	2.918	2.9	20.6
5 1	14 15.39	-0 26.5	2.339	3.321	4.6	20.8	5 1	14 15.15	-16 10.1	1.903	2.909	1.6	20.5
5 11	14 7.89	-0 15.8	2.376	3.326	7.0	20.9	5 11	14 6.96	-15 20.6	1.915	2.900	5.5	20.8
5 21	14 1.39	-0 17.4	2.439	3.330	9.7	21.1	5 21	13 59.92	-14 34.0	1.953	2.891	9.2	21.0
5 31	13 56.38	-0 32.0	2.525	3.334	12.1	21.3	5 31	13 54.71	-13 55.0	2.015	2.881	12.6	21.2
389764	2011 SV ₂₁₄		4 27.0 220°38'	0°9/27.8	17		338313	2002 VN ₄₄		4 27.1 213°25'	4°1/23.4	18	
3 22	14 43.00	-17 23.0	2.559	3.365	11.5	21.4	3 22	14 43.30	-1 32.1	2.487	3.317	11.0	20.9
4 1	14 38.07	-17 25.9	2.465	3.360	8.9	21.2	4 1	14 38.21	-0 58.4	2.404	3.312	8.5	20.7
4 11	14 31.42	-17 20.7	2.395	3.355	5.8	21.0	4 11	14 31.46	-0 25.5	2.345	3.306	5.9	20.5
4 21	14 23.55	-17 8.3	2.353	3.350	2.6	20.8	4 21	14 23.58	+0 2.9	2.315	3.300	4.2	20.4
5 1	14 15.17	-16 50.6	2.339	3.345	1.4	20.7	5 1	14 15.25	+0 23.1	2.313	3.293	4.9	20.4
5 11	14 7.06	-16 30.5	2.355	3.339	4.7	20.9	5 11	14 7.22	+0 31.9	2.339	3.286	7.3	20.6
5 21	13 59.91	-16 11.2	2.399	3.333	7.9	21.1	5 21	14 0.17	+0 27.7	2.392	3.279	10.0	20.7
5 31	13 54.31	-15 55.9	2.467	3.327	10.7	21.2	5 31	13 54.63	+0 10.0	2.468	3.271	12.5	20.9
87370	2000 QY ₅₀		4 27.0 255°97'	6°6/1.6	18 R		107942	2001 FB ₁₁₅		4 27.1 122°67'	2°6/24.9	18	
3 22	14 48.34	-31 32.1	2.084	2.837	15.4	19.5	3 22	14 42.85	-8 7.0	2.001	2.839	13.0	19.7
4 1	14 43.07	-32 20.4	1.978	2.820	13.1	19.3	4 1	14 38.21	-7 34.0	1.926	2.842	9.8	19.5
4 11	14 35.15	-32 51.9	1.892	2.804	10.4	19.1	4 11	14 31.60	-6 56.6	1.875	2.845	6.3	19.3
4 21	14 25.15	-33 3.2	1.830	2.786	7.8	18.9	4 21	14 23.65	-6 18.8	1.850	2.848	3.1	19.1
5 1	14 14.07	-32 52.5	1.794	2.769	6.6	18.8	5 1	14 15.21	-5 45.0	1.854	2.851	3.6	19.2
5 11	14 3.16	-32 21.7	1.785	2.751	7.6	18.8	5 11	14 7.20	-5 19.7	1.884	2.853	7.0	19.4
5 21	13 53.59	-31 36.0	1.802	2.733	10.3	18.9	5 21	14 0.43	-5 6.0	1.941	2.856	10.5	19.6
5 31	13 46.32	-30 42.8	1.842	2.714	13.3	19.1	5 31	13 55.49	-5 5.7	2.019	2.859	13.6	19.8
207493	2006 HG ₆₆		4 27.0 98°42'	1°0/26.3	18		389248	2009 FV ₃₇		4 27.1 2°33'	6°1/20.9	17	
3 22	14 43.48	-12 15.7	1.988	2.818	13.4	20.7	3 22	14 36.48	-2 39.8	1.727	2.588	13.6	20.0
4 1	14 38.72	-11 58.0	1.912	2.824	10.1	20.5	4 1	14 33.64	-0 53.8	1.662	2.587	10.5	19.8
4 11	14 31.93	-11 33.2	1.860	2.829	6.4	20.3	4 11	14 28.79	+0 55.2	1.622	2.587	7.5	19.7
4 21	14 23.76	-11 4.2	1.834	2.835	2.4	20.0	4 21	14 22.59	+2 38.6	1.606	2.587	6.1	19.6
5 1	14 15.08	-10 34.6	1.837	2.840	2.3	20.0	5 1	14 15.90	+4 7.5	1.618	2.589	7.5	19.7
5 11	14 6.85	-10 8.8	1.867	2.846	6.2	20.3	5 11	14 9.69	+5 14.9	1.654	2.591	10.5	19.8
5 21	13 59.90	-9 50.5	1.922	2.851	9.9	20.5	5 21	14 4.73	+5 57.2	1.713	2.593	13.6	20.0
5 31	13 54.84	-9 42.3	2.001	2.856	13.1	20.8	5 31	14 1.61	+6 13.7	1.792	2.597	16.4	20.2
200661	2001 TD ₄₉		4 27.0 156°87'	1°6/25.9	18		44585	1999 JT ₂₈		4 27.1 5°72'	1°7/27.9	18	
3 22	14 48.20	-11 23.0	1.770	2.600	14.8	20.5	3 22	14 43.54	-17 50.7	1.198	2.047	19.2	18.7
4 1	14 42.51	-10 56.2	1.696	2.607	11.2	20.3	4 1	14 40.16	-18 1.9	1.129	2.046	14.9	18.4
4 11	14 34.44	-10 21.9	1.645	2.614	7.1	20.1	4 11	14 33.55	-17 57.8	1.078	2.047	9.9	18.2
4 21	14 24.73	-9 43.4	1.620	2.620	2.8	19.8	4 21	14 24.56	-17 39.3	1.050	2.048	4.4	17.9
5 1	14 14.44	-9 5.4	1.623	2.625	2.9	19.8	5 1	14 14.59	-17 9.9	1.044	2.050	2.5	17.7
5 11	14 4.71	-8 33.3	1.654	2.630	7.1	20.1	5 11	14 5.28	-16 36.4	1.063	2.053	7.8	18.0
5 21	13 56.51	-8 11.2	1.710	2.634	11.2	20.4	5 21	13 58.01	-16 6.1	1.104	2.056	13.1	18.3
5 31	13 50.53	-8 2.0	1.789	2.637	14.7	20.6	5 31	13 53.73	-15 45.4	1.164	2.061	17.6	18.6
314120	2005 EC ₁₃₈		4 27.0 24°23'	0°3/26.9	17		299949	2006 TD ₅₉		4 27.1 308°08'	2°1/28.9	18	
3 22	14 43.46	-14 31.5	1.267	2.119	18.1	20.7	3 22	14 40.59	-22 13.8	2.178	2.982	13.3	20.4
4 1	14 39.74	-14 23.0	1.203	2.125	13.8	20.4	4 1	14 36.58	-22 1.5	2.087	2.977	10.5	20.2
4 11	14 33.06	-14 2.4	1.158	2.131	8.9	20.2	4 11	14 30.63	-21 35.2	2.019	2.973	7.2	20.0
4 21	14 24.29	-13 32.6	1.137	2.138	3.4	19.9	4 21	14 23.31	-20 56.0	1.976	2.968	3.8	19.8
5 1	14 14.74	-12 58.7	1.140	2.145	2.4	19.8	5 1	14 15.43	-20 6.7	1.961	2.964	2.3	19.7
5 11	14 5.92	-12 27.6	1.167	2.153	7.8	20.2	5 11	14 7.89	-19 11.9	1.973	2.960	5.2	19.9
5 21	13 59.02	-12 5.0	1.217	2.162	12.8	20.5	5 21	14 1.51	-18 17.0	2.013	2.955	8.7	20.1
5 31	13 54.87	-11 55.4	1.287	2.172	17.0	20.7	5 31	13 56.89	-17 27.2	2.076	2.951	11.9	20.3
392870	2012 UO ₁₀₁		4 27.0 111°68'	0°6/26.5	17		216174	2006 TA ₂₁		4 27.1 171°75'	0°1/26.9	18	
3 22	14 41.74	-14 5.8	2.437	3.256	11.6	22.3	3 22	14 42.47	-14 34.4	2.632	3.445	11.0	21.1
4 1	14 36.99	-13 37.4	2.364	3.270	8.7	22.1	4 1	14 37.54	-14 24.8	2.546	3.447	8.4	20.9
4 11	14 30.63	-13 1.7	2.316	3.283	5.5	22.0	4 11	14 31.02	-14 8.4	2.485	3.449	5.3	20.7
4 21	14 23.22	-12 21.2	2.296	3.296	2.0	21.7	4 21	14 23.41	-13 47.0	2.451	3.451	2.0	20.5
5 1	14 15.47	-11 39.3	2.305	3.309	1.7	21.7	5 1	14 15.38	-13 23.0	2.447	3.452	1.4	20.4
5 11	14 8.13	-11 0.1	2.342	3.322	5.1	22.0	5 11	14 7.66	-12 59.6	2.472	3.453	4.7	20.7
5 21	14 1.84	-10 27.0	2.407	3.334	8.2	22.2	5 21	14 0.88	-12 39.6	2.524	3.453	7.8	20.9
5 31	13 57.09	-10 2.8	2.497	3.346	11.0	22.4	5 31	13 55.57	-12 25.9	2.602	3.454	10.5	21.0
113021	2002 RO ₄₃		4 27.0 108°45'	1°7/25.6	18 R		214862	2006 YL ₃₉		4 27.1 339°85'	4°9/22.9	17	
3 22	14 41.80	-11 2.6	2.046	2.880	12.9	19.6	3 22						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
144782	2004 <i>HH</i> ₃₀		4 27.1 285°21	0°3/27.3	17		193398	2000 <i>WY</i> ₁₃		4 27.1 174°10	1°2/29.1	18	
3 22	14 43.03	-15 23.0	2.208	3.027	12.6	20.0	3 22	14 36.86	-21 59.5	4.271	5.050	7.7	21.8
4 1	14 38.36	-15 24.2	2.119	3.022	9.7	19.8	4 1	14 32.80	-21 42.4	4.176	5.052	6.0	21.7
4 11	14 31.74	-15 17.6	2.052	3.017	6.3	19.5	4 11	14 27.78	-21 17.9	4.107	5.054	4.1	21.6
4 21	14 23.74	-15 4.4	2.013	3.012	2.5	19.3	4 21	14 22.14	-20 46.9	4.066	5.056	2.2	21.4
5 1	14 15.16	-14 47.1	2.001	3.007	1.5	19.2	5 1	14 16.27	-20 11.1	4.055	5.057	1.3	21.3
5 11	14 6.89	-14 29.0	2.018	3.002	5.3	19.4	5 11	14 10.59	-19 32.5	4.075	5.058	2.9	21.5
5 21	13 59.72	-14 13.6	2.061	2.997	8.9	19.7	5 21	14 5.47	-18 53.5	4.124	5.059	4.9	21.6
5 31	13 54.30	-14 4.3	2.129	2.992	12.1	19.8	5 31	14 1.24	-18 16.5	4.200	5.060	6.7	21.7
320361	2007 <i>TR</i> ₂₃₇		4 27.1 148°59	1°1/27.9	16		84108	2002 <i>RA</i> ₁₈		4 27.1 220°35	1°3/25.9	18	
3 22	14 44.81	-19 52.0	1.687	2.506	15.9	21.7	3 22	14 44.93	-12 34.2	2.085	2.910	13.0	20.5
4 1	14 40.18	-19 21.2	1.609	2.511	12.3	21.5	4 1	14 39.90	-11 56.8	1.991	2.900	9.9	20.3
4 11	14 33.08	-18 34.0	1.553	2.515	8.1	21.2	4 11	14 32.78	-11 10.6	1.922	2.890	6.3	20.0
4 21	14 24.28	-17 32.7	1.522	2.519	3.6	21.0	4 21	14 24.18	-10 18.7	1.879	2.879	2.5	19.7
5 1	14 14.85	-16 22.3	1.518	2.523	1.9	20.8	5 1	14 14.93	-9 25.7	1.865	2.867	2.5	19.7
5 11	14 5.99	-15 10.1	1.541	2.527	6.4	21.1	5 11	14 6.01	-8 36.9	1.879	2.855	6.5	19.9
5 21	13 58.71	-14 3.3	1.589	2.530	10.7	21.4	5 21	13 58.28	-7 57.1	1.920	2.842	10.3	20.1
5 31	13 53.71	-13 8.3	1.661	2.533	14.5	21.6	5 31	13 52.41	-7 29.8	1.984	2.828	13.6	20.3
382463	2000 <i>SG</i> ₉₀		4 27.1 256°53	1°3/28.3	18		209519	2004 <i>RQ</i> ₃₂₆		4 27.1 72°82	4°8/29.1	18	
3 22	14 43.51	-21 0.0	2.191	2.993	13.3	21.4	3 22	15 2.14	-21 40.4	1.457	2.250	19.2	19.9
4 1	14 38.92	-20 26.7	2.079	2.970	10.4	21.1	4 1	14 53.65	-23 7.2	1.404	2.284	15.2	19.7
4 11	14 32.22	-19 38.2	1.991	2.948	7.0	20.9	4 11	14 41.78	-24 19.4	1.373	2.318	10.7	19.5
4 21	14 23.98	-18 35.6	1.928	2.924	3.3	20.6	4 21	14 27.63	-25 12.4	1.367	2.351	6.5	19.3
5 1	14 15.00	-17 22.4	1.895	2.900	1.7	20.4	5 1	14 12.79	-25 44.3	1.388	2.384	4.9	19.3
5 11	14 6.25	-16 4.3	1.891	2.875	5.5	20.6	5 11	13 59.03	-25 57.9	1.438	2.416	7.7	19.6
5 21	13 58.61	-14 47.9	1.914	2.850	9.4	20.8	5 21	13 47.71	-25 59.0	1.513	2.448	11.6	19.9
5 31	13 52.81	-13 39.5	1.961	2.824	13.0	21.0	5 31	13 39.67	-25 55.3	1.611	2.479	15.1	20.1
272809	2006 <i>AG</i> ₃₄		4 27.1 130°80	0°3/26.8	17		230294	2001 <i>YW</i> ₇₉		4 27.1 146°18	2°0/29.9	18	
3 22	14 44.03	-14 41.0	1.953	2.778	13.8	21.6	3 22	14 38.08	-24 28.9	3.786	4.557	8.7	21.3
4 1	14 39.22	-14 22.4	1.875	2.783	10.5	21.4	4 1	14 33.85	-24 22.1	3.696	4.564	6.9	21.2
4 11	14 32.31	-13 54.6	1.821	2.788	6.7	21.1	4 11	14 28.51	-24 6.3	3.631	4.570	4.9	21.0
4 21	14 23.95	-13 19.9	1.793	2.793	2.5	20.9	4 21	14 22.44	-23 42.2	3.593	4.577	2.9	20.9
5 1	14 15.07	-12 42.3	1.793	2.798	1.8	20.8	5 1	14 16.10	-23 11.2	3.586	4.583	2.0	20.8
5 11	14 6.64	-12 6.5	1.820	2.802	6.0	21.1	5 11	14 10.00	-22 35.6	3.607	4.589	3.3	20.9
5 21	13 59.53	-11 36.8	1.874	2.807	9.8	21.3	5 21	14 4.55	-21 58.1	3.658	4.595	5.4	21.1
5 31	13 54.37	-11 17.0	1.951	2.811	13.2	21.6	5 31	14 0.13	-21 21.4	3.736	4.601	7.3	21.2
89892	2002 <i>CE</i> ₂₅₇		4 27.1 312°66	0°2/26.9	18		24979	1998 <i>JB</i> ₂		4 27.1 279°92	1°7/26.0	18	
3 22	14 39.72	-15 23.9	2.089	2.918	12.9	19.4	3 22	14 45.48	-10 55.6	1.560	2.403	15.8	17.9
4 1	14 35.99	-15 1.8	1.995	2.904	9.9	19.2	4 1	14 41.02	-10 40.2	1.474	2.392	12.1	17.7
4 11	14 30.30	-14 29.8	1.924	2.891	6.3	18.9	4 11	14 33.86	-10 17.3	1.409	2.380	7.7	17.4
4 21	14 23.22	-13 50.2	1.878	2.878	2.4	18.6	4 21	14 24.69	-9 50.1	1.369	2.369	3.1	17.1
5 1	14 15.52	-13 6.7	1.861	2.866	1.7	18.5	5 1	14 14.60	-9 23.2	1.355	2.358	3.1	17.0
5 11	14 8.10	-12 23.9	1.870	2.854	5.7	18.8	5 11	14 4.89	-9 2.0	1.367	2.346	7.9	17.3
5 21	14 1.78	-11 46.7	1.906	2.842	9.5	19.0	5 21	13 56.73	-8 51.1	1.403	2.335	12.5	17.5
5 31	13 57.21	-11 19.0	1.965	2.830	12.9	19.2	5 31	13 51.00	-8 53.8	1.460	2.324	16.6	17.7
510767	2013 <i>AK</i> ₂₃		4 27.1 165°48	5°4/19.9	18		414804	2010 <i>SN</i> ₂₉		4 27.1 161°80	2°7/24.9	16	
3 22	14 39.99	+ 6 39.5	3.191	4.014	9.0	22.5	3 22	14 44.45	- 9 46.0	1.847	2.683	14.0	22.1
4 1	14 35.31	+ 7 39.2	3.128	4.019	7.3	22.4	4 1	14 39.59	- 8 52.6	1.773	2.688	10.5	21.9
4 11	14 29.43	+ 8 34.1	3.090	4.024	5.9	22.3	4 11	14 32.56	- 7 52.0	1.722	2.692	6.7	21.6
4 21	14 22.77	+ 9 20.5	3.080	4.028	5.4	22.3	4 21	14 24.08	- 6 48.9	1.698	2.695	3.2	21.4
5 1	14 15.85	+ 9 54.7	3.099	4.032	6.1	22.4	5 1	14 15.06	- 5 49.4	1.701	2.698	3.8	21.5
5 11	14 9.22	+10 14.5	3.144	4.036	7.6	22.5	5 11	14 6.55	- 4 59.4	1.732	2.701	7.6	21.7
5 21	14 3.35	+10 19.0	3.215	4.038	9.4	22.6	5 21	13 59.41	- 4 23.4	1.788	2.703	11.3	21.9
5 31	13 58.63	+10 8.5	3.308	4.041	11.0	22.7	5 31	13 54.28	- 4 3.9	1.867	2.705	14.6	22.1
506635	2006 <i>QB</i> ₂₇		4 27.1 222°84	0°5/26.6	17		294557	2007 <i>YK</i> ₃₀		4 27.1 163°84	1°5/25.9	16	
3 22	14 45.34	-14 46.0	2.009	2.831	13.6	22.4	3 22	14 46.40	-11 50.5	1.855	2.684	14.2	21.9
4 1	14 40.32	-14 16.6	1.915	2.821	10.4	22.1	4 1	14 41.10	-11 19.4	1.778	2.689	10.8	21.7
4 11	14 33.10	-13 36.7	1.844	2.810	6.7	21.9	4 11	14 33.56	-10 40.2	1.725	2.693	6.8	21.4
4 21	14 24.31	-12 48.9	1.799	2.799	2.5	21.6	4 21	14 24.47	- 9 56.5	1.697	2.697	2.7	21.2
5 1	14 14.82	-11 57.5	1.783	2.788	2.0	21.5	5 1	14 14.81	- 9 13.1	1.698	2.700	2.8	21.2
5 11	14 5.66	-11 7.7	1.795	2.775	6.3	21.8	5 11	14 5.66	- 8 35.1	1.726	2.703	6.9	21.5
5 21	13 57.75	-10 24.8	1.834	2.762	10.3	22.0	5 21	13 57.92	- 8 7.1	1.781	2.705	10.8	21.7
5 31	13 51.80	- 9 53.1	1.896	2.748	13.8	22.2	5 31	13 52.26	- 7 52.0	1.858	2.706	14.2	21.9
363382	2002 <i>UG</i> ₃₈		4 27.1 277°99	2°2/28.6	17		203320	2001 <i>TJ</i> ₉₃		4 27.1 107°47	4°5/29.8	18	
3 22	14 44.58	-21 14.2	1.726	2.540	15.8	21.3	3 22	14 50.47	-24 37.0	1.532	2.333	18.0	20.8
4 1	14 40.40	-21 7.6	1.619	2.516	12.5	21.0	4 1	14 44.86	-25 6.7	1.462	2.346	14.5	20.6
4 11	14 33.55	-20 44.6	1.533	2.491	8.6	20.7	4 11	14 36.27	-25 18.3	1.413	2.359	10.4	20.4
4 21	14 24.60	-20 5.3	1.471	2.466	4.4	20.4	4 21	14 25.58	-25 10.1	1.387	2.372	6.3	20.2
5 1	14 14.57	-19 12.1	1.436	2.441	2.5	20.2	5 1	14 14.10	-24 43.3	1.387	2.384	4.5	20.1
5 11	14 4.74	-18 10.8	1.428	2.415	6.6	20.4	5 11	14 3.33	-24 3.1	1.413	2.396	7.2	20.3
5 21	13 56.29	-17 8.6	1.445	2.389	11.3	20.6	5 21	13 54.52	-23 17.0	1.464	2.408	11.1	20.5
5 31	13 50.19	-16 13.1	1.484	2.363	15.5	20.8	5 31	13 48.50	-22 33.0	1.537	2.419	14.9	20.8
44981	1999 <i>VG</i> ₁₅₉		4 27.1 303°37	1°8/28.3	17		505561	2014 <i>AC</i> ₃₇		4 27.1			

EPHEMERIDES

4 27.1

4 27.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
64850	2001 YM ₁₉		4 27.1 215°13	2°3/24.9	18		70410	1999 SE ₃		4 27.1 301°86	9°4/5.4	18	
3 22	14 44.43	- 8 20.9	2.477	3.300	11.3	20.7	3 22	14 42.38	-40 17.4	1.501	2.244	20.8	17.3
4 1	14 39.17	- 7 42.5	2.382	3.291	8.5	20.5	4 1	14 39.63	-40 9.0	1.390	2.218	18.4	17.0
4 11	14 32.16	- 6 59.4	2.313	3.280	5.5	20.2	4 11	14 33.50	-39 22.9	1.295	2.191	15.3	16.7
4 21	14 23.93	- 6 15.0	2.272	3.269	2.7	20.0	4 21	14 24.71	-37 52.4	1.220	2.165	12.1	16.4
5 1	14 15.18	- 5 33.3	2.261	3.257	3.2	20.1	5 1	14 14.64	-35 35.1	1.167	2.139	9.7	16.2
5 11	14 6.71	- 4 58.3	2.279	3.244	6.3	20.2	5 11	14 5.05	-32 37.6	1.139	2.113	9.9	16.2
5 21	13 59.21	- 4 33.2	2.324	3.230	9.4	20.4	5 21	13 57.49	-29 14.8	1.136	2.087	12.9	16.2
5 31	13 53.27	- 4 20.3	2.393	3.216	12.3	20.6	5 31	13 53.05	-25 46.3	1.157	2.062	17.0	16.4
504653	2008 YQ ₁₅₂		4 27.1 100°33	1°8/28.7	17		457601	2009 BZ ₃₆		4 27.1 163°28	5°9/1.2	16	
3 22	14 42.07	-21 23.8	2.121	2.926	13.5	21.8	3 22	14 49.32	-29 28.7	1.734	2.508	17.3	22.2
4 1	14 37.68	-21 10.1	2.039	2.931	10.6	21.7	4 1	14 43.94	-29 57.1	1.651	2.512	14.3	22.0
4 11	14 31.33	-20 42.9	1.980	2.935	7.2	21.4	4 11	14 35.72	-30 5.2	1.588	2.516	10.9	21.8
4 21	14 23.62	-20 3.5	1.946	2.940	3.6	21.2	4 21	14 25.42	-29 50.3	1.549	2.519	7.6	21.6
5 1	14 15.41	-19 14.9	1.940	2.944	2.1	21.1	5 1	14 14.25	-29 12.8	1.535	2.522	5.9	21.5
5 11	14 7.62	-18 22.0	1.962	2.948	5.2	21.3	5 11	14 3.62	-28 17.3	1.547	2.524	7.4	21.6
5 21	14 1.05	-17 30.0	2.011	2.953	8.7	21.6	5 21	13 54.75	-27 11.6	1.585	2.526	10.7	21.8
5 31	13 56.30	-16 44.1	2.084	2.957	11.9	21.8	5 31	13 48.50	-26 4.4	1.646	2.527	14.1	22.0
291235	2006 BP ₃₀		4 27.1 155°48	1°6/25.9	18		39188	2000 WM ₁₇₂		4 27.1 230°39	5°9/21.1	18	
3 22	14 47.77	-11 59.2	1.673	2.505	15.4	21.6	3 22	14 41.17	- 0 37.6	2.062	2.906	12.4	19.8
4 1	14 42.36	-11 28.0	1.599	2.512	11.7	21.3	4 1	14 36.96	+ 0 53.7	1.985	2.898	9.7	19.6
4 11	14 34.46	-10 48.1	1.549	2.518	7.4	21.1	4 11	14 30.86	+ 2 26.3	1.932	2.890	7.1	19.5
4 21	14 24.85	-10 3.1	1.523	2.523	2.9	20.8	4 21	14 23.46	+ 3 53.3	1.907	2.882	5.9	19.4
5 1	14 14.62	- 9 18.3	1.526	2.528	2.9	20.8	5 1	14 15.53	+ 5 7.4	1.909	2.873	7.1	19.4
5 11	14 4.98	- 8 39.5	1.555	2.533	7.4	21.1	5 11	14 7.97	+ 6 2.9	1.937	2.864	9.7	19.6
5 21	13 56.92	- 8 11.6	1.610	2.536	11.6	21.4	5 21	14 1.53	+ 6 36.7	1.990	2.855	12.6	19.7
5 31	13 51.19	- 7 57.7	1.687	2.539	15.2	21.6	5 31	13 56.82	+ 6 48.1	2.063	2.845	15.3	19.9
344726	2003 UH ₁₁₇		4 27.1 219°86	1°6/25.7	18		190807	2001 RY ₉₅		4 27.1 129°25	0°5/27.4	18	
3 22	14 43.52	-10 23.2	2.380	3.204	11.6	21.6	3 22	14 48.86	-16 5.9	1.561	2.388	16.6	20.2
4 1	14 38.56	- 9 58.7	2.288	3.197	8.8	21.4	4 1	14 43.41	-16 0.7	1.490	2.397	12.7	20.0
4 11	14 31.81	- 9 28.8	2.221	3.188	5.6	21.2	4 11	14 35.24	-15 43.8	1.441	2.406	8.2	19.8
4 21	14 23.81	- 8 56.3	2.181	3.180	2.4	21.0	4 21	14 25.19	-15 16.9	1.416	2.415	3.3	19.5
5 1	14 15.27	- 8 24.7	2.170	3.171	2.5	21.0	5 1	14 14.44	-14 43.9	1.418	2.423	1.9	19.4
5 11	14 7.03	- 7 57.7	2.188	3.161	5.9	21.2	5 11	14 4.34	-14 10.3	1.446	2.431	6.9	19.7
5 21	13 59.79	- 7 38.5	2.233	3.151	9.2	21.4	5 21	13 56.00	-13 41.9	1.500	2.438	11.4	20.0
5 31	13 54.16	- 7 29.6	2.302	3.141	12.2	21.5	5 31	13 50.20	-13 23.2	1.576	2.445	15.3	20.3
319229	2006 AD ₁₀		4 27.1 157°88	1°3/28.3	18		225749	2001 SQ ₁₀₀		4 27.1 20°73	3°3/29.2	18	
3 22	14 43.42	-20 40.9	2.145	2.949	13.4	20.9	3 22	14 42.66	-22 8.0	1.347	2.178	18.5	19.4
4 1	14 38.65	-20 12.7	2.062	2.954	10.4	20.7	4 1	14 39.20	-22 21.8	1.279	2.183	14.6	19.2
4 11	14 31.91	-19 30.7	2.001	2.959	7.0	20.5	4 11	14 32.80	-22 17.1	1.231	2.190	10.1	18.9
4 21	14 23.84	-18 36.8	1.967	2.963	3.2	20.2	4 21	14 24.30	-21 54.0	1.204	2.197	5.5	18.7
5 1	14 15.28	-17 34.7	1.962	2.967	1.7	20.1	5 1	14 15.00	-21 15.3	1.202	2.205	3.5	18.6
5 11	14 7.16	-16 29.8	1.985	2.970	5.2	20.4	5 11	14 6.37	-20 27.8	1.225	2.214	7.1	18.8
5 21	14 0.27	-15 27.8	2.035	2.973	8.9	20.6	5 21	13 59.62	-19 39.3	1.270	2.223	11.7	19.1
5 31	13 55.22	-14 34.0	2.110	2.976	12.1	20.8	5 31	13 55.59	-18 57.4	1.337	2.233	15.8	19.3
390805	2004 GW ₈₂		4 27.1 94°75	2°0/28.8	17		230864	2004 RR ₁₈₃		4 27.1 232°91	1°7/28.6	18	
3 22	14 45.37	-20 43.0	2.301	3.097	12.9	21.7	3 22	14 44.58	-20 53.8	2.340	3.137	12.7	22.0
4 1	14 39.95	-20 54.2	2.228	3.114	10.1	21.6	4 1	14 39.58	-20 43.6	2.236	3.123	10.0	21.8
4 11	14 32.65	-20 54.4	2.179	3.131	6.8	21.4	4 11	14 32.59	-20 21.2	2.155	3.109	6.8	21.5
4 21	14 24.10	-20 44.1	2.156	3.148	3.6	21.2	4 21	14 24.16	-19 47.1	2.101	3.095	3.4	21.3
5 1	14 15.12	-20 25.3	2.162	3.165	2.2	21.1	5 1	14 15.07	-19 3.7	2.075	3.079	1.9	21.2
5 11	14 6.59	-20 1.1	2.197	3.181	4.9	21.3	5 11	14 6.23	-18 15.1	2.079	3.063	5.1	21.3
5 21	13 59.28	-19 35.6	2.259	3.197	8.1	21.6	5 21	13 58.46	-17 26.2	2.110	3.047	8.7	21.5
5 31	13 53.74	-19 12.9	2.345	3.213	11.0	21.8	5 31	13 52.44	-16 41.9	2.165	3.030	11.9	21.7
393936	2005 UG ₁₃₆		4 27.1 301°22	0°3/26.8	16		380864	2006 BE ₁₈₂		4 27.1 196°27	0°5/27.5	17	
3 22	14 39.59	-15 21.8	2.198	3.023	12.4	21.7	3 22	14 43.98	-17 1.7	2.132	2.947	13.1	22.0
4 1	14 35.79	-14 52.1	2.104	3.012	9.5	21.4	4 1	14 39.14	-16 47.4	2.044	2.945	10.1	21.7
4 11	14 30.14	-14 12.4	2.034	3.002	6.1	21.2	4 11	14 32.29	-16 22.7	1.980	2.943	6.6	21.5
4 21	14 23.19	-13 25.4	1.991	2.991	2.3	20.9	4 21	14 24.03	-15 49.3	1.942	2.941	2.7	21.3
5 1	14 15.67	-12 34.9	1.975	2.980	1.7	20.9	5 1	14 15.19	-15 10.5	1.933	2.938	1.5	21.2
5 11	14 8.46	-11 45.7	1.988	2.970	5.6	21.1	5 11	14 6.72	-14 30.6	1.951	2.935	5.5	21.4
5 21	14 2.29	-11 2.5	2.026	2.959	9.2	21.3	5 21	13 59.44	-13 54.3	1.997	2.932	9.2	21.7
5 31	13 57.79	-10 29.2	2.089	2.949	12.4	21.5	5 31	13 54.00	-13 25.6	2.067	2.929	12.5	21.9
91070	1998 FO ₇₁		4 27.1 95°51	2°9/24.4	18		370970	2005 SE ₁₈₁		4 27.1 35°07	2°2/28.7	17	
3 22	14 41.79	-10 21.1	1.868	2.708	13.7	18.4	3 22	14 43.32	-20 57.3	1.558	2.382	16.7	20.6
4 1	14 37.45	- 9 5.0	1.804	2.722	10.2	18.2	4 1	14 39.30	-20 54.1	1.485	2.387	13.1	20.4
4 11	14 31.13	- 7 40.8	1.764	2.735	6.5	18.0	4 11	14 32.68	-20 34.6	1.433	2.393	8.9	20.2
4 21	14 23.52	- 6 14.5	1.750	2.747	3.2	17.8	4 21	14 24.23	-19 59.6	1.404	2.399	4.4	19.9
5 1	14 15.51	- 4 53.1	1.764	2.760	4.0	17.9	5 1	14 15.07	-19 12.9	1.401	2.405	2.5	19.8
5 11	14 8.07	- 3 43.3	1.806	2.773	7.5	18.1	5 11	14 6.50	-18 20.7	1.423	2.412	6.5	20.1
5 21	14 1.95	- 2 49.8	1.874	2.785	11.1	18.4	5 21	13 59.59	-17 30.0	1.471	2.418	10.8	20.3
5 31	13 57.72	- 2 15.1	1.963	2.797	14.1	18.6	5 31	13 55.10	-16 47.3	1.540	2.426	14.7	20.6
206247	2002 XJ ₂₆		4 27.1 95°04	6°1/3.5	18		507467						

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
158076	2000 <i>UO</i> ₆₀		4 27.1 140°30	0°6/27.7	17		303283	2004 <i>RA</i> ₂₆₅		4 27.1 354°50	0°2/27.1	17	
3 22	14 43.06	-19 20.2	2.186	2.994	13.1	20.5	3 22	14 41.66	-15 1.2	1.077	1.942	19.7	20.6
4 1	14 38.28	-18 37.2	2.107	3.003	10.1	20.4	4 1	14 39.03	-14 59.2	1.009	1.937	15.2	20.3
4 11	14 31.63	-17 41.0	2.051	3.012	6.6	20.2	4 11	14 33.04	-14 43.1	0.959	1.933	9.9	20.0
4 21	14 23.73	-16 34.3	2.023	3.021	2.7	19.9	4 21	14 24.52	-14 15.5	0.930	1.931	3.8	19.6
5 1	14 15.43	-15 21.7	2.024	3.029	1.5	19.8	5 1	14 14.91	-13 41.7	0.923	1.929	2.5	19.5
5 11	14 7.59	-14 8.9	2.053	3.037	5.2	20.1	5 11	14 5.96	-13 9.3	0.939	1.929	8.6	19.9
5 21	14 0.97	-13 1.5	2.110	3.044	8.8	20.3	5 21	13 59.12	-12 45.6	0.976	1.929	14.2	20.2
5 31	13 56.12	-12 4.5	2.191	3.051	11.9	20.5	5 31	13 55.40	-12 36.2	1.032	1.931	19.1	20.5
236608	2006 <i>JH</i> ₃₉		4 27.1 226°72	1°1/26.1	18		185531	2007 <i>WR</i> ₂₃		4 27.1 229°73	1°5/25.7	17	
3 22	14 41.97	-12 40.9	2.179	3.007	12.4	21.1	3 22	14 41.74	-11 6.4	2.267	3.096	12.0	21.2
4 1	14 37.55	-12 9.2	2.092	3.002	9.4	20.9	4 1	14 37.30	-10 35.0	2.180	3.091	9.1	21.0
4 11	14 31.24	-11 29.8	2.029	2.997	6.0	20.7	4 11	14 31.05	-9 57.3	2.117	3.085	5.7	20.7
4 21	14 23.62	-10 45.4	1.992	2.992	2.3	20.4	4 21	14 23.56	-9 16.3	2.080	3.080	2.4	20.5
5 1	14 15.48	-10 0.2	1.984	2.987	2.3	20.4	5 1	14 15.57	-8 36.0	2.073	3.074	2.6	20.5
5 11	14 7.67	-9 19.0	2.004	2.981	6.0	20.7	5 11	14 7.89	-8 0.5	2.094	3.068	6.0	20.7
5 21	14 0.97	-8 45.6	2.050	2.976	9.5	20.9	5 21	14 1.26	-7 33.6	2.141	3.062	9.4	20.9
5 31	13 55.97	-8 23.4	2.120	2.970	12.7	21.0	5 31	13 56.27	-7 17.9	2.212	3.056	12.4	21.1
200157	1998 <i>ST</i> ₄₀		4 27.1 6°74	0°2/27.0	16		275590	1999 <i>VC</i> ₆₄		4 27.1 252°73	0°3/27.4	18	
3 22	14 42.21	-14 58.6	1.047	1.912	20.1	20.0	3 22	14 42.33	-17 49.7	2.224	3.037	12.7	20.6
4 1	14 39.45	-14 53.4	0.983	1.912	15.5	19.7	4 1	14 37.94	-17 13.4	2.120	3.020	9.8	20.4
4 11	14 33.27	-14 33.7	0.938	1.913	10.0	19.4	4 11	14 31.58	-16 24.5	2.040	3.003	6.4	20.1
4 21	14 24.58	-14 2.5	0.914	1.915	3.9	19.1	4 21	14 23.81	-15 25.1	1.986	2.985	2.6	19.8
5 1	14 14.87	-13 25.5	0.912	1.918	2.5	19.0	5 1	14 15.39	-14 19.3	1.961	2.967	1.5	19.7
5 11	14 5.92	-12 50.8	0.932	1.922	8.7	19.4	5 11	14 7.24	-13 12.3	1.965	2.948	5.5	20.0
5 21	13 59.17	-12 25.7	0.974	1.927	14.3	19.7	5 21	14 0.15	-12 10.0	1.996	2.929	9.3	20.2
5 31	13 55.57	-12 15.8	1.033	1.932	19.1	20.0	5 31	13 54.80	-11 17.3	2.051	2.909	12.7	20.3
461679	2005 <i>LU</i> ₂		4 27.1 323°07	5°6/23.4	17		497192	2004 <i>TU</i> ₁₅₀		4 27.1 149°83	0°7/27.7	17	
3 22	14 39.32	-5 26.5	1.256	2.128	17.0	20.8	3 22	14 43.78	-17 50.9	2.044	2.859	13.6	22.2
4 1	14 36.87	-4 25.3	1.173	2.106	13.1	20.5	4 1	14 39.03	-17 33.5	1.963	2.863	10.5	22.0
4 11	14 31.52	-3 17.0	1.111	2.085	8.9	20.2	4 11	14 32.24	-17 4.6	1.905	2.867	6.8	21.8
4 21	14 23.92	-2 9.5	1.071	2.064	5.8	20.0	4 21	14 24.03	-16 26.2	1.872	2.871	2.9	21.6
5 1	14 15.24	-1 12.3	1.054	2.045	7.1	20.0	5 1	14 15.29	-15 41.7	1.868	2.874	1.6	21.5
5 11	14 6.93	-0 34.5	1.060	2.026	11.5	20.2	5 11	14 6.99	-14 56.0	1.893	2.877	5.5	21.7
5 21	14 0.28	-0 21.5	1.087	2.009	16.2	20.4	5 21	13 59.94	-14 14.0	1.943	2.880	9.3	22.0
5 31	13 56.28	-0 35.3	1.131	1.992	20.5	20.6	5 31	13 54.80	-13 40.2	2.018	2.883	12.6	22.2
463227	2012 <i>DK</i> ₈₃		4 27.1 312°97	1°1/27.7	17		506052	2015 <i>KW</i> ₁₁₇		4 27.1 184°12	4°7/22.3	18	
3 22	14 42.17	-17 21.6	1.397	2.239	17.3	21.1	3 22	14 41.65	+0 59.0	2.635	3.466	10.4	21.5
4 1	14 39.02	-17 20.7	1.303	2.218	13.6	20.8	4 1	14 36.88	+1 42.9	2.560	3.466	8.1	21.3
4 11	14 32.92	-17 5.4	1.229	2.198	9.0	20.5	4 11	14 30.61	+2 24.7	2.511	3.466	5.9	21.2
4 21	14 24.49	-16 36.8	1.178	2.177	3.9	20.1	4 21	14 23.35	+3 0.3	2.490	3.466	4.7	21.1
5 1	14 14.86	-15 58.4	1.152	2.158	2.1	19.9	5 1	14 15.73	+3 25.9	2.497	3.465	5.4	21.1
5 11	14 5.50	-15 16.3	1.150	2.139	7.6	20.2	5 11	14 8.43	+3 38.6	2.531	3.464	7.5	21.3
5 21	13 57.77	-14 37.9	1.171	2.120	12.8	20.4	5 21	14 2.05	+3 37.1	2.591	3.462	9.9	21.4
5 31	13 52.73	-14 9.9	1.213	2.102	17.5	20.7	5 31	13 57.05	+3 21.1	2.674	3.460	12.1	21.6
280125	2002 <i>JK</i> ₁₃₆		4 27.1 0°60	0°1/27.1	17		262534	2006 <i>UF</i> ₃₃₈		4 27.1 124°63	0°6/26.7	17	
3 22	14 41.96	-15 2.7	1.170	2.029	18.9	20.3	3 22	14 45.70	-14 31.6	1.850	2.676	14.4	21.6
4 1	14 38.99	-14 59.0	1.102	2.027	14.5	20.1	4 1	14 40.56	-14 4.1	1.780	2.688	10.9	21.4
4 11	14 32.86	-14 42.0	1.052	2.026	9.4	19.8	4 11	14 33.22	-13 26.7	1.731	2.699	6.9	21.2
4 21	14 24.41	-14 14.3	1.024	2.025	3.7	19.4	4 21	14 24.40	-12 42.4	1.709	2.710	2.6	20.9
5 1	14 14.99	-13 40.8	1.020	2.026	2.3	19.3	5 1	14 15.08	-11 55.7	1.715	2.720	2.0	20.9
5 11	14 6.21	-13 8.9	1.039	2.028	8.2	19.7	5 11	14 6.32	-11 12.1	1.749	2.730	6.3	21.2
5 21	13 59.43	-12 45.1	1.080	2.030	13.5	20.0	5 21	13 59.00	-10 36.3	1.809	2.739	10.2	21.4
5 31	13 55.56	-12 34.7	1.140	2.034	18.1	20.3	5 31	13 53.75	-10 12.1	1.891	2.749	13.6	21.7
302456	2002 <i>ER</i> ₁₁₁		4 27.1 48°36	5°5/24.4	18		380438	2003 <i>SY</i> ₂₁₀		4 27.1 165°86	2°6/29.8	17	
3 22	14 47.54	-3 41.2	1.151	2.015	18.8	19.7	3 22	14 43.84	-25 5.4	2.686	3.460	11.8	22.0
4 1	14 42.67	-3 6.2	1.109	2.036	14.2	19.5	4 1	14 38.67	-24 51.9	2.597	3.466	9.4	21.8
4 11	14 34.79	-2 31.7	1.087	2.059	9.5	19.3	4 11	14 31.82	-24 25.0	2.530	3.471	6.7	21.6
4 21	14 24.98	-2 4.8	1.088	2.081	5.8	19.1	4 21	14 23.84	-23 45.5	2.491	3.475	3.9	21.4
5 1	14 14.73	-1 51.7	1.113	2.104	6.6	19.2	5 1	14 15.44	-22 55.4	2.480	3.479	2.6	21.4
5 11	14 5.54	-1 57.0	1.161	2.128	10.6	19.5	5 11	14 7.41	-21 58.7	2.500	3.482	4.5	21.5
5 21	13 58.53	-2 21.3	1.231	2.152	14.8	19.8	5 21	14 0.41	-21 0.0	2.547	3.485	7.3	21.7
5 31	13 54.37	-3 3.6	1.320	2.176	18.4	20.1	5 31	13 54.96	-20 4.0	2.621	3.487	10.0	21.9
422604	2014 <i>TQ</i> ₇₁		4 27.1 288°58	2°6/25.3	17		285648	2000 <i>SK</i> ₂₇		4 27.1 255°27	1°1/24.9	18	
3 22	14 42.59	-11 14.1	1.468	2.319	16.2	21.2	3 22	14 33.19	-9 40.0	4.638	5.459	6.4	20.3
4 1	14 38.99	-10 24.9	1.381	2.304	12.4	21.0	4 1	14 30.01	-9 2.4	4.543	5.451	4.8	20.2
4 11	14 32.68	-9 23.9	1.315	2.288	7.9	20.7	4 11	14 26.06	-8 22.0	4.475	5.443	3.0	20.0
4 21	14 24.32	-8 16.4	1.273	2.273	3.5	20.3	4 21	14 21.58	-7 40.5	4.437	5.434	1.4	19.9
5 1	14 15.02	-7 9.6	1.257	2.257	4.1	20.3	5 1	14 16.90	-7 0.0	4.428	5.426	1.7	19.9
5 11	14 6.10	-6 11.8	1.266	2.242	8.8	20.6	5 11	14 12.36	-6 22.7	4.450	5.417	3.4	20.0
5 21	13 58.75	-5 29.6	1.298	2.227	13.6	20.8	5 21	14 8.26	-5 50.2	4.501	5.409	5.2	20.2
5 31	13 53.84	-5 7.5	1.350	2.212	17.8	21.0	5 31	14 4.86	-5 24.1	4.577	5.400	6.8	20.3
374387	2005 <i>UG</i> ₄₇₉		4 27.1 178°67	3°2/29.8	17								

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
341385	2007 <i>TH</i> ₁₂₆		4 27.1 121°14	0°4/26.7	17		332721	2009 <i>SA</i> ₂₂₅		4 27.1 270°13	1°5/26.0	17	
3 22	14 41.72	-14 52.4	2.261	3.083	12.3	21.4	3 22	14 44.17	-11 31.4	1.756	2.594	14.5	21.2
4 1	14 37.23	-14 22.7	2.184	3.090	9.3	21.2	4 1	14 39.71	-11 9.7	1.673	2.588	11.1	21.0
4 11	14 30.97	-13 44.2	2.130	3.096	5.9	21.0	4 11	14 32.89	-10 40.2	1.611	2.581	7.1	20.7
4 21	14 23.54	-12 59.7	2.103	3.103	2.2	20.7	4 21	14 24.38	-10 6.2	1.575	2.575	2.8	20.4
5 1	14 15.68	-12 12.9	2.105	3.109	1.7	20.7	5 1	14 15.15	-9 32.2	1.566	2.569	2.8	20.4
5 11	14 8.23	-11 28.4	2.135	3.116	5.4	21.0	5 11	14 6.32	-9 3.4	1.584	2.562	7.1	20.7
5 21	14 1.88	-10 50.2	2.192	3.122	8.8	21.2	5 21	13 58.87	-8 44.1	1.627	2.556	11.3	20.9
5 31	13 57.18	-10 21.6	2.273	3.128	11.7	21.4	5 31	13 53.56	-8 37.4	1.691	2.550	14.9	21.1
117010	2004 <i>JG</i> ₁		4 27.1 269°09	7°7/18.9	18		31298	Chantaihei		4 27.1 3°94	1°7/25.8	18	
3 22	14 40.57	+ 8 42.2	2.294	3.126	11.7	19.8	3 22	14 41.57	-10 12.8	1.907	2.747	13.5	18.7
4 1	14 36.34	+ 9 55.4	2.227	3.120	9.7	19.6	4 1	14 37.46	-9 56.4	1.830	2.746	10.2	18.5
4 11	14 30.41	+11 1.8	2.183	3.113	8.2	19.5	4 11	14 31.31	-9 34.6	1.776	2.747	6.5	18.2
4 21	14 23.33	+11 55.0	2.165	3.107	7.8	19.5	4 21	14 23.72	-9 10.4	1.748	2.748	2.7	18.0
5 1	14 15.82	+12 29.9	2.174	3.100	8.8	19.5	5 1	14 15.58	-8 47.8	1.747	2.749	2.8	18.0
5 11	14 8.66	+12 43.0	2.207	3.094	10.6	19.6	5 11	14 7.86	-8 30.8	1.773	2.750	6.6	18.2
5 21	14 2.52	+12 33.9	2.263	3.087	12.8	19.8	5 21	14 1.38	-8 22.7	1.824	2.752	10.3	18.5
5 31	13 57.95	+12 3.7	2.339	3.081	14.8	19.9	5 31	13 56.79	-8 25.7	1.898	2.755	13.6	18.7
389776	2011 <i>SP</i> ₂₆₉		4 27.1 290°18	0°3/27.4	17		387360	2012 <i>XS</i> ₃₈		4 27.1 205°25	0°4/26.7	17	
3 22	14 41.68	-16 12.3	2.164	2.985	12.8	21.5	3 22	14 41.47	-14 33.9	2.448	3.267	11.5	22.0
4 1	14 37.43	-15 59.6	2.075	2.979	9.8	21.3	4 1	14 36.99	-14 6.7	2.359	3.264	8.8	21.8
4 11	14 31.24	-15 37.5	2.008	2.973	6.4	21.1	4 11	14 30.84	-13 31.4	2.294	3.261	5.6	21.6
4 21	14 23.69	-15 7.8	1.967	2.967	2.5	20.8	4 21	14 23.52	-12 50.4	2.257	3.257	2.1	21.4
5 1	14 15.57	-14 33.4	1.955	2.961	1.5	20.7	5 1	14 15.74	-12 6.9	2.249	3.253	1.6	21.3
5 11	14 7.76	-13 58.6	1.971	2.955	5.4	21.0	5 11	14 8.27	-11 25.3	2.269	3.250	5.1	21.6
5 21	14 1.06	-13 27.6	2.013	2.949	9.1	21.2	5 21	14 1.79	-10 49.1	2.317	3.245	8.4	21.8
5 31	13 56.11	-13 4.1	2.078	2.943	12.3	21.4	5 31	13 56.83	-10 21.8	2.389	3.241	11.3	21.9
359991	2012 <i>VW</i> ₆₈		4 27.1 203°00	1°2/25.9	17		224470	2005 <i>VA</i> ₅₆		4 27.1 96°53	1°1/27.9	17	
3 22	14 42.21	-11 41.7	2.381	3.206	11.6	21.8	3 22	14 45.94	-17 57.6	1.821	2.639	14.9	21.3
4 1	14 37.57	-11 15.1	2.294	3.203	8.8	21.6	4 1	14 40.88	-17 55.5	1.749	2.650	11.5	21.1
4 11	14 31.20	-10 42.4	2.232	3.200	5.6	21.4	4 11	14 33.52	-17 41.7	1.700	2.662	7.6	20.9
4 21	14 23.64	-10 6.1	2.197	3.197	2.2	21.2	4 21	14 24.59	-17 17.6	1.675	2.673	3.3	20.7
5 1	14 15.61	-9 29.8	2.191	3.194	2.2	21.2	5 1	14 15.09	-16 46.3	1.678	2.683	1.8	20.6
5 11	14 7.90	-8 57.5	2.214	3.190	5.6	21.4	5 11	14 6.15	-16 12.5	1.708	2.694	5.9	20.9
5 21	14 1.20	-8 32.4	2.264	3.186	8.9	21.6	5 21	13 58.69	-15 41.3	1.765	2.705	9.9	21.1
5 31	13 56.08	-8 17.3	2.337	3.182	11.8	21.8	5 31	13 53.37	-15 17.3	1.844	2.715	13.3	21.4
245268	2005 <i>AB</i> ₅₈		4 27.1 163°36	4°0/23.7	17		164331	2005 <i>AV</i> ₇₂		4 27.1 278°00	0°3/26.9	18	
3 22	14 45.19	- 1 54.0	2.402	3.231	11.4	21.0	3 22	14 42.52	-14 46.4	1.975	2.803	13.6	20.7
4 1	14 39.67	- 1 23.1	2.329	3.236	8.7	20.8	4 1	14 38.27	-14 27.5	1.885	2.794	10.4	20.5
4 11	14 32.45	- 0 53.0	2.280	3.240	6.0	20.6	4 11	14 31.89	-13 59.1	1.817	2.784	6.7	20.2
4 21	14 24.10	- 0 27.6	2.258	3.244	4.1	20.5	4 21	14 24.00	-13 23.3	1.775	2.775	2.6	19.9
5 1	14 15.34	- 0 10.4	2.266	3.248	4.8	20.5	5 1	14 15.43	-12 44.0	1.761	2.766	1.8	19.9
5 11	14 6.98	- 0 4.5	2.302	3.251	7.2	20.7	5 11	14 7.20	-12 6.0	1.774	2.756	6.0	20.1
5 21	13 59.68	- 0 11.1	2.364	3.253	10.0	20.9	5 21	14 0.18	-11 33.9	1.813	2.747	10.0	20.3
5 31	13 53.98	- 0 30.9	2.450	3.255	12.5	21.1	5 31	13 55.05	-11 11.6	1.875	2.738	13.5	20.5
178752	2000 <i>VO</i> ₂		4 27.1 31°15	2°9/28.6	18		332206	2006 <i>EY</i> ₃₃		4 27.1 138°88	3°6/23.7	17	
3 22	14 52.76	-18 47.7	2.028	2.823	14.4	19.3	3 22	14 42.40	- 5 49.6	2.196	3.032	12.1	21.2
4 1	14 46.07	-19 59.0	1.946	2.831	11.3	19.1	4 1	14 37.70	- 4 48.0	2.127	3.041	9.1	21.1
4 11	14 36.90	-21 3.0	1.888	2.839	7.8	18.9	4 11	14 31.25	- 3 43.2	2.083	3.050	6.0	20.9
4 21	14 25.92	-21 57.3	1.858	2.847	4.4	18.7	4 21	14 23.66	- 2 40.1	2.067	3.058	3.8	20.8
5 1	14 14.14	-22 40.6	1.857	2.856	3.1	18.6	5 1	14 15.69	- 1 44.2	2.078	3.066	4.6	20.8
5 11	14 2.73	-23 13.6	1.885	2.865	6.0	18.8	5 11	14 8.16	- 1 0.0	2.118	3.073	7.4	21.0
5 21	13 52.74	-23 38.8	1.940	2.875	9.4	19.1	5 21	14 1.75	- 0 30.7	2.184	3.080	10.4	21.2
5 31	13 44.96	-23 59.8	2.021	2.885	12.6	19.3	5 31	13 57.00	- 0 17.5	2.272	3.087	13.1	21.4
72498	2001 <i>DN</i> ₆₃		4 27.1 282°53	2°7/29.2	18		510324	2011 <i>SW</i> ₁₉		4 27.1 187°12	4°2/ 2.6	18	
3 22	14 43.38	-22 23.3	1.939	2.744	14.6	19.5	3 22	14 43.10	-33 12.5	3.401	4.122	10.6	22.8
4 1	14 39.06	-22 27.4	1.848	2.737	11.6	19.2	4 1	14 37.94	-33 15.4	3.300	4.121	8.9	22.7
4 11	14 32.47	-22 17.1	1.778	2.731	8.1	19.0	4 11	14 31.32	-33 4.5	3.221	4.120	7.0	22.5
4 21	14 24.21	-21 52.5	1.733	2.724	4.4	18.8	4 21	14 23.69	-32 39.3	3.167	4.118	5.2	22.4
5 1	14 15.23	-21 15.7	1.716	2.718	2.8	18.6	5 1	14 15.67	-32 0.5	3.143	4.115	4.2	22.3
5 11	14 6.60	-20 31.2	1.725	2.711	5.8	18.8	5 11	14 7.91	-31 10.6	3.147	4.112	4.8	22.4
5 21	13 59.28	-19 44.7	1.761	2.705	9.6	19.0	5 21	14 1.01	-30 13.2	3.180	4.108	6.4	22.5
5 31	13 54.02	-19 2.1	1.819	2.698	13.1	19.2	5 31	13 55.45	-29 12.7	3.240	4.104	8.3	22.6
359632	2011 <i>QK</i> ₄₇		4 27.1 252°40	1°5/27.9	16		67160	2000 <i>AT</i> ₂₀₀		4 27.1 162°36	3°5/23.2	18	
3 22	14 48.75	-17 44.6	1.548	2.372	16.8	21.5	3 22	14 41.98	- 4 51.2	2.582	3.413	10.6	20.3
4 1	14 43.81	-17 56.5	1.455	2.359	13.2	21.2	4 1	14 37.15	- 3 46.1	2.509	3.419	8.1	20.1
4 11	14 35.89	-17 56.0	1.383	2.346	8.8	21.0	4 11	14 30.81	- 2 38.6	2.461	3.425	5.4	20.0
4 21	14 25.65	-17 43.5	1.335	2.332	4.0	20.6	4 21	14 23.48	- 1 33.1	2.442	3.431	3.6	19.9
5 1	14 14.27	-17 20.8	1.313	2.318	2.2	20.5	5 1	14 15.82	- 0 34.5	2.453	3.435	4.4	19.9
5 11	14 3.21	-16 52.9	1.317	2.304	7.1	20.7	5 11	14 8.51	+ 0 13.2	2.492	3.440	6.8	20.1
5 21	13 53.78	-16 25.7	1.346	2.289	12.1	21.0	5 21	14 2.16	+ 0 47.2	2.558	3.443	9.5	20.2
5 31	13 47.01	-16 5.4	1.397	2.274	16.4	21.2	5 31	13 57.22	+ 1 6.2	2.647	3.446	11.9	20.4
415643	2014 <i>QU</i> ₃₈₆		4 27.1 206°04	1°4/26.0	14 C		302866	2003 <i>GU</i> ₅₆		4 27.1 72°71	0°8/26.5	17	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
368676	2005 <i>QQ</i> ₂₉		4 27.1 150°94	1°5/25.7	17		207390	2005 <i>VJ</i> ₉₉		4 27.1 124°09	12°5/7.5	18	
3 22	14 43.67	-13 3.9	2.088	2.914	13.0	21.3	3 22	14 51.96	-43 58.1	1.271	1.998	24.7	20.3
4 1	14 38.81	-12 9.4	2.012	2.922	9.8	21.1	4 1	14 47.47	-44 32.6	1.201	2.007	21.9	20.1
4 11	14 32.03	-11 5.6	1.961	2.929	6.2	20.9	4 11	14 38.70	-44 27.2	1.144	2.017	18.7	19.9
4 21	14 23.99	-9 56.6	1.936	2.936	2.5	20.6	4 21	14 26.80	-43 33.7	1.104	2.025	15.4	19.7
5 1	14 15.50	-8 47.8	1.941	2.942	2.6	20.7	5 1	14 13.79	-41 49.6	1.084	2.034	13.0	19.6
5 11	14 7.49	-7 45.1	1.974	2.948	6.3	20.9	5 11	14 2.01	-39 22.7	1.087	2.041	12.7	19.6
5 21	14 0.70	-6 53.2	2.033	2.953	9.9	21.1	5 21	13 53.21	-36 29.4	1.112	2.049	14.6	19.7
5 31	13 55.72	-6 15.4	2.116	2.958	13.0	21.3	5 31	13 48.36	-33 29.5	1.158	2.056	17.6	19.9
69350	1993 <i>YP</i>		4 27.1 193°57	18°1/8.7	18 A		135179	2001 <i>QV</i> ₂₈₂		4 27.1 101°28	5°6/21.8	18	
3 22	14 47.66	+20 46.4	1.250	2.077	19.8	18.5	3 22	14 41.20	+1 11.4	2.197	3.037	11.9	19.3
4 1	14 43.13	+24 16.2	1.218	2.077	18.5	18.4	4 1	14 36.80	+2 14.1	2.134	3.044	9.3	19.2
4 11	14 35.39	+27 20.5	1.206	2.075	18.2	18.3	4 11	14 30.70	+3 14.4	2.095	3.051	6.9	19.0
4 21	14 25.40	+29 42.1	1.215	2.073	19.0	18.4	4 21	14 23.48	+4 6.8	2.083	3.057	5.6	19.0
5 1	14 14.61	+31 9.3	1.242	2.069	20.7	18.5	5 1	14 15.89	+4 46.2	2.099	3.064	6.6	19.0
5 11	14 4.65	+31 39.0	1.285	2.065	22.7	18.6	5 11	14 8.72	+5 8.9	2.140	3.070	8.8	19.2
5 21	13 56.82	+31 16.0	1.341	2.061	24.7	18.8	5 21	14 2.65	+5 13.5	2.206	3.076	11.4	19.4
5 31	13 51.93	+30 8.9	1.407	2.055	26.5	18.9	5 31	13 58.18	+5 0.1	2.294	3.082	13.8	19.5
497737	2006 <i>ST</i> ₂₀₅		4 27.1 262°17	0°2/27.2	17		276144	2002 <i>JY</i> ₁₉		4 27.1 294°79	5°3/23.7	17	
3 22	14 47.32	-15 15.0	1.848	2.669	14.6	22.4	3 22	14 45.78	-0 38.6	1.829	2.670	13.9	20.4
4 1	14 42.31	-15 9.0	1.742	2.647	11.3	22.1	4 1	14 40.93	-0 13.0	1.738	2.651	10.9	20.2
4 11	14 34.74	-14 52.9	1.659	2.624	7.4	21.8	4 11	14 33.73	+0 10.7	1.669	2.631	7.7	20.0
4 21	14 25.21	-14 28.3	1.601	2.601	2.9	21.5	4 21	14 24.79	+0 27.3	1.626	2.612	5.4	19.8
5 1	14 14.66	-13 57.9	1.571	2.576	1.8	21.4	5 1	14 15.02	+0 32.1	1.610	2.592	6.2	19.8
5 11	14 4.28	-13 26.4	1.569	2.552	6.6	21.6	5 11	14 5.53	+0 21.0	1.620	2.573	9.4	19.9
5 21	13 55.18	-12 59.0	1.592	2.527	11.1	21.8	5 21	13 57.31	-0 7.3	1.654	2.554	13.0	20.1
5 31	13 48.27	-12 40.5	1.639	2.501	15.1	22.0	5 31	13 51.16	-0 52.8	1.710	2.535	16.3	20.3
10255	Taurus		4 27.1 149°89	1°3/26.2	18		351956	2006 <i>TJ</i> ₉₉		4 27.1 161°82	0°5/27.6	18	
3 22	14 46.99	-13 10.6	1.668	2.500	15.4	18.5	3 22	14 44.27	-16 6.1	2.940	3.740	10.3	21.7
4 1	14 41.82	-12 33.4	1.595	2.507	11.7	18.3	4 1	14 38.82	-16 7.7	2.853	3.746	7.9	21.5
4 11	14 34.20	-11 45.9	1.545	2.514	7.4	18.1	4 11	14 31.88	-16 2.8	2.791	3.751	5.1	21.3
4 21	14 24.88	-10 52.0	1.520	2.520	2.9	17.8	4 21	14 23.94	-15 52.4	2.758	3.756	2.1	21.1
5 1	14 14.96	-9 57.3	1.523	2.526	2.7	17.8	5 1	14 15.61	-15 38.2	2.755	3.760	1.2	21.0
5 11	14 5.63	-9 8.2	1.552	2.531	7.2	18.1	5 11	14 7.55	-15 22.8	2.782	3.764	4.2	21.3
5 21	13 57.89	-8 30.0	1.607	2.536	11.5	18.4	5 21	14 0.38	-15 8.6	2.837	3.767	7.0	21.5
5 31	13 52.43	-8 6.5	1.684	2.540	15.1	18.6	5 31	13 54.56	-14 58.3	2.919	3.770	9.5	21.6
306928	2001 <i>UC</i> ₆₁		4 27.1 140°20	0°8/27.8	17		422881	2002 <i>QX</i> ₅₂		4 27.1 219°10	0°8/27.8	17	
3 22	14 46.13	-17 49.8	2.172	2.980	13.2	22.0	3 22	14 46.39	-17 57.6	2.041	2.851	13.8	22.3
4 1	14 40.66	-17 36.2	2.095	2.991	10.1	21.8	4 1	14 41.22	-17 45.2	1.945	2.843	10.7	22.1
4 11	14 33.22	-17 12.0	2.042	3.002	6.6	21.6	4 11	14 33.82	-17 21.1	1.873	2.834	7.1	21.8
4 21	14 24.46	-16 38.9	2.015	3.013	2.8	21.4	4 21	14 24.79	-16 46.7	1.826	2.824	3.0	21.6
5 1	14 15.24	-15 59.9	2.017	3.023	1.5	21.3	5 1	14 15.04	-16 4.9	1.808	2.813	1.6	21.4
5 11	14 6.48	-15 19.6	2.048	3.032	5.3	21.6	5 11	14 5.61	-15 20.5	1.818	2.802	5.8	21.7
5 21	13 58.98	-14 42.3	2.106	3.041	8.8	21.8	5 21	13 57.44	-14 38.6	1.855	2.790	9.7	21.9
5 31	13 53.34	-14 12.1	2.189	3.049	11.9	22.0	5 31	13 51.25	-14 4.3	1.916	2.778	13.3	22.1
156958	2003 <i>HZ</i> ₂₁		4 27.1 33°18	2°2/25.2	18		115794	2003 <i>UL</i> ₂₂₇		4 27.1 272°03	1°9/28.7	17	
3 22	14 39.85	-13 48.2	1.569	2.416	15.5	19.6	3 22	14 43.20	-20 39.2	2.004	2.813	14.1	20.2
4 1	14 36.49	-12 25.1	1.500	2.422	11.7	19.4	4 1	14 38.84	-20 37.2	1.914	2.808	11.1	19.9
4 11	14 30.82	-10 48.0	1.454	2.427	7.3	19.2	4 11	14 32.31	-20 22.2	1.845	2.802	7.5	19.7
4 21	14 23.58	-9 3.6	1.433	2.433	3.0	18.9	4 21	14 24.21	-19 54.9	1.802	2.796	3.8	19.5
5 1	14 15.81	-7 20.7	1.439	2.440	3.6	19.0	5 1	14 15.43	-19 17.7	1.786	2.790	2.2	19.3
5 11	14 8.62	-5 48.5	1.471	2.446	8.0	19.2	5 11	14 7.00	-18 35.1	1.798	2.785	5.6	19.5
5 21	14 2.93	-4 34.3	1.528	2.453	12.2	19.5	5 21	13 59.83	-17 52.4	1.836	2.779	9.4	19.8
5 31	13 59.39	-3 42.1	1.606	2.460	15.8	19.7	5 31	13 54.61	-17 14.9	1.898	2.773	12.8	20.0
118079	5189 <i>T</i> ₂		4 27.1 212°05	1°4/28.6	18		382094	2011 <i>GA</i> ₃₇		4 27.1 322°62	2°5/28.9	17	
3 22	14 41.07	-20 58.5	2.684	3.480	11.3	21.1	3 22	14 41.59	-21 53.2	1.670	2.489	16.0	20.7
4 1	14 36.63	-20 37.0	2.588	3.475	8.8	21.0	4 1	14 38.09	-21 50.6	1.580	2.479	12.7	20.4
4 11	14 30.59	-20 4.3	2.515	3.469	5.9	20.8	4 11	14 32.07	-21 31.4	1.511	2.469	8.8	20.2
4 21	14 23.45	-19 21.6	2.470	3.464	2.9	20.6	4 21	14 24.18	-20 56.1	1.466	2.459	4.6	19.9
5 1	14 15.86	-18 31.5	2.453	3.458	1.6	20.4	5 1	14 15.45	-20 7.5	1.447	2.450	2.7	19.7
5 11	14 8.55	-17 38.0	2.466	3.451	4.4	20.6	5 11	14 7.10	-19 11.5	1.453	2.442	6.3	19.9
5 21	14 2.17	-16 45.3	2.507	3.445	7.5	20.8	5 21	14 0.21	-18 15.0	1.485	2.433	10.7	20.2
5 31	13 57.23	-15 57.5	2.574	3.438	10.2	21.0	5 31	13 55.60	-17 25.0	1.538	2.426	14.6	20.4
164444	2006 <i>DZ</i> ₃₈		4 27.1 233°80	3°9/23.9	16		213762	2003 <i>AW</i> ₆₆		4 27.1 91°40	3°9/23.9	18	
3 22	14 45.20	-7 27.0	1.830	2.668	14.0	21.2	3 22	14 44.33	-2 30.2	2.274	3.106	11.8	20.3
4 1	14 40.44	-6 17.0	1.739	2.655	10.7	21.0	4 1	14 39.05	-2 3.3	2.212	3.122	9.0	20.1
4 11	14 33.36	-4 59.3	1.672	2.640	7.0	20.7	4 11	14 32.08	-1 37.3	2.174	3.137	6.1	19.9
4 21	14 24.61	-3 39.7	1.631	2.625	4.1	20.5	4 21	14 24.02	-1 15.9	2.164	3.152	4.0	19.8
5 1	14 15.11	-2 25.5	1.619	2.609	5.1	20.6	5 1	14 15.62	-1 2.7	2.182	3.167	4.6	19.9
5 11	14 5.94	-1 23.9	1.633	2.593	8.8	20.7	5 11	14 7.69	-1 0.3	2.228	3.182	7.2	20.1
5 21	13 58.09	-0 40.0	1.673	2.575	12.7	20.9	5 21	14 0.90	-1 10.1	2.300	3.196	10.0	20.3
5 31	13 52.29	-0 16.6	1.734	2.557	16.2	21.1	5 31	13 55.75	-1 32.4	2.395	3.211	12.5	20.5
54672	2000 <i>WO</i> ₁₈₀		4 27.1 225°84	3°4/21.1	18		349212	2					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
10998	1978 UN ₄		4 27.1 332°31	0°5/26.6	18		309956	2009 HK ₉		4 27.1 257°92	5°3/21.8	17	
3 22	14 38.51	-16 42.8	2.056	2.884	13.1	17.7	3 22	14 41.36	+ 2 11.2	2.512	3.345	10.8	20.8
4 1	14 35.10	-15 43.8	1.969	2.879	10.0	17.5	4 1	14 36.89	+ 3 0.7	2.427	3.332	8.5	20.6
4 11	14 29.80	-14 31.5	1.906	2.874	6.4	17.3	4 11	14 30.80	+ 3 47.8	2.367	3.319	6.4	20.5
4 21	14 23.21	-13 9.8	1.869	2.869	2.4	17.0	4 21	14 23.60	+ 4 28.0	2.335	3.306	5.3	20.4
5 1	14 16.11	-11 44.1	1.860	2.864	1.9	17.0	5 1	14 15.93	+ 4 56.7	2.330	3.292	6.1	20.4
5 11	14 9.39	-10 21.4	1.879	2.860	5.9	17.2	5 11	14 8.53	+ 5 10.8	2.352	3.279	8.3	20.5
5 21	14 3.80	- 9 7.8	1.924	2.856	9.7	17.4	5 21	14 2.03	+ 5 8.7	2.399	3.265	10.8	20.6
5 31	13 59.92	- 8 8.0	1.993	2.852	13.0	17.6	5 31	13 56.97	+ 4 50.1	2.468	3.251	13.1	20.8
336391	2008 UN ₉₂		4 27.1 217°43	3°3/24.2	18		462461	2008 UA ₁₅₅		4 27.1 198°27	0°3/26.9	16	
3 22	14 43.80	- 5 17.6	2.371	3.201	11.5	21.6	3 22	14 48.69	-15 4.4	1.736	2.559	15.3	22.5
4 1	14 38.81	- 4 38.8	2.283	3.193	8.7	21.4	4 1	14 43.26	-14 46.9	1.650	2.556	11.8	22.2
4 11	14 32.06	- 3 57.6	2.219	3.185	5.8	21.2	4 11	14 35.27	-14 18.3	1.587	2.553	7.6	22.0
4 21	14 24.07	- 3 17.8	2.184	3.176	3.5	21.0	4 21	14 25.43	-13 41.0	1.549	2.549	2.9	21.7
5 1	14 15.57	- 2 43.6	2.177	3.166	4.1	21.1	5 1	14 14.79	-12 59.0	1.539	2.544	2.0	21.6
5 11	14 7.37	- 2 18.9	2.198	3.156	7.0	21.2	5 11	14 4.60	-12 18.0	1.556	2.538	6.8	21.9
5 21	14 0.17	- 2 6.3	2.246	3.146	10.0	21.4	5 21	13 55.93	-11 43.4	1.599	2.532	11.2	22.1
5 31	13 54.56	- 2 7.2	2.317	3.135	12.8	21.6	5 31	13 49.58	-11 19.9	1.665	2.525	15.0	22.4
303787	2005 RB ₄₁		4 27.1 173°46	3°2/23.6	18		216114	2006 SF ₁₄		4 27.2 279°48	0°5/27.5	17	
3 22	14 39.79	- 5 16.0	2.654	3.487	10.3	21.0	3 22	14 43.56	-18 10.8	1.634	2.462	15.9	21.3
4 1	14 35.53	- 4 22.1	2.576	3.489	7.8	20.8	4 1	14 39.74	-17 40.8	1.533	2.440	12.4	21.0
4 11	14 29.83	- 3 25.9	2.525	3.490	5.2	20.7	4 11	14 33.26	-16 54.2	1.452	2.418	8.2	20.7
4 21	14 23.17	- 2 31.2	2.501	3.491	3.3	20.5	4 21	14 24.73	-15 53.0	1.397	2.396	3.4	20.4
5 1	14 16.16	- 1 42.4	2.506	3.492	4.0	20.6	5 1	14 15.18	-14 41.9	1.367	2.373	1.9	20.2
5 11	14 9.46	- 1 3.1	2.540	3.493	6.4	20.7	5 11	14 5.89	-13 28.1	1.364	2.350	7.0	20.4
5 21	14 3.63	- 0 36.0	2.600	3.493	9.1	20.9	5 21	13 58.02	-12 19.9	1.386	2.327	11.9	20.7
5 31	13 59.15	- 0 22.5	2.683	3.493	11.4	21.1	5 31	13 52.51	-11 24.4	1.430	2.304	16.3	20.9
371752	2007 FZ ₁₆		4 27.1 103°10	0°6/27.6	17		219770	2001 YZ ₁₃₀		4 27.2 124°78	2°0/25.5	18	
3 22	14 44.45	-17 18.1	1.781	2.605	15.0	22.0	3 22	14 46.87	- 9 2.5	2.297	3.119	12.1	21.2
4 1	14 39.85	-17 1.4	1.706	2.611	11.5	21.7	4 1	14 40.98	- 8 36.5	2.231	3.138	9.1	21.0
4 11	14 32.95	-16 32.4	1.652	2.617	7.5	21.5	4 11	14 33.32	- 8 6.6	2.190	3.156	5.8	20.9
4 21	14 24.45	-15 53.3	1.624	2.623	3.1	21.3	4 21	14 24.54	- 7 35.8	2.176	3.174	2.6	20.7
5 1	14 15.36	-15 8.2	1.623	2.629	1.7	21.2	5 1	14 15.41	- 7 7.6	2.192	3.191	2.9	20.7
5 11	14 6.78	-14 22.4	1.649	2.634	6.1	21.5	5 11	14 6.78	- 6 45.6	2.237	3.207	6.0	21.0
5 21	13 59.66	-13 41.7	1.701	2.640	10.2	21.7	5 21	13 59.34	- 6 32.4	2.310	3.223	9.2	21.2
5 31	13 54.67	-13 10.6	1.776	2.646	13.8	22.0	5 31	13 53.61	- 6 29.7	2.406	3.238	11.9	21.4
418066	2007 VX ₁₉₇		4 27.1 144°92	4°0/24.4	17		503876	2000 ST ₃₃₆		4 27.2 228°33	1°5/28.3	18	
3 22	14 46.33	- 5 34.8	1.733	2.575	14.5	21.6	3 22	14 47.91	-18 52.2	2.472	3.265	12.2	22.1
4 1	14 41.20	- 4 53.1	1.664	2.580	11.1	21.4	4 1	14 42.11	-19 2.6	2.365	3.252	9.5	21.9
4 11	14 33.76	- 4 8.5	1.618	2.586	7.3	21.1	4 11	14 34.31	-19 3.9	2.283	3.237	6.4	21.6
4 21	14 24.76	- 3 26.3	1.597	2.591	4.3	21.0	4 21	14 25.03	-18 56.4	2.228	3.222	3.1	21.4
5 1	14 15.19	- 2 51.9	1.604	2.595	5.0	21.0	5 1	14 15.03	-18 41.3	2.202	3.206	1.8	21.3
5 11	14 6.17	- 2 30.4	1.637	2.600	8.5	21.2	5 11	14 5.23	-18 21.5	2.206	3.190	5.0	21.5
5 21	13 58.63	- 2 24.5	1.695	2.604	12.2	21.5	5 21	13 56.44	-18 0.4	2.239	3.172	8.4	21.6
5 31	13 53.23	- 2 35.2	1.774	2.607	15.4	21.7	5 31	13 49.36	-17 42.0	2.297	3.154	11.5	21.8
143220	2002 YY ₄		4 27.1 125°16	12°7/18.3	18		162737	2000 VP ₅₃		4 27.2 234°29	2°1/28.8	17	
3 22	14 53.87	+23 45.9	1.994	2.766	15.4	19.7	3 22	14 45.75	-21 57.5	1.769	2.577	15.7	20.5
4 1	14 46.45	+24 41.6	1.954	2.778	13.9	19.6	4 1	14 41.16	-21 39.9	1.674	2.567	12.4	20.2
4 11	14 36.82	+25 15.6	1.934	2.789	12.9	19.5	4 11	14 34.01	-21 5.0	1.600	2.556	8.5	19.9
4 21	14 25.84	+25 21.0	1.938	2.799	12.7	19.5	4 21	14 24.97	-20 13.4	1.551	2.545	4.3	19.7
5 1	14 14.59	+24 53.9	1.964	2.810	13.4	19.6	5 1	14 15.08	-19 8.5	1.529	2.533	2.4	19.5
5 11	14 4.17	+23 54.5	2.013	2.820	14.7	19.7	5 11	14 5.56	-17 56.9	1.535	2.521	6.3	19.7
5 21	13 55.44	+22 26.8	2.083	2.829	16.2	19.8	5 21	13 57.51	-16 46.0	1.566	2.508	10.7	19.9
5 31	13 48.95	+20 36.6	2.171	2.838	17.7	20.0	5 31	13 51.75	-15 43.3	1.620	2.495	14.6	20.2
502395	2015 BC ₂₄₉		4 27.1 146°70	0°9/26.4	17		435589	2008 RV ₁₃₉		4 27.2 195°45	0°8/27.8	17	
3 22	14 44.39	-13 29.5	2.016	2.842	13.4	22.1	3 22	14 44.14	-17 50.8	2.200	3.010	12.9	22.0
4 1	14 39.50	-12 59.8	1.939	2.848	10.2	21.9	4 1	14 39.30	-17 39.4	2.111	3.008	10.0	21.8
4 11	14 32.59	-12 21.5	1.886	2.854	6.4	21.6	4 11	14 32.49	-17 17.4	2.046	3.007	6.6	21.5
4 21	14 24.30	-11 37.6	1.859	2.859	2.5	21.4	4 21	14 24.29	-16 46.4	2.007	3.004	2.8	21.3
5 1	14 15.50	-10 52.4	1.860	2.864	2.1	21.4	5 1	14 15.53	-16 9.1	1.996	3.002	1.5	21.2
5 11	14 7.17	-10 10.8	1.890	2.869	6.1	21.6	5 11	14 7.12	-15 29.9	2.014	2.999	5.2	21.4
5 21	14 0.10	- 9 37.2	1.945	2.873	9.8	21.9	5 21	13 59.86	-14 53.3	2.059	2.996	8.9	21.7
5 31	13 54.91	- 9 14.9	2.025	2.877	13.0	22.1	5 31	13 54.39	-14 23.3	2.129	2.992	12.1	21.8
504129	2006 RY ₈₅		4 27.1 255°55	1°0/27.8	17		470135	2006 UU ₄₄		4 27.2 185°15	0°3/26.8	17	
3 22	14 46.43	-18 0.4	1.862	2.678	14.7	22.5	3 22	14 41.65	-14 19.8	2.779	3.592	10.5	22.8
4 1	14 41.61	-17 51.9	1.759	2.659	11.5	22.3	4 1	14 36.96	-13 58.5	2.690	3.592	8.0	22.6
4 11	14 34.30	-17 30.9	1.678	2.640	7.7	22.0	4 11	14 30.78	-13 30.4	2.626	3.591	5.1	22.4
4 21	14 25.09	-16 58.3	1.622	2.620	3.3	21.7	4 21	14 23.58	-12 57.6	2.590	3.590	1.9	22.2
5 1	14 14.94	-16 16.9	1.594	2.600	1.8	21.5	5 1	14 15.99	-12 22.7	2.584	3.589	1.4	22.1
5 11	14 5.01	-15 31.9	1.593	2.579	6.3	21.8	5 11	14 8.67	-11 49.1	2.607	3.587	4.6	22.4
5 21	13 56.38	-14 49.0	1.619	2.557	10.7	22.0	5 21	14 2.23	-11 19.9	2.659	3.585	7.6	22.5
5 31	13 49.93	-14 14.0	1.667	2.535	14.7	22.2	5 31	13 57.15	-10 57.9	2.735	3.583	10.2	22.7
105896	2000 SG ₁₈₇		4 27.1 268°84	0°6/26.2	18		105972	2000 SZ ₂₆					

EPHEMERIDES

4 27.2

4 27.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
42627	1998 <i>FF</i> ₃₃		4 27.2 341°64	3°5/25.0	18		487447	2014 <i>RR</i> ₆₃		4 27.2 307°60	6°0/16.3	18	
3 22	14 37.50	-10 27.1	1.104	1.980	18.5	17.5	3 22	14 36.30	+18 15.4	4.279	5.068	7.5	20.8
4 1	14 35.80	-9 37.0	1.031	1.967	14.1	17.2	4 1	14 32.45	+18 56.0	4.220	5.064	6.6	20.8
4 11	14 31.02	-8 34.1	0.977	1.955	9.1	16.9	4 11	14 27.69	+19 28.4	4.187	5.060	6.1	20.7
4 21	14 23.90	-7 25.3	0.945	1.945	4.2	16.6	4 21	14 22.37	+19 49.7	4.179	5.056	6.1	20.7
5 1	14 15.75	-6 20.0	0.935	1.935	5.1	16.6	5 1	14 16.84	+19 58.0	4.196	5.053	6.6	20.7
5 11	14 8.12	-5 28.4	0.947	1.927	10.3	16.9	5 11	14 11.51	+19 52.1	4.239	5.049	7.5	20.8
5 21	14 2.37	-4 57.7	0.980	1.921	15.6	17.1	5 21	14 6.73	+19 32.1	4.304	5.045	8.5	20.9
5 31	13 59.45	-4 51.7	1.030	1.916	20.2	17.4	5 31	14 2.80	+18 58.7	4.389	5.042	9.5	21.0
166536	2002 <i>RX</i> ₂₃		4 27.2 214°60	1°9/25.4	18		237041	2008 <i>SO</i> ₁₁₆		4 27.2 12°09	1°6/28.0	16	
3 22	14 41.47	-10 56.5	2.232	3.063	12.1	20.8	3 22	14 42.96	-17 50.7	1.047	1.906	20.6	19.8
4 1	14 37.16	-10 11.3	2.148	3.060	9.1	20.6	4 1	14 40.17	-18 0.6	0.984	1.907	16.1	19.5
4 11	14 31.07	-9 19.0	2.087	3.056	5.8	20.4	4 11	14 33.89	-17 53.4	0.939	1.910	10.7	19.2
4 21	14 23.74	-8 23.4	2.053	3.052	2.5	20.2	4 21	14 25.04	-17 30.2	0.915	1.914	4.7	18.9
5 1	14 15.92	-7 29.0	2.048	3.048	2.9	20.2	5 1	14 15.15	-16 55.6	0.913	1.919	2.5	18.8
5 11	14 8.44	-6 40.8	2.071	3.043	6.3	20.4	5 11	14 6.04	-16 17.2	0.933	1.925	8.3	19.1
5 21	14 2.02	-6 2.9	2.121	3.039	9.6	20.6	5 21	13 59.18	-15 43.5	0.975	1.932	13.8	19.5
5 31	13 57.23	-5 37.9	2.194	3.034	12.6	20.8	5 31	13 55.53	-15 21.4	1.035	1.940	18.6	19.8
204203	2004 <i>CT</i> ₅		4 27.2 75°07	1°0/26.3	18		321643	2010 <i>AT</i> ₂₆		4 27.2 44°74	2°1/28.6	17	
3 22	14 42.60	-12 47.5	2.046	2.876	13.1	20.2	3 22	14 44.12	-20 6.5	1.675	2.496	15.9	20.5
4 1	14 38.07	-12 21.2	1.977	2.888	9.9	20.0	4 1	14 39.77	-20 11.1	1.607	2.507	12.4	20.3
4 11	14 31.63	-11 47.5	1.931	2.900	6.2	19.8	4 11	14 32.99	-20 1.7	1.559	2.519	8.4	20.1
4 21	14 23.94	-11 9.3	1.911	2.912	2.4	19.6	4 21	14 24.54	-19 39.2	1.536	2.531	4.1	19.8
5 1	14 15.82	-10 30.8	1.920	2.923	2.2	19.6	5 1	14 15.49	-19 6.5	1.539	2.544	2.3	19.7
5 11	14 8.17	-9 56.4	1.956	2.935	5.9	19.9	5 11	14 7.03	-18 29.0	1.569	2.557	6.1	20.0
5 21	14 1.75	-9 29.9	2.019	2.947	9.5	20.1	5 21	14 0.13	-17 52.2	1.624	2.570	10.1	20.3
5 31	13 57.12	-9 14.1	2.104	2.959	12.5	20.3	5 31	13 55.49	-17 21.7	1.701	2.584	13.7	20.5
475199	2005 <i>VQ</i> ₂		4 27.2 247°20	3°6/29.9	16		96286	1996 <i>AE</i> ₁₃		4 27.2 168°99	0°2/27.3	18	
3 22	14 49.28	-24 54.1	2.756	3.518	11.8	21.6	3 22	14 44.42	-15 42.4	2.150	2.967	13.0	20.2
4 1	14 43.12	-25 41.3	2.646	3.505	9.6	21.4	4 1	14 39.52	-15 33.2	2.067	2.969	9.9	20.0
4 11	14 34.97	-26 19.0	2.561	3.492	7.1	21.2	4 11	14 32.64	-15 15.2	2.006	2.970	6.4	19.8
4 21	14 25.32	-26 45.4	2.503	3.478	4.7	21.0	4 21	14 24.38	-14 49.9	1.973	2.972	2.6	19.5
5 1	14 14.88	-27 0.0	2.474	3.464	3.7	20.9	5 1	14 15.58	-14 20.5	1.967	2.973	1.5	19.4
5 11	14 4.55	-27 3.9	2.476	3.450	5.2	21.0	5 11	14 7.15	-13 50.9	1.990	2.974	5.4	19.7
5 21	13 55.15	-26 59.6	2.506	3.436	7.8	21.1	5 21	13 59.91	-13 25.1	2.040	2.974	9.1	19.9
5 31	13 47.37	-26 51.1	2.562	3.421	10.4	21.3	5 31	13 54.47	-13 6.7	2.114	2.975	12.3	20.1
289009	2004 <i>TM</i> ₉₁		4 27.2 51°16	2°0/28.5	17		289478	2005 <i>EL</i> ₈₀		4 27.2 36°48	6°8/22.6	18	
3 22	14 45.18	-19 37.3	1.650	2.471	16.1	20.5	3 22	14 40.96	-4 13.9	1.132	2.008	18.2	19.7
4 1	14 40.57	-19 45.7	1.584	2.485	12.5	20.3	4 1	14 37.86	-2 37.4	1.090	2.023	13.8	19.5
4 11	14 33.48	-19 40.5	1.539	2.499	8.4	20.1	4 11	14 31.91	-0 58.5	1.068	2.040	9.5	19.3
4 21	14 24.71	-19 22.5	1.518	2.514	4.1	19.9	4 21	14 24.11	+0 31.9	1.069	2.058	6.9	19.2
5 1	14 15.34	-18 54.7	1.524	2.529	2.3	19.8	5 1	14 15.82	+1 42.9	1.093	2.077	8.3	19.4
5 11	14 6.60	-18 22.0	1.556	2.544	6.1	20.1	5 11	14 8.44	+2 26.8	1.139	2.096	12.1	19.6
5 21	13 59.47	-17 50.1	1.614	2.559	10.2	20.3	5 21	14 3.01	+2 41.2	1.206	2.116	16.0	19.9
5 31	13 54.65	-17 24.2	1.694	2.575	13.8	20.6	5 31	14 0.18	+2 27.7	1.291	2.136	19.4	20.2
496910	2001 <i>SK</i> ₁₆₈		4 27.2 137°34	0°1/27.0	18		173843	2001 <i>TN</i> ₁₁₈		4 27.2 130°03	4°4/2.4	17	
3 22	14 41.03	-16 46.7	2.847	3.654	10.4	21.8	3 22	14 44.64	-32 25.5	2.976	3.706	11.7	21.9
4 1	14 36.37	-16 1.5	2.769	3.666	7.9	21.7	4 1	14 39.26	-32 32.4	2.893	3.722	9.8	21.8
4 11	14 30.33	-15 7.7	2.715	3.678	5.0	21.5	4 11	14 32.26	-32 24.3	2.833	3.737	7.6	21.7
4 21	14 23.40	-14 7.6	2.690	3.690	1.9	21.3	4 21	14 24.18	-32 0.8	2.798	3.752	5.6	21.6
5 1	14 16.18	-13 4.9	2.696	3.701	1.3	21.3	5 1	14 15.74	-31 22.8	2.791	3.767	4.4	21.5
5 11	14 9.31	-12 3.7	2.731	3.711	4.4	21.5	5 11	14 7.68	-30 33.4	2.813	3.781	5.1	21.6
5 21	14 3.34	-11 8.0	2.795	3.721	7.2	21.7	5 21	14 0.65	-29 36.8	2.863	3.794	6.9	21.7
5 31	13 58.70	-10 20.7	2.884	3.731	9.7	21.9	5 31	13 55.15	-28 37.8	2.940	3.807	9.0	21.9
299246	2005 <i>MR</i> ₃₇		4 27.2 220°74	3°3/30.3	17		318963	2005 <i>UW</i> ₂₄₉		4 27.2 300°78	0°6/26.8	17	
3 22	14 42.49	-26 0.1	2.482	3.259	12.6	21.3	3 22	14 43.55	-13 55.5	1.672	2.509	15.2	20.6
4 1	14 37.98	-26 2.2	2.386	3.255	10.2	21.1	4 1	14 39.51	-13 41.2	1.584	2.498	11.7	20.3
4 11	14 31.63	-25 50.4	2.313	3.251	7.4	20.9	4 11	14 32.98	-13 17.0	1.518	2.487	7.5	20.0
4 21	14 23.98	-25 24.6	2.266	3.247	4.6	20.7	4 21	14 24.62	-12 45.3	1.476	2.476	2.9	19.7
5 1	14 15.79	-24 46.3	2.247	3.243	3.3	20.6	5 1	14 15.42	-12 10.4	1.461	2.466	2.2	19.6
5 11	14 7.89	-23 59.1	2.256	3.238	5.0	20.7	5 11	14 6.58	-11 37.5	1.472	2.455	6.9	19.9
5 21	14 1.05	-23 7.6	2.292	3.233	7.9	20.9	5 21	13 59.15	-11 11.9	1.508	2.445	11.4	20.1
5 31	13 55.86	-22 17.0	2.354	3.228	10.7	21.1	5 31	13 53.95	-10 57.8	1.565	2.435	15.3	20.4
498856	2008 <i>YX</i> ₄		4 27.2 188°11	3°2/23.7	18		264503	2001 <i>QG</i> ₁₃₅		4 27.2 182°40	2°8/29.7	17	
3 22	14 43.71	-3 13.7	2.934	3.756	9.7	22.6	3 22	14 45.40	-24 44.1	2.220	3.004	13.7	21.0
4 1	14 38.37	-2 35.9	2.850	3.755	7.4	22.5	4 1	14 40.34	-24 31.9	2.129	3.005	10.9	20.8
4 11	14 31.62	-1 57.6	2.792	3.753	5.0	22.3	4 11	14 33.21	-24 4.2	2.060	3.005	7.7	20.6
4 21	14 23.92	-1 21.9	2.764	3.751	3.3	22.2	4 21	14 24.65	-23 21.3	2.018	3.005	4.4	20.4
5 1	14 15.86	-0 52.3	2.765	3.748	4.0	22.2	5 1	14 15.51	-22 25.7	2.003	3.004	2.8	20.3
5 11	14 8.07	-0 31.6	2.795	3.744	6.2	22.4	5 11	14 6.78	-21 22.3	2.018	3.002	5.3	20.4
5 21	14 1.12	-0 21.6	2.854	3.739	8.6	22.5	5 21	13 59.28	-20 17.0	2.059	3.000	8.6	20.6
5 31	13 55.46	-0 23.4	2.936	3.734	10.8	22.7	5 31	13 53.66	-19 15.7	2.126	2.998	11.8	20.8
504522	2008 <i>RE</i> ₆₈		4 27.2 222°28	0°5/26.7	17		353120	2009 <i>FC</i> ₃₇		4 27.2 170°58	3°4/30.1	17	

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4 27.2

4 27.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
209527	2004 <i>TQ</i> ₆₀		4 27.2 119°94	1°9/28.4	18		316692	1996 <i>GX</i> ₅		4 27.2 53°42	0°5/26.5	18	
3 22	14 50.65	-19 25.5	1.667	2.478	16.4	21.3	3 22	14 35.92	-12 10.4	4.149	4.964	7.3	20.3
4 1	14 44.75	-19 34.5	1.597	2.493	12.8	21.1	4 1	14 32.22	-11 59.6	4.064	4.967	5.5	20.2
4 11	14 36.21	-19 30.0	1.549	2.507	8.6	20.8	4 11	14 27.61	-11 45.5	4.005	4.971	3.4	20.0
4 21	14 25.84	-19 12.6	1.526	2.521	4.1	20.6	4 21	14 22.40	-11 29.5	3.974	4.974	1.3	19.9
5 1	14 14.82	-18 44.7	1.530	2.534	2.3	20.5	5 1	14 16.96	-11 13.2	3.974	4.978	1.1	19.8
5 11	14 4.46	-18 11.6	1.561	2.547	6.3	20.8	5 11	14 11.70	-10 58.3	4.003	4.981	3.2	20.0
5 21	13 55.84	-17 38.9	1.618	2.559	10.5	21.1	5 21	14 6.96	-10 46.5	4.061	4.985	5.3	20.2
5 31	13 49.70	-17 12.3	1.699	2.571	14.2	21.3	5 31	14 3.05	-10 39.2	4.145	4.988	7.1	20.3
300025	2006 <i>UL</i> ₉₂		4 27.2 66°87	1°0/26.3	17		266336	2007 <i>DT</i> ₅₉		4 27.2 37°73	1°6/28.2	17	
3 22	14 40.68	-13 28.2	2.184	3.012	12.4	21.2	3 22	14 44.80	-18 23.4	1.316	2.156	18.3	20.4
4 1	14 36.57	-12 51.2	2.110	3.020	9.4	21.0	4 1	14 40.72	-18 28.8	1.263	2.175	14.2	20.2
4 11	14 30.69	-12 6.1	2.060	3.029	5.9	20.8	4 11	14 33.78	-18 19.0	1.228	2.194	9.3	20.0
4 21	14 23.64	-11 16.1	2.037	3.037	2.3	20.6	4 21	14 24.92	-17 55.8	1.217	2.215	4.2	19.7
5 1	14 16.17	-10 25.5	2.042	3.045	2.1	20.6	5 1	14 15.47	-17 23.3	1.230	2.236	2.2	19.7
5 11	14 9.13	-9 39.1	2.075	3.054	5.7	20.9	5 11	14 6.86	-16 47.9	1.269	2.258	6.9	20.0
5 21	14 3.19	-9 0.8	2.134	3.062	9.1	21.1	5 21	14 0.19	-16 16.0	1.330	2.280	11.5	20.3
5 31	13 58.90	-8 33.8	2.217	3.071	12.0	21.3	5 31	13 56.18	-15 53.3	1.413	2.303	15.5	20.6
271929	2004 <i>XX</i> ₁₁₀		4 27.2 175°98	1°2/26.2	18		105352	2000 <i>QB</i> ₁₀₄		4 27.2 212°36	1°1/26.1	18	
3 22	14 45.84	-10 59.9	2.424	3.241	11.7	20.8	3 22	14 42.36	-11 12.7	2.677	3.497	10.6	20.3
4 1	14 40.33	-10 46.0	2.339	3.244	8.8	20.6	4 1	14 37.61	-10 53.2	2.586	3.492	8.0	20.1
4 11	14 33.06	-10 27.1	2.279	3.246	5.6	20.4	4 11	14 31.30	-10 28.7	2.519	3.486	5.1	19.9
4 21	14 24.56	-10 5.5	2.247	3.247	2.2	20.2	4 21	14 23.90	-10 1.4	2.481	3.480	2.1	19.7
5 1	14 15.59	-9 44.0	2.245	3.248	2.1	20.2	5 1	14 16.06	-9 34.3	2.472	3.474	2.0	19.7
5 11	14 6.96	-9 25.9	2.272	3.248	5.5	20.4	5 11	14 8.48	-9 10.4	2.492	3.468	5.1	19.9
5 21	13 59.39	-9 14.1	2.326	3.247	8.8	20.6	5 21	14 1.77	-8 52.6	2.540	3.461	8.1	20.1
5 31	13 53.43	-9 10.8	2.405	3.246	11.6	20.8	5 31	13 56.47	-8 43.1	2.612	3.454	10.8	20.3
275509	1995 <i>VN</i> ₂		4 27.2 207°52	0°4/27.5	17		295102	2008 <i>EZ</i> ₁₆₁		4 27.2 250°53	0°3/26.9	16	
3 22	14 45.22	-15 47.1	1.982	2.801	13.8	20.5	3 22	14 42.54	-13 51.1	2.523	3.340	11.3	20.9
4 1	14 40.35	-15 44.4	1.896	2.800	10.6	20.3	4 1	14 37.89	-13 44.5	2.429	3.332	8.6	20.7
4 11	14 33.31	-15 32.4	1.834	2.798	6.9	20.1	4 11	14 31.56	-13 31.5	2.360	3.325	5.5	20.5
4 21	14 24.72	-15 12.6	1.797	2.796	2.8	19.8	4 21	14 24.03	-13 13.7	2.318	3.317	2.1	20.3
5 1	14 15.48	-14 47.9	1.789	2.794	1.6	19.7	5 1	14 15.98	-12 53.6	2.304	3.310	1.5	20.2
5 11	14 6.62	-14 22.4	1.808	2.792	5.8	20.0	5 11	14 8.19	-12 34.4	2.320	3.302	4.9	20.4
5 21	13 59.03	-14 0.3	1.853	2.790	9.7	20.2	5 21	14 1.33	-12 18.9	2.363	3.294	8.2	20.6
5 31	13 53.41	-13 45.5	1.922	2.788	13.1	20.4	5 31	13 55.97	-12 9.9	2.431	3.286	11.1	20.8
25635	2000 <i>AV</i> ₆₁		4 27.2 238°01	3°1/29.9	18		100269	1994 <i>UM</i> ₆		4 27.2 339°47	2°9/28.8	17	
3 22	14 44.35	-24 59.7	2.388	3.168	12.9	19.2	3 22	14 43.88	-19 41.8	1.753	2.572	15.4	18.5
4 1	14 39.55	-25 2.4	2.284	3.156	10.4	19.0	4 1	14 39.88	-20 22.6	1.661	2.559	12.2	18.3
4 11	14 32.75	-24 51.3	2.203	3.144	7.5	18.7	4 11	14 33.34	-20 53.2	1.590	2.547	8.5	18.0
4 21	14 24.51	-24 26.0	2.147	3.131	4.6	18.5	4 21	14 24.86	-21 12.7	1.543	2.536	4.6	17.8
5 1	14 15.60	-23 47.9	2.119	3.117	3.1	18.4	5 1	14 15.43	-21 21.2	1.523	2.525	3.0	17.6
5 11	14 6.93	-23 0.7	2.121	3.104	5.2	18.5	5 11	14 6.24	-21 21.3	1.529	2.515	6.3	17.8
5 21	13 59.34	-22 9.2	2.149	3.089	8.3	18.7	5 21	13 58.42	-21 16.9	1.560	2.507	10.4	18.0
5 31	13 53.50	-21 18.9	2.202	3.075	11.4	18.9	5 31	13 52.85	-21 13.1	1.613	2.499	14.1	18.2
49037	1998 <i>QV</i> ₁₀₇		4 27.2 275°75	2°0/25.7	18		285132	1995 <i>SY</i> ₆₃		4 27.2 53°43	0°7/27.6	15	
3 22	14 44.19	-11 38.8	1.684	2.523	15.0	19.5	3 22	14 48.02	-16 5.3	1.306	2.146	18.4	21.6
4 1	14 40.07	-11 0.2	1.587	2.503	11.5	19.2	4 1	14 43.48	-16 11.4	1.235	2.149	14.3	21.3
4 11	14 33.43	-10 11.4	1.511	2.482	7.4	18.9	4 11	14 35.80	-16 4.9	1.184	2.152	9.3	21.0
4 21	14 24.87	-9 16.1	1.461	2.461	3.1	18.6	4 21	14 25.82	-15 47.0	1.155	2.155	3.9	20.7
5 1	14 15.36	-8 20.0	1.438	2.439	3.3	18.6	5 1	14 14.89	-15 21.5	1.152	2.158	2.1	20.6
5 11	14 6.10	-7 30.1	1.441	2.418	7.9	18.8	5 11	14 4.60	-14 54.2	1.173	2.161	7.6	21.0
5 21	13 58.20	-6 52.0	1.468	2.396	12.4	19.0	5 21	13 56.29	-14 31.6	1.218	2.164	12.7	21.3
5 31	13 52.52	-6 30.3	1.517	2.374	16.4	19.2	5 31	13 50.87	-14 19.0	1.283	2.167	17.1	21.5
494340	2016 <i>TK</i> ₄₃		4 27.2 272°27	1°0/26.2	18		308177	2005 <i>CJ</i> ₂₆		4 27.2 89°89	0°9/27.8	18	
3 22	14 41.14	-13 8.9	2.424	3.247	11.5	22.5	3 22	14 47.70	-18 30.7	1.566	2.389	16.7	21.2
4 1	14 36.97	-12 32.4	2.318	3.225	8.8	22.3	4 1	14 42.48	-18 8.3	1.505	2.409	12.8	21.0
4 11	14 31.04	-11 47.4	2.235	3.203	5.6	22.0	4 11	14 34.70	-17 31.0	1.466	2.430	8.4	20.7
4 21	14 23.83	-10 56.7	2.180	3.180	2.2	21.8	4 21	14 25.25	-16 41.7	1.452	2.450	3.5	20.5
5 1	14 16.03	-10 4.2	2.154	3.157	2.1	21.7	5 1	14 15.30	-15 45.2	1.464	2.470	1.8	20.4
5 11	14 8.41	-9 14.4	2.157	3.134	5.6	21.9	5 11	14 6.13	-14 48.6	1.504	2.490	6.5	20.8
5 21	14 1.70	-8 31.6	2.187	3.111	9.1	22.1	5 21	13 58.72	-13 58.3	1.568	2.509	10.8	21.1
5 31	13 56.51	-7 59.4	2.240	3.087	12.2	22.2	5 31	13 53.74	-13 19.6	1.655	2.528	14.5	21.3
152497	2005 <i>WJ</i> ₁₂₀		4 27.2 18°67	4°6/ 1.1	17		97394	2000 <i>AR</i> ₁₀₂		4 27.2 61°70	7°7/21.4	18	
3 22	14 40.50	-28 57.1	1.507	2.309	18.2	19.0	3 22	14 44.40	+ 5 41.5	1.847	2.686	13.8	18.6
4 1	14 37.48	-28 34.6	1.431	2.313	14.9	18.7	4 1	14 39.58	+ 6 37.9	1.789	2.693	11.1	18.4
4 11	14 31.76	-27 45.6	1.375	2.317	10.9	18.5	4 11	14 32.70	+ 7 27.0	1.755	2.700	8.8	18.3
4 21	14 24.16	-26 30.6	1.340	2.322	6.9	18.3	4 21	14 24.46	+ 8 2.4	1.746	2.708	7.7	18.2
5 1	14 15.87	-24 54.0	1.331	2.328	4.6	18.2	5 1	14 15.78	+ 8 18.6	1.762	2.715	8.6	18.3
5 11	14 8.23	-23 4.8	1.347	2.335	6.8	18.3	5 11	14 7.65	+ 8 12.8	1.804	2.722	10.9	18.4
5 21	14 2.32	-21 13.9	1.387	2.341	10.8	18.5	5 21	14 0.88	+ 7 45.0	1.868	2.730	13.5	18.6
5 31	13 58.89	-19 31.8	1.451	2.349	14.6	18.8	5 31	13 56.06	+ 6 57.1	1.952	2.737	16.0	18.8
305477	2008 <i>DU</i> ₅₉		4 27.2 335°16	0°5/27.7	17		485396	2011 <i>LV</i> ₂		4 27.2 247°25	2		

EPHEMERIDES

4 27.2

4 27.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
173543	2000 <i>WP</i> ₁₇₃		4 27.2 185°55	1°4/24.9	18		453070	2007 <i>UB</i> ₅₅		4 27.2 74°08	0°8/27.8	18	
3 22	14 36.43	- 8 30.8	4.196	5.015	7.1	21.5	3 22	14 44.53	-19 41.4	1.460	2.290	17.4	21.2
4 1	14 32.58	- 7 54.6	4.108	5.015	5.3	21.4	4 1	14 40.31	-18 58.0	1.397	2.305	13.4	21.0
4 11	14 27.84	- 7 15.9	4.048	5.014	3.4	21.3	4 11	14 33.44	-17 56.2	1.355	2.320	8.7	20.8
4 21	14 22.51	- 6 36.7	4.016	5.013	1.7	21.1	4 21	14 24.81	-16 40.0	1.336	2.335	3.7	20.5
5 1	14 16.96	- 5 59.2	4.016	5.011	2.0	21.2	5 1	14 15.64	-15 16.0	1.344	2.350	1.9	20.4
5 11	14 11.59	- 5 25.6	4.045	5.009	3.8	21.3	5 11	14 7.23	-13 53.2	1.378	2.365	6.8	20.8
5 21	14 6.73	- 4 57.9	4.103	5.007	5.8	21.4	5 21	14 0.59	-12 39.8	1.437	2.380	11.4	21.1
5 31	14 2.69	- 4 37.3	4.186	5.005	7.5	21.5	5 31	13 56.41	-11 42.1	1.517	2.395	15.3	21.3
502363	2015 <i>BO</i> ₂₃₁		4 27.2 332°03	3°0/25.4	17		431987	2008 <i>UR</i> ₂₁₄		4 27.2 261°51	6°8/1.7	18	
3 22	14 44.94	- 7 43.1	1.621	2.467	15.1	20.4	3 22	14 49.56	-31 41.0	2.112	2.861	15.4	21.3
4 1	14 40.51	- 7 22.6	1.544	2.463	11.5	20.2	4 1	14 44.21	-32 39.1	2.006	2.845	13.1	21.0
4 11	14 33.60	- 6 58.0	1.489	2.460	7.5	20.0	4 11	14 36.18	-33 21.4	1.921	2.829	10.4	20.8
4 21	14 24.91	- 6 33.3	1.459	2.457	3.6	19.7	4 21	14 26.04	-33 44.2	1.860	2.813	8.0	20.7
5 1	14 15.49	- 6 13.4	1.455	2.454	4.0	19.7	5 1	14 14.76	-33 45.1	1.825	2.796	6.8	20.5
5 11	14 6.52	- 6 3.0	1.477	2.451	8.1	20.0	5 11	14 3.60	-33 25.6	1.816	2.779	7.8	20.6
5 21	13 59.05	- 6 5.1	1.523	2.448	12.2	20.2	5 21	13 53.75	-32 50.2	1.834	2.762	10.3	20.7
5 31	13 53.83	- 6 21.6	1.591	2.446	15.9	20.4	5 31	13 46.18	-32 5.9	1.875	2.745	13.2	20.8
300003	2006 <i>UK</i> ₃₇		4 27.2 166°13	0°2/27.4	18		88388	2001 <i>QT</i> ₂		4 27.2 145°95	1°9/25.7	18	R
3 22	14 41.85	-16 26.7	2.819	3.625	10.5	22.3	3 22	14 46.11	-10 19.3	2.081	2.907	13.0	20.3
4 1	14 37.13	-16 7.0	2.732	3.629	8.0	22.1	4 1	14 40.75	- 9 48.1	2.008	2.917	9.8	20.1
4 11	14 30.94	-15 39.4	2.671	3.633	5.2	22.0	4 11	14 33.42	- 9 11.0	1.958	2.926	6.2	19.9
4 21	14 23.76	-15 5.7	2.637	3.636	2.1	21.8	4 21	14 24.77	- 8 31.5	1.935	2.934	2.7	19.7
5 1	14 16.21	-14 28.5	2.633	3.639	1.2	21.7	5 1	14 15.65	- 7 53.8	1.941	2.942	2.9	19.7
5 11	14 8.95	-13 51.3	2.658	3.641	4.3	21.9	5 11	14 7.01	- 7 22.3	1.976	2.949	6.4	19.9
5 21	14 2.57	-13 17.2	2.712	3.643	7.2	22.1	5 21	13 59.62	- 7 0.5	2.037	2.956	9.9	20.1
5 31	13 57.54	-12 49.2	2.791	3.645	9.8	22.3	5 31	13 54.07	- 6 50.7	2.121	2.962	13.0	20.4
192839	1999 <i>VK</i> ₁₃₂		4 27.2 102°61	1°3/26.2	17		247480	2002 <i>JY</i> ₁₄₉		4 27.2 258°66	3°5/25.0	16	
3 22	14 43.15	-12 19.9	1.959	2.791	13.5	21.0	3 22	14 46.23	- 7 14.9	1.536	2.383	15.8	20.3
4 1	14 38.69	-11 50.4	1.883	2.795	10.2	20.8	4 1	14 41.62	- 6 43.5	1.460	2.380	12.0	20.0
4 11	14 32.19	-11 13.2	1.830	2.799	6.5	20.5	4 11	14 34.38	- 6 7.4	1.406	2.377	7.8	19.8
4 21	14 24.30	-10 31.3	1.803	2.803	2.5	20.3	4 21	14 25.25	- 5 31.6	1.377	2.373	4.1	19.5
5 1	14 15.89	- 9 49.4	1.805	2.808	2.4	20.3	5 1	14 15.34	- 5 1.8	1.373	2.370	4.6	19.6
5 11	14 7.92	- 9 12.3	1.833	2.812	6.3	20.5	5 11	14 5.93	- 4 43.5	1.396	2.367	8.7	19.8
5 21	14 1.22	- 8 44.1	1.888	2.816	10.1	20.8	5 21	13 58.12	- 4 40.2	1.442	2.364	13.0	20.0
5 31	13 56.38	- 8 27.7	1.965	2.820	13.3	21.0	5 31	13 52.70	- 4 53.8	1.509	2.360	16.8	20.3
142230	2002 <i>RR</i> ₈₁		4 27.2 273°57	1°3/26.2	17		497888	2006 <i>UQ</i> ₂₇₄		4 27.2 132°09	1°3/25.7	17	
3 22	14 43.98	-13 33.8	1.695	2.531	15.0	20.5	3 22	14 40.86	-12 4.2	2.798	3.617	10.2	22.9
4 1	14 39.93	-12 55.4	1.597	2.511	11.6	20.2	4 1	14 36.30	-11 17.8	2.724	3.630	7.7	22.7
4 11	14 33.36	-12 4.9	1.521	2.491	7.4	19.9	4 11	14 30.36	-10 25.6	2.676	3.643	4.8	22.6
4 21	14 24.88	-11 5.6	1.470	2.471	2.9	19.6	4 21	14 23.54	- 9 30.4	2.655	3.655	2.0	22.4
5 1	14 15.47	-10 3.2	1.446	2.450	2.7	19.5	5 1	14 16.42	- 8 36.0	2.665	3.666	2.1	22.4
5 11	14 6.33	- 9 4.6	1.449	2.429	7.5	19.8	5 11	14 9.65	- 7 46.3	2.705	3.677	4.9	22.6
5 21	13 58.54	- 8 16.4	1.477	2.408	12.1	20.0	5 21	14 3.76	- 7 4.4	2.772	3.688	7.7	22.8
5 31	13 52.98	- 7 43.5	1.526	2.386	16.1	20.2	5 31	13 59.19	- 6 32.8	2.864	3.698	10.1	23.0
1653	Yakhontovia		4 27.2 189°06	1°7/28.9	18		175557	2006 <i>SH</i> ₃₅₃		4 27.2 276°50	2°4/25.1	18	
3 22	14 45.62	-21 31.4	2.668	3.453	11.6	17.2	3 22	14 41.51	- 8 44.4	2.199	3.034	12.1	19.9
4 1	14 40.16	-21 19.4	2.572	3.452	9.1	17.1	4 1	14 37.34	- 8 9.4	2.109	3.023	9.2	19.7
4 11	14 32.98	-20 56.2	2.500	3.450	6.2	16.9	4 11	14 31.32	- 7 29.2	2.043	3.012	5.9	19.5
4 21	14 24.59	-20 22.4	2.456	3.447	3.2	16.7	4 21	14 24.00	- 6 47.5	2.004	3.002	2.9	19.3
5 1	14 15.72	-19 40.4	2.441	3.444	1.8	16.5	5 1	14 16.12	- 6 8.7	1.994	2.991	3.3	19.3
5 11	14 7.15	-18 53.6	2.456	3.440	4.5	16.7	5 11	14 8.52	- 5 37.0	2.011	2.981	6.6	19.5
5 21	13 59.57	-18 6.4	2.499	3.435	7.6	16.9	5 21	14 1.96	- 5 15.9	2.053	2.970	10.0	19.7
5 31	13 53.55	-17 23.0	2.569	3.429	10.4	17.1	5 31	13 57.05	- 5 7.7	2.119	2.959	13.0	19.8
346220	2007 <i>YK</i> ₅₇		4 27.2 162°06	4°3/1.6	17		23586	1995 <i>TA</i> ₁		4 27.2 27°34	0°9/26.6	18	
3 22	14 42.82	-29 51.4	2.373	3.134	13.5	20.8	3 22	14 43.44	-14 20.7	1.418	2.264	16.9	18.8
4 1	14 38.37	-29 49.0	2.282	3.136	11.1	20.7	4 1	14 39.66	-13 49.6	1.349	2.267	12.9	18.6
4 11	14 31.97	-29 29.4	2.213	3.137	8.4	20.5	4 11	14 33.17	-13 5.9	1.299	2.271	8.2	18.3
4 21	14 24.22	-28 52.2	2.169	3.139	5.8	20.3	4 21	14 24.78	-12 13.7	1.274	2.275	3.1	18.0
5 1	14 15.95	-27 58.9	2.152	3.140	4.3	20.2	5 1	14 15.66	-11 18.9	1.274	2.279	2.5	18.0
5 11	14 8.07	-26 53.9	2.163	3.141	5.5	20.3	5 11	14 7.15	-10 28.9	1.299	2.283	7.6	18.3
5 21	14 1.35	-25 42.8	2.201	3.142	8.1	20.5	5 21	14 0.35	- 9 50.1	1.348	2.288	12.3	18.6
5 31	13 56.42	-24 31.9	2.265	3.143	10.9	20.6	5 31	13 56.03	- 9 26.8	1.418	2.293	16.3	18.8
82399	2001 <i>NS</i> ₄		4 27.2 268°15	0°2/27.3	18		419061	2009 <i>SX</i> ₁₉		4 27.2 267°12	4°3/18.6	18	
3 22	14 42.76	-15 52.4	2.116	2.936	13.0	20.2	3 22	14 33.63	+ 7 20.9	4.436	5.259	6.7	20.8
4 1	14 38.39	-15 39.0	2.026	2.931	10.0	20.0	4 1	14 30.48	+ 8 25.4	4.364	5.254	5.5	20.7
4 11	14 32.04	-15 16.2	1.960	2.925	6.5	19.8	4 11	14 26.53	+ 9 26.6	4.320	5.248	4.5	20.7
4 21	14 24.27	-14 45.9	1.921	2.920	2.6	19.5	4 21	14 22.04	+10 21.6	4.304	5.243	4.3	20.7
5 1	14 15.91	-14 11.1	1.909	2.914	1.5	19.4	5 1	14 17.34	+11 7.7	4.316	5.237	4.9	20.7
5 11	14 7.87	-13 36.2	1.925	2.909	5.5	19.7	5 11	14 12.78	+11 42.9	4.355	5.231	6.0	20.8
5 21	14 0.97	-13 5.5	1.967	2.903	9.2	19.9	5 21	14 8.69	+12 6.2	4.420	5.226	7.3	20.9
5 31	13 55.86	-12 42.9	2.034	2.898	12.5	20.1	5 31	14 5.33	+12 17.2	4.506	5.220	8.5	20.9
96770	1999 <i>RF</i> ₅₄		4 27.2 247°60	3°1/29.7	18		58686	1998 <i>BB</i> ₁		4 27.2 285°69	8°5/2.		

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4 27.2

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
148026	1998 <i>DZ</i> ₃₇		4 27.2	0°00	7°9/20.3	17	332074	2005 <i>SO</i> ₂₁₉		4 27.2	258°52	1°9/28.8	18
3 22	14 34.55	- 0 23.6	1.406	2.281	15.3	18.7	3 22	14 45.95	-21 29.1	2.270	3.063	13.1	21.3
4 1	14 32.78	+ 1 24.3	1.347	2.277	12.0	18.5	4 1	14 40.98	-21 16.8	2.153	3.038	10.4	21.0
4 11	14 28.70	+ 3 12.9	1.310	2.274	9.0	18.3	4 11	14 33.85	-20 51.0	2.059	3.011	7.2	20.8
4 21	14 23.02	+ 4 51.5	1.297	2.274	7.9	18.2	4 21	14 25.08	-20 11.9	1.991	2.984	3.7	20.5
5 1	14 16.75	+ 6 10.1	1.307	2.274	9.4	18.3	5 1	14 15.47	-19 21.8	1.952	2.955	2.1	20.3
5 11	14 11.00	+ 7 1.1	1.341	2.277	12.5	18.5	5 11	14 6.01	-18 24.9	1.941	2.926	5.4	20.5
5 21	14 6.68	+ 7 21.7	1.395	2.281	15.8	18.7	5 21	13 57.59	-17 26.7	1.959	2.896	9.2	20.7
5 31	14 4.45	+ 7 12.6	1.466	2.286	18.8	18.9	5 31	13 50.99	-16 33.1	2.001	2.866	12.7	20.8
480149	2015 <i>FK</i> ₂₄₆		4 27.2	303°91	5°8/22.2	17	480791	2016 <i>PA</i> ₃₇		4 27.2	238°66	4°8/22.9	17
3 22	14 41.20	- 0 47.9	1.877	2.726	13.3	20.8	3 22	14 43.05	+ 0 40.6	2.429	3.261	11.2	21.6
4 1	14 37.34	+ 0 17.3	1.799	2.716	10.3	20.6	4 1	14 38.24	+ 1 15.2	2.349	3.256	8.7	21.4
4 11	14 31.43	+ 1 22.6	1.745	2.706	7.5	20.4	4 11	14 31.77	+ 1 47.4	2.294	3.251	6.3	21.2
4 21	14 24.07	+ 2 21.8	1.716	2.697	5.8	20.3	4 21	14 24.16	+ 2 13.3	2.267	3.245	4.8	21.1
5 1	14 16.11	+ 3 8.3	1.714	2.687	6.9	20.3	5 1	14 16.10	+ 2 28.9	2.267	3.240	5.5	21.2
5 11	14 8.52	+ 3 36.9	1.737	2.678	9.7	20.5	5 11	14 8.35	+ 2 31.4	2.295	3.234	7.8	21.3
5 21	14 2.12	+ 3 45.1	1.784	2.669	12.9	20.6	5 21	14 1.58	+ 2 19.4	2.348	3.229	10.4	21.5
5 31	13 57.59	+ 3 32.4	1.851	2.661	15.8	20.8	5 31	13 56.33	+ 1 52.9	2.424	3.223	12.8	21.6
70743	1999 <i>VG</i> ₁₉		4 27.2	130°16	1°0/28.2	18	208561	2002 <i>BF</i> ₂₀		4 27.2	45°77	17°8/10.9	18
3 22	14 42.92	-20 13.5	2.218	3.023	13.0	19.6	3 22	14 42.34	+21 18.4	1.216	2.052	19.7	19.0
4 1	14 38.32	-19 37.5	2.139	3.033	10.1	19.4	4 1	14 38.91	+24 17.2	1.202	2.066	18.3	18.9
4 11	14 31.86	-18 48.2	2.083	3.042	6.7	19.2	4 11	14 32.62	+26 44.4	1.207	2.081	17.8	18.9
4 21	14 24.18	-17 48.0	2.054	3.051	3.0	19.0	4 21	14 24.51	+28 26.7	1.231	2.097	18.3	19.0
5 1	14 16.07	-16 40.9	2.054	3.059	1.5	18.9	5 1	14 15.96	+29 16.6	1.273	2.113	19.5	19.1
5 11	14 8.41	-15 32.4	2.082	3.067	5.0	19.1	5 11	14 8.40	+29 14.2	1.330	2.129	21.2	19.3
5 21	14 1.93	-14 27.9	2.138	3.075	8.5	19.4	5 21	14 2.82	+28 25.7	1.402	2.146	22.8	19.5
5 31	13 57.18	-13 32.3	2.218	3.083	11.6	19.6	5 31	13 59.85	+26 59.8	1.484	2.163	24.3	19.7
140552	2001 <i>TW</i> ₂₀₁		4 27.2	226°26	3°5/23.9	18	176546	2002 <i>AC</i> ₈₉		4 27.2	177°85	8°7/14.7	18
3 22	14 42.66	- 3 57.0	2.500	3.331	10.9	20.5	3 22	14 41.73	+19 47.9	3.018	3.805	10.4	20.9
4 1	14 37.94	- 3 21.0	2.414	3.324	8.4	20.3	4 1	14 36.93	+21 7.1	2.970	3.807	9.3	20.8
4 11	14 31.58	- 2 43.8	2.352	3.316	5.6	20.1	4 11	14 30.77	+22 14.3	2.946	3.808	8.7	20.7
4 21	14 24.08	- 2 9.1	2.318	3.308	3.6	20.0	4 21	14 23.73	+23 4.6	2.946	3.809	8.8	20.7
5 1	14 16.11	- 1 40.8	2.313	3.299	4.3	20.0	5 1	14 16.38	+23 34.4	2.972	3.809	9.6	20.8
5 11	14 8.42	- 1 22.3	2.335	3.290	6.8	20.1	5 11	14 9.36	+23 41.9	3.020	3.809	10.7	20.9
5 21	14 1.67	- 1 15.8	2.385	3.281	9.6	20.3	5 21	14 3.20	+23 27.6	3.090	3.808	11.9	21.0
5 31	13 56.38	- 1 22.3	2.457	3.271	12.2	20.5	5 31	13 58.32	+22 53.4	3.177	3.807	13.1	21.1
230930	2004 <i>VL</i> ₇₂		4 27.2	201°32	0°8/27.9	18	329113	2011 <i>CQ</i> ₁₈		4 27.2	67°89	0°4/27.6	18
3 22	14 42.88	-18 50.6	2.020	2.835	13.8	20.6	3 22	14 40.26	-16 26.7	2.968	3.775	10.0	21.2
4 1	14 38.56	-18 23.5	1.934	2.834	10.7	20.4	4 1	14 35.80	-16 17.2	2.900	3.796	7.6	21.1
4 11	14 32.18	-17 43.3	1.871	2.832	7.0	20.1	4 11	14 30.04	-16 1.0	2.856	3.817	4.9	20.9
4 21	14 24.35	-16 52.1	1.833	2.831	3.0	19.9	4 21	14 23.44	-15 39.4	2.840	3.838	2.0	20.7
5 1	14 15.95	-15 53.8	1.823	2.829	1.5	19.8	5 1	14 16.57	-15 14.9	2.853	3.859	1.1	20.7
5 11	14 7.94	-14 54.0	1.842	2.827	5.5	20.0	5 11	14 10.03	-14 50.0	2.896	3.879	3.9	20.9
5 21	14 1.17	-13 58.3	1.886	2.825	9.4	20.3	5 21	14 4.33	-14 27.5	2.966	3.900	6.6	21.1
5 31	13 56.28	-13 11.8	1.955	2.823	12.8	20.5	5 31	13 59.90	-14 9.7	3.063	3.920	8.9	21.3
212000	2005 <i>BU</i> ₈		4 27.2	6°07	1°7/28.1	17	112310	2002 <i>LV</i> ₄₈		4 27.2	313°29	1°8/28.3	17
3 22	14 43.06	-17 36.9	1.153	2.006	19.5	19.9	3 22	14 42.87	-19 10.1	1.368	2.206	17.8	19.7
4 1	14 40.08	-17 53.1	1.086	2.006	15.2	19.6	4 1	14 39.75	-19 11.6	1.278	2.189	14.1	19.4
4 11	14 33.83	-17 54.3	1.037	2.006	10.1	19.3	4 11	14 33.62	-18 56.9	1.208	2.173	9.5	19.1
4 21	14 25.15	-17 41.3	1.010	2.008	4.6	19.0	4 21	14 25.13	-18 26.3	1.160	2.157	4.5	18.8
5 1	14 15.46	-17 17.4	1.006	2.011	2.4	18.9	5 1	14 15.45	-17 43.0	1.136	2.141	2.4	18.6
5 11	14 6.42	-16 49.2	1.025	2.015	7.8	19.2	5 11	14 6.10	-16 53.7	1.137	2.126	7.4	18.9
5 21	13 59.44	-16 23.7	1.065	2.021	13.1	19.5	5 21	13 58.45	-16 6.3	1.160	2.112	12.7	19.1
5 31	13 55.47	-16 7.5	1.126	2.027	17.7	19.8	5 31	13 53.54	-15 28.2	1.205	2.098	17.3	19.3
93680	2000 <i>VC</i> ₁₂		4 27.2	160°38	1°1/26.3	17	392125	2009 <i>FX</i> ₄₆		4 27.2	50°54	3°2/24.0	17
3 22	14 43.71	-13 4.7	2.006	2.834	13.4	20.1	3 22	14 39.71	- 8 9.8	2.041	2.884	12.6	21.2
4 1	14 39.11	-12 31.6	1.927	2.837	10.1	19.9	4 1	14 35.94	- 7 0.6	1.973	2.891	9.5	21.0
4 11	14 32.48	-11 50.0	1.871	2.839	6.4	19.7	4 11	14 30.38	- 5 45.8	1.928	2.898	6.1	20.8
4 21	14 24.46	-11 3.0	1.841	2.841	2.5	19.5	4 21	14 23.62	- 4 30.8	1.911	2.906	3.5	20.7
5 1	14 15.91	-10 15.1	1.840	2.843	2.3	19.5	5 1	14 16.46	- 3 21.6	1.921	2.913	4.3	20.7
5 11	14 7.78	- 9 31.5	1.866	2.845	6.2	19.7	5 11	14 9.73	- 2 24.0	1.959	2.921	7.4	20.9
5 21	14 0.89	- 8 56.5	1.919	2.847	9.9	19.9	5 21	14 4.15	- 1 41.7	2.022	2.929	10.6	21.1
5 31	13 55.86	- 8 33.4	1.995	2.848	13.2	20.1	5 31	14 0.24	- 1 16.8	2.107	2.937	13.4	21.3
499724	2011 <i>BJ</i> ₉		4 27.2	116°46	1°8/28.5	17	203056	2000 <i>GA</i> ₂₆		4 27.2	322°81	3°2/24.9	16
3 22	14 45.32	-19 50.4	1.766	2.581	15.4	21.9	3 22	14 39.29	-12 38.2	1.171	2.038	18.3	20.0
4 1	14 40.73	-19 47.9	1.686	2.584	12.0	21.7	4 1	14 37.13	-11 24.2	1.093	2.025	14.0	19.7
4 11	14 33.72	-19 31.7	1.628	2.587	8.1	21.5	4 11	14 31.93	- 9 52.1	1.035	2.012	8.9	19.4
4 21	14 24.99	-19 2.6	1.594	2.589	3.9	21.2	4 21	14 24.44	- 8 9.2	1.000	2.000	4.0	19.1
5 1	14 15.57	-18 23.7	1.587	2.592	2.1	21.1	5 1	14 15.91	- 6 26.6	0.988	1.989	4.9	19.1
5 11	14 6.63	-17 40.3	1.608	2.595	6.0	21.4	5 11	14 7.89	- 4 56.6	0.999	1.978	10.2	19.3
5 21	13 59.17	-16 58.1	1.653	2.597	10.1	21.6	5 21	14 1.69	- 3 49.0	1.032	1.968	15.5	19.6
5 31	13 53.92	-16 22.8	1.722	2.599	13.8	21.8	5 31	13 58.28	- 3 9.3	1.083	1.959	20.2	19.8
30666	1156 <i>T</i> -2		4 27.2	188°54	1°4/25.9	17	245123	2004 <i>RE</i> ₁₈		4			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
154293	2002 <i>TF</i> ₂₆₀		4 27.2 182°75	2°3/25.6	18		405410	2004 <i>RQ</i> ₇₃		4 27.2 293°44	0°9/27.7	17	
3 22	14 47.40	-11 28.4	1.571	2.409	15.9	20.7	3 22	14 45.92	-16 35.3	1.349	2.189	17.9	20.9
4 1	14 42.46	-10 41.8	1.495	2.410	12.1	20.4	4 1	14 42.17	-16 39.0	1.258	2.172	14.0	20.6
4 11	14 34.90	-9 45.0	1.441	2.411	7.7	20.2	4 11	14 35.25	-16 29.4	1.187	2.155	9.3	20.3
4 21	14 25.48	-8 43.0	1.411	2.411	3.3	19.9	4 21	14 25.82	-16 7.5	1.139	2.138	4.0	19.9
5 1	14 15.33	-7 42.3	1.409	2.410	3.6	19.9	5 1	14 15.09	-15 36.3	1.115	2.121	2.1	19.7
5 11	14 5.73	-6 50.1	1.433	2.408	8.1	20.2	5 11	14 4.65	-15 2.0	1.116	2.104	7.8	20.0
5 21	13 57.75	-6 11.9	1.482	2.406	12.5	20.4	5 21	13 55.95	-14 31.6	1.140	2.087	13.2	20.3
5 31	13 52.17	-5 51.4	1.552	2.404	16.3	20.6	5 31	13 50.10	-14 11.5	1.184	2.071	18.0	20.5
367121	2006 <i>SH</i> ₁₀₉		4 27.2 264°16	0°4/26.9	17		136672	1995 <i>SU</i> ₁₈		4 27.2 194°18	0°3/27.5	18	
3 22	14 46.35	-14 31.2	1.770	2.597	14.9	22.0	3 22	14 42.05	-16 40.0	2.486	3.297	11.6	21.1
4 1	14 41.72	-14 16.8	1.669	2.578	11.5	21.8	4 1	14 37.56	-16 22.8	2.397	3.296	8.9	20.9
4 11	14 34.54	-13 52.1	1.592	2.558	7.5	21.5	4 11	14 31.39	-15 56.7	2.333	3.295	5.8	20.7
4 21	14 25.42	-13 18.9	1.539	2.539	2.9	21.2	4 21	14 24.05	-15 23.6	2.295	3.293	2.4	20.5
5 1	14 15.33	-12 41.2	1.513	2.519	2.0	21.0	5 1	14 16.25	-14 46.2	2.286	3.292	1.3	20.4
5 11	14 5.47	-12 4.1	1.515	2.498	6.8	21.3	5 11	14 8.75	-14 8.3	2.306	3.290	4.8	20.6
5 21	13 56.94	-11 33.1	1.542	2.477	11.4	21.5	5 21	14 2.22	-13 33.8	2.354	3.288	8.0	20.8
5 31	13 50.62	-11 12.9	1.592	2.456	15.4	21.7	5 31	13 57.22	-13 6.0	2.426	3.286	10.9	21.0
386581	2009 <i>EJ</i> ₁₄		4 27.2 117°58	4°3/22.9	17		305536	2008 <i>GU</i> ₅₉		4 27.2 201°80	3°7/23.1	17	
3 22	14 40.86	-3 29.8	2.235	3.075	11.7	21.5	3 22	14 39.79	-3 40.5	2.594	3.429	10.4	21.1
4 1	14 36.66	-2 25.9	2.166	3.080	8.9	21.3	4 1	14 35.69	-2 43.4	2.515	3.427	8.0	20.9
4 11	14 30.78	-1 20.4	2.122	3.086	6.1	21.2	4 11	14 30.10	-1 44.8	2.462	3.425	5.4	20.8
4 21	14 23.78	-0 18.5	2.104	3.091	4.3	21.1	4 21	14 23.53	-0 48.8	2.437	3.423	3.8	20.7
5 1	14 16.40	+0 34.3	2.115	3.096	5.2	21.1	5 1	14 16.57	+0 0.0	2.440	3.421	4.6	20.7
5 11	14 9.40	+1 13.8	2.153	3.100	7.8	21.3	5 11	14 9.91	+0 37.9	2.471	3.419	6.9	20.8
5 21	14 3.46	+1 37.4	2.217	3.105	10.6	21.5	5 21	14 4.13	+1 2.3	2.529	3.416	9.5	21.0
5 31	13 59.09	+1 44.0	2.302	3.110	13.1	21.6	5 31	13 59.70	+1 12.1	2.609	3.413	11.9	21.2
474869	2005 <i>SN</i> ₁₄₂		4 27.2 279°38	1°7/25.6	16		140870	2001 <i>VS</i> ₁₂		4 27.2 133°96	1°9/28.8	18	
3 22	14 41.47	-10 17.5	2.325	3.155	11.7	21.8	3 22	14 46.52	-19 50.5	2.509	3.301	12.1	19.8
4 1	14 37.29	-9 48.4	2.227	3.138	8.9	21.6	4 1	14 40.96	-20 12.2	2.424	3.308	9.4	19.6
4 11	14 31.32	-9 13.5	2.153	3.121	5.7	21.4	4 11	14 33.57	-20 25.0	2.363	3.315	6.4	19.5
4 21	14 24.05	-8 35.7	2.106	3.104	2.5	21.1	4 21	14 24.91	-20 28.9	2.329	3.321	3.3	19.3
5 1	14 16.20	-7 58.9	2.087	3.087	2.7	21.1	5 1	14 15.73	-20 24.8	2.325	3.327	2.1	19.2
5 11	14 8.57	-7 27.0	2.097	3.070	6.0	21.3	5 11	14 6.87	-20 15.3	2.349	3.333	4.7	19.4
5 21	14 1.90	-7 3.8	2.133	3.053	9.4	21.5	5 21	13 59.07	-20 3.5	2.402	3.339	7.8	19.6
5 31	13 56.80	-6 51.7	2.192	3.036	12.5	21.7	5 31	13 52.92	-19 52.8	2.480	3.344	10.6	19.8
370087	2001 <i>SG</i> ₂₂₁		4 27.2 179°29	0°7/25.8	18		140630	2001 <i>UY</i> ₁₄		4 27.2 232°91	1°2/26.2	18	
3 22	14 33.36	-10 47.0	5.474	6.288	5.6	22.0	3 22	14 43.93	-10 47.4	2.492	3.312	11.3	19.5
4 1	14 30.15	-10 23.1	5.385	6.289	4.2	21.9	4 1	14 38.99	-10 36.6	2.398	3.304	8.6	19.3
4 11	14 26.27	-9 56.7	5.323	6.289	2.6	21.8	4 11	14 32.32	-10 21.2	2.329	3.296	5.5	19.1
4 21	14 21.97	-9 29.3	5.291	6.290	1.1	21.7	4 21	14 24.43	-10 3.3	2.288	3.287	2.2	18.8
5 1	14 17.50	-9 2.3	5.289	6.290	1.1	21.7	5 1	14 16.01	-9 45.5	2.276	3.278	2.1	18.8
5 11	14 13.16	-8 37.2	5.317	6.290	2.7	21.8	5 11	14 7.84	-9 31.1	2.293	3.269	5.4	19.0
5 21	14 9.19	-8 15.4	5.374	6.289	4.3	21.9	5 21	14 0.62	-9 22.6	2.337	3.260	8.6	19.2
5 31	14 5.82	-7 58.0	5.458	6.289	5.7	22.0	5 31	13 54.93	-9 22.2	2.406	3.250	11.5	19.4
503424	2016 <i>EX</i> ₄		4 27.2 342°99	2°8/25.5	17		299809	2006 <i>SS</i> ₁₂₅		4 27.2 259°09	5°9/21.3	18	
3 22	14 40.36	-10 26.3	1.258	2.123	17.4	20.9	3 22	14 41.12	+2 3.3	2.272	3.111	11.6	20.5
4 1	14 37.72	-9 49.0	1.184	2.114	13.3	20.6	4 1	14 36.94	+3 8.8	2.194	3.102	9.2	20.3
4 11	14 32.19	-9 1.8	1.130	2.105	8.5	20.3	4 11	14 31.03	+4 12.5	2.140	3.092	7.0	20.1
4 21	14 24.52	-8 9.9	1.098	2.098	3.8	20.0	4 21	14 23.93	+5 8.6	2.113	3.083	5.9	20.0
5 1	14 15.92	-7 20.8	1.090	2.091	4.2	20.0	5 1	14 16.33	+5 51.7	2.113	3.073	6.9	20.1
5 11	14 7.82	-6 42.4	1.106	2.086	9.2	20.2	5 11	14 9.05	+6 17.8	2.139	3.063	9.1	20.2
5 21	14 1.47	-6 20.5	1.143	2.081	14.1	20.5	5 21	14 2.77	+6 24.9	2.190	3.054	11.7	20.3
5 31	13 57.75	-6 18.5	1.199	2.078	18.4	20.7	5 31	13 58.04	+6 13.0	2.261	3.044	14.1	20.5
463512	2013 <i>QN</i> ₆₄		4 27.2 292°45	3°0/29.1	17		419025	2009 <i>QF</i> ₃₉		4 27.2 1°99	4°2/29.7	17	
3 22	14 44.85	-21 50.6	1.571	2.389	16.9	21.1	3 22	14 45.17	-23 24.3	1.473	2.290	17.9	20.5
4 1	14 41.07	-22 1.1	1.470	2.367	13.5	20.8	4 1	14 41.27	-23 56.4	1.395	2.289	14.4	20.2
4 11	14 34.41	-21 55.4	1.389	2.345	9.5	20.5	4 11	14 34.43	-24 11.7	1.337	2.289	10.3	20.0
4 21	14 25.45	-21 32.6	1.331	2.324	5.2	20.2	4 21	14 25.40	-24 8.6	1.301	2.289	6.2	19.7
5 1	14 15.30	-20 54.2	1.299	2.302	3.2	20.0	5 1	14 15.41	-23 48.1	1.290	2.290	4.3	19.6
5 11	14 5.33	-20 5.4	1.292	2.281	7.0	20.2	5 11	14 5.92	-23 14.8	1.304	2.291	7.2	19.8
5 21	13 56.89	-19 13.5	1.310	2.259	11.8	20.4	5 21	13 58.19	-22 35.8	1.342	2.293	11.4	20.0
5 31	13 51.00	-18 26.3	1.349	2.238	16.2	20.6	5 31	13 53.14	-21 58.5	1.401	2.295	15.3	20.3
125369	2001 <i>VK</i> ₇₁		4 27.2 77°30	12°8/19.9	18		465350	2007 <i>WH</i> ₂₈		4 27.2 120°41	2°2/28.9	18	
3 22	14 53.73	+21 35.8	1.805	2.592	16.2	19.4	3 22	14 48.99	-22 10.0	1.947	2.742	14.9	22.6
4 1	14 46.57	+22 23.3	1.766	2.607	14.5	19.3	4 1	14 43.14	-21 58.3	1.877	2.762	11.7	22.4
4 11	14 37.09	+22 48.7	1.747	2.621	13.2	19.3	4 11	14 35.05	-21 31.5	1.830	2.782	8.0	22.2
4 21	14 26.19	+22 45.0	1.751	2.636	12.8	19.3	4 21	14 25.48	-20 50.8	1.808	2.800	4.1	22.0
5 1	14 15.02	+22 8.4	1.779	2.650	13.4	19.3	5 1	14 15.44	-19 59.5	1.815	2.818	2.3	21.9
5 11	14 4.77	+20 59.6	1.829	2.665	14.8	19.5	5 11	14 6.03	-19 3.0	1.850	2.835	5.5	22.1
5 21	13 56.29	+19 23.1	1.900	2.679	16.5	19.6	5 21	13 58.14	-18 7.6	1.912	2.851	9.2	22.4
5 31	13 50.17	+17 25.0	1.990	2.693	18.2	19.8	5 31	13 52.38	-17 18.7	1.998	2.867	12.5	22.6
392617	2011 <i>UV</i> ₃		4 27.2 129°44	3°0/23.7	17		258523	2002 <i>AT</i> ₁₉₉		4 27.2 50°39	1°9/28.9	17	

EPHEMERIDES

4 27.2

4 27.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
99651	2002 <i>HB</i> ₄		4 27.2	5°59	6°7/23.3	18	36102	1999 <i>RA</i> ₁₁₆		4 27.2	279°24	7°1/20.4	18 R
3 22	14 46.81	+ 2 48.0	1.659	2.503	15.0	18.6	3 22	14 41.56	+ 1 21.6	1.896	2.743	13.2	18.5
4 1	14 41.78	+ 3 15.2	1.592	2.503	11.8	18.4	4 1	14 37.73	+ 2 55.5	1.810	2.722	10.5	18.2
4 11	14 34.35	+ 3 36.2	1.547	2.503	8.7	18.2	4 11	14 31.79	+ 4 30.4	1.747	2.702	8.1	18.0
4 21	14 25.26	+ 3 45.3	1.527	2.504	6.8	18.1	4 21	14 24.32	+ 5 58.5	1.711	2.680	7.1	17.9
5 1	14 15.56	+ 3 37.7	1.532	2.506	7.6	18.2	5 1	14 16.13	+ 7 11.4	1.701	2.659	8.4	18.0
5 11	14 6.41	+ 3 10.6	1.563	2.507	10.4	18.3	5 11	14 8.22	+ 8 2.6	1.716	2.637	11.2	18.1
5 21	13 58.76	+ 2 24.4	1.617	2.509	13.6	18.5	5 21	14 1.46	+ 8 28.9	1.754	2.616	14.2	18.2
5 31	13 53.34	+ 1 20.7	1.692	2.511	16.7	18.7	5 31	13 56.56	+ 8 29.4	1.811	2.594	17.1	18.4
381597	2008 <i>VH</i> ₉		4 27.2	207°99	3°1/24.6	17	61841	2000 <i>QW</i> ₁₉₉		4 27.2	44°23	5°1/30.4	18
3 22	14 44.84	- 5 26.3	2.415	3.242	11.4	21.7	3 22	14 48.08	-25 47.4	1.704	2.497	16.8	18.8
4 1	14 39.66	- 4 55.8	2.328	3.236	8.7	21.5	4 1	14 43.18	-26 32.8	1.625	2.501	13.7	18.6
4 11	14 32.74	- 4 23.4	2.266	3.231	5.7	21.3	4 11	14 35.52	-27 2.2	1.566	2.505	10.1	18.4
4 21	14 24.60	- 3 52.3	2.231	3.224	3.3	21.1	4 21	14 25.82	-27 12.9	1.531	2.509	6.7	18.2
5 1	14 15.95	- 3 26.5	2.226	3.217	3.9	21.1	5 1	14 15.23	-27 5.0	1.521	2.514	5.1	18.1
5 11	14 7.61	- 3 9.3	2.249	3.210	6.7	21.3	5 11	14 5.11	-26 41.8	1.538	2.519	7.1	18.3
5 21	14 0.27	- 3 3.2	2.299	3.202	9.7	21.5	5 21	13 56.63	-26 9.2	1.580	2.524	10.5	18.5
5 31	13 54.49	- 3 9.4	2.373	3.193	12.4	21.6	5 31	13 50.66	-25 34.4	1.644	2.529	14.0	18.7
470233	2006 <i>WO</i> ₁₅₆		4 27.2	177°44	3°2/1.3	18	24626	<i>Astrowizard</i>		4 27.2	195°28	1°7/25.3	18
3 22	14 42.29	-29 49.1	2.829	3.581	11.8	21.3	3 22	14 42.64	-10 29.0	2.735	3.554	10.4	19.8
4 1	14 37.60	-29 12.0	2.732	3.582	9.6	21.2	4 1	14 37.81	- 9 42.3	2.645	3.551	7.9	19.6
4 11	14 31.33	-28 18.4	2.657	3.583	7.1	21.0	4 11	14 31.46	- 8 49.9	2.581	3.547	5.0	19.4
4 21	14 24.01	-27 8.8	2.609	3.584	4.6	20.9	4 21	14 24.09	- 7 54.8	2.545	3.543	2.3	19.2
5 1	14 16.33	-25 46.0	2.591	3.584	3.2	20.8	5 1	14 16.31	- 7 1.0	2.539	3.538	2.6	19.2
5 11	14 9.02	-24 14.7	2.602	3.584	4.5	20.8	5 11	14 8.81	- 6 12.5	2.563	3.532	5.4	19.4
5 21	14 2.71	-22 40.5	2.643	3.584	7.0	21.0	5 21	14 2.19	- 5 32.7	2.615	3.526	8.3	19.6
5 31	13 57.88	-21 9.2	2.711	3.583	9.5	21.2	5 31	13 56.93	- 5 4.0	2.692	3.519	10.9	19.8
208595	2002 <i>CD</i> ₁₄₂		4 27.2	15°66	0°4/26.9	18	55419	2001 <i>TF</i> ₁₉		4 27.2	293°11	6°4/14.5	18
3 22	14 40.72	-16 45.5	1.171	2.028	19.0	19.3	3 22	14 35.85	+21 8.7	4.406	5.183	7.5	18.5
4 1	14 38.09	-16 3.6	1.107	2.031	14.6	19.1	4 1	14 32.19	+21 56.9	4.353	5.180	6.8	18.5
4 11	14 32.43	-15 3.2	1.062	2.035	9.3	18.8	4 11	14 27.66	+22 36.1	4.325	5.176	6.4	18.4
4 21	14 24.60	-13 49.1	1.039	2.039	3.6	18.5	4 21	14 22.56	+23 3.5	4.322	5.173	6.5	18.4
5 1	14 15.97	-12 29.4	1.039	2.045	2.5	18.4	5 1	14 17.26	+23 17.1	4.343	5.170	7.0	18.5
5 11	14 8.06	-11 14.6	1.064	2.051	8.2	18.8	5 11	14 12.15	+23 15.9	4.389	5.166	7.8	18.5
5 21	14 2.10	-10 13.6	1.110	2.058	13.4	19.1	5 21	14 7.58	+22 59.8	4.455	5.163	8.6	18.6
5 31	13 58.92	- 9 32.4	1.176	2.066	17.9	19.4	5 31	14 3.82	+22 29.9	4.541	5.160	9.5	18.7
158106	2000 <i>YB</i> ₁₈		4 27.2	151°58	6°2/21.8	17	423964	2006 <i>UO</i> ₁₇₅		4 27.2	202°65	1°5/26.0	17
3 22	14 45.36	+ 3 48.7	2.254	3.084	12.0	20.4	3 22	14 46.54	-11 36.4	2.153	2.974	12.8	22.5
4 1	14 40.01	+ 4 43.0	2.191	3.091	9.5	20.3	4 1	14 41.22	-11 5.4	2.063	2.969	9.7	22.3
4 11	14 32.89	+ 5 32.7	2.152	3.098	7.3	20.2	4 11	14 33.88	-10 27.1	1.997	2.964	6.2	22.0
4 21	14 24.62	+ 6 12.6	2.139	3.105	6.2	20.1	4 21	14 25.10	- 9 44.7	1.958	2.958	2.5	21.8
5 1	14 15.97	+ 6 38.0	2.155	3.111	7.0	20.2	5 1	14 15.71	- 9 2.1	1.949	2.951	2.5	21.8
5 11	14 7.76	+ 6 46.0	2.197	3.117	9.1	20.3	5 11	14 6.67	- 8 24.1	1.968	2.943	6.3	22.0
5 21	14 0.70	+ 6 35.7	2.264	3.122	11.6	20.5	5 21	13 58.79	- 7 54.6	2.014	2.934	9.9	22.2
5 31	13 55.30	+ 6 7.9	2.352	3.127	13.9	20.6	5 31	13 52.72	- 7 36.8	2.083	2.925	13.1	22.4
329295	2000 <i>QQ</i> ₁₈₄		4 27.2	220°31	2°1/25.2	18	470100	2006 <i>TU</i> ₃₆		4 27.2	119°65	0°6/27.9	18
3 22	14 44.80	- 9 4.0	2.482	3.304	11.3	22.0	3 22	14 41.01	-18 57.8	2.469	3.276	11.8	21.4
4 1	14 39.65	- 8 26.4	2.385	3.293	8.6	21.8	4 1	14 36.74	-18 23.1	2.388	3.283	9.1	21.2
4 11	14 32.76	- 7 43.7	2.314	3.280	5.5	21.5	4 11	14 30.84	-17 37.3	2.331	3.291	5.9	21.0
4 21	14 24.62	- 6 58.9	2.270	3.268	2.6	21.3	4 21	14 23.85	-16 42.7	2.301	3.298	2.5	20.8
5 1	14 15.94	- 6 16.2	2.257	3.254	3.0	21.3	5 1	14 16.49	-15 42.9	2.300	3.306	1.3	20.7
5 11	14 7.51	- 5 39.6	2.272	3.240	6.1	21.5	5 11	14 9.50	-14 42.6	2.328	3.313	4.6	20.9
5 21	14 0.04	- 5 12.4	2.315	3.224	9.3	21.7	5 21	14 3.52	-13 46.2	2.384	3.320	7.9	21.1
5 31	13 54.11	- 4 57.0	2.381	3.209	12.2	21.8	5 31	13 59.06	-12 57.9	2.464	3.326	10.7	21.3
66852	1999 <i>VH</i> ₁₁		4 27.2	216°37	0°4/27.6	18	106291	2000 <i>UW</i> ₇₉		4 27.2	156°27	1°3/26.5	18
3 22	14 43.16	-17 38.6	2.249	3.060	12.7	19.8	3 22	14 49.10	-11 36.9	1.721	2.550	15.2	19.8
4 1	14 38.62	-17 11.6	2.156	3.055	9.8	19.6	4 1	14 43.56	-11 26.5	1.645	2.555	11.6	19.6
4 11	14 32.18	-16 33.4	2.087	3.049	6.4	19.4	4 11	14 35.55	-11 9.1	1.591	2.559	7.4	19.4
4 21	14 24.41	-15 46.1	2.044	3.043	2.6	19.2	4 21	14 25.79	-10 47.3	1.563	2.563	2.9	19.1
5 1	14 16.08	-14 53.1	2.030	3.036	1.4	19.0	5 1	14 15.34	-10 25.1	1.563	2.567	2.5	19.1
5 11	14 8.07	-13 59.2	2.045	3.029	5.2	19.3	5 11	14 5.41	-10 7.0	1.590	2.570	7.0	19.4
5 21	14 1.15	-13 9.5	2.087	3.022	8.9	19.5	5 21	13 57.02	- 9 56.8	1.643	2.573	11.2	19.6
5 31	13 55.93	-12 28.2	2.153	3.014	12.1	19.7	5 31	13 50.91	- 9 57.5	1.718	2.575	14.8	19.9
118385	1999 <i>JP</i> ₁₁		4 27.2	9°15	14°2/20.9	17	380466	2003 <i>UV</i> ₃₁₅		4 27.2	119°23	3°2/23.8	17
3 22	14 56.27	+22 19.5	1.573	2.364	18.1	18.7	3 22	14 42.32	- 7 3.1	2.406	3.237	11.3	21.6
4 1	14 49.03	+22 54.2	1.520	2.364	16.2	18.6	4 1	14 37.59	- 5 50.8	2.343	3.254	8.5	21.4
4 11	14 38.95	+23 3.4	1.487	2.366	14.8	18.5	4 11	14 31.30	- 4 34.7	2.305	3.271	5.6	21.2
4 21	14 27.01	+22 38.7	1.475	2.367	14.2	18.4	4 21	14 24.02	- 3 19.7	2.295	3.287	3.4	21.1
5 1	14 14.59	+21 35.4	1.486	2.370	14.8	18.5	5 1	14 16.44	- 2 11.0	2.315	3.303	4.1	21.2
5 11	14 3.10	+19 54.4	1.519	2.372	16.4	18.6	5 11	14 9.30	- 1 13.4	2.363	3.318	6.7	21.4
5 21	13 53.65	+17 42.1	1.573	2.376	18.4	18.7	5 21	14 3.20	- 0 30.0	2.439	3.333	9.5	21.6
5 31	13 46.95	+15 6.7	1.647	2.379	20.4	18.9	5 31	13 58.60	- 0 2.4	2.537	3.347	12.0	21.8
197516	2004 <i>CG</i> ₈₉		4 27.2	253°29	3°6/24.1	18	281612	2008 <i>UQ</i> ₂₁₁		4 27.2	271°93		

EPHEMERIDES

4 27.2

4 27.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
210990	2001 <i>WN</i> ₇₇		4 27.2 194°55	2°2/25.3	17		106662	2000 <i>WW</i> ₁₄₄		4 27.3 169°53	0°9/26.3	18	
3 22	14 43.56	- 7 32.3	2.534	3.360	11.0	21.3	3 22	14 41.10	-12 29.0	3.011	3.825	9.7	20.9
4 1	14 38.62	- 7 12.3	2.450	3.358	8.3	21.2	4 1	14 36.51	-11 59.5	2.926	3.829	7.3	20.8
4 11	14 32.04	- 6 49.6	2.390	3.357	5.4	21.0	4 11	14 30.59	-11 24.5	2.866	3.832	4.6	20.6
4 21	14 24.35	- 6 26.9	2.358	3.355	2.7	20.8	4 21	14 23.77	-10 46.3	2.835	3.835	1.8	20.4
5 1	14 16.21	- 6 7.2	2.355	3.352	3.0	20.8	5 1	14 16.62	-10 7.8	2.834	3.837	1.7	20.4
5 11	14 8.37	- 5 53.8	2.381	3.350	5.8	21.0	5 11	14 9.74	- 9 32.1	2.863	3.839	4.5	20.6
5 21	14 1.48	- 5 48.8	2.434	3.347	8.8	21.2	5 21	14 3.65	- 9 1.9	2.920	3.840	7.2	20.8
5 31	13 56.06	- 5 53.7	2.512	3.344	11.5	21.3	5 31	13 58.80	- 8 39.7	3.002	3.841	9.6	20.9
39694	1996 <i>ST</i> ₂		4 27.2 59°31	2°6/25.5	18		218311	2003 <i>UN</i> ₂₇₄		4 27.3 255°24	0°5/27.5	18	
3 22	14 44.65	-11 57.3	1.302	2.156	17.7	19.3	3 22	14 48.35	-15 58.7	1.799	2.618	15.0	21.3
4 1	14 40.54	-10 58.3	1.250	2.174	13.3	19.0	4 1	14 43.30	-15 56.8	1.697	2.600	11.7	21.0
4 11	14 33.68	- 9 48.3	1.219	2.192	8.4	18.8	4 11	14 35.64	-15 44.5	1.617	2.580	7.7	20.8
4 21	14 25.03	- 8 34.0	1.211	2.211	3.6	18.6	4 21	14 25.96	-15 22.8	1.562	2.561	3.2	20.4
5 1	14 15.87	- 7 23.9	1.228	2.229	4.0	18.7	5 1	14 15.24	-14 54.5	1.534	2.540	1.8	20.3
5 11	14 7.55	- 6 26.1	1.271	2.248	8.6	19.0	5 11	14 4.73	-14 24.0	1.535	2.519	6.6	20.5
5 21	14 1.13	- 5 46.2	1.337	2.268	13.1	19.3	5 21	13 55.55	-13 56.8	1.561	2.498	11.1	20.7
5 31	13 57.25	- 5 26.8	1.422	2.287	16.9	19.6	5 31	13 48.64	-13 37.7	1.610	2.476	15.2	20.9
229533	2005 <i>YZ</i> ₃₃		4 27.2 88°87	3°0/24.9	18		214636	2006 <i>SB</i> ₁₂		4 27.3 167°19	3°2/30.2	18	
3 22	14 44.21	- 8 7.2	1.831	2.671	13.9	20.6	3 22	14 45.46	-25 2.0	2.648	3.420	12.0	20.6
4 1	14 39.57	- 7 26.8	1.764	2.681	10.5	20.4	4 1	14 40.20	-25 21.9	2.557	3.423	9.7	20.4
4 11	14 32.83	- 6 41.6	1.721	2.690	6.8	20.2	4 11	14 33.15	-25 30.1	2.489	3.426	7.0	20.3
4 21	14 24.68	- 5 56.3	1.704	2.700	3.4	20.0	4 21	14 24.83	-25 26.1	2.448	3.428	4.4	20.1
5 1	14 16.05	- 5 16.0	1.714	2.710	4.0	20.1	5 1	14 15.98	-25 10.8	2.435	3.430	3.2	20.0
5 11	14 7.94	- 4 45.8	1.750	2.720	7.5	20.3	5 11	14 7.41	-24 46.7	2.451	3.432	4.8	20.1
5 21	14 1.20	- 4 28.7	1.812	2.729	11.1	20.6	5 21	13 59.86	-24 17.6	2.495	3.433	7.5	20.3
5 31	13 56.42	- 4 26.7	1.896	2.739	14.2	20.8	5 31	13 53.91	-23 47.5	2.565	3.434	10.1	20.5
93509	2000 <i>TP</i> ₅₆		4 27.3 92°29	6°2/ 2.3	18		395221	2010 <i>KC</i> ₁₁₆		4 27.3 275°99	2°2/24.8	17	
3 22	14 48.73	-31 39.2	1.931	2.688	16.4	19.9	3 22	14 39.10	-10 46.4	2.366	3.199	11.4	21.3
4 1	14 43.35	-32 14.1	1.858	2.704	13.6	19.7	4 1	14 35.40	- 9 38.8	2.278	3.191	8.6	21.1
4 11	14 35.44	-32 29.1	1.805	2.720	10.6	19.5	4 11	14 30.07	- 8 23.2	2.215	3.184	5.5	20.9
4 21	14 25.75	-32 21.9	1.776	2.735	7.8	19.4	4 21	14 23.62	- 7 4.1	2.179	3.177	2.6	20.7
5 1	14 15.40	-31 52.9	1.773	2.751	6.3	19.3	5 1	14 16.71	- 5 46.9	2.172	3.169	3.2	20.7
5 11	14 5.64	-31 6.0	1.796	2.766	7.2	19.4	5 11	14 10.11	- 4 37.0	2.194	3.162	6.3	20.9
5 21	13 57.49	-30 8.0	1.845	2.781	9.7	19.6	5 21	14 4.45	- 3 39.1	2.243	3.154	9.5	21.1
5 31	13 51.70	-29 6.6	1.917	2.796	12.5	19.8	5 31	14 0.27	- 2 56.2	2.315	3.147	12.3	21.2
6276	<i>Kurohone</i>		4 27.3 253°52	0°8/27.9	18 R		16378	1981 <i>ET</i> ₁₇		4 27.3 128°63	0°5/27.7	18	
3 22	14 42.83	-17 52.3	2.120	2.935	13.2	17.9	3 22	14 46.05	-17 34.6	2.252	3.058	12.8	19.5
4 1	14 38.51	-17 37.8	2.031	2.931	10.2	17.7	4 1	14 40.64	-17 12.5	2.178	3.074	9.8	19.4
4 11	14 32.20	-17 12.1	1.964	2.926	6.7	17.5	4 11	14 33.37	-16 40.1	2.129	3.089	6.4	19.2
4 21	14 24.48	-16 37.1	1.924	2.921	2.9	17.2	4 21	14 24.88	-15 59.4	2.106	3.104	2.6	19.0
5 1	14 16.16	-15 55.7	1.911	2.917	1.5	17.1	5 1	14 15.99	-15 13.8	2.113	3.118	1.4	18.9
5 11	14 8.17	-15 12.7	1.926	2.912	5.3	17.4	5 11	14 7.57	-14 27.8	2.148	3.132	5.1	19.2
5 21	14 1.33	-14 32.6	1.968	2.907	9.1	17.6	5 21	14 0.36	-13 45.9	2.212	3.145	8.5	19.4
5 31	13 56.28	-14 0.0	2.034	2.902	12.4	17.8	5 31	13 54.91	-13 11.8	2.299	3.157	11.5	19.6
173767	2001 <i>RC</i> ₁₃₈		4 27.3 133°50	4°0/23.2	18		62165	2000 <i>SM</i> ₂₉		4 27.3 170°86	1°6/28.9	18	
3 22	14 41.12	- 3 59.1	2.347	3.184	11.4	20.4	3 22	14 42.59	-21 11.1	2.830	3.619	10.9	20.2
4 1	14 36.81	- 2 57.6	2.277	3.190	8.6	20.2	4 1	14 37.82	-21 2.0	2.739	3.622	8.5	20.1
4 11	14 30.89	- 1 54.4	2.232	3.196	5.9	20.0	4 11	14 31.51	-20 42.8	2.673	3.624	5.8	19.9
4 21	14 23.90	- 0 54.3	2.215	3.202	4.0	19.9	4 21	14 24.16	-20 14.4	2.634	3.626	3.0	19.7
5 1	14 16.53	+ 0 2.2	2.226	3.208	4.8	20.0	5 1	14 16.40	-19 38.8	2.625	3.628	1.7	19.6
5 11	14 9.55	+ 0 37.6	2.264	3.213	7.4	20.1	5 11	14 8.92	-18 59.3	2.644	3.629	4.1	19.8
5 21	14 3.57	+ 1 2.5	2.329	3.218	10.1	20.3	5 21	14 2.34	-18 19.5	2.693	3.630	7.0	20.0
5 31	13 59.10	+ 1 11.5	2.415	3.223	12.6	20.5	5 31	13 57.16	-17 43.1	2.767	3.631	9.6	20.1
168368	1996 <i>WU</i> ₃		4 27.3 257°98	5°6/22.2	18		218004	2001 <i>XO</i> ₈₆		4 27.3 181°47	1°3/28.5	17	
3 22	14 43.23	+ 2 16.6	2.314	3.147	11.6	20.0	3 22	14 45.70	-20 26.8	2.686	3.474	11.5	21.6
4 1	14 38.55	+ 3 1.2	2.231	3.137	9.2	19.8	4 1	14 40.24	-20 7.9	2.593	3.476	8.9	21.4
4 11	14 32.09	+ 3 42.9	2.174	3.126	6.9	19.7	4 11	14 33.09	-19 38.2	2.524	3.476	6.0	21.2
4 21	14 24.41	+ 4 16.8	2.142	3.115	5.6	19.6	4 21	14 24.79	-18 58.7	2.482	3.476	2.9	21.0
5 1	14 16.21	+ 4 38.3	2.139	3.104	6.4	19.6	5 1	14 16.04	-18 12.1	2.471	3.475	1.5	20.9
5 11	14 8.31	+ 4 44.2	2.162	3.093	8.7	19.7	5 11	14 7.60	-17 22.1	2.489	3.474	4.4	21.1
5 21	14 1.41	+ 4 33.2	2.210	3.081	11.3	19.9	5 21	14 0.15	-16 33.0	2.537	3.471	7.5	21.3
5 31	13 56.10	+ 4 5.3	2.280	3.070	13.8	20.0	5 31	13 54.24	-15 48.8	2.610	3.467	10.3	21.4
368243	2001 <i>VQ</i> ₁₁		4 27.3 91°70	4°7/ 1.8	18		179397	2001 <i>YW</i> ₁₁₆		4 27.3 126°86	1°6/25.6	18	
3 22	14 47.32	-30 34.0	1.953	2.717	16.0	20.8	3 22	14 42.03	-10 3.7	2.633	3.456	10.7	21.0
4 1	14 41.99	-30 23.6	1.886	2.741	13.1	20.6	4 1	14 37.34	- 9 33.7	2.558	3.466	8.0	20.8
4 11	14 34.37	-29 51.8	1.839	2.765	9.8	20.5	4 11	14 31.17	- 8 59.3	2.509	3.477	5.1	20.6
4 21	14 25.27	-28 58.8	1.817	2.788	6.6	20.3	4 21	14 24.01	- 8 23.3	2.488	3.487	2.2	20.4
5 1	14 15.75	-27 47.5	1.822	2.811	4.8	20.3	5 1	14 16.52	- 7 48.9	2.496	3.496	2.4	20.5
5 11	14 6.95	-26 24.2	1.854	2.834	6.1	20.4	5 11	14 9.37	- 7 19.6	2.534	3.506	5.3	20.7
5 21	13 59.74	-24 56.7	1.913	2.856	9.0	20.6	5 21	14 3.16	- 6 58.1	2.598	3.515	8.1	20.9
5 31	13 54.72	-23 32.8	1.997	2.878	12.0	20.8	5 31	13 58.34	- 6 46.2	2.687	3.524	10.7	21.1
150244	1999 <i>CZ</i> ₁₅₀		4 27.3 180°22	3°1/24.4	17		431991	2008 <i>UN</i> ₂₅₃		4 27.3 271°24	0°		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
136975	1998 <i>RS</i> ₅₁		4 27.3 255°47'	0°4/27.5	18		442473	2011 <i>US</i> ₃₀₅		4 27.3 168°19'	1°6/29.1	18	
3 22	14 47.13	-15 57.0	1.817	2.638	14.8	20.8	3 22	14 41.18	-22 27.2	2.775	3.563	11.1	21.3
4 1	14 42.29	-15 54.5	1.720	2.623	11.5	20.6	4 1	14 36.79	-22 3.0	2.684	3.565	8.7	21.1
4 11	14 34.93	-15 41.8	1.644	2.608	7.6	20.3	4 11	14 30.88	-21 27.0	2.618	3.568	6.0	20.9
4 21	14 25.67	-15 20.0	1.594	2.593	3.1	20.0	4 21	14 23.94	-20 40.6	2.578	3.570	3.1	20.7
5 1	14 15.48	-14 51.9	1.571	2.577	1.7	19.9	5 1	14 16.61	-19 46.4	2.568	3.572	1.7	20.6
5 11	14 5.55	-14 22.3	1.576	2.561	6.4	20.1	5 11	14 9.59	-18 48.3	2.588	3.573	4.2	20.8
5 21	13 56.95	-13 56.0	1.606	2.544	10.8	20.3	5 21	14 3.48	-17 50.6	2.635	3.574	7.1	21.0
5 31	13 50.54	-13 37.8	1.660	2.527	14.7	20.5	5 31	13 58.77	-16 57.5	2.709	3.575	9.7	21.2
97425	2000 <i>AP</i> ₁₉₂		4 27.3 183°38'	1°5/25.6	18		144857	2004 <i>LT</i> ₇		4 27.3 276°63'	1°6/26.2	18	
3 22	14 42.51	-11 49.9	2.658	3.476	10.7	20.2	3 22	14 44.94	-11 35.4	1.840	2.673	14.2	19.9
4 1	14 37.75	-10 58.9	2.571	3.477	8.1	20.0	4 1	14 40.55	-11 12.0	1.740	2.653	10.9	19.6
4 11	14 31.47	-10 1.1	2.510	3.477	5.1	19.8	4 11	14 33.79	-10 40.5	1.663	2.632	7.0	19.3
4 21	14 24.15	-8 59.8	2.477	3.476	2.2	19.6	4 21	14 25.23	-10 3.8	1.611	2.611	2.9	19.0
5 1	14 16.44	-7 58.9	2.475	3.475	2.4	19.6	5 1	14 15.78	-9 26.4	1.586	2.589	2.8	19.0
5 11	14 9.04	-7 3.0	2.502	3.473	5.4	19.8	5 11	14 6.54	-8 53.4	1.589	2.568	7.1	19.2
5 21	14 2.56	-6 15.8	2.556	3.470	8.4	20.0	5 21	13 58.53	-8 29.5	1.617	2.546	11.4	19.4
5 31	13 57.48	-5 40.0	2.636	3.467	11.0	20.2	5 31	13 52.59	-8 18.6	1.667	2.524	15.2	19.6
497207	2004 <i>UP</i> ₉		4 27.3 176°15'	1°7/25.5	17		285915	2001 <i>QE</i> ₁₆₄		4 27.3 168°96'	0°1/27.4	17	
3 22	14 44.49	-9 39.4	2.862	3.677	10.1	23.6	3 22	14 47.89	-15 23.3	2.453	3.257	12.0	21.4
4 1	14 39.11	-9 6.0	2.777	3.681	7.7	23.4	4 1	14 41.99	-15 14.7	2.368	3.263	9.2	21.3
4 11	14 32.28	-8 28.3	2.718	3.683	4.9	23.2	4 11	14 34.26	-14 58.4	2.306	3.267	5.9	21.1
4 21	14 24.46	-7 48.9	2.687	3.685	2.2	23.0	4 21	14 25.28	-14 35.8	2.273	3.271	2.4	20.8
5 1	14 16.27	-7 11.2	2.687	3.686	2.4	23.0	5 1	14 15.81	-14 9.4	2.269	3.275	1.3	20.7
5 11	14 8.37	-6 38.3	2.717	3.686	5.2	23.2	5 11	14 6.69	-13 42.7	2.295	3.277	5.0	21.0
5 21	14 1.35	-6 13.0	2.776	3.686	7.9	23.4	5 21	13 58.66	-13 19.2	2.350	3.279	8.3	21.2
5 31	13 55.68	-5 57.2	2.859	3.684	10.4	23.6	5 31	13 52.31	-13 1.9	2.429	3.280	11.2	21.4
140772	2001 <i>UU</i> ₁₂₇		4 27.3 193°75'	3°4/24.0	18		336696	2010 <i>BZ</i> ₁		4 27.3 134°18'	4°5/23.1	17	
3 22	14 42.67	-3 54.9	2.536	3.366	10.8	19.9	3 22	14 43.29	-2 49.9	2.204	3.040	12.0	21.2
4 1	14 37.94	-3 20.6	2.455	3.365	8.3	19.8	4 1	14 38.53	-1 48.4	2.139	3.050	9.2	21.0
4 11	14 31.62	-2 45.4	2.400	3.363	5.6	19.6	4 11	14 32.02	-0 46.2	2.098	3.060	6.4	20.8
4 21	14 24.22	-2 12.9	2.372	3.361	3.5	19.4	4 21	14 24.38	+0 11.6	2.084	3.069	4.5	20.7
5 1	14 16.41	-1 46.7	2.372	3.359	4.1	19.5	5 1	14 16.36	+0 59.7	2.099	3.078	5.4	20.8
5 11	14 8.90	-1 30.1	2.402	3.357	6.6	19.6	5 11	14 8.78	+1 34.0	2.141	3.086	7.9	21.0
5 21	14 2.33	-1 25.1	2.457	3.354	9.4	19.8	5 21	14 2.31	+1 52.1	2.208	3.094	10.7	21.1
5 31	13 57.20	-1 32.6	2.536	3.351	11.9	20.0	5 31	13 57.49	+1 53.4	2.298	3.102	13.3	21.3
21332	1997 <i>BX</i>		4 27.3 147°50'	2°0/25.7	18		504857	2010 <i>TY</i> ₁₄₈		4 27.3 257°03'	1°9/28.5	17	
3 22	14 46.96	-10 50.8	1.867	2.697	14.1	19.3	3 22	14 49.01	-19 51.9	1.927	2.730	14.8	22.1
4 1	14 41.69	-10 13.3	1.794	2.705	10.7	19.1	4 1	14 43.80	-19 57.2	1.816	2.706	11.7	21.9
4 11	14 34.23	-9 28.6	1.745	2.713	6.8	18.9	4 11	14 35.99	-19 50.0	1.727	2.682	8.0	21.6
4 21	14 25.28	-8 40.6	1.722	2.721	2.9	18.7	4 21	14 26.14	-19 30.0	1.663	2.657	4.0	21.3
5 1	14 15.80	-7 54.3	1.727	2.728	3.1	18.7	5 1	14 15.21	-18 58.7	1.627	2.631	2.2	21.1
5 11	14 6.84	-7 15.1	1.760	2.734	7.0	18.9	5 11	14 4.39	-18 20.4	1.619	2.605	6.2	21.3
5 21	13 59.27	-6 47.0	1.819	2.740	10.8	19.2	5 21	13 54.83	-17 40.6	1.638	2.577	10.5	21.5
5 31	13 53.75	-6 32.9	1.900	2.745	14.1	19.4	5 31	13 47.45	-17 5.2	1.680	2.549	14.5	21.7
105473	2000 <i>QA</i> ₂₁₁		4 27.3 183°43'	0°7/26.5	18		326190	2012 <i>CE</i> ₅		4 27.3 58°69'	0°7/27.7	18	
3 22	14 41.55	-13 13.8	2.872	3.686	10.1	21.2	3 22	14 45.77	-17 22.3	1.420	2.255	17.5	20.5
4 1	14 36.95	-12 45.9	2.783	3.686	7.7	21.0	4 1	14 41.44	-17 8.6	1.357	2.268	13.4	20.3
4 11	14 30.93	-12 11.8	2.720	3.686	4.9	20.8	4 11	14 34.36	-16 40.6	1.315	2.281	8.7	20.1
4 21	14 23.94	-11 33.7	2.686	3.685	1.9	20.6	4 21	14 25.39	-16 0.8	1.296	2.295	3.6	19.8
5 1	14 16.58	-10 54.7	2.681	3.684	1.6	20.6	5 1	14 15.77	-15 14.0	1.302	2.308	1.9	19.7
5 11	14 9.49	-10 17.9	2.705	3.683	4.6	20.8	5 11	14 6.88	-14 27.1	1.335	2.322	6.9	20.1
5 21	14 3.22	-9 46.6	2.758	3.681	7.5	21.0	5 21	13 59.79	-13 46.7	1.391	2.336	11.5	20.4
5 31	13 58.26	-9 23.1	2.835	3.679	10.0	21.1	5 31	13 55.26	-13 18.1	1.469	2.350	15.5	20.6
71957	2000 <i>WO</i> ₁₀₉		4 27.3 139°77'	0°8/26.8	18		344261	2001 <i>SK</i> ₃₁₁		4 27.3 233°10'	1°8/29.1	18	
3 22	14 49.01	-12 45.5	1.629	2.460	15.8	19.7	3 22	14 42.13	-22 13.2	2.403	3.198	12.4	20.9
4 1	14 43.67	-12 40.9	1.555	2.465	12.1	19.4	4 1	14 37.83	-21 54.4	2.306	3.191	9.8	20.7
4 11	14 35.72	-12 28.2	1.502	2.470	7.7	19.2	4 11	14 31.71	-21 22.5	2.232	3.184	6.7	20.5
4 21	14 25.93	-12 9.9	1.474	2.474	3.0	18.9	4 21	14 24.31	-20 38.4	2.184	3.176	3.5	20.2
5 1	14 15.40	-11 49.4	1.474	2.479	2.2	18.9	5 1	14 16.38	-19 44.9	2.165	3.169	2.0	20.1
5 11	14 5.43	-11 31.6	1.501	2.483	7.0	19.2	5 11	14 8.74	-18 46.3	2.175	3.161	4.8	20.3
5 21	13 57.07	-11 20.7	1.552	2.487	11.4	19.4	5 21	14 2.13	-17 47.8	2.212	3.153	8.1	20.5
5 31	13 51.10	-11 20.0	1.626	2.490	15.1	19.7	5 31	13 57.14	-16 54.3	2.274	3.145	11.1	20.7
19107	1981 <i>EU</i> ₁₉		4 27.3 314°64'	4°0/29.3	18		118062	4256 <i>T</i> ₋₂		4 27.3 246°01'	0°8/27.9	17	
3 22	14 45.20	-22 0.9	1.327	2.156	18.8	17.8	3 22	14 44.27	-16 44.1	2.444	3.251	11.9	20.1
4 1	14 41.82	-22 33.7	1.239	2.141	15.2	17.6	4 1	14 39.41	-16 48.5	2.347	3.243	9.2	19.9
4 11	14 35.18	-22 50.0	1.170	2.127	10.8	17.3	4 11	14 32.72	-16 45.0	2.275	3.235	6.1	19.7
4 21	14 25.92	-22 48.1	1.122	2.113	6.2	17.0	4 21	14 24.73	-16 34.6	2.229	3.227	2.6	19.5
5 1	14 15.32	-22 28.2	1.098	2.100	4.1	16.8	5 1	14 16.14	-16 19.0	2.213	3.218	1.4	19.4
5 11	14 5.03	-21 55.2	1.098	2.087	7.8	17.0	5 11	14 7.79	-16 1.2	2.225	3.209	4.8	19.6
5 21	13 56.56	-21 16.4	1.121	2.075	12.8	17.2	5 21	14 0.42	-15 44.6	2.265	3.201	8.2	19.8
5 31	13 51.07	-20 40.4	1.164	2.063	17.4	17.4	5 31	13 54.65	-15 32.3	2.329	3.192	11.2	20.0
336276	2008 <i>SB</i> ₂₄₀		4 27.3 225°77'	1°8/25.8	18		205871	2002 <i>EV</i> ₁₀₄		4 27.3 31°48'	2°4/25.9	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
214794	2006 <i>UA</i> ₁₇₈		4 27.3 276°13	2°2/25.4	18		167647	2004 <i>DW</i> ₃₇		4 27.3 80°43	0°5/26.8	18	R
3 22	14 41.77	- 9 26.4	2.220	3.053	12.1	20.7	3 22	14 43.74	-14 9.0	2.128	2.951	12.9	20.5
4 1	14 37.63	- 8 52.1	2.127	3.040	9.2	20.5	4 1	14 38.98	-13 46.3	2.062	2.968	9.8	20.4
4 11	14 31.63	- 8 12.2	2.058	3.027	5.9	20.2	4 11	14 32.37	-13 15.5	2.020	2.986	6.2	20.2
4 21	14 24.32	- 7 30.1	2.016	3.014	2.7	20.0	4 21	14 24.56	-12 39.5	2.004	3.004	2.4	20.0
5 1	14 16.42	- 6 50.0	2.002	3.001	3.1	20.0	5 1	14 16.37	-12 1.9	2.017	3.021	1.7	19.9
5 11	14 8.79	- 6 16.3	2.016	2.988	6.4	20.2	5 11	14 8.67	-11 26.9	2.057	3.039	5.5	20.2
5 21	14 2.17	- 5 52.7	2.056	2.975	9.9	20.4	5 21	14 2.18	-10 58.5	2.125	3.056	8.9	20.5
5 31	13 57.18	- 5 41.5	2.120	2.962	12.9	20.5	5 31	13 57.43	-10 39.4	2.216	3.073	11.9	20.7
522903	2016 <i>PF</i> ₁₀₅		4 27.3 267°01	5°8/21.5	17		289885	2005 <i>MN</i> ₂₈		4 27.3 302°84	1°7/28.5	17	
3 22	14 41.10	+ 2 51.9	2.399	3.234	11.2	21.2	3 22	14 42.42	-20 43.5	1.549	2.375	16.7	21.1
4 1	14 36.88	+ 3 48.6	2.321	3.227	8.9	21.1	4 1	14 39.08	-20 22.5	1.458	2.362	13.2	20.9
4 11	14 31.02	+ 4 42.3	2.269	3.219	6.8	20.9	4 11	14 33.05	-19 43.2	1.388	2.350	8.9	20.6
4 21	14 24.04	+ 5 28.1	2.242	3.210	5.8	20.8	4 21	14 25.01	-18 46.8	1.341	2.337	4.2	20.3
5 1	14 16.61	+ 6 1.2	2.244	3.202	6.6	20.9	5 1	14 16.04	-17 37.7	1.320	2.325	2.1	20.1
5 11	14 9.47	+ 6 18.1	2.271	3.194	8.7	21.0	5 11	14 7.44	-16 23.2	1.324	2.313	6.7	20.3
5 21	14 3.29	+ 6 17.4	2.323	3.186	11.2	21.1	5 21	14 0.39	-15 11.9	1.353	2.301	11.5	20.6
5 31	13 58.58	+ 5 59.1	2.397	3.178	13.5	21.3	5 31	13 55.75	-14 11.5	1.404	2.290	15.8	20.8
143315	2003 <i>AQ</i> ₄₈		4 27.3 213°29	4°0/23.5	18		8750	2000 <i>RB</i> ₁₃		4 27.3 216°06	2°7/24.5	18	
3 22	14 43.23	- 1 55.9	2.479	3.310	11.0	20.2	3 22	14 42.80	- 9 53.8	2.188	3.019	12.3	20.6
4 1	14 38.42	- 1 18.7	2.397	3.305	8.5	20.0	4 1	14 38.37	- 8 41.7	2.099	3.012	9.3	20.4
4 11	14 31.98	- 0 41.9	2.340	3.300	5.9	19.8	4 11	14 32.08	- 7 21.5	2.036	3.004	6.0	20.2
4 21	14 24.41	- 0 9.2	2.310	3.295	4.1	19.7	4 21	14 24.50	- 5 57.9	2.000	2.996	3.1	20.0
5 1	14 16.39	+ 0 15.3	2.309	3.290	4.8	19.7	5 1	14 16.39	- 4 37.0	1.993	2.988	3.8	20.0
5 11	14 8.66	+ 0 28.5	2.336	3.284	7.2	19.9	5 11	14 8.61	- 3 25.2	2.015	2.978	7.1	20.2
5 21	14 1.89	+ 0 28.6	2.389	3.278	9.9	20.0	5 21	14 1.91	- 2 27.2	2.063	2.969	10.4	20.4
5 31	13 56.60	+ 0 14.9	2.465	3.271	12.4	20.2	5 31	13 56.89	- 1 46.1	2.134	2.959	13.5	20.6
85260	1993 <i>TC</i> ₂₃		4 27.3 308°41	1°6/25.8	18		284671	2008 <i>QG</i> ₁₄		4 27.3 220°42	0°2/27.2	17	
3 22	14 39.70	-11 58.0	2.174	3.008	12.3	19.2	3 22	14 48.19	-16 8.7	1.660	2.484	15.9	22.5
4 1	14 36.09	-11 17.1	2.082	2.995	9.3	19.0	4 1	14 43.23	-15 42.5	1.570	2.476	12.3	22.3
4 11	14 30.66	-10 28.2	2.013	2.983	5.9	18.8	4 11	14 35.61	-15 2.9	1.502	2.467	8.0	22.0
4 21	14 23.94	- 9 34.6	1.972	2.971	2.5	18.5	4 21	14 26.00	-14 12.3	1.458	2.458	3.2	21.7
5 1	14 16.65	- 8 40.9	1.958	2.959	2.6	18.5	5 1	14 15.48	-13 15.4	1.442	2.448	1.9	21.6
5 11	14 9.64	- 7 52.2	1.971	2.948	6.1	18.7	5 11	14 5.36	-12 18.9	1.453	2.437	7.0	21.9
5 21	14 3.65	- 7 12.9	2.011	2.936	9.7	18.9	5 21	13 56.77	-11 29.5	1.489	2.425	11.7	22.1
5 31	13 59.28	- 6 46.1	2.074	2.925	12.8	19.1	5 31	13 50.57	-10 52.7	1.548	2.413	15.7	22.3
57515	2001 <i>SX</i> ₂₈₁		4 27.3 106°31	7°2/18.2	18		457583	2009 <i>AV</i> ₁₀		4 27.3 82°36	0°2/27.2	18	
3 22	14 41.23	+ 8 21.0	2.598	3.424	10.7	19.4	3 22	14 49.80	-15 42.7	1.443	2.274	17.5	22.1
4 1	14 36.67	+10 2.0	2.556	3.444	8.9	19.3	4 1	14 44.28	-15 22.6	1.389	2.299	13.3	21.9
4 11	14 30.71	+11 36.0	2.539	3.463	7.5	19.3	4 11	14 36.04	-14 50.0	1.356	2.323	8.5	21.7
4 21	14 23.85	+12 56.8	2.550	3.483	7.2	19.3	4 21	14 26.04	-14 8.1	1.348	2.348	3.3	21.4
5 1	14 16.75	+13 59.7	2.588	3.502	8.1	19.4	5 1	14 15.56	-13 22.3	1.366	2.371	2.0	21.4
5 11	14 10.06	+14 41.5	2.652	3.520	9.7	19.5	5 11	14 5.96	-12 39.1	1.410	2.395	7.0	21.8
5 21	14 4.32	+15 1.6	2.739	3.538	11.5	19.6	5 21	13 58.28	-12 4.3	1.479	2.418	11.5	22.1
5 31	13 59.96	+15 1.3	2.846	3.556	13.1	19.8	5 31	13 53.18	-11 42.2	1.570	2.440	15.3	22.4
304729	2006 <i>XF</i> ₃₁		4 27.3 182°31	1°3/26.0	18		346854	2009 <i>DW</i> ₁₃₂		4 27.3 211°03	0°7/26.6	17	
3 22	14 43.55	-10 0.5	2.814	3.631	10.2	21.7	3 22	14 42.34	-13 43.2	2.474	3.293	11.4	21.9
4 1	14 38.50	- 9 47.1	2.727	3.632	7.7	21.5	4 1	14 37.85	-13 14.2	2.384	3.288	8.7	21.7
4 11	14 31.95	- 9 29.9	2.666	3.632	4.9	21.3	4 11	14 31.67	-12 37.7	2.318	3.284	5.5	21.5
4 21	14 24.39	- 9 11.1	2.633	3.632	2.1	21.1	4 21	14 24.33	-11 56.0	2.279	3.278	2.1	21.2
5 1	14 16.42	- 8 53.1	2.629	3.631	2.1	21.1	5 1	14 16.51	-11 12.6	2.269	3.273	1.7	21.2
5 11	14 8.72	- 8 38.7	2.656	3.630	4.9	21.3	5 11	14 8.97	-10 31.5	2.288	3.267	5.2	21.4
5 21	14 1.89	- 8 30.1	2.710	3.628	7.8	21.5	5 21	14 2.40	- 9 56.6	2.334	3.261	8.5	21.6
5 31	13 56.39	- 8 29.2	2.789	3.627	10.3	21.7	5 31	13 57.33	- 9 30.8	2.405	3.255	11.3	21.8
416989	2005 <i>TV</i> ₁₄₀		4 27.3 111°43	1°6/25.9	17		304688	2006 <i>WZ</i> ₁₄₇		4 27.3 85°52	0°7/27.9	17	
3 22	14 45.50	-11 54.6	2.009	2.835	13.4	22.1	3 22	14 41.81	-17 47.1	2.328	3.140	12.3	21.5
4 1	14 40.36	-11 13.8	1.943	2.853	10.1	21.9	4 1	14 37.55	-17 31.4	2.243	3.142	9.5	21.3
4 11	14 33.27	-10 25.6	1.902	2.870	6.4	21.7	4 11	14 31.52	-17 5.8	2.183	3.144	6.2	21.1
4 21	14 24.91	- 9 33.8	1.887	2.887	2.6	21.5	4 21	14 24.28	-16 32.0	2.149	3.146	2.7	20.8
5 1	14 16.15	- 8 43.3	1.901	2.903	2.6	21.5	5 1	14 16.56	-15 52.8	2.143	3.149	1.3	20.7
5 11	14 7.93	- 7 59.0	1.943	2.919	6.3	21.8	5 11	14 9.18	-15 12.4	2.166	3.151	4.9	21.0
5 21	14 1.03	- 7 25.0	2.011	2.934	9.8	22.0	5 21	14 2.85	-14 35.0	2.215	3.153	8.3	21.2
5 31	13 55.98	- 7 3.9	2.103	2.949	12.9	22.2	5 31	13 58.13	-14 4.2	2.289	3.156	11.3	21.4
402191	2004 <i>TR</i> ₁₆₁		4 27.3 93°84	0°9/27.8	18		504655	2008 <i>YT</i> ₁₅₆		4 27.3 137°97	0°1/27.3	17	
3 22	14 51.30	-16 26.7	1.529	2.352	17.0	21.4	3 22	14 43.57	-15 40.5	2.287	3.102	12.3	22.2
4 1	14 45.46	-16 34.7	1.467	2.371	13.1	21.2	4 1	14 38.87	-15 24.5	2.206	3.107	9.4	22.0
4 11	14 36.85	-16 31.3	1.426	2.390	8.5	20.9	4 11	14 32.35	-14 59.8	2.149	3.112	6.1	21.8
4 21	14 26.38	-16 17.6	1.410	2.408	3.6	20.7	4 21	14 24.60	-14 28.5	2.118	3.117	2.4	21.6
5 1	14 15.29	-15 56.7	1.420	2.426	1.9	20.6	5 1	14 16.38	-13 53.7	2.116	3.122	1.4	21.5
5 11	14 4.96	-15 33.8	1.458	2.444	6.6	21.0	5 11	14 8.53	-13 19.3	2.143	3.127	5.1	21.8
5 21	13 56.49	-15 14.0	1.520	2.461	11.1	21.3	5 21	14 1.77	-12 49.2	2.197	3.131	8.5	22.0
5 31	13 50.61	-15 1.9	1.605	2.478	14.9	21.5	5 31	13 56.67	-12 26.7	2.275	3.135	11.5	22.2
491118	2011 <i>SK</i> ₁₀₀		4 27.3 207°78	0°5/27.8	17		136108	Haumea		4 27.3 217°66			

EPHEMERIDES

4 27.3

4 27.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V	
224394	2005 <i>UH</i> ₂₃₃	4 27.3 151°11' 1.4°/26.1 17						438964	2010 <i>MC</i> ₁	4 27.3 303°87' 9.6°/ 8.2 18				
3 22	14 45.51	-11 50.8	2.285	3.105	12.2	21.7	3 22	14 44.61	-46 19.5	2.337	2.994	16.3	20.0	
4 1	14 40.25	-11 17.1	2.209	3.115	9.2	21.5	4 1	14 40.53	-46 39.5	2.228	2.978	14.7	19.8	
4 11	14 33.18	-10 36.7	2.157	3.123	5.8	21.3	4 11	14 33.87	-46 34.1	2.136	2.962	13.0	19.7	
4 21	14 24.91	-9 52.7	2.132	3.132	2.4	21.1	4 21	14 25.34	-45 58.9	2.065	2.947	11.2	19.5	
5 1	14 16.22	-9 9.1	2.137	3.139	2.3	21.1	5 1	14 15.98	-44 52.3	2.015	2.931	9.9	19.4	
5 11	14 7.94	-8 30.2	2.171	3.146	5.8	21.3	5 11	14 7.06	-43 16.6	1.991	2.916	9.6	19.4	
5 21	14 0.79	-7 59.6	2.232	3.152	9.1	21.5	5 21	13 59.66	-41 18.2	1.992	2.901	10.6	19.4	
5 31	13 55.33	-7 39.9	2.316	3.158	12.0	21.7	5 31	13 54.60	-39 6.5	2.017	2.887	12.4	19.5	
102637	1999 <i>VH</i> ₃₈	4 27.3 247°95' 0°3'/27.5 18						365863	2011 <i>UH</i> ₁₄₉	4 27.3 103°38' 1°7'/26.2 18				
3 22	14 45.00	-16 21.1	2.294	3.104	12.5	20.6	3 22	14 48.51	-11 50.5	1.564	2.400	16.1	21.8	
4 1	14 40.16	-16 6.5	2.189	3.087	9.7	20.4	4 1	14 43.22	-11 21.7	1.501	2.415	12.2	21.6	
4 11	14 33.35	-15 42.3	2.107	3.070	6.3	20.1	4 11	14 35.38	-10 44.3	1.461	2.430	7.7	21.4	
4 21	14 25.06	-15 10.1	2.053	3.052	2.6	19.9	4 21	14 25.85	-10 2.5	1.445	2.445	3.1	21.2	
5 1	14 16.09	-14 32.6	2.027	3.033	1.4	19.7	5 1	14 15.76	-9 21.5	1.457	2.460	2.9	21.2	
5 11	14 7.31	-13 54.0	2.030	3.014	5.3	20.0	5 11	14 6.37	-8 47.2	1.495	2.474	7.4	21.5	
5 21	13 59.56	-13 18.5	2.061	2.994	9.0	20.2	5 21	13 58.68	-8 24.1	1.558	2.488	11.7	21.8	
5 31	13 53.51	-12 50.3	2.115	2.974	12.3	20.3	5 31	13 53.38	-8 15.1	1.642	2.501	15.3	22.0	
154081	2002 <i>CY</i> ₂₂₅	4 27.3 100°80' 1°9'/25.7 17						240611	2004 <i>XU</i> ₂₃	4 27.3 162°53' 1°4'/26.2 18				
3 22	14 43.89	-11 27.0	1.858	2.692	14.0	20.7	3 22	14 46.38	-10 28.0	2.270	3.091	12.2	20.6	
4 1	14 39.38	-10 42.7	1.788	2.702	10.6	20.5	4 1	14 40.99	-10 14.9	2.190	3.096	9.3	20.4	
4 11	14 32.79	-9 50.6	1.742	2.712	6.7	20.3	4 11	14 33.72	-9 57.0	2.133	3.100	5.9	20.2	
4 21	14 24.79	-8 54.8	1.722	2.721	2.8	20.0	4 21	14 25.18	-9 36.6	2.104	3.103	2.4	19.9	
5 1	14 16.30	-8 0.7	1.729	2.730	3.0	20.1	5 1	14 16.13	-9 17.0	2.104	3.106	2.3	19.9	
5 11	14 8.33	-7 14.1	1.764	2.739	6.8	20.3	5 11	14 7.46	-9 1.5	2.133	3.109	5.8	20.2	
5 21	14 1.70	-6 39.2	1.824	2.748	10.6	20.6	5 21	13 59.91	-8 52.9	2.189	3.112	9.2	20.4	
5 31	13 57.01	-6 18.8	1.907	2.757	13.8	20.8	5 31	13 54.07	-8 53.3	2.269	3.113	12.1	20.6	
112644	2002 <i>PV</i> ₈₂	4 27.3 275°31' 1°1'/26.6 17						177869	2005 <i>QN</i> ₄₅	4 27.3 318°45' 7°2'/19.6 17				
3 22	14 45.68	-13 16.6	1.678	2.512	15.3	21.0	3 22	14 39.85	+ 5 13.2	2.186	3.027	11.9	19.5	
4 1	14 41.41	-12 54.2	1.579	2.491	11.8	20.7	4 1	14 36.08	+ 6 39.1	2.120	3.023	9.7	19.4	
4 11	14 34.53	-12 21.3	1.501	2.470	7.6	20.4	4 11	14 30.60	+ 8 0.6	2.078	3.020	7.8	19.2	
4 21	14 25.64	-11 40.7	1.449	2.449	3.0	20.1	4 21	14 23.95	+ 9 11.3	2.062	3.017	7.2	19.2	
5 1	14 15.72	-10 57.0	1.423	2.428	2.5	20.0	5 1	14 16.86	+10 4.9	2.073	3.014	8.3	19.3	
5 11	14 6.03	-10 16.2	1.424	2.406	7.3	20.2	5 11	14 10.12	+10 37.4	2.109	3.011	10.3	19.4	
5 21	13 57.70	-9 43.9	1.450	2.384	12.0	20.4	5 21	14 4.42	+10 47.3	2.167	3.008	12.7	19.5	
5 31	13 51.65	-9 24.9	1.497	2.362	16.2	20.6	5 31	14 0.28	+10 35.2	2.245	3.005	14.9	19.7	
156185	2001 <i>TH</i> ₂₂₀	4 27.3 334°59' 5°5'/ 4.7 18						162431	2000 <i>FV</i> ₄	4 27.3 156°01' 3°0'/24.0 18				
3 22	14 45.09	-40 35.0	4.242	4.896	9.5	19.8	3 22	14 41.19	- 8 32.1	2.332	3.165	11.6	19.6	
4 1	14 39.65	-41 27.2	4.140	4.894	8.3	19.7	4 1	14 36.96	- 7 15.4	2.256	3.169	8.7	19.5	
4 11	14 32.75	-42 7.7	4.060	4.892	7.2	19.6	4 11	14 31.09	- 5 52.6	2.205	3.173	5.6	19.3	
4 21	14 24.78	-42 34.7	4.004	4.890	6.1	19.5	4 21	14 24.12	- 4 28.9	2.183	3.177	3.2	19.1	
5 1	14 16.26	-42 47.3	3.976	4.888	5.5	19.5	5 1	14 16.77	- 3 10.0	2.189	3.180	4.0	19.2	
5 11	14 7.83	-42 46.0	3.974	4.887	5.6	19.5	5 11	14 9.78	- 2 1.5	2.225	3.183	6.8	19.4	
5 21	14 0.06	-42 33.0	4.000	4.885	6.4	19.5	5 21	14 3.82	- 1 7.2	2.286	3.186	9.8	19.6	
5 31	13 53.48	-42 11.0	4.051	4.883	7.5	19.6	5 31	13 59.37	- 0 29.6	2.371	3.189	12.5	19.7	
175109	Sharickaer	4 27.3 10°35' 9°9'/ 6.9 17						162537	2000 <i>QP</i> ₁₆₄	4 27.3 133°14' 2°6'/29.3 18				
3 22	14 42.70	-42 1.6	1.869	2.580	18.3	19.5	3 22	14 48.28	-23 2.9	1.739	2.540	16.2	20.2	
4 1	14 39.36	-42 44.0	1.788	2.583	16.2	19.3	4 1	14 43.07	-22 51.0	1.664	2.552	12.8	20.0	
4 11	14 33.24	-42 59.7	1.724	2.586	13.9	19.1	4 11	14 35.33	-22 21.7	1.611	2.562	8.9	19.8	
4 21	14 25.09	-42 44.5	1.680	2.590	11.7	19.0	4 21	14 25.86	-21 35.7	1.581	2.573	4.7	19.6	
5 1	14 16.10	-41 57.1	1.657	2.595	10.2	18.9	5 1	14 15.76	-20 36.7	1.579	2.582	2.7	19.4	
5 11	14 7.66	-40 41.1	1.658	2.601	10.1	18.9	5 11	14 6.26	-19 30.9	1.605	2.592	6.1	19.7	
5 21	14 0.95	-39 4.2	1.683	2.607	11.3	19.0	5 21	13 58.39	-18 25.7	1.656	2.600	10.1	19.9	
5 31	13 56.80	-37 16.4	1.731	2.614	13.4	19.2	5 31	13 52.86	-17 28.0	1.731	2.608	13.7	20.2	
58054	2003 <i>AR</i> ₅	4 27.3 59°73' 1°5'/28.5 18						387681	2002 <i>TP</i> ₁₃₅	4 27.3 258°94' 3°9'/30.3 18				
3 22	14 44.17	-20 33.5	1.567	2.390	16.7	19.4	3 22	14 47.35	-26 1.5	2.413	3.183	13.1	21.2	
4 1	14 40.05	-20 10.3	1.501	2.403	13.0	19.1	4 1	14 42.13	-26 30.1	2.301	3.163	10.7	21.0	
4 11	14 33.42	-19 30.1	1.456	2.417	8.7	18.9	4 11	14 34.74	-26 46.3	2.210	3.143	8.0	20.8	
4 21	14 25.07	-18 35.3	1.434	2.431	4.0	18.7	4 21	14 25.69	-26 48.5	2.146	3.122	5.3	20.6	
5 1	14 16.16	-17 30.8	1.439	2.444	2.0	18.6	5 1	14 15.78	-26 36.7	2.109	3.101	4.0	20.4	
5 11	14 7.90	-16 24.0	1.470	2.458	6.3	18.9	5 11	14 5.97	-26 12.9	2.101	3.080	5.6	20.5	
5 21	14 1.29	-15 22.1	1.526	2.472	10.6	19.2	5 21	13 57.20	-25 41.2	2.121	3.058	8.6	20.6	
5 31	13 57.01	-14 31.4	1.604	2.487	14.4	19.4	5 31	13 50.23	-25 6.8	2.165	3.036	11.6	20.8	
354335	2003 <i>BC</i> ₇	4 27.3 148°05' 3°1'/25.0 18						22883	1999 <i>RC</i> ₂₃₁	4 27.3 236°55' 2°6'/24.8 18				
3 22	14 49.19	- 8 32.4	1.764	2.596	14.7	21.4	3 22	14 44.69	- 7 13.6	2.612	3.434	10.8	19.9	
4 1	14 43.48	- 7 42.3	1.696	2.608	11.2	21.2	4 1	14 39.61	- 6 34.4	2.509	3.416	8.2	19.7	
4 11	14 35.45	- 6 46.2	1.651	2.618	7.2	21.0	4 11	14 32.84	- 5 51.2	2.432	3.397	5.4	19.5	
4 21	14 25.85	- 5 49.3	1.632	2.628	3.6	20.8	4 21	14 24.85	- 5 7.4	2.383	3.378	2.9	19.3	
5 1	14 15.73	- 4 57.4	1.641	2.637	4.2	20.9	5 1	14 16.31	- 4 26.7	2.364	3.357	3.4	19.3	
5 11	14 6.20	- 4 16.4	1.678	2.645	7.9	21.1	5 11	14 7.95	- 3 53.1	2.374	3.336	6.2	19.5	
5 21	13 58.19	- 3 50.2	1.740	2.652	11.7	21.3	5 21	14 0.47	- 3 29.6	2.411	3.314	9.3	19.6	
5 31	13 52.36	- 3 40.7	1.824	2.659	15.0	21.6	5 31	13 54.43	- 3 18.4	2.473	3.292	12.0	19.8	
478232	2011 <i>UA</i> ₃₃₄	4 27.3 232°99' 1°9'/29.1 17						504557	2008 <i>SB</i> ₂₈₁	4 27.3 219°56' 0°8'/28.1 17				
3 22	14 41.77	-22 15.4	2.385	3.181	12.5	21.6	3 22	14 43.01	-18 59.4	2.141	2.952	13.2	21.6	
4 1	14 37.58	-21 56.8	2.292	3.177	9.8	21.5	4 1	14 38.69						

EPHEMERIDES

4 27.3

4 27.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
212648	2006 <i>UH</i> ₆₈		4 27.3 243°08	1.7/25.6	18		421477	2014 <i>OW</i> ₄₂		4 27.3 154°99	4.0/29.9	16	
3 22	14 41.36	-10 57.1	2.423	3.250	11.4	21.0	3 22	14 49.86	-24 13.8	1.583	2.384	17.6	21.8
4 1	14 37.16	-10 17.1	2.331	3.241	8.6	20.8	4 1	14 44.73	-24 33.5	1.504	2.388	14.1	21.6
4 11	14 31.29	-9 30.6	2.264	3.232	5.5	20.6	4 11	14 36.68	-24 35.5	1.445	2.392	10.1	21.3
4 21	14 24.24	-8 40.8	2.224	3.223	2.4	20.3	4 21	14 26.49	-24 18.5	1.409	2.396	6.0	21.1
5 1	14 16.69	-7 51.8	2.213	3.213	2.6	20.3	5 1	14 15.40	-23 43.9	1.399	2.399	4.0	21.0
5 11	14 9.41	-7 7.9	2.230	3.203	5.8	20.5	5 11	14 4.86	-22 56.9	1.416	2.401	6.9	21.2
5 21	14 3.07	-6 32.9	2.275	3.194	9.0	20.7	5 21	13 56.10	-22 5.1	1.458	2.404	11.0	21.4
5 31	13 58.23	-6 9.5	2.343	3.184	11.9	20.9	5 31	13 50.00	-21 16.2	1.522	2.406	14.9	21.6
309787	2008 <i>YB</i> ₁₆₆		4 27.3 193°39	1.4/26.3	16		357956	2006 <i>AN</i> ₁₁		4 27.3 69°85	14.1/5.3	18	
3 22	14 47.44	-12 51.6	1.758	2.587	14.9	22.2	3 22	15 10.48	-41 4.5	1.424	2.126	23.4	20.2
4 1	14 42.39	-12 15.1	1.676	2.586	11.4	22.0	4 1	15 2.07	-43 46.5	1.377	2.160	20.7	20.1
4 11	14 34.92	-11 28.6	1.616	2.584	7.3	21.7	4 11	14 48.72	-45 59.2	1.347	2.194	17.9	20.0
4 21	14 25.73	-10 35.7	1.581	2.581	2.9	21.5	4 21	14 31.46	-47 29.9	1.337	2.228	15.5	19.9
5 1	14 15.83	-9 41.8	1.575	2.578	2.7	21.4	5 1	14 12.48	-48 10.7	1.350	2.261	14.2	19.9
5 11	14 6.37	-8 52.9	1.596	2.574	7.1	21.7	5 11	13 54.57	-48 3.4	1.386	2.293	14.3	20.0
5 21	13 58.36	-8 14.4	1.642	2.569	11.3	21.9	5 21	13 40.03	-47 19.2	1.443	2.325	15.6	20.2
5 31	13 52.55	-7 50.2	1.711	2.564	15.0	22.1	5 31	13 30.18	-46 13.3	1.520	2.357	17.4	20.4
491789	2012 <i>XY</i> ₁₀		4 27.3 131°34	0.1/27.2	17		123272	2000 <i>UN</i> ₈₉		4 27.3 270°97	0.9/26.7	18	
3 22	14 42.53	-15 47.0	2.415	3.229	11.8	22.3	3 22	14 44.91	-12 57.7	1.843	2.674	14.2	20.2
4 1	14 37.98	-15 21.1	2.336	3.237	9.0	22.1	4 1	14 40.45	-12 42.8	1.755	2.666	10.9	19.9
4 11	14 31.75	-14 46.6	2.280	3.244	5.8	21.9	4 11	14 33.70	-12 19.7	1.690	2.658	7.0	19.7
4 21	14 24.40	-14 5.7	2.252	3.251	2.3	21.7	4 21	14 25.28	-11 50.8	1.650	2.650	2.7	19.4
5 1	14 16.63	-13 21.7	2.252	3.258	1.4	21.6	5 1	14 16.13	-11 20.1	1.638	2.642	2.2	19.3
5 11	14 9.23	-12 38.8	2.282	3.265	4.9	21.9	5 11	14 7.31	-10 52.2	1.653	2.634	6.5	19.6
5 21	14 2.86	-12 0.9	2.339	3.271	8.2	22.1	5 21	13 59.79	-10 31.5	1.693	2.627	10.6	19.8
5 31	13 58.04	-11 31.2	2.420	3.277	11.0	22.3	5 31	13 54.32	-10 21.5	1.756	2.619	14.3	20.0
155814	2000 <i>WY</i> ₃₁		4 27.3 245°53	2.2/25.3	18		413931	2006 <i>XB</i> ₁₆		4 27.3 122°83	1.9/25.8	16	
3 22	14 44.25	-9 50.7	2.273	3.099	12.0	21.1	3 22	14 47.28	-10 25.9	2.063	2.888	13.2	22.0
4 1	14 39.55	-9 6.3	2.172	3.082	9.2	20.8	4 1	14 41.70	-9 52.1	1.997	2.905	9.9	21.9
4 11	14 32.94	-8 15.1	2.096	3.063	5.9	20.6	4 11	14 34.16	-9 12.5	1.955	2.923	6.3	21.7
4 21	14 24.94	-7 20.6	2.046	3.044	2.8	20.4	4 21	14 25.36	-8 30.7	1.940	2.939	2.7	21.5
5 1	14 16.29	-6 27.3	2.026	3.024	3.2	20.4	5 1	14 16.15	-7 50.9	1.954	2.955	2.8	21.5
5 11	14 7.86	-5 40.4	2.034	3.003	6.6	20.5	5 11	14 7.47	-7 17.7	1.997	2.970	6.4	21.8
5 21	14 0.43	-5 3.9	2.069	2.982	10.1	20.7	5 21	14 0.10	-6 54.4	2.066	2.985	9.8	22.0
5 31	13 54.65	-4 40.9	2.127	2.961	13.2	20.9	5 31	13 54.59	-6 43.2	2.158	2.998	12.8	22.2
296461	2009 <i>HY</i> ₈₀		4 27.3 85°48	2.3/24.9	18		75237	1999 <i>WK</i> ₈		4 27.3 7°51	1.3/26.7	18	
3 22	14 40.74	-10 29.7	2.228	3.061	12.0	20.8	3 22	14 44.76	-10 47.5	1.145	2.008	18.9	17.7
4 1	14 36.66	-9 26.7	2.159	3.073	9.0	20.6	4 1	14 41.39	-11 0.0	1.081	2.008	14.5	17.4
4 11	14 30.91	-8 17.1	2.115	3.085	5.7	20.4	4 11	14 34.79	-11 6.1	1.036	2.010	9.3	17.1
4 21	14 24.06	-7 5.4	2.098	3.096	2.7	20.3	4 21	14 25.81	-11 8.4	1.012	2.013	3.7	16.8
5 1	14 16.85	-5 57.0	2.110	3.108	3.2	20.3	5 1	14 15.85	-11 10.8	1.012	2.017	2.9	16.7
5 11	14 10.07	-4 57.1	2.151	3.119	6.3	20.5	5 11	14 6.56	-11 17.9	1.036	2.023	8.5	17.1
5 21	14 4.36	-4 9.6	2.217	3.130	9.5	20.7	5 21	13 59.30	-11 33.4	1.081	2.029	13.7	17.4
5 31	14 0.22	-3 37.0	2.307	3.142	12.3	20.9	5 31	13 55.01	-12 0.1	1.145	2.037	18.2	17.7
304698	2006 <i>WQ</i> ₁₇₄		4 27.3 70°83	3.6/24.3	17		54491	2000 <i>OD</i> ₃₅		4 27.3 238°40	1.5/25.8	18	
3 22	14 42.84	-3 52.5	2.296	3.131	11.6	20.7	3 22	14 40.90	-12 17.7	2.450	3.275	11.3	19.6
4 1	14 38.24	-3 22.9	2.222	3.134	8.9	20.5	4 1	14 36.81	-11 28.2	2.358	3.267	8.6	19.4
4 11	14 31.94	-2 52.8	2.173	3.137	6.0	20.3	4 11	14 31.07	-10 30.7	2.290	3.258	5.4	19.2
4 21	14 24.48	-2 25.9	2.150	3.140	3.8	20.2	4 21	14 24.18	-9 28.7	2.249	3.249	2.3	19.0
5 1	14 16.60	-2 6.0	2.155	3.143	4.3	20.2	5 1	14 16.81	-8 26.5	2.238	3.239	2.4	19.0
5 11	14 9.07	-1 56.2	2.188	3.146	7.0	20.4	5 11	14 9.71	-7 29.0	2.256	3.230	5.7	19.2
5 21	14 2.58	-1 58.5	2.247	3.149	9.9	20.6	5 21	14 3.54	-6 40.4	2.300	3.220	8.9	19.3
5 31	13 57.67	-2 13.6	2.329	3.153	12.5	20.8	5 31	13 58.85	-6 3.8	2.369	3.210	11.8	19.5
249082	2007 <i>VF</i> ₂₀		4 27.3 314°28	1.5/28.2	17		87606	2000 <i>RZ</i> ₄₃		4 27.3 178°76	4.7/1.5	17	
3 22	14 42.66	-18 42.2	1.279	2.123	18.5	20.5	3 22	14 48.65	-29 51.1	2.517	3.263	13.2	20.9
4 1	14 39.91	-18 40.1	1.189	2.104	14.6	20.2	4 1	14 42.90	-30 15.0	2.422	3.265	10.9	20.8
4 11	14 34.00	-18 20.9	1.119	2.086	9.9	19.9	4 11	14 35.09	-30 23.9	2.350	3.267	8.4	20.6
4 21	14 25.58	-17 45.2	1.070	2.069	4.5	19.5	4 21	14 25.80	-30 16.3	2.304	3.267	6.0	20.5
5 1	14 15.87	-16 56.7	1.046	2.052	2.3	19.3	5 1	14 15.88	-29 52.4	2.285	3.267	4.7	20.4
5 11	14 6.47	-16 2.8	1.045	2.035	7.8	19.6	5 11	14 6.26	-29 15.1	2.295	3.267	5.7	20.4
5 21	13 58.84	-15 12.1	1.066	2.019	13.3	19.8	5 21	13 57.81	-28 28.8	2.332	3.265	8.1	20.6
5 31	13 54.08	-14 32.6	1.107	2.004	18.2	20.1	5 31	13 51.19	-27 39.3	2.395	3.264	10.7	20.7
268983	2007 <i>EO</i> ₇₀		4 27.3 28°00	5.0/23.6	17		468861	2013 <i>LU</i> ₂₈		4 27.3 359°41	4.0/25.8	18	
3 22	14 40.93	-6 8.7	1.422	2.284	16.0	20.0	3 22	14 40.78	+47 54.6	11.655	12.198	4.0	19.2
4 1	14 37.66	-4 53.8	1.365	2.291	12.1	19.8	4 1	14 35.59	+48 38.8	11.612	12.162	4.0	19.2
4 11	14 31.93	-3 33.8	1.329	2.300	8.1	19.6	4 11	14 29.81	+49 16.0	11.589	12.126	4.1	19.2
4 21	14 24.54	-2 16.8	1.317	2.309	5.2	19.4	4 21	14 23.61	+49 45.1	11.584	12.090	4.2	19.2
5 1	14 16.59	-1 11.1	1.330	2.319	6.2	19.5	5 1	14 17.20	+50 5.3	11.598	12.055	4.4	19.2
5 11	14 9.28	-0 24.1	1.367	2.329	9.9	19.8	5 11	14 10.80	+50 16.3	11.627	12.019	4.5	19.2
5 21	14 3.56	+0 0.7	1.428	2.341	13.7	20.0	5 21	14 4.64	+50 18.4	11.671	11.983	4.7	19.2
5 31	14 0.09	+0 2.2	1.507	2.352	17.1	20.3	5 31	13 58.92	+50 11.9	11.724	11.948	4.8	19.2
208383	2001 <i>ST</i> ₉₅		4 27.3 162°70	0.3/27.6	18		229257	2005 <i>AF</i> ₁₃		4 27.3 59°35	5.4/23.6	18	

EPHEMERIDES

4 27.3

4 27.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
436680	2011 SC ₁₃₈		4 27.3 252°56	2°0/25.3	17		37150	2000 VJ ₅₃		4 27.3 275°53	2°9/29.6	18	
3 22	14 40.75	-10 54.5	2.381	3.210	11.5	21.6	3 22	14 43.82	-23 43.7	1.873	2.674	15.2	17.9
4 1	14 36.76	-10 1.9	2.288	3.199	8.7	21.4	4 1	14 39.79	-23 37.7	1.778	2.664	12.2	17.7
4 11	14 31.07	-9 2.0	2.220	3.189	5.5	21.2	4 11	14 33.39	-23 14.9	1.704	2.654	8.6	17.5
4 21	14 24.21	-7 58.4	2.180	3.178	2.5	21.0	4 21	14 25.23	-22 35.4	1.654	2.644	4.8	17.2
5 1	14 16.84	-6 55.8	2.168	3.167	2.9	21.0	5 1	14 16.27	-21 41.7	1.632	2.633	3.0	17.1
5 11	14 9.75	-5 59.4	2.185	3.156	6.1	21.2	5 11	14 7.64	-20 39.1	1.636	2.623	5.9	17.2
5 21	14 3.60	-5 13.2	2.229	3.145	9.3	21.3	5 21	14 0.35	-19 34.3	1.666	2.613	9.8	17.4
5 31	13 58.95	-4 40.2	2.296	3.133	12.2	21.5	5 31	13 55.18	-18 34.5	1.719	2.602	13.5	17.6
153528	2001 SZ ₄₉		4 27.3 140°60	2°0/25.6	17		256451	2007 CQ ₄₆		4 27.3 129°16	2°3/25.5	17	
3 22	14 46.77	-9 30.3	2.258	3.080	12.3	21.0	3 22	14 46.32	-9 28.1	1.998	2.827	13.3	21.1
4 1	14 41.21	-8 59.0	2.186	3.093	9.3	20.9	4 1	14 41.10	-8 51.9	1.929	2.839	10.1	20.9
4 11	14 33.83	-8 22.9	2.139	3.105	5.9	20.7	4 11	14 33.87	-8 10.2	1.883	2.851	6.4	20.7
4 21	14 25.26	-7 45.3	2.119	3.117	2.7	20.5	4 21	14 25.30	-7 27.0	1.865	2.862	3.0	20.5
5 1	14 16.27	-7 10.1	2.129	3.128	2.9	20.5	5 1	14 16.28	-6 46.9	1.874	2.873	3.3	20.6
5 11	14 7.74	-6 41.3	2.167	3.139	6.1	20.7	5 11	14 7.76	-6 14.6	1.912	2.884	6.7	20.8
5 21	14 0.37	-6 21.9	2.233	3.148	9.3	21.0	5 21	14 0.53	-5 53.2	1.976	2.894	10.2	21.0
5 31	13 54.71	-6 13.8	2.323	3.157	12.2	21.2	5 31	13 55.19	-5 45.1	2.063	2.903	13.3	21.3
96735	1999 NV ₄₃		4 27.3 300°47	11°0/17.6	18		431831	2008 SV ₈		4 27.3 250°65	2°9/29.7	17	
3 22	14 44.58	+10 53.8	1.699	2.535	15.0	19.1	3 22	14 46.74	-23 50.2	2.303	3.085	13.3	21.7
4 1	14 40.55	+12 24.5	1.611	2.503	12.9	18.9	4 1	14 41.70	-23 57.0	2.191	3.066	10.7	21.5
4 11	14 33.99	+13 47.5	1.545	2.470	11.3	18.7	4 11	14 34.50	-23 50.6	2.102	3.046	7.7	21.3
4 21	14 25.51	+14 53.0	1.503	2.438	11.1	18.6	4 21	14 25.66	-23 30.3	2.039	3.025	4.5	21.0
5 1	14 16.04	+15 31.5	1.484	2.405	12.4	18.6	5 1	14 16.01	-22 57.2	2.004	3.003	3.0	20.9
5 11	14 6.77	+15 37.3	1.487	2.372	14.9	18.7	5 11	14 6.50	-22 14.8	1.997	2.981	5.4	21.0
5 21	13 58.80	+15 8.9	1.511	2.339	17.8	18.8	5 21	13 58.08	-21 27.9	2.018	2.958	8.8	21.2
5 31	13 53.00	+14 8.6	1.551	2.307	20.6	18.9	5 31	13 51.48	-20 42.1	2.064	2.935	12.1	21.3
438344	2006 RJ ₂₄		4 27.3 199°93	2°6/29.9	17		257363	2009 NC ₂		4 27.3 304°59	3°9/1.4	17	
3 22	14 43.13	-24 27.0	2.473	3.256	12.5	21.7	3 22	14 41.05	-28 45.3	2.516	3.282	12.7	20.1
4 1	14 38.61	-24 18.3	2.379	3.254	10.0	21.5	4 1	14 37.11	-28 42.5	2.418	3.276	10.4	20.0
4 11	14 32.28	-23 56.1	2.308	3.251	7.1	21.3	4 11	14 31.36	-28 24.1	2.343	3.271	7.8	19.8
4 21	14 24.69	-23 20.7	2.263	3.249	4.1	21.1	4 21	14 24.35	-27 49.8	2.292	3.266	5.3	19.6
5 1	14 16.58	-22 34.3	2.246	3.246	2.6	21.0	5 1	14 16.81	-27 1.3	2.269	3.260	3.9	19.5
5 11	14 8.77	-21 40.8	2.258	3.242	4.7	21.1	5 11	14 9.56	-26 2.1	2.275	3.255	5.1	19.6
5 21	14 2.00	-20 45.0	2.297	3.239	7.8	21.3	5 21	14 3.33	-24 57.5	2.307	3.250	7.7	19.7
5 31	13 56.86	-19 52.1	2.362	3.235	10.7	21.5	5 31	13 58.71	-23 52.9	2.364	3.245	10.4	19.9
55442	2001 TQ ₉₂		4 27.3 69°86	0°5/27.8	18		302079	2000 WQ ₁₅₂		4 27.3 192°45	2°9/1.0	18	
3 22	14 41.19	-18 40.8	2.157	2.972	13.0	19.6	3 22	14 42.39	-27 59.4	3.132	3.887	10.7	21.2
4 1	14 37.22	-18 3.3	2.077	2.977	10.0	19.4	4 1	14 37.69	-27 42.6	3.031	3.885	8.7	21.0
4 11	14 31.40	-17 13.3	2.019	2.981	6.5	19.2	4 11	14 31.53	-27 12.6	2.954	3.882	6.4	20.9
4 21	14 24.33	-16 13.4	1.988	2.986	2.7	19.0	4 21	14 24.37	-26 29.8	2.904	3.879	4.1	20.7
5 1	14 16.80	-15 7.9	1.985	2.991	1.4	18.9	5 1	14 16.82	-25 35.8	2.882	3.876	2.9	20.6
5 11	14 9.68	-14 2.4	2.011	2.996	5.2	19.1	5 11	14 9.55	-24 34.1	2.891	3.872	4.1	20.7
5 21	14 3.68	-13 2.0	2.063	3.001	8.8	19.4	5 21	14 3.12	-23 28.8	2.928	3.867	6.4	20.9
5 31	13 59.39	-12 11.5	2.139	3.006	11.9	19.6	5 31	13 58.02	-22 24.4	2.992	3.862	8.8	21.0
301039	2008 SQ ₃₀₅		4 27.3 29°92	2°0/26.3	18		225035	2007 FB ₄₂		4 27.3 99°73	3°0/24.6	17	
3 22	14 47.36	-10 40.6	1.254	2.107	18.2	20.9	3 22	14 44.00	-9 35.8	1.882	2.719	13.7	21.6
4 1	14 43.11	-10 29.2	1.188	2.110	13.9	20.6	4 1	14 39.37	-8 22.5	1.821	2.736	10.3	21.4
4 11	14 35.77	-10 10.0	1.142	2.114	8.9	20.3	4 11	14 32.76	-7 2.3	1.784	2.753	6.6	21.3
4 21	14 26.19	-9 46.9	1.118	2.118	3.7	20.0	4 21	14 24.86	-5 41.1	1.774	2.770	3.4	21.1
5 1	14 15.73	-9 25.2	1.119	2.123	3.4	20.0	5 1	14 16.58	-4 25.5	1.792	2.786	4.1	21.2
5 11	14 5.94	-9 10.7	1.145	2.127	8.6	20.3	5 11	14 8.87	-3 21.9	1.837	2.802	7.5	21.4
5 21	13 58.12	-9 7.9	1.193	2.133	13.5	20.6	5 21	14 2.50	-2 34.4	1.908	2.818	11.0	21.6
5 31	13 53.13	-9 19.7	1.261	2.138	17.8	20.9	5 31	13 58.01	-2 5.3	2.001	2.833	14.0	21.9
456729	2007 SC ₁₆		4 27.3 219°90	3°4/24.7	16		248073	2004 PT ₄₈		4 27.3 283°02	7°4/3.7	18 R	
3 22	14 45.68	-9 0.5	1.714	2.553	14.7	22.2	3 22	14 46.15	-37 2.3	2.476	3.189	14.2	20.7
4 1	14 41.13	-7 59.1	1.630	2.547	11.2	22.0	4 1	14 41.48	-37 49.0	2.365	3.170	12.4	20.5
4 11	14 34.19	-6 49.2	1.570	2.540	7.3	21.7	4 11	14 34.48	-38 18.5	2.274	3.151	10.4	20.3
4 21	14 25.52	-5 36.5	1.536	2.532	3.8	21.5	4 21	14 25.70	-38 27.4	2.206	3.132	8.5	20.2
5 1	14 16.11	-4 28.0	1.528	2.524	4.5	21.5	5 1	14 15.99	-38 14.0	2.163	3.113	7.4	20.1
5 11	14 7.12	-3 30.8	1.548	2.515	8.4	21.7	5 11	14 6.40	-37 39.7	2.147	3.094	7.8	20.1
5 21	13 59.54	-2 50.2	1.592	2.506	12.5	21.9	5 21	13 57.96	-36 48.6	2.156	3.075	9.4	20.1
5 31	13 54.11	-2 29.1	1.658	2.497	16.1	22.2	5 31	13 51.48	-35 47.1	2.189	3.056	11.7	20.2
87691	2000 SH ₁₃		4 27.3 220°59	3°5/29.8	17		80055	1999 JL ₇₀		4 27.3 20°76	1°6/25.9	18 R	
3 22	14 47.91	-23 41.4	2.033	2.822	14.6	20.2	3 22	14 41.45	-11 35.6	2.063	2.896	12.8	19.1
4 1	14 42.76	-24 5.0	1.939	2.817	11.7	20.0	4 1	14 37.48	-10 58.6	1.984	2.898	9.7	18.9
4 11	14 35.23	-24 15.1	1.868	2.811	8.4	19.8	4 11	14 31.61	-10 14.3	1.930	2.899	6.2	18.7
4 21	14 25.95	-24 10.7	1.821	2.806	5.1	19.6	4 21	14 24.45	-9 26.2	1.901	2.901	2.6	18.5
5 1	14 15.85	-23 52.6	1.801	2.800	3.5	19.5	5 1	14 16.79	-8 39.0	1.901	2.902	2.6	18.5
5 11	14 6.04	-23 24.0	1.810	2.793	5.9	19.6	5 11	14 9.51	-7 57.6	1.928	2.904	6.2	18.7
5 21	13 57.54	-22 50.0	1.845	2.787	9.4	19.8	5 21	14 3.36	-7 25.9	1.980	2.906	9.8	18.9
5 31	13 51.13	-22 16.2	1.904	2.780	12.7	20.0	5 31	13 58.94	-7 6.7	2.056	2.908	12.9	19.1
304726	2006 XS ₂₆		4 27.3 170°17	2°9/24.6	17		283735	2002 WY ₆		4 27.3 159°72	2°6/29.0	18	
3 22	14 42.97	-5 6.9	2.622	3.450	10.6	21.4	3 22						

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4 27.3

4 27.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
203379	2001 <i>XD</i> ₆₁		4 27.3 199°29	3°9/24.8	18		473274	2015 <i>MW</i> ₉₂		4 27.3 311°29	4°5/23.6	17	
3 22	14 49.04	- 5 56.1	1.719	2.556	14.8	20.5	3 22	14 42.70	- 2 22.6	2.062	2.903	12.6	20.7
4 1	14 43.65	- 5 19.7	1.640	2.553	11.4	20.3	4 1	14 38.45	- 1 43.1	1.983	2.897	9.7	20.5
4 11	14 35.79	- 4 39.9	1.583	2.550	7.5	20.1	4 11	14 32.27	- 1 3.5	1.927	2.890	6.7	20.3
4 21	14 26.16	- 4 1.6	1.552	2.546	4.3	19.9	4 21	14 24.75	- 0 28.5	1.898	2.884	4.7	20.2
5 1	14 15.80	- 3 30.2	1.549	2.542	4.9	19.9	5 1	14 16.69	- 0 2.9	1.895	2.879	5.4	20.2
5 11	14 5.88	- 3 10.8	1.572	2.537	8.5	20.1	5 11	14 8.96	+ 0 9.5	1.920	2.873	8.2	20.4
5 21	13 57.44	- 3 6.7	1.620	2.532	12.5	20.3	5 21	14 2.35	+ 0 6.5	1.969	2.867	11.3	20.6
5 31	13 51.23	- 3 19.1	1.690	2.526	16.0	20.5	5 31	13 57.46	- 0 12.4	2.040	2.862	14.1	20.7
184917	2005 <i>UY</i> ₄₆₈		4 27.3 263°41	1°8/29.1	18		291870	2006 <i>PA</i> ₁₀		4 27.3 250°75	3°4/24.7	18	
3 22	14 42.26	-21 36.2	2.594	3.386	11.7	21.0	3 22	14 45.25	- 8 16.4	1.793	2.632	14.2	21.3
4 1	14 37.96	-21 27.4	2.486	3.370	9.2	20.8	4 1	14 40.83	- 7 21.1	1.701	2.617	10.9	21.0
4 11	14 31.91	-21 7.2	2.402	3.353	6.4	20.6	4 11	14 34.05	- 6 18.2	1.632	2.601	7.1	20.8
4 21	14 24.61	-20 36.3	2.345	3.336	3.3	20.4	4 21	14 25.53	- 5 12.9	1.589	2.585	3.8	20.5
5 1	14 16.71	-19 56.6	2.316	3.319	1.9	20.3	5 1	14 16.21	- 4 11.5	1.574	2.568	4.6	20.5
5 11	14 9.01	-19 11.6	2.316	3.302	4.6	20.4	5 11	14 7.19	- 3 20.9	1.585	2.551	8.4	20.7
5 21	14 2.21	-18 25.6	2.344	3.284	7.7	20.6	5 21	13 59.45	- 2 46.0	1.621	2.534	12.4	20.9
5 31	13 56.92	-17 42.9	2.397	3.266	10.7	20.7	5 31	13 53.79	- 2 29.7	1.678	2.516	16.0	21.1
363272	2002 <i>GE</i> ₃₄		4 27.3 10°28	5°6/24.3	17		51351	2000 <i>QO</i> ₂₁₈		4 27.3 190°05	0°7/26.2	18	
3 22	14 41.60	- 5 23.9	1.069	1.946	18.9	19.9	3 22	14 35.02	-11 38.9	4.640	5.454	6.6	19.8
4 1	14 38.99	- 4 34.8	1.013	1.947	14.5	19.6	4 1	14 31.65	-11 17.7	4.551	5.454	4.9	19.7
4 11	14 33.23	- 3 41.9	0.975	1.950	9.7	19.3	4 11	14 27.47	-10 53.4	4.487	5.453	3.1	19.6
4 21	14 25.23	- 2 53.3	0.959	1.954	5.9	19.1	4 21	14 22.76	-10 27.5	4.453	5.452	1.2	19.4
5 1	14 16.39	- 2 18.0	0.966	1.960	6.9	19.2	5 1	14 17.85	-10 1.7	4.449	5.451	1.2	19.4
5 11	14 8.31	- 2 3.1	0.994	1.966	11.2	19.5	5 11	14 13.08	- 9 37.7	4.475	5.450	3.0	19.5
5 21	14 2.25	- 2 11.6	1.043	1.974	15.9	19.7	5 21	14 8.75	- 9 17.2	4.529	5.449	4.9	19.7
5 31	13 59.05	- 2 43.4	1.109	1.983	19.9	20.0	5 31	14 5.15	- 9 1.4	4.610	5.448	6.5	19.8
498775	2008 <i>UM</i> ₁₀₈		4 27.3 199°30	0°2/27.5	17		69659	1998 <i>FE</i> ₁₁₆		4 27.3 29°65	4°1/29.8	18	
3 22	14 46.96	-14 55.8	2.349	3.158	12.3	21.8	3 22	14 46.35	-23 27.1	1.361	2.181	18.9	18.8
4 1	14 41.54	-14 58.6	2.257	3.155	9.4	21.6	4 1	14 42.43	-23 51.0	1.290	2.186	15.1	18.6
4 11	14 34.21	-14 54.3	2.190	3.152	6.1	21.4	4 11	14 35.42	-23 56.0	1.237	2.191	10.8	18.3
4 21	14 25.51	-14 44.2	2.150	3.149	2.5	21.1	4 21	14 26.13	-23 41.0	1.207	2.196	6.3	18.1
5 1	14 16.21	-14 30.2	2.139	3.145	1.4	21.0	5 1	14 15.89	-23 7.9	1.201	2.202	4.1	18.0
5 11	14 7.20	-14 15.5	2.157	3.140	5.1	21.3	5 11	14 6.28	-22 22.5	1.220	2.208	7.3	18.2
5 21	13 59.26	-14 3.2	2.203	3.135	8.6	21.5	5 21	13 58.59	-21 33.1	1.262	2.214	11.7	18.4
5 31	13 53.02	-13 56.4	2.273	3.130	11.7	21.7	5 31	13 53.74	-20 47.8	1.325	2.221	15.9	18.7
21200	1994 <i>PU</i> ₁₀		4 27.3 304°80	3°4/24.5	18		316770	1999 <i>TH</i> ₅₂		4 27.3 132°76	0°6/27.9	18	
3 22	14 42.56	- 7 31.4	1.884	2.727	13.5	19.1	3 22	14 47.51	-18 5.8	1.884	2.696	14.7	22.0
4 1	14 38.47	- 6 38.1	1.809	2.726	10.2	18.9	4 1	14 42.25	-17 42.3	1.810	2.708	11.3	21.8
4 11	14 32.34	- 5 39.5	1.756	2.725	6.7	18.7	4 11	14 34.74	-17 6.2	1.759	2.720	7.4	21.5
4 21	14 24.77	- 4 40.7	1.730	2.725	3.7	18.5	4 21	14 25.72	-16 19.5	1.734	2.732	3.1	21.3
5 1	14 16.65	- 3 47.6	1.731	2.724	4.4	18.6	5 1	14 16.16	-15 26.5	1.736	2.742	1.5	21.2
5 11	14 8.95	- 3 5.8	1.758	2.724	7.8	18.8	5 11	14 7.15	-14 32.8	1.767	2.753	5.8	21.5
5 21	14 2.49	- 2 38.9	1.811	2.723	11.3	19.0	5 21	13 59.58	-13 44.1	1.825	2.762	9.8	21.7
5 31	13 57.90	- 2 29.1	1.885	2.722	14.5	19.2	5 31	13 54.10	-13 5.2	1.906	2.771	13.2	22.0
66957	1999 <i>XO</i> ₂₁		4 27.3 218°35	2°5/25.0	18		154489	2003 <i>EN</i> ₅₁		4 27.3 67°85	11°7/15.0	18	
3 22	14 43.04	- 9 10.3	2.267	3.096	12.0	20.2	3 22	14 44.05	+ 9 59.6	1.594	2.437	15.5	19.5
4 1	14 38.56	- 8 21.4	2.179	3.090	9.1	19.9	4 1	14 39.60	+13 9.7	1.572	2.464	13.1	19.4
4 11	14 32.28	- 7 26.5	2.115	3.083	5.8	19.7	4 11	14 32.95	+16 4.8	1.576	2.492	11.8	19.4
4 21	14 24.74	- 6 29.6	2.079	3.076	2.9	19.5	4 21	14 24.95	+18 32.1	1.605	2.519	11.9	19.5
5 1	14 16.67	- 5 35.4	2.071	3.068	3.4	19.5	5 1	14 16.66	+20 22.1	1.659	2.546	13.3	19.6
5 11	14 8.91	- 4 48.8	2.092	3.060	6.6	19.7	5 11	14 9.12	+21 31.3	1.735	2.573	15.3	19.8
5 21	14 2.17	- 4 13.6	2.139	3.051	9.9	19.9	5 21	14 3.15	+22 1.4	1.829	2.600	17.3	20.0
5 31	13 57.06	- 3 52.3	2.210	3.042	12.8	20.1	5 31	13 59.27	+21 57.2	1.939	2.626	19.0	20.2
180754	2004 <i>NK</i> ₂₇		4 27.3 294°43	1°1/28.4	18		419621	2010 <i>SN</i>		4 27.3 213°28	2°7/25.1	17	
3 22	14 41.18	-19 24.8	2.258	3.068	12.7	20.6	3 22	14 45.23	- 9 57.6	1.868	2.703	13.9	22.0
4 1	14 37.33	-19 7.8	2.159	3.055	9.9	20.3	4 1	14 40.62	- 9 1.3	1.784	2.697	10.6	21.8
4 11	14 31.60	-18 38.9	2.083	3.042	6.6	20.1	4 11	14 33.79	- 7 56.8	1.722	2.691	6.8	21.5
4 21	14 24.50	-17 59.6	2.033	3.029	3.1	19.9	4 21	14 25.39	- 6 48.8	1.687	2.685	3.3	21.3
5 1	14 16.79	-17 12.7	2.010	3.016	1.5	19.7	5 1	14 16.33	- 5 43.4	1.680	2.678	3.8	21.3
5 11	14 9.33	-16 22.6	2.016	3.003	5.0	19.9	5 11	14 7.66	- 4 47.2	1.700	2.670	7.6	21.5
5 21	14 2.89	-15 34.2	2.049	2.990	8.6	20.1	5 21	14 0.28	- 4 5.1	1.746	2.662	11.5	21.7
5 31	13 58.12	-14 52.3	2.105	2.977	11.9	20.3	5 31	13 54.89	- 3 40.1	1.814	2.653	14.9	21.9
106363	2000 <i>VE</i> ₈		4 27.3 73°35	0°1/27.4	18		58066	7579 <i>P-L</i>		4 27.3 202°99	0°7/27.9	18	
3 22	14 42.55	-15 46.5	2.283	3.100	12.3	19.4	3 22	14 46.33	-17 10.5	2.310	3.115	12.6	20.5
4 1	14 38.08	-15 27.0	2.212	3.115	9.4	19.2	4 1	14 41.14	-17 5.8	2.217	3.111	9.7	20.3
4 11	14 31.88	-14 58.8	2.166	3.130	6.0	19.0	4 11	14 33.99	-16 51.8	2.147	3.107	6.4	20.1
4 21	14 24.54	-14 24.3	2.146	3.145	2.4	18.8	4 21	14 25.45	-16 29.7	2.105	3.102	2.8	19.9
5 1	14 16.82	-13 46.7	2.154	3.160	1.4	18.8	5 1	14 16.31	-16 1.9	2.091	3.097	1.4	19.7
5 11	14 9.51	-13 10.1	2.191	3.175	5.0	19.0	5 11	14 7.45	-15 32.1	2.106	3.091	5.1	20.0
5 21	14 3.31	-12 38.3	2.255	3.190	8.3	19.3	5 21	13 59.69	-15 4.1	2.149	3.084	8.6	20.2
5 31	13 58.72	-12 14.5	2.343	3.204	11.2	19.5	5 31	13 53.65	-14 41.8	2.216	3.077	11.8	20.4
407781	2011 <i>YU</i> ₁		4 27.3 96°42	0°4/27.1	18		54514	2000 <i>PA</i> ₁₂		4 27.3 95°82	6°1/1		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
25980	2001 <i>FK</i> ₅₃		4 27.4 258°16	0°8/27.9	18		465969	2011 <i>CN</i> ₆		4 27.4 61°41	8°6/20.8	18	
3 22	14 48.83	-16 53.7	1.963	2.774	14.3	18.2	3 22	14 45.06	+ 4 13.8	1.554	2.404	15.5	20.7
4 1	14 43.64	-16 55.8	1.854	2.752	11.2	17.9	4 1	14 40.37	+ 5 50.4	1.521	2.431	12.3	20.6
4 11	14 35.96	-16 47.8	1.768	2.729	7.4	17.7	4 11	14 33.46	+ 7 19.0	1.509	2.458	9.7	20.5
4 21	14 26.36	-16 30.4	1.708	2.705	3.2	17.3	4 21	14 25.19	+ 8 30.8	1.523	2.485	8.6	20.5
5 1	14 15.74	-16 5.5	1.675	2.681	1.7	17.2	5 1	14 16.63	+ 9 18.8	1.561	2.512	9.7	20.6
5 11	14 5.24	-15 37.3	1.671	2.656	6.1	17.4	5 11	14 8.87	+ 9 39.3	1.623	2.539	12.0	20.8
5 21	13 55.94	-15 10.4	1.694	2.631	10.4	17.6	5 21	14 2.72	+ 9 32.7	1.707	2.566	14.7	21.0
5 31	13 48.72	-14 49.8	1.740	2.604	14.3	17.8	5 31	13 58.71	+ 9 1.9	1.810	2.593	17.1	21.3
174820	2003 <i>YV</i> ₂₀		4 27.4 42°80	0°7/27.8	17		295753	2008 <i>UY</i> ₁₂₉		4 27.4 246°70	0°9/27.9	16	
3 22	14 45.22	-17 10.3	1.381	2.219	17.7	20.4	3 22	14 50.59	-16 38.8	1.617	2.437	16.4	21.4
4 1	14 41.23	-17 0.7	1.316	2.229	13.6	20.1	4 1	14 45.45	-16 44.5	1.520	2.422	12.8	21.1
4 11	14 34.44	-16 36.8	1.272	2.240	8.9	19.9	4 11	14 37.37	-16 39.0	1.443	2.406	8.6	20.8
4 21	14 25.68	-16 1.1	1.252	2.251	3.7	19.6	4 21	14 27.00	-16 22.7	1.392	2.390	3.7	20.5
5 1	14 16.22	-15 18.2	1.256	2.262	1.9	19.5	5 1	14 15.45	-15 58.0	1.367	2.373	1.9	20.3
5 11	14 7.44	-14 35.0	1.285	2.274	7.0	19.8	5 11	14 4.13	-15 29.7	1.369	2.355	7.0	20.6
5 21	14 0.47	-13 57.9	1.339	2.286	11.7	20.1	5 21	13 54.34	-15 3.6	1.396	2.336	11.9	20.8
5 31	13 56.09	-13 32.3	1.413	2.298	15.8	20.4	5 31	13 47.10	-14 45.2	1.445	2.317	16.2	21.0
389025	2008 <i>UM</i> ₂₈₂		4 27.4 116°23	0°2/27.1	17		423502	2005 <i>TT</i> ₁₅₈		4 27.4 157°26	0°4/27.7	17	
3 22	14 44.40	-15 30.7	2.392	3.203	12.0	22.1	3 22	14 45.80	-17 22.3	2.139	2.949	13.3	22.9
4 1	14 39.37	-15 1.2	2.321	3.221	9.1	22.0	4 1	14 40.77	-16 58.1	2.057	2.955	10.2	22.7
4 11	14 32.67	-14 23.1	2.274	3.238	5.8	21.8	4 11	14 33.75	-16 23.0	1.999	2.961	6.7	22.5
4 21	14 24.87	-13 39.0	2.255	3.254	2.3	21.6	4 21	14 25.37	-15 38.9	1.968	2.966	2.7	22.2
5 1	14 16.71	-12 52.5	2.265	3.270	1.4	21.5	5 1	14 16.48	-14 49.6	1.965	2.971	1.4	22.1
5 11	14 9.00	-12 7.8	2.304	3.286	4.9	21.8	5 11	14 8.00	-14 0.0	1.991	2.975	5.3	22.4
5 21	14 2.37	-11 28.7	2.371	3.301	8.2	22.0	5 21	14 0.74	-13 14.8	2.044	2.979	9.0	22.6
5 31	13 57.35	-10 58.5	2.463	3.316	11.0	22.2	5 31	13 55.30	-12 38.4	2.121	2.982	12.2	22.8
118420	1999 <i>TF</i> ₅₉		4 27.4 223°25	0°3/27.6	18		74787	1999 <i>SH</i> ₂		4 27.4 172°58	1°2/26.4	18	
3 22	14 42.02	-16 29.0	2.859	3.664	10.4	21.0	3 22	14 46.96	-12 52.8	2.057	2.877	13.3	20.2
4 1	14 37.51	-16 11.6	2.760	3.655	8.0	20.8	4 1	14 41.70	-12 17.3	1.975	2.881	10.2	20.0
4 11	14 31.50	-15 46.5	2.686	3.646	5.2	20.6	4 11	14 34.38	-11 33.3	1.918	2.884	6.5	19.8
4 21	14 24.44	-15 15.0	2.639	3.637	2.1	20.4	4 21	14 25.63	-10 43.9	1.887	2.886	2.6	19.6
5 1	14 16.93	-14 39.8	2.622	3.628	1.1	20.3	5 1	14 16.33	-9 53.8	1.885	2.888	2.3	19.5
5 11	14 9.63	-14 3.9	2.635	3.618	4.3	20.5	5 11	14 7.45	-9 8.0	1.911	2.889	6.2	19.8
5 21	14 3.15	-13 30.7	2.676	3.608	7.3	20.7	5 21	13 59.83	-8 31.0	1.965	2.889	9.9	20.0
5 31	13 57.98	-13 3.2	2.742	3.598	9.9	20.8	5 31	13 54.09	-8 6.1	2.041	2.889	13.2	20.2
258943	2002 <i>RV</i> ₁₆₀		4 27.4 182°55	0°6/27.9	17		437722	2014 <i>DD</i> ₁₁₁		4 27.4 95°23	2°4/29.3	17	
3 22	14 47.12	-17 42.2	2.106	2.913	13.5	22.4	3 22	14 45.54	-21 43.0	2.201	2.996	13.4	21.4
4 1	14 41.87	-17 23.6	2.018	2.914	10.5	22.2	4 1	14 40.60	-21 53.3	2.122	3.006	10.6	21.2
4 11	14 34.51	-16 53.6	1.954	2.915	6.9	22.0	4 11	14 33.66	-21 51.6	2.066	3.016	7.3	21.0
4 21	14 25.68	-16 14.1	1.917	2.914	2.9	21.7	4 21	14 25.34	-21 38.2	2.036	3.026	4.0	20.8
5 1	14 16.25	-15 28.3	1.908	2.913	1.4	21.6	5 1	14 16.50	-21 14.9	2.034	3.036	2.4	20.7
5 11	14 7.20	-14 41.1	1.927	2.912	5.5	21.9	5 11	14 8.05	-20 45.3	2.060	3.046	5.1	20.9
5 21	13 59.38	-13 57.4	1.974	2.909	9.3	22.1	5 21	14 0.82	-20 13.8	2.113	3.055	8.4	21.1
5 31	13 53.47	-13 21.8	2.045	2.906	12.6	22.3	5 31	13 55.41	-19 45.0	2.191	3.065	11.4	21.3
138656	2000 <i>RQ</i> ₈₁		4 27.4 103°52	1°2/26.0	18		62950	2000 <i>VD</i> ₃₄		4 27.4 199°69	6°0/21.5	18	
3 22	14 41.91	-12 40.8	2.653	3.471	10.8	20.2	3 22	14 45.23	+ 7 22.7	2.777	3.593	10.4	19.0
4 1	14 37.29	-11 53.5	2.586	3.491	8.1	20.0	4 1	14 39.81	+ 7 56.7	2.703	3.590	8.5	18.8
4 11	14 31.25	-10 59.9	2.545	3.512	5.1	19.9	4 11	14 32.90	+ 8 24.5	2.653	3.587	6.8	18.7
4 21	14 24.30	-10 3.1	2.532	3.531	2.1	19.7	4 21	14 24.99	+ 8 42.0	2.631	3.584	6.0	18.6
5 1	14 17.08	- 9 7.1	2.549	3.551	2.0	19.7	5 1	14 16.70	+ 8 45.9	2.637	3.580	6.6	18.7
5 11	14 10.25	- 8 15.9	2.595	3.570	5.0	20.0	5 11	14 8.73	+ 8 34.3	2.671	3.576	8.3	18.8
5 21	14 4.37	- 7 32.8	2.669	3.588	7.8	20.2	5 21	14 1.65	+ 8 6.9	2.730	3.572	10.3	18.9
5 31	13 59.87	- 7 0.4	2.767	3.607	10.3	20.4	5 31	13 55.95	+ 7 24.8	2.811	3.568	12.2	19.0
308021	2004 <i>RU</i> ₂₂₆		4 27.4 228°29	2°6/28.9	16		420067	2011 <i>EF</i> ₁₈		4 27.4 118°86	0°6/27.9	18	
3 22	14 49.83	-20 54.1	1.705	2.511	16.3	21.0	3 22	14 48.34	-17 31.7	2.210	3.013	13.1	22.4
4 1	14 44.69	-21 8.3	1.612	2.503	12.9	20.8	4 1	14 42.50	-17 18.2	2.141	3.034	10.1	22.2
4 11	14 36.76	-21 8.5	1.540	2.494	9.0	20.5	4 11	14 34.74	-16 54.7	2.095	3.055	6.6	22.0
4 21	14 26.71	-20 54.1	1.492	2.484	4.7	20.2	4 21	14 25.72	-16 22.8	2.077	3.074	2.8	21.8
5 1	14 15.63	-20 26.6	1.471	2.474	2.8	20.1	5 1	14 16.31	-15 45.6	2.088	3.093	1.4	21.7
5 11	14 4.86	-19 50.5	1.477	2.464	6.5	20.3	5 11	14 7.41	-15 7.5	2.128	3.112	5.1	22.0
5 21	13 55.63	-19 12.0	1.509	2.452	10.9	20.5	5 21	13 59.79	-14 32.7	2.195	3.129	8.5	22.3
5 31	13 48.86	-18 37.5	1.563	2.441	14.9	20.7	5 31	13 54.01	-14 4.8	2.288	3.146	11.5	22.5
345959	2007 <i>SA</i> ₂₃		4 27.4 262°75	3°5/24.4	17		336902	2011 <i>HQ</i> ₁		4 27.4 349°72	6°6/21.5	17	
3 22	14 44.64	- 5 4.7	2.288	3.118	11.8	21.6	3 22	14 39.36	- 2 37.1	1.560	2.421	14.8	20.0
4 1	14 39.90	- 4 28.6	2.187	3.097	9.1	21.4	4 1	14 36.44	- 0 56.3	1.493	2.417	11.5	19.8
4 11	14 33.26	- 3 49.9	2.111	3.076	6.1	21.1	4 11	14 31.24	+ 0 48.0	1.448	2.413	8.3	19.6
4 21	14 25.22	- 3 12.4	2.062	3.054	3.7	20.9	4 21	14 24.44	+ 2 26.8	1.428	2.410	6.6	19.5
5 1	14 16.51	- 2 40.5	2.041	3.031	4.3	20.9	5 1	14 17.02	+ 3 50.3	1.434	2.408	8.0	19.6
5 11	14 7.99	- 2 18.4	2.049	3.009	7.3	21.1	5 11	14 10.07	+ 4 51.0	1.464	2.406	11.1	19.7
5 21	14 0.43	- 2 8.8	2.083	2.985	10.5	21.2	5 21	14 4.50	+ 5 25.0	1.516	2.405	14.6	19.9
5 31	13 54.51	- 2 13.5	2.139	2.962	13.5	21.4	5 31	14 1.01	+ 5 31.8	1.587	2.404	17.7	20.1
260487	2005 <i>CE</i> ₅₈		4 27.4 59°63	4°1/24.4	18		258886	2002 <i>QO</i> ₆₁		4 27.			

EPHEMERIDES

4 27.4

4 27.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
180517	2004 <i>DX</i> ₃₀		4 27.4 117° 93	3° 6/29.9	17		125441	2001 <i>VT</i> ₁₁₇		4 27.4 152° 85	0° 3/27.6	18	
3 22	14 48.38	-24 4.7	1.744	2.541	16.3	21.0	3 22	14 49.92	-16 11.0	1.764	2.581	15.4	19.9
4 1	14 43.35	-24 21.4	1.667	2.549	13.1	20.8	4 1	14 44.32	-15 59.2	1.687	2.589	11.8	19.7
4 11	14 35.72	-24 21.7	1.610	2.556	9.3	20.6	4 11	14 36.24	-15 36.2	1.633	2.596	7.7	19.5
4 21	14 26.23	-24 4.9	1.577	2.564	5.5	20.4	4 21	14 26.43	-15 3.9	1.604	2.603	3.1	19.2
5 1	14 16.00	-23 32.7	1.571	2.571	3.7	20.3	5 1	14 15.95	-14 26.1	1.603	2.609	1.7	19.1
5 11	14 6.28	-22 49.9	1.592	2.577	6.3	20.5	5 11	14 6.00	-13 48.0	1.630	2.614	6.3	19.4
5 21	13 58.17	-22 2.9	1.639	2.584	10.1	20.7	5 21	13 57.59	-13 14.9	1.683	2.619	10.5	19.7
5 31	13 52.43	-21 18.5	1.708	2.590	13.6	20.9	5 31	13 51.46	-12 51.3	1.759	2.623	14.2	19.9
505060	2011 <i>SN</i> ₁₀₇		4 27.4 151° 29	4° 9/3.0	18		319876	2006 <i>WA</i> ₁₀₈		4 27.4 174° 87	3° 9/23.5	18	
3 22	14 45.94	-33 56.8	3.090	3.806	11.6	22.4	3 22	14 42.76	-1 57.8	2.601	3.431	10.6	21.1
4 1	14 40.55	-34 18.9	2.999	3.815	9.8	22.2	4 1	14 38.07	-1 19.6	2.524	3.432	8.1	21.0
4 11	14 33.48	-34 26.5	2.931	3.823	7.8	22.1	4 11	14 31.86	-0 41.8	2.473	3.433	5.7	20.8
4 21	14 25.25	-34 18.5	2.888	3.831	6.0	22.0	4 21	14 24.62	-0 8.1	2.449	3.434	4.0	20.7
5 1	14 16.56	-33 55.1	2.872	3.838	5.0	21.9	5 1	14 16.99	+ 0 17.7	2.454	3.435	4.6	20.7
5 11	14 8.16	-33 18.6	2.885	3.845	5.4	22.0	5 11	14 9.67	+ 0 32.7	2.488	3.435	6.9	20.9
5 21	14 0.73	-22 32.7	2.926	3.851	7.0	22.1	5 21	14 3.26	+ 0 35.2	2.547	3.435	9.4	21.0
5 31	13 54.82	-31 41.9	2.993	3.857	8.9	22.2	5 31	13 58.24	+ 0 24.5	2.629	3.435	11.8	21.2
191794	2004 <i>TO</i> ₁₆₁		4 27.4 220° 31	0° 1/27.3	18		291348	2006 <i>BH</i> ₂₄₂		4 27.4 292° 23	0° 5/28.1	18	
3 22	14 43.17	-16 53.8	2.069	2.887	13.4	20.4	3 22	14 36.21	-17 27.5	4.270	5.068	7.4	20.7
4 1	14 38.92	-16 13.1	1.979	2.882	10.3	20.1	4 1	14 32.68	-17 18.8	4.173	5.063	5.7	20.6
4 11	14 32.66	-15 20.1	1.913	2.878	6.6	19.9	4 11	14 28.23	-17 4.8	4.101	5.059	3.7	20.4
4 21	14 24.98	-14 17.6	1.873	2.872	2.6	19.6	4 21	14 23.15	-16 46.6	4.057	5.054	1.6	20.3
5 1	14 16.72	-13 10.2	1.861	2.867	1.6	19.5	5 1	14 17.82	-16 25.6	4.044	5.049	0.8	20.2
5 11	14 8.81	-12 3.8	1.878	2.861	5.7	19.8	5 11	14 12.62	-16 3.5	4.060	5.045	2.8	20.4
5 21	14 2.07	-11 4.1	1.921	2.855	9.5	20.0	5 21	14 7.93	-15 42.3	4.105	5.040	4.9	20.5
5 31	13 57.14	-10 15.8	1.988	2.849	12.9	20.2	5 31	14 4.05	-15 23.9	4.177	5.036	6.7	20.6
500363	2012 <i>TG</i> ₃₄		4 27.4 264° 43	5° 5/22.5	17		422211	2014 <i>RR</i> ₅₅		4 27.4 354° 47	1° 5/26.3	17	
3 22	14 43.47	- 0 14.2	2.098	2.936	12.5	20.8	3 22	14 42.91	-14 50.8	1.360	2.209	17.3	21.0
4 1	14 39.10	+ 0 43.6	2.011	2.921	9.8	20.6	4 1	14 39.60	-13 53.9	1.287	2.208	13.3	20.7
4 11	14 32.77	+ 1 41.3	1.948	2.905	7.1	20.4	4 11	14 33.50	-12 41.1	1.235	2.207	8.5	20.5
4 21	14 25.03	+ 2 33.3	1.911	2.890	5.5	20.3	4 21	14 25.41	-11 17.6	1.206	2.206	3.3	20.1
5 1	14 16.67	+ 3 13.7	1.901	2.874	6.5	20.3	5 1	14 16.53	- 9 51.7	1.202	2.206	3.0	20.1
5 11	14 8.59	+ 3 38.1	1.919	2.858	9.1	20.4	5 11	14 8.22	- 8 33.1	1.223	2.206	8.2	20.4
5 21	14 1.58	+ 3 43.9	1.960	2.841	12.1	20.6	5 21	14 1.63	- 7 29.9	1.268	2.206	13.1	20.7
5 31	13 56.28	+ 3 30.5	2.023	2.825	14.9	20.7	5 31	13 57.56	- 6 47.3	1.333	2.206	17.3	21.0
206822	2004 <i>EB</i> ₁₇		4 27.4 20° 37	5° 5/22.8	18		311223	2005 <i>AC</i> ₄₁		4 27.4 115° 54	1° 6/26.3	18	
3 22	14 41.99	- 0 31.1	1.950	2.795	13.0	19.5	3 22	14 47.36	-12 45.0	1.622	2.456	15.7	21.2
4 1	14 37.94	+ 0 23.6	1.883	2.798	10.1	19.4	4 1	14 42.40	-12 6.7	1.556	2.468	11.9	20.9
4 11	14 31.96	+ 1 17.1	1.840	2.800	7.2	19.2	4 11	14 34.99	-11 18.6	1.511	2.480	7.6	20.7
4 21	14 24.68	+ 2 3.6	1.822	2.803	5.6	19.1	4 21	14 25.92	-10 24.9	1.491	2.491	3.0	20.5
5 1	14 16.91	+ 2 37.6	1.832	2.807	6.4	19.1	5 1	14 16.27	- 9 31.3	1.499	2.502	2.8	20.5
5 11	14 9.58	+ 2 55.1	1.867	2.810	9.0	19.3	5 11	14 7.24	- 8 44.3	1.533	2.513	7.2	20.8
5 21	14 3.43	+ 2 54.3	1.925	2.814	12.0	19.5	5 21	13 59.82	- 8 8.9	1.593	2.523	11.4	21.0
5 31	13 59.06	+ 2 35.1	2.005	2.818	14.7	19.7	5 31	13 54.67	- 7 48.6	1.674	2.533	15.1	21.3
82056	2000 <i>TD</i> ₅₀		4 27.4 290° 56	5° 3/22.3	18		429499	2011 <i>AG</i> ₆₈		4 27.4 138° 05	4° 8/23.2	17	
3 22	14 41.16	- 0 30.0	2.174	3.016	12.0	19.2	3 22	14 45.22	- 2 37.6	2.022	2.859	12.9	22.1
4 1	14 37.27	+ 0 30.9	2.088	3.000	9.4	19.0	4 1	14 40.26	- 1 35.4	1.957	2.869	9.9	21.9
4 11	14 31.56	+ 1 32.1	2.025	2.984	6.8	18.8	4 11	14 33.39	- 0 32.6	1.917	2.878	6.9	21.7
4 21	14 24.55	+ 2 28.0	1.989	2.968	5.4	18.7	4 21	14 25.24	+ 0 25.3	1.902	2.887	4.9	21.6
5 1	14 16.96	+ 3 13.0	1.980	2.952	6.3	18.7	5 1	14 16.66	+ 1 12.5	1.916	2.895	5.8	21.7
5 11	14 9.64	+ 3 42.4	1.998	2.937	8.8	18.8	5 11	14 8.56	+ 1 44.4	1.957	2.903	8.5	21.9
5 21	14 3.31	+ 3 53.8	2.040	2.921	11.7	19.0	5 21	14 1.69	+ 1 59.0	2.023	2.911	11.5	22.1
5 31	13 58.59	+ 3 46.3	2.103	2.905	14.4	19.1	5 31	13 56.62	+ 1 55.5	2.110	2.918	14.2	22.3
299896	2006 <i>SP</i> ₃₆₀		4 27.4 224° 27	1° 0/26.3	17		36561	2000 <i>QJ</i> ₁₀₉		4 27.4 185° 94	2° 1/25.7	18	
3 22	14 41.09	-13 35.8	2.490	3.311	11.3	21.7	3 22	14 45.39	- 9 41.8	2.070	2.899	13.0	19.8
4 1	14 36.98	-12 50.3	2.399	3.305	8.6	21.5	4 1	14 40.52	- 9 9.7	1.989	2.899	9.8	19.5
4 11	14 31.24	-11 56.5	2.333	3.300	5.4	21.3	4 11	14 33.65	- 8 32.0	1.931	2.899	6.3	19.3
4 21	14 24.38	-10 57.4	2.294	3.294	2.2	21.0	4 21	14 25.38	- 7 52.1	1.900	2.898	2.9	19.1
5 1	14 17.07	- 9 57.1	2.284	3.287	2.0	21.0	5 1	14 16.56	- 7 14.5	1.897	2.897	3.1	19.1
5 11	14 10.04	- 9 0.3	2.304	3.281	5.3	21.2	5 11	14 8.11	- 6 43.5	1.922	2.895	6.6	19.3
5 21	14 3.93	- 8 11.2	2.350	3.274	8.5	21.4	5 21	14 0.84	- 6 22.7	1.974	2.893	10.1	19.5
5 31	13 59.28	- 7 33.0	2.421	3.267	11.4	21.6	5 31	13 55.39	- 6 14.5	2.048	2.891	13.3	19.7
379877	2012 <i>HB</i> ₄₇		4 27.4 108° 13	2° 3/25.5	18		269548	2009 <i>WR</i>		4 27.4 255° 85	2° 3/25.4	17	
3 22	14 46.53	-19 37.8	1.132	1.976	20.4	21.0	3 22	14 44.67	-10 23.5	1.996	2.827	13.3	21.7
4 1	14 42.60	-17 9.7	1.069	1.988	15.5	20.7	4 1	14 40.23	- 9 37.6	1.897	2.809	10.2	21.5
4 11	14 35.44	-14 10.3	1.027	1.999	9.7	20.4	4 11	14 33.63	- 8 43.4	1.822	2.791	6.6	21.2
4 21	14 26.12	-10 51.3	1.009	2.010	3.7	20.1	4 21	14 25.44	- 7 44.8	1.773	2.771	3.0	21.0
5 1	14 16.17	- 7 31.3	1.018	2.020	4.3	20.2	5 1	14 16.50	- 6 47.2	1.753	2.752	3.4	20.9
5 11	14 7.21	- 4 30.1	1.054	2.030	10.2	20.5	5 11	14 7.79	- 5 56.5	1.760	2.732	7.2	21.1
5 21	14 0.46	- 2 2.4	1.114	2.040	15.5	20.8	5 21	14 0.21	- 5 17.4	1.792	2.711	11.1	21.3
5 31	13 56.64	- 0 14.8	1.193	2.050	20.0	21.1	5 31	13 54.51	- 4 53.5	1.848	2.690	14.5	21.5
398683	2012 <i>VM</i> ₈₈		4 27.4 113° 93	0° 9/26.5	17		259721						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
472158	2014 <i>DB</i> ₁₅		4 27.4 313°65	6°1/21.4	17		248482	2005 <i>UE</i> ₂₁₅		4 27.4 253°23	3°7/23.4	16	
3 22	14 41.15	+ 1 9.0	2.080	2.923	12.4	21.5	3 22	14 40.92	- 3 47.1	2.564	3.397	10.6	20.7
4 1	14 37.23	+ 2 23.8	2.010	2.921	9.7	21.3	4 1	14 36.82	- 2 54.2	2.475	3.386	8.1	20.5
4 11	14 31.50	+ 3 37.1	1.964	2.919	7.3	21.1	4 11	14 31.16	- 1 59.4	2.411	3.373	5.6	20.3
4 21	14 24.52	+ 4 42.6	1.945	2.917	6.1	21.0	4 21	14 24.41	- 1 6.7	2.374	3.361	3.8	20.2
5 1	14 17.07	+ 5 34.3	1.952	2.915	7.1	21.1	5 1	14 17.20	- 0 20.7	2.366	3.349	4.5	20.2
5 11	14 10.00	+ 6 7.5	1.985	2.913	9.5	21.2	5 11	14 10.22	+ 0 14.7	2.386	3.336	7.0	20.3
5 21	14 4.01	+ 6 20.2	2.042	2.911	12.2	21.4	5 21	14 4.10	+ 0 36.9	2.432	3.323	9.7	20.5
5 31	13 59.68	+ 6 12.3	2.120	2.910	14.7	21.6	5 31	13 59.35	+ 0 44.3	2.501	3.310	12.2	20.6
410381	2007 <i>VF</i> ₂₃₈		4 27.4 119°71	0°9/26.7	18		235139	2003 <i>QC</i> ₆₉		4 27.4 245°91	1°2/28.3	18	
3 22	14 49.44	-13 12.9	1.806	2.629	14.8	21.9	3 22	14 47.40	-18 5.5	2.387	3.186	12.4	20.5
4 1	14 43.73	-12 52.0	1.739	2.645	11.3	21.7	4 1	14 42.10	-18 11.2	2.278	3.168	9.7	20.3
4 11	14 35.73	-12 22.6	1.695	2.662	7.2	21.5	4 11	14 34.77	-18 7.8	2.194	3.150	6.5	20.1
4 21	14 26.19	-11 47.6	1.678	2.677	2.8	21.3	4 21	14 25.93	-17 55.9	2.136	3.131	3.0	19.8
5 1	14 16.15	-11 11.4	1.688	2.692	2.1	21.2	5 1	14 16.32	-17 37.0	2.107	3.112	1.6	19.7
5 11	14 6.72	-10 38.8	1.726	2.707	6.4	21.5	5 11	14 6.87	-17 14.2	2.107	3.092	5.0	19.9
5 21	13 58.80	-10 14.1	1.791	2.721	10.4	21.8	5 21	13 58.41	-16 51.2	2.135	3.071	8.6	20.1
5 31	13 53.05	-10 0.5	1.878	2.734	13.8	22.0	5 31	13 51.65	-16 31.9	2.189	3.050	11.9	20.2
425770	2011 <i>CQ</i> ₃₁		4 27.4 160°71	4°0/23.7	17		174028	2001 <i>YM</i> ₁₅₀		4 27.4 84°08	3°0/24.3	18	
3 22	14 44.62	- 5 12.6	2.113	2.947	12.5	22.5	3 22	14 41.84	- 7 23.8	2.320	3.153	11.6	20.5
4 1	14 39.79	- 4 9.2	2.041	2.953	9.5	22.3	4 1	14 37.45	- 6 24.5	2.260	3.173	8.7	20.4
4 11	14 33.10	- 3 2.6	1.993	2.958	6.4	22.1	4 11	14 31.48	- 5 21.7	2.226	3.193	5.7	20.2
4 21	14 25.14	- 1 58.1	1.973	2.962	4.1	22.0	4 21	14 24.50	- 4 19.9	2.218	3.212	3.2	20.1
5 1	14 16.74	- 1 1.4	1.981	2.966	4.9	22.1	5 1	14 17.21	- 3 23.9	2.240	3.231	3.8	20.2
5 11	14 8.75	- 0 17.5	2.016	2.970	7.8	22.2	5 11	14 10.38	- 2 38.1	2.289	3.250	6.5	20.4
5 21	14 1.93	+ 0 10.5	2.077	2.973	10.9	22.4	5 21	14 4.59	- 2 5.3	2.365	3.269	9.4	20.6
5 31	13 56.83	+ 0 21.4	2.161	2.975	13.7	22.6	5 31	14 0.32	- 1 47.1	2.464	3.288	11.9	20.8
1232	<i>Cortusa</i>		4 27.4 341°75	3°8/30.9	18		377409	2004 <i>TS</i> ₆₈		4 27.4 212°64	1°3/26.3	18	
3 22	14 40.47	-27 15.0	2.011	2.799	14.8	14.9	3 22	14 46.14	-11 11.2	2.310	3.129	12.1	21.6
4 1	14 37.14	-27 8.1	1.919	2.793	12.0	14.7	4 1	14 40.99	-10 51.1	2.218	3.123	9.2	21.4
4 11	14 31.67	-26 42.9	1.848	2.787	8.8	14.5	4 11	14 33.95	-10 25.2	2.150	3.115	5.9	21.2
4 21	14 24.66	-25 59.2	1.801	2.781	5.6	14.3	4 21	14 25.56	- 9 56.0	2.109	3.108	2.4	21.0
5 1	14 16.99	-24 59.5	1.780	2.776	3.8	14.1	5 1	14 16.59	- 9 26.8	2.097	3.100	2.3	20.9
5 11	14 9.69	-23 48.8	1.786	2.772	5.7	14.2	5 11	14 7.89	- 9 1.3	2.114	3.091	5.8	21.1
5 21	14 3.62	-22 33.8	1.818	2.768	9.0	14.4	5 21	14 0.24	- 8 43.0	2.159	3.081	9.2	21.3
5 31	13 59.47	-21 21.7	1.875	2.764	12.3	14.6	5 31	13 54.26	- 8 34.4	2.227	3.072	12.3	21.5
501153	2013 <i>TG</i> ₇₂		4 27.4 190°68	0°4/27.7	17		503471	2016 <i>ES</i> ₁₄₇		4 27.4 77°58	2°0/26.2	17	
3 22	14 45.82	-16 54.9	2.184	2.994	13.0	22.8	3 22	14 47.89	-10 17.0	1.563	2.402	15.9	21.6
4 1	14 40.86	-16 39.3	2.095	2.993	10.1	22.6	4 1	14 42.92	- 9 59.8	1.498	2.413	12.1	21.4
4 11	14 33.89	-16 13.7	2.030	2.992	6.6	22.4	4 11	14 35.41	- 9 36.3	1.455	2.425	7.7	21.2
4 21	14 25.51	-15 39.5	1.992	2.990	2.7	22.2	4 21	14 26.16	- 9 10.1	1.437	2.436	3.3	20.9
5 1	14 16.54	-15 0.1	1.982	2.987	1.4	22.1	5 1	14 16.29	- 8 45.8	1.446	2.448	3.1	21.0
5 11	14 7.92	-14 19.7	2.000	2.985	5.3	22.3	5 11	14 7.06	- 8 28.3	1.480	2.459	7.5	21.2
5 21	14 0.45	-13 42.9	2.046	2.981	9.0	22.5	5 21	13 59.47	- 8 21.4	1.540	2.471	11.7	21.5
5 31	13 54.77	-13 13.6	2.116	2.978	12.2	22.7	5 31	13 54.23	- 8 27.2	1.621	2.482	15.3	21.8
311206	2004 <i>XR</i> ₁₄₄		4 27.4 121°98	1°8/26.1	18		343900	2011 <i>JD</i> ₁₂		4 27.4 270°50	2°9/25.4	17	
3 22	14 48.43	-11 38.7	1.707	2.538	15.2	21.8	3 22	14 47.08	- 6 25.8	2.052	2.882	13.0	20.4
4 1	14 43.09	-11 3.3	1.641	2.552	11.5	21.6	4 1	14 42.03	- 6 12.6	1.955	2.865	10.0	20.2
4 11	14 35.38	-10 19.7	1.598	2.566	7.3	21.4	4 11	14 34.80	- 5 57.1	1.881	2.847	6.6	19.9
4 21	14 26.08	- 9 32.0	1.580	2.579	3.0	21.2	4 21	14 25.96	- 5 42.6	1.834	2.830	3.4	19.7
5 1	14 16.26	- 8 45.6	1.589	2.592	2.9	21.2	5 1	14 16.35	- 5 32.6	1.815	2.812	3.7	19.7
5 11	14 7.04	- 8 6.0	1.626	2.604	7.1	21.5	5 11	14 6.94	- 5 30.8	1.824	2.793	7.2	19.9
5 21	13 59.39	- 7 37.8	1.689	2.615	11.1	21.7	5 21	13 58.66	- 5 39.5	1.858	2.775	10.9	20.0
5 31	13 53.94	- 7 23.8	1.774	2.626	14.6	22.0	5 31	13 52.24	- 6 0.4	1.916	2.756	14.2	20.2
36564	2000 <i>QD</i> ₁₁₆		4 27.4 170°15	1°4/28.5	18		501133	2013 <i>TN</i> ₃₅		4 27.4 205°56	1°5/28.8	17	
3 22	14 46.84	-19 20.8	2.202	3.002	13.2	19.7	3 22	14 46.24	-20 44.8	2.526	3.316	12.1	23.2
4 1	14 41.62	-19 17.6	2.115	3.006	10.3	19.5	4 1	14 41.01	-20 31.5	2.426	3.309	9.5	23.0
4 11	14 34.38	-19 3.3	2.052	3.008	6.9	19.3	4 11	14 33.94	-20 6.7	2.350	3.302	6.4	22.8
4 21	14 25.71	-18 38.8	2.016	3.011	3.3	19.0	4 21	14 25.56	-19 31.2	2.301	3.294	3.2	22.6
5 1	14 16.46	-18 6.6	2.007	3.012	1.7	18.9	5 1	14 16.61	-18 47.5	2.281	3.286	1.7	22.5
5 11	14 7.57	-17 30.5	2.028	3.014	5.1	19.2	5 11	14 7.93	-17 59.4	2.291	3.276	4.7	22.7
5 21	13 59.87	-16 55.1	2.076	3.015	8.7	19.4	5 21	14 0.26	-17 11.3	2.330	3.266	8.0	22.9
5 31	13 54.01	-16 24.8	2.148	3.015	11.9	19.6	5 31	13 54.20	-16 27.8	2.393	3.256	11.0	23.0
201626	2003 <i>SB</i> ₂₅₉		4 27.4 194°94	0°6/27.9	18		137904	2000 <i>AU</i> ₂₁₇		4 27.4 200°72	0°9/28.1	17	
3 22	14 45.19	-17 9.4	2.306	3.114	12.5	20.8	3 22	14 47.32	-18 36.0	2.113	2.917	13.6	21.8
4 1	14 40.29	-17 1.4	2.216	3.112	9.7	20.6	4 1	14 42.13	-18 17.7	2.020	2.913	10.6	21.6
4 11	14 33.49	-16 44.0	2.150	3.110	6.4	20.4	4 11	14 34.80	-17 47.4	1.950	2.909	7.0	21.4
4 21	14 25.36	-16 18.6	2.110	3.108	2.7	20.2	4 21	14 25.93	-17 6.3	1.907	2.903	3.1	21.1
5 1	14 16.66	-15 47.8	2.100	3.105	1.3	20.1	5 1	14 16.40	-16 17.9	1.892	2.897	1.5	21.0
5 11	14 8.26	-15 15.4	2.118	3.102	5.0	20.3	5 11	14 7.21	-15 26.9	1.905	2.891	5.4	21.2
5 21	14 0.95	-14 45.3	2.163	3.099	8.5	20.5	5 21	13 59.23	-14 38.6	1.946	2.883	9.3	21.5
5 31	13 55.33	-14 21.3	2.233	3.095	11.6	20.7	5 31	13 53.17	-13 58.0	2.012	2.875	12.7	21.7
471467	2011 <i>UM</i> ₃₀₉		4 27.4 191°99	3°3/23.6	18		463883	2014 <i>UQ</i> ₆₅		4 27.4 9			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
160397	2004 <i>PJ</i> ₈₅		4 27.4 290°91	3°0/28.8	18		290994	2005 <i>XB</i> ₇₃		4 27.4 108°43	3°8/29.9	18	
3 22	14 49.15	-19 43.2	1.415	2.239	18.1	19.8	3 22	14 49.45	-24 24.7	1.480	2.286	18.3	21.1
4 1	14 45.10	-20 15.9	1.310	2.212	14.6	19.5	4 1	14 44.57	-24 31.4	1.410	2.297	14.7	20.9
4 11	14 37.68	-20 36.1	1.225	2.184	10.2	19.2	4 11	14 36.73	-24 18.2	1.359	2.308	10.4	20.6
4 21	14 27.41	-20 42.0	1.162	2.156	5.4	18.8	4 21	14 26.79	-23 44.7	1.331	2.318	6.0	20.4
5 1	14 15.43	-20 33.4	1.124	2.128	3.3	18.6	5 1	14 16.05	-22 53.5	1.328	2.329	3.8	20.3
5 11	14 3.40	-20 13.7	1.111	2.099	7.8	18.8	5 11	14 6.00	-21 51.6	1.351	2.339	6.9	20.5
5 21	13 52.95	-19 49.2	1.121	2.071	13.2	19.0	5 21	13 57.85	-20 47.3	1.399	2.348	11.2	20.8
5 31	13 45.44	-19 27.4	1.152	2.043	18.2	19.2	5 31	13 52.43	-19 49.0	1.469	2.357	15.1	21.0
359636	2011 <i>QM</i> ₆₂		4 27.4 95°44	4°0/29.8	18		30506	2000 <i>RO</i> ₈₅		4 27.4 237°34	4°0/3.9	18	
3 22	14 50.18	-23 44.6	1.431	2.240	18.7	21.2	3 22	14 39.43	-36 15.5	4.696	5.387	8.2	18.6
4 1	14 45.24	-24 6.5	1.361	2.251	14.9	21.0	4 1	14 35.25	-36 37.5	4.591	5.382	7.0	18.5
4 11	14 37.21	-24 9.6	1.311	2.261	10.6	20.7	4 11	14 29.99	-36 49.4	4.508	5.378	5.8	18.4
4 21	14 26.96	-23 52.9	1.284	2.272	6.2	20.5	4 21	14 23.97	-36 50.6	4.450	5.373	4.7	18.3
5 1	14 15.85	-23 18.2	1.282	2.282	4.1	20.4	5 1	14 17.61	-36 41.0	4.420	5.368	4.0	18.2
5 11	14 5.42	-22 31.5	1.305	2.292	7.1	20.6	5 11	14 11.38	-36 22.0	4.418	5.363	4.2	18.3
5 21	13 56.96	-21 40.8	1.353	2.302	11.4	20.9	5 21	14 5.70	-35 55.3	4.444	5.359	5.1	18.3
5 31	13 51.34	-20 54.1	1.423	2.312	15.4	21.1	5 31	14 0.93	-35 23.6	4.496	5.354	6.3	18.4
138741	2000 <i>SE</i> ₂₁₃		4 27.4 148°29	2°5/24.8	18		60608	2000 <i>EE</i> ₁₇₃		4 27.4 13°46	0°2/29.5	14 C	
3 22	14 42.62	-6 26.1	2.808	3.632	10.1	20.8	3 22	14 23.97	-20 33.6	24.963	25.743	1.4	22.7
4 1	14 37.86	-5 53.6	2.732	3.640	7.6	20.6	4 1	14 22.99	-20 30.2	24.878	25.755	1.1	22.7
4 11	14 31.71	-5 19.0	2.682	3.647	5.0	20.5	4 11	14 21.88	-20 25.8	24.820	25.767	0.7	22.7
4 21	14 24.62	-4 45.3	2.660	3.654	2.8	20.3	4 21	14 20.69	-20 20.5	24.789	25.779	0.4	22.6
5 1	14 17.19	-4 15.7	2.668	3.661	3.2	20.4	5 1	14 19.47	-20 14.6	24.788	25.790	0.2	22.6
5 11	14 10.08	-3 53.1	2.705	3.667	5.6	20.5	5 11	14 18.27	-20 8.3	24.817	25.802	0.5	22.6
5 21	14 3.81	-3 39.8	2.768	3.673	8.2	20.7	5 21	14 17.14	-20 1.9	24.875	25.814	0.8	22.7
5 31	13 58.85	-3 36.8	2.857	3.678	10.5	20.9	5 31	14 16.12	-19 55.6	24.959	25.826	1.2	22.7
196821	2003 <i>SC</i> ₂₃₃		4 27.4 312°04	0°1/27.5	18		2241	Alcathous		4 27.4 16°77	3°1/2.6	18	
3 22	14 46.96	-13 44.5	1.762	2.590	14.9	19.7	3 22	14 36.93	-31 20.6	4.111	4.844	8.7	15.7
4 1	14 42.34	-14 0.7	1.671	2.579	11.5	19.5	4 1	14 33.39	-31 15.7	4.013	4.845	7.2	15.6
4 11	14 35.21	-14 10.2	1.602	2.568	7.5	19.2	4 11	14 28.79	-31 0.2	3.939	4.847	5.6	15.5
4 21	14 26.19	-14 13.8	1.559	2.558	3.1	18.9	4 21	14 23.48	-30 34.2	3.891	4.849	4.0	15.4
5 1	14 16.26	-14 13.7	1.542	2.548	1.7	18.8	5 1	14 17.90	-29 58.6	3.871	4.850	3.1	15.3
5 11	14 6.61	-14 13.1	1.553	2.538	6.4	19.1	5 11	14 12.51	-29 15.6	3.880	4.852	3.6	15.4
5 21	13 58.31	-14 15.5	1.588	2.529	10.7	19.3	5 21	14 7.73	-28 27.8	3.918	4.854	5.1	15.5
5 31	13 52.21	-14 24.3	1.647	2.520	14.6	19.5	5 31	14 3.91	-27 38.3	3.983	4.856	6.7	15.6
140618	2001 <i>UC</i> ₉		4 27.4 320°70	1°8/28.6	17		68982	2002 <i>SR</i> ₂₉		4 27.4 146°03	0°3/27.6	18	
3 22	14 46.61	-18 17.6	2.008	2.818	14.0	19.7	3 22	14 48.87	-15 30.3	1.861	2.678	14.7	19.4
4 1	14 41.81	-18 45.4	1.916	2.811	11.0	19.4	4 1	14 43.47	-15 27.0	1.783	2.685	11.3	19.2
4 11	14 34.74	-19 4.3	1.847	2.804	7.5	19.2	4 11	14 35.72	-15 14.3	1.728	2.692	7.3	19.0
4 21	14 25.98	-19 14.0	1.803	2.798	3.7	19.0	4 21	14 26.34	-14 53.7	1.699	2.698	3.0	18.7
5 1	14 16.42	-19 15.4	1.787	2.792	2.1	18.8	5 1	14 16.30	-14 28.3	1.697	2.703	1.6	18.6
5 11	14 7.12	-19 11.4	1.799	2.786	5.6	19.0	5 11	14 6.74	-14 2.4	1.724	2.708	6.0	18.9
5 21	13 59.05	-19 5.3	1.837	2.780	9.4	19.3	5 21	13 58.60	-13 40.4	1.776	2.713	10.0	19.2
5 31	13 52.96	-19 1.3	1.899	2.774	12.8	19.5	5 31	13 52.60	-13 26.4	1.852	2.717	13.5	19.4
233560	2007 <i>PZ</i>		4 27.4 294°55	3°8/30.1	17		381467	2008 <i>RX</i> ₁₁₉		4 27.4 218°67	0°6/26.9	17	
3 22	14 44.75	-24 35.0	1.884	2.680	15.3	20.6	3 22	14 45.38	-13 36.5	2.032	2.855	13.4	21.8
4 1	14 40.70	-24 51.5	1.785	2.666	12.4	20.3	4 1	14 40.69	-13 21.7	1.946	2.852	10.3	21.6
4 11	14 34.18	-24 52.5	1.708	2.652	9.0	20.1	4 11	14 33.90	-12 58.9	1.883	2.849	6.6	21.3
4 21	14 25.80	-24 37.0	1.654	2.638	5.5	19.8	4 21	14 25.62	-12 30.3	1.845	2.845	2.6	21.1
5 1	14 16.50	-24 5.9	1.626	2.625	3.8	19.7	5 1	14 16.70	-11 59.4	1.836	2.841	1.8	21.0
5 11	14 7.45	-23 23.3	1.626	2.611	6.2	19.8	5 11	14 8.13	-11 30.5	1.855	2.837	5.9	21.3
5 21	13 59.70	-22 35.0	1.651	2.598	9.9	20.0	5 21	14 0.74	-11 7.6	1.900	2.833	9.7	21.5
5 31	13 54.12	-21 47.6	1.699	2.584	13.5	20.2	5 31	13 55.23	-10 54.1	1.969	2.829	13.1	21.7
392552	2011 <i>SA</i> ₄₆		4 27.4 148°69	1°7/25.5	17		211113	2002 <i>FF</i> ₃₄		4 27.4 355°69	4°6/25.3	17	
3 22	14 41.16	-11 9.8	2.489	3.314	11.1	21.7	3 22	14 42.59	-5 48.8	1.042	1.918	19.3	19.4
4 1	14 36.99	-10 19.9	2.409	3.318	8.4	21.5	4 1	14 40.10	-5 31.9	0.978	1.912	14.9	19.1
4 11	14 31.26	-9 23.6	2.355	3.322	5.3	21.3	4 11	14 34.26	-5 12.5	0.932	1.908	9.9	18.8
4 21	14 24.48	-8 24.4	2.328	3.326	2.4	21.1	4 21	14 25.93	-4 56.7	0.907	1.904	5.3	18.5
5 1	14 17.31	-7 26.7	2.330	3.329	2.6	21.1	5 1	14 16.52	-4 51.5	0.904	1.903	5.8	18.5
5 11	14 10.47	-6 34.9	2.361	3.333	5.6	21.3	5 11	14 7.73	-5 2.4	0.923	1.903	10.6	18.8
5 21	14 4.57	-5 52.7	2.419	3.336	8.6	21.5	5 21	14 1.00	-5 31.9	0.962	1.904	15.7	19.1
5 31	14 0.11	-5 22.5	2.501	3.339	11.3	21.7	5 31	13 57.32	-6 20.3	1.019	1.907	20.2	19.3
487545	2014 <i>UB</i> ₂₀₄		4 27.4 230°42	0°0/27.4	17		503731	2016 <i>LM</i> ₇		4 27.4 356°37	6°8/22.3	17	
3 22	14 35.00	-15 41.1	4.545	5.349	6.8	21.6	3 22	14 43.26	+ 0 11.7	1.601	2.454	14.9	20.6
4 1	14 31.74	-15 15.7	4.450	5.346	5.2	21.5	4 1	14 39.40	+ 1 19.5	1.535	2.453	11.7	20.4
4 11	14 27.64	-14 45.5	4.381	5.343	3.3	21.4	4 11	14 33.19	+ 2 25.8	1.491	2.452	8.6	20.2
4 21	14 23.00	-14 11.9	4.341	5.339	1.3	21.2	4 21	14 25.34	+ 3 23.2	1.472	2.451	6.9	20.1
5 1	14 18.14	-13 36.6	4.331	5.336	0.8	21.1	5 1	14 16.88	+ 4 4.2	1.478	2.451	7.9	20.2
5 11	14 13.42	-13 1.7	4.351	5.333	2.8	21.3	5 11	14 8.91	+ 4 23.6	1.508	2.451	10.9	20.3
5 21	14 9.16	-12 29.1	4.400	5.330	4.7	21.5	5 21	14 2.37	+ 4 19.6	1.561	2.451	14.2	20.5
5 31	14 5.64	-12 0.6	4.476	5.326	6.5	21.6	5 31	13 57.97	+ 3 52.8	1.634	2.452	17.2	20.7
57835	2001 <i>XO</i> ₃₆		4 27.4 210°95	1°5/28.7	17		475183	2005 <i>UP</i> ₄₈₆		4 27.4 214°60	2°4/30.5		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
193095	2000 <i>GB</i> ₁₁₂		4 27.4	69°85	2°0/26.4	18	109706	2001 <i>RU</i> ₄₃		4 27.4	170°86	1°3/26.2	17
3 22	14 48.52	-11 10.7	1.303	2.152	18.0	19.6	3 22	14 45.32	-12 51.8	2.309	3.127	12.2	20.8
4 1	14 43.94	-10 51.8	1.240	2.160	13.7	19.3	4 1	14 40.29	-12 5.6	2.227	3.131	9.2	20.6
4 11	14 36.35	-10 24.3	1.196	2.168	8.8	19.1	4 11	14 33.46	-11 11.1	2.169	3.135	5.9	20.4
4 21	14 26.65	-9 52.3	1.176	2.176	3.6	18.8	4 21	14 25.41	-10 11.8	2.139	3.138	2.4	20.2
5 1	14 16.16	-9 21.5	1.181	2.184	3.3	18.8	5 1	14 16.90	-9 12.3	2.138	3.140	2.3	20.2
5 11	14 6.38	-8 58.0	1.211	2.193	8.3	19.1	5 11	14 8.77	-8 17.4	2.166	3.142	5.7	20.4
5 21	13 58.54	-8 46.6	1.264	2.201	13.1	19.4	5 21	14 1.72	-7 31.4	2.222	3.143	9.1	20.6
5 31	13 53.45	-8 50.3	1.337	2.210	17.3	19.7	5 31	13 56.32	-6 57.5	2.302	3.143	12.1	20.8
158264	2001 <i>TZ</i> ₁₇₇		4 27.4	295°17	0°8/27.9	16	465846	2010 <i>OK</i> ₁₂₂		4 27.4	68°32	3°7/30.6	18
3 22	14 43.07	-19 27.8	1.327	2.166	18.2	20.2	3 22	14 46.66	-27 6.0	1.567	2.363	17.9	20.7
4 1	14 40.26	-18 54.0	1.233	2.145	14.4	19.9	4 1	14 42.09	-26 41.9	1.507	2.387	14.3	20.5
4 11	14 34.35	-17 58.5	1.158	2.125	9.6	19.6	4 11	14 34.89	-25 54.9	1.466	2.411	10.2	20.3
4 21	14 26.02	-16 43.3	1.105	2.104	4.2	19.2	4 21	14 26.00	-24 46.3	1.450	2.435	6.0	20.1
5 1	14 16.43	-15 14.0	1.077	2.084	2.0	19.0	5 1	14 16.63	-23 21.0	1.459	2.459	3.8	20.0
5 11	14 7.14	-13 40.5	1.074	2.063	7.8	19.3	5 11	14 8.07	-21 47.7	1.495	2.483	6.3	20.2
5 21	13 59.54	-12 13.8	1.094	2.043	13.5	19.5	5 21	14 1.33	-20 15.6	1.556	2.506	10.2	20.5
5 31	13 54.72	-11 3.6	1.134	2.024	18.5	19.8	5 31	13 57.03	-18 53.0	1.641	2.530	13.8	20.8
389857	2012 <i>RQ</i> ₂₈		4 27.4	213°99	4°3/1.1	18	297477	2000 <i>TV</i> ₄₁		4 27.4	103°83	4°8/24.0	18
3 22	14 48.26	-28 3.2	2.554	3.309	12.8	21.9	3 22	14 48.66	-4 42.2	1.631	2.472	15.3	20.4
4 1	14 42.76	-28 31.3	2.451	3.301	10.6	21.7	4 1	14 43.23	-3 41.2	1.578	2.492	11.6	20.2
4 11	14 35.22	-28 46.2	2.371	3.294	8.0	21.5	4 11	14 35.47	-2 38.2	1.547	2.512	7.8	20.0
4 21	14 26.17	-28 46.3	2.316	3.286	5.5	21.4	4 21	14 26.21	-1 39.7	1.541	2.531	5.0	19.9
5 1	14 16.39	-28 31.6	2.290	3.277	4.3	21.3	5 1	14 16.52	-0 52.2	1.563	2.550	5.8	20.0
5 11	14 6.83	-28 4.5	2.293	3.268	5.5	21.3	5 11	14 7.54	-0 21.1	1.611	2.568	9.1	20.2
5 21	13 58.31	-27 28.8	2.323	3.258	8.1	21.5	5 21	14 0.18	-0 8.8	1.683	2.586	12.6	20.4
5 31	13 51.55	-26 49.9	2.379	3.248	10.8	21.6	5 31	13 55.04	-0 15.7	1.776	2.603	15.7	20.7
364164	2006 <i>HE</i> ₁₂₀		4 27.4	348°41	0°3/27.3	17	126420	2002 <i>BK</i> ₂₉		4 27.4	166°31	0°6/26.9	17
3 22	14 42.94	-16 23.4	1.276	2.125	18.2	20.7	3 22	14 47.32	-13 12.3	2.584	3.391	11.3	21.2
4 1	14 39.94	-15 54.1	1.202	2.122	14.1	20.4	4 1	14 41.63	-12 55.2	2.499	3.397	8.6	21.0
4 11	14 33.95	-15 8.3	1.148	2.118	9.1	20.1	4 11	14 34.25	-12 31.8	2.440	3.403	5.5	20.8
4 21	14 25.76	-14 9.5	1.116	2.116	3.6	19.8	4 21	14 25.72	-12 4.1	2.409	3.408	2.2	20.6
5 1	14 16.64	-13 4.2	1.108	2.114	2.2	19.7	5 1	14 16.75	-11 34.8	2.408	3.412	1.6	20.6
5 11	14 8.07	-12 1.3	1.124	2.112	7.8	20.0	5 11	14 8.12	-11 7.4	2.437	3.416	4.9	20.8
5 21	14 1.31	-11 8.8	1.164	2.111	13.0	20.3	5 21	14 0.49	-10 44.9	2.494	3.418	8.1	21.0
5 31	13 57.26	-10 33.0	1.223	2.111	17.5	20.6	5 31	13 54.40	-10 30.0	2.576	3.420	10.9	21.2
472612	2015 <i>DT</i> ₁₆₃		4 27.4	353°21	2°9/25.4	17	116481	2004 <i>BW</i> ₆		4 27.4	313°10	9°1/20.1	18
3 22	14 42.37	-8 51.0	1.637	2.486	14.9	21.3	3 22	14 45.07	+10 23.8	1.952	2.781	13.6	19.7
4 1	14 38.77	-8 17.4	1.562	2.483	11.3	21.0	4 1	14 40.42	+11 21.8	1.885	2.774	11.5	19.5
4 11	14 32.84	-7 37.7	1.509	2.480	7.3	20.8	4 11	14 33.71	+12 9.7	1.839	2.766	9.7	19.4
4 21	14 25.23	-6 56.6	1.480	2.478	3.5	20.6	4 21	14 25.55	+12 40.9	1.818	2.759	9.1	19.3
5 1	14 16.95	-6 19.5	1.477	2.476	3.9	20.6	5 1	14 16.84	+12 49.6	1.822	2.752	10.0	19.3
5 11	14 9.10	-5 52.1	1.500	2.475	7.8	20.8	5 11	14 8.54	+12 33.1	1.850	2.745	11.9	19.5
5 21	14 2.64	-5 38.1	1.547	2.475	11.9	21.0	5 21	14 1.49	+11 51.8	1.901	2.738	14.3	19.6
5 31	13 58.29	-5 39.9	1.616	2.475	15.5	21.3	5 31	13 56.32	+10 48.2	1.971	2.732	16.6	19.7
284470	2007 <i>HT</i> ₆		4 27.4	322°19	1°0/26.7	17	173316	1999 <i>VL</i> ₅₁		4 27.4	137°67	2°5/29.4	17
3 22	14 42.04	-14 9.0	1.582	2.424	15.6	20.9	3 22	14 46.86	-22 55.7	1.756	2.559	16.0	20.5
4 1	14 38.76	-13 37.6	1.496	2.413	12.0	20.6	4 1	14 42.17	-22 42.1	1.677	2.566	12.7	20.3
4 11	14 32.98	-12 54.1	1.432	2.402	7.7	20.3	4 11	14 35.01	-22 11.2	1.620	2.572	8.8	20.1
4 21	14 25.35	-12 2.0	1.392	2.392	3.0	20.0	4 21	14 26.11	-21 23.9	1.586	2.578	4.6	19.9
5 1	14 16.89	-11 6.8	1.377	2.382	2.4	19.9	5 1	14 16.54	-20 23.7	1.580	2.583	2.6	19.7
5 11	14 8.79	-10 15.4	1.389	2.373	7.2	20.2	5 11	14 7.50	-19 16.8	1.601	2.589	5.9	20.0
5 21	14 2.11	-9 33.9	1.424	2.364	11.8	20.5	5 21	13 59.99	-18 10.6	1.648	2.593	10.0	20.2
5 31	13 57.67	-9 7.1	1.481	2.355	15.8	20.7	5 31	13 54.74	-17 11.8	1.718	2.598	13.7	20.4
140507	2001 <i>TH</i> ₁₆₄		4 27.4	190°62	0°2/27.2	18	274406	2008 <i>RD</i> ₁₃₄		4 27.4	200°03	3°3/24.6	18
3 22	14 42.47	-15 26.5	2.527	3.340	11.4	20.5	3 22	14 44.46	-6 27.1	2.115	2.949	12.6	21.0
4 1	14 38.06	-14 58.2	2.438	3.339	8.7	20.3	4 1	14 39.82	-5 44.2	2.034	2.947	9.6	20.8
4 11	14 32.01	-14 21.4	2.374	3.338	5.6	20.1	4 11	14 33.26	-4 57.8	1.978	2.944	6.3	20.6
4 21	14 24.83	-13 38.4	2.337	3.337	2.2	19.9	4 21	14 25.37	-4 12.1	1.948	2.942	3.6	20.4
5 1	14 17.20	-12 52.4	2.329	3.335	1.4	19.8	5 1	14 16.94	-3 31.9	1.946	2.939	4.2	20.5
5 11	14 9.87	-12 7.6	2.351	3.333	4.8	20.1	5 11	14 8.87	-3 1.7	1.972	2.936	7.2	20.6
5 21	14 3.48	-11 27.7	2.399	3.331	8.0	20.3	5 21	14 1.92	-2 44.6	2.024	2.932	10.5	20.8
5 31	13 58.56	-10 56.2	2.473	3.328	10.9	20.5	5 31	13 56.70	-2 42.3	2.098	2.928	13.5	21.0
500628	2012 <i>UW</i> ₁₆₀		4 27.4	143°04	0°4/27.8	17	87537	2000 <i>QX</i> ₂₀₅		4 27.4	249°95	1°7/25.9	18
3 22	14 43.95	-16 58.0	2.787	3.588	10.8	23.3	3 22	14 44.75	-11 47.2	2.156	2.981	12.7	20.7
4 1	14 38.96	-16 40.2	2.706	3.599	8.2	23.1	4 1	14 40.20	-11 5.1	2.054	2.963	9.7	20.5
4 11	14 32.47	-16 14.5	2.650	3.609	5.4	22.9	4 11	14 33.63	-10 14.3	1.977	2.944	6.2	20.2
4 21	14 24.98	-15 42.4	2.622	3.620	2.2	22.7	4 21	14 25.57	-9 18.3	1.926	2.925	2.7	19.9
5 1	14 17.13	-15 6.4	2.623	3.629	1.1	22.7	5 1	14 16.81	-8 21.6	1.904	2.905	2.7	19.9
5 11	14 9.61	-14 30.0	2.655	3.638	4.2	22.9	5 11	14 8.26	-7 29.8	1.910	2.885	6.4	20.1
5 21	14 3.00	-13 56.4	2.714	3.647	7.2	23.1	5 21	14 0.77	-6 47.4	1.943	2.864	10.2	20.3
5 31	13 57.78	-13 28.7	2.799	3.655	9.8	23.3	5 31	13 55.03	-6 18.1	1.999	2.843	13.5	20.5
88201	2000 <i>YJ</i> ₉₂		4 27.4	14°84	9°2/18.0	18	369436	2009 <i>YM</i> ₁₉		4 27.4	129°17	4°1/24.1	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
135300	2001 SB ₂₄₄		4 27.4 252°98	3°1/24.2	18		180957	2005 MB ₃₂		4 27.4 293°66	0°6/27.8	18	
3 22	14 41.24	- 7 27.7	2.321	3.156	11.6	20.5	3 22	14 45.45	-16 39.1	1.590	2.420	16.1	19.8
4 1	14 37.28	- 6 27.8	2.233	3.146	8.8	20.3	4 1	14 41.62	-16 35.3	1.492	2.400	12.6	19.5
4 11	14 31.60	- 5 22.7	2.169	3.136	5.8	20.1	4 11	14 35.04	-16 19.0	1.414	2.380	8.4	19.2
4 21	14 24.72	- 4 16.8	2.132	3.126	3.3	19.9	4 21	14 26.30	-15 51.6	1.361	2.360	3.6	18.9
5 1	14 17.33	- 3 15.3	2.124	3.115	4.0	20.0	5 1	14 16.45	-15 16.2	1.334	2.340	1.8	18.7
5 11	14 10.21	- 2 23.2	2.144	3.105	6.9	20.1	5 11	14 6.81	-14 38.4	1.333	2.320	6.9	19.0
5 21	14 4.06	- 1 44.2	2.190	3.094	10.0	20.3	5 21	13 58.59	-14 4.2	1.356	2.300	11.8	19.2
5 31	13 59.42	- 1 20.8	2.259	3.084	12.8	20.5	5 31	13 52.79	-13 39.6	1.400	2.281	16.2	19.4
42054	2000 YA ₁₁₁		4 27.4 248°82	0°7/27.9	18		218003	2001 XL ₈₀		4 27.4 133°58	2°2/25.4	17	
3 22	14 47.42	-17 19.0	1.736	2.556	15.5	19.5	3 22	14 45.59	-10 3.3	2.164	2.989	12.6	20.7
4 1	14 42.81	-17 8.2	1.641	2.543	12.1	19.2	4 1	14 40.52	- 9 15.0	2.094	3.003	9.5	20.5
4 11	14 35.61	-16 44.8	1.567	2.530	8.0	19.0	4 11	14 33.62	- 8 20.7	2.048	3.015	6.1	20.3
4 21	14 26.45	-16 10.0	1.518	2.516	3.4	18.6	4 21	14 25.51	- 7 24.5	2.030	3.028	2.8	20.1
5 1	14 16.33	-15 27.3	1.496	2.502	1.7	18.5	5 1	14 16.99	- 6 31.2	2.041	3.039	3.1	20.2
5 11	14 6.50	-14 42.1	1.501	2.487	6.5	18.8	5 11	14 8.93	- 5 45.6	2.080	3.050	6.4	20.4
5 21	13 58.07	-14 0.5	1.532	2.472	11.0	19.0	5 21	14 2.05	- 5 11.4	2.146	3.061	9.7	20.6
5 31	13 51.92	-13 28.2	1.585	2.457	15.1	19.2	5 31	13 56.89	- 4 50.8	2.235	3.071	12.6	20.8
61687	2000 QY ₁₂₆		4 27.4 252°19	7°6/18.1	18		303719	2005 QM ₁₃		4 27.4 200°51	4°4/21.7	18	
3 22	14 40.28	+ 7 7.5	2.356	3.190	11.4	19.2	3 22	14 40.63	+ 0 10.7	3.007	3.835	9.4	21.4
4 1	14 36.48	+ 8 50.5	2.288	3.183	9.4	19.0	4 1	14 36.37	+ 1 19.6	2.927	3.831	7.3	21.3
4 11	14 31.04	+10 28.9	2.245	3.176	8.0	18.9	4 11	14 30.81	+ 2 28.1	2.874	3.827	5.4	21.1
4 21	14 24.48	+11 55.8	2.229	3.170	7.6	18.9	4 21	14 24.38	+ 3 32.0	2.849	3.822	4.4	21.1
5 1	14 17.47	+13 4.8	2.240	3.162	8.7	18.9	5 1	14 17.60	+ 4 27.0	2.854	3.816	5.2	21.1
5 11	14 10.76	+13 51.7	2.276	3.155	10.6	19.1	5 11	14 11.05	+ 5 9.8	2.886	3.811	7.0	21.2
5 21	14 4.99	+14 14.9	2.334	3.148	12.7	19.2	5 21	14 5.24	+ 5 38.1	2.945	3.804	9.2	21.4
5 31	14 0.69	+14 14.8	2.412	3.141	14.7	19.3	5 31	14 0.61	+ 5 51.3	3.026	3.797	11.1	21.5
264525	2001 RA ₆₀		4 27.4 172°88	2°0/25.7	17		314173	2005 GM ₇₄		4 27.4 329°59	3°8/25.2	17	
3 22	14 46.77	- 9 30.4	2.273	3.095	12.2	21.7	3 22	14 42.24	- 8 18.7	1.258	2.122	17.5	20.0
4 1	14 41.42	- 8 58.5	2.192	3.098	9.3	21.5	4 1	14 39.50	- 7 41.5	1.179	2.108	13.4	19.8
4 11	14 34.23	- 8 21.6	2.135	3.101	5.9	21.3	4 11	14 33.79	- 6 56.7	1.120	2.094	8.8	19.4
4 21	14 25.76	- 7 42.8	2.106	3.104	2.7	21.1	4 21	14 25.82	- 6 9.9	1.083	2.081	4.5	19.2
5 1	14 16.79	- 7 6.2	2.106	3.105	2.9	21.1	5 1	14 16.77	- 5 28.6	1.070	2.069	5.1	19.1
5 11	14 8.19	- 6 35.8	2.135	3.106	6.2	21.3	5 11	14 8.12	- 5 0.6	1.081	2.058	9.8	19.4
5 21	14 0.70	- 6 14.8	2.191	3.107	9.5	21.5	5 21	14 1.18	- 4 50.9	1.113	2.048	14.7	19.6
5 31	13 54.90	- 6 5.4	2.270	3.106	12.4	21.7	5 31	13 56.92	- 5 2.3	1.163	2.039	19.1	19.8
396301	2014 DZ ₂₃		4 27.4 29°80	2°2/25.4	17		167658	2004 EA ₁₅		4 27.4 120°72	0°5/27.1	18	
3 22	14 40.85	-10 29.4	2.095	2.931	12.6	21.0	3 22	14 45.72	-13 3.5	2.248	3.066	12.4	19.9
4 1	14 37.08	- 9 38.8	2.020	2.934	9.5	20.8	4 1	14 40.71	-13 1.1	2.167	3.070	9.5	19.7
4 11	14 31.50	- 8 41.2	1.968	2.937	6.1	20.6	4 11	14 33.82	-12 52.5	2.110	3.075	6.1	19.5
4 21	14 24.68	- 7 40.9	1.942	2.940	2.8	20.4	4 21	14 25.63	-12 39.5	2.081	3.080	2.4	19.3
5 1	14 17.39	- 6 43.1	1.945	2.944	3.2	20.4	5 1	14 16.92	-12 24.7	2.079	3.085	1.6	19.2
5 11	14 10.48	- 5 53.0	1.975	2.947	6.5	20.6	5 11	14 8.56	-12 11.3	2.107	3.089	5.3	19.5
5 21	14 4.68	- 5 14.7	2.031	2.951	9.9	20.8	5 21	14 1.31	-12 2.3	2.161	3.093	8.8	19.7
5 31	14 0.52	- 4 50.7	2.109	2.955	12.9	21.0	5 31	13 55.77	-12 0.3	2.240	3.098	11.8	19.9
12558	1998 QV ₆₃		4 27.4 195°55	1°2/26.3	18		249377	2009 BV ₁₀		4 27.4 186°12	4°5/1.7	18	
3 22	14 43.39	-12 48.8	2.299	3.121	12.1	18.4	3 22	14 44.41	-29 28.5	2.230	2.995	14.2	20.8
4 1	14 38.91	-12 11.3	2.213	3.119	9.2	18.2	4 1	14 40.02	-29 34.4	2.139	2.995	11.7	20.6
4 11	14 32.64	-11 25.9	2.151	3.118	5.8	18.0	4 11	14 33.53	-29 22.9	2.069	2.995	8.9	20.5
4 21	14 25.14	-10 35.8	2.116	3.115	2.4	17.8	4 21	14 25.55	-28 53.2	2.024	2.994	6.1	20.3
5 1	14 17.13	- 9 45.1	2.110	3.113	2.2	17.7	5 1	14 16.95	-28 6.6	2.005	2.994	4.5	20.2
5 11	14 9.44	- 8 58.3	2.132	3.110	5.7	18.0	5 11	14 8.70	-27 7.2	2.014	2.994	5.8	20.3
5 21	14 2.80	- 8 19.6	2.181	3.106	9.1	18.2	5 21	14 1.68	-26 0.8	2.050	2.993	8.5	20.4
5 31	13 57.76	- 7 52.0	2.255	3.103	12.1	18.4	5 31	13 56.54	-24 53.9	2.110	2.992	11.4	20.6
3694	Sharon		4 27.4 190°44	1°3/29.4	18 R		241393	2008 SK ₂₉₀		4 27.4 176°23	2°9/25.0	18	
3 22	14 39.25	-21 45.1	3.953	4.732	8.2	17.4	3 22	14 44.25	- 7 34.7	2.050	2.884	12.9	20.3
4 1	14 35.12	-21 36.3	3.855	4.730	6.5	17.3	4 1	14 39.72	- 6 55.5	1.972	2.885	9.8	20.1
4 11	14 29.92	-21 19.9	3.782	4.728	4.5	17.2	4 11	14 33.24	- 6 12.1	1.918	2.886	6.4	19.9
4 21	14 23.99	-20 56.8	3.737	4.726	2.4	17.0	4 21	14 25.41	- 5 28.6	1.890	2.886	3.4	19.7
5 1	14 17.77	-20 28.3	3.722	4.724	1.4	16.9	5 1	14 17.04	- 4 49.7	1.891	2.886	3.8	19.7
5 11	14 11.72	-19 56.5	3.736	4.721	3.1	17.0	5 11	14 9.06	- 4 19.9	1.919	2.886	7.1	19.9
5 21	14 6.26	-19 23.9	3.780	4.718	5.2	17.2	5 21	14 2.24	- 4 2.5	1.972	2.886	10.5	20.1
5 31	14 1.75	-18 52.9	3.851	4.715	7.1	17.3	5 31	13 57.19	- 3 59.3	2.048	2.886	13.5	20.3
502806	2015 DX ₁₁₁		4 27.4 5°91	3°9/25.0	17		18245	3061 T ₋₂		4 27.4 216°62	5°2/21.7	18	
3 22	14 46.34	- 4 49.6	1.666	2.510	14.9	20.9	3 22	14 40.31	- 1 11.1	2.280	3.121	11.5	19.3
4 1	14 41.73	- 4 30.0	1.593	2.510	11.4	20.7	4 1	14 36.52	+ 0 13.8	2.208	3.120	8.9	19.1
4 11	14 34.73	- 4 9.5	1.543	2.510	7.6	20.5	4 11	14 31.08	+ 1 39.5	2.161	3.119	6.5	18.9
4 21	14 26.03	- 3 52.3	1.517	2.511	4.4	20.3	4 21	14 24.52	+ 3 0.1	2.142	3.119	5.2	18.9
5 1	14 16.65	- 3 43.0	1.518	2.512	4.8	20.3	5 1	14 17.54	+ 4 9.4	2.150	3.118	6.2	18.9
5 11	14 7.74	- 3 45.6	1.545	2.513	8.3	20.5	5 11	14 10.89	+ 5 2.4	2.186	3.117	8.6	19.1
5 21	14 0.29	- 4 2.0	1.596	2.515	12.2	20.7	5 21	14 5.22	+ 5 36.6	2.246	3.116	11.2	19.2
5 31	13 55.01	- 4 32.9	1.669	2.517	15.6	21.0	5 31	14 1.05	+ 5 51.0	2.327	3.115	13.6	19.4
486681	2013 TM ₈₈		4 27.4 245°63	2°2/30.6	18		251917	1999 VR ₁₅₆		4 27.4 189°65	0°8/28.1	17	
3 22	14 40.76	-25 21.9	4.582	5.335	7.6								

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4 27.4

4 27.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
264717	2002 <i>CJ</i>		4 27.4 47°38'	7.4/2.3	18		221378	2005 <i>XZ</i> ₆₆		4 27.5 102°97'	0.3/27.2	18	
3 22	14 49.92	-31 17.0	1.705	2.472	17.8	20.3	3 22	14 49.19	-14 8.8	2.165	2.975	13.1	21.6
4 1	14 45.03	-32 21.7	1.629	2.479	15.0	20.1	4 1	14 43.20	-13 57.8	2.102	3.001	10.0	21.4
4 11	14 37.18	-33 6.8	1.572	2.487	11.9	19.9	4 11	14 35.31	-13 39.4	2.063	3.026	6.4	21.3
4 21	14 27.13	-33 28.4	1.538	2.495	9.0	19.7	4 21	14 26.19	-13 15.5	2.051	3.050	2.5	21.1
5 1	14 16.08	-33 24.7	1.528	2.503	7.4	19.7	5 1	14 16.70	-12 49.3	2.068	3.073	1.5	21.0
5 11	14 5.51	-32 58.7	1.544	2.512	8.4	19.7	5 11	14 7.75	-12 24.7	2.115	3.096	5.3	21.3
5 21	13 56.69	-32 16.7	1.583	2.520	11.0	19.9	5 21	14 0.11	-12 4.9	2.188	3.119	8.8	21.6
5 31	13 50.54	-31 27.3	1.646	2.529	14.0	20.1	5 31	13 54.31	-11 52.9	2.287	3.140	11.7	21.8
506446	2001 <i>RD</i> ₁₄₂		4 27.4 196°82'	4.0/22.0	18		389190	2009 <i>BW</i> ₁₈₁		4 27.5 129°89'	2.6/24.8	18	
3 22	14 42.62	+ 2 21.4	3.564	4.381	8.3	23.0	3 22	14 41.59	- 8 47.2	2.315	3.147	11.7	21.3
4 1	14 37.66	+ 3 7.2	3.481	4.376	6.5	22.9	4 1	14 37.46	- 7 49.8	2.240	3.152	8.8	21.1
4 11	14 31.55	+ 3 51.0	3.425	4.371	4.9	22.8	4 11	14 31.67	- 6 47.0	2.189	3.157	5.7	21.0
4 21	14 24.67	+ 4 29.6	3.397	4.365	4.0	22.7	4 21	14 24.76	- 5 43.3	2.166	3.162	3.0	20.8
5 1	14 17.49	+ 5 0.1	3.400	4.358	4.6	22.8	5 1	14 17.45	- 4 43.5	2.172	3.166	3.5	20.8
5 11	14 10.50	+ 5 20.1	3.432	4.351	6.2	22.9	5 11	14 10.50	- 3 52.4	2.206	3.171	6.4	21.0
5 21	14 4.16	+ 5 28.3	3.490	4.343	8.0	23.0	5 21	14 4.56	- 3 13.6	2.266	3.175	9.5	21.2
5 31	13 58.86	+ 5 24.4	3.573	4.334	9.8	23.1	5 31	14 0.15	- 2 49.2	2.349	3.180	12.2	21.4
385853	2006 <i>PU</i> ₃₅		4 27.5 328°08'	6.3/23.4	17		424182	2007 <i>JD</i> ₃		4 27.5 315°53'	1.2/26.9	17	
3 22	14 42.12	- 0 57.8	1.506	2.365	15.4	19.8	3 22	14 48.82	- 9 55.4	1.620	2.456	15.6	20.5
4 1	14 39.01	- 0 15.9	1.418	2.340	12.1	19.5	4 1	14 44.04	-10 15.0	1.529	2.442	12.1	20.2
4 11	14 33.30	+ 0 25.5	1.351	2.316	8.7	19.3	4 11	14 36.52	-10 31.4	1.460	2.428	7.8	19.9
4 21	14 25.60	+ 0 59.7	1.307	2.293	6.4	19.1	4 21	14 26.90	-10 46.3	1.416	2.415	3.2	19.6
5 1	14 16.91	+ 1 19.7	1.288	2.271	7.4	19.1	5 1	14 16.22	-11 1.9	1.398	2.403	2.4	19.5
5 11	14 8.47	+ 1 19.8	1.293	2.250	10.8	19.2	5 11	14 5.79	-11 21.0	1.407	2.390	7.2	19.8
5 21	14 1.41	+ 0 57.4	1.320	2.230	14.8	19.4	5 21	13 56.82	-11 46.0	1.441	2.379	11.8	20.0
5 31	13 56.64	+ 0 12.6	1.366	2.211	18.5	19.6	5 31	13 50.25	-12 19.1	1.497	2.367	15.9	20.2
125553	2001 <i>XO</i> ₇		4 27.5 240°94'	6.5/1.7	18		62021	2000 <i>RL</i> ₄₆		4 27.5 236°25'	0.9/28.1	17	
3 22	14 50.69	-30 32.0	1.978	2.735	16.0	20.0	3 22	14 47.74	-18 35.3	1.806	2.620	15.2	19.8
4 1	14 45.42	-31 26.7	1.881	2.727	13.5	19.8	4 1	14 42.98	-18 18.3	1.709	2.607	11.9	19.6
4 11	14 37.40	-32 5.0	1.804	2.719	10.6	19.6	4 11	14 35.70	-17 47.4	1.634	2.595	8.0	19.3
4 21	14 27.24	-32 23.3	1.751	2.710	7.9	19.4	4 21	14 26.52	-17 3.7	1.584	2.581	3.5	19.0
5 1	14 16.00	-32 19.7	1.724	2.701	6.5	19.3	5 1	14 16.44	-16 10.9	1.561	2.567	1.7	18.8
5 11	14 4.95	-31 56.1	1.723	2.692	7.6	19.4	5 11	14 6.65	-15 14.6	1.566	2.552	6.2	19.1
5 21	13 55.33	-31 17.9	1.748	2.682	10.3	19.5	5 21	13 58.22	-14 21.5	1.597	2.537	10.7	19.3
5 31	13 48.09	-30 32.2	1.797	2.672	13.4	19.7	5 31	13 52.02	-13 37.6	1.651	2.521	14.6	19.5
408126	2013 <i>CH</i> ₄₃		4 27.5 348°30'	3.8/25.4	16		205811	2002 <i>CF</i> ₂₀₁		4 27.5 288°53'	3.1/25.4	17	
3 22	14 44.39	- 8 15.6	1.133	2.000	18.8	20.7	3 22	14 44.79	- 9 59.5	1.437	2.287	16.5	20.1
4 1	14 41.33	- 7 44.0	1.065	1.995	14.4	20.4	4 1	14 41.17	- 9 14.8	1.351	2.272	12.7	19.8
4 11	14 35.03	- 7 5.3	1.016	1.990	9.4	20.2	4 11	14 34.75	- 8 20.4	1.286	2.258	8.2	19.5
4 21	14 26.32	- 6 25.6	0.988	1.987	4.7	19.9	4 21	14 26.19	- 7 21.1	1.244	2.243	3.9	19.2
5 1	14 16.56	- 5 52.4	0.984	1.984	5.1	19.9	5 1	14 16.62	- 6 24.3	1.228	2.228	4.3	19.2
5 11	14 7.39	- 5 33.1	1.003	1.982	10.1	20.1	5 11	14 7.39	- 5 37.7	1.237	2.214	9.0	19.4
5 21	14 0.20	- 5 32.3	1.043	1.981	15.2	20.4	5 21	13 59.73	- 5 7.3	1.270	2.199	13.8	19.6
5 31	13 55.94	- 5 51.9	1.101	1.981	19.6	20.7	5 31	13 54.56	- 4 56.9	1.321	2.185	18.0	19.8
388361	2006 <i>UK</i> ₃₃		4 27.5 174°75'	0.9/26.6	17		136007	2002 <i>VU</i> ₅₉		4 27.5 176°18'	1.0/26.6	18	
3 22	14 42.57	-13 6.7	2.416	3.236	11.6	21.4	3 22	14 42.85	-13 12.7	2.147	2.973	12.7	20.1
4 1	14 38.21	-12 40.1	2.332	3.237	8.8	21.2	4 1	14 38.64	-12 42.0	2.065	2.973	9.6	19.9
4 11	14 32.17	-12 6.5	2.272	3.238	5.6	21.0	4 11	14 32.55	-12 3.1	2.006	2.973	6.2	19.7
4 21	14 24.97	-11 28.5	2.239	3.238	2.2	20.8	4 21	14 25.15	-11 19.2	1.974	2.974	2.4	19.4
5 1	14 17.32	-10 49.4	2.234	3.238	1.8	20.7	5 1	14 17.24	-10 34.2	1.970	2.974	2.0	19.4
5 11	14 9.97	-10 13.2	2.259	3.239	5.2	21.0	5 11	14 9.68	- 9 52.8	1.994	2.974	5.7	19.6
5 21	14 3.60	- 9 43.5	2.311	3.239	8.5	21.2	5 21	14 3.21	- 9 19.0	2.044	2.974	9.3	19.8
5 31	13 58.75	- 9 23.1	2.386	3.239	11.3	21.3	5 31	13 58.45	- 8 56.2	2.118	2.974	12.4	20.0
272518	2005 <i>UY</i> ₂₅₁		4 27.5 106°08'	2.1/29.0	18		122960	2000 <i>SA</i> ₂₁₃		4 27.5 175°28'	1.6/26.0	18	
3 22	14 51.00	-20 32.6	2.146	2.936	13.9	21.8	3 22	14 46.31	-10 28.8	2.388	3.207	11.8	20.8
4 1	14 44.74	-20 46.4	2.077	2.960	10.9	21.6	4 1	14 41.03	-10 2.5	2.305	3.210	9.0	20.6
4 11	14 36.39	-20 48.7	2.032	2.983	7.4	21.4	4 11	14 33.98	- 9 30.9	2.246	3.212	5.7	20.4
4 21	14 26.64	-20 39.8	2.014	3.005	3.8	21.3	4 21	14 25.70	- 8 56.8	2.215	3.213	2.5	20.2
5 1	14 16.43	-20 21.4	2.024	3.027	2.2	21.2	5 1	14 16.95	- 8 23.8	2.213	3.214	2.4	20.2
5 11	14 6.76	-19 57.3	2.064	3.049	5.1	21.4	5 11	14 8.52	- 7 55.5	2.241	3.215	5.7	20.4
5 21	13 58.47	-19 31.5	2.131	3.069	8.5	21.7	5 21	14 1.15	- 7 35.0	2.295	3.214	8.9	20.6
5 31	13 52.16	-19 8.7	2.223	3.089	11.5	21.9	5 31	13 55.38	- 7 24.8	2.374	3.214	11.8	20.8
205885	2002 <i>FB</i> ₁₀		4 27.5 44°99'	4.2/29.9	18		426823	2013 <i>UD</i> ₇		4 27.5 233°57'	2.8/29.7	17	
3 22	14 47.05	-23 52.4	1.239	2.064	20.1	19.7	3 22	14 46.12	-23 10.8	1.970	2.766	14.8	21.1
4 1	14 43.18	-24 11.2	1.180	2.078	16.1	19.5	4 1	14 41.56	-23 13.2	1.876	2.760	11.8	20.9
4 11	14 36.06	-24 8.6	1.138	2.093	11.4	19.3	4 11	14 34.68	-23 0.6	1.805	2.753	8.3	20.7
4 21	14 26.65	-23 44.1	1.118	2.108	6.6	19.1	4 21	14 26.08	-22 33.0	1.758	2.746	4.7	20.4
5 1	14 16.42	-23 0.6	1.122	2.123	4.2	19.0	5 1	14 16.71	-21 52.3	1.738	2.739	2.9	20.3
5 11	14 7.01	-22 5.5	1.150	2.140	7.4	19.2	5 11	14 7.67	-21 3.0	1.746	2.732	5.7	20.4
5 21	13 59.74	-21 8.0	1.201	2.156	12.0	19.5	5 21	13 59.92	-20 11.2	1.780	2.725	9.4	20.7
5 31	13 55.44	-20 17.0	1.273	2.173	16.1	19.8	5 31	13 54.23	-19 22.8	1.838	2.717	13.0	20.9
285244	1998 <i>BO</i> ₃		4 27.5 139°01'	2.7/25.4	18		503503	2016 <i>EH</i> ₂₀₁		4 27			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
390992	2005 <i>SM</i> ₈₆		4 27.5 257°12	1.7/28.8	16		300879	2008 <i>AE</i> ₈₇		4 27.5 178°97	6°6/20.4	18	
3 22	14 45.43	-19 12.9	2.418	3.216	12.3	21.2	3 22	14 43.48	+ 7 43.7	2.628	3.450	10.7	20.8
4 1	14 40.56	-19 28.7	2.324	3.212	9.6	21.0	4 1	14 38.69	+ 8 41.7	2.562	3.451	8.8	20.6
4 11	14 33.80	-19 35.6	2.253	3.207	6.5	20.8	4 11	14 32.37	+ 9 33.5	2.521	3.452	7.2	20.5
4 21	14 25.68	-19 33.8	2.209	3.202	3.3	20.6	4 21	14 25.05	+10 14.3	2.506	3.452	6.6	20.5
5 1	14 16.95	-19 24.5	2.194	3.198	1.8	20.5	5 1	14 17.37	+10 39.9	2.518	3.452	7.4	20.5
5 11	14 8.45	-19 10.5	2.207	3.193	4.7	20.6	5 11	14 10.01	+10 47.7	2.557	3.452	9.1	20.6
5 21	14 0.97	-18 55.0	2.248	3.188	8.0	20.8	5 21	14 3.57	+10 37.3	2.620	3.451	11.0	20.8
5 31	13 55.12	-18 41.7	2.313	3.183	11.0	21.0	5 31	13 58.52	+10 9.3	2.704	3.450	12.9	20.9
92	Undina		4 27.5 242°17	3°9/23.6	18		496751	2016 <i>PT</i> ₃₇		4 27.5 196°39	4°7/21.4	18	
3 22	14 42.26	- 2 28.2	2.558	3.390	10.7	12.0	3 22	14 40.83	+ 1 4.2	2.926	3.755	9.6	21.6
4 1	14 37.88	- 1 47.6	2.473	3.382	8.2	11.8	4 1	14 36.58	+ 2 14.8	2.849	3.752	7.5	21.5
4 11	14 31.93	- 1 6.7	2.414	3.374	5.7	11.6	4 11	14 30.99	+ 3 24.6	2.798	3.748	5.6	21.4
4 21	14 24.89	- 0 29.4	2.381	3.366	4.0	11.5	4 21	14 24.50	+ 4 28.9	2.775	3.745	4.7	21.3
5 1	14 17.40	+ 0 0.5	2.377	3.358	4.6	11.5	5 1	14 17.67	+ 5 23.5	2.782	3.741	5.5	21.3
5 11	14 10.17	+ 0 19.5	2.401	3.350	7.0	11.7	5 11	14 11.08	+ 6 4.8	2.816	3.736	7.4	21.4
5 21	14 3.81	+ 0 25.7	2.451	3.342	9.6	11.8	5 21	14 5.25	+ 6 30.9	2.876	3.731	9.5	21.6
5 31	13 58.85	+ 0 18.1	2.524	3.333	12.1	12.0	5 31	14 0.63	+ 6 41.1	2.959	3.726	11.5	21.7
380191	2000 <i>WK</i> ₉₃		4 27.5 197°96	1°4/28.9	18		359010	2008 <i>UV</i> ₂₀₃		4 27.5 206°98	1°4/28.4	16	
3 22	14 45.71	-21 4.8	2.660	3.446	11.6	22.4	3 22	14 50.62	-18 36.9	1.715	2.526	16.0	22.1
4 1	14 40.55	-20 45.7	2.561	3.442	9.1	22.2	4 1	14 45.29	-18 37.1	1.625	2.522	12.5	21.8
4 11	14 33.68	-20 15.2	2.486	3.437	6.2	22.0	4 11	14 37.24	-18 24.1	1.557	2.516	8.4	21.5
4 21	14 25.60	-19 34.3	2.439	3.432	3.1	21.8	4 21	14 27.17	-17 58.8	1.514	2.510	3.9	21.3
5 1	14 17.01	-18 45.5	2.421	3.426	1.6	21.7	5 1	14 16.17	-17 23.6	1.498	2.504	1.9	21.1
5 11	14 8.70	-17 52.7	2.433	3.419	4.4	21.9	5 11	14 5.54	-16 43.8	1.510	2.496	6.4	21.4
5 21	14 1.35	-17 0.2	2.474	3.411	7.6	22.1	5 21	13 56.44	-16 5.3	1.547	2.488	10.9	21.6
5 31	13 55.51	-16 12.4	2.541	3.402	10.4	22.2	5 31	13 49.75	-15 34.0	1.607	2.480	14.9	21.8
320259	2007 <i>PJ</i> ₄₆		4 27.5 266°25	2°8/24.9	17		9471	Ostend		4 27.5 153°74	1°2/28.5	18	
3 22	14 43.13	- 8 35.2	2.098	2.932	12.6	21.0	3 22	14 45.03	-19 24.5	2.191	2.996	13.2	18.3
4 1	14 38.99	- 7 48.3	2.004	2.917	9.6	20.8	4 1	14 40.33	-19 12.9	2.107	3.000	10.3	18.1
4 11	14 32.88	- 6 55.3	1.933	2.902	6.3	20.5	4 11	14 33.66	-18 49.7	2.046	3.003	6.9	17.9
4 21	14 25.34	- 6 0.2	1.890	2.886	3.2	20.3	4 21	14 25.63	-18 16.4	2.011	3.007	3.2	17.6
5 1	14 17.15	- 5 8.1	1.874	2.870	3.7	20.3	5 1	14 17.06	-17 35.6	2.005	3.010	1.6	17.5
5 11	14 9.20	- 4 24.4	1.885	2.853	7.1	20.5	5 11	14 8.86	-16 51.8	2.027	3.013	5.0	17.8
5 21	14 2.31	- 3 53.0	1.923	2.837	10.7	20.7	5 21	14 1.82	-16 9.8	2.075	3.016	8.6	18.0
5 31	13 57.14	- 3 36.9	1.983	2.820	13.9	20.8	5 31	13 56.55	-15 33.8	2.149	3.018	11.8	18.2
106710	2000 <i>WB</i> ₁₇₂		4 27.5 255°18	5°1/21.8	17		391617	2007 <i>VP</i> ₄₈		4 27.5 290°74	1°6/28.7	17	
3 22	14 41.51	+ 0 42.0	2.595	3.427	10.5	20.1	3 22	14 44.75	-19 27.3	2.097	2.904	13.6	21.0
4 1	14 37.34	+ 1 46.7	2.505	3.411	8.3	19.9	4 1	14 40.31	-19 32.3	2.007	2.900	10.7	20.8
4 11	14 31.62	+ 2 51.0	2.441	3.394	6.2	19.8	4 11	14 33.77	-19 26.2	1.939	2.896	7.2	20.6
4 21	14 24.78	+ 3 50.1	2.404	3.377	5.1	19.7	4 21	14 25.72	-19 9.7	1.898	2.892	3.6	20.3
5 1	14 17.47	+ 4 39.2	2.396	3.360	5.9	19.7	5 1	14 17.00	-18 44.9	1.883	2.888	1.9	20.2
5 11	14 10.36	+ 5 14.1	2.415	3.342	8.1	19.8	5 11	14 8.58	-18 15.4	1.897	2.884	5.2	20.4
5 21	14 4.08	+ 5 32.5	2.459	3.324	10.5	19.9	5 21	14 1.33	-17 45.8	1.937	2.880	8.9	20.6
5 31	13 59.17	+ 5 33.8	2.525	3.306	12.8	20.1	5 31	13 55.93	-17 20.5	2.001	2.877	12.3	20.8
502545	2015 <i>BP</i> ₄₅₇		4 27.5 177°34	0°3/27.7	17		329975	2005 <i>SW</i> ₉₉		4 27.5 343°45	0°3/27.7	17	
3 22	14 45.93	-16 43.7	2.110	2.922	13.3	22.3	3 22	14 41.44	-19 47.8	1.568	2.398	16.4	20.2
4 1	14 41.06	-16 24.6	2.025	2.924	10.3	22.1	4 1	14 38.31	-18 47.6	1.487	2.395	12.7	19.9
4 11	14 34.16	-15 55.1	1.963	2.925	6.7	21.9	4 11	14 32.70	-17 27.5	1.426	2.392	8.3	19.6
4 21	14 25.82	-15 17.1	1.927	2.926	2.8	21.6	4 21	14 25.32	-15 51.3	1.390	2.389	3.4	19.3
5 1	14 16.91	-14 34.1	1.920	2.926	1.4	21.5	5 1	14 17.24	-14 6.2	1.381	2.387	1.7	19.2
5 11	14 8.37	-13 50.8	1.941	2.926	5.4	21.8	5 11	14 9.64	-12 22.1	1.398	2.385	6.7	19.5
5 21	14 1.02	-13 11.7	1.989	2.925	9.2	22.0	5 21	14 3.55	-10 48.2	1.440	2.384	11.4	19.8
5 31	13 55.51	-12 41.0	2.061	2.924	12.4	22.2	5 31	13 59.71	- 9 31.7	1.505	2.383	15.4	20.0
255717	2006 <i>QH</i> ₁₂₀		4 27.5 202°13	0°3/27.2	17		65272	2002 <i>GE</i> ₄₁		4 27.5 154°92	1°0/26.2	18	
3 22	14 46.65	-16 6.9	2.050	2.864	13.6	21.3	3 22	14 40.84	-13 53.6	2.739	3.555	10.5	19.6
4 1	14 41.71	-15 31.4	1.959	2.860	10.5	21.1	4 1	14 36.68	-12 58.6	2.656	3.560	7.9	19.4
4 11	14 34.63	-14 44.5	1.891	2.855	6.8	20.9	4 11	14 31.09	-11 55.7	2.598	3.564	5.0	19.3
4 21	14 26.03	-13 48.6	1.850	2.850	2.7	20.6	4 21	14 24.55	-10 48.2	2.569	3.568	2.0	19.0
5 1	14 16.80	-12 48.2	1.838	2.843	1.6	20.5	5 1	14 17.67	- 9 40.1	2.569	3.572	1.9	19.0
5 11	14 7.91	-11 48.8	1.854	2.837	5.9	20.8	5 11	14 11.09	- 8 35.9	2.600	3.576	4.9	19.3
5 21	14 0.24	-10 56.0	1.897	2.829	9.8	21.0	5 21	14 5.38	- 7 39.5	2.658	3.579	7.8	19.4
5 31	13 54.48	-10 14.3	1.964	2.821	13.2	21.2	5 31	14 0.97	- 6 53.9	2.741	3.582	10.4	19.6
169406	2001 <i>XR</i> ₄₁		4 27.5 92°43	5°8/ 4.2	18		230103	2000 <i>YH</i> ₁₂₂		4 27.5 104°99	4°9/22.9	18	
3 22	14 47.55	-36 13.4	2.681	3.390	13.3	20.3	3 22	14 45.51	- 1 48.0	2.154	2.987	12.4	20.9
4 1	14 42.00	-36 30.8	2.609	3.417	11.3	20.1	4 1	14 40.36	- 0 41.0	2.101	3.009	9.5	20.7
4 11	14 34.59	-36 30.2	2.559	3.442	9.1	20.0	4 11	14 33.47	+ 0 25.3	2.072	3.031	6.7	20.6
4 21	14 25.94	-36 10.4	2.532	3.468	7.1	19.9	4 21	14 25.48	+ 1 25.5	2.071	3.053	4.9	20.5
5 1	14 16.89	-35 32.1	2.532	3.492	5.9	19.9	5 1	14 17.19	+ 2 14.2	2.099	3.074	5.7	20.6
5 11	14 8.33	-34 38.6	2.560	3.517	6.2	20.0	5 11	14 9.43	+ 2 47.6	2.153	3.094	8.2	20.8
5 21	14 1.01	-33 35.0	2.615	3.541	7.7	20.1	5 21	14 2.86	+ 3 3.7	2.233	3.114	10.9	21.0
5 31	13 55.47	-32 27.1	2.696	3.565	9.7	20.2	5 31	13 57.97	+ 3 2.6	2.335	3.133	13.3	21.2
31624	1999 <i>GP</i> ₂₀		4 27.5 61°85	0°2/27.3	18		12961	4262 <i>T</i> ₋₂		4 27.5 335°45	2°6/26.2	18	

EPHEMERIDES

4 27.5

4 27.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
203059	2000 <i>HO</i> ₃₂		4 27.5 301°13	1.9°/26.5	17		499252	2009 <i>VZ</i> ₂		4 27.5 195°50	4°4'/1.8	17	
3 22	14 47.35	-10 35.8	1.300	2.151	17.8	20.5	3 22	14 48.03	-30 23.5	2.596	3.339	12.9	23.1
4 1	14 43.61	-10 30.9	1.211	2.132	13.8	20.2	4 1	14 42.55	-30 28.0	2.495	3.336	10.7	23.0
4 11	14 36.64	-10 18.6	1.142	2.114	9.0	19.8	4 11	14 35.10	-30 16.5	2.415	3.332	8.2	22.8
4 21	14 27.09	-10 2.1	1.095	2.095	3.8	19.5	4 21	14 26.24	-29 47.9	2.362	3.327	5.7	22.6
5 1	14 16.19	-9 46.0	1.073	2.077	3.3	19.4	5 1	14 16.78	-29 3.3	2.337	3.322	4.4	22.5
5 11	14 5.52	-9 36.1	1.075	2.059	8.8	19.6	5 11	14 7.61	-28 5.8	2.340	3.315	5.4	22.6
5 21	13 56.56	-9 37.3	1.100	2.041	14.2	19.9	5 21	13 59.55	-27 0.7	2.372	3.308	7.9	22.7
5 31	13 50.47	-9 53.2	1.144	2.024	19.0	20.1	5 31	13 53.23	-25 53.9	2.429	3.301	10.5	22.9
522967	2016 <i>PW</i> ₁₁₅		4 27.5 181°32	3°6'/1.2	17		147046	2002 <i>RB</i> ₈₂		4 27.5 228°03	0°1'/27.6	17	
3 22	14 44.18	-27 50.0	2.652	3.413	12.3	22.0	3 22	14 46.95	-16 26.7	1.980	2.795	14.0	21.4
4 1	14 39.52	-27 56.5	2.558	3.414	10.0	21.9	4 1	14 42.12	-16 4.8	1.884	2.785	10.8	21.2
4 11	14 33.08	-27 49.1	2.486	3.414	7.5	21.7	4 11	14 35.03	-15 31.4	1.811	2.774	7.1	20.9
4 21	14 25.40	-27 27.4	2.441	3.414	5.0	21.5	4 21	14 26.28	-14 48.6	1.764	2.763	2.9	20.6
5 1	14 17.20	-26 52.7	2.423	3.414	3.6	21.4	5 1	14 16.76	-14 0.0	1.745	2.751	1.5	20.5
5 11	14 9.28	-26 8.1	2.433	3.413	4.9	21.5	5 11	14 7.53	-13 10.9	1.754	2.738	5.9	20.8
5 21	14 2.36	-25 17.9	2.472	3.412	7.4	21.7	5 21	13 59.53	-12 26.7	1.790	2.725	10.0	21.0
5 31	13 57.02	-24 27.1	2.536	3.411	10.0	21.8	5 31	13 53.52	-11 52.1	1.849	2.712	13.7	21.2
198563	2004 <i>XY</i> ₁₅₅		4 27.5 175°72	1°1'/28.5	17		137426	1999 <i>TM</i> ₂₀₇		4 27.5 129°93	8°0'/3.9	17	
3 22	14 45.79	-19 10.8	2.409	3.207	12.3	22.1	3 22	14 50.52	-35 51.6	1.806	2.544	18.0	20.0
4 1	14 40.74	-18 58.5	2.321	3.210	9.6	21.9	4 1	14 45.43	-36 29.9	1.726	2.552	15.4	19.9
4 11	14 33.86	-18 35.6	2.255	3.211	6.4	21.7	4 11	14 37.42	-36 44.5	1.664	2.560	12.5	19.7
4 21	14 25.71	-18 3.3	2.217	3.213	3.0	21.5	4 21	14 27.27	-36 31.5	1.624	2.567	9.8	19.5
5 1	14 17.04	-17 24.2	2.208	3.213	1.4	21.3	5 1	14 16.25	-35 50.2	1.609	2.574	8.1	19.5
5 11	14 8.69	-16 42.3	2.228	3.214	4.7	21.6	5 11	14 5.78	-34 44.7	1.619	2.581	8.6	19.5
5 21	14 1.41	-16 1.9	2.276	3.213	8.1	21.8	5 21	13 57.11	-33 23.1	1.653	2.587	10.8	19.6
5 31	13 55.77	-15 26.9	2.349	3.213	11.1	22.0	5 31	13 51.11	-31 55.2	1.712	2.594	13.6	19.8
499870	2011 <i>FP</i> ₂₀		4 27.5 207°54	2°7'/25.0	17		176506	2001 <i>YO</i> ₃₃		4 27.5 165°28	3°4'/30.9	18	
3 22	14 44.44	-8 43.8	2.139	2.969	12.5	22.0	3 22	14 43.84	-27 4.3	2.522	3.291	12.6	20.9
4 1	14 39.86	-8 54.4	2.054	2.965	9.5	21.8	4 1	14 39.32	-27 4.5	2.431	3.293	10.2	20.8
4 11	14 33.37	-8 65.2	1.993	2.961	6.2	21.5	4 11	14 32.99	-26 50.3	2.362	3.295	7.5	20.6
4 21	14 25.53	-8 2.4	1.959	2.956	3.2	21.3	4 21	14 25.39	-26 21.6	2.319	3.297	4.9	20.4
5 1	14 17.14	-7 5.9	1.954	2.950	3.6	21.3	5 1	14 17.28	-25 40.1	2.304	3.298	3.4	20.3
5 11	14 9.07	-6 24.0	1.977	2.944	6.9	21.5	5 11	14 9.49	-24 49.3	2.317	3.299	4.9	20.4
5 21	14 2.11	-5 31.4	2.026	2.938	10.3	21.7	5 21	14 2.74	-23 54.0	2.358	3.301	7.6	20.6
5 31	13 56.87	-4 33.6	2.097	2.931	13.4	21.9	5 31	13 57.62	-22 59.3	2.424	3.301	10.3	20.8
427465	2001 <i>UQ</i> ₁₂₇		4 27.5 163°28	1°5'/26.3	17		276927	2004 <i>TQ</i> ₁₃₈		4 27.5 149°33	0°6'/28.1	17	
3 22	14 48.90	-10 4.1	2.353	3.167	12.1	22.3	3 22	14 44.27	-20 14.9	2.234	3.036	13.0	20.8
4 1	14 43.01	-9 50.6	2.272	3.174	9.2	22.1	4 1	14 39.64	-19 22.1	2.151	3.044	10.1	20.6
4 11	14 35.27	-9 32.8	2.215	3.180	5.9	21.9	4 11	14 33.16	-18 15.0	2.092	3.051	6.7	20.4
4 21	14 26.26	-9 12.8	2.187	3.185	2.5	21.7	4 21	14 25.44	-16 56.6	2.060	3.057	2.9	20.2
5 1	14 16.75	-8 53.9	2.188	3.190	2.3	21.7	5 1	14 17.28	-15 31.5	2.057	3.063	1.3	20.1
5 11	14 7.62	-8 39.1	2.218	3.193	5.7	21.9	5 11	14 9.55	-14 6.1	2.084	3.069	5.1	20.4
5 21	13 59.59	-8 31.1	2.277	3.197	9.0	22.1	5 21	14 2.98	-12 46.4	2.138	3.074	8.6	20.6
5 31	13 53.26	-8 32.0	2.359	3.199	11.9	22.3	5 31	13 58.13	-11 37.6	2.217	3.079	11.7	20.8
320543	2008 <i>AY</i> ₁₄		4 27.5 166°23	3°8'/24.5	18		306464	1999 <i>RO</i> ₄₄		4 27.5 338°20	15°1'/6.9	17	
3 22	14 46.08	-6 53.2	1.765	2.605	14.4	20.6	3 22	14 25.35	+3 52.2	0.973	1.878	17.8	17.2
4 1	14 41.41	-5 57.1	1.692	2.607	11.0	20.4	4 1	14 27.08	+8 58.7	0.899	1.836	15.5	16.9
4 11	14 34.49	-4 55.9	1.642	2.610	7.2	20.2	4 11	14 26.11	+14 27.7	0.850	1.796	15.3	16.8
4 21	14 26.00	-3 55.3	1.618	2.612	4.2	20.0	4 21	14 22.92	+19 48.1	0.825	1.759	17.8	16.7
5 1	14 16.91	-3 1.7	1.621	2.614	4.9	20.0	5 1	14 18.56	+24 26.5	0.823	1.723	21.9	16.8
5 11	14 8.29	-2 20.8	1.651	2.615	8.3	20.3	5 11	14 14.47	+27 59.2	0.839	1.691	26.3	17.0
5 21	14 1.06	-1 56.5	1.706	2.616	12.0	20.5	5 21	14 11.99	+30 17.5	0.867	1.661	30.3	17.1
5 31	13 55.89	-1 50.5	1.782	2.617	15.3	20.7	5 31	14 12.24	+31 24.0	0.902	1.635	33.5	17.2
123296	2000 <i>UJ</i> ₁₀₄		4 27.5 251°22	4°2'/1.4	18		38058	1999 <i>CA</i> ₃₅		4 27.5 258°77	0°3'/27.6	18	
3 22	14 45.76	-29 12.4	2.228	2.992	14.2	20.1	3 22	14 48.61	-15 49.0	1.595	2.421	16.3	18.2
4 1	14 41.21	-29 1.9	2.117	2.974	11.8	19.9	4 1	14 44.04	-15 43.1	1.500	2.406	12.7	17.9
4 11	14 34.45	-28 32.5	2.028	2.956	8.8	19.7	4 11	14 36.64	-15 25.6	1.426	2.391	8.4	17.6
4 21	14 26.05	-27 43.3	1.963	2.937	5.9	19.5	4 21	14 27.04	-14 57.9	1.376	2.375	3.5	17.3
5 1	14 16.86	-26 35.7	1.925	2.918	4.2	19.3	5 1	14 16.33	-14 23.2	1.352	2.358	1.8	17.1
5 11	14 7.92	-25 14.5	1.916	2.898	5.7	19.4	5 11	14 5.88	-13 47.2	1.356	2.342	7.0	17.4
5 21	14 0.16	-23 46.3	1.934	2.878	8.9	19.5	5 21	13 56.93	-13 15.9	1.384	2.325	11.9	17.7
5 31	13 54.33	-22 18.8	1.978	2.857	12.2	19.7	5 31	13 50.45	-12 54.7	1.433	2.308	16.2	17.9
381703	2009 <i>HD</i> ₈₄		4 27.5 266°14	2°2'/23.9	18		300125	2006 <i>VS</i> ₂₀		4 27.5 181°50	0°3'/27.8	17	
3 22	14 36.38	-2 52.3	4.501	5.325	6.6	21.4	3 22	14 42.92	-16 39.6	2.635	3.442	11.1	21.7
4 1	14 32.83	-2 29.3	4.409	5.314	5.0	21.3	4 1	14 38.41	-16 21.0	2.546	3.442	8.6	21.5
4 11	14 28.44	-2 6.4	4.342	5.303	3.4	21.1	4 11	14 32.30	-15 54.0	2.482	3.442	5.6	21.3
4 21	14 23.49	-1 45.5	4.305	5.292	2.3	21.0	4 21	14 25.10	-15 20.3	2.444	3.442	2.3	21.1
5 1	14 18.30	-1 28.3	4.297	5.280	2.7	21.1	5 1	14 17.45	-14 42.7	2.436	3.442	1.1	21.0
5 11	14 13.23	-1 16.6	4.319	5.269	4.1	21.2	5 11	14 10.08	-14 4.6	2.457	3.441	4.5	21.2
5 21	14 8.60	-1 11.4	4.369	5.258	5.8	21.3	5 21	14 3.62	-13 29.8	2.506	3.440	7.6	21.4
5 31	14 4.71	-1 13.7	4.443	5.247	7.3	21.4	5 31	13 58.59	-13 1.3	2.580	3.439	10.4	21.6
282032	1995 <i>OP</i> ₄		4 27.5 199°97	3°1'/30.4	18		312149	2007 <i>TE</i> ₄₁₃		4 27.5 192°29	4°3'/24.4</		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
11968	Demariotte		4 27.5 72°03	1.3/28.4	18		379699	2011 <i>FF</i> ₉₃		4 27.5 342°31	1.4/26.3	17	
3 22	14 46.08	-18 26.5	1.869	2.684	14.7	18.0	3 22	14 43.30	-13 13.9	1.785	2.620	14.4	21.7
4 1	14 41.46	-18 28.7	1.791	2.689	11.5	17.8	4 1	14 39.39	-12 31.9	1.706	2.619	11.0	21.4
4 11	14 34.57	-18 19.3	1.735	2.695	7.6	17.6	4 11	14 33.26	-11 39.6	1.649	2.619	7.0	21.2
4 21	14 26.07	-17 59.5	1.704	2.700	3.5	17.4	4 21	14 25.57	-10 41.0	1.618	2.618	2.8	20.9
5 1	14 16.93	-17 31.8	1.700	2.706	1.7	17.2	5 1	14 17.26	-9 41.6	1.614	2.617	2.6	20.9
5 11	14 8.22	-17 0.6	1.724	2.711	5.6	17.5	5 11	14 9.36	-8 47.7	1.637	2.617	6.8	21.2
5 21	14 0.87	-16 31.0	1.774	2.717	9.6	17.7	5 21	14 2.78	-8 4.5	1.685	2.616	10.8	21.4
5 31	13 55.59	-16 7.4	1.847	2.723	13.1	18.0	5 31	13 58.20	-7 35.9	1.755	2.616	14.4	21.6
379296	2009 <i>VJ</i> ₆₄		4 27.5 192°47	2.3/25.4	18		172577	2003 <i>UF</i> ₂₄₀		4 27.5 101°66	0.3/27.7	18	
3 22	14 46.09	-8 30.1	2.381	3.203	11.7	21.8	3 22	14 48.33	-17 3.4	1.667	2.488	15.9	20.9
4 1	14 40.92	-7 56.4	2.295	3.202	8.9	21.6	4 1	14 43.25	-16 41.7	1.601	2.504	12.2	20.6
4 11	14 33.98	-7 18.3	2.234	3.199	5.8	21.4	4 11	14 35.71	-16 7.2	1.556	2.520	8.0	20.4
4 21	14 25.79	-6 39.2	2.200	3.196	2.8	21.2	4 21	14 26.52	-15 22.7	1.537	2.536	3.3	20.2
5 1	14 17.09	-6 2.8	2.195	3.192	3.1	21.2	5 1	14 16.78	-14 32.6	1.545	2.551	1.6	20.1
5 11	14 8.70	-5 33.2	2.219	3.188	6.2	21.4	5 11	14 7.67	-13 43.2	1.580	2.566	6.3	20.4
5 21	14 1.34	-5 13.3	2.271	3.183	9.4	21.6	5 21	14 0.16	-13 0.2	1.641	2.581	10.5	20.7
5 31	13 55.56	-5 5.3	2.346	3.177	12.2	21.8	5 31	13 54.95	-12 28.3	1.724	2.595	14.1	21.0
311173	2004 <i>TE</i> ₂₉₅		4 27.5 152°22	0.5/27.1	16		374436	2005 <i>WM</i> ₁₆₅		4 27.5 37°48	2.0/26.2	17	
3 22	14 44.65	-12 21.2	2.826	3.636	10.4	21.2	3 22	14 44.71	-11 7.5	1.502	2.348	16.1	20.3
4 1	14 39.58	-12 23.5	2.740	3.640	7.9	21.1	4 1	14 40.71	-10 41.6	1.439	2.358	12.2	20.1
4 11	14 32.99	-12 21.3	2.679	3.643	5.1	20.9	4 11	14 34.19	-10 7.8	1.397	2.368	7.8	19.9
4 21	14 25.37	-12 16.2	2.646	3.646	2.0	20.7	4 21	14 25.95	-9 30.4	1.380	2.379	3.3	19.6
5 1	14 17.33	-12 9.8	2.643	3.648	1.4	20.6	5 1	14 17.09	-8 54.8	1.388	2.390	3.1	19.6
5 11	14 9.54	-12 4.7	2.670	3.651	4.4	20.8	5 11	14 8.83	-8 26.5	1.421	2.402	7.5	19.9
5 21	14 2.61	-12 2.7	2.725	3.653	7.3	21.0	5 21	14 2.17	-8 9.9	1.479	2.414	11.8	20.2
5 31	13 57.03	-12 6.1	2.805	3.656	9.9	21.2	5 31	13 57.82	-8 7.7	1.558	2.427	15.5	20.4
110245	2001 <i>ST</i> ₂₃₄		4 27.5 193°15	0.4/27.1	18 R		258602	2002 <i>CA</i> ₂₃₆		4 27.5 45°35	12°3/9.3	18	
3 22	14 46.27	-14 50.3	2.081	2.899	13.3	21.0	3 22	14 55.48	-50 10.1	2.301	2.914	17.4	19.9
4 1	14 41.38	-14 26.0	1.994	2.897	10.2	20.8	4 1	14 49.76	-51 54.6	2.225	2.924	16.1	19.8
4 11	14 34.43	-13 52.3	1.931	2.895	6.6	20.5	4 11	14 40.63	-53 15.9	2.166	2.934	14.7	19.7
4 21	14 26.01	-13 11.6	1.894	2.893	2.6	20.3	4 21	14 28.76	-54 7.6	2.126	2.944	13.4	19.7
5 1	14 16.98	-12 27.6	1.885	2.890	1.7	20.2	5 1	14 15.46	-54 25.1	2.106	2.954	12.5	19.6
5 11	14 8.30	-11 45.2	1.904	2.887	5.7	20.5	5 11	14 2.45	-54 8.7	2.108	2.964	12.3	19.6
5 21	14 0.81	-11 8.8	1.951	2.883	9.5	20.7	5 21	13 51.33	-53 23.0	2.132	2.975	12.7	19.7
5 31	13 55.18	-10 42.4	2.021	2.879	12.9	20.9	5 31	13 43.27	-52 16.3	2.176	2.986	13.7	19.8
126910	2002 <i>EX</i> ₁₂₁		4 27.5 176°40	2.0/25.6	18		441597	2008 <i>UC</i> ₁₈₀		4 27.5 173°55	0°7/28.5	18	
3 22	14 45.34	-10 0.2	2.272	3.096	12.1	21.4	3 22	14 38.98	-18 43.1	3.996	4.786	8.0	22.7
4 1	14 40.41	-9 20.6	2.190	3.098	9.2	21.2	4 1	14 34.93	-18 27.7	3.903	4.788	6.1	22.5
4 11	14 33.66	-8 35.3	2.133	3.100	5.9	21.0	4 11	14 29.86	-18 6.0	3.835	4.790	4.1	22.4
4 21	14 25.66	-7 47.7	2.103	3.101	2.7	20.8	4 21	14 24.10	-17 38.9	3.796	4.792	1.9	22.2
5 1	14 17.18	-7 2.0	2.102	3.101	2.9	20.8	5 1	14 18.09	-17 8.3	3.788	4.793	0.9	22.1
5 11	14 9.04	-6 22.8	2.130	3.101	6.2	21.0	5 11	14 12.25	-16 36.2	3.809	4.794	3.0	22.3
5 21	14 1.99	-5 53.5	2.184	3.101	9.5	21.2	5 21	14 6.98	-16 4.9	3.860	4.795	5.2	22.5
5 31	13 56.58	-5 36.6	2.262	3.100	12.4	21.4	5 31	14 2.62	-15 36.7	3.937	4.795	7.1	22.6
423547	2005 <i>UL</i> ₂₇₆		4 27.5 158°41	0.4/27.8	17		387147	2012 <i>TP</i> ₂₂₀		4 27.5 303°81	0°9/26.8	17	
3 22	14 47.27	-16 40.6	2.258	3.064	12.8	23.0	3 22	14 45.18	-12 15.2	2.026	2.852	13.3	20.9
4 1	14 41.93	-16 26.3	2.176	3.071	9.8	22.8	4 1	14 40.61	-12 6.0	1.942	2.850	10.2	20.7
4 11	14 34.66	-16 2.5	2.117	3.077	6.4	22.6	4 11	14 33.97	-11 50.2	1.881	2.848	6.5	20.4
4 21	14 26.07	-15 30.9	2.085	3.083	2.7	22.3	4 21	14 25.86	-11 30.2	1.847	2.846	2.6	20.2
5 1	14 16.96	-14 54.6	2.083	3.089	1.3	22.2	5 1	14 17.13	-11 9.1	1.840	2.844	2.0	20.1
5 11	14 8.24	-14 17.6	2.109	3.093	5.1	22.5	5 11	14 8.73	-10 51.0	1.861	2.842	5.9	20.4
5 21	14 0.67	-13 44.1	2.163	3.097	8.6	22.7	5 21	14 1.52	-10 39.1	1.908	2.841	9.7	20.6
5 31	13 54.86	-13 17.7	2.241	3.101	11.7	22.9	5 31	13 56.15	-10 36.3	1.978	2.839	13.0	20.8
331158	2010 <i>XT</i> ₄₂		4 27.5 114°19	4.8/23.7	17		33837	2000 <i>FQ</i> ₄₀		4 27.5 291°84	4°1/29.1	18	
3 22	14 47.15	-2 27.2	1.936	2.771	13.5	21.2	3 22	14 58.08	-21 36.7	2.158	2.930	14.4	18.7
4 1	14 41.89	-1 36.3	1.876	2.787	10.3	21.1	4 1	14 51.21	-22 53.5	2.030	2.898	11.7	18.5
4 11	14 34.61	-0 45.7	1.840	2.802	7.1	20.9	4 11	14 41.41	-24 4.9	1.926	2.865	8.6	18.2
4 21	14 26.02	-0 0.7	1.831	2.816	5.0	20.8	4 21	14 29.12	-25 7.3	1.850	2.831	5.4	17.9
5 1	14 17.02	+ 0 33.5	1.849	2.830	5.7	20.8	5 1	14 15.23	-25 57.5	1.804	2.798	4.2	17.8
5 11	14 8.56	+ 0 52.9	1.894	2.844	8.4	21.0	5 11	14 0.99	-26 34.2	1.788	2.764	6.7	17.9
5 21	14 1.43	+ 0 55.7	1.964	2.857	11.5	21.3	5 21	13 47.73	-26 59.2	1.801	2.730	10.4	18.0
5 31	13 56.20	+ 0 41.6	2.055	2.870	14.3	21.5	5 31	13 36.62	-27 16.5	1.839	2.695	14.0	18.2
469884	2005 <i>UP</i> ₄₅₅		4 27.5 245°51	2.6/30.5	17		203057	2000 <i>GP</i> ₁₂₁		4 27.5 227°08	0°1/27.5	17	
3 22	14 42.79	-26 21.1	2.863	3.630	11.3	21.8	3 22	14 44.18	-15 21.4	2.139	2.958	13.0	21.0
4 1	14 38.39	-26 1.2	2.750	3.614	9.2	21.6	4 1	14 39.76	-15 6.4	2.053	2.956	10.0	20.8
4 11	14 32.35	-25 27.4	2.661	3.597	6.6	21.4	4 11	14 33.39	-14 42.4	1.990	2.954	6.5	20.5
4 21	14 25.16	-24 40.2	2.599	3.580	4.1	21.2	4 21	14 25.62	-14 11.4	1.953	2.952	2.6	20.3
5 1	14 17.45	-23 41.3	2.565	3.563	2.7	21.1	5 1	14 17.27	-13 36.8	1.944	2.950	1.4	20.2
5 11	14 9.94	-22 34.5	2.561	3.545	4.3	21.2	5 11	14 9.25	-13 2.6	1.963	2.948	5.4	20.5
5 21	14 3.29	-21 24.5	2.585	3.527	7.1	21.3	5 21	14 2.35	-12 33.1	2.009	2.945	9.1	20.7
5 31	13 58.06	-20 16.3	2.636	3.508	9.8	21.5	5 31	13 57.20	-12 11.9	2.079	2.943	12.3	20.9
283287	2011 <i>HN</i> ₇₄		4 27.5 310°53	7.7/20.9	16		175176	2005 <i>EU</i> ₁₄₄		4 27.5 267°31	0°1/27.5	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
207547	Charito		4 27.5 204°93	0°8/26.8	18		12447	Yatescup		4 27.5 314°45	4°7/25.1	18	
3 22	14 44.43	-13 9.6	2.249	3.070	12.4	20.6	3 22	14 44.20	-6 44.7	1.108	1.978	18.9	16.9
4 1	14 39.84	-12 47.7	2.162	3.067	9.4	20.4	4 1	14 41.66	-6 12.9	1.023	1.954	14.7	16.5
4 11	14 33.38	-12 18.3	2.099	3.065	6.0	20.2	4 11	14 35.68	-5 34.7	0.956	1.930	9.9	16.2
4 21	14 25.61	-11 44.1	2.062	3.062	2.4	20.0	4 21	14 26.88	-4 56.3	0.910	1.907	5.4	15.8
5 1	14 17.29	-11 8.4	2.054	3.059	1.8	19.9	5 1	14 16.53	-4 26.1	0.886	1.885	6.1	15.8
5 11	14 9.28	-10 35.3	2.075	3.055	5.5	20.2	5 11	14 6.39	-4 12.2	0.885	1.863	11.3	16.0
5 21	14 2.33	-10 8.6	2.122	3.052	9.0	20.4	5 21	13 58.08	-4 20.2	0.904	1.842	16.9	16.2
5 31	13 57.04	-9 51.3	2.193	3.048	12.1	20.6	5 31	13 52.88	-4 52.3	0.939	1.823	21.9	16.4
56985	2000 SR ₂₀₂		4 27.5 94°27	1°0/26.2	18		207533	2006 KM ₂₃		4 27.5 326°50	2°0/28.7	17	
3 22	14 39.41	-11 33.6	3.308	4.124	8.9	20.3	3 22	14 42.69	-19 53.5	1.241	2.084	19.0	20.1
4 1	14 35.36	-11 5.3	3.235	4.139	6.7	20.1	4 1	14 40.18	-19 52.0	1.158	2.071	15.1	19.8
4 11	14 30.16	-10 33.0	3.188	4.154	4.2	20.0	4 11	14 34.48	-19 31.8	1.093	2.058	10.3	19.5
4 21	14 24.23	-9 58.5	3.170	4.169	1.7	19.8	4 21	14 26.30	-18 53.4	1.049	2.046	5.0	19.2
5 1	14 18.05	-9 24.7	3.181	4.184	1.6	19.8	5 1	14 16.90	-18 0.6	1.029	2.035	2.5	19.0
5 11	14 12.13	-8 54.1	3.222	4.198	4.1	20.0	5 11	14 7.88	-17 1.2	1.033	2.025	7.6	19.2
5 21	14 6.91	-8 28.9	3.291	4.213	6.5	20.2	5 21	14 0.69	-16 4.2	1.059	2.015	13.0	19.5
5 31	14 2.76	-8 11.1	3.386	4.227	8.6	20.4	5 31	13 56.39	-15 18.3	1.104	2.006	17.9	19.8
45082	1999 XF ₄₄		4 27.5 289°39	1°0/26.9	18		270584	2002 JG ₁₅₀		4 27.5 311°58	2°6/25.6	17	
3 22	14 47.83	-12 12.0	1.533	2.370	16.3	18.1	3 22	14 43.34	-9 26.3	1.715	2.558	14.6	20.7
4 1	14 43.51	-12 10.9	1.442	2.355	12.6	17.8	4 1	14 39.63	-8 54.2	1.628	2.545	11.1	20.5
4 11	14 36.34	-12 2.2	1.372	2.340	8.2	17.5	4 11	14 33.58	-8 15.3	1.563	2.533	7.2	20.2
4 21	14 26.97	-11 48.0	1.326	2.326	3.3	17.2	4 21	14 25.79	-7 33.7	1.523	2.521	3.4	20.0
5 1	14 16.50	-11 31.8	1.306	2.311	2.4	17.1	5 1	14 17.20	-6 54.7	1.509	2.509	3.6	19.9
5 11	14 6.30	-11 18.6	1.312	2.296	7.5	17.3	5 11	14 8.93	-6 24.0	1.521	2.497	7.7	20.1
5 21	13 57.62	-11 12.8	1.342	2.282	12.4	17.6	5 21	14 1.96	-6 5.8	1.558	2.486	11.8	20.4
5 31	13 51.42	-11 18.1	1.394	2.267	16.6	17.8	5 31	13 57.06	-6 3.0	1.617	2.475	15.5	20.6
176516	2001 YC ₆₈		4 27.5 7°72	4°9/23.3	18		335490	2005 XG ₅		4 27.5 150°77	6°5/9.5	18	
3 22	14 43.29	-0 25.8	2.228	3.065	11.9	19.9	3 22	14 45.78	-51 15.4	4.806	5.363	9.3	20.7
4 1	14 38.87	+0 14.8	2.155	3.065	9.3	19.7	4 1	14 40.50	-52 2.7	4.708	5.364	8.6	20.6
4 11	14 32.69	+0 53.7	2.106	3.065	6.6	19.5	4 11	14 33.68	-52 36.7	4.630	5.365	7.8	20.5
4 21	14 25.31	+1 26.6	2.084	3.065	4.9	19.4	4 21	14 25.73	-52 55.7	4.572	5.366	7.1	20.5
5 1	14 17.47	+1 49.0	2.089	3.065	5.6	19.5	5 1	14 17.25	-52 58.5	4.538	5.367	6.6	20.4
5 11	14 9.98	+1 57.6	2.121	3.066	8.0	19.6	5 11	14 8.88	-52 45.6	4.527	5.368	6.5	20.4
5 21	14 3.54	+1 50.9	2.178	3.066	10.8	19.8	5 21	14 1.26	-52 19.0	4.541	5.369	6.8	20.4
5 31	13 58.70	+1 28.9	2.257	3.067	13.3	20.0	5 31	13 54.91	-51 41.4	4.579	5.370	7.3	20.5
171282	2006 FK ₄₁		4 27.5 254°86	1°0/26.9	17		303761	2005 QH ₁₄₈		4 27.5 233°32	3°9/23.2	18	
3 22	14 48.08	-13 32.0	1.712	2.540	15.3	20.8	3 22	14 42.63	-1 31.4	2.887	3.712	9.8	21.7
4 1	14 43.44	-13 10.1	1.614	2.523	11.8	20.6	4 1	14 38.06	-0 45.7	2.794	3.699	7.6	21.5
4 11	14 36.16	-12 37.9	1.538	2.505	7.7	20.3	4 11	14 32.07	+0 0.1	2.728	3.685	5.4	21.3
4 21	14 26.87	-11 57.9	1.487	2.487	3.1	20.0	4 21	14 25.07	+0 42.5	2.689	3.671	3.9	21.2
5 1	14 16.57	-11 14.4	1.463	2.468	2.3	19.8	5 1	14 17.63	+1 17.6	2.680	3.656	4.6	21.3
5 11	14 6.50	-10 33.4	1.467	2.449	7.1	20.1	5 11	14 10.39	+1 42.2	2.699	3.640	6.7	21.4
5 21	13 57.80	-10 0.5	1.495	2.429	11.8	20.3	5 21	14 3.91	+1 54.4	2.745	3.625	9.1	21.5
5 31	13 51.37	-9 40.3	1.546	2.409	15.9	20.5	5 31	13 58.67	+1 53.1	2.814	3.608	11.3	21.6
317401	2002 PG ₁₁₄		4 27.5 331°30	5°2/23.9	17		98715	2000 XH ₄₈		4 27.5 94°91	2°2/29.4	18	
3 22	14 43.02	-5 45.3	1.382	2.241	16.5	20.4	3 22	14 46.24	-21 17.1	2.481	3.269	12.3	19.2
4 1	14 39.76	-4 39.3	1.309	2.235	12.6	20.2	4 1	14 41.10	-21 36.9	2.399	3.279	9.7	19.0
4 11	14 33.81	-3 27.3	1.258	2.229	8.5	19.9	4 11	14 34.13	-21 46.7	2.341	3.288	6.7	18.8
4 21	14 25.89	-2 17.0	1.231	2.223	5.5	19.7	4 21	14 25.91	-21 46.6	2.309	3.298	3.7	18.7
5 1	14 17.14	-1 17.1	1.228	2.218	6.5	19.8	5 1	14 17.18	-21 37.5	2.306	3.307	2.3	18.6
5 11	14 8.88	-0 35.3	1.249	2.213	10.4	20.0	5 11	14 8.77	-21 22.3	2.332	3.317	4.6	18.7
5 21	14 2.23	-0 16.2	1.292	2.209	14.6	20.2	5 21	14 1.42	-21 4.2	2.385	3.326	7.6	18.9
5 31	13 58.00	-0 21.2	1.355	2.205	18.4	20.4	5 31	13 55.71	-20 47.0	2.464	3.335	10.4	19.1
353513	2011 SR ₁₁₁		4 27.5 203°43	3°4/1.0	17		427230	2014 WK ₅₀		4 27.5 253°93	1°0/29.3	18	
3 22	14 44.01	-27 24.8	2.683	3.446	12.1	21.7	3 22	14 35.81	-21 18.3	4.489	5.271	7.3	20.8
4 1	14 39.41	-27 25.6	2.585	3.443	9.9	21.5	4 1	14 32.50	-20 58.9	4.388	5.267	5.7	20.7
4 11	14 33.06	-27 12.4	2.509	3.439	7.3	21.3	4 11	14 28.30	-20 32.8	4.313	5.262	3.9	20.5
4 21	14 25.48	-26 45.3	2.460	3.435	4.8	21.1	4 21	14 23.51	-20 0.9	4.266	5.258	2.0	20.4
5 1	14 17.37	-26 5.5	2.438	3.431	3.4	21.0	5 1	14 18.49	-19 24.7	4.249	5.253	1.1	20.3
5 11	14 9.53	-25 16.3	2.446	3.427	4.8	21.1	5 11	14 13.61	-18 46.2	4.263	5.248	2.7	20.4
5 21	14 2.65	-24 22.1	2.481	3.422	7.3	21.3	5 21	14 9.21	-18 7.6	4.305	5.244	4.6	20.6
5 31	13 57.33	-23 27.9	2.542	3.417	10.0	21.4	5 31	14 5.59	-17 31.2	4.374	5.239	6.3	20.7
366248	2012 XH ₂₇		4 27.5 135°97	1°8/25.9	18		301510	2009 FY ₂		4 27.5 335°63	5°0/22.7	17	
3 22	14 44.21	-9 26.2	2.298	3.125	11.9	20.8	3 22	14 41.17	-1 55.8	2.121	2.963	12.2	20.4
4 1	14 39.56	-9 6.2	2.219	3.127	9.1	20.6	4 1	14 37.38	-0 49.8	2.047	2.961	9.4	20.2
4 11	14 33.14	-8 42.0	2.163	3.130	5.8	20.4	4 11	14 31.80	+0 16.9	1.998	2.959	6.7	20.1
4 21	14 25.50	-8 16.3	2.134	3.132	2.6	20.2	4 21	14 24.99	+1 18.8	1.975	2.957	5.1	20.0
5 1	14 17.38	-7 52.6	2.134	3.135	2.6	20.2	5 1	14 17.71	+2 10.1	1.979	2.955	5.9	20.0
5 11	14 9.59	-7 34.3	2.162	3.137	5.8	20.4	5 11	14 10.77	+2 46.1	2.010	2.954	8.5	20.2
5 21	14 2.84	-7 24.1	2.217	3.139	9.1	20.6	5 21	14 4.88	+3 4.4	2.066	2.952	11.4	20.3
5 31	13 57.70	-7 24.0	2.296	3.141	12.0	20.8	5 31	14 0.61	+3 4.2	2.143	2.951	14.0	20.5
367739	2010 US ₉₇		4 27.5 145°81	3°0/25.4	17		108871	2001 OR ₁₀₂		4 27.5 77°33	7°1/2.1	18	
3 22	14 47.78	-7 45.7	1.869	2.701	14.0	21.7	3 22	14 52.17	-30 40.9	1.689	2.456		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
56991	2000 <i>SB</i> ₂₈₂		4 27.5	23°63	3°3/30.7	18	214807	2006 <i>UE</i> ₂₂₆		4 27.5	121°93	0°1/27.6	18
3 22	14 42.44	-26 12.3	2.138	2.924	14.1	19.1	3 22	14 41.96	-17 8.5	2.384	3.196	12.0	20.6
4 1	14 38.57	-26 3.2	2.052	2.926	11.4	18.9	4 1	14 37.83	-16 30.9	2.302	3.201	9.2	20.5
4 11	14 32.68	-25 37.4	1.988	2.928	8.2	18.7	4 11	14 32.02	-15 43.0	2.244	3.206	6.0	20.3
4 21	14 25.38	-24 55.4	1.948	2.931	5.0	18.5	4 21	14 25.08	-14 47.3	2.212	3.211	2.4	20.0
5 1	14 17.51	-23 59.6	1.935	2.934	3.3	18.4	5 1	14 17.71	-13 47.7	2.210	3.216	1.3	19.9
5 11	14 10.02	-22 55.0	1.950	2.936	5.2	18.5	5 11	14 10.68	-12 49.0	2.237	3.221	4.9	20.2
5 21	14 3.73	-21 47.5	1.992	2.939	8.4	18.7	5 21	14 4.67	-11 55.8	2.290	3.225	8.2	20.4
5 31	13 59.27	-20 43.3	2.058	2.943	11.6	18.9	5 31	14 0.20	-11 11.8	2.369	3.230	11.1	20.6
390983	2005 <i>SO</i> ₂₁		4 27.5	312°85	2°1/25.4	18	138919	2001 <i>AU</i> ₂₃		4 27.5	59°81	2°1/26.2	18
3 22	14 39.22	-13 13.0	1.973	2.810	13.2	20.1	3 22	14 45.79	-11 54.9	1.440	2.285	16.7	19.8
4 1	14 36.24	-11 56.7	1.873	2.789	10.1	19.8	4 1	14 41.71	-11 16.3	1.374	2.292	12.7	19.5
4 11	14 31.27	-10 27.2	1.798	2.768	6.4	19.6	4 11	14 34.95	-10 27.7	1.329	2.300	8.1	19.3
4 21	14 24.85	-8 49.4	1.749	2.748	2.8	19.3	4 21	14 26.34	-9 33.9	1.308	2.307	3.4	19.0
5 1	14 17.77	-7 10.1	1.728	2.728	3.2	19.3	5 1	14 17.04	-8 41.4	1.312	2.315	3.3	19.0
5 11	14 10.93	-5 37.2	1.735	2.708	7.1	19.5	5 11	14 8.36	-7 57.3	1.343	2.323	7.9	19.3
5 21	14 5.16	-4 17.6	1.767	2.689	11.0	19.7	5 21	14 1.36	-7 26.7	1.397	2.331	12.4	19.6
5 31	14 1.14	-3 16.1	1.822	2.670	14.5	19.9	5 31	13 56.79	-7 13.0	1.471	2.339	16.3	19.9
91295	1999 <i>FK</i> ₂₉		4 27.5	93°20	2°0/26.3	18	499874	2011 <i>FK</i> ₂₄		4 27.5	212°57	0°4/27.8	17
3 22	14 48.64	-11 12.2	1.453	2.294	16.8	19.2	3 22	14 46.06	-16 12.3	1.917	2.736	14.2	21.1
4 1	14 43.82	-10 45.0	1.389	2.305	12.8	19.0	4 1	14 41.47	-16 4.6	1.832	2.734	11.0	20.9
4 11	14 36.28	-10 9.6	1.345	2.315	8.2	18.7	4 11	14 34.64	-15 46.8	1.770	2.733	7.2	20.7
4 21	14 26.85	-9 30.0	1.326	2.325	3.4	18.5	4 21	14 26.21	-15 20.5	1.733	2.731	3.0	20.4
5 1	14 16.74	-8 51.9	1.332	2.335	3.2	18.5	5 1	14 17.09	-14 48.9	1.724	2.730	1.5	20.3
5 11	14 7.29	-8 21.3	1.365	2.345	7.8	18.8	5 11	14 8.33	-14 16.5	1.742	2.728	5.8	20.5
5 21	13 59.59	-8 2.9	1.422	2.355	12.3	19.1	5 21	14 0.86	-13 48.0	1.786	2.726	9.8	20.8
5 31	13 54.40	-7 59.6	1.500	2.365	16.2	19.3	5 31	13 55.39	-13 27.5	1.854	2.724	13.3	21.0
71084	1999 <i>XQ</i> ₁₂₁		4 27.5	187°13	0°5/27.9	18	46076	2001 <i>EH</i> ₄		4 27.5	157°61	2°6/25.2	18
3 22	14 45.71	-16 56.3	2.196	3.006	13.0	19.7	3 22	14 44.17	-8 36.6	2.108	2.940	12.6	19.9
4 1	14 40.91	-16 46.6	2.109	3.006	10.0	19.5	4 1	14 39.68	-7 53.5	2.031	2.943	9.6	19.7
4 11	14 34.13	-16 27.3	2.044	3.005	6.6	19.2	4 11	14 33.29	-7 5.4	1.978	2.946	6.2	19.5
4 21	14 25.96	-15 59.9	2.007	3.004	2.8	19.0	4 21	14 25.61	-6 16.2	1.952	2.948	3.1	19.3
5 1	14 17.20	-15 27.1	1.997	3.003	1.3	18.9	5 1	14 17.43	-5 30.7	1.954	2.951	3.5	19.3
5 11	14 8.76	-14 53.0	2.017	3.002	5.2	19.1	5 11	14 9.63	-4 53.7	1.984	2.953	6.7	19.5
5 21	14 1.46	-14 21.8	2.063	3.000	8.8	19.4	5 21	14 2.96	-4 28.5	2.039	2.955	10.1	19.8
5 31	13 55.91	-13 57.3	2.133	2.998	12.0	19.6	5 31	13 58.01	-4 17.3	2.118	2.956	13.1	19.9
2626	Belnika		4 27.5	99°41	0°5/27.9	18	139429	2001 <i>OH</i> ₄₀		4 27.5	124°89	6°7/21.8	18
3 22	14 44.48	-17 9.2	2.039	2.855	13.6	16.3	3 22	14 47.63	+ 4 21.4	2.119	2.946	12.8	20.5
4 1	14 40.09	-16 56.4	1.957	2.857	10.5	16.1	4 1	14 42.09	+ 5 26.3	2.065	2.963	10.2	20.4
4 11	14 33.65	-16 33.1	1.897	2.860	6.9	15.9	4 11	14 34.70	+ 6 25.7	2.036	2.980	7.9	20.3
4 21	14 25.77	-16 0.9	1.864	2.862	2.9	15.6	4 21	14 26.12	+ 7 13.8	2.033	2.995	6.8	20.2
5 1	14 17.31	-15 23.2	1.858	2.864	1.4	15.5	5 1	14 17.20	+ 7 45.4	2.058	3.010	7.6	20.3
5 11	14 9.22	-14 44.5	1.881	2.867	5.4	15.8	5 11	14 8.81	+ 7 57.5	2.109	3.025	9.7	20.5
5 21	14 2.34	-14 9.5	1.929	2.869	9.2	16.0	5 21	14 1.66	+ 7 49.6	2.184	3.039	12.1	20.6
5 31	13 57.31	-13 42.2	2.001	2.871	12.5	16.2	5 31	13 56.28	+ 7 22.9	2.281	3.052	14.3	20.8
498638	2008 <i>SL</i> ₁₀		4 27.5	209°53	0°6/27.0	17	280649	2005 <i>BJ</i> ₂₁		4 27.5	197°80	2°5/25.3	17
3 22	14 44.51	-14 58.7	2.269	3.085	12.4	22.1	3 22	14 44.00	-8 44.0	2.193	3.023	12.3	21.5
4 1	14 39.92	-14 23.6	2.178	3.080	9.5	21.9	4 1	14 39.53	-8 1.7	2.110	3.021	9.3	21.3
4 11	14 33.47	-13 38.8	2.110	3.074	6.1	21.6	4 11	14 33.20	-7 14.2	2.052	3.019	6.0	21.1
4 21	14 25.69	-12 47.1	2.069	3.068	2.4	21.4	4 21	14 25.60	-6 25.3	2.020	3.017	3.0	20.9
5 1	14 17.35	-11 52.4	2.057	3.062	1.7	21.3	5 1	14 17.47	-5 39.7	2.017	3.014	3.4	21.0
5 11	14 9.31	-10 59.6	2.074	3.055	5.5	21.6	5 11	14 9.67	-5 2.0	2.042	3.012	6.6	21.1
5 21	14 2.32	-10 13.3	2.118	3.048	9.0	21.8	5 21	14 2.95	-4 35.5	2.094	3.008	9.9	21.3
5 31	13 57.00	-9 37.3	2.186	3.040	12.2	21.9	5 31	13 57.88	-4 22.6	2.168	3.005	12.9	21.5
459428	2012 <i>SC</i> ₅₀		4 27.5	260°40	1°8/30.5	17	497588	2006 <i>HJ</i> ₇₃		4 27.5	329°13	4°3/25.0	17
3 22	14 36.56	-24 44.2	4.651	5.415	7.3	21.1	3 22	14 46.29	-6 27.8	1.359	2.213	17.0	21.2
4 1	14 33.07	-24 40.1	4.546	5.408	5.8	21.0	4 1	14 42.37	-5 50.3	1.286	2.209	13.1	20.9
4 11	14 28.69	-24 28.8	4.465	5.400	4.2	20.9	4 11	14 35.58	-5 8.3	1.234	2.205	8.7	20.7
4 21	14 23.69	-24 10.7	4.412	5.393	2.6	20.8	4 21	14 26.69	-4 27.5	1.205	2.201	4.8	20.4
5 1	14 18.43	-23 46.8	4.389	5.385	1.8	20.7	5 1	14 16.90	-3 54.9	1.201	2.197	5.4	20.4
5 11	14 13.30	-23 18.7	4.395	5.377	2.8	20.8	5 11	14 7.61	-3 36.7	1.222	2.194	9.6	20.7
5 21	14 8.64	-22 48.5	4.430	5.370	4.4	20.9	5 21	14 0.04	-3 36.8	1.265	2.191	14.1	20.9
5 31	14 4.75	-22 18.4	4.492	5.362	6.1	21.0	5 31	13 55.04	-3 56.3	1.328	2.188	18.1	21.2
393836	2005 <i>SW</i> ₁₀₈		4 27.5	218°74	1°8/29.1	16	396675	2002 <i>RH</i> ₁₇₆		4 27.5	267°37	1°3/26.6	17
3 22	14 45.11	-20 27.1	2.641	3.431	11.6	21.8	3 22	14 48.08	-14 39.3	1.539	2.371	16.5	22.8
4 1	14 40.22	-20 37.8	2.544	3.426	9.1	21.6	4 1	14 43.89	-13 54.9	1.434	2.345	12.8	22.5
4 11	14 33.60	-20 39.3	2.471	3.422	6.3	21.4	4 11	14 36.76	-12 54.9	1.350	2.318	8.4	22.2
4 21	14 25.74	-20 31.7	2.426	3.417	3.3	21.2	4 21	14 27.28	-11 42.1	1.290	2.290	3.4	21.8
5 1	14 17.32	-20 16.5	2.409	3.412	1.9	21.1	5 1	14 16.51	-10 22.9	1.256	2.261	2.8	21.7
5 11	14 9.12	-19 56.1	2.421	3.406	4.4	21.3	5 11	14 5.85	-9 5.9	1.250	2.231	8.2	21.9
5 21	14 1.84	-19 34.0	2.461	3.401	7.5	21.5	5 21	13 56.65	-7 59.7	1.267	2.201	13.5	22.1
5 31	13 56.07	-19 13.7	2.527	3.395	10.3	21.6	5 31	13 49.96	-7 11.3	1.306	2.169	18.1	22.3
513085	2017 <i>WR</i> ₂₁		4 27.5	242°79	1°5/26.3	18	36121	1999 <i>RO</i> ₁₄₃		4 27.5	314°09	0°3/27.7	18
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
361109	2006 <i>DF</i> ₂₀₆		4 27.5 56°68'	5°4/30.6	17		419537	2010 <i>MO</i> ₆		4 27.5 176°81'	0°1/27.5	16	
3 22	14 49.68	-25 47.0	1.403	2.208	19.2	20.7	3 22	14 47.48	-16 47.4	2.139	2.948	13.3	22.4
4 1	14 45.28	-26 26.3	1.328	2.212	15.7	20.5	4 1	14 42.27	-16 14.4	2.053	2.950	10.3	22.2
4 11	14 37.65	-26 46.1	1.272	2.216	11.6	20.3	4 11	14 35.03	-15 30.1	1.991	2.952	6.7	21.9
4 21	14 27.58	-26 43.7	1.238	2.220	7.5	20.0	4 21	14 26.37	-14 37.1	1.955	2.954	2.7	21.7
5 1	14 16.43	-26 19.4	1.229	2.224	5.4	19.9	5 1	14 17.14	-13 39.2	1.948	2.954	1.4	21.6
5 11	14 5.85	-25 38.0	1.244	2.229	7.7	20.1	5 11	14 8.31	-12 41.9	1.971	2.954	5.5	21.9
5 21	13 57.23	-24 47.8	1.283	2.233	11.8	20.3	5 21	14 0.68	-11 50.3	2.021	2.953	9.2	22.1
5 31	13 51.55	-23 57.8	1.343	2.238	15.8	20.6	5 31	13 54.90	-11 8.7	2.094	2.951	12.5	22.3
169012	2001 <i>DD</i> ₄₅		4 27.5 117°69'	1°9/26.1	18		12312	Väte		4 27.5 178°03'	3°3/24.6	18	
3 22	14 48.31	-11 38.4	1.771	2.600	14.8	20.2	3 22	14 45.01	-5 57.0	2.260	3.090	12.0	19.0
4 1	14 43.06	-10 57.4	1.705	2.615	11.2	20.0	4 1	14 40.21	-5 14.9	2.181	3.091	9.1	18.9
4 11	14 35.56	-10 8.4	1.663	2.631	7.1	19.8	4 11	14 33.61	-4 30.0	2.127	3.092	6.1	18.7
4 21	14 26.55	-9 15.5	1.647	2.646	3.0	19.6	4 21	14 25.78	-3 46.3	2.100	3.093	3.5	18.5
5 1	14 17.04	-8 24.2	1.658	2.660	2.9	19.6	5 1	14 17.47	-3 8.3	2.101	3.093	4.1	18.5
5 11	14 8.13	-7 40.2	1.697	2.674	6.9	19.9	5 11	14 9.50	-2 40.1	2.131	3.092	6.9	18.7
5 21	14 0.69	-7 7.8	1.762	2.687	10.8	20.2	5 21	14 2.60	-2 24.2	2.187	3.092	10.0	18.9
5 31	13 55.37	-6 50.0	1.849	2.699	14.2	20.4	5 31	13 57.31	-2 22.4	2.266	3.091	12.8	19.1
321828	2010 <i>RA</i> ₆₆		4 27.5 169°01'	0°7/26.9	17		344804	2004 <i>BE</i> ₃₂		4 27.5 19°78'	5°8/22.7	17	
3 22	14 46.61	-14 44.6	1.729	2.557	15.2	21.6	3 22	14 43.56	+0 35.0	2.010	2.850	12.8	20.8
4 1	14 42.04	-14 12.5	1.651	2.559	11.6	21.3	4 1	14 39.29	+1 28.7	1.941	2.851	10.1	20.7
4 11	14 35.08	-13 29.1	1.594	2.561	7.5	21.1	4 11	14 33.09	+2 20.4	1.895	2.852	7.4	20.5
4 21	14 26.43	-12 37.6	1.562	2.562	2.9	20.8	4 21	14 25.59	+3 4.3	1.876	2.853	5.8	20.4
5 1	14 17.09	-11 43.0	1.558	2.563	2.0	20.7	5 1	14 17.59	+3 35.3	1.883	2.854	6.6	20.5
5 11	14 8.21	-10 51.5	1.581	2.564	6.6	21.0	5 11	14 9.98	+3 49.3	1.916	2.855	9.1	20.6
5 21	14 0.77	-10 8.8	1.629	2.564	10.9	21.3	5 21	14 3.53	+3 44.9	1.974	2.857	11.9	20.8
5 31	13 55.50	-9 39.2	1.700	2.565	14.6	21.5	5 31	13 58.84	+3 22.2	2.052	2.858	14.6	21.0
250162	2002 <i>TY</i> ₅₇		4 27.5 209°46'	2°3/25.9	18		509681	2008 <i>OW</i> ₅		4 27.5 234°54'	3°8/1.2	17	
3 22	14 53.59	-11 14.4	1.711	2.532	15.6	23.3	3 22	14 47.33	-28 25.2	2.569	3.323	12.8	22.8
4 1	14 47.57	-10 30.0	1.618	2.524	12.0	23.1	4 1	14 42.19	-28 25.2	2.455	3.307	10.5	22.6
4 11	14 38.80	-9 35.7	1.549	2.515	7.8	22.8	4 11	14 35.05	-28 9.9	2.364	3.290	7.9	22.4
4 21	14 27.99	-8 35.3	1.505	2.504	3.4	22.5	4 21	14 26.43	-27 38.4	2.299	3.272	5.3	22.2
5 1	14 16.22	-7 34.9	1.490	2.491	3.5	22.5	5 1	14 17.10	-26 51.6	2.261	3.253	3.8	22.1
5 11	14 4.80	-6 41.5	1.503	2.477	8.0	22.7	5 11	14 7.96	-25 52.9	2.253	3.233	5.2	22.1
5 21	13 54.91	-6 0.9	1.542	2.461	12.5	22.9	5 21	13 59.84	-24 47.4	2.273	3.213	8.0	22.3
5 31	13 47.42	-5 37.1	1.603	2.444	16.4	23.1	5 31	13 53.42	-23 41.0	2.319	3.192	10.9	22.4
410752	2009 <i>DQ</i> ₄₇		4 27.5 41°81'	1°0/26.9	18		376527	2012 <i>QX</i> ₃₉		4 27.5 200°92'	1°0/29.3	17	
3 22	14 46.23	-13 41.8	1.209	2.061	18.8	20.8	3 22	14 35.97	-21 6.0	4.887	5.667	6.8	21.6
4 1	14 42.44	-13 21.6	1.152	2.074	14.4	20.6	4 1	14 32.57	-20 54.4	4.788	5.665	5.3	21.5
4 11	14 35.61	-12 49.4	1.115	2.087	9.2	20.3	4 11	14 28.36	-20 36.8	4.715	5.662	3.6	21.4
4 21	14 26.67	-12 9.3	1.101	2.101	3.6	20.1	4 21	14 23.61	-20 14.2	4.670	5.660	1.9	21.2
5 1	14 17.00	-11 27.5	1.111	2.116	2.6	20.0	5 1	14 18.64	-19 47.6	4.655	5.658	1.1	21.2
5 11	14 8.13	-10 51.3	1.145	2.131	8.0	20.4	5 11	14 13.80	-19 18.8	4.670	5.656	2.5	21.3
5 21	14 1.26	-10 26.6	1.201	2.147	12.9	20.7	5 21	14 9.39	-18 49.6	4.714	5.653	4.2	21.4
5 31	13 57.17	-10 17.2	1.278	2.163	17.1	21.0	5 31	14 5.71	-18 21.9	4.786	5.651	5.8	21.5
351816	2006 <i>OZ</i> ₂₁		4 27.5 118°94'	5°1/2.3	17		189745	2001 <i>XR</i> ₂₄₀		4 27.5 51°78'	6°6/2.9	17	
3 22	14 51.60	-31 55.5	2.893	3.614	12.2	21.7	3 22	14 46.25	-32 17.0	1.709	2.477	17.8	19.7
4 1	14 45.14	-32 43.8	2.810	3.631	10.2	21.6	4 1	14 42.17	-32 38.8	1.632	2.485	14.9	19.5
4 11	14 36.76	-33 18.6	2.751	3.648	8.1	21.5	4 11	14 35.36	-32 37.5	1.575	2.493	11.6	19.3
4 21	14 27.05	-33 37.8	2.717	3.664	6.1	21.4	4 21	14 26.60	-32 10.8	1.539	2.502	8.5	19.1
5 1	14 16.76	-33 40.9	2.713	3.680	5.1	21.3	5 1	14 17.05	-31 19.6	1.528	2.510	6.6	19.0
5 11	14 6.77	-33 29.6	2.737	3.695	5.7	21.4	5 11	14 8.07	-30 9.2	1.543	2.519	7.5	19.1
5 21	13 57.86	-33 7.3	2.789	3.710	7.5	21.5	5 21	14 0.78	-28 47.9	1.582	2.528	10.3	19.3
5 31	13 50.64	-32 38.5	2.867	3.725	9.5	21.7	5 31	13 55.98	-27 25.1	1.645	2.538	13.5	19.5
463117	2011 <i>UU</i> ₂₆₀		4 27.5 149°51'	0°7/28.1	16		3949	Mach		4 27.5 20°30'	1°7/28.7	18	
3 22	14 49.63	-18 0.7	1.824	2.635	15.2	22.7	3 22	14 45.91	-20 29.0	1.306	2.139	18.8	16.5
4 1	14 44.21	-17 42.4	1.747	2.644	11.8	22.5	4 1	14 42.36	-20 12.2	1.232	2.140	14.8	16.2
4 11	14 36.41	-17 11.2	1.692	2.653	7.7	22.3	4 11	14 35.71	-19 35.7	1.178	2.141	10.0	16.0
4 21	14 26.94	-16 29.1	1.663	2.661	3.3	22.1	4 21	14 26.81	-18 41.0	1.145	2.142	4.7	15.7
5 1	14 16.84	-15 40.0	1.662	2.668	1.5	21.9	5 1	14 16.95	-17 33.4	1.138	2.143	2.2	15.5
5 11	14 7.26	-14 49.5	1.689	2.674	5.9	22.2	5 11	14 7.70	-16 21.4	1.155	2.145	7.2	15.8
5 21	13 59.17	-14 3.4	1.742	2.680	10.1	22.5	5 21	14 0.34	-15 14.3	1.195	2.147	12.3	16.1
5 31	13 53.26	-13 26.8	1.818	2.685	13.7	22.7	5 31	13 55.77	-14 20.2	1.256	2.149	16.8	16.4
439351	2012 <i>XN</i> ₆₃		4 27.5 28°63'	6°5/21.9	17		320437	2007 <i>VM</i> ₁₁₅		4 27.5 94°78'	1°8/26.3	18	
3 22	14 43.29	+3 24.4	2.057	2.896	12.7	20.4	3 22	14 47.65	-12 16.9	1.589	2.425	15.9	21.8
4 1	14 39.01	+4 18.7	1.993	2.899	10.1	20.3	4 1	14 42.83	-11 36.7	1.527	2.440	12.1	21.6
4 11	14 32.87	+5 8.5	1.952	2.902	7.7	20.1	4 11	14 35.54	-10 47.1	1.486	2.455	7.7	21.4
4 21	14 25.47	+5 48.2	1.937	2.905	6.5	20.0	4 21	14 26.60	-9 52.7	1.471	2.470	3.2	21.1
5 1	14 17.63	+6 12.6	1.948	2.909	7.3	20.1	5 1	14 17.12	-8 59.5	1.482	2.485	2.9	21.1
5 11	14 10.19	+6 18.5	1.985	2.912	9.6	20.2	5 11	14 8.28	-8 13.7	1.520	2.499	7.3	21.4
5 21	14 3.90	+6 4.9	2.046	2.916	12.1	20.4	5 21	14 1.06	-7 40.4	1.583	2.513	11.5	21.7
5 31	13 59.31	+5 32.7	2.128	2.920	14.6	20.6	5 31	13 56.13	-7 22.5	1.668	2.527	15.0	22.0
507431	2012 <i>RR</i> ₇		4 27.5 220°72'	2°4/29.7	18		102336	1999 <i>TA</i> ₁₁₄		4 27.5 110°16'	0°3/27.2	18	
3 22	14 46.93												

EPHEMERIDES

4 27.5

4 27.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
287159	2002 <i>RP</i> ₂₃₅		4 27.5 317°41	0°5/27.8	17		33403	1999 <i>CN</i> ₇₃		4 27.6 40°72	3°0/29.5	18	
3 22	14 43.40	-16 49.6	1.363	2.206	17.6	20.7	3 22	14 45.72	-22 41.9	1.262	2.091	19.6	19.0
4 1	14 40.48	-16 37.7	1.275	2.190	13.8	20.4	4 1	14 42.27	-22 36.8	1.196	2.099	15.5	18.7
4 11	14 34.61	-16 10.7	1.207	2.175	9.1	20.1	4 11	14 35.67	-22 10.3	1.148	2.107	10.8	18.5
4 21	14 26.44	-15 30.6	1.161	2.160	3.9	19.8	4 21	14 26.81	-21 22.9	1.122	2.115	5.7	18.2
5 1	14 17.13	-14 41.9	1.140	2.146	1.9	19.6	5 1	14 17.08	-20 19.4	1.120	2.124	3.1	18.1
5 11	14 8.13	-13 51.7	1.143	2.133	7.5	19.9	5 11	14 8.06	-19 8.1	1.142	2.133	7.2	18.4
5 21	14 0.78	-13 7.7	1.170	2.120	12.7	20.1	5 21	14 1.04	-17 58.8	1.188	2.143	12.0	18.7
5 31	13 56.06	-12 36.4	1.216	2.107	17.4	20.4	5 31	13 56.88	-17 0.2	1.254	2.153	16.4	18.9
480509	2015 <i>MY</i>		4 27.5 294°89	3°2/24.5	16		465358	2008 <i>AA</i> ₆₄		4 27.6 147°36	1°5/26.3	16	
3 22	14 41.53	- 7 34.3	2.164	3.001	12.2	20.9	3 22	14 48.08	-12 17.0	1.994	2.816	13.7	22.4
4 1	14 37.88	- 6 40.3	2.062	2.976	9.3	20.7	4 1	14 42.76	-11 38.4	1.920	2.826	10.4	22.2
4 11	14 32.32	- 5 40.3	1.984	2.952	6.2	20.4	4 11	14 35.36	-10 51.8	1.870	2.836	6.6	22.0
4 21	14 25.37	- 4 38.4	1.933	2.927	3.5	20.2	4 21	14 26.55	-10 0.6	1.846	2.845	2.7	21.8
5 1	14 17.73	- 3 40.3	1.910	2.903	4.2	20.2	5 1	14 17.23	- 9 9.7	1.851	2.853	2.5	21.8
5 11	14 10.26	- 2 51.2	1.914	2.878	7.3	20.3	5 11	14 8.39	- 8 24.3	1.884	2.861	6.3	22.0
5 21	14 3.75	- 2 15.6	1.944	2.854	10.8	20.5	5 21	14 0.85	- 7 48.7	1.944	2.868	10.0	22.3
5 31	13 58.87	- 1 56.1	1.996	2.829	14.0	20.7	5 31	13 55.23	- 7 25.9	2.027	2.874	13.2	22.5
192227	2008 <i>AD</i> ₁₁₈		4 27.5 69°80	5°0/23.6	18		249545	2010 <i>HB</i> ₄₅		4 27.6 318°59	1°4/29.7	18	
3 22	14 45.42	+ 0 51.4	2.236	3.068	12.0	20.1	3 22	14 36.72	-22 7.4	4.227	5.007	7.7	19.9
4 1	14 40.47	+ 1 20.5	2.169	3.074	9.4	19.9	4 1	14 33.31	-22 0.2	4.127	5.002	6.1	19.7
4 11	14 33.75	+ 1 46.4	2.125	3.081	6.8	19.8	4 11	14 28.94	-21 45.8	4.053	4.998	4.2	19.6
4 21	14 25.85	+ 2 5.0	2.108	3.087	5.1	19.7	4 21	14 23.91	-21 25.2	4.006	4.994	2.3	19.5
5 1	14 17.52	+ 2 12.5	2.119	3.094	5.7	19.7	5 1	14 18.61	-20 59.4	3.988	4.990	1.4	19.4
5 11	14 9.60	+ 2 6.3	2.157	3.101	8.0	19.9	5 11	14 13.46	-20 30.6	4.000	4.986	2.8	19.5
5 21	14 2.77	+ 1 45.6	2.221	3.107	10.7	20.1	5 21	14 8.81	-20 0.7	4.041	4.982	4.8	19.6
5 31	13 57.57	+ 1 10.8	2.307	3.114	13.1	20.2	5 31	14 5.01	-19 32.1	4.109	4.978	6.6	19.8
498630	2008 <i>RK</i> ₁₃₃		4 27.5 222°19	5°4/21.6	18		257301	2009 <i>HT</i> ₆₁		4 27.6 251°21	0°6/27.2	17	
3 22	14 44.08	+ 0 55.3	2.498	3.327	11.0	22.1	3 22	14 49.31	-13 18.3	1.745	2.570	15.2	21.3
4 1	14 39.42	+ 2 9.5	2.413	3.316	8.7	21.9	4 1	14 44.37	-13 14.3	1.650	2.557	11.7	21.0
4 11	14 33.10	+ 3 23.4	2.353	3.304	6.5	21.7	4 11	14 36.83	-13 2.1	1.578	2.544	7.7	20.8
4 21	14 25.61	+ 4 31.7	2.321	3.291	5.4	21.7	4 21	14 27.30	-12 43.5	1.530	2.530	3.1	20.5
5 1	14 17.63	+ 5 28.8	2.317	3.278	6.3	21.7	5 1	14 16.79	-12 21.7	1.510	2.516	2.0	20.3
5 11	14 9.88	+ 6 10.5	2.341	3.265	8.5	21.8	5 11	14 6.53	-12 1.3	1.518	2.501	6.7	20.6
5 21	14 3.05	+ 6 34.4	2.391	3.250	11.0	21.9	5 21	13 57.65	-11 46.7	1.550	2.486	11.3	20.8
5 31	13 57.67	+ 6 39.6	2.462	3.235	13.3	22.1	5 31	13 51.02	-11 41.9	1.606	2.471	15.2	21.0
381183	2007 <i>LN</i> ₂₁		4 27.5 300°49	2°3/25.6	17		105458	2000 <i>QN</i> ₁₉₉		4 27.6 120°95	5°3/2.2	18	
3 22	14 42.95	-11 16.4	1.815	2.653	14.1	21.3	3 22	14 47.74	-30 59.5	2.452	3.197	13.6	20.2
4 1	14 39.16	-10 24.5	1.734	2.649	10.7	21.1	4 1	14 42.57	-31 36.5	2.365	3.203	11.4	20.0
4 11	14 33.20	- 9 23.5	1.676	2.646	6.9	20.8	4 11	14 35.32	-31 58.3	2.299	3.209	8.9	19.8
4 21	14 25.71	- 8 18.0	1.644	2.642	3.1	20.6	4 21	14 26.59	-32 3.1	2.258	3.215	6.6	19.7
5 1	14 17.58	- 7 14.1	1.638	2.639	3.3	20.6	5 1	14 17.20	-31 50.7	2.245	3.221	5.3	19.6
5 11	14 9.84	- 6 18.1	1.660	2.635	7.2	20.8	5 11	14 8.11	-31 23.5	2.258	3.227	6.1	19.7
5 21	14 3.37	- 5 35.2	1.707	2.632	11.1	21.1	5 21	14 0.19	-30 45.9	2.299	3.232	8.2	19.8
5 31	13 58.83	- 5 8.7	1.776	2.629	14.6	21.3	5 31	13 54.11	-30 3.3	2.364	3.238	10.7	20.0
420472	2012 <i>DR</i> ₉₁		4 27.5 58°26	1°1/28.3	16		160690	2000 <i>HD</i> ₇		4 27.6 265°88	1°6/26.7	17	
3 22	14 47.02	-18 5.5	1.519	2.346	16.9	21.5	3 22	14 52.34	-10 30.8	1.659	2.486	15.7	20.6
4 1	14 42.73	-18 1.4	1.446	2.351	13.2	21.2	4 1	14 47.02	-10 30.2	1.554	2.462	12.2	20.3
4 11	14 35.72	-17 43.5	1.394	2.357	8.8	21.0	4 11	14 38.78	-10 24.1	1.471	2.437	8.0	20.0
4 21	14 26.78	-17 13.2	1.366	2.363	3.9	20.7	4 21	14 28.19	-10 14.5	1.413	2.412	3.4	19.7
5 1	14 17.05	-16 34.3	1.363	2.369	1.8	20.6	5 1	14 16.29	-10 4.8	1.382	2.386	2.8	19.6
5 11	14 7.87	-15 52.9	1.387	2.375	6.5	20.9	5 11	14 4.45	- 9 59.2	1.379	2.359	7.7	19.8
5 21	14 0.36	-15 15.1	1.435	2.382	11.1	21.2	5 21	13 53.98	-10 1.6	1.401	2.332	12.6	20.0
5 31	13 55.32	-14 46.6	1.505	2.388	15.1	21.4	5 31	13 45.96	-10 15.4	1.445	2.304	16.9	20.2
150895	2001 <i>SU</i> ₂₈₂		4 27.5 231°51	3°1/29.6	18		521192	2015 <i>FN</i> ₄₁₂		4 27.6 88°33	5°3/21.9	17	
3 22	14 50.75	-22 17.4	2.129	2.915	14.1	19.4	3 22	14 41.64	- 1 12.4	2.235	3.074	11.8	20.9
4 1	14 45.17	-22 47.3	2.027	2.904	11.3	19.1	4 1	14 37.58	+ 0 15.3	2.177	3.088	9.1	20.7
4 11	14 37.19	-23 5.9	1.948	2.893	8.1	18.9	4 11	14 31.88	+ 1 42.9	2.144	3.101	6.6	20.6
4 21	14 27.39	-23 12.0	1.895	2.882	4.7	18.7	4 21	14 25.12	+ 3 4.3	2.138	3.115	5.3	20.6
5 1	14 16.67	-23 5.8	1.870	2.870	3.1	18.6	5 1	14 18.02	+ 4 13.2	2.161	3.128	6.2	20.6
5 11	14 6.14	-22 49.9	1.873	2.857	5.7	18.7	5 11	14 11.33	+ 5 5.3	2.210	3.141	8.5	20.8
5 21	13 56.80	-22 28.3	1.904	2.844	9.2	18.9	5 21	14 5.68	+ 5 38.0	2.284	3.154	11.1	21.0
5 31	13 49.49	-22 6.3	1.959	2.831	12.6	19.1	5 31	14 1.56	+ 5 51.1	2.379	3.167	13.4	21.2
303839	2005 <i>SO</i> ₁₆₄		4 27.5 226°84	2°1/25.7	18		431278	2006 <i>UG</i> ₁₃₃		4 27.6 311°44	0°1/27.5	17	
3 22	14 44.74	- 7 23.0	2.678	3.499	10.6	20.5	3 22	14 41.13	-17 16.2	2.113	2.933	13.1	20.7
4 1	14 39.83	- 7 9.0	2.587	3.492	8.1	20.3	4 1	14 37.56	-16 32.5	2.023	2.927	10.1	20.5
4 11	14 33.33	- 6 52.6	2.520	3.485	5.2	20.2	4 11	14 32.09	-15 36.4	1.956	2.921	6.5	20.3
4 21	14 25.71	- 6 36.4	2.482	3.478	2.6	20.0	4 21	14 25.28	-14 30.7	1.915	2.914	2.6	20.0
5 1	14 17.61	- 6 23.0	2.472	3.470	2.8	20.0	5 1	14 17.91	-13 20.0	1.903	2.908	1.4	19.9
5 11	14 9.73	- 6 15.2	2.493	3.462	5.5	20.1	5 11	14 10.85	-12 10.3	1.918	2.903	5.5	20.2
5 21	14 2.72	- 6 14.9	2.540	3.455	8.4	20.3	5 21	14 4.88	-11 7.1	1.960	2.897	9.2	20.4
5 31	13 57.09	- 6 23.8	2.612	3.446	11.0	20.5	5 31	14 0.60	-10 15.3	2.025	2.892	12.5	20.6
278830	2008 <i>SB</i> ₂₇₃		4 27.5 240°9										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
247769	2003 <i>QE</i> ₆₆	4 27.6 224°65		1.8°/28.9 17			93207	2000 <i>SY</i> ₁₂₂	4 27.6 214°66		1.6°/26.2 18		
3 22	14 48.91	-20 38.3	1.925	2.725	14.9	21.3	3 22	14 44.86	-12 0.0	2.023	2.850	13.3	20.3
4 1	14 43.89	-20 31.6	1.827	2.716	11.8	21.1	4 1	14 40.45	-11 21.7	1.937	2.847	10.1	20.1
4 11	14 36.42	-20 10.9	1.750	2.705	8.1	20.8	4 11	14 33.99	-10 35.1	1.875	2.842	6.5	19.8
4 21	14 27.11	-19 36.6	1.700	2.693	4.0	20.6	4 21	14 26.08	-9 43.8	1.839	2.838	2.7	19.6
5 1	14 16.94	-18 51.1	1.677	2.681	2.1	20.4	5 1	14 17.56	-8 52.5	1.831	2.833	2.6	19.6
5 11	14 7.04	-17 59.6	1.682	2.669	5.8	20.6	5 11	14 9.38	-8 6.5	1.851	2.828	6.4	19.8
5 21	13 58.46	-17 8.0	1.713	2.655	10.0	20.8	5 21	14 2.37	-7 30.3	1.897	2.823	10.1	20.0
5 31	13 52.01	-16 22.5	1.769	2.641	13.7	21.0	5 31	13 57.18	-7 7.1	1.966	2.818	13.4	20.2
467443	2006 <i>AE</i> ₇₂	4 27.6 124°76		11.7°/15.9 17			62959	2000 <i>VV</i> ₃₉	4 27.6 162°58		1°0/28.9 18		
3 22	14 45.31	+17 26.6	1.938	2.750	14.4	20.8	3 22	14 39.92	-19 42.5	3.678	4.466	8.6	21.0
4 1	14 40.71	+19 7.5	1.893	2.754	12.8	20.7	4 1	14 35.82	-19 31.4	3.587	4.469	6.7	20.8
4 11	14 34.06	+20 32.6	1.871	2.757	11.8	20.7	4 11	14 30.59	-19 13.1	3.520	4.472	4.5	20.7
4 21	14 26.04	+21 33.9	1.872	2.761	11.8	20.7	4 21	14 24.62	-18 48.6	3.482	4.475	2.2	20.5
5 1	14 17.56	+22 5.1	1.896	2.765	12.8	20.8	5 1	14 18.34	-18 19.7	3.473	4.478	1.1	20.4
5 11	14 9.61	+22 4.2	1.941	2.768	14.3	20.9	5 11	14 12.26	-17 48.5	3.495	4.481	3.2	20.6
5 21	14 2.97	+21 32.5	2.005	2.772	16.1	21.0	5 21	14 6.80	-17 17.6	3.545	4.483	5.5	20.8
5 31	13 58.25	+20 33.9	2.086	2.775	17.8	21.1	5 31	14 2.35	-16 49.5	3.622	4.485	7.6	20.9
102775	1999 <i>VS</i> ₁₄₄	4 27.6 228°49		3°1/ 1.2 18			454524	2014 <i>OB</i> ₂₄₁	4 27.6 230°10		0°5/26.8 15		
3 22	14 42.42	-28 26.2	2.611	3.374	12.4	19.2	3 22	14 38.80	-13 0.1	4.142	4.948	7.4	23.7
4 1	14 38.28	-27 55.0	2.511	3.370	10.1	19.0	4 1	14 34.86	-12 37.0	4.038	4.935	5.6	23.5
4 11	14 32.42	-27 7.0	2.434	3.365	7.4	18.8	4 11	14 29.95	-12 9.5	3.959	4.922	3.6	23.4
4 21	14 25.39	-26 3.0	2.382	3.360	4.7	18.6	4 21	14 24.36	-11 39.3	3.910	4.909	1.4	23.2
5 1	14 17.88	-24 45.4	2.359	3.355	3.1	18.5	5 1	14 18.48	-11 8.3	3.891	4.895	1.1	23.2
5 11	14 10.70	-23 19.2	2.366	3.350	4.6	18.6	5 11	14 12.72	-10 38.6	3.903	4.881	3.3	23.3
5 21	14 4.51	-21 50.0	2.401	3.345	7.4	18.8	5 21	14 7.46	-10 12.1	3.944	4.867	5.4	23.5
5 31	13 59.87	-20 24.0	2.462	3.340	10.2	18.9	5 31	14 3.05	-9 50.8	4.011	4.852	7.3	23.6
15715	1989 <i>UN</i> ₁	4 27.6 176°95		0°2/27.4 18			296513	2009 <i>KB</i> ₂₂	4 27.6 250°26		2°6/22.6 18		
3 22	14 46.53	-16 12.5	2.468	3.272	11.9	20.0	3 22	14 34.84	-2 10.4	4.622	5.448	6.4	21.0
4 1	14 41.31	-15 38.9	2.379	3.275	9.1	19.8	4 1	14 31.76	-1 16.3	4.538	5.443	4.9	20.9
4 11	14 34.33	-14 55.7	2.316	3.277	5.9	19.6	4 11	14 27.90	-0 21.7	4.481	5.438	3.4	20.8
4 21	14 26.15	-14 5.4	2.280	3.278	2.4	19.3	4 21	14 23.52	+0 30.7	4.453	5.433	2.6	20.7
5 1	14 17.49	-13 11.3	2.273	3.279	1.3	19.2	5 1	14 18.93	+1 18.7	4.456	5.428	3.1	20.7
5 11	14 9.17	-12 18.1	2.297	3.279	4.9	19.5	5 11	14 14.48	+2 0.0	4.488	5.423	4.4	20.8
5 21	14 1.87	-11 30.0	2.348	3.278	8.3	19.7	5 21	14 10.45	+2 33.1	4.547	5.418	5.9	20.9
5 31	13 56.17	-10 50.8	2.425	3.276	11.2	19.9	5 31	14 7.11	+2 57.0	4.631	5.413	7.4	21.0
169588	2002 <i>GO</i> ₅₆	4 27.6 259°72		3°5/29.6 18			456080	2006 <i>BZ</i> ₆₆	4 27.6 174°13		2°0/28.9 16		
3 22	14 49.44	-22 34.8	1.663	2.466	16.7	19.9	3 22	14 50.26	-20 13.3	1.637	2.447	16.7	22.2
4 1	14 44.83	-22 58.2	1.566	2.453	13.5	19.6	4 1	14 45.19	-20 14.0	1.555	2.450	13.1	22.0
4 11	14 37.34	-23 6.8	1.490	2.440	9.6	19.3	4 11	14 37.36	-19 59.8	1.495	2.451	8.9	21.7
4 21	14 27.60	-22 59.1	1.438	2.427	5.5	19.1	4 21	14 27.53	-19 31.1	1.458	2.452	4.4	21.5
5 1	14 16.69	-22 35.7	1.412	2.413	3.5	18.9	5 1	14 16.83	-18 50.8	1.448	2.453	2.3	21.3
5 11	14 6.01	-22 0.8	1.412	2.399	6.7	19.1	5 11	14 6.60	-18 4.5	1.466	2.453	6.4	21.6
5 21	13 56.84	-21 20.5	1.437	2.384	11.1	19.3	5 21	13 58.00	-17 18.8	1.508	2.453	10.8	21.8
5 31	13 50.19	-20 42.1	1.485	2.370	15.2	19.5	5 31	13 51.88	-16 40.1	1.574	2.452	14.8	22.1
317883	2003 <i>UB</i> ₁₂₀	4 27.6 212°38		1°4/28.7 18			70243	1999 <i>RH</i> ₇₅	4 27.6 117°01		0°5/27.9 18		
3 22	14 45.86	-19 27.2	2.214	3.016	13.1	21.5	3 22	14 48.90	-17 16.2	1.744	2.561	15.5	20.3
4 1	14 41.16	-19 24.0	2.122	3.012	10.3	21.3	4 1	14 43.74	-16 57.6	1.674	2.575	12.0	20.1
4 11	14 34.43	-19 9.7	2.053	3.008	7.0	21.1	4 11	14 36.17	-16 26.6	1.626	2.588	7.8	19.9
4 21	14 26.26	-18 45.2	2.009	3.004	3.4	20.8	4 21	14 26.96	-15 45.5	1.603	2.601	3.3	19.6
5 1	14 17.45	-18 12.8	1.995	3.000	1.7	20.7	5 1	14 17.17	-14 58.5	1.607	2.614	1.5	19.5
5 11	14 8.92	-17 36.4	2.008	2.995	5.0	20.9	5 11	14 7.95	-14 11.2	1.640	2.626	6.0	19.8
5 21	14 1.52	-17 0.4	2.049	2.990	8.6	21.1	5 21	14 0.26	-13 29.4	1.698	2.637	10.2	20.1
5 31	13 55.88	-16 29.3	2.114	2.985	11.9	21.3	5 31	13 54.80	-12 57.6	1.779	2.648	13.8	20.4
503393	2016 <i>CV</i> ₁₈₈	4 27.6 60°27		2°3/25.9 17			207037	2004 <i>XA</i> ₆	4 27.6 81°25		4°5/24.8 18		
3 22	14 45.63	-11 36.2	1.448	2.294	16.6	21.3	3 22	14 50.15	-5 33.5	1.444	2.289	16.7	20.2
4 1	14 41.61	-10 51.7	1.383	2.302	12.6	21.1	4 1	14 44.79	-4 46.4	1.395	2.312	12.7	20.0
4 11	14 34.96	-9 57.3	1.339	2.310	8.1	20.8	4 11	14 36.84	-3 57.1	1.367	2.334	8.4	19.8
4 21	14 26.49	-8 58.2	1.319	2.319	3.5	20.6	4 21	14 27.20	-3 11.6	1.363	2.356	4.9	19.7
5 1	14 17.36	-8 1.3	1.325	2.327	3.5	20.6	5 1	14 17.10	-2 36.4	1.386	2.378	5.5	19.7
5 11	14 8.84	-7 13.7	1.357	2.336	8.0	20.9	5 11	14 7.82	-2 16.7	1.434	2.400	9.1	20.0
5 21	14 1.98	-6 40.7	1.412	2.345	12.4	21.1	5 21	14 0.34	-2 14.9	1.506	2.421	13.0	20.3
5 31	13 57.53	-6 25.4	1.488	2.354	16.2	21.4	5 31	13 55.32	-2 31.0	1.599	2.442	16.4	20.5
433263	2012 <i>XX</i> ₈₄	4 27.6 229°73		3°8/23.5 17			502011	2015 <i>AF</i> ₅₇	4 27.6 105°67		1°7/28.9 17		
3 22	14 42.92	-3 55.3	2.541	3.371	10.8	21.6	3 22	14 47.08	-20 27.6	1.849	2.656	15.1	22.4
4 1	14 38.55	-2 58.3	2.452	3.360	8.3	21.5	4 1	14 42.31	-20 16.8	1.775	2.668	11.8	22.2
4 11	14 32.57	-1 59.0	2.388	3.349	5.7	21.3	4 11	14 35.25	-19 52.0	1.723	2.679	8.0	22.0
4 21	14 25.47	-1 1.7	2.351	3.338	3.9	21.1	4 21	14 26.60	-19 14.3	1.695	2.690	3.9	21.8
5 1	14 17.88	-0 11.1	2.344	3.326	4.6	21.2	5 1	14 17.36	-18 27.3	1.696	2.701	1.9	21.6
5 11	14 10.52	+0 28.6	2.365	3.314	7.1	21.3	5 11	14 8.64	-17 36.3	1.723	2.711	5.6	21.9
5 21	14 4.04	+0 54.6	2.412	3.301	9.8	21.4	5 21	14 1.34	-16 47.3	1.777	2.721	9.5	22.1
5 31	13 58.96	+1 5.5	2.481	3.288	12.3	21.6	5 31	13 56.14	-16 5.6	1.855	2.731	13.0	22.4
161550	2004 <i>XS</i> ₅₄	4 27.6 214°50		0°6/27.9 16			383973	2008 <i>TL</i> ₈₈	4 27.6 164°73		2°3/25.5 17		
3 22	14 49.86	-17 2.4	1.866	2.677									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
182077	2000 GA ₁₃₁		4 27.6 224°36	0°1/27.6 17			499687	2010 WJ ₂₄		4 27.6 327°01	1°9/28.8 17		
3 22	14 43.51	-16 24.2	2.363	3.174	12.1	20.8	3 22	14 42.85	-19 54.9	1.366	2.202	18.0	20.8
4 1	14 39.20	-15 56.1	2.269	3.168	9.3	20.6	4 1	14 40.12	-19 49.7	1.280	2.189	14.2	20.5
4 11	14 33.09	-15 18.2	2.200	3.162	6.1	20.4	4 11	14 34.44	-19 26.8	1.213	2.177	9.7	20.2
4 21	14 25.72	-14 32.6	2.157	3.156	2.5	20.1	4 21	14 26.50	-18 47.0	1.169	2.165	4.7	19.9
5 1	14 17.80	-13 42.8	2.143	3.149	1.3	20.0	5 1	14 17.44	-17 54.1	1.148	2.154	2.2	19.7
5 11	14 10.16	-12 53.2	2.158	3.142	5.0	20.3	5 11	14 8.74	-16 55.3	1.153	2.144	7.1	20.0
5 21	14 3.51	-12 8.3	2.200	3.134	8.5	20.5	5 21	14 1.71	-15 58.9	1.180	2.134	12.2	20.2
5 31	13 58.44	-11 31.9	2.266	3.127	11.6	20.7	5 31	13 57.33	-15 12.7	1.228	2.126	16.8	20.5
307372	2002 ST ₁₁		4 27.6 170°73	1°1/28.4 17			87703	2000 SE ₂₃		4 27.6 223°38	0°6/26.9 18		
3 22	14 49.52	-17 57.9	1.948	2.755	14.5	21.2	3 22	14 42.95	-13 50.6	2.772	3.583	10.5	20.3
4 1	14 44.17	-18 0.5	1.863	2.757	11.3	21.0	4 1	14 38.51	-13 24.1	2.675	3.575	8.0	20.1
4 11	14 36.48	-17 52.4	1.802	2.760	7.5	20.7	4 11	14 32.55	-12 50.6	2.602	3.566	5.2	19.9
4 21	14 27.13	-17 34.2	1.766	2.762	3.4	20.5	4 21	14 25.51	-12 12.4	2.557	3.556	2.1	19.6
5 1	14 17.07	-17 8.5	1.758	2.763	1.6	20.3	5 1	14 18.00	-11 32.4	2.542	3.547	1.5	19.6
5 11	14 7.40	-16 39.3	1.778	2.764	5.6	20.6	5 11	14 10.70	-10 54.0	2.556	3.536	4.6	19.8
5 21	13 59.08	-16 11.4	1.825	2.765	9.6	20.8	5 21	14 4.22	-10 20.6	2.598	3.526	7.7	20.0
5 31	13 52.84	-15 49.2	1.895	2.765	13.1	21.1	5 31	13 59.07	-9 55.1	2.665	3.515	10.4	20.1
201949	2004 JF ₁		4 27.6 121°06	16°0/22.3 17			134077	2004 XW ₇₁		4 27.6 309°69	4°4/20.4 18		
3 22	15 3.33	+19 39.2	1.194	2.003	21.7	19.6	3 22	14 36.85	+7 18.7	4.096	4.915	7.3	19.4
4 1	14 55.54	+20 35.3	1.150	2.012	19.1	19.5	4 1	14 33.38	+7 57.1	4.020	4.908	5.9	19.3
4 11	14 44.07	+21 3.6	1.122	2.020	17.0	19.4	4 11	14 29.00	+8 31.3	3.971	4.901	4.8	19.3
4 21	14 30.16	+20 52.3	1.114	2.028	16.0	19.3	4 21	14 24.01	+8 58.9	3.949	4.895	4.4	19.2
5 1	14 15.60	+19 54.6	1.128	2.036	16.6	19.4	5 1	14 18.79	+9 17.3	3.955	4.889	4.9	19.2
5 11	14 2.30	+18 12.0	1.163	2.043	18.5	19.5	5 11	14 13.72	+9 25.1	3.988	4.882	6.1	19.3
5 21	13 51.66	+15 53.2	1.218	2.050	21.0	19.7	5 21	14 9.16	+9 21.4	4.046	4.876	7.5	19.4
5 31	13 44.49	+13 9.2	1.290	2.056	23.5	19.9	5 31	14 5.40	+9 6.3	4.127	4.870	8.8	19.5
156188	2001 TV ₂₃₃		4 27.6 281°73	0°4/28.2 18			415629	2014 QX ₃₇₁		4 27.6 248°57	1°5/28.5 16		
3 22	14 36.82	-16 53.5	4.402	5.200	7.2	20.2	3 22	14 50.88	-18 10.1	1.689	2.502	16.1	22.1
4 1	14 33.35	-16 44.2	4.302	5.193	5.5	20.1	4 1	14 45.87	-18 18.6	1.589	2.486	12.7	21.8
4 11	14 28.98	-16 30.0	4.228	5.186	3.6	19.9	4 11	14 38.02	-18 15.0	1.511	2.470	8.6	21.5
4 21	14 23.99	-16 11.8	4.182	5.179	1.6	19.8	4 21	14 27.94	-17 59.5	1.457	2.453	4.0	21.2
5 1	14 18.75	-15 51.2	4.166	5.172	0.7	19.7	5 1	14 16.69	-17 34.0	1.430	2.435	2.0	21.0
5 11	14 13.63	-15 29.8	4.180	5.165	2.8	19.9	5 11	14 5.63	-17 3.0	1.430	2.417	6.6	21.3
5 21	14 8.98	-15 9.4	4.223	5.158	4.8	20.0	5 21	13 56.02	-16 32.1	1.456	2.399	11.3	21.5
5 31	14 5.11	-14 51.9	4.292	5.151	6.6	20.1	5 31	13 48.84	-16 7.4	1.504	2.380	15.5	21.7
190691	2001 EG ₃		4 27.6 131°87	3°6/23.9 17			347805	2002 JP ₁₁₀		4 27.6 286°29	2°0/28.6 17		
3 22	14 45.32	-4 23.8	2.549	3.374	11.0	21.0	3 22	14 48.24	-18 46.3	1.261	2.097	19.2	20.3
4 1	14 40.16	-3 27.4	2.485	3.391	8.3	20.8	4 1	14 44.73	-18 57.5	1.170	2.079	15.3	20.0
4 11	14 33.48	-2 29.5	2.446	3.408	5.6	20.7	4 11	14 37.76	-18 53.0	1.098	2.062	10.4	19.6
4 21	14 25.81	-1 34.5	2.436	3.423	3.7	20.6	4 21	14 27.97	-18 32.5	1.047	2.044	5.0	19.3
5 1	14 17.83	-0 46.7	2.455	3.439	4.3	20.6	5 1	14 16.65	-17 58.1	1.020	2.026	2.5	19.0
5 11	14 10.25	-0 9.8	2.503	3.453	6.7	20.8	5 11	14 5.52	-17 16.2	1.017	2.008	7.9	19.3
5 21	14 3.66	+0 14.0	2.577	3.467	9.3	21.0	5 21	13 56.24	-16 34.7	1.037	1.990	13.6	19.6
5 31	13 58.52	+0 23.6	2.675	3.480	11.6	21.2	5 31	13 50.04	-16 2.2	1.076	1.972	18.7	19.8
353991	2000 RL ₁₉		4 27.6 274°03	10°2/6.1 18			412723	2014 OX ₃₃₃		4 27.6 255°57	0°7/27.2 16		
3 22	14 51.83	-44 41.6	2.463	3.116	15.6	21.0	3 22	14 48.09	-14 3.9	1.521	2.355	16.6	22.0
4 1	14 46.60	-45 59.3	2.357	3.101	14.2	20.8	4 1	14 43.75	-13 47.8	1.435	2.347	12.8	21.7
4 11	14 38.53	-46 58.0	2.270	3.086	12.6	20.7	4 11	14 36.60	-13 20.8	1.370	2.338	8.3	21.4
4 21	14 28.16	-47 32.1	2.203	3.071	11.2	20.5	4 21	14 27.32	-12 45.3	1.329	2.329	3.3	21.1
5 1	14 16.50	-47 38.0	2.159	3.055	10.3	20.5	5 1	14 17.05	-12 5.9	1.315	2.320	2.2	21.0
5 11	14 4.88	-47 15.4	2.139	3.040	10.3	20.4	5 11	14 7.15	-11 28.8	1.326	2.311	7.3	21.3
5 21	13 54.61	-46 28.1	2.143	3.025	11.2	20.5	5 21	13 58.82	-10 59.7	1.362	2.302	12.2	21.5
5 31	13 46.75	-45 23.1	2.170	3.009	12.8	20.5	5 31	13 52.98	-10 43.6	1.419	2.292	16.4	21.7
437751	2014 FK ₄₀		4 27.6 283°59	5°9/21.8 17			39019	2000 UR ₅₃		4 27.6 345°34	3°8/25.4 18		
3 22	14 41.97	+1 43.2	2.247	3.085	11.8	21.1	3 22	14 41.83	-9 7.8	1.140	2.010	18.5	18.0
4 1	14 38.03	+2 47.6	2.168	3.075	9.3	20.9	4 1	14 39.53	-8 25.6	1.070	2.001	14.2	17.7
4 11	14 32.35	+3 50.3	2.113	3.065	7.0	20.8	4 11	14 34.13	-7 34.0	1.018	1.994	9.3	17.4
4 21	14 25.44	+4 45.7	2.085	3.055	5.9	20.7	4 21	14 26.37	-6 39.5	0.989	1.987	4.6	17.1
5 1	14 18.01	+5 28.3	2.083	3.046	6.8	20.7	5 1	14 17.57	-5 50.5	0.982	1.982	5.1	17.1
5 11	14 10.87	+5 54.1	2.108	3.036	9.0	20.8	5 11	14 9.28	-5 15.6	0.998	1.977	10.0	17.3
5 21	14 4.70	+6 1.0	2.157	3.026	11.6	21.0	5 21	14 2.84	-5 0.4	1.034	1.974	15.1	17.6
5 31	14 0.08	+5 48.9	2.227	3.017	14.1	21.1	5 31	13 59.21	-5 7.8	1.089	1.972	19.6	17.8
127183	2002 GW ₁₆₇		4 27.6 332°16	0°8/28.2 17			42832	1999 NL ₄₄		4 27.6 262°19	9°5/20.1 17		
3 22	14 43.61	-18 28.0	1.761	2.583	15.1	20.1	3 22	14 47.17	+6 26.0	1.648	2.488	15.2	18.9
4 1	14 39.89	-18 6.2	1.676	2.580	11.8	19.9	4 1	14 42.73	+7 53.0	1.571	2.473	12.6	18.7
4 11	14 33.85	-17 30.3	1.614	2.576	7.8	19.6	4 11	14 35.77	+9 15.0	1.516	2.456	10.3	18.5
4 21	14 26.12	-16 42.5	1.576	2.573	3.4	19.4	4 21	14 26.95	+10 22.5	1.485	2.440	9.5	18.4
5 1	14 17.67	-15 47.0	1.564	2.570	1.5	19.2	5 1	14 17.27	+11 6.9	1.479	2.423	10.7	18.4
5 11	14 9.60	-14 49.8	1.580	2.568	6.0	19.5	5 11	14 7.94	+11 22.5	1.497	2.406	13.3	18.6
5 21	14 2.89	-13 57.3	1.621	2.565	10.2	19.7	5 21	14 0.01	+11 7.9	1.535	2.388	16.4	18.7
5 31	13 58.26	-13 14.9	1.684	2.563	14.0	20.0	5 31	13 54.30	+10 24.8	1.592	2.370	19.3	18.9
117903	3115 P-L		4 27.6 246°15	3°4/30.5 18			192830	1999 VU ₁₀₁		4 27.6 201°73	0°6/28.1 18		
3 22	14 46.25	-25 46.0	2.206	2.984									

EPHEMERIDES

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4 27.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
484783	2009 <i>CJ</i>	4 27.6 231°28' 14.6"/2.5 18					473890	2016 <i>EK</i> ₁₄₅	4 27.6 25°90' 1.5"/28.3 17				
3 22	15 2.13	-36 49.9	1.233	1.985	24.1	21.1	3 22	14 49.21	-16 10.5	1.330	2.167	18.3	20.7
4 1	14 57.01	-39 24.7	1.154	1.981	21.4	20.8	4 1	14 44.85	-16 42.8	1.263	2.173	14.3	20.5
4 11	14 46.83	-41 39.6	1.092	1.977	18.5	20.6	4 11	14 37.40	-17 4.7	1.215	2.180	9.5	20.2
4 21	14 32.06	-43 20.8	1.049	1.972	15.9	20.4	4 21	14 27.67	-17 16.1	1.189	2.187	4.3	20.0
5 1	14 14.42	-44 15.7	1.026	1.967	14.6	20.3	5 1	14 16.98	-17 18.7	1.189	2.195	2.1	19.8
5 11	13 56.73	-44 20.7	1.025	1.962	15.3	20.4	5 11	14 6.89	-17 16.5	1.214	2.204	7.1	20.2
5 21	13 41.80	-43 43.1	1.044	1.956	17.6	20.5	5 21	13 58.71	-17 14.4	1.263	2.213	11.9	20.5
5 31	13 31.67	-42 38.6	1.081	1.950	20.7	20.6	5 31	13 53.34	-17 17.3	1.332	2.223	16.2	20.7
258687	2002 <i>FZ</i> ₄	4 27.6 333°57' 11.4"/27.0 17					218675	2005 <i>SK</i> ₂₆₂	4 27.6 255°26' 3.5"/30.2 17				
3 22	15 1.15	-21 22.4	1.058	1.880	23.0	19.5	3 22	14 47.74	-24 47.8	1.955	2.742	15.2	21.4
4 1	14 56.91	-24 52.1	0.961	1.852	19.5	19.1	4 1	14 43.17	-24 55.2	1.850	2.726	12.3	21.1
4 11	14 47.48	-28 34.9	0.884	1.826	15.5	18.8	4 11	14 36.12	-24 46.7	1.766	2.709	8.9	20.9
4 21	14 32.75	-32 17.0	0.829	1.801	12.1	18.5	4 21	14 27.15	-24 21.2	1.707	2.692	5.4	20.7
5 1	14 13.79	-35 37.8	0.800	1.777	11.7	18.4	5 1	14 17.21	-23 39.9	1.675	2.674	3.5	20.5
5 11	13 53.22	-38 19.3	0.794	1.756	15.0	18.5	5 11	14 7.47	-22 47.0	1.670	2.656	6.0	20.6
5 21	13 34.36	-40 15.0	0.810	1.737	19.8	18.6	5 21	13 59.00	-21 48.6	1.692	2.637	9.8	20.8
5 31	13 20.21	-41 32.5	0.844	1.720	24.5	18.8	5 31	13 52.67	-20 52.0	1.737	2.618	13.5	21.0
253923	2004 <i>CL</i> ₅₈	4 27.6 95°44' 3.4"/25.4 18					181228	2005 <i>TA</i> ₄₆	4 27.6 232°32' 2.5"/24.9 18				
3 22	14 49.12	-7 8.4	1.668	2.505	15.2	20.4	3 22	14 41.12	-8 37.9	2.523	3.352	10.9	20.2
4 1	14 43.84	-6 33.4	1.608	2.522	11.6	20.2	4 1	14 37.22	-7 46.3	2.438	3.348	8.3	20.0
4 11	14 36.21	-5 54.9	1.571	2.538	7.5	20.0	4 11	14 31.75	-6 49.6	2.378	3.344	5.4	19.8
4 21	14 27.02	-5 17.4	1.559	2.555	4.0	19.9	4 21	14 25.22	-5 51.8	2.345	3.340	2.8	19.7
5 1	14 17.32	-4 46.4	1.575	2.571	4.3	19.9	5 1	14 18.25	-4 57.1	2.341	3.336	3.2	19.7
5 11	14 8.26	-4 26.5	1.617	2.587	7.9	20.2	5 11	14 11.55	-4 9.9	2.366	3.332	6.0	19.9
5 21	14 0.75	-4 20.5	1.684	2.602	11.7	20.4	5 21	14 5.73	-3 33.6	2.418	3.328	8.9	20.0
5 31	13 55.44	-4 29.7	1.773	2.618	15.0	20.7	5 31	14 1.29	-3 10.3	2.493	3.324	11.6	20.2
253417	2003 <i>QV</i> ₃₇	4 27.6 227°28' 1.4"/28.6 16					506514	2004 <i>RQ</i> ₁₅₈	4 27.6 188°23' 6.0"/2.5 17				
3 22	14 48.93	-19 38.6	1.952	2.755	14.6	22.0	3 22	14 50.67	-32 22.7	2.304	3.040	14.6	21.8
4 1	14 43.91	-19 26.3	1.852	2.743	11.5	21.7	4 1	14 45.12	-33 3.2	2.209	3.040	12.3	21.7
4 11	14 36.48	-19 0.5	1.774	2.731	7.8	21.5	4 11	14 37.21	-33 27.2	2.136	3.039	9.8	21.5
4 21	14 27.24	-18 22.0	1.723	2.718	3.7	21.2	4 21	14 27.54	-33 31.8	2.086	3.037	7.4	21.3
5 1	14 17.14	-17 33.6	1.699	2.704	1.7	21.0	5 1	14 17.03	-33 16.3	2.063	3.035	6.1	21.3
5 11	14 7.30	-16 40.5	1.703	2.690	5.8	21.3	5 11	14 6.80	-32 43.0	2.068	3.033	6.8	21.3
5 21	13 58.73	-15 48.6	1.734	2.675	10.0	21.5	5 21	13 57.84	-31 56.8	2.099	3.030	9.0	21.4
5 31	13 52.25	-15 3.8	1.789	2.659	13.7	21.7	5 31	13 50.95	-31 4.2	2.155	3.027	11.6	21.6
392130	2009 <i>FD</i> ₆₉	4 27.6 293°65' 2.8"/24.6 17					99078	2001 <i>FF</i> ₁₆	4 27.6 15°33' 3.5"/29.7 18				
3 22	14 40.38	-10 5.2	2.186	3.022	12.1	20.7	3 22	14 48.03	-21 43.3	1.699	2.506	16.3	18.9
4 1	14 36.95	-8 48.1	2.094	3.009	9.2	20.5	4 1	14 43.51	-22 24.0	1.619	2.508	13.0	18.7
4 11	14 31.73	-7 22.2	2.027	2.995	6.0	20.3	4 11	14 36.34	-22 51.9	1.561	2.511	9.2	18.5
4 21	14 25.24	-5 52.3	1.986	2.982	3.2	20.1	4 21	14 27.22	-23 5.7	1.527	2.515	5.4	18.3
5 1	14 18.20	-4 24.9	1.975	2.969	3.8	20.1	5 1	14 17.21	-23 5.8	1.518	2.519	3.6	18.2
5 11	14 11.42	-3 6.5	1.991	2.956	7.0	20.3	5 11	14 7.59	-22 55.2	1.536	2.523	6.3	18.3
5 21	14 5.62	-2 2.2	2.033	2.943	10.4	20.4	5 21	13 59.50	-22 38.9	1.580	2.528	10.2	18.6
5 31	14 1.40	-1 15.4	2.099	2.931	13.4	20.6	5 31	13 53.76	-22 22.5	1.646	2.533	13.8	18.8
104336	2000 <i>FM</i> ₁₂	4 27.6 158°54' 2.3"/25.3 18					270561	2002 <i>GF</i> ₁₈₈	4 27.6 191°33' 1.4"/26.6 18				
3 22	14 44.31	-5 34.5	2.942	3.762	9.8	19.5	3 22	14 46.96	-11 5.4	2.000	2.825	13.5	20.6
4 1	14 39.34	-5 21.1	2.861	3.765	7.4	19.3	4 1	14 42.10	-10 50.7	1.917	2.825	10.3	20.4
4 11	14 32.98	-5 6.8	2.806	3.768	4.9	19.1	4 11	14 35.12	-10 30.0	1.858	2.824	6.6	20.2
4 21	14 25.67	-4 53.8	2.778	3.771	2.7	19.0	4 21	14 26.64	-10 6.0	1.824	2.823	2.8	19.9
5 1	14 18.00	-4 44.8	2.780	3.774	2.9	19.0	5 1	14 17.53	-9 42.2	1.819	2.822	2.4	19.9
5 11	14 10.58	-4 41.8	2.812	3.777	5.3	19.2	5 11	14 8.76	-9 22.8	1.842	2.821	6.2	20.2
5 21	14 3.97	-4 46.5	2.871	3.779	7.8	19.3	5 21	14 1.22	-9 11.0	1.891	2.820	10.0	20.4
5 31	13 58.61	-4 59.8	2.956	3.781	10.1	19.5	5 31	13 55.56	-9 9.6	1.963	2.818	13.3	20.6
165382	2000 <i>WN</i> ₁₅₆	4 27.6 205°53' 3.7"/30.4 17					151111	2001 <i>WX</i> ₂₉	4 27.6 205°43' 3.8"/24.5 18				
3 22	14 49.17	-25 23.1	1.824	2.612	16.1	20.9	3 22	14 46.89	-4 41.3	2.169	2.998	12.5	20.3
4 1	14 44.29	-25 27.5	1.733	2.608	13.0	20.6	4 1	14 41.86	-3 59.4	2.085	2.993	9.6	20.1
4 11	14 36.81	-25 14.2	1.662	2.604	9.4	20.4	4 11	14 34.88	-3 15.2	2.025	2.988	6.5	19.9
4 21	14 27.39	-24 42.3	1.615	2.599	5.7	20.2	4 21	14 26.53	-2 33.2	1.992	2.982	4.0	19.7
5 1	14 17.09	-23 53.5	1.595	2.594	3.7	20.0	5 1	14 17.60	-1 58.1	1.988	2.976	4.6	19.8
5 11	14 7.16	-22 53.0	1.602	2.588	6.2	20.2	5 11	14 8.98	-1 34.0	2.011	2.969	7.5	19.9
5 21	13 58.70	-21 47.9	1.636	2.582	10.0	20.4	5 21	14 1.47	-1 23.6	2.061	2.962	10.7	20.1
5 31	13 52.57	-20 45.7	1.693	2.575	13.7	20.6	5 31	13 55.68	-1 28.3	2.133	2.954	13.6	20.3
431946	2008 <i>UA</i> ₃₀	4 27.6 237°30' 0.9"/26.8 18					171157	2005 <i>GE</i> ₉₅	4 27.6 80°99' 1.4"/26.4 18				
3 22	14 44.32	-14 5.6	2.158	2.979	12.8	21.7	3 22	14 44.52	-11 39.5	2.045	2.873	13.1	20.1
4 1	14 40.02	-13 30.3	2.065	2.970	9.8	21.5	4 1	14 40.11	-11 12.7	1.971	2.880	10.0	19.9
4 11	14 33.75	-12 45.5	1.995	2.961	6.3	21.2	4 11	14 33.75	-10 39.2	1.920	2.888	6.4	19.7
4 21	14 26.08	-11 54.1	1.952	2.951	2.5	21.0	4 21	14 26.06	-10 2.2	1.896	2.895	2.7	19.5
5 1	14 17.78	-11 0.3	1.937	2.941	1.9	20.9	5 1	14 17.87	-9 25.7	1.900	2.903	2.4	19.5
5 11	14 9.76	-10 9.2	1.950	2.931	5.8	21.1	5 11	14 10.08	-8 54.1	1.931	2.910	6.0	19.7
5 21	14 2.81	-9 25.5	1.990	2.921	9.5	21.3	5 21	14 3.48	-8 31.1	1.988	2.917	9.6	19.9
5 31	13 57.59	-8 53.1	2.054	2.910	12.8	21.5	5 31	13 58.64	-8 19.4	2.069	2.925	12.7	20.2
153917	2001 <i>YK</i> ₉	4 27.6 33°77' 0.1"/27.6 18					352559	2008 <i>CB</i> ₂₁₄	4 27.6 317°68' 1.2"/26.7 16				
3 22	14 46.85	-14 18.1	1.450	2.289	17.0	18.9	3 22	14 42.06	-12 24.6	2.080	2.911	12.8	21.1
4 1	14 42.65	-14 23.1	1.386	2.300	13.0	18.7	4 1	14 38.41	-12 2.1				

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
377721	2005 <i>WS</i> ₁₄₃		4 27.6 227°58	4.4/24.1	17		437655	2014 <i>CH</i> ₂		4 27.6 154°34	0.9/26.8	17	
3 22	14 48.48	- 1 59.1	2.228	3.053	12.3	22.0	3 22	14 43.68	-13 26.5	2.181	3.003	12.6	21.3
4 1	14 43.09	- 1 24.1	2.137	3.041	9.6	21.8	4 1	14 39.43	-12 56.6	2.098	3.005	9.6	21.1
4 11	14 35.71	- 0 49.1	2.071	3.029	6.7	21.6	4 11	14 33.32	-12 18.5	2.040	3.006	6.2	20.9
4 21	14 26.90	- 0 18.5	2.031	3.016	4.6	21.4	4 21	14 25.92	-11 35.3	2.008	3.007	2.5	20.7
5 1	14 17.44	+ 0 3.4	2.020	3.003	5.2	21.4	5 1	14 17.99	-10 50.8	2.004	3.008	1.9	20.6
5 11	14 8.24	+ 0 12.8	2.038	2.989	7.9	21.6	5 11	14 10.41	-10 9.5	2.028	3.009	5.6	20.9
5 21	14 0.10	+ 0 7.7	2.081	2.974	11.0	21.7	5 21	14 3.91	- 9 35.6	2.079	3.010	9.1	21.1
5 31	13 53.68	- 0 12.5	2.147	2.959	13.8	21.9	5 31	13 59.08	- 9 12.2	2.154	3.011	12.2	21.3
108852	2001 <i>OJ</i> ₉₄		4 27.6 248°32	0.6/27.1	18		380896	2006 <i>DE</i> ₁₁₁		4 27.6 352°43	3.1/28.9	18	
3 22	14 44.44	-13 38.1	2.311	3.129	12.2	20.4	3 22	14 52.27	-18 30.0	1.627	2.439	16.7	19.6
4 1	14 40.01	-13 18.5	2.216	3.119	9.3	20.2	4 1	14 47.01	-19 36.1	1.542	2.436	13.2	19.3
4 11	14 33.72	-12 51.3	2.144	3.109	6.0	20.0	4 11	14 38.81	-20 34.4	1.479	2.433	9.2	19.1
4 21	14 26.09	-12 18.8	2.099	3.098	2.4	19.7	4 21	14 28.33	-21 22.3	1.440	2.431	5.1	18.8
5 1	14 17.86	-11 44.0	2.083	3.087	1.7	19.7	5 1	14 16.70	-21 58.6	1.428	2.429	3.3	18.7
5 11	14 9.86	-11 11.2	2.095	3.077	5.3	19.9	5 11	14 5.36	-22 24.1	1.442	2.428	6.7	18.9
5 21	14 2.84	-10 43.8	2.134	3.065	8.9	20.1	5 21	13 55.61	-22 42.2	1.483	2.428	11.0	19.2
5 31	13 57.45	-10 25.3	2.197	3.054	12.0	20.3	5 31	13 48.43	-22 57.5	1.545	2.428	14.8	19.4
164903	1999 <i>VP</i> ₂₂₅		4 27.6 226°19	1.7/25.0	18		315255	2007 <i>TP</i> ₁₀		4 27.6 232°43	0.4/27.4	17	
3 22	14 38.41	- 7 35.3	4.144	4.961	7.2	21.5	3 22	14 49.25	-14 28.6	1.718	2.542	15.4	21.5
4 1	14 34.60	- 7 1.6	4.045	4.949	5.5	21.4	4 1	14 44.39	-14 15.5	1.627	2.533	11.9	21.3
4 11	14 29.83	- 6 25.6	3.974	4.938	3.5	21.2	4 11	14 36.92	-13 52.2	1.558	2.523	7.8	21.0
4 21	14 24.42	- 5 49.3	3.931	4.926	1.9	21.1	4 21	14 27.50	-13 20.8	1.514	2.513	3.1	20.7
5 1	14 18.74	- 5 14.9	3.919	4.913	2.1	21.1	5 1	14 17.15	-12 45.1	1.497	2.503	1.9	20.6
5 11	14 13.18	- 4 44.8	3.937	4.901	3.9	21.2	5 11	14 7.11	-12 10.4	1.508	2.492	6.7	20.9
5 21	14 8.12	- 4 20.7	3.983	4.888	5.9	21.3	5 21	13 58.49	-11 41.9	1.543	2.480	11.2	21.1
5 31	14 3.88	- 4 3.9	4.055	4.875	7.7	21.4	5 31	13 52.15	-11 24.2	1.602	2.468	15.2	21.3
93666	2000 <i>UL</i> ₁₀₉		4 27.6 202°86	4.0/24.1	18		12295	Tasso		4 27.6 164°52	1.7/26.3	18	
3 22	14 46.92	- 2 48.9	2.405	3.230	11.5	20.5	3 22	14 48.44	-11 27.3	2.077	2.897	13.3	18.7
4 1	14 41.69	- 2 9.5	2.320	3.225	8.9	20.3	4 1	14 43.08	-10 52.3	1.998	2.903	10.1	18.5
4 11	14 34.69	- 1 29.6	2.260	3.220	6.1	20.1	4 11	14 35.69	-10 10.1	1.943	2.908	6.5	18.3
4 21	14 26.45	- 0 53.1	2.227	3.214	4.1	19.9	4 21	14 26.88	- 9 24.2	1.915	2.913	2.8	18.0
5 1	14 17.70	- 0 24.3	2.224	3.207	4.7	20.0	5 1	14 17.53	- 8 38.9	1.915	2.917	2.6	18.0
5 11	14 9.23	- 0 6.7	2.249	3.200	7.2	20.1	5 11	14 8.59	- 7 59.1	1.944	2.920	6.3	18.3
5 21	14 1.75	- 0 2.3	2.300	3.192	10.1	20.3	5 21	14 0.88	- 7 28.7	2.000	2.923	9.9	18.5
5 31	13 55.84	- 0 12.2	2.374	3.184	12.7	20.4	5 31	13 55.03	- 7 10.6	2.080	2.924	13.1	18.7
347658	2001 <i>TV</i> ₁₈₂		4 27.6 157°14	2.0/29.9	18		516925	2011 <i>UX</i> ₄₁₄		4 27.6 208°83	0.9/28.5	18	
3 22	14 44.48	-23 21.3	3.022	3.795	10.6	22.3	3 22	14 42.51	-19 2.0	2.586	3.388	11.5	21.6
4 1	14 39.56	-23 11.2	2.933	3.803	8.4	22.1	4 1	14 38.33	-18 42.8	2.495	3.386	8.9	21.4
4 11	14 33.18	-22 50.4	2.868	3.810	5.9	22.0	4 11	14 32.53	-18 13.5	2.427	3.383	6.0	21.2
4 21	14 25.80	-22 19.7	2.830	3.817	3.3	21.8	4 21	14 25.59	-17 35.6	2.385	3.381	2.7	21.0
5 1	14 18.04	-21 40.8	2.822	3.823	2.0	21.7	5 1	14 18.18	-16 51.7	2.373	3.379	1.2	20.9
5 11	14 10.56	-20 56.9	2.844	3.829	3.9	21.8	5 11	14 11.03	-16 5.8	2.390	3.376	4.4	21.1
5 21	14 3.94	-20 11.6	2.894	3.834	6.5	22.0	5 21	14 4.79	-15 21.9	2.434	3.373	7.5	21.3
5 31	13 58.65	-19 28.7	2.971	3.838	8.9	22.2	5 31	14 0.00	-14 43.6	2.503	3.371	10.4	21.5
289398	2005 <i>CJ</i> ₄₄		4 27.6 128°86	3.8/24.3	17		249674	1999 <i>VM</i> ₁₆₃		4 27.6 138°67	0.8/28.2	18	
3 22	14 43.96	- 5 23.4	2.047	2.884	12.8	20.8	3 22	14 49.19	-18 20.5	1.988	2.793	14.3	21.6
4 1	14 39.67	- 4 33.4	1.974	2.887	9.8	20.6	4 1	14 43.77	-18 1.2	1.912	2.806	11.1	21.4
4 11	14 33.48	- 3 40.6	1.924	2.889	6.5	20.4	4 11	14 36.16	-17 29.8	1.860	2.818	7.3	21.2
4 21	14 25.97	- 2 49.9	1.901	2.892	4.0	20.3	4 21	14 27.07	-16 48.2	1.833	2.830	3.2	21.0
5 1	14 17.96	- 2 6.3	1.905	2.894	4.7	20.3	5 1	14 17.44	-15 59.9	1.834	2.840	1.4	20.9
5 11	14 10.33	- 1 34.6	1.936	2.896	7.6	20.5	5 11	14 8.30	-15 10.3	1.864	2.850	5.5	21.2
5 21	14 3.84	- 1 17.5	1.993	2.899	10.8	20.7	5 21	14 0.52	-14 24.5	1.922	2.860	9.3	21.4
5 31	13 59.08	- 1 16.5	2.072	2.901	13.7	20.9	5 31	13 54.75	-13 47.1	2.003	2.868	12.6	21.6
248491	2005 <i>UA</i> ₃₄₉		4 27.6 190°12	7.1/ 5.7	18		330007	2005 <i>TY</i> ₁₇₀		4 27.6 143°44	0.9/28.6	18	
3 22	14 49.69	-41 47.5	3.132	3.789	12.5	21.3	3 22	14 46.50	-20 34.8	2.369	3.162	12.7	21.3
4 1	14 44.03	-42 34.4	3.032	3.788	11.1	21.2	4 1	14 41.38	-19 54.8	2.289	3.175	9.8	21.1
4 11	14 36.35	-43 5.0	2.952	3.786	9.5	21.1	4 11	14 34.46	-19 1.8	2.232	3.187	6.5	21.0
4 21	14 27.19	-43 16.4	2.896	3.784	8.1	21.0	4 21	14 26.35	-17 58.2	2.203	3.198	3.0	20.7
5 1	14 17.30	-43 7.4	2.864	3.782	7.2	20.9	5 1	14 17.82	-16 47.7	2.203	3.209	1.3	20.6
5 11	14 7.62	-42 39.1	2.859	3.779	7.3	20.9	5 11	14 9.73	-15 35.7	2.233	3.219	4.7	20.9
5 21	13 58.97	-41 54.9	2.881	3.776	8.2	21.0	5 21	14 2.77	-14 27.5	2.291	3.228	8.1	21.1
5 31	13 52.04	-40 59.9	2.927	3.772	9.7	21.0	5 31	13 57.48	-13 27.9	2.374	3.236	11.1	21.3
299235	2005 <i>LH</i> ₁₄		4 27.6 314°97	4.4/23.5	18		504637	2008 <i>WG</i> ₇₇		4 27.6 212°50	0.2/27.8	17	
3 22	14 42.32	- 3 12.7	2.169	3.008	12.1	20.5	3 22	14 43.85	-17 32.9	2.116	2.930	13.3	22.0
4 1	14 38.34	- 2 15.7	2.094	3.006	9.3	20.3	4 1	14 39.69	-16 59.9	2.028	2.928	10.2	21.8
4 11	14 32.59	- 1 17.3	2.043	3.005	6.5	20.1	4 11	14 33.57	-16 15.0	1.963	2.925	6.7	21.6
4 21	14 25.61	- 0 22.5	2.018	3.004	4.5	20.0	4 21	14 26.05	-15 20.6	1.925	2.923	2.8	21.3
5 1	14 18.15	+ 0 23.4	2.021	3.003	5.3	20.1	5 1	14 17.95	-14 20.8	1.914	2.920	1.3	21.2
5 11	14 11.02	+ 0 55.9	2.051	3.002	7.9	20.2	5 11	14 10.20	-13 20.9	1.932	2.917	5.3	21.5
5 21	14 4.93	+ 1 12.5	2.106	3.000	10.8	20.4	5 21	14 3.57	-12 26.3	1.976	2.914	9.1	21.7
5 31	14 0.43	+ 1 12.3	2.183	2.999	13.5	20.6	5 31	13 58.70	-11 41.5	2.044	2.911	12.4	21.9
147948	4211 <i>T</i> ₋₃		4 27.6 210°03	1.2/26.6	17		378880	2008 <i>TD</i> ₁₄₉		4 27.6 120°86			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
133454	2003 <i>SN</i> ₂₂₆		4 27.6 292°94	0°5/27.2	18		273041	2006 <i>DU</i> ₁₃₃		4 27.6 242°43	0°1/27.7	17	
3 22	14 43.39	-15 16.2	1.908	2.734	14.0	20.1	3 22	14 46.24	-15 39.3	2.046	2.862	13.6	21.1
4 1	14 39.59	-14 44.3	1.819	2.726	10.8	19.9	4 1	14 41.66	-15 29.2	1.954	2.855	10.5	20.9
4 11	14 33.63	-14 1.3	1.752	2.719	7.0	19.6	4 11	14 34.95	-15 9.8	1.884	2.847	6.9	20.7
4 21	14 26.12	-13 10.0	1.711	2.711	2.8	19.3	4 21	14 26.67	-14 42.7	1.841	2.840	2.8	20.4
5 1	14 17.92	-12 14.9	1.698	2.703	1.8	19.2	5 1	14 17.68	-14 10.9	1.825	2.832	1.4	20.3
5 11	14 10.04	-11 21.7	1.711	2.695	6.1	19.5	5 11	14 8.97	-13 38.8	1.838	2.823	5.6	20.5
5 21	14 3.36	-10 35.9	1.751	2.688	10.1	19.7	5 21	14 1.42	-13 10.6	1.877	2.815	9.5	20.7
5 31	13 58.58	-10 1.9	1.813	2.680	13.7	19.9	5 31	13 55.75	-12 50.4	1.940	2.806	12.9	20.9
416846	2005 <i>LM</i> ₂₇		4 27.6 311°62	4°1/24.6	17		233115	2005 <i>SY</i> ₂₂₆		4 27.6 133°86	0°5/27.4	18	
3 22	14 43.28	- 8 20.7	1.457	2.311	16.1	20.9	3 22	14 49.73	-14 58.9	1.423	2.257	17.5	21.4
4 1	14 40.06	- 7 16.8	1.377	2.301	12.3	20.6	4 1	14 45.03	-14 40.0	1.351	2.262	13.5	21.1
4 11	14 34.21	- 6 3.9	1.320	2.291	8.1	20.4	4 11	14 37.43	-14 8.6	1.300	2.267	8.8	20.8
4 21	14 26.42	- 4 48.7	1.286	2.282	4.5	20.1	4 21	14 27.72	-13 27.6	1.272	2.272	3.5	20.5
5 1	14 17.77	- 3 39.4	1.277	2.272	5.3	20.2	5 1	14 17.18	-12 42.3	1.271	2.276	2.0	20.4
5 11	14 9.52	- 2 44.3	1.294	2.264	9.4	20.4	5 11	14 7.22	-11 59.3	1.295	2.281	7.3	20.8
5 21	14 2.77	- 2 9.1	1.333	2.255	13.8	20.6	5 21	13 59.06	-11 25.0	1.343	2.285	12.2	21.1
5 31	13 58.37	- 1 56.6	1.392	2.247	17.7	20.8	5 31	13 53.54	-11 4.1	1.413	2.288	16.3	21.3
245525	2005 <i>SD</i> ₁₆₇		4 27.6 284°13	4°9/22.6	17		266893	2009 <i>WA</i> ₇₆		4 27.6 93°70	0°9/26.5	18	
3 22	14 42.61	- 1 37.6	2.360	3.195	11.4	20.5	3 22	14 40.13	-12 11.3	3.279	4.093	9.0	21.7
4 1	14 38.64	- 0 33.2	2.258	3.167	8.9	20.3	4 1	14 36.07	-11 43.2	3.206	4.108	6.8	21.6
4 11	14 32.88	+ 0 33.2	2.180	3.139	6.4	20.1	4 11	14 30.85	-11 10.6	3.159	4.124	4.3	21.5
4 21	14 25.80	+ 1 36.7	2.130	3.110	4.9	19.9	4 21	14 24.88	-10 35.6	3.141	4.140	1.8	21.3
5 1	14 18.08	+ 2 31.5	2.107	3.081	5.8	19.9	5 1	14 18.65	-10 0.9	3.152	4.155	1.5	21.3
5 11	14 10.49	+ 3 12.8	2.112	3.052	8.3	20.0	5 11	14 12.68	- 9 29.0	3.193	4.170	4.0	21.5
5 21	14 3.76	+ 3 37.3	2.142	3.023	11.2	20.2	5 21	14 7.41	- 9 2.4	3.261	4.185	6.4	21.7
5 31	13 58.52	+ 3 43.4	2.194	2.993	14.0	20.3	5 31	14 3.23	- 8 42.9	3.356	4.200	8.6	21.8
195157	2002 <i>CZ</i> ₂₁₇		4 27.6 148°57	10°6/ 5.7	17		257295	2009 <i>HN</i> ₅₅		4 27.6 329°29	1°3/28.4	17	
3 22	14 55.45	-42 23.0	2.097	2.774	17.4	20.7	3 22	14 44.20	-17 31.4	1.271	2.116	18.5	20.7
4 1	14 49.66	-43 52.7	2.011	2.777	15.6	20.6	4 1	14 41.42	-17 39.3	1.187	2.102	14.6	20.4
4 11	14 40.68	-45 1.2	1.943	2.780	13.6	20.4	4 11	14 35.50	-17 32.8	1.122	2.090	9.8	20.1
4 21	14 29.16	-45 42.2	1.897	2.783	11.8	20.3	4 21	14 27.09	-17 12.6	1.079	2.078	4.5	19.7
5 1	14 16.32	-45 51.5	1.873	2.786	10.7	20.3	5 1	14 17.45	-16 41.9	1.060	2.066	2.0	19.5
5 11	14 3.75	-45 29.8	1.874	2.788	10.8	20.3	5 11	14 8.13	-16 7.1	1.065	2.056	7.5	19.8
5 21	13 52.89	-44 42.2	1.898	2.791	11.9	20.3	5 21	14 0.58	-15 35.1	1.092	2.047	12.9	20.1
5 31	13 44.84	-43 37.4	1.945	2.793	13.7	20.5	5 31	13 55.86	-15 13.0	1.138	2.038	17.7	20.4
387400	2013 <i>QZ</i> ₂		4 27.6 169°01	4°2/23.5	17		25347	1999 <i>RQ</i> ₁₁₆		4 27.6 232°62	1°9/23.9	18	
3 22	14 45.56	- 3 52.7	2.328	3.157	11.7	22.4	3 22	14 35.12	- 5 10.8	4.679	5.502	6.3	19.1
4 1	14 40.64	- 2 45.9	2.254	3.161	9.0	22.3	4 1	14 32.03	- 4 29.3	4.592	5.498	4.8	19.0
4 11	14 33.99	- 1 37.0	2.205	3.165	6.2	22.1	4 11	14 28.16	- 3 46.6	4.532	5.494	3.2	18.9
4 21	14 26.18	- 0 31.1	2.183	3.169	4.3	22.0	4 21	14 23.78	- 3 4.7	4.501	5.490	2.0	18.8
5 1	14 17.93	+ 0 26.7	2.191	3.172	5.0	22.0	5 1	14 19.20	- 2 25.9	4.500	5.487	2.4	18.8
5 11	14 10.05	+ 1 11.6	2.227	3.174	7.6	22.2	5 11	14 14.74	- 1 52.1	4.529	5.483	3.8	18.9
5 21	14 3.20	+ 1 40.8	2.289	3.175	10.4	22.4	5 21	14 10.70	- 1 24.8	4.586	5.479	5.5	19.0
5 31	13 57.93	+ 1 53.3	2.373	3.176	12.9	22.5	5 31	14 7.35	- 1 5.2	4.668	5.474	7.0	19.2
305884	2009 <i>FM</i> ₁₇		4 27.6 316°51	5°5/22.1	17		106868	2000 <i>YK</i> ₃₁		4 27.6 245°00	0°7/28.1	18	
3 22	14 40.02	- 3 5.0	1.940	2.789	12.9	20.1	3 22	14 49.11	-17 37.9	1.935	2.744	14.5	20.5
4 1	14 36.90	- 1 34.9	1.859	2.776	10.0	19.9	4 1	14 44.16	-17 23.8	1.830	2.726	11.4	20.3
4 11	14 31.83	- 0 1.0	1.801	2.764	7.1	19.7	4 11	14 36.76	-16 57.4	1.748	2.708	7.6	20.0
4 21	14 25.38	+ 1 30.0	1.769	2.752	5.5	19.6	4 21	14 27.49	-16 19.9	1.691	2.688	3.3	19.7
5 1	14 18.32	+ 2 50.2	1.765	2.740	6.6	19.6	5 1	14 17.26	-15 34.4	1.662	2.668	1.5	19.5
5 11	14 11.56	+ 3 53.1	1.787	2.729	9.5	19.8	5 11	14 7.21	-14 45.9	1.661	2.647	6.0	19.8
5 21	14 5.88	+ 4 34.6	1.832	2.717	12.6	19.9	5 21	13 58.39	-14 0.2	1.687	2.625	10.3	20.0
5 31	14 1.91	+ 4 53.2	1.898	2.707	15.5	20.1	5 31	13 51.65	-13 22.7	1.736	2.603	14.2	20.2
175799	1999 <i>RT</i> ₁₄₇		4 27.6 248°14	1°6/28.8	18		499093	2009 <i>FY</i> ₄₇		4 27.6 11°27	1°1/27.1	17	
3 22	14 48.41	-20 32.7	1.940	2.742	14.7	20.9	3 22	14 46.84	-11 53.4	1.186	2.041	18.9	20.5
4 1	14 43.66	-20 18.7	1.834	2.723	11.7	20.6	4 1	14 43.31	-12 0.8	1.120	2.043	14.5	20.2
4 11	14 36.44	-19 50.0	1.749	2.704	8.0	20.3	4 11	14 36.57	-12 0.2	1.073	2.046	9.4	19.9
4 21	14 27.34	-19 7.2	1.689	2.684	3.9	20.0	4 21	14 27.45	-11 54.2	1.049	2.049	3.8	19.6
5 1	14 17.29	-18 12.9	1.658	2.663	1.9	19.9	5 1	14 17.33	-11 46.7	1.048	2.054	2.5	19.5
5 11	14 7.41	-17 12.4	1.654	2.641	5.8	20.1	5 11	14 7.83	-11 43.1	1.071	2.059	8.1	19.9
5 21	13 58.78	-16 12.4	1.677	2.619	10.1	20.3	5 21	14 0.30	-11 47.7	1.116	2.065	13.3	20.2
5 31	13 52.24	-15 19.1	1.724	2.596	14.0	20.5	5 31	13 55.69	-12 3.8	1.181	2.072	17.8	20.5
217624	5003 <i>T-2</i>		4 27.6 201°77	1°7/29.2	18		269461	2009 <i>SA</i> ₃₄₅		4 27.6 115°98	1°9/26.1	17	
3 22	14 47.43	-21 44.9	2.383	3.170	12.8	21.3	3 22	14 45.97	-11 17.4	1.870	2.701	14.1	21.5
4 1	14 42.29	-21 27.3	2.285	3.165	10.1	21.1	4 1	14 41.41	-10 39.5	1.798	2.709	10.7	21.3
4 11	14 35.21	-20 56.8	2.210	3.159	6.9	20.9	4 11	14 34.70	- 9 54.0	1.748	2.716	6.8	21.1
4 21	14 26.73	-20 14.1	2.161	3.153	3.6	20.7	4 21	14 26.53	- 9 5.0	1.725	2.724	3.0	20.9
5 1	14 17.64	-19 21.8	2.142	3.146	1.8	20.6	5 1	14 17.82	- 8 17.4	1.729	2.731	2.9	20.9
5 11	14 8.84	-18 24.4	2.152	3.138	4.8	20.8	5 11	14 9.57	- 7 36.6	1.761	2.738	6.7	21.1
5 21	14 1.12	-17 27.0	2.190	3.130	8.2	21.0	5 21	14 2.63	- 7 6.7	1.818	2.745	10.5	21.4
5 31	13 55.10	-16 34.7	2.253	3.120	11.4	21.1	5 31	13 57.63	- 6 50.5	1.899	2.752	13.8	21.6
240687	2005 <i>EU</i> ₁₉₅		4 27.6 167°86	0°5/28.1	17		238222	2003 <i>UJ</i> ₁₃₇ </					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
244220	2002 <i>AJ</i> ₁₄₄		4 27.6 167°77	11°8/16.6	18		114936	2003 <i>QH</i> ₅₁		4 27.6 126°20	0°2/27.5	18	
3 22	14 50.33	+17 33.8	1.938	2.740	14.7	21.6	3 22	14 50.83	-14 21.7	1.688	2.510	15.7	20.1
4 1	14 44.61	+19 17.4	1.892	2.746	13.1	21.4	4 1	14 45.43	-14 19.1	1.615	2.519	12.1	19.9
4 11	14 36.70	+20 45.4	1.868	2.751	12.0	21.4	4 11	14 37.47	-14 7.3	1.564	2.528	7.9	19.6
4 21	14 27.31	+21 49.0	1.867	2.754	11.9	21.4	4 21	14 27.72	-13 48.3	1.538	2.537	3.2	19.4
5 1	14 17.45	+22 21.9	1.890	2.758	12.9	21.4	5 1	14 17.27	-13 25.5	1.539	2.545	1.7	19.3
5 11	14 8.14	+22 21.7	1.935	2.760	14.5	21.6	5 11	14 7.34	-13 3.4	1.568	2.553	6.4	19.6
5 21	14 0.26	+21 50.0	2.000	2.761	16.3	21.7	5 21	13 58.98	-12 46.5	1.623	2.561	10.7	19.9
5 31	13 54.44	+20 51.0	2.082	2.762	18.0	21.8	5 31	13 52.94	-12 38.5	1.700	2.568	14.4	20.1
375813	2009 <i>UU</i> ₄		4 27.6 250°24	1°4/28.7	17		62233	2000 <i>SP</i> ₇₂		4 27.6 184°73	1°0/28.3	18	
3 22	14 46.28	-19 56.2	1.940	2.748	14.5	21.8	3 22	14 50.49	-16 45.8	2.247	3.047	13.0	19.5
4 1	14 41.92	-19 42.9	1.842	2.736	11.4	21.5	4 1	14 44.72	-17 0.2	2.157	3.047	10.2	19.3
4 11	14 35.25	-19 15.8	1.766	2.724	7.8	21.3	4 11	14 36.85	-17 6.5	2.090	3.047	6.8	19.1
4 21	14 26.85	-18 35.9	1.716	2.711	3.7	21.0	4 21	14 27.46	-17 5.3	2.050	3.046	3.1	18.9
5 1	14 17.63	-17 46.1	1.693	2.698	1.7	20.8	5 1	14 17.38	-16 58.0	2.039	3.045	1.4	18.8
5 11	14 8.67	-16 51.7	1.697	2.685	5.7	21.0	5 11	14 7.60	-16 47.5	2.058	3.043	5.1	19.0
5 21	14 0.95	-15 58.6	1.728	2.672	9.8	21.3	5 21	13 58.96	-16 37.1	2.104	3.041	8.7	19.2
5 31	13 55.25	-15 12.7	1.782	2.658	13.5	21.5	5 31	13 52.16	-16 30.3	2.175	3.038	11.9	19.4
238857	2005 <i>WN</i> ₈₇		4 27.6 109°81	3°9/25.3	18		309968	2009 <i>HW</i> ₄₂		4 27.6 243°05	1°6/25.9	18	
3 22	14 50.76	- 6 46.0	1.472	2.314	16.6	20.5	3 22	14 41.54	-12 18.9	2.412	3.237	11.5	20.9
4 1	14 45.49	- 6 8.3	1.411	2.326	12.7	20.2	4 1	14 37.68	-11 24.3	2.323	3.231	8.7	20.7
4 11	14 37.52	- 5 26.6	1.371	2.339	8.3	20.0	4 11	14 32.17	-10 21.6	2.258	3.225	5.6	20.5
4 21	14 27.71	- 4 46.6	1.355	2.351	4.5	19.8	4 21	14 25.52	- 9 14.3	2.221	3.220	2.4	20.2
5 1	14 17.26	- 4 14.2	1.366	2.362	4.9	19.9	5 1	14 18.38	- 8 7.2	2.213	3.214	2.5	20.2
5 11	14 7.49	- 3 54.8	1.403	2.374	8.8	20.1	5 11	14 11.53	- 7 5.3	2.233	3.208	5.7	20.4
5 21	13 59.47	- 3 51.6	1.464	2.384	12.9	20.4	5 21	14 5.59	- 6 13.0	2.280	3.202	8.9	20.6
5 31	13 53.95	- 4 5.6	1.546	2.395	16.6	20.6	5 31	14 1.13	- 5 33.4	2.352	3.195	11.8	20.8
427913	2005 <i>UU</i> ₂₈₈		4 27.6 31°14	3°9/30.9	17		312044	2007 <i>RS</i> ₂₃₂		4 27.6 212°83	0°4/27.4	16	
3 22	14 42.73	-27 20.9	1.461	2.268	18.5	20.2	3 22	14 50.68	-14 15.4	1.867	2.683	14.7	21.5
4 1	14 39.71	-26 56.7	1.391	2.277	14.9	19.9	4 1	14 45.30	-14 6.0	1.775	2.677	11.4	21.3
4 11	14 33.96	-26 7.5	1.341	2.288	10.8	19.7	4 11	14 37.44	-13 47.6	1.706	2.669	7.4	21.0
4 21	14 26.30	-24 54.2	1.313	2.298	6.5	19.5	4 21	14 27.77	-13 22.0	1.663	2.661	3.0	20.7
5 1	14 17.96	-23 21.8	1.309	2.310	3.9	19.4	5 1	14 17.23	-12 52.4	1.647	2.653	1.7	20.6
5 11	14 10.28	-21 39.4	1.332	2.322	6.5	19.5	5 11	14 7.00	-12 23.6	1.660	2.643	6.3	20.9
5 21	14 4.33	-19 57.6	1.379	2.335	10.6	19.8	5 21	13 58.12	-12 0.1	1.699	2.633	10.6	21.1
5 31	14 0.85	-18 25.9	1.448	2.348	14.6	20.1	5 31	13 51.38	-11 46.0	1.761	2.623	14.3	21.3
196983	2003 <i>UH</i> ₇₉		4 27.6 233°21	4°1/24.1	18		425537	2010 <i>PE</i> ₄₅		4 27.6 276°61	4°0/30.1	17	
3 22	14 44.38	- 4 31.2	2.063	2.899	12.7	19.9	3 22	14 49.60	-24 30.4	1.751	2.544	16.4	21.1
4 1	14 40.07	- 3 42.2	1.983	2.895	9.8	19.7	4 1	14 45.18	-24 46.6	1.635	2.514	13.5	20.8
4 11	14 33.81	- 2 50.8	1.927	2.891	6.6	19.5	4 11	14 37.84	-24 46.5	1.540	2.484	9.8	20.6
4 21	14 26.19	- 2 1.9	1.897	2.887	4.3	19.4	4 21	14 28.11	-24 27.7	1.468	2.454	6.0	20.3
5 1	14 18.01	- 1 20.6	1.895	2.882	4.9	19.4	5 1	14 16.98	-23 50.4	1.423	2.422	4.0	20.1
5 11	14 10.15	- 0 51.7	1.920	2.878	7.8	19.6	5 11	14 5.83	-22 58.4	1.404	2.390	6.8	20.1
5 21	14 3.41	- 0 37.8	1.971	2.873	11.0	19.8	5 21	13 55.99	-21 58.5	1.411	2.358	11.3	20.3
5 31	13 58.40	- 0 40.4	2.043	2.869	14.0	19.9	5 31	13 48.59	-20 59.1	1.440	2.325	15.6	20.5
267316	2001 <i>TS</i> ₁₇₂		4 27.6 118°48	1°0/28.3	17		268529	2005 <i>YY</i> ₂₅₇		4 27.6 165°47	0°1/27.7	17	
3 22	14 50.24	-17 3.9	1.895	2.705	14.7	21.1	3 22	14 47.13	-15 52.8	2.211	3.020	12.9	21.7
4 1	14 44.76	-17 14.8	1.819	2.715	11.4	20.9	4 1	14 42.08	-15 33.8	2.127	3.025	9.9	21.5
4 11	14 36.94	-17 15.9	1.765	2.725	7.6	20.7	4 11	14 35.07	-15 5.5	2.067	3.029	6.5	21.3
4 21	14 27.48	-17 7.9	1.738	2.734	3.4	20.4	4 21	14 26.71	-14 30.0	2.034	3.032	2.6	21.0
5 1	14 17.36	-16 53.1	1.738	2.743	1.6	20.3	5 1	14 17.80	-13 50.4	2.029	3.035	1.3	20.9
5 11	14 7.70	-16 35.1	1.766	2.753	5.6	20.6	5 11	14 9.25	-13 11.1	2.053	3.038	5.2	21.2
5 21	13 59.45	-16 18.2	1.821	2.761	9.6	20.8	5 21	14 1.84	-12 36.4	2.105	3.040	8.8	21.4
5 31	13 53.32	-16 6.5	1.899	2.770	13.0	21.1	5 31	13 56.19	-12 9.9	2.181	3.041	12.0	21.6
352078	2006 <i>WC</i> ₁₄₉		4 27.6 207°78	2°2/25.7	17		467325	2001 <i>TQ</i> ₂₅₂		4 27.7 269°09	3°6/24.7	17	
3 22	14 44.82	- 7 33.0	2.553	3.375	11.0	21.6	3 22	14 43.91	- 8 40.4	1.745	2.588	14.4	22.1
4 1	14 40.05	- 7 14.3	2.466	3.373	8.4	21.4	4 1	14 40.15	- 7 33.8	1.660	2.578	11.0	21.8
4 11	14 33.64	- 6 53.0	2.405	3.370	5.4	21.2	4 11	14 34.10	- 6 18.7	1.598	2.567	7.2	21.6
4 21	14 26.09	- 6 31.7	2.370	3.366	2.7	21.0	4 21	14 26.39	- 5 1.0	1.562	2.557	4.0	21.4
5 1	14 18.07	- 6 13.4	2.365	3.363	2.9	21.0	5 1	14 17.95	- 3 47.8	1.552	2.546	4.7	21.4
5 11	14 10.30	- 6 1.1	2.389	3.359	5.7	21.2	5 11	14 9.85	- 2 46.4	1.569	2.536	8.4	21.6
5 21	14 3.44	- 5 57.1	2.440	3.356	8.6	21.4	5 21	14 3.02	- 2 2.2	1.610	2.525	12.3	21.8
5 31	13 58.03	- 6 2.9	2.515	3.352	11.3	21.5	5 31	13 58.21	- 1 38.1	1.673	2.514	15.8	22.0
93400	2000 <i>SW</i> ₂₈₈		4 27.6 239°22	0°3/27.9	18		23794	1998 <i>QG</i> ₂₉		4 27.7 354°42	1°0/26.9	18	
3 22	14 44.54	-18 11.4	1.992	2.807	13.9	20.2	3 22	14 41.99	-15 51.9	1.328	2.177	17.6	18.3
4 1	14 40.42	-17 31.6	1.899	2.799	10.8	20.0	4 1	14 39.33	-15 3.5	1.254	2.174	13.6	18.1
4 11	14 34.17	-16 37.9	1.828	2.790	7.1	19.8	4 11	14 33.86	-13 58.4	1.200	2.171	8.8	17.8
4 21	14 26.38	-15 32.8	1.783	2.781	3.0	19.5	4 21	14 26.35	-12 41.2	1.169	2.169	3.5	17.5
5 1	14 17.91	-14 20.8	1.766	2.772	1.4	19.3	5 1	14 17.98	-11 19.5	1.163	2.168	2.5	17.4
5 11	14 9.76	-13 8.2	1.778	2.763	5.7	19.6	5 11	14 10.14	-10 3.0	1.182	2.168	7.8	17.7
5 21	14 2.80	-12 1.5	1.815	2.754	9.7	19.8	5 21	14 3.97	- 9 0.1	1.223	2.168	12.8	18.0
5 31	13 57.73	-11 6.0	1.877	2.744	13.3	20.0	5 31	14 0.32	- 8 16.4	1.285	2.169	17.1	18.2
333900	1999 <i>RG</i> ₇₀		4 27.6 297°48	6°3/21.8	17		67760	2000 <i>UY</i> ₅₇	</				

EPHEMERIDES

4 27.7

4 27.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
345997	2007 <i>TO</i> ₁₉₄		4 27.7 302°61		0°1/27.7 17		341510	2007 <i>TP</i> ₄₁₈		4 27.7 223°11		4°0/24.1 18	
3 22	14 44.75	-15 38.1	2.074	2.893	13.3	21.8	3 22	14 45.21	-2 52.3	2.366	3.195	11.5	20.8
4 1	14 40.45	-15 25.4	1.989	2.892	10.3	21.6	4 1	14 40.49	-2 15.0	2.281	3.189	8.9	20.6
4 11	14 34.12	-15 3.4	1.927	2.891	6.7	21.3	4 11	14 34.02	-1 37.3	2.221	3.182	6.2	20.4
4 21	14 26.37	-14 34.1	1.891	2.890	2.8	21.1	4 21	14 26.32	-1 3.2	2.189	3.175	4.1	20.3
5 1	14 17.99	-14 0.6	1.882	2.889	1.4	21.0	5 1	14 18.10	-0 36.7	2.184	3.168	4.7	20.3
5 11	14 9.95	-13 27.4	1.902	2.888	5.4	21.2	5 11	14 10.15	-0 21.3	2.208	3.161	7.2	20.4
5 21	14 3.05	-12 58.6	1.948	2.887	9.2	21.5	5 21	14 3.18	-0 19.3	2.257	3.153	10.1	20.6
5 31	13 57.95	-12 37.9	2.017	2.886	12.5	21.7	5 31	13 57.74	-0 31.3	2.330	3.145	12.8	20.8
506979	2008 <i>SQ</i> ₁₅₄		4 27.7 242°42		0°3/27.9 17		53265	1999 <i>FB</i> ₁₁		4 27.7 214°13		1°3/28.7 17	
3 22	14 47.27	-16 22.4	2.360	3.165	12.4	22.3	3 22	14 46.90	-18 7.7	2.353	3.153	12.5	19.3
4 1	14 42.29	-16 10.8	2.253	3.148	9.6	22.1	4 1	14 41.94	-18 18.9	2.261	3.151	9.8	19.1
4 11	14 35.32	-15 50.1	2.170	3.130	6.3	21.8	4 11	14 35.05	-18 21.5	2.192	3.148	6.6	18.9
4 21	14 26.88	-15 21.6	2.114	3.112	2.7	21.6	4 21	14 26.77	-18 15.9	2.150	3.145	3.1	18.7
5 1	14 17.71	-14 47.9	2.087	3.093	1.2	21.4	5 1	14 17.87	-18 3.7	2.137	3.142	1.5	18.5
5 11	14 8.71	-14 12.8	2.089	3.073	5.1	21.7	5 11	14 9.21	-17 47.8	2.153	3.139	4.8	18.8
5 21	14 0.68	-13 40.2	2.118	3.053	8.8	21.8	5 21	14 1.59	-17 31.5	2.196	3.136	8.2	19.0
5 31	13 54.32	-13 14.3	2.172	3.032	12.0	22.0	5 31	13 55.65	-17 18.5	2.263	3.132	11.3	19.1
286086	2001 <i>TH</i> ₂₀		4 27.7 184°41		3°1/ 1.2 18		36970	2000 <i>SX</i> ₂₉₇		4 27.7 126°95		0°2/27.5 18	
3 22	14 45.27	-27 38.3	3.048	3.800	11.0	21.7	3 22	14 43.53	-18 17.3	1.830	2.651	14.7	19.5
4 1	14 40.31	-27 38.7	2.949	3.800	9.0	21.6	4 1	14 39.74	-17 17.7	1.748	2.651	11.4	19.2
4 11	14 33.79	-27 26.8	2.874	3.800	6.7	21.4	4 11	14 33.76	-16 2.4	1.688	2.652	7.4	19.0
4 21	14 26.18	-27 2.3	2.825	3.799	4.4	21.2	4 21	14 26.25	-14 35.0	1.654	2.653	3.0	18.7
5 1	14 18.11	-26 26.4	2.806	3.797	3.1	21.2	5 1	14 18.15	-13 1.8	1.648	2.654	1.6	18.6
5 11	14 10.28	-25 42.0	2.815	3.795	4.3	21.2	5 11	14 10.48	-11 30.8	1.670	2.655	6.1	18.9
5 21	14 3.32	-24 52.7	2.854	3.793	6.6	21.4	5 21	14 4.13	-10 9.2	1.718	2.656	10.2	19.2
5 31	13 57.73	-24 3.0	2.918	3.790	8.9	21.5	5 31	13 59.75	-9 2.8	1.789	2.657	13.8	19.4
291725	2006 <i>JQ</i> ₃₄		4 27.7 64°76		1°3/26.9 18		328868	2009 <i>WU</i> ₂₄₈		4 27.7 275°45		5°3/23.4 17	
3 22	14 50.19	-11 54.5	1.362	2.204	17.7	20.4	3 22	14 47.43	-2 10.9	1.934	2.769	13.5	20.7
4 1	14 45.40	-11 50.1	1.299	2.214	13.6	20.2	4 1	14 42.84	-1 16.2	1.831	2.740	10.6	20.5
4 11	14 37.68	-11 37.6	1.256	2.225	8.7	19.9	4 11	14 35.93	-0 19.1	1.750	2.710	7.6	20.2
4 21	14 27.88	-11 20.0	1.236	2.236	3.5	19.6	4 21	14 27.24	+0 34.8	1.696	2.680	5.5	20.0
5 1	14 17.30	-11 1.6	1.242	2.247	2.5	19.6	5 1	14 17.60	+1 19.0	1.668	2.649	6.3	20.0
5 11	14 7.40	-10 47.6	1.274	2.258	7.6	19.9	5 11	14 8.06	+1 47.7	1.668	2.617	9.5	20.1
5 21	13 59.37	-10 42.4	1.329	2.270	12.3	20.2	5 21	13 59.61	+1 57.4	1.692	2.585	13.1	20.3
5 31	13 54.03	-10 49.1	1.405	2.281	16.4	20.5	5 31	13 53.08	+1 46.5	1.737	2.552	16.5	20.4
125286	2001 <i>VZ</i> ₂₂		4 27.7 115°61		0°2/27.4 18		309884	2009 <i>DE</i> ₁₂₉		4 27.7 318°10		5°5/ 1.0 16	
3 22	14 41.00	-14 22.4	3.739	4.540	8.2	20.5	3 22	14 47.60	-27 6.2	1.958	2.737	15.4	20.4
4 1	14 36.62	-14 8.6	3.662	4.557	6.3	20.4	4 1	14 43.29	-28 0.9	1.857	2.721	12.8	20.2
4 11	14 31.19	-13 50.1	3.612	4.573	4.0	20.3	4 11	14 36.41	-28 42.1	1.776	2.705	9.8	19.9
4 21	14 25.07	-13 28.4	3.590	4.589	1.6	20.1	4 21	14 27.49	-29 6.9	1.719	2.690	6.9	19.7
5 1	14 18.71	-13 5.2	3.599	4.604	0.9	20.0	5 1	14 17.46	-29 13.9	1.689	2.676	5.5	19.6
5 11	14 12.58	-12 42.8	3.638	4.620	3.3	20.3	5 11	14 7.54	-29 4.6	1.684	2.661	6.9	19.7
5 21	14 7.08	-12 23.1	3.705	4.635	5.5	20.4	5 21	13 58.86	-28 43.2	1.706	2.648	10.0	19.8
5 31	14 2.55	-12 7.9	3.800	4.650	7.5	20.6	5 31	13 52.37	-28 16.0	1.750	2.634	13.3	20.0
462146	2007 <i>TO</i> ₅₂		4 27.7 130°80		0°5/27.3 16		217903	2001 <i>SU</i> ₈₂		4 27.7 201°69		0°8/28.3 18	
3 22	14 46.73	-16 35.8	1.636	2.462	15.9	22.4	3 22	14 46.48	-18 11.6	1.799	2.616	15.1	20.7
4 1	14 42.37	-15 47.6	1.562	2.469	12.2	22.2	4 1	14 42.13	-17 54.5	1.715	2.615	11.8	20.5
4 11	14 35.52	-14 44.8	1.510	2.476	7.9	21.9	4 11	14 35.40	-17 24.3	1.652	2.614	7.8	20.2
4 21	14 26.97	-13 31.4	1.482	2.482	3.1	21.6	4 21	14 26.96	-16 42.7	1.615	2.612	3.4	20.0
5 1	14 17.76	-12 13.8	1.482	2.488	1.9	21.6	5 1	14 17.79	-15 53.5	1.604	2.611	1.5	19.8
5 11	14 9.10	-10 59.6	1.510	2.494	6.7	21.9	5 11	14 9.01	-15 2.4	1.621	2.609	5.9	20.1
5 21	14 1.97	-9 55.9	1.562	2.499	11.1	22.1	5 21	14 1.60	-14 15.3	1.664	2.607	10.1	20.3
5 31	13 57.09	-9 7.9	1.637	2.504	14.9	22.4	5 31	13 56.31	-13 37.5	1.730	2.605	13.8	20.6
179688	2002 <i>QN</i> ₁₁₈		4 27.7 145°69		1°2/26.8 18		372456	2009 <i>SL</i> ₁₃₄		4 27.7 179°82		2°3/25.6 17	
3 22	14 48.98	-12 32.2	1.972	2.792	13.9	21.3	3 22	14 45.97	-9 59.3	2.176	3.001	12.6	21.9
4 1	14 43.63	-12 6.9	1.897	2.801	10.6	21.1	4 1	14 41.19	-9 13.5	2.095	3.002	9.6	21.7
4 11	14 36.14	-11 34.0	1.845	2.810	6.8	20.9	4 11	14 34.52	-8 21.4	2.037	3.003	6.2	21.5
4 21	14 27.18	-10 56.3	1.820	2.819	2.8	20.6	4 21	14 26.53	-7 26.7	2.006	3.004	2.9	21.3
5 1	14 17.66	-10 18.0	1.823	2.827	2.2	20.6	5 1	14 18.02	-6 34.4	2.005	3.003	3.1	21.3
5 11	14 8.59	-9 43.7	1.854	2.834	6.1	20.9	5 11	14 9.86	-5 49.2	2.031	3.003	6.4	21.5
5 21	14 0.84	-9 17.6	1.912	2.840	9.9	21.1	5 21	14 2.80	-5 15.1	2.084	3.001	9.8	21.7
5 31	13 55.05	-9 2.7	1.993	2.846	13.2	21.3	5 31	13 57.45	-4 54.6	2.161	3.000	12.8	21.9
303872	2005 <i>TB</i> ₁₀		4 27.7 169°02		4°1/ 1.7 18		318651	2005 <i>MF</i> ₄₃		4 27.7 290°06		4°9/23.8 18	
3 22	14 44.73	-28 50.0	2.503	3.262	13.0	20.6	3 22	14 44.22	-6 1.8	1.618	2.466	15.0	20.1
4 1	14 40.30	-29 2.3	2.410	3.263	10.7	20.5	4 1	14 40.75	-4 51.6	1.523	2.442	11.6	19.9
4 11	14 33.98	-28 59.8	2.340	3.263	8.1	20.3	4 11	14 34.74	-3 33.7	1.449	2.417	7.9	19.6
4 21	14 26.32	-28 41.7	2.294	3.264	5.5	20.1	4 21	14 26.79	-2 14.4	1.401	2.393	5.1	19.4
5 1	14 18.08	-28 9.1	2.276	3.264	4.2	20.0	5 1	14 17.84	-1 2.2	1.379	2.368	6.1	19.3
5 11	14 10.13	-27 25.1	2.286	3.265	5.2	20.1	5 11	14 9.09	-0 5.1	1.382	2.343	9.9	19.5
5 21	14 3.22	-26 34.2	2.323	3.265	7.7	20.3	5 21	14 1.62	+0 31.0	1.409	2.318	14.1	19.7
5 31	13 57.99	-25 41.8	2.385	3.265	10.4	20.4	5 31	13 56.34	+0 43.2	1.455	2.293	18.0	19.9
416478	2003 <i>WC</i> ₁₀₉		4 27.7 261°82		1°9/28.9 17		326687	2002 <i>XZ</i> ₇₀		4 27.7 129°72		1°6/26.5 18	</

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
299250	2005 <i>MZ</i> ₄₆		4 27.7 345°66	5°2/ 1.4 17			42425	3227 <i>T</i> ₋₂		4 27.7 212°16	0°6/27.2 18		
3 22	14 42.86	-27 32.0	1.717	2.511	16.7	19.7	3 22	14 47.39	-13 17.4	2.007	2.827	13.6	19.5
4 1	14 39.79	-27 58.8	1.628	2.503	13.7	19.4	4 1	14 42.57	-13 8.9	1.920	2.824	10.5	19.2
4 11	14 34.13	-28 7.1	1.558	2.495	10.4	19.2	4 11	14 35.58	-12 52.9	1.857	2.822	6.8	19.0
4 21	14 26.53	-27 55.2	1.512	2.488	7.0	19.0	4 21	14 27.05	-12 31.5	1.820	2.819	2.7	18.7
5 1	14 18.01	-27 23.7	1.490	2.482	5.2	18.9	5 1	14 17.83	-12 7.9	1.810	2.816	1.7	18.7
5 11	14 9.79	-26 36.7	1.493	2.477	6.8	18.9	5 11	14 8.94	-11 46.1	1.829	2.812	5.8	18.9
5 21	14 3.01	-25 40.8	1.521	2.472	10.2	19.1	5 21	14 1.25	-11 29.8	1.874	2.809	9.7	19.1
5 31	13 58.52	-24 43.9	1.571	2.469	13.7	19.3	5 31	13 55.46	-11 22.3	1.943	2.805	13.1	19.3
105976	2000 <i>SV</i> ₂₆₅		4 27.7 225°58	1°8/26.1 18			86290	1999 <i>UH</i> ₄₇		4 27.7 229°13	1°1/28.8 18		
3 22	14 44.88	- 9 0.1	2.579	3.399	11.0	20.3	3 22	14 43.96	-19 19.9	2.832	3.625	10.8	20.4
4 1	14 40.15	- 8 42.5	2.488	3.393	8.4	20.1	4 1	14 39.43	-19 14.3	2.731	3.616	8.5	20.3
4 11	14 33.77	- 8 21.2	2.421	3.386	5.4	19.9	4 11	14 33.31	-18 59.8	2.654	3.607	5.7	20.1
4 21	14 26.24	- 7 58.8	2.382	3.379	2.5	19.7	4 21	14 26.07	-18 37.3	2.604	3.598	2.8	19.8
5 1	14 18.19	- 7 38.2	2.372	3.372	2.5	19.7	5 1	14 18.33	-18 8.5	2.583	3.588	1.3	19.7
5 11	14 10.37	- 7 22.4	2.391	3.364	5.4	19.9	5 11	14 10.76	-17 36.6	2.591	3.578	4.1	19.9
5 21	14 3.44	- 7 14.0	2.437	3.357	8.5	20.0	5 21	14 4.02	-17 4.8	2.628	3.568	7.1	20.1
5 31	13 57.94	- 7 14.7	2.508	3.349	11.2	20.2	5 31	13 58.62	-16 36.5	2.691	3.557	9.8	20.2
91358	1999 <i>JL</i> ₆₅		4 27.7 350°96	3°9/25.8 18			353659	2011 <i>UV</i> ₁₅₀		4 27.7 177°25	1°7/25.7 18		
3 22	14 45.25	- 5 50.3	1.279	2.139	17.5	18.4	3 22	14 42.08	-10 54.2	2.724	3.544	10.5	21.1
4 1	14 41.96	- 5 44.0	1.206	2.132	13.5	18.1	4 1	14 37.89	-10 3.3	2.639	3.545	7.9	20.9
4 11	14 35.70	- 5 36.4	1.153	2.125	9.0	17.9	4 11	14 32.24	- 9 6.5	2.580	3.546	5.1	20.7
4 21	14 27.20	- 5 32.0	1.123	2.120	4.7	17.6	4 21	14 25.61	- 8 7.0	2.549	3.547	2.3	20.5
5 1	14 17.70	- 5 35.9	1.116	2.116	4.9	17.6	5 1	14 18.58	- 7 8.9	2.548	3.547	2.5	20.6
5 11	14 8.65	- 5 52.2	1.134	2.113	9.2	17.8	5 11	14 11.83	- 6 16.3	2.576	3.547	5.3	20.7
5 21	14 1.33	- 6 23.1	1.174	2.111	13.9	18.1	5 21	14 5.92	- 5 32.5	2.631	3.547	8.1	20.9
5 31	13 56.67	- 7 9.3	1.233	2.111	18.1	18.3	5 31	14 1.32	- 5 0.2	2.711	3.546	10.6	21.1
242557	2005 <i>EZ</i> ₁₂₈		4 27.7 237°37	3°8/30.3 18			126757	2002 <i>DX</i> ₇		4 27.7 155°92	4°7/24.0 18		
3 22	14 51.33	-25 2.5	2.033	2.810	15.0	21.1	3 22	14 48.90	- 0 48.8	2.170	2.996	12.5	20.3
4 1	14 45.98	-25 21.6	1.925	2.794	12.2	20.9	4 1	14 43.34	- 0 15.0	2.099	3.002	9.7	20.1
4 11	14 38.06	-25 25.9	1.839	2.778	8.9	20.6	4 11	14 35.87	+ 0 17.1	2.051	3.008	6.9	20.0
4 21	14 28.15	-25 14.0	1.778	2.760	5.6	20.4	4 21	14 27.10	+ 0 43.2	2.031	3.013	4.9	19.8
5 1	14 17.20	-24 46.0	1.745	2.742	3.8	20.3	5 1	14 17.85	+ 0 59.1	2.039	3.018	5.4	19.9
5 11	14 6.39	-24 5.4	1.740	2.723	6.1	20.4	5 11	14 9.00	+ 1 1.6	2.074	3.023	8.0	20.0
5 21	13 56.85	-23 17.6	1.761	2.703	9.7	20.5	5 21	14 1.32	+ 0 49.6	2.136	3.026	10.8	20.2
5 31	13 49.46	-22 29.5	1.807	2.683	13.3	20.7	5 31	13 55.40	+ 0 22.9	2.220	3.030	13.5	20.4
466673	2014 <i>WE</i> ₁₉₆		4 27.7 205°92	3°3/29.9 17			470052	2006 <i>SH</i> ₁₈₆		4 27.7 113°30	0°2/27.5 17		
3 22	14 50.29	-23 32.7	1.883	2.673	15.6	22.2	3 22	14 42.57	-16 34.5	2.346	3.159	12.1	21.8
4 1	14 45.17	-23 46.3	1.790	2.669	12.5	21.9	4 1	14 38.52	-15 54.4	2.264	3.165	9.3	21.6
4 11	14 37.48	-23 45.0	1.719	2.665	8.9	21.7	4 11	14 32.76	-15 4.2	2.207	3.170	6.0	21.4
4 21	14 27.88	-23 27.7	1.673	2.660	5.2	21.5	4 21	14 25.84	-14 6.6	2.176	3.175	2.4	21.2
5 1	14 17.38	-22 55.9	1.654	2.654	3.3	21.3	5 1	14 18.48	-13 5.5	2.174	3.180	1.3	21.1
5 11	14 7.20	-22 13.7	1.662	2.648	6.0	21.5	5 11	14 11.47	-12 6.0	2.201	3.185	4.9	21.3
5 21	13 58.43	-21 27.1	1.697	2.642	9.8	21.7	5 21	14 5.47	-11 12.7	2.255	3.190	8.3	21.6
5 31	13 51.90	-20 42.6	1.755	2.635	13.5	21.9	5 31	14 1.01	-10 29.2	2.334	3.195	11.3	21.8
265013	2003 <i>FX</i> ₁₂₉		4 27.7 346°08	6°2/23.9 17			308597	2005 <i>VS</i> ₆₁		4 27.7 243°24	8°2/ 6.8 18		
3 22	14 43.87	- 2 3.4	1.383	2.243	16.4	19.9	3 22	14 48.43	-43 52.5	2.781	3.435	14.0	20.7
4 1	14 40.62	- 1 18.6	1.312	2.236	12.8	19.7	4 1	14 43.48	-44 28.6	2.673	3.423	12.5	20.6
4 11	14 34.67	- 0 33.9	1.262	2.229	9.0	19.5	4 11	14 36.27	-44 45.2	2.583	3.411	10.9	20.4
4 21	14 26.75	+ 0 3.7	1.235	2.223	6.4	19.3	4 21	14 27.38	-44 39.0	2.515	3.399	9.4	20.3
5 1	14 17.97	+ 0 26.9	1.232	2.218	7.2	19.3	5 1	14 17.68	-44 8.3	2.472	3.387	8.4	20.2
5 11	14 9.64	+ 0 30.3	1.252	2.213	10.7	19.5	5 11	14 8.22	-43 14.7	2.453	3.374	8.3	20.2
5 21	14 2.89	+ 0 11.8	1.295	2.210	14.7	19.7	5 21	13 59.95	-42 2.3	2.461	3.361	9.2	20.2
5 31	13 58.56	- 0 28.4	1.356	2.208	18.3	19.9	5 31	13 53.64	-40 37.7	2.492	3.348	10.8	20.3
283543	2001 <i>UG</i> ₅₉		4 27.7 279°52	0°5/28.4 18			467627	2008 <i>HV</i> ₁₉		4 27.7 279°51	3°9/23.9 17		
3 22	14 38.74	-17 10.1	4.330	5.123	7.3	20.6	3 22	14 43.53	- 9 44.5	1.819	2.659	14.0	21.4
4 1	14 34.93	-17 10.7	4.226	5.113	5.7	20.4	4 1	14 39.95	- 8 9.9	1.718	2.634	10.8	21.2
4 11	14 30.16	-17 6.5	4.148	5.103	3.8	20.3	4 11	14 34.10	- 6 22.0	1.640	2.609	7.1	20.9
4 21	14 24.73	-16 58.3	4.098	5.094	1.7	20.1	4 21	14 26.53	- 4 27.4	1.589	2.583	4.1	20.6
5 1	14 18.99	-16 47.2	4.078	5.084	0.8	20.0	5 1	14 18.10	- 2 34.8	1.566	2.557	5.1	20.6
5 11	14 13.37	-16 34.9	4.089	5.074	2.8	20.2	5 11	14 9.87	- 0 53.7	1.570	2.531	8.9	20.8
5 21	14 8.22	-16 22.8	4.128	5.065	4.8	20.3	5 21	14 2.80	+ 0 28.4	1.599	2.505	13.0	21.0
5 31	14 3.88	-16 12.9	4.195	5.055	6.7	20.4	5 31	13 57.69	+ 1 26.8	1.650	2.478	16.6	21.1
325826	2010 <i>RZ</i> ₁₇₄		4 27.7 166°90	0°4/28.0 16			298765	2004 <i>KC</i> ₁₅		4 27.7 293°42	2°8/29.9 18		
3 22	14 49.35	-16 56.5	2.030	2.837	14.0	22.7	3 22	14 46.27	-22 32.3	2.251	3.041	13.3	20.4
4 1	14 44.00	-16 43.2	1.946	2.842	10.8	22.5	4 1	14 41.66	-22 51.8	2.159	3.038	10.7	20.2
4 11	14 36.46	-16 19.3	1.886	2.846	7.1	22.3	4 11	14 34.99	-22 59.6	2.090	3.035	7.6	20.0
4 21	14 27.39	-15 46.5	1.852	2.850	3.0	22.0	4 21	14 26.83	-22 55.5	2.046	3.032	4.4	19.8
5 1	14 17.68	-15 8.0	1.846	2.852	1.4	21.9	5 1	14 17.98	-22 40.5	2.030	3.030	2.8	19.6
5 11	14 8.36	-14 28.4	1.869	2.855	5.5	22.2	5 11	14 9.39	-22 17.5	2.041	3.027	5.1	19.8
5 21	14 0.33	-13 52.4	1.919	2.856	9.4	22.4	5 21	14 1.91	-21 50.7	2.080	3.025	8.3	20.0
5 31	13 54.27	-13 24.4	1.993	2.857	12.8	22.6	5 31	13 56.20	-21 24.6	2.144	3.022	11.4	20.2
97238	1999 <i>XY</i> ₇₉		4 27.7 37°52	3°9/25.1 18			21804	Václavneumann		4 27.7 238°09	0°9/2		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
2736 Ops	4 27.7 266°07' 3°4/30.1 18						368077 2012 KZ ₄₆	4 27.7 280°04' 3°8/24.8 17					
3 22	14 46.50	-24 43.9	1.541	2.348	17.7	16.8	3 22	14 45.39	-6 42.2	1.764	2.605	14.3	20.6
4 1	14 42.80	-24 33.1	1.450	2.339	14.3	16.6	4 1	14 41.37	-5 56.7	1.675	2.590	11.0	20.4
4 11	14 36.22	-24 1.0	1.379	2.329	10.2	16.3	4 11	14 35.02	-5 5.9	1.608	2.576	7.4	20.1
4 21	14 27.46	-23 7.2	1.331	2.320	5.8	16.0	4 21	14 26.92	-4 14.9	1.567	2.561	4.2	19.9
5 1	14 17.67	-21 54.7	1.308	2.310	3.4	15.8	5 1	14 18.01	-3 29.9	1.552	2.546	4.8	19.9
5 11	14 8.26	-20 30.9	1.311	2.301	6.7	16.0	5 11	14 9.37	-2 56.5	1.564	2.531	8.4	20.1
5 21	14 0.47	-19 5.1	1.339	2.291	11.3	16.2	5 21	14 1.98	-2 38.9	1.600	2.516	12.3	20.3
5 31	13 55.25	-17 46.8	1.389	2.281	15.5	16.5	5 31	13 56.63	-2 39.4	1.657	2.501	15.9	20.5
62077 2000 RE ₈₁	4 27.7 337°35' 3°8/ 1.0 17						27258 Chelseavoss	4 27.7 147°86' 0°8/28.3 18					
3 22	14 43.29	-27 46.2	1.661	2.456	17.1	19.0	3 22	14 48.91	-17 59.5	1.850	2.661	15.0	20.4
4 1	14 40.05	-27 16.7	1.574	2.452	13.9	18.7	4 1	14 43.88	-17 45.4	1.771	2.668	11.6	20.2
4 11	14 34.24	-26 22.9	1.506	2.449	10.1	18.5	4 11	14 36.50	-17 19.0	1.714	2.674	7.7	20.0
4 21	14 26.58	-25 5.4	1.462	2.446	6.2	18.2	4 21	14 27.47	-16 42.0	1.683	2.680	3.4	19.7
5 1	14 18.14	-23 28.2	1.443	2.443	3.8	18.1	5 1	14 17.78	-15 57.9	1.680	2.686	1.5	19.6
5 11	14 10.17	-21 39.4	1.451	2.440	6.2	18.2	5 11	14 8.55	-15 12.0	1.704	2.691	5.7	19.9
5 21	14 3.73	-19 49.1	1.485	2.438	10.2	18.5	5 21	14 0.73	-14 29.9	1.755	2.696	9.8	20.1
5 31	13 59.58	-18 7.2	1.542	2.436	14.2	18.7	5 31	13 55.03	-13 56.4	1.829	2.700	13.4	20.3
17025 Pilachowski	4 27.7 295°55' 2°8/29.3 18						34005 2000 OY ₇	4 27.7 231°41' 4°8/ 2.4 18					
3 22	14 48.01	-20 26.4	1.692	2.503	16.1	18.2	3 22	14 46.13	-31 25.1	2.695	3.434	12.6	19.4
4 1	14 43.90	-20 51.8	1.588	2.481	12.9	17.9	4 1	14 41.41	-31 42.2	2.589	3.424	10.6	19.2
4 11	14 36.99	-21 5.1	1.504	2.459	9.1	17.6	4 11	14 34.79	-31 44.3	2.506	3.415	8.3	19.0
4 21	14 27.84	-21 5.0	1.445	2.437	4.9	17.3	4 21	14 26.77	-31 30.0	2.447	3.405	6.0	18.9
5 1	14 17.44	-20 52.3	1.411	2.414	2.9	17.2	5 1	14 18.10	-30 59.6	2.416	3.395	4.8	18.8
5 11	14 7.12	-20 30.4	1.404	2.392	6.5	17.3	5 11	14 9.63	-30 15.7	2.412	3.384	5.5	18.8
5 21	13 58.13	-20 4.4	1.422	2.370	11.0	17.5	5 21	14 2.14	-29 22.5	2.437	3.373	7.7	18.9
5 31	13 51.53	-19 40.7	1.462	2.348	15.3	17.7	5 31	13 56.28	-28 25.4	2.486	3.362	10.1	19.1
38847 2000 SJ ₆₈	4 27.7 142°47' 1°2/28.5 18						466099 2012 CO ₁₄	4 27.7 140°17' 1°6/28.9 18					
3 22	14 51.24	-17 4.9	2.072	2.874	13.9	19.9	3 22	14 50.59	-20 19.3	1.968	2.765	14.7	22.5
4 1	14 45.46	-17 25.3	1.990	2.881	10.8	19.7	4 1	14 45.00	-20 11.6	1.890	2.777	11.5	22.3
4 11	14 37.45	-17 37.2	1.930	2.887	7.2	19.5	4 11	14 37.14	-19 50.7	1.836	2.789	7.8	22.1
4 21	14 27.84	-17 40.8	1.898	2.893	3.4	19.2	4 21	14 27.71	-19 17.6	1.807	2.801	3.8	21.9
5 1	14 17.55	-17 37.5	1.893	2.899	1.6	19.1	5 1	14 17.67	-18 35.2	1.806	2.811	1.9	21.8
5 11	14 7.62	-17 30.2	1.918	2.904	5.3	19.4	5 11	14 8.13	-17 48.5	1.834	2.821	5.4	22.0
5 21	13 58.98	-17 22.4	1.970	2.909	9.0	19.6	5 21	13 59.99	-17 3.0	1.889	2.830	9.2	22.3
5 31	13 52.33	-17 17.8	2.046	2.914	12.3	19.8	5 31	13 53.94	-16 23.8	1.968	2.838	12.6	22.5
203843 2002 VF ₅₆	4 27.7 48°40' 4°3/25.1 18						441337 2008 CZ ₁₃₂	4 27.7 111°98' 4°1/23.4 17					
3 22	14 49.91	-3 8.2	1.702	2.539	15.0	19.2	3 22	14 42.61	-2 48.8	2.507	3.339	10.9	21.4
4 1	14 44.24	-2 47.6	1.662	2.574	11.4	19.1	4 1	14 38.33	-1 49.7	2.442	3.350	8.3	21.2
4 11	14 36.42	-2 28.4	1.645	2.608	7.6	18.9	4 11	14 32.54	-0 50.0	2.402	3.361	5.8	21.1
4 21	14 27.29	-2 14.8	1.653	2.643	4.7	18.8	4 21	14 25.77	+ 0 5.7	2.389	3.372	4.2	21.0
5 1	14 17.89	-2 10.7	1.688	2.679	5.0	18.9	5 1	14 18.65	+ 0 53.0	2.404	3.383	4.8	21.1
5 11	14 9.26	-2 18.8	1.750	2.714	8.0	19.1	5 11	14 11.87	+ 1 28.0	2.448	3.394	7.1	21.2
5 21	14 2.20	-2 39.8	1.838	2.749	11.2	19.4	5 21	14 6.02	+ 1 48.8	2.517	3.404	9.6	21.4
5 31	13 57.25	-3 13.4	1.947	2.784	14.1	19.7	5 31	14 1.57	+ 1 54.5	2.610	3.414	11.9	21.6
148695 2001 SR ₂₅₃	4 27.7 254°11' 1°9/26.2 18						315365 2007 VB	4 27.7 178°19' 0°5/27.4 18					
3 22	14 45.75	-11 27.9	1.815	2.648	14.3	20.8	3 22	14 49.93	-14 37.7	1.985	2.798	14.0	21.5
4 1	14 41.56	-10 51.3	1.728	2.639	11.0	20.6	4 1	14 44.52	-14 17.5	1.900	2.800	10.8	21.3
4 11	14 35.07	-10 6.1	1.663	2.631	7.1	20.3	4 11	14 36.87	-13 48.0	1.839	2.802	7.0	21.1
4 21	14 26.91	-9 16.1	1.624	2.622	3.1	20.1	4 21	14 27.63	-13 11.3	1.804	2.803	2.8	20.8
5 1	14 18.00	-8 26.5	1.612	2.614	2.9	20.0	5 1	14 17.73	-12 31.2	1.797	2.803	1.7	20.7
5 11	14 9.41	-7 43.0	1.627	2.605	7.0	20.3	5 11	14 8.21	-11 52.7	1.819	2.802	5.9	21.0
5 21	14 2.09	-7 10.5	1.667	2.596	11.1	20.5	5 21	13 59.99	-11 20.2	1.868	2.801	9.9	21.2
5 31	13 56.79	-6 52.4	1.730	2.587	14.7	20.7	5 31	13 53.76	-10 57.5	1.941	2.799	13.3	21.4
418079 2007 VZ ₂₈₃	4 27.7 125°45' 2°4/26.3 17						331038 2009 VN ₅₀	4 27.7 246°83' 2°7/25.5 18					
3 22	14 50.08	-9 20.3	1.628	2.462	15.7	21.4	3 22	14 47.06	-8 16.1	2.117	2.943	12.8	21.1
4 1	14 44.95	-9 2.2	1.556	2.468	12.0	21.1	4 1	14 42.31	-7 39.3	2.018	2.927	9.8	20.9
4 11	14 37.27	-8 38.6	1.506	2.474	7.7	20.9	4 11	14 35.47	-6 57.2	1.944	2.910	6.5	20.7
4 21	14 27.80	-8 13.3	1.482	2.480	3.5	20.7	4 21	14 27.09	-6 13.5	1.896	2.892	3.3	20.4
5 1	14 17.61	-7 50.7	1.484	2.486	3.3	20.7	5 1	14 17.97	-5 32.6	1.876	2.874	3.6	20.4
5 11	14 7.94	-7 35.6	1.514	2.491	7.5	20.9	5 11	14 9.05	-4 59.5	1.885	2.855	7.0	20.6
5 21	13 59.83	-7 31.3	1.568	2.496	11.7	21.2	5 21	14 1.20	-4 37.8	1.920	2.835	10.6	20.8
5 31	13 54.03	-7 40.2	1.644	2.501	15.3	21.4	5 31	13 55.11	-4 30.2	1.978	2.816	13.9	20.9
490088 2008 TD ₁₈₄	4 27.7 179°49' 3°2/30.9 17						472045 2013 YS ₄₁	4 27.7 228°05' 5°9/22.5 17					
3 22	14 47.74	-26 50.9	2.788	3.544	11.8	22.5	3 22	14 47.42	+ 2 34.2	2.287	3.113	12.0	22.1
4 1	14 42.38	-26 55.9	2.691	3.546	9.6	22.3	4 1	14 42.30	+ 3 25.3	2.202	3.102	9.6	21.9
4 11	14 35.26	-26 48.1	2.618	3.547	7.1	22.2	4 11	14 35.31	+ 4 13.6	2.142	3.090	7.2	21.7
4 21	14 26.91	-26 27.0	2.572	3.547	4.6	22.0	4 21	14 26.98	+ 4 54.0	2.108	3.078	5.9	21.6
5 1	14 18.04	-25 53.9	2.554	3.547	3.2	21.9	5 1	14 18.05	+ 5 21.4	2.102	3.065	6.7	21.6
5 11	14 9.43	-25 11.7	2.566	3.546	4.6	22.0	5 11	14 9.39	+ 5 32.4	2.123	3.051	9.0	21.8
5 21	14 1.79	-24 24.4	2.606	3.545	7.1	22.2	5 21	14 1.75	+ 5 25.2	2.169	3.037	11.6	21.9
5 31	13 55.69	-23 36.8	2.672	3.543	9.7	22.3	5 31	13 55.75	+ 5 0.1	2.237	3.023	14.2	22.1
176032 2000 SO ₁₇₅	4 27.7 171°70' 3°8/ 1.4 18						70212 1999 RA ₃₈	4 27.7 136°93' 0°1/27.7 18					
3 22	14 46.27	-27 43.3	2.669	3.427	12.3	20.1	3 22	14 49.79	-15 34.7	1.836	2.652	14.9	19.1
4 1	14 41.38	-28 1.9	2.576	3.429	10.1	20.0	4 1	14 44.50	-15 19.9	1.761	2.662	11.5	18.9
4 11	14 34.68	-28 7.5	2.505	3.430	7.5	19.8	4 11	14 36.88	-14 54.7	1.709	2.672	7.5	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
240599	2004 VN ₁₄		4 27.7 268°08	1.7/26.7	17		250854	2005 UO ₂₅₇		4 27.7 260°24	1.0/26.8	16	
3 22	14 51.04	-10 51.6	1.624	2.454	15.9	20.1	3 22	14 44.95	-11 21.7	2.477	3.295	11.4	20.9
4 1	14 46.21	-10 41.1	1.522	2.432	12.3	19.8	4 1	14 40.37	-11 12.6	2.383	3.286	8.7	20.7
4 11	14 38.51	-10 23.4	1.441	2.408	8.1	19.5	4 11	14 34.04	-10 58.6	2.313	3.278	5.6	20.5
4 21	14 28.50	-10 1.3	1.385	2.384	3.5	19.1	4 21	14 26.47	-10 41.7	2.270	3.269	2.3	20.2
5 1	14 17.24	-9 38.7	1.356	2.360	2.9	19.0	5 1	14 18.34	-10 24.5	2.256	3.259	1.8	20.2
5 11	14 6.07	-9 20.8	1.354	2.335	7.8	19.3	5 11	14 10.41	-10 10.2	2.270	3.250	5.2	20.4
5 21	13 56.28	-9 12.2	1.376	2.309	12.6	19.5	5 21	14 3.40	-10 1.4	2.312	3.241	8.4	20.6
5 31	13 48.90	-9 16.5	1.420	2.283	17.0	19.7	5 31	13 57.88	-10 0.3	2.379	3.232	11.4	20.7
500994	2013 RA ₂₀		4 27.7 289°44	1.4/28.6	17		188496	2004 PF ₇₅		4 27.7 265°18	0.6/27.1	18	
3 22	14 47.15	-18 27.1	1.620	2.442	16.3	21.4	3 22	14 43.41	-13 35.9	2.607	3.421	11.0	21.3
4 1	14 43.33	-18 27.2	1.515	2.417	12.9	21.1	4 1	14 39.17	-13 15.0	2.503	3.404	8.5	21.1
4 11	14 36.68	-18 13.8	1.430	2.392	8.8	20.8	4 11	14 33.27	-12 47.2	2.423	3.387	5.5	20.9
4 21	14 27.77	-17 47.2	1.370	2.366	4.1	20.4	4 21	14 26.16	-12 14.5	2.371	3.370	2.2	20.7
5 1	14 17.61	-17 9.8	1.335	2.341	1.9	20.2	5 1	14 18.49	-11 39.7	2.347	3.352	1.5	20.6
5 11	14 7.52	-16 26.9	1.326	2.315	6.7	20.4	5 11	14 10.97	-11 6.5	2.353	3.335	4.9	20.8
5 21	13 58.80	-15 44.9	1.342	2.290	11.7	20.6	5 21	14 4.29	-10 38.1	2.386	3.317	8.1	21.0
5 31	13 52.49	-15 10.7	1.380	2.264	16.1	20.8	5 31	13 59.01	-10 17.6	2.444	3.299	11.0	21.1
251306	2006 XC ₅₉		4 27.7 277°83	2.9/30.5	17		507539	2012 XL ₄₆		4 27.7 64°94	6.2/22.7	17	
3 22	14 43.82	-24 50.2	2.403	3.185	12.8	20.5	3 22	14 45.93	+ 4 20.9	2.185	3.014	12.4	20.9
4 1	14 39.69	-24 51.3	2.308	3.180	10.3	20.3	4 1	14 41.00	+ 5 1.9	2.130	3.030	9.8	20.8
4 11	14 33.68	-24 38.9	2.235	3.176	7.4	20.1	4 11	14 34.32	+ 5 37.0	2.100	3.046	7.5	20.7
4 21	14 26.33	-24 13.1	2.188	3.171	4.5	19.9	4 21	14 26.52	+ 6 1.5	2.095	3.061	6.3	20.6
5 1	14 18.38	-23 35.5	2.168	3.167	2.9	19.8	5 1	14 18.36	+ 6 11.4	2.118	3.077	6.9	20.7
5 11	14 10.70	-22 49.8	2.177	3.163	4.8	19.9	5 11	14 10.68	+ 6 4.3	2.167	3.093	8.9	20.8
5 21	14 4.03	-22 0.5	2.213	3.158	7.8	20.1	5 21	14 4.14	+ 5 40.1	2.241	3.109	11.3	21.0
5 31	13 59.01	-21 12.9	2.273	3.154	10.8	20.3	5 31	13 59.25	+ 5 0.0	2.336	3.125	13.5	21.2
268340	2005 SF ₁₅₅		4 27.7 187°00	5.2/23.1	17		13380	Yamamohammed		4 27.7 327°00	2.4/26.3	18	
3 22	14 47.67	+ 0 9.9	2.301	3.126	11.9	21.4	3 22	14 41.95	-12 41.7	1.123	1.989	19.0	16.9
4 1	14 42.39	+ 1 2.9	2.224	3.126	9.4	21.2	4 1	14 39.97	-11 59.2	1.045	1.974	14.7	16.6
4 11	14 35.30	+ 1 54.6	2.172	3.125	6.8	21.1	4 11	14 34.76	-11 1.4	0.985	1.960	9.6	16.3
4 21	14 26.95	+ 2 40.1	2.147	3.124	5.2	21.0	4 21	14 27.03	- 9 53.6	0.947	1.947	4.1	15.9
5 1	14 18.11	+ 3 14.5	2.150	3.121	5.9	21.0	5 1	14 18.05	- 8 44.3	0.931	1.935	3.8	15.8
5 11	14 9.60	+ 3 34.2	2.181	3.118	8.3	21.1	5 11	14 9.47	- 7 43.8	0.939	1.924	9.5	16.1
5 21	14 2.14	+ 3 37.3	2.238	3.114	11.0	21.3	5 21	14 2.73	- 7 0.8	0.966	1.913	15.1	16.4
5 31	13 56.32	+ 3 23.6	2.317	3.110	13.5	21.5	5 31	13 58.91	- 6 40.8	1.012	1.904	20.0	16.6
251651	2336 T ₋₃		4 27.7 245°53	1.7/28.9	17		434565	2005 TZ ₁₇₇		4 27.7 266°29	3.7/23.5	16	
3 22	14 49.26	-20 11.8	1.926	2.728	14.8	21.6	3 22	14 41.62	- 5 48.7	2.432	3.265	11.1	21.2
4 1	14 44.42	-20 8.0	1.822	2.711	11.8	21.4	4 1	14 37.85	- 4 33.9	2.338	3.249	8.5	21.0
4 11	14 37.08	-19 50.8	1.740	2.694	8.1	21.1	4 11	14 32.42	- 3 14.1	2.269	3.233	5.8	20.8
4 21	14 27.84	-19 20.2	1.683	2.676	4.0	20.8	4 21	14 25.82	- 1 54.1	2.227	3.216	3.9	20.6
5 1	14 17.62	-18 38.8	1.653	2.658	2.0	20.7	5 1	14 18.68	- 0 39.7	2.215	3.199	4.6	20.7
5 11	14 7.58	-17 51.0	1.651	2.639	5.8	20.9	5 11	14 11.75	+ 0 23.8	2.231	3.182	7.3	20.8
5 21	13 58.79	-17 2.8	1.676	2.619	10.1	21.1	5 21	14 5.69	+ 1 12.4	2.272	3.165	10.2	20.9
5 31	13 52.12	-16 20.3	1.725	2.599	13.9	21.3	5 31	14 1.05	+ 1 43.9	2.337	3.148	12.9	21.1
370103	2001 TT ₁₀₈		4 27.7 183°50	2.2/29.7	17		70892	1999 VY ₁₆₈		4 27.7 199°93	1.4/26.6	18	
3 22	14 49.07	-22 26.7	2.462	3.241	12.6	22.7	3 22	14 47.59	-10 41.4	2.403	3.218	11.8	20.4
4 1	14 43.57	-22 25.9	2.368	3.242	10.0	22.5	4 1	14 42.38	-10 27.0	2.312	3.215	9.0	20.2
4 11	14 36.13	-22 13.1	2.297	3.242	7.0	22.3	4 11	14 35.34	-10 7.7	2.247	3.211	5.8	20.0
4 21	14 27.32	-21 48.6	2.253	3.242	3.8	22.1	4 21	14 27.01	- 9 45.8	2.208	3.206	2.5	19.7
5 1	14 17.92	-21 14.1	2.238	3.240	2.2	22.0	5 1	14 18.11	- 9 24.3	2.199	3.202	2.1	19.7
5 11	14 8.80	-20 33.1	2.252	3.238	4.7	22.1	5 11	14 9.47	- 9 6.4	2.219	3.196	5.5	19.9
5 21	14 0.75	-19 50.2	2.295	3.235	7.9	22.3	5 21	14 1.83	- 8 55.1	2.267	3.191	8.8	20.1
5 31	13 54.40	-19 9.8	2.363	3.231	10.9	22.5	5 31	13 55.79	- 8 52.6	2.339	3.185	11.8	20.3
349038	2006 VS ₆₂		4 27.7 146°11	0.1/27.7	18		114836	2003 OZ ₂₆		4 27.7 171°06	1.4/26.5	18	
3 22	14 43.99	-15 47.1	2.775	3.579	10.7	22.4	3 22	14 49.09	-12 40.3	2.120	2.935	13.2	21.0
4 1	14 39.35	-15 27.8	2.692	3.587	8.2	22.2	4 1	14 43.68	-12 1.1	2.038	2.940	10.1	20.8
4 11	14 33.22	-15 1.1	2.633	3.594	5.3	22.0	4 11	14 36.23	-11 13.5	1.980	2.944	6.5	20.6
4 21	14 26.08	-14 28.9	2.603	3.601	2.2	21.8	4 21	14 27.37	-10 21.0	1.949	2.947	2.7	20.4
5 1	14 18.55	-13 53.7	2.602	3.607	1.1	21.7	5 1	14 17.95	- 9 27.9	1.947	2.950	2.3	20.4
5 11	14 11.30	-13 18.8	2.630	3.614	4.2	22.0	5 11	14 8.92	- 8 39.4	1.974	2.951	6.0	20.6
5 21	14 4.92	-12 47.5	2.686	3.620	7.2	22.2	5 21	14 1.11	- 7 59.9	2.028	2.952	9.7	20.8
5 31	13 59.90	-12 22.6	2.768	3.625	9.8	22.3	5 31	13 55.13	- 7 32.7	2.106	2.952	12.9	21.0
296515	2009 KJ ₂₈		4 27.7 311°35	0.2/27.6	16		423996	2006 VU ₁₁₆		4 27.7 233°32	0.2/27.9	17	
3 22	14 40.63	-17 45.1	2.090	2.910	13.2	20.7	3 22	14 48.41	-16 19.4	1.982	2.794	14.1	22.6
4 1	14 37.46	-16 53.1	1.990	2.894	10.2	20.5	4 1	14 43.56	-16 3.6	1.884	2.783	11.0	22.4
4 11	14 32.34	-15 46.9	1.914	2.878	6.7	20.2	4 11	14 36.40	-15 37.0	1.809	2.770	7.2	22.1
4 21	14 25.82	-14 29.6	1.863	2.862	2.7	19.9	4 21	14 27.53	-15 1.2	1.759	2.757	3.0	21.8
5 1	14 18.65	-13 6.1	1.841	2.847	1.5	19.8	5 1	14 17.83	-14 19.5	1.738	2.744	1.4	21.7
5 11	14 11.74	-11 43.0	1.847	2.832	5.6	20.0	5 11	14 8.37	-13 36.9	1.745	2.730	5.8	22.0
5 21	14 5.87	-10 26.8	1.879	2.817	9.5	20.2	5 21	14 0.12	-12 58.4	1.778	2.715	10.0	22.2
5 31	14 1.69	- 9 22.8	1.935	2.803	12.9	20.4	5 31	13 53.85	-12 28.7	1.835	2.700	13.6	22.4
42855	1999 RF ₇₂		4 27.7 209°08	3.3/25.1	17		498349	2007 VQ ₃₀₃		4 27.7 90°75	7.6/19.9	17	
3 22	14 47.88	- 7 52.0	1.951										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
254546	2005 <i>EP</i> ₂₁₇		4 27.7 263°76	2.4/25.9	17		484756	2009 <i>AR</i> ₂₇		4 27.7 184°09	19°2/11.9	18	
3 22	14 46.72	-11 17.3	1.769	2.602	14.7	21.0	3 22	14 55.72	+27 12.4	1.340	2.127	20.8	21.5
4 1	14 42.54	-10 27.3	1.669	2.581	11.3	20.8	4 1	14 49.91	+29 33.8	1.308	2.128	19.7	21.4
4 11	14 35.90	-9 26.7	1.592	2.560	7.4	20.5	4 11	14 40.76	+31 24.2	1.293	2.128	19.2	21.4
4 21	14 27.38	-8 19.6	1.540	2.538	3.4	20.2	4 21	14 29.31	+32 30.4	1.296	2.128	19.5	21.4
5 1	14 17.91	-7 12.2	1.515	2.515	3.5	20.1	5 1	14 17.11	+32 43.8	1.316	2.127	20.6	21.5
5 11	14 8.62	-6 11.6	1.517	2.492	7.7	20.3	5 11	14 5.86	+32 3.8	1.352	2.125	22.1	21.6
5 21	14 0.59	-5 24.0	1.544	2.469	12.1	20.5	5 21	13 56.85	+30 36.3	1.402	2.122	23.8	21.7
5 31	13 54.66	-4 53.8	1.594	2.445	16.0	20.7	5 31	13 50.90	+28 30.6	1.465	2.119	25.4	21.8
131282	2001 <i>FW</i> ₉₃		4 27.7 87°63	5°6/23.2	17 R		64243	2001 <i>TJ</i> ₁₄₉		4 27.7 123°60	4°5/25.0	18	
3 22	14 46.19	-0 9.9	1.952	2.789	13.3	19.7	3 22	14 49.55	-5 40.2	1.436	2.282	16.7	19.2
4 1	14 41.42	+0 46.4	1.895	2.804	10.3	19.5	4 1	14 44.86	-4 59.5	1.368	2.285	12.9	18.9
4 11	14 34.70	+1 40.5	1.862	2.819	7.5	19.3	4 11	14 37.40	-4 15.5	1.321	2.289	8.6	18.7
4 21	14 26.71	+2 26.8	1.855	2.834	5.7	19.3	4 21	14 27.96	-3 34.0	1.299	2.292	5.0	18.5
5 1	14 18.31	+3 0.0	1.875	2.849	6.4	19.3	5 1	14 17.74	-3 1.7	1.302	2.296	5.5	18.5
5 11	14 10.42	+3 16.3	1.922	2.864	8.9	19.5	5 11	14 8.09	-2 44.3	1.330	2.299	9.4	18.7
5 21	14 3.80	+3 14.5	1.993	2.879	11.7	19.7	5 21	14 0.14	-2 44.8	1.382	2.302	13.6	19.0
5 31	13 58.99	+2 54.8	2.085	2.893	14.3	19.9	5 31	13 54.70	-3 4.3	1.454	2.305	17.3	19.2
139615	2001 <i>QX</i> ₁₃₆		4 27.7 216°75	3°9/ 1.5	18		308911	2006 <i>SW</i> ₂₆₅		4 27.7 121°86	2°5/29.8	17	
3 22	14 45.65	-28 15.3	2.542	3.301	12.8	20.2	3 22	14 46.98	-21 58.5	2.351	3.139	12.9	21.4
4 1	14 41.07	-28 22.9	2.442	3.296	10.5	20.0	4 1	14 42.09	-22 16.9	2.264	3.142	10.2	21.2
4 11	14 34.58	-28 15.8	2.365	3.291	7.9	19.8	4 11	14 35.25	-22 24.4	2.199	3.145	7.2	21.0
4 21	14 26.73	-27 53.5	2.313	3.285	5.3	19.6	4 21	14 27.02	-22 20.8	2.161	3.149	4.1	20.8
5 1	14 18.26	-27 16.9	2.289	3.279	3.9	19.5	5 1	14 18.18	-22 7.3	2.151	3.152	2.5	20.7
5 11	14 10.04	-26 29.4	2.293	3.273	5.1	19.6	5 11	14 9.63	-21 46.7	2.169	3.155	4.8	20.9
5 21	14 2.84	-25 35.4	2.325	3.267	7.7	19.8	5 21	14 2.15	-21 22.9	2.215	3.158	8.0	21.1
5 31	13 57.28	-24 40.3	2.382	3.260	10.4	19.9	5 31	13 56.39	-21 0.0	2.285	3.160	10.9	21.3
310528	2001 <i>AB</i> ₆		4 27.7 136°41	0°5/28.1	18		507951	2015 <i>BO</i> ₆		4 27.7 168°78	7°2/ 3.7	17	
3 22	14 49.72	-17 31.5	1.830	2.642	15.1	21.5	3 22	14 50.63	-34 59.3	2.079	2.810	16.1	21.5
4 1	14 44.47	-17 10.6	1.756	2.653	11.7	21.3	4 1	14 45.53	-35 40.2	1.990	2.812	13.8	21.3
4 11	14 36.87	-16 37.4	1.704	2.664	7.7	21.0	4 11	14 37.81	-36 1.1	1.921	2.814	11.2	21.2
4 21	14 27.66	-15 54.0	1.677	2.675	3.3	20.8	4 21	14 28.16	-35 58.8	1.874	2.816	8.7	21.0
5 1	14 17.84	-15 4.5	1.678	2.685	1.4	20.7	5 1	14 17.62	-35 32.2	1.852	2.817	7.3	20.9
5 11	14 8.54	-14 14.4	1.708	2.694	5.8	21.0	5 11	14 7.44	-34 44.2	1.857	2.818	7.8	20.9
5 21	14 0.69	-13 29.5	1.763	2.702	9.9	21.2	5 21	13 58.72	-33 40.8	1.887	2.819	9.9	21.1
5 31	13 54.98	-12 54.3	1.842	2.710	13.5	21.5	5 31	13 52.32	-32 30.1	1.942	2.819	12.5	21.2
61174	2000 <i>NN</i> ₂₂		4 27.7 277°35	0°3/27.6	18		162105	1998 <i>RZ</i> ₂₂		4 27.7 283°13	2°5/29.4	17	
3 22	14 46.26	-17 8.7	1.549	2.378	16.5	19.3	3 22	14 48.05	-21 3.5	2.024	2.822	14.3	20.2
4 1	14 42.65	-16 30.1	1.447	2.355	13.0	19.0	4 1	14 43.52	-21 21.7	1.912	2.797	11.5	19.9
4 11	14 36.24	-15 34.3	1.366	2.332	8.6	18.7	4 11	14 36.57	-21 28.4	1.822	2.773	8.1	19.7
4 21	14 27.60	-14 23.6	1.309	2.308	3.5	18.3	4 21	14 27.71	-21 22.8	1.758	2.748	4.4	19.4
5 1	14 17.79	-13 3.6	1.278	2.284	1.9	18.2	5 1	14 17.80	-21 5.9	1.720	2.723	2.6	19.2
5 11	14 8.16	-11 42.6	1.273	2.260	7.4	18.4	5 11	14 7.94	-20 40.6	1.711	2.698	5.7	19.4
5 21	13 59.96	-10 29.5	1.293	2.235	12.5	18.6	5 21	13 59.18	-20 11.5	1.727	2.672	9.7	19.6
5 31	13 54.20	-9 31.8	1.334	2.210	17.1	18.9	5 31	13 52.43	-19 44.1	1.768	2.647	13.4	19.7
424651	2008 <i>QX</i> ₁₂		4 27.7 306°70	4°9/30.9	17		3646	Aduatiques		4 27.7 161°10	0°2/27.8	18	
3 22	14 47.23	-26 6.1	1.715	2.508	16.7	20.9	3 22	14 46.18	-16 20.4	2.214	3.024	12.9	17.9
4 1	14 43.28	-26 40.4	1.621	2.497	13.7	20.6	4 1	14 41.46	-16 1.2	2.130	3.028	9.9	17.7
4 11	14 36.56	-26 58.2	1.547	2.486	10.3	20.4	4 11	14 34.81	-15 32.5	2.070	3.031	6.5	17.5
4 21	14 27.70	-26 57.2	1.496	2.475	6.8	20.1	4 21	14 26.83	-14 56.1	2.036	3.034	2.7	17.2
5 1	14 17.75	-26 37.4	1.470	2.464	4.9	20.0	5 1	14 18.30	-14 15.4	2.031	3.037	1.3	17.1
5 11	14 8.03	-26 2.1	1.470	2.454	6.9	20.1	5 11	14 10.11	-13 34.8	2.054	3.039	5.1	17.4
5 21	13 59.77	-25 17.5	1.495	2.444	10.6	20.3	5 21	14 3.04	-12 58.4	2.105	3.042	8.7	17.6
5 31	13 53.92	-24 31.2	1.542	2.434	14.3	20.5	5 31	13 57.69	-12 30.1	2.180	3.043	11.8	17.8
288713	2004 <i>RS</i> ₁₇		4 27.7 250°46	2°0/26.1	18		290478	2005 <i>TG</i> ₁₉₂		4 27.7 271°00	7°1/20.5	18	
3 22	14 46.92	-10 12.4	2.147	2.971	12.8	21.4	3 22	14 44.85	+8 1.6	2.498	3.318	11.3	20.0
4 1	14 42.21	-9 42.2	2.047	2.953	9.8	21.1	4 1	14 40.27	+8 57.1	2.411	3.299	9.3	19.8
4 11	14 35.44	-9 5.5	1.970	2.936	6.4	20.9	4 11	14 33.99	+9 46.7	2.349	3.279	7.7	19.7
4 21	14 27.13	-8 25.5	1.919	2.917	2.9	20.6	4 21	14 26.50	+10 25.2	2.313	3.260	7.1	19.6
5 1	14 18.06	-7 46.4	1.898	2.898	2.8	20.6	5 1	14 18.45	+10 47.7	2.304	3.240	7.9	19.6
5 11	14 9.19	-7 12.7	1.904	2.879	6.5	20.8	5 11	14 10.60	+10 51.2	2.322	3.219	9.7	19.7
5 21	14 1.35	-6 48.3	1.937	2.859	10.2	21.0	5 21	14 3.65	+10 34.6	2.362	3.199	11.9	19.8
5 31	13 55.27	-6 36.3	1.993	2.839	13.5	21.1	5 31	13 58.16	+9 58.8	2.424	3.178	14.0	19.9
170792	2004 <i>DL</i> ₁₀		4 27.7 140°38	1°1/28.8	18		15414	Pettirosi		4 27.7 46°82	1°6/26.4	18	
3 22	14 44.95	-19 39.8	2.416	3.214	12.3	20.6	3 22	14 44.27	-11 15.8	2.037	2.866	13.1	18.5
4 1	14 40.36	-19 21.6	2.332	3.221	9.6	20.4	4 1	14 40.11	-10 47.0	1.959	2.869	10.0	18.3
4 11	14 34.01	-18 52.4	2.273	3.228	6.4	20.2	4 11	14 33.99	-10 11.6	1.904	2.872	6.4	18.1
4 21	14 26.45	-18 13.6	2.239	3.234	3.0	20.0	4 21	14 26.50	-9 32.9	1.876	2.875	2.8	17.8
5 1	14 18.43	-17 28.3	2.235	3.241	1.4	19.9	5 1	14 18.46	-8 55.1	1.875	2.878	2.5	17.8
5 11	14 10.75	-16 40.5	2.260	3.247	4.5	20.1	5 11	14 10.79	-8 22.6	1.902	2.881	6.1	18.1
5 21	14 4.10	-15 54.6	2.312	3.252	7.8	20.3	5 21	14 4.27	-7 59.1	1.955	2.884	9.7	18.3
5 31	13 59.04	-15 14.7	2.389	3.258	10.8	20.5	5 31	13 59.50	-7 47.5	2.031	2.887	12.9	18.5
191726	2004 <i>RV</i> ₂₈₇		4 27.7 280°98	1°3/26.7	17		300047	2006 <i>UB</i> ₁₄₁		4 27.7 219°23	1°0/28.7	16	

EPHEMERIDES

4 27.7

4 27.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
422448	2014 <i>SF</i> ₃₀₆		4 27.7 176°13	1°5/26.7	16		21144	1993 <i>FA</i> ₄₆		4 27.7 195°01	0°4/27.4	18	
3 22	14 50.20	-11 26.2	1.826	2.650	14.6	22.1	3 22	14 45.71	-15 24.4	2.201	3.015	12.8	19.8
4 1	14 44.91	-11 6.6	1.745	2.652	11.2	21.9	4 1	14 41.15	-14 55.1	2.113	3.013	9.9	19.6
4 11	14 37.24	-10 39.9	1.687	2.653	7.2	21.7	4 11	14 34.66	-14 16.1	2.048	3.011	6.4	19.3
4 21	14 27.87	-10 9.0	1.655	2.654	3.0	21.4	4 21	14 26.80	-13 30.0	2.010	3.009	2.6	19.1
5 1	14 17.79	-9 38.2	1.651	2.655	2.5	21.4	5 1	14 18.37	-12 40.3	2.001	3.006	1.5	19.0
5 11	14 8.13	-9 12.1	1.675	2.655	6.7	21.6	5 11	14 10.25	-11 52.1	2.020	3.003	5.4	19.3
5 21	13 59.84	-8 54.8	1.725	2.654	10.7	21.9	5 21	14 3.21	-11 9.7	2.066	2.999	9.0	19.5
5 31	13 53.68	-8 49.2	1.797	2.653	14.3	22.1	5 31	13 57.89	-10 37.1	2.136	2.996	12.2	19.7
98662	2000 <i>WN</i> ₁₅₅		4 27.7 134°25	4°4/30.9	18		201824	2003 <i>YH</i> ₂₉		4 27.7 297°24	6°7/3.7	18	
3 22	14 50.16	-26 31.5	1.681	2.469	17.2	19.7	3 22	14 45.71	-34 27.5	2.063	2.805	15.9	19.8
4 1	14 45.32	-26 45.0	1.602	2.475	14.0	19.5	4 1	14 41.79	-34 49.9	1.965	2.797	13.6	19.6
4 11	14 37.72	-26 39.3	1.543	2.482	10.3	19.3	4 11	14 35.41	-34 51.5	1.886	2.788	10.9	19.4
4 21	14 28.12	-26 13.2	1.508	2.488	6.5	19.1	4 21	14 27.21	-34 29.6	1.830	2.780	8.4	19.2
5 1	14 17.67	-25 28.3	1.498	2.494	4.4	19.0	5 1	14 18.14	-33 44.1	1.800	2.772	6.8	19.1
5 11	14 7.74	-24 29.9	1.515	2.500	6.6	19.1	5 11	14 9.38	-32 38.4	1.795	2.764	7.3	19.1
5 21	13 59.47	-23 25.7	1.557	2.505	10.3	19.3	5 21	14 1.96	-31 19.0	1.815	2.756	9.6	19.2
5 31	13 53.70	-22 23.9	1.622	2.510	13.9	19.5	5 31	13 56.70	-29 54.1	1.860	2.748	12.4	19.4
66754	1999 <i>TZ</i> ₁₇₃		4 27.7 195°06	0°9/26.9	18		141381	2002 <i>AP</i> ₆₉		4 27.7 110°89	3°7/1.4	18	
3 22	14 45.32	-13 45.1	2.284	3.100	12.3	20.7	3 22	14 44.60	-27 56.3	2.359	3.127	13.4	19.9
4 1	14 40.75	-13 11.6	2.196	3.099	9.4	20.5	4 1	14 40.32	-27 53.4	2.272	3.132	11.0	19.7
4 11	14 34.34	-12 29.7	2.132	3.096	6.1	20.3	4 11	14 34.12	-27 34.4	2.206	3.136	8.1	19.6
4 21	14 26.64	-11 42.1	2.095	3.094	2.4	20.0	4 21	14 26.58	-26 59.5	2.165	3.141	5.3	19.4
5 1	14 18.40	-10 52.9	2.087	3.091	1.8	20.0	5 1	14 18.50	-26 10.4	2.152	3.146	3.7	19.3
5 11	14 10.45	-10 6.6	2.107	3.087	5.4	20.2	5 11	14 10.76	-25 11.3	2.167	3.150	5.1	19.4
5 21	14 3.55	-9 27.3	2.154	3.084	8.9	20.4	5 21	14 4.15	-24 7.4	2.209	3.155	7.9	19.6
5 31	13 58.27	-8 58.5	2.226	3.079	12.0	20.6	5 31	13 59.25	-23 4.6	2.276	3.159	10.7	19.8
160523	1995 <i>SN</i> ₄₀		4 27.7 274°49	1°5/26.6	17		48091	2001 <i>FT</i> ₄₄		4 27.7 9°29	2°2/28.9	18	
3 22	14 45.53	-12 33.5	1.957	2.784	13.7	20.8	3 22	14 48.75	-18 21.9	1.380	2.210	18.2	18.6
4 1	14 41.42	-11 59.6	1.854	2.763	10.6	20.5	4 1	14 44.71	-18 49.6	1.306	2.211	14.3	18.3
4 11	14 35.08	-11 16.4	1.774	2.741	6.9	20.2	4 11	14 37.59	-19 4.7	1.250	2.212	9.8	18.0
4 21	14 27.05	-10 26.7	1.720	2.719	2.9	19.9	4 21	14 28.17	-19 6.7	1.218	2.213	4.8	17.8
5 1	14 18.16	-9 35.3	1.693	2.697	2.5	19.9	5 1	14 17.71	-18 57.4	1.210	2.216	2.5	17.6
5 11	14 9.45	-8 47.6	1.694	2.674	6.6	20.1	5 11	14 7.72	-18 41.3	1.228	2.218	6.9	17.9
5 21	14 1.84	-8 9.0	1.721	2.651	10.7	20.3	5 21	13 59.52	-18 24.0	1.269	2.221	11.7	18.2
5 31	13 56.12	-7 43.4	1.771	2.628	14.4	20.5	5 31	13 54.08	-18 11.6	1.332	2.225	16.0	18.4
226767	2004 <i>RE</i> ₉₉		4 27.7 142°58	0°9/26.9	17		69242	1979 <i>MA</i> ₇		4 27.7 286°93	0°7/28.3	17	
3 22	14 45.77	-14 17.4	2.105	2.924	13.1	20.9	3 22	14 44.50	-18 22.6	1.951	2.767	14.2	19.4
4 1	14 41.17	-13 37.7	2.027	2.931	10.0	20.7	4 1	14 40.54	-18 1.1	1.864	2.763	11.0	19.1
4 11	14 34.62	-12 48.6	1.973	2.938	6.4	20.5	4 11	14 34.41	-17 26.8	1.799	2.760	7.3	18.9
4 21	14 26.74	-11 53.3	1.946	2.945	2.6	20.3	4 21	14 26.75	-16 41.7	1.760	2.757	3.2	18.7
5 1	14 18.37	-10 56.4	1.947	2.951	1.9	20.2	5 1	14 18.41	-15 49.6	1.747	2.754	1.4	18.5
5 11	14 10.39	-10 3.2	1.976	2.957	5.7	20.5	5 11	14 10.42	-14 55.8	1.763	2.751	5.5	18.8
5 21	14 3.58	-9 18.2	2.032	2.963	9.3	20.7	5 21	14 3.63	-14 6.0	1.804	2.747	9.5	19.0
5 31	13 58.54	-8 45.0	2.112	2.968	12.5	20.9	5 31	13 58.76	-13 25.0	1.869	2.744	13.0	19.2
287543	2003 <i>EQ</i> ₂₁		4 27.7 60°84	0°9/28.3	18		159163	2005 <i>ES</i> ₁₂₉		4 27.7 198°50	0°1/27.9	18	
3 22	14 49.96	-17 22.6	1.514	2.338	17.1	20.6	3 22	14 36.55	-15 57.5	4.752	5.551	6.7	21.1
4 1	14 44.91	-17 20.0	1.461	2.364	13.2	20.4	4 1	14 33.23	-15 41.4	4.658	5.549	5.1	21.0
4 11	14 37.23	-17 4.7	1.428	2.390	8.7	20.2	4 11	14 29.11	-15 21.0	4.589	5.548	3.3	20.9
4 21	14 27.82	-16 38.6	1.419	2.416	3.8	19.9	4 21	14 24.44	-14 57.3	4.549	5.547	1.4	20.7
5 1	14 17.89	-16 5.7	1.436	2.443	1.6	19.8	5 1	14 19.55	-14 31.8	4.540	5.546	0.6	20.6
5 11	14 8.73	-15 31.6	1.480	2.469	6.2	20.2	5 11	14 14.79	-14 6.3	4.560	5.544	2.6	20.8
5 21	14 1.34	-15 1.8	1.549	2.495	10.5	20.5	5 21	14 10.45	-13 42.3	4.610	5.543	4.4	20.9
5 31	13 56.39	-14 40.9	1.641	2.521	14.2	20.8	5 31	14 6.83	-13 21.6	4.686	5.542	6.1	21.0
123002	2000 <i>SS</i> ₂₅₅		4 27.7 138°60	0°1/27.8	17		143464	2003 <i>BB</i> ₉₁		4 27.7 16°75	9°5/18.7	18	
3 22	14 47.10	-16 25.8	2.169	2.979	13.1	21.2	3 22	14 41.14	+ 8 49.6	1.809	2.652	13.9	18.8
4 1	14 42.14	-16 2.7	2.091	2.988	10.1	21.0	4 1	14 37.85	+10 27.7	1.759	2.656	11.7	18.7
4 11	14 35.23	-15 29.7	2.037	2.998	6.6	20.8	4 11	14 32.56	+11 56.7	1.731	2.662	10.0	18.6
4 21	14 27.00	-14 49.0	2.009	3.007	2.7	20.6	4 21	14 25.94	+13 8.3	1.728	2.668	9.5	18.5
5 1	14 18.26	-14 4.1	2.009	3.016	1.3	20.5	5 1	14 18.84	+13 55.7	1.749	2.674	10.6	18.6
5 11	14 9.92	-13 19.7	2.039	3.024	5.2	20.8	5 11	14 12.21	+14 15.0	1.793	2.681	12.6	18.8
5 21	14 2.76	-12 40.2	2.095	3.031	8.8	21.0	5 21	14 6.80	+14 6.1	1.858	2.689	14.8	18.9
5 31	13 57.38	-12 9.3	2.176	3.038	11.9	21.2	5 31	14 3.20	+13 31.5	1.941	2.697	17.0	19.1
133952	2004 <i>TN</i> ₁₁₁		4 27.7 179°25	3°5/24.2	17		497019	2003 <i>GN</i> ₅₁		4 27.7 169°04	20°9/9.9	18	
3 22	14 45.04	- 5 36.0	2.390	3.217	11.5	21.0	3 22	14 45.71	+ 4 27.0	0.574	1.481	25.8	20.4
4 1	14 40.37	- 4 36.9	2.311	3.219	8.8	20.9	4 1	14 44.30	+10 43.1	0.546	1.484	22.1	20.2
4 11	14 34.00	- 3 34.4	2.257	3.220	5.9	20.7	4 11	14 38.14	+16 52.6	0.538	1.486	20.9	20.1
4 21	14 26.48	- 2 33.3	2.230	3.220	3.7	20.5	4 21	14 28.51	+22 7.9	0.548	1.488	22.7	20.2
5 1	14 18.51	- 1 38.4	2.233	3.220	4.3	20.6	5 1	14 17.63	+25 53.5	0.574	1.488	26.4	20.5
5 11	14 10.85	- 0 54.2	2.264	3.219	7.0	20.7	5 11	14 8.03	+27 58.9	0.612	1.489	30.5	20.7
5 21	14 4.17	- 0 23.7	2.321	3.218	9.8	20.9	5 21	14 1.51	+28 34.0	0.660	1.488	34.1	21.0
5 31	13 59.01	- 0 8.5	2.402	3.217	12.5	21.1	5 31	13 59.04	+27 56.5	0.712	1.487	37.0	21.2
328013	2007 <i>HC</i> ₇₀		4 27.7 126°54	17°0/21.8	18		169053	2001 <i>FO</i> ₉₂		4 27.7			

EPHEMERIDES

4 27.7

4 27.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
122860	2000 <i>ST</i> ₁₃₂		4 27.7 254°09	2°5/ 2.1	18		46327	2001 <i>QU</i> ₁₆₁		4 27.8	8°73	1°1/26.9	18
3 22	14 37.74	-29 6.6	4.552	5.292	7.8	19.9	3 22	14 44.81	-12 16.3	1.911	2.741	13.8	19.0
4 1	14 34.27	-29 1.5	4.448	5.288	6.4	19.7	4 1	14 40.72	-12 0.0	1.831	2.741	10.6	18.8
4 11	14 29.84	-28 47.4	4.368	5.284	4.8	19.6	4 11	14 34.52	-11 36.4	1.775	2.742	6.8	18.5
4 21	14 24.77	-28 24.7	4.314	5.280	3.4	19.5	4 21	14 26.82	-11 8.4	1.744	2.743	2.8	18.3
5 1	14 19.42	-27 54.2	4.290	5.276	2.5	19.4	5 1	14 18.49	-10 39.8	1.740	2.745	2.1	18.2
5 11	14 14.22	-27 17.8	4.295	5.272	3.1	19.5	5 11	14 10.52	-10 15.0	1.764	2.746	6.1	18.5
5 21	14 9.52	-26 37.5	4.329	5.268	4.5	19.6	5 21	14 3.77	-9 57.7	1.813	2.748	9.9	18.7
5 31	14 5.65	-25 56.1	4.390	5.264	6.1	19.7	5 31	13 58.90	-9 50.9	1.885	2.750	13.3	18.9
18228	Hyperenor		4 27.7 227°29	0°3/28.3	18		78489	2002 <i>RZ</i> ₆₀		4 27.8 257°40	1°3/26.8	18	
3 22	14 36.68	-16 51.8	5.000	5.793	6.4	19.7	3 22	14 48.31	-12 42.1	1.893	2.716	14.2	20.6
4 1	14 33.31	-16 40.4	4.899	5.787	4.9	19.6	4 1	14 43.69	-12 15.7	1.790	2.696	11.0	20.3
4 11	14 29.16	-16 24.6	4.825	5.782	3.2	19.4	4 11	14 36.66	-11 40.0	1.710	2.676	7.2	20.0
4 21	14 24.48	-16 5.4	4.779	5.776	1.4	19.3	4 21	14 27.79	-10 57.9	1.656	2.655	3.0	19.7
5 1	14 19.57	-15 44.0	4.764	5.770	0.6	19.2	5 1	14 17.98	-10 13.5	1.629	2.633	2.4	19.6
5 11	14 14.77	-15 22.0	4.779	5.764	2.4	19.4	5 11	14 8.33	-9 32.3	1.630	2.611	6.7	19.8
5 21	14 10.37	-15 0.9	4.823	5.758	4.2	19.5	5 21	13 59.86	-8 59.4	1.657	2.588	11.0	20.0
5 31	14 6.65	-14 42.3	4.894	5.752	5.8	19.6	5 31	13 53.42	-8 39.0	1.707	2.565	14.8	20.2
208605	2002 <i>CV</i> ₂₁₅		4 27.7 78°43	0°6/28.1	18		130445	2000 <i>QV</i> ₃₁		4 27.8 198°22	0°3/27.9	18	
3 22	14 50.49	-16 56.4	1.422	2.250	17.8	21.1	3 22	14 51.07	-16 25.4	2.080	2.884	13.8	21.1
4 1	14 45.62	-16 49.5	1.360	2.267	13.8	20.8	4 1	14 45.46	-16 12.5	1.987	2.880	10.7	20.9
4 11	14 37.89	-16 29.2	1.319	2.283	9.0	20.6	4 11	14 37.60	-15 49.4	1.916	2.876	7.1	20.6
4 21	14 28.19	-15 57.6	1.302	2.300	3.9	20.3	4 21	14 28.10	-15 17.6	1.873	2.870	3.0	20.4
5 1	14 17.81	-15 19.2	1.310	2.317	1.7	20.2	5 1	14 17.86	-14 40.1	1.858	2.864	1.3	20.2
5 11	14 8.14	-14 40.1	1.345	2.333	6.7	20.6	5 11	14 7.92	-14 1.4	1.872	2.857	5.6	20.5
5 21	14 0.33	-14 6.7	1.404	2.350	11.4	20.9	5 21	13 59.20	-13 26.2	1.914	2.849	9.5	20.7
5 31	13 55.14	-13 43.8	1.484	2.366	15.4	21.2	5 31	13 52.45	-12 58.9	1.980	2.840	13.0	20.9
192725	1999 <i>TZ</i> ₁₅₉		4 27.8 252°18	0°2/27.9	18		83928	2001 <i>VJ</i> ₅₀		4 27.8 277°01	3°3/30.2	18	
3 22	14 45.21	-16 53.8	2.047	2.862	13.6	21.0	3 22	14 47.37	-23 42.2	2.234	3.018	13.6	19.2
4 1	14 41.03	-16 27.3	1.951	2.851	10.6	20.8	4 1	14 42.67	-24 8.8	2.138	3.011	11.0	19.0
4 11	14 34.75	-15 49.1	1.878	2.841	6.9	20.6	4 11	14 35.83	-24 23.5	2.064	3.005	7.9	18.8
4 21	14 26.92	-15 1.3	1.831	2.830	2.9	20.3	4 21	14 27.39	-24 25.4	2.015	2.998	4.9	18.6
5 1	14 18.38	-14 7.9	1.812	2.818	1.4	20.1	5 1	14 18.19	-24 14.9	1.994	2.992	3.3	18.5
5 11	14 10.10	-13 14.0	1.821	2.807	5.6	20.4	5 11	14 9.19	-23 54.7	2.001	2.985	5.3	18.6
5 21	14 2.95	-12 25.0	1.856	2.795	9.5	20.6	5 21	14 1.30	-23 29.0	2.035	2.979	8.5	18.8
5 31	13 57.63	-11 45.6	1.915	2.783	13.0	20.8	5 31	13 55.25	-23 2.5	2.093	2.972	11.6	19.0
464091	2014 <i>WM</i> ₃₄₈		4 27.8 199°17	3°5/30.2	17		389282	2009 <i>HK</i> ₅₀		4 27.8 42°00	1°0/28.4	17	
3 22	14 50.55	-24 15.6	1.904	2.690	15.5	22.0	3 22	14 48.43	-16 16.1	2.006	2.818	14.0	20.4
4 1	14 45.42	-24 29.6	1.812	2.688	12.5	21.8	4 1	14 43.43	-16 39.1	1.929	2.826	10.8	20.2
4 11	14 37.76	-24 28.2	1.742	2.685	9.0	21.6	4 11	14 36.25	-16 54.1	1.874	2.834	7.2	20.0
4 21	14 28.20	-24 10.4	1.696	2.681	5.4	21.3	4 21	14 27.52	-17 1.7	1.845	2.842	3.3	19.7
5 1	14 17.76	-23 37.5	1.678	2.677	3.5	21.2	5 1	14 18.15	-17 3.3	1.845	2.850	1.5	19.6
5 11	14 7.65	-22 53.6	1.687	2.672	6.0	21.3	5 11	14 9.16	-17 1.6	1.872	2.859	5.3	19.9
5 21	13 58.94	-22 4.8	1.722	2.667	9.7	21.5	5 21	14 1.43	-17 0.0	1.926	2.868	9.0	20.1
5 31	13 52.46	-21 17.7	1.781	2.662	13.3	21.8	5 31	13 55.64	-17 1.7	2.003	2.877	12.3	20.3
30970	1995 <i>BP</i> ₃		4 27.8 353°73	8°2/21.4	18		461668	2005 <i>GY</i> ₁₉₀		4 27.8 99°01	0°5/28.1	16	
3 22	14 41.77	+ 0 15.8	1.396	2.259	16.1	17.6	3 22	14 49.62	-17 20.9	1.597	2.419	16.5	22.4
4 1	14 38.98	+ 1 54.3	1.333	2.255	12.8	17.3	4 1	14 44.71	-17 5.3	1.530	2.433	12.8	22.0
4 11	14 33.64	+ 3 32.8	1.292	2.252	9.6	17.2	4 11	14 37.21	-16 36.5	1.484	2.447	8.4	22.2
4 21	14 26.49	+ 5 1.1	1.274	2.250	8.2	17.1	4 21	14 27.92	-15 56.9	1.462	2.460	3.6	21.7
5 1	14 18.62	+ 6 9.3	1.281	2.249	9.5	17.1	5 1	14 17.98	-15 10.7	1.468	2.474	1.5	21.6
5 11	14 11.24	+ 6 49.9	1.310	2.248	12.6	17.3	5 11	14 8.66	-14 24.2	1.500	2.487	6.3	21.9
5 21	14 5.38	+ 7 0.5	1.360	2.248	16.0	17.5	5 21	14 0.97	-13 43.3	1.557	2.500	10.7	22.2
5 31	14 1.79	+ 6 41.9	1.428	2.248	19.1	17.7	5 31	13 55.66	-13 13.0	1.636	2.513	14.5	22.5
285697	2000 <i>SZ</i> ₁₉₄		4 27.8 151°08	1°3/26.8	18		374107	2004 <i>SE</i>		4 27.8 169°51	3°2/ 1.4	17	
3 22	14 49.29	-13 26.7	1.814	2.636	14.8	21.4	3 22	14 47.15	-29 48.6	2.209	2.967	14.5	21.0
4 1	14 44.17	-12 48.3	1.739	2.644	11.3	21.2	4 1	14 42.33	-28 51.5	2.114	2.970	11.8	20.8
4 11	14 36.74	-12 0.0	1.686	2.652	7.3	21.0	4 11	14 35.43	-27 32.1	2.041	2.972	8.6	20.6
4 21	14 27.71	-11 5.4	1.660	2.659	3.0	20.7	4 21	14 27.14	-25 51.6	1.995	2.974	5.3	20.4
5 1	14 18.06	-10 9.7	1.661	2.665	2.3	20.7	5 1	14 18.36	-23 54.2	1.978	2.976	3.2	20.3
5 11	14 8.90	-9 18.9	1.691	2.671	6.6	21.0	5 11	14 10.06	-21 47.6	1.991	2.977	5.1	20.4
5 21	14 1.16	-8 38.2	1.746	2.676	10.6	21.2	5 21	14 3.07	-19 40.4	2.033	2.978	8.4	20.6
5 31	13 55.52	-8 11.1	1.825	2.681	14.1	21.4	5 31	13 57.97	-17 41.1	2.102	2.979	11.7	20.8
37078	2000 <i>UZ</i> ₅₇		4 27.8 164°31	1°2/29.0	18		415282	2013 <i>FK</i> ₁₆		4 27.8 322°10	2°4/28.8	17	
3 22	14 43.68	-20 20.1	2.710	3.502	11.3	19.8	3 22	14 47.98	-17 31.1	1.223	2.064	19.3	20.9
4 1	14 39.28	-20 0.5	2.621	3.506	8.8	19.6	4 1	14 44.78	-18 9.7	1.137	2.049	15.4	20.6
4 11	14 33.30	-19 30.5	2.556	3.509	5.9	19.4	4 11	14 38.11	-18 37.2	1.069	2.034	10.6	20.3
4 21	14 26.25	-18 51.4	2.518	3.511	2.9	19.2	4 21	14 28.61	-18 52.4	1.023	2.019	5.2	19.9
5 1	14 18.76	-18 5.8	2.509	3.514	1.3	19.1	5 1	14 17.55	-18 55.9	1.000	2.006	2.7	19.7
5 11	14 11.55	-17 17.4	2.529	3.516	4.1	19.3	5 11	14 6.68	-18 51.3	1.001	1.993	7.8	20.0
5 21	14 5.23	-16 30.2	2.577	3.518	7.1	19.5	5 21	13 57.66	-18 44.4	1.025	1.981	13.4	20.2
5 31	14 0.32	-15 47.9	2.651	3.519	9.8	19.7	5 31	13 51.75	-18 41.8	1.067	1.970	18.3	20.5
183118	2002 <i>RE</i> ₁₅₇		4 27.8 265°94	1°2/28.6	18		241606	1999 <i>RX</i> ₁₉₉		4 27.8 266°17	3°9/ 1.7	18	

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
459557	2013 <i>GF</i> ₈₁		4 27.8 60°10	0°1/27.7	16		35597	1998 <i>HJ</i> ₁₁₈		4 27.8 359°33	7°6/21.0	18	
3 22	14 50.00	-15 2.7	1.288	2.128	18.6	21.6	3 22	14 41.77	+ 0 13.8	1.589	2.445	14.9	18.2
4 1	14 45.50	-14 58.4	1.229	2.143	14.3	21.4	4 1	14 38.68	+ 1 58.9	1.526	2.443	11.7	18.0
4 11	14 37.95	-14 42.1	1.190	2.157	9.3	21.2	4 11	14 33.31	+ 3 44.2	1.485	2.443	8.9	17.8
4 21	14 28.28	-14 16.2	1.173	2.173	3.8	20.9	4 21	14 26.35	+ 5 20.4	1.469	2.442	7.6	17.7
5 1	14 17.83	-13 45.5	1.182	2.188	1.9	20.8	5 1	14 18.76	+ 6 38.0	1.479	2.442	8.9	17.8
5 11	14 8.14	-13 16.1	1.215	2.203	7.3	21.2	5 11	14 11.64	+ 7 30.2	1.512	2.443	11.7	18.0
5 21	14 0.43	-12 54.0	1.272	2.219	12.2	21.5	5 21	14 5.87	+ 7 54.2	1.568	2.444	14.9	18.1
5 31	13 55.50	-12 43.5	1.350	2.235	16.4	21.8	5 31	14 2.14	+ 7 50.4	1.642	2.445	17.7	18.3
395363	2011 <i>RK</i> ₉		4 27.8 179°45	3°6/1.4	17		411738	2012 <i>BB</i> ₇₀		4 27.8 71°65	2°7/26.0	18	
3 22	14 47.99	-27 44.7	3.064	3.810	11.1	21.7	3 22	14 48.25	- 9 47.6	1.474	2.316	16.5	21.1
4 1	14 42.54	-28 8.5	2.966	3.811	9.1	21.6	4 1	14 43.73	- 9 11.9	1.413	2.330	12.6	20.8
4 11	14 35.44	-28 21.0	2.892	3.812	6.9	21.4	4 11	14 36.60	- 8 29.3	1.373	2.343	8.1	20.6
4 21	14 27.16	-28 21.3	2.844	3.813	4.7	21.3	4 21	14 27.69	- 7 44.6	1.358	2.356	3.8	20.4
5 1	14 18.34	-28 9.8	2.826	3.813	3.6	21.2	5 1	14 18.14	- 7 3.9	1.369	2.369	3.8	20.4
5 11	14 9.71	-27 48.4	2.836	3.812	4.6	21.3	5 11	14 9.24	- 6 33.1	1.405	2.383	8.0	20.7
5 21	14 1.95	-27 20.3	2.876	3.811	6.7	21.4	5 21	14 2.02	- 6 16.4	1.466	2.396	12.2	21.0
5 31	13 55.60	-26 49.4	2.941	3.810	9.0	21.6	5 31	13 57.19	- 6 15.9	1.547	2.410	15.9	21.2
430805	2005 <i>AJ</i> ₆₇		4 27.8 111°57	3°2/30.7	17		265656	2005 <i>TK</i> ₁₄₃		4 27.8 94°06	2°3/26.1	17	
3 22	14 47.30	-25 56.9	2.226	3.001	13.9	22.1	3 22	14 46.60	-10 32.3	1.762	2.596	14.6	20.7
4 1	14 42.38	-25 51.7	2.148	3.016	11.2	22.0	4 1	14 42.15	- 9 54.5	1.692	2.605	11.1	20.5
4 11	14 35.45	-25 31.0	2.093	3.031	8.1	21.8	4 11	14 35.45	- 9 9.6	1.645	2.613	7.2	20.3
4 21	14 27.16	-24 55.1	2.063	3.045	4.9	21.6	4 21	14 27.20	- 8 21.8	1.623	2.621	3.2	20.1
5 1	14 18.36	-24 6.3	2.061	3.059	3.2	21.5	5 1	14 18.37	- 7 36.4	1.628	2.629	3.2	20.1
5 11	14 10.02	-23 9.2	2.088	3.073	5.0	21.7	5 11	14 10.03	- 6 58.9	1.661	2.638	7.0	20.3
5 21	14 2.91	-22 9.2	2.142	3.086	8.1	21.9	5 21	14 3.06	- 6 33.4	1.718	2.646	10.9	20.6
5 31	13 57.65	-21 12.1	2.220	3.099	11.1	22.1	5 31	13 58.13	- 6 22.4	1.798	2.653	14.3	20.8
125546	2001 <i>XN</i>		4 27.8 160°62	10°4/15.1	18		280612	2004 <i>XF</i> ₂₀		4 27.8 107°76	2°6/25.7	18	
3 22	14 48.19	+21 0.1	2.542	3.321	12.3	20.6	3 22	14 48.28	- 7 25.6	2.158	2.982	12.7	20.9
4 1	14 42.66	+22 34.5	2.501	3.329	11.1	20.5	4 1	14 42.92	- 7 0.0	2.093	2.999	9.6	20.7
4 11	14 35.44	+23 54.1	2.483	3.337	10.5	20.5	4 11	14 35.70	- 6 31.5	2.052	3.016	6.3	20.5
4 21	14 27.10	+24 52.4	2.490	3.343	10.5	20.5	4 21	14 27.24	- 6 3.5	2.037	3.033	3.2	20.4
5 1	14 18.40	+25 25.0	2.520	3.349	11.3	20.5	5 1	14 18.38	- 5 39.8	2.052	3.049	3.3	20.4
5 11	14 10.12	+25 30.3	2.573	3.355	12.5	20.6	5 11	14 9.97	- 5 23.8	2.095	3.065	6.4	20.6
5 21	14 2.93	+25 9.3	2.645	3.359	13.8	20.7	5 21	14 2.75	- 5 17.9	2.164	3.080	9.6	20.8
5 31	13 57.34	+24 25.0	2.735	3.363	15.1	20.9	5 31	13 57.27	- 5 23.6	2.257	3.095	12.4	21.1
266694	2009 <i>PY</i> ₁₁		4 27.8 187°93	5°6/2.4	17		214169	2005 <i>CQ</i> ₄₉		4 27.8 30°85	1°4/26.9	18	
3 22	14 50.57	-31 25.3	2.209	2.954	14.9	21.6	3 22	14 44.72	-13 55.4	1.192	2.048	18.8	19.4
4 1	14 45.25	-31 50.1	2.115	2.953	12.5	21.4	4 1	14 41.64	-13 21.7	1.134	2.057	14.4	19.2
4 11	14 37.56	-31 57.3	2.041	2.952	9.7	21.2	4 11	14 35.54	-12 34.6	1.096	2.068	9.2	18.9
4 21	14 28.12	-31 44.6	1.991	2.951	7.1	21.1	4 21	14 27.33	-11 39.1	1.079	2.079	3.7	18.6
5 1	14 17.87	-31 12.1	1.968	2.948	5.6	21.0	5 1	14 18.34	-10 42.5	1.086	2.091	2.8	18.6
5 11	14 7.94	-30 22.9	1.973	2.946	6.5	21.0	5 11	14 10.07	- 9 53.2	1.118	2.104	8.1	18.9
5 21	13 59.31	-29 22.7	2.005	2.942	9.0	21.2	5 21	14 3.73	- 9 17.8	1.171	2.118	13.1	19.2
5 31	13 52.77	-28 18.5	2.061	2.939	11.8	21.3	5 31	14 0.08	- 9 0.2	1.244	2.132	17.3	19.5
309211	2007 <i>HJ</i> ₈₁		4 27.8 241°30	0°1/27.8	16		418349	2008 <i>GM</i> ₈₁		4 27.8 310°23	4°0/25.3	17	
3 22	14 50.82	-15 27.2	1.610	2.433	16.3	21.3	3 22	14 48.71	- 4 54.1	1.660	2.500	15.1	20.6
4 1	14 46.03	-15 18.5	1.516	2.421	12.7	21.1	4 1	14 44.01	- 4 31.6	1.583	2.497	11.7	20.4
4 11	14 38.40	-14 58.4	1.444	2.408	8.4	20.8	4 11	14 36.82	- 4 7.8	1.529	2.494	7.8	20.2
4 21	14 28.57	-14 28.4	1.396	2.394	3.5	20.5	4 21	14 27.84	- 3 47.0	1.499	2.492	4.5	20.0
5 1	14 17.63	-13 52.2	1.374	2.380	1.7	20.3	5 1	14 18.07	- 3 34.3	1.495	2.489	4.9	20.0
5 11	14 6.94	-13 15.3	1.379	2.366	6.9	20.6	5 11	14 8.72	- 3 33.7	1.518	2.487	8.4	20.2
5 21	13 57.75	-12 43.7	1.410	2.351	11.8	20.8	5 21	14 0.80	- 3 47.5	1.566	2.485	12.3	20.4
5 31	13 51.03	-12 22.6	1.462	2.335	16.1	21.0	5 31	13 55.10	- 4 16.5	1.634	2.483	15.8	20.6
37699	Santini-Aichl		4 27.8 161°98	4°5/2.9	18		432337	2009 <i>UT</i> ₁₄₇		4 27.8 145°36	3°4/30.9	17	
3 22	14 45.89	-32 16.5	2.962	3.690	11.8	20.2	3 22	14 45.90	-27 22.2	1.989	2.768	15.2	21.4
4 1	14 41.02	-32 27.7	2.868	3.695	9.9	20.1	4 1	14 41.65	-26 57.6	1.902	2.772	12.3	21.2
4 11	14 34.47	-32 24.4	2.796	3.699	7.7	19.9	4 11	14 35.16	-26 13.2	1.837	2.775	8.9	21.0
4 21	14 26.76	-32 5.8	2.750	3.703	5.7	19.8	4 21	14 27.11	-25 9.7	1.796	2.778	5.5	20.8
5 1	14 18.55	-31 32.5	2.731	3.707	4.5	19.7	5 1	14 18.44	-23 50.2	1.783	2.781	3.4	20.7
5 11	14 10.62	-30 47.1	2.740	3.710	5.1	19.8	5 11	14 10.22	-22 21.0	1.797	2.784	5.5	20.8
5 21	14 3.62	-29 53.7	2.778	3.713	6.9	19.9	5 21	14 3.34	-20 49.9	1.839	2.787	9.0	21.1
5 31	13 58.12	-28 57.0	2.842	3.715	9.1	20.0	5 31	13 58.48	-19 24.4	1.905	2.790	12.3	21.3
280363	2003 <i>SE</i> ₃₉₁		4 27.8 277°67	2°9/25.4	17		91012	1998 <i>DY</i>		4 27.8 337°18	2°6/29.6	18	
3 22	14 44.60	- 8 20.9	1.940	2.775	13.4	20.7	3 22	14 46.31	-21 43.8	1.703	2.513	16.1	19.8
4 1	14 40.54	- 7 39.2	1.857	2.770	10.3	20.5	4 1	14 42.37	-21 49.2	1.619	2.511	12.8	19.6
4 11	14 34.41	- 6 52.1	1.797	2.765	6.7	20.3	4 11	14 35.87	-21 39.3	1.555	2.508	8.9	19.4
4 21	14 26.79	- 6 3.8	1.764	2.760	3.5	20.1	4 21	14 27.48	-21 14.4	1.515	2.506	4.8	19.1
5 1	14 18.53	- 5 19.5	1.758	2.755	3.8	20.1	5 1	14 18.24	-20 36.7	1.500	2.504	2.7	19.0
5 11	14 10.60	- 4 44.2	1.779	2.749	7.2	20.3	5 11	14 9.37	-19 51.4	1.513	2.502	6.0	19.2
5 21	14 3.83	- 4 21.8	1.825	2.744	10.8	20.5	5 21	14 1.95	-19 4.7	1.551	2.501	10.2	19.4
5 31	13 58.90	- 4 14.6	1.893	2.739	14.1	20.7	5 31	13 56.79	-18 23.2	1.611	2.499	14.0	19.6
250403	2003 <i>UR</i> ₂₁₂		4 27.8 206°97	0°7/28.3	17		463103	2011 <i>UP</i> ₆₆		4 27.8 122°27			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
173260	1999 <i>RS</i> ₁₄₁		4 27.8 244°60	2.7/29.5	17		435698	2008 <i>TE</i> ₁₄₂		4 27.8 48°65	3.0/25.2	17	
3 22	14 50.19	-21 25.4	1.775	2.577	15.9	20.4	3 22	14 43.22	-10 13.2	1.733	2.574	14.5	20.9
4 1	14 45.42	-21 38.6	1.678	2.565	12.7	20.1	4 1	14 39.59	-9 6.1	1.666	2.583	11.0	20.7
4 11	14 37.95	-21 38.0	1.602	2.553	8.9	19.9	4 11	14 33.80	-7 50.7	1.621	2.591	7.1	20.4
4 21	14 28.39	-21 22.8	1.549	2.540	4.8	19.6	4 21	14 26.55	-6 32.9	1.603	2.600	3.6	20.2
5 1	14 17.78	-20 54.4	1.524	2.527	2.8	19.4	5 1	14 18.77	-5 19.6	1.611	2.609	4.0	20.3
5 11	14 7.39	-20 17.0	1.526	2.514	6.2	19.6	5 11	14 11.47	-4 17.6	1.646	2.618	7.6	20.5
5 21	13 58.39	-19 36.6	1.554	2.500	10.5	19.8	5 21	14 5.49	-3 31.9	1.706	2.627	11.4	20.8
5 31	13 51.72	-18 59.6	1.605	2.486	14.4	20.0	5 31	14 1.46	-3 5.0	1.787	2.637	14.7	21.0
427977	2005 <i>YL</i> ₁₉₁		4 27.8 189°54	3.8/24.7	17		250332	2003 <i>SV</i> ₉₃		4 27.8 261°31	1.4/28.7	18	
3 22	14 46.10	-5 35.9	1.972	2.806	13.3	20.9	3 22	14 48.77	-19 3.8	1.716	2.530	15.9	20.9
4 1	14 41.59	-4 51.4	1.894	2.806	10.2	20.7	4 1	14 44.42	-18 57.7	1.615	2.512	12.6	20.6
4 11	14 35.04	-4 3.9	1.841	2.806	6.8	20.5	4 11	14 37.36	-18 37.5	1.535	2.494	8.5	20.3
4 21	14 27.05	-3 18.2	1.813	2.805	4.1	20.3	4 21	14 28.19	-18 3.8	1.479	2.475	4.0	20.0
5 1	14 18.48	-2 39.3	1.813	2.804	4.6	20.3	5 1	14 17.92	-17 19.3	1.450	2.456	1.8	19.8
5 11	14 10.27	-2 12.0	1.840	2.803	7.7	20.5	5 11	14 7.84	-16 29.6	1.448	2.436	6.3	20.0
5 21	14 3.24	-1 59.2	1.892	2.802	11.1	20.7	5 21	13 59.11	-15 41.1	1.471	2.416	11.0	20.2
5 31	13 58.05	-2 2.3	1.967	2.800	14.1	20.9	5 31	13 52.70	-15 0.4	1.517	2.396	15.2	20.4
204981	1995 <i>EX</i> ₆		4 27.8 57°04	2.6/25.9	17		376499	2012 <i>KL</i> ₄₀		4 27.8 260°28	1.2/26.7	18	
3 22	14 46.44	-11 21.3	1.394	2.241	17.1	20.9	3 22	14 45.12	-14 21.6	1.946	2.771	13.8	21.8
4 1	14 42.62	-10 31.9	1.327	2.246	13.0	20.6	4 1	14 41.12	-13 31.7	1.847	2.754	10.7	21.5
4 11	14 36.05	-9 32.0	1.280	2.251	8.4	20.4	4 11	14 34.92	-12 29.8	1.771	2.738	6.9	21.2
4 21	14 27.53	-8 27.4	1.257	2.256	3.8	20.1	4 21	14 27.09	-11 19.1	1.721	2.720	2.8	20.9
5 1	14 18.26	-7 25.2	1.260	2.262	3.8	20.1	5 1	14 18.48	-10 5.1	1.699	2.703	2.3	20.9
5 11	14 9.56	-6 33.5	1.288	2.267	8.3	20.4	5 11	14 10.11	-8 54.5	1.705	2.685	6.5	21.1
5 21	14 2.56	-5 57.7	1.339	2.273	12.9	20.7	5 21	14 2.88	-7 53.5	1.737	2.667	10.6	21.3
5 31	13 58.03	-5 41.4	1.411	2.278	16.8	20.9	5 31	13 57.55	-7 7.0	1.791	2.649	14.3	21.5
181219	2005 <i>SE</i> ₂₅₉		4 27.8 283°18	7.0/19.8	16		178556	1999 <i>VM</i> ₁₃₂		4 27.8 228°95	1.3/26.8	17	
3 22	14 41.90	+4 16.2	2.287	3.122	11.7	20.3	3 22	14 48.61	-12 53.0	1.957	2.777	13.9	21.3
4 1	14 38.24	+5 47.1	2.201	3.102	9.5	20.1	4 1	14 43.76	-12 23.2	1.861	2.766	10.7	21.0
4 11	14 32.83	+7 16.3	2.141	3.083	7.6	19.9	4 11	14 36.62	-11 44.4	1.789	2.754	7.0	20.8
4 21	14 26.16	+8 37.2	2.107	3.062	7.0	19.9	4 21	14 27.80	-10 59.4	1.743	2.742	2.9	20.5
5 1	14 18.90	+9 43.1	2.099	3.042	8.1	19.9	5 1	14 18.17	-10 12.5	1.725	2.729	2.3	20.4
5 11	14 11.83	+10 29.0	2.118	3.022	10.2	20.0	5 11	14 8.80	-9 29.1	1.735	2.715	6.4	20.7
5 21	14 5.68	+10 52.4	2.160	3.002	12.7	20.1	5 21	14 0.63	-8 54.1	1.771	2.701	10.5	20.9
5 31	14 1.03	+10 52.9	2.222	2.981	15.0	20.2	5 31	13 54.43	-8 31.3	1.831	2.686	14.1	21.1
425224	2009 <i>VP</i> ₆₉		4 27.8 226°79	1.8/29.3	17		258548	2002 <i>CD</i> ₃₀		4 27.8 25°78	5.5/1.9	18	
3 22	14 46.38	-21 37.3	2.054	2.853	14.2	21.5	3 22	14 46.96	-28 47.0	1.948	2.721	15.7	19.6
4 1	14 42.00	-21 19.3	1.959	2.846	11.2	21.3	4 1	14 42.68	-29 32.2	1.871	2.729	13.0	19.4
4 11	14 35.42	-20 46.7	1.886	2.838	7.7	21.1	4 11	14 35.98	-30 0.8	1.814	2.738	10.0	19.2
4 21	14 27.26	-20 0.4	1.838	2.831	3.9	20.8	4 21	14 27.53	-30 10.8	1.780	2.747	7.1	19.1
5 1	14 18.37	-19 3.4	1.818	2.823	1.9	20.7	5 1	14 18.31	-30 1.9	1.772	2.757	5.6	19.0
5 11	14 9.78	-18 0.9	1.826	2.814	5.3	20.9	5 11	14 9.47	-29 37.2	1.791	2.767	6.7	19.1
5 21	14 2.39	-16 59.1	1.861	2.805	9.1	21.1	5 21	14 2.01	-29 1.9	1.835	2.778	9.3	19.3
5 31	13 56.91	-16 3.7	1.920	2.796	12.6	21.3	5 31	13 56.71	-28 22.4	1.902	2.789	12.2	19.5
144824	2004 <i>JZ</i> ₁₃		4 27.8 230°88	0.1/27.8	17		355248	2007 <i>GB</i> ₃₈		4 27.8 249°11	2.0/26.4	17	
3 22	14 46.50	-14 28.8	2.446	3.255	11.8	20.1	3 22	14 48.12	-12 41.8	1.559	2.394	16.2	21.4
4 1	14 41.65	-14 30.0	2.352	3.250	9.1	19.9	4 1	14 43.96	-11 54.6	1.468	2.381	12.5	21.2
4 11	14 35.00	-14 24.7	2.283	3.244	6.0	19.7	4 11	14 37.05	-10 54.8	1.398	2.367	8.1	20.9
4 21	14 27.04	-14 14.2	2.241	3.239	2.5	19.5	4 21	14 28.06	-9 46.8	1.353	2.352	3.5	20.5
5 1	14 18.50	-14 0.6	2.227	3.233	1.2	19.4	5 1	14 18.04	-8 37.0	1.334	2.337	3.2	20.5
5 11	14 10.17	-13 46.7	2.243	3.228	4.8	19.6	5 11	14 8.32	-7 33.5	1.342	2.321	8.0	20.7
5 21	14 2.80	-13 35.7	2.286	3.222	8.2	19.8	5 21	14 0.07	-6 43.3	1.374	2.305	12.8	21.0
5 31	13 57.00	-13 30.2	2.354	3.216	11.1	20.0	5 31	13 54.22	-6 11.3	1.427	2.289	17.0	21.2
471879	2013 <i>AE</i> ₉₆		4 27.8 226°97	4.2/1.6	16		469709	2005 <i>JY</i> ₉		4 27.8 215°17	0.2/27.6	17	
3 22	14 45.90	-28 24.0	2.452	3.212	13.2	21.2	3 22	14 44.68	-15 29.4	2.278	3.092	12.4	22.1
4 1	14 41.40	-28 42.7	2.357	3.210	10.8	21.1	4 1	14 40.37	-15 5.1	2.189	3.089	9.6	21.9
4 11	14 34.93	-28 46.9	2.284	3.208	8.2	20.9	4 11	14 34.21	-14 31.8	2.123	3.085	6.2	21.7
4 21	14 27.04	-28 35.8	2.236	3.206	5.6	20.7	4 21	14 26.74	-13 51.5	2.083	3.082	2.5	21.4
5 1	14 18.50	-28 9.9	2.215	3.203	4.2	20.6	5 1	14 18.70	-13 7.7	2.072	3.078	1.3	21.3
5 11	14 10.21	-27 32.1	2.222	3.201	5.4	20.7	5 11	14 10.95	-12 24.8	2.090	3.074	5.1	21.6
5 21	14 2.97	-26 46.9	2.256	3.198	7.9	20.9	5 21	14 4.22	-11 47.0	2.134	3.070	8.7	21.8
5 31	13 57.45	-25 59.6	2.315	3.196	10.6	21.0	5 31	13 59.11	-11 17.9	2.203	3.065	11.8	22.0
55458	2001 <i>TK</i> ₁₃₇		4 27.8 243°35	5.1/22.8	18		343322	Tomskuniver		4 27.8 71°21	6.7/3.1	17	
3 22	14 43.98	+0 5.3	2.372	3.204	11.4	19.1	3 22	14 49.34	-32 38.1	1.921	2.672	16.6	20.4
4 1	14 39.69	+1 0.9	2.289	3.195	9.0	18.9	4 1	14 44.60	-33 17.4	1.844	2.684	14.0	20.3
4 11	14 33.69	+1 55.7	2.231	3.185	6.6	18.8	4 11	14 37.26	-33 36.7	1.788	2.696	11.1	20.1
4 21	14 26.49	+2 44.9	2.199	3.176	5.1	18.6	4 21	14 28.06	-33 33.3	1.754	2.708	8.3	20.0
5 1	14 18.77	+3 23.5	2.195	3.166	5.9	18.7	5 1	14 18.08	-33 6.9	1.745	2.720	6.7	19.9
5 11	14 11.31	+3 47.8	2.219	3.156	8.2	18.8	5 11	14 8.58	-32 21.3	1.762	2.732	7.4	19.9
5 21	14 4.77	+3 55.5	2.267	3.146	10.8	18.9	5 21	14 0.61	-31 22.9	1.805	2.744	9.7	20.1
5 31	13 59.73	+3 46.3	2.338	3.135	13.3	19.1	5 31	13 54.98	-30 19.5	1.871	2.756	12.5	20.3
522725	2016 <i>LV</i> ₆₂		4 27.8 220°77	6.1/20.6	17		502787	2015 <i>DE</i> ₉₈		4 27.8 142°07	0.2/27.9	17	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
333469	2004 <i>RF</i> ₁₅₁		4 27.8 241°57'	4.7/22.8	18		431027	2005 <i>YV</i> ₂₈₂		4 27.8 138°30'	2.3/29.7	17	
3 22	14 45.25	- 3 3.0	2.383	3.211	11.5	21.3	3 22	14 47.93	-22 41.1	2.111	2.901	14.1	21.9
4 1	14 40.75	- 1 45.6	2.287	3.193	8.9	21.1	4 1	14 43.01	-22 32.8	2.030	2.910	11.2	21.8
4 11	14 34.45	- 0 24.8	2.216	3.174	6.3	20.9	4 11	14 35.99	-22 10.3	1.971	2.919	7.8	21.6
4 21	14 26.86	+ 0 54.2	2.173	3.155	4.7	20.8	4 21	14 27.50	-21 34.4	1.938	2.927	4.2	21.3
5 1	14 18.66	+ 2 5.3	2.159	3.134	5.6	20.8	5 1	14 18.43	-20 47.7	1.932	2.935	2.3	21.2
5 11	14 10.65	+ 3 3.0	2.173	3.113	8.1	20.9	5 11	14 9.77	-19 54.9	1.955	2.942	5.1	21.4
5 21	14 3.54	+ 3 43.8	2.213	3.091	11.0	21.1	5 21	14 2.37	-19 1.6	2.005	2.949	8.6	21.6
5 31	13 57.95	+ 4 5.8	2.275	3.069	13.7	21.2	5 31	13 56.87	-18 13.0	2.079	2.956	11.8	21.9
347735	2001 <i>YF</i> ₁₄₃		4 27.8 136°87'	4.8/23.2	18		239780	2010 <i>CB</i> ₉₅		4 27.8 87°39'	1.4/26.7	17	
3 22	14 46.63	+ 2 44.3	2.751	3.569	10.4	21.3	3 22	14 45.02	-12 17.0	1.993	2.820	13.5	20.8
4 1	14 41.32	+ 3 17.1	2.684	3.579	8.2	21.2	4 1	14 40.81	-11 46.2	1.915	2.823	10.3	20.6
4 11	14 34.54	+ 3 46.1	2.643	3.590	6.1	21.1	4 11	14 34.57	-11 7.8	1.859	2.826	6.6	20.4
4 21	14 26.81	+ 4 7.8	2.629	3.600	4.9	21.0	4 21	14 26.92	-10 24.8	1.830	2.829	2.8	20.2
5 1	14 18.74	+ 4 19.1	2.644	3.609	5.4	21.0	5 1	14 18.70	- 9 41.8	1.829	2.832	2.3	20.1
5 11	14 11.00	+ 4 17.6	2.688	3.618	7.2	21.2	5 11	14 10.86	- 9 3.5	1.855	2.835	6.1	20.4
5 21	14 4.17	+ 4 2.8	2.758	3.627	9.4	21.3	5 21	14 4.19	- 8 34.1	1.907	2.838	9.8	20.6
5 31	13 58.70	+ 3 35.0	2.851	3.635	11.5	21.5	5 31	13 59.33	- 8 16.7	1.982	2.841	13.0	20.8
363043	1999 <i>TY</i> ₂₁₅		4 27.8 197°88'	2.1/25.9	16		356368	2010 <i>MR</i> ₈₄		4 27.8 299°35'	10.5/6.9	18	
3 22	14 47.43	-11 50.4	2.069	2.890	13.2	22.0	3 22	14 51.61	-45 35.0	2.431	3.079	15.9	20.6
4 1	14 42.61	-10 53.2	1.981	2.887	10.1	21.7	4 1	14 46.74	-46 55.3	2.330	3.068	14.5	20.5
4 11	14 35.73	- 9 46.8	1.918	2.883	6.5	21.5	4 11	14 39.00	-47 55.8	2.248	3.057	12.9	20.3
4 21	14 27.39	- 8 35.3	1.881	2.879	2.9	21.3	4 21	14 28.97	-48 31.3	2.186	3.046	11.5	20.2
5 1	14 18.44	- 7 24.4	1.873	2.874	3.0	21.3	5 1	14 17.65	-48 37.9	2.146	3.036	10.6	20.1
5 11	14 9.82	- 6 20.1	1.894	2.867	6.6	21.5	5 11	14 6.42	-48 15.6	2.129	3.025	10.5	20.1
5 21	14 2.36	- 5 27.5	1.941	2.861	10.3	21.7	5 21	13 56.56	-47 28.2	2.136	3.015	11.4	20.1
5 31	13 56.73	- 4 50.2	2.012	2.853	13.6	21.9	5 31	13 49.13	-46 22.6	2.165	3.004	12.8	20.2
173652	2001 <i>FN</i> ₁₉₃		4 27.8 340°92'	5.8/24.0	17		373311	2012 <i>JW</i> ₆		4 27.8 30°12'	0.2/27.9	17	
3 22	14 45.33	- 3 56.0	1.396	2.252	16.5	19.7	3 22	14 45.15	-16 52.6	1.456	2.292	17.1	20.7
4 1	14 41.83	- 2 56.7	1.326	2.248	12.8	19.4	4 1	14 41.64	-16 29.9	1.387	2.298	13.2	20.5
4 11	14 35.62	- 1 54.4	1.277	2.244	8.9	19.2	4 11	14 35.45	-15 52.9	1.338	2.304	8.6	20.2
4 21	14 27.44	- 0 56.6	1.251	2.241	6.0	19.0	4 21	14 27.35	-15 4.6	1.312	2.311	3.6	20.0
5 1	14 18.42	- 0 11.2	1.250	2.238	6.8	19.0	5 1	14 18.51	-14 10.3	1.312	2.318	1.6	19.8
5 11	14 9.88	+ 0 15.0	1.273	2.235	10.5	19.2	5 11	14 10.21	-13 17.1	1.337	2.326	6.7	20.2
5 21	14 2.93	+ 0 18.6	1.319	2.233	14.5	19.5	5 21	14 3.54	-12 31.7	1.386	2.334	11.4	20.5
5 31	13 58.41	- 0 0.8	1.383	2.232	18.2	19.7	5 31	13 59.28	-11 59.3	1.457	2.342	15.4	20.7
329776	2004 <i>LL</i> ₁₈		4 27.8 31°36'	6.9/4.1	18		63103	2000 <i>WG</i> ₁₄₉		4 27.8 262°04'	7.8/19.4	18	
3 22	14 40.29	-38 14.4	0.875	1.686	27.6	19.1	3 22	14 44.41	+10 7.9	2.473	3.292	11.4	19.7
4 1	14 39.70	-36 56.0	0.815	1.694	23.3	18.8	4 1	14 40.00	+11 14.3	2.396	3.277	9.6	19.5
4 11	14 34.92	-34 38.0	0.768	1.704	18.0	18.5	4 11	14 33.91	+12 13.6	2.342	3.263	8.2	19.4
4 21	14 27.21	-31 19.4	0.738	1.715	12.0	18.2	4 21	14 26.63	+13 0.1	2.314	3.248	7.8	19.3
5 1	14 18.60	-27 12.1	0.730	1.727	7.3	18.0	5 1	14 18.84	+13 28.6	2.313	3.233	8.6	19.4
5 11	14 11.21	-22 43.1	0.745	1.740	8.7	18.2	5 11	14 11.29	+13 36.2	2.337	3.217	10.3	19.4
5 21	14 6.54	-18 24.3	0.784	1.754	14.0	18.5	5 21	14 4.65	+13 22.1	2.383	3.202	12.4	19.6
5 31	14 5.32	-14 41.1	0.843	1.769	19.5	18.9	5 31	13 59.47	+12 47.3	2.450	3.186	14.3	19.7
164704	1998 <i>BF</i> ₃₁		4 27.8 187°31'	1.0/28.6	18		506029	2015 <i>JY</i> ₂		4 27.8 308°92'	5.7/22.9	17	
3 22	14 49.64	-18 51.3	1.820	2.629	15.3	21.0	3 22	14 44.41	+ 0 45.1	2.096	2.933	12.5	20.6
4 1	14 44.69	-18 36.6	1.734	2.629	12.0	20.8	4 1	14 40.21	+ 1 36.4	2.021	2.929	9.9	20.4
4 11	14 37.28	-18 8.4	1.670	2.628	8.0	20.6	4 11	14 34.13	+ 2 25.7	1.971	2.926	7.3	20.2
4 21	14 28.09	-17 28.1	1.631	2.627	3.7	20.3	4 21	14 26.74	+ 3 7.7	1.946	2.922	5.7	20.1
5 1	14 18.11	-16 39.1	1.619	2.625	1.5	20.1	5 1	14 18.81	+ 3 37.2	1.948	2.919	6.5	20.2
5 11	14 8.52	-15 47.1	1.635	2.623	5.9	20.4	5 11	14 11.21	+ 3 50.4	1.976	2.916	8.9	20.3
5 21	14 0.34	-14 58.1	1.678	2.620	10.1	20.7	5 21	14 4.69	+ 3 45.7	2.029	2.913	11.7	20.5
5 31	13 54.34	-14 17.7	1.744	2.617	13.9	20.9	5 31	13 59.84	+ 3 23.1	2.103	2.910	14.3	20.6
251017	2006 <i>QJ</i> ₃₀		4 27.8 190°57'	1.6/26.5	16		188942	2007 <i>DD</i> ₈		4 27.8 280°48'	3.2/21.9	18	
3 22	14 48.79	-11 39.8	2.062	2.881	13.4	21.6	3 22	14 36.02	+ 1 1.6	4.385	5.210	6.7	20.2
4 1	14 43.66	-11 6.1	1.976	2.880	10.2	21.4	4 1	14 32.95	+ 1 50.8	4.300	5.201	5.2	20.1
4 11	14 36.42	-10 24.9	1.913	2.878	6.6	21.2	4 11	14 29.04	+ 2 39.0	4.242	5.192	3.9	20.0
4 21	14 27.68	- 9 39.3	1.877	2.876	2.8	21.0	4 21	14 24.56	+ 3 23.8	4.212	5.182	3.2	19.9
5 1	14 18.31	- 8 53.9	1.870	2.873	2.5	20.9	5 1	14 19.85	+ 4 2.6	4.212	5.173	3.7	19.9
5 11	14 9.27	- 8 13.4	1.892	2.869	6.3	21.2	5 11	14 15.25	+ 4 33.3	4.240	5.164	5.0	20.0
5 21	14 1.42	- 7 42.1	1.940	2.864	10.0	21.4	5 21	14 11.10	+ 4 54.7	4.294	5.154	6.5	20.1
5 31	13 55.43	- 7 23.2	2.011	2.859	13.3	21.6	5 31	14 7.67	+ 5 6.0	4.373	5.145	7.9	20.2
385040	2012 <i>TL</i> ₃₁₁		4 27.8 236°97'	0.2/27.6	17		110520	2001 <i>TL</i> ₇₉		4 27.8 56°57'	2.6/26.5	18	
3 22	14 45.45	-15 40.7	2.329	3.140	12.3	22.1	3 22	14 52.12	- 7 29.0	1.514	2.351	16.5	18.8
4 1	14 41.00	-15 13.3	2.229	3.128	9.5	21.8	4 1	14 46.57	- 7 30.9	1.459	2.372	12.6	18.6
4 11	14 34.67	-14 36.3	2.154	3.116	6.2	21.6	4 11	14 38.41	- 7 30.4	1.426	2.393	8.1	18.4
4 21	14 26.97	-13 51.8	2.105	3.103	2.5	21.4	4 21	14 28.50	- 7 30.6	1.417	2.414	3.8	18.2
5 1	14 18.64	-13 3.3	2.085	3.090	1.3	21.2	5 1	14 18.03	- 7 34.8	1.434	2.436	3.5	18.3
5 11	14 10.53	-12 15.2	2.093	3.077	5.2	21.5	5 11	14 8.28	- 7 46.2	1.479	2.457	7.5	18.5
5 21	14 3.40	-11 32.0	2.129	3.063	8.8	21.7	5 21	14 0.28	- 8 6.9	1.548	2.479	11.6	18.8
5 31	13 57.88	-10 57.7	2.190	3.049	11.9	21.8	5 31	13 54.71	- 8 37.8	1.639	2.501	15.1	19.1
505330	2013 <i>AH</i> ₆		4 27.8 141°29'	2.8/25.2	17		370164	2002 <i>AQ</i> ₁₁					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
212084	2005 <i>EE</i> ₁₁₄		4 27.8 128°68	3°3/25.3	18		192883	1999 <i>XT</i> ₆₇		4 27.8 225°25	4°1/24.3	18	
3 22	14 47.63	- 9 13.7	1.678	2.515	15.1	20.8	3 22	14 46.77	- 3 11.3	2.246	3.074	12.1	20.3
4 1	14 43.06	- 8 14.3	1.610	2.524	11.5	20.6	4 1	14 41.95	- 2 33.0	2.160	3.066	9.4	20.1
4 11	14 36.13	- 7 7.6	1.564	2.532	7.5	20.3	4 11	14 35.26	- 1 53.8	2.098	3.058	6.5	19.9
4 21	14 27.58	- 5 59.1	1.544	2.540	3.9	20.1	4 21	14 27.23	- 1 18.0	2.063	3.050	4.3	19.8
5 1	14 18.44	- 4 55.8	1.551	2.548	4.2	20.2	5 1	14 18.61	- 0 50.0	2.056	3.041	4.8	19.8
5 11	14 9.82	- 4 4.2	1.585	2.555	8.0	20.4	5 11	14 10.26	- 0 33.6	2.077	3.032	7.5	19.9
5 21	14 2.67	- 3 28.8	1.643	2.562	11.9	20.6	5 21	14 2.93	- 0 31.0	2.124	3.023	10.5	20.1
5 31	13 57.64	- 3 12.0	1.723	2.569	15.3	20.9	5 31	13 57.24	- 0 43.3	2.194	3.013	13.3	20.3
271800	2004 <i>TQ</i> ₆₉		4 27.8 216°05	0°5/27.4	18		387180	2012 <i>TD</i> ₂₆₇		4 27.8 185°35	1°4/26.5	17	
3 22	14 48.18	-13 48.4	2.205	3.018	12.8	21.2	3 22	14 44.91	-11 43.2	2.311	3.132	12.1	21.9
4 1	14 43.17	-13 38.0	2.112	3.011	9.9	21.0	4 1	14 40.48	-11 12.1	2.226	3.132	9.2	21.7
4 11	14 36.12	-13 20.1	2.042	3.005	6.4	20.7	4 11	14 34.26	-10 34.4	2.166	3.131	5.9	21.5
4 21	14 27.60	-12 56.6	1.999	2.998	2.6	20.5	4 21	14 26.80	- 9 53.1	2.132	3.131	2.5	21.3
5 1	14 18.40	-12 30.4	1.984	2.990	1.5	20.4	5 1	14 18.82	- 9 12.0	2.127	3.130	2.2	21.3
5 11	14 9.45	-12 5.4	1.999	2.982	5.4	20.6	5 11	14 11.14	- 8 35.2	2.151	3.129	5.6	21.5
5 21	14 1.58	-11 45.0	2.040	2.973	9.1	20.8	5 21	14 4.47	- 8 6.5	2.202	3.128	8.9	21.7
5 31	13 55.47	-11 32.7	2.106	2.964	12.4	21.0	5 31	13 59.37	- 7 48.4	2.276	3.126	11.9	21.9
321814	2010 <i>RP</i> ₁₄		4 27.8 220°65	3°7/24.7	16		423807	2006 <i>HE</i> ₁₀₅		4 27.8 326°14	7°1/22.5	17	
3 22	14 47.59	- 7 14.6	1.995	2.824	13.4	22.0	3 22	14 43.34	+ 0 47.2	1.612	2.464	14.9	20.4
4 1	14 42.86	- 6 12.9	1.905	2.815	10.3	21.8	4 1	14 40.07	+ 1 49.3	1.533	2.449	11.8	20.2
4 11	14 35.98	- 5 5.1	1.840	2.805	6.8	21.6	4 11	14 34.40	+ 2 50.2	1.476	2.434	8.8	20.0
4 21	14 27.55	- 3 56.2	1.801	2.794	4.0	21.4	4 21	14 26.97	+ 3 42.4	1.443	2.420	7.1	19.8
5 1	14 18.43	- 2 52.4	1.790	2.782	4.6	21.4	5 1	14 18.73	+ 4 18.5	1.434	2.407	8.1	19.9
5 11	14 9.59	- 1 59.8	1.808	2.770	7.9	21.6	5 11	14 10.80	+ 4 32.8	1.450	2.394	11.1	20.0
5 21	14 1.91	- 1 22.7	1.850	2.757	11.5	21.7	5 21	14 4.19	+ 4 23.0	1.489	2.382	14.5	20.2
5 31	13 56.09	- 1 3.7	1.916	2.743	14.7	21.9	5 31	13 59.67	+ 3 49.5	1.546	2.371	17.7	20.3
110437	2001 <i>TD</i> ₂₉		4 27.8 133°48	0°9/28.7	17		266367	2007 <i>EM</i> ₆₄		4 27.8 167°03	7°3/ 3.5	17	
3 22	14 45.56	-21 17.4	1.896	2.702	14.9	19.7	3 22	14 52.10	-34 27.5	2.053	2.785	16.3	21.3
4 1	14 41.37	-20 25.2	1.815	2.708	11.6	19.5	4 1	14 46.80	-35 15.3	1.965	2.788	13.9	21.1
4 11	14 34.99	-19 15.6	1.756	2.714	7.8	19.2	4 11	14 38.81	-35 43.8	1.896	2.790	11.3	20.9
4 21	14 27.11	-17 51.7	1.723	2.719	3.6	19.0	4 21	14 28.81	-35 49.4	1.850	2.793	8.8	20.8
5 1	14 18.67	-16 18.9	1.718	2.724	1.4	18.8	5 1	14 17.86	-35 30.6	1.829	2.794	7.3	20.7
5 11	14 10.69	-14 44.8	1.741	2.729	5.5	19.1	5 11	14 7.24	-34 50.0	1.835	2.796	7.9	20.7
5 21	14 4.04	-13 16.9	1.791	2.734	9.6	19.4	5 21	13 58.12	-33 53.5	1.866	2.797	10.0	20.8
5 31	13 59.37	-12 1.7	1.865	2.738	13.1	19.6	5 31	13 51.35	-32 49.1	1.921	2.797	12.6	21.0
238004	2002 <i>TE</i> ₁₄₀		4 27.8 285°82	0°5/28.2	17		500102	2012 <i>BX</i> ₇₀		4 27.8 63°29	0°4/28.1	17	
3 22	14 45.09	-17 1.3	2.032	2.847	13.7	20.5	3 22	14 48.17	-17 2.5	1.439	2.270	17.5	21.8
4 1	14 41.01	-16 49.4	1.940	2.840	10.6	20.3	4 1	14 43.91	-16 46.9	1.375	2.283	13.5	21.6
4 11	14 34.82	-16 26.9	1.871	2.833	7.0	20.0	4 11	14 36.90	-16 17.4	1.332	2.297	8.9	21.3
4 21	14 27.08	-15 55.4	1.828	2.826	3.1	19.8	4 21	14 27.96	-15 36.6	1.312	2.310	3.8	21.1
5 1	14 18.65	-15 18.1	1.812	2.819	1.3	19.6	5 1	14 18.31	-14 49.4	1.317	2.324	1.6	20.9
5 11	14 10.49	-14 39.4	1.824	2.811	5.4	19.9	5 11	14 9.32	-14 2.5	1.349	2.338	6.7	21.3
5 21	14 3.46	-14 4.1	1.862	2.804	9.3	20.1	5 21	14 2.07	-13 22.4	1.405	2.351	11.3	21.6
5 31	13 58.28	-13 36.5	1.924	2.798	12.7	20.3	5 31	13 57.33	-12 54.2	1.482	2.365	15.3	21.9
272657	2005 <i>WP</i> ₁₇₅		4 27.8 118°33	2°3/25.9	18		170847	2004 <i>FX</i> ₈₁		4 27.8 173°01	4°6/23.4	18	
3 22	14 48.17	- 9 4.0	2.031	2.856	13.3	21.1	3 22	14 44.60	- 1 8.8	2.359	3.189	11.5	20.0
4 1	14 43.05	- 8 34.3	1.962	2.869	10.1	20.9	4 1	14 40.13	+ 0 19.5	2.284	3.190	8.9	19.8
4 11	14 35.93	- 7 59.9	1.916	2.882	6.5	20.7	4 11	14 33.98	+ 0 29.2	2.234	3.192	6.4	19.7
4 21	14 27.46	- 7 24.5	1.897	2.894	3.1	20.5	4 21	14 26.67	+ 1 12.8	2.212	3.192	4.7	19.5
5 1	14 18.51	- 6 52.2	1.907	2.906	3.1	20.5	5 1	14 18.91	+ 1 46.7	2.217	3.193	5.4	19.6
5 11	14 10.01	- 6 27.1	1.944	2.918	6.5	20.8	5 11	14 11.47	+ 2 7.4	2.249	3.194	7.7	19.7
5 21	14 2.76	- 6 12.4	2.008	2.929	9.9	21.0	5 21	14 5.00	+ 2 13.1	2.307	3.194	10.3	19.9
5 31	13 57.33	- 6 10.0	2.095	2.940	13.0	21.2	5 31	14 0.04	+ 2 3.2	2.388	3.194	12.8	20.1
222305	2000 <i>SP</i> ₂₉₀		4 27.8 133°44	1°5/29.2	18		210563	1999 <i>TD</i> ₁₇₆		4 27.8 305°02	0°9/28.4	17	
3 22	14 48.31	-20 37.0	2.248	3.040	13.3	20.9	3 22	14 44.77	-18 47.9	1.439	2.271	17.4	20.1
4 1	14 43.12	-20 26.4	2.169	3.053	10.4	20.8	4 1	14 41.70	-18 25.9	1.349	2.258	13.7	19.8
4 11	14 35.97	-20 3.9	2.113	3.065	7.1	20.6	4 11	14 35.77	-17 46.3	1.280	2.245	9.2	19.5
4 21	14 27.48	-19 30.5	2.084	3.077	3.5	20.4	4 21	14 27.63	-16 51.1	1.234	2.232	4.1	19.2
5 1	14 18.49	-18 48.9	2.083	3.088	1.7	20.3	5 1	14 18.42	-15 44.9	1.213	2.220	1.7	19.0
5 11	14 9.91	-18 3.4	2.112	3.099	4.8	20.5	5 11	14 9.52	-14 35.7	1.217	2.207	7.0	19.3
5 21	14 2.52	-17 18.8	2.168	3.109	8.2	20.7	5 21	14 2.20	-13 31.9	1.245	2.196	12.1	19.5
5 31	13 56.90	-16 39.5	2.248	3.119	11.3	20.9	5 31	13 57.41	-12 41.1	1.294	2.184	16.6	19.7
201713	2003 <i>UA</i> ₁₇₆		4 27.8 263°46	0°2/27.9	18		383908	2008 <i>SE</i> ₈₄		4 27.8 199°76	1°1/26.7	17	
3 22	14 45.58	-16 21.3	2.020	2.837	13.7	21.0	3 22	14 45.97	-12 33.4	2.643	3.454	11.0	22.5
4 1	14 41.39	-16 5.4	1.929	2.830	10.6	20.8	4 1	14 41.09	-11 59.5	2.550	3.449	8.4	22.3
4 11	14 35.07	-15 39.1	1.860	2.822	7.0	20.5	4 11	14 34.58	-11 18.8	2.481	3.444	5.4	22.1
4 21	14 27.20	-15 4.3	1.817	2.815	3.0	20.2	4 21	14 26.93	-10 33.9	2.440	3.439	2.3	21.9
5 1	14 18.62	-14 24.3	1.801	2.807	1.3	20.1	5 1	14 18.79	- 9 48.3	2.429	3.432	1.9	21.8
5 11	14 10.31	-13 43.8	1.813	2.800	5.5	20.4	5 11	14 10.88	- 9 5.9	2.448	3.425	5.0	22.0
5 21	14 3.16	-13 7.5	1.852	2.792	9.4	20.6	5 21	14 3.86	- 8 30.0	2.494	3.418	8.1	22.2
5 31	13 57.86	-12 39.9	1.914	2.784	12.9	20.8	5 31	13 58.26	- 8 3.7	2.566	3.409	10.9	22.4
161852	2007 <i>BP</i> ₁₈		4 27.8 81°71	8°5/ 4.5	17		357735	2005 <i>RR</i> ₂₇ </					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
96342	1997 PF ₂		4 27.8 246°91	0°2/27.9	16		231914	2000 YT ₁₄₀		4 27.8 6°24	1°1/27.2	18	
3 22	14 50.46	-16 7.0	1.759	2.576	15.4	20.9	3 22	14 48.74	-11 15.8	1.787	2.615	14.7	19.6
4 1	14 45.63	-15 54.6	1.658	2.559	12.1	20.7	4 1	14 43.98	-11 20.3	1.707	2.615	11.3	19.3
4 11	14 38.14	-15 30.5	1.579	2.541	8.0	20.4	4 11	14 36.84	-11 19.4	1.649	2.615	7.3	19.1
4 21	14 28.59	-14 56.2	1.525	2.523	3.4	20.1	4 21	14 27.96	-11 15.1	1.617	2.616	3.0	18.8
5 1	14 17.96	-14 15.0	1.498	2.504	1.6	19.9	5 1	14 18.33	-11 10.4	1.611	2.616	2.1	18.8
5 11	14 7.51	-13 32.4	1.499	2.485	6.5	20.2	5 11	14 9.07	-11 8.6	1.634	2.617	6.4	19.0
5 21	13 58.39	-12 54.2	1.525	2.465	11.2	20.4	5 21	14 1.16	-11 12.8	1.681	2.618	10.5	19.3
5 31	13 51.53	-12 25.8	1.574	2.444	15.3	20.6	5 31	13 55.36	-11 25.5	1.752	2.620	14.1	19.5
350749	2001 YO ₁₅₁		4 27.8 89°18	7°0/5.4	17		32957	1996 HX ₂₀		4 27.8 194°54	0°7/27.3	18	
3 22	14 48.49	-38 33.3	2.490	3.189	14.5	21.1	3 22	14 48.21	-15 52.3	1.720	2.543	15.5	20.2
4 1	14 43.47	-39 1.6	2.412	3.206	12.5	21.0	4 1	14 43.68	-15 7.8	1.636	2.541	11.9	19.9
4 11	14 36.31	-39 10.2	2.353	3.222	10.4	20.9	4 11	14 36.68	-14 9.8	1.574	2.539	7.8	19.7
4 21	14 27.67	-38 57.0	2.317	3.239	8.4	20.8	4 21	14 27.91	-13 1.5	1.538	2.537	3.1	19.4
5 1	14 18.46	-38 21.8	2.306	3.255	7.1	20.7	5 1	14 18.37	-11 48.8	1.529	2.534	2.0	19.3
5 11	14 9.69	-37 27.7	2.322	3.271	7.2	20.7	5 11	14 9.25	-10 38.9	1.547	2.530	6.6	19.6
5 21	14 2.22	-36 20.0	2.365	3.287	8.6	20.8	5 21	14 1.55	-9 38.6	1.591	2.526	11.1	19.8
5 31	13 56.69	-35 5.5	2.432	3.303	10.5	21.0	5 31	13 56.05	-8 53.1	1.657	2.522	14.9	20.0
476324	2007 YQ ₁₀		4 27.8 127°55	3°6/1.1	17		304528	2006 UH ₂₆₃		4 27.8 196°95	1°5/26.4	17	
3 22	14 46.57	-26 21.9	2.396	3.166	13.2	21.9	3 22	14 45.77	-9 52.4	2.623	3.439	10.9	22.0
4 1	14 41.90	-26 37.1	2.308	3.170	10.7	21.7	4 1	14 40.94	-9 37.1	2.534	3.437	8.3	21.8
4 11	14 35.27	-26 38.7	2.242	3.174	7.9	21.5	4 11	14 34.49	-9 17.7	2.471	3.435	5.4	21.6
4 21	14 27.25	-26 26.0	2.202	3.179	5.1	21.4	4 21	14 26.91	-8 56.7	2.434	3.432	2.4	21.4
5 1	14 18.64	-26 0.1	2.189	3.183	3.6	21.3	5 1	14 18.85	-8 36.8	2.428	3.429	2.2	21.4
5 11	14 10.33	-25 24.2	2.204	3.187	5.1	21.4	5 11	14 11.02	-8 20.9	2.450	3.426	5.1	21.5
5 21	14 3.11	-24 42.7	2.247	3.191	7.8	21.5	5 21	14 4.07	-8 11.6	2.500	3.423	8.2	21.7
5 31	13 57.60	-24 0.6	2.315	3.194	10.6	21.7	5 31	13 58.54	-8 10.6	2.575	3.419	10.9	21.9
416251	2003 EQ		4 27.8 37°20	3°9/25.8	17		455282	2001 YW ₁₅₇		4 27.8 87°02	4°9/1.1	16	
3 22	14 48.76	-5 46.7	1.395	2.244	16.9	20.2	3 22	14 49.34	-26 53.5	1.471	2.269	18.8	21.7
4 1	14 44.30	-5 31.4	1.337	2.256	13.0	20.0	4 1	14 45.19	-27 8.7	1.396	2.275	15.3	21.5
4 11	14 37.11	-5 14.5	1.300	2.269	8.6	19.7	4 11	14 37.97	-27 2.2	1.339	2.280	11.3	21.2
4 21	14 28.04	-5 0.8	1.286	2.282	4.6	19.5	4 21	14 28.51	-26 32.5	1.304	2.285	7.2	21.0
5 1	14 18.31	-4 54.9	1.298	2.296	4.7	19.6	5 1	14 18.10	-25 41.3	1.294	2.291	4.9	20.9
5 11	14 9.24	-5 1.0	1.335	2.310	8.6	19.8	5 11	14 8.24	-24 35.0	1.309	2.296	7.1	21.0
5 21	14 1.91	-5 20.9	1.396	2.325	12.8	20.1	5 21	14 0.23	-23 22.6	1.349	2.302	11.1	21.3
5 31	13 57.07	-5 55.0	1.477	2.340	16.4	20.4	5 31	13 54.95	-22 13.4	1.411	2.307	15.1	21.5
477631	2010 LG ₉₇		4 27.8 259°22	4°0/1.6	18		137624	1999 VQ ₂₁₃		4 27.8 213°93	1°8/26.4	17	
3 22	14 46.20	-28 29.2	2.757	3.509	12.1	22.0	3 22	14 48.53	-11 35.9	2.037	2.858	13.5	20.8
4 1	14 41.57	-28 45.8	2.643	3.491	10.0	21.8	4 1	14 43.58	-10 56.9	1.945	2.850	10.3	20.6
4 11	14 35.08	-28 49.4	2.551	3.473	7.6	21.6	4 11	14 36.48	-10 9.7	1.876	2.842	6.7	20.3
4 21	14 27.21	-28 38.9	2.485	3.454	5.3	21.4	4 21	14 27.81	-9 17.8	1.834	2.833	2.9	20.1
5 1	14 18.64	-28 14.5	2.447	3.435	4.0	21.3	5 1	14 18.42	-8 25.8	1.821	2.823	2.7	20.0
5 11	14 10.18	-27 38.7	2.438	3.415	5.0	21.3	5 11	14 9.32	-7 39.1	1.836	2.812	6.5	20.3
5 21	14 2.59	-26 55.2	2.456	3.395	7.5	21.4	5 21	14 1.39	-7 2.3	1.877	2.801	10.3	20.5
5 31	13 56.53	-26 8.7	2.500	3.375	10.1	21.6	5 31	13 55.33	-6 38.9	1.942	2.789	13.7	20.7
429236	2010 AT ₅₂		4 27.8 122°78	1°8/26.2	17		388725	2007 VJ ₁₀₂		4 27.8 135°15	0°1/27.9	17	
3 22	14 46.47	-11 9.0	2.181	3.002	12.6	22.1	3 22	14 45.10	-16 15.3	2.665	3.468	11.1	22.1
4 1	14 41.64	-10 29.5	2.110	3.015	9.6	21.9	4 1	14 40.36	-15 55.8	2.585	3.479	8.6	22.0
4 11	14 34.98	-9 43.6	2.063	3.028	6.1	21.8	4 11	14 34.06	-15 28.3	2.529	3.489	5.6	21.8
4 21	14 27.09	-8 54.9	2.043	3.041	2.7	21.6	4 21	14 26.71	-14 54.7	2.501	3.499	2.3	21.6
5 1	14 18.75	-8 7.7	2.051	3.053	2.6	21.6	5 1	14 18.96	-14 17.8	2.502	3.508	1.0	21.5
5 11	14 10.84	-7 26.5	2.089	3.064	5.9	21.8	5 11	14 11.52	-13 41.1	2.533	3.517	4.3	21.7
5 21	14 4.06	-6 55.1	2.152	3.075	9.3	22.0	5 21	14 5.00	-13 7.9	2.591	3.526	7.4	21.9
5 31	13 58.97	-6 35.8	2.240	3.086	12.2	22.2	5 31	13 59.90	-12 41.2	2.675	3.535	10.0	22.1
382966	2004 XX ₉₆		4 27.8 210°16	5°0/2.7	18		406396	2007 TJ ₅₅		4 27.8 176°41	0°6/28.3	16	
3 22	14 48.66	-32 8.8	2.589	3.322	13.2	22.3	3 22	14 50.97	-17 46.3	2.199	2.997	13.4	23.3
4 1	14 43.53	-32 20.1	2.485	3.315	11.1	22.2	4 1	14 45.27	-17 30.7	2.111	3.000	10.4	23.1
4 11	14 36.38	-32 15.0	2.402	3.308	8.7	22.0	4 11	14 37.46	-17 4.4	2.046	3.003	6.9	22.9
4 21	14 27.74	-31 51.9	2.343	3.300	6.4	21.8	4 21	14 28.18	-16 28.7	2.008	3.004	3.0	22.6
5 1	14 18.42	-31 11.2	2.312	3.291	5.0	21.7	5 1	14 18.27	-15 46.8	1.999	3.005	1.3	22.5
5 11	14 9.33	-30 15.9	2.310	3.281	5.7	21.8	5 11	14 8.71	-15 3.0	2.019	3.005	5.1	22.7
5 21	14 1.32	-29 10.9	2.335	3.271	8.0	21.9	5 21	14 0.35	-14 22.0	2.068	3.004	8.9	23.0
5 31	13 55.06	-28 2.2	2.386	3.261	10.5	22.0	5 31	13 53.85	-13 48.1	2.141	3.002	12.1	23.2
423919	2006 SJ ₃₅₅		4 27.8 265°57	0°8/27.3	17		388336	2006 TY ₁₁		4 27.8 266°50	2°7/29.9	16	
3 22	14 49.01	-13 14.4	1.744	2.569	15.1	21.5	3 22	14 47.08	-22 26.4	2.322	3.109	13.1	21.4
4 1	14 44.49	-13 2.4	1.645	2.552	11.8	21.2	4 1	14 42.44	-22 45.4	2.222	3.099	10.5	21.2
4 11	14 37.39	-12 41.5	1.569	2.534	7.7	20.9	4 11	14 35.74	-22 53.3	2.144	3.088	7.4	20.9
4 21	14 28.28	-12 13.9	1.517	2.516	3.2	20.6	4 21	14 27.52	-22 49.5	2.091	3.078	4.3	20.7
5 1	14 18.14	-11 43.2	1.493	2.498	2.0	20.5	5 1	14 18.55	-22 35.1	2.067	3.068	2.7	20.6
5 11	14 8.17	-11 14.5	1.495	2.479	6.8	20.8	5 11	14 9.76	-22 12.6	2.071	3.057	5.0	20.7
5 21	13 59.51	-10 52.7	1.523	2.460	11.3	21.0	5 21	14 1.99	-21 46.1	2.103	3.047	8.3	20.9
5 31	13 53.05	-10 42.0	1.573	2.441	15.4	21.2	5 31	13 55.96	-21 20.1	2.159	3.036	11.4	21.1
503987	2004 TQ ₁₈₈		4 27.8 228°31	0°3/27.6	17		277755	2006 DJ ₁₃₂		4 27.8 180°15	2°4/25.8	17	
3 22	14 45.91	-15 51.8	2.088	2.903	13.4								

EPHEMERIDES

4 27.8

4 27.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
207157	2005 <i>CL</i> ₂₈		4 27.8 332°32	0°4/28.0	17		284353	2006 <i>SU</i> ₄₂		4 27.8 240°70	2°5/24.9	18	
3 22	14 44.61	-15 43.1	1.238	2.088	18.6	19.9	3 22	14 43.75	-7 36.3	2.942	3.761	9.8	22.1
4 1	14 41.98	-15 44.5	1.157	2.075	14.6	19.6	4 1	14 39.32	-6 44.2	2.838	3.742	7.5	21.9
4 11	14 36.19	-15 32.6	1.094	2.063	9.7	19.3	4 11	14 33.43	-5 47.7	2.760	3.723	5.0	21.7
4 21	14 27.90	-15 9.2	1.053	2.052	4.1	18.9	4 21	14 26.51	-4 50.0	2.710	3.703	2.8	21.5
5 1	14 18.36	-14 38.4	1.035	2.042	1.8	18.7	5 1	14 19.11	-3 55.0	2.690	3.683	3.2	21.5
5 11	14 9.15	-14 6.6	1.041	2.032	7.7	19.1	5 11	14 11.85	-3 6.6	2.700	3.661	5.6	21.6
5 21	14 1.70	-13 40.7	1.069	2.024	13.2	19.3	5 21	14 5.31	-2 28.0	2.738	3.640	8.3	21.8
5 31	13 57.09	-13 26.7	1.117	2.016	18.0	19.6	5 31	13 59.98	-2 1.4	2.800	3.617	10.8	21.9
300180	2006 <i>WX</i> ₄₂		4 27.8 116°37	0°5/27.3	18		24220	1999 <i>XJ</i> ₇₂		4 27.8 266°79	1°1/27.1	18	
3 22	14 42.96	-15 44.3	2.534	3.345	11.4	21.2	3 22	14 48.27	-13 18.8	1.746	2.572	15.1	19.2
4 1	14 38.81	-15 0.2	2.456	3.355	8.7	21.1	4 1	14 43.95	-12 55.4	1.645	2.553	11.7	18.9
4 11	14 33.09	-14 7.0	2.401	3.364	5.6	20.9	4 11	14 37.07	-12 21.9	1.567	2.533	7.7	18.6
4 21	14 26.32	-13 7.8	2.375	3.373	2.2	20.7	4 21	14 28.20	-11 40.9	1.513	2.512	3.2	18.3
5 1	14 19.18	-12 6.4	2.377	3.382	1.4	20.6	5 1	14 18.29	-10 56.7	1.487	2.491	2.2	18.2
5 11	14 12.36	-11 7.3	2.409	3.391	4.7	20.9	5 11	14 8.55	-10 15.3	1.487	2.470	6.9	18.4
5 21	14 6.48	-10 14.7	2.468	3.400	7.8	21.1	5 21	14 0.09	-9 42.0	1.513	2.449	11.5	18.7
5 31	14 2.02	-9 32.0	2.552	3.408	10.6	21.3	5 31	13 53.80	-9 21.5	1.561	2.427	15.6	18.8
93588	2000 <i>UO</i> ₅₂		4 27.8 222°72	0°9/28.6	18		247919	2003 <i>WK</i> ₅₇		4 27.8 188°11	0°4/28.2	16	
3 22	14 45.96	-19 26.4	2.127	2.931	13.5	20.4	3 22	14 49.54	-17 22.5	1.968	2.776	14.3	21.9
4 1	14 41.60	-18 59.3	2.032	2.925	10.6	20.1	4 1	14 44.45	-17 3.9	1.880	2.775	11.1	21.7
4 11	14 35.19	-18 19.1	1.960	2.918	7.1	19.9	4 11	14 37.10	-16 33.5	1.815	2.774	7.4	21.4
4 21	14 27.28	-17 27.4	1.915	2.911	3.3	19.7	4 21	14 28.10	-15 53.2	1.775	2.773	3.2	21.2
5 1	14 18.71	-16 27.9	1.897	2.903	1.3	19.5	5 1	14 18.38	-15 6.4	1.764	2.770	1.3	21.0
5 11	14 10.42	-15 25.7	1.907	2.895	5.2	19.7	5 11	14 9.02	-14 18.4	1.781	2.768	5.6	21.3
5 21	14 3.27	-14 26.5	1.945	2.887	9.0	20.0	5 21	14 0.95	-13 34.5	1.825	2.764	9.7	21.5
5 31	13 57.91	-13 35.7	2.007	2.878	12.4	20.1	5 31	13 54.88	-12 59.4	1.893	2.760	13.2	21.8
322565	2011 <i>YZ</i> ₆₀		4 27.8 33°35	0°8/27.3	17		464770	2003 <i>UT</i> ₂₁₁		4 27.8 215°57	0°2/27.9	16	
3 22	14 44.44	-15 42.4	1.213	2.065	18.8	20.3	3 22	14 50.19	-16 14.9	2.088	2.893	13.7	22.4
4 1	14 41.43	-15 5.5	1.156	2.077	14.4	20.0	4 1	14 44.92	-15 58.6	1.990	2.885	10.7	22.2
4 11	14 35.46	-14 13.3	1.119	2.090	9.3	19.8	4 11	14 37.41	-15 32.0	1.915	2.875	7.0	21.9
4 21	14 27.44	-13 10.5	1.103	2.103	3.7	19.5	4 21	14 28.25	-14 56.8	1.867	2.864	3.0	21.6
5 1	14 18.69	-12 4.4	1.112	2.118	2.2	19.4	5 1	14 18.30	-14 16.0	1.847	2.853	1.3	21.5
5 11	14 10.67	-11 4.1	1.145	2.134	7.7	19.8	5 11	14 8.60	-13 34.2	1.856	2.841	5.6	21.8
5 21	14 4.54	-10 16.9	1.201	2.150	12.6	20.1	5 21	14 0.07	-12 56.4	1.892	2.828	9.6	22.0
5 31	14 1.06	-9 47.4	1.277	2.166	16.8	20.4	5 31	13 53.45	-12 26.9	1.953	2.814	13.1	22.2
388756	2007 <i>WL</i> ₄₄		4 27.8 133°34	3°0/30.7	17		478167	2011 <i>UV</i> ₁₇₇		4 27.8 275°45	2°1/26.1	17	
3 22	14 47.40	-25 24.2	2.607	3.374	12.3	21.9	3 22	14 46.09	-8 37.5	2.360	3.183	11.8	21.8
4 1	14 42.30	-25 32.2	2.523	3.385	9.9	21.7	4 1	14 41.53	-8 19.9	2.257	3.163	9.1	21.6
4 11	14 35.42	-25 27.7	2.462	3.396	7.2	21.5	4 11	14 35.10	-7 58.4	2.177	3.142	5.9	21.3
4 21	14 27.32	-25 10.5	2.427	3.407	4.5	21.4	4 21	14 27.28	-7 35.7	2.124	3.121	2.8	21.1
5 1	14 18.73	-24 42.0	2.420	3.417	3.0	21.3	5 1	14 18.76	-7 15.0	2.100	3.100	2.8	21.1
5 11	14 10.45	-24 5.4	2.443	3.426	4.6	21.4	5 11	14 10.37	-6 59.9	2.105	3.079	6.0	21.2
5 21	14 3.21	-23 24.7	2.494	3.435	7.3	21.6	5 21	14 2.89	-6 53.1	2.136	3.058	9.4	21.4
5 31	13 57.56	-22 44.4	2.570	3.444	9.9	21.8	5 31	13 56.96	-6 56.9	2.192	3.036	12.5	21.6
141899	2002 <i>PY</i> ₆₂		4 27.8 245°18	3°8/24.9	18		197048	2003 <i>UO</i> ₁₄₀		4 27.8 151°86	3°2/24.8	17	
3 22	14 47.77	-6 42.0	1.796	2.631	14.3	20.9	3 22	14 45.27	-6 35.3	2.281	3.109	11.9	20.8
4 1	14 43.29	-5 54.5	1.707	2.619	11.1	20.6	4 1	14 40.71	-5 44.8	2.206	3.115	9.1	20.6
4 11	14 36.45	-5 1.8	1.641	2.607	7.4	20.4	4 11	14 34.40	-4 50.8	2.156	3.120	6.0	20.4
4 21	14 27.86	-4 8.9	1.601	2.595	4.3	20.2	4 21	14 26.91	-3 57.6	2.133	3.125	3.5	20.3
5 1	14 18.45	-3 21.8	1.588	2.582	4.8	20.2	5 1	14 18.97	-3 9.9	2.139	3.130	4.0	20.3
5 11	14 9.31	-2 46.5	1.602	2.568	8.3	20.3	5 11	14 11.37	-2 32.1	2.172	3.134	6.8	20.5
5 21	14 1.45	-2 26.8	1.641	2.555	12.2	20.5	5 21	14 4.80	-2 7.2	2.232	3.138	9.8	20.7
5 31	13 55.63	-2 25.1	1.701	2.540	15.7	20.7	5 31	13 59.82	-1 56.7	2.315	3.142	12.5	20.9
437668	2014 <i>CP</i> ₁₁		4 27.8 136°43	5°6/22.4	18		499723	2011 <i>BG</i> ₇		4 27.8 118°87	2°9/25.6	17	
3 22	14 43.66	+ 0 47.7	2.229	3.064	11.9	20.6	3 22	14 48.17	-8 8.1	1.914	2.744	13.8	22.0
4 1	14 39.52	+ 1 52.4	2.160	3.066	9.4	20.4	4 1	14 43.19	-7 27.4	1.847	2.756	10.5	21.8
4 11	14 33.64	+ 2 55.5	2.115	3.068	7.0	20.3	4 11	14 36.12	-6 42.2	1.803	2.769	6.9	21.6
4 21	14 26.59	+ 3 51.5	2.097	3.070	5.6	20.2	4 21	14 27.63	-5 56.7	1.785	2.780	3.5	21.4
5 1	14 19.08	+ 4 35.1	2.106	3.072	6.4	20.2	5 1	14 18.65	-5 16.0	1.795	2.792	3.8	21.5
5 11	14 11.91	+ 5 2.3	2.142	3.074	8.7	20.4	5 11	14 10.14	-4 44.9	1.833	2.803	7.1	21.7
5 21	14 5.76	+ 5 11.2	2.202	3.076	11.3	20.6	5 21	14 2.94	-4 26.6	1.896	2.814	10.6	21.9
5 31	14 1.16	+ 5 1.9	2.283	3.078	13.7	20.7	5 31	13 57.65	-4 22.7	1.982	2.824	13.7	22.1
62241	2000 <i>SW</i> ₇₅		4 27.8 133°12	0°3/27.4	18		232498	2003 <i>QT</i> ₅		4 27.8 198°63	3°8/30.9	18	
3 22	14 41.72	-13 22.0	3.805	4.607	8.1	20.0	3 22	14 48.07	-25 55.9	2.164	2.940	14.2	20.8
4 1	14 37.36	-13 11.9	3.723	4.617	6.2	19.9	4 1	14 43.33	-26 11.9	2.072	2.939	11.6	20.6
4 11	14 31.94	-12 57.8	3.667	4.628	4.0	19.7	4 11	14 36.39	-26 13.2	2.002	2.937	8.5	20.4
4 21	14 25.83	-12 41.0	3.639	4.638	1.6	19.5	4 21	14 27.82	-25 59.0	1.956	2.935	5.4	20.2
5 1	14 19.44	-12 23.1	3.642	4.648	0.9	19.5	5 1	14 18.52	-25 30.2	1.938	2.933	3.8	20.1
5 11	14 13.25	-12 6.2	3.675	4.657	3.3	19.7	5 11	14 9.51	-24 50.3	1.947	2.931	5.5	20.2
5 21	14 7.65	-11 52.0	3.738	4.666	5.5	19.9	5 21	14 1.70	-24 4.4	1.983	2.928	8.6	20.4
5 31	14 3.01	-11 42.2	3.826	4.675	7.5	20.0	5 31	13 55.81	-23 18.4	2.044	2.925	11.8	20.6
420901	2013 <i>LU</i> ₃₃		4 27.8 317°31	3°3/29.9	17		473920	2016 <i>EX</i> ₁₅₂		4 27.8 104°18	0°7/27.4	16	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
31074	1996 WY ₁		4 27.8 252°43	4.3/24.9	18		144442	2004 EA ₃₇		4 27.8 278°06	3.6/24.3	18	
3 22	14 50.60	- 2 46.4	2.026	2.851	13.3	18.6	3 22	14 42.50	- 6 36.8	2.196	3.031	12.1	19.6
4 1	14 45.23	- 2 25.7	1.932	2.837	10.4	18.4	4 1	14 38.81	- 5 33.9	2.109	3.021	9.2	19.4
4 11	14 37.63	- 2 5.3	1.861	2.821	7.2	18.1	4 11	14 33.31	- 4 26.1	2.046	3.011	6.2	19.2
4 21	14 28.35	- 1 49.3	1.817	2.805	4.6	17.9	4 21	14 26.53	- 3 18.2	2.010	3.001	3.8	19.1
5 1	14 18.27	- 1 41.8	1.801	2.789	5.0	17.9	5 1	14 19.19	- 2 15.8	2.002	2.992	4.4	19.1
5 11	14 8.41	- 1 46.3	1.812	2.773	8.0	18.1	5 11	14 12.10	- 1 24.2	2.022	2.982	7.3	19.2
5 21	13 59.68	- 2 4.6	1.850	2.756	11.5	18.2	5 21	14 6.00	- 0 47.3	2.067	2.972	10.5	19.4
5 31	13 52.86	- 2 37.5	1.910	2.739	14.7	18.4	5 31	14 1.46	- 0 27.1	2.134	2.962	13.4	19.6
332404	2007 LH ₂₃		4 27.8 128°25	5.9/22.2	17		63565	2001 QP ₁₈		4 27.8 217°48	3.1/30.5	18	
3 22	14 45.69	+ 0 53.2	2.156	2.989	12.4	21.1	3 22	14 47.53	-24 35.1	2.505	3.278	12.6	20.3
4 1	14 41.04	+ 2 8.1	2.096	3.000	9.7	20.9	4 1	14 42.64	-24 51.1	2.406	3.272	10.2	20.1
4 11	14 34.61	+ 3 21.1	2.060	3.011	7.2	20.8	4 11	14 35.82	-24 55.2	2.330	3.267	7.4	19.9
4 21	14 26.99	+ 4 26.1	2.050	3.022	5.9	20.7	4 21	14 27.59	-24 46.8	2.279	3.261	4.6	19.8
5 1	14 18.97	+ 5 17.5	2.068	3.032	6.7	20.8	5 1	14 18.70	-24 26.7	2.257	3.254	3.1	19.6
5 11	14 11.36	+ 5 51.0	2.113	3.042	9.0	20.9	5 11	14 10.00	-23 57.6	2.264	3.248	4.8	19.7
5 21	14 4.87	+ 6 5.1	2.183	3.051	11.6	21.1	5 21	14 2.30	-23 23.6	2.298	3.241	7.8	19.9
5 31	14 0.02	+ 5 59.7	2.273	3.060	13.9	21.3	5 31	13 56.24	-22 49.1	2.358	3.234	10.6	20.1
281771	2009 RR ₂₃		4 27.8 99°15	3.6/25.1	18		18105	2000 NT ₃		4 27.8 199°51	0.1/27.9	18	
3 22	14 48.17	- 6 40.6	1.853	2.686	14.1	21.3	3 22	14 44.53	-16 15.9	3.196	3.991	9.6	19.3
4 1	14 43.18	- 5 54.0	1.792	2.703	10.7	21.1	4 1	14 39.79	-15 56.7	3.097	3.986	7.4	19.1
4 11	14 36.10	- 5 4.2	1.755	2.720	7.1	20.9	4 11	14 33.69	-15 30.5	3.023	3.981	4.9	18.9
4 21	14 27.62	- 4 15.9	1.744	2.737	4.0	20.8	4 21	14 26.63	-14 58.9	2.978	3.975	2.0	18.7
5 1	14 18.69	- 3 34.5	1.760	2.754	4.4	20.8	5 1	14 19.16	-14 23.9	2.963	3.969	0.9	18.6
5 11	14 10.29	- 3 4.9	1.804	2.770	7.6	21.0	5 11	14 11.88	-13 48.5	2.978	3.962	3.8	18.8
5 21	14 3.26	- 2 49.7	1.873	2.785	11.0	21.3	5 21	14 5.31	-13 15.6	3.022	3.955	6.5	19.0
5 31	13 58.17	- 2 50.2	1.964	2.801	14.0	21.5	5 31	13 59.93	-12 48.0	3.093	3.947	9.0	19.1
119039	2001 FZ ₉₁		4 27.8 2°41	1°0/28.7	17		513634	2011 OP ₆₀		4 27.8 291°64	3.4/ 3.2	18	
3 22	14 42.91	-17 1.1	2.502	3.310	11.6	18.8	3 22	14 39.90	-32 26.7	4.399	5.117	8.4	21.2
4 1	14 38.97	-17 17.7	2.415	3.310	9.0	18.6	4 1	14 36.10	-32 40.0	4.296	5.114	7.0	21.1
4 11	14 33.34	-17 27.2	2.353	3.311	6.0	18.4	4 11	14 31.22	-32 43.5	4.216	5.111	5.6	21.0
4 21	14 26.52	-17 30.3	2.316	3.312	2.8	18.2	4 21	14 25.59	-32 37.0	4.162	5.108	4.2	20.9
5 1	14 19.17	-17 28.4	2.308	3.313	1.3	18.1	5 1	14 19.64	-32 20.9	4.135	5.105	3.4	20.9
5 11	14 12.05	-17 23.9	2.328	3.316	4.3	18.3	5 11	14 13.81	-31 56.6	4.138	5.102	3.7	20.9
5 21	14 5.83	-17 19.4	2.375	3.319	7.5	18.5	5 21	14 8.53	-31 26.2	4.168	5.099	4.9	21.0
5 31	14 1.07	-17 17.6	2.447	3.323	10.3	18.7	5 31	14 4.15	-30 52.4	4.225	5.096	6.4	21.1
437560	2014 AX ₃		4 27.8 49°12	6.3/23.2	17		427885	2005 SR ₂₁₈		4 27.8 138°17	1°8/26.1	15	
3 22	14 45.79	+ 1 29.4	1.840	2.680	13.8	21.1	3 22	14 49.29	- 9 26.4	2.684	3.492	10.9	22.7
4 1	14 41.33	+ 2 20.6	1.789	2.698	10.9	20.9	4 1	14 43.43	- 8 57.8	2.612	3.511	8.3	22.6
4 11	14 34.87	+ 3 7.5	1.761	2.716	8.0	20.8	4 11	14 36.00	- 8 25.3	2.566	3.528	5.3	22.4
4 21	14 27.10	+ 3 44.6	1.759	2.734	6.3	20.7	4 21	14 27.56	- 7 51.6	2.548	3.544	2.5	22.3
5 1	14 18.94	+ 4 6.5	1.783	2.753	7.0	20.8	5 1	14 18.76	- 7 19.9	2.560	3.560	2.4	22.3
5 11	14 11.32	+ 4 10.2	1.832	2.772	9.4	21.0	5 11	14 10.34	- 6 53.3	2.603	3.574	5.2	22.5
5 21	14 5.02	+ 3 55.0	1.905	2.791	12.2	21.2	5 21	14 2.90	- 6 34.4	2.674	3.588	8.0	22.7
5 31	14 0.57	+ 3 21.9	1.999	2.810	14.7	21.4	5 31	13 56.92	- 6 25.0	2.770	3.601	10.5	22.9
152344	2005 UY ₇₅		4 27.8 141°84	7.4/ 3.5	17	R	300234	2006 YH ₁₆		4 27.8 218°03	1°4/29.4	18	
3 22	14 51.82	-34 24.2	1.975	2.711	16.7	20.2	3 22	14 45.00	-21 11.0	3.080	3.860	10.3	22.7
4 1	14 46.70	-35 14.0	1.890	2.716	14.3	20.1	4 1	14 40.29	-20 59.5	2.974	3.850	8.1	22.6
4 11	14 38.84	-35 44.0	1.824	2.720	11.6	19.9	4 11	14 34.09	-20 38.6	2.892	3.839	5.6	22.4
4 21	14 28.92	-35 50.3	1.781	2.724	9.0	19.7	4 21	14 26.83	-20 8.7	2.837	3.828	2.9	22.2
5 1	14 18.04	-35 31.7	1.762	2.728	7.5	19.7	5 1	14 19.08	-19 31.9	2.813	3.817	1.5	22.1
5 11	14 7.54	-34 50.7	1.770	2.732	8.0	19.7	5 11	14 11.50	-18 50.9	2.818	3.804	3.8	22.2
5 21	13 58.57	-33 53.7	1.803	2.735	10.2	19.8	5 21	14 4.68	-18 9.2	2.852	3.792	6.6	22.4
5 31	13 52.03	-32 48.7	1.860	2.739	12.9	20.0	5 31	13 59.11	-17 30.3	2.913	3.778	9.1	22.5
125048	2001 TW ₂₁₅		4 27.8 221°92	2.8/ 2.6	18		231322	2006 DF ₁		4 27.8 220°42	1°8/29.4	17	
3 22	14 39.75	-30 36.2	4.860	5.585	7.5	20.2	3 22	14 45.84	-21 31.0	2.015	2.816	14.3	20.8
4 1	14 35.86	-30 50.2	4.756	5.582	6.3	20.1	4 1	14 41.66	-21 13.7	1.925	2.813	11.3	20.6
4 11	14 31.01	-30 55.9	4.676	5.579	4.9	20.0	4 11	14 35.31	-20 41.7	1.857	2.810	7.8	20.3
4 21	14 25.49	-30 53.3	4.622	5.575	3.6	19.9	4 21	14 27.40	-19 56.2	1.814	2.807	4.0	20.1
5 1	14 19.67	-30 42.6	4.596	5.572	2.9	19.8	5 1	14 18.81	-19 0.5	1.799	2.804	1.9	19.9
5 11	14 13.96	-30 25.1	4.600	5.569	3.3	19.9	5 11	14 10.55	-17 59.7	1.811	2.800	5.2	20.2
5 21	14 8.72	-30 2.6	4.633	5.565	4.5	19.9	5 21	14 3.50	-16 59.8	1.851	2.797	9.1	20.4
5 31	14 4.28	-29 37.2	4.693	5.562	5.9	20.0	5 31	13 58.36	-16 6.8	1.914	2.793	12.5	20.6
236384	2006 DH ₁₄		4 27.8 47°97	5.7/23.7	17		153622	2001 TB ₃₃		4 27.8 94°05	2.8/30.0	18	
3 22	14 45.60	- 1 48.2	1.669	2.515	14.7	20.1	3 22	14 50.87	-23 6.2	1.931	2.720	15.3	20.2
4 1	14 41.48	- 0 51.7	1.611	2.526	11.4	20.0	4 1	14 45.39	-23 13.0	1.864	2.742	12.1	20.1
4 11	14 35.12	+ 0 4.0	1.575	2.537	8.1	19.8	4 11	14 37.62	-23 5.2	1.818	2.764	8.5	19.9
4 21	14 27.26	+ 0 52.7	1.565	2.549	5.8	19.7	4 21	14 28.30	-22 42.8	1.798	2.786	4.8	19.7
5 1	14 18.88	+ 1 28.0	1.580	2.561	6.6	19.7	5 1	14 18.44	-22 8.3	1.806	2.807	2.8	19.6
5 11	14 11.04	+ 1 45.4	1.621	2.573	9.5	19.9	5 11	14 9.14	-21 26.2	1.841	2.828	5.4	19.8
5 21	14 4.60	+ 1 43.2	1.685	2.585	12.7	20.1	5 21	14 1.32	-20 42.2	1.903	2.848	8.9	20.1
5 31	14 0.19	+ 1 21.6	1.770	2.598	15.7	20.4	5 31	13 55.61	-20 1.8	1.989	2.868	12.1	20.3
211934	2004 XT ₆		4 27.8 141°09	2.6/29.9	18		438830	2009 BD ₂₉		4 27.8 27°79	0.7/28.3	17	
3 22	14 52.01	-23 31.3	1.968	2.									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
248665	2006 <i>JQ</i> ₁₃		4 27.8 163°46'	0°4/27.5	18		247174	2001 <i>BS</i> ₄₀		4 27.9 107°62'	4°8/23.3	18	
3 22	14 45.32	-15 38.4	2.136	2.951	13.1	20.8	3 22	14 46.37	-2 34.6	2.175	3.006	12.4	20.9
4 1	14 41.00	-15 4.0	2.052	2.954	10.1	20.6	4 1	14 41.49	-1 21.9	2.120	3.027	9.5	20.8
4 11	14 34.74	-14 19.4	1.993	2.956	6.5	20.3	4 11	14 34.87	-0 9.0	2.089	3.047	6.7	20.6
4 21	14 27.13	-13 27.4	1.959	2.958	2.6	20.1	4 21	14 27.13	+0 58.6	2.085	3.067	4.9	20.5
5 1	14 18.97	-12 32.1	1.954	2.960	1.5	20.0	5 1	14 19.05	+1 55.2	2.110	3.086	5.6	20.6
5 11	14 11.15	-11 38.6	1.977	2.961	5.4	20.3	5 11	14 11.44	+2 36.6	2.162	3.105	8.0	20.8
5 21	14 4.45	-10 51.7	2.027	2.962	9.1	20.5	5 21	14 4.97	+3 0.6	2.239	3.123	10.7	21.0
5 31	13 59.48	-10 15.4	2.101	2.963	12.3	20.7	5 31	14 0.14	+3 6.7	2.339	3.141	13.2	21.2
11489	1988 <i>SN</i>		4 27.8 200°33'	2°6/29.6	18		336958	2011 <i>JZ</i> ₈		4 27.9 106°04'	2°1/25.8	18	
3 22	14 51.24	-21 34.3	1.902	2.697	15.3	18.3	3 22	14 45.26	-11 56.1	2.103	2.928	12.9	21.1
4 1	14 46.03	-21 46.8	1.811	2.694	12.2	18.1	4 1	14 40.80	-10 50.5	2.036	2.944	9.8	20.9
4 11	14 38.31	-21 46.0	1.741	2.691	8.5	17.8	4 11	14 34.51	-9 36.8	1.993	2.959	6.3	20.7
4 21	14 28.70	-21 31.5	1.697	2.687	4.6	17.6	4 21	14 27.01	-8 19.6	1.977	2.974	2.8	20.5
5 1	14 18.22	-21 4.7	1.680	2.682	2.6	17.5	5 1	14 19.10	-7 4.8	1.990	2.989	2.9	20.6
5 11	14 8.04	-20 29.7	1.690	2.678	5.7	17.6	5 11	14 11.65	-5 58.1	2.031	3.004	6.3	20.8
5 21	13 59.22	-19 52.0	1.728	2.672	9.7	17.9	5 21	14 5.36	-5 4.1	2.099	3.018	9.6	21.0
5 31	13 52.59	-19 17.3	1.789	2.666	13.3	18.1	5 31	14 0.77	-4 25.6	2.190	3.032	12.6	21.3
66463	1999 <i>RS</i> ₁₂		4 27.9 222°62'	4°3/30.9	18		160568	1998 <i>UB</i> ₃₅		4 27.9 228°85'	1°5/29.3	17	
3 22	14 50.18	-26 26.4	1.836	2.617	16.2	19.5	3 22	14 45.65	-21 25.7	2.444	3.234	12.4	20.3
4 1	14 45.45	-26 40.9	1.741	2.610	13.3	19.3	4 1	14 41.19	-21 2.9	2.341	3.224	9.8	20.1
4 11	14 38.06	-26 37.8	1.666	2.603	9.8	19.0	4 11	14 34.88	-20 27.4	2.262	3.213	6.7	19.9
4 21	14 28.64	-26 15.6	1.616	2.595	6.3	18.8	4 21	14 27.23	-19 40.1	2.209	3.202	3.4	19.7
5 1	14 18.25	-25 35.1	1.591	2.587	4.3	18.7	5 1	14 18.97	-18 43.8	2.185	3.190	1.6	19.5
5 11	14 8.14	-24 40.7	1.594	2.579	6.3	18.8	5 11	14 10.94	-17 43.0	2.190	3.178	4.6	19.7
5 21	13 59.47	-23 39.2	1.623	2.570	10.0	18.9	5 21	14 3.87	-16 42.7	2.223	3.165	8.0	19.9
5 31	13 53.13	-22 38.4	1.675	2.560	13.7	19.1	5 31	13 58.40	-15 47.9	2.281	3.152	11.1	20.1
304084	2006 <i>GL</i> ₅₄		4 27.9 42°43'	1°1/27.3	17		153764	2001 <i>VZ</i> ₁₁		4 27.9 170°63'	2°7/30.1	17	
3 22	14 51.10	-11 43.9	1.389	2.228	17.6	20.6	3 22	14 50.11	-23 16.1	2.266	3.045	13.6	21.1
4 1	14 46.45	-11 47.3	1.317	2.231	13.6	20.3	4 1	14 44.72	-23 24.6	2.177	3.049	10.9	20.9
4 11	14 38.81	-11 43.4	1.265	2.234	8.8	20.1	4 11	14 37.22	-23 20.1	2.110	3.052	7.7	20.7
4 21	14 28.95	-11 34.7	1.237	2.237	3.6	19.8	4 21	14 28.21	-23 2.7	2.069	3.055	4.4	20.5
5 1	14 18.14	-11 24.9	1.235	2.240	2.4	19.7	5 1	14 18.54	-22 33.7	2.056	3.057	2.7	20.4
5 11	14 7.85	-11 18.5	1.257	2.243	7.5	20.0	5 11	14 9.19	-21 56.7	2.073	3.058	5.0	20.5
5 21	13 59.34	-11 19.7	1.304	2.247	12.4	20.3	5 21	14 1.01	-21 16.3	2.117	3.059	8.3	20.7
5 31	13 53.51	-11 31.7	1.372	2.250	16.6	20.5	5 31	13 54.69	-20 37.8	2.186	3.059	11.4	20.9
474997	2005 <i>TF</i> ₁₃₆		4 27.9 259°96'	0°7/27.2	16		74783	1999 <i>RA</i> ₂₅₀		4 27.9 144°56'	2°4/25.9	18	
3 22	14 44.20	-13 31.0	2.554	3.368	11.3	22.3	3 22	14 47.99	-11 14.4	1.815	2.644	14.5	20.6
4 1	14 39.96	-13 7.0	2.451	3.352	8.7	22.1	4 1	14 43.26	-10 19.9	1.743	2.652	11.0	20.4
4 11	14 34.03	-12 35.9	2.372	3.336	5.6	21.8	4 11	14 36.31	-9 16.8	1.693	2.660	7.1	20.2
4 21	14 26.86	-11 59.6	2.320	3.319	2.3	21.6	4 21	14 27.81	-8 9.8	1.669	2.667	3.3	20.0
5 1	14 19.10	-11 21.4	2.298	3.302	1.6	21.5	5 1	14 18.74	-7 5.0	1.673	2.674	3.3	20.0
5 11	14 11.50	-10 44.9	2.304	3.285	5.0	21.7	5 11	14 10.14	-6 8.7	1.705	2.680	7.1	20.2
5 21	14 4.75	-10 13.8	2.337	3.268	8.3	21.9	5 21	14 2.91	-5 25.8	1.762	2.685	11.0	20.5
5 31	13 59.43	-9 51.1	2.395	3.250	11.2	22.1	5 31	13 57.69	-4 59.4	1.842	2.691	14.3	20.7
347913	2002 <i>YL</i> ₂₆		4 27.9 97°67'	3°7/30.3	18		247899	2003 <i>UV</i> ₂₄₉		4 27.9 168°50'	1°9/26.3	18	
3 22	14 50.92	-24 17.0	1.415	2.222	19.0	20.9	3 22	14 49.34	-11 4.6	2.004	2.825	13.6	21.1
4 1	14 46.37	-24 21.8	1.346	2.234	15.2	20.6	4 1	14 44.15	-10 26.3	1.924	2.829	10.4	20.9
4 11	14 38.74	-24 6.0	1.295	2.245	10.8	20.4	4 11	14 36.83	-9 40.7	1.868	2.834	6.7	20.7
4 21	14 28.90	-23 29.4	1.268	2.256	6.2	20.2	4 21	14 28.03	-8 51.4	1.839	2.837	3.0	20.5
5 1	14 18.19	-22 34.9	1.265	2.267	3.7	20.0	5 1	14 18.64	-8 3.3	1.838	2.840	2.8	20.5
5 11	14 8.15	-21 29.8	1.288	2.278	6.8	20.2	5 11	14 9.65	-7 21.5	1.866	2.842	6.5	20.7
5 21	14 0.04	-20 22.8	1.336	2.288	11.3	20.5	5 21	14 1.90	-6 50.0	1.920	2.843	10.2	20.9
5 31	13 54.71	-19 22.6	1.405	2.298	15.3	20.8	5 31	13 56.05	-6 31.8	1.997	2.843	13.4	21.1
272719	2005 <i>YD</i> ₅₁		4 27.9 15°04'	2°1/29.4	17		501330	2013 <i>XP</i> ₁₀		4 27.9 188°34'	1°8/29.5	17	
3 22	14 46.30	-21 15.2	1.791	2.599	15.5	20.7	3 22	14 46.64	-22 5.4	2.230	3.022	13.4	22.1
4 1	14 42.27	-21 11.3	1.708	2.600	12.3	20.5	4 1	14 42.06	-21 45.5	2.139	3.021	10.6	21.9
4 11	14 35.84	-20 52.6	1.646	2.600	8.5	20.2	4 11	14 35.48	-21 11.7	2.070	3.020	7.3	21.7
4 21	14 27.67	-20 19.8	1.608	2.601	4.4	20.0	4 21	14 27.48	-20 25.1	2.027	3.019	3.8	21.5
5 1	14 18.74	-19 35.8	1.597	2.602	2.2	19.8	5 1	14 18.89	-19 28.5	2.013	3.017	1.9	21.3
5 11	14 10.20	-18 45.8	1.613	2.603	5.7	20.1	5 11	14 10.61	-18 27.0	2.027	3.015	4.9	21.5
5 21	14 3.03	-17 56.1	1.655	2.604	9.7	20.3	5 21	14 3.45	-17 25.9	2.068	3.012	8.4	21.8
5 31	13 57.99	-17 12.6	1.720	2.605	13.4	20.5	5 31	13 58.06	-16 30.7	2.135	3.009	11.6	21.9
77894	2001 <i>SY</i> ₂₆₃		4 27.9 232°31'	4°5/ 6.5	18		103277	2000 <i>AU</i> ₃₃		4 27.9 45°83'	8°9/20.9	18	
3 22	14 40.35	-41 14.9	4.686	5.339	8.6	20.0	3 22	14 46.33	+ 8 38.2	1.834	2.667	14.2	19.4
4 1	14 36.46	-41 19.8	4.579	5.335	7.6	19.9	4 1	14 41.88	+ 9 45.6	1.780	2.674	11.8	19.2
4 11	14 31.46	-41 12.6	4.494	5.332	6.4	19.8	4 11	14 35.34	+10 43.5	1.749	2.681	9.8	19.1
4 21	14 25.72	-40 52.7	4.432	5.328	5.4	19.7	4 21	14 27.39	+11 24.8	1.741	2.688	8.9	19.1
5 1	14 19.66	-40 20.3	4.397	5.325	4.7	19.7	5 1	14 18.96	+11 43.7	1.759	2.695	9.8	19.1
5 11	14 13.78	-39 36.9	4.390	5.321	4.6	19.6	5 11	14 11.03	+11 37.4	1.800	2.703	11.8	19.3
5 21	14 8.51	-38 44.6	4.409	5.318	5.3	19.7	5 21	14 4.41	+11 6.3	1.863	2.710	14.2	19.4
5 31	14 4.20	-37 46.7	4.456	5.314	6.4	19.8	5 31	13 59.71	+10 12.9	1.946	2.718	16.4	19.6
382731	2003 <i>AN</i> ₄₂		4 27.9 31°56'	9°5/ 6.6	17		291709	2006 <i>JF</i> ₁₃		4 27.9 17°14'	2°4/25.9	1	

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
179810	2002 <i>TC</i> ₇₅		4 27.9 261°05	3°3/25.7	18		93726	2000 <i>VZ</i> ₄₁		4 27.9 247°99	2°2/29.6	17	
3 22	14 48.24	- 7 52.5	1.711	2.548	14.9	20.8	3 22	14 47.25	-21 37.4	1.973	2.772	14.6	19.8
4 1	14 43.84	- 7 18.9	1.623	2.536	11.5	20.6	4 1	14 42.92	-21 35.9	1.878	2.764	11.6	19.6
4 11	14 36.95	- 6 39.8	1.556	2.523	7.6	20.3	4 11	14 36.27	-21 20.5	1.805	2.756	8.1	19.4
4 21	14 28.20	- 5 59.7	1.515	2.510	4.0	20.1	4 21	14 27.92	-20 51.4	1.757	2.748	4.3	19.1
5 1	14 18.55	- 5 23.8	1.500	2.498	4.2	20.0	5 1	14 18.76	-20 11.0	1.736	2.739	2.3	18.9
5 11	14 9.17	- 4 57.9	1.512	2.484	8.0	20.2	5 11	14 9.85	-19 23.8	1.742	2.731	5.4	19.1
5 21	14 1.11	- 4 45.7	1.548	2.471	12.2	20.4	5 21	14 2.18	-18 35.4	1.775	2.722	9.3	19.3
5 31	13 55.22	- 4 49.9	1.606	2.458	15.9	20.6	5 31	13 56.51	-17 51.6	1.832	2.713	12.9	19.5
511534	2014 <i>SQ</i> ₃₄₉		4 27.9 271°41	6°4/14.7	18		383929	2008 <i>ST</i> ₁₉₂		4 27.9 179°54	1°8/26.4	17	
3 22	14 38.53	+21 59.2	4.505	5.272	7.5	20.9	3 22	14 46.27	-10 53.5	2.176	2.998	12.6	22.0
4 1	14 34.89	+22 47.3	4.450	5.266	6.8	20.9	4 1	14 41.70	-10 21.0	2.093	2.999	9.6	21.8
4 11	14 30.37	+23 26.3	4.419	5.261	6.5	20.8	4 11	14 35.22	- 9 42.3	2.034	3.000	6.2	21.6
4 21	14 25.27	+23 53.7	4.413	5.255	6.5	20.8	4 21	14 27.40	- 9 0.4	2.002	3.000	2.8	21.4
5 1	14 19.94	+24 7.2	4.431	5.249	7.0	20.9	5 1	14 19.03	- 8 19.6	1.998	3.000	2.6	21.4
5 11	14 14.77	+24 5.9	4.473	5.244	7.7	20.9	5 11	14 10.97	- 7 44.2	2.023	2.999	6.0	21.6
5 21	14 10.11	+23 49.8	4.536	5.238	8.6	21.0	5 21	14 4.00	- 7 17.8	2.074	2.999	9.5	21.8
5 31	14 6.24	+23 19.6	4.618	5.233	9.4	21.0	5 31	13 58.72	- 7 3.2	2.148	2.998	12.5	22.0
384790	2012 <i>PY</i> ₄₃		4 27.9 236°70	1°1/28.7	17		250058	2002 <i>CP</i> ₃₁₂		4 27.9 330°47	0°1/27.9	17	
3 22	14 47.33	-18 25.6	2.198	3.000	13.2	21.6	3 22	14 41.31	-17 8.4	1.164	2.020	19.2	20.5
4 1	14 42.69	-18 21.8	2.100	2.991	10.4	21.4	4 1	14 39.67	-16 42.2	1.081	2.003	15.0	20.2
4 11	14 35.98	-18 7.6	2.026	2.982	7.0	21.1	4 11	14 34.85	-15 56.8	1.017	1.988	10.0	19.9
4 21	14 27.74	-17 43.8	1.977	2.972	3.3	20.9	4 21	14 27.53	-14 55.0	0.973	1.973	4.2	19.5
5 1	14 18.78	-17 12.8	1.957	2.962	1.4	20.7	5 1	14 18.93	-13 43.2	0.953	1.960	1.9	19.3
5 11	14 10.03	-16 38.3	1.965	2.952	5.0	20.9	5 11	14 10.66	-12 31.4	0.956	1.947	8.1	19.6
5 21	14 2.37	-16 4.9	2.000	2.942	8.8	21.1	5 21	14 4.17	-11 29.4	0.980	1.936	13.9	19.9
5 31	13 56.47	-15 36.9	2.059	2.931	12.1	21.3	5 31	14 0.54	-10 45.4	1.023	1.926	18.9	20.1
336490	2008 <i>WF</i> ₄		4 27.9 234°11	0°9/28.5	17		153811	2001 <i>VL</i> ₁₁₉		4 27.9 204°29	1°3/28.9	17	
3 22	14 47.30	-17 47.3	2.143	2.949	13.4	21.4	3 22	14 48.60	-19 24.4	2.167	2.965	13.5	20.8
4 1	14 42.69	-17 42.2	2.049	2.942	10.5	21.2	4 1	14 43.67	-19 17.1	2.073	2.961	10.6	20.6
4 11	14 35.98	-17 26.8	1.976	2.934	7.0	20.9	4 11	14 36.62	-18 58.2	2.001	2.956	7.2	20.4
4 21	14 27.74	-17 2.3	1.930	2.927	3.2	20.7	4 21	14 28.03	-18 28.6	1.956	2.951	3.5	20.1
5 1	14 18.78	-16 31.0	1.912	2.918	1.3	20.5	5 1	14 18.74	-17 50.9	1.940	2.945	1.5	20.0
5 11	14 10.06	-15 57.1	1.923	2.910	5.1	20.8	5 11	14 9.72	-17 9.1	1.952	2.939	5.1	20.2
5 21	14 2.45	-15 25.0	1.960	2.901	8.9	21.0	5 21	14 1.84	-16 28.2	1.991	2.933	8.8	20.4
5 31	13 56.64	-14 58.8	2.021	2.893	12.3	21.2	5 31	13 55.80	-15 52.9	2.054	2.925	12.2	20.6
437265	2012 <i>XG</i> ₁₂₃		4 27.9 127°19	4°5/23.4	17		13821	1999 <i>VE</i> ₈		4 27.9 207°60	1°6/26.6	18	
3 22	14 44.06	- 1 21.3	2.436	3.266	11.2	21.7	3 22	14 49.02	-11 55.6	2.096	2.913	13.2	19.7
4 1	14 39.69	- 0 27.9	2.367	3.273	8.7	21.5	4 1	14 43.97	-11 22.5	2.004	2.907	10.2	19.5
4 11	14 33.73	+ 0 25.0	2.323	3.280	6.2	21.4	4 11	14 36.80	-10 41.6	1.936	2.901	6.6	19.2
4 21	14 26.71	+ 1 12.9	2.306	3.287	4.6	21.3	4 21	14 28.10	- 9 55.9	1.895	2.893	2.8	19.0
5 1	14 19.30	+ 1 51.3	2.318	3.293	5.2	21.3	5 1	14 18.72	- 9 9.8	1.883	2.885	2.4	18.9
5 11	14 12.21	+ 2 16.7	2.357	3.300	7.4	21.5	5 11	14 9.61	- 8 28.1	1.899	2.877	6.2	19.2
5 21	14 6.07	+ 2 27.4	2.421	3.306	10.0	21.7	5 21	14 1.65	- 7 55.2	1.941	2.867	10.0	19.4
5 31	14 1.37	+ 2 22.6	2.508	3.312	12.3	21.8	5 31	13 55.51	- 7 34.4	2.008	2.857	13.3	19.6
471393	2011 <i>SP</i> ₁₄₃		4 27.9 271°29	0°1/27.9	16		214657	2006 <i>SQ</i> ₁₀₁		4 27.9 153°14	0°5/28.3	17	
3 22	14 44.73	-16 2.7	2.299	3.111	12.4	21.9	3 22	14 50.22	-17 14.7	2.055	2.859	13.9	21.9
4 1	14 40.60	-15 46.1	2.198	3.097	9.6	21.7	4 1	14 44.85	-17 0.9	1.975	2.868	10.8	21.7
4 11	14 34.57	-15 20.2	2.121	3.083	6.3	21.5	4 11	14 37.32	-16 36.6	1.917	2.876	7.1	21.5
4 21	14 27.15	-14 46.8	2.070	3.068	2.7	21.2	4 21	14 28.29	-16 3.2	1.886	2.883	3.1	21.3
5 1	14 19.07	-14 8.8	2.048	3.054	1.2	21.1	5 1	14 18.66	-15 24.0	1.883	2.889	1.3	21.2
5 11	14 11.17	-13 30.4	2.053	3.039	5.0	21.3	5 11	14 9.43	-14 43.7	1.909	2.895	5.3	21.4
5 21	14 4.23	-12 55.7	2.086	3.025	8.7	21.5	5 21	14 1.47	-14 6.8	1.962	2.901	9.1	21.7
5 31	13 58.90	-12 28.6	2.143	3.010	11.9	21.7	5 31	13 55.45	-13 37.7	2.040	2.905	12.4	21.9
105151	2000 <i>NQ</i> ₂₂		4 27.9 214°09	7°5/ 6.4	18		31008	1996 <i>BN</i> ₂		4 27.9 44°23	0°1/27.9	18	
3 22	14 48.74	-41 59.9	2.773	3.440	13.8	19.6	3 22	14 46.92	-17 2.4	1.221	2.066	19.2	18.5
4 1	14 43.80	-42 27.3	2.670	3.435	12.2	19.4	4 1	14 43.51	-16 34.6	1.159	2.074	14.8	18.2
4 11	14 36.71	-42 35.5	2.586	3.429	10.4	19.3	4 11	14 37.00	-15 50.1	1.115	2.083	9.7	18.0
4 21	14 28.05	-42 21.6	2.524	3.423	8.8	19.2	4 21	14 28.27	-14 52.4	1.093	2.093	4.1	17.7
5 1	14 18.67	-41 44.6	2.487	3.416	7.7	19.1	5 1	14 18.68	-13 48.2	1.096	2.102	1.8	17.5
5 11	14 9.57	-40 46.5	2.476	3.410	7.6	19.1	5 11	14 9.79	-12 46.2	1.123	2.113	7.5	17.9
5 21	14 1.64	-39 32.0	2.492	3.403	8.7	19.1	5 21	14 2.85	-11 54.7	1.173	2.123	12.7	18.2
5 31	13 55.58	-38 7.4	2.532	3.395	10.4	19.2	5 31	13 58.69	-11 19.5	1.243	2.134	17.1	18.5
272537	2005 <i>UP</i> ₃₁₄		4 27.9 163°84	2°4/25.5	17		325058	2008 <i>CY</i> ₁₉₂		4 27.9 334°87	0°4/28.1	17	
3 22	14 45.88	-11 0.2	2.146	2.970	12.7	21.5	3 22	14 41.80	-17 4.6	1.252	2.103	18.4	20.7
4 1	14 41.35	- 9 50.8	2.067	2.974	9.7	21.3	4 1	14 39.84	-16 48.7	1.169	2.088	14.4	20.4
4 11	14 34.94	- 8 33.1	2.013	2.979	6.2	21.1	4 11	14 34.85	-16 16.1	1.104	2.074	9.6	20.0
4 21	14 27.26	- 7 11.8	1.986	2.982	3.0	20.9	4 21	14 27.50	-15 29.0	1.061	2.061	4.1	19.7
5 1	14 19.08	- 5 53.0	1.988	2.986	3.3	20.9	5 1	14 18.97	-14 32.8	1.042	2.048	1.8	19.5
5 11	14 11.27	- 4 42.8	2.019	2.988	6.6	21.1	5 11	14 10.76	-13 35.5	1.046	2.037	7.6	19.8
5 21	14 4.58	- 3 45.8	2.076	2.991	10.0	21.3	5 21	14 4.22	-12 45.6	1.072	2.028	13.0	20.0
5 31	13 59.58	- 3 5.1	2.157	2.992	13.0	21.5	5 31	14 0.40	-12 10.3	1.118	2.019	17.8	20.3
306152	2010 <i>KH</i> ₉₈		4 27.9 296°09	3°0/30.8	16		377939	2006 <i>HP</i> ₅₈					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
246009	2006 <i>TF</i> ₁₇		4 27.9 239°08	1°0/26.9	17		353938	1998 <i>QR</i> ₁₅		4 27.9 244°25	3°3/1.4	13 C	
3 22	14 43.59	-13 38.3	2.451	3.267	11.6	21.6	3 22	14 49.55	-28 11.3	3.245	3.983	10.7	24.3
4 1	14 39.54	-12 58.4	2.356	3.259	8.9	21.4	4 1	14 43.93	-28 15.2	3.117	3.957	8.8	24.2
4 11	14 33.78	-12 10.1	2.285	3.250	5.7	21.2	4 11	14 36.62	-28 7.0	3.012	3.931	6.7	24.0
4 21	14 26.82	-11 16.4	2.242	3.241	2.4	21.0	4 21	14 28.04	-27 45.9	2.934	3.904	4.5	23.8
5 1	14 19.33	-10 21.1	2.228	3.232	1.8	20.9	5 1	14 18.80	-27 12.4	2.886	3.876	3.3	23.7
5 11	14 12.07	-9 28.8	2.242	3.222	5.2	21.1	5 11	14 9.63	-26 28.8	2.869	3.847	4.4	23.7
5 21	14 5.72	-8 43.6	2.284	3.213	8.5	21.3	5 21	14 1.20	-25 38.5	2.881	3.816	6.7	23.8
5 31	14 0.83	-8 8.9	2.350	3.203	11.5	21.5	5 31	13 54.10	-24 45.9	2.920	3.785	9.1	23.9
243278	2008 <i>CV</i> ₅₁		4 27.9 342°43	1°6/26.8	17		434883	2006 <i>SZ</i> ₃₅₇		4 27.9 306°79	0°9/28.8	17	
3 22	14 42.16	-11 49.3	1.674	2.517	14.9	19.7	3 22	14 42.71	-20 2.6	2.100	2.909	13.5	20.6
4 1	14 39.25	-11 28.0	1.589	2.506	11.4	19.4	4 1	14 39.24	-19 28.7	2.005	2.900	10.6	20.4
4 11	14 34.00	-10 58.5	1.525	2.495	7.4	19.1	4 11	14 33.78	-18 40.6	1.932	2.891	7.1	20.2
4 21	14 27.02	-10 24.2	1.485	2.485	3.1	18.9	4 21	14 26.88	-17 40.2	1.886	2.882	3.3	19.9
5 1	14 19.24	-9 49.6	1.472	2.476	2.6	18.8	5 1	14 19.35	-16 31.6	1.867	2.873	1.3	19.7
5 11	14 11.74	-9 20.2	1.484	2.468	6.9	19.0	5 11	14 12.09	-15 20.5	1.876	2.864	5.1	20.0
5 21	14 5.50	-9 0.5	1.520	2.460	11.1	19.3	5 21	14 5.91	-14 12.9	1.911	2.856	8.9	20.2
5 31	14 1.31	-8 54.0	1.578	2.454	14.9	19.5	5 31	14 1.46	-13 14.2	1.971	2.848	12.3	20.4
445119	2008 <i>UE</i> ₂₁₀		4 27.9 159°21	0°4/28.4	18		34978	1901 <i>T</i> ₋₃		4 27.9 81°52	3°7/1.5	18	
3 22	14 40.63	-17 22.9	3.972	4.763	8.0	22.5	3 22	14 45.27	-27 24.0	2.386	3.154	13.3	18.8
4 1	14 36.60	-17 6.0	3.882	4.769	6.1	22.4	4 1	14 41.01	-27 31.1	2.297	3.157	10.8	18.6
4 11	14 31.55	-16 43.2	3.818	4.774	4.0	22.3	4 11	14 34.84	-27 23.5	2.230	3.160	8.1	18.4
4 21	14 25.82	-16 15.7	3.782	4.779	1.8	22.1	4 21	14 27.30	-27 0.7	2.188	3.163	5.3	18.2
5 1	14 19.82	-15 45.4	3.777	4.783	0.7	22.0	5 1	14 19.17	-26 24.1	2.173	3.166	3.7	18.1
5 11	14 13.99	-15 14.3	3.802	4.787	3.0	22.2	5 11	14 11.35	-25 37.2	2.187	3.169	5.1	18.2
5 21	14 8.72	-14 44.8	3.856	4.791	5.2	22.4	5 21	14 4.60	-24 44.9	2.227	3.172	7.8	18.4
5 31	14 4.35	-14 18.8	3.936	4.795	7.1	22.5	5 31	13 59.54	-23 52.5	2.292	3.175	10.6	18.6
343896	2011 <i>JK</i> ₈		4 27.9 254°40	0°9/26.3	18		505149	2012 <i>PU</i> ₈		4 27.9 275°48	7°2/20.3	17	
3 22	14 36.55	-10 57.5	4.654	5.466	6.6	20.9	3 22	14 43.62	+ 0 50.8	1.949	2.791	13.1	21.4
4 1	14 33.41	-10 26.2	4.556	5.457	5.0	20.8	4 1	14 40.02	+ 2 42.7	1.862	2.771	10.5	21.2
4 11	14 29.45	-9 51.7	4.485	5.449	3.2	20.7	4 11	14 34.35	+ 4 37.3	1.799	2.750	8.1	21.0
4 21	14 24.95	-9 15.7	4.443	5.440	1.4	20.5	4 21	14 27.15	+ 6 26.2	1.763	2.729	7.2	20.9
5 1	14 20.22	-8 40.1	4.431	5.432	1.3	20.5	5 1	14 19.22	+ 8 0.5	1.754	2.708	8.5	21.0
5 11	14 15.59	-8 6.8	4.449	5.423	3.1	20.6	5 11	14 11.51	+ 9 12.8	1.770	2.687	11.1	21.1
5 21	14 11.38	-7 37.6	4.496	5.415	4.9	20.7	5 21	14 4.85	+ 9 59.0	1.810	2.665	14.1	21.2
5 31	14 7.87	-7 14.0	4.568	5.406	6.6	20.9	5 31	13 59.97	+10 18.0	1.869	2.644	16.9	21.4
184314	2005 <i>EO</i> ₃₀₂		4 27.9 321°42	0°1/29.2	08 C		239418	2007 <i>TY</i> ₉₃		4 27.9 235°13	1°2/26.8	17	
3 22	14 24.49	-18 12.5	39.895	40.681	0.9	22.5	3 22	14 44.96	-12 33.4	2.249	3.069	12.4	21.3
4 1	14 23.82	-18 10.0	39.796	40.678	0.7	22.5	4 1	14 40.73	-12 2.8	2.159	3.063	9.5	21.1
4 11	14 23.07	-18 6.9	39.724	40.675	0.4	22.4	4 11	14 34.64	-11 24.6	2.092	3.057	6.1	20.9
4 21	14 22.27	-18 3.5	39.679	40.672	0.2	22.4	4 21	14 27.22	-10 41.8	2.052	3.051	2.6	20.7
5 1	14 21.44	-17 59.7	39.664	40.670	0.1	22.4	5 1	14 19.22	-9 58.3	2.041	3.045	2.0	20.6
5 11	14 20.63	-17 55.8	39.679	40.667	0.3	22.4	5 11	14 11.47	-9 18.3	2.058	3.038	5.6	20.8
5 21	14 19.86	-17 51.9	39.723	40.664	0.5	22.4	5 21	14 4.73	-8 46.0	2.102	3.031	9.1	21.0
5 31	14 19.15	-17 48.2	39.793	40.661	0.7	22.5	5 31	13 59.60	-8 24.4	2.169	3.024	12.2	21.2
478092	2011 <i>UJ</i> ₄₈		4 27.9 184°45	0°1/27.9	16		146232	2000 <i>WJ</i> ₁₂₅		4 27.9 170°04	3°0/1.0	18	
3 22	14 44.19	-15 54.8	3.022	3.821	10.0	22.7	3 22	14 48.38	-26 4.1	3.131	3.883	10.8	21.1
4 1	14 39.64	-15 35.7	2.930	3.821	7.7	22.5	4 1	14 42.92	-26 25.4	3.036	3.887	8.7	21.0
4 11	14 33.68	-15 9.7	2.862	3.821	5.0	22.3	4 11	14 35.87	-26 36.2	2.964	3.890	6.5	20.8
4 21	14 26.75	-14 38.2	2.823	3.820	2.1	22.1	4 21	14 27.69	-26 36.1	2.919	3.893	4.2	20.7
5 1	14 19.41	-14 3.6	2.813	3.819	0.9	22.0	5 1	14 19.01	-26 25.6	2.904	3.896	3.0	20.6
5 11	14 12.28	-13 29.1	2.833	3.817	3.9	22.2	5 11	14 10.52	-26 6.5	2.919	3.898	4.2	20.7
5 21	14 5.92	-12 57.5	2.882	3.815	6.8	22.4	5 21	14 2.86	-25 41.9	2.962	3.899	6.4	20.8
5 31	14 0.79	-12 31.7	2.956	3.813	9.3	22.6	5 31	13 56.56	-25 15.4	3.032	3.900	8.7	21.0
45476	2000 <i>AU</i> ₂₂₆		4 27.9 204°03	1°0/28.7	18		489240	2006 <i>QR</i> ₁₈₂		4 27.9 208°64	3°8/1.5	16	
3 22	14 46.22	-18 56.4	2.285	3.086	12.8	19.9	3 22	14 48.31	-27 45.4	2.723	3.476	12.2	23.0
4 1	14 41.71	-18 41.8	2.193	3.083	10.0	19.7	4 1	14 43.20	-28 7.1	2.622	3.471	10.0	22.8
4 11	14 35.28	-18 16.2	2.124	3.080	6.7	19.5	4 11	14 36.23	-28 16.2	2.542	3.465	7.6	22.7
4 21	14 27.48	-17 40.9	2.082	3.077	3.1	19.2	4 21	14 27.89	-28 11.6	2.489	3.459	5.1	22.5
5 1	14 19.07	-16 58.6	2.067	3.073	1.3	19.1	5 1	14 18.90	-27 53.8	2.464	3.452	3.8	22.4
5 11	14 10.93	-16 13.7	2.082	3.069	4.8	19.3	5 11	14 10.09	-27 24.9	2.468	3.446	5.0	22.5
5 21	14 3.85	-15 30.6	2.123	3.065	8.3	19.5	5 21	14 2.22	-26 48.8	2.499	3.438	7.4	22.6
5 31	13 58.44	-14 53.7	2.190	3.060	11.5	19.7	5 31	13 55.93	-26 10.0	2.557	3.431	10.0	22.8
489421	2006 <i>VC</i> ₁₂₁		4 27.9 166°46	1°2/29.4	18		45060	1999 <i>XL</i> ₃₀		4 27.9 263°95	2°3/26.1	18	
3 22	14 44.54	-21 15.8	3.199	3.978	10.0	23.1	3 22	14 45.96	-12 13.3	1.674	2.509	15.2	19.4
4 1	14 39.83	-20 55.8	3.107	3.983	7.8	22.9	4 1	14 42.20	-11 17.9	1.584	2.497	11.7	19.1
4 11	14 33.76	-20 26.3	3.040	3.988	5.4	22.8	4 11	14 35.95	-10 10.8	1.516	2.484	7.6	18.8
4 21	14 26.77	-19 48.5	3.001	3.992	2.7	22.6	4 21	14 27.87	-8 56.4	1.473	2.471	3.4	18.5
5 1	14 19.41	-19 4.4	2.991	3.996	1.3	22.5	5 1	14 18.91	-7 41.7	1.457	2.458	3.4	18.5
5 11	14 12.29	-18 17.3	3.012	3.999	3.6	22.6	5 11	14 10.25	-6 34.2	1.467	2.445	7.7	18.7
5 21	14 5.95	-17 30.5	3.063	4.002	6.2	22.8	5 21	14 2.92	-5 40.5	1.502	2.431	12.1	18.9
5 31	14 0.81	-16 47.2	3.139	4.004	8.6	23.0	5 31	13 57.74	-5 5.1	1.559	2.418	16.0	19.1
1523	Pieksämäki		4 27.9 52°87	4°3/30.4	18 R		222633	2001 <i>XP</i> ₁₁₅		4 27.9 176°92	0°8/27.3		

EPHEMERIDES

4 27.9

4 27.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
183669	2003 <i>WX</i> ₁₃₅		4 27.9 202°07	0°4/28.2	17		465352	2007 <i>XC</i> ₅₃		4 27.9 63°93	3°0/26.1	16	
3 22	14 49.90	-17 9.4	1.983	2.790	14.3	21.5	3 22	14 52.58	-9 22.6	1.404	2.243	17.4	22.2
4 1	14 44.84	-16 53.8	1.892	2.787	11.1	21.3	4 1	14 46.93	-8 41.6	1.365	2.279	13.2	22.0
4 11	14 37.48	-16 26.9	1.823	2.782	7.4	21.1	4 11	14 38.69	-7 55.0	1.347	2.315	8.4	21.9
4 21	14 28.46	-15 50.3	1.780	2.777	3.2	20.8	4 21	14 28.83	-7 8.2	1.353	2.350	4.0	21.7
5 1	14 18.66	-15 7.3	1.765	2.771	1.3	20.6	5 1	14 18.63	-6 27.5	1.385	2.385	3.9	21.8
5 11	14 9.17	-14 22.7	1.779	2.765	5.6	20.9	5 11	14 9.39	-5 58.3	1.444	2.420	8.0	22.1
5 21	14 0.93	-13 41.9	1.819	2.758	9.7	21.1	5 21	14 2.05	-5 44.0	1.527	2.455	12.0	22.4
5 31	13 54.69	-13 9.4	1.883	2.750	13.3	21.3	5 31	13 57.19	-5 45.8	1.631	2.489	15.4	22.7
140656	2001 <i>UT</i> ₃₇		4 27.9 294°84	2°0/29.7	18		345986	2007 <i>TK</i> ₁₅₄		4 27.9 251°84	0°1/27.9	17	
3 22	14 43.71	-22 40.7	2.101	2.899	13.9	19.4	3 22	14 44.04	-18 34.7	2.246	3.053	12.8	21.1
4 1	14 40.07	-22 19.3	2.004	2.889	11.0	19.2	4 1	14 40.12	-17 40.8	2.146	3.041	9.9	20.9
4 11	14 34.36	-21 42.5	1.929	2.880	7.7	19.0	4 11	14 34.29	-16 32.9	2.069	3.029	6.6	20.7
4 21	14 27.16	-20 51.4	1.880	2.871	4.1	18.7	4 21	14 27.11	-15 13.7	2.019	3.017	2.8	20.4
5 1	14 19.27	-19 49.1	1.858	2.862	2.1	18.6	5 1	14 19.32	-13 48.1	1.998	3.004	1.2	20.3
5 11	14 11.65	-18 40.8	1.864	2.853	5.0	18.8	5 11	14 11.78	-12 22.1	2.006	2.992	5.2	20.5
5 21	14 5.15	-17 32.7	1.896	2.844	8.8	19.0	5 21	14 5.27	-11 2.1	2.042	2.978	8.9	20.7
5 31	14 0.43	-16 30.8	1.953	2.835	12.2	19.1	5 31	14 0.39	-9 53.4	2.102	2.965	12.2	20.9
271701	2004 <i>RU</i> ₁₄₈		4 27.9 253°76	4°6/23.5	18		346378	2008 <i>SB</i> ₄₇		4 27.9 301°80	0°4/27.7	17	
3 22	14 45.07	-4 49.3	2.064	2.899	12.8	20.8	3 22	14 46.89	-14 26.1	1.682	2.512	15.4	20.9
4 1	14 41.01	-3 34.1	1.972	2.883	9.9	20.6	4 1	14 43.24	-14 18.7	1.573	2.481	12.1	20.6
4 11	14 34.93	-2 13.8	1.904	2.867	6.8	20.4	4 11	14 36.90	-14 1.4	1.485	2.451	8.0	20.3
4 21	14 27.39	-0 54.3	1.863	2.850	4.7	20.2	4 21	14 28.41	-13 35.5	1.421	2.420	3.4	19.9
5 1	14 19.16	+0 17.8	1.850	2.833	5.5	20.2	5 1	14 18.68	-13 4.5	1.384	2.390	1.7	19.7
5 11	14 11.15	+1 16.2	1.864	2.815	8.5	20.4	5 11	14 8.94	-12 33.5	1.373	2.359	6.8	20.0
5 21	14 4.19	+1 56.7	1.903	2.797	11.8	20.5	5 21	14 0.41	-12 8.0	1.386	2.329	11.7	20.2
5 31	13 58.94	+2 17.0	1.964	2.779	14.8	20.7	5 31	13 54.11	-11 53.0	1.421	2.299	16.1	20.3
150875	2001 <i>SD</i> ₂₁₃		4 27.9 266°27	0°5/27.5	17 R		367485	2009 <i>FR</i> ₅₇		4 27.9 321°46	2°0/26.8	17	
3 22	14 47.45	-14 31.5	1.764	2.590	15.0	20.8	3 22	14 44.80	-11 45.9	1.290	2.144	17.8	20.6
4 1	14 43.26	-14 14.2	1.673	2.580	11.6	20.6	4 1	14 42.09	-11 24.3	1.205	2.128	13.8	20.3
4 11	14 36.62	-13 46.7	1.604	2.570	7.6	20.3	4 11	14 36.33	-10 52.1	1.140	2.111	9.0	20.0
4 21	14 28.15	-13 11.3	1.560	2.559	3.1	20.0	4 21	14 28.18	-10 13.3	1.096	2.096	3.9	19.7
5 1	14 18.81	-12 31.9	1.543	2.549	1.7	19.9	5 1	14 18.81	-9 33.8	1.077	2.081	3.2	19.6
5 11	14 9.74	-11 54.0	1.553	2.539	6.4	20.2	5 11	14 9.71	-9 0.8	1.081	2.067	8.5	19.8
5 21	14 1.97	-11 22.7	1.588	2.528	10.8	20.4	5 21	14 2.23	-8 40.5	1.108	2.054	13.8	20.1
5 31	13 56.32	-11 2.3	1.646	2.518	14.6	20.6	5 31	13 57.44	-8 37.5	1.154	2.041	18.4	20.3
61867	2000 <i>QQ</i> ₂₁₁		4 27.9 135°42	2°0/26.4	18		499823	2011 <i>DN</i> ₁₄		4 27.9 275°66	1°8/26.5	17	
3 22	14 46.38	-10 59.6	1.853	2.683	14.2	19.2	3 22	14 45.59	-12 20.4	1.767	2.600	14.7	21.7
4 1	14 42.35	-10 26.5	1.775	2.685	10.8	19.0	4 1	14 41.73	-11 40.2	1.681	2.593	11.3	21.5
4 11	14 35.82	-9 46.2	1.720	2.687	7.0	18.7	4 11	14 35.56	-10 50.1	1.617	2.585	7.3	21.2
4 21	14 27.75	-9 2.3	1.691	2.689	3.1	18.5	4 21	14 27.70	-9 54.2	1.579	2.578	3.1	21.0
5 1	14 19.03	-8 19.6	1.689	2.691	2.8	18.5	5 1	14 19.07	-8 57.8	1.568	2.571	2.8	20.9
5 11	14 10.70	-7 43.5	1.715	2.693	6.7	18.7	5 11	14 10.76	-8 7.3	1.583	2.564	6.9	21.2
5 21	14 3.64	-7 17.9	1.765	2.695	10.6	19.0	5 21	14 3.73	-7 27.9	1.624	2.556	11.1	21.4
5 31	13 58.54	-7 5.9	1.839	2.696	14.0	19.2	5 31	13 58.73	-7 3.5	1.687	2.549	14.8	21.6
505277	2012 <i>VJ</i> ₃₆		4 27.9 229°73	4°2/24.3	17		133174	2003 <i>QE</i> ₄₅		4 27.9 285°35	5°8/23.7	17	
3 22	14 46.74	-2 13.9	2.363	3.189	11.7	21.7	3 22	14 46.05	-4 32.6	1.470	2.321	16.1	19.9
4 1	14 41.95	-1 39.6	2.277	3.181	9.0	21.5	4 1	14 42.57	-3 21.0	1.386	2.306	12.5	19.7
4 11	14 35.37	-1 5.3	2.215	3.174	6.3	21.3	4 11	14 36.38	-2 3.4	1.323	2.290	8.7	19.4
4 21	14 27.53	-0 35.0	2.180	3.165	4.3	21.2	4 21	14 28.12	-0 47.5	1.285	2.274	6.0	19.2
5 1	14 19.12	-0 12.9	2.174	3.157	4.8	21.2	5 1	14 18.86	+0 17.8	1.271	2.257	7.0	19.2
5 11	14 10.97	-0 2.3	2.195	3.148	7.3	21.3	5 11	14 9.89	+1 4.2	1.282	2.241	10.7	19.4
5 21	14 3.77	-0 5.0	2.242	3.139	10.2	21.5	5 21	14 2.37	+1 26.8	1.316	2.225	14.9	19.6
5 31	13 58.12	-0 21.9	2.313	3.129	12.8	21.7	5 31	13 57.22	+1 23.9	1.369	2.210	18.7	19.8
31010	1996 <i>CJ</i> ₁		4 27.9 23°85	1°5/27.2	18		25965	Masihdas		4 27.9 325°89	1°5/28.8	18	
3 22	14 47.61	-11 56.3	1.090	1.950	19.9	18.2	3 22	14 44.22	-18 35.4	1.318	2.158	18.3	19.0
4 1	14 44.36	-11 51.0	1.031	1.956	15.3	18.0	4 1	14 41.69	-18 35.8	1.230	2.142	14.5	18.7
4 11	14 37.74	-11 36.1	0.990	1.963	9.9	17.7	4 11	14 36.10	-18 20.2	1.162	2.127	9.9	18.4
4 21	14 28.67	-11 15.3	0.971	1.971	4.1	17.4	4 21	14 28.10	-17 49.3	1.116	2.113	4.7	18.1
5 1	14 18.62	-10 54.0	0.975	1.980	2.8	17.3	5 1	14 18.85	-17 6.6	1.093	2.100	2.0	17.8
5 11	14 9.29	-10 38.8	1.002	1.990	8.5	17.7	5 11	14 9.87	-16 18.9	1.095	2.087	7.2	18.1
5 21	14 2.06	-10 34.6	1.051	2.001	13.8	18.0	5 21	14 2.54	-15 33.9	1.119	2.075	12.5	18.4
5 31	13 57.85	-10 44.8	1.118	2.013	18.3	18.3	5 31	13 57.93	-14 59.0	1.164	2.064	17.3	18.6
160456	2005 <i>WH</i> ₁₁₇		4 27.9 252°52	10°7/6.4	18		308412	2005 <i>ST</i> ₁₀₃		4 27.9 260°15	1°7/29.2	17	
3 22	14 49.96	-40 59.8	1.229	1.978	24.3	20.0	3 22	14 47.79	-20 37.6	1.928	2.731	14.8	21.2
4 1	14 47.10	-41 6.2	1.141	1.970	21.4	19.7	4 1	14 43.50	-20 29.0	1.825	2.714	11.7	21.0
4 11	14 40.09	-40 31.2	1.066	1.962	17.9	19.4	4 11	14 36.80	-20 6.3	1.743	2.697	8.1	20.7
4 21	14 29.83	-39 6.4	1.010	1.954	14.1	19.2	4 21	14 28.27	-19 29.8	1.686	2.680	4.1	20.4
5 1	14 18.06	-36 49.0	0.974	1.945	11.2	19.0	5 1	14 18.79	-18 42.3	1.657	2.662	1.9	20.3
5 11	14 7.01	-33 47.3	0.961	1.936	11.1	18.9	5 11	14 9.50	-17 48.6	1.655	2.644	5.6	20.5
5 21	13 58.51	-30 20.0	0.971	1.926	14.0	19.1	5 21	14 1.41	-16 54.7	1.679	2.625	9.9	20.7
5 31	13 53.76	-26 50.0	1.004	1.917	18.2	19.3	5 31	13 55.37	-16 7.0	1.728	2.606	13.7	20.9
385893	2006 <i>SJ</i> ₂₃₂		4 27.9 259°41	3°3/30.5	18 R		381499	2008 <i>SJ</i> ₁₁₈		4 27.9 113°65	0°4/28.2	17	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
51935	2001 <i>QK</i> ₁₃₄		4 27.9 144°66	2°2/ 1.8	18		360522	2003 <i>QQ</i> ₇₁		4 27.9 269°29	6°3/21.6	18	
3 22	14 38.09	-27 58.7	4.851	5.594	7.3	19.7	3 22	14 45.35	-5 55.2	1.651	2.497	14.9	20.7
4 1	14 34.61	-27 52.1	4.754	5.597	6.0	19.6	4 1	14 41.79	-3 38.6	1.558	2.475	11.6	20.4
4 11	14 30.26	-27 37.5	4.681	5.601	4.4	19.5	4 11	14 35.77	-1 8.7	1.489	2.453	8.2	20.2
4 21	14 25.33	-27 15.2	4.635	5.604	3.0	19.4	4 21	14 27.87	+1 24.7	1.447	2.431	6.3	20.0
5 1	14 20.16	-26 46.2	4.619	5.608	2.2	19.3	5 1	14 19.04	+3 49.0	1.433	2.408	7.9	20.0
5 11	14 15.14	-26 12.2	4.632	5.611	2.8	19.4	5 11	14 10.44	+5 52.3	1.446	2.384	11.6	20.2
5 21	14 10.58	-25 35.2	4.674	5.614	4.2	19.5	5 21	14 3.11	+7 26.5	1.482	2.360	15.5	20.4
5 31	14 6.79	-24 57.5	4.743	5.617	5.7	19.6	5 31	13 57.90	+8 27.9	1.538	2.336	19.0	20.5
439185	2011 <i>WY</i> ₁₁₃		4 27.9 215°82	3°7/23.9	18		411181	2010 <i>GH</i> ₁₁₈		4 27.9 295°58	5°1/25.0	17	
3 22	14 45.73	-1 5.2	2.968	3.786	9.7	21.9	3 22	14 48.28	-5 15.2	1.343	2.196	17.3	21.2
4 1	14 40.82	-0 33.3	2.879	3.778	7.6	21.7	4 1	14 44.59	-4 34.8	1.261	2.182	13.5	20.9
4 11	14 34.47	-0 2.2	2.815	3.769	5.4	21.6	4 11	14 37.88	-3 50.3	1.199	2.167	9.2	20.6
4 21	14 27.13	+0 24.9	2.778	3.760	3.8	21.5	4 21	14 28.83	-3 7.9	1.160	2.153	5.6	20.3
5 1	14 19.35	+0 44.9	2.772	3.750	4.3	21.5	5 1	14 18.61	-2 35.1	1.145	2.139	6.1	20.3
5 11	14 11.77	+0 55.1	2.794	3.740	6.3	21.6	5 11	14 8.70	-2 18.8	1.155	2.125	10.3	20.5
5 21	14 4.93	+0 54.0	2.844	3.729	8.6	21.7	5 21	14 0.42	-2 22.8	1.186	2.111	14.9	20.7
5 31	13 59.33	+0 41.0	2.917	3.718	10.8	21.9	5 31	13 54.77	-2 48.6	1.237	2.098	19.1	20.9
127996	2003 <i>HJ</i> ₅₀		4 27.9 153°87	10°6/19.9	17		106786	2000 <i>XZ</i> ₂₁		4 27.9 45°73	0°7/28.4	18	
3 22	14 51.11	+15 21.3	1.958	2.764	14.5	19.9	3 22	14 47.14	-16 3.7	2.235	3.044	12.8	18.7
4 1	14 45.50	+16 21.9	1.902	2.766	12.5	19.8	4 1	14 42.42	-16 14.8	2.154	3.049	9.9	18.5
4 11	14 37.73	+17 8.1	1.868	2.768	11.1	19.7	4 11	14 35.77	-16 18.3	2.096	3.055	6.6	18.3
4 21	14 28.50	+17 32.8	1.857	2.770	10.6	19.6	4 21	14 27.75	-16 15.2	2.064	3.061	2.9	18.1
5 1	14 18.76	+17 30.8	1.871	2.772	11.3	19.7	5 1	14 19.15	-16 7.2	2.060	3.067	1.2	18.0
5 11	14 9.55	+17 0.3	1.909	2.774	13.0	19.8	5 11	14 10.86	-15 57.3	2.085	3.073	4.8	18.2
5 21	14 1.70	+16 3.1	1.968	2.776	15.0	19.9	5 21	14 3.65	-15 48.6	2.137	3.079	8.3	18.5
5 31	13 55.85	+14 43.0	2.047	2.777	17.0	20.1	5 31	13 58.14	-15 44.2	2.214	3.085	11.4	18.7
467784	2009 <i>WY</i> ₁₆₁		4 27.9 231°66	1°3/29.0	17		248674	2006 <i>JK</i> ₄₉		4 27.9 67°54	0°4/27.6	18	
3 22	14 48.36	-19 56.6	2.281	3.074	13.1	22.1	3 22	14 45.36	-16 50.7	1.822	2.644	14.8	20.4
4 1	14 43.50	-19 43.8	2.176	3.061	10.3	21.9	4 1	14 41.26	-16 2.0	1.757	2.662	11.3	20.2
4 11	14 36.57	-19 19.1	2.094	3.047	7.0	21.6	4 11	14 35.05	-15 0.7	1.715	2.680	7.3	20.0
4 21	14 28.11	-18 43.1	2.039	3.033	3.4	21.4	4 21	14 27.43	-13 50.7	1.699	2.698	3.0	19.8
5 1	14 18.89	-17 58.4	2.012	3.017	1.5	21.2	5 1	14 19.34	-12 37.7	1.710	2.716	1.6	19.7
5 11	14 9.87	-17 9.3	2.014	3.001	5.0	21.4	5 11	14 11.78	-11 28.2	1.748	2.734	5.8	20.1
5 21	14 1.88	-16 20.6	2.044	2.985	8.7	21.6	5 21	14 5.58	-10 28.3	1.813	2.752	9.7	20.3
5 31	13 55.64	-15 37.4	2.098	2.968	12.0	21.8	5 31	14 1.31	-9 42.1	1.901	2.770	13.1	20.6
94032	2000 <i>XC</i> ₄₁		4 27.9 20°77	1°6/28.8	18		384498	2010 <i>CM</i> ₆₁		4 27.9 75°55	1°7/26.5	17	
3 22	14 52.27	-16 43.1	2.182	2.980	13.4	18.3	3 22	14 44.95	-12 7.3	1.946	2.775	13.7	21.4
4 1	14 46.49	-17 29.0	2.095	2.983	10.5	18.1	4 1	14 40.96	-11 26.6	1.867	2.776	10.4	21.2
4 11	14 38.52	-18 8.7	2.031	2.985	7.1	17.9	4 11	14 34.92	-10 37.5	1.810	2.777	6.7	21.0
4 21	14 28.91	-18 41.4	1.995	2.988	3.5	17.7	4 21	14 27.42	-9 43.7	1.779	2.778	2.9	20.8
5 1	14 18.55	-19 7.2	1.987	2.992	1.8	17.6	5 1	14 19.32	-8 50.3	1.777	2.779	2.6	20.7
5 11	14 8.43	-19 27.4	2.009	2.995	5.1	17.8	5 11	14 11.58	-8 2.8	1.801	2.780	6.3	21.0
5 21	13 59.48	-19 44.3	2.058	2.999	8.6	18.0	5 21	14 5.03	-7 25.6	1.851	2.781	10.1	21.2
5 31	13 52.42	-20 0.8	2.132	3.002	11.8	18.2	5 31	14 0.30	-7 2.0	1.924	2.782	13.4	21.4
351230	2004 <i>PM</i> ₄₉		4 27.9 313°43	9°3/18.3	18		10951	Spessart		4 27.9 130°58	1°1/26.8	18	
3 22	14 42.84	+10 45.4	2.066	2.895	13.0	19.9	3 22	14 43.85	-14 3.4	2.288	3.107	12.2	18.7
4 1	14 39.29	+12 10.4	1.993	2.879	11.1	19.8	4 1	14 39.79	-13 14.7	2.208	3.112	9.3	18.5
4 11	14 33.80	+13 27.3	1.943	2.863	9.7	19.7	4 11	14 33.98	-12 17.0	2.151	3.116	6.0	18.3
4 21	14 26.93	+14 28.6	1.917	2.847	9.4	19.6	4 21	14 26.99	-11 13.7	2.122	3.121	2.5	18.1
5 1	14 19.45	+15 7.9	1.916	2.831	10.4	19.6	5 1	14 19.52	-10 9.5	2.122	3.126	1.9	18.0
5 11	14 12.23	+15 21.0	1.938	2.816	12.3	19.7	5 11	14 12.40	-9 9.4	2.150	3.130	5.4	18.3
5 21	14 6.06	+15 7.3	1.982	2.801	14.5	19.8	5 21	14 6.29	-8 17.9	2.205	3.134	8.8	18.5
5 31	14 1.56	+14 28.2	2.044	2.787	16.6	20.0	5 31	14 1.74	-7 38.3	2.285	3.138	11.7	18.7
412154	2013 <i>GG</i> ₇₃		4 27.9 297°55	4°8/25.2	17		172022	2001 <i>UZ</i> ₂₀₉		4 27.9 119°07	6°3/20.5	17	
3 22	14 48.40	-5 23.3	1.385	2.236	17.0	20.3	3 22	14 44.47	+6 46.4	2.733	3.552	10.5	20.5
4 1	14 44.54	-4 46.1	1.305	2.225	13.2	20.0	4 1	14 39.82	+7 59.0	2.682	3.570	8.5	20.4
4 11	14 37.74	-4 5.3	1.246	2.214	8.9	19.7	4 11	14 33.78	+9 6.0	2.656	3.586	6.9	20.3
4 21	14 28.72	-3 26.7	1.209	2.203	5.3	19.5	4 21	14 26.84	+10 2.5	2.657	3.603	6.3	20.3
5 1	14 18.63	-2 57.3	1.198	2.192	5.8	19.5	5 1	14 19.61	+10 44.1	2.686	3.619	7.0	20.4
5 11	14 8.89	-2 43.4	1.211	2.182	9.9	19.7	5 11	14 12.74	+11 8.3	2.742	3.634	8.6	20.5
5 21	14 0.76	-2 48.5	1.247	2.171	14.4	19.9	5 21	14 6.74	+11 14.4	2.822	3.650	10.4	20.6
5 31	13 55.20	-3 14.0	1.302	2.161	18.5	20.1	5 31	14 2.06	+11 3.1	2.923	3.664	12.1	20.8
409180	2003 <i>UK</i> ₂₉₇		4 27.9 143°96	1°9/29.1	16		395522	2011 <i>UB</i> ₁₃₆		4 27.9 190°86	0°4/27.5	17	
3 22	14 52.18	-19 21.8	1.754	2.559	15.9	21.4	3 22	14 43.17	-15 35.7	2.657	3.466	11.0	21.8
4 1	14 46.86	-19 35.3	1.675	2.565	12.6	21.2	4 1	14 39.09	-14 57.2	2.567	3.465	8.4	21.6
4 11	14 38.94	-19 36.6	1.617	2.571	8.6	21.0	4 11	14 33.46	-14 10.1	2.502	3.464	5.5	21.4
4 21	14 29.12	-19 25.7	1.583	2.577	4.3	20.7	4 21	14 26.77	-13 16.8	2.464	3.462	2.2	21.2
5 1	14 18.49	-19 4.5	1.577	2.582	2.1	20.6	5 1	14 19.63	-12 20.8	2.455	3.461	1.3	21.1
5 11	14 8.28	-18 37.4	1.599	2.587	5.9	20.8	5 11	14 12.75	-11 26.3	2.476	3.459	4.5	21.4
5 21	13 59.59	-18 9.6	1.647	2.592	10.1	21.1	5 21	14 6.72	-10 37.4	2.525	3.457	7.6	21.6
5 31	13 53.21	-17 46.4	1.717	2.596	13.8	21.3	5 31	14 2.05	-9 57.2	2.598	3.455	10.4	21.7
471344	2011 <i>QE</i> ₂₂		4 27.9 109°45	3°1/24.8	17		38364	1999 <i>RT</i> ₁₅₇		4 27.9 170°01	2°2/25.5	18	
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
432019	2008 <i>VN</i> ₃₃		4 27.9 184°61	2°1/26.1	18		58821	1998 <i>HZ</i> ₅		4 27.9 52°23	2°5/25.8	18	
3 22	14 46.89	- 9 19.6	2.298	3.119	12.1	21.6	3 22	14 43.89	- 9 37.5	2.007	2.841	13.1	19.4
4 1	14 42.13	- 8 50.3	2.214	3.120	9.2	21.4	4 1	14 39.98	- 8 51.8	1.941	2.853	10.0	19.3
4 11	14 35.54	- 8 16.2	2.155	3.119	6.0	21.2	4 11	14 34.18	- 8 0.5	1.899	2.866	6.4	19.1
4 21	14 27.67	- 7 40.5	2.122	3.119	2.9	21.0	4 21	14 27.11	- 7 7.9	1.883	2.880	3.1	18.9
5 1	14 19.26	- 7 7.0	2.118	3.118	2.8	21.0	5 1	14 19.60	- 6 18.9	1.894	2.893	3.3	18.9
5 11	14 11.14	- 6 39.5	2.143	3.116	5.9	21.2	5 11	14 12.50	- 5 38.4	1.933	2.907	6.5	19.1
5 21	14 4.04	- 6 21.3	2.194	3.115	9.2	21.4	5 21	14 6.56	- 5 9.9	1.997	2.920	9.9	19.4
5 31	13 58.55	- 6 14.3	2.269	3.112	12.2	21.6	5 31	14 2.33	- 4 55.6	2.085	2.934	12.8	19.6
403265	2008 <i>YQ</i> ₁₄₄		4 27.9 221°70	0°8/28.5	16		172065	2001 <i>XL</i> ₂₄₅		4 27.9 72°04	5°5/23.1	17	
3 22	14 49.44	-18 55.4	1.696	2.509	16.0	22.1	3 22	14 45.64	+ 1 8.6	2.166	2.999	12.3	19.4
4 1	14 44.97	-18 32.3	1.605	2.502	12.6	21.9	4 1	14 41.07	+ 2 0.4	2.111	3.016	9.7	19.3
4 11	14 37.85	-17 53.8	1.535	2.495	8.5	21.6	4 11	14 34.76	+ 2 49.0	2.081	3.033	7.1	19.1
4 21	14 28.76	-17 1.6	1.490	2.487	3.8	21.3	4 21	14 27.32	+ 3 29.5	2.076	3.051	5.6	19.1
5 1	14 18.75	-15 59.8	1.472	2.478	1.5	21.1	5 1	14 19.52	+ 3 57.2	2.099	3.068	6.2	19.1
5 11	14 9.07	-14 55.1	1.481	2.469	6.2	21.4	5 11	14 12.16	+ 4 9.0	2.149	3.085	8.4	19.3
5 21	14 0.84	-13 54.6	1.516	2.460	10.8	21.6	5 21	14 5.91	+ 4 4.0	2.223	3.103	10.9	19.5
5 31	13 54.90	-13 4.8	1.573	2.450	14.9	21.9	5 31	14 1.28	+ 3 42.5	2.319	3.120	13.3	19.7
167326	2003 <i>UV</i> ₂₆₇		4 27.9 262°10	1°6/26.8	18		62829	2000 <i>UP</i> ₅₃		4 27.9 234°01	2°0/25.9	18	
3 22	14 49.33	- 9 50.2	2.153	2.972	12.9	19.8	3 22	14 44.72	- 8 55.1	2.667	3.486	10.7	19.8
4 1	14 44.32	- 9 45.6	2.053	2.956	10.0	19.6	4 1	14 40.30	- 8 26.5	2.572	3.476	8.2	19.6
4 11	14 37.18	- 9 36.9	1.976	2.940	6.5	19.3	4 11	14 34.30	- 7 53.8	2.502	3.466	5.3	19.4
4 21	14 28.44	- 9 26.2	1.926	2.924	2.9	19.1	4 21	14 27.18	- 7 19.7	2.460	3.456	2.6	19.2
5 1	14 18.90	- 9 16.4	1.904	2.907	2.4	19.0	5 1	14 19.54	- 6 47.6	2.447	3.445	2.6	19.2
5 11	14 9.50	- 9 10.6	1.911	2.890	6.0	19.2	5 11	14 12.10	- 6 20.9	2.462	3.435	5.4	19.4
5 21	14 1.15	- 9 11.9	1.945	2.873	9.8	19.4	5 21	14 5.47	- 6 2.3	2.505	3.423	8.4	19.5
5 31	13 54.57	- 9 22.3	2.002	2.855	13.2	19.6	5 31	14 0.20	- 5 53.8	2.573	3.412	11.0	19.7
498711	2008 <i>TS</i> ₈₄		4 27.9 238°12	0°6/28.4	17		12036	1997 <i>CR</i> ₁₉		4 27.9 70°09	1°4/28.9	18	
3 22	14 47.16	-17 27.4	2.077	2.886	13.7	21.7	3 22	14 49.05	-18 15.5	1.844	2.654	15.1	17.6
4 1	14 42.72	-17 16.8	1.983	2.878	10.6	21.5	4 1	14 44.34	-18 26.7	1.766	2.661	11.8	17.4
4 11	14 36.14	-16 55.5	1.912	2.871	7.1	21.2	4 11	14 37.26	-18 27.0	1.710	2.667	8.0	17.2
4 21	14 28.00	-16 24.9	1.866	2.863	3.2	21.0	4 21	14 28.48	-18 17.0	1.679	2.674	3.8	16.9
5 1	14 19.13	-15 47.9	1.849	2.855	1.3	20.8	5 1	14 18.98	-17 58.9	1.675	2.681	1.7	16.8
5 11	14 10.51	-15 9.0	1.860	2.847	5.3	21.1	5 11	14 9.88	-17 36.6	1.699	2.688	5.5	17.0
5 21	14 3.02	-14 32.7	1.897	2.839	9.2	21.3	5 21	14 2.15	-17 14.8	1.748	2.694	9.5	17.3
5 31	13 57.37	-14 3.5	1.958	2.830	12.6	21.5	5 31	13 56.52	-16 57.8	1.821	2.701	13.0	17.5
472364	2015 <i>BJ</i> ₃₁		4 27.9 107°93	2°1/26.1	17		184985	2006 <i>CC</i> ₅₁		4 27.9 277°86	1°1/26.2	18	
3 22	14 45.29	-11 33.7	1.885	2.716	14.0	20.9	3 22	14 37.72	- 9 51.6	4.241	5.055	7.1	20.9
4 1	14 41.26	-10 43.0	1.809	2.720	10.6	20.7	4 1	14 34.43	- 9 26.4	4.145	5.048	5.4	20.7
4 11	14 35.13	- 9 43.8	1.756	2.724	6.9	20.5	4 11	14 30.23	- 8 58.5	4.076	5.040	3.5	20.6
4 21	14 27.54	- 8 40.4	1.729	2.727	3.1	20.3	4 21	14 25.42	- 8 29.6	4.036	5.033	1.6	20.4
5 1	14 19.37	- 7 38.6	1.730	2.731	3.0	20.3	5 1	14 20.34	- 8 1.4	4.026	5.026	1.5	20.4
5 11	14 11.59	- 6 44.2	1.758	2.735	6.7	20.5	5 11	14 15.39	- 7 36.2	4.045	5.019	3.4	20.6
5 21	14 5.05	- 6 2.2	1.812	2.738	10.5	20.7	5 21	14 10.90	- 7 15.5	4.093	5.011	5.4	20.7
5 31	14 0.38	- 5 35.5	1.888	2.742	13.8	21.0	5 31	14 7.18	- 7 0.9	4.166	5.004	7.2	20.8
147803	2005 <i>SQ</i> ₅₂		4 27.9 257°11	0°3/27.7	18		500860	2013 <i>JZ</i> ₁₀		4 27.9 303°46	2°0/26.6	17	
3 22	14 44.86	-14 50.5	2.587	3.396	11.3	21.1	3 22	14 44.29	-13 41.6	1.358	2.206	17.4	21.6
4 1	14 40.55	-14 31.9	2.483	3.380	8.7	20.9	4 1	14 41.62	-12 52.2	1.267	2.187	13.5	21.3
4 11	14 34.55	-14 5.6	2.403	3.364	5.7	20.7	4 11	14 36.03	-11 47.1	1.197	2.168	8.8	21.0
4 21	14 27.30	-13 33.5	2.350	3.348	2.4	20.4	4 21	14 28.15	-10 30.8	1.149	2.149	3.8	20.6
5 1	14 19.45	-12 58.2	2.325	3.331	1.2	20.3	5 1	14 19.09	- 9 10.8	1.126	2.130	3.2	20.5
5 11	14 11.76	-12 23.4	2.331	3.315	4.7	20.5	5 11	14 10.27	- 7 56.7	1.128	2.112	8.5	20.8
5 21	14 4.90	-11 52.5	2.363	3.297	8.0	20.7	5 21	14 3.00	- 6 57.2	1.153	2.094	13.8	21.0
5 31	13 59.47	-11 28.9	2.421	3.280	11.0	20.9	5 31	13 58.29	- 6 18.6	1.197	2.077	18.4	21.2
436646	2011 <i>QJ</i> ₃₁		4 27.9 191°88	0°8/28.8	17		209430	2004 <i>FR</i> ₅₆		4 27.9 334°42	3°0/25.7	17	
3 22	14 44.47	-19 43.5	2.507	3.304	11.9	21.2	3 22	14 44.04	- 7 48.8	1.854	2.694	13.8	19.8
4 1	14 40.23	-19 14.1	2.415	3.303	9.3	21.0	4 1	14 40.46	- 7 19.1	1.770	2.685	10.6	19.6
4 11	14 34.29	-18 33.2	2.346	3.301	6.3	20.8	4 11	14 34.74	- 6 45.0	1.708	2.676	7.0	19.3
4 21	14 27.16	-17 42.7	2.305	3.300	2.9	20.6	4 21	14 27.45	- 6 10.4	1.672	2.668	3.6	19.1
5 1	14 19.53	-16 45.7	2.292	3.298	1.2	20.5	5 1	14 19.45	- 5 40.1	1.663	2.661	3.8	19.1
5 11	14 12.18	-15 46.6	2.308	3.296	4.4	20.7	5 11	14 11.74	- 5 18.9	1.680	2.654	7.3	19.3
5 21	14 5.77	-14 50.0	2.353	3.293	7.7	20.9	5 21	14 5.19	- 5 10.0	1.721	2.647	11.0	19.5
5 31	14 0.85	-14 0.2	2.422	3.291	10.6	21.1	5 31	14 0.51	- 5 15.5	1.785	2.641	14.4	19.7
93917	2000 <i>WV</i> ₁₅₈		4 27.9 95°85	3°2/25.1	18		165356	2000 <i>WE</i> ₆₉		4 27.9 237°67	4°6/30.9	17	
3 22	14 46.13	- 8 37.5	1.950	2.782	13.5	19.8	3 22	14 51.78	-25 56.5	1.763	2.546	16.7	20.4
4 1	14 41.67	- 7 32.9	1.887	2.799	10.2	19.6	4 1	14 47.01	-26 22.5	1.665	2.536	13.7	20.1
4 11	14 35.26	- 6 22.7	1.849	2.815	6.7	19.4	4 11	14 39.38	-26 31.8	1.588	2.525	10.2	19.9
4 21	14 27.55	- 5 12.2	1.837	2.831	3.6	19.2	4 21	14 29.52	-26 22.1	1.534	2.513	6.5	19.6
5 1	14 19.41	- 4 7.6	1.852	2.847	4.0	19.3	5 1	14 18.50	-25 53.6	1.506	2.502	4.6	19.5
5 11	14 11.76	- 3 14.3	1.896	2.863	7.2	19.5	5 11	14 7.69	-25 9.9	1.505	2.489	6.7	19.6
5 21	14 5.34	- 2 36.1	1.965	2.878	10.5	19.7	5 21	13 58.35	-24 17.5	1.529	2.476	10.5	19.8
5 31	14 0.73	- 2 15.0	2.057	2.893	13.5	20.0	5 31	13 51.45	-23 24.4	1.577	2.463	14.4	20.0
274060	2007 <i>TF</i> ₁₁₁		4 27.9 203°02	2°7/ 2.0	18		138602	2000 <i>QY</i> ₁₇₆		4			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
369898	2012 <i>TU</i> ₂₇₁		4 27.9 140°04	1.2/26.9	17		118882	2000 <i>TL</i> ₅₉		4 27.9 121°43	6°2/23.2	18	
3 22	14 46.30	-12 21.6	2.112	2.934	13.0	21.3	3 22	14 49.28	+ 2 25.4	2.038	2.866	13.2	19.5
4 1	14 41.87	-11 58.2	2.031	2.937	10.0	21.1	4 1	14 44.01	+ 3 12.6	1.976	2.877	10.4	19.3
4 11	14 35.47	-11 27.7	1.974	2.939	6.4	20.9	4 11	14 36.77	+ 3 55.6	1.938	2.888	7.8	19.2
4 21	14 27.70	-10 53.0	1.943	2.942	2.7	20.7	4 21	14 28.21	+ 4 29.1	1.926	2.898	6.2	19.1
5 1	14 19.37	-10 17.8	1.940	2.944	2.0	20.6	5 1	14 19.20	+ 4 48.2	1.942	2.908	6.9	19.2
5 11	14 11.36	- 9 46.3	1.965	2.946	5.7	20.9	5 11	14 10.64	+ 4 49.8	1.984	2.918	9.1	19.3
5 21	14 4.46	- 9 22.3	2.017	2.949	9.3	21.1	5 21	14 3.32	+ 4 33.4	2.050	2.928	11.8	19.5
5 31	13 59.30	- 9 8.7	2.092	2.951	12.5	21.3	5 31	13 57.81	+ 3 59.6	2.139	2.937	14.3	19.7
343161	2009 <i>KH</i> ₃		4 27.9 284°05	3°7/20.8	18		299839	2006 <i>SY</i> ₂₀₀		4 27.9 140°19	0°5/28.4	18	
3 22	14 36.65	+ 3 25.0	4.400	5.222	6.7	20.7	3 22	14 45.71	-17 7.6	2.536	3.338	11.7	21.9
4 1	14 33.59	+ 4 24.5	4.313	5.208	5.4	20.6	4 1	14 41.12	-16 55.4	2.452	3.344	9.0	21.7
4 11	14 29.69	+ 5 22.5	4.253	5.194	4.2	20.5	4 11	14 34.86	-16 34.7	2.392	3.350	6.0	21.5
4 21	14 25.20	+ 6 16.2	4.221	5.179	3.7	20.4	4 21	14 27.44	-16 6.9	2.359	3.356	2.6	21.3
5 1	14 20.47	+ 7 2.8	4.218	5.165	4.3	20.5	5 1	14 19.54	-15 34.6	2.355	3.361	1.0	21.1
5 11	14 15.83	+ 7 40.2	4.244	5.150	5.5	20.5	5 11	14 11.94	-15 1.3	2.380	3.366	4.4	21.4
5 21	14 11.62	+ 8 6.9	4.296	5.135	6.9	20.6	5 21	14 5.28	-14 30.5	2.433	3.372	7.6	21.6
5 31	14 8.13	+ 8 22.4	4.370	5.121	8.3	20.7	5 31	14 0.11	-14 5.5	2.510	3.376	10.4	21.8
431032	2006 <i>AE</i> ₅₉		4 27.9 195°58	2°5/25.6	18		497467	2005 <i>YR</i> ₁₃₉		4 27.9 168°49	2°1/25.9	17	
3 22	14 47.55	- 8 12.6	2.488	3.305	11.4	22.4	3 22	14 48.40	- 8 50.5	2.549	3.362	11.3	23.2
4 1	14 42.52	- 7 31.9	2.399	3.302	8.7	22.2	4 1	14 43.07	- 8 16.6	2.467	3.368	8.6	23.0
4 11	14 35.77	- 6 46.8	2.335	3.298	5.7	22.0	4 11	14 36.07	- 7 38.5	2.410	3.373	5.6	22.8
4 21	14 27.80	- 6 0.7	2.299	3.294	3.0	21.8	4 21	14 27.93	- 6 59.3	2.381	3.377	2.8	22.6
5 1	14 19.32	- 5 17.7	2.293	3.289	3.2	21.8	5 1	14 19.34	- 6 22.6	2.382	3.380	2.8	22.6
5 11	14 11.09	- 4 41.7	2.315	3.283	6.0	22.0	5 11	14 11.04	- 5 52.0	2.412	3.383	5.6	22.8
5 21	14 3.81	- 4 15.8	2.365	3.276	9.1	22.2	5 21	14 3.71	- 5 30.4	2.470	3.385	8.6	23.0
5 31	13 58.02	- 4 2.2	2.439	3.269	11.8	22.3	5 31	13 57.86	- 5 19.6	2.553	3.386	11.3	23.2
303229	2004 <i>OU</i> ₈		4 27.9 246°55	6°5/ 2.5	16		214688	2006 <i>SN</i> ₂₄₇		4 27.9 306°49	1°3/28.7	17	
3 22	14 50.94	-31 7.7	1.645	2.413	18.3	21.2	3 22	14 47.81	-17 19.6	1.411	2.244	17.7	20.7
4 1	14 46.71	-31 30.3	1.546	2.401	15.4	21.0	4 1	14 44.46	-17 32.9	1.316	2.224	14.0	20.4
4 11	14 39.36	-31 30.3	1.466	2.388	12.1	20.7	4 11	14 38.02	-17 33.9	1.241	2.204	9.6	20.1
4 21	14 29.56	-31 4.0	1.408	2.375	8.6	20.5	4 21	14 29.08	-17 22.7	1.188	2.185	4.5	19.8
5 1	14 18.50	-30 10.7	1.375	2.361	6.5	20.4	5 1	14 18.76	-17 1.6	1.160	2.167	1.9	19.5
5 11	14 7.68	-28 54.9	1.367	2.347	7.8	20.4	5 11	14 8.56	-16 35.5	1.157	2.148	7.1	19.8
5 21	13 58.52	-27 25.4	1.384	2.333	11.3	20.5	5 21	13 59.91	-16 10.6	1.177	2.130	12.4	20.0
5 31	13 52.08	-25 53.0	1.424	2.318	15.2	20.7	5 31	13 53.94	-15 53.2	1.218	2.113	17.1	20.3
176550	2002 <i>AS</i> ₁₁₀		4 27.9 206°74	7°7/ 5.9	18		388635	2007 <i>TM</i> ₁₁₃		4 27.9 70°73	4°8/22.7	18	
3 22	14 49.17	-40 31.1	2.613	3.294	14.2	19.9	3 22	14 46.19	- 3 46.1	2.197	3.027	12.3	20.4
4 1	14 44.35	-41 13.1	2.516	3.292	12.6	19.7	4 1	14 41.31	- 2 0.7	2.157	3.064	9.3	20.3
4 11	14 37.27	-41 36.5	2.438	3.290	10.7	19.6	4 11	14 34.81	- 0 14.7	2.143	3.101	6.5	20.2
4 21	14 28.53	-41 38.1	2.383	3.288	9.0	19.5	4 21	14 27.34	+ 1 24.9	2.157	3.137	4.9	20.2
5 1	14 18.98	-41 16.5	2.352	3.285	7.8	19.4	5 1	14 19.66	+ 2 51.7	2.200	3.173	5.7	20.3
5 11	14 9.69	-40 33.5	2.347	3.283	7.9	19.4	5 11	14 12.52	+ 4 0.8	2.272	3.208	8.0	20.5
5 21	14 1.59	-39 33.6	2.368	3.280	9.0	19.5	5 21	14 6.54	+ 4 49.8	2.369	3.243	10.6	20.7
5 31	13 55.42	-38 23.1	2.413	3.278	10.8	19.6	5 31	14 2.14	+ 5 18.3	2.488	3.278	12.8	20.9
377630	2005 <i>SF</i> ₂₉₀		4 27.9 291°30	1°5/28.8	17		308501	2005 <i>TV</i> ₁₅₈		4 27.9 145°57	0°2/27.8	17	
3 22	14 49.91	-17 24.8	1.669	2.487	16.1	21.7	3 22	14 43.11	-16 35.4	2.482	3.291	11.7	21.1
4 1	14 45.57	-17 46.3	1.572	2.471	12.7	21.4	4 1	14 39.18	-15 56.9	2.396	3.293	9.0	20.9
4 11	14 38.46	-17 57.8	1.495	2.455	8.7	21.1	4 11	14 33.62	-15 8.6	2.334	3.295	5.8	20.7
4 21	14 29.16	-17 59.3	1.443	2.439	4.2	20.8	4 21	14 26.93	-14 13.2	2.299	3.297	2.4	20.5
5 1	14 18.68	-17 52.0	1.417	2.423	1.9	20.6	5 1	14 19.79	-13 14.3	2.293	3.299	1.2	20.4
5 11	14 8.34	-17 39.4	1.418	2.407	6.3	20.9	5 11	14 12.93	-12 16.6	2.316	3.300	4.6	20.6
5 21	13 59.36	-17 26.1	1.444	2.392	11.0	21.1	5 21	14 7.00	-11 24.3	2.366	3.302	7.9	20.8
5 31	13 52.75	-17 17.4	1.492	2.376	15.1	21.3	5 31	14 2.52	-10 41.1	2.441	3.304	10.8	21.0
312880	2011 <i>UL</i> ₁₉₆		4 27.9 146°34	1°5/29.4	17		77831	2001 <i>QL</i> ₂₂₆		4 27.9 82°21	3°9/ 1.4	18 R	
3 22	14 46.17	-19 57.9	2.591	3.382	11.8	21.3	3 22	14 46.88	-26 59.4	2.193	2.965	14.2	19.0
4 1	14 41.52	-20 3.4	2.502	3.385	9.2	21.2	4 1	14 42.46	-27 10.9	2.109	2.972	11.5	18.8
4 11	14 35.14	-19 59.6	2.437	3.388	6.3	21.0	4 11	14 35.95	-27 6.9	2.047	2.979	8.6	18.6
4 21	14 27.56	-19 47.0	2.399	3.391	3.2	20.8	4 21	14 27.96	-26 47.0	2.010	2.986	5.6	18.4
5 1	14 19.45	-19 27.2	2.389	3.393	1.6	20.7	5 1	14 19.34	-26 12.4	1.999	2.993	3.9	18.3
5 11	14 11.59	-19 3.3	2.408	3.396	4.2	20.8	5 11	14 11.07	-25 27.0	2.017	3.000	5.4	18.4
5 21	14 4.66	-18 38.4	2.456	3.398	7.3	21.0	5 21	14 3.99	-24 35.9	2.061	3.007	8.3	18.6
5 31	13 59.22	-18 16.3	2.528	3.401	10.1	21.2	5 31	13 58.77	-23 45.1	2.129	3.014	11.2	18.8
237153	2008 <i>UV</i> ₉₅		4 27.9 155°35	3°1/25.2	17		215461	2002 <i>QB</i> ₃₀		4 27.9 265°62	1°4/26.9	17	
3 22	14 46.52	- 6 50.8	2.167	2.995	12.5	20.8	3 22	14 49.09	-12 35.2	1.806	2.631	14.7	22.0
4 1	14 41.91	- 6 8.9	2.091	2.999	9.5	20.6	4 1	14 44.68	-12 9.3	1.702	2.609	11.5	21.7
4 11	14 35.44	- 5 23.5	2.038	3.003	6.3	20.4	4 11	14 37.74	-11 33.9	1.621	2.586	7.5	21.5
4 21	14 27.68	- 4 38.6	2.013	3.006	3.6	20.2	4 21	14 28.85	-10 51.8	1.565	2.564	3.2	21.1
5 1	14 19.40	- 3 59.0	2.016	3.010	3.9	20.3	5 1	14 18.91	-10 7.4	1.536	2.540	2.4	21.0
5 11	14 11.48	- 3 28.8	2.047	3.013	6.8	20.5	5 11	14 9.09	- 9 26.3	1.535	2.516	6.9	21.2
5 21	14 4.63	- 3 11.1	2.103	3.015	10.0	20.7	5 21	14 0.48	- 8 54.0	1.559	2.492	11.4	21.4
5 31	13 59.45	- 3 7.3	2.183	3.018	12.9	20.9	5 31	13 53.97	- 8 34.7	1.605	2.467	15.4	21.6
111804	2002 <i>CE</i> ₂₅₆		4 27.9 220°49	3°9/ 1.6	17		252949	2002 <i>PB</i> ₇₆					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
300233	2006 YX ₈		4 27.9 185°28	3°1/24.5	18		1666	van Gent		4 27.9 247°46	1°4/28.9	18	R
3 22	14 44.83	- 3 18.7	3.079	3.897	9.4	21.5	3 22	14 50.35	-19 45.0	1.628	2.440	16.7	16.4
4 1	14 40.10	- 2 44.1	2.996	3.897	7.3	21.4	4 1	14 45.99	-19 30.8	1.530	2.425	13.2	16.1
4 11	14 34.05	- 2 9.1	2.938	3.896	5.0	21.2	4 11	14 38.78	-19 0.5	1.452	2.410	9.0	15.8
4 21	14 27.08	- 1 36.6	2.909	3.895	3.3	21.1	4 21	14 29.35	-18 14.8	1.398	2.393	4.3	15.5
5 1	14 19.75	- 1 9.7	2.909	3.893	3.7	21.1	5 1	14 18.77	-17 16.9	1.370	2.377	1.8	15.3
5 11	14 12.63	- 0 51.1	2.939	3.891	5.7	21.2	5 11	14 8.40	-16 13.3	1.370	2.359	6.5	15.5
5 21	14 6.24	- 0 42.5	2.996	3.889	8.0	21.4	5 21	13 59.49	-15 11.6	1.395	2.341	11.4	15.8
5 31	14 1.02	- 0 44.9	3.077	3.886	10.1	21.5	5 31	13 53.02	-14 19.4	1.442	2.323	15.8	16.0
501897	2014 WL ₄₂₉		4 27.9 96°22	0°3/27.7	17		483925	2006 BP ₆₂		4 27.9 118°58	20°3/15.1	18	
3 22	14 48.56	-14 16.4	1.957	2.774	14.0	21.0	3 22	14 58.47	+28 39.1	1.233	2.018	22.4	21.2
4 1	14 43.73	-14 7.4	1.883	2.785	10.8	20.8	4 1	14 52.34	+30 42.6	1.210	2.028	21.1	21.1
4 11	14 36.75	-13 50.3	1.832	2.795	7.0	20.6	4 11	14 42.71	+32 10.2	1.203	2.037	20.4	21.1
4 21	14 28.29	-13 27.1	1.807	2.805	2.9	20.3	4 21	14 30.79	+32 49.3	1.212	2.046	20.5	21.1
5 1	14 19.24	-13 1.0	1.809	2.815	1.4	20.2	5 1	14 18.29	+32 32.9	1.237	2.055	21.3	21.2
5 11	14 10.61	-12 36.2	1.840	2.825	5.6	20.5	5 11	14 7.00	+31 22.4	1.278	2.063	22.6	21.3
5 21	14 3.25	-12 16.6	1.896	2.835	9.4	20.8	5 21	13 58.19	+29 25.7	1.334	2.070	24.1	21.4
5 31	13 57.82	-12 5.4	1.977	2.844	12.7	21.0	5 31	13 52.59	+26 53.7	1.402	2.078	25.6	21.6
77912	2001 TF ₂₃₉		4 27.9 41°83	6°0/22.3	18		237241	2008 WP ₃₅		4 27.9 152°71	0°5/28.5	17	
3 22	14 44.28	+ 1 41.6	2.158	2.993	12.3	18.9	3 22	14 46.37	-18 2.5	2.233	3.038	13.0	21.6
4 1	14 40.22	+ 2 46.0	2.088	2.993	9.7	18.7	4 1	14 41.89	-17 39.7	2.149	3.043	10.1	21.4
4 11	14 34.37	+ 3 48.0	2.043	2.994	7.3	18.6	4 11	14 35.50	-17 6.0	2.089	3.047	6.7	21.2
4 21	14 27.27	+ 4 42.1	2.023	2.994	6.1	18.5	4 21	14 27.79	-16 23.3	2.054	3.051	3.0	21.0
5 1	14 19.68	+ 5 22.6	2.031	2.994	6.8	18.5	5 1	14 19.53	-15 34.9	2.048	3.054	1.1	20.8
5 11	14 12.42	+ 5 45.7	2.064	2.995	9.1	18.7	5 11	14 11.59	-14 45.5	2.070	3.058	4.9	21.1
5 21	14 6.21	+ 5 49.6	2.122	2.995	11.7	18.8	5 21	14 4.75	-13 59.7	2.120	3.061	8.4	21.3
5 31	14 1.59	+ 5 34.6	2.201	2.995	14.1	19.0	5 31	13 59.60	-13 21.7	2.195	3.064	11.6	21.5
360525	2003 QK ₁₀₁		4 27.9 258°98	4°4/30.6	17		218745	2005 UV ₄₈₂		4 27.9 150°44	4°4/23.7	17	
3 22	14 51.29	-24 54.5	1.676	2.468	17.1	21.2	3 22	14 46.51	- 4 43.3	2.128	2.959	12.6	21.3
4 1	14 46.82	-25 23.6	1.577	2.454	14.0	20.9	4 1	14 41.91	- 3 26.3	2.058	2.967	9.7	21.2
4 11	14 39.40	-25 36.5	1.498	2.440	10.3	20.7	4 11	14 35.45	- 2 6.2	2.013	2.974	6.6	21.0
4 21	14 29.63	-25 31.0	1.443	2.425	6.5	20.4	4 21	14 27.75	+ 0 48.7	1.995	2.981	4.5	20.9
5 1	14 18.59	-25 6.9	1.413	2.410	4.4	20.3	5 1	14 19.57	+ 0 20.0	2.005	2.988	5.3	20.9
5 11	14 7.71	-24 27.9	1.409	2.395	6.8	20.4	5 11	14 11.78	+ 1 14.4	2.044	2.994	8.0	21.1
5 21	13 58.31	-23 40.4	1.431	2.380	10.9	20.5	5 21	14 5.11	+ 1 51.4	2.107	2.999	10.9	21.3
5 31	13 51.44	-22 52.4	1.475	2.364	15.0	20.7	5 31	14 0.11	+ 2 9.6	2.193	3.004	13.6	21.5
320524	2007 YZ ₄₀		4 27.9 46°21	8°5/23.4	17		271673	2004 RZ ₆₇		4 27.9 242°42	1°2/28.9	18	
3 22	14 51.16	+ 4 31.9	1.445	2.288	16.8	20.3	3 22	14 48.91	-18 58.4	2.253	3.050	13.1	21.8
4 1	14 46.25	+ 5 17.4	1.387	2.294	13.5	20.1	4 1	14 44.07	-18 53.7	2.147	3.034	10.3	21.5
4 11	14 38.63	+ 5 55.0	1.350	2.300	10.4	19.9	4 11	14 37.10	-18 38.2	2.064	3.018	7.0	21.3
4 21	14 29.11	+ 6 16.9	1.336	2.306	8.5	19.8	4 21	14 28.55	-18 12.6	2.007	3.001	3.4	21.0
5 1	14 18.91	+ 6 17.0	1.347	2.313	9.2	19.9	5 1	14 19.19	-17 38.9	1.978	2.984	1.5	20.8
5 11	14 9.33	+ 5 52.1	1.381	2.320	11.9	20.1	5 11	14 9.97	-17 1.0	1.978	2.966	5.0	21.1
5 21	14 1.47	+ 5 3.2	1.438	2.328	15.2	20.3	5 21	14 1.78	-16 23.4	2.006	2.948	8.8	21.3
5 31	13 56.07	+ 3 53.2	1.515	2.335	18.2	20.5	5 31	13 55.35	-15 50.8	2.059	2.929	12.2	21.4
335919	2007 SQ ₁₆		4 27.9 151°35	1°9/26.0	18		425813	2011 DD ₁₈		4 27.9 44°32	1°9/26.6	17	
3 22	14 44.77	-11 26.5	2.378	3.198	11.8	21.3	3 22	14 45.91	-11 51.0	1.677	2.513	15.2	21.6
4 1	14 40.44	-10 32.5	2.299	3.204	8.9	21.1	4 1	14 42.03	-11 13.6	1.605	2.519	11.6	21.3
4 11	14 34.43	- 9 31.4	2.245	3.210	5.8	20.9	4 11	14 35.82	-10 27.5	1.556	2.524	7.5	21.1
4 21	14 27.29	- 8 27.1	2.218	3.215	2.6	20.7	4 21	14 27.98	- 9 36.8	1.532	2.530	3.3	20.9
5 1	14 19.69	- 7 24.1	2.220	3.220	2.6	20.8	5 1	14 19.48	- 8 47.2	1.534	2.537	2.8	20.8
5 11	14 12.43	- 6 27.4	2.251	3.224	5.7	21.0	5 11	14 11.43	- 8 4.4	1.562	2.543	6.9	21.1
5 21	14 6.14	- 5 40.9	2.309	3.229	8.9	21.2	5 21	14 4.77	- 7 33.4	1.616	2.550	11.0	21.4
5 31	14 1.36	- 5 7.4	2.391	3.232	11.7	21.4	5 31	14 0.20	- 7 17.2	1.691	2.556	14.6	21.6
255500	2006 AX ₉₇		4 27.9 141°73	2°0/27.4	17		350241	2012 TJ ₇₁		4 27.9 292°91	0°6/28.5	17	
3 22	15 6.28	- 6 50.3	1.272	2.095	19.8	20.3	3 22	14 44.52	-19 20.9	1.863	2.678	14.7	21.1
4 1	14 58.67	- 7 36.8	1.200	2.103	15.4	20.1	4 1	14 41.16	-18 44.9	1.755	2.653	11.6	20.9
4 11	14 47.23	- 8 25.2	1.148	2.111	10.2	19.8	4 11	14 35.44	-17 52.6	1.668	2.628	7.8	20.6
4 21	14 32.88	- 9 16.1	1.120	2.118	4.5	19.5	4 21	14 27.92	-16 45.7	1.607	2.604	3.5	20.2
5 1	14 17.24	-10 9.6	1.120	2.124	3.0	19.4	5 1	14 19.45	-15 28.5	1.572	2.579	1.3	20.0
5 11	14 2.25	-11 5.9	1.147	2.130	8.5	19.7	5 11	14 11.14	-14 7.7	1.565	2.554	5.9	20.3
5 21	13 49.61	-12 5.5	1.200	2.135	13.9	20.0	5 21	14 3.97	-12 50.8	1.584	2.529	10.4	20.5
5 31	13 40.41	-13 9.3	1.274	2.140	18.4	20.3	5 31	13 58.80	-11 44.8	1.626	2.504	14.4	20.7
147166	2002 VG ₁₂		4 27.9 239°09	2°4/26.3	18		22360	1993 FT ₁₁		4 27.9 188°87	2°1/29.6	18	
3 22	14 49.94	- 9 9.6	1.972	2.795	13.7	20.4	3 22	14 51.19	-20 33.8	2.370	3.153	12.9	18.5
4 1	14 44.98	- 8 44.9	1.876	2.782	10.6	20.2	4 1	14 45.63	-20 51.7	2.275	3.153	10.2	18.3
4 11	14 37.75	- 8 14.7	1.803	2.768	7.0	19.9	4 11	14 38.01	-20 59.7	2.204	3.151	7.1	18.1
4 21	14 28.80	- 7 42.4	1.757	2.754	3.3	19.6	4 21	14 28.89	-20 57.5	2.160	3.150	3.8	17.9
5 1	14 19.02	- 7 12.1	1.739	2.739	3.2	19.6	5 1	14 19.07	-20 46.2	2.144	3.147	2.1	17.8
5 11	14 9.44	- 6 48.4	1.749	2.724	6.9	19.8	5 11	14 9.47	-20 28.5	2.158	3.145	4.8	18.0
5 21	14 1.03	- 6 35.0	1.784	2.708	10.8	20.0	5 21	14 0.94	-20 8.0	2.200	3.141	8.1	18.2
5 31	13 54.55	- 6 34.4	1.843	2.692	14.3	20.2	5 31	13 54.17	-19 48.9	2.267	3.137	11.2	18.4
277596	2006 AF ₂₇		4 27.9 44°55	1°8/26.7	17		73836	1996 FJ ₇		4 2			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
431084	2006 <i>DL</i> ₄₃		4 27.9 240°82	2°1/29.5	17		214158	2005 <i>CJ</i> ₁₆		4 27.9 87°34	1°8/26.8	18	
3 22	14 48.30	-20 50.2	2.060	2.857	14.2	21.7	3 22	14 50.30	-12 24.9	1.519	2.353	16.6	20.8
4 1	14 43.75	-20 55.8	1.965	2.850	11.2	21.4	4 1	14 45.47	-11 46.6	1.460	2.371	12.7	20.5
4 11	14 36.96	-20 49.2	1.891	2.843	7.8	21.2	4 11	14 38.05	-10 58.8	1.423	2.390	8.1	20.3
4 21	14 28.50	-20 30.6	1.844	2.835	4.1	21.0	4 21	14 28.90	-10 6.0	1.409	2.408	3.5	20.1
5 1	14 19.24	-20 1.7	1.823	2.827	2.1	20.8	5 1	14 19.16	-9 14.2	1.423	2.426	2.8	20.1
5 11	14 10.21	-19 26.5	1.831	2.819	5.2	21.0	5 11	14 10.10	-8 30.1	1.463	2.444	7.2	20.4
5 21	14 2.35	-18 49.8	1.865	2.811	9.0	21.2	5 21	14 2.70	-7 58.3	1.527	2.461	11.5	20.7
5 31	13 56.41	-18 16.7	1.924	2.803	12.5	21.4	5 31	13 57.67	-7 42.2	1.613	2.479	15.2	20.9
512981	2017 <i>UD</i> ₁₂		4 27.9 243°80	0°8/27.3	18		369047	2008 <i>CQ</i> ₈₆		4 27.9 276°09	2°3/29.4	17	
3 22	14 47.43	-14 37.1	2.151	2.965	13.1	21.9	3 22	14 50.12	-19 54.1	1.679	2.489	16.3	21.2
4 1	14 42.93	-14 0.9	2.048	2.948	10.1	21.7	4 1	14 45.78	-20 13.4	1.583	2.476	13.0	20.9
4 11	14 36.36	-13 14.5	1.969	2.932	6.6	21.4	4 11	14 38.65	-20 20.2	1.508	2.463	9.1	20.7
4 21	14 28.24	-12 20.3	1.916	2.914	2.7	21.1	4 21	14 29.34	-20 14.0	1.457	2.449	4.7	20.4
5 1	14 19.36	-11 22.5	1.892	2.897	1.8	21.0	5 1	14 18.89	-19 55.9	1.432	2.436	2.5	20.2
5 11	14 10.66	-10 26.4	1.896	2.878	5.8	21.2	5 11	14 8.62	-19 30.0	1.433	2.422	6.3	20.4
5 21	14 3.01	-9 37.2	1.927	2.859	9.7	21.4	5 21	13 59.74	-19 1.5	1.460	2.409	10.8	20.6
5 31	13 57.10	-8 59.3	1.982	2.839	13.1	21.6	5 31	13 53.25	-18 36.7	1.509	2.395	14.9	20.8
374580	2006 <i>CJ</i> ₅₂		4 27.9 329°46	4°0/21.2	18		40599	1999 <i>RX</i> ₁₅₀		4 27.9 143°28	1°3/29.1	18	
3 22	14 37.39	+ 4 47.5	4.180	5.001	7.1	20.7	3 22	14 49.13	-19 25.9	2.286	3.080	13.0	20.0
4 1	14 34.20	+ 5 33.7	4.107	4.999	5.7	20.6	4 1	14 43.98	-19 23.0	2.204	3.089	10.2	19.8
4 11	14 30.13	+ 6 17.0	4.059	4.997	4.5	20.5	4 11	14 36.87	-19 9.5	2.145	3.098	6.9	19.6
4 21	14 25.48	+ 6 54.9	4.040	4.995	4.0	20.5	4 21	14 28.39	-18 46.3	2.112	3.106	3.4	19.4
5 1	14 20.59	+ 7 24.8	4.049	4.994	4.5	20.5	5 1	14 19.36	-18 15.7	2.108	3.114	1.5	19.3
5 11	14 15.84	+ 7 44.8	4.086	4.992	5.7	20.6	5 11	14 10.68	-17 41.5	2.133	3.121	4.7	19.5
5 21	14 11.56	+ 7 54.1	4.148	4.990	7.1	20.7	5 21	14 3.11	-17 7.7	2.186	3.128	8.1	19.7
5 31	14 8.06	+ 7 52.2	4.234	4.989	8.4	20.8	5 31	13 57.29	-16 38.7	2.263	3.134	11.2	19.9
212827	2007 <i>UT</i> ₃₃		4 27.9 234°07	3°9/30.6	17		187370	2005 <i>UU</i> ₃₀₈		4 27.9 205°23	0°3/27.7	18	
3 22	14 51.23	-24 46.9	1.765	2.553	16.5	20.6	3 22	14 43.82	-15 10.9	2.831	3.636	10.5	21.3
4 1	14 46.55	-25 3.8	1.668	2.544	13.4	20.3	4 1	14 39.59	-14 43.5	2.737	3.633	8.1	21.2
4 11	14 39.09	-25 4.1	1.593	2.534	9.8	20.1	4 11	14 33.87	-14 8.6	2.668	3.629	5.2	21.0
4 21	14 29.49	-24 46.4	1.540	2.524	6.0	19.8	4 21	14 27.11	-13 28.3	2.626	3.624	2.2	20.7
5 1	14 18.80	-24 11.4	1.515	2.513	3.9	19.7	5 1	14 19.91	-12 45.4	2.614	3.620	1.1	20.6
5 11	14 8.35	-23 23.4	1.516	2.502	6.4	19.8	5 11	14 12.92	-12 3.5	2.631	3.615	4.3	20.9
5 21	13 59.34	-22 29.1	1.542	2.491	10.4	20.0	5 21	14 6.72	-11 25.8	2.677	3.610	7.2	21.1
5 31	13 52.72	-21 36.1	1.592	2.479	14.2	20.2	5 31	14 1.80	-10 55.4	2.747	3.604	9.9	21.2
306452	1999 <i>AC</i> ₁₅		4 27.9 56°88	8°1/ 4.4	18		425647	2010 <i>VP</i> ₁₉₉		4 27.9 185°12	3°5/25.0	16	
3 22	14 51.00	-34 54.7	1.541	2.297	19.9	20.0	3 22	14 49.24	-6 21.2	2.185	3.007	12.6	22.2
4 1	14 46.61	-35 32.9	1.479	2.318	16.8	19.9	4 1	14 44.06	-5 31.5	2.103	3.007	9.7	22.0
4 11	14 39.11	-35 44.6	1.435	2.340	13.5	19.7	4 11	14 36.93	-4 38.1	2.045	3.007	6.5	21.8
4 21	14 29.41	-35 26.5	1.411	2.361	10.3	19.6	4 21	14 28.43	-3 45.2	2.014	3.006	3.8	21.7
5 1	14 18.91	-34 38.8	1.411	2.383	8.3	19.5	5 1	14 19.35	-2 58.0	2.013	3.004	4.2	21.7
5 11	14 9.16	-33 27.5	1.435	2.405	8.7	19.6	5 11	14 10.60	-2 21.0	2.039	3.001	7.1	21.9
5 21	14 1.41	-32 1.8	1.484	2.428	11.0	19.8	5 21	14 2.96	-1 57.5	2.092	2.998	10.4	22.0
5 31	13 56.47	-30 32.8	1.555	2.450	14.0	20.0	5 31	13 57.03	-1 49.2	2.169	2.993	13.3	22.2
105853	2000 <i>SY</i> ₁₆₅		4 27.9 108°19	4°6/ 2.4	17		109364	2001 <i>QW</i> ₁₅₇		4 27.9 175°00	1°2/28.9	18	
3 22	14 46.40	-30 10.0	2.413	3.165	13.6	19.9	3 22	14 48.11	-19 21.4	1.819	2.629	15.3	20.0
4 1	14 42.03	-30 22.9	2.324	3.169	11.3	19.7	4 1	14 43.75	-19 7.8	1.735	2.630	12.0	19.8
4 11	14 35.67	-30 19.8	2.256	3.173	8.7	19.6	4 11	14 37.01	-18 40.5	1.673	2.630	8.1	19.6
4 21	14 27.91	-29 59.8	2.212	3.177	6.1	19.4	4 21	14 28.53	-18 0.9	1.636	2.631	3.8	19.3
5 1	14 19.53	-29 23.7	2.196	3.181	4.6	19.3	5 1	14 19.30	-17 12.4	1.625	2.631	1.5	19.2
5 11	14 11.46	-28 34.8	2.207	3.184	5.5	19.4	5 11	14 10.45	-16 20.7	1.642	2.631	5.6	19.4
5 21	14 4.50	-27 38.2	2.245	3.188	7.9	19.5	5 21	14 2.95	-15 31.5	1.685	2.631	9.8	19.7
5 31	13 59.27	-26 39.5	2.308	3.192	10.5	19.7	5 31	13 57.55	-14 50.5	1.752	2.631	13.5	19.9
143575	2003 <i>EB</i> ₆₀		4 27.9 147°89	4°3/ 2.2	18		292097	2006 <i>RD</i> ₄₆		4 27.9 267°20	2°3/25.9	17	
3 22	14 46.85	-29 24.1	2.487	3.240	13.2	20.6	3 22	14 44.00	-9 49.8	2.211	3.040	12.3	20.8
4 1	14 42.31	-29 38.2	2.396	3.243	10.9	20.4	4 1	14 40.08	-9 6.6	2.129	3.038	9.4	20.6
4 11	14 35.83	-29 37.3	2.326	3.246	8.3	20.3	4 11	14 34.35	-8 17.4	2.070	3.036	6.1	20.4
4 21	14 27.97	-29 20.4	2.282	3.248	5.8	20.1	4 21	14 27.35	-7 26.0	2.037	3.034	3.0	20.2
5 1	14 19.51	-28 48.4	2.264	3.251	4.3	20.0	5 1	14 19.82	-6 36.9	2.033	3.032	3.0	20.2
5 11	14 11.32	-28 4.3	2.275	3.253	5.3	20.1	5 11	14 12.57	-5 54.8	2.057	3.031	6.2	20.4
5 21	14 4.20	-27 12.8	2.313	3.256	7.7	20.2	5 21	14 6.34	-5 23.5	2.107	3.029	9.5	20.6
5 31	13 58.77	-26 19.4	2.376	3.258	10.3	20.4	5 31	14 1.68	-5 5.2	2.180	3.027	12.5	20.7
168442	1998 <i>XO</i> ₅		4 27.9 64°90	1°3/26.9	18		371727	2007 <i>EG</i> ₁₀₁		4 27.9 58°35	2°6/29.5	17	
3 22	14 46.13	-12 4.3	2.023	2.848	13.4	20.5	3 22	14 52.80	-19 27.5	1.629	2.437	16.8	20.6
4 1	14 41.89	-11 40.5	1.941	2.848	10.2	20.3	4 1	14 47.58	-20 6.8	1.559	2.450	13.3	20.4
4 11	14 35.61	-11 9.5	1.883	2.848	6.6	20.0	4 11	14 39.61	-20 34.6	1.510	2.463	9.2	20.2
4 21	14 27.89	-10 34.3	1.850	2.849	2.8	19.8	4 21	14 29.64	-20 49.9	1.485	2.476	4.9	19.9
5 1	14 19.55	-9 58.8	1.845	2.849	2.2	19.8	5 1	14 18.84	-20 53.3	1.487	2.490	2.7	19.8
5 11	14 11.54	-9 27.5	1.868	2.850	5.9	20.0	5 11	14 8.54	-20 48.1	1.515	2.504	6.1	20.1
5 21	14 4.67	-9 4.3	1.917	2.850	9.6	20.2	5 21	13 59.89	-20 39.0	1.569	2.517	10.2	20.3
5 31	13 59.59	-8 52.1	1.990	2.850	12.9	20.4	5 31	13 53.71	-20 31.2	1.646	2.531	13.9	20.6
33469	1999 <i>FL</i> ₃₆		4 27.9 350°16	2°9/30.1	17		22487	Megphillips		4 27.9 295°99	1°2/28.8	1	

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