

EPHEMERIDES

11 3.9

11 4.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
225491	2000 HV ₄₀	11	3.9 258°92	1.2°/ 4.9 18			24300	1999 XX ₂₂₃	11	3.9 70°19	2.3°/ 2.7 18		
9 28	3 4.59	+21 32.1	1.763	2.572	15.9	20.4	9 28	3 8.34	+12 6.0	1.377	2.215	18.1	18.3
10 8	3 0.22	+21 6.2	1.665	2.555	12.6	20.2	10 8	3 2.93	+11 34.4	1.330	2.240	13.7	18.1
10 18	2 53.18	+20 24.1	1.588	2.538	8.6	19.9	10 18	2 54.69	+10 55.5	1.304	2.265	8.8	17.9
10 28	2 44.13	+19 26.6	1.537	2.520	4.1	19.6	10 28	2 44.61	+10 13.9	1.303	2.289	3.9	17.6
11 7	2 34.10	+18 17.5	1.513	2.502	1.6	19.4	11 7	2 34.07	+9 35.6	1.328	2.314	3.3	17.7
11 17	2 24.36	+17 3.4	1.517	2.484	6.2	19.7	11 17	2 24.42	+9 6.3	1.380	2.338	7.8	18.0
11 27	2 16.13	+15 52.4	1.549	2.465	10.8	19.9	11 27	2 16.85	+8 50.6	1.457	2.362	12.2	18.3
12 7	2 10.33	+14 51.9	1.605	2.446	14.9	20.1	12 7	2 12.02	+8 50.7	1.556	2.386	15.8	18.6
349659	2008 VK ₄₇	11	3.9 1°45	7.4/30.8 18			279233	2009 UT ₁₃₉	11	3.9 14°29	4°1/ 7.0 18		
9 28	3 2.63	+0 13.4	1.414	2.268	16.9	19.9	9 28	3 3.24	+27 16.5	2.020	2.803	15.1	20.3
10 8	2 58.75	-0 43.1	1.354	2.266	13.4	19.7	10 8	2 58.85	+27 43.1	1.939	2.805	12.3	20.1
10 18	2 52.14	-1 36.0	1.315	2.266	9.9	19.5	10 18	2 52.09	+27 54.9	1.879	2.807	9.0	19.9
10 28	2 43.62	-2 17.1	1.299	2.266	7.6	19.4	10 28	2 43.62	+27 50.5	1.844	2.810	5.8	19.7
11 7	2 34.38	-2 39.1	1.307	2.267	8.3	19.4	11 7	2 34.42	+27 30.5	1.836	2.813	4.1	19.6
11 17	2 25.70	-2 37.5	1.341	2.268	11.3	19.6	11 17	2 25.59	+26 58.2	1.855	2.816	5.8	19.8
11 27	2 18.78	-2 10.7	1.397	2.270	14.9	19.8	11 27	2 18.18	+26 18.8	1.903	2.820	9.0	20.0
12 7	2 14.40	-1 20.9	1.474	2.273	18.1	20.1	12 7	2 12.96	+25 38.8	1.975	2.824	12.1	20.2
69317	1993 FB ₂₀	11	3.9 335°53	1.4°/ 3.3 18 R			54856	2001 OF ₂₁	11	3.9 41°77	2°1/ 5.4 18		
9 28	3 4.47	+11 43.2	1.410	2.255	17.4	18.4	9 28	3 3.58	+22 6.9	1.794	2.602	15.8	18.3
10 8	3 0.55	+11 53.7	1.330	2.243	13.5	18.2	10 8	2 59.18	+22 9.8	1.720	2.608	12.4	18.1
10 18	2 53.61	+11 59.3	1.271	2.233	8.9	17.9	10 18	2 52.31	+21 59.1	1.668	2.614	8.5	17.9
10 28	2 44.36	+12 2.3	1.235	2.223	3.8	17.5	10 28	2 43.70	+21 35.2	1.640	2.621	4.4	17.7
11 7	2 34.02	+12 5.7	1.225	2.214	2.5	17.4	11 7	2 34.41	+21 0.5	1.640	2.627	2.2	17.5
11 17	2 24.03	+12 13.2	1.242	2.205	7.6	17.7	11 17	2 25.59	+20 19.8	1.667	2.634	5.6	17.8
11 27	2 15.83	+12 28.6	1.283	2.198	12.6	18.0	11 27	2 18.34	+19 39.1	1.722	2.641	9.6	18.0
12 7	2 10.42	+12 54.5	1.345	2.192	16.9	18.2	12 7	2 13.39	+19 4.1	1.801	2.649	13.2	18.3
520701	2014 QE ₄₆₆	11	3.9 74°11	1°1/ 3.1 18			509917	2009 HA	11	3.9 167°84	3°3/ 1.2 18		
9 28	3 1.50	+13 32.3	2.258	3.077	12.6	21.6	9 28	3 3.95	+5 17.0	2.549	3.367	11.3	21.8
10 8	2 56.85	+13 6.8	2.193	3.093	9.6	21.4	10 8	2 58.54	+4 45.0	2.474	3.372	8.7	21.6
10 18	2 50.40	+12 35.2	2.152	3.109	6.1	21.2	10 18	2 51.46	+4 12.4	2.424	3.376	5.9	21.4
10 28	2 42.78	+12 0.3	2.139	3.126	2.6	21.0	10 28	2 43.25	+3 42.6	2.402	3.379	3.6	21.3
11 7	2 34.77	+11 25.6	2.154	3.142	1.9	21.0	11 7	2 34.62	+3 19.1	2.411	3.382	3.9	21.3
11 17	2 27.18	+10 54.9	2.199	3.158	5.3	21.2	11 17	2 26.31	+3 5.0	2.449	3.385	6.3	21.5
11 27	2 20.79	+10 31.8	2.272	3.174	8.6	21.5	11 27	2 19.05	+3 2.4	2.515	3.387	9.1	21.7
12 7	2 16.12	+10 18.6	2.371	3.190	11.4	21.7	12 7	2 13.38	+3 12.2	2.606	3.388	11.6	21.8
73667	1981 ER ₄₅	11	3.9 274°89	2°4/ 2.4 18			148460	2000 YA ₁₁₂	11	4.0 191°94	3°6/ 7.6 18		
9 28	3 3.11	+14 0.1	1.458	2.299	17.1	19.7	9 28	3 3.40	+29 51.8	2.860	3.608	11.9	20.0
10 8	2 59.35	+13 2.1	1.375	2.288	13.2	19.5	10 8	2 58.29	+29 58.6	2.764	3.606	9.8	19.8
10 18	2 52.72	+11 50.7	1.314	2.276	8.6	19.2	10 18	2 51.41	+29 52.2	2.691	3.604	7.3	19.7
10 28	2 43.95	+10 31.1	1.277	2.264	3.8	18.9	10 28	2 43.27	+29 31.9	2.644	3.601	4.9	19.5
11 7	2 34.22	+9 11.0	1.266	2.252	3.5	18.8	11 7	2 34.61	+28 58.6	2.626	3.598	3.6	19.4
11 17	2 24.89	+7 59.3	1.282	2.240	8.3	19.1	11 17	2 26.19	+28 14.6	2.639	3.595	4.7	19.5
11 27	2 17.30	+7 4.2	1.323	2.228	13.2	19.3	11 27	2 18.82	+27 24.4	2.681	3.591	7.0	19.6
12 7	2 12.36	+6 30.6	1.386	2.216	17.4	19.6	12 7	2 13.07	+26 33.0	2.750	3.587	9.5	19.8
219131	1998 UY ₄₁	11	3.9 31°40	0°0/ 3.8 18			469387	2001 SE ₂₆₀	11	4.0 37°24	0°0/ 3.8 16		
9 28	3 9.60	+12 54.1	1.549	2.376	16.9	18.1	9 28	3 4.53	+17 13.5	1.135	1.985	20.3	20.9
10 8	3 3.79	+13 40.4	1.496	2.399	13.0	17.9	10 8	3 0.69	+16 59.9	1.090	2.004	15.6	20.7
10 18	2 55.25	+14 22.0	1.465	2.422	8.5	17.7	10 18	2 53.56	+16 32.1	1.063	2.024	10.2	20.4
10 28	2 44.87	+14 58.8	1.460	2.447	3.5	17.5	10 28	2 44.23	+15 53.5	1.058	2.046	4.2	20.2
11 7	2 33.89	+15 31.5	1.482	2.472	1.5	17.4	11 7	2 34.26	+15 10.1	1.078	2.068	1.8	20.1
11 17	2 23.65	+16 1.6	1.532	2.497	6.3	17.8	11 17	2 25.26	+14 29.2	1.122	2.090	7.5	20.5
11 27	2 15.32	+16 31.6	1.609	2.524	10.5	18.1	11 27	2 18.58	+13 58.1	1.191	2.114	12.6	20.9
12 7	2 9.63	+17 4.2	1.710	2.551	14.1	18.4	12 7	2 14.96	+13 41.6	1.280	2.138	16.8	21.2
147765	2005 QP ₃₂	11	3.9 54°26	5°1/ 1.5 18			315912	2008 RT ₈₅	11	4.0 138°06	0°5/ 3.4 18		
9 28	3 6.80	+5 26.5	1.318	2.168	18.1	19.3	9 28	2 59.30	+16 38.6	2.534	3.345	11.6	20.8
10 8	3 1.94	+4 51.7	1.268	2.182	13.9	19.1	10 8	2 55.11	+15 55.1	2.453	3.349	8.9	20.6
10 18	2 54.16	+4 16.6	1.238	2.197	9.4	18.9	10 18	2 49.28	+15 2.9	2.397	3.352	5.7	20.4
10 28	2 44.43	+3 47.5	1.232	2.212	5.6	18.7	10 28	2 42.36	+14 4.9	2.369	3.355	2.3	20.2
11 7	2 34.09	+3 30.4	1.252	2.228	5.9	18.8	11 7	2 35.02	+13 4.7	2.370	3.359	1.4	20.1
11 17	2 24.57	+3 29.8	1.297	2.243	9.6	19.0	11 17	2 28.01	+12 7.0	2.401	3.362	4.8	20.3
11 27	2 17.08	+3 47.7	1.366	2.259	13.7	19.3	11 27	2 22.01	+11 16.1	2.462	3.365	7.9	20.6
12 7	2 12.38	+4 23.5	1.456	2.276	17.3	19.6	12 7	2 17.55	+10 35.5	2.548	3.367	10.7	20.7
375165	2008 CH ₁₇₉	11	3.9 198°10	3°4/ 2.0 18			265056	2003 SB ₉	11	4.0 212°59	2°5/ 6.1 18		
9 28	3 7.06	+8 35.4	1.631	2.465	15.9	20.5	9 28	3 2.91	+24 6.1	2.453	3.236	12.7	20.8
10 8	3 1.94	+8 3.8	1.556	2.464	12.3	20.3	10 8	2 58.13	+24 16.0	2.363	3.234	10.2	20.6
10 18	2 54.17	+7 27.9	1.504	2.462	8.1	20.0	10 18	2 51.41	+24 14.6	2.296	3.232	7.2	20.4
10 28	2 44.49	+6 52.4	1.476	2.460	4.2	19.8	10 28	2 43.31	+24 1.7	2.256	3.230	4.1	20.2
11 7	2 34.03	+6 22.6	1.476	2.457	4.2	19.8	11 7	2 34.60	+23 38.6	2.244	3.228	2.5	20.1
11 17	2 24.03	+6 3.6	1.504	2.455	8.1	20.0	11 17	2 26.17	+23 8.0	2.262	3.226	4.7	20.2
11 27	2 15.70	+5 59.2	1.558	2.451	12.3	20.2	11 27	2 18.86	+22 34.4	2.309	3.223	7.8	20.4
12 7	2 9.83	+6 11.1	1.634	2.448	15.9	20.5	12 7	2 13.32	+22 2.2	2.382	3.221	10.7	20.6
12062	Tilmanspohn	11	3.9 95°49	0°8/ 3.4 18			93526	2000 UY	11	4.0 357°39	0°7/ 3.4 18		
9 28	3 4.86	+16 28.4	1.836	2.655	15.0	18.6	9 28	3 1.17	+15 21.2	2.007	2.830	13.8	

EPHEMERIDES

11 4.0

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
157713	2006 <i>AO</i> ₇₁	11	4.0 357°42	1°6/ 2.8 18			29813	1999 <i>CF</i> ₁₁₁	11	4.0 279°49	0°9/ 4.7 18		
9 28	3 0.43	+12 56.5	2.083	2.910	13.2	20.1	9 28	3 2.34	+19 56.1	1.950	2.762	14.6	18.6
10 8	2 56.34	+12 24.2	2.005	2.909	10.1	19.9	10 8	2 58.08	+19 37.8	1.866	2.758	11.4	18.4
10 18	2 50.27	+11 45.0	1.950	2.909	6.5	19.7	10 18	2 51.57	+19 7.0	1.804	2.755	7.6	18.1
10 28	2 42.83	+11 2.2	1.922	2.908	2.8	19.4	10 28	2 43.43	+18 25.3	1.767	2.752	3.5	17.9
11 7	2 34.83	+10 20.0	1.922	2.908	2.3	19.4	11 7	2 34.62	+17 36.3	1.759	2.749	1.3	17.7
11 17	2 27.19	+ 9 43.0	1.951	2.908	5.9	19.6	11 17	2 26.17	+16 44.8	1.779	2.745	5.5	18.0
11 27	2 20.76	+ 9 15.4	2.007	2.908	9.5	19.9	11 27	2 19.09	+15 56.9	1.827	2.742	9.5	18.2
12 7	2 16.17	+ 8 59.9	2.088	2.909	12.7	20.1	12 7	2 14.10	+15 17.7	1.899	2.739	13.0	18.4
423307	2005 <i>EX</i> ₁₇₉	11	4.0 177°43	2°5/ 2.3 16			326383	2001 <i>HG</i> ₃₂	11	4.0 210°75	10°9/ 1.9 17		
9 28	3 5.25	+12 52.8	1.592	2.426	16.3	22.2	9 28	3 23.46	- 8 40.8	1.173	1.994	21.7	20.3
10 8	3 0.59	+11 56.4	1.519	2.427	12.5	22.0	10 8	3 15.62	- 8 46.1	1.107	1.991	18.0	20.1
10 18	2 53.30	+10 49.9	1.468	2.428	8.1	21.7	10 18	3 3.68	- 8 32.3	1.059	1.989	14.1	19.8
10 28	2 44.16	+ 9 38.3	1.442	2.429	3.7	21.5	10 28	2 48.67	- 7 49.7	1.033	1.986	11.3	19.7
11 7	2 34.28	+ 8 28.7	1.444	2.429	3.5	21.5	11 7	2 32.40	- 6 32.8	1.032	1.982	11.3	19.7
11 17	2 24.94	+ 7 28.6	1.474	2.429	7.8	21.7	11 17	2 16.99	- 4 42.9	1.058	1.978	14.3	19.8
11 27	2 17.28	+ 6 44.1	1.530	2.428	12.2	22.0	11 27	2 4.35	- 2 26.7	1.108	1.974	18.4	20.0
12 7	2 12.10	+ 6 18.9	1.607	2.427	15.9	22.2	12 7	1 55.58	+ 0 6.4	1.178	1.969	22.2	20.3
173486	2000 <i>SK</i> ₁₃₃	11	4.0 315°64	3°4/ 6.3 17			76443	2000 <i>FS</i> ₃₁	11	4.0 301°44	0°9/ 3.6 18		
9 28	3 4.53	+26 14.9	1.363	2.177	19.5	19.8	9 28	3 6.33	+12 39.3	1.712	2.539	15.6	19.2
10 8	3 0.83	+26 0.3	1.286	2.174	15.7	19.6	10 8	3 1.71	+12 51.5	1.613	2.516	12.2	19.0
10 18	2 53.87	+25 22.3	1.228	2.172	11.2	19.3	10 18	2 54.33	+12 59.1	1.535	2.493	8.0	18.7
10 28	2 44.50	+24 20.4	1.192	2.170	6.3	19.1	10 28	2 44.75	+13 3.3	1.483	2.470	3.4	18.4
11 7	2 34.12	+22 58.8	1.181	2.168	3.5	18.9	11 7	2 34.01	+13 6.5	1.458	2.447	2.0	18.2
11 17	2 24.34	+21 26.0	1.197	2.166	7.0	19.1	11 17	2 23.38	+13 11.7	1.462	2.424	6.8	18.5
11 27	2 16.64	+19 53.5	1.238	2.164	11.9	19.4	11 27	2 14.18	+13 22.4	1.491	2.402	11.5	18.7
12 7	2 11.99	+18 32.1	1.301	2.162	16.4	19.6	12 7	2 7.44	+13 41.9	1.544	2.380	15.6	18.9
273532	2007 <i>BE</i> ₃₂	11	4.0 176°00	1°7/ 2.8 18			271860	2004 <i>TG</i> ₂₇₈	11	4.0 60°18	0°9/ 3.5 17		
9 28	3 5.92	+12 59.3	1.921	2.742	14.4	21.6	9 28	3 9.00	+14 24.7	1.427	2.259	17.9	21.1
10 8	3 0.68	+12 23.7	1.844	2.744	11.0	21.4	10 8	3 3.35	+14 13.7	1.383	2.288	13.6	20.9
10 18	2 53.17	+11 40.3	1.789	2.746	7.2	21.2	10 18	2 54.94	+13 53.9	1.359	2.318	8.8	20.7
10 28	2 44.06	+10 52.7	1.761	2.747	3.1	20.9	10 28	2 44.75	+13 28.3	1.360	2.348	3.6	20.5
11 7	2 34.33	+10 5.6	1.762	2.748	2.6	20.9	11 7	2 34.14	+13 1.4	1.388	2.377	2.0	20.4
11 17	2 25.02	+ 9 24.1	1.792	2.748	6.5	21.2	11 17	2 24.45	+12 38.4	1.444	2.407	6.9	20.8
11 27	2 17.15	+ 8 53.2	1.849	2.747	10.4	21.4	11 27	2 16.80	+12 24.0	1.525	2.436	11.3	21.1
12 7	2 11.42	+ 8 35.8	1.931	2.746	13.8	21.6	12 7	2 11.87	+12 21.2	1.629	2.466	14.9	21.4
45983	2001 <i>BF</i> ₅₄	11	4.0 237°58	3°2/ 1.9 18			473681	2015 <i>XM</i> ₃₇₂	11	4.0 352°88	5°7/ 8.3 17		
9 28	3 5.38	+10 15.8	1.629	2.464	15.9	19.7	9 28	2 59.38	+31 21.7	1.658	2.445	17.7	20.7
10 8	3 0.78	+ 9 28.9	1.547	2.456	12.2	19.4	10 8	2 56.52	+31 34.6	1.576	2.439	14.7	20.4
10 18	2 53.51	+ 8 34.5	1.487	2.447	8.1	19.2	10 18	2 50.90	+31 25.6	1.512	2.434	11.3	20.2
10 28	2 44.30	+ 7 37.8	1.453	2.437	4.1	18.9	10 28	2 43.24	+30 52.3	1.470	2.430	7.8	20.0
11 7	2 34.22	+ 6 45.1	1.446	2.428	4.1	18.9	11 7	2 34.70	+29 56.2	1.454	2.427	5.7	19.9
11 17	2 24.53	+ 6 2.9	1.467	2.418	8.2	19.1	11 17	2 26.59	+28 42.2	1.463	2.425	7.0	20.0
11 27	2 16.44	+ 5 36.6	1.513	2.407	12.5	19.4	11 27	2 20.17	+27 19.2	1.498	2.423	10.3	20.2
12 7	2 10.79	+ 5 29.0	1.581	2.396	16.3	19.6	12 7	2 16.32	+25 56.9	1.557	2.423	13.9	20.4
265449	2004 <i>XL</i> ₉₇	11	4.0 250°53	4°9/ 8.7 17			213375	2001 <i>TC</i> ₂₄₆	11	4.0 21°88	0°2/ 4.2 18		
9 28	3 2.90	+33 16.4	2.572	3.311	13.3	20.8	9 28	3 2.78	+17 26.9	1.767	2.590	15.3	20.5
10 8	2 58.27	+33 31.7	2.472	3.303	11.2	20.7	10 8	2 58.55	+17 16.9	1.693	2.593	11.9	20.3
10 18	2 51.59	+33 31.1	2.394	3.294	8.7	20.5	10 18	2 51.93	+16 56.4	1.640	2.596	7.8	20.1
10 28	2 43.43	+33 13.0	2.341	3.286	6.4	20.3	10 28	2 43.60	+16 27.2	1.613	2.599	3.4	19.8
11 7	2 34.59	+32 37.4	2.315	3.277	5.0	20.2	11 7	2 34.59	+15 52.9	1.613	2.603	1.3	19.7
11 17	2 26.01	+31 47.1	2.318	3.268	5.7	20.3	11 17	2 26.02	+15 18.3	1.641	2.607	5.9	20.0
11 27	2 18.59	+30 46.9	2.350	3.259	7.9	20.4	11 27	2 18.95	+14 48.6	1.696	2.611	10.1	20.3
12 7	2 13.03	+29 43.2	2.408	3.250	10.5	20.5	12 7	2 14.14	+14 28.2	1.774	2.615	13.7	20.5
334482	2002 <i>QE</i> ₁₈	11	4.0 87°03	5°9/ 8.5 18			235281	Jackwilliamson	11	4.0 297°07	4°1/ 6.1 17		
9 28	3 10.84	+32 19.4	1.972	2.721	16.5	20.6	9 28	3 10.56	+24 35.9	2.270	3.041	14.0	20.0
10 8	3 4.65	+32 57.8	1.909	2.746	13.7	20.5	10 8	3 4.62	+25 41.4	2.158	3.018	11.4	19.8
10 18	2 55.81	+33 17.5	1.866	2.771	10.5	20.3	10 18	2 56.11	+26 39.0	2.069	2.996	8.4	19.5
10 28	2 45.17	+33 15.5	1.848	2.795	7.6	20.2	10 28	2 45.51	+27 25.4	2.007	2.973	5.5	19.3
11 7	2 33.90	+32 52.1	1.857	2.819	5.9	20.2	11 7	2 33.70	+27 58.6	1.975	2.950	4.1	19.2
11 17	2 23.29	+32 10.8	1.894	2.843	6.8	20.3	11 17	2 21.83	+28 18.2	1.972	2.928	6.0	19.3
11 27	2 14.48	+31 18.4	1.958	2.866	9.3	20.5	11 27	2 11.10	+28 27.1	1.999	2.906	9.3	19.4
12 7	2 8.22	+30 22.8	2.048	2.889	12.1	20.7	12 7	2 2.51	+28 29.8	2.052	2.883	12.5	19.6
304499	2006 <i>UL</i> ₁₅₇	11	4.0 236°05	0°3/ 3.8 18			146538	2001 <i>SJ</i> ₂₄₅	11	4.0 46°24	1°7/ 3.1 18		
9 28	3 3.73	+15 34.2	2.020	2.837	13.9	21.2	9 28	3 5.30	+11 13.1	1.751	2.581	15.2	19.7
10 8	2 59.02	+15 24.0	1.936	2.834	10.7	21.0	10 8	3 0.36	+11 10.4	1.685	2.590	11.6	19.5
10 18	2 52.12	+15 5.8	1.876	2.831	7.0	20.7	10 18	2 53.02	+11 3.2	1.641	2.600	7.5	19.3
10 28	2 43.65	+14 41.3	1.842	2.829	2.9	20.5	10 28	2 44.03	+10 54.0	1.623	2.609	3.3	19.1
11 7	2 34.52	+14 13.8	1.836	2.826	1.4	20.4	11 7	2 34.43	+10 46.3	1.632	2.619	2.5	19.0
11 17	2 25.72	+13 47.1	1.860	2.823	5.6	20.7	11 17	2 25.34	+10 43.3	1.670	2.630	6.5	19.3
11 27	2 18.23	+13 25.7	1.911	2.820	9.5	20.9	11 27	2 17.80	+10 48.2	1.735	2.640	10.5	19.6
12 7	2 12.77	+13 13.1	1.986	2.816	12.9	21.1	12 7	2 12.53	+11 3.1	1.823	2.651	13.9	19.8
275470	2011 <i>DQ</i> ₁₂	11	4.0 150°07	3°0/ 6.0 18			212781	2007 <i>TU</i> ₁₆₅	11	4.0 3°72	2°		

EPHEMERIDES

11 4.0

11 4.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
51655	Susannemond	11	4.0	52°32	9°6/28.8	18	521791	2015 SM ₂₉	11	4.0	1°09	4°9/ 7.9	17
9 28	3 3.62	- 7 58.4	1.692	2.524	15.5	18.9	9 28	3 2.40	+30 9.9	1.926	2.702	16.0	21.2
10 8	2 58.97	- 9 11.9	1.645	2.533	12.9	18.8	10 8	2 58.42	+30 27.4	1.843	2.701	13.2	21.1
10 18	2 52.03	-10 14.5	1.620	2.542	10.6	18.6	10 18	2 51.95	+30 26.8	1.780	2.701	10.0	20.9
10 28	2 43.58	-10 57.7	1.619	2.552	9.6	18.6	10 28	2 43.67	+30 6.4	1.741	2.701	6.8	20.7
11 7	2 34.65	-11 15.5	1.642	2.561	10.4	18.7	11 7	2 34.61	+29 27.0	1.728	2.701	5.0	20.6
11 17	2 26.32	-11 5.2	1.691	2.571	12.4	18.8	11 17	2 25.95	+28 32.6	1.742	2.702	6.3	20.6
11 27	2 19.57	-10 27.4	1.761	2.581	14.8	19.0	11 27	2 18.81	+27 30.0	1.784	2.703	9.4	20.8
12 7	2 15.01	- 9 25.7	1.852	2.591	17.1	19.2	12 7	2 13.98	+26 26.9	1.850	2.705	12.6	21.0
230118	2001 DB ₃	11	4.0	139°29	7°1/12.9	10 C	163728	2003 JP ₃	11	4.0	52°56	0°0/ 3.8	18
9 28	3 15.13	+46 11.3	3.355	3.971	12.4	23.6	9 28	3 8.51	+15 52.3	1.155	2.001	20.4	19.7
10 8	3 7.31	+46 52.7	3.273	3.991	11.0	23.5	10 8	3 3.93	+15 55.3	1.101	2.013	15.8	19.5
10 18	2 57.31	+47 16.5	3.212	4.010	9.5	23.4	10 18	2 55.86	+15 46.6	1.065	2.026	10.3	19.2
10 28	2 45.79	+47 19.4	3.174	4.028	8.1	23.3	10 28	2 45.34	+15 28.2	1.052	2.039	4.3	18.9
11 7	2 33.68	+47 0.0	3.162	4.045	7.2	23.3	11 7	2 33.96	+15 4.7	1.063	2.053	1.9	18.8
11 17	2 22.01	+46 19.7	3.179	4.061	7.1	23.3	11 17	2 23.46	+14 41.9	1.099	2.067	7.8	19.2
11 27	2 11.73	+45 22.6	3.224	4.076	7.9	23.4	11 27	2 15.36	+14 26.4	1.160	2.081	13.1	19.6
12 7	2 3.53	+44 14.8	3.296	4.090	9.1	23.5	12 7	2 10.54	+14 23.0	1.241	2.095	17.5	19.9
408038	2012 FP ₄₉	11	4.0	56°23	1°7/ 5.2	18	188160	2002 GU ₁₀₇	11	4.0	80°70	5°7/29.6	18
9 28	3 4.27	+20 34.6	2.131	2.932	13.9	20.9	9 28	3 0.88	+ 0 21.3	2.269	3.099	12.1	19.9
10 8	2 59.33	+20 50.5	2.056	2.940	10.9	20.7	10 8	2 56.25	- 1 4.8	2.226	3.124	9.5	19.7
10 18	2 52.26	+20 56.4	2.004	2.949	7.4	20.5	10 18	2 49.97	- 2 28.2	2.207	3.149	7.1	19.6
10 28	2 43.71	+20 52.4	1.977	2.958	3.7	20.3	10 28	2 42.67	- 3 42.5	2.216	3.173	5.8	19.6
11 7	2 34.57	+20 40.2	1.980	2.968	1.9	20.2	11 7	2 35.10	- 4 42.3	2.253	3.197	6.5	19.7
11 17	2 25.81	+20 22.6	2.011	2.977	5.0	20.4	11 17	2 28.01	- 5 23.7	2.319	3.221	8.5	19.9
11 27	2 18.38	+20 3.9	2.071	2.986	8.5	20.6	11 27	2 22.08	- 5 45.1	2.410	3.244	10.8	20.0
12 7	2 12.94	+19 48.3	2.156	2.996	11.6	20.9	12 7	2 17.79	- 5 46.8	2.523	3.267	12.9	20.2
381070	2006 YV ₅₁	11	4.0	357°91	0°9/ 4.5	18	269434	2009 SR ₁₆₄	11	4.0	3°77	0°1/ 4.1	18
9 28	2 58.62	+19 4.3	1.048	1.909	20.9	20.0	9 28	3 3.76	+15 31.0	1.990	2.808	14.1	20.0
10 8	2 56.85	+18 55.3	0.984	1.904	16.4	19.7	10 8	2 59.10	+15 42.4	1.910	2.808	10.9	19.8
10 18	2 51.56	+18 28.0	0.938	1.901	10.9	19.4	10 18	2 52.23	+15 47.2	1.853	2.808	7.2	19.6
10 28	2 43.64	+17 44.6	0.912	1.899	4.9	19.1	10 28	2 43.76	+15 46.2	1.822	2.809	3.0	19.4
11 7	2 34.59	+16 51.0	0.908	1.899	1.8	18.9	11 7	2 34.61	+15 41.6	1.820	2.810	1.2	19.2
11 17	2 26.16	+15 55.9	0.928	1.900	8.0	19.3	11 17	2 25.81	+15 36.1	1.846	2.811	5.4	19.5
11 27	2 20.01	+15 9.3	0.971	1.902	13.7	19.6	11 27	2 18.33	+15 33.5	1.900	2.812	9.3	19.8
12 7	2 17.12	+14 38.6	1.032	1.907	18.6	19.9	12 7	2 12.90	+15 36.7	1.978	2.814	12.7	20.0
355862	2008 UK ₂₇₂	11	4.0	348°75	1°3/ 4.7	18	227141	2005 PJ	11	4.0	24°45	0°5/ 3.8	18
9 28	3 0.76	+18 26.7	1.225	2.074	19.2	20.2	9 28	3 3.28	+15 16.0	1.053	1.914	20.8	19.8
10 8	2 58.17	+18 40.1	1.151	2.064	15.1	19.9	10 8	3 0.11	+15 12.9	1.004	1.925	16.0	19.6
10 18	2 52.32	+18 40.2	1.096	2.056	10.2	19.6	10 18	2 53.45	+14 57.8	0.972	1.937	10.4	19.3
10 28	2 43.96	+18 27.4	1.063	2.049	4.7	19.3	10 28	2 44.35	+14 33.9	0.962	1.950	4.3	19.1
11 7	2 34.43	+18 4.8	1.054	2.044	1.9	19.1	11 7	2 34.41	+14 6.6	0.975	1.965	2.1	19.0
11 17	2 25.35	+17 37.9	1.069	2.039	7.4	19.4	11 17	2 25.35	+13 42.6	1.012	1.981	8.1	19.4
11 27	2 18.29	+17 14.0	1.108	2.036	12.7	19.7	11 27	2 18.68	+13 28.4	1.072	1.998	13.4	19.7
12 7	2 14.29	+16 59.6	1.167	2.035	17.4	20.0	12 7	2 15.24	+13 28.3	1.152	2.015	17.9	20.1
480996	2004 DU ₁₄	11	4.0	240°19	6°0/ 8.6	18	302768	2002 VO ₁₁₃	11	4.0	15°28	3°2/ 2.8	18
9 28	3 6.71	+33 26.2	2.192	2.935	15.2	21.3	9 28	3 0.95	+ 8 39.8	1.024	1.898	20.2	18.9
10 8	3 1.67	+34 0.0	2.095	2.926	12.9	21.1	10 8	2 58.21	+ 8 43.4	0.982	1.910	15.5	18.6
10 18	2 54.09	+34 16.7	2.018	2.917	10.1	20.9	10 18	2 52.14	+ 8 44.4	0.957	1.924	10.1	18.4
10 28	2 44.59	+34 13.0	1.965	2.908	7.5	20.7	10 28	2 43.77	+ 8 47.1	0.953	1.940	4.8	18.1
11 7	2 34.17	+33 48.2	1.939	2.898	6.0	20.6	11 7	2 34.67	+ 8 56.2	0.972	1.958	4.1	18.2
11 17	2 24.01	+33 4.4	1.941	2.889	6.8	20.7	11 17	2 26.45	+ 9 15.1	1.015	1.979	9.0	18.5
11 27	2 15.27	+32 7.4	1.971	2.879	9.3	20.8	11 27	2 20.52	+ 9 46.5	1.080	2.001	13.9	18.9
12 7	2 8.83	+31 4.9	2.026	2.868	12.2	21.0	12 7	2 17.67	+10 30.5	1.165	2.025	18.0	19.2
367216	2007 EC ₁₆	11	4.0	165°58	3°0/ 7.4	18	435084	2007 BV ₉₉	11	4.0	173°58	0°0/ 3.9	18
9 28	3 3.35	+29 0.7	3.267	4.012	10.6	22.5	9 28	3 7.08	+16 51.3	1.849	2.662	15.2	21.9
10 8	2 57.99	+29 4.1	3.176	4.018	8.6	22.3	10 8	3 1.78	+16 36.4	1.770	2.665	11.7	21.7
10 18	2 51.10	+28 56.0	3.109	4.023	6.4	22.2	10 18	2 54.03	+16 11.4	1.713	2.667	7.7	21.4
10 28	2 43.17	+28 36.1	3.069	4.028	4.2	22.0	10 28	2 44.53	+15 38.1	1.682	2.668	3.3	21.2
11 7	2 34.83	+28 5.5	3.058	4.032	3.0	22.0	11 7	2 34.32	+15 0.1	1.680	2.669	1.4	21.0
11 17	2 26.74	+27 26.3	3.079	4.036	4.1	22.0	11 17	2 24.54	+14 22.3	1.706	2.670	6.0	21.4
11 27	2 19.57	+26 42.2	3.130	4.039	6.2	22.2	11 27	2 16.30	+13 50.0	1.760	2.670	10.1	21.6
12 7	2 13.83	+25 57.3	3.209	4.042	8.4	22.3	12 7	2 10.34	+13 27.6	1.839	2.669	13.7	21.8
412654	2014 OO ₁₉₂	11	4.0	348°04	4°6/30.9	18	65874	1997 WL ₁₃	11	4.0	340°93	2°9/ 6.1	18
9 28	2 59.09	+ 4 6.2	2.206	3.042	12.3	21.1	9 28	2 58.18	+24 56.1	1.470	2.292	17.9	18.1
10 8	2 55.16	+ 3 3.3	2.135	3.041	9.5	20.9	10 8	2 55.81	+24 44.1	1.385	2.279	14.4	17.8
10 18	2 49.45	+ 1 59.3	2.088	3.040	6.7	20.7	10 18	2 50.58	+24 11.6	1.320	2.267	10.2	17.5
10 28	2 42.51	+ 0 59.5	2.067	3.039	4.7	20.6	10 28	2 43.20	+23 18.5	1.277	2.256	5.6	17.3
11 7	2 35.11	+ 0 9.4	2.075	3.039	5.3	20.6	11 7	2 34.85	+22 8.6	1.259	2.246	3.0	17.1
11 17	2 28.04	- 0 26.6	2.111	3.038	7.8	20.8	11 17	2 26.88	+20 48.9	1.268	2.238	6.5	17.3
11 27	2 22.06	- 0 45.6	2.173	3.037	10.6	21.0	11 27	2 20.64	+19 29.2	1.301	2.230	11.2	17.5
12 7	2 17.76	- 0 46.8	2.258	3.037	13.2	21.2	12 7	2 17.04	+18 18.9	1.357	2.223	15.5	17.7
264111	2009 SY ₃₄₀	11	4.0	254°34	1°0/ 3.2	18	182238	2001 DW ₄₅	11	4.0	177°83	2°9/ 6.0	18
9 28	3 2.03	+13 12.7	2.346	3.163	12.2	20.8</							

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11 4.0

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
369579	2011 <i>BP</i> ₉₆		11 4.0 254°79	3°6/31.6	18		309953	2009 <i>HB</i> ₅		11 4.0 81°96	3°7/ 1.1	18	
9 28	2 59.26	+ 6 13.0	2.399	3.229	11.6	21.3	9 28	3 1.83	+ 8 24.8	1.901	2.736	13.9	20.7
10 8	2 55.19	+ 5 18.4	2.320	3.224	8.9	21.1	10 8	2 57.45	+ 7 22.0	1.839	2.748	10.6	20.5
10 18	2 49.45	+ 4 21.4	2.266	3.220	6.1	20.9	10 18	2 51.01	+ 6 15.0	1.801	2.759	7.1	20.3
10 28	2 42.55	+ 3 26.4	2.239	3.216	3.9	20.7	10 28	2 43.21	+ 5 9.3	1.790	2.771	4.1	20.1
11 7	2 35.17	+ 2 38.1	2.241	3.212	4.3	20.8	11 7	2 34.95	+ 4 11.1	1.807	2.782	4.4	20.2
11 17	2 28.08	+ 2 0.7	2.272	3.207	6.8	20.9	11 17	2 27.19	+ 3 25.5	1.851	2.794	7.6	20.4
11 27	2 22.00	+ 1 37.4	2.331	3.203	9.7	21.1	11 27	2 20.79	+ 2 56.5	1.923	2.805	10.9	20.6
12 7	2 17.48	+ 1 29.5	2.413	3.198	12.3	21.3	12 7	2 16.36	+ 2 45.5	2.017	2.816	13.9	20.9
53748	2000 <i>EW</i> ₅₇		11 4.0 100°38	1°7/ 5.2	18		485377	2011 <i>FS</i> ₂₁		11 4.0 249°47	7°3/ 9.5	17	
9 28	3 8.41	+21 31.2	1.704	2.509	16.6	19.6	9 28	3 11.96	+38 25.8	2.700	3.390	13.8	21.6
10 8	3 2.85	+21 24.1	1.641	2.527	13.0	19.5	10 8	3 5.64	+39 42.2	2.597	3.380	12.0	21.4
10 18	2 54.69	+21 2.6	1.599	2.546	8.8	19.2	10 18	2 56.75	+40 44.3	2.515	3.370	10.1	21.3
10 28	2 44.76	+20 27.8	1.582	2.564	4.3	19.0	10 28	2 45.82	+41 27.4	2.458	3.359	8.4	21.2
11 7	2 34.27	+19 43.2	1.593	2.582	1.9	18.9	11 7	2 33.76	+41 48.5	2.429	3.349	7.4	21.1
11 17	2 24.45	+18 54.2	1.633	2.599	5.8	19.2	11 17	2 21.71	+41 47.2	2.427	3.338	7.7	21.1
11 27	2 16.42	+18 7.6	1.700	2.616	10.0	19.5	11 27	2 10.87	+41 26.8	2.453	3.327	9.2	21.2
12 7	2 10.89	+17 29.1	1.791	2.632	13.6	19.7	12 7	2 2.20	+40 53.4	2.505	3.316	11.1	21.3
375178	2008 <i>DR</i> ₂₇		11 4.0 111°65	2°0/ 2.8	16		158825	2003 <i>UZ</i> ₂₅₆		11 4.0 39°60	2°5/ 2.4	18	
9 28	3 7.99	+12 32.2	1.566	2.396	16.6	21.8	9 28	3 2.90	+ 8 57.3	1.913	2.746	14.0	19.0
10 8	3 2.62	+12 0.7	1.504	2.410	12.7	21.5	10 8	2 58.26	+ 8 42.6	1.854	2.760	10.7	18.8
10 18	2 54.59	+11 21.5	1.464	2.423	8.2	21.3	10 18	2 51.54	+ 8 25.3	1.817	2.775	7.0	18.6
10 28	2 44.74	+10 38.5	1.449	2.436	3.6	21.1	10 28	2 43.44	+ 8 8.6	1.806	2.790	3.4	18.4
11 7	2 34.28	+ 9 57.3	1.462	2.448	2.9	21.1	11 7	2 34.86	+ 7 56.1	1.823	2.806	3.2	18.5
11 17	2 24.48	+ 9 23.4	1.502	2.460	7.3	21.4	11 17	2 26.78	+ 7 51.0	1.868	2.822	6.5	18.7
11 27	2 16.50	+ 9 1.7	1.569	2.472	11.6	21.7	11 27	2 20.09	+ 7 55.9	1.941	2.838	10.0	19.0
12 7	2 11.07	+ 8 55.1	1.658	2.483	15.3	21.9	12 7	2 15.39	+ 8 12.0	2.037	2.855	13.1	19.2
12406	Zvikov		11 4.0 353°95	2°4/ 5.3	18		134091	Jaysoncowley		11 4.0 253°75	1°0/ 4.9	17	
9 28	3 1.08	+21 52.6	1.155	2.000	20.5	17.6	9 28	3 2.44	+19 33.3	2.443	3.242	12.3	20.3
10 8	2 58.61	+21 55.1	1.086	1.994	16.2	17.4	10 8	2 57.80	+19 32.5	2.348	3.233	9.7	20.1
10 18	2 52.69	+21 38.3	1.034	1.990	11.2	17.1	10 18	2 51.28	+19 22.7	2.277	3.225	6.5	19.9
10 28	2 44.16	+21 2.1	1.004	1.987	5.7	16.8	10 28	2 43.38	+19 4.6	2.233	3.216	3.1	19.7
11 7	2 34.48	+20 10.8	0.997	1.986	2.6	16.6	11 7	2 34.86	+18 40.1	2.217	3.207	1.3	19.5
11 17	2 25.37	+19 12.0	1.014	1.985	7.5	16.9	11 17	2 26.57	+18 12.3	2.232	3.197	4.6	19.8
11 27	2 18.47	+18 15.9	1.054	1.985	13.0	17.2	11 27	2 19.33	+17 45.2	2.276	3.188	8.0	20.0
12 7	2 14.79	+17 31.3	1.115	1.987	17.7	17.5	12 7	2 13.80	+17 22.7	2.345	3.179	11.0	20.2
424634	2008 <i>KW</i> ₄₀		11 4.0 178°32	2°5/ 2.1	15		28740	Nathansperry		11 4.0 308°71	3°7/ 1.5	18	
9 28	3 6.42	+10 42.1	2.032	2.852	13.7	22.6	9 28	3 2.49	+ 7 19.5	1.854	2.691	14.2	18.7
10 8	3 0.96	+ 9 57.9	1.954	2.854	10.5	22.4	10 8	2 58.19	+ 6 38.8	1.779	2.687	10.9	18.5
10 18	2 53.33	+ 9 7.8	1.900	2.856	6.9	22.2	10 18	2 51.65	+ 5 54.9	1.727	2.684	7.3	18.3
10 28	2 44.20	+ 8 15.7	1.873	2.857	3.4	22.0	10 28	2 43.55	+ 5 12.7	1.700	2.681	4.2	18.1
11 7	2 34.49	+ 7 26.7	1.875	2.857	3.3	22.0	11 7	2 34.81	+ 4 37.3	1.701	2.678	4.5	18.1
11 17	2 25.18	+ 6 45.6	1.907	2.856	6.8	22.2	11 17	2 26.44	+ 4 13.6	1.730	2.675	7.7	18.3
11 27	2 17.23	+ 6 16.9	1.966	2.855	10.4	22.4	11 27	2 19.44	+ 4 5.0	1.785	2.672	11.3	18.5
12 7	2 11.31	+ 6 3.0	2.050	2.853	13.6	22.6	12 7	2 14.50	+ 4 12.8	1.863	2.670	14.6	18.7
290391	2005 <i>TF</i> ₉		11 4.0 46°92	0°7/ 3.5	18		274135	2008 <i>FN</i> ₄		11 4.0 92°54	2°1/ 2.7	16	
9 28	3 2.42	+15 10.7	1.824	2.650	14.8	21.0	9 28	3 8.47	+12 28.0	1.580	2.409	16.6	21.5
10 8	2 58.10	+14 49.2	1.757	2.661	11.3	20.8	10 8	3 2.82	+11 51.4	1.527	2.431	12.6	21.3
10 18	2 51.54	+14 19.0	1.713	2.671	7.3	20.6	10 18	2 54.61	+11 7.3	1.495	2.454	8.1	21.1
10 28	2 43.45	+13 42.9	1.695	2.682	3.0	20.4	10 28	2 44.72	+10 20.2	1.490	2.476	3.6	20.9
11 7	2 34.82	+13 5.3	1.704	2.693	1.7	20.3	11 7	2 34.37	+ 9 35.8	1.512	2.497	3.0	20.9
11 17	2 26.68	+12 30.7	1.742	2.705	6.0	20.6	11 17	2 24.78	+ 8 59.4	1.562	2.519	7.2	21.2
11 27	2 19.99	+12 3.9	1.807	2.716	9.9	20.9	11 27	2 17.03	+ 8 35.9	1.638	2.539	11.3	21.5
12 7	2 15.43	+11 48.3	1.895	2.728	13.3	21.1	12 7	2 11.78	+ 8 27.5	1.738	2.559	14.8	21.8
476409	2008 <i>CU</i> ₂₁₂		11 4.0 208°13	0°6/ 3.6	18		114691	2003 <i>FJ</i> ₈₈		11 4.0 72°54	3°1/ 2.6	18	
9 28	3 7.86	+15 13.0	1.857	2.672	15.0	22.1	9 28	3 10.40	+10 14.9	1.224	2.069	19.5	19.2
10 8	3 2.46	+14 57.7	1.771	2.667	11.7	21.9	10 8	3 4.90	+ 9 48.4	1.178	2.091	14.9	19.0
10 18	2 54.55	+14 33.5	1.706	2.662	7.6	21.6	10 18	2 56.23	+ 9 16.3	1.151	2.112	9.6	18.8
10 28	2 44.79	+14 2.4	1.669	2.655	3.2	21.3	10 28	2 45.44	+ 8 43.7	1.148	2.134	4.5	18.5
11 7	2 34.22	+13 28.2	1.659	2.648	1.7	21.2	11 7	2 34.08	+ 8 16.7	1.171	2.155	4.0	18.6
11 17	2 24.01	+12 55.3	1.679	2.641	6.3	21.5	11 17	2 23.71	+ 8 0.7	1.219	2.176	8.7	18.9
11 27	2 15.28	+12 29.0	1.726	2.632	10.5	21.8	11 27	2 15.66	+ 7 59.8	1.292	2.198	13.3	19.2
12 7	2 8.85	+12 13.3	1.798	2.623	14.2	22.0	12 7	2 10.66	+ 8 15.3	1.386	2.218	17.3	19.5
411066	2009 <i>VU</i> ₆₀		11 4.0 202°87	0°1/ 4.2	18		32929	1995 <i>QY</i> ₉		11 4.0 20°95	0°1/ 5.4	15	R
9 28	3 0.02	+18 42.5	2.601	3.404	11.6	21.3	9 28	2 41.13	+20 12.7	29.626	30.408	1.2	23.3
10 8	2 55.72	+18 8.8	2.513	3.402	8.9	21.2	10 8	2 40.25	+20 9.7	29.537	30.413	0.9	23.3
10 18	2 49.78	+17 25.5	2.448	3.400	5.9	21.0	10 18	2 39.25	+20 6.0	29.475	30.417	0.6	23.3
10 28	2 42.69	+16 34.6	2.411	3.397	2.5	20.7	10 28	2 38.18	+20 1.7	29.442	30.421	0.3	23.2
11 7	2 35.14	+15 39.4	2.404	3.394	1.0	20.6	11 7	2 37.09	+19 56.9	29.438	30.426	0.2	23.2
11 17	2 27.87	+14 44.1	2.428	3.391	4.4	20.9	11 17	2 36.00	+19 51.9	29.465	30.430	0.4	23.3
11 27	2 21.59	+13 53.2	2.480	3.388	7.7	21.1	11 27	2 34.98	+19 46.9	29.522	30.435	0.7	23.3
12 7	2 16.85	+13 10.4	2.559	3.385	10.5	21.3	12 7	2 34.06	+19 42.0	29.608	30.439	1.0	23.3
444942	2008 <i>CL</i> ₄₈		11 4.0 307°82	1°1/ 4.7	17		506440	2000 <i>YZ</i> ₁₁₉		11 4.1 332°35	20°7/27.3	18	
9 28													

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
436438	2011 <i>BU</i> ₁₆₁		11 4.1 237°73	2°0/ 2.8 18			367042	2006 <i>EH</i> ₅		11 4.1 217°03	1°6/ 4.9 17		
9 28	3 6.37	+12 17.6	1.716	2.544	15.5	22.4	9 28	3 9.19	+19 33.0	1.414	2.236	18.6	21.6
10 8	3 1.53	+11 47.9	1.629	2.534	12.0	22.1	10 8	3 4.34	+19 42.3	1.336	2.233	14.6	21.3
10 18	2 54.07	+11 10.4	1.565	2.523	7.9	21.8	10 18	2 56.23	+19 38.1	1.278	2.230	9.9	21.0
10 28	2 44.66	+10 28.5	1.526	2.512	3.5	21.6	10 28	2 45.66	+19 20.2	1.243	2.227	4.7	20.7
11 7	2 34.36	+9 47.1	1.515	2.501	2.9	21.5	11 7	2 33.98	+18 51.3	1.235	2.224	2.0	20.5
11 17	2 24.39	+9 11.8	1.532	2.489	7.3	21.7	11 17	2 22.78	+18 16.6	1.253	2.221	7.0	20.8
11 27	2 15.96	+8 48.0	1.576	2.477	11.7	22.0	11 27	2 13.60	+17 43.4	1.297	2.217	12.1	21.1
12 7	2 9.91	+8 39.0	1.642	2.464	15.5	22.2	12 7	2 7.45	+17 18.5	1.364	2.213	16.5	21.4
469234	2016 <i>JG</i> ₅		11 4.1 48°98	10°0/31.4 17			338469	2003 <i>FY</i> ₇₆		11 4.1 207°16	0°3/ 4.3 18		
9 28	3 10.56	- 3 5.3	1.019	1.879	21.5	20.1	9 28	3 6.24	+18 1.1	1.925	2.735	14.8	21.7
10 8	3 4.97	- 4 12.0	0.999	1.911	17.0	19.9	10 8	3 1.17	+17 47.1	1.838	2.731	11.5	21.5
10 18	2 56.09	- 5 5.8	0.997	1.944	12.8	19.8	10 18	2 53.70	+17 22.2	1.774	2.726	7.6	21.3
10 28	2 45.28	- 5 36.4	1.016	1.977	10.2	19.8	10 28	2 44.48	+16 48.0	1.736	2.721	3.3	21.0
11 7	2 34.25	- 5 37.4	1.058	2.011	10.7	19.9	11 7	2 34.50	+16 7.8	1.726	2.716	1.3	20.8
11 17	2 24.59	- 5 7.7	1.123	2.045	13.5	20.2	11 17	2 24.87	+15 26.2	1.745	2.710	5.7	21.1
11 27	2 17.52	- 4 10.2	1.209	2.079	16.9	20.5	11 27	2 16.67	+14 48.8	1.793	2.704	9.9	21.4
12 7	2 13.62	- 2 51.4	1.313	2.113	19.9	20.8	12 7	2 10.68	+14 20.4	1.864	2.697	13.5	21.6
484157	2006 <i>UK</i> ₃₀		11 4.1 337°81	2°3/ 5.2 17			273484	2006 <i>YQ</i> ₄₉		11 4.1 295°55	0°9/ 4.5 18		
9 28	3 5.03	+20 2.5	1.632	2.450	16.6	21.5	9 28	3 5.77	+18 5.3	1.479	2.307	17.6	21.0
10 8	3 0.82	+20 36.4	1.548	2.442	13.2	21.3	10 8	3 1.65	+18 10.4	1.393	2.295	13.8	20.7
10 18	2 53.79	+21 0.0	1.484	2.433	9.1	21.0	10 18	2 54.48	+18 3.5	1.328	2.283	9.3	20.4
10 28	2 44.60	+21 12.1	1.444	2.426	4.7	20.7	10 28	2 44.95	+17 45.4	1.286	2.272	4.2	20.1
11 7	2 34.37	+21 13.6	1.431	2.419	2.5	20.6	11 7	2 34.28	+17 18.8	1.270	2.260	1.6	19.9
11 17	2 24.43	+21 6.9	1.445	2.413	6.3	20.8	11 17	2 23.92	+16 48.6	1.281	2.249	6.9	20.2
11 27	2 16.12	+20 57.2	1.486	2.407	10.7	21.0	11 27	2 15.35	+16 21.5	1.318	2.238	11.9	20.5
12 7	2 10.39	+20 50.0	1.549	2.402	14.7	21.3	12 7	2 9.58	+16 3.5	1.376	2.227	16.3	20.7
299610	2006 <i>HP</i> ₈₈		11 4.1 142°31	2°6/ 2.1 18			484945	2009 <i>SL</i> ₂₄₀		11 4.1 4°80	13°6/24.8 17		
9 28	3 4.27	+10 13.4	2.087	2.911	13.3	21.3	9 28	2 53.08	-10 15.0	1.225	2.092	18.1	19.5
10 8	2 59.20	+9 30.6	2.017	2.919	10.2	21.1	10 8	2 51.77	-12 26.9	1.190	2.092	15.6	19.3
10 18	2 52.13	+8 42.7	1.971	2.928	6.6	20.9	10 18	2 47.79	-14 22.4	1.174	2.095	14.0	19.3
10 28	2 43.71	+7 54.0	1.952	2.936	3.3	20.7	10 28	2 41.99	-15 48.0	1.179	2.099	13.7	19.3
11 7	2 34.80	+7 9.0	1.962	2.943	3.3	20.7	11 7	2 35.58	-16 34.1	1.205	2.106	14.8	19.4
11 17	2 26.34	+6 32.3	2.001	2.950	6.5	21.0	11 17	2 29.78	-16 37.0	1.250	2.115	16.9	19.5
11 27	2 19.16	+6 7.7	2.068	2.957	9.9	21.2	11 27	2 25.69	-15 58.4	1.313	2.126	19.3	19.7
12 7	2 13.90	+5 57.2	2.158	2.963	12.9	21.4	12 7	2 24.00	-14 44.9	1.392	2.139	21.4	19.9
326859	2003 <i>UN</i> ₂₀₂		11 4.1 18°02	2°1/ 3.3 18			518472	2005 <i>QD</i> ₁₉₁		11 4.1 52°24	0°2/ 4.2 18		
9 28	3 8.15	+9 49.1	1.076	1.935	20.6	19.5	9 28	3 2.67	+17 40.6	1.905	2.723	14.6	21.3
10 8	3 3.96	+10 11.0	1.019	1.939	16.0	19.2	10 8	2 58.31	+17 24.4	1.833	2.730	11.3	21.1
10 18	2 56.12	+10 30.2	0.980	1.944	10.5	19.0	10 18	2 51.72	+16 57.8	1.783	2.737	7.4	20.9
10 28	2 45.60	+10 49.1	0.964	1.951	4.6	18.7	10 28	2 43.60	+16 23.0	1.758	2.744	3.2	20.6
11 7	2 34.02	+11 10.6	0.971	1.959	3.2	18.6	11 7	2 34.90	+15 43.6	1.762	2.752	1.2	20.5
11 17	2 23.22	+11 37.7	1.002	1.967	8.8	19.0	11 17	2 26.64	+15 4.2	1.794	2.759	5.5	20.8
11 27	2 14.86	+12 13.2	1.057	1.977	14.2	19.3	11 27	2 19.79	+14 30.0	1.854	2.767	9.5	21.1
12 7	2 9.94	+12 58.5	1.131	1.987	18.7	19.6	12 7	2 15.03	+14 5.2	1.938	2.775	12.9	21.3
119275	2001 <i>RR</i> ₈₁		11 4.1 78°09	1°2/ 4.8 18			303162	2004 <i>EM</i> ₆₁		11 4.1 239°50	1°7/ 2.7 18		
9 28	3 9.98	+19 32.3	1.533	2.348	17.7	20.3	9 28	3 2.12	+13 14.8	2.096	2.918	13.3	21.6
10 8	3 4.20	+19 33.0	1.480	2.373	13.7	20.1	10 8	2 57.75	+12 34.1	2.009	2.911	10.2	21.4
10 18	2 55.63	+19 20.5	1.447	2.398	9.1	19.9	10 18	2 51.33	+11 45.5	1.946	2.904	6.6	21.2
10 28	2 45.20	+18 56.1	1.438	2.422	4.2	19.7	10 28	2 43.45	+10 52.4	1.910	2.896	2.9	20.9
11 7	2 34.23	+18 23.2	1.457	2.447	1.7	19.6	11 7	2 34.95	+9 59.4	1.902	2.888	2.5	20.9
11 17	2 24.08	+17 47.2	1.504	2.471	6.2	19.9	11 17	2 26.74	+9 11.5	1.924	2.880	6.1	21.1
11 27	2 15.92	+17 14.4	1.578	2.495	10.6	20.2	11 27	2 19.75	+8 33.7	1.973	2.871	9.8	21.3
12 7	2 10.48	+16 50.2	1.675	2.518	14.3	20.5	12 7	2 14.64	+8 9.3	2.046	2.863	13.1	21.5
352255	2007 <i>TZ</i> ₁₈₀		11 4.1 0°36	2°5/ 2.6 18			462994	2011 <i>FR</i> ₄₆		11 4.1 308°87	7°6/ 4.6 16		
9 28	3 2.82	+10 46.7	1.503	2.347	16.5	20.4	9 28	3 23.38	+19 14.5	1.003	1.829	24.2	20.9
10 8	2 58.97	+10 24.6	1.433	2.346	12.7	20.2	10 8	3 17.93	+21 57.2	0.920	1.814	19.9	20.6
10 18	2 52.43	+9 56.6	1.383	2.345	8.3	19.9	10 18	3 7.03	+24 45.8	0.855	1.800	14.7	20.3
10 28	2 43.96	+9 26.7	1.359	2.345	3.9	19.7	10 28	2 51.00	+27 28.0	0.813	1.786	9.5	19.9
11 7	2 34.70	+9 0.1	1.360	2.345	3.4	19.6	11 7	2 31.53	+29 48.3	0.795	1.772	7.8	19.8
11 17	2 25.92	+8 41.9	1.388	2.346	7.7	19.9	11 17	2 11.58	+31 34.4	0.802	1.759	12.0	20.0
11 27	2 18.82	+8 36.4	1.441	2.348	12.1	20.2	11 27	1 54.54	+32 46.4	0.833	1.747	17.7	20.2
12 7	2 14.22	+8 45.9	1.516	2.350	15.9	20.4	12 7	1 42.78	+33 34.9	0.882	1.736	23.0	20.5
17228	2000 <i>CJ</i> ₉₄		11 4.1 194°48	0°2/ 4.3 18			99692	2002 <i>JS</i> ₂₇		11 4.1 169°08	2°4/ 2.6 18		
9 28	3 1.05	+17 44.4	2.792	3.592	10.9	19.4	9 28	3 6.71	+9 36.2	1.912	2.736	14.3	19.9
10 8	2 56.42	+17 29.2	2.702	3.590	8.5	19.2	10 8	3 1.37	+9 22.0	1.836	2.738	11.0	19.7
10 18	2 50.22	+17 6.5	2.637	3.588	5.6	19.0	10 18	2 53.73	+9 4.3	1.783	2.740	7.2	19.5
10 28	2 42.91	+16 37.6	2.600	3.586	2.4	18.8	10 28	2 44.46	+8 46.1	1.756	2.741	3.4	19.2
11 7	2 35.15	+16 5.0	2.593	3.583	0.9	18.7	11 7	2 34.54	+8 31.0	1.758	2.742	3.1	19.2
11 17	2 27.63	+15 31.7	2.617	3.580	4.2	18.9	11 17	2 25.03	+8 22.7	1.789	2.743	6.7	19.5
11 27	2 21.03	+15 1.1	2.670	3.577	7.2	19.1	11 27	2 16.94	+8 24.3	1.847	2.743	10.5	19.7
12 7	2 15.89	+14 36.5	2.749	3.574	9.9	19.3	12 7	2 10.99	+8 37.5	1.929	2.744	13.8	19.9
72731	2001 <i>FM</i> ₁₀₀		11 4.1 71°42	7°9/10.3 18			228517	2001 <i>TX</i> ₂₁₇		11 4.1 308°58	3°0/ 5.7 18		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
476579	2008 <i>RC</i> ₆₃		11 4.1 359°74	0°9/ 4.5 18			128578	2004 <i>PW</i> ₁₀₄		11 4.1 27°48	0°5/ 3.7 18		
9 28	3 0.28	+17 22.5	1.112	1.970	20.1	20.6	9 28	3 5.09	+13 37.7	1.874	2.697	14.6	19.4
10 8	2 58.01	+17 35.8	1.048	1.966	15.8	20.3	10 8	3 0.23	+13 47.0	1.801	2.701	11.3	19.2
10 18	2 52.33	+17 36.1	1.001	1.964	10.5	20.0	10 18	2 53.04	+13 50.7	1.750	2.706	7.3	19.0
10 28	2 44.07	+17 24.3	0.976	1.963	4.7	19.7	10 28	2 44.22	+13 50.2	1.725	2.712	3.1	18.8
11 7	2 34.70	+17 4.2	0.973	1.963	1.8	19.5	11 7	2 34.73	+13 47.9	1.728	2.717	1.6	18.7
11 17	2 25.90	+16 41.7	0.995	1.966	7.7	19.9	11 17	2 25.65	+13 46.7	1.760	2.723	5.8	19.0
11 27	2 19.28	+16 24.0	1.039	1.969	13.2	20.2	11 27	2 18.01	+13 50.0	1.819	2.729	9.8	19.2
12 7	2 15.85	+16 17.0	1.103	1.975	17.9	20.5	12 7	2 12.53	+14 0.4	1.902	2.736	13.2	19.5
487854	2015 <i>TW</i> ₁₀₄		11 4.1 334°62	3°7/ 1.0 18			372807	2010 <i>TP</i> ₄₀		11 4.1 155°38	3°4/ 6.0 15		
9 28	2 59.28	+ 8 27.4	1.930	2.769	13.6	21.3	9 28	3 10.81	+24 8.2	1.596	2.393	17.9	22.1
10 8	2 55.67	+ 7 25.7	1.854	2.764	10.4	21.1	10 8	3 5.28	+24 27.8	1.520	2.398	14.3	21.9
10 18	2 50.01	+ 6 18.7	1.801	2.759	7.0	20.9	10 18	2 56.68	+24 31.5	1.464	2.403	10.1	21.7
10 28	2 42.90	+ 5 12.0	1.774	2.755	4.1	20.7	10 28	2 45.84	+24 17.8	1.432	2.408	5.8	21.4
11 7	2 35.21	+ 4 11.6	1.775	2.751	4.5	20.7	11 7	2 34.05	+23 47.9	1.427	2.412	3.4	21.3
11 17	2 27.86	+ 3 23.3	1.804	2.747	7.7	20.9	11 17	2 22.80	+23 6.5	1.450	2.415	6.5	21.5
11 27	2 21.76	+ 2 51.5	1.858	2.743	11.1	21.1	11 27	2 13.49	+22 21.0	1.499	2.418	10.9	21.8
12 7	2 17.56	+ 2 38.1	1.936	2.740	14.2	21.3	12 7	2 7.04	+21 39.2	1.572	2.420	14.8	22.0
517373	2014 <i>KR</i> ₅₂		11 4.1 18°10	4°4/ 1.0 18			195189	2002 <i>CD</i> ₂₇₄		11 4.1 143°50	2°8/ 2.1 18		
9 28	3 2.25	+ 5 55.2	1.782	2.622	14.5	21.3	9 28	3 4.87	+ 9 59.4	1.924	2.751	14.1	20.6
10 8	2 58.04	+ 5 6.7	1.714	2.623	11.2	21.1	10 8	2 59.87	+ 9 18.0	1.854	2.758	10.8	20.4
10 18	2 51.58	+ 4 16.1	1.668	2.625	7.6	20.9	10 18	2 52.70	+ 8 31.5	1.807	2.764	7.1	20.2
10 28	2 43.56	+ 3 29.0	1.648	2.626	4.8	20.7	10 28	2 44.04	+ 7 44.2	1.786	2.770	3.6	20.0
11 7	2 34.94	+ 2 51.0	1.655	2.628	5.2	20.7	11 7	2 34.83	+ 7 1.1	1.794	2.776	3.5	20.0
11 17	2 26.76	+ 2 27.2	1.689	2.630	8.3	20.9	11 17	2 26.07	+ 6 27.0	1.831	2.781	7.0	20.3
11 27	2 20.00	+ 2 20.6	1.749	2.632	11.8	21.1	11 27	2 18.71	+ 6 5.8	1.895	2.786	10.6	20.5
12 7	2 15.33	+ 2 32.0	1.832	2.634	14.9	21.3	12 7	2 13.41	+ 5 59.6	1.982	2.791	13.8	20.7
455278	2001 <i>YY</i> ₂		11 4.1 36°21	13°3/14.9 17			452918	2006 <i>VH</i> ₁₁₈		11 4.1 298°08	1°0/ 4.9 18		
9 28	3 5.99	+45 55.8	1.018	1.774	28.3	20.0	9 28	3 2.34	+20 15.4	1.956	2.767	14.6	21.4
10 8	3 3.86	+46 26.6	0.960	1.781	25.1	19.8	10 8	2 58.18	+20 0.8	1.870	2.762	11.4	21.2
10 18	2 56.76	+46 10.7	0.913	1.789	21.3	19.6	10 18	2 51.76	+19 33.8	1.806	2.757	7.7	20.9
10 28	2 46.00	+44 57.8	0.881	1.798	17.4	19.4	10 28	2 43.71	+18 55.7	1.768	2.752	3.6	20.7
11 7	2 33.98	+42 45.6	0.867	1.808	14.3	19.3	11 7	2 34.94	+18 9.6	1.757	2.747	1.4	20.5
11 17	2 23.35	+39 44.3	0.875	1.818	13.4	19.3	11 17	2 26.51	+17 20.4	1.775	2.742	5.4	20.8
11 27	2 16.25	+36 16.1	0.904	1.829	15.3	19.4	11 27	2 19.43	+16 34.0	1.821	2.737	9.4	21.0
12 7	2 13.59	+32 47.3	0.956	1.841	18.8	19.7	12 7	2 14.44	+15 55.6	1.891	2.732	12.9	21.2
90254	2003 <i>BN</i> ₆₈		11 4.1 133°25	2°3/ 5.7 18			263651	2008 <i>GU</i> ₈₉		11 4.1 212°01	2°6/ 1.8 18		
9 28	3 7.79	+23 9.0	1.909	2.701	15.5	20.0	9 28	3 0.65	+10 57.1	2.173	3.001	12.7	21.1
10 8	3 2.31	+23 8.6	1.834	2.712	12.3	19.8	10 8	2 56.48	+ 9 59.7	2.094	2.999	9.7	20.9
10 18	2 54.38	+22 54.2	1.781	2.723	8.5	19.6	10 18	2 50.44	+ 8 55.8	2.039	2.997	6.3	20.7
10 28	2 44.74	+22 25.8	1.754	2.733	4.5	19.4	10 28	2 43.08	+ 7 49.9	2.011	2.995	3.2	20.5
11 7	2 34.46	+21 45.9	1.755	2.742	2.3	19.3	11 7	2 35.21	+ 6 47.2	2.012	2.993	3.3	20.5
11 17	2 24.69	+20 59.2	1.785	2.751	5.5	19.5	11 17	2 27.68	+ 5 52.9	2.042	2.991	6.5	20.7
11 27	2 16.50	+20 11.8	1.843	2.759	9.3	19.8	11 27	2 21.29	+ 5 11.6	2.100	2.988	9.8	20.9
12 7	2 10.64	+19 29.9	1.927	2.767	12.8	20.0	12 7	2 16.66	+ 4 45.9	2.182	2.986	12.8	21.1
59805	1999 <i>RZ</i> ₆		11 4.1 77°21	2°3/ 5.8 18			309041	2006 <i>UR</i> ₂₂₁		11 4.1 349°45	0°2/ 4.3 18		
9 28	3 5.56	+23 11.1	2.119	2.909	14.3	19.1	9 28	3 0.03	+19 36.3	1.680	2.506	15.9	20.4
10 8	3 0.28	+23 19.3	2.053	2.929	11.2	18.9	10 8	2 56.69	+18 56.1	1.601	2.502	12.4	20.2
10 18	2 52.89	+23 15.2	2.010	2.949	7.8	18.7	10 18	2 50.90	+18 0.7	1.543	2.499	8.2	19.9
10 28	2 44.07	+22 58.9	1.992	2.970	4.2	18.5	10 28	2 43.36	+16 52.9	1.510	2.496	3.5	19.6
11 7	2 34.76	+22 32.4	2.004	2.990	2.4	18.5	11 7	2 35.10	+15 38.3	1.504	2.494	1.4	19.5
11 17	2 25.95	+21 59.4	2.044	3.010	5.0	18.7	11 17	2 27.27	+14 23.9	1.526	2.492	6.1	19.8
11 27	2 18.56	+21 24.8	2.113	3.029	8.3	18.9	11 27	2 20.96	+13 17.7	1.574	2.491	10.6	20.0
12 7	2 13.21	+20 53.5	2.208	3.049	11.3	19.1	12 7	2 16.92	+12 25.4	1.646	2.490	14.4	20.3
429811	2012 <i>JM</i> ₅₀		11 4.1 71°72	0°9/ 3.5 16			8940	<i>Yakushima</i>		11 4.1 70°50	1°4/ 2.9 18		
9 28	3 7.87	+15 51.8	1.373	2.207	18.4	21.7	9 28	3 2.30	+12 56.6	2.063	2.887	13.4	17.8
10 8	3 2.78	+15 21.8	1.322	2.229	14.1	21.4	10 8	2 57.85	+12 31.1	1.988	2.890	10.3	17.6
10 18	2 54.80	+14 40.2	1.292	2.251	9.1	21.2	10 18	2 51.37	+11 59.2	1.936	2.894	6.7	17.3
10 28	2 44.90	+13 50.8	1.285	2.273	3.7	21.0	10 28	2 43.49	+11 23.8	1.911	2.897	2.9	17.1
11 7	2 34.45	+12 59.7	1.306	2.295	2.1	20.9	11 7	2 35.06	+10 48.9	1.914	2.901	2.2	17.1
11 17	2 24.88	+12 13.7	1.353	2.316	7.2	21.3	11 17	2 27.01	+10 18.5	1.946	2.905	5.9	17.3
11 27	2 17.37	+11 39.1	1.425	2.338	11.8	21.6	11 27	2 20.22	+ 9 56.8	2.006	2.908	9.5	17.6
12 7	2 12.64	+11 19.7	1.520	2.359	15.7	21.9	12 7	2 15.32	+ 9 46.4	2.090	2.912	12.6	17.8
288792	2004 <i>RJ</i> ₁₄₂		11 4.1 60°86	0°5/ 4.5 18			153320	2001 <i>OR</i> ₁₃		11 4.1 6°78	8°3/ 7.0 18		
9 28	3 2.03	+18 53.3	2.027	2.839	14.0	20.9	9 28	3 1.57	+25 28.1	0.886	1.741	24.3	17.5
10 8	2 57.68	+18 33.2	1.955	2.849	10.9	20.7	10 8	3 0.10	+27 23.7	0.834	1.741	20.1	17.2
10 18	2 51.25	+18 2.4	1.906	2.858	7.2	20.5	10 18	2 54.33	+29 0.6	0.798	1.744	15.2	17.0
10 28	2 43.41	+17 22.6	1.883	2.868	3.2	20.3	10 28	2 45.12	+30 10.3	0.780	1.750	10.6	16.7
11 7	2 35.04	+16 37.5	1.888	2.878	1.2	20.1	11 7	2 34.35	+30 47.8	0.782	1.758	8.3	16.7
11 17	2 27.11	+15 51.9	1.922	2.888	5.2	20.5	11 17	2 24.30	+30 54.7	0.805	1.769	10.5	16.8
11 27	2 20.52	+15 10.8	1.984	2.898	8.9	20.7	11 27	2 17.15	+30 40.0	0.848	1.783	14.8	17.1
12 7	2 15.88	+14 38.5	2.071	2.908	12.2	20.9	12 7	2 14.16	+30 16.2	0.909	1.798	19.1	17.4
406265	2007 <i>ED</i> ₄₆		11 4.1 184°82	2°8/ 1.5 18			354037	2001 <i>RQ</i> ₁₃₇		11 4.1 100°23	3°9/3		

EPHEMERIDES

11 4.1

11 4.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
70028	1999 <i>BM</i> ₁₇	11	4.1 350°90	3°7/ 6.4	18		396921	2005 <i>EG</i> ₁₄₁	11	4.1 206°65	6°9/ 9.9	18	
9 28	3 5.18	+24 36.3	2.032	2.821	14.8	18.5	9 28	3 8.16	+37 7.2	2.232	2.952	15.6	21.1
10 8	3 0.47	+25 18.0	1.946	2.818	12.0	18.3	10 8	3 2.86	+37 38.5	2.138	2.948	13.4	21.0
10 18	2 53.35	+25 48.1	1.881	2.815	8.7	18.1	10 18	2 54.96	+37 50.3	2.064	2.944	10.9	20.8
10 28	2 44.42	+26 4.8	1.842	2.812	5.4	17.9	10 28	2 45.12	+37 39.0	2.012	2.939	8.5	20.6
11 7	2 34.65	+26 8.0	1.830	2.810	3.7	17.8	11 7	2 34.40	+37 3.6	1.987	2.934	7.0	20.5
11 17	2 25.13	+25 59.6	1.847	2.809	5.7	17.9	11 17	2 24.03	+36 6.6	1.990	2.928	7.4	20.6
11 27	2 16.99	+25 43.9	1.891	2.808	9.1	18.1	11 27	2 15.17	+34 54.2	2.020	2.922	9.4	20.7
12 7	2 11.04	+25 26.3	1.960	2.807	12.3	18.3	12 7	2 8.71	+33 34.8	2.076	2.916	12.0	20.8
509643	2008 <i>GK</i> ₂₄	11	4.1 266°33	0°4/ 3.8	18		50460	2000 <i>DK</i> ₅₆	11	4.1 93°73	4°7/ 30.5	18	
9 28	3 7.41	+15 6.2	1.518	2.347	17.1	22.1	9 28	2 59.61	+ 2 35.3	2.419	3.249	11.5	19.2
10 8	3 2.77	+15 4.0	1.435	2.338	13.4	21.8	10 8	2 55.38	+ 1 28.2	2.359	3.260	8.9	19.0
10 18	2 55.14	+14 52.5	1.372	2.330	8.8	21.5	10 18	2 49.55	+ 0 21.6	2.324	3.271	6.4	18.9
10 28	2 45.25	+14 33.5	1.334	2.321	3.7	21.2	10 28	2 42.68	- 0 39.3	2.316	3.282	4.8	18.8
11 7	2 34.30	+14 10.6	1.323	2.312	1.8	21.0	11 7	2 35.46	- 1 29.6	2.337	3.293	5.4	18.9
11 17	2 23.71	+13 48.4	1.338	2.303	7.1	21.4	11 17	2 28.59	- 2 5.6	2.386	3.304	7.5	19.0
11 27	2 14.88	+13 32.7	1.380	2.294	12.0	21.6	11 27	2 22.77	- 2 24.9	2.462	3.314	10.0	19.2
12 7	2 8.79	+13 27.9	1.444	2.285	16.2	21.9	12 7	2 18.47	- 2 27.1	2.561	3.325	12.2	19.4
298069	2002 <i>QJ</i> ₁₀₆	11	4.1 357°43	7°7/ 7.6	18		317290	2002 <i>GF</i> ₄₇	11	4.1 34°20	2°4/ 5.0	18	
9 28	3 8.89	+29 46.4	1.494	2.280	19.4	19.8	9 28	3 9.53	+18 32.5	1.057	1.902	21.9	19.5
10 8	3 4.52	+31 17.4	1.416	2.277	16.2	19.6	10 8	3 5.18	+19 20.6	1.006	1.915	17.2	19.2
10 18	2 56.67	+32 32.4	1.357	2.275	12.7	19.4	10 18	2 57.00	+19 55.6	0.973	1.930	11.6	19.0
10 28	2 46.03	+33 25.0	1.321	2.273	9.4	19.2	10 28	2 46.05	+20 16.0	0.961	1.945	5.7	18.7
11 7	2 33.96	+33 51.1	1.309	2.273	7.7	19.1	11 7	2 34.08	+20 22.6	0.973	1.961	2.8	18.6
11 17	2 22.19	+33 51.3	1.323	2.273	9.0	19.2	11 17	2 23.06	+20 19.7	1.009	1.979	7.8	19.0
11 27	2 12.47	+33 31.7	1.361	2.274	12.2	19.4	11 27	2 14.70	+20 14.3	1.068	1.997	13.1	19.3
12 7	2 6.00	+33 1.7	1.421	2.276	15.6	19.6	12 7	2 9.94	+20 13.3	1.148	2.015	17.7	19.6
180880	2005 <i>JN</i> ₁₀₁	11	4.1 293°97	0°4/ 3.9	18		222061	1998 <i>XN</i> ₅	11	4.1 10°67	2°0/ 3.1	18	
9 28	3 4.23	+17 1.5	1.395	2.232	18.0	20.7	9 28	3 1.42	+12 47.3	1.067	1.933	20.2	19.4
10 8	3 0.55	+16 37.2	1.313	2.221	14.0	20.4	10 8	2 58.80	+12 32.1	1.011	1.935	15.6	19.1
10 18	2 53.80	+15 58.8	1.251	2.210	9.3	20.1	10 18	2 52.77	+12 7.5	0.973	1.939	10.1	18.8
10 28	2 44.71	+15 8.8	1.212	2.199	3.9	19.8	10 28	2 44.27	+11 37.8	0.956	1.944	4.3	18.5
11 7	2 34.54	+14 12.6	1.199	2.188	1.8	19.6	11 7	2 34.81	+11 9.4	0.963	1.951	3.1	18.5
11 17	2 24.75	+13 17.6	1.212	2.178	7.5	19.9	11 17	2 26.08	+10 49.1	0.993	1.959	8.7	18.8
11 27	2 16.80	+12 31.9	1.250	2.167	12.7	20.2	11 27	2 19.59	+10 42.6	1.045	1.968	14.0	19.2
12 7	2 11.69	+12 1.6	1.309	2.157	17.2	20.5	12 7	2 16.26	+10 52.9	1.118	1.979	18.5	19.5
238227	2003 <i>UB</i> ₁₇₄	11	4.1 35°10	1°1/ 4.7	18		352981	2009 <i>BQ</i> ₇₆	11	4.1 248°60	3°8/ 1.5	18	
9 28	3 3.93	+19 41.9	1.241	2.081	19.6	19.7	9 28	3 4.57	+ 6 17.7	1.992	2.821	13.6	20.9
10 8	3 0.12	+19 31.3	1.195	2.102	15.2	19.5	10 8	2 59.76	+ 5 43.0	1.907	2.810	10.6	20.7
10 18	2 53.23	+19 4.8	1.167	2.124	10.1	19.3	10 18	2 52.76	+ 5 6.1	1.844	2.799	7.2	20.5
10 28	2 44.31	+18 24.9	1.162	2.148	4.5	19.1	10 28	2 44.15	+ 4 31.4	1.808	2.788	4.3	20.3
11 7	2 34.79	+17 36.9	1.122	2.172	1.7	19.0	11 7	2 34.84	+ 4 3.6	1.801	2.776	4.5	20.3
11 17	2 26.16	+16 48.1	1.228	2.197	6.8	19.4	11 17	2 25.80	+ 3 47.1	1.822	2.764	7.6	20.5
11 27	2 19.69	+16 6.3	1.298	2.223	11.6	19.7	11 27	2 18.04	+ 3 44.9	1.870	2.752	11.2	20.6
12 7	2 16.08	+15 37.0	1.391	2.250	15.7	20.0	12 7	2 12.27	+ 3 58.3	1.941	2.740	14.3	20.8
382692	2002 <i>VT</i> ₆₀	11	4.1 0°96	1°6/ 4.8	18		266731	2009 <i>RN</i> ₅₉	11	4.1 6°51	0°7/ 3.6	17	
9 28	3 1.12	+18 48.5	1.058	1.916	21.0	20.2	9 28	3 0.89	+14 51.7	1.787	2.618	14.9	20.6
10 8	2 58.87	+19 4.9	0.995	1.912	16.5	19.9	10 8	2 57.15	+14 37.6	1.713	2.619	11.4	20.4
10 18	2 53.02	+19 5.9	0.949	1.911	11.2	19.6	10 18	2 51.11	+14 15.1	1.662	2.621	7.4	20.1
10 28	2 44.44	+18 52.2	0.924	1.910	5.2	19.3	10 28	2 43.46	+13 46.9	1.635	2.623	3.1	19.9
11 7	2 34.67	+18 27.1	0.922	1.912	2.1	19.1	11 7	2 35.15	+13 16.8	1.636	2.625	1.7	19.8
11 17	2 25.53	+17 57.2	0.943	1.915	7.8	19.4	11 17	2 27.24	+12 49.3	1.665	2.629	6.0	20.1
11 27	2 18.71	+17 30.7	0.986	1.919	13.5	19.8	11 27	2 20.74	+12 29.0	1.720	2.633	10.1	20.3
12 7	2 15.25	+17 14.7	1.049	1.925	18.3	20.1	12 7	2 16.37	+12 19.3	1.798	2.637	13.6	20.6
209739	2005 <i>EY</i> ₁₈₄	11	4.1 168°42	4°1/ 7.2	18		88192	2000 <i>YT</i> ₃₅	11	4.1 347°39	6°7/ 30.7	18	
9 28	3 8.26	+28 10.9	2.301	3.061	14.1	20.8	9 28	3 2.13	- 1 16.8	1.807	2.646	14.4	18.3
10 8	3 2.54	+28 39.0	2.214	3.065	11.5	20.7	10 8	2 57.96	- 2 2.4	1.740	2.642	11.5	18.1
10 18	2 54.54	+28 53.4	2.149	3.068	8.6	20.5	10 18	2 51.58	- 2 43.4	1.694	2.638	8.6	17.9
10 28	2 44.88	+28 52.2	2.109	3.070	5.7	20.3	10 28	2 43.64	- 3 13.8	1.673	2.635	6.8	17.8
11 7	2 34.50	+28 35.6	2.098	3.073	4.1	20.2	11 7	2 35.07	- 3 27.8	1.679	2.632	7.4	17.9
11 17	2 24.43	+28 6.1	2.117	3.074	5.6	20.3	11 17	2 26.91	- 3 22.1	1.711	2.629	9.9	18.0
11 27	2 15.71	+27 28.7	2.164	3.076	8.4	20.5	11 27	2 20.12	- 2 55.3	1.767	2.627	12.9	18.2
12 7	2 9.09	+26 49.2	2.238	3.076	11.3	20.7	12 7	2 15.40	- 2 8.9	1.845	2.626	15.7	18.4
121100	1999 <i>FS</i> ₆₂	11	4.1 155°12	0°0/ 3.9	18		148276	2000 <i>GL</i> ₅₆	11	4.1 145°95	0°6/ 3.6	18	
9 28	3 6.54	+17 16.4	2.024	2.832	14.2	20.8	9 28	3 6.70	+15 59.4	1.891	2.705	14.8	20.9
10 8	3 1.16	+16 56.7	1.947	2.839	11.0	20.6	10 8	3 1.39	+15 30.9	1.818	2.714	11.4	20.7
10 18	2 53.56	+16 27.1	1.893	2.846	7.2	20.4	10 18	2 53.76	+14 52.7	1.767	2.722	7.4	20.4
10 28	2 44.43	+15 49.6	1.866	2.852	3.1	20.1	10 28	2 44.54	+14 7.4	1.743	2.730	3.1	20.2
11 7	2 34.71	+15 7.7	1.868	2.857	1.3	20.0	11 7	2 34.73	+13 19.5	1.748	2.737	1.6	20.1
11 17	2 25.43	+14 26.1	1.899	2.862	5.5	20.3	11 17	2 25.40	+12 34.0	1.782	2.744	6.0	20.4
11 27	2 17.55	+13 49.9	1.958	2.866	9.4	20.6	11 27	2 17.58	+11 56.3	1.844	2.750	10.0	20.7
12 7	2 11.76	+13 23.0	2.043	2.870	12.7	20.8	12 7	2 11.95	+11 30.4	1.930	2.755	13.4	20.9
417345	2006 <i>DE</i> ₁₅₄	11	4.1 144°69	3°8/ 30.8	18		277254	2005 <i>RC</i> ₄₆	11	4.1 247°78	4°6/ 1.2</		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
210883	2001 <i>SE</i> ₇₈	11	4.1	85°02	1°3/ 4.9	18	231946	2001 <i>KT</i> ₁	11	4.1	98°83	7°4/30.4	18
9 28	3 4.83	+20 6.3	1.950	2.756	14.7	20.7	9 28	3 6.95	- 5 1.2	1.973	2.794	14.1	20.0
10 8	2 59.99	+20 4.9	1.877	2.765	11.5	20.5	10 8	3 1.22	- 5 48.7	1.924	2.811	11.4	19.9
10 18	2 52.88	+19 52.2	1.825	2.774	7.8	20.3	10 18	2 53.46	- 6 28.2	1.897	2.827	8.9	19.7
10 28	2 44.18	+19 29.0	1.800	2.783	3.7	20.0	10 28	2 44.37	- 6 53.7	1.897	2.844	7.4	19.7
11 7	2 34.88	+18 58.1	1.803	2.792	1.5	19.9	11 7	2 34.91	- 7 0.8	1.923	2.860	8.0	19.8
11 17	2 26.02	+18 23.5	1.835	2.801	5.3	20.2	11 17	2 26.02	- 6 47.3	1.977	2.875	10.0	19.9
11 27	2 18.61	+17 50.5	1.894	2.810	9.1	20.4	11 27	2 18.57	- 6 13.2	2.056	2.890	12.4	20.1
12 7	2 13.34	+17 23.8	1.978	2.819	12.5	20.7	12 7	2 13.14	- 5 21.0	2.157	2.905	14.7	20.3
112367	2002 <i>NV</i> ₁₈	11	4.1	111°80	1°8/ 2.7	18	481899	2009 <i>AR</i> ₄₈	11	4.1	306°49	9°6/27.9	18
9 28	3 3.84	+13 4.9	1.927	2.752	14.2	19.9	9 28	3 1.63	- 5 31.6	1.648	2.489	15.4	20.8
10 8	2 59.08	+12 21.2	1.860	2.762	10.8	19.7	10 8	2 57.90	- 7 2.5	1.580	2.476	12.8	20.6
10 18	2 52.19	+11 29.9	1.815	2.773	7.0	19.5	10 18	2 51.72	- 8 27.3	1.534	2.464	10.5	20.5
10 28	2 43.86	+10 34.9	1.797	2.783	3.1	19.3	10 28	2 43.79	- 9 36.3	1.512	2.452	9.6	20.4
11 7	2 35.02	+ 9 41.4	1.808	2.793	2.6	19.3	11 7	2 35.11	-10 21.1	1.515	2.440	10.6	20.4
11 17	2 26.67	+ 8 54.6	1.847	2.803	6.4	19.6	11 17	2 26.80	-10 36.3	1.541	2.429	13.0	20.5
11 27	2 19.72	+ 8 19.2	1.914	2.813	10.1	19.8	11 27	2 19.96	-10 20.3	1.590	2.417	15.8	20.7
12 7	2 14.80	+ 7 58.1	2.005	2.822	13.3	20.0	12 7	2 15.36	- 9 35.8	1.658	2.406	18.5	20.9
127457	2002 <i>QM</i> ₂₈	11	4.1	44°96	2°1/ 5.7	18	59222	1999 <i>BT</i> ₃₁	11	4.1	335°53	1°6/ 4.9	18
9 28	3 3.14	+22 22.6	2.097	2.895	14.1	19.6	9 28	3 1.31	+19 47.2	1.232	2.076	19.4	18.9
10 8	2 58.59	+22 32.1	2.024	2.905	11.1	19.4	10 8	2 58.79	+19 52.1	1.153	2.063	15.4	18.6
10 18	2 51.91	+22 29.9	1.973	2.915	7.7	19.2	10 18	2 52.95	+19 41.2	1.092	2.050	10.5	18.3
10 28	2 43.77	+22 16.2	1.947	2.926	4.1	19.1	10 28	2 44.50	+19 14.9	1.053	2.039	5.0	18.0
11 7	2 35.05	+21 53.0	1.950	2.937	2.2	18.9	11 7	2 34.79	+18 36.5	1.038	2.028	2.0	17.8
11 17	2 26.73	+21 23.5	1.982	2.948	5.0	19.2	11 17	2 25.45	+17 52.4	1.048	2.018	7.4	18.1
11 27	2 19.75	+20 52.7	2.041	2.959	8.4	19.4	11 27	2 18.11	+17 11.5	1.081	2.010	12.9	18.3
12 7	2 14.76	+20 25.3	2.126	2.971	11.6	19.6	12 7	2 13.89	+16 41.3	1.134	2.003	17.7	18.6
480251	2015 <i>HA</i> ₅₆	11	4.1	164°73	2°1/ 5.7	18	388208	2006 <i>FB</i> ₄₁	11	4.1	162°69	0°1/ 4.2	18
9 28	3 7.88	+23 20.4	2.056	2.843	14.7	22.5	9 28	3 6.22	+17 17.1	2.149	2.953	13.6	22.2
10 8	3 2.30	+23 14.3	1.974	2.849	11.7	22.3	10 8	3 0.85	+17 5.0	2.068	2.958	10.5	22.0
10 18	2 54.39	+22 54.5	1.914	2.854	8.1	22.1	10 18	2 53.38	+16 44.0	2.011	2.963	6.9	21.8
10 28	2 44.83	+22 21.1	1.880	2.858	4.3	21.8	10 28	2 44.42	+16 15.4	1.981	2.967	3.0	21.6
11 7	2 34.62	+21 36.6	1.875	2.862	2.2	21.7	11 7	2 34.87	+15 42.4	1.981	2.970	1.2	21.4
11 17	2 24.83	+20 45.5	1.899	2.865	5.3	21.9	11 17	2 25.71	+15 8.7	2.010	2.973	5.2	21.7
11 27	2 16.51	+19 53.7	1.953	2.867	9.0	22.1	11 27	2 17.85	+14 39.1	2.067	2.976	8.9	21.9
12 7	2 10.38	+19 7.3	2.031	2.869	12.3	22.4	12 7	2 11.97	+14 17.3	2.150	2.978	12.1	22.2
474179	1999 <i>VS</i> ₆	11	4.1	298°57	23°9/27.6	17 R	291581	2006 <i>FZ</i> ₅₂	11	4.1	192°77	0°2/ 4.3	17
9 28	4 17.76	-10 53.6	0.375	1.229	45.4	19.0	9 28	3 8.88	+17 39.2	1.547	2.367	17.3	22.2
10 8	4 19.51	- 4 57.3	0.284	1.194	41.4	18.3	10 8	3 3.80	+17 28.3	1.468	2.366	13.5	22.0
10 18	4 11.83	+ 6 39.8	0.202	1.159	33.3	17.2	10 18	2 55.76	+17 5.0	1.410	2.365	9.0	21.7
10 28	3 41.32	+30 28.3	0.143	1.123	24.0	16.2	10 28	2 45.55	+16 31.1	1.377	2.363	3.9	21.4
11 7	1 45.19	+63 13.2	0.137	1.087	42.9	16.5	11 7	2 34.40	+15 50.2	1.371	2.361	1.5	21.2
11 17	21 4.48	+70 10.2	0.182	1.053	64.7	17.7	11 17	2 23.73	+15 8.2	1.393	2.358	6.7	21.6
11 27	19 12.99	+62 24.5	0.246	1.020	75.2	18.6	11 27	2 14.89	+14 32.0	1.441	2.355	11.6	21.9
12 7	18 36.41	+56 42.5	0.310	0.991	79.8	19.2	12 7	2 8.78	+14 6.9	1.512	2.352	15.7	22.1
344969	2004 <i>XQ</i> ₄₉	11	4.1	347°92	2°0/ 2.9	18	248624	2006 <i>EP</i> ₅₆	11	4.1	80°62	3°1/ 2.2	18
9 28	3 4.77	+11 44.5	1.571	2.408	16.3	21.0	9 28	3 7.25	+12 50.5	1.278	2.123	18.8	20.5
10 8	3 0.46	+11 28.7	1.497	2.406	12.5	20.7	10 8	3 2.49	+11 42.4	1.229	2.142	14.3	20.3
10 18	2 53.47	+11 6.5	1.444	2.404	8.2	20.5	10 18	2 54.73	+10 23.7	1.199	2.161	9.3	20.1
10 28	2 44.53	+10 41.2	1.416	2.403	3.6	20.2	10 28	2 45.00	+ 9 1.6	1.194	2.180	4.3	19.9
11 7	2 34.77	+10 17.4	1.415	2.402	2.8	20.2	11 7	2 34.71	+ 7 45.3	1.215	2.199	4.1	19.9
11 17	2 25.45	+ 9 59.8	1.441	2.401	7.3	20.4	11 17	2 25.32	+ 6 43.1	1.262	2.218	8.7	20.2
11 27	2 17.79	+ 9 53.0	1.492	2.400	11.7	20.7	11 27	2 18.05	+ 6 1.4	1.334	2.236	13.3	20.5
12 7	2 12.61	+ 9 59.4	1.566	2.399	15.6	20.9	12 7	2 13.62	+ 5 42.5	1.426	2.254	17.2	20.8
107867	2001 <i>FH</i> ₈₅	11	4.1	37°40	0°4/ 3.8	18	12017	1996 <i>XC</i> ₁	11	4.1	98°97	0°6/ 3.7	18
9 28	3 1.63	+15 52.8	1.936	2.759	14.2	20.1	9 28	3 6.16	+16 41.0	1.469	2.300	17.5	18.2
10 8	2 57.46	+15 35.6	1.869	2.770	10.9	20.0	10 8	3 1.63	+16 9.9	1.402	2.307	13.5	17.9
10 18	2 51.18	+15 9.9	1.824	2.781	7.1	19.7	10 18	2 54.26	+15 25.9	1.355	2.313	8.8	17.7
10 28	2 43.47	+14 38.0	1.805	2.792	2.9	19.5	10 28	2 44.87	+14 32.4	1.333	2.320	3.7	17.4
11 7	2 35.23	+14 3.7	1.814	2.804	1.4	19.4	11 7	2 34.72	+13 35.2	1.337	2.326	1.9	17.3
11 17	2 27.44	+13 31.3	1.852	2.816	5.5	19.7	11 17	2 25.20	+12 41.2	1.368	2.333	7.0	17.6
11 27	2 21.01	+13 5.3	1.917	2.828	9.3	20.0	11 27	2 17.53	+11 57.6	1.426	2.339	11.7	17.9
12 7	2 16.57	+12 49.0	2.006	2.841	12.6	20.2	12 7	2 12.55	+11 29.1	1.505	2.345	15.8	18.2
518886	2010 <i>EK</i> ₁₅₇	11	4.1	310°70	4°3/30.8	18	435555	2008 <i>QF</i> ₃₈	11	4.1	101°92	2°4/ 5.6	18
9 28	2 57.92	+ 6 49.4	2.189	3.026	12.3	20.9	9 28	3 8.58	+22 5.7	1.711	2.513	16.6	21.5
10 8	2 54.45	+ 5 23.6	2.107	3.015	9.5	20.7	10 8	3 3.26	+22 20.7	1.640	2.524	13.2	21.3
10 18	2 49.18	+ 3 52.7	2.049	3.005	6.5	20.5	10 18	2 55.22	+22 22.2	1.590	2.534	9.1	21.0
10 28	2 42.63	+ 2 22.8	2.020	2.995	4.4	20.4	10 28	2 45.27	+22 9.7	1.565	2.545	4.8	20.8
11 7	2 35.55	+ 1 0.6	2.019	2.985	5.1	20.4	11 7	2 34.56	+21 45.3	1.568	2.555	2.5	20.7
11 17	2 28.75	- 0 7.8	2.046	2.975	7.9	20.6	11 17	2 24.39	+21 13.1	1.598	2.565	5.9	20.9
11 27	2 23.01	- 0 58.0	2.100	2.966	10.9	20.8	11 27	2 15.97	+20 39.2	1.656	2.575	10.0	21.2
12 7	2 18.92	- 1 27.9	2.177	2.957	13.6	20.9	12 7	2 10.10	+20 9.9	1.738	2.584	13.7	21.4
159772	2003 <i>HT</i> ₅₂	11	4.1	221°06	0°7/ 3.6	18	441772	2009 <i>DE</i> ₄	11	4.1	324°10		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
355296	2007 <i>RV</i> ₁₇₉		11 4.1 18 ^o 76	0 ^o 5/ 4.3	18		129560	1997 <i>CW</i> ₁₂		11 4.1 131 ^o 56	0 ^o 6/ 4.5	18	
9 28	3 10.21	+13 58.7	1.469	2.297	17.7	19.7	9 28	3 6.49	+18 7.8	1.908	2.717	14.9	20.8
10 8	3 4.91	+14 48.0	1.400	2.302	13.7	19.4	10 8	3 1.35	+18 5.6	1.832	2.723	11.6	20.6
10 18	2 56.54	+15 32.9	1.351	2.307	9.1	19.2	10 18	2 53.86	+17 53.4	1.778	2.729	7.7	20.4
10 28	2 45.90	+16 12.5	1.328	2.314	4.0	18.9	10 28	2 44.69	+17 32.2	1.750	2.735	3.4	20.1
11 7	2 34.29	+16 46.9	1.331	2.321	1.5	18.8	11 7	2 34.85	+17 5.0	1.750	2.740	1.3	20.0
11 17	2 23.19	+17 17.6	1.362	2.328	6.7	19.1	11 17	2 25.45	+16 35.6	1.780	2.745	5.5	20.3
11 27	2 14.02	+17 47.3	1.419	2.337	11.4	19.4	11 27	2 17.53	+16 9.2	1.837	2.750	9.5	20.5
12 7	2 7.72	+18 19.3	1.499	2.346	15.4	19.7	12 7	2 11.81	+15 50.1	1.919	2.755	13.0	20.8
154255	2002 <i>LA</i> ₄₅		11 4.1 169 ^o 67	5 ^o 5/30.5	18		472271	2014 <i>UM</i> ₃₃		11 4.1 275 ^o 14	0 ^o 1/ 5.5	17	
9 28	3 1.02	+ 0 12.5	2.269	3.099	12.2	19.8	9 28	2 40.42	+20 4.6	42.641	43.424	0.8	21.2
10 8	2 56.67	- 0 42.7	2.201	3.100	9.6	19.6	10 8	2 39.77	+20 1.6	42.545	43.420	0.6	21.1
10 18	2 50.54	- 1 35.7	2.156	3.100	7.1	19.4	10 18	2 39.04	+19 58.1	42.474	43.416	0.4	21.1
10 28	2 43.21	- 2 21.2	2.138	3.100	5.5	19.4	10 28	2 38.27	+19 54.1	42.432	43.412	0.2	21.1
11 7	2 35.41	- 2 54.4	2.148	3.100	6.1	19.4	11 7	2 37.47	+19 49.9	42.420	43.408	0.1	21.1
11 17	2 27.95	- 3 11.7	2.186	3.100	8.3	19.5	11 17	2 36.68	+19 45.5	42.439	43.404	0.3	21.1
11 27	2 21.58	- 3 11.3	2.250	3.101	10.9	19.7	11 27	2 35.93	+19 41.1	42.487	43.400	0.5	21.1
12 7	2 16.87	- 2 53.3	2.337	3.101	13.3	19.9	12 7	2 35.25	+19 36.8	42.564	43.396	0.7	21.2
331157	2010 <i>XA</i> ₄₂		11 4.1 239 ^o 77	3 ^o 5/ 1.2	17		201101	2002 <i>GU</i> ₁₃₁		11 4.1 129 ^o 71	0 ^o 7/ 4.6	18	
9 28	3 1.81	+ 5 13.5	2.503	3.326	11.4	21.5	9 28	3 5.07	+19 55.1	1.944	2.751	14.8	20.9
10 8	2 57.20	+ 4 40.6	2.418	3.318	8.8	21.3	10 8	3 0.17	+19 29.5	1.870	2.760	11.5	20.7
10 18	2 50.88	+ 4 6.8	2.358	3.310	6.0	21.1	10 18	2 53.01	+18 51.2	1.818	2.768	7.7	20.5
10 28	2 43.37	+ 3 35.7	2.325	3.301	3.8	21.0	10 28	2 44.30	+18 2.3	1.792	2.777	3.4	20.2
11 7	2 35.34	+ 3 11.1	2.321	3.293	4.0	21.0	11 7	2 35.02	+17 6.7	1.795	2.785	1.2	20.1
11 17	2 27.55	+ 2 56.1	2.346	3.284	6.5	21.1	11 17	2 26.22	+16 9.9	1.827	2.792	5.4	20.4
11 27	2 20.74	+ 2 53.1	2.400	3.274	9.3	21.3	11 27	2 18.87	+15 17.8	1.886	2.799	9.3	20.6
12 7	2 15.48	+ 3 3.2	2.478	3.265	11.9	21.5	12 7	2 13.65	+14 35.6	1.971	2.806	12.8	20.9
248805	2006 <i>SZ</i> ₁₃₂		11 4.1 329 ^o 34	5 ^o 0/ 7.7	18		427537	2002 <i>QV</i> ₁₁₉		11 4.1 174 ^o 80	2 ^o 6/ 2.5	18	
9 28	3 1.87	+29 40.9	1.685	2.474	17.4	19.9	9 28	3 6.67	+11 30.1	1.670	2.501	15.8	21.7
10 8	2 58.55	+29 52.3	1.596	2.463	14.4	19.7	10 8	3 1.71	+10 49.1	1.597	2.502	12.1	21.4
10 18	2 52.43	+29 43.3	1.526	2.453	10.8	19.4	10 18	2 54.19	+10 0.7	1.545	2.504	7.9	21.2
10 28	2 44.20	+29 11.7	1.479	2.443	7.2	19.2	10 28	2 44.85	+ 9 9.2	1.519	2.505	3.7	21.0
11 7	2 34.98	+28 18.7	1.457	2.434	5.1	19.1	11 7	2 34.79	+ 8 20.5	1.521	2.505	3.4	20.9
11 17	2 26.11	+27 9.0	1.462	2.425	6.8	19.2	11 17	2 25.21	+ 7 40.4	1.551	2.505	7.5	21.2
11 27	2 18.90	+25 51.2	1.493	2.417	10.4	19.3	11 27	2 17.25	+ 7 14.1	1.607	2.505	11.7	21.4
12 7	2 14.26	+24 34.6	1.547	2.410	14.2	19.6	12 7	2 11.68	+ 7 4.2	1.686	2.504	15.3	21.7
262207	2006 <i>SJ</i> ₂₀₈		11 4.1 13 ^o 57	1 ^o 7/ 3.3	18		347809	2002 <i>LJ</i> ₃₉		11 4.1 106 ^o 87	8 ^o 6/ 29.9	18	
9 28	3 3.21	+13 51.7	1.129	1.987	19.9	20.1	9 28	3 8.54	- 8 34.7	1.953	2.766	14.5	20.6
10 8	3 0.09	+13 29.3	1.069	1.990	15.3	19.9	10 8	3 2.47	- 9 24.6	1.906	2.782	12.0	20.4
10 18	2 53.61	+12 55.7	1.028	1.993	10.0	19.6	10 18	2 54.29	-10 3.6	1.881	2.798	9.8	20.3
10 28	2 44.69	+12 15.2	1.009	1.997	4.2	19.3	10 28	2 44.77	-10 25.3	1.882	2.814	8.6	20.3
11 7	2 34.82	+11 34.6	1.013	2.002	2.9	19.2	11 7	2 34.87	-10 25.1	1.909	2.829	9.1	20.4
11 17	2 25.64	+11 1.2	1.042	2.008	8.5	19.6	11 17	2 25.58	-10 1.3	1.963	2.844	10.9	20.5
11 27	2 18.66	+10 41.7	1.094	2.015	13.8	19.9	11 27	2 17.79	- 9 15.0	2.042	2.858	13.2	20.7
12 7	2 14.80	+10 39.8	1.166	2.022	18.3	20.2	12 7	2 12.10	- 8 9.3	2.142	2.872	15.3	20.9
1207	Ostania		11 4.1 339 ^o 60	2 ^o 3/ 5.6	18		163197	2002 <i>EZ</i> ₂₅		11 4.1 175 ^o 87	1 ^o 6/ 5.4	18	
9 28	3 4.83	+21 21.1	1.987	2.788	14.7	15.3	9 28	3 6.49	+21 53.7	2.212	3.001	13.7	21.5
10 8	3 0.21	+21 47.6	1.901	2.784	11.6	15.1	10 8	3 1.12	+21 46.0	2.126	3.004	10.8	21.3
10 18	2 53.22	+22 3.8	1.836	2.780	8.1	14.9	10 18	2 53.60	+21 26.4	2.063	3.006	7.4	21.1
10 28	2 44.46	+22 8.9	1.797	2.776	4.3	14.7	10 28	2 44.57	+20 55.3	2.027	3.007	3.7	20.9
11 7	2 34.89	+22 4.0	1.786	2.773	2.4	14.5	11 7	2 34.91	+20 15.2	2.020	3.008	1.7	20.7
11 17	2 25.60	+21 51.5	1.804	2.770	5.4	14.7	11 17	2 25.61	+19 30.1	2.042	3.008	4.9	21.0
11 27	2 17.66	+21 35.8	1.849	2.767	9.2	15.0	11 27	2 17.61	+18 45.2	2.094	3.007	8.5	21.2
12 7	2 11.89	+21 21.7	1.919	2.764	12.6	15.2	12 7	2 11.60	+18 5.7	2.172	3.006	11.8	21.4
82328	2001 <i>LH</i> ₃		11 4.1 82 ^o 73	6 ^o 5/31.3	18		34841	2001 <i>SE</i> ₂₆₈		11 4.1 240 ^o 36	2 ^o 2/ 2.5	18	
9 28	3 7.14	- 1 58.0	1.871	2.698	14.5	18.7	9 28	3 3.37	+13 41.2	1.696	2.528	15.5	19.5
10 8	3 1.48	- 2 36.8	1.821	2.716	11.5	18.6	10 8	2 59.23	+12 45.0	1.617	2.524	11.9	19.3
10 18	2 53.68	- 3 9.7	1.794	2.734	8.5	18.4	10 18	2 52.60	+11 38.0	1.559	2.519	7.8	19.0
10 28	2 44.51	- 3 31.0	1.793	2.752	6.6	18.4	10 28	2 44.20	+10 24.9	1.527	2.514	3.5	18.8
11 7	2 34.93	- 3 36.2	1.819	2.770	7.1	18.4	11 7	2 35.06	+ 9 12.3	1.523	2.509	3.1	18.7
11 17	2 25.97	- 3 23.1	1.872	2.788	9.4	18.6	11 17	2 26.33	+ 8 7.4	1.547	2.503	7.3	19.0
11 27	2 18.51	- 2 51.3	1.951	2.805	12.1	18.8	11 27	2 19.11	+ 7 16.8	1.597	2.498	11.6	19.2
12 7	2 13.15	- 2 2.7	2.053	2.823	14.7	19.0	12 7	2 14.18	+ 6 44.5	1.670	2.492	15.3	19.4
255318	2005 <i>WH</i> ₂₆		11 4.1 323 ^o 87	1 ^o 9/ 5.6	18		494395	2016 <i>UB</i> ₅₄		11 4.1 15 ^o 71	4 ^o 6/ 2.3	18	
9 28	3 2.19	+22 29.9	2.050	2.851	14.3	20.4	9 28	3 4.13	+ 6 9.2	1.116	1.981	19.6	20.1
10 8	2 58.05	+22 23.7	1.964	2.847	11.3	20.2	10 8	3 0.66	+ 5 58.6	1.064	1.987	15.1	19.9
10 18	2 51.71	+22 4.5	1.899	2.844	7.8	20.0	10 18	2 53.89	+ 5 47.8	1.031	1.994	10.2	19.6
10 28	2 43.79	+21 32.8	1.860	2.840	4.1	19.8	10 28	2 44.79	+ 5 42.6	1.019	2.003	5.6	19.4
11 7	2 35.19	+20 51.2	1.849	2.837	2.0	19.6	11 7	2 34.86	+ 5 48.3	1.031	2.013	5.4	19.4
11 17	2 26.91	+20 3.9	1.867	2.834	5.1	19.8	11 17	2 25.69	+ 6 8.4	1.068	2.025	9.7	19.7
11 27	2 19.94	+19 16.6	1.913	2.831	8.9	20.1	11 27	2 18.72	+ 6 44.9	1.127	2.037	14.4	20.0
12 7	2 14.99	+18 34.8	1.983	2.829	12.3	20.3	12 7	2 14.81	+ 7 37.1	1.206	2.051	18.5	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
144490	2004 <i>EX</i> ₆₃		11 4.1 332°00	3.4/ 1.6	18		31861	Darleshimizu		11 4.1 150°13	0.9/ 3.5	18	
9 28	3 0.03	+10 41.8	1.697	2.540	15.0	19.8	9 28	3 6.90	+15 13.1	1.892	2.708	14.8	20.7
10 8	2 56.63	+9 37.1	1.621	2.534	11.5	19.6	10 8	3 1.59	+14 43.1	1.819	2.716	11.4	20.5
10 18	2 50.89	+8 24.1	1.566	2.527	7.6	19.3	10 18	2 53.98	+14 3.9	1.768	2.723	7.4	20.2
10 28	2 43.47	+7 8.6	1.537	2.521	4.0	19.1	10 28	2 44.75	+13 18.4	1.744	2.730	3.1	20.0
11 7	2 35.37	+5 57.8	1.536	2.516	4.2	19.1	11 7	2 34.93	+12 31.0	1.748	2.736	1.8	19.9
11 17	2 27.64	+4 58.6	1.561	2.511	8.0	19.3	11 17	2 25.59	+11 47.0	1.781	2.742	6.1	20.2
11 27	2 21.34	+4 16.9	1.612	2.506	11.9	19.6	11 27	2 17.73	+11 11.4	1.843	2.747	10.1	20.5
12 7	2 17.19	+3 55.3	1.685	2.502	15.4	19.8	12 7	2 12.06	+10 48.0	1.928	2.752	13.5	20.7
444022	2004 <i>FP</i> ₁₄₉		11 4.1 240°71	2.2/ 2.1	18		451954	2014 <i>ML</i> ₄₃		11 4.1 78°12	3.3/ 7.2	18	
9 28	3 1.56	+12 44.8	2.141	2.964	13.0	21.5	9 28	3 2.56	+28 0.1	2.227	3.001	14.1	20.6
10 8	2 57.35	+11 41.3	2.052	2.955	10.0	21.3	10 8	2 58.17	+27 53.0	2.146	3.008	11.4	20.5
10 18	2 51.15	+10 28.9	1.987	2.945	6.5	21.0	10 18	2 51.69	+27 30.0	2.087	3.014	8.3	20.3
10 28	2 43.55	+9 11.9	1.950	2.935	3.1	20.8	10 28	2 43.78	+26 51.1	2.053	3.021	5.2	20.1
11 7	2 35.34	+7 56.0	1.942	2.925	3.0	20.8	11 7	2 35.32	+25 58.4	2.047	3.027	3.3	20.0
11 17	2 27.43	+6 47.4	1.964	2.915	6.5	21.0	11 17	2 27.26	+24 56.3	2.070	3.034	5.0	20.1
11 27	2 20.68	+5 51.5	2.013	2.904	10.1	21.2	11 27	2 20.50	+23 50.8	2.122	3.041	8.1	20.3
12 7	2 15.74	+5 11.8	2.086	2.893	13.2	21.4	12 7	2 15.68	+22 48.2	2.200	3.047	11.1	20.5
103354	2000 <i>AV</i> ₉₀		11 4.1 206°81	5.3/30.6	18		163731	2003 <i>KD</i>		11 4.1 139°64	2.7/30.8	18	
9 28	3 0.95	+0 15.2	2.302	3.132	12.0	19.6	9 28	2 53.30	+2 20.5	4.460	5.280	6.8	20.0
10 8	2 56.61	-0 36.6	2.233	3.131	9.5	19.4	10 8	2 50.03	+1 41.9	4.385	5.281	5.3	19.9
10 18	2 50.52	-1 26.2	2.187	3.131	7.0	19.3	10 18	2 45.91	+1 4.0	4.336	5.282	3.8	19.8
10 28	2 43.23	-2 8.5	2.169	3.131	5.4	19.2	10 28	2 41.25	+0 29.0	4.317	5.283	2.8	19.7
11 7	2 35.49	-2 38.8	2.178	3.131	6.0	19.2	11 7	2 36.36	-0 0.9	4.327	5.284	3.1	19.7
11 17	2 28.07	-2 53.8	2.215	3.131	8.1	19.4	11 17	2 31.62	-0 24.0	4.367	5.285	4.4	19.8
11 27	2 21.72	-2 51.5	2.279	3.131	10.7	19.5	11 27	2 27.36	-0 38.7	4.436	5.287	5.9	19.9
12 7	2 17.01	-2 32.1	2.365	3.131	13.1	19.7	12 7	2 23.88	-0 44.4	4.530	5.288	7.4	20.0
130037	1999 <i>VR</i> ₁₂₅		11 4.1 75°97	0.6/ 3.8	18		451343	2010 <i>VE</i> ₂₀₇		11 4.1 279°78	2.1/ 5.9	18	
9 28	3 8.63	+13 33.0	1.710	2.532	15.8	19.9	9 28	3 1.87	+24 21.6	2.123	2.916	14.1	21.2
10 8	3 3.12	+13 42.0	1.644	2.544	12.2	19.7	10 8	2 57.76	+24 2.0	2.034	2.912	11.3	21.0
10 18	2 55.06	+13 44.8	1.600	2.556	8.0	19.5	10 18	2 51.52	+23 27.5	1.966	2.907	7.9	20.7
10 28	2 45.22	+13 43.0	1.581	2.568	3.3	19.3	10 28	2 43.76	+22 38.8	1.925	2.903	4.2	20.5
11 7	2 34.70	+13 39.2	1.590	2.580	1.7	19.2	11 7	2 35.36	+21 38.9	1.911	2.898	2.1	20.4
11 17	2 24.74	+13 36.6	1.628	2.592	6.2	19.5	11 17	2 27.28	+20 32.7	1.927	2.894	5.0	20.6
11 27	2 16.44	+13 39.0	1.693	2.604	10.4	19.8	11 27	2 20.48	+19 26.5	1.971	2.889	8.7	20.8
12 7	2 10.56	+13 49.1	1.782	2.615	14.0	20.0	12 7	2 15.65	+18 26.6	2.040	2.885	12.0	21.0
454066	2012 <i>KG</i> ₃₅		11 4.1 217°57	1.1/ 2.9	18		84522	2002 <i>TC</i> ₃₀₂		11 4.1 326°30	0.4/ 9.3	18	
9 28	2 59.93	+14 51.5	2.533	3.347	11.5	20.9	9 28	2 40.94	+32 2.1	43.240	43.954	0.9	20.4
10 8	2 55.78	+14 2.7	2.446	3.343	8.8	20.8	10 8	2 40.18	+32 2.5	43.135	43.948	0.8	20.4
10 18	2 49.97	+13 5.8	2.383	3.339	5.7	20.6	10 18	2 39.34	+32 1.9	43.055	43.942	0.6	20.4
10 28	2 43.01	+12 3.9	2.348	3.335	2.4	20.3	10 28	2 38.44	+32 0.4	43.001	43.936	0.4	20.4
11 7	2 35.59	+11 1.1	2.344	3.330	1.8	20.3	11 7	2 37.51	+31 58.1	42.976	43.930	0.4	20.4
11 17	2 28.45	+10 2.1	2.369	3.326	5.1	20.5	11 17	2 36.60	+31 55.2	42.981	43.924	0.4	20.4
11 27	2 22.28	+9 11.3	2.423	3.321	8.3	20.7	11 27	2 35.73	+31 51.7	43.014	43.918	0.5	20.4
12 7	2 17.65	+8 32.0	2.503	3.316	11.1	20.9	12 7	2 34.93	+31 47.9	43.076	43.912	0.7	20.4
94464	2001 <i>TM</i> ₁₂₇		11 4.1 355°29	0.5/ 3.9	18		115703	2003 <i>UW</i> ₁₆₄		11 4.1 28°08	1.0/ 3.3	18	
9 28	3 4.26	+16 47.2	1.141	1.993	20.2	20.1	9 28	3 0.91	+14 18.5	2.093	2.916	13.3	20.1
10 8	3 1.06	+16 24.7	1.075	1.990	15.7	19.8	10 8	2 56.85	+13 52.4	2.018	2.920	10.2	19.9
10 18	2 54.38	+15 47.0	1.026	1.989	10.4	19.5	10 18	2 50.81	+13 18.8	1.967	2.924	6.6	19.7
10 28	2 45.12	+14 57.1	1.000	1.987	4.4	19.2	10 28	2 43.42	+12 40.7	1.942	2.929	2.8	19.5
11 7	2 34.75	+14 1.7	0.997	1.987	2.1	19.0	11 7	2 35.51	+12 1.8	1.945	2.933	1.8	19.4
11 17	2 25.01	+13 9.2	1.019	1.987	8.2	19.4	11 17	2 27.95	+11 26.5	1.977	2.938	5.5	19.7
11 27	2 17.49	+12 28.4	1.064	1.987	13.8	19.7	11 27	2 21.61	+10 59.0	2.037	2.943	9.1	19.9
12 7	2 13.21	+12 5.3	1.130	1.989	18.5	20.0	12 7	2 17.10	+10 42.3	2.121	2.949	12.3	20.1
193255	2000 <i>SR</i> ₈₅		11 4.1 18°00	2.6/ 2.6	18		127020	2002 <i>GK</i> ₁₆		11 4.1 308°78	4.0/31.6	18	
9 28	3 4.44	+10 59.0	1.511	2.353	16.6	19.1	9 28	2 59.74	+7 19.3	2.021	2.858	13.2	19.7
10 8	3 0.26	+10 31.8	1.443	2.354	12.8	18.9	10 8	2 56.03	+6 11.8	1.942	2.851	10.1	19.5
10 18	2 53.38	+9 58.2	1.395	2.356	8.4	18.7	10 18	2 50.33	+4 59.8	1.887	2.844	6.9	19.3
10 28	2 44.57	+9 22.5	1.372	2.358	3.9	18.4	10 28	2 43.24	+3 48.8	1.859	2.838	4.3	19.1
11 7	2 34.99	+8 50.1	1.376	2.361	3.4	18.4	11 7	2 35.57	+2 45.2	1.859	2.831	4.8	19.1
11 17	2 25.92	+8 26.3	1.406	2.364	7.7	18.7	11 17	2 28.22	+1 54.5	1.887	2.825	7.8	19.3
11 27	2 18.57	+8 15.7	1.462	2.367	12.1	18.9	11 27	2 22.05	+1 20.9	1.942	2.819	11.1	19.5
12 7	2 13.72	+8 20.7	1.539	2.371	15.9	19.2	12 7	2 17.70	+1 6.4	2.019	2.813	14.0	19.7
315274	2007 <i>TX</i> ₈₇		11 4.1 191°63	1.9/ 3.1	17		49709	1999 <i>VJ</i> ₂₆		11 4.1 295°74	0.9/ 3.7	18	
9 28	3 9.67	+12 1.6	1.561	2.389	16.8	21.4	9 28	3 5.45	+14 48.2	1.423	2.261	17.6	19.2
10 8	3 4.32	+11 46.6	1.484	2.388	13.0	21.1	10 8	3 1.57	+14 36.6	1.338	2.247	13.8	18.9
10 18	2 56.09	+11 24.8	1.429	2.387	8.5	20.9	10 18	2 54.61	+14 14.7	1.273	2.232	9.1	18.6
10 28	2 45.75	+10 59.3	1.399	2.386	3.7	20.6	10 28	2 45.26	+13 44.8	1.231	2.218	3.9	18.2
11 7	2 34.50	+10 34.4	1.397	2.384	2.8	20.5	11 7	2 34.74	+13 11.4	1.215	2.204	2.1	18.1
11 17	2 23.73	+10 15.2	1.422	2.381	7.4	20.8	11 17	2 24.51	+12 40.3	1.225	2.190	7.5	18.4
11 27	2 14.74	+10 6.3	1.473	2.378	12.0	21.0	11 27	2 16.06	+12 18.0	1.261	2.177	12.7	18.6
12 7	2 8.41	+10 10.7	1.547	2.375	16.0	21.3	12 7	2 10.43	+12 9.4	1.318	2.163	17.2	18.9
514773	2007 <i>FW</i> ₃₇		11 4.1 283°98	0.9/ 4.7	18		331209	2011 <i>BC</i> ₃₅		11 4.1 336°23	3.5/ 1.5	18	
9 28	3 5.66	+18											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
23173	Hideaki		11 4.1 254°12	1°0/ 3.6 18			145529	2006 FQ ₃₁		11 4.2 300°12	1°6/ 2.8 17		
9 28	3 7.02	+12 25.2	1.983	2.801	14.1	18.8	9 28	2 59.89	+13 40.2	2.131	2.956	13.0	20.3
10 8	3 1.78	+12 30.9	1.898	2.795	10.9	18.6	10 8	2 56.24	+12 57.2	2.032	2.935	10.0	20.0
10 18	2 54.22	+12 32.0	1.834	2.790	7.2	18.4	10 18	2 50.58	+12 5.2	1.956	2.914	6.5	19.8
10 28	2 44.94	+12 30.2	1.798	2.784	3.0	18.1	10 28	2 43.42	+11 7.7	1.907	2.893	2.9	19.5
11 7	2 34.90	+12 27.7	1.790	2.778	1.8	18.0	11 7	2 35.56	+10 9.4	1.886	2.872	2.4	19.4
11 17	2 25.15	+12 27.5	1.811	2.773	5.9	18.3	11 17	2 27.88	+ 9 15.4	1.894	2.852	6.1	19.6
11 27	2 16.72	+12 32.6	1.861	2.767	9.9	18.5	11 27	2 21.29	+ 8 31.2	1.930	2.831	9.9	19.8
12 7	2 10.41	+12 45.7	1.935	2.761	13.3	18.7	12 7	2 16.51	+ 8 0.6	1.900	2.811	13.2	20.0
20722	1999 XZ ₁₀₉		11 4.1 112°53	3°2/ 1.8 18			215770	2004 GP ₁₆		11 4.2 196°09	5°0/ 31.4 18		
9 28	3 3.66	+ 6 8.3	2.298	3.121	12.3	17.8	9 28	3 3.45	+ 2 26.1	2.094	2.923	13.0	20.4
10 8	2 58.67	+ 5 44.9	2.227	3.128	9.4	17.6	10 8	2 58.74	+ 1 40.3	2.022	2.923	10.2	20.2
10 18	2 51.88	+ 5 20.8	2.181	3.135	6.3	17.5	10 18	2 52.05	+ 0 55.2	1.973	2.922	7.3	20.0
10 28	2 43.86	+ 4 59.2	2.162	3.141	3.7	17.3	10 28	2 43.98	+ 0 16.2	1.950	2.920	5.2	19.9
11 7	2 35.37	+ 4 43.6	2.172	3.148	3.8	17.3	11 7	2 35.38	- 0 11.9	1.956	2.919	5.6	19.9
11 17	2 27.24	+ 4 37.1	2.211	3.154	6.4	17.5	11 17	2 27.12	- 0 25.4	1.990	2.918	8.2	20.1
11 27	2 20.26	+ 4 41.7	2.278	3.160	9.4	17.7	11 27	2 20.08	- 0 22.0	2.050	2.916	11.1	20.3
12 7	2 14.98	+ 4 58.2	2.369	3.166	12.1	17.9	12 7	2 14.89	- 0 1.7	2.134	2.914	13.8	20.5
429399	2010 RK ₁₀₃		11 4.1 4°94	4°7/ 6.2 17			310589	2001 UM ₁₈₇		11 4.2 330°32	1°3/ 4.9 18		
9 28	3 6.02	+23 25.9	1.088	1.925	21.9	21.2	9 28	3 3.34	+18 50.2	1.652	2.475	16.2	20.7
10 8	3 2.91	+24 15.9	1.023	1.924	17.7	20.9	10 8	2 59.58	+19 3.1	1.565	2.463	12.8	20.5
10 18	2 55.91	+24 48.1	0.975	1.924	12.7	20.6	10 18	2 53.12	+19 5.3	1.499	2.452	8.7	20.2
10 28	2 45.90	+24 59.1	0.948	1.925	7.5	20.3	10 28	2 44.60	+18 57.0	1.457	2.441	4.1	19.9
11 7	2 34.51	+24 48.8	0.943	1.928	4.7	20.2	11 7	2 35.10	+18 40.2	1.441	2.431	1.7	19.7
11 17	2 23.74	+24 21.8	0.962	1.931	8.2	20.4	11 17	2 25.86	+18 18.8	1.453	2.421	6.1	20.0
11 27	2 15.48	+23 47.2	1.003	1.935	13.4	20.7	11 27	2 18.16	+17 58.2	1.491	2.412	10.7	20.3
12 7	2 10.87	+23 15.2	1.065	1.940	18.1	21.0	12 7	2 12.92	+17 43.8	1.552	2.404	14.7	20.5
493547	2015 HL ₅₆		11 4.1 51°69	5°4/ 8.3 18			398850	2013 CE ₄₅		11 4.2 63°79	3°9/ 6.9 18		
9 28	3 6.67	+31 43.3	1.436	2.221	20.1	20.6	9 28	3 6.27	+26 40.6	1.828	2.615	16.3	21.0
10 8	3 2.18	+31 36.6	1.383	2.247	16.4	20.4	10 8	3 1.47	+27 0.7	1.757	2.626	13.2	20.8
10 18	2 54.63	+31 3.9	1.349	2.274	12.2	20.3	10 18	2 54.10	+27 4.6	1.706	2.638	9.6	20.6
10 28	2 45.06	+30 4.5	1.337	2.300	8.0	20.1	10 28	2 44.91	+26 51.1	1.680	2.649	5.9	20.4
11 7	2 34.94	+28 42.5	1.351	2.327	5.4	20.0	11 7	2 35.02	+26 21.7	1.681	2.661	3.9	20.3
11 17	2 25.77	+27 6.3	1.391	2.354	7.0	20.2	11 17	2 25.63	+25 40.2	1.709	2.673	5.9	20.5
11 27	2 18.80	+25 27.2	1.457	2.382	10.6	20.5	11 27	2 17.88	+24 53.3	1.765	2.685	9.4	20.7
12 7	2 14.71	+23 55.7	1.546	2.409	14.2	20.8	12 7	2 12.54	+24 7.9	1.845	2.697	12.8	20.9
108240	2001 HE ₄₄		11 4.1 165°81	1°1/ 3.4 17			326599	2002 RY ₄		11 4.2 59°83	0°5/ 4.6 18		
9 28	3 7.27	+14 48.9	1.745	2.566	15.6	20.5	9 28	3 0.14	+20 35.5	2.271	3.075	13.0	20.3
10 8	3 2.14	+14 20.6	1.670	2.570	12.0	20.3	10 8	2 56.13	+19 53.3	2.194	3.083	10.1	20.1
10 18	2 54.49	+13 42.8	1.617	2.573	7.8	20.1	10 18	2 50.29	+18 58.9	2.141	3.091	6.7	19.9
10 28	2 45.05	+12 58.4	1.589	2.576	3.3	19.8	10 28	2 43.21	+17 55.0	2.115	3.100	3.0	19.7
11 7	2 34.91	+12 12.3	1.590	2.578	2.0	19.7	11 7	2 35.70	+16 45.5	2.118	3.108	1.0	19.5
11 17	2 25.23	+11 30.0	1.619	2.580	6.5	20.0	11 17	2 28.57	+15 35.8	2.151	3.116	4.7	19.8
11 27	2 17.15	+10 56.9	1.675	2.581	10.8	20.3	11 27	2 22.60	+14 31.5	2.212	3.125	8.2	20.1
12 7	2 11.42	+10 36.9	1.755	2.582	14.5	20.5	12 7	2 18.37	+13 37.1	2.299	3.133	11.2	20.3
480117	2015 FH ₈₅		11 4.1 154°96	0°3/ 4.4 16			184648	2005 SY ₂₆		11 4.2 51°11	2°4/ 2.8 18		
9 28	3 7.33	+19 40.9	2.015	2.816	14.5	22.0	9 28	3 6.31	+12 25.1	1.262	2.110	18.8	19.9
10 8	3 1.83	+19 4.6	1.938	2.825	11.3	21.8	10 8	3 1.88	+11 50.1	1.215	2.129	14.4	19.7
10 18	2 54.10	+18 15.6	1.884	2.834	7.5	21.6	10 18	2 54.45	+11 6.6	1.187	2.149	9.3	19.5
10 28	2 44.83	+17 16.0	1.856	2.841	3.3	21.3	10 28	2 45.03	+10 20.0	1.183	2.170	4.1	19.2
11 7	2 35.01	+16 10.3	1.858	2.848	1.2	21.2	11 7	2 35.02	+ 9 36.9	1.204	2.191	3.4	19.2
11 17	2 25.67	+15 4.2	1.890	2.854	5.4	21.5	11 17	2 25.88	+ 9 3.8	1.251	2.212	8.1	19.6
11 27	2 17.78	+14 4.1	1.951	2.860	9.3	21.8	11 27	2 18.85	+ 8 45.8	1.323	2.233	12.7	19.9
12 7	2 12.02	+13 14.9	2.037	2.864	12.7	22.0	12 7	2 14.64	+ 8 45.1	1.415	2.255	16.6	20.2
90101	2002 XG ₂₁		11 4.1 357°40	1°5/ 4.9 18			285955	2001 RE ₃₃		11 4.2 58°94	6°8/ 29.9 18		
9 28	3 7.57	+19 3.6	1.449	2.273	18.1	19.7	9 28	3 2.19	+ 1 32.0	1.679	2.524	15.1	20.4
10 8	3 3.08	+19 19.9	1.374	2.272	14.2	19.5	10 8	2 57.96	- 0 3.2	1.636	2.544	11.8	20.2
10 18	2 55.49	+19 24.0	1.319	2.272	9.6	19.2	10 18	2 51.55	- 1 36.1	1.616	2.564	8.7	20.1
10 28	2 45.60	+19 16.0	1.287	2.271	4.6	18.9	10 28	2 43.74	- 2 58.3	1.622	2.585	6.9	20.0
11 7	2 34.67	+18 58.0	1.282	2.271	1.9	18.8	11 7	2 35.54	- 4 2.2	1.654	2.605	7.7	20.1
11 17	2 24.22	+18 34.4	1.303	2.271	6.7	19.1	11 17	2 27.97	- 4 42.7	1.713	2.626	10.2	20.3
11 27	2 15.67	+18 11.6	1.350	2.272	11.6	19.3	11 27	2 21.91	- 4 57.9	1.795	2.647	13.1	20.6
12 7	2 9.99	+17 55.7	1.420	2.272	15.8	19.6	12 7	2 17.95	- 4 49.1	1.898	2.668	15.7	20.8
401632	2013 GD ₇₅		11 4.2 126°17	1°4/ 3.2 18			377992	2006 RP ₃₅		11 4.2 11°30	2°5/ 3.2 18		
9 28	3 5.25	+11 30.5	2.245	3.061	12.8	21.5	9 28	2 58.07	+11 27.3	0.798	1.690	22.7	19.5
10 8	3 0.01	+11 24.0	2.170	3.067	9.8	21.4	10 8	2 57.01	+11 24.3	0.756	1.694	17.5	19.3
10 18	2 52.82	+11 13.4	2.118	3.073	6.4	21.2	10 18	2 52.02	+11 13.2	0.729	1.700	11.4	19.0
10 28	2 44.29	+11 0.9	2.094	3.079	2.8	20.9	10 28	2 44.20	+10 59.1	0.721	1.710	5.0	18.7
11 7	2 35.23	+10 49.2	2.098	3.085	2.1	20.9	11 7	2 35.35	+10 48.8	0.733	1.721	3.7	18.7
11 17	2 26.52	+10 41.2	2.133	3.091	5.5	21.1	11 17	2 27.42	+10 48.5	0.766	1.736	9.7	19.1
11 27	2 19.01	+10 39.6	2.196	3.096	8.9	21.4	11 27	2 22.13	+11 3.1	0.819	1.752	15.4	19.4
12 7	2 13.32	+10 46.6	2.285	3.102	11.9	21.6	12 7	2 20.38	+11 34.3	0.890	1.771	20.2	19.8
286649	2002 EC ₆₈		11 4.2 131°88	0°0/ 4.1 16			303576	2005 GP ₁₂₃		11 4.2 165°86	3°2/ 1.8 18		
9 28	3 10.02	+18 0.4	1.827	2.633	15.6	22.1							

EPHEMERIDES

11 4.2

11 4.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
300807	2007 <i>WW</i> ₆		11 4.2 41°62'	0°3'/ 4.3 18			278215	2007 <i>EF</i> ₄₄		11 4.2 209°36'	3°8'/ 1.3 18		
9 28	3 8.03	+15 55.8	1.399	2.231	18.2	20.0	9 28	3 3.66	+9 51.1	1.753	2.588	14.9	21.1
10 8	3 3.09	+16 13.0	1.347	2.252	14.0	19.8	10 8	2 59.35	+8 37.4	1.677	2.586	11.5	20.9
10 18	2 55.23	+16 20.7	1.316	2.273	9.2	19.6	10 18	2 52.69	+7 16.0	1.624	2.582	7.6	20.7
10 28	2 45.38	+16 20.1	1.308	2.295	4.0	19.4	10 28	2 44.36	+5 52.9	1.597	2.579	4.3	20.5
11 7	2 34.90	+16 14.0	1.327	2.317	1.5	19.2	11 7	2 35.35	+4 35.7	1.598	2.576	4.6	20.5
11 17	2 25.19	+16 6.5	1.373	2.340	6.5	19.6	11 17	2 26.76	+3 31.5	1.627	2.572	8.2	20.7
11 27	2 17.51	+16 2.3	1.444	2.364	11.1	20.0	11 27	2 19.62	+2 46.1	1.682	2.568	12.0	20.9
12 7	2 12.59	+16 5.5	1.538	2.387	15.0	20.3	12 7	2 14.67	+2 21.8	1.760	2.563	15.4	21.1
387048	2012 <i>TH</i> ₁₇		11 4.2 223°86'	1°5'/ 3.1 18			514211	2015 <i>NJ</i> ₁₆		11 4.2 144°23'	5°0'/ 8.2 18		
9 28	3 4.07	+14 50.3	1.810	2.634	15.0	21.2	9 28	3 7.34	+31 20.4	2.058	2.815	15.7	21.8
10 8	2 59.68	+14 4.2	1.727	2.630	11.5	21.0	10 8	3 2.20	+31 36.0	1.976	2.821	13.0	21.6
10 18	2 52.92	+13 7.4	1.667	2.625	7.5	20.7	10 18	2 54.58	+31 33.6	1.914	2.826	9.9	21.4
10 28	2 44.44	+12 3.6	1.633	2.620	3.2	20.5	10 28	2 45.17	+31 11.0	1.877	2.832	6.8	21.2
11 7	2 35.23	+10 58.4	1.627	2.614	2.4	20.4	11 7	2 35.04	+30 29.2	1.867	2.837	5.0	21.1
11 17	2 26.41	+9 58.3	1.649	2.608	6.6	20.7	11 17	2 25.34	+29 31.7	1.885	2.841	6.2	21.2
11 27	2 19.02	+9 9.5	1.699	2.602	10.8	20.9	11 27	2 17.19	+28 25.5	1.931	2.846	9.0	21.4
12 7	2 13.83	+8 36.2	1.771	2.596	14.4	21.1	12 7	2 11.36	+27 18.3	2.003	2.850	12.1	21.6
356092	2009 <i>DS</i> ₁₄₀		11 4.2 269°76'	1°3'/ 5.1 18			129487	1994 <i>RX</i> ₁₄		11 4.2 43°97'	0°6'/ 4.5 18		
9 28	3 4.25	+21 12.7	2.013	2.816	14.5	22.3	9 28	3 5.42	+18 37.1	1.394	2.226	18.3	19.4
10 8	2 59.89	+20 56.6	1.909	2.795	11.5	22.0	10 8	3 1.10	+18 25.8	1.343	2.246	14.1	19.2
10 18	2 53.15	+20 27.0	1.827	2.774	7.9	21.8	10 18	2 53.94	+18 1.0	1.311	2.268	9.3	19.0
10 28	2 44.60	+19 44.6	1.770	2.753	3.8	21.5	10 28	2 44.86	+17 25.0	1.304	2.290	4.1	18.7
11 7	2 35.14	+18 52.1	1.741	2.731	1.5	21.3	11 7	2 35.21	+16 42.6	1.322	2.312	1.4	18.6
11 17	2 25.86	+17 54.5	1.742	2.709	5.5	21.5	11 17	2 26.33	+16 0.1	1.367	2.335	6.5	19.0
11 27	2 17.86	+16 58.0	1.771	2.686	9.7	21.7	11 27	2 19.43	+15 24.1	1.438	2.358	11.0	19.3
12 7	2 11.96	+16 9.0	1.824	2.664	13.4	21.9	12 7	2 15.21	+14 59.6	1.531	2.382	14.9	19.6
396646	2002 <i>AT</i> ₁₉₃		11 4.2 234°85'	14°3'/ 13.9 18			42449	3496 <i>T</i> ₋₃		11 4.2 60°65'	2°8'/ 2.2 18		
9 28	3 14.22	+46 21.0	1.358	2.066	24.4	20.4	9 28	3 7.33	+12 47.4	1.528	2.361	16.9	18.1
10 8	3 10.19	+47 43.4	1.279	2.061	22.1	20.2	10 8	3 1.89	+11 32.2	1.493	2.400	12.7	17.9
10 18	3 1.32	+48 33.9	1.214	2.056	19.4	20.0	10 18	2 54.05	+10 9.4	1.479	2.439	8.1	17.8
10 28	2 48.46	+48 40.4	1.165	2.051	16.7	19.8	10 28	2 44.78	+8 45.8	1.492	2.477	3.8	17.6
11 7	2 33.59	+47 55.2	1.135	2.045	14.8	19.7	11 7	2 35.28	+7 29.1	1.532	2.515	3.7	17.7
11 17	2 19.39	+46 18.9	1.127	2.039	14.4	19.6	11 17	2 26.71	+6 26.2	1.601	2.553	7.5	18.0
11 27	2 8.37	+44 3.3	1.141	2.033	15.9	19.7	11 27	2 19.98	+5 41.7	1.695	2.590	11.4	18.3
12 7	2 1.98	+41 27.5	1.176	2.027	18.5	19.8	12 7	2 15.65	+5 17.3	1.813	2.627	14.6	18.6
476873	2008 <i>VR</i> ₂₃		11 4.2 358°15'	4°4'/ 2.1 18			327182	2005 <i>LN</i> ₂₆		11 4.2 79°76'	4°5'/ 1.4 16		
9 28	3 5.08	+5 59.7	1.368	2.219	17.5	20.7	9 28	3 6.21	+8 15.1	1.422	2.267	17.3	21.0
10 8	3 1.06	+5 43.3	1.302	2.216	13.6	20.5	10 8	3 1.54	+7 10.4	1.370	2.282	13.2	20.7
10 18	2 54.11	+5 26.4	1.255	2.215	9.2	20.2	10 18	2 54.15	+6 1.0	1.338	2.297	8.8	20.5
10 28	2 45.02	+5 14.1	1.232	2.214	5.2	20.0	10 28	2 44.95	+4 54.1	1.331	2.313	5.1	20.4
11 7	2 35.04	+5 11.6	1.234	2.213	5.2	20.0	11 7	2 35.19	+3 57.4	1.351	2.328	5.4	20.4
11 17	2 25.57	+5 22.7	1.262	2.214	9.1	20.2	11 17	2 26.15	+3 17.4	1.397	2.343	9.1	20.7
11 27	2 17.94	+5 50.0	1.313	2.215	13.5	20.5	11 27	2 18.98	+2 58.3	1.468	2.358	13.1	21.0
12 7	2 13.03	+6 33.5	1.386	2.218	17.4	20.8	12 7	2 14.39	+3 0.6	1.559	2.373	16.6	21.2
296377	2009 <i>FD</i> ₄₆		11 4.2 250°59'	7°8'/ 29.2 17			444151	2005 <i>EE</i> ₁₃₈		11 4.2 224°03'	1°1'/ 3.4 18		
9 28	3 4.15	+10 46.8	1.068	1.932	20.3	20.5	9 28	3 5.76	+13 18.8	2.272	3.083	12.8	22.0
10 8	3 1.06	+7 43.7	1.000	1.925	15.7	20.2	10 8	3 0.58	+13 2.4	2.179	3.074	9.9	21.8
10 18	2 54.46	+4 17.2	0.954	1.918	10.8	19.9	10 18	2 53.36	+12 39.9	2.109	3.064	6.5	21.5
10 28	2 45.25	+0 44.7	0.933	1.910	7.8	19.7	10 28	2 44.65	+12 13.4	2.067	3.053	2.8	21.3
11 7	2 34.97	-2 31.6	0.937	1.901	9.8	19.8	11 7	2 35.26	+11 45.9	2.054	3.042	1.8	21.2
11 17	2 25.35	-5 11.3	0.966	1.893	14.6	20.0	11 17	2 26.10	+11 21.1	2.071	3.030	5.5	21.4
11 27	2 17.98	-7 2.4	1.017	1.885	19.5	20.3	11 27	2 18.07	+11 2.7	2.117	3.018	9.1	21.6
12 7	2 13.84	-8 3.6	1.084	1.876	23.7	20.6	12 7	2 11.88	+10 53.8	2.188	3.005	12.3	21.8
41955	2000 <i>XD</i> ₂₂		11 4.2 219°44'	3°4'/ 6.6 18			205358	2000 <i>XT</i> ₂₆		11 4.2 316°59'	5°9'/ 7.4 18		
9 28	3 7.41	+25 51.8	2.063	2.842	15.0	19.6	9 28	3 4.86	+28 18.4	1.512	2.310	18.7	19.5
10 8	3 2.28	+26 6.4	1.969	2.835	12.1	19.4	10 8	3 1.46	+29 2.0	1.419	2.292	15.5	19.2
10 18	2 54.68	+26 6.8	1.897	2.829	8.8	19.1	10 18	2 54.81	+29 27.9	1.345	2.274	11.8	18.9
10 28	2 45.25	+25 51.7	1.851	2.821	5.3	18.9	10 28	2 45.53	+29 32.0	1.293	2.257	8.0	18.7
11 7	2 34.96	+25 22.0	1.832	2.814	3.4	18.8	11 7	2 34.85	+29 13.1	1.265	2.241	5.9	18.5
11 17	2 24.94	+24 41.1	1.842	2.806	5.6	18.9	11 17	2 24.35	+28 33.7	1.263	2.225	7.8	18.6
11 27	2 16.33	+23 54.6	1.881	2.797	9.1	19.1	11 27	2 15.64	+27 41.5	1.285	2.210	11.8	18.8
12 7	2 9.94	+23 9.3	1.945	2.788	12.5	19.3	12 7	2 9.94	+26 46.4	1.330	2.195	15.9	19.0
399662	2004 <i>RB</i> ₂₀₅		11 4.2 62°99'	5°5'/ 8.9 18			347795	2002 <i>GV</i> ₁₈₃		11 4.2 70°82'	2°3'/ 2.4 18		
9 28	3 7.66	+32 48.6	2.003	2.754	16.2	21.1	9 28	3 2.66	+14 4.9	1.663	2.497	15.7	20.5
10 8	3 2.27	+33 8.0	1.945	2.783	13.4	20.9	10 8	2 58.61	+12 56.2	1.598	2.506	12.0	20.3
10 18	2 54.45	+33 8.0	1.906	2.812	10.3	20.8	10 18	2 52.17	+11 36.7	1.555	2.515	7.7	20.1
10 28	2 45.03	+32 46.7	1.892	2.841	7.3	20.7	10 28	2 44.12	+10 11.9	1.538	2.524	3.5	19.9
11 7	2 35.10	+32 5.7	1.904	2.869	5.5	20.6	11 7	2 35.50	+8 49.3	1.548	2.533	3.2	19.9
11 17	2 25.84	+31 9.2	1.945	2.898	6.3	20.7	11 17	2 27.43	+7 36.5	1.586	2.542	7.3	20.2
11 27	2 18.27	+30 4.2	2.013	2.926	8.8	20.9	11 27	2 20.92	+6 39.7	1.651	2.551	11.3	20.4
12 7	2 13.04	+28 58.4	2.106	2.954	11.5	21.2	12 7	2 16.65	+6 2.4	1.738	2.560	14.8	20.7
331216	2011 <i>BU</i> ₄₅		11 4.2 269°71'	6°5'/ 29.3 18			155991	2001 <i>QB</i> ₂₈₄		11 4.2 1°47'	0°5'/ 4.0 18		
9 28	3 0.79	-3											

EPHEMERIDES

11 4.2

11 4.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
240972	2006 <i>JK</i> ₂₆		11 4.2 242°87	2°5/ 5.8	18		328932	2010 <i>VX</i> ₁₃		11 4.2 239°51	0°8/ 3.8	16	
9 28	3 7.75	+22 30.2	1.982	2.775	15.0	20.6	9 28	3 8.80	+14 31.2	1.502	2.331	17.3	20.9
10 8	3 2.65	+22 47.7	1.887	2.764	12.0	20.4	10 8	3 3.96	+14 26.2	1.422	2.325	13.5	20.7
10 18	2 55.02	+22 53.4	1.813	2.753	8.4	20.2	10 18	2 56.10	+14 12.3	1.362	2.320	8.9	20.4
10 28	2 45.45	+22 46.4	1.765	2.742	4.6	19.9	10 28	2 45.97	+13 51.5	1.327	2.314	3.8	20.1
11 7	2 34.95	+22 27.6	1.744	2.731	2.6	19.8	11 7	2 34.81	+13 27.6	1.318	2.308	1.9	19.9
11 17	2 24.66	+22 0.0	1.753	2.719	5.6	19.9	11 17	2 24.04	+13 5.5	1.337	2.301	7.2	20.3
11 27	2 15.77	+21 29.0	1.790	2.707	9.5	20.2	11 27	2 15.06	+12 50.8	1.382	2.295	12.1	20.5
12 7	2 9.14	+21 0.3	1.852	2.694	13.1	20.4	12 7	2 8.85	+12 47.8	1.449	2.288	16.3	20.8
121477	1999 <i>TX</i> ₂₃₂		11 4.2 14°96	0°3/ 3.9	18		265987	2006 <i>DV</i> ₇₇		11 4.2 355°99	3°2/ 1.8	18	
9 28	3 0.74	+16 50.4	1.741	2.570	15.3	20.0	9 28	3 0.04	+ 8 59.8	1.826	2.666	14.2	20.2
10 8	2 57.19	+16 24.3	1.670	2.574	11.8	19.8	10 8	2 56.51	+ 8 17.5	1.752	2.663	10.9	20.0
10 18	2 51.31	+15 47.3	1.620	2.578	7.7	19.6	10 18	2 50.82	+ 7 30.7	1.702	2.661	7.2	19.8
10 28	2 43.80	+15 2.3	1.596	2.583	3.2	19.3	10 28	2 43.60	+ 6 43.9	1.677	2.660	3.9	19.6
11 7	2 35.65	+14 13.8	1.598	2.588	1.5	19.2	11 7	2 35.76	+ 6 2.6	1.679	2.659	4.0	19.6
11 17	2 27.95	+13 27.4	1.629	2.594	6.0	19.5	11 17	2 28.28	+ 5 31.7	1.708	2.658	7.4	19.8
11 27	2 21.70	+12 48.8	1.685	2.601	10.1	19.8	11 27	2 22.12	+ 5 15.3	1.763	2.658	11.0	20.0
12 7	2 17.61	+12 22.3	1.766	2.608	13.7	20.0	12 7	2 17.96	+ 5 15.1	1.842	2.659	14.3	20.3
303533	2005 <i>EM</i> ₂₆₆		11 4.2 319°85	4°5/ 2.4	18		165928	2001 <i>TS</i> ₁₉₆		11 4.2 21°43	5°2/ 1.1	18	
9 28	3 12.19	+ 2 5.9	1.754	2.575	15.5	19.6	9 28	3 4.01	+ 0 20.4	1.998	2.828	13.6	18.8
10 8	3 5.99	+ 2 18.6	1.674	2.571	12.2	19.4	10 8	2 59.21	+ 0 5.5	1.935	2.835	10.6	18.7
10 18	2 57.13	+ 2 36.2	1.617	2.567	8.5	19.2	10 18	2 52.40	- 0 5.1	1.896	2.844	7.6	18.5
10 28	2 46.32	+ 3 2.0	1.587	2.563	5.2	19.0	10 28	2 44.21	- 0 7.2	1.883	2.852	5.4	18.4
11 7	2 34.66	+ 3 38.7	1.585	2.560	5.0	19.0	11 7	2 35.54	+ 0 2.6	1.898	2.861	5.7	18.4
11 17	2 23.39	+ 4 27.5	1.612	2.556	8.2	19.1	11 17	2 27.31	+ 0 26.2	1.940	2.871	8.1	18.6
11 27	2 13.71	+ 5 28.2	1.666	2.553	12.0	19.4	11 27	2 20.38	+ 1 4.4	2.009	2.882	11.0	18.8
12 7	2 6.48	+ 6 39.7	1.744	2.550	15.4	19.6	12 7	2 15.36	+ 1 56.0	2.101	2.892	13.7	19.0
8025	Forrestpeterson		11 4.2 140°09	1°7/ 5.5	18		208777	2002 <i>PT</i> ₁₆₅		11 4.2 57°02	1°9/ 2.9	18	
9 28	3 5.75	+21 47.3	2.181	2.973	13.8	17.9	9 28	3 3.90	+12 30.2	1.723	2.555	15.3	20.9
10 8	3 0.63	+21 45.9	2.101	2.980	10.9	17.7	10 8	2 59.55	+11 58.0	1.655	2.562	11.7	20.7
10 18	2 53.38	+21 33.0	2.044	2.987	7.5	17.5	10 18	2 52.82	+11 18.4	1.609	2.568	7.6	20.4
10 28	2 44.65	+21 9.1	2.014	2.994	3.8	17.3	10 28	2 44.45	+10 35.5	1.589	2.575	3.4	20.2
11 7	2 35.33	+20 36.3	2.012	3.000	1.8	17.1	11 7	2 35.45	+ 9 54.0	1.596	2.582	2.7	20.2
11 17	2 26.39	+19 58.5	2.040	3.006	4.9	17.4	11 17	2 26.93	+ 9 19.4	1.631	2.589	6.8	20.4
11 27	2 18.76	+19 20.5	2.096	3.011	8.4	17.6	11 27	2 19.93	+ 8 56.2	1.692	2.596	10.8	20.7
12 7	2 13.11	+18 47.2	2.178	3.017	11.6	17.8	12 7	2 15.16	+ 8 47.2	1.776	2.603	14.3	20.9
179897	2002 <i>UW</i> ₃₉		11 4.2 159°05	1°5/ 3.1	17		445194	2009 <i>CY</i> ₅₈		11 4.2 157°71	1°8/ 5.5	18	
9 28	3 7.55	+13 44.9	1.933	2.749	14.5	20.6	9 28	3 5.99	+21 44.6	2.159	2.951	13.9	21.9
10 8	3 2.10	+13 10.2	1.859	2.756	11.1	20.4	10 8	3 0.89	+21 48.6	2.076	2.955	11.0	21.7
10 18	2 54.38	+12 27.5	1.807	2.763	7.2	20.2	10 18	2 53.61	+21 41.3	2.016	2.958	7.6	21.5
10 28	2 45.08	+11 39.9	1.782	2.768	3.1	20.0	10 28	2 44.78	+21 22.9	1.982	2.961	3.9	21.3
11 7	2 35.18	+10 52.2	1.786	2.773	2.3	19.9	11 7	2 35.31	+20 55.2	1.977	2.964	1.9	21.2
11 17	2 25.74	+10 9.3	1.820	2.778	6.3	20.2	11 17	2 26.18	+20 21.9	2.001	2.967	5.0	21.4
11 27	2 17.75	+ 9 36.2	1.881	2.781	10.1	20.4	11 27	2 18.36	+19 47.8	2.054	2.969	8.6	21.6
12 7	2 11.90	+ 9 16.2	1.967	2.784	13.5	20.7	12 7	2 12.55	+19 17.7	2.132	2.971	11.8	21.8
80368	1999 <i>XV</i> ₁₅₁		11 4.2 149°55	4°3/ 7.2	18		107517	2001 <i>DM</i> ₅₄		11 4.2 139°09	1°7/ 5.2	16	
9 28	3 8.51	+28 2.1	1.726	2.508	17.3	19.8	9 28	3 12.43	+20 14.5	1.886	2.679	15.7	20.7
10 8	3 3.49	+28 11.2	1.648	2.513	14.1	19.6	10 8	3 6.04	+20 31.1	1.812	2.692	12.3	20.5
10 18	2 55.62	+28 1.4	1.589	2.518	10.3	19.4	10 18	2 57.07	+20 36.6	1.760	2.704	8.4	20.3
10 28	2 45.70	+27 31.2	1.554	2.522	6.5	19.2	10 28	2 46.27	+20 30.9	1.734	2.715	4.2	20.0
11 7	2 34.93	+26 42.1	1.546	2.526	4.3	19.0	11 7	2 34.75	+20 15.5	1.738	2.726	1.9	19.9
11 17	2 24.67	+25 39.2	1.566	2.529	6.4	19.2	11 17	2 23.73	+19 53.7	1.771	2.736	5.6	20.2
11 27	2 16.20	+24 30.6	1.613	2.533	10.1	19.4	11 27	2 14.37	+19 30.9	1.832	2.745	9.6	20.4
12 7	2 10.37	+23 25.1	1.684	2.536	13.8	19.6	12 7	2 7.45	+19 12.1	1.919	2.754	13.1	20.7
488492	2000 <i>EX</i> ₂₀₂		11 4.2 335°83	2°1/ 2.2	18		278449	2007 <i>TS</i> ₅		11 4.2 317°98	9°3/ 27.3	16	
9 28	2 59.05	+13 12.9	2.133	2.961	12.9	21.5	9 28	2 56.65	+12 3.9	0.873	1.760	21.7	20.1
10 8	2 55.47	+12 8.8	2.052	2.957	9.9	21.3	10 8	2 55.92	+ 8 14.7	0.808	1.745	16.7	19.7
10 18	2 50.00	+10 56.1	1.994	2.953	6.4	21.0	10 18	2 51.46	+ 3 49.4	0.762	1.731	11.7	19.4
10 28	2 43.21	+ 9 38.9	1.964	2.950	3.0	20.8	10 28	2 44.14	- 0 48.1	0.741	1.717	9.3	19.2
11 7	2 35.90	+ 8 23.2	1.963	2.947	2.9	20.8	11 7	2 35.57	- 5 5.7	0.744	1.704	12.4	19.4
11 17	2 28.91	+ 7 14.8	1.991	2.944	6.2	21.0	11 17	2 27.60	- 8 34.4	0.769	1.692	17.8	19.6
11 27	2 23.06	+ 6 19.0	2.046	2.941	9.7	21.2	11 27	2 21.97	-10 57.9	0.813	1.681	23.1	19.9
12 7	2 18.94	+ 5 39.2	2.126	2.939	12.8	21.4	12 7	2 19.76	-12 15.7	0.871	1.671	27.5	20.1
285277	1998 <i>RL</i> ₆₃		11 4.2 351°54	10°3/ 27.5	18		351847	2006 <i>RZ</i> ₂		11 4.2 118°25	3°0/ 6.5	18	
9 28	2 53.36	+ 0 0.9	1.133	2.015	18.1	19.0	9 28	3 7.85	+25 21.9	2.189	2.965	14.3	21.3
10 8	2 52.48	- 2 9.2	1.076	2.003	14.6	18.8	10 8	3 2.25	+25 35.0	2.115	2.979	11.4	21.1
10 18	2 48.70	- 4 19.5	1.039	1.992	11.6	18.6	10 18	2 54.45	+25 34.7	2.062	2.994	8.2	20.9
10 28	2 42.82	- 6 15.6	1.024	1.984	10.3	18.5	10 28	2 45.12	+25 20.5	2.036	3.007	4.8	20.7
11 7	2 36.05	- 7 43.4	1.032	1.978	11.9	18.6	11 7	2 35.21	+24 53.8	2.038	3.021	3.0	20.7
11 17	2 29.77	- 8 33.4	1.060	1.973	15.1	18.7	11 17	2 25.75	+24 17.9	2.070	3.034	5.1	20.8
11 27	2 25.28	- 8 42.1	1.108	1.971	18.6	19.0	11 27	2 17.69	+23 38.1	2.131	3.046	8.3	21.0
12 7	2 23.41	- 8 12.5	1.172	1.970	21.9	19.2	12 7	2 11.70	+22 59.9	2.217	3.058	11.3	21.3
510226	2011 <i>EH</i> ₃₅		11 4.2 168°87	0°6/ 4.6	18		222054	1998 <i>WS</i> ₂		11 4.2 42°31	1°4/ 5.6		

EPHEMERIDES

11 4.2

11 4.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
71651	2000 <i>EC</i> ₁₁₈	11	4.2 346°17	7°3/29.9	18		266619	2008 <i>PC</i> ₆	11	4.2 113°71	4°5/8.4	18	
9 28	3 2.21	- 4 41.9	2.027	2.856	13.4	18.5	9 28	3 4.61	+31 40.3	2.469	3.216	13.6	21.2
10 8	2 57.90	- 5 31.8	1.960	2.852	10.9	18.3	10 8	2 59.74	+31 54.9	2.386	3.224	11.3	21.0
10 18	2 51.60	- 6 15.2	1.917	2.849	8.6	18.2	10 18	2 52.82	+31 53.9	2.324	3.231	8.6	20.9
10 28	2 43.92	- 6 45.8	1.899	2.846	7.4	18.1	10 28	2 44.48	+31 36.0	2.288	3.239	6.1	20.7
11 7	2 35.69	- 6 58.6	1.907	2.844	8.0	18.1	11 7	2 35.55	+31 2.0	2.279	3.246	4.6	20.6
11 17	2 27.83	- 6 50.6	1.942	2.842	10.0	18.3	11 17	2 26.98	+30 14.8	2.300	3.254	5.4	20.7
11 27	2 21.19	- 6 21.1	2.001	2.840	12.5	18.4	11 27	2 19.66	+29 19.6	2.349	3.261	7.8	20.9
12 7	2 16.42	- 5 31.8	2.082	2.838	14.9	18.6	12 7	2 14.22	+28 22.4	2.424	3.268	10.4	21.1
385644	2005 <i>QH</i> ₁₃₈	11	4.2 348°76	0°9/3.7	17		144411	2004 <i>EW</i> ₉	11	4.2 41°64	10°9/11.4	17	A
9 28	3 1.97	+14 41.5	1.170	2.026	19.4	20.8	9 28	3 56.85	+42 42.6	0.550	1.342	41.8	17.6
10 8	2 59.35	+14 34.4	1.100	2.019	15.1	20.5	10 8	3 39.29	+42 17.9	0.564	1.420	33.4	17.5
10 18	2 53.40	+14 16.1	1.048	2.012	10.0	20.2	10 18	3 16.74	+40 53.4	0.586	1.498	24.7	17.5
10 28	2 44.91	+13 49.7	1.018	2.006	4.2	19.8	10 28	2 53.23	+38 27.9	0.624	1.575	16.7	17.5
11 7	2 35.27	+13 20.3	1.012	2.002	2.2	19.7	11 7	2 32.87	+35 22.0	0.683	1.650	11.5	17.6
11 17	2 26.11	+12 54.3	1.030	1.998	8.1	20.0	11 17	2 18.03	+32 6.7	0.763	1.724	11.8	17.9
11 27	2 19.01	+12 38.6	1.072	1.996	13.5	20.3	11 27	2 9.30	+29 9.6	0.866	1.795	15.3	18.4
12 7	2 15.00	+12 37.8	1.133	1.995	18.2	20.6	12 7	2 6.04	+26 45.4	0.989	1.864	19.2	18.9
365311	2009 <i>SX</i> ₂₅	11	4.2 96°99	0°3/4.5	18		437830	3383 <i>T</i> ₋₃	11	4.2 21°71	1°9/3.1	15	
9 28	3 3.56	+18 31.4	2.381	3.182	12.6	22.1	9 28	2 58.84	+15 16.2	1.029	1.899	20.5	20.0
10 8	2 58.62	+18 11.0	2.313	3.200	9.7	22.0	10 8	2 56.76	+14 28.1	0.990	1.916	15.7	19.7
10 18	2 51.89	+17 41.5	2.269	3.219	6.4	21.8	10 18	2 51.43	+13 26.3	0.968	1.935	10.1	19.5
10 28	2 43.99	+17 4.8	2.252	3.237	2.8	21.6	10 28	2 43.95	+12 17.6	0.967	1.956	4.2	19.3
11 7	2 35.69	+16 23.9	2.265	3.255	1.0	21.5	11 7	2 35.82	+11 11.1	0.990	1.978	3.0	19.3
11 17	2 27.82	+15 42.8	2.307	3.272	4.5	21.8	11 17	2 28.61	+10 16.0	1.036	2.003	8.4	19.7
11 27	2 21.11	+15 5.5	2.379	3.289	7.8	22.0	11 27	2 23.58	+ 9 39.3	1.106	2.028	13.4	20.0
12 7	2 16.12	+14 35.8	2.477	3.306	10.7	22.2	12 7	2 21.46	+ 9 24.0	1.195	2.055	17.6	20.4
485728	2012 <i>BY</i> ₅₅	11	4.2 217°69	3°1/1.4	18		110990	2001 <i>UH</i> ₂₀₂	11	4.2 357°12	0°4/4.5	18	
9 28	3 1.95	+ 6 45.9	2.564	3.385	11.2	21.8	9 28	3 1.69	+18 50.5	1.706	2.530	15.8	19.9
10 8	2 57.36	+ 6 6.2	2.479	3.378	8.6	21.6	10 8	2 58.10	+18 29.1	1.629	2.528	12.3	19.7
10 18	2 51.11	+ 5 24.3	2.419	3.372	5.8	21.4	10 18	2 52.05	+17 54.8	1.572	2.527	8.2	19.5
10 28	2 43.70	+ 4 43.8	2.386	3.365	3.5	21.3	10 28	2 44.23	+17 9.7	1.540	2.526	3.6	19.2
11 7	2 35.80	+ 4 8.5	2.383	3.357	3.7	21.3	11 7	2 35.67	+16 18.1	1.536	2.526	1.3	19.0
11 17	2 28.13	+ 3 42.0	2.410	3.350	6.2	21.4	11 17	2 27.51	+15 25.8	1.558	2.526	5.9	19.3
11 27	2 21.41	+ 3 27.1	2.465	3.342	9.0	21.6	11 27	2 20.85	+14 39.2	1.608	2.526	10.3	19.6
12 7	2 16.21	+ 3 25.3	2.544	3.333	11.6	21.8	12 7	2 16.46	+14 3.8	1.681	2.527	14.0	19.8
161977	2007 <i>LE</i> ₃	11	4.2 15°38	1°7/3.1	18		407610	2011 <i>BZ</i> ₁₀₂	11	4.2 311°90	3°7/1.6	18	
9 28	2 51.97	+17 45.7	0.817	1.706	22.6	17.1	9 28	3 1.85	+ 6 18.1	2.065	2.898	13.1	21.0
10 8	2 52.12	+16 33.2	0.783	1.720	17.2	16.9	10 8	2 57.75	+ 5 46.2	1.981	2.887	10.1	20.7
10 18	2 48.67	+14 59.6	0.765	1.736	11.1	16.6	10 18	2 51.61	+ 5 12.4	1.921	2.876	6.9	20.5
10 28	2 42.80	+13 15.1	0.767	1.756	4.5	16.3	10 28	2 44.01	+ 4 40.9	1.886	2.866	4.1	20.3
11 7	2 36.20	+11 33.4	0.790	1.778	3.1	16.4	11 7	2 35.75	+ 4 16.1	1.880	2.856	4.3	20.3
11 17	2 30.57	+10 7.8	0.834	1.804	9.1	16.8	11 17	2 27.75	+ 4 2.0	1.902	2.846	7.2	20.5
11 27	2 27.25	+ 9 7.8	0.900	1.831	14.6	17.2	11 27	2 20.92	+ 4 1.5	1.950	2.836	10.6	20.7
12 7	2 26.92	+ 8 36.8	0.983	1.860	19.1	17.6	12 7	2 15.92	+ 4 15.7	2.022	2.827	13.6	20.9
182315	2001 <i>OF</i> ₆₆	11	4.2 44°41	3°7/2.7	18		515310	2012 <i>VX</i> ₈₃	11	4.2 134°42	1°2/3.4	18	
9 28	3 10.13	+ 7 29.1	1.174	2.025	19.8	18.4	9 28	3 6.50	+13 33.6	1.901	2.720	14.6	21.2
10 8	3 4.96	+ 7 24.6	1.132	2.047	15.1	18.2	10 8	3 1.38	+13 13.9	1.829	2.728	11.2	21.0
10 18	2 56.57	+ 7 18.8	1.109	2.070	10.0	18.0	10 18	2 53.99	+12 47.1	1.778	2.734	7.3	20.8
10 28	2 46.05	+ 7 16.2	1.109	2.094	5.0	17.8	10 28	2 45.00	+12 15.9	1.755	2.741	3.1	20.5
11 7	2 34.95	+ 7 21.0	1.135	2.118	4.5	17.8	11 7	2 35.39	+11 44.1	1.759	2.747	2.0	20.5
11 17	2 24.84	+ 7 36.7	1.185	2.143	8.8	18.1	11 17	2 26.23	+11 16.2	1.793	2.753	6.1	20.7
11 27	2 17.06	+ 8 5.2	1.260	2.168	13.4	18.5	11 27	2 18.51	+10 56.5	1.854	2.759	10.0	21.0
12 7	2 12.34	+ 8 46.7	1.356	2.194	17.3	18.8	12 7	2 12.93	+10 47.8	1.939	2.764	13.4	21.2
225701	2001 <i>QH</i> ₂₀₃	11	4.2 16°91	1°0/3.8	18		397981	2009 <i>BC</i> ₆₇	11	4.2 284°19	0°6/3.8	18	
9 28	3 4.00	+13 35.3	1.076	1.937	20.5	19.2	9 28	3 3.56	+16 16.3	1.815	2.638	15.0	21.8
10 8	3 0.90	+13 41.1	1.022	1.943	15.8	19.0	10 8	2 59.38	+15 49.1	1.734	2.635	11.6	21.6
10 18	2 54.34	+13 37.9	0.986	1.951	10.3	18.7	10 18	2 52.82	+15 11.4	1.675	2.631	7.6	21.4
10 28	2 45.26	+13 28.5	0.972	1.960	4.4	18.4	10 28	2 44.56	+14 25.9	1.641	2.627	3.2	21.1
11 7	2 35.23	+13 17.5	0.980	1.970	2.3	18.3	11 7	2 35.56	+13 36.8	1.634	2.624	1.6	21.0
11 17	2 25.95	+13 10.1	1.013	1.982	8.1	18.7	11 17	2 26.93	+12 49.8	1.657	2.620	6.1	21.3
11 27	2 18.98	+13 11.7	1.069	1.994	13.5	19.0	11 27	2 19.72	+12 10.5	1.706	2.617	10.3	21.5
12 7	2 15.22	+13 25.9	1.145	2.009	18.0	19.3	12 7	2 14.69	+11 43.3	1.778	2.613	13.9	21.7
50804	2000 <i>FC</i> ₂₈	11	4.2 37°46	0°7/4.7	18		63247	2001 <i>BN</i> ₃₄	11	4.2 241°32	4°2/6.8	18	
9 28	3 3.51	+19 9.9	1.743	2.562	15.7	18.3	9 28	3 8.73	+26 40.3	1.665	2.455	17.6	19.9
10 8	2 59.38	+18 53.9	1.670	2.566	12.2	18.1	10 8	3 4.01	+26 58.8	1.575	2.446	14.3	19.6
10 18	2 52.80	+18 25.4	1.618	2.571	8.2	17.9	10 18	2 56.26	+26 59.8	1.503	2.436	10.5	19.4
10 28	2 44.50	+17 46.3	1.592	2.577	3.7	17.6	10 28	2 46.16	+26 41.1	1.456	2.427	6.5	19.1
11 7	2 35.52	+17 0.4	1.592	2.582	1.3	17.4	11 7	2 34.92	+26 3.2	1.435	2.417	4.2	19.0
11 17	2 27.00	+16 13.2	1.621	2.588	5.8	17.8	11 17	2 23.99	+25 10.3	1.442	2.406	6.7	19.1
11 27	2 20.01	+15 30.6	1.676	2.594	10.0	18.0	11 27	2 14.81	+24 10.4	1.475	2.395	10.8	19.3
12 7	2 15.29	+14 58.0	1.755	2.600	13.6	18.3	12 7	2 8.40	+23 12.3	1.531	2.384	14.8	19.5
390236	2012 <i>XT</i> ₅₅	11	4.2 138°02	3°2/2.1	18		415148	2012 <i>EJ</i> ₁₇	11	4.2 139°65	1°7/2.		

EPHEMERIDES

11 4.2

11 4.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
449058	2012 <i>EM</i> ₂		11 4.2 213°03	4°0/31.5	18		225151	2008 <i>GN</i> ₄₇		11 4.2 81°07	2°7/ 2.3	18	
9 28	3 0.77	+ 5 42.1	2.320	3.149	12.0	21.1	9 28	3 5.61	+ 7 48.4	2.224	3.043	12.7	20.0
10 8	2 56.61	+ 4 41.1	2.243	3.146	9.2	21.0	10 8	3 0.18	+ 7 28.3	2.167	3.066	9.7	19.8
10 18	2 50.70	+ 3 37.6	2.191	3.144	6.4	20.8	10 18	2 52.93	+ 7 6.6	2.135	3.089	6.4	19.7
10 28	2 43.58	+ 2 36.7	2.166	3.141	4.2	20.6	10 28	2 44.50	+ 6 46.4	2.130	3.112	3.4	19.5
11 7	2 35.97	+ 1 43.5	2.171	3.139	4.7	20.7	11 7	2 35.70	+ 6 30.9	2.154	3.134	3.2	19.6
11 17	2 28.66	+ 1 2.4	2.203	3.136	7.2	20.8	11 17	2 27.39	+ 6 23.2	2.208	3.157	6.1	19.8
11 27	2 22.39	+ 0 36.6	2.263	3.133	10.1	21.0	11 27	2 20.33	+ 6 25.2	2.290	3.179	9.1	20.0
12 7	2 17.74	+ 0 27.6	2.347	3.130	12.7	21.2	12 7	2 15.06	+ 6 38.0	2.397	3.200	11.8	20.2
367626	2009 <i>US</i> ₁₄₉		11 4.2 120°39	3°1/ 7.4	18		324113	2005 <i>XX</i> ₈₉		11 4.2 318°94	1°5/ 3.1	18	
9 28	3 2.84	+28 40.0	2.549	3.312	12.9	20.9	9 28	3 2.11	+12 38.1	1.964	2.792	13.9	21.0
10 8	2 58.20	+28 27.0	2.467	3.321	10.4	20.7	10 8	2 58.12	+12 16.7	1.879	2.783	10.7	20.8
10 18	2 51.72	+27 59.3	2.407	3.329	7.6	20.6	10 18	2 51.96	+11 48.8	1.817	2.775	7.0	20.5
10 28	2 44.00	+27 17.0	2.373	3.338	4.8	20.4	10 28	2 44.22	+11 17.3	1.780	2.767	3.1	20.3
11 7	2 35.82	+26 22.2	2.367	3.346	3.1	20.3	11 7	2 35.77	+10 46.1	1.772	2.759	2.3	20.2
11 17	2 28.00	+25 18.8	2.392	3.355	4.6	20.4	11 17	2 27.61	+10 19.4	1.791	2.751	6.1	20.4
11 27	2 21.34	+24 12.2	2.446	3.363	7.3	20.6	11 27	2 20.68	+10 1.5	1.838	2.744	10.0	20.7
12 7	2 16.41	+23 8.0	2.527	3.371	10.0	20.8	12 7	2 15.73	+ 9 55.4	1.909	2.737	13.4	20.9
47597	2000 <i>AK</i> ₂₁₄		11 4.2 0°54	1°1/ 3.5	18		365392	2009 <i>VH</i> ₁₀₅		11 4.2 39°22	12°3/28.9	18	
9 28	3 3.11	+14 56.5	1.670	2.502	15.7	19.5	9 28	3 9.36	-20 37.6	1.903	2.683	16.0	19.6
10 8	2 59.18	+14 28.6	1.595	2.501	12.1	19.2	10 8	3 3.28	-21 21.7	1.868	2.697	14.2	19.5
10 18	2 52.76	+13 50.8	1.542	2.501	7.9	19.0	10 18	2 55.01	-21 44.9	1.852	2.712	12.9	19.5
10 28	2 44.55	+13 6.4	1.514	2.501	3.3	18.7	10 28	2 45.36	-21 40.3	1.859	2.727	12.3	19.5
11 7	2 35.61	+12 20.3	1.512	2.501	2.0	18.6	11 7	2 35.41	-21 4.4	1.889	2.743	12.7	19.5
11 17	2 27.08	+11 38.1	1.538	2.501	6.6	18.9	11 17	2 26.18	-19 57.4	1.943	2.758	13.9	19.6
11 27	2 20.09	+11 5.5	1.591	2.502	10.9	19.2	11 27	2 18.59	-18 23.0	2.018	2.775	15.4	19.8
12 7	2 15.40	+10 46.5	1.666	2.503	14.6	19.4	12 7	2 13.21	-16 27.2	2.114	2.791	16.9	20.0
117359	2004 <i>XS</i> ₁₀₂		11 4.2 23°91	7°4/31.6	18		444953	2008 <i>CW</i> ₁₅₉		11 4.2 79°86	0°3/ 4.0	18	
9 28	3 7.29	- 2 6.0	1.545	2.382	16.5	19.0	9 28	3 3.03	+16 57.9	2.007	2.823	14.0	21.5
10 8	3 2.36	- 2 40.5	1.485	2.386	13.2	18.8	10 8	2 58.65	+16 30.0	1.933	2.830	10.8	21.3
10 18	2 54.79	- 3 8.0	1.445	2.389	9.9	18.6	10 18	2 52.18	+15 52.2	1.883	2.837	7.1	21.1
10 28	2 45.39	- 3 21.9	1.431	2.393	7.6	18.5	10 28	2 44.26	+15 7.1	1.859	2.845	3.0	20.8
11 7	2 35.31	- 3 16.7	1.441	2.397	8.1	18.6	11 7	2 35.79	+14 18.8	1.863	2.853	1.3	20.7
11 17	2 25.79	- 2 49.7	1.478	2.402	10.7	18.7	11 17	2 27.74	+13 32.1	1.896	2.860	5.4	21.0
11 27	2 17.99	- 2 0.9	1.539	2.407	14.0	18.9	11 27	2 21.01	+12 52.1	1.957	2.868	9.2	21.3
12 7	2 12.66	- 0 53.0	1.621	2.412	17.1	19.2	12 7	2 16.25	+12 22.7	2.042	2.875	12.5	21.5
430425	1999 <i>TV</i> ₇₄		11 4.2 261°72	1°1/ 3.6	18		297115	2010 <i>RX</i> ₄₇		11 4.2 23°31	0°7/ 4.7	18	
9 28	3 6.85	+14 36.2	1.577	2.406	16.6	21.7	9 28	3 3.24	+18 50.3	1.836	2.653	15.1	21.4
10 8	3 2.44	+14 15.5	1.489	2.393	13.0	21.4	10 8	2 59.11	+18 40.8	1.761	2.656	11.8	21.2
10 18	2 55.15	+13 44.6	1.422	2.380	8.6	21.1	10 18	2 52.64	+18 20.0	1.707	2.659	7.9	20.9
10 28	2 45.68	+13 6.3	1.379	2.366	3.6	20.8	10 28	2 44.50	+17 49.4	1.678	2.663	3.6	20.7
11 7	2 35.15	+12 25.1	1.364	2.352	2.2	20.7	11 7	2 35.69	+17 12.4	1.676	2.666	1.2	20.5
11 17	2 24.90	+11 46.9	1.376	2.338	7.2	21.0	11 17	2 27.28	+16 33.6	1.703	2.670	5.5	20.8
11 27	2 16.29	+11 18.0	1.413	2.324	12.0	21.2	11 27	2 20.32	+15 58.4	1.757	2.675	9.6	21.1
12 7	2 10.28	+11 3.0	1.474	2.310	16.2	21.4	12 7	2 15.51	+15 31.7	1.835	2.679	13.2	21.3
282652	2005 <i>UP</i> ₁₁₃		11 4.2 336°89	0°1/ 4.3	18		487767	2015 <i>RD</i> ₂₀₅		11 4.2 22°52	0°0/ 4.2	18	
9 28	3 4.04	+16 12.2	1.928	2.746	14.4	20.2	9 28	3 6.98	+15 2.3	1.814	2.632	15.2	21.1
10 8	2 59.67	+16 14.5	1.845	2.742	11.2	20.0	10 8	3 2.02	+15 20.1	1.738	2.635	11.8	20.9
10 18	2 53.01	+16 8.8	1.783	2.738	7.4	19.8	10 18	2 54.58	+15 31.5	1.684	2.638	7.8	20.7
10 28	2 44.67	+15 56.3	1.748	2.734	3.2	19.5	10 28	2 45.35	+15 37.2	1.655	2.641	3.4	20.4
11 7	2 35.58	+15 39.7	1.741	2.731	1.2	19.4	11 7	2 35.36	+15 39.0	1.655	2.645	1.3	20.3
11 17	2 26.79	+15 22.4	1.762	2.727	5.5	19.7	11 17	2 25.75	+15 39.8	1.683	2.649	5.8	20.6
11 27	2 19.34	+15 8.6	1.810	2.725	9.6	19.9	11 27	2 17.64	+15 43.1	1.739	2.653	9.9	20.9
12 7	2 13.99	+15 2.1	1.883	2.722	13.1	20.1	12 7	2 11.80	+15 52.1	1.819	2.658	13.5	21.1
115178	2003 <i>SO</i> ₈₈		11 4.2 2°34	1°9/ 5.9	18		393589	2003 <i>SC</i> ₃₉₅		11 4.2 251°57	4°7/31.9	18	
9 28	3 1.06	+24 4.0	2.107	2.904	14.1	19.3	9 28	3 3.73	+ 5 29.8	1.811	2.647	14.5	21.7
10 8	2 57.21	+23 41.7	2.023	2.903	11.2	19.1	10 8	2 59.40	+ 4 36.0	1.737	2.644	11.2	21.5
10 18	2 51.28	+23 4.7	1.961	2.903	7.8	18.9	10 18	2 52.79	+ 3 39.9	1.686	2.641	7.8	21.3
10 28	2 43.89	+22 14.0	1.925	2.903	4.1	18.7	10 28	2 44.56	+ 2 47.3	1.661	2.638	5.0	21.1
11 7	2 35.89	+21 12.8	1.916	2.904	2.0	18.6	11 7	2 35.67	+ 2 4.2	1.663	2.634	5.4	21.2
11 17	2 28.26	+20 6.2	1.937	2.904	4.9	18.8	11 17	2 27.17	+ 1 35.9	1.693	2.631	8.5	21.3
11 27	2 21.89	+19 0.5	1.985	2.905	8.5	19.0	11 27	2 20.04	+ 1 25.8	1.748	2.628	12.0	21.5
12 7	2 17.44	+18 1.6	2.060	2.906	11.8	19.2	12 7	2 15.01	+ 1 34.6	1.826	2.624	15.2	21.7
49877	1999 <i>XD</i> ₁₃₃		11 4.2 198°21	5°5/ 7.8	18		27427	2000 <i>FE</i> ₁		11 4.2 107°04	4°2/ 1.3	18	
9 28	3 10.74	+30 11.7	1.839	2.603	17.0	19.2	9 28	3 5.27	+ 4 35.7	2.012	2.839	13.6	17.9
10 8	3 5.36	+30 45.5	1.751	2.601	14.1	19.0	10 8	3 0.22	+ 4 0.6	1.947	2.849	10.5	17.7
10 18	2 57.03	+31 1.7	1.683	2.598	10.8	18.8	10 18	2 53.12	+ 3 25.5	1.906	2.858	7.2	17.5
10 28	2 46.48	+30 56.7	1.638	2.595	7.4	18.6	10 28	2 44.64	+ 2 54.8	1.891	2.867	4.6	17.4
11 7	2 34.87	+30 30.1	1.621	2.592	5.5	18.5	11 7	2 35.67	+ 2 33.1	1.905	2.876	4.8	17.4
11 17	2 23.62	+29 44.9	1.631	2.588	7.0	18.5	11 17	2 27.14	+ 2 23.8	1.947	2.885	7.6	17.6
11 27	2 14.09	+28 48.1	1.669	2.583	10.2	18.7	11 27	2 19.92	+ 2 29.1	2.016	2.893	10.7	17.8
12 7	2 7.24	+27 48.5	1.731	2.578	13.6	18.9	12 7	2 14.65	+ 2 49.2	2.108	2.902	13.5	18.0
447576	2006 <i>TQ</i> ₈₈		11 4.2 26°96	1°3/ 5.2	17		431736	2008 <i>FP</i> ₈₇		11 4.2 126°61	0°8/ 3.7		

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11 4.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
91658	1999 TX ₁₀₄	11	4.2 171°43	3°2/ 6.6	18		236498	2006 GX ₂₀	11	4.2 290°75	2°3/ 2.7	18	
9 28	3 6.11	+25 21.3	2.322	3.097	13.6	19.3	9 28	3 3.70	+12 6.5	1.659	2.494	15.6	20.4
10 8	3 1.03	+25 45.9	2.234	3.098	11.0	19.1	10 8	2 59.83	+11 30.4	1.571	2.479	12.1	20.2
10 18	2 53.79	+25 58.7	2.169	3.099	7.9	18.9	10 18	2 53.36	+10 45.7	1.504	2.464	8.0	19.9
10 28	2 45.00	+25 58.5	2.130	3.099	4.9	18.7	10 28	2 44.93	+9 56.6	1.463	2.449	3.7	19.6
11 7	2 35.52	+25 46.0	2.119	3.100	3.2	18.6	11 7	2 35.57	+9 8.5	1.449	2.434	3.2	19.6
11 17	2 26.30	+25 23.6	2.138	3.100	5.1	18.7	11 17	2 26.48	+8 27.5	1.462	2.419	7.5	19.8
11 27	2 18.30	+24 55.6	2.185	3.100	8.1	18.9	11 27	2 18.86	+7 59.5	1.500	2.405	11.9	20.0
12 7	2 12.24	+24 27.1	2.258	3.100	11.1	19.1	12 7	2 13.58	+7 48.0	1.561	2.390	15.8	20.2
139632	2001 QT ₁₅₆	11	4.2 35°70	0°6/ 4.7	18		183152	2002 RR ₂₇₃	11	4.2 61°85	0°8/ 3.8	17	
9 28	3 2.86	+19 30.4	1.661	2.483	16.2	19.5	9 28	3 8.85	+15 54.6	1.274	2.112	19.3	20.4
10 8	2 58.98	+19 8.7	1.593	2.491	12.6	19.2	10 8	3 3.92	+15 29.4	1.227	2.135	14.8	20.2
10 18	2 52.60	+18 33.6	1.546	2.500	8.4	19.0	10 18	2 55.92	+14 52.2	1.200	2.159	9.6	20.0
10 28	2 44.49	+17 47.2	1.524	2.509	3.8	18.8	10 28	2 45.89	+14 6.9	1.196	2.183	4.0	19.7
11 7	2 35.74	+16 54.1	1.529	2.519	1.3	18.6	11 7	2 35.29	+13 19.6	1.218	2.207	2.0	19.7
11 17	2 27.50	+16 0.2	1.561	2.529	5.9	18.9	11 17	2 25.61	+12 37.1	1.266	2.231	7.3	20.1
11 27	2 20.86	+15 12.2	1.620	2.539	10.2	19.2	11 27	2 18.13	+12 6.0	1.339	2.255	12.1	20.4
12 7	2 16.54	+14 35.2	1.702	2.550	13.9	19.5	12 7	2 13.57	+11 50.1	1.434	2.279	16.1	20.7
72770	2001 FR ₁₄₇	11	4.2 158°36	4°1/ 7.9	18		13144	1995 BJ	11	4.2 336°79	5°2/ 8.4	18	R
9 28	3 4.33	+30 2.2	2.522	3.276	13.2	19.5	9 28	3 3.30	+31 25.7	2.065	2.828	15.4	18.0
10 8	2 59.53	+30 16.5	2.433	3.278	10.9	19.3	10 8	2 59.30	+31 45.6	1.975	2.823	12.8	17.8
10 18	2 52.74	+30 16.6	2.367	3.280	8.2	19.1	10 18	2 52.88	+31 47.9	1.906	2.819	9.9	17.6
10 28	2 44.53	+30 1.2	2.325	3.282	5.6	19.0	10 28	2 44.68	+31 30.5	1.860	2.814	7.0	17.4
11 7	2 35.71	+29 31.1	2.312	3.284	4.1	18.9	11 7	2 35.68	+30 53.8	1.841	2.810	5.2	17.3
11 17	2 27.18	+28 49.0	2.328	3.285	5.1	18.9	11 17	2 26.98	+30 1.2	1.850	2.807	6.3	17.4
11 27	2 19.82	+27 59.7	2.373	3.287	7.6	19.1	11 27	2 19.69	+28 58.8	1.886	2.803	9.0	17.5
12 7	2 14.28	+27 8.9	2.445	3.288	10.3	19.3	12 7	2 14.59	+27 54.3	1.946	2.800	12.1	17.7
53452	1999 XW ₁₃₄	11	4.2 146°92	20°1/24.9	17		67207	2000 DJ ₁₉	11	4.2 29°90	0°4/ 3.9	18	
9 28	3 15.18	-26 37.9	1.233	2.017	22.8	18.8	9 28	3 1.55	+16 17.8	1.833	2.658	14.8	18.6
10 8	3 9.11	-28 39.0	1.206	2.022	21.3	18.7	10 8	2 57.69	+15 56.2	1.767	2.669	11.4	18.4
10 18	2 59.45	-30 6.0	1.194	2.026	20.3	18.6	10 18	2 51.63	+15 25.2	1.723	2.680	7.4	18.2
10 28	2 47.40	-30 44.5	1.200	2.030	20.2	18.6	10 28	2 44.07	+14 47.3	1.704	2.691	3.1	17.9
11 7	2 34.69	-30 26.9	1.223	2.033	20.8	18.7	11 7	2 35.95	+14 6.7	1.714	2.703	1.4	17.8
11 17	2 23.10	-29 13.5	1.262	2.036	22.1	18.8	11 17	2 28.29	+13 28.4	1.751	2.716	5.7	18.1
11 27	2 14.11	-27 11.7	1.317	2.039	23.7	19.0	11 27	2 22.04	+12 57.1	1.815	2.729	9.6	18.4
12 7	2 8.50	-24 33.3	1.386	2.042	25.2	19.1	12 7	2 17.85	+12 36.7	1.903	2.742	13.0	18.6
361008	2005 VB ₄₅	11	4.2 335°23	0°1/ 4.4	18		404379	2013 GB ₃₃	11	4.2 86°87	1°6/ 5.6	18	
9 28	3 1.34	+18 41.3	1.889	2.708	14.7	21.0	9 28	3 5.51	+21 58.7	2.374	3.161	13.0	21.7
10 8	2 57.64	+18 10.5	1.806	2.703	11.4	20.7	10 8	3 0.17	+21 54.4	2.310	3.186	10.2	21.6
10 18	2 51.69	+17 27.3	1.745	2.699	7.6	20.5	10 18	2 52.98	+21 39.4	2.269	3.211	6.9	21.4
10 28	2 44.12	+16 34.1	1.709	2.695	3.3	20.2	10 28	2 44.57	+21 14.3	2.255	3.235	3.5	21.3
11 7	2 35.87	+15 35.1	1.702	2.692	1.2	20.1	11 7	2 35.77	+20 41.7	2.271	3.258	1.7	21.2
11 17	2 27.97	+14 36.1	1.722	2.688	5.6	20.4	11 17	2 27.43	+20 5.0	2.316	3.282	4.4	21.4
11 27	2 21.41	+13 43.3	1.770	2.685	9.7	20.6	11 27	2 20.34	+19 28.6	2.391	3.305	7.6	21.6
12 7	2 16.92	+13 1.8	1.842	2.683	13.3	20.8	12 7	2 15.05	+18 56.6	2.492	3.328	10.4	21.9
231514	2008 RW ₁₁₃	11	4.2 332°25	0°2/ 4.1	18		133465	2003 SL ₂₃₈	11	4.2 221°27	0°5/ 4.6	18	
9 28	3 0.42	+16 37.7	2.000	2.822	13.9	20.8	9 28	3 4.60	+19 21.9	1.921	2.731	14.8	20.2
10 8	2 56.85	+16 17.8	1.913	2.813	10.7	20.5	10 8	3 0.14	+18 57.6	1.836	2.727	11.6	20.0
10 18	2 51.14	+15 48.3	1.848	2.803	7.1	20.3	10 18	2 53.34	+18 20.7	1.772	2.723	7.7	19.8
10 28	2 43.90	+15 11.4	1.808	2.795	3.0	20.0	10 28	2 44.86	+17 33.0	1.734	2.719	3.5	19.5
11 7	2 35.96	+14 30.7	1.796	2.786	1.3	19.9	11 7	2 35.65	+16 38.3	1.724	2.714	1.2	19.3
11 17	2 28.28	+13 50.7	1.813	2.778	5.5	20.2	11 17	2 26.78	+15 42.1	1.743	2.709	5.6	19.6
11 27	2 21.83	+13 16.6	1.857	2.771	9.4	20.4	11 27	2 19.30	+14 50.5	1.790	2.704	9.7	19.9
12 7	2 17.29	+12 52.3	1.925	2.764	12.9	20.6	12 7	2 13.96	+14 8.9	1.861	2.699	13.3	20.1
186605	2003 CN ₁	11	4.2 328°84	7°8/31.3	18		232496	2003 PV ₆	11	4.2 83°90	6°7/ 9.7	18	
9 28	3 3.00	- 1 5.2	1.425	2.277	16.9	19.1	9 28	3 13.63	+35 15.2	1.895	2.629	17.6	21.0
10 8	2 59.73	- 1 41.8	1.340	2.250	13.6	18.8	10 8	3 7.18	+35 50.0	1.837	2.660	14.7	20.9
10 18	2 53.56	- 2 13.6	1.274	2.224	10.3	18.5	10 18	2 57.91	+36 2.9	1.799	2.691	11.6	20.7
10 28	2 45.10	- 2 32.6	1.231	2.198	8.0	18.3	10 28	2 46.74	+35 50.8	1.784	2.721	8.6	20.6
11 7	2 35.46	- 2 31.7	1.213	2.174	8.6	18.3	11 7	2 34.99	+35 14.1	1.795	2.750	6.8	20.6
11 17	2 26.01	- 2 5.9	1.219	2.151	11.7	18.4	11 17	2 24.01	+34 16.9	1.835	2.780	7.4	20.7
11 27	2 18.13	- 1 13.6	1.248	2.129	15.7	18.6	11 27	2 15.03	+33 7.3	1.901	2.808	9.7	20.9
12 7	2 12.88	+ 0 3.0	1.296	2.108	19.4	18.8	12 7	2 8.77	+31 54.5	1.993	2.836	12.3	21.1
186644	2003 ML ₈	11	4.2 68°78	8°2/28.6	18		16335	5058 T ₋₂	11	4.2 198°25	2°4/ 6.4	18	
9 28	3 2.56	- 7 18.2	2.089	2.912	13.3	19.6	9 28	3 4.40	+25 17.3	2.337	3.116	13.4	19.1
10 8	2 57.95	- 8 35.5	2.050	2.932	11.0	19.5	10 8	2 59.65	+25 6.2	2.246	3.114	10.7	18.9
10 18	2 51.51	- 9 43.7	2.033	2.952	9.0	19.4	10 18	2 52.86	+24 41.4	2.177	3.111	7.6	18.7
10 28	2 43.92	-10 36.1	2.042	2.972	8.2	19.4	10 28	2 44.61	+24 2.8	2.134	3.108	4.3	18.5
11 7	2 36.00	-11 7.7	2.078	2.992	8.8	19.5	11 7	2 35.75	+23 12.8	2.120	3.105	2.4	18.4
11 17	2 28.58	-11 15.7	2.139	3.011	10.5	19.6	11 17	2 27.20	+22 15.3	2.135	3.101	4.7	18.5
11 27	2 22.43	-11 0.3	2.224	3.031	12.6	19.8	11 27	2 19.84	+21 16.0	2.180	3.097	8.1	18.7
12 7	2 18.05	-10 23.7	2.330	3.051	14.5	20.0	12 7	2 14.36	+20 20.5	2.251	3.093	11.1	18.9
159255	2005 YS ₁₃₄	11	4.2 146°85	1°3/ 5.3	18		54346	2000 KZ ₂₈	11	4.3 170°88	0°4/ 3.9	18	
9 28	3 3.98	+20 48.6	2.582	3.371	12.0	20.7							

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
128686	2004 <i>RE</i> ₈₀		11 4.3 351°48	2°0/ 2.9	18		246577	2008 <i>TT</i> ₁₇₆		11 4.3 258°87	0°7/ 4.7	18	
9 28	3 2.83	+13 50.0	1.431	2.275	17.2	19.9	9 28	3 4.87	+19 27.5	1.882	2.692	15.1	20.9
10 8	2 59.38	+13 9.0	1.359	2.272	13.3	19.6	10 8	3 0.52	+19 10.1	1.789	2.680	11.8	20.6
10 18	2 53.12	+12 17.1	1.308	2.270	8.7	19.4	10 18	2 53.72	+18 40.0	1.717	2.668	8.0	20.4
10 28	2 44.83	+11 18.8	1.281	2.268	3.8	19.1	10 28	2 45.10	+17 58.6	1.672	2.656	3.6	20.1
11 7	2 35.68	+10 20.8	1.279	2.267	2.9	19.0	11 7	2 35.61	+17 9.3	1.654	2.644	1.3	19.9
11 17	2 27.01	+9 30.3	1.304	2.266	7.7	19.3	11 17	2 26.39	+16 17.2	1.664	2.631	5.7	20.2
11 27	2 20.08	+8 54.0	1.354	2.265	12.4	19.6	11 27	2 18.55	+15 28.7	1.703	2.618	10.0	20.4
12 7	2 15.74	+8 35.7	1.425	2.265	16.5	19.8	12 7	2 12.92	+14 49.3	1.765	2.605	13.8	20.6
25749	2000 <i>BP</i> ₃		11 4.3 219°52	0°5/ 3.8	18		398816	2013 <i>BZ</i> ₅₃		11 4.3 297°82	2°1/ 2.8	18	
9 28	3 2.05	+15 14.9	2.626	3.433	11.4	18.9	9 28	3 3.19	+12 24.0	1.776	2.607	14.9	21.8
10 8	2 57.52	+14 56.7	2.536	3.428	8.8	18.7	10 8	2 59.17	+11 46.9	1.695	2.601	11.5	21.5
10 18	2 51.32	+14 31.9	2.470	3.423	5.7	18.5	10 18	2 52.78	+11 2.0	1.636	2.595	7.5	21.3
10 28	2 43.93	+14 2.4	2.431	3.417	2.4	18.3	10 28	2 44.66	+10 13.0	1.603	2.589	3.4	21.0
11 7	2 36.03	+13 30.8	2.423	3.412	1.2	18.2	11 7	2 35.80	+9 25.2	1.597	2.583	2.9	21.0
11 17	2 28.35	+13 0.5	2.444	3.406	4.6	18.4	11 17	2 27.28	+8 44.2	1.619	2.577	6.9	21.2
11 27	2 21.62	+12 34.9	2.495	3.400	7.7	18.6	11 27	2 20.16	+8 15.2	1.668	2.571	11.0	21.4
12 7	2 16.41	+12 16.8	2.572	3.394	10.5	18.8	12 7	2 15.21	+8 1.3	1.739	2.565	14.6	21.7
140488	2001 <i>TS</i> ₁₄₃		11 4.3 100°65	0°6/ 3.9	18		182180	2000 <i>SP</i> ₂₉₄		11 4.3 350°53	0°0/ 4.1	18	
9 28	3 8.13	+13 38.3	2.041	2.852	14.0	20.3	9 28	3 6.39	+14 26.1	1.804	2.625	15.2	19.9
10 8	3 2.53	+13 45.9	1.969	2.863	10.8	20.1	10 8	3 1.68	+14 45.9	1.723	2.622	11.8	19.7
10 18	2 54.73	+13 48.0	1.920	2.874	7.0	19.9	10 18	2 54.47	+15 0.0	1.664	2.619	7.8	19.4
10 28	2 45.40	+13 46.1	1.898	2.884	3.0	19.7	10 28	2 45.41	+15 9.2	1.630	2.616	3.4	19.2
11 7	2 35.48	+13 42.3	1.906	2.895	1.4	19.6	11 7	2 35.52	+15 15.2	1.624	2.614	1.3	19.0
11 17	2 25.99	+13 39.5	1.943	2.905	5.4	19.9	11 17	2 25.94	+15 20.6	1.647	2.613	5.9	19.3
11 27	2 17.87	+13 40.7	2.008	2.915	9.2	20.2	11 27	2 17.81	+15 28.7	1.697	2.612	10.1	19.6
12 7	2 11.80	+13 48.5	2.098	2.925	12.4	20.4	12 7	2 11.95	+15 42.6	1.771	2.611	13.7	19.8
223869	2004 <i>TJ</i> ₃₃₆		11 4.3 289°38	0°5/ 3.9	17		193673	2001 <i>DQ</i> ₉₆		11 4.3 333°04	5°1/ 31.9	18	
9 28	3 2.18	+15 39.2	2.213	3.028	12.9	20.8	9 28	2 56.25	+9 48.5	1.204	2.075	18.1	18.8
10 8	2 58.08	+15 21.1	2.113	3.009	10.0	20.6	10 8	2 54.93	+8 30.2	1.123	2.051	14.1	18.5
10 18	2 51.94	+14 54.8	2.036	2.991	6.6	20.3	10 18	2 50.60	+6 59.0	1.062	2.028	9.5	18.2
10 28	2 44.28	+14 22.2	1.986	2.972	2.8	20.0	10 28	2 43.92	+5 23.3	1.023	2.007	5.6	17.9
11 7	2 35.89	+13 46.4	1.964	2.953	1.4	19.9	11 7	2 36.07	+3 54.2	1.008	1.987	6.3	17.9
11 17	2 27.66	+13 11.5	1.971	2.934	5.3	20.1	11 17	2 28.50	+2 43.3	1.016	1.968	10.9	18.1
11 27	2 20.51	+12 41.9	2.007	2.916	9.1	20.3	11 27	2 22.68	+1 59.3	1.046	1.951	15.9	18.3
12 7	2 15.16	+12 21.3	2.067	2.897	12.5	20.5	12 7	2 19.65	+1 45.9	1.095	1.935	20.3	18.5
322393	2011 <i>QA</i> ₅₇		11 4.3 35°58	0°0/ 4.1	18		356867	2011 <i>WU</i> ₇₇		11 4.3 88°50	1°8/ 5.7	18	
9 28	3 3.81	+17 44.6	1.585	2.413	16.6	21.1	9 28	3 5.29	+22 40.9	1.969	2.767	14.9	21.2
10 8	2 59.84	+17 23.4	1.517	2.419	12.9	20.9	10 8	3 0.50	+22 29.2	1.899	2.781	11.8	21.0
10 18	2 53.26	+16 49.8	1.470	2.426	8.5	20.6	10 18	2 53.46	+22 3.9	1.851	2.795	8.1	20.8
10 28	2 44.84	+16 6.4	1.447	2.433	3.7	20.4	10 28	2 44.89	+21 25.8	1.829	2.808	4.1	20.6
11 7	2 35.71	+15 17.9	1.451	2.441	1.4	20.2	11 7	2 35.76	+20 38.2	1.834	2.822	1.9	20.5
11 17	2 27.11	+14 30.2	1.482	2.448	6.3	20.6	11 17	2 27.13	+19 45.8	1.869	2.836	5.1	20.7
11 27	2 20.16	+13 49.9	1.539	2.456	10.7	20.9	11 27	2 19.96	+18 54.7	1.931	2.849	8.8	21.0
12 7	2 15.65	+13 21.8	1.619	2.465	14.5	21.1	12 7	2 14.90	+18 10.3	2.019	2.862	12.1	21.2
260737	2005 <i>LR</i> ₃₀		11 4.3 103°21	4°2/ 1.9	18		200453	2000 <i>WA</i> ₆₀		11 4.3 288°81	4°1/ 1.8	18	
9 28	3 7.43	+7 24.6	1.520	2.359	16.6	20.2	9 28	3 5.21	+6 54.9	1.708	2.544	15.2	19.7
10 8	3 2.58	+6 43.8	1.457	2.366	12.8	19.9	10 8	3 0.99	+6 20.3	1.615	2.523	11.9	19.5
10 18	2 55.02	+5 59.8	1.415	2.373	8.6	19.7	10 18	2 54.17	+5 42.3	1.544	2.501	8.1	19.2
10 28	2 45.58	+5 18.2	1.398	2.380	4.9	19.5	10 28	2 45.35	+5 5.7	1.499	2.480	4.7	19.0
11 7	2 35.44	+4 45.1	1.408	2.386	4.9	19.5	11 7	2 35.53	+4 36.2	1.480	2.458	4.9	18.9
11 17	2 25.88	+4 25.7	1.444	2.393	8.6	19.8	11 17	2 25.89	+4 19.0	1.489	2.436	8.5	19.1
11 27	2 18.07	+4 23.6	1.506	2.399	12.7	20.0	11 27	2 17.64	+4 18.2	1.523	2.414	12.7	19.3
12 7	2 12.78	+4 39.5	1.590	2.405	16.3	20.3	12 7	2 11.69	+4 35.5	1.579	2.393	16.4	19.5
266574	2008 <i>HK</i> ₃		11 4.3 169°86	1°8/ 3.0	17		170044	2002 <i>VA</i> ₄₃		11 4.3 280°86	2°4/ 2.9	18	
9 28	3 8.06	+12 32.7	1.874	2.693	14.8	21.7	9 28	3 6.72	+9 8.8	1.938	2.762	14.2	19.6
10 8	3 2.69	+12 1.8	1.798	2.697	11.4	21.5	10 8	3 1.82	+9 2.7	1.845	2.746	11.0	19.4
10 18	2 54.95	+11 23.8	1.744	2.700	7.4	21.3	10 18	2 54.54	+8 53.9	1.775	2.731	7.3	19.2
10 28	2 45.53	+10 41.9	1.717	2.703	3.3	21.1	10 28	2 45.47	+8 45.0	1.731	2.715	3.6	18.9
11 7	2 35.45	+10 0.9	1.719	2.705	2.6	21.0	11 7	2 35.52	+8 39.4	1.715	2.699	3.0	18.8
11 17	2 25.81	+9 25.6	1.749	2.706	6.5	21.3	11 17	2 25.76	+8 40.3	1.728	2.684	6.8	19.0
11 27	2 17.63	+9 0.6	1.807	2.707	10.5	21.5	11 27	2 17.29	+8 50.6	1.768	2.668	10.7	19.2
12 7	2 11.65	+8 48.9	1.889	2.707	14.0	21.7	12 7	2 10.92	+9 12.3	1.833	2.652	14.3	19.4
66601	1999 <i>RH</i> ₁₈₆		11 4.3 113°74	5°8/ 30.7	18		473557	2015 <i>XF</i> ₂₀₆		11 4.3 47°20	2°0/ 3.0	18	
9 28	3 6.21	+1 0.4	2.058	2.883	13.4	20.1	9 28	3 5.11	+10 4.1	2.004	2.828	13.8	20.9
10 8	3 0.75	-0 10.5	2.008	2.904	10.5	20.0	10 8	3 0.24	+9 58.2	1.934	2.836	10.6	20.7
10 18	2 53.37	-1 19.1	1.981	2.924	7.7	19.9	10 18	2 53.26	+9 48.9	1.887	2.843	6.9	20.5
10 28	2 44.76	-2 19.2	1.982	2.944	5.9	19.8	10 28	2 44.82	+9 39.1	1.866	2.851	3.2	20.2
11 7	2 35.78	-3 5.1	2.011	2.963	6.4	19.9	11 7	2 35.81	+9 31.7	1.874	2.860	2.6	20.2
11 17	2 27.34	-3 32.9	2.068	2.982	8.7	20.0	11 17	2 27.20	+9 29.6	1.911	2.868	6.1	20.5
11 27	2 20.25	-3 40.9	2.152	3.000	11.4	20.3	11 27	2 19.91	+9 35.7	1.975	2.877	9.7	20.7
12 7	2 15.05	-3 29.8	2.258	3.017	13.8	20.5	12 7	2 14.59	+9 51.4	2.064	2.885	12.8	20.9
73188	2002 <i>JU</i>		11 4.3 103°57	5°0/ 1.0	18		7704	Dellen		11 4.3 115°82	3°0/ 2.3	18	
9 28	3 5.07	+8 1.3	1.415	2.263									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
369516	2010 VX ₁₇₅	11	4.3 351°38	5°7/ 7.7	18		354301	2002 TB ₁₄₈	11	4.3 2°87	3°8/ 7.0	18	
9 28	3 5.01	+29 16.7	1.266	2.074	21.1	20.3	9 28	3 0.66	+27 24.7	1.441	2.253	18.8	19.7
10 8	3 1.93	+29 33.2	1.192	2.071	17.4	20.1	10 8	2 57.99	+27 13.5	1.367	2.252	15.2	19.5
10 18	2 55.30	+29 24.8	1.135	2.069	13.0	19.8	10 18	2 52.38	+26 39.4	1.311	2.252	11.0	19.2
10 28	2 45.94	+28 48.2	1.099	2.067	8.4	19.6	10 28	2 44.61	+25 42.2	1.278	2.252	6.6	19.0
11 7	2 35.37	+27 45.1	1.086	2.066	5.7	19.4	11 7	2 35.96	+24 25.6	1.270	2.254	3.8	18.8
11 17	2 25.36	+26 22.3	1.098	2.065	7.9	19.5	11 17	2 27.83	+22 57.4	1.287	2.257	6.5	19.0
11 27	2 17.60	+24 51.9	1.134	2.065	12.3	19.8	11 27	2 21.54	+21 28.0	1.330	2.260	10.9	19.3
12 7	2 13.15	+23 26.5	1.192	2.065	16.7	20.0	12 7	2 17.96	+20 7.4	1.396	2.265	15.0	19.5
257639	1999 TK ₂₅₂	11	4.3 15°07	2°4/ 6.3	18		46598	1993 FT ₂	11	4.3 332°43	17°9/ 5.0	18	
9 28	3 1.21	+25 15.2	1.905	2.703	15.3	19.6	9 28	3 14.57	+36 24.4	1.104	1.884	25.2	16.6
10 8	2 57.60	+24 52.0	1.825	2.705	12.2	19.4	10 8	3 12.31	+40 9.3	1.017	1.855	22.8	16.3
10 18	2 51.70	+24 11.9	1.767	2.708	8.6	19.2	10 18	3 4.64	+43 49.8	0.946	1.827	20.4	16.0
10 28	2 44.20	+23 15.7	1.734	2.711	4.7	19.0	10 28	2 51.20	+47 7.6	0.895	1.801	18.5	15.8
11 7	2 36.07	+22 7.0	1.728	2.715	2.4	18.8	11 7	2 33.03	+49 41.6	0.864	1.776	18.0	15.7
11 17	2 28.36	+20 51.9	1.751	2.719	5.2	19.0	11 17	2 12.98	+51 15.9	0.853	1.754	19.2	15.6
11 27	2 22.06	+19 37.6	1.801	2.723	9.1	19.3	11 27	1 55.25	+51 50.1	0.860	1.733	21.7	15.7
12 7	2 17.87	+18 31.0	1.876	2.728	12.5	19.5	12 7	1 43.39	+51 39.3	0.883	1.715	24.7	15.8
323255	2003 SQ ₂₆₀	11	4.3 99°57	1°8/ 5.9	18		454686	2014 RX ₄	11	4.3 85°76	2°1/ 2.4	18	
9 28	3 3.85	+22 59.9	2.414	3.200	12.8	21.8	9 28	3 1.62	+12 22.5	2.244	3.066	12.6	21.2
10 8	2 59.03	+22 54.6	2.339	3.213	10.1	21.6	10 8	2 57.28	+11 25.4	2.180	3.081	9.5	21.1
10 18	2 52.36	+22 37.9	2.287	3.226	7.0	21.5	10 18	2 51.18	+10 21.9	2.139	3.096	6.2	20.9
10 28	2 44.42	+22 10.5	2.261	3.239	3.7	21.3	10 28	2 43.91	+ 9 16.2	2.127	3.111	2.9	20.7
11 7	2 36.01	+21 34.6	2.265	3.252	1.9	21.2	11 7	2 36.26	+ 8 13.3	2.143	3.126	2.7	20.7
11 17	2 27.96	+20 53.7	2.298	3.264	4.4	21.4	11 17	2 29.02	+ 7 17.9	2.189	3.141	5.8	20.9
11 27	2 21.09	+20 12.3	2.360	3.277	7.6	21.6	11 27	2 22.94	+ 6 34.4	2.263	3.156	9.0	21.2
12 7	2 15.97	+19 35.0	2.449	3.289	10.4	21.8	12 7	2 18.54	+ 6 5.1	2.362	3.170	11.8	21.4
71698	2000 FW ₅₅	11	4.3 275°10	9°5/25.5	18		70985	1999 XA ₂₈	11	4.3 305°82	1°7/ 5.4	18	
9 28	3 0.99	-14 30.1	2.412	3.214	12.4	19.2	9 28	3 2.76	+21 59.9	1.644	2.460	16.6	19.1
10 8	2 56.80	-15 52.6	2.354	3.208	10.9	19.1	10 8	2 59.37	+21 44.8	1.551	2.443	13.2	18.9
10 18	2 50.89	-17 3.8	2.320	3.202	9.8	19.0	10 18	2 53.24	+21 13.3	1.477	2.427	9.1	18.6
10 28	2 43.80	-17 57.0	2.311	3.196	9.5	19.0	10 28	2 45.03	+20 25.9	1.428	2.411	4.6	18.3
11 7	2 36.24	-18 27.1	2.326	3.190	10.2	19.0	11 7	2 35.80	+19 26.1	1.406	2.395	1.9	18.1
11 17	2 28.99	-18 31.4	2.366	3.184	11.6	19.1	11 17	2 26.81	+18 20.0	1.410	2.379	6.1	18.3
11 27	2 22.78	-18 9.7	2.427	3.178	13.2	19.2	11 27	2 19.37	+17 15.7	1.441	2.364	10.8	18.5
12 7	2 18.17	-17 24.5	2.508	3.173	14.8	19.3	12 7	2 14.40	+16 20.9	1.495	2.349	15.1	18.8
10081	1990 OW ₁	11	4.3 90°90	0°0/ 4.2	18		88830	2001 SY ₁₆₂	11	4.3 35°84	0°6/ 4.6	18	
9 28	3 12.20	+16 49.4	1.404	2.227	18.6	17.9	9 28	3 5.44	+18 20.1	1.176	2.020	20.2	19.5
10 8	3 6.44	+16 44.6	1.348	2.247	14.4	17.7	10 8	3 1.77	+18 11.9	1.126	2.036	15.6	19.3
10 18	2 57.64	+16 28.3	1.313	2.267	9.5	17.5	10 18	2 54.82	+17 48.8	1.094	2.053	10.4	19.0
10 28	2 46.75	+16 2.4	1.301	2.287	4.1	17.2	10 28	2 45.61	+17 13.2	1.084	2.071	4.6	18.8
11 7	2 35.19	+15 31.1	1.317	2.307	1.5	17.1	11 7	2 35.65	+16 30.5	1.099	2.089	1.5	18.6
11 17	2 24.44	+14 59.9	1.360	2.326	6.8	17.5	11 17	2 26.54	+15 47.8	1.139	2.109	7.2	19.0
11 27	2 15.83	+14 35.1	1.429	2.345	11.5	17.8	11 27	2 19.66	+15 12.9	1.203	2.129	12.3	19.4
12 7	2 10.13	+14 21.2	1.521	2.363	15.5	18.1	12 7	2 15.82	+14 51.2	1.289	2.150	16.5	19.7
193494	2000 YX ₉	11	4.3 15°30	2°4/ 5.7	18		112221	2002 KH ₄	11	4.3 163°02	3°6/ 8.3	18	
9 28	3 2.08	+22 8.2	1.222	2.060	19.9	18.6	9 28	3 19.72	+35 6.4	2.532	3.230	14.4	20.9
10 8	2 59.35	+22 10.9	1.161	2.065	15.8	18.4	10 8	3 10.94	+33 51.7	2.429	3.240	11.9	20.7
10 18	2 53.38	+21 55.1	1.118	2.071	10.9	18.1	10 18	2 59.96	+32 12.5	2.351	3.249	8.9	20.5
10 28	2 45.05	+21 21.2	1.096	2.079	5.6	17.8	10 28	2 47.60	+30 8.7	2.302	3.257	5.7	20.3
11 7	2 35.80	+20 33.6	1.099	2.088	2.5	17.7	11 7	2 34.94	+27 44.5	2.288	3.264	3.6	20.2
11 17	2 27.19	+19 39.3	1.126	2.098	6.9	18.0	11 17	2 23.07	+25 8.0	2.310	3.269	5.0	20.3
11 27	2 20.68	+18 47.5	1.178	2.109	11.9	18.3	11 27	2 12.92	+22 29.9	2.367	3.273	8.0	20.5
12 7	2 17.16	+18 6.1	1.250	2.121	16.3	18.6	12 7	2 5.08	+20 0.4	2.456	3.276	11.0	20.7
369945	2013 GY ₉₅	11	4.3 72°24	2°5/ 2.6	18		131525	2001 UZ ₄₁	11	4.3 357°63	1°2/ 3.8	18	
9 28	3 5.44	+ 8 33.9	2.116	2.938	13.2	20.0	9 28	3 5.90	+13 22.7	1.045	1.905	21.0	19.6
10 8	3 0.27	+ 8 18.6	2.056	2.956	10.1	19.9	10 8	3 2.80	+13 26.7	0.981	1.902	16.4	19.3
10 18	2 53.16	+ 8 1.1	2.018	2.974	6.6	19.7	10 18	2 55.97	+13 21.7	0.935	1.899	10.8	19.0
10 28	2 44.76	+ 7 44.5	2.008	2.991	3.3	19.5	10 28	2 46.30	+13 10.4	0.910	1.898	4.6	18.7
11 7	2 35.93	+ 7 31.9	2.027	3.009	3.1	19.5	11 7	2 35.35	+12 57.5	0.909	1.898	2.4	18.6
11 17	2 27.55	+ 7 26.4	2.075	3.026	6.1	19.8	11 17	2 25.00	+12 48.6	0.930	1.899	8.6	18.9
11 27	2 20.46	+ 7 30.3	2.150	3.044	9.4	20.0	11 27	2 17.03	+12 49.8	0.975	1.900	14.4	19.3
12 7	2 15.24	+ 7 44.7	2.250	3.061	12.2	20.2	12 7	2 12.53	+13 5.0	1.038	1.903	19.3	19.6
133460	2003 SM ₂₃₁	11	4.3 329°89	8°4/28.6	18		125271	2001 VR ₅	11	4.3 45°98	1°4/ 5.1	18	
9 28	3 1.01	- 0 56.8	1.590	2.439	15.5	19.5	9 28	3 7.86	+19 52.1	1.234	2.067	20.1	20.1
10 8	2 57.62	- 2 44.5	1.527	2.433	12.5	19.3	10 8	3 3.45	+19 52.6	1.186	2.089	15.6	19.9
10 18	2 51.82	- 4 30.8	1.486	2.428	9.8	19.1	10 18	2 55.82	+19 37.3	1.157	2.112	10.5	19.7
10 28	2 44.30	- 6 5.4	1.470	2.424	8.5	19.0	10 28	2 46.00	+19 7.8	1.150	2.135	4.9	19.5
11 7	2 36.08	- 7 18.7	1.479	2.419	9.5	19.1	11 7	2 35.52	+18 28.6	1.169	2.159	1.8	19.3
11 17	2 28.29	- 8 4.2	1.513	2.415	12.2	19.2	11 17	2 25.95	+17 46.5	1.213	2.183	6.8	19.7
11 27	2 21.98	- 8 18.7	1.570	2.411	15.2	19.4	11 27	2 18.63	+17 9.3	1.282	2.207	11.7	20.1
12 7	2 17.88	- 8 3.8	1.645	2.407	18.0	19.6	12 7	2 14.34	+16 42.8	1.373	2.232	15.8	20.4
471960	2013 SQ ₆₅	11	4.3 138°89	1°8/ 3.1	16		369253	2009 ED ₃₁	11	4.3 212°83	1°9/ 5.4	17	
9 28	3 8.13	+14 6.6	1.628	2.453									

EPHEMERIDES

11 4.3

11 4.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
482321	2011 <i>UE</i> ₂₄₄	11	4.3	36°86	0°6/ 3.9	18	600	Musa	11	4.3	141°29	5°5/31.1	18
9 28	3 5.51	+14 40.4	1.843	2.664	14.9	21.5	9 28	3 3.88	+ 2 47.5	1.934	2.767	13.8	14.6
10 8	3 0.87	+14 35.6	1.767	2.666	11.5	21.3	10 8	2 59.34	+ 1 43.9	1.868	2.771	10.8	14.4
10 18	2 53.87	+14 23.4	1.713	2.669	7.6	21.0	10 18	2 52.72	+ 0 40.5	1.825	2.774	7.7	14.3
10 28	2 45.18	+14 5.6	1.685	2.672	3.2	20.8	10 28	2 44.66	- 0 16.7	1.809	2.778	5.6	14.1
11 7	2 35.79	+13 45.5	1.685	2.674	1.5	20.7	11 7	2 36.05	- 1 1.4	1.820	2.781	6.2	14.2
11 17	2 26.78	+13 26.9	1.713	2.677	5.9	21.0	11 17	2 27.86	- 1 29.2	1.859	2.784	8.8	14.3
11 27	2 19.21	+13 14.1	1.769	2.680	9.9	21.2	11 27	2 20.98	- 1 37.4	1.924	2.787	11.8	14.5
12 7	2 13.82	+13 10.3	1.848	2.683	13.5	21.5	12 7	2 16.06	- 1 25.9	2.010	2.790	14.6	14.7
423155	2004 <i>EN</i> ₈₁	11	4.3	190°95	1°3/ 3.4	18	412427	2014 <i>EA</i> ₂	11	4.3	173°84	6°7/ 9.8	18
9 28	3 9.04	+13 7.4	2.014	2.825	14.2	22.2	9 28	3 12.17	+36 39.9	2.392	3.102	14.9	21.6
10 8	3 3.41	+12 49.1	1.930	2.824	10.9	22.0	10 8	3 6.04	+37 27.7	2.302	3.105	12.8	21.4
10 18	2 55.47	+12 24.1	1.868	2.822	7.2	21.7	10 18	2 57.36	+37 58.3	2.233	3.107	10.4	21.3
10 28	2 45.86	+11 54.9	1.834	2.820	3.1	21.5	10 28	2 46.75	+38 7.9	2.187	3.109	8.2	21.1
11 7	2 35.54	+11 25.0	1.829	2.816	2.1	21.4	11 7	2 35.24	+37 54.8	2.168	3.110	6.8	21.1
11 17	2 25.55	+10 58.5	1.853	2.812	6.0	21.7	11 17	2 24.02	+37 20.6	2.178	3.111	7.2	21.1
11 27	2 16.93	+10 39.8	1.906	2.808	10.0	21.9	11 27	2 14.26	+36 30.5	2.216	3.111	9.1	21.2
12 7	2 10.42	+10 31.8	1.984	2.802	13.4	22.1	12 7	2 6.82	+35 31.7	2.279	3.110	11.4	21.4
317244	2002 <i>CR</i> ₂₅₂	11	4.3	261°43	3°1/ 2.7	18	127055	2002 <i>GG</i> ₄₇	11	4.3	111°86	1°0/ 5.1	18
9 28	3 8.20	+10 7.6	1.408	2.248	17.7	21.0	9 28	3 5.93	+22 23.7	1.941	2.739	15.1	20.1
10 8	3 3.72	+ 9 41.4	1.331	2.241	13.7	20.8	10 8	3 0.97	+21 38.4	1.871	2.755	11.8	19.9
10 18	2 56.17	+ 9 9.0	1.274	2.233	9.1	20.5	10 18	2 53.77	+20 37.8	1.824	2.770	7.9	19.7
10 28	2 46.30	+ 8 34.8	1.240	2.226	4.5	20.2	10 28	2 45.09	+19 24.2	1.802	2.785	3.7	19.5
11 7	2 35.36	+ 8 4.6	1.234	2.218	3.9	20.1	11 7	2 35.92	+18 2.8	1.810	2.799	1.3	19.3
11 17	2 24.83	+ 7 44.3	1.253	2.210	8.5	20.4	11 17	2 27.31	+16 40.1	1.847	2.813	5.2	19.6
11 27	2 16.14	+ 7 38.8	1.297	2.202	13.3	20.7	11 27	2 20.20	+15 23.5	1.913	2.827	9.1	19.9
12 7	2 10.26	+ 7 50.7	1.363	2.194	17.6	20.9	12 7	2 15.21	+14 18.7	2.004	2.840	12.5	20.1
128596	2004 <i>QS</i> ₁₀	11	4.3	53°07	4°6/ 1.1	18	143185	2002 <i>XS</i> ₇₇	11	4.3	260°74	5°6/ 9.2	18
9 28	3 3.90	+ 3 21.6	2.006	2.837	13.5	19.8	9 28	3 5.20	+34 5.1	2.134	2.879	15.5	20.1
10 8	2 59.27	+ 2 47.4	1.941	2.843	10.5	19.6	10 8	3 0.84	+34 10.8	2.035	2.868	13.1	19.9
10 18	2 52.62	+ 2 14.3	1.899	2.850	7.3	19.4	10 18	2 54.00	+33 56.6	1.956	2.858	10.3	19.7
10 28	2 44.59	+ 1 46.9	1.883	2.857	4.9	19.3	10 28	2 45.32	+33 19.9	1.900	2.847	7.4	19.5
11 7	2 36.04	+ 1 29.4	1.895	2.864	5.2	19.3	11 7	2 35.80	+32 21.3	1.871	2.836	5.7	19.4
11 17	2 27.91	+ 1 25.4	1.935	2.871	7.8	19.5	11 17	2 26.58	+31 4.4	1.870	2.825	6.4	19.4
11 27	2 21.05	+ 1 36.5	2.002	2.878	10.9	19.7	11 27	2 18.79	+29 36.5	1.897	2.813	9.1	19.5
12 7	2 16.09	+ 2 2.9	2.091	2.885	13.6	19.9	12 7	2 13.25	+28 6.3	1.950	2.802	12.2	19.7
331690	2002 <i>QS</i> ₁₁₉	11	4.3	184°89	11°6/25.1	18	416460	2003 <i>WY</i> ₄₀	11	4.3	346°28	6°5/ 1.5	18
9 28	3 6.37	-12 55.5	1.849	2.660	15.2	21.5	9 28	3 11.39	- 4 41.3	1.984	2.796	14.3	19.9
10 8	3 1.39	-15 0.1	1.799	2.661	13.3	21.4	10 8	3 5.15	- 4 34.5	1.907	2.791	11.6	19.7
10 18	2 54.12	-16 52.4	1.772	2.661	11.9	21.3	10 18	2 56.58	- 4 18.2	1.852	2.786	8.8	19.6
10 28	2 45.26	-18 21.8	1.769	2.660	11.6	21.3	10 28	2 46.36	- 3 48.1	1.823	2.781	6.7	19.4
11 7	2 35.80	-19 20.5	1.790	2.658	12.6	21.3	11 7	2 35.44	- 3 1.4	1.824	2.777	6.9	19.4
11 17	2 26.81	-19 44.4	1.835	2.656	14.3	21.4	11 17	2 24.91	- 1 57.6	1.853	2.774	9.1	19.6
11 27	2 19.27	-19 33.6	1.901	2.653	16.3	21.6	11 27	2 15.78	- 0 37.9	1.909	2.771	12.0	19.7
12 7	2 13.89	-18 52.3	1.983	2.650	18.2	21.7	12 7	2 8.81	+ 0 54.8	1.990	2.768	14.8	19.9
312719	2010 <i>RG</i> ₄₈	11	4.3	55°25	0°7/ 4.8	18	268853	2006 <i>XX</i> ₄₂	11	4.3	243°84	1°4/ 3.4	18
9 28	3 3.94	+19 1.6	1.928	2.739	14.7	20.8	9 28	3 6.74	+14 4.0	1.727	2.551	15.6	21.6
10 8	2 59.57	+18 50.1	1.853	2.745	11.4	20.6	10 8	3 2.14	+13 37.0	1.639	2.541	12.1	21.3
10 18	2 52.97	+18 27.5	1.801	2.752	7.6	20.4	10 18	2 54.92	+13 0.8	1.573	2.530	8.0	21.1
10 28	2 44.78	+17 55.5	1.774	2.758	3.5	20.2	10 28	2 45.74	+12 18.2	1.533	2.519	3.5	20.8
11 7	2 35.98	+17 17.2	1.775	2.765	1.2	20.0	11 7	2 35.65	+11 33.9	1.520	2.508	2.3	20.7
11 17	2 27.58	+16 37.2	1.805	2.771	5.3	20.3	11 17	2 25.86	+10 53.5	1.536	2.497	6.8	20.9
11 27	2 20.57	+16 0.7	1.862	2.778	9.2	20.6	11 27	2 17.56	+10 22.8	1.578	2.485	11.3	21.2
12 7	2 15.65	+15 32.3	1.944	2.785	12.6	20.8	12 7	2 11.62	+10 5.8	1.643	2.472	15.2	21.4
439163	2011 <i>UB</i> ₃₁₈	11	4.3	19°96	2°0/ 5.9	16	58343	1995 <i>BG</i> ₅	11	4.3	195°19	3°6/ 6.9	18
9 28	2 57.55	+27 15.1	1.209	2.039	20.6	19.7	9 28	3 7.57	+26 40.6	1.821	2.606	16.4	20.0
10 8	2 55.72	+25 57.0	1.153	2.052	16.3	19.4	10 8	3 2.80	+26 45.5	1.736	2.605	13.3	19.8
10 18	2 50.84	+24 9.0	1.115	2.066	11.2	19.2	10 18	2 55.34	+26 33.2	1.671	2.603	9.7	19.5
10 28	2 43.91	+21 56.1	1.100	2.082	5.7	19.0	10 28	2 45.91	+26 2.6	1.631	2.602	5.8	19.3
11 7	2 36.34	+19 29.3	1.111	2.100	2.1	18.8	11 7	2 35.61	+25 15.4	1.617	2.600	3.6	19.2
11 17	2 29.59	+17 2.8	1.147	2.119	6.7	19.1	11 17	2 25.69	+24 16.3	1.632	2.598	6.0	19.3
11 27	2 24.86	+14 51.1	1.209	2.140	11.7	19.5	11 27	2 17.40	+23 12.6	1.675	2.595	9.8	19.5
12 7	2 22.83	+13 3.9	1.294	2.161	16.1	19.8	12 7	2 11.56	+22 12.4	1.742	2.592	13.4	19.8
57688	2001 <i>UH</i> ₇₃	11	4.3	25°01	4°0/ 2.4	18	222920	2002 <i>JQ</i> ₁₄₁	11	4.3	79°04	0°2/ 4.5	18
9 28	3 7.50	+ 4 58.7	1.636	2.471	15.8	18.2	9 28	3 5.42	+16 26.1	2.204	3.011	13.2	20.3
10 8	3 2.52	+ 4 57.1	1.571	2.477	12.3	18.0	10 8	3 0.42	+16 31.5	2.128	3.018	10.3	20.1
10 18	2 54.98	+ 4 56.9	1.528	2.484	8.3	17.8	10 18	2 53.40	+16 29.6	2.075	3.026	6.8	19.9
10 28	2 45.66	+ 5 1.8	1.511	2.491	4.7	17.6	10 28	2 44.97	+16 21.7	2.049	3.034	3.0	19.7
11 7	2 35.66	+ 5 15.2	1.520	2.499	4.5	17.6	11 7	2 35.97	+16 9.8	2.052	3.042	1.0	19.5
11 17	2 26.17	+ 5 39.4	1.557	2.508	7.9	17.8	11 17	2 27.32	+15 56.8	2.085	3.050	4.9	19.8
11 27	2 18.30	+ 6 15.8	1.620	2.517	11.7	18.1	11 27	2 19.90	+15 46.2	2.146	3.058	8.4	20.1
12 7	2 12.82	+ 7 4.1	1.706	2.526	15.1	18.3	12 7	2 14.34	+15 41.2	2.233	3.066	11.5	20.3
97935	2000 <i>QJ</i> ₁₁₅	11	4.3	242°54	3°9/ 6.5	18	1168	Brandia	11	4.3	38°82	0°6/ 3.9	18
9 28	3												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
444159	2005 GZ ₈₃	11	4.3 213°01	1°5/ 5.5 18			358624	2007 VN ₁₄₇	11	4.3 330°99	3°5/ 2.3 18		
9 28	3 6.75	+21 11.5	2.294	3.083	13.3	22.0	9 28	3 3.40	+8 32.8	1.579	2.422	15.9	20.9
10 8	3 1.57	+21 13.1	2.199	3.077	10.5	21.8	10 8	2 59.69	+8 5.0	1.500	2.412	12.3	20.6
10 18	2 54.26	+21 4.1	2.128	3.070	7.3	21.6	10 18	2 53.36	+7 33.1	1.443	2.403	8.3	20.4
10 28	2 45.39	+20 44.8	2.083	3.063	3.7	21.4	10 28	2 45.09	+7 1.6	1.411	2.394	4.4	20.1
11 7	2 35.80	+20 16.8	2.067	3.055	1.7	21.2	11 7	2 35.95	+6 36.0	1.404	2.386	4.2	20.1
11 17	2 26.45	+19 43.6	2.081	3.047	4.8	21.4	11 17	2 27.14	+6 21.3	1.424	2.378	8.1	20.3
11 27	2 18.29	+19 9.7	2.124	3.038	8.4	21.6	11 27	2 19.86	+6 21.4	1.470	2.371	12.3	20.5
12 7	2 12.02	+18 39.7	2.193	3.029	11.6	21.8	12 7	2 14.96	+6 38.0	1.537	2.365	16.1	20.8
242030	2002 QG ₈₁	11	4.3 295°82	7°8/29.6 18			212936	2008 UX ₂₄₈	11	4.3 336°33	3°2/ 2.1 18		
9 28	3 2.95	-1 53.7	1.749	2.588	14.8	20.4	9 28	3 3.42	+9 53.1	1.737	2.573	15.0	20.5
10 8	2 59.00	-3 9.1	1.677	2.577	12.0	20.2	10 8	2 59.37	+9 8.2	1.663	2.571	11.6	20.3
10 18	2 52.72	-4 21.3	1.627	2.567	9.3	20.0	10 18	2 52.96	+8 17.5	1.611	2.569	7.6	20.0
10 28	2 44.75	-5 22.4	1.602	2.557	7.8	19.9	10 28	2 44.86	+7 25.6	1.584	2.568	4.0	19.8
11 7	2 36.05	-6 4.9	1.603	2.546	8.6	19.9	11 7	2 36.06	+6 38.4	1.585	2.566	3.9	19.8
11 17	2 27.70	-6 23.6	1.629	2.536	11.1	20.1	11 17	2 27.66	+6 1.6	1.613	2.565	7.5	20.0
11 27	2 20.71	-6 16.2	1.680	2.527	14.1	20.2	11 27	2 20.69	+5 39.6	1.668	2.564	11.4	20.3
12 7	2 15.86	-5 44.1	1.750	2.517	16.9	20.4	12 7	2 15.90	+5 34.7	1.745	2.563	14.9	20.5
320232	2007 JP ₁₅	11	4.3 226°59	1°2/ 3.3 18			342372	2008 UQ ₅	11	4.3 41°19	0°0/ 4.1 16		
9 28	3 2.35	+13 17.9	2.463	3.277	11.8	21.8	9 28	3 3.70	+19 34.8	1.273	2.111	19.3	20.6
10 8	2 57.90	+12 52.7	2.375	3.272	9.1	21.6	10 8	3 0.15	+18 46.5	1.223	2.131	14.9	20.4
10 18	2 51.70	+12 21.5	2.312	3.267	5.9	21.4	10 18	2 53.62	+17 40.9	1.193	2.151	9.7	20.2
10 28	2 44.24	+11 46.7	2.275	3.261	2.6	21.1	10 28	2 45.11	+16 22.7	1.186	2.172	4.2	19.9
11 7	2 36.25	+11 11.6	2.268	3.255	1.8	21.1	11 7	2 36.02	+14 59.7	1.204	2.194	1.5	19.8
11 17	2 28.49	+10 39.9	2.291	3.249	5.1	21.3	11 17	2 27.77	+13 41.3	1.248	2.216	7.0	20.2
11 27	2 21.74	+10 15.0	2.342	3.243	8.4	21.5	11 27	2 21.55	+12 36.2	1.318	2.239	11.8	20.6
12 7	2 16.58	+9 59.7	2.419	3.237	11.3	21.7	12 7	2 18.08	+11 49.7	1.409	2.262	15.9	20.9
254125	2004 PG ₁₀	11	4.3 16°29	0°4/ 4.0 18			445629	2011 SC ₂₃₀	11	4.3 352°27	1°1/ 5.1 18		
9 28	3 1.87	+16 8.6	1.653	2.484	15.8	19.9	9 28	3 3.04	+21 5.8	1.773	2.586	15.7	21.1
10 8	2 58.31	+15 51.7	1.584	2.489	12.2	19.7	10 8	2 59.19	+20 40.6	1.693	2.585	12.3	20.8
10 18	2 52.29	+15 24.7	1.537	2.495	8.0	19.5	10 18	2 52.90	+20 0.6	1.634	2.584	8.4	20.6
10 28	2 44.56	+14 50.3	1.514	2.501	3.4	19.2	10 28	2 44.85	+19 7.5	1.600	2.583	4.0	20.3
11 7	2 36.14	+14 12.7	1.519	2.508	1.5	19.1	11 7	2 36.07	+18 5.5	1.593	2.583	1.4	20.2
11 17	2 28.18	+13 37.1	1.550	2.516	6.1	19.4	11 17	2 27.69	+17 0.7	1.614	2.582	5.6	20.5
11 27	2 21.75	+13 8.9	1.608	2.525	10.4	19.7	11 27	2 20.80	+16 0.1	1.663	2.582	9.9	20.7
12 7	2 17.58	+12 52.1	1.688	2.534	14.0	20.0	12 7	2 16.15	+15 10.0	1.735	2.582	13.6	20.9
450479	2005 XP ₂₆	11	4.3 304°18	7°0/30.1 18			267820	2003 UE ₃₄	11	4.3 292°04	0°3/ 4.0 17		
9 28	3 3.18	-3 56.5	2.095	2.921	13.2	20.9	9 28	3 0.13	+18 49.5	2.270	3.080	12.8	20.4
10 8	2 58.75	-4 46.9	2.023	2.914	10.7	20.7	10 8	2 56.46	+17 54.0	2.173	3.066	10.0	20.2
10 18	2 52.34	-5 31.8	1.974	2.907	8.4	20.6	10 18	2 50.88	+16 45.6	2.099	3.052	6.6	19.9
10 28	2 44.53	-6 5.1	1.950	2.900	7.1	20.5	10 28	2 43.94	+15 27.4	2.052	3.038	2.8	19.7
11 7	2 36.14	-6 21.8	1.954	2.893	7.6	20.5	11 7	2 36.40	+14 3.9	2.034	3.024	1.2	19.5
11 17	2 28.07	-6 18.5	1.984	2.886	9.7	20.6	11 17	2 29.11	+12 41.3	2.047	3.010	5.2	19.8
11 27	2 21.17	-5 54.3	2.039	2.879	12.3	20.8	11 27	2 22.89	+11 25.7	2.088	2.996	8.8	20.0
12 7	2 16.09	-5 10.4	2.116	2.873	14.7	20.9	12 7	2 18.38	+10 22.4	2.155	2.983	12.1	20.2
59553	1999 JP ₄₀	11	4.3 68°42	0°6/ 3.8 18			42144	2001 BW ₄₀	11	4.3 40°43	5°3/ 2.5 18		
9 28	3 4.18	+18 44.9	1.563	2.389	16.9	19.1	9 28	3 12.30	+2 59.1	1.203	2.050	19.6	17.1
10 8	3 0.06	+17 41.7	1.501	2.402	13.0	18.8	10 8	3 6.53	+3 0.3	1.167	2.077	15.2	17.0
10 18	2 53.39	+16 23.1	1.459	2.416	8.5	18.6	10 18	2 57.64	+3 5.9	1.150	2.106	10.3	16.8
10 28	2 44.98	+14 53.6	1.443	2.430	3.5	18.4	10 28	2 46.77	+3 20.5	1.156	2.135	6.2	16.6
11 7	2 36.01	+13 20.8	1.455	2.444	1.7	18.3	11 7	2 35.45	+3 47.4	1.188	2.165	5.9	16.7
11 17	2 27.68	+11 53.4	1.494	2.458	6.6	18.6	11 17	2 25.19	+4 28.0	1.246	2.196	9.5	17.0
11 27	2 21.06	+10 39.2	1.560	2.472	11.0	18.9	11 27	2 17.26	+5 22.1	1.328	2.227	13.5	17.3
12 7	2 16.86	+9 43.7	1.649	2.486	14.7	19.2	12 7	2 12.33	+6 27.6	1.431	2.258	17.1	17.7
474257	2001 SR ₂₇₅	11	4.3 12°33	3°5/ 2.1 18			118317	1998 WK ₄₁	11	4.3 326°19	0°0/ 4.2 18		
9 28	3 1.63	+11 56.7	1.276	2.131	18.2	21.0	9 28	3 2.89	+18 53.1	1.410	2.245	17.9	19.7
10 8	2 58.69	+10 51.6	1.214	2.133	14.0	20.8	10 8	2 59.69	+18 13.7	1.332	2.238	14.0	19.5
10 18	2 52.81	+9 35.8	1.172	2.135	9.2	20.5	10 18	2 53.55	+17 17.2	1.274	2.232	9.3	19.2
10 28	2 44.84	+8 16.3	1.153	2.139	4.6	20.3	10 28	2 45.22	+16 6.7	1.239	2.226	4.0	18.9
11 7	2 36.05	+7 2.2	1.159	2.143	4.5	20.3	11 7	2 35.94	+14 48.7	1.230	2.220	1.6	18.7
11 17	2 27.86	+6 2.3	1.191	2.147	9.0	20.5	11 17	2 27.09	+13 31.8	1.247	2.215	7.1	19.0
11 27	2 21.55	+5 23.5	1.246	2.153	13.7	20.8	11 27	2 20.03	+12 25.1	1.290	2.210	12.1	19.3
12 7	2 17.93	+5 8.3	1.322	2.159	17.7	21.1	12 7	2 15.67	+11 35.5	1.354	2.205	16.5	19.6
240406	2003 UL ₂₀₀	11	4.3 35°57	1°5/ 3.5 16			205132	1999 VJ ₁₆₈	11	4.3 320°29	1°5/ 5.2 18		
9 28	3 6.30	+12 34.6	1.418	2.258	17.6	20.0	9 28	3 2.51	+20 33.8	1.511	2.338	17.3	20.3
10 8	3 1.96	+12 29.2	1.360	2.270	13.5	19.8	10 8	2 59.45	+20 31.1	1.421	2.320	13.8	20.0
10 18	2 54.78	+12 17.1	1.322	2.282	8.8	19.6	10 18	2 53.49	+20 13.5	1.349	2.302	9.5	19.7
10 28	2 45.63	+12 1.2	1.308	2.295	3.8	19.3	10 28	2 45.26	+19 41.4	1.302	2.285	4.6	19.4
11 7	2 35.77	+11 45.6	1.320	2.309	2.4	19.3	11 7	2 35.89	+18 57.8	1.280	2.269	1.8	19.1
11 17	2 26.54	+11 34.9	1.359	2.323	7.1	19.6	11 17	2 26.74	+18 8.4	1.284	2.253	6.5	19.4
11 27	2 19.18	+11 33.4	1.423	2.338	11.7	19.9	11 27	2 19.22	+17 20.7	1.313	2.238	11.5	19.6
12 7	2 14.47	+11 43.5	1.510	2.353	15.5	20.2	12 7	2 14.34	+16 42.1	1.365	2.224	15.9	19.9
330220	2006 HZ ₄₂	11	4.3 152°48	0°3/ 4.1 17			222911	2002 JZ ₄₅	11	4.3 104°09	0°7/ 5.1 18		
9 28	3 7.15	+13 35.0	2.505	3.307	12.0	21.0	9 28	3 3.12	+21 4				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
447161	2005 <i>JJ</i> ₁₃₁		11 4.3 240°35	4.9/ 1.0	18		435109	2007 <i>DA</i> ₄₉		11 4.3 159°49	0.2/ 4.1	18	
9 28	3 5.14	+ 3 13.9	1.922	2.753	14.0	21.3	9 28	3 7.31	+17 1.5	1.929	2.739	14.7	22.3
10 8	3 0.43	+ 2 35.0	1.849	2.751	10.9	21.1	10 8	3 2.16	+16 36.4	1.852	2.745	11.4	22.1
10 18	2 53.53	+ 1 56.7	1.798	2.748	7.7	20.9	10 18	2 54.69	+16 0.9	1.797	2.750	7.5	21.9
10 28	2 45.09	+ 1 24.1	1.773	2.746	5.2	20.8	10 28	2 45.59	+15 17.3	1.768	2.754	3.2	21.7
11 7	2 36.00	+ 1 2.2	1.776	2.744	5.6	20.8	11 7	2 35.85	+14 29.7	1.768	2.758	1.3	21.5
11 17	2 27.28	+ 0 54.9	1.807	2.741	8.3	21.0	11 17	2 26.53	+13 43.0	1.798	2.762	5.7	21.8
11 27	2 19.87	+ 1 4.4	1.864	2.739	11.6	21.1	11 27	2 18.65	+13 2.8	1.855	2.764	9.7	22.1
12 7	2 14.48	+ 1 30.7	1.943	2.736	14.6	21.3	12 7	2 12.92	+12 33.3	1.937	2.767	13.2	22.3
53958	2000 <i>GN</i> ₆₁		11 4.3 64°89	0°3/ 4.5	18		198020	2004 <i>RJ</i> ₂₂₁		11 4.3 28°13	10°6/ 11.1	18	
9 28	3 4.97	+17 48.8	1.835	2.651	15.2	20.0	9 28	3 10.13	+38 29.8	1.469	2.217	21.3	18.3
10 8	3 0.47	+17 37.0	1.763	2.658	11.8	19.8	10 8	3 6.04	+39 55.3	1.402	2.224	18.5	18.1
10 18	2 53.63	+17 14.8	1.713	2.666	7.8	19.6	10 18	2 58.17	+40 55.7	1.352	2.232	15.5	17.9
10 28	2 45.13	+16 43.8	1.688	2.674	3.4	19.3	10 28	2 47.35	+41 23.2	1.322	2.241	12.6	17.8
11 7	2 36.00	+16 7.7	1.692	2.682	1.2	19.2	11 7	2 35.18	+41 14.1	1.313	2.250	10.8	17.7
11 17	2 27.31	+15 31.0	1.723	2.690	5.6	19.5	11 17	2 23.58	+40 30.4	1.329	2.260	11.0	17.8
11 27	2 20.09	+14 59.0	1.782	2.698	9.6	19.7	11 27	2 14.38	+39 21.2	1.367	2.271	12.9	17.9
12 7	2 15.05	+14 36.1	1.865	2.706	13.1	20.0	12 7	2 8.71	+37 59.3	1.428	2.282	15.7	18.1
198410	2004 <i>VN</i> ₆₂		11 4.3 32°91	11°5/ 29.6	18		71711	2000 <i>GU</i> ₈₃		11 4.3 281°93	6°2/ 29.3	18	
9 28	3 6.01	- 9 14.0	1.347	2.188	18.3	18.9	9 28	3 0.13	- 1 33.1	2.326	3.156	11.9	19.3
10 8	3 1.65	-10 27.1	1.307	2.198	15.3	18.7	10 8	2 56.28	- 2 47.5	2.250	3.145	9.6	19.1
10 18	2 54.49	-11 25.3	1.286	2.209	12.8	18.6	10 18	2 50.68	- 3 59.9	2.197	3.134	7.4	18.9
10 28	2 45.48	-11 58.4	1.288	2.221	11.5	18.6	10 28	2 43.86	- 5 4.2	2.172	3.124	6.3	18.8
11 7	2 35.91	-11 59.6	1.312	2.234	12.2	18.7	11 7	2 36.51	- 5 54.6	2.174	3.113	7.0	18.9
11 17	2 27.10	-11 27.0	1.359	2.247	14.3	18.8	11 17	2 29.39	- 6 26.9	2.203	3.102	9.0	19.0
11 27	2 20.20	-10 22.9	1.427	2.261	16.9	19.0	11 27	2 23.28	- 6 38.6	2.258	3.092	11.5	19.1
12 7	2 15.93	- 8 53.3	1.514	2.275	19.4	19.3	12 7	2 18.74	- 6 29.9	2.334	3.081	13.8	19.3
450067	2015 <i>RC</i> ₄₇		11 4.3 71°83	0°5/ 4.7	18		77326	2001 <i>FV</i> ₉₂		11 4.3 84°67	4°7/ 1.6	17	
9 28	3 3.85	+19 13.3	1.897	2.709	14.9	21.7	9 28	3 10.05	+ 6 23.8	1.510	2.344	16.9	19.0
10 8	2 59.55	+18 49.6	1.823	2.716	11.6	21.5	10 8	3 4.35	+ 5 30.3	1.465	2.371	13.0	18.9
10 18	2 52.99	+18 13.9	1.771	2.722	7.7	21.3	10 18	2 56.06	+ 4 35.2	1.442	2.397	8.8	18.7
10 28	2 44.85	+17 28.1	1.744	2.729	3.4	21.0	10 28	2 46.11	+ 3 45.0	1.444	2.422	5.3	18.6
11 7	2 36.11	+16 36.4	1.746	2.736	1.1	20.9	11 7	2 35.74	+ 3 6.1	1.473	2.447	5.4	18.6
11 17	2 27.80	+15 43.9	1.776	2.743	5.4	21.2	11 17	2 26.18	+ 2 43.3	1.529	2.472	8.8	18.9
11 27	2 20.90	+14 56.6	1.834	2.750	9.4	21.4	11 27	2 18.50	+ 2 39.3	1.611	2.496	12.5	19.2
12 7	2 16.11	+14 19.2	1.917	2.757	12.8	21.7	12 7	2 13.34	+ 2 53.9	1.715	2.520	15.7	19.4
233351	2006 <i>DU</i> ₆₁		11 4.3 140°22	1°3/ 3.4	18		132736	2002 <i>PQ</i> ₂₈		11 4.3 157°44	3°5/ 31.9	18	
9 28	3 8.17	+12 30.0	2.241	3.049	13.0	20.3	9 28	3 0.74	+ 6 18.7	2.495	3.320	11.3	20.3
10 8	3 2.39	+12 16.3	2.169	3.061	10.0	20.2	10 8	2 56.56	+ 5 25.1	2.420	3.322	8.7	20.1
10 18	2 54.62	+11 57.5	2.120	3.073	6.5	20.0	10 18	2 50.76	+ 4 29.4	2.371	3.324	5.9	20.0
10 28	2 45.50	+11 35.8	2.098	3.084	2.8	19.8	10 28	2 43.85	+ 3 35.8	2.349	3.326	3.8	19.8
11 7	2 35.88	+11 14.2	2.107	3.094	1.9	19.7	11 7	2 36.52	+ 2 48.7	2.356	3.327	4.1	19.8
11 17	2 26.65	+10 56.0	2.146	3.104	5.4	20.0	11 17	2 29.47	+ 2 12.1	2.393	3.329	6.5	20.0
11 27	2 18.68	+10 44.5	2.214	3.113	8.9	20.2	11 27	2 23.40	+ 1 48.8	2.457	3.330	9.2	20.2
12 7	2 12.59	+10 42.0	2.307	3.122	11.8	20.4	12 7	2 18.83	+ 1 40.1	2.545	3.332	11.7	20.4
30068	Frankmelillo		11 4.3 61°39	6°2/ 31.4	18		183845	2004 <i>BQ</i> ₁₁₄		11 4.3 268°25	0°5/ 3.9	18	
9 28	3 5.25	+ 0 51.7	1.717	2.554	15.1	18.1	9 28	3 4.65	+18 12.9	1.560	2.386	16.9	20.3
10 8	3 0.50	- 0 1.3	1.667	2.570	11.9	18.0	10 8	3 0.85	+17 27.3	1.473	2.375	13.2	20.0
10 18	2 53.50	- 0 51.0	1.639	2.587	8.6	17.8	10 18	2 54.25	+16 25.5	1.407	2.363	8.8	19.7
10 28	2 45.02	- 1 30.8	1.637	2.603	6.4	17.7	10 28	2 45.55	+15 10.8	1.365	2.352	3.7	19.4
11 7	2 36.07	- 1 55.2	1.661	2.620	6.9	17.8	11 7	2 35.88	+13 49.3	1.351	2.340	1.7	19.2
11 17	2 27.71	- 2 0.7	1.712	2.637	9.4	18.0	11 17	2 26.56	+12 29.3	1.364	2.329	6.9	19.5
11 27	2 20.88	- 1 46.0	1.788	2.654	12.5	18.2	11 27	2 18.88	+11 19.5	1.403	2.317	11.8	19.8
12 7	2 16.21	- 1 12.3	1.885	2.671	15.2	18.5	12 7	2 13.75	+10 26.7	1.464	2.305	16.1	20.0
302753	2002 <i>VQ</i> ₁₉		11 4.3 346°41	0°6/ 3.9	18		144328	2004 <i>DU</i> ₂₂		11 4.3 271°29	2°5/ 2.9	18	
9 28	3 5.06	+14 36.1	1.745	2.571	15.4	20.6	9 28	3 6.52	+11 38.6	1.549	2.384	16.6	20.5
10 8	3 0.74	+14 30.4	1.667	2.569	11.9	20.4	10 8	3 2.28	+11 8.7	1.465	2.372	12.9	20.3
10 18	2 53.94	+14 16.8	1.610	2.567	7.9	20.1	10 18	2 55.21	+10 31.0	1.401	2.360	8.5	20.0
10 28	2 45.33	+13 57.5	1.578	2.565	3.3	19.9	10 28	2 45.99	+ 9 49.3	1.361	2.347	4.0	19.7
11 7	2 35.92	+13 35.8	1.574	2.563	1.6	19.7	11 7	2 35.73	+ 9 9.2	1.349	2.335	3.3	19.6
11 17	2 26.87	+13 15.8	1.597	2.562	6.2	20.0	11 17	2 25.78	+ 8 36.7	1.363	2.322	7.8	19.9
11 27	2 19.30	+13 2.2	1.648	2.561	10.4	20.3	11 27	2 17.44	+ 8 17.3	1.403	2.309	12.5	20.1
12 7	2 14.00	+12 58.5	1.721	2.560	14.1	20.5	12 7	2 11.67	+ 8 14.5	1.465	2.296	16.6	20.3
224077	2005 <i>NM</i> ₆₁		11 4.3 73°99	2°8/ 2.7	18		246392	2007 <i>UT</i> ₄₆		11 4.3 22°43	1°3/ 3.5	18	
9 28	3 8.04	+11 22.5	1.425	2.263	17.6	21.0	9 28	3 4.79	+13 35.9	1.641	2.473	15.9	20.5
10 8	3 3.13	+10 42.7	1.372	2.281	13.5	20.8	10 8	3 0.60	+13 19.0	1.570	2.476	12.3	20.3
10 18	2 55.45	+ 9 55.9	1.340	2.300	8.8	20.5	10 18	2 53.87	+12 54.3	1.520	2.479	8.0	20.0
10 28	2 45.90	+ 9 7.3	1.333	2.318	4.1	20.3	10 28	2 45.31	+12 24.6	1.495	2.482	3.5	19.8
11 7	2 35.76	+ 8 23.2	1.352	2.337	3.6	20.3	11 7	2 36.02	+11 54.4	1.497	2.485	2.1	19.7
11 17	2 26.38	+ 7 49.5	1.398	2.355	7.9	20.6	11 17	2 27.17	+11 28.5	1.527	2.489	6.6	20.0
11 27	2 18.92	+ 7 30.9	1.470	2.373	12.2	20.9	11 27	2 19.89	+11 11.6	1.582	2.494	10.9	20.3
12 7	2 14.08	+ 7 29.5	1.563	2.392	15.8	21.2	12 7	2 14.97	+11 7.1	1.661	2.498	14.6	20.5
203188	2001 <i>CQ</i> ₅		11 4.3 230°25	4°4/ 1.1	18		392017	2009 <i>AX</i> ₂₅		11 4.3 153°28	2°2/ 2.8		

EPHEMERIDES

11 4.3

11 4.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
189111	2001 <i>TC</i> ₁₂₅		11 4.3 84°09	3°2/ 6.9	17		226528	2003 <i>UJ</i> ₁₂₅		11 4.3 321°92	5°0/31.2	17	
9 28	3 10.09	+27 47.9	1.650	2.434	17.9	20.2	9 28	2 59.23	+ 5 1.5	1.917	2.759	13.6	19.8
10 8	3 4.52	+27 20.7	1.594	2.462	14.3	20.0	10 8	2 56.08	+ 3 54.6	1.831	2.741	10.6	19.6
10 18	2 56.25	+26 32.5	1.557	2.491	10.2	19.8	10 18	2 50.83	+ 2 44.3	1.769	2.723	7.5	19.4
10 28	2 46.23	+25 24.3	1.545	2.518	5.9	19.6	10 28	2 44.05	+ 1 36.8	1.732	2.706	5.2	19.2
11 7	2 35.77	+24 0.9	1.561	2.545	3.2	19.5	11 7	2 36.55	+ 0 38.6	1.722	2.689	5.8	19.2
11 17	2 26.15	+22 29.9	1.605	2.572	5.8	19.7	11 17	2 29.28	- 0 4.2	1.740	2.673	8.7	19.3
11 27	2 18.48	+21 0.8	1.677	2.598	9.7	20.0	11 27	2 23.16	- 0 27.4	1.782	2.657	12.1	19.5
12 7	2 13.41	+19 41.7	1.774	2.623	13.3	20.3	12 7	2 18.93	- 0 29.7	1.847	2.641	15.1	19.7
46187	2001 <i>FW</i> ₁₂₆		11 4.3 46°90	7°6/29.9	18		91388	1999 <i>JM</i> ₁₃₂		11 4.3 161°30	1°1/ 3.3	18	
9 28	3 2.65	+ 0 53.0	1.498	2.347	16.3	17.7	9 28	3 4.98	+17 4.8	1.931	2.746	14.6	20.0
10 8	2 58.81	- 0 44.1	1.454	2.364	12.8	17.5	10 8	3 0.34	+15 57.4	1.854	2.750	11.2	19.8
10 18	2 52.53	- 2 18.2	1.433	2.380	9.6	17.4	10 18	2 53.50	+14 37.0	1.799	2.754	7.3	19.6
10 28	2 44.67	- 3 39.9	1.436	2.397	7.7	17.3	10 28	2 45.13	+13 7.9	1.771	2.757	3.1	19.4
11 7	2 36.32	- 4 40.7	1.464	2.415	8.5	17.4	11 7	2 36.19	+11 36.7	1.773	2.761	2.0	19.3
11 17	2 28.62	- 5 15.4	1.518	2.433	11.2	17.6	11 17	2 27.69	+10 10.5	1.804	2.763	6.1	19.6
11 27	2 22.57	- 5 22.1	1.595	2.451	14.2	17.9	11 27	2 20.59	+ 8 56.3	1.863	2.765	10.1	19.8
12 7	2 18.80	- 5 3.0	1.691	2.469	17.0	18.1	12 7	2 15.56	+ 7 58.8	1.947	2.767	13.5	20.0
216722	2005 <i>EC</i> ₂₈₆		11 4.3 69°95	1°3/ 3.9	18		43558	2001 <i>FW</i> ₆₂		11 4.3 11°12	5°7/30.9	18	
9 28	3 24.46	+ 9 12.1	1.365	2.177	19.6	19.2	9 28	3 0.76	+ 2 3.2	1.915	2.755	13.7	18.5
10 8	3 15.71	+10 4.9	1.319	2.212	15.1	19.0	10 8	2 57.05	+ 0 59.3	1.851	2.757	10.7	18.3
10 18	3 3.64	+10 56.3	1.294	2.247	9.8	18.8	10 18	2 51.32	- 0 3.8	1.809	2.758	7.8	18.1
10 28	2 49.41	+11 45.8	1.296	2.282	4.2	18.5	10 28	2 44.20	- 0 59.7	1.794	2.761	5.9	18.0
11 7	2 34.64	+12 33.4	1.327	2.316	2.2	18.5	11 7	2 36.53	- 1 42.5	1.805	2.763	6.4	18.1
11 17	2 21.03	+13 19.5	1.387	2.349	7.2	18.9	11 17	2 29.24	- 2 7.6	1.843	2.767	9.0	18.2
11 27	2 9.97	+14 5.9	1.475	2.382	11.9	19.2	11 27	2 23.21	- 2 12.5	1.906	2.770	11.9	18.4
12 7	2 2.24	+14 54.6	1.587	2.415	15.7	19.6	12 7	2 19.04	- 1 57.4	1.991	2.774	14.6	18.6
163299	2002 <i>HP</i> ₁₆		11 4.3 107°47	0°6/ 3.9	18		65463	2002 <i>XD</i> ₂		11 4.3 303°94	2°3/ 2.9	18	
9 28	3 6.65	+16 14.6	1.932	2.745	14.6	21.4	9 28	3 4.31	+12 43.9	1.421	2.265	17.4	19.5
10 8	3 1.51	+15 42.6	1.867	2.761	11.2	21.3	10 8	3 0.84	+12 9.1	1.339	2.251	13.5	19.2
10 18	2 54.17	+15 1.0	1.824	2.778	7.3	21.1	10 18	2 54.41	+11 24.2	1.276	2.237	8.9	18.9
10 28	2 45.36	+14 12.8	1.808	2.794	3.1	20.8	10 28	2 45.72	+10 33.4	1.238	2.224	4.1	18.6
11 7	2 36.06	+13 22.3	1.821	2.810	1.5	20.7	11 7	2 35.94	+ 9 43.1	1.224	2.211	3.3	18.5
11 17	2 27.28	+12 34.8	1.862	2.825	5.6	21.1	11 17	2 26.48	+ 9 0.3	1.238	2.198	8.1	18.7
11 27	2 19.95	+11 55.3	1.932	2.840	9.5	21.3	11 27	2 18.72	+ 8 31.8	1.275	2.186	13.1	19.0
12 7	2 14.71	+11 27.4	2.027	2.854	12.8	21.6	12 7	2 13.65	+ 8 21.6	1.334	2.174	17.4	19.2
316740	1998 <i>WG</i> ₃₉		11 4.3 33°18	0°8/ 3.8	18		128168	2003 <i>QC</i> ₁₀₉		11 4.3 99°29	4°7/31.5	18	
9 28	3 3.74	+15 45.0	1.665	2.493	15.9	20.5	9 28	3 2.78	+ 2 17.2	2.296	3.122	12.2	19.8
10 8	2 59.76	+15 17.9	1.595	2.498	12.3	20.2	10 8	2 58.21	+ 1 32.1	2.231	3.130	9.5	19.6
10 18	2 53.29	+14 40.4	1.546	2.503	8.0	20.0	10 18	2 51.89	+ 0 48.2	2.190	3.138	6.8	19.5
10 28	2 45.08	+13 55.7	1.522	2.509	3.4	19.7	10 28	2 44.40	+ 0 10.1	2.177	3.145	4.8	19.4
11 7	2 36.17	+13 8.5	1.525	2.515	1.7	19.6	11 7	2 36.47	- 0 17.7	2.191	3.153	5.2	19.4
11 17	2 27.74	+12 24.7	1.556	2.521	6.3	20.0	11 17	2 28.90	- 0 32.1	2.234	3.160	7.5	19.6
11 27	2 20.86	+11 49.9	1.614	2.527	10.6	20.2	11 27	2 22.42	- 0 31.1	2.304	3.168	10.1	19.8
12 7	2 16.27	+11 28.1	1.694	2.534	14.3	20.5	12 7	2 17.60	- 0 14.7	2.397	3.175	12.6	20.0
219218	1999 <i>VP</i> ₁₀₈		11 4.3 42°64	0°2/ 4.5	18		346574	2008 <i>VR</i> ₄₇		11 4.3 21°32	2°6/ 2.3	18	
9 28	3 2.59	+18 36.1	1.815	2.635	15.2	20.0	9 28	3 0.21	+16 23.0	1.350	2.198	17.9	19.4
10 8	2 58.59	+18 9.0	1.753	2.650	11.7	19.8	10 8	2 57.46	+14 41.8	1.288	2.203	13.7	19.2
10 18	2 52.36	+17 30.3	1.712	2.666	7.7	19.6	10 18	2 51.94	+12 43.1	1.246	2.209	8.8	18.9
10 28	2 44.62	+16 42.5	1.697	2.682	3.4	19.4	10 28	2 44.52	+10 34.8	1.229	2.216	4.0	18.6
11 7	2 36.36	+15 50.1	1.709	2.699	1.1	19.3	11 7	2 36.43	+ 8 28.7	1.238	2.223	3.7	18.6
11 17	2 28.62	+14 58.6	1.749	2.716	5.5	19.6	11 17	2 28.96	+ 6 36.4	1.274	2.232	8.4	19.0
11 27	2 22.33	+14 13.7	1.817	2.733	9.4	19.9	11 27	2 23.27	+ 5 7.5	1.335	2.241	13.0	19.2
12 7	2 18.14	+13 39.7	1.909	2.751	12.8	20.2	12 7	2 20.09	+ 4 6.6	1.418	2.250	17.0	19.5
431709	2008 <i>EV</i> ₁₁₆		11 4.3 159°55	0°4/ 4.1	16		384583	2010 <i>JC</i> ₄₄		11 4.3 224°45	0°6/ 3.9	18	
9 28	3 8.95	+16 13.4	1.808	2.621	15.5	22.6	9 28	3 9.67	+13 26.0	2.002	2.812	14.3	20.5
10 8	3 3.60	+15 54.1	1.732	2.627	12.0	22.4	10 8	3 4.09	+13 36.1	1.914	2.806	11.1	20.2
10 18	2 55.76	+15 24.9	1.678	2.632	7.9	22.2	10 18	2 56.11	+13 41.2	1.847	2.800	7.3	20.0
10 28	2 46.14	+14 48.0	1.650	2.636	3.4	21.9	10 28	2 46.34	+13 42.4	1.808	2.794	3.1	19.7
11 7	2 35.80	+14 7.3	1.651	2.640	1.4	21.8	11 7	2 35.74	+13 41.6	1.798	2.787	1.5	19.6
11 17	2 25.92	+13 27.9	1.680	2.644	6.0	22.1	11 17	2 25.38	+13 41.6	1.817	2.780	5.7	19.9
11 27	2 17.60	+12 55.2	1.737	2.647	10.2	22.4	11 27	2 16.37	+13 45.5	1.865	2.772	9.8	20.1
12 7	2 11.59	+12 33.5	1.818	2.649	13.9	22.6	12 7	2 9.49	+13 56.4	1.937	2.765	13.3	20.3
144585	2004 <i>FJ</i> ₃₈		11 4.3 201°63	1°9/ 5.9	18		434183	2002 <i>XL</i> ₉		11 4.3 332°43	4°5/ 2.6	18	
9 28	3 5.18	+22 57.4	2.268	3.055	13.5	20.8	9 28	3 8.71	+ 5 20.5	1.314	2.161	18.3	20.2
10 8	3 0.40	+22 51.2	2.178	3.053	10.7	20.6	10 8	3 4.36	+ 5 16.3	1.240	2.152	14.3	19.9
10 18	2 53.54	+22 32.7	2.110	3.050	7.5	20.4	10 18	2 56.79	+ 5 13.3	1.186	2.145	9.8	19.7
10 28	2 45.17	+22 2.2	2.069	3.047	4.0	20.2	10 28	2 46.76	+ 5 16.1	1.155	2.137	5.5	19.4
11 7	2 36.15	+21 22.0	2.056	3.043	1.9	20.0	11 7	2 35.58	+ 5 29.4	1.150	2.131	5.2	19.4
11 17	2 27.41	+20 35.8	2.073	3.039	4.8	20.2	11 17	2 24.81	+ 5 56.6	1.170	2.125	9.4	19.6
11 27	2 19.87	+19 48.8	2.119	3.035	8.3	20.4	11 27	2 15.97	+ 6 39.4	1.214	2.119	14.1	19.9
12 7	2 14.23	+19 6.3	2.190	3.031	11.4	20.6	12 7	2 10.09	+ 7 37.4	1.279	2.114	18.3	20.1
121795	2000 <i>AR</i> ₁₂₅		11 4.3 231°47	1°4/ 5.7	18		485545	2011 <i>UG</i> ₁₁₁		11 4.3 18°00	5°2/ 8.2		

EPHEMERIDES

11 4.3

11 4.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
349000	2006 <i>UU</i> ₂₄₀	11	4.3 314°48	3°6/ 2.5 18			275018	2009 <i>UF</i> ₂₆	11	4.4 85°72	0°6/ 3.9 16		
9 28	3 3.68	+10 9.0	1.279	2.133	18.3	20.7	9 28	3 7.42	+17 11.1	1.504	2.330	17.4	21.7
10 8	3 0.70	+9 34.1	1.196	2.114	14.3	20.4	10 8	3 2.72	+16 33.7	1.444	2.345	13.4	21.5
10 18	2 54.54	+8 51.2	1.133	2.096	9.5	20.1	10 18	2 55.28	+15 43.4	1.404	2.360	8.8	21.3
10 28	2 45.86	+8 5.4	1.092	2.078	4.8	19.8	10 28	2 45.96	+14 43.8	1.389	2.375	3.7	21.0
11 7	2 35.90	+7 24.2	1.076	2.060	4.5	19.7	11 7	2 36.00	+13 40.9	1.401	2.390	1.7	20.9
11 17	2 26.20	+6 54.7	1.085	2.044	9.3	20.0	11 17	2 26.72	+12 41.9	1.440	2.405	6.7	21.3
11 27	2 18.31	+6 43.5	1.117	2.028	14.5	20.2	11 27	2 19.29	+11 53.6	1.506	2.419	11.2	21.6
12 7	2 13.35	+6 53.3	1.169	2.013	19.1	20.4	12 7	2 14.43	+11 20.6	1.594	2.434	15.0	21.9
514299	2015 <i>TT</i> ₁₉₇	11	4.3 109°30	2°0/ 5.8 18			323636	2004 <i>XU</i> ₂₁	11	4.4 13°12	2°8/ 2.6 18		
9 28	3 8.10	+22 3.4	2.188	2.975	14.0	21.8	9 28	3 4.06	+8 12.0	1.851	2.683	14.4	19.5
10 8	3 2.57	+22 15.5	2.115	2.990	11.0	21.6	10 8	2 59.74	+8 0.4	1.780	2.686	11.1	19.3
10 18	2 54.90	+22 16.5	2.065	3.004	7.6	21.4	10 18	2 53.19	+7 46.8	1.732	2.689	7.3	19.1
10 28	2 45.74	+22 6.6	2.041	3.018	4.1	21.2	10 28	2 45.06	+7 34.4	1.709	2.693	3.8	18.9
11 7	2 36.00	+21 47.1	2.045	3.032	2.1	21.1	11 7	2 36.30	+7 26.8	1.714	2.697	3.4	18.9
11 17	2 26.68	+21 21.4	2.080	3.046	4.8	21.3	11 17	2 27.92	+7 27.4	1.747	2.702	6.8	19.1
11 27	2 18.71	+20 53.9	2.144	3.059	8.2	21.6	11 27	2 20.91	+7 38.7	1.807	2.707	10.5	19.3
12 7	2 12.75	+20 29.3	2.233	3.072	11.3	21.8	12 7	2 15.95	+8 1.7	1.890	2.713	13.7	19.5
131939	2002 <i>CH</i> ₁₅	11	4.3 94°30	4°8/ 1.6 18			268902	2007 <i>BH</i> ₅₈	11	4.4 193°05	2°0/ 5.8 18		
9 28	3 9.62	+6 58.7	1.410	2.250	17.6	20.1	9 28	3 8.73	+22 55.5	2.053	2.840	14.8	21.7
10 8	3 4.36	+6 2.7	1.359	2.268	13.6	19.9	10 8	3 3.38	+22 50.2	1.964	2.839	11.7	21.4
10 18	2 56.29	+5 3.8	1.329	2.285	9.2	19.7	10 18	2 55.64	+22 31.5	1.896	2.836	8.2	21.2
10 28	2 46.35	+4 8.9	1.323	2.303	5.4	19.6	10 28	2 46.15	+21 59.4	1.855	2.833	4.3	21.0
11 7	2 35.82	+3 25.1	1.344	2.320	5.6	19.6	11 7	2 35.90	+21 16.2	1.842	2.830	2.1	20.8
11 17	2 26.07	+2 58.2	1.391	2.336	9.3	19.9	11 17	2 25.97	+20 26.2	1.859	2.825	5.2	21.0
11 27	2 18.26	+2 51.6	1.463	2.352	13.2	20.2	11 27	2 17.44	+19 35.3	1.904	2.820	9.1	21.3
12 7	2 13.12	+3 5.2	1.557	2.368	16.7	20.4	12 7	2 11.08	+18 49.6	1.975	2.814	12.6	21.5
443724	2015 <i>LH</i> ₁₂	11	4.3 59°51	2°8/ 2.6 18			61019	2000 <i>KU</i> ₄₆	11	4.4 181°88	3°8/ 1.6 18		
9 28	3 5.71	+11 23.3	1.530	2.368	16.6	21.1	9 28	3 5.40	+8 54.7	1.761	2.593	15.0	19.2
10 8	3 1.20	+10 38.8	1.478	2.387	12.7	20.9	10 8	3 0.88	+7 53.7	1.687	2.593	11.6	19.0
10 18	2 54.15	+9 47.6	1.447	2.406	8.3	20.7	10 18	2 53.99	+6 46.8	1.637	2.594	7.7	18.8
10 28	2 45.42	+8 54.8	1.441	2.426	3.9	20.5	10 28	2 45.42	+5 39.7	1.612	2.594	4.4	18.6
11 7	2 36.16	+8 6.7	1.461	2.445	3.5	20.5	11 7	2 36.18	+4 39.2	1.616	2.593	4.6	18.6
11 17	2 27.57	+7 29.1	1.509	2.465	7.5	20.8	11 17	2 27.36	+3 51.3	1.647	2.593	8.0	18.8
11 27	2 20.71	+7 6.4	1.583	2.485	11.6	21.1	11 27	2 20.00	+3 20.8	1.704	2.591	11.8	19.0
12 7	2 16.26	+7 0.6	1.679	2.505	15.0	21.4	12 7	2 14.82	+3 9.7	1.784	2.590	15.1	19.3
165070	2000 <i>FX</i> ₈	11	4.3 172°27	0°0/ 4.2 18			415477	2014 <i>OQ</i> ₁₉₁	11	4.4 27°07	0°0/ 4.2 18		
9 28	3 1.60	+17 25.9	2.681	3.482	11.3	20.7	9 28	3 2.46	+16 58.7	1.946	2.765	14.3	20.8
10 8	2 57.23	+17 2.5	2.595	3.484	8.7	20.6	10 8	2 58.46	+16 47.0	1.875	2.772	11.1	20.6
10 18	2 51.25	+16 31.2	2.534	3.485	5.8	20.4	10 18	2 52.32	+16 26.0	1.825	2.780	7.3	20.4
10 28	2 44.15	+15 53.7	2.501	3.486	2.5	20.2	10 28	2 44.69	+15 57.9	1.802	2.788	3.2	20.1
11 7	2 36.59	+15 13.0	2.497	3.487	0.9	20.0	11 7	2 36.47	+15 25.8	1.806	2.796	1.1	20.0
11 17	2 29.29	+14 32.4	2.523	3.487	4.2	20.3	11 17	2 28.64	+14 54.1	1.839	2.805	5.3	20.3
11 27	2 22.93	+13 55.8	2.579	3.488	7.4	20.5	11 27	2 22.14	+14 27.3	1.899	2.815	9.1	20.6
12 7	2 18.05	+13 26.3	2.661	3.488	10.1	20.7	12 7	2 17.62	+14 9.1	1.984	2.824	12.5	20.8
107362	2001 <i>CG</i> ₂₉	11	4.4 261°72	4°5/ 7.2 18			385114	2012 <i>WS</i> ₂₆	11	4.4 271°70	5°1/ 31.1 18		
9 28	3 8.63	+27 24.6	1.940	2.716	15.9	20.5	9 28	3 2.96	+6 19.1	1.874	2.709	14.1	20.3
10 8	3 3.79	+27 57.8	1.842	2.703	13.1	20.3	10 8	2 59.06	+4 54.2	1.783	2.689	11.0	20.1
10 18	2 56.21	+28 16.5	1.765	2.689	9.8	20.0	10 18	2 52.88	+3 22.9	1.715	2.669	7.7	19.9
10 28	2 46.50	+28 18.0	1.711	2.676	6.4	19.8	10 28	2 45.01	+1 52.0	1.675	2.649	5.3	19.7
11 7	2 35.69	+28 1.9	1.685	2.662	4.5	19.7	11 7	2 36.33	+0 29.4	1.662	2.628	6.0	19.7
11 17	2 25.05	+27 30.6	1.688	2.649	6.3	19.7	11 17	2 27.86	-0 37.3	1.677	2.607	9.2	19.8
11 27	2 15.85	+26 49.7	1.717	2.634	9.8	19.9	11 27	2 20.63	-1 22.5	1.717	2.586	12.7	20.0
12 7	2 9.07	+26 6.6	1.771	2.620	13.3	20.1	12 7	2 15.42	-1 44.1	1.779	2.565	16.0	20.2
179603	2002 <i>NJ</i> ₄₆	11	4.4 20°82	9°6/ 11.9 18			336106	2008 <i>HE</i> ₇₀	11	4.4 122°99	2°0/ 2.9 16		
9 28	3 2.41	+38 50.7	1.280	2.051	22.8	19.5	9 28	3 9.33	+12 12.2	1.945	2.760	14.5	21.9
10 8	3 0.11	+39 24.8	1.222	2.062	19.6	19.3	10 8	3 3.49	+11 34.6	1.883	2.779	11.1	21.7
10 18	2 54.18	+39 26.0	1.179	2.075	16.0	19.1	10 18	2 55.47	+10 50.7	1.843	2.798	7.2	21.5
10 28	2 45.62	+38 49.3	1.154	2.089	12.4	19.0	10 28	2 45.99	+10 4.1	1.831	2.816	3.3	21.3
11 7	2 36.08	+37 35.2	1.152	2.105	9.9	18.9	11 7	2 36.03	+9 19.5	1.848	2.833	2.7	21.3
11 17	2 27.39	+35 51.0	1.172	2.122	10.0	18.9	11 17	2 26.63	+8 41.7	1.894	2.850	6.3	21.5
11 27	2 21.12	+33 49.9	1.217	2.141	12.3	19.1	11 27	2 18.72	+8 14.8	1.969	2.865	10.0	21.8
12 7	2 18.16	+31 46.9	1.283	2.160	15.5	19.4	12 7	2 12.93	+8 1.3	2.068	2.880	13.1	22.0
288345	2004 <i>BA</i> ₁₂₀	11	4.4 342°04	6°3/ 6.8 17			515891	2015 <i>PC</i> ₄₂	11	4.4 29°19	1°1/ 3.7 18		
9 28	3 4.88	+25 24.5	1.296	2.116	20.0	19.8	9 28	3 6.53	+13 3.1	1.698	2.525	15.7	21.1
10 8	3 2.14	+26 44.2	1.212	2.099	16.6	19.5	10 8	3 1.92	+13 0.3	1.625	2.528	12.1	20.9
10 18	2 55.85	+27 50.9	1.146	2.084	12.5	19.2	10 18	2 54.77	+12 51.2	1.574	2.531	8.0	20.7
10 28	2 46.57	+28 39.1	1.101	2.070	8.4	19.0	10 28	2 45.80	+12 38.1	1.549	2.535	3.4	20.4
11 7	2 35.63	+29 5.2	1.080	2.058	6.3	18.8	11 7	2 36.08	+12 24.3	1.550	2.539	1.9	20.3
11 17	2 24.80	+29 9.7	1.083	2.047	8.6	18.9	11 17	2 26.77	+12 13.6	1.580	2.543	6.4	20.6
11 27	2 15.95	+28 58.2	1.110	2.037	12.8	19.1	11 27	2 19.02	+12 10.0	1.636	2.548	10.6	20.9
12 7	2 10.46	+28 39.7	1.157	2.030	17.2	19.4	12 7	2 13.61	+12 16.4	1.716	2.552	14.3	21.1
296636	2009 <i>SR</i> ₇₅	11	4.4 283°02	3°6/ 1.0 18			8 Flora	11	4.4 0°56	6°3/ 1.6 18			
9 28	3 0.43	+7 42.3	2.252	3.082									

EPHEMERIDES

11 4.4

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
209261	2003 <i>WP</i> ₁₇₄	11	4.4 254°11	1.2°/ 3.6 18			186514	2002 <i>VC</i> ₂₄	11	4.4 24°13	0°0/ 4.2 18		
9 28	3 7.27	+12 38.7	1.902	2.721	14.6	21.0	9 28	3 5.40	+15 52.2	1.053	1.910	21.1	19.5
10 8	3 2.36	+12 33.6	1.815	2.713	11.3	20.8	10 8	3 2.23	+15 59.8	1.003	1.920	16.4	19.2
10 18	2 55.05	+12 22.9	1.750	2.705	7.4	20.5	10 18	2 55.51	+15 55.3	0.969	1.932	10.8	18.9
10 28	2 45.95	+12 8.5	1.711	2.697	3.2	20.2	10 28	2 46.22	+15 40.9	0.957	1.945	4.7	18.7
11 7	2 36.02	+11 53.7	1.701	2.689	2.0	20.1	11 7	2 36.00	+15 21.2	0.969	1.959	1.7	18.5
11 17	2 26.35	+11 42.0	1.719	2.680	6.2	20.4	11 17	2 26.61	+15 2.2	1.004	1.974	7.7	18.9
11 27	2 18.03	+11 37.2	1.765	2.672	10.3	20.6	11 27	2 19.59	+14 50.5	1.062	1.991	13.2	19.3
12 7	2 11.88	+11 42.2	1.835	2.663	13.9	20.8	12 7	2 15.86	+14 50.8	1.141	2.008	17.7	19.6
399822	2005 <i>SV</i> ₂₈₈	11	4.4 117°67	5°9/30.2 18			292510	2006 <i>TP</i> ₂₂	11	4.4 269°93	1°3/ 3.5 18		
9 28	3 2.26	+ 0 4.8	2.185	3.014	12.6	21.0	9 28	3 4.39	+13 27.0	1.986	2.807	14.0	21.0
10 8	2 57.93	- 1 6.9	2.123	3.021	10.0	20.9	10 8	2 59.97	+13 6.4	1.904	2.804	10.8	20.8
10 18	2 51.79	- 2 16.5	2.085	3.027	7.4	20.7	10 18	2 53.38	+12 38.8	1.845	2.801	7.1	20.6
10 28	2 44.42	- 3 17.9	2.074	3.033	6.0	20.7	10 28	2 45.20	+12 6.9	1.811	2.798	3.1	20.3
11 7	2 36.60	- 4 5.5	2.091	3.039	6.6	20.7	11 7	2 36.35	+11 34.4	1.806	2.794	2.0	20.3
11 17	2 29.15	- 4 35.3	2.136	3.045	8.7	20.9	11 17	2 27.80	+11 5.7	1.830	2.791	5.9	20.5
11 27	2 22.84	- 4 45.2	2.206	3.051	11.3	21.0	11 27	2 20.53	+10 44.9	1.881	2.788	9.8	20.7
12 7	2 18.23	- 4 35.6	2.298	3.056	13.6	21.2	12 7	2 15.25	+10 35.3	1.957	2.785	13.1	20.9
193054	2000 <i>FR</i> ₄₃	11	4.4 177°70	4°7/30.6 18			150276	1999 <i>TH</i> ₃₈	11	4.4 230°90	3°3/ 1.4 18		
9 28	3 0.32	+ 1 59.0	2.556	3.382	11.1	20.1	9 28	3 1.15	+ 9 2.1	2.200	3.028	12.6	19.6
10 8	2 56.24	+ 0 52.9	2.485	3.382	8.7	19.9	10 8	2 57.19	+ 7 58.0	2.122	3.026	9.6	19.4
10 18	2 50.61	- 0 12.8	2.438	3.383	6.3	19.8	10 18	2 51.38	+ 6 48.8	2.069	3.025	6.4	19.2
10 28	2 43.90	- 1 13.2	2.419	3.383	4.8	19.7	10 28	2 44.29	+ 5 39.3	2.043	3.024	3.7	19.0
11 7	2 36.78	- 2 3.6	2.429	3.383	5.4	19.7	11 7	2 36.69	+ 4 35.1	2.046	3.022	3.9	19.0
11 17	2 29.93	- 2 40.1	2.468	3.383	7.4	19.8	11 17	2 29.39	+ 3 41.2	2.078	3.020	6.8	19.2
11 27	2 24.01	- 3 0.2	2.533	3.383	9.8	20.0	11 27	2 23.19	+ 3 2.0	2.137	3.019	10.0	19.4
12 7	2 19.53	- 3 3.5	2.621	3.383	12.1	20.2	12 7	2 18.68	+ 2 39.5	2.219	3.017	12.8	19.6
179031	2001 <i>RP</i> ₁₁₄	11	4.4 328°49	0°6/ 4.0 18			273392	2006 <i>VY</i> ₆₅	11	4.4 4°80	0°2/ 4.3 18		
9 28	3 2.56	+15 10.7	1.582	2.417	16.3	20.0	9 28	2 59.01	+17 37.8	0.975	1.844	21.5	19.8
10 8	2 59.29	+15 2.0	1.494	2.401	12.7	19.7	10 8	2 57.67	+17 17.4	0.918	1.842	16.8	19.5
10 18	2 53.32	+14 43.8	1.428	2.386	8.4	19.4	10 18	2 52.73	+16 39.2	0.877	1.843	11.1	19.2
10 28	2 45.29	+14 18.3	1.385	2.372	3.6	19.1	10 28	2 45.12	+15 46.9	0.857	1.845	4.8	18.9
11 7	2 36.25	+13 49.4	1.369	2.358	1.7	19.0	11 7	2 36.39	+14 48.1	0.858	1.849	1.8	18.7
11 17	2 27.44	+13 22.0	1.379	2.345	6.7	19.3	11 17	2 28.33	+13 52.2	0.883	1.854	8.2	19.1
11 27	2 20.14	+13 1.7	1.415	2.333	11.4	19.5	11 27	2 22.58	+13 9.2	0.929	1.862	14.0	19.5
12 7	2 15.27	+12 53.1	1.473	2.322	15.5	19.7	12 7	2 20.11	+12 45.2	0.994	1.871	19.0	19.8
358795	2008 <i>EL</i> ₄₄	11	4.4 109°96	1°1/ 5.4 18			429408	2010 <i>TB</i> ₁₁₆	11	4.4 44°26	3°4/ 6.3 16		
9 28	3 5.99	+20 42.7	2.583	3.368	12.1	21.6	9 28	3 8.17	+24 13.9	1.060	1.894	22.6	20.6
10 8	3 0.56	+20 35.9	2.513	3.389	9.5	21.5	10 8	3 4.40	+24 20.6	1.014	1.913	17.9	20.4
10 18	2 53.39	+20 19.9	2.467	3.410	6.4	21.3	10 18	2 56.88	+24 4.4	0.984	1.934	12.5	20.1
10 28	2 45.08	+19 55.3	2.449	3.430	3.1	21.1	10 28	2 46.77	+23 25.5	0.975	1.955	6.8	19.9
11 7	2 36.38	+19 24.6	2.460	3.449	1.3	21.0	11 7	2 35.85	+22 28.5	0.990	1.977	3.5	19.8
11 17	2 28.06	+18 50.8	2.503	3.468	4.1	21.3	11 17	2 25.98	+21 22.6	1.029	2.000	7.4	20.1
11 27	2 20.86	+18 17.9	2.575	3.487	7.2	21.5	11 27	2 18.71	+20 18.8	1.091	2.023	12.5	20.5
12 7	2 15.32	+17 49.5	2.673	3.505	9.9	21.7	12 7	2 14.88	+19 26.5	1.175	2.047	17.0	20.8
143685	2003 <i>SS</i> ₃₁₇	11	4.4 15°81	0°1/ 3.1 15			321529	2009 <i>SQ</i> ₂₄₂	11	4.4 56°12	8°1/29.4 18		
9 28	2 42.45	+11 24.6	27.581	28.389	1.2	22.4	9 28	3 3.35	- 5 37.7	1.920	2.749	14.1	20.2
10 8	2 41.56	+11 19.3	27.498	28.392	0.9	22.4	10 8	2 58.84	- 6 52.6	1.881	2.770	11.5	20.1
10 18	2 40.56	+11 13.7	27.441	28.395	0.6	22.4	10 18	2 52.38	- 7 58.9	1.864	2.791	9.2	20.0
10 28	2 39.49	+11 8.0	27.413	28.398	0.3	22.3	10 28	2 44.67	- 8 49.7	1.873	2.812	8.1	20.0
11 7	2 38.38	+11 2.4	27.415	28.401	0.2	22.3	11 7	2 36.60	- 9 19.6	1.908	2.833	8.7	20.1
11 17	2 37.28	+10 57.1	27.448	28.404	0.5	22.4	11 17	2 29.08	- 9 25.7	1.968	2.855	10.6	20.2
11 27	2 36.24	+10 52.3	27.511	28.407	0.8	22.4	11 27	2 22.92	- 9 8.1	2.053	2.876	12.8	20.4
12 7	2 35.31	+10 48.3	27.601	28.411	1.2	22.4	12 7	2 18.64	- 8 29.2	2.158	2.898	14.9	20.6
242846	2006 <i>EE</i> ₃₉	11	4.4 171°69	4°3/ 8.2 18			384411	2009 <i>WK</i> ₁₄₃	11	4.4 295°55	0°4/ 4.2 18		
9 28	3 9.20	+31 4.9	2.464	3.205	13.8	21.6	9 28	3 7.62	+14 47.0	1.486	2.317	17.4	21.2
10 8	3 3.47	+31 15.7	2.374	3.210	11.4	21.4	10 8	3 3.49	+14 51.0	1.397	2.301	13.6	20.9
10 18	2 55.56	+31 10.9	2.306	3.213	8.7	21.2	10 18	2 56.30	+14 46.6	1.328	2.285	9.1	20.6
10 28	2 46.11	+30 48.8	2.263	3.216	5.9	21.1	10 28	2 46.68	+14 35.3	1.282	2.269	4.0	20.3
11 7	2 36.00	+30 10.3	2.249	3.219	4.3	21.0	11 7	2 35.81	+14 20.1	1.263	2.253	1.6	20.1
11 17	2 26.22	+29 18.3	2.264	3.220	5.4	21.1	11 17	2 25.13	+14 5.3	1.271	2.237	7.1	20.4
11 27	2 17.74	+28 18.3	2.309	3.221	7.9	21.2	11 27	2 16.13	+13 56.4	1.304	2.222	12.2	20.6
12 7	2 11.25	+27 16.8	2.381	3.221	10.7	21.4	12 7	2 9.90	+13 58.0	1.359	2.207	16.7	20.9
291555	2006 <i>EE</i> ₇₃	11	4.4 89°11	4°3/ 6.8 18			223850	2004 <i>TN</i> ₂₀₃	11	4.4 215°28	0°3/ 4.6 17		
9 28	3 12.05	+25 31.1	1.778	2.560	16.9	20.7	9 28	3 3.83	+17 30.2	2.613	3.411	11.7	21.0
10 8	3 6.35	+26 18.4	1.705	2.572	13.7	20.5	10 8	2 59.08	+17 22.8	2.520	3.406	9.1	20.8
10 18	2 57.79	+26 51.8	1.654	2.583	10.0	20.3	10 18	2 52.58	+17 8.0	2.452	3.401	6.0	20.6
10 28	2 47.16	+27 8.5	1.626	2.594	6.3	20.1	10 28	2 44.83	+16 46.9	2.411	3.395	2.7	20.4
11 7	2 35.62	+27 8.2	1.627	2.606	4.3	20.0	11 7	2 36.52	+16 21.6	2.399	3.389	0.9	20.2
11 17	2 24.55	+26 53.3	1.655	2.617	6.3	20.2	11 17	2 28.42	+15 55.2	2.418	3.383	4.3	20.4
11 27	2 15.23	+26 29.6	1.711	2.628	9.9	20.4	11 27	2 21.28	+15 31.0	2.467	3.377	7.6	20.6
12 7	2 8.54	+26 3.8	1.791	2.639	13.3	20.6	12 7	2 15.72	+15 12.4	2.541	3.370	10.4	20.8
403437	2009 <i>SW</i> ₂₁₂	11	4.4 37°44	1°4/ 3.4 16			251295	2006 <i>XE</i> ₇	11	4.4 202°06			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
260718	2005 <i>JX</i> ₁₇₆		11	4.4 170 ^o 85	5 ^o 6/ 9.8 18								
9 28	3 12.13	+36 44.0	2.082	2.802	16.6	21.0							
10 8	3 6.11	+36 18.8	1.990	2.807	14.0	20.8							
10 18	2 57.45	+35 28.8	1.919	2.811	10.9	20.6							
10 28	2 46.95	+34 12.0	1.872	2.815	7.8	20.5							
11 7	2 35.81	+32 30.1	1.853	2.817	5.7	20.3							
11 17	2 25.29	+30 29.4	1.864	2.818	6.4	20.4							
11 27	2 16.53	+28 20.0	1.905	2.819	9.2	20.6							
12 7	2 10.27	+26 12.7	1.973	2.819	12.3	20.8							
102366	1999 <i>TR</i> ₁₄₀		11	4.4 355 ^o 33	1 ^o 3/ 5.2 18								
9 28	3 3.61	+20 4.8	1.469	2.297	17.7	20.0							
10 8	3 0.25	+20 1.5	1.394	2.294	13.9	19.7							
10 18	2 54.00	+19 43.6	1.338	2.291	9.5	19.5							
10 28	2 45.61	+19 12.3	1.306	2.290	4.5	19.2							
11 7	2 36.27	+18 31.0	1.299	2.289	1.6	19.0							
11 17	2 27.35	+17 45.7	1.319	2.288	6.4	19.3							
11 27	2 20.18	+17 3.5	1.364	2.289	11.2	19.6							
12 7	2 15.66	+16 31.0	1.431	2.290	15.3	19.8							
173705	2001 <i>QB</i> ₆₁		11	4.4 308 ^o 35	19 ^o 0/ 9.5 17								
9 28	3 22.90	+42 22.1	1.115	1.856	27.1	19.1							
10 8	3 19.31	+45 49.0	1.044	1.846	24.8	18.9							
10 18	3 9.56	+48 57.4	0.987	1.836	22.3	18.7							
10 28	2 53.58	+51 27.6	0.947	1.827	20.2	18.5							
11 7	2 33.09	+53 0.3	0.925	1.818	19.1	18.4							
11 17	2 11.78	+53 25.4	0.923	1.809	19.5	18.4							
11 27	1 54.11	+52 49.6	0.938	1.801	21.2	18.5							
12 7	1 43.08	+51 33.7	0.969	1.794	23.6	18.6							
415576	2014 <i>QC</i> ₂₇₇		11	4.4 52 ^o 52	5 ^o 0/ 31.4 18								
9 28	3 2.09	+ 3 31.7	1.985	2.820	13.4	21.0							
10 8	2 57.98	+ 2 31.9	1.925	2.829	10.4	20.8							
10 18	2 51.92	+ 1 32.1	1.888	2.838	7.4	20.7							
10 28	2 44.53	+ 0 38.2	1.877	2.848	5.2	20.6							
11 7	2 36.68	- 0 4.3	1.894	2.857	5.7	20.6							
11 17	2 29.23	- 0 31.2	1.938	2.867	8.2	20.8							
11 27	2 23.03	- 0 39.9	2.008	2.877	11.2	21.0							
12 7	2 18.67	- 0 30.4	2.100	2.887	13.8	21.2							
230739	2003 <i>WU</i> ₁₁		11	4.4 6 ^o 28	4 ^o 0/ 7.6 17								
9 28	3 2.22	+28 8.3	1.945	2.729	15.6	20.4							
10 8	2 58.61	+28 16.8	1.864	2.730	12.7	20.2							
10 18	2 52.63	+28 8.4	1.803	2.731	9.4	20.0							
10 28	2 44.94	+27 42.2	1.767	2.733	6.0	19.8							
11 7	2 36.51	+26 59.9	1.756	2.735	4.0	19.7							
11 17	2 28.45	+26 5.6	1.774	2.738	5.7	19.8							
11 27	2 21.80	+25 5.8	1.818	2.742	8.9	20.0							
12 7	2 17.31	+24 7.7	1.888	2.746	12.2	20.2							
263798	2008 <i>RE</i> ₅		11	4.4 343 ^o 92	0 ^o 0/ 4.2 18								
9 28	3 1.10	+16 51.4	1.891	2.715	14.5	20.6							
10 8	2 57.67	+16 40.3	1.806	2.706	11.3	20.3							
10 18	2 51.99	+16 19.8	1.743	2.699	7.5	20.1							
10 28	2 44.67	+15 51.5	1.706	2.692	3.3	19.8							
11 7	2 36.61	+15 18.8	1.695	2.685	1.2	19.7							
11 17	2 28.81	+14 46.1	1.713	2.680	5.5	20.0							
11 27	2 22.30	+14 18.4	1.757	2.675	9.6	20.2							
12 7	2 17.81	+13 59.8	1.826	2.671	13.2	20.4							
223419	2003 <i>SE</i> ₂₁₂		11	4.4 15 ^o 48	8 ^o 2/ 28.6 18								
9 28	3 1.68	- 7 0.8	2.085	2.910	13.2	19.8							
10 8	2 57.63	- 8 13.4	2.027	2.912	11.0	19.6							
10 18	2 51.68	- 9 18.3	1.993	2.914	9.1	19.5							
10 28	2 44.44	- 10 8.6	1.984	2.915	8.2	19.5							
11 7	2 36.72	- 10 38.6	2.000	2.918	8.9	19.5							
11 17	2 29.37	- 10 45.2	2.042	2.920	10.7	19.7							
11 27	2 23.19	- 10 27.7	2.108	2.923	12.9	19.8							
12 7	2 18.78	- 9 48.0	2.195	2.926	15.0	20.0							
244655	2003 <i>HS</i> ₁₀		11	4.4 49 ^o 49	3 ^o 7/ 2.2 18								
9 28	3 5.85	+13 12.3	1.049	1.910	20.9	19.0							
10 8	3 2.20	+11 51.0	1.009	1.931	15.9	18.8							
10 18	2 55.20	+10 17.6	0.988	1.952	10.3	18.6							
10 28	2 46.00	+ 8 41.4	0.989	1.975	5.0	18.4							
11 7	2 36.22	+ 7 13.8	1.014	1.998	4.7	18.4							
11 17	2 27.47	+ 6 5.0	1.063	2.021	9.6	18.8							
11 27	2 21.08	+ 5 21.6	1.135	2.045	14.4	19.1							
12 7	2 17.74	+ 5 5.1	1.227	2.069	18.5	19.5							
223217	2003 <i>BO</i> ₈₃		11	4.4 319 ^o 91	0 ^o 0/ 4.2 18								
9 28	3 2.49	+17 58.0	1.319	2.161	18.5	20.4							
10 8	2 59.84	+17 37.9	1.234	2.143	14.6	20.1							
10 18	2 54.03	+17 2.2	1.167	2.127	9.8	19.8							
10 28	2 45.74	+16 12.9	1.124	2.111	4.3	19.5							
11 7	2 36.21	+15 15.2	1.105	2.095	1.5	19.2							
11 17	2 26.95	+14 16.9	1.111	2.080	7.4	19.6							
11 27	2 19.50	+13 26.7	1.142	2.067	12.9	19.8							
12 7	2 14.94	+12 51.8	1.193	2.053	17.7	20.1							
482585	2012 <i>XC</i> ₅₃		11	4.4 296 ^o 24	8 ^o 5/ 30.2 18								
9 28	3 6.19	- 4 24.3	1.710	2.542	15.4	21.2							
10 8	3 1.79	- 5 19.1	1.628	2.522	12.7	21.0							
10 18	2 54.84	- 6 7.7	1.568	2.502	10.0	20.8							
10 28	2 45.96	- 6 42.4	1.532	2.482	8.5	20.7							
11 7	2 36.16	- 6 56.1	1.521	2.462	9.2	20.7							
11 17	2 26.60	- 6 44.4	1.536	2.442	11.7	20.8							
11 27	2 18.46	- 6 6.0	1.574	2.423	14.8	20.9							
12 7	2 12.59	- 5 3.1	1.634	2.403	17.8	21.1							
243472	2009 <i>SD</i> ₂₁₄		11	4.4 310 ^o 82	2 ^o 8/ 1.8 18								
9 28	3 0.08	+11 13.9	2.088	2.918	13.0	19.9							
10 8	2 56.57	+10 8.1	2.003	2.909	10.0	19.7							
10 18	2 51.11	+ 8 54.6	1.942	2.900	6.6	19.5							
10 28	2 44.25	+ 7 38.1	1.908	2.891	3.4	19.2							
11 7	2 36.80	+ 6 24.6	1.902	2.883	3.5	19.2							
11 17	2 29.62	+ 5 20.2	1.926	2.875	6.8	19.4							
11 27	2 23.56	+ 4 30.0	1.976	2.867	10								

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
406275	2007 <i>EN</i> ₈₄	11 4.4 101°27′	8°2′/26.5 18				269849	2000 <i>DY</i> ₃₈	11 4.4 296°71′	0°1′/ 4.5 18			
9 28	3 1.67	- 9 11.4	2.443	3.256	11.9	21.2	9 28	3 4.96	+18 6.0	1.454	2.284	17.7	20.7
10 8	2 57.27	-10 56.5	2.401	3.272	10.0	21.1	10 8	3 1.53	+17 47.8	1.364	2.267	13.9	20.4
10 18	2 51.27	-12 33.0	2.385	3.288	8.6	21.1	10 18	2 55.05	+17 15.1	1.294	2.250	9.4	20.1
10 28	2 44.23	-13 54.0	2.395	3.304	8.2	21.1	10 28	2 46.20	+16 29.7	1.248	2.234	4.2	19.8
11 7	2 36.86	-14 54.0	2.433	3.319	8.9	21.1	11 7	2 36.14	+15 36.0	1.227	2.217	1.4	19.6
11 17	2 29.86	-15 30.0	2.496	3.335	10.4	21.3	11 17	2 26.32	+14 40.8	1.232	2.200	7.0	19.9
11 27	2 23.92	-15 41.4	2.582	3.350	12.1	21.4	11 27	2 18.20	+13 52.3	1.263	2.184	12.2	20.1
12 7	2 19.50	-15 30.0	2.688	3.365	13.7	21.6	12 7	2 12.83	+13 17.1	1.316	2.168	16.8	20.4
477569	2010 <i>GY</i> ₁₄₅	11 4.4 115°69′	2°1′/ 3.5 18				135174	2001 <i>QC</i> ₂₇₀	11 4.4 7°31′	3°5′/ 2.5 18			
9 28	3 18.62	+ 7 7.7	2.071	2.868	14.3	20.8	9 28	3 3.14	+10 33.7	1.199	2.058	18.9	19.0
10 8	3 10.62	+ 7 39.3	1.999	2.883	11.1	20.6	10 8	3 0.18	+ 9 54.7	1.138	2.058	14.6	18.8
10 18	3 0.22	+ 8 11.6	1.950	2.899	7.4	20.4	10 18	2 54.08	+ 9 7.9	1.096	2.060	9.7	18.5
10 28	2 48.16	+ 8 45.7	1.931	2.914	3.5	20.2	10 28	2 45.69	+ 8 19.4	1.076	2.062	4.8	18.2
11 7	2 35.47	+ 9 22.4	1.943	2.928	2.6	20.2	11 7	2 36.37	+ 7 36.8	1.081	2.065	4.4	18.2
11 17	2 23.27	+10 2.3	1.987	2.942	6.1	20.4	11 17	2 27.64	+ 7 7.0	1.110	2.069	9.0	18.5
11 27	2 12.63	+10 46.4	2.062	2.956	9.7	20.7	11 27	2 20.89	+ 6 55.7	1.162	2.074	13.9	18.8
12 7	2 4.28	+11 35.3	2.163	2.969	12.9	20.9	12 7	2 17.03	+ 7 4.8	1.234	2.080	18.1	19.1
98837	2001 <i>AQ</i> ₁₇	11 4.4 225°86′	1°9′/ 5.9 18				154085	2002 <i>CD</i> ₂₃₇	11 4.4 122°58′	1°1′/ 3.4 18			
9 28	3 6.78	+23 3.8	2.366	3.147	13.2	20.6	9 28	3 3.83	+13 31.4	2.429	3.240	12.0	20.6
10 8	3 1.70	+22 56.2	2.264	3.135	10.5	20.4	10 8	2 59.05	+13 5.7	2.356	3.250	9.2	20.4
10 18	2 54.51	+22 36.3	2.185	3.123	7.4	20.2	10 18	2 52.53	+12 34.1	2.306	3.260	6.0	20.3
10 28	2 45.77	+22 4.4	2.133	3.110	3.9	20.0	10 28	2 44.83	+11 59.1	2.285	3.270	2.6	20.0
11 7	2 36.28	+21 22.3	2.109	3.097	1.9	19.8	11 7	2 36.69	+11 24.0	2.293	3.280	1.7	20.0
11 17	2 27.00	+20 33.7	2.117	3.083	4.7	20.0	11 17	2 28.88	+10 52.5	2.330	3.290	5.0	20.2
11 27	2 18.85	+19 43.8	2.153	3.068	8.2	20.2	11 27	2 22.16	+10 27.9	2.397	3.299	8.2	20.5
12 7	2 12.56	+18 57.8	2.216	3.052	11.5	20.4	12 7	2 17.06	+10 12.8	2.489	3.308	11.0	20.7
453549	2009 <i>WH</i> ₁₈₇	11 4.4 75°51′	0°7′/ 3.9 18				298190	2002 <i>TQ</i> ₂₀₅	11 4.4 20°58′	2°0′/ 5.9 18			
9 28	3 5.35	+13 30.6	2.284	3.095	12.7	21.0	9 28	3 1.99	+23 54.2	1.508	2.325	17.8	19.6
10 8	3 0.39	+13 31.9	2.206	3.100	9.8	20.8	10 8	2 58.85	+23 26.7	1.439	2.331	14.1	19.3
10 18	2 53.50	+13 28.2	2.153	3.106	6.4	20.6	10 18	2 52.97	+22 39.7	1.389	2.337	9.7	19.1
10 28	2 45.27	+13 21.0	2.126	3.112	2.7	20.4	10 28	2 45.15	+21 34.9	1.363	2.344	5.0	18.8
11 7	2 36.48	+13 12.7	2.129	3.118	1.4	20.3	11 7	2 36.59	+20 17.5	1.363	2.352	2.1	18.7
11 17	2 28.00	+13 5.8	2.162	3.124	5.0	20.6	11 17	2 28.58	+18 55.3	1.390	2.361	6.0	19.0
11 27	2 20.68	+13 3.3	2.223	3.130	8.4	20.8	11 27	2 22.30	+17 37.5	1.443	2.370	10.5	19.2
12 7	2 15.12	+13 7.6	2.310	3.136	11.4	21.0	12 7	2 18.54	+16 31.7	1.520	2.380	14.5	19.5
80754	2000 <i>CV</i> ₄₉	11 4.4 199°93′	3°5′/ 1.6 18				20780	Chanyikhei	11 4.4 337°92′	3°2′/ 2.3 18			
9 28	3 6.08	+ 9 29.0	1.915	2.741	14.2	20.0	9 28	3 0.96	+12 8.7	1.398	2.248	17.2	17.5
10 8	3 1.30	+ 8 23.9	1.835	2.738	11.0	19.8	10 8	2 58.22	+11 8.6	1.323	2.239	13.3	17.2
10 18	2 54.28	+ 7 12.0	1.779	2.734	7.3	19.6	10 18	2 52.69	+ 9 57.4	1.268	2.231	8.8	17.0
10 28	2 45.65	+ 5 58.9	1.749	2.730	4.1	19.4	10 28	2 45.10	+ 8 41.1	1.238	2.223	4.3	16.7
11 7	2 36.35	+ 4 51.0	1.747	2.725	4.3	19.4	11 7	2 36.59	+ 7 28.0	1.233	2.216	4.1	16.7
11 17	2 27.40	+ 3 54.6	1.775	2.720	7.6	19.6	11 17	2 28.48	+ 6 26.6	1.253	2.210	8.6	16.9
11 27	2 19.79	+ 3 14.6	1.830	2.714	11.3	19.8	11 27	2 22.04	+ 5 44.1	1.298	2.205	13.2	17.2
12 7	2 14.25	+ 2 53.4	1.907	2.707	14.5	20.0	12 7	2 18.14	+ 5 24.0	1.364	2.200	17.3	17.4
139788	2001 <i>RA</i> ₄	11 4.4 355°56′	9°8′/10.9 18				152793	1999 <i>TP</i> ₈₂	11 4.4 160°69′	3°6′/ 1.9 18			
9 28	3 3.55	+37 12.7	1.456	2.221	20.7	18.3	9 28	3 1.96	+10 6.1	2.451	3.271	11.7	20.3
10 8	3 1.01	+38 20.1	1.379	2.215	18.0	18.1	10 8	2 57.62	+ 9 9.4	2.374	3.274	8.9	20.2
10 18	2 55.00	+39 2.6	1.318	2.211	14.9	17.9	10 18	2 51.61	+ 8 7.8	2.322	3.277	5.9	20.0
10 28	2 46.23	+39 13.8	1.277	2.207	11.9	17.7	10 28	2 44.45	+ 7 5.2	2.298	3.280	3.1	19.8
11 7	2 36.11	+38 50.6	1.258	2.205	10.0	17.6	11 7	2 36.84	+ 6 6.3	2.304	3.283	3.2	19.8
11 17	2 26.37	+37 55.3	1.262	2.205	10.3	17.6	11 17	2 29.54	+ 5 15.6	2.339	3.286	5.9	20.0
11 27	2 18.75	+36 36.9	1.290	2.205	12.5	17.7	11 27	2 23.25	+ 4 36.8	2.403	3.288	8.9	20.2
12 7	2 14.38	+35 7.7	1.339	2.207	15.6	17.9	12 7	2 18.51	+ 4 12.2	2.492	3.290	11.6	20.4
169480	2002 <i>CX</i> ₁₃₇	11 4.4 334°53′	2°9′/ 2.6 18				162843	2001 <i>DN</i> ₁₃	11 4.4 235°27′	5°1′/ 7.3 18			
9 28	3 3.73	+13 50.2	1.232	2.084	19.0	19.4	9 28	3 12.12	+27 57.6	2.026	2.790	15.7	19.8
10 8	3 0.68	+12 46.2	1.162	2.079	14.7	19.1	10 8	3 6.48	+28 52.5	1.932	2.783	13.0	19.6
10 18	2 54.45	+11 27.7	1.112	2.075	9.6	18.8	10 18	2 58.06	+29 34.4	1.858	2.775	9.8	19.4
10 28	2 45.87	+10 1.3	1.085	2.071	4.5	18.5	10 28	2 47.46	+30 0.0	1.810	2.768	6.7	19.2
11 7	2 36.28	+ 8 36.3	1.082	2.068	4.0	18.5	11 7	2 35.74	+30 7.4	1.789	2.760	5.1	19.1
11 17	2 27.22	+ 7 23.1	1.105	2.065	9.0	18.8	11 17	2 24.15	+29 57.9	1.797	2.752	6.6	19.2
11 27	2 20.13	+ 6 30.4	1.152	2.063	14.1	19.1	11 27	2 14.02	+29 36.0	1.832	2.744	9.7	19.3
12 7	2 15.96	+ 6 2.4	1.218	2.060	18.6	19.4	12 7	2 6.33	+29 8.5	1.893	2.735	12.9	19.5
73144	2002 <i>GP</i> ₉₅	11 4.4 108°59′	2°4′/ 6.1 18				258006	2001 <i>FT</i> ₅₆	11 4.4 256°68′	3°9′/ 1.9 18			
9 28	3 8.31	+23 41.5	1.925	2.715	15.5	20.0	9 28	3 7.14	+ 8 45.0	1.653	2.486	15.8	20.6
10 8	3 3.08	+23 41.4	1.854	2.729	12.3	19.9	10 8	3 2.68	+ 7 57.6	1.565	2.471	12.3	20.4
10 18	2 55.45	+23 27.2	1.804	2.743	8.6	19.7	10 18	2 55.54	+ 7 4.0	1.498	2.455	8.3	20.1
10 28	2 46.14	+22 58.9	1.780	2.757	4.7	19.5	10 28	2 46.34	+ 6 9.3	1.456	2.438	4.6	19.9
11 7	2 36.21	+22 19.0	1.783	2.770	2.4	19.3	11 7	2 36.15	+ 5 20.0	1.442	2.422	4.6	19.8
11 17	2 26.78	+21 32.0	1.816	2.783	5.3	19.6	11 17	2 26.20	+ 4 42.4	1.455	2.404	8.5	20.0
11 27	2 18.89	+20 44.1	1.877	2.796	9.0	19.8	11 27	2 17.74	+ 4 21.9	1.494	2.387	12.8	20.2
12 7	2 13.25	+20 1.1	1.963	2.808	12.4	20.0	12 7	2 11.68	+ 4 21.0	1.555	2.369	16.6	20.4
159231	2005 <i>XF</i> ₆₀	11 4.4 172°24′	0°8′/ 3.9 18				42602	1998 <i>BX</i> ₆	11 4.4 287°65′	4°1′/ 2.2 18			

EPHEMERIDES

11 4.4

11 4.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
343762	2011 FC ₁₀₃	11	4.4	125°20	0°0/ 4.3	17	330977	2009 TY ₁₁	11	4.4	323°22	3°2/ 2.5	17
9 28	3 9.81	+16 46.3	1.919	2.725	15.0	21.6	9 28	3 5.31	+6 23.0	1.999	2.826	13.7	20.2
10 8	3 4.10	+16 33.1	1.850	2.740	11.6	21.4	10 8	3 0.75	+6 16.7	1.913	2.815	10.6	20.0
10 18	2 56.05	+16 10.6	1.804	2.755	7.6	21.2	10 18	2 53.99	+6 10.2	1.850	2.804	7.2	19.8
10 28	2 46.41	+15 40.6	1.784	2.769	3.3	21.0	10 28	2 45.61	+6 6.4	1.813	2.794	4.0	19.6
11 7	2 36.18	+15 6.5	1.793	2.783	1.2	20.9	11 7	2 36.47	+6 8.8	1.804	2.784	3.7	19.6
11 17	2 26.47	+14 32.7	1.832	2.796	5.5	21.2	11 17	2 27.57	+6 20.0	1.823	2.774	6.9	19.7
11 27	2 18.27	+14 4.1	1.899	2.809	9.5	21.5	11 27	2 19.88	+6 42.2	1.870	2.765	10.5	19.9
12 7	2 12.28	+13 44.6	1.990	2.820	12.8	21.7	12 7	2 14.15	+7 16.1	1.941	2.756	13.7	20.1
167977	2005 GC ₁₀	11	4.4	314°80	2°9/ 2.6	18	176712	2002 QB ₆₆	11	4.4	107°33	2°7/ 2.7	16
9 28	3 4.72	+9 44.0	1.739	2.573	15.1	19.8	9 28	3 11.32	+10 40.8	1.708	2.528	15.9	21.1
10 8	3 0.56	+9 14.7	1.661	2.568	11.7	19.6	10 8	3 5.28	+10 2.5	1.653	2.552	12.2	21.0
10 18	2 53.96	+8 40.4	1.605	2.563	7.7	19.3	10 18	2 56.80	+9 18.8	1.620	2.576	7.9	20.8
10 28	2 45.59	+8 5.1	1.574	2.558	3.9	19.1	10 28	2 46.71	+8 34.0	1.614	2.598	3.9	20.6
11 7	2 36.44	+7 34.0	1.570	2.553	3.6	19.1	11 7	2 36.15	+7 53.5	1.636	2.620	3.4	20.6
11 17	2 27.63	+7 11.7	1.594	2.548	7.3	19.3	11 17	2 26.27	+7 22.3	1.687	2.641	7.1	20.9
11 27	2 20.25	+7 2.3	1.643	2.544	11.3	19.5	11 27	2 18.12	+7 4.2	1.765	2.661	11.0	21.1
12 7	2 15.08	+7 8.0	1.716	2.540	14.9	19.7	12 7	2 12.34	+7 1.0	1.867	2.680	14.3	21.4
42863	1999 RD ₉₉	11	4.4	353°63	7°3/30.2	18	257092	2008 GW ₃₄	11	4.4	293°42	0°4/ 4.1	18
9 28	2 58.82	+4 32.0	1.312	2.176	17.2	18.3	9 28	3 3.37	+16 21.9	2.019	2.836	13.9	21.2
10 8	2 56.56	+2 48.6	1.250	2.171	13.5	18.0	10 8	2 59.24	+15 57.2	1.936	2.832	10.8	21.0
10 18	2 51.57	+1 0.7	1.209	2.166	9.8	17.8	10 18	2 52.96	+15 22.9	1.874	2.829	7.1	20.7
10 28	2 44.59	-0 40.8	1.191	2.163	7.4	17.7	10 28	2 45.14	+14 41.6	1.839	2.825	3.1	20.5
11 7	2 36.81	-2 4.7	1.198	2.161	8.4	17.7	11 7	2 36.66	+13 56.9	1.832	2.822	1.3	20.4
11 17	2 29.50	-3 2.0	1.229	2.159	11.8	17.9	11 17	2 28.47	+13 13.6	1.854	2.819	5.5	20.6
11 27	2 23.88	-3 28.1	1.282	2.159	15.6	18.2	11 27	2 21.54	+12 36.8	1.904	2.815	9.4	20.9
12 7	2 20.75	-3 23.2	1.354	2.160	19.1	18.4	12 7	2 16.55	+12 10.5	1.978	2.812	12.8	21.1
160001	Bakonybél	11	4.4	272°22	4°3/30.9	18	230810	2004 HJ ₁₂	11	4.4	249°96	4°1/ 7.2	18
9 28	3 0.04	+6 22.8	2.356	3.185	11.8	20.5	9 28	3 7.36	+27 51.8	1.687	2.473	17.5	20.7
10 8	2 56.30	+4 55.5	2.272	3.175	9.1	20.3	10 8	3 3.12	+27 52.3	1.596	2.465	14.3	20.5
10 18	2 50.84	+3 23.6	2.213	3.166	6.3	20.1	10 18	2 55.95	+27 33.0	1.525	2.456	10.5	20.2
10 28	2 44.16	+1 52.9	2.183	3.156	4.4	20.0	10 28	2 46.57	+26 52.2	1.477	2.447	6.5	20.0
11 7	2 36.97	+0 29.7	2.182	3.146	5.0	20.0	11 7	2 36.14	+25 51.6	1.456	2.438	4.1	19.8
11 17	2 30.01	-0 40.3	2.209	3.136	7.5	20.1	11 17	2 26.05	+24 36.6	1.462	2.428	6.4	19.9
11 27	2 24.03	-1 32.7	2.264	3.126	10.4	20.3	11 27	2 17.66	+23 16.1	1.495	2.418	10.5	20.2
12 7	2 19.60	-2 5.6	2.343	3.116	13.0	20.5	12 7	2 11.91	+21 59.7	1.552	2.408	14.5	20.4
13062	Podarkes	11	4.4	26°18	1°5/ 2.2	18	325691	2009 UP ₁₅	11	4.4	352°27	4°1/ 7.8	17
9 28	2 55.69	+8 26.1	4.305	5.117	7.2	18.3	9 28	3 3.18	+28 51.1	2.031	2.807	15.3	20.3
10 8	2 52.18	+8 5.8	4.222	5.117	5.5	18.2	10 8	2 59.33	+28 58.0	1.945	2.805	12.5	20.1
10 18	2 47.77	+7 44.2	4.164	5.117	3.6	18.1	10 18	2 53.14	+28 47.9	1.879	2.803	9.3	19.9
10 28	2 42.75	+7 23.0	4.136	5.118	1.9	18.0	10 28	2 45.26	+28 19.9	1.838	2.802	6.1	19.7
11 7	2 37.47	+7 3.9	4.138	5.118	1.9	18.0	11 7	2 36.62	+27 35.4	1.823	2.801	4.1	19.6
11 17	2 32.32	+6 48.6	4.171	5.119	3.5	18.1	11 17	2 28.31	+26 38.3	1.836	2.800	5.6	19.7
11 27	2 27.68	+6 38.7	4.234	5.119	5.4	18.2	11 27	2 21.36	+25 35.1	1.877	2.799	8.8	19.9
12 7	2 23.87	+6 35.3	4.323	5.119	7.1	18.3	12 7	2 16.54	+24 32.9	1.943	2.799	12.0	20.1
263057	2007 HU ₅₈	11	4.4	198°11	3°4/ 1.2	18	446729	2015 OW ₇₃	11	4.4	68°09	3°6/ 1.5	18
9 28	3 3.87	+3 39.5	2.902	3.714	10.3	21.3	9 28	3 2.99	+9 46.3	1.784	2.619	14.7	20.7
10 8	2 58.84	+3 10.5	2.818	3.711	8.0	21.2	10 8	2 58.94	+8 34.2	1.722	2.630	11.2	20.5
10 18	2 52.32	+2 41.9	2.760	3.707	5.6	21.0	10 18	2 52.71	+7 16.1	1.683	2.640	7.5	20.3
10 28	2 44.77	+2 16.7	2.730	3.702	3.7	20.9	10 28	2 44.99	+5 57.9	1.670	2.651	4.2	20.1
11 7	2 36.77	+1 58.0	2.730	3.698	3.9	20.9	11 7	2 36.75	+4 46.6	1.684	2.662	4.4	20.1
11 17	2 28.99	+1 48.5	2.761	3.692	5.9	21.0	11 17	2 28.99	+3 48.6	1.727	2.673	7.7	20.4
11 27	2 22.05	+1 49.8	2.820	3.687	8.4	21.2	11 27	2 22.65	+3 8.6	1.796	2.684	11.3	20.6
12 7	2 16.47	+2 2.8	2.904	3.681	10.6	21.3	12 7	2 18.35	+2 48.3	1.888	2.695	14.4	20.8
190179	2005 UT ₄₁₁	11	4.4	95°56	2°1/ 3.1	18	432571	2010 NY ₃₈	11	4.4	12°01	3°2/ 2.7	17
9 28	3 8.55	+11 53.6	1.640	2.468	16.2	20.2	9 28	3 2.18	+12 37.3	1.023	1.892	20.7	20.6
10 8	3 3.41	+11 25.3	1.579	2.482	12.4	20.0	10 8	2 59.89	+11 48.8	0.968	1.893	16.0	20.3
10 18	2 55.72	+10 50.5	1.540	2.497	8.1	19.8	10 18	2 54.11	+10 48.1	0.930	1.897	10.5	20.0
10 28	2 46.30	+10 13.0	1.526	2.511	3.7	19.6	10 28	2 45.79	+9 42.4	0.914	1.901	4.9	19.7
11 7	2 36.27	+9 37.7	1.539	2.525	2.9	19.5	11 7	2 36.46	+8 41.1	0.920	1.906	4.2	19.7
11 17	2 26.82	+9 9.7	1.581	2.539	7.0	19.8	11 17	2 27.85	+7 53.5	0.950	1.913	9.5	20.0
11 27	2 19.07	+8 53.2	1.649	2.553	11.1	20.1	11 27	2 21.50	+7 27.0	1.001	1.921	14.9	20.3
12 7	2 13.70	+8 50.8	1.740	2.566	14.6	20.4	12 7	2 18.32	+7 24.4	1.072	1.929	19.4	20.7
484186	2006 VK ₁	11	4.4	311°94	1°1/ 5.2	17	49105	1998 RT ₇₉	11	4.4	110°48	0°6/ 4.0	18
9 28	3 1.71	+21 13.8	1.752	2.568	15.8	21.6	9 28	3 10.58	+15 33.3	1.728	2.542	16.0	19.5
10 8	2 58.52	+20 47.7	1.656	2.549	12.5	21.4	10 8	3 4.87	+15 14.0	1.666	2.560	12.4	19.3
10 18	2 52.81	+20 5.6	1.580	2.531	8.5	21.1	10 18	2 56.63	+14 45.5	1.625	2.579	8.1	19.1
10 28	2 45.18	+19 8.9	1.529	2.513	4.1	20.8	10 28	2 46.69	+14 10.3	1.611	2.597	3.4	18.8
11 7	2 36.61	+18 1.7	1.505	2.495	1.4	20.6	11 7	2 36.17	+13 32.5	1.624	2.614	1.6	18.7
11 17	2 28.25	+16 50.0	1.509	2.478	5.8	20.8	11 17	2 26.26	+12 57.2	1.667	2.630	6.1	19.1
11 27	2 21.29	+15 42.0	1.539	2.461	10.4	21.1	11 27	2 18.05	+12 29.5	1.737	2.646	10.3	19.4
12 7	2 16.59	+14 44.5	1.593	2.444	14.4	21.3	12 7	2 12.23	+12 13.1	1.831	2.662	13.8	19.6
135011	2001 KR ₁₂	11	4.4	136°02	5°1/31.9	18	224690	2006 BV ₁₀	11	4.4	354°73	1°4/ 3.3	18
9 28	3 7.14	+1 27.3	2.093	2.914	13.3	19.8	9 28	3 2.65	+13 2.8	2.046	2.869	13.5	20.6

EPHEMERIDES

11 4.4

11 4.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
298163	2002 <i>TN</i> ₁₀₁	11 4.4 25°29'	3°1'/ 1.9	18			458572	2011 <i>EM</i> ₇₈	11 4.4 287°70'	1°4'/ 3.3	17		
9 28	3 0.44	+14 20.5	1.484	2.329	16.7	19.8	9 28	3 1.63	+13 23.7	2.332	3.149	12.3	21.9
10 8	2 57.45	+12 40.8	1.422	2.336	12.7	19.6	10 8	2 57.70	+12 52.1	2.234	3.133	9.5	21.7
10 18	2 51.94	+10 47.4	1.382	2.344	8.3	19.3	10 18	2 51.90	+12 13.5	2.160	3.116	6.2	21.4
10 28	2 44.71	+8 48.3	1.367	2.352	4.0	19.1	10 28	2 44.72	+11 30.6	2.114	3.099	2.8	21.2
11 7	2 36.87	+6 53.7	1.379	2.361	4.1	19.1	11 7	2 36.89	+10 47.1	2.096	3.083	2.0	21.1
11 17	2 29.60	+5 13.8	1.418	2.371	8.2	19.4	11 17	2 29.23	+10 7.2	2.107	3.066	5.4	21.3
11 27	2 23.94	+3 56.3	1.483	2.382	12.4	19.7	11 27	2 22.57	+9 35.2	2.147	3.049	8.9	21.5
12 7	2 20.59	+3 4.8	1.570	2.393	16.1	19.9	12 7	2 17.55	+9 14.2	2.211	3.033	12.1	21.7
19267	1995 <i>TB</i> ₈	11 4.4 200°36'	0°5'/ 4.8	18			272265	2005 <i>QP</i> ₁₈₂	11 4.4 297°14'	3°1'/ 2.4	18		
9 28	3 5.86	+19 1.4	1.931	2.739	14.8	18.5	9 28	3 4.01	+12 6.9	1.495	2.336	16.8	21.3
10 8	3 1.29	+18 43.0	1.847	2.737	11.6	18.3	10 8	3 0.45	+11 9.1	1.417	2.328	13.0	21.1
10 18	2 54.39	+18 12.9	1.785	2.736	7.8	18.1	10 18	2 54.14	+10 0.8	1.359	2.320	8.6	20.8
10 28	2 45.80	+17 32.6	1.749	2.734	3.5	17.8	10 28	2 45.79	+8 47.5	1.326	2.312	4.2	20.5
11 7	2 36.48	+16 45.7	1.742	2.732	1.1	17.7	11 7	2 36.53	+7 36.8	1.320	2.304	3.9	20.5
11 17	2 27.49	+15 57.2	1.763	2.729	5.4	18.0	11 17	2 27.65	+6 36.7	1.340	2.296	8.3	20.7
11 27	2 19.89	+15 12.8	1.812	2.727	9.5	18.2	11 27	2 20.40	+5 54.0	1.385	2.288	12.8	21.0
12 7	2 14.42	+14 37.5	1.885	2.724	13.1	18.4	12 7	2 15.64	+5 32.5	1.452	2.281	16.8	21.2
345005	2005 <i>CK</i> ₅	11 4.4 276°48'	7°8'/29.0	18			290332	2005 <i>SZ</i> ₂₂₆	11 4.4 276°48'	1°2'/ 5.2	18		
9 28	3 3.80	- 2 0.2	1.885	2.717	14.1	20.7	9 28	3 5.67	+19 23.8	2.085	2.887	14.1	21.6
10 8	2 59.77	- 3 26.7	1.800	2.696	11.5	20.4	10 8	3 1.07	+19 29.7	1.997	2.883	11.1	21.4
10 18	2 53.45	- 4 51.9	1.738	2.674	9.0	20.2	10 18	2 54.24	+19 25.9	1.931	2.879	7.5	21.2
10 28	2 45.43	- 6 7.8	1.701	2.652	7.8	20.1	10 28	2 45.77	+19 12.8	1.892	2.874	3.6	20.9
11 7	2 36.59	- 7 6.3	1.691	2.630	8.7	20.1	11 7	2 36.55	+18 52.5	1.881	2.870	1.4	20.7
11 17	2 27.93	- 7 41.4	1.708	2.607	11.2	20.2	11 17	2 27.59	+18 28.1	1.898	2.866	5.0	21.0
11 27	2 20.51	- 7 49.8	1.748	2.584	14.2	20.4	11 27	2 19.88	+18 4.3	1.944	2.862	8.9	21.2
12 7	2 15.10	- 7 31.9	1.808	2.561	17.0	20.5	12 7	2 14.18	+17 45.3	2.016	2.857	12.2	21.4
434010	2000 <i>XB</i> ₁₄	11 4.4 20°85'	1°8'/ 3.5	16			293781	2007 <i>RA</i> ₁₂₄	11 4.4 56°09'	2°5'/ 5.9	17		
9 28	3 3.90	+12 57.1	1.186	2.041	19.3	20.4	9 28	3 9.57	+23 39.7	1.105	1.935	22.1	20.4
10 8	3 0.75	+12 42.7	1.132	2.050	14.9	20.2	10 8	3 5.33	+23 26.2	1.058	1.957	17.5	20.2
10 18	2 54.43	+12 19.5	1.097	2.060	9.7	19.9	10 18	2 57.48	+22 50.3	1.029	1.980	12.0	20.0
10 28	2 45.87	+11 51.6	1.084	2.071	4.2	19.6	10 28	2 47.17	+21 53.3	1.021	2.003	6.2	19.7
11 7	2 36.48	+11 24.8	1.095	2.084	2.7	19.6	11 7	2 36.14	+20 41.4	1.037	2.026	2.6	19.6
11 17	2 27.79	+11 4.9	1.131	2.097	7.9	19.9	11 17	2 26.17	+19 24.4	1.079	2.050	7.2	19.9
11 27	2 21.16	+10 57.1	1.191	2.112	12.8	20.3	11 27	2 18.75	+18 13.6	1.144	2.073	12.4	20.3
12 7	2 17.43	+11 4.4	1.272	2.128	17.1	20.6	12 7	2 14.67	+17 17.4	1.231	2.097	16.8	20.7
271018	2003 <i>AV</i> ₁₅	11 4.4 322°38'	1°7'/ 3.6	18			66375	1999 <i>JF</i> ₁₂₁	11 4.4 50°63'	6°8'/ 1.6	18		
9 28	3 7.73	+11 55.9	1.406	2.245	17.7	20.2	9 28	3 9.77	+ 2 43.5	1.162	2.015	19.7	17.9
10 8	3 3.59	+11 54.7	1.328	2.237	13.8	20.0	10 8	3 5.06	+ 2 2.2	1.118	2.031	15.4	17.7
10 18	2 56.37	+11 47.5	1.271	2.230	9.2	19.7	10 18	2 57.12	+ 1 23.9	1.092	2.048	10.8	17.5
10 28	2 46.80	+11 36.9	1.236	2.223	4.1	19.4	10 28	2 47.00	+ 0 56.5	1.090	2.065	7.3	17.4
11 7	2 36.11	+11 26.8	1.228	2.216	2.6	19.3	11 7	2 36.20	+ 0 46.9	1.111	2.082	7.4	17.5
11 17	2 25.79	+11 21.7	1.246	2.210	7.6	19.5	11 17	2 26.30	+ 0 58.9	1.157	2.100	10.9	17.7
11 27	2 17.26	+11 26.1	1.289	2.204	12.6	19.8	11 27	2 18.66	+ 1 33.2	1.226	2.118	15.0	18.0
12 7	2 11.54	+11 42.8	1.354	2.199	16.9	20.1	12 7	2 14.02	+ 2 27.4	1.315	2.137	18.7	18.3
201149	2002 <i>JP</i> ₁₃₈	11 4.4 286°18'	0°4'/ 4.7	18			72543	Simonemarchi	11 4.4 269°50'	6°4'/30.8	18		
9 28	3 4.00	+19 33.4	1.719	2.537	15.9	20.7	9 28	3 4.30	+ 1 36.1	1.776	2.613	14.7	19.6
10 8	3 0.32	+19 2.3	1.624	2.520	12.6	20.4	10 8	3 0.15	+ 0 28.0	1.702	2.605	11.6	19.3
10 18	2 54.02	+18 16.2	1.550	2.503	8.5	20.1	10 18	2 53.68	- 0 39.8	1.650	2.598	8.6	19.1
10 28	2 45.74	+17 16.7	1.501	2.486	3.8	19.8	10 28	2 45.54	- 1 40.2	1.624	2.590	6.5	19.0
11 7	2 36.49	+16 8.6	1.479	2.470	1.2	19.6	11 7	2 36.67	- 2 26.2	1.625	2.583	7.2	19.0
11 17	2 27.47	+14 58.3	1.485	2.453	6.2	19.9	11 17	2 28.13	- 2 52.4	1.653	2.575	9.9	19.2
11 27	2 19.89	+13 53.8	1.518	2.436	10.8	20.1	11 27	2 20.96	- 2 55.8	1.705	2.567	13.1	19.4
12 7	2 14.66	+13 1.7	1.574	2.419	14.9	20.3	12 7	2 15.91	- 2 36.7	1.778	2.560	16.2	19.6
452432	2003 <i>EA</i> ₃₀	11 4.4 300°38'	5°4'/31.2	18			330582	2008 <i>CY</i> ₁₀₈	11 4.4 107°28'	2°1'/ 3.0	16		
9 28	3 1.75	+ 4 31.4	1.839	2.679	14.2	20.9	9 28	3 8.32	+13 40.3	1.632	2.457	16.3	21.1
10 8	2 58.23	+ 3 21.7	1.752	2.660	11.1	20.6	10 8	3 3.24	+12 48.1	1.572	2.474	12.5	20.9
10 18	2 52.46	+ 2 8.6	1.688	2.641	7.9	20.4	10 18	2 55.63	+11 46.4	1.533	2.490	8.1	20.7
10 28	2 45.01	+ 0 58.7	1.650	2.622	5.6	20.2	10 28	2 46.31	+10 40.2	1.520	2.506	3.6	20.5
11 7	2 36.76	- 0 1.0	1.639	2.604	6.2	20.2	11 7	2 36.44	+ 9 35.9	1.536	2.522	2.9	20.4
11 17	2 28.73	- 0 44.0	1.654	2.586	9.2	20.4	11 17	2 27.20	+ 8 40.0	1.579	2.537	7.0	20.7
11 27	2 21.93	- 1 6.0	1.695	2.568	12.7	20.5	11 27	2 19.65	+ 7 58.3	1.649	2.551	11.2	21.0
12 7	2 17.14	- 1 5.6	1.758	2.550	15.9	20.7	12 7	2 14.50	+ 7 33.8	1.742	2.565	14.7	21.3
308950	2006 <i>TJ</i> ₁₆	11 4.4 346°99'	0°9'/ 3.8	18			448041	2008 <i>EX</i> ₁₅₆	11 4.4 190°46'	1°4'/ 3.4	18		
9 28	3 2.55	+15 52.8	1.719	2.548	15.5	20.5	9 28	3 4.25	+13 12.3	2.069	2.888	13.6	21.8
10 8	2 58.97	+15 20.6	1.641	2.544	12.0	20.2	10 8	2 59.83	+12 48.6	1.989	2.888	10.4	21.6
10 18	2 52.97	+14 37.5	1.584	2.541	7.9	20.0	10 18	2 53.32	+12 18.2	1.932	2.888	6.8	21.3
10 28	2 45.22	+13 46.6	1.552	2.539	3.4	19.7	10 28	2 45.35	+11 44.0	1.902	2.888	3.0	21.1
11 7	2 36.71	+12 53.0	1.547	2.536	1.8	19.6	11 7	2 36.75	+11 9.8	1.900	2.888	2.0	21.0
11 17	2 28.57	+12 2.7	1.570	2.534	6.3	19.9	11 17	2 28.46	+10 39.6	1.928	2.888	5.7	21.3
11 27	2 21.87	+11 21.6	1.620	2.533	10.6	20.1	11 27	2 21.41	+10 17.6	1.982	2.887	9.4	21.5
12 7	2 17.38	+10 54.2	1.692	2.532	14.3	20.4	12 7	2 16.24	+10 6.6	2.062	2.887	12.7	21.7
476891	2008 <i>VJ</i> ₇₈	11 4.4 330°47'	2°2'/ 3.1	18			267652	2002 <i>TX</i> ₃₅	11 4.4 61°69'	0°5'/ 4.7	18		
9 28	2 58.66	+14 28.5	1.251	2.109	18.3	20.3	9 28	3 10.57	+17 34.5	1.318	2.147	19.3	20.1
10 8	2 57.01	+13 44.8	1.165	2.085	14.3	19.9	10 8	3 5.60	+17 36.4	1.265	2.166	15.0	19.9
10 18	2 52.29	+12 46.2	1.098	2.063	9.5	19.6	10 18	2 57.48	+17 25.8	1.231	2.186	9.9	19.7
10 28	2 45.13	+11 37.3	1.054	2.041	4.2	19.2	10 28	2 47.18	+17 4.5	1.221	2.206	4.4	19.4
11 7	2 36.71	+10 25.8	1.034	2.021	3.2	19.1	11 7	2 36.15	+16 36.3	1.236	2.227	1.4	19.3
11 17	2 28.50	+ 9 21.2	1.038	2.002	8.6	19.4	11 17	2 25.94	+16 6.9	1.279	2.247	6.7	19.7

EPHEMERIDES

11 4.4

11 4.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
518805	2010 BG ₁₁₂		11 4.4 313°80	3°8/ 1.7 17			328767	2009 UD ₁₀₂		11 4.4 312°04	2°1/ 3.0 18		
9 28	3 2.06	+ 6 33.3	2.022	2.855	13.3	21.0	9 28	3 4.61	+ 9 41.3	2.189	3.010	12.9	20.2
10 8	2 58.27	+ 5 57.1	1.934	2.839	10.3	20.8	10 8	3 0.03	+ 9 31.3	2.106	3.005	9.9	20.0
10 18	2 52.40	+ 5 18.4	1.869	2.824	7.1	20.5	10 18	2 53.44	+ 9 18.3	2.045	3.000	6.6	19.7
10 28	2 44.99	+ 4 41.6	1.829	2.809	4.2	20.3	10 28	2 45.42	+ 9 4.9	2.011	2.996	3.2	19.5
11 7	2 36.86	+ 4 11.3	1.818	2.794	4.4	20.3	11 7	2 36.76	+ 8 54.2	2.006	2.991	2.6	19.5
11 17	2 28.93	+ 3 52.0	1.834	2.779	7.4	20.5	11 17	2 28.36	+ 8 49.0	2.031	2.986	5.9	19.7
11 27	2 22.14	+ 3 47.1	1.877	2.765	10.8	20.7	11 27	2 21.07	+ 8 52.2	2.083	2.982	9.3	19.9
12 7	2 17.21	+ 3 57.8	1.943	2.751	14.0	20.8	12 7	2 15.59	+ 9 5.4	2.159	2.978	12.4	20.1
65712	Schneidmüller		11 4.4 47°42	3°5/ 1.6 18			80703	2000 CJ ₅		11 4.5 6°70	0°3/ 4.3 18		
9 28	3 1.82	+ 9 17.2	1.870	2.705	14.1	18.6	9 28	2 58.96	+17 47.6	1.171	2.027	19.5	17.9
10 8	2 57.88	+ 8 9.3	1.818	2.725	10.8	18.5	10 8	2 57.16	+17 19.2	1.110	2.027	15.1	17.6
10 18	2 51.94	+ 6 56.8	1.788	2.746	7.1	18.3	10 18	2 52.24	+16 34.5	1.067	2.030	10.0	17.3
10 28	2 44.68	+ 5 45.7	1.786	2.767	4.0	18.1	10 28	2 45.04	+15 37.4	1.046	2.034	4.3	17.0
11 7	2 37.01	+ 4 42.1	1.811	2.788	4.2	18.2	11 7	2 36.92	+14 34.9	1.049	2.039	1.6	16.9
11 17	2 29.86	+ 3 51.4	1.864	2.809	7.3	18.4	11 17	2 29.38	+13 35.6	1.077	2.047	7.4	17.3
11 27	2 24.05	+ 3 17.5	1.944	2.831	10.6	18.7	11 27	2 23.80	+12 48.1	1.127	2.055	12.6	17.6
12 7	2 20.15	+ 3 1.7	2.046	2.853	13.4	18.9	12 7	2 21.06	+12 18.1	1.198	2.066	17.1	17.9
445791	2012 AN ₁₄		11 4.4 3°74	7°1/31.1 17			480374	2015 KL ₃₆		11 4.5 8°01	12°5/28.3 18		
9 28	3 3.15	+ 0 4.4	1.564	2.411	15.9	20.5	9 28	3 9.56	-16 30.5	1.698	2.499	16.8	20.0
10 8	2 59.46	- 0 51.7	1.503	2.410	12.6	20.3	10 8	3 4.19	-17 35.9	1.647	2.499	14.8	19.9
10 18	2 53.29	- 1 44.4	1.462	2.410	9.4	20.2	10 18	2 56.28	-18 23.1	1.616	2.499	13.2	19.8
10 28	2 45.37	- 2 26.2	1.446	2.411	7.3	20.0	10 28	2 46.64	-18 43.0	1.608	2.500	12.5	19.8
11 7	2 36.76	- 2 50.5	1.455	2.413	7.8	20.1	11 7	2 36.39	-18 29.9	1.623	2.500	13.1	19.8
11 17	2 28.60	- 2 52.7	1.490	2.415	10.5	20.2	11 17	2 26.73	-17 42.1	1.660	2.501	14.7	19.9
11 27	2 21.99	- 2 31.5	1.548	2.418	13.8	20.5	11 27	2 18.74	-16 22.3	1.720	2.502	16.7	20.1
12 7	2 17.65	- 1 48.3	1.626	2.421	16.9	20.7	12 7	2 13.13	-14 36.4	1.798	2.503	18.7	20.2
403420	2009 SZ ₁₀₀		11 4.4 23°63	6°2/ 9.1 18			475411	2006 KA ₁₂		11 4.5 75°30	7°2/30.5 18		
9 28	3 7.03	+33 2.1	2.057	2.806	15.9	21.2	9 28	3 5.29	- 0 38.4	1.702	2.539	15.2	20.8
10 8	3 2.48	+33 45.8	1.974	2.809	13.4	21.0	10 8	3 0.75	- 1 52.8	1.652	2.552	12.1	20.7
10 18	2 55.35	+34 12.2	1.912	2.812	10.6	20.8	10 18	2 53.93	- 3 3.2	1.623	2.566	9.1	20.5
10 28	2 46.32	+34 18.1	1.873	2.816	7.8	20.7	10 28	2 45.59	- 4 1.8	1.620	2.579	7.3	20.4
11 7	2 36.41	+34 2.7	1.861	2.820	6.2	20.6	11 7	2 36.76	- 4 42.1	1.644	2.593	7.9	20.5
11 17	2 26.81	+33 28.4	1.875	2.824	6.9	20.6	11 17	2 28.48	- 4 59.7	1.693	2.606	10.4	20.7
11 27	2 18.71	+32 40.7	1.917	2.828	9.3	20.8	11 27	2 21.71	- 4 53.4	1.767	2.619	13.3	20.9
12 7	2 12.93	+31 47.2	1.983	2.833	12.1	21.0	12 7	2 17.09	- 4 24.7	1.861	2.633	15.9	21.1
492384	2014 HF ₁₄₃		11 4.4 317°98	2°3/ 3.1 18			482292	2011 TV ₁₁		11 4.5 347°19	2°7/ 5.5 18		
9 28	3 6.23	+10 35.2	1.686	2.517	15.6	21.2	9 28	3 9.33	+18 47.9	1.465	2.286	18.1	20.1
10 8	3 1.87	+10 20.2	1.607	2.512	12.1	21.0	10 8	3 5.02	+19 47.8	1.384	2.278	14.4	19.8
10 18	2 54.95	+10 0.3	1.549	2.507	8.0	20.7	10 18	2 57.50	+20 40.1	1.322	2.271	10.0	19.5
10 28	2 46.14	+ 9 38.8	1.517	2.502	3.8	20.4	10 28	2 47.43	+21 22.4	1.285	2.265	5.3	19.3
11 7	2 36.47	+ 9 19.8	1.512	2.497	3.0	20.4	11 7	2 36.05	+21 53.6	1.273	2.260	2.8	19.1
11 17	2 27.15	+ 9 7.7	1.534	2.493	7.1	20.6	11 17	2 24.91	+22 14.5	1.288	2.256	6.7	19.3
11 27	2 19.31	+ 9 6.3	1.583	2.489	11.3	20.9	11 27	2 15.58	+22 29.2	1.329	2.253	11.5	19.6
12 7	2 13.80	+ 9 17.8	1.654	2.484	15.0	21.1	12 7	2 9.16	+22 42.9	1.393	2.251	15.7	19.8
57199	2001 QS ₄₇		11 4.4 349°96	5°4/ 7.6 18			82652	2001 PZ ₁₂		11 4.5 95°43	3°8/ 1.9 18		
9 28	3 4.92	+28 4.0	1.324	2.134	20.3	18.5	9 28	3 7.12	+ 5 44.8	1.957	2.781	14.0	19.9
10 8	3 1.95	+28 30.8	1.248	2.129	16.7	18.2	10 8	3 1.95	+ 5 17.3	1.893	2.794	10.8	19.7
10 18	2 55.58	+28 36.0	1.190	2.125	12.4	18.0	10 18	2 54.65	+ 4 49.2	1.853	2.806	7.3	19.5
10 28	2 46.57	+28 16.4	1.153	2.122	8.1	17.7	10 28	2 45.91	+ 4 24.7	1.839	2.818	4.4	19.4
11 7	2 36.32	+27 32.8	1.139	2.119	5.4	17.6	11 7	2 36.65	+ 4 7.8	1.854	2.829	4.4	19.4
11 17	2 26.52	+26 30.5	1.150	2.117	7.6	17.7	11 17	2 27.84	+ 4 2.0	1.897	2.841	7.3	19.6
11 27	2 18.79	+25 19.7	1.186	2.116	11.9	17.9	11 27	2 20.41	+ 4 9.4	1.967	2.852	10.5	19.8
12 7	2 14.22	+24 11.4	1.244	2.116	16.2	18.2	12 7	2 14.97	+ 4 30.6	2.060	2.864	13.5	20.0
491546	2012 LO ₁₉		11 4.4 222°76	4°3/31.5 18			119086	2001 NR ₁₉		11 4.5 46°73	0°9/ 3.9 18		
9 28	3 3.90	+ 0 24.6	2.886	3.698	10.3	22.4	9 28	3 7.07	+16 19.2	1.211	2.054	19.8	19.5
10 8	2 58.94	- 0 6.2	2.800	3.689	8.1	22.2	10 8	3 3.00	+15 48.4	1.165	2.076	15.2	19.3
10 18	2 52.46	- 0 34.9	2.740	3.680	5.9	22.1	10 18	2 55.77	+15 4.6	1.137	2.097	9.9	19.0
10 28	2 44.92	- 0 58.1	2.707	3.670	4.4	22.0	10 28	2 46.45	+14 12.0	1.133	2.120	4.2	18.8
11 7	2 36.92	- 1 12.4	2.704	3.660	4.7	22.0	11 7	2 36.50	+13 17.6	1.154	2.143	2.0	18.7
11 17	2 29.10	- 1 15.4	2.730	3.650	6.6	22.1	11 17	2 27.43	+12 28.8	1.200	2.167	7.4	19.1
11 27	2 22.12	- 1 5.7	2.785	3.639	8.9	22.2	11 27	2 20.54	+11 52.7	1.271	2.190	12.3	19.5
12 7	2 16.50	- 0 42.9	2.865	3.628	11.1	22.4	12 7	2 16.55	+11 33.2	1.363	2.215	16.4	19.8
475946	2007 EK ₁₉₂		11 4.4 210°70	0°3/ 4.6 18			474255	2001 ST ₂₄₄		11 4.5 338°02	1°6/ 5.0 18		
9 28	3 8.40	+17 52.8	1.972	2.776	14.7	22.0	9 28	3 3.05	+17 2.0	1.113	1.967	20.4	20.0
10 8	3 3.29	+17 40.6	1.882	2.771	11.5	21.8	10 8	3 1.03	+17 40.7	1.032	1.948	16.2	19.7
10 18	2 55.77	+17 18.1	1.815	2.765	7.7	21.6	10 18	2 55.36	+18 10.2	0.969	1.929	11.1	19.4
10 28	2 46.48	+16 46.6	1.773	2.758	3.4	21.3	10 28	2 46.67	+18 29.8	0.927	1.912	5.4	19.0
11 7	2 36.37	+16 9.0	1.761	2.751	1.1	21.1	11 7	2 36.31	+18 40.2	0.907	1.897	2.0	18.7
11 17	2 26.55	+15 29.9	1.778	2.743	5.5	21.4	11 17	2 26.11	+18 44.4	0.911	1.884	7.8	19.0
11 27	2 18.09	+14 54.6	1.822	2.735	9.7	21.6	11 27	2 17.97	+18 48.4	0.937	1.872	13.8	19.3
12 7	2 11.79	+14 27.7	1.892	2.726	13.3	21.8	12 7	2 13.26	+18 58.3	0.983	1.862	19.0	19.6
2689	Bruxelles		11 4.4 202°73	1°9/ 3.2 18			180374	2003 YW ₁₂₇		11 4.5 306°69	1°7/ 5.2 18		
9 28	3 7.73	+14 23.0	1.666	2.490	16.1	17.4	9 28	3 8.27	+18 53.9	1.365	2.193	18.8	20.1
10 8	3 3.05	+13 33.6	1.586	2.487	12.5	17.1	10 8	3 4.42	+19 15.9	1.281	2.180	14.9	19.9
10 18	2 55.73	+12 32.9	1.527	2.484	8.2	16.9	10 18	2 57.23	+19 26.3	1.215	2.168	10.3	19.6
10 28	2 46.48	+11 25.1	1.494	2.480	3.6	16.6	10 28	2 47.36	+19 24.4	1.172	2.156	5.0	19.2
11 7	2 36.40	+10 16.5	1.489	2.475	2.7	16.5	11 7	2 36.10	+19 11.6	1.154	2.144	2.0	19.0
11 17	2 26.73	+ 9 14.2	1.511	2.470	7.1	16.8	11 17	2 25.09	+18 52.1	1.163	2.132	7.0	19.3
11 27	2 18.64	+ 8 24.9	1.561	2.465	11.6	17.0	11 27	2 15.96	+18 32.3	1.196	2.121	12.3	19.6
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
158121	2001 <i>DU</i> ₃₁		11 4.5 237°83		5°9/29.4 18		336713	2010 <i>CF</i> ₁₂₇		11 4.5 147°24	3°3/ 7.6 17		
9 28	3 1.59	- 2 5.4	2.554	3.375	11.2	20.9	9 28	3 3.24	+28 8.1	2.771	3.529	12.0	21.2
10 8	2 57.39	- 3 16.4	2.475	3.365	9.0	20.7	10 8	2 58.77	+28 20.1	2.680	3.530	9.8	21.0
10 18	2 51.56	- 4 25.0	2.422	3.355	7.0	20.6	10 18	2 52.54	+28 20.0	2.612	3.531	7.3	20.9
10 28	2 44.58	- 5 25.9	2.395	3.344	6.0	20.5	10 28	2 45.05	+28 7.1	2.569	3.531	4.7	20.7
11 7	2 37.11	- 6 13.7	2.397	3.334	6.6	20.5	11 7	2 37.01	+27 42.4	2.556	3.532	3.3	20.6
11 17	2 29.84	- 6 44.8	2.427	3.323	8.5	20.6	11 17	2 29.20	+27 8.2	2.572	3.532	4.5	20.7
11 27	2 23.50	- 6 56.9	2.483	3.311	10.7	20.8	11 27	2 22.36	+26 28.5	2.617	3.533	6.9	20.8
12 7	2 18.61	- 6 50.0	2.561	3.300	12.9	20.9	12 7	2 17.11	+25 47.8	2.689	3.533	9.4	21.0
340127	2005 <i>XG</i> ₁₈		11 4.5 280°36	2°2/ 3.1 18			216106	2006 <i>RN</i> ₄₆		11 4.5 90°67	0°3/ 4.7 18		
9 28	3 5.85	+12 14.1	1.659	2.490	15.8	21.1	9 28	3 6.26	+17 32.4	1.937	2.748	14.7	21.1
10 8	3 1.79	+11 43.8	1.569	2.474	12.3	20.9	10 8	3 1.56	+17 25.8	1.862	2.754	11.4	20.9
10 18	2 55.06	+11 5.3	1.500	2.458	8.2	20.6	10 18	2 54.57	+17 9.6	1.809	2.760	7.6	20.6
10 28	2 46.28	+10 22.1	1.456	2.442	3.8	20.3	10 28	2 45.97	+16 45.4	1.781	2.766	3.4	20.4
11 7	2 36.50	+ 9 39.5	1.439	2.426	3.0	20.2	11 7	2 36.71	+16 16.1	1.782	2.772	1.1	20.2
11 17	2 26.94	+ 9 3.2	1.450	2.409	7.4	20.5	11 17	2 27.84	+15 45.9	1.812	2.778	5.3	20.5
11 27	2 18.84	+ 8 39.0	1.487	2.393	11.9	20.7	11 27	2 20.36	+15 19.4	1.869	2.784	9.3	20.8
12 7	2 13.12	+ 8 30.4	1.546	2.377	15.9	20.9	12 7	2 14.97	+15 0.8	1.951	2.790	12.7	21.0
491589	2012 <i>SS</i> ₂₁		11 4.5 92°15	0°4/ 4.7 16			365372	2009 <i>TR</i> ₃₇		11 4.5 34°43	0°5/ 4.9 18		
9 28	3 8.96	+18 49.1	1.670	2.482	16.6	22.1	9 28	3 1.85	+20 24.6	1.994	2.803	14.3	20.4
10 8	3 3.79	+18 29.8	1.608	2.501	12.9	21.9	10 8	2 58.09	+19 48.5	1.919	2.810	11.2	20.3
10 18	2 56.05	+17 58.1	1.568	2.519	8.5	21.7	10 18	2 52.24	+18 59.3	1.866	2.816	7.5	20.0
10 28	2 46.56	+17 16.0	1.552	2.537	3.8	21.4	10 28	2 44.94	+17 59.4	1.839	2.823	3.4	19.8
11 7	2 36.47	+16 27.9	1.565	2.555	1.2	21.3	11 7	2 37.08	+16 53.3	1.840	2.830	1.0	19.6
11 17	2 27.00	+15 39.4	1.605	2.572	5.8	21.6	11 17	2 29.62	+15 46.6	1.870	2.837	5.1	19.9
11 27	2 19.26	+14 56.8	1.673	2.589	10.1	21.9	11 27	2 23.45	+14 45.5	1.928	2.845	8.9	20.2
12 7	2 13.95	+14 25.0	1.765	2.606	13.7	22.2	12 7	2 19.21	+13 55.0	2.010	2.853	12.2	20.4
295344	2008 <i>HK</i> ₁₇		11 4.5 57°00	0°0/ 4.4 18			452756	2006 <i>BB</i> ₂₄₉		11 4.5 236°73	0°0/ 4.4 17		
9 28	3 5.76	+20 7.5	1.336	2.167	19.0	20.0	9 28	3 3.45	+17 9.3	2.549	3.350	11.8	22.3
10 8	3 1.90	+19 18.0	1.278	2.181	14.7	19.8	10 8	2 58.96	+16 55.0	2.454	3.342	9.2	22.1
10 18	2 55.05	+18 10.4	1.240	2.196	9.7	19.5	10 18	2 52.69	+16 32.9	2.383	3.333	6.1	21.9
10 28	2 46.17	+16 48.9	1.226	2.212	4.3	19.2	10 28	2 45.14	+16 4.3	2.340	3.325	2.7	21.6
11 7	2 36.61	+15 21.2	1.238	2.228	1.4	19.1	11 7	2 37.00	+15 32.0	2.326	3.316	0.9	21.5
11 17	2 27.80	+13 56.6	1.276	2.244	6.8	19.5	11 17	2 29.06	+14 59.1	2.342	3.307	4.5	21.7
11 27	2 20.99	+12 44.4	1.339	2.260	11.7	19.8	11 27	2 22.08	+14 29.5	2.387	3.297	7.8	21.9
12 7	2 16.93	+11 50.7	1.425	2.276	15.9	20.1	12 7	2 16.69	+14 6.5	2.458	3.288	10.7	22.1
144217	2004 <i>CD</i> ₁₈		11 4.5 133°90	1°5/ 3.4 18			239147	2006 <i>JT</i> ₄₈		11 4.5 112°93	0°6/ 4.1 18		
9 28	3 4.98	+13 17.2	1.986	2.807	14.0	20.0	9 28	3 10.62	+13 42.0	2.014	2.821	14.3	20.5
10 8	3 0.46	+12 48.2	1.910	2.810	10.8	19.8	10 8	3 4.69	+13 46.3	1.944	2.836	11.0	20.3
10 18	2 53.78	+12 11.9	1.857	2.813	7.1	19.6	10 18	2 56.51	+13 44.9	1.898	2.850	7.2	20.1
10 28	2 45.59	+11 31.6	1.830	2.816	3.1	19.4	10 28	2 46.78	+13 39.2	1.879	2.865	3.1	19.9
11 7	2 36.79	+10 51.4	1.832	2.819	2.2	19.3	11 7	2 36.47	+13 31.8	1.889	2.879	1.4	19.8
11 17	2 28.35	+10 15.9	1.862	2.822	6.0	19.6	11 17	2 26.61	+13 25.4	1.929	2.892	5.5	20.1
11 27	2 21.21	+ 9 49.6	1.920	2.824	9.7	19.8	11 27	2 18.18	+13 23.4	1.998	2.905	9.2	20.3
12 7	2 16.04	+ 9 35.4	2.002	2.827	13.0	20.0	12 7	2 11.86	+13 28.5	2.092	2.918	12.5	20.6
155140	2005 <i>UD</i>		11 4.5 193°52	9°8/ 8.6 18 R			105137	2000 <i>NA</i> ₆		11 4.5 18°67	3°5/ 6.8 18		
9 28	3 58.83	+38 0.2	1.741	2.384	21.7	21.5	9 28	2 59.28	+25 39.5	1.126	1.964	21.3	17.0
10 8	3 45.02	+39 20.5	1.626	2.387	18.9	21.3	10 8	2 57.49	+25 31.0	1.080	1.982	16.9	16.8
10 18	3 25.14	+40 18.3	1.531	2.385	15.5	21.1	10 18	2 52.42	+24 58.3	1.052	2.001	11.9	16.5
10 28	2 59.94	+40 37.0	1.463	2.378	11.9	20.8	10 28	2 45.11	+24 2.7	1.044	2.023	6.7	16.3
11 7	2 31.78	+40 3.4	1.427	2.367	9.8	20.7	11 7	2 37.07	+22 50.5	1.059	2.046	3.5	16.2
11 17	2 4.13	+38 36.3	1.427	2.351	11.0	20.7	11 17	2 29.86	+21 30.9	1.099	2.072	6.8	16.5
11 27	1 40.32	+36 30.8	1.461	2.330	14.5	20.9	11 27	2 24.80	+20 15.0	1.162	2.098	11.5	16.8
12 7	1 22.19	+34 10.7	1.524	2.305	18.4	21.1	12 7	2 22.63	+19 11.7	1.248	2.127	15.7	17.2
24438	<i>Michaeloy</i>		11 4.5 338°58	3°7/ 6.7 18			159405	1999 <i>JG</i> ₁₁₀		11 4.5 65°17	3°0/ 6.8 18		
9 28	3 4.54	+25 45.6	1.366	2.181	19.4	18.5	9 28	3 9.66	+27 37.3	1.543	2.333	18.7	19.6
10 8	3 1.48	+25 47.5	1.287	2.175	15.7	18.2	10 8	3 4.42	+26 59.5	1.493	2.366	14.8	19.5
10 18	2 55.18	+25 28.2	1.227	2.169	11.3	17.9	10 18	2 56.43	+25 59.7	1.463	2.399	10.4	19.3
10 28	2 46.41	+24 46.7	1.188	2.165	6.6	17.7	10 28	2 46.70	+24 39.8	1.457	2.432	5.9	19.1
11 7	2 36.51	+23 45.6	1.175	2.160	3.7	17.5	11 7	2 36.57	+23 5.8	1.479	2.465	3.0	19.0
11 17	2 27.04	+22 31.9	1.186	2.156	6.9	17.7	11 17	2 27.37	+21 26.4	1.528	2.497	5.8	19.3
11 27	2 19.52	+21 15.7	1.223	2.153	11.7	17.9	11 27	2 20.18	+19 51.7	1.605	2.529	9.9	19.6
12 7	2 14.98	+20 7.2	1.282	2.150	16.1	18.2	12 7	2 15.63	+18 29.5	1.707	2.560	13.5	19.9
147832	2005 <i>TV</i> ₂₆		11 4.5 135°65	0°2/ 4.3 18			510222	2011 <i>EZ</i> ₁₈		11 4.5 274°35	3°0/ 2.6 18		
9 28	3 4.72	+16 24.4	2.318	3.123	12.7	20.8	9 28	3 5.76	+11 48.4	1.569	2.405	16.4	22.1
10 8	2 59.97	+16 6.4	2.240	3.130	9.8	20.6	10 8	3 1.88	+10 58.7	1.480	2.388	12.7	21.8
10 18	2 53.33	+15 40.4	2.185	3.136	6.5	20.4	10 18	2 55.23	+ 9 59.0	1.411	2.370	8.5	21.5
10 28	2 45.38	+15 8.4	2.157	3.143	2.8	20.1	10 28	2 46.43	+ 8 54.0	1.367	2.352	4.2	21.2
11 7	2 36.90	+14 33.5	2.159	3.149	1.1	20.0	11 7	2 36.57	+ 7 50.5	1.350	2.335	3.8	21.1
11 17	2 28.76	+13 59.3	2.190	3.154	4.8	20.3	11 17	2 26.94	+ 6 56.1	1.361	2.316	8.2	21.4
11 27	2 21.74	+13 29.9	2.251	3.160	8.2	20.5	11 27	2 18.85	+ 6 17.5	1.396	2.298	12.8	21.6
12 7	2 16.47	+13 8.7	2.336	3.165	11.2	20.7	12 7	2 13.25	+ 5 58.7	1.453	2.280	16.9	21.8
77178	2001 <i>FH</i> ₃		11 4.5 71°90	3°2/ 2.5 18			80789	2000 <i>CC</i> ₈₅		11 4.5 140°85	2°0/ 3.1 18		
9 28	3 7.17												

2020							2020						
2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
521681	2015 RR ₂₆₁	11 4.5 15°32' 1.4"/ 5.3 15		m			521426	2015 MP ₁₄₈	11 4.5 113°42' 0°0' / 4.3 18		m		
9 28	3 4.90	+20 5.1	1.674	2.491	16.4	21.4	9 28	3 5.53	+17 44.4	1.918	2.730	14.7	21.8
10 8	3 0.96	+20 5.7	1.600	2.493	12.9	21.2	10 8	3 1.01	+17 18.6	1.843	2.736	11.4	21.6
10 18	2 54.42	+19 53.7	1.545	2.496	8.8	20.9	10 18	2 54.23	+16 42.0	1.790	2.742	7.6	21.4
10 28	2 45.99	+19 29.9	1.516	2.499	4.3	20.7	10 28	2 45.87	+15 56.8	1.763	2.748	3.3	21.2
11 7	2 36.76	+18 57.1	1.513	2.502	1.6	20.5	11 7	2 36.88	+15 7.1	1.764	2.754	1.1	21.0
11 17	2 27.93	+18 20.2	1.537	2.506	5.7	20.8	11 17	2 28.29	+14 18.1	1.794	2.760	5.5	21.3
11 27	2 20.67	+17 45.1	1.588	2.511	10.1	21.1	11 27	2 21.10	+13 35.3	1.852	2.766	9.5	21.6
12 7	2 15.80	+17 17.5	1.663	2.515	13.9	21.3	12 7	2 16.00	+13 3.0	1.935	2.771	12.9	21.8
274140	2008 FS ₂₅	11 4.5 110°75' 1°3' / 3.6 16		m			518067	2015 XT ₃₈₀	11 4.5 33°85' 1°0' / 3.9 18		m		
9 28	3 9.66	+14 19.0	1.693	2.512	16.1	21.6	9 28	3 6.11	+12 46.3	1.891	2.713	14.5	20.4
10 8	3 4.28	+13 50.1	1.630	2.529	12.4	21.4	10 8	3 1.46	+12 48.2	1.820	2.720	11.2	20.2
10 18	2 56.37	+13 12.4	1.589	2.545	8.1	21.2	10 18	2 54.53	+12 44.9	1.771	2.727	7.4	20.0
10 28	2 46.75	+12 29.4	1.574	2.560	3.5	21.0	10 28	2 46.01	+12 38.4	1.749	2.735	3.2	19.7
11 7	2 36.53	+11 45.7	1.587	2.575	2.1	20.9	11 7	2 36.83	+12 31.3	1.754	2.743	1.7	19.6
11 17	2 26.90	+11 6.9	1.628	2.590	6.4	21.2	11 17	2 28.05	+12 26.8	1.788	2.751	5.8	19.9
11 27	2 18.95	+10 38.0	1.697	2.604	10.6	21.5	11 27	2 20.64	+12 28.2	1.849	2.760	9.6	20.2
12 7	2 13.37	+10 22.4	1.789	2.617	14.1	21.8	12 7	2 15.33	+12 37.9	1.934	2.769	13.0	20.4
90598	4253 P-L	11 4.5 324°15' 4°3' / 6.7 18		m			104912	2000 JB ₁₅	11 4.5 121°67' 1°9' / 6.3 18		m		
9 28	3 5.92	+24 50.3	1.546	2.352	18.0	19.3	9 28	3 6.47	+24 15.3	2.376	3.153	13.3	19.6
10 8	3 2.42	+25 27.6	1.456	2.337	14.6	19.1	10 8	3 1.29	+23 58.1	2.301	3.169	10.5	19.5
10 18	2 55.83	+25 50.2	1.385	2.323	10.7	18.8	10 18	2 54.19	+23 28.0	2.249	3.185	7.3	19.3
10 28	2 46.79	+25 55.4	1.337	2.310	6.6	18.5	10 28	2 45.79	+22 45.7	2.224	3.200	4.0	19.1
11 7	2 36.45	+25 42.9	1.314	2.297	4.3	18.4	11 7	2 36.93	+21 54.1	2.228	3.215	1.9	19.0
11 17	2 26.28	+25 15.7	1.317	2.284	6.8	18.5	11 17	2 28.48	+20 57.2	2.262	3.229	4.4	19.2
11 27	2 17.80	+24 40.2	1.346	2.273	11.2	18.7	11 27	2 21.26	+20 0.5	2.326	3.242	7.6	19.4
12 7	2 12.11	+24 4.6	1.398	2.262	15.3	18.9	12 7	2 15.87	+19 9.0	2.416	3.256	10.6	19.6
78710	2002 TV ₁₈₄	11 4.5 128°55' 1°2' / 5.3 18		m			449868	2015 MN ₅₈	11 4.5 128°81' 1°9' / 5.9 18		m		
9 28	3 9.81	+20 47.3	1.704	2.508	16.6	20.0	9 28	3 7.94	+22 32.9	1.973	2.765	15.1	21.1
10 8	3 4.59	+20 33.6	1.632	2.519	13.1	19.8	10 8	3 2.88	+22 27.3	1.897	2.775	11.9	20.9
10 18	2 56.71	+20 5.8	1.582	2.529	8.9	19.6	10 18	2 55.48	+22 8.4	1.842	2.784	8.3	20.7
10 28	2 46.95	+19 25.2	1.557	2.540	4.2	19.4	10 28	2 46.42	+21 36.6	1.814	2.793	4.3	20.5
11 7	2 36.46	+18 35.3	1.560	2.549	1.5	19.2	11 7	2 36.71	+20 54.6	1.813	2.801	1.9	20.4
11 17	2 26.52	+17 42.0	1.591	2.559	5.8	19.5	11 17	2 27.43	+20 6.9	1.842	2.809	5.1	20.6
11 27	2 18.29	+16 52.0	1.650	2.567	10.1	19.8	11 27	2 19.60	+19 19.5	1.898	2.817	8.9	20.8
12 7	2 12.54	+16 11.4	1.732	2.576	13.8	20.0	12 7	2 13.95	+18 37.9	1.980	2.824	12.3	21.1
415720	1999 RU ₂₁₅	11 4.5 53°40' 0°1' / 5.7 13 C		m			271949	2005 AZ ₁₉	11 4.5 270°95' 3°7' / 7.9 17		m		
9 28	2 42.02	+19 45.5	40.582	41.362	0.9	23.6	9 28	3 3.63	+29 10.5	2.473	3.233	13.3	20.9
10 8	2 41.33	+19 43.3	40.490	41.364	0.7	23.5	10 8	2 59.40	+29 13.4	2.373	3.223	10.9	20.7
10 18	2 40.57	+19 40.5	40.425	41.366	0.5	23.5	10 18	2 53.16	+29 1.7	2.294	3.213	8.2	20.5
10 28	2 39.74	+19 37.3	40.388	41.367	0.2	23.5	10 28	2 45.44	+28 34.5	2.241	3.203	5.4	20.3
11 7	2 38.90	+19 33.9	40.381	41.369	0.1	23.5	11 7	2 37.03	+27 52.9	2.216	3.192	3.7	20.2
11 17	2 38.07	+19 30.2	40.404	41.371	0.3	23.5	11 17	2 28.82	+26 59.8	2.220	3.182	5.0	20.3
11 27	2 37.27	+19 26.5	40.457	41.372	0.5	23.5	11 27	2 21.72	+26 0.5	2.253	3.172	7.7	20.4
12 7	2 36.55	+19 23.0	40.539	41.374	0.7	23.5	12 7	2 16.40	+25 1.0	2.313	3.161	10.6	20.6
50591	2000 EQ ₄₆	11 4.5 279°63' 1°2' / 3.7 18		m			11646	1997 BZ ₁	11 4.5 38°08' 0°4' / 4.2 18		m		
9 28	3 5.87	+15 19.6	1.575	2.404	16.6	19.1	9 28	3 6.04	+16 1.6	1.592	2.419	16.6	18.1
10 8	3 2.02	+14 48.5	1.484	2.388	13.0	18.8	10 8	3 1.86	+15 46.6	1.521	2.423	12.9	17.9
10 18	2 55.36	+14 5.5	1.414	2.371	8.6	18.5	10 18	2 55.03	+15 21.3	1.472	2.428	8.5	17.7
10 28	2 46.51	+13 13.6	1.368	2.355	3.8	18.2	10 28	2 46.29	+14 48.1	1.447	2.434	3.7	17.4
11 7	2 36.57	+12 17.9	1.349	2.338	2.1	18.0	11 7	2 36.78	+14 11.5	1.449	2.439	1.5	17.2
11 17	2 26.87	+11 25.3	1.358	2.322	7.1	18.3	11 17	2 27.73	+13 36.5	1.479	2.445	6.3	17.6
11 27	2 18.72	+10 42.9	1.392	2.305	12.0	18.6	11 27	2 20.33	+13 9.0	1.534	2.451	10.8	17.9
12 7	2 13.10	+10 16.0	1.448	2.288	16.3	18.8	12 7	2 15.37	+12 53.1	1.613	2.457	14.7	18.1
128122	2003 QD ₃₅	11 4.5 2°24' 5°2' / 31.4 18		m			230862	2004 RA ₁₇₈	11 4.5 58°51' 4°6' / 7.8 18		m		
9 28	3 0.79	+ 4 5.3	1.876	2.717	13.9	19.3	9 28	3 7.58	+28 59.9	1.507	2.298	19.0	20.3
10 8	2 57.32	+ 3 1.6	1.808	2.716	10.8	19.1	10 8	3 3.36	+29 2.0	1.443	2.313	15.5	20.1
10 18	2 51.77	+ 1 56.7	1.763	2.716	7.7	18.9	10 18	2 56.13	+28 41.9	1.397	2.327	11.4	19.9
10 28	2 44.78	+ 0 57.0	1.744	2.716	5.4	18.8	10 28	2 46.77	+27 58.5	1.374	2.342	7.2	19.7
11 7	2 37.21	+ 0 8.6	1.752	2.717	5.9	18.9	11 7	2 36.65	+26 54.7	1.377	2.357	4.6	19.6
11 17	2 29.98	- 0 23.4	1.787	2.719	8.6	19.0	11 17	2 27.20	+25 37.3	1.406	2.372	6.6	19.7
11 27	2 24.01	- 0 36.0	1.847	2.720	11.7	19.2	11 27	2 19.73	+24 15.9	1.462	2.388	10.4	20.0
12 7	2 19.93	- 0 28.7	1.929	2.723	14.6	19.4	12 7	2 15.06	+23 0.2	1.541	2.403	14.2	20.2
358703	2008 AL ₇₈	11 4.5 9°15' 2°3' / 5.9 18		m			155497	1999 CL ₉₁	11 4.5 236°03' 0°6' / 4.1 18		m		
9 28	3 5.17	+22 11.6	1.665	2.475	16.7	20.9	9 28	3 7.25	+16 5.1	1.885	2.699	14.9	21.5
10 8	3 1.28	+22 21.0	1.588	2.476	13.3	20.6	10 8	3 2.58	+15 40.1	1.794	2.689	11.6	21.2
10 18	2 54.70	+22 16.4	1.532	2.478	9.2	20.4	10 18	2 55.47	+15 4.9	1.724	2.678	7.7	21.0
10 28	2 46.16	+21 57.7	1.500	2.479	4.9	20.2	10 28	2 46.52	+14 21.7	1.681	2.667	3.3	20.7
11 7	2 36.75	+21 27.2	1.494	2.482	2.4	20.0	11 7	2 36.71	+13 34.6	1.665	2.655	1.5	20.5
11 17	2 27.74	+20 49.2	1.515	2.484	5.8	20.2	11 17	2 27.15	+12 48.6	1.679	2.643	6.0	20.8
11 27	2 20.33	+20 10.3	1.563	2.488	10.0	20.5	11 27	2 18.95	+12 9.7	1.720	2.630	10.3	21.0
12 7	2 15.36	+19 36.7	1.635	2.491	13.9	20.7	12 7	2 12.94	+11 42.3	1.786	2.617	14.0	21.2
173024	2006 QG ₇	11 4.5 334°41' 5°2' / 7.4 18		m			14294	3306 T- ₁	11 4.5 70°79' 1°5' / 3.6 18		m		
9 28	3 6.16	+27 11.5	1.6										

EPHEMERIDES

11 4.5

11 4.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
349999	2010 GC ₂₈		11 4.5 177°66	3°0/ 2.3 18			287351	2002 US ₁		11 4.5 345°76	1°5/ 5.5 18		
9 28	3 7.25	+ 7 57.8	2.218	3.034	12.9	21.5	9 28	3 3.39	+21 9.6	1.633	2.451	16.6	20.2
10 8	3 1.99	+ 7 27.8	2.139	3.036	9.9	21.3	10 8	2 59.98	+20 58.8	1.552	2.446	13.2	20.0
10 18	2 54.74	+ 6 55.1	2.085	3.037	6.7	21.1	10 18	2 53.91	+20 33.2	1.492	2.442	9.0	19.7
10 28	2 46.10	+ 6 23.2	2.057	3.038	3.6	20.9	10 28	2 45.88	+19 53.8	1.455	2.438	4.5	19.4
11 7	2 36.89	+ 5 56.1	2.059	3.038	3.5	20.9	11 7	2 36.96	+19 4.0	1.445	2.435	1.6	19.2
11 17	2 27.98	+ 5 37.4	2.091	3.038	6.4	21.1	11 17	2 28.41	+18 9.7	1.462	2.432	5.9	19.5
11 27	2 20.26	+ 5 29.9	2.150	3.037	9.7	21.3	11 27	2 21.41	+17 18.0	1.506	2.430	10.4	19.8
12 7	2 14.35	+ 5 35.3	2.234	3.036	12.6	21.5	12 7	2 16.83	+16 35.4	1.572	2.428	14.3	20.0
41202	1999 WX ₆		11 4.5 14°51	1°1/ 5.5 18			159797	2003 QP ₁₁₄		11 4.5 40°81	3°9/ 2.5 18		
9 28	3 1.82	+22 6.2	1.961	2.767	14.7	18.7	9 28	3 7.80	+ 8 25.9	1.243	2.094	18.9	19.4
10 8	2 58.22	+21 33.0	1.881	2.768	11.6	18.5	10 8	3 3.33	+ 7 53.0	1.205	2.120	14.4	19.3
10 18	2 52.44	+20 45.2	1.823	2.771	7.9	18.3	10 18	2 55.92	+ 7 17.1	1.186	2.147	9.5	19.1
10 28	2 45.14	+19 44.7	1.791	2.773	3.8	18.0	10 28	2 46.60	+ 6 43.9	1.191	2.175	5.0	18.9
11 7	2 37.21	+18 35.5	1.787	2.776	1.3	17.9	11 7	2 36.79	+ 6 19.7	1.221	2.203	4.6	19.0
11 17	2 29.66	+17 23.8	1.811	2.779	5.1	18.1	11 17	2 27.89	+ 6 9.0	1.276	2.232	8.6	19.3
11 27	2 23.43	+16 16.0	1.863	2.783	9.0	18.4	11 27	2 21.06	+ 6 14.8	1.356	2.261	12.9	19.6
12 7	2 19.18	+15 18.2	1.940	2.787	12.4	18.6	12 7	2 16.99	+ 6 37.3	1.457	2.291	16.5	19.9
386873	2011 FR ₅		11 4.5 167°26	3°8/ 2.2 18			284562	2007 TH ₃₂		11 4.5 71°02	1°8/ 5.7 18		
9 28	3 8.51	+ 7 26.9	1.759	2.586	15.2	20.9	9 28	3 9.85	+21 18.2	1.668	2.472	16.9	21.4
10 8	3 3.44	+ 6 51.3	1.686	2.589	11.8	20.7	10 8	3 4.56	+21 20.7	1.610	2.496	13.3	21.2
10 18	2 55.93	+ 6 12.7	1.636	2.591	8.0	20.5	10 18	2 56.63	+21 9.6	1.574	2.520	9.0	21.0
10 28	2 46.67	+ 5 35.7	1.612	2.593	4.5	20.3	10 28	2 46.94	+20 45.6	1.562	2.543	4.5	20.8
11 7	2 36.70	+ 5 5.7	1.616	2.594	4.4	20.3	11 7	2 36.66	+20 11.7	1.578	2.567	1.9	20.7
11 17	2 27.15	+ 4 47.2	1.647	2.595	7.8	20.5	11 17	2 27.05	+19 32.9	1.622	2.591	5.6	21.0
11 27	2 19.10	+ 4 43.5	1.706	2.596	11.6	20.7	11 27	2 19.22	+18 55.2	1.694	2.614	9.7	21.3
12 7	2 13.30	+ 4 56.0	1.787	2.597	15.0	21.0	12 7	2 13.87	+18 24.4	1.789	2.637	13.3	21.5
20909	4026 P-L		11 4.5 148°32	4°9/ 7.9 18			486989	2014 NE ₄₆		11 4.5 38°29	1°4/ 5.7 18		
9 28	3 11.54	+29 40.5	2.147	2.900	15.2	18.0	9 28	3 2.74	+22 45.9	2.033	2.833	14.5	21.3
10 8	3 5.80	+30 19.3	2.063	2.906	12.6	17.8	10 8	2 58.85	+22 18.7	1.954	2.837	11.4	21.1
10 18	2 57.54	+30 43.2	2.001	2.913	9.6	17.7	10 18	2 52.82	+21 37.1	1.897	2.842	7.8	20.9
10 28	2 47.41	+30 49.5	1.964	2.919	6.6	17.5	10 28	2 45.30	+20 42.8	1.866	2.847	4.0	20.7
11 7	2 36.44	+30 37.7	1.955	2.924	4.9	17.4	11 7	2 37.19	+19 39.4	1.863	2.852	1.5	20.5
11 17	2 25.80	+30 10.1	1.974	2.929	6.1	17.5	11 17	2 29.45	+18 32.3	1.888	2.857	4.9	20.8
11 27	2 16.62	+29 32.1	2.022	2.934	8.9	17.7	11 27	2 23.02	+17 27.9	1.942	2.862	8.7	21.0
12 7	2 9.72	+28 50.2	2.096	2.938	11.8	17.9	12 7	2 18.54	+16 31.9	2.021	2.868	12.0	21.2
68142	2001 AX ₃₁		11 4.5 314°27	1°6/ 3.7 18			374766	2006 SB ₂₈₃		11 4.5 11°29	0°8/ 4.8 18 R		
9 28	3 8.41	+12 39.9	1.325	2.166	18.5	17.9	9 28	3 8.11	+16 7.8	1.110	1.958	20.8	20.1
10 8	3 4.40	+12 35.0	1.248	2.158	14.5	17.7	10 8	3 4.64	+16 38.2	1.047	1.960	16.4	19.8
10 18	2 57.15	+12 22.7	1.191	2.151	9.6	17.4	10 18	2 57.51	+16 58.7	1.003	1.962	11.0	19.6
10 28	2 47.39	+12 5.6	1.157	2.144	4.3	17.1	10 28	2 47.59	+17 9.4	0.980	1.966	5.0	19.2
11 7	2 36.43	+11 48.2	1.149	2.137	2.5	16.9	11 7	2 36.43	+17 12.3	0.981	1.971	1.6	19.0
11 17	2 25.85	+11 35.5	1.166	2.131	7.8	17.2	11 17	2 25.86	+17 11.3	1.006	1.977	7.6	19.4
11 27	2 17.18	+11 32.8	1.208	2.125	13.0	17.5	11 27	2 17.62	+17 12.6	1.054	1.984	13.2	19.8
12 7	2 11.47	+11 43.6	1.271	2.119	17.5	17.8	12 7	2 12.76	+17 21.2	1.123	1.991	17.9	20.1
263063	2007 HT ₉₇		11 4.5 189°13	1°9/ 2.9 18			391193	2006 DB ₈₇		11 4.5 76°47	3°7/ 6.7 18		
9 28	3 3.38	+10 35.3	2.618	3.430	11.2	21.3	9 28	3 11.18	+24 40.5	1.697	2.487	17.2	20.4
10 8	2 58.77	+10 9.8	2.534	3.429	8.6	21.1	10 8	3 5.86	+25 14.7	1.629	2.502	13.9	20.2
10 18	2 52.52	+ 9 40.4	2.475	3.429	5.7	20.9	10 18	2 57.71	+25 34.3	1.581	2.516	10.0	20.0
10 28	2 45.11	+ 9 9.8	2.443	3.427	2.7	20.7	10 28	2 47.51	+25 37.3	1.558	2.530	6.0	19.8
11 7	2 37.22	+ 8 41.1	2.442	3.426	2.3	20.7	11 7	2 36.48	+25 24.6	1.562	2.544	3.7	19.7
11 17	2 29.57	+ 8 17.4	2.471	3.424	5.1	20.9	11 17	2 25.97	+24 59.5	1.593	2.558	6.1	19.9
11 27	2 22.85	+ 8 1.7	2.528	3.422	8.1	21.1	11 27	2 17.25	+24 28.2	1.652	2.572	9.9	20.2
12 7	2 17.63	+ 7 56.0	2.611	3.420	10.8	21.2	12 7	2 11.16	+23 57.5	1.734	2.586	13.4	20.4
322958	2002 JA ₈₉		11 4.5 161°88	0°6/ 4.8 18			85662	1998 QL ₄₁		11 4.5 357°56	11°8/ 10.2 18		
9 28	3 10.79	+18 18.8	1.639	2.450	16.9	21.3	9 28	3 2.76	+34 54.1	1.146	1.945	23.4	17.6
10 8	3 5.57	+18 13.5	1.562	2.454	13.2	21.1	10 8	3 1.38	+36 50.5	1.078	1.938	20.3	17.4
10 18	2 57.53	+17 56.5	1.507	2.458	8.9	20.8	10 18	2 55.97	+38 23.7	0.992	1.932	17.0	17.2
10 28	2 47.43	+17 28.7	1.476	2.461	4.0	20.6	10 28	2 47.16	+39 23.8	0.922	1.928	13.8	17.0
11 7	2 36.45	+16 53.6	1.473	2.463	1.2	20.4	11 7	2 36.52	+39 44.6	0.978	1.927	11.9	16.9
11 17	2 25.92	+16 16.1	1.499	2.466	6.1	20.7	11 17	2 26.18	+39 25.8	0.985	1.928	12.3	16.9
11 27	2 17.12	+15 42.5	1.551	2.467	10.7	21.0	11 27	2 18.34	+38 36.0	1.013	1.931	14.8	17.1
12 7	2 10.91	+15 18.2	1.627	2.469	14.7	21.2	12 7	2 14.43	+37 29.1	1.060	1.937	18.0	17.3
90619	1227 T- ₁		11 4.5 231°25	1°3/ 5.4 18			407972	2012 DP ₄₀		11 4.5 203°65	2°2/ 6.3 17		
9 28	3 8.83	+20 25.3	1.796	2.599	15.9	20.7	9 28	3 5.21	+23 16.6	2.326	3.111	13.3	21.8
10 8	3 4.03	+20 22.0	1.705	2.591	12.6	20.5	10 8	3 0.60	+23 24.5	2.238	3.110	10.6	21.6
10 18	2 56.55	+20 5.9	1.635	2.582	8.7	20.2	10 18	2 53.95	+23 21.1	2.172	3.109	7.5	21.4
10 28	2 47.04	+19 37.4	1.591	2.573	4.2	19.9	10 28	2 45.82	+23 6.3	2.133	3.108	4.2	21.2
11 7	2 36.56	+18 59.0	1.574	2.563	1.6	19.7	11 7	2 37.03	+22 41.6	2.122	3.108	2.2	21.1
11 17	2 26.34	+18 15.4	1.586	2.553	5.8	20.0	11 17	2 28.50	+22 9.9	2.140	3.107	4.6	21.2
11 27	2 17.62	+17 32.9	1.625	2.543	10.2	20.2	11 27	2 21.11	+21 35.9	2.187	3.106	7.9	21.4
12 7	2 11.30	+16 57.5	1.688	2.532	14.1	20.5	12 7	2 15.56	+21 4.1	2.260	3.105	11.0	21.6
114409	2002 YY ₂₁		11 4.5 347°93	0°5/ 4.2 18			252097	2000 UW ₇₁		11 4.5 341°10	1°9/ 5.6 18		
9 28	3 1.56	+16 37.8	1.142	1.998	19.9	19.							

EPHEMERIDES

11 4.5

11 4.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
160614	1999 <i>TW</i> ₈₂		11 4.5 72°20	0°3/ 4.3 18			397877	2008 <i>UV</i> ₈₉		11 4.5 301°77	2°1/ 3.3 18		
9 28	3 8.57	+16 15.2	1.643	2.463	16.5	20.8	9 28	3 6.14	+12 0.0	1.616	2.448	16.1	21.4
10 8	3 3.54	+15 59.4	1.586	2.483	12.7	20.6	10 8	3 2.05	+11 37.7	1.535	2.440	12.5	21.1
10 18	2 55.97	+15 33.7	1.550	2.504	8.3	20.4	10 18	2 55.30	+11 8.3	1.475	2.433	8.3	20.8
10 28	2 46.67	+15 0.6	1.538	2.524	3.6	20.2	10 28	2 46.55	+10 35.2	1.439	2.425	3.8	20.6
11 7	2 36.81	+14 24.3	1.555	2.545	1.4	20.1	11 7	2 36.87	+10 3.2	1.431	2.418	2.8	20.5
11 17	2 27.57	+13 49.9	1.599	2.565	6.0	20.4	11 17	2 27.51	+9 37.6	1.450	2.411	7.2	20.7
11 27	2 20.05	+13 22.7	1.671	2.585	10.2	20.7	11 27	2 19.69	+9 23.2	1.495	2.404	11.6	21.0
12 7	2 14.92	+13 6.3	1.766	2.605	13.8	21.0	12 7	2 14.27	+9 23.1	1.562	2.397	15.5	21.2
153335	2001 <i>OL</i> ₆₀		11 4.5 35°56	3°7/ 2.6 18			174756	2003 <i>VN</i>		11 4.5 37°91	7°9/ 1.9 18		
9 28	3 5.65	+10 24.8	1.125	1.984	19.9	19.7	9 28	3 10.75	+1 25.1	0.910	1.779	22.6	18.4
10 8	3 2.14	+9 42.1	1.080	2.000	15.2	19.5	10 8	3 6.22	+0 47.1	0.885	1.806	17.6	18.2
10 18	2 55.41	+8 52.6	1.054	2.018	10.0	19.3	10 18	2 58.05	+0 16.2	0.877	1.834	12.5	18.1
10 28	2 46.49	+8 3.1	1.051	2.036	5.0	19.1	10 28	2 47.58	+0 1.2	0.889	1.864	8.5	18.0
11 7	2 36.89	+7 21.3	1.072	2.056	4.5	19.1	11 7	2 36.64	+0 8.4	0.923	1.894	8.5	18.1
11 17	2 28.15	+6 53.9	1.117	2.076	9.0	19.4	11 17	2 27.02	+0 39.8	0.980	1.926	12.0	18.4
11 27	2 21.58	+6 45.5	1.185	2.097	13.7	19.8	11 27	2 20.09	+1 34.0	1.058	1.958	16.2	18.8
12 7	2 17.95	+6 56.9	1.273	2.119	17.7	20.1	12 7	2 16.50	+2 46.5	1.155	1.990	19.8	19.1
202564	2006 <i>EP</i> ₂₀		11 4.5 89°08	1°1/ 3.8 18			71335	2000 <i>AK</i> ₉₆		11 4.5 321°26	10°0/ 26.8 18		
9 28	3 7.93	+14 28.6	1.699	2.521	15.9	20.7	9 28	3 1.00	-9 22.8	1.890	2.718	14.3	18.3
10 8	3 3.05	+14 6.8	1.634	2.533	12.3	20.5	10 8	2 57.67	-10 53.8	1.819	2.700	12.2	18.1
10 18	2 55.68	+13 36.4	1.590	2.546	8.0	20.3	10 18	2 52.18	-12 16.6	1.771	2.682	10.6	18.0
10 28	2 46.58	+13 0.5	1.573	2.559	3.5	20.1	10 28	2 45.12	-13 22.2	1.746	2.665	10.0	17.9
11 7	2 36.85	+12 23.5	1.583	2.571	1.9	20.0	11 7	2 37.35	-14 3.1	1.746	2.648	10.9	17.9
11 17	2 27.65	+11 50.4	1.621	2.584	6.3	20.3	11 17	2 29.83	-14 14.8	1.770	2.632	12.9	18.0
11 27	2 20.05	+11 26.0	1.686	2.596	10.4	20.6	11 27	2 23.52	-13 56.0	1.815	2.616	15.2	18.1
12 7	2 14.78	+11 13.8	1.774	2.608	14.0	20.8	12 7	2 19.13	-13 9.1	1.879	2.601	17.4	18.3
310355	2011 <i>UY</i> ₂₆₃		11 4.5 44°75	5°6/ 1.4 18			17032	<i>Edu</i>		11 4.5 233°41	0°8/ 3.9 18		
9 28	3 7.11	+1 57.4	1.702	2.536	15.4	20.2	9 28	3 5.37	+14 48.8	2.486	3.289	12.0	19.4
10 8	3 2.34	+1 26.2	1.641	2.544	12.1	20.0	10 8	3 0.56	+14 25.9	2.386	3.276	9.3	19.2
10 18	2 55.18	+0 57.6	1.602	2.552	8.6	19.8	10 18	2 53.87	+13 55.8	2.311	3.263	6.1	19.0
10 28	2 46.36	+0 37.3	1.588	2.560	5.9	19.7	10 28	2 45.82	+13 20.6	2.263	3.249	2.7	18.7
11 7	2 36.93	+0 30.0	1.601	2.568	6.1	19.7	11 7	2 37.12	+12 43.2	2.245	3.234	1.4	18.6
11 17	2 28.00	+0 38.9	1.641	2.577	8.9	19.9	11 17	2 28.58	+12 7.5	2.258	3.219	4.9	18.8
11 27	2 20.58	+1 5.3	1.707	2.586	12.2	20.2	11 27	2 21.03	+11 37.2	2.299	3.203	8.4	19.0
12 7	2 15.39	+1 48.3	1.794	2.595	15.3	20.4	12 7	2 15.11	+11 15.8	2.367	3.187	11.4	19.2
445721	2011 <i>UN</i> ₂₈₃		11 4.5 312°35	3°0/ 2.6 18			286808	2002 <i>KR</i> ₁		11 4.5 149°22	1°0/ 5.5 18		
9 28	3 4.66	+9 13.9	1.742	2.576	15.1	21.2	9 28	3 4.45	+20 40.3	2.750	3.535	11.5	21.6
10 8	3 0.72	+8 48.1	1.658	2.565	11.7	21.0	10 8	2 59.58	+20 29.0	2.667	3.543	9.0	21.5
10 18	2 54.33	+8 17.8	1.596	2.553	7.8	20.7	10 18	2 53.06	+20 8.5	2.608	3.550	6.1	21.3
10 28	2 46.09	+7 47.1	1.558	2.542	4.0	20.5	10 28	2 45.40	+19 39.9	2.576	3.557	3.0	21.1
11 7	2 37.00	+7 20.6	1.548	2.531	3.7	20.4	11 7	2 37.28	+19 5.4	2.574	3.563	1.1	21.0
11 17	2 28.15	+7 3.2	1.565	2.520	7.4	20.6	11 17	2 29.44	+18 28.1	2.603	3.570	3.9	21.2
11 27	2 20.69	+6 58.8	1.609	2.510	11.5	20.8	11 27	2 22.57	+17 51.6	2.662	3.575	6.9	21.4
12 7	2 15.41	+7 9.3	1.675	2.500	15.1	21.0	12 7	2 17.22	+17 19.7	2.747	3.581	9.6	21.6
259279	2003 <i>DQ</i> ₂₄		11 4.5 162°81	1°8/ 2.8 18			481934	2009 <i>BR</i> ₁₂₃		11 4.5 300°75	1°7/ 5.6 18		
9 28	3 3.83	+11 38.2	2.634	3.444	11.2	21.6	9 28	3 4.76	+21 19.9	1.675	2.488	16.5	21.6
10 8	2 59.07	+10 57.1	2.555	3.449	8.6	21.4	10 8	3 1.26	+21 15.1	1.575	2.466	13.2	21.3
10 18	2 52.70	+10 10.9	2.501	3.454	5.6	21.2	10 18	2 54.98	+20 55.7	1.496	2.444	9.2	21.0
10 28	2 45.22	+9 22.7	2.475	3.459	2.7	21.0	10 28	2 46.50	+20 21.7	1.441	2.423	4.6	20.7
11 7	2 37.31	+8 36.2	2.479	3.463	2.3	21.0	11 7	2 36.87	+19 35.6	1.412	2.401	1.8	20.5
11 17	2 29.68	+7 55.2	2.514	3.466	5.1	21.2	11 17	2 27.36	+18 42.6	1.410	2.380	6.1	20.7
11 27	2 23.02	+7 23.0	2.577	3.469	8.1	21.4	11 27	2 19.31	+17 50.1	1.435	2.359	10.8	20.9
12 7	2 17.85	+7 1.9	2.667	3.472	10.7	21.6	12 7	2 13.72	+17 5.2	1.483	2.338	15.1	21.1
394583	2007 <i>VN</i> ₁₀₇		11 4.5 24°35	0°4/ 4.3 18			226956	2004 <i>VS</i> ₄₃		11 4.5 296°58	0°8/ 3.9 18		
9 28	3 5.50	+15 42.3	1.540	2.370	16.9	20.8	9 28	3 1.58	+16 30.8	2.164	2.980	13.2	20.4
10 8	3 1.56	+15 33.8	1.472	2.375	13.1	20.6	10 8	2 57.89	+15 48.5	2.073	2.969	10.2	20.2
10 18	2 54.92	+15 15.6	1.424	2.381	8.6	20.3	10 18	2 52.22	+14 55.7	2.004	2.959	6.7	20.0
10 28	2 46.33	+14 49.8	1.401	2.387	3.7	20.1	10 28	2 45.12	+13 55.4	1.962	2.948	2.9	19.7
11 7	2 36.96	+14 20.7	1.404	2.394	1.5	19.9	11 7	2 37.37	+12 52.0	1.949	2.938	1.5	19.6
11 17	2 28.06	+13 53.1	1.435	2.401	6.4	20.3	11 17	2 29.86	+11 50.8	1.965	2.928	5.4	19.8
11 27	2 20.84	+13 32.4	1.491	2.409	10.9	20.6	11 27	2 23.46	+10 57.4	2.009	2.918	9.1	20.1
12 7	2 16.09	+13 22.7	1.570	2.418	14.8	20.8	12 7	2 18.82	+10 15.9	2.078	2.908	12.4	20.2
426142	2012 <i>HH</i> ₃₀		11 4.5 103°53	2°1/ 3.2 16			46437	2002 <i>LL</i> ₅		11 4.5 32°91	2°6/ 3.4 18		
9 28	3 11.12	+12 10.4	1.647	2.469	16.4	21.7	9 28	3 7.55	+11 31.9	0.948	1.815	22.1	17.7
10 8	3 5.42	+11 38.9	1.590	2.490	12.5	21.5	10 8	3 4.01	+11 18.1	0.912	1.836	16.9	17.5
10 18	2 57.17	+11 0.7	1.554	2.510	8.2	21.3	10 18	2 56.81	+10 56.6	0.894	1.859	11.0	17.3
10 28	2 47.21	+10 19.5	1.545	2.530	3.7	21.1	10 28	2 47.15	+10 32.9	0.895	1.882	5.0	17.1
11 7	2 36.70	+9 40.6	1.563	2.549	2.8	21.1	11 7	2 36.79	+10 13.3	0.920	1.908	3.5	17.1
11 17	2 26.85	+9 9.0	1.610	2.568	6.9	21.4	11 17	2 27.53	+10 3.6	0.968	1.934	8.8	17.5
11 27	2 18.74	+8 49.1	1.683	2.586	11.0	21.7	11 27	2 20.83	+10 8.4	1.038	1.961	14.0	17.8
12 7	2 13.07	+8 43.5	1.780	2.604	14.4	21.9	12 7	2 17.45	+10 29.1	1.128	1.989	18.4	18.2
257961	2001 <i>BZ</i> ₃₁		11 4.5 305°87	6°6/ 30.2 17			227702	2006 <i>DY</i> ₈₀		11 4.5 359°60	0°8/ 5.2 18		
9 28	3 2.13	+0 21.5	1.9										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
85393	1996 <i>RF</i> ₁₇		11 4.5	8°17'	2°6'	6.2 18	277726	2006 <i>DX</i> ₆₂		11 4.5	215°25'	7°4'	10.4 17
9 28	3 6.20	+22 48.8	1.812	2.613	15.9	19.0	9 28	3 14.55	+39 30.5	2.761	3.438	13.8	20.7
10 8	3 1.96	+23 4.8	1.732	2.613	12.7	18.8	10 8	3 8.20	+40 45.2	2.662	3.434	12.1	20.5
10 18	2 55.16	+23 7.8	1.673	2.614	8.9	18.6	10 18	2 59.31	+41 45.3	2.584	3.428	10.2	20.4
10 28	2 46.48	+22 57.1	1.638	2.615	5.0	18.4	10 28	2 48.39	+42 26.0	2.530	3.423	8.5	20.3
11 7	2 36.95	+22 34.4	1.630	2.617	2.6	18.2	11 7	2 36.36	+42 44.5	2.503	3.418	7.5	20.2
11 17	2 27.77	+22 3.3	1.650	2.618	5.6	18.4	11 17	2 24.34	+42 40.5	2.504	3.412	7.7	20.2
11 27	2 20.07	+21 29.4	1.697	2.620	9.5	18.7	11 27	2 13.52	+42 17.2	2.533	3.406	9.0	20.3
12 7	2 14.68	+20 58.8	1.769	2.622	13.1	18.9	12 7	2 4.83	+41 40.7	2.587	3.400	10.8	20.4
174289	2002 <i>SV</i> ₄₆		11 4.5	7°77'	1°4'	3.6 18	211807	2004 <i>DD</i> ₂₆		11 4.5	149°20'	1°9'	5.9 18
9 28	2 56.72	+18 8.4	1.182	2.040	19.2	18.4	9 28	3 7.23	+22 21.0	2.118	2.908	14.3	20.6
10 8	2 55.43	+16 58.1	1.122	2.042	14.8	18.1	10 8	3 2.32	+22 24.0	2.036	2.912	11.3	20.4
10 18	2 51.15	+15 28.3	1.081	2.045	9.7	17.9	10 18	2 55.19	+22 15.0	1.976	2.916	7.9	20.2
10 28	2 44.76	+13 45.6	1.063	2.051	4.1	17.6	10 28	2 46.45	+21 54.2	1.941	2.920	4.2	19.9
11 7	2 37.54	+12 0.4	1.069	2.058	2.5	17.5	11 7	2 37.04	+21 23.6	1.936	2.923	2.0	19.8
11 17	2 30.92	+10 24.2	1.100	2.067	7.9	17.8	11 17	2 27.95	+20 46.8	1.959	2.926	4.9	20.0
11 27	2 26.15	+9 7.2	1.154	2.077	12.9	18.2	11 27	2 20.17	+20 8.9	2.011	2.929	8.5	20.2
12 7	2 24.03	+8 15.1	1.229	2.089	17.3	18.5	12 7	2 14.41	+19 35.1	2.088	2.932	11.8	20.5
38288	1999 <i>RZ</i> ₆₈		11 4.5	345°35'	3°9'	6.9 18	412481	2014 <i>HQ</i> ₁₉₄		11 4.5	183°23'	0°1'	4.4 18
9 28	3 6.74	+24 54.5	1.831	2.623	16.1	18.9	9 28	3 5.76	+18 6.8	2.231	3.033	13.3	21.6
10 8	3 2.53	+25 34.4	1.745	2.618	13.1	18.7	10 8	3 0.99	+17 32.2	2.146	3.033	10.3	21.4
10 18	2 55.66	+26 1.6	1.680	2.613	9.5	18.4	10 18	2 54.20	+16 47.0	2.083	3.033	6.8	21.2
10 28	2 46.76	+26 13.8	1.639	2.609	5.9	18.2	10 28	2 45.99	+15 53.4	2.048	3.033	3.0	21.0
11 7	2 36.86	+26 10.9	1.624	2.605	3.9	18.1	11 7	2 37.19	+14 55.3	2.042	3.032	1.0	20.8
11 17	2 27.19	+25 55.2	1.637	2.602	6.0	18.2	11 17	2 28.70	+13 57.7	2.066	3.030	5.0	21.1
11 27	2 18.99	+25 31.9	1.677	2.599	9.7	18.4	11 27	2 21.40	+13 5.7	2.119	3.028	8.7	21.3
12 7	2 13.17	+25 7.1	1.741	2.597	13.2	18.6	12 7	2 15.93	+12 23.7	2.197	3.026	11.9	21.5
434296	2004 <i>DD</i> ₃₀		11 4.5	239°04'	5°0'	31.9 18	160378	2004 <i>HN</i> ₃₀		11 4.5	174°82'	0°5'	4.2 18
9 28	3 7.23	+5 39.0	1.787	2.617	14.9	21.9	9 28	3 9.51	+15 43.8	1.847	2.658	15.3	21.3
10 8	3 2.63	+4 35.5	1.702	2.604	11.7	21.6	10 8	3 4.29	+15 29.6	1.767	2.660	11.9	21.1
10 18	2 55.57	+3 28.1	1.639	2.591	8.2	21.4	10 18	2 56.60	+15 6.3	1.710	2.662	7.9	20.8
10 28	2 46.67	+2 22.9	1.603	2.578	5.4	21.2	10 28	2 47.10	+14 35.9	1.678	2.663	3.4	20.6
11 7	2 36.92	+1 27.0	1.594	2.564	5.8	21.2	11 7	2 36.84	+14 2.1	1.674	2.664	1.4	20.4
11 17	2 27.43	+0 46.6	1.613	2.549	9.0	21.4	11 17	2 26.95	+13 29.4	1.700	2.664	5.9	20.7
11 27	2 19.31	+0 26.3	1.658	2.534	12.7	21.6	11 27	2 18.53	+13 2.8	1.753	2.664	10.1	21.0
12 7	2 13.39	+0 27.3	1.724	2.518	16.1	21.8	12 7	2 12.39	+12 46.3	1.831	2.663	13.7	21.2
134949	2001 <i>CR</i>		11 4.5	332°47'	5°9'	31.9 18	329238	2012 <i>FZ</i> ₂₂		11 4.5	144°07'	0°9'	3.7 18
9 28	3 0.30	+8 40.4	1.102	1.973	19.4	18.8	9 28	3 3.21	+14 21.7	2.691	3.496	11.2	22.0
10 8	2 58.56	+7 20.0	1.032	1.958	15.1	18.5	10 8	2 58.62	+13 55.7	2.612	3.503	8.6	21.8
10 18	2 53.53	+5 48.6	0.980	1.945	10.4	18.2	10 18	2 52.44	+13 23.7	2.557	3.510	5.6	21.6
10 28	2 45.94	+4 15.8	0.950	1.932	6.4	17.9	10 28	2 45.18	+12 48.0	2.530	3.516	2.4	21.4
11 7	2 37.15	+2 53.7	0.943	1.920	7.0	17.9	11 7	2 37.48	+12 11.5	2.534	3.522	1.4	21.3
11 17	2 28.76	+1 53.5	0.959	1.910	11.5	18.1	11 17	2 30.05	+11 37.6	2.568	3.528	4.5	21.6
11 27	2 22.32	+1 23.0	0.997	1.901	16.5	18.4	11 27	2 23.57	+11 9.4	2.631	3.534	7.5	21.8
12 7	2 18.90	+1 24.0	1.052	1.893	21.0	18.6	12 7	2 18.55	+10 49.7	2.720	3.539	10.1	22.0
93507	2000 <i>TA</i> ₅₆		11 4.5	13°48'	8°0'	30.9 18	261566	2005 <i>WX</i> ₁₇₅		11 4.5	13°89'	1°1'	5.3 18
9 28	2 58.66	+3 54.0	1.034	1.913	19.7	18.7	9 28	3 3.63	+19 35.9	1.722	2.540	15.9	20.3
10 8	2 57.03	+2 22.5	0.991	1.919	15.4	18.4	10 8	2 59.96	+19 33.9	1.649	2.543	12.5	20.1
10 18	2 52.23	+0 50.3	0.966	1.927	11.1	18.2	10 18	2 53.83	+19 20.0	1.596	2.547	8.5	19.8
10 28	2 45.22	-0 30.4	0.963	1.937	8.2	18.1	10 28	2 45.91	+18 55.1	1.569	2.552	4.0	19.6
11 7	2 37.44	-1 28.6	0.981	1.948	9.0	18.2	11 7	2 37.24	+18 22.5	1.567	2.557	1.4	19.4
11 17	2 30.38	-1 56.7	1.022	1.961	12.5	18.5	11 17	2 28.97	+17 46.6	1.594	2.563	5.5	19.7
11 27	2 25.34	-1 52.1	1.084	1.976	16.5	18.7	11 27	2 22.18	+17 13.4	1.647	2.570	9.7	20.0
12 7	2 23.11	-1 17.8	1.163	1.992	20.1	19.0	12 7	2 17.65	+16 47.7	1.724	2.577	13.4	20.2
484181	2006 <i>UQ</i> ₂₇₇		11 4.5	9°36'	0°9'	5.2 18	368331	2002 <i>PQ</i> ₂₀₁		11 4.5	347°59'	3°9'	7.8 17
9 28	3 3.28	+20 33.1	1.718	2.534	16.0	21.1	9 28	3 4.11	+28 23.1	2.199	2.970	14.4	20.9
10 8	2 59.70	+20 9.6	1.641	2.535	12.6	20.8	10 8	3 0.03	+28 35.1	2.110	2.968	11.8	20.7
10 18	2 53.65	+19 31.7	1.585	2.536	8.5	20.6	10 18	2 53.75	+28 31.9	2.043	2.966	8.8	20.5
10 28	2 45.82	+18 41.3	1.554	2.538	4.0	20.3	10 28	2 45.87	+28 12.7	2.000	2.964	5.7	20.3
11 7	2 37.24	+17 42.6	1.550	2.540	1.2	20.2	11 7	2 37.26	+27 38.3	1.985	2.962	3.9	20.2
11 17	2 29.06	+16 41.7	1.573	2.542	5.6	20.5	11 17	2 28.92	+26 52.2	1.998	2.961	5.3	20.3
11 27	2 22.37	+15 45.6	1.623	2.545	10.0	20.7	11 27	2 21.83	+25 59.7	2.040	2.960	8.3	20.5
12 7	2 17.94	+15 0.1	1.698	2.548	13.7	21.0	12 7	2 16.71	+25 7.2	2.106	2.959	11.3	20.7
429768	2012 <i>DX</i> ₇₃		11 4.5	311°23'	2°2'	5.7 18	308680	2006 <i>DY</i> ₆₂		11 4.5	152°69'	2°7'	1.5 18
9 28	3 7.16	+21 27.4	1.253	2.083	20.0	21.5	9 28	3 4.07	+3 34.6	3.745	4.546	8.4	21.2
10 8	3 3.88	+21 32.6	1.174	2.074	16.0	21.2	10 8	2 58.73	+3 14.0	3.671	4.557	6.5	21.1
10 18	2 57.09	+21 20.5	1.113	2.065	11.1	20.9	10 18	2 52.26	+2 54.1	3.623	4.567	4.5	21.0
10 28	2 47.54	+20 50.5	1.074	2.057	5.7	20.6	10 28	2 45.05	+2 37.1	3.605	4.577	2.9	20.9
11 7	2 36.64	+20 5.6	1.059	2.048	2.3	20.3	11 7	2 37.55	+2 25.0	3.619	4.586	3.0	20.9
11 17	2 26.10	+19 12.2	1.070	2.041	7.2	20.6	11 17	2 30.27	+2 19.6	3.664	4.595	4.6	21.0
11 27	2 17.63	+18 20.0	1.104	2.033	12.7	20.9	11 27	2 23.66	+2 22.2	3.739	4.603	6.6	21.2
12 7	2 12.37	+17 37.6	1.160	2.026	17.6	21.2	12 7	2 18.12	+2 33.4	3.841	4.610	8.4	21.3
408056	2012 <i>FL</i> ₇₆		11 4.5	161°83'	4°0'	31.9 18	398780	2013 <i>AO</i> ₁₁₁		11 4.5	251°48'	5°4'	31.5 18
9 28	3 2.09	+5 26											

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
251595	Rudolfböttger	11 4.6	39°92	6.4/ 1.5	18		510121	2010 <i>TN</i> ₇₅	11 4.6	343°53	2.6/ 5.6	18	
9 28	3 6.52	+ 6 2.9	1.030	1.896	20.7	19.6	9 28	3 9.54	+19 14.2	1.178	2.014	20.7	20.9
10 8	3 3.00	+ 4 56.3	0.990	1.913	16.0	19.4	10 8	3 5.95	+19 57.0	1.105	2.008	16.5	20.6
10 18	2 56.09	+ 3 47.9	0.969	1.930	11.0	19.1	10 18	2 58.61	+20 28.2	1.050	2.003	11.5	20.3
10 28	2 46.89	+ 2 47.3	0.969	1.948	7.0	19.0	10 28	2 48.29	+20 45.8	1.016	1.999	5.9	20.0
11 7	2 37.00	+ 2 4.0	0.992	1.967	7.2	19.1	11 7	2 36.48	+20 50.1	1.006	1.995	2.7	19.8
11 17	2 28.05	+ 1 44.6	1.038	1.987	11.2	19.4	11 17	2 25.04	+20 44.3	1.021	1.992	7.5	20.1
11 27	2 21.43	+ 1 51.7	1.107	2.007	15.6	19.7	11 27	2 15.83	+20 35.1	1.060	1.990	13.0	20.4
12 7	2 17.90	+ 2 23.3	1.194	2.028	19.4	20.0	12 7	2 10.08	+20 29.6	1.119	1.988	17.9	20.7
521790	2015 <i>SF</i> ₂₉	11 4.6	346°38	2.8/ 6.9	18		55130	2001 <i>QR</i> ₁₇₉	11 4.6	31°87	2.1/ 3.1	18	
9 28	3 2.99	+26 30.4	2.042	2.828	14.9	20.8	9 28	3 4.82	+11 47.4	1.916	2.741	14.3	19.2
10 8	2 59.22	+26 11.3	1.955	2.825	12.0	20.6	10 8	3 0.54	+11 16.5	1.839	2.741	11.0	19.0
10 18	2 53.23	+25 35.3	1.889	2.824	8.6	20.4	10 18	2 54.05	+10 39.4	1.785	2.742	7.2	18.8
10 28	2 45.63	+24 42.8	1.849	2.822	5.0	20.2	10 28	2 45.99	+ 9 59.5	1.757	2.742	3.4	18.5
11 7	2 37.36	+23 36.8	1.836	2.821	2.8	20.1	11 7	2 37.27	+ 9 21.4	1.757	2.743	2.7	18.5
11 17	2 29.42	+22 22.4	1.851	2.819	5.0	20.2	11 17	2 28.90	+ 8 49.8	1.786	2.744	6.4	18.7
11 27	2 22.80	+21 6.7	1.895	2.818	8.6	20.4	11 27	2 21.83	+ 8 28.8	1.842	2.745	10.2	19.0
12 7	2 18.20	+19 56.6	1.964	2.817	12.0	20.6	12 7	2 16.77	+ 8 21.0	1.921	2.745	13.5	19.2
157854	1998 <i>TN</i> ₁₅	11 4.6	35°66	0.0/ 4.4	18		295227	2008 <i>GG</i> ₇	11 4.6	60°60	1.5/ 3.5	18	
9 28	3 2.06	+18 49.6	2.114	2.924	13.6	19.9	9 28	3 6.58	+12 35.3	1.943	2.762	14.3	20.4
10 8	2 58.24	+18 10.9	2.036	2.928	10.6	19.7	10 8	3 1.61	+12 16.9	1.888	2.786	10.9	20.2
10 18	2 52.43	+17 20.6	1.980	2.932	7.0	19.5	10 18	2 54.55	+11 52.9	1.856	2.811	7.1	20.0
10 28	2 45.24	+16 21.5	1.951	2.936	3.1	19.3	10 28	2 46.13	+11 26.2	1.850	2.836	3.1	19.8
11 7	2 37.50	+15 17.9	1.950	2.941	1.0	19.1	11 7	2 37.26	+11 0.5	1.873	2.860	2.1	19.8
11 17	2 30.10	+14 15.0	1.979	2.945	5.0	19.4	11 17	2 28.93	+10 39.6	1.925	2.885	5.7	20.1
11 27	2 23.91	+13 18.4	2.036	2.950	8.7	19.7	11 27	2 22.00	+10 26.9	2.004	2.910	9.3	20.3
12 7	2 19.53	+12 32.8	2.118	2.955	11.9	19.9	12 7	2 17.07	+10 24.7	2.108	2.934	12.4	20.6
256440	2007 <i>CJ</i> ₁₆	11 4.6	315°41	0.9/ 3.9	18		104665	2000 <i>GQ</i> ₁₄₀	11 4.6	244°91	1.1/ 3.6	17	
9 28	3 3.65	+14 36.1	1.803	2.629	15.0	20.9	9 28	3 2.60	+13 39.0	2.664	3.472	11.2	20.9
10 8	3 0.00	+14 19.1	1.712	2.614	11.7	20.7	10 8	2 58.31	+13 12.6	2.569	3.462	8.6	20.7
10 18	2 53.92	+13 53.5	1.644	2.601	7.7	20.4	10 18	2 52.36	+12 40.3	2.498	3.451	5.7	20.5
10 28	2 46.01	+13 21.8	1.601	2.587	3.4	20.1	10 28	2 45.23	+12 4.1	2.455	3.440	2.5	20.3
11 7	2 37.22	+12 47.8	1.585	2.574	1.7	20.0	11 7	2 37.55	+11 27.3	2.441	3.429	1.6	20.2
11 17	2 28.64	+12 16.3	1.596	2.561	6.2	20.2	11 17	2 30.04	+10 53.1	2.458	3.417	4.7	20.4
11 27	2 21.37	+11 52.3	1.635	2.548	10.5	20.5	11 27	2 23.42	+10 25.2	2.504	3.406	7.9	20.6
12 7	2 16.26	+11 39.9	1.696	2.536	14.3	20.7	12 7	2 18.25	+10 6.3	2.575	3.394	10.6	20.8
422619	2014 <i>UW</i> ₁₀	11 4.6	312°72	4.5/31.7	17		300744	2007 <i>VO</i> ₁₈₀	11 4.6	61°35	1.6/ 3.4	18	
9 28	3 1.27	+ 4 11.4	2.208	3.039	12.4	20.8	9 28	3 4.62	+14 5.8	1.801	2.627	15.0	20.7
10 8	2 57.53	+ 3 17.5	2.128	3.031	9.7	20.6	10 8	3 0.53	+13 24.4	1.726	2.628	11.6	20.5
10 18	2 51.95	+ 2 22.4	2.071	3.022	6.8	20.4	10 18	2 54.12	+12 33.8	1.673	2.630	7.6	20.3
10 28	2 45.04	+ 1 31.0	2.041	3.014	4.7	20.3	10 28	2 46.05	+11 37.7	1.645	2.631	3.4	20.0
11 7	2 37.56	+ 0 48.6	2.039	3.005	5.1	20.3	11 7	2 37.30	+10 41.5	1.646	2.633	2.4	19.9
11 17	2 30.32	+ 0 19.4	2.065	2.997	7.6	20.4	11 17	2 28.93	+ 9 51.0	1.674	2.635	6.4	20.2
11 27	2 24.12	+ 0 6.4	2.118	2.990	10.5	20.6	11 27	2 21.97	+ 9 11.7	1.730	2.636	10.5	20.5
12 7	2 19.57	+ 0 10.6	2.193	2.982	13.3	20.7	12 7	2 17.13	+ 8 47.2	1.808	2.638	14.0	20.7
109576	2001 <i>QB</i> ₂₇₁	11 4.6	92°06	5.3/31.8	18		377762	2005 <i>YQ</i> ₆₀	11 4.6	330°84	2.0/ 2.9	18	
9 28	3 6.01	+ 2 25.9	1.936	2.765	14.0	19.8	9 28	2 59.96	+10 26.2	2.393	3.217	11.8	20.6
10 8	3 1.21	+ 1 35.7	1.877	2.777	10.9	19.7	10 8	2 56.52	+10 5.1	2.296	3.198	9.1	20.4
10 18	2 54.33	+ 0 47.0	1.841	2.789	7.8	19.5	10 18	2 51.32	+ 9 39.9	2.224	3.180	6.0	20.2
10 28	2 46.04	+ 0 5.3	1.832	2.801	5.5	19.4	10 28	2 44.81	+ 9 13.3	2.178	3.162	2.9	20.0
11 7	2 37.26	+ 0 24.3	1.850	2.813	5.9	19.4	11 7	2 37.68	+ 8 48.8	2.160	3.145	2.5	19.9
11 17	2 28.94	+ 0 38.0	1.895	2.824	8.4	19.6	11 17	2 30.69	+ 8 29.6	2.172	3.128	5.5	20.1
11 27	2 21.96	+ 0 33.9	1.967	2.836	11.4	19.8	11 27	2 24.61	+ 8 18.9	2.211	3.112	8.8	20.3
12 7	2 16.93	+ 0 12.2	2.062	2.847	14.1	20.0	12 7	2 20.06	+ 8 18.9	2.274	3.096	11.8	20.5
340321	2006 <i>DW</i> ₂₆	11 4.6	49°07	5.4/31.8	18		465100	2006 <i>UQ</i> ₂₄₅	11 4.6	259°28	4.4/ 5.4	17	
9 28	3 4.15	+ 6 3.1	1.581	2.424	15.9	20.0	9 28	3 24.42	+18 21.6	1.236	2.043	21.5	21.3
10 8	3 0.30	+ 4 46.7	1.519	2.429	12.3	19.8	10 8	3 18.06	+20 9.2	1.150	2.035	17.4	21.0
10 18	2 53.99	+ 3 26.8	1.479	2.435	8.5	19.6	10 18	3 7.17	+21 55.0	1.083	2.027	12.4	20.6
10 28	2 45.96	+ 2 11.0	1.465	2.441	5.7	19.4	10 28	2 52.34	+23 32.2	1.041	2.018	7.1	20.3
11 7	2 37.28	+ 1 7.2	1.477	2.447	6.2	19.5	11 7	2 35.15	+24 53.3	1.025	2.009	4.5	20.2
11 17	2 29.10	+ 0 22.1	1.515	2.453	9.4	19.7	11 17	2 17.92	+25 54.1	1.036	2.000	8.8	20.4
11 27	2 22.46	+ 0 0.5	1.579	2.459	13.0	19.9	11 27	2 3.10	+26 37.1	1.074	1.991	14.3	20.7
12 7	2 18.10	+ 0 0.0	1.663	2.465	16.2	20.1	12 7	1 52.42	+27 9.9	1.133	1.982	19.2	20.9
295150	2008 <i>FJ</i> ₅₃	11 4.6	99°36	0.0/ 4.4	18		364639	2007 <i>TY</i> ₁₀₉	11 4.6	50°41	2.2/ 3.8	16	
9 28	3 5.19	+17 0.5	2.116	2.924	13.7	21.3	9 28	3 15.43	+10 49.9	1.006	1.857	22.3	19.8
10 8	3 0.66	+16 48.3	2.037	2.929	10.6	21.2	10 8	3 9.88	+10 59.0	0.971	1.885	17.1	19.6
10 18	2 54.05	+16 27.4	1.982	2.933	7.0	20.9	10 18	3 0.59	+11 2.5	0.953	1.914	11.2	19.4
10 28	2 45.97	+15 59.4	1.952	2.937	3.1	20.7	10 28	2 48.84	+11 3.8	0.957	1.943	5.0	19.2
11 7	2 37.28	+15 27.5	1.951	2.941	1.0	20.5	11 7	2 36.48	+11 6.8	0.985	1.973	3.0	19.1
11 17	2 28.91	+14 55.4	1.980	2.946	5.0	20.9	11 17	2 25.37	+11 15.6	1.038	2.003	8.5	19.6
11 27	2 21.78	+14 27.6	2.036	2.950	8.7	21.1	11 27	2 17.01	+11 34.0	1.114	2.034	13.6	20.0
12 7	2 16.55	+14 7.8	2.118	2.954	12.0	21.3	12 7	2 12.15	+12 3.6	1.211	2.064	17.9	20.3
412628	2014 <i>OQ</i> ₁₃₆	11 4.6	218°14	3.1/ 2.2	18		159525	2001 <i>FD</i> ₁₁₇	11 4.6	166°26	5.9/28.5	18</	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
108174	2001 <i>HH</i> ₁₁	11	4.6 185°01	0°5/ 4.9 18			136743	Echigo	11	4.6 355°46	0°6/ 4.9 18		
9 28	3 7.09	+18 40.3	2.224	3.022	13.4	20.9	9 28	2 57.59	+18 27.1	0.947	1.818	21.8	18.8
10 8	3 2.09	+18 27.5	2.138	3.022	10.5	20.7	10 8	2 57.05	+18 21.1	0.884	1.809	17.2	18.5
10 18	2 55.01	+18 5.0	2.074	3.022	7.1	20.5	10 18	2 52.86	+17 56.7	0.838	1.803	11.6	18.2
10 28	2 46.42	+17 33.8	2.037	3.021	3.2	20.3	10 28	2 45.81	+17 16.1	0.811	1.798	5.3	17.9
11 7	2 37.19	+16 57.0	2.029	3.020	1.0	20.1	11 7	2 37.44	+16 25.6	0.805	1.795	1.6	17.6
11 17	2 28.24	+16 18.3	2.052	3.018	4.8	20.4	11 17	2 29.58	+15 34.1	0.821	1.795	8.1	18.0
11 27	2 20.49	+15 42.4	2.103	3.016	8.5	20.6	11 27	2 23.99	+14 52.0	0.859	1.797	14.1	18.3
12 7	2 14.63	+15 13.5	2.179	3.013	11.8	20.8	12 7	2 21.77	+14 26.9	0.915	1.801	19.3	18.7
175071	2004 <i>GC</i> ₃₅	11	4.6 178°67	1°9/ 6.3 18			64754	2001 <i>XP</i> ₁₅₈	11	4.6 5°52	1°8/ 3.3 18		
9 28	3 5.83	+24 9.6	2.467	3.243	12.9	21.1	9 28	3 3.92	+12 42.2	1.864	2.691	14.5	19.1
10 8	3 0.96	+23 55.4	2.377	3.245	10.2	20.9	10 8	2 59.95	+12 13.4	1.788	2.691	11.2	18.9
10 18	2 54.18	+23 28.7	2.310	3.246	7.2	20.7	10 18	2 53.74	+11 37.5	1.734	2.691	7.4	18.7
10 28	2 46.03	+22 49.9	2.270	3.246	3.9	20.5	10 28	2 45.92	+10 57.9	1.706	2.692	3.3	18.4
11 7	2 37.32	+22 1.4	2.259	3.246	2.0	20.4	11 7	2 37.43	+10 19.2	1.706	2.693	2.4	18.4
11 17	2 28.88	+21 6.9	2.279	3.246	4.4	20.5	11 17	2 29.28	+9 46.2	1.734	2.694	6.3	18.6
11 27	2 21.57	+20 11.6	2.328	3.245	7.6	20.7	11 27	2 22.46	+9 23.2	1.788	2.695	10.2	18.9
12 7	2 16.00	+19 20.6	2.404	3.244	10.6	20.9	12 7	2 17.67	+9 13.2	1.867	2.697	13.6	19.1
41282	1999 <i>XO</i> ₉₆	11	4.6 1°78	0°1/ 4.5 18			84760	2002 <i>XS</i> ₂₂	11	4.6 220°43	0°4/ 4.3 18		
9 28	3 3.24	+16 17.5	1.772	2.597	15.2	18.4	9 28	3 6.57	+15 21.2	2.157	2.965	13.5	20.3
10 8	2 59.61	+16 9.7	1.695	2.596	11.9	18.1	10 8	3 1.79	+15 11.7	2.069	2.960	10.5	20.1
10 18	2 53.60	+15 52.7	1.640	2.595	7.9	17.9	10 18	2 54.88	+14 54.9	2.004	2.956	6.9	19.9
10 28	2 45.87	+15 28.5	1.610	2.596	3.4	17.6	10 28	2 46.43	+14 32.3	1.965	2.951	3.0	19.6
11 7	2 37.38	+15 0.3	1.607	2.597	1.2	17.5	11 7	2 37.27	+14 6.9	1.956	2.946	1.2	19.5
11 17	2 29.23	+14 32.7	1.631	2.598	5.7	17.8	11 17	2 28.36	+13 42.2	1.976	2.940	5.2	19.8
11 27	2 22.47	+14 10.5	1.682	2.601	9.9	18.0	11 27	2 20.63	+13 22.3	2.025	2.935	9.0	20.0
12 7	2 17.87	+13 57.6	1.757	2.603	13.5	18.3	12 7	2 14.80	+13 10.5	2.098	2.929	12.3	20.2
82612	2001 <i>OD</i> ₁₀₁	11	4.6 41°36	2°2/ 6.2 18			483873	2005 <i>YO</i> ₁₄₃	11	4.6 314°29	8°5/ 28.8 18		
9 28	3 5.19	+23 26.7	1.785	2.587	16.1	19.0	9 28	3 3.52	- 7 43.2	2.061	2.882	13.5	21.3
10 8	3 1.15	+23 18.9	1.710	2.592	12.8	18.8	10 8	2 59.39	- 8 49.2	1.993	2.874	11.3	21.2
10 18	2 54.61	+22 55.8	1.655	2.598	8.9	18.6	10 18	2 53.24	- 9 47.2	1.949	2.867	9.4	21.1
10 28	2 46.30	+22 17.9	1.625	2.604	4.8	18.3	10 28	2 45.68	-10 30.3	1.929	2.859	8.5	21.0
11 7	2 37.25	+21 28.2	1.622	2.610	2.2	18.2	11 7	2 37.53	-10 52.7	1.935	2.852	9.2	21.0
11 17	2 28.63	+20 32.1	1.647	2.616	5.4	18.4	11 17	2 29.67	-10 51.0	1.967	2.845	11.0	21.1
11 27	2 21.53	+19 36.3	1.699	2.623	9.4	18.7	11 27	2 22.99	-10 24.5	2.022	2.839	13.3	21.3
12 7	2 16.71	+18 47.4	1.776	2.629	13.1	18.9	12 7	2 18.13	- 9 35.3	2.098	2.832	15.5	21.4
401571	2013 <i>FY</i> ₁₅	11	4.6 203°28	0°9/ 3.9 18			178031	2006 <i>RG</i> ₅₂	11	4.6 83°15	1°5/ 3.4 18		
9 28	3 5.47	+14 6.9	2.175	2.988	13.2	21.6	9 28	3 4.30	+14 16.2	1.926	2.747	14.3	21.0
10 8	3 0.85	+13 49.3	2.092	2.986	10.2	21.4	10 8	3 0.14	+13 36.0	1.851	2.751	11.0	20.8
10 18	2 54.19	+13 25.0	2.031	2.984	6.7	21.2	10 18	2 53.80	+12 47.0	1.799	2.755	7.2	20.6
10 28	2 46.08	+12 56.1	1.997	2.983	2.9	21.0	10 28	2 45.94	+11 52.9	1.773	2.759	3.2	20.4
11 7	2 37.33	+12 25.9	1.992	2.980	1.6	20.9	11 7	2 37.46	+10 58.5	1.776	2.763	2.1	20.3
11 17	2 28.84	+11 58.3	2.016	2.978	5.3	21.1	11 17	2 29.36	+10 9.3	1.807	2.767	6.0	20.6
11 27	2 21.53	+11 37.1	2.069	2.976	9.0	21.4	11 27	2 22.58	+9 30.4	1.865	2.772	9.9	20.8
12 7	2 16.05	+11 25.5	2.146	2.973	12.2	21.6	12 7	2 17.79	+9 5.0	1.948	2.776	13.2	21.0
398309	2011 <i>AD</i> ₁₁	11	4.6 234°24	4°4/ 8.6 17			484234	2007 <i>EL</i> ₁₂₉	11	4.6 191°72	0°3/ 4.9 18		
9 28	3 5.05	+31 19.9	2.440	3.189	13.7	21.1	9 28	3 4.45	+18 18.6	2.455	3.253	12.3	22.3
10 8	3 0.62	+31 29.1	2.347	3.186	11.4	21.0	10 8	2 59.89	+18 3.6	2.367	3.252	9.6	22.2
10 18	2 54.10	+31 22.6	2.274	3.182	8.7	20.8	10 18	2 53.49	+17 39.9	2.303	3.251	6.4	22.0
10 28	2 46.06	+30 59.1	2.226	3.179	6.1	20.6	10 28	2 45.78	+17 8.8	2.265	3.249	2.9	21.7
11 7	2 37.34	+30 19.3	2.206	3.175	4.4	20.5	11 7	2 37.51	+16 33.1	2.258	3.248	0.9	21.6
11 17	2 28.87	+29 26.1	2.214	3.172	5.3	20.6	11 17	2 29.49	+15 56.0	2.280	3.246	4.4	21.8
11 27	2 21.57	+28 24.9	2.252	3.168	7.9	20.7	11 27	2 22.50	+15 22.0	2.331	3.244	7.8	22.0
12 7	2 16.15	+27 22.0	2.315	3.164	10.6	20.9	12 7	2 17.17	+14 54.5	2.408	3.242	10.8	22.2
327673	2006 <i>RQ</i> ₁₁	11	4.6 26°95	1°5/ 5.3 18			243319	2008 <i>RR</i> ₁₀₉	11	4.6 161°86	4°8/ 29.7 18		
9 28	3 5.24	+20 2.7	1.026	1.877	22.0	19.9	9 28	3 1.33	+ 0 54.6	2.959	3.776	10.0	21.2
10 8	3 2.51	+20 2.6	0.976	1.888	17.3	19.6	10 8	2 57.02	- 0 33.3	2.890	3.781	7.9	21.0
10 18	2 56.11	+19 44.0	0.942	1.901	11.7	19.4	10 18	2 51.36	- 2 0.8	2.848	3.785	5.9	20.9
10 28	2 47.07	+19 8.8	0.929	1.914	5.6	19.1	10 28	2 44.78	- 3 22.9	2.835	3.790	4.8	20.9
11 7	2 37.05	+18 22.2	0.939	1.929	1.8	18.9	11 7	2 37.85	- 4 34.6	2.852	3.794	5.4	20.9
11 17	2 27.88	+17 32.5	0.973	1.946	7.4	19.3	11 17	2 31.16	- 5 32.1	2.899	3.797	7.1	21.0
11 27	2 21.14	+16 49.2	1.030	1.963	13.0	19.7	11 27	2 25.28	- 6 12.8	2.973	3.800	9.2	21.2
12 7	2 17.73	+16 19.3	1.106	1.981	17.6	20.0	12 7	2 20.65	- 6 36.2	3.070	3.803	11.1	21.3
407964	2012 <i>DX</i> ₂₃	11	4.6 302°76	4°4/ 31.7 18			447256	2005 <i>UG</i> ₂₉₇	11	4.6 347°48	0°7/ 5.1 17		
9 28	3 1.67	+ 5 46.3	2.104	2.936	12.9	20.9	9 28	2 59.72	+20 20.7	1.531	2.362	16.9	20.9
10 8	2 57.93	+ 4 40.2	2.026	2.930	10.0	20.7	10 8	2 57.39	+19 52.4	1.450	2.352	13.3	20.6
10 18	2 52.26	+ 3 31.0	1.972	2.925	7.0	20.5	10 18	2 52.41	+19 7.7	1.388	2.343	9.0	20.4
10 28	2 45.23	+ 2 24.4	1.945	2.919	4.7	20.4	10 28	2 45.46	+18 8.8	1.351	2.336	4.2	20.1
11 7	2 37.62	+ 1 26.2	1.946	2.914	5.1	20.4	11 7	2 37.61	+17 0.7	1.339	2.329	1.2	19.8
11 17	2 30.28	+ 0 41.5	1.975	2.909	7.8	20.5	11 17	2 30.08	+15 50.6	1.353	2.323	6.2	20.2
11 27	2 24.05	+ 0 14.2	2.030	2.904	10.8	20.7	11 27	2 24.10	+14 46.9	1.393	2.319	10.9	20.4
12 7	2 19.55	+ 0 5.5	2.108	2.899	13.7	20.9	12 7	2 20.51	+13 56.3	1.455	2.315	15.0	20.7
405784	2006 <i>AD</i> ₄₄	11	4.6 305°99	5°8/ 30.8 17			423406	2005 <i>MK</i> ₃	11	4.6 122°76	5°8/ 1.1 17		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
317784	2003 SA ₁₆₁	11 4.6 95°23	1.1°/ 5.2	15			246797	2009 EP ₉	11 4.6 303°67	0.1°/ 4.7	18		
9 28	3 14.56	+18 39.5	1.476	2.287	18.4	21.1	9 28	3 5.57	+18 7.1	1.803	2.618	15.4	21.3
10 8	3 8.62	+18 48.9	1.418	2.308	14.4	20.9	10 8	3 1.41	+17 45.2	1.723	2.617	12.0	21.1
10 18	2 59.64	+18 46.1	1.379	2.328	9.7	20.7	10 18	2 54.83	+17 11.6	1.664	2.616	8.0	20.9
10 28	2 48.53	+18 31.8	1.365	2.348	4.5	20.4	10 28	2 46.47	+16 28.3	1.630	2.615	3.6	20.6
11 7	2 36.68	+18 8.6	1.378	2.368	1.5	20.3	11 7	2 37.35	+15 39.4	1.624	2.614	1.1	20.4
11 17	2 25.57	+17 41.6	1.419	2.387	6.3	20.6	11 17	2 28.59	+14 50.1	1.646	2.613	5.7	20.7
11 27	2 16.52	+17 17.0	1.487	2.406	10.9	21.0	11 27	2 21.25	+14 6.6	1.696	2.613	9.9	21.0
12 7	2 10.34	+17 0.0	1.578	2.424	14.8	21.2	12 7	2 16.13	+13 33.8	1.769	2.612	13.6	21.2
39605	1993 TX ₂₃	11 4.6 92°69	1.6°/ 3.3	18			153425	2001 QD ₂₀₅	11 4.6 28°68	0.7°/ 5.1	18		
9 28	3 4.70	+12 13.7	2.280	3.095	12.6	19.6	9 28	3 6.18	+20 26.1	1.528	2.347	17.5	20.2
10 8	3 0.02	+11 48.2	2.212	3.108	9.7	19.4	10 8	3 2.31	+19 58.3	1.453	2.348	13.8	20.0
10 18	2 53.51	+11 17.5	2.167	3.121	6.3	19.2	10 18	2 55.62	+19 14.3	1.397	2.349	9.3	19.7
10 28	2 45.76	+10 44.5	2.149	3.134	2.9	19.0	10 28	2 46.86	+18 16.1	1.366	2.350	4.3	19.4
11 7	2 37.55	+10 12.7	2.161	3.147	2.1	19.0	11 7	2 37.24	+17 8.8	1.361	2.352	1.3	19.2
11 17	2 29.71	+9 45.6	2.202	3.160	5.3	19.2	11 17	2 28.07	+15 59.6	1.384	2.353	6.2	19.5
11 27	2 23.00	+9 26.7	2.271	3.172	8.6	19.5	11 27	2 20.64	+14 56.9	1.433	2.355	11.0	19.8
12 7	2 17.99	+9 18.1	2.366	3.185	11.4	19.7	12 7	2 15.78	+14 7.3	1.505	2.356	15.1	20.1
246934	1999 PL	11 4.6 0°81	9.6°/12.6	17			152751	1999 BL ₂₇	11 4.6 266°02	0.4°/ 4.8	18		
9 28	2 52.61	+39 20.3	1.046	1.848	25.0	18.5	9 28	3 7.37	+18 19.8	1.695	2.510	16.2	21.2
10 8	2 53.52	+39 28.3	0.980	1.842	21.7	18.2	10 8	3 3.16	+18 6.6	1.603	2.497	12.8	21.0
10 18	2 50.63	+38 53.9	0.928	1.839	17.7	18.0	10 18	2 56.22	+17 41.0	1.532	2.484	8.6	20.7
10 28	2 44.85	+37 31.6	0.892	1.839	13.5	17.8	10 28	2 47.19	+17 4.4	1.487	2.471	3.9	20.4
11 7	2 37.84	+35 23.2	0.876	1.841	10.2	17.6	11 7	2 37.12	+16 20.3	1.468	2.458	1.2	20.2
11 17	2 31.51	+32 39.4	0.882	1.846	10.0	17.6	11 17	2 27.27	+15 34.0	1.477	2.445	6.1	20.5
11 27	2 27.57	+29 39.9	0.911	1.853	13.0	17.8	11 27	2 18.93	+14 52.1	1.513	2.431	10.8	20.7
12 7	2 26.98	+26 45.6	0.961	1.862	17.1	18.1	12 7	2 13.02	+14 20.5	1.573	2.418	14.9	20.9
170780	2004 CU ₁₀₁	11 4.6 341°11	3°1/ 6.9	18			172351	2002 VG ₁₂₆	11 4.6 24°23	4°4/ 7.7	18		
9 28	2 59.06	+26 51.7	1.380	2.199	19.1	19.2	9 28	3 4.11	+28 3.4	1.474	2.276	18.9	19.1
10 8	2 57.35	+26 21.6	1.295	2.186	15.5	18.9	10 8	3 0.92	+28 7.7	1.407	2.284	15.4	18.9
10 18	2 52.64	+25 25.9	1.228	2.173	11.1	18.6	10 18	2 54.77	+27 50.4	1.360	2.294	11.3	18.7
10 28	2 45.64	+24 4.6	1.183	2.161	6.3	18.3	10 28	2 46.50	+27 10.6	1.334	2.304	7.0	18.5
11 7	2 37.57	+22 22.6	1.163	2.151	3.1	18.1	11 7	2 37.39	+26 11.4	1.334	2.316	4.4	18.3
11 17	2 29.87	+20 29.5	1.169	2.141	6.5	18.3	11 17	2 28.86	+24 59.2	1.360	2.328	6.5	18.5
11 27	2 23.93	+18 37.6	1.200	2.133	11.5	18.5	11 27	2 22.19	+23 43.3	1.411	2.341	10.4	18.8
12 7	2 20.72	+16 58.6	1.253	2.127	16.0	18.8	12 7	2 18.22	+22 33.0	1.486	2.354	14.3	19.0
289412	2005 CT ₇₃	11 4.6 187°59	1°4/ 5.4	16			233354	2006 DA ₇₂	11 4.6 63°09	0.7°/ 5.0	18		
9 28	3 10.39	+20 25.3	1.571	2.381	17.6	21.7	9 28	3 7.56	+18 40.7	1.666	2.481	16.5	20.6
10 8	3 5.61	+20 23.9	1.491	2.381	13.9	21.4	10 8	3 3.13	+18 36.0	1.593	2.486	12.9	20.3
10 18	2 57.85	+20 8.5	1.432	2.380	9.5	21.2	10 18	2 56.04	+18 19.5	1.540	2.491	8.7	20.1
10 28	2 47.87	+19 39.4	1.397	2.380	4.7	20.9	10 28	2 47.04	+17 52.5	1.511	2.496	4.0	19.9
11 7	2 36.88	+18 59.8	1.389	2.379	1.7	20.7	11 7	2 37.22	+17 18.2	1.510	2.501	1.2	19.7
11 17	2 26.31	+18 14.8	1.409	2.377	6.2	21.0	11 17	2 27.83	+16 41.7	1.537	2.506	5.8	20.0
11 27	2 17.51	+17 31.7	1.455	2.376	10.9	21.3	11 27	2 20.06	+16 8.8	1.591	2.511	10.2	20.3
12 7	2 11.41	+16 57.0	1.524	2.374	15.1	21.5	12 7	2 14.71	+15 44.6	1.668	2.516	14.1	20.5
73238	2002 JL ₃₄	11 4.6 12°39	4°4/ 2.7	18			469723	2005 MS ₂₃	11 4.6 97°00	2°1/ 6.0	16		
9 28	3 7.75	+7 23.0	1.147	2.003	19.7	18.4	9 28	3 9.17	+23 35.0	1.540	2.344	18.1	21.3
10 8	3 4.12	+7 2.5	1.087	2.005	15.4	18.1	10 8	3 4.52	+23 15.7	1.473	2.357	14.3	21.1
10 18	2 57.09	+6 39.5	1.046	2.007	10.4	17.9	10 18	2 56.99	+22 38.3	1.425	2.369	9.9	20.9
10 28	2 47.57	+6 19.8	1.027	2.010	5.6	17.6	10 28	2 47.43	+21 43.7	1.402	2.382	5.2	20.6
11 7	2 37.00	+6 9.7	1.032	2.014	5.2	17.6	11 7	2 37.11	+20 36.3	1.405	2.394	2.1	20.5
11 17	2 27.05	+6 14.1	1.061	2.019	9.6	17.9	11 17	2 27.42	+19 23.2	1.436	2.406	6.0	20.8
11 27	2 19.25	+6 36.2	1.113	2.025	14.5	18.2	11 27	2 19.60	+18 13.3	1.494	2.417	10.5	21.1
12 7	2 14.55	+7 16.1	1.185	2.031	18.8	18.5	12 7	2 14.46	+17 14.1	1.576	2.429	14.5	21.3
267027	1996 RN ₈	11 4.6 355°35	5°4/30.8	18			355522	2008 AX ₄₇	11 4.6 358°08	2°2/ 3.3	18		
9 28	2 59.95	+3 36.3	2.005	2.844	13.2	19.7	9 28	3 4.28	+11 49.5	1.571	2.409	16.2	20.6
10 8	2 56.69	+2 19.1	1.936	2.842	10.3	19.6	10 8	3 0.68	+11 25.2	1.498	2.407	12.6	20.3
10 18	2 51.49	+1 0.6	1.889	2.840	7.4	19.4	10 18	2 54.47	+10 54.0	1.446	2.406	8.3	20.1
10 28	2 44.94	-0 12.9	1.869	2.838	5.5	19.3	10 28	2 46.37	+10 19.7	1.419	2.405	3.8	19.8
11 7	2 37.84	-1 14.8	1.877	2.837	6.1	19.3	11 7	2 37.43	+9 47.3	1.418	2.405	2.9	19.8
11 17	2 31.04	-1 59.7	1.912	2.836	8.6	19.5	11 17	2 28.88	+9 22.1	1.444	2.405	7.1	20.0
11 27	2 25.38	-2 24.3	1.972	2.836	11.5	19.6	11 27	2 21.89	+9 8.7	1.495	2.406	11.5	20.3
12 7	2 21.47	-2 28.0	2.054	2.837	14.2	19.8	12 7	2 17.25	+9 10.0	1.569	2.407	15.3	20.5
243485	2009 TH ₂₆	11 4.6 81°56	0°3/ 4.8	18			187432	2005 WF ₂₉	11 4.6 134°61	1°2/ 3.7	18		
9 28	3 10.39	+15 21.1	2.258	3.056	13.3	20.2	9 28	3 6.13	+12 32.6	2.289	3.100	12.7	20.4
10 8	3 4.54	+15 47.9	2.183	3.067	10.3	20.0	10 8	3 1.23	+12 22.1	2.211	3.105	9.8	20.2
10 18	2 56.59	+16 9.3	2.131	3.079	6.9	19.8	10 18	2 54.40	+12 6.6	2.156	3.109	6.4	20.0
10 28	2 47.17	+16 25.7	2.106	3.091	3.1	19.6	10 28	2 46.22	+11 48.4	2.128	3.114	2.9	19.8
11 7	2 37.13	+16 38.1	2.112	3.102	0.9	19.4	11 7	2 37.49	+11 30.3	2.130	3.118	1.8	19.7
11 17	2 27.42	+16 48.1	2.148	3.114	4.7	19.7	11 17	2 29.04	+11 15.2	2.161	3.122	5.2	20.0
11 27	2 18.96	+16 58.5	2.213	3.125	8.2	20.0	11 27	2 21.73	+11 6.5	2.221	3.126	8.6	20.2
12 7	2 12.40	+17 11.7	2.305	3.136	11.3	20.2	12 7	2 16.16	+11 6.3	2.307	3.129	11.6	20.4
226481	2003 SQ ₁₉₃	11 4.6 354°80	5°2/ 8.7	18			411888	2012 FK ₃₂	11 4.6 67°37	4°2/ 1.2	18		
9 28	3 4.76	+31 10.0	2.028	2.791	15.7	19.8	9 28						

EPHEMERIDES

11 4.6

11 4.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
159783	2003 <i>MY</i> ₉		11 4.6 45°39'	7.8/ 1.9	18		227867	2007 <i>DZ</i> ₉₇		11 4.6 288°31'	0.7/ 5.1	18	
9 28	3 13.84	- 2 16.5	1.268	2.107	19.3	18.0	9 28	3 6.41	+19 20.8	1.554	2.374	17.2	21.5
10 8	3 7.85	- 2 38.0	1.236	2.137	15.3	17.9	10 8	3 2.75	+19 7.2	1.462	2.358	13.6	21.3
10 18	2 58.91	- 2 49.7	1.224	2.168	11.2	17.7	10 18	2 56.16	+18 39.3	1.389	2.342	9.3	21.0
10 28	2 48.13	- 2 45.2	1.235	2.200	8.2	17.6	10 28	2 47.28	+17 58.0	1.341	2.326	4.4	20.7
11 7	2 36.97	- 2 20.5	1.270	2.231	8.2	17.7	11 7	2 37.22	+17 7.0	1.319	2.309	1.3	20.4
11 17	2 26.86	- 1 34.8	1.332	2.264	10.9	18.0	11 17	2 27.36	+16 12.4	1.324	2.293	6.5	20.7
11 27	2 18.97	- 0 30.1	1.417	2.296	14.3	18.3	11 27	2 19.10	+15 21.9	1.355	2.277	11.5	21.0
12 7	2 13.92	+ 0 49.6	1.524	2.329	17.3	18.6	12 7	2 13.46	+14 42.5	1.408	2.261	15.9	21.2
212752	2007 <i>TA</i> ₁₀		11 4.6 1°21'	1.7/ 3.6	18		407068	2009 <i>SF</i> ₁₇₃		11 4.6 139°94'	3.6/ 7.7	17	
9 28	3 1.37	+14 35.2	1.310	2.161	18.1	20.1	9 28	3 7.20	+27 58.5	2.458	3.217	13.4	21.5
10 8	2 58.91	+14 0.5	1.243	2.159	14.0	19.8	10 8	3 2.20	+28 17.6	2.372	3.222	10.9	21.3
10 18	2 53.53	+13 14.0	1.195	2.158	9.2	19.6	10 18	2 55.15	+28 23.6	2.308	3.227	8.1	21.1
10 28	2 46.01	+12 20.1	1.170	2.158	4.1	19.3	10 28	2 46.63	+28 15.4	2.270	3.232	5.3	21.0
11 7	2 37.56	+11 25.4	1.170	2.159	2.6	19.2	11 7	2 37.46	+27 53.6	2.261	3.237	3.6	20.9
11 17	2 29.59	+10 37.6	1.195	2.161	7.6	19.5	11 17	2 28.55	+27 20.9	2.280	3.241	4.9	21.0
11 27	2 23.39	+10 3.5	1.245	2.165	12.5	19.8	11 27	2 20.82	+26 41.6	2.329	3.245	7.6	21.1
12 7	2 19.84	+ 9 47.3	1.315	2.169	16.7	20.1	12 7	2 14.93	+26 1.1	2.404	3.249	10.4	21.3
433012	2012 <i>RO</i> ₁₉		11 4.6 66°80'	0.6/ 4.3	18		118219	1996 <i>HT</i> ₂₀		11 4.6 277°23'	0.8/ 4.1	18	
9 28	3 12.04	+15 26.4	1.454	2.278	18.1	20.7	9 28	3 6.76	+15 41.3	1.605	2.430	16.5	19.6
10 8	3 6.47	+15 16.4	1.407	2.306	13.9	20.5	10 8	3 2.75	+15 18.0	1.519	2.421	12.9	19.4
10 18	2 58.08	+14 56.7	1.379	2.334	9.1	20.3	10 18	2 55.99	+14 43.6	1.455	2.411	8.6	19.1
10 28	2 47.83	+14 30.0	1.377	2.363	3.9	20.1	10 28	2 47.13	+14 0.9	1.415	2.402	3.8	18.8
11 7	2 37.04	+14 0.5	1.401	2.391	1.5	20.0	11 7	2 37.28	+13 14.3	1.402	2.392	1.7	18.6
11 17	2 27.08	+13 33.6	1.453	2.419	6.5	20.4	11 17	2 27.72	+12 29.9	1.417	2.382	6.7	18.9
11 27	2 19.11	+13 14.3	1.531	2.446	10.9	20.8	11 27	2 19.72	+11 54.1	1.458	2.373	11.4	19.2
12 7	2 13.83	+13 6.2	1.632	2.474	14.6	21.1	12 7	2 14.19	+11 31.9	1.521	2.363	15.5	19.4
54231	2000 <i>JO</i> ₁₄		11 4.6 262°43'	1.2/ 3.8	18		488168	2015 <i>XA</i> ₅₄		11 4.6 134°03'	8.1/ 29.6	18	
9 28	3 7.07	+14 59.3	1.703	2.525	15.9	19.9	9 28	3 7.15	-10 36.1	2.367	3.167	12.7	21.4
10 8	3 2.88	+14 28.4	1.610	2.511	12.4	19.7	10 8	3 1.84	-11 19.5	2.307	3.170	10.7	21.3
10 18	2 56.01	+13 46.8	1.540	2.496	8.2	19.4	10 18	2 54.71	-11 52.8	2.270	3.174	9.0	21.2
10 28	2 47.11	+12 57.2	1.494	2.480	3.6	19.1	10 28	2 46.37	-12 10.5	2.259	3.177	8.1	21.1
11 7	2 37.20	+12 4.6	1.476	2.465	2.0	18.9	11 7	2 37.58	-12 8.6	2.274	3.180	8.6	21.2
11 17	2 27.50	+11 15.2	1.486	2.449	6.7	19.2	11 17	2 29.16	-11 45.2	2.317	3.183	10.0	21.3
11 27	2 19.26	+10 35.2	1.522	2.433	11.3	19.4	11 27	2 21.87	-11 0.7	2.384	3.186	12.0	21.4
12 7	2 13.38	+10 9.6	1.582	2.417	15.4	19.7	12 7	2 16.28	- 9 57.7	2.473	3.189	13.8	21.6
81201	2000 <i>FL</i> ₆		11 4.6 177°41'	1.9/ 5.9	18		514225	2015 <i>OE</i> ₇₀		11 4.6 115°54'	7.0/ 10.5	18	
9 28	3 8.61	+21 23.2	2.141	2.930	14.2	20.3	9 28	3 10.58	+36 56.4	1.983	2.709	17.1	21.7
10 8	3 3.49	+21 36.3	2.055	2.931	11.2	20.1	10 8	3 5.52	+37 23.2	1.904	2.719	14.6	21.5
10 18	2 56.11	+21 38.8	1.991	2.932	7.8	19.9	10 18	2 57.68	+37 28.2	1.845	2.729	11.8	21.3
10 28	2 47.07	+21 30.5	1.954	2.932	4.1	19.7	10 28	2 47.82	+37 8.0	1.807	2.738	9.0	21.2
11 7	2 37.28	+21 13.0	1.945	2.932	1.9	19.5	11 7	2 37.12	+36 22.2	1.796	2.747	7.2	21.1
11 17	2 27.75	+20 49.1	1.965	2.932	4.9	19.7	11 17	2 26.91	+35 14.3	1.811	2.756	7.5	21.1
11 27	2 19.51	+20 23.3	2.014	2.932	8.6	19.9	11 27	2 18.43	+33 52.1	1.854	2.764	9.7	21.3
12 7	2 13.30	+20 0.5	2.089	2.931	11.8	20.2	12 7	2 12.52	+32 24.9	1.923	2.773	12.4	21.5
303556	2005 <i>GH</i> ₄₄		11 4.6 103°55'	1.9/ 6.2	18		308900	2006 <i>SB</i> ₁₉₉		11 4.6 59°65'	0.0/ 4.4	18	
9 28	3 7.63	+23 19.9	2.056	2.844	14.7	21.2	9 28	3 5.41	+17 54.8	1.793	2.609	15.4	21.0
10 8	3 2.63	+23 8.5	1.985	2.860	11.6	21.0	10 8	3 1.21	+17 30.9	1.724	2.619	12.0	20.8
10 18	2 55.43	+22 43.5	1.936	2.875	8.1	20.8	10 18	2 54.64	+16 55.8	1.676	2.629	8.0	20.6
10 28	2 46.71	+22 5.7	1.913	2.890	4.3	20.6	10 28	2 46.43	+16 11.6	1.653	2.638	3.5	20.3
11 7	2 37.43	+21 17.9	1.918	2.905	2.0	20.5	11 7	2 37.58	+15 22.9	1.658	2.648	1.1	20.2
11 17	2 28.61	+20 24.8	1.952	2.920	4.9	20.7	11 17	2 29.17	+14 34.9	1.692	2.658	5.6	20.5
11 27	2 21.19	+19 32.3	2.015	2.934	8.5	20.9	11 27	2 22.24	+13 53.3	1.752	2.669	9.7	20.8
12 7	2 15.84	+18 45.8	2.104	2.948	11.7	21.2	12 7	2 17.47	+13 22.6	1.837	2.679	13.2	21.0
298432	2003 <i>UY</i> ₁		11 4.6 132°93'	1.3/ 5.5	18		367971	2012 <i>DZ</i> ₉₆		11 4.6 308°92'	4.6/ 2.2	18 R	
9 28	3 6.85	+21 2.9	1.860	2.663	15.5	20.9	9 28	3 6.15	+ 9 0.4	1.213	2.068	19.0	20.6
10 8	3 2.38	+20 50.8	1.781	2.666	12.2	20.7	10 8	3 3.01	+ 8 11.9	1.139	2.056	14.9	20.3
10 18	2 55.46	+20 25.5	1.722	2.669	8.3	20.5	10 18	2 56.54	+ 7 15.8	1.083	2.044	10.1	20.0
10 28	2 46.80	+19 48.0	1.690	2.672	4.1	20.2	10 28	2 47.50	+ 6 18.6	1.050	2.033	5.6	19.7
11 7	2 37.39	+19 1.5	1.685	2.674	1.5	20.1	11 7	2 37.21	+ 5 29.0	1.041	2.022	5.4	19.7
11 17	2 28.36	+18 11.0	1.708	2.677	5.3	20.3	11 17	2 27.28	+ 4 55.0	1.057	2.012	10.0	19.9
11 27	2 20.79	+17 22.8	1.760	2.679	9.4	20.6	11 27	2 19.29	+ 4 43.0	1.095	2.002	15.1	20.1
12 7	2 15.43	+16 42.3	1.836	2.682	13.1	20.8	12 7	2 14.31	+ 4 54.8	1.153	1.993	19.6	20.4
51397	2001 <i>DT</i> ₇₄		11 4.6 147°89'	0.6/ 4.2	18		104786	2000 <i>HH</i> ₃₅		11 4.6 201°60'	2.7/ 2.3	18	
9 28	3 10.34	+15 38.7	1.736	2.549	16.0	19.4	9 28	3 3.22	+ 7 46.2	2.540	3.358	11.4	20.1
10 8	3 5.11	+15 22.2	1.662	2.556	12.4	19.2	10 8	2 58.83	+ 7 16.4	2.460	3.357	8.8	19.9
10 18	2 57.29	+14 56.2	1.610	2.563	8.2	18.9	10 18	2 52.78	+ 6 44.3	2.403	3.356	5.9	19.7
10 28	2 47.60	+14 23.1	1.583	2.569	3.6	18.7	10 28	2 45.56	+ 6 13.2	2.374	3.354	3.3	19.5
11 7	2 37.16	+13 46.7	1.584	2.574	1.5	18.5	11 7	2 37.85	+ 5 46.4	2.374	3.353	3.2	19.5
11 17	2 27.17	+13 12.0	1.615	2.579	6.1	18.9	11 17	2 30.37	+ 5 27.2	2.404	3.351	5.7	19.7
11 27	2 18.77	+12 44.3	1.672	2.584	10.4	19.1	11 27	2 23.84	+ 5 18.1	2.462	3.350	8.6	19.9
12 7	2 12.76	+12 27.7	1.753	2.588	14.1	19.4	12 7	2 18.80	+ 5 20.5	2.545	3.348	11.2	20.0
302789	2002 <i>XK</i> ₆₁		11 4.6 2°97'	2.2/ 3.2	18		22945	Schikowski		11 4.6 135°96'	3.2/ 2.5	18 R	
9 28	2 59.86	+14 2.6	1.301	2.155	18.0	19.5	9 28	3 7.72	+11 21.7	1.567	2.399	16.5	18.7
10 8	2 57.74	+13 17.1	1.235	2.153	13.9	19.2	10 8	3 3.24	+10 24.0	1.499	2.405	12.8	18.4
10 18	2 52.75	+12 19.6	1.190	2.153	9.1	19.0	10 18	2 56.12	+ 9 17.9	1.452	2.410	8.4	18.2
10 28	2 45.69	+11 15.6	1.167	2.154	4.1	18.7	10 28	2 47.12	+ 8 9.1	1.431	2.415	4.3	18.0
11 7	2 37.76	+10 12.5	1.170	2.157	3.1	18.6	11 7	2 37.38	+ 7 4.6	1.437	2.420	3.9	18.0
11 17	2 30.30	+ 9 18.5	1.197	2.161	7.8	18.9	11 17	2 28.14	+ 6 11.5	1.470	2.424	7.9	18.2
11 27	2 24.59	+ 8 40.5	1.248	2.166	12.6	19.2	11 27	2 20.56	+ 5 35.5	1.529	2.428	12.1	18.5
12 7	2 21.46	+ 8 22.3	1.320	2.173	16.8	19.5</							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
125235	2001 <i>UE</i> ₁₆₃		11 4.6 284°09	1.2°/ 3.9 18			302993	2003 <i>WH</i> ₂₉		11 4.6 299°03	3°6/ 7.3 18		
9 28	3 9.26	+12 49.1	1.619	2.444	16.4	19.8	9 28	3 5.25	+27 6.5	1.760	2.550	16.7	20.4
10 8	3 4.77	+12 50.0	1.529	2.430	12.9	19.5	10 8	3 1.62	+27 4.7	1.667	2.538	13.7	20.1
10 18	2 57.42	+12 44.8	1.460	2.416	8.6	19.2	10 18	2 55.28	+26 44.3	1.593	2.526	10.0	19.9
10 28	2 47.83	+12 35.5	1.416	2.402	3.8	18.9	10 28	2 46.87	+26 4.3	1.543	2.515	6.1	19.6
11 7	2 37.11	+12 25.2	1.399	2.388	2.0	18.8	11 7	2 37.46	+25 6.4	1.520	2.503	3.7	19.4
11 17	2 26.57	+12 17.8	1.410	2.374	6.8	19.0	11 17	2 28.30	+23 55.8	1.524	2.492	5.9	19.6
11 27	2 17.56	+12 17.6	1.447	2.361	11.6	19.3	11 27	2 20.66	+22 40.5	1.555	2.481	10.0	19.8
12 7	2 11.08	+12 28.0	1.507	2.347	15.7	19.5	12 7	2 15.46	+21 29.2	1.610	2.470	13.9	20.0
69875	1998 <i>SB</i> ₇₄		11 4.6 330°09	2°1/ 3.1 18			384705	2011 <i>HQ</i> ₃₀		11 4.6 261°54	0°3/ 4.4 18		
9 28	3 2.18	+11 51.7	1.894	2.725	14.2	19.4	9 28	3 8.71	+16 21.7	1.750	2.565	15.8	22.2
10 8	2 58.74	+11 21.6	1.808	2.713	11.0	19.1	10 8	3 4.21	+16 7.0	1.652	2.547	12.4	22.0
10 18	2 53.09	+10 44.9	1.745	2.702	7.3	18.9	10 18	2 57.00	+15 41.9	1.576	2.529	8.4	21.7
10 28	2 45.81	+10 5.0	1.707	2.692	3.4	18.6	10 28	2 47.65	+15 7.8	1.524	2.510	3.7	21.4
11 7	2 37.77	+9 26.5	1.696	2.682	2.7	18.6	11 7	2 37.21	+14 28.4	1.501	2.491	1.3	21.1
11 17	2 29.96	+8 54.2	1.713	2.672	6.4	18.8	11 17	2 26.90	+13 48.8	1.506	2.471	6.3	21.4
11 27	2 23.37	+8 32.6	1.757	2.663	10.3	19.0	11 27	2 18.01	+13 15.0	1.537	2.451	11.0	21.7
12 7	2 18.75	+8 24.7	1.824	2.655	13.8	19.2	12 7	2 11.50	+12 52.1	1.593	2.431	15.1	21.9
141711	2002 <i>LX</i> ₉		11 4.6 76°83	3°5/ 2.7 18			367830	2011 <i>BQ</i> ₂₇		11 4.6 104°72	5°6/ 9.8 17		
9 28	3 11.77	+10 1.8	1.382	2.217	18.2	19.8	9 28	3 7.61	+34 45.0	2.567	3.289	13.7	20.7
10 8	3 6.31	+9 16.5	1.337	2.243	13.9	19.6	10 8	3 2.64	+35 19.7	2.481	3.295	11.6	20.6
10 18	2 58.01	+8 25.9	1.312	2.270	9.2	19.4	10 18	2 55.53	+35 38.8	2.416	3.301	9.3	20.4
10 28	2 47.86	+7 35.6	1.312	2.296	4.7	19.2	10 28	2 46.87	+35 39.9	2.375	3.307	7.0	20.3
11 7	2 37.19	+6 52.4	1.339	2.322	4.2	19.2	11 7	2 37.50	+35 22.6	2.362	3.313	5.7	20.2
11 17	2 27.39	+6 22.0	1.393	2.347	8.2	19.5	11 17	2 28.40	+34 48.9	2.377	3.319	6.1	20.3
11 27	2 19.60	+6 8.4	1.471	2.372	12.4	19.9	11 27	2 20.50	+34 3.1	2.420	3.325	7.9	20.4
12 7	2 14.52	+6 12.6	1.572	2.397	16.0	20.1	12 7	2 14.52	+33 11.4	2.489	3.331	10.2	20.5
263872	2009 <i>DA</i> ₅₀		11 4.6 92°47	0°9/ 4.1 16			15493	1999 <i>CS</i> ₁₀₅		11 4.6 161°72	4°7/ 9.3 18		
9 28	3 13.36	+15 35.4	1.503	2.321	17.8	21.4	9 28	3 5.83	+33 21.7	2.697	3.427	13.0	19.0
10 8	3 7.45	+15 7.4	1.451	2.348	13.7	21.2	10 8	3 1.11	+33 39.2	2.606	3.429	10.9	18.8
10 18	2 58.74	+14 28.9	1.420	2.374	9.0	21.0	10 18	2 54.44	+33 41.7	2.536	3.431	8.5	18.7
10 28	2 48.19	+13 43.4	1.414	2.400	3.9	20.8	10 28	2 46.37	+33 27.7	2.491	3.433	6.2	18.5
11 7	2 37.09	+12 56.2	1.435	2.425	1.8	20.7	11 7	2 37.67	+32 57.4	2.474	3.434	4.8	18.5
11 17	2 26.80	+12 13.4	1.485	2.449	6.6	21.1	11 17	2 29.22	+32 13.1	2.486	3.436	5.4	18.5
11 27	2 18.48	+11 40.7	1.562	2.473	11.1	21.4	11 27	2 21.87	+31 19.5	2.526	3.437	7.4	18.6
12 7	2 12.84	+11 21.9	1.661	2.496	14.8	21.7	12 7	2 16.27	+30 22.1	2.593	3.438	9.7	18.8
184899	2005 <i>UF</i> ₂₆₇		11 4.6 103°22	1°2/ 3.7 18			159104	2004 <i>UD</i> ₆		11 4.6 358°41	0°7/ 4.2 18		
9 28	3 5.15	+14 2.0	2.245	3.056	12.9	21.2	9 28	3 3.40	+14 52.6	1.753	2.581	15.3	19.7
10 8	3 0.46	+13 32.1	2.175	3.070	9.9	21.1	10 8	2 59.84	+14 43.0	1.676	2.579	11.8	19.5
10 18	2 53.89	+12 55.6	2.129	3.083	6.5	20.9	10 18	2 53.89	+14 25.1	1.620	2.577	7.8	19.3
10 28	2 46.05	+12 15.0	2.110	3.096	2.8	20.7	10 28	2 46.19	+14 1.4	1.590	2.576	3.4	19.0
11 7	2 37.74	+11 34.3	2.121	3.109	1.7	20.6	11 7	2 37.73	+13 35.4	1.586	2.576	1.5	18.9
11 17	2 29.80	+10 57.5	2.161	3.121	5.2	20.9	11 17	2 29.58	+13 11.5	1.610	2.576	5.9	19.2
11 27	2 23.03	+10 28.3	2.229	3.134	8.6	21.1	11 27	2 22.83	+12 54.3	1.660	2.577	10.1	19.4
12 7	2 18.01	+10 9.7	2.323	3.146	11.5	21.3	12 7	2 18.22	+12 47.3	1.734	2.579	13.8	19.6
125970	2001 <i>YS</i> ₁₅		11 4.6 78°81	2°8/ 3.0 18			101479	1998 <i>WC</i> ₂₉		11 4.6 234°50	0°2/ 4.8 18		
9 28	3 10.67	+10 0.2	1.582	2.410	16.6	19.9	9 28	3 5.47	+18 36.8	1.934	2.743	14.7	20.7
10 8	3 5.26	+9 33.9	1.529	2.432	12.8	19.7	10 8	3 1.25	+18 13.1	1.850	2.741	11.5	20.5
10 18	2 57.27	+9 3.1	1.498	2.454	8.4	19.5	10 18	2 54.73	+17 37.8	1.788	2.738	7.7	20.3
10 28	2 47.55	+8 32.1	1.492	2.476	4.1	19.3	10 28	2 46.54	+16 52.7	1.751	2.736	3.5	20.0
11 7	2 37.29	+8 5.6	1.513	2.497	3.4	19.3	11 7	2 37.62	+16 1.6	1.743	2.733	1.0	19.8
11 17	2 27.70	+7 48.3	1.562	2.519	7.3	19.6	11 17	2 29.01	+15 9.8	1.763	2.730	5.4	20.2
11 27	2 19.88	+7 43.4	1.638	2.540	11.3	19.9	11 27	2 21.74	+14 23.0	1.811	2.727	9.5	20.4
12 7	2 14.50	+7 52.6	1.736	2.561	14.7	20.2	12 7	2 16.53	+13 46.2	1.884	2.725	13.0	20.6
139079	2001 <i>FR</i> ₁₅		11 4.6 150°96	2°0/ 5.9 18			331823	2003 <i>SU</i> ₄₀₄		11 4.6 335°66	2°0/ 3.4 17		
9 28	3 12.28	+21 38.4	1.806	2.598	16.3	20.3	9 28	3 6.02	+9 37.0	1.992	2.815	13.9	20.8
10 8	3 6.69	+21 47.6	1.728	2.606	12.9	20.1	10 8	3 1.59	+9 38.0	1.907	2.808	10.8	20.6
10 18	2 58.40	+21 44.0	1.671	2.613	8.9	19.9	10 18	2 54.93	+9 36.4	1.845	2.800	7.2	20.4
10 28	2 48.15	+21 27.4	1.640	2.619	4.7	19.7	10 28	2 46.64	+9 34.8	1.809	2.794	3.4	20.2
11 7	2 37.07	+20 59.6	1.637	2.625	2.1	19.5	11 7	2 37.59	+9 35.8	1.802	2.787	2.6	20.1
11 17	2 26.41	+20 24.7	1.663	2.631	5.6	19.8	11 17	2 28.77	+9 42.1	1.822	2.782	6.1	20.3
11 27	2 17.39	+19 48.7	1.717	2.635	9.7	20.0	11 27	2 21.16	+9 56.4	1.871	2.776	9.9	20.5
12 7	2 10.83	+19 17.5	1.795	2.639	13.4	20.3	12 7	2 15.52	+10 20.2	1.943	2.771	13.2	20.7
420687	2012 <i>KW</i> ₂₈		11 4.6 66°59	2°9/ 2.4 18			117477	2005 <i>BC</i> ₂₅		11 4.6 223°71	0°8/ 5.4 18		
9 28	3 4.37	+7 16.0	2.363	3.182	12.1	21.2	9 28	3 3.69	+19 56.9	2.791	3.579	11.2	21.0
10 8	2 59.83	+6 54.3	2.286	3.184	9.3	21.0	10 8	2 59.21	+19 46.4	2.694	3.572	8.8	20.8
10 18	2 53.49	+6 31.0	2.233	3.185	6.3	20.8	10 18	2 53.08	+19 27.3	2.621	3.565	6.0	20.6
10 28	2 45.90	+6 9.3	2.207	3.187	3.5	20.7	10 28	2 45.75	+19 0.5	2.575	3.557	2.9	20.4
11 7	2 37.78	+5 52.4	2.210	3.189	3.3	20.7	11 7	2 37.88	+18 28.0	2.560	3.549	1.0	20.2
11 17	2 29.93	+5 43.4	2.242	3.190	6.0	20.8	11 17	2 30.18	+17 52.8	2.574	3.541	3.9	20.5
11 27	2 23.13	+5 44.6	2.302	3.192	9.0	21.0	11 27	2 23.37	+17 18.5	2.619	3.533	7.0	20.6
12 7	2 17.94	+5 57.2	2.387	3.194	11.8	21.2	12 7	2 18.02	+16 48.7	2.690	3.524	9.8	20.8
41776	2000 <i>VQ</i> ₄₆		11 4.6 296°13	2°2/ 5.7 18			116746	2004 <i>DC</i> ₄₉		11 4.6 196°49	3°1/ 2.4 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
420729	2012 <i>RL</i> ₁₇		11 4.6 98°18'	6°5'	8.6	18	212598	2006 <i>SW</i> ₂₃₀		11 4.6 122°71'	1°1'	5.6	18
9 28	3 16.32	+31 7.5	1.733	2.489	18.2	20.5	9 28	3 7.42	+20 56.0	2.189	2.980	13.8	21.4
10 8	3 10.24	+32 9.3	1.665	2.505	15.2	20.3	10 8	3 2.38	+20 43.5	2.114	2.993	10.8	21.2
10 18	3 0.99	+32 53.0	1.615	2.522	11.8	20.2	10 18	2 55.27	+20 19.8	2.061	3.005	7.4	21.0
10 28	2 49.39	+33 13.9	1.590	2.538	8.5	20.0	10 28	2 46.73	+19 45.8	2.036	3.017	3.6	20.8
11 7	2 36.77	+33 10.3	1.590	2.554	6.6	19.9	11 7	2 37.64	+19 4.5	2.039	3.028	1.3	20.6
11 17	2 24.67	+32 44.8	1.618	2.570	7.6	20.0	11 17	2 28.93	+18 19.9	2.071	3.039	4.7	20.9
11 27	2 14.55	+32 4.2	1.673	2.585	10.4	20.2	11 27	2 21.50	+17 37.0	2.133	3.050	8.2	21.1
12 7	2 7.35	+31 17.6	1.753	2.600	13.5	20.5	12 7	2 15.99	+17 0.6	2.221	3.060	11.4	21.4
518068	2015 <i>XE</i> ₃₉₇		11 4.6 77°74'	3°5'	2.0	18	419245	2009 <i>VS</i> ₅₀		11 4.6 46°23'	2°1'	3.4	18
9 28	3 4.74	+5 33.9	2.297	3.118	12.3	21.5	9 28	3 8.49	+8 41.5	2.083	2.899	13.6	20.4
10 8	3 0.11	+5 7.2	2.227	3.125	9.5	21.3	10 8	3 3.22	+8 48.9	2.012	2.908	10.5	20.2
10 18	2 53.67	+4 40.1	2.181	3.133	6.5	21.2	10 18	2 55.84	+8 54.9	1.964	2.917	6.9	20.0
10 28	2 45.99	+4 16.0	2.163	3.140	3.9	21.0	10 28	2 46.99	+9 1.6	1.943	2.926	3.4	19.8
11 7	2 37.83	+3 58.7	2.173	3.147	3.9	21.0	11 7	2 37.55	+9 11.1	1.951	2.936	2.6	19.8
11 17	2 29.99	+3 51.0	2.212	3.154	6.5	21.2	11 17	2 28.47	+9 25.7	1.988	2.946	5.8	20.0
11 27	2 23.24	+3 55.1	2.278	3.162	9.4	21.4	11 27	2 20.66	+9 47.2	2.054	2.956	9.3	20.2
12 7	2 18.15	+4 11.7	2.369	3.169	12.0	21.6	12 7	2 14.78	+10 16.7	2.144	2.966	12.4	20.5
27287	Garbarino		11 4.6 226°03'	1°4'	3.7	18	456756	2007 <i>TX</i> ₈₄		11 4.7 320°60'	19°2'	5.9	16
9 28	3 8.40	+14 33.7	1.882	2.697	14.9	20.3	9 28	3 22.06	+35 39.8	0.942	1.731	28.0	20.2
10 8	3 3.62	+13 58.6	1.792	2.687	11.6	20.0	10 8	3 19.55	+39 40.4	0.868	1.714	25.2	19.9
10 18	2 56.39	+13 13.7	1.723	2.677	7.7	19.8	10 18	3 10.82	+43 35.6	0.809	1.697	22.3	19.7
10 28	2 47.32	+12 22.1	1.681	2.666	3.4	19.5	10 28	2 55.38	+47 3.0	0.769	1.681	20.0	19.5
11 7	2 37.40	+11 28.4	1.667	2.655	2.1	19.4	11 7	2 34.55	+49 37.3	0.747	1.666	19.2	19.3
11 17	2 27.72	+10 38.4	1.682	2.643	6.3	19.6	11 17	2 21.90	+51 0.8	0.744	1.652	20.4	19.4
11 27	2 19.40	+9 57.7	1.724	2.630	10.6	19.9	11 27	1 52.46	+51 16.1	0.759	1.639	23.0	19.5
12 7	2 13.25	+9 30.7	1.791	2.617	14.3	20.1	12 7	1 40.02	+50 44.2	0.787	1.628	26.2	19.6
487485	2014 <i>SA</i> ₂₄₄		11 4.6 72°36'	4°0'	1.5	18	138031	2000 <i>DK</i> ₉		11 4.7 307°24'	0°6'	3.7	18
9 28	3 4.71	+4 31.9	2.207	3.030	12.7	20.9	9 28	2 56.16	+13 36.0	4.366	5.168	7.3	20.6
10 8	3 0.05	+3 53.0	2.149	3.048	9.8	20.7	10 8	2 52.83	+13 15.8	4.276	5.166	5.5	20.5
10 18	2 53.59	+3 14.2	2.115	3.065	6.8	20.6	10 18	2 48.59	+12 52.3	4.212	5.163	3.6	20.3
10 28	2 45.94	+2 39.8	2.108	3.082	4.4	20.5	10 28	2 43.72	+12 26.9	4.176	5.161	1.6	20.2
11 7	2 37.87	+2 14.0	2.129	3.099	4.5	20.5	11 7	2 38.58	+12 1.2	4.171	5.159	1.0	20.1
11 17	2 30.21	+1 59.9	2.179	3.116	6.9	20.7	11 17	2 33.55	+11 37.0	4.197	5.157	2.9	20.3
11 27	2 23.71	+1 59.6	2.256	3.133	9.8	20.9	11 27	2 29.02	+11 16.3	4.253	5.155	4.9	20.4
12 7	2 18.92	+2 13.5	2.357	3.150	12.3	21.1	12 7	2 25.30	+11 0.6	4.336	5.152	6.7	20.5
130967	2000 <i>WX</i> ₁₁₂		11 4.6 304°82'	2°0'	3.7	18	219067	Bossuet		11 4.7 177°03'	1°3'	3.7	18
9 28	3 9.84	+10 14.6	1.631	2.458	16.2	19.4	9 28	3 9.48	+14 13.6	1.984	2.793	14.4	21.3
10 8	3 5.10	+10 19.6	1.548	2.450	12.7	19.1	10 8	3 4.19	+13 43.6	1.903	2.796	11.2	21.1
10 18	2 57.56	+10 21.4	1.486	2.442	8.5	18.9	10 18	2 56.60	+13 5.3	1.845	2.798	7.4	20.9
10 28	2 47.91	+10 22.3	1.449	2.434	3.9	18.6	10 28	2 47.38	+12 21.7	1.814	2.799	3.2	20.6
11 7	2 37.22	+10 25.5	1.439	2.426	2.7	18.5	11 7	2 37.46	+11 36.9	1.811	2.799	1.9	20.6
11 17	2 26.80	+10 34.0	1.457	2.418	7.0	18.8	11 17	2 27.89	+10 55.7	1.838	2.799	5.9	20.8
11 27	2 17.93	+10 51.0	1.501	2.411	11.5	19.0	11 27	2 19.69	+10 23.1	1.894	2.798	9.8	21.1
12 7	2 11.55	+11 18.4	1.569	2.404	15.5	19.2	12 7	2 13.57	+10 2.6	1.974	2.796	13.2	21.3
486604	2013 <i>JR</i> ₆₂		11 4.6 59°81'	1°2'	3.6	18	119403	2001 <i>TU</i> ₆₂		11 4.7 314°28'	1°5'	3.7	18
9 28	3 3.04	+15 37.6	2.007	2.826	13.9	20.8	9 28	3 4.49	+14 45.6	1.424	2.263	17.5	19.7
10 8	2 59.10	+14 46.2	1.938	2.837	10.7	20.6	10 8	3 1.39	+14 14.6	1.340	2.249	13.7	19.4
10 18	2 53.13	+13 45.1	1.892	2.847	7.0	20.4	10 18	2 55.34	+13 31.7	1.276	2.235	9.1	19.1
10 28	2 45.78	+12 38.2	1.872	2.858	3.0	20.1	10 28	2 47.00	+12 40.2	1.235	2.222	4.0	18.8
11 7	2 37.92	+11 30.6	1.881	2.869	1.9	20.1	11 7	2 37.55	+11 46.2	1.220	2.209	2.4	18.6
11 17	2 30.47	+10 28.2	1.918	2.880	5.6	20.4	11 17	2 28.36	+10 56.8	1.232	2.197	7.5	18.9
11 27	2 24.28	+9 36.2	1.984	2.891	9.3	20.6	11 27	2 20.82	+10 19.3	1.267	2.185	12.5	19.2
12 7	2 19.95	+8 58.3	2.074	2.902	12.5	20.8	12 7	2 15.95	+9 58.7	1.325	2.173	17.0	19.4
287623	2003 <i>HW</i> ₁₆		11 4.6 198°12'	0°8'	3.9	18	313297	2002 <i>CT</i> ₁₈₁		11 4.7 0°54'	7°1'	30.3	18
9 28	3 3.88	+16 3.2	2.477	3.281	12.0	22.0	9 28	3 3.39	-1 50.9	1.896	2.729	14.0	20.4
10 8	2 59.47	+15 22.8	2.389	3.279	9.3	21.8	10 8	2 59.48	-2 58.9	1.832	2.729	11.3	20.2
10 18	2 53.28	+14 33.9	2.324	3.276	6.1	21.6	10 18	2 53.46	-4 3.1	1.790	2.728	8.7	20.0
10 28	2 45.85	+13 38.9	2.288	3.273	2.7	21.4	10 28	2 45.98	-4 56.3	1.774	2.728	7.2	20.0
11 7	2 37.89	+12 41.8	2.281	3.270	1.4	21.2	11 7	2 37.90	-5 32.4	1.784	2.728	7.8	20.0
11 17	2 30.18	+11 46.9	2.304	3.266	4.8	21.5	11 17	2 30.17	-5 47.3	1.821	2.729	10.0	20.1
11 27	2 23.47	+10 58.7	2.357	3.262	8.1	21.7	11 27	2 23.71	-5 39.1	1.881	2.730	12.8	20.3
12 7	2 18.36	+10 20.9	2.435	3.257	11.1	21.9	12 7	2 19.17	-5 9.1	1.963	2.731	15.3	20.5
336122	2008 <i>OA</i> ₈		11 4.6 29°67'	2°0'	3.5	18	248232	2005 <i>EZ</i> ₂₂₀		11 4.7 103°22'	1°7'	3.2	18
9 28	3 4.53	+14 6.5	1.146	2.001	19.9	19.8	9 28	3 6.68	+13 36.9	2.163	2.974	13.3	20.5
10 8	3 1.50	+13 29.6	1.097	2.015	15.3	19.6	10 8	3 1.60	+12 45.9	2.102	2.997	10.2	20.4
10 18	2 55.27	+12 41.4	1.067	2.030	10.0	19.3	10 18	2 54.62	+11 47.7	2.065	3.018	6.6	20.2
10 28	2 46.83	+11 47.2	1.060	2.047	4.4	19.1	10 28	2 46.40	+10 46.3	2.055	3.040	3.0	20.0
11 7	2 37.62	+10 54.8	1.076	2.064	2.9	19.0	11 7	2 37.79	+9 46.4	2.075	3.061	2.3	20.0
11 17	2 29.19	+10 11.6	1.117	2.082	8.0	19.4	11 17	2 29.64	+8 52.9	2.124	3.081	5.6	20.2
11 27	2 22.86	+9 44.3	1.181	2.102	13.0	19.7	11 27	2 22.76	+8 10.3	2.203	3.101	9.0	20.5
12 7	2 19.43	+9 35.7	1.266	2.122	17.2	20.1	12 7	2 17.70	+7 41.1	2.306	3.120	11.9	20.7
388981	2008 <i>UK</i> ₅₄		11 4.6 30°28'	1°0'	4.2	18	144168	2004 <i>BF</i> ₁₀₇		11 4.7 244°97'	3°1'	6.7	18
9 28	3 11.64	+12 5.9	1.546	2.370	17.1								

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
195956	2002 <i>RP</i> ₁₆₄		11 4.7 110°12' 1.7°/ 6.1 18				421455	2014 <i>NT</i> ₇		11 4.7 72°33' 1.0°/ 3.9 18			
9 28	3 5.16	+22 18.3	2.571	3.353	12.3	21.2	9 28	3 4.64	+14 50.4	2.030	2.846	13.9	21.3
10 8	3 0.42	+22 18.6	2.491	3.363	9.7	21.1	10 8	3 0.38	+14 22.2	1.956	2.853	10.7	21.1
10 18	2 53.89	+22 8.8	2.435	3.373	6.7	20.9	10 18	2 54.04	+13 46.0	1.904	2.859	7.0	20.9
10 28	2 46.13	+21 49.4	2.405	3.382	3.6	20.7	10 28	2 46.24	+13 4.5	1.879	2.865	3.1	20.7
11 7	2 37.86	+21 22.3	2.405	3.392	1.7	20.6	11 7	2 37.85	+12 21.8	1.883	2.872	1.6	20.6
11 17	2 29.87	+20 50.3	2.434	3.401	4.1	20.8	11 17	2 29.83	+11 42.5	1.915	2.878	5.5	20.9
11 27	2 22.94	+20 17.4	2.493	3.411	7.1	21.0	11 27	2 23.05	+11 11.1	1.975	2.885	9.2	21.1
12 7	2 17.63	+19 47.6	2.579	3.420	9.9	21.2	12 7	2 18.18	+10 50.8	2.060	2.891	12.4	21.3
11187	Richoliver		11 4.7 103°47' 2.2°/ 3.1 18 R				344163	2000 <i>YZ</i> ₄₉		11 4.7 16°98' 7.5°/ 9.6 18			
9 28	3 7.53	+11 48.9	1.849	2.670	14.8	18.4	9 28	3 2.25	+32 36.6	1.135	1.945	22.9	18.6
10 8	3 2.67	+11 12.3	1.784	2.684	11.4	18.2	10 8	3 0.50	+33 7.2	1.079	1.954	19.2	18.4
10 18	2 55.55	+10 29.4	1.741	2.696	7.5	18.0	10 18	2 55.07	+33 8.1	1.038	1.964	14.9	18.2
10 28	2 46.88	+9 44.1	1.725	2.709	3.5	17.8	10 28	2 46.91	+32 35.6	1.017	1.976	10.5	18.0
11 7	2 37.64	+9 1.3	1.736	2.722	2.8	17.8	11 7	2 37.66	+31 31.5	1.017	1.989	7.6	17.9
11 17	2 28.87	+8 25.9	1.777	2.734	6.5	18.0	11 17	2 29.16	+30 3.6	1.040	2.005	8.6	18.0
11 27	2 21.54	+8 2.0	1.844	2.746	10.2	18.3	11 27	2 23.04	+28 25.1	1.086	2.021	12.2	18.2
12 7	2 16.32	+7 52.1	1.936	2.757	13.5	18.5	12 7	2 20.24	+26 49.5	1.154	2.039	16.2	18.5
223303	2003 <i>NP</i> ₃		11 4.7 33°81' 7.9°/11.7 17				44687	1999 <i>RS</i> ₂₀₄		11 4.7 274°72' 3.1°/ 7.2 18			
9 28	3 7.28	+39 17.1	2.029	2.746	17.0	19.8	9 28	3 5.54	+27 26.2	1.823	2.608	16.4	18.6
10 8	3 3.09	+39 55.1	1.952	2.754	14.8	19.7	10 8	3 1.73	+27 3.6	1.728	2.598	13.3	18.3
10 18	2 56.18	+40 11.0	1.892	2.762	12.2	19.5	10 18	2 55.30	+26 20.9	1.654	2.587	9.7	18.1
10 28	2 47.27	+40 1.2	1.855	2.771	9.7	19.4	10 28	2 46.92	+25 17.7	1.604	2.577	5.7	17.8
11 7	2 37.50	+39 24.6	1.841	2.779	8.1	19.3	11 7	2 37.64	+23 57.1	1.581	2.566	3.1	17.7
11 17	2 28.16	+38 24.2	1.854	2.789	8.2	19.3	11 17	2 28.66	+22 25.3	1.587	2.555	5.6	17.8
11 27	2 20.47	+37 6.9	1.894	2.798	9.8	19.5	11 27	2 21.17	+20 51.3	1.620	2.545	9.7	18.0
12 7	2 15.27	+35 41.7	1.958	2.808	12.2	19.6	12 7	2 16.02	+19 24.0	1.678	2.534	13.6	18.2
374234	2005 <i>GF</i> ₃₄		11 4.7 243°91' 2.8°/ 2.8 15				446852	2001 <i>TN</i> ₂₅₉		11 4.7 353°79' 2.4°/ 5.9 17			
9 28	3 7.43	+12 29.7	1.564	2.396	16.6	22.0	9 28	3 7.23	+20 15.4	1.593	2.408	17.1	21.0
10 8	3 3.30	+11 36.0	1.481	2.387	12.9	21.7	10 8	3 3.30	+20 50.3	1.513	2.404	13.6	20.8
10 18	2 56.39	+10 31.7	1.420	2.378	8.6	21.4	10 18	2 56.51	+21 14.5	1.453	2.400	9.5	20.5
10 28	2 47.40	+9 21.8	1.383	2.368	4.1	21.2	10 28	2 47.51	+21 27.0	1.417	2.397	5.0	20.3
11 7	2 37.45	+8 13.4	1.374	2.358	3.6	21.1	11 7	2 37.45	+21 28.4	1.408	2.396	2.4	20.1
11 17	2 27.82	+7 14.0	1.392	2.348	7.9	21.3	11 17	2 27.68	+21 21.4	1.425	2.394	6.0	20.3
11 27	2 19.78	+6 30.5	1.435	2.338	12.5	21.6	11 27	2 19.53	+21 11.1	1.469	2.394	10.5	20.6
12 7	2 14.23	+6 6.8	1.501	2.327	16.5	21.8	12 7	2 13.96	+21 3.0	1.535	2.394	14.4	20.8
380394	2002 <i>XM</i> ₇₆		11 4.7 290°66' 12.3°/29.5 18				163816	2003 <i>RD</i> ₄		11 4.7 18°58' 9.9°/ 7.5 18			
9 28	3 14.86	-13 10.4	1.593	2.398	17.6	20.7	9 28	3 18.71	+28 10.9	1.189	1.985	22.8	18.2
10 8	3 9.26	-14 3.5	1.506	2.369	15.3	20.5	10 8	3 13.75	+30 50.6	1.131	1.995	19.2	17.9
10 18	3 0.53	-14 41.9	1.439	2.340	13.3	20.3	10 18	3 4.35	+33 16.0	1.090	2.007	15.2	17.7
10 28	2 49.33	-14 55.1	1.395	2.311	12.3	20.2	10 28	2 51.27	+35 15.5	1.072	2.020	11.6	17.6
11 7	2 36.83	-14 34.4	1.375	2.282	12.9	20.1	11 7	2 36.27	+36 39.4	1.077	2.035	9.9	17.5
11 17	2 24.48	-13 35.9	1.378	2.252	15.1	20.2	11 17	2 21.69	+37 25.2	1.107	2.051	11.2	17.7
11 27	2 13.76	-12 0.8	1.405	2.223	18.0	20.3	11 27	2 9.84	+37 39.1	1.160	2.069	14.3	17.9
12 7	2 5.77	-9 55.2	1.451	2.193	20.9	20.4	12 7	2 2.20	+37 33.4	1.234	2.088	17.6	18.2
213379	2001 <i>UU</i> ₄₂		11 4.7 58°47' 1.1°/ 5.3 18				20208	Philippe		11 4.7 318°22' 3.3°/ 1.9 18			
9 28	3 11.17	+17 29.8	1.811	2.616	15.7	20.0	9 28	3 1.85	+10 4.7	1.975	2.807	13.6	18.1
10 8	3 5.73	+18 0.4	1.741	2.629	12.3	19.8	10 8	2 58.35	+9 1.4	1.894	2.800	10.5	17.9
10 18	2 57.74	+18 23.1	1.694	2.642	8.3	19.6	10 18	2 52.78	+7 51.3	1.836	2.793	7.0	17.7
10 28	2 47.91	+18 37.4	1.672	2.655	4.0	19.4	10 28	2 45.73	+6 39.4	1.805	2.787	3.9	17.5
11 7	2 37.32	+18 44.6	1.678	2.668	1.4	19.2	11 7	2 38.03	+5 32.0	1.801	2.780	3.9	17.5
11 17	2 27.17	+18 46.9	1.714	2.681	5.4	19.6	11 17	2 30.60	+4 35.0	1.826	2.774	7.1	17.6
11 27	2 18.59	+18 48.3	1.777	2.695	9.5	19.8	11 27	2 24.36	+3 53.4	1.877	2.768	10.7	17.9
12 7	2 12.35	+18 52.5	1.864	2.709	13.0	20.1	12 7	2 19.96	+3 29.7	1.952	2.763	13.8	18.1
291189	2006 <i>AR</i> ₅₄		11 4.7 123°78' 5.3°/31.1 18				320049	2007 <i>EY</i> ₁		11 4.7 297°22' 0.2°/ 4.5 17			
9 28	3 3.26	+0 44.5	2.317	3.141	12.1	20.2	9 28	3 4.05	+16 52.7	2.015	2.829	14.1	21.9
10 8	2 58.97	+0 12.5	2.249	3.144	9.6	20.1	10 8	3 0.20	+16 34.5	1.921	2.815	11.0	21.7
10 18	2 52.94	-1 7.6	2.206	3.148	7.1	19.9	10 18	2 54.12	+16 6.5	1.848	2.801	7.3	21.4
10 28	2 45.71	-1 55.8	2.190	3.152	5.4	19.8	10 28	2 46.37	+15 30.6	1.801	2.787	3.3	21.1
11 7	2 38.01	-2 32.2	2.201	3.155	5.9	19.9	11 7	2 37.81	+14 50.1	1.783	2.773	1.1	20.9
11 17	2 30.61	-2 53.3	2.241	3.158	8.0	20.0	11 17	2 29.44	+14 9.6	1.793	2.759	5.4	21.2
11 27	2 24.26	-2 57.1	2.307	3.162	10.5	20.2	11 27	2 22.24	+13 34.3	1.830	2.745	9.4	21.4
12 7	2 19.51	-2 43.5	2.396	3.165	12.9	20.4	12 7	2 17.00	+13 8.4	1.892	2.732	13.0	21.6
219066	1997 <i>EQ</i> ₄₄		11 4.7 218°48' 3.1°/ 6.7 18				205090	1999 <i>TJ</i> ₁₃₁		11 4.7 352°71' 7.5°/ 8.1 18			
9 28	3 10.93	+24 59.0	1.899	2.680	16.0	21.3	9 28	3 11.82	+29 46.9	1.507	2.288	19.5	19.6
10 8	3 5.82	+25 6.6	1.804	2.672	12.9	21.1	10 8	3 7.54	+31 12.9	1.427	2.284	16.4	19.3
10 18	2 58.01	+24 59.2	1.730	2.664	9.3	20.8	10 18	2 59.75	+32 23.3	1.366	2.281	12.8	19.1
10 28	2 48.13	+24 35.6	1.682	2.655	5.4	20.6	10 28	2 49.11	+33 11.6	1.327	2.279	9.4	18.9
11 7	2 37.24	+23 57.0	1.661	2.646	3.1	20.4	11 7	2 36.94	+33 33.9	1.312	2.277	7.5	18.8
11 17	2 26.59	+23 7.3	1.669	2.635	5.7	20.6	11 17	2 24.98	+33 30.5	1.324	2.276	8.8	18.9
11 27	2 17.42	+22 13.3	1.705	2.625	9.7	20.8	11 27	2 14.97	+33 7.5	1.359	2.276	11.9	19.1
12 7	2 10.66	+21 22.2	1.766	2.613	13.4	21.0	12 7	2 8.16	+32 34.3	1.418	2.276	15.5	19.3
303566	2005 <i>GR</i> ₇₇		11 4.7 92°21' 1.4°/ 3.9 18				39726	Hideyukitezuka					

EPHEMERIDES

11 4.7

11 4.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
218 Bianca 11 4.7 161°34 5°6/30.7 18							405446 2004 TP ₈₆ 11 4.7 301°95 2°6/ 6.4 17						
9 28	3 4.64	+2 36.8	2.129	2.955	13.0	13.2	9 28	3 7.38	+22 57.4	2.139	2.926	14.3	21.3
10 8	3 0.19	+1 13.3	2.061	2.959	10.2	13.0	10 8	3 2.75	+23 22.6	2.047	2.919	11.4	21.1
10 18	2 53.82	-0 10.8	2.018	2.963	7.4	12.9	10 18	2 55.82	+23 37.2	1.977	2.913	8.1	20.9
10 28	2 46.13	-1 29.1	2.002	2.966	5.7	12.8	10 28	2 47.15	+23 40.1	1.932	2.907	4.7	20.7
11 7	2 37.93	-2 35.0	2.015	2.969	6.3	12.9	11 7	2 37.64	+23 32.0	1.916	2.901	2.6	20.5
11 17	2 30.07	-3 23.4	2.055	2.972	8.6	13.0	11 17	2 28.30	+23 15.1	1.928	2.895	5.1	20.7
11 27	2 23.37	-3 51.3	2.122	2.974	11.4	13.2	11 27	2 20.18	+22 53.9	1.969	2.889	8.6	20.9
12 7	2 18.44	-3 58.3	2.211	2.976	13.9	13.3	12 7	2 14.08	+22 33.2	2.035	2.883	11.9	21.1
28445 2000 AQ ₉₅ 11 4.7 108°39 7°1/30.2 18							318883 2005 TJ ₁₂₃ 11 4.7 259°33 0°7/ 5.2 18						
9 28	3 5.61	-2 7.5	1.962	2.788	13.9	18.5	9 28	3 5.68	+19 4.0	2.108	2.910	13.9	21.4
10 8	3 1.02	-3 21.6	1.906	2.798	11.2	18.3	10 8	3 1.30	+18 57.7	2.021	2.908	10.9	21.2
10 18	2 54.39	-4 31.3	1.873	2.808	8.6	18.2	10 18	2 54.76	+18 41.3	1.957	2.905	7.4	21.0
10 28	2 46.38	-5 29.7	1.866	2.817	7.2	18.1	10 28	2 46.65	+18 16.0	1.920	2.903	3.5	20.8
11 7	2 37.87	-6 10.6	1.886	2.827	7.7	18.2	11 7	2 37.83	+17 44.2	1.910	2.900	1.1	20.6
11 17	2 29.80	-6 30.2	1.933	2.836	9.9	18.3	11 17	2 29.26	+17 9.7	1.930	2.898	4.9	20.9
11 27	2 23.02	-6 27.1	2.005	2.845	12.4	18.5	11 27	2 21.92	+16 37.4	1.978	2.895	8.7	21.1
12 7	2 18.14	-6 2.5	2.098	2.854	14.8	18.7	12 7	2 16.50	+16 11.6	2.050	2.892	12.1	21.3
356643 2011 UN ₄₈ 11 4.7 18°79 0°0/ 4.5 18							296751 2009 UX ₁₃ 11 4.7 15°01 4°4/ 1.2 18						
9 28	3 4.44	+18 32.8	1.820	2.636	15.3	20.7	9 28	3 2.11	+6 15.9	1.946	2.781	13.7	19.7
10 8	3 0.57	+17 59.8	1.742	2.637	11.9	20.5	10 8	2 58.49	+5 15.0	1.877	2.783	10.6	19.5
10 18	2 54.35	+17 14.3	1.685	2.638	7.9	20.3	10 18	2 52.84	+4 11.3	1.831	2.785	7.3	19.3
10 28	2 46.45	+16 18.6	1.654	2.639	3.5	20.0	10 28	2 45.77	+3 10.4	1.812	2.788	4.7	19.1
11 7	2 37.84	+15 17.6	1.650	2.641	1.1	19.9	11 7	2 38.13	+2 18.3	1.820	2.791	5.0	19.1
11 17	2 29.60	+14 17.0	1.675	2.642	5.6	20.2	11 17	2 30.83	+1 40.1	1.855	2.794	7.8	19.3
11 27	2 22.75	+13 23.4	1.727	2.644	9.8	20.4	11 27	2 24.74	+1 19.2	1.917	2.798	11.0	19.5
12 7	2 18.04	+12 41.9	1.803	2.646	13.4	20.7	12 7	2 20.50	+1 16.8	2.001	2.802	13.9	19.7
374729 2006 SC ₇₁ 11 4.7 354°23 2°3/ 3.5 18							253525 2003 ST ₁₈₇ 11 4.7 36°85 4°6/ 6.9 18						
9 28	2 59.61	+13 47.3	0.976	1.850	21.0	20.2	9 28	3 10.06	+24 24.3	1.053	1.884	22.9	20.0
10 8	2 58.54	+13 18.0	0.913	1.842	16.4	19.9	10 8	3 6.51	+25 3.6	1.003	1.900	18.4	19.7
10 18	2 53.89	+12 35.2	0.868	1.835	10.9	19.6	10 18	2 59.03	+25 21.9	0.970	1.916	13.2	19.5
10 28	2 46.48	+11 44.4	0.843	1.831	4.9	19.3	10 28	2 48.68	+25 16.9	0.956	1.933	7.8	19.3
11 7	2 37.81	+10 53.8	0.839	1.828	3.3	19.2	11 7	2 37.26	+24 50.0	0.966	1.951	4.6	19.2
11 17	2 29.64	+10 12.6	0.858	1.827	9.1	19.5	11 17	2 26.73	+24 8.0	0.999	1.970	7.7	19.4
11 27	2 23.66	+9 49.0	0.898	1.828	14.9	19.8	11 27	2 18.83	+23 21.1	1.056	1.989	12.7	19.8
12 7	2 20.94	+9 47.2	0.957	1.830	19.8	20.1	12 7	2 14.52	+22 39.3	1.133	2.010	17.1	20.1
518493 2005 YT ₇ 11 4.7 45°17 5°4/31.5 18							183107 2002 RJ ₁₂₇ 11 4.7 320°71 4°0/ 7.9 18						
9 28	3 4.37	+0 37.2	2.168	2.994	12.8	21.1	9 28	3 4.63	+29 52.5	1.759	2.539	17.1	19.7
10 8	2 59.98	-0 8.8	2.099	2.995	10.1	20.9	10 8	3 1.13	+29 31.7	1.670	2.533	14.1	19.4
10 18	2 53.69	-0 52.4	2.053	2.996	7.4	20.8	10 18	2 54.96	+28 48.6	1.601	2.528	10.4	19.2
10 28	2 46.09	-1 28.6	2.034	2.997	5.6	20.7	10 28	2 46.82	+27 42.3	1.555	2.522	6.6	19.0
11 7	2 37.96	-1 52.6	2.042	2.999	6.0	20.7	11 7	2 37.81	+26 15.8	1.536	2.517	4.1	18.8
11 17	2 30.14	-2 1.1	2.078	3.000	8.2	20.8	11 17	2 29.17	+24 35.8	1.544	2.512	5.9	18.9
11 27	2 23.44	-1 52.4	2.140	3.002	10.9	21.0	11 27	2 22.12	+22 51.8	1.580	2.507	9.7	19.1
12 7	2 18.47	-1 26.7	2.225	3.003	13.4	21.2	12 7	2 17.49	+21 13.9	1.641	2.503	13.5	19.3
286338 2001 XP ₃₄ 11 4.7 333°45 7°7/10.9 18							190467 2000 CP ₁₁₁ 11 4.7 293°88 7°4/10.4 17						
9 28	3 5.84	+37 27.3	1.853	2.590	17.8	19.9	9 28	3 9.03	+37 24.2	2.317	3.031	15.3	20.2
10 8	3 2.32	+37 56.2	1.763	2.583	15.4	19.7	10 8	3 4.39	+38 19.4	2.217	3.019	13.2	20.0
10 18	2 55.90	+38 2.2	1.690	2.576	12.5	19.5	10 18	2 57.14	+38 57.9	2.137	3.007	11.0	19.8
10 28	2 47.27	+37 41.0	1.640	2.570	9.7	19.4	10 28	2 47.85	+39 15.3	2.079	2.996	8.8	19.7
11 7	2 37.59	+36 51.8	1.613	2.564	7.9	19.2	11 7	2 37.46	+39 9.5	2.047	2.984	7.5	19.6
11 17	2 28.23	+35 37.5	1.613	2.558	8.1	19.2	11 17	2 27.16	+38 41.1	2.042	2.973	7.8	19.6
11 27	2 20.55	+34 6.2	1.638	2.553	10.4	19.4	11 27	2 18.18	+37 54.7	2.064	2.961	9.5	19.7
12 7	2 15.48	+32 28.3	1.688	2.549	13.3	19.5	12 7	2 11.45	+36 57.5	2.110	2.950	11.8	19.8
329716 2003 WK ₆₈ 11 4.7 351°70 3°3/ 3.4 18							321906 2010 TD ₂₃ 11 4.7 74°84 2°2/ 3.3 18						
9 28	3 9.49	+8 24.8	1.178	2.029	19.7	19.9	9 28	3 7.67	+14 33.7	1.325	2.164	18.6	21.0
10 8	3 5.69	+8 28.1	1.110	2.025	15.4	19.6	10 8	3 3.74	+13 40.7	1.261	2.170	14.4	20.8
10 18	2 58.41	+8 29.5	1.061	2.021	10.4	19.3	10 18	2 56.77	+12 35.0	1.217	2.177	9.5	20.5
10 28	2 48.44	+8 32.8	1.034	2.019	5.1	19.0	10 28	2 47.60	+11 21.9	1.197	2.183	4.3	20.3
11 7	2 37.24	+8 42.3	1.031	2.017	4.0	19.0	11 7	2 37.59	+10 9.4	1.203	2.190	3.0	20.2
11 17	2 26.49	+9 1.8	1.053	2.016	8.8	19.2	11 17	2 28.18	+9 6.1	1.235	2.197	7.9	20.5
11 27	2 17.85	+9 34.1	1.098	2.015	14.1	19.5	11 27	2 20.71	+8 19.4	1.291	2.203	12.8	20.8
12 7	2 12.39	+10 20.1	1.164	2.016	18.6	19.8	12 7	2 16.02	+7 53.3	1.369	2.210	17.0	21.1
113760 2002 TA ₁₇₂ 11 4.7 293°73 6°5/11.1 17							21739 Annekeschwob 11 4.7 19°91 0°3/ 4.8 18						
9 28	3 5.42	+38 26.9	2.382	3.093	14.9	18.8	9 28	3 8.71	+17 1.8	1.268	2.104	19.5	18.6
10 8	3 1.33	+38 39.1	2.280	3.083	12.9	18.6	10 8	3 4.90	+17 5.1	1.201	2.106	15.3	18.4
10 18	2 54.90	+38 31.3	2.198	3.072	10.6	18.4	10 18	2 57.76	+16 56.3	1.153	2.109	10.3	18.1
10 28	2 46.73	+38 0.6	2.139	3.062	8.2	18.3	10 28	2 48.13	+16 36.8	1.127	2.113	4.6	17.8
11 7	2 37.77	+37 6.8	2.106	3.052	6.7	18.1	11 7	2 37.41	+16 10.4	1.126	2.116	1.3	17.6
11 17	2 29.06	+35 52.6	2.100	3.042	6.9	18.1	11 17	2 27.22	+15 42.7	1.151	2.121	7.1	18.0
11 27	2 21.67	+34 24.2	2.123	3.032	8.7	18.2	11 27	2 19.08	+15 20.5	1.200	2.125	12.3	18.3
12 7	2 16.36	+32 49.6	2.171	3.022	11.1	18.4	12 7	2 13.98	+15 9.3	1.271	2.131	16.8	18.6
392352 2010 FX ₈₈ 11 4.7 110°00 2°7/ 2.6 18							31072 1996 VZ ₂₂ 11 4.7 10°65 4°1/ 1.8 18						
9 28	3 5.07	+12 16.0	1.785	2.613	15.0	21.5	9 28	3 3.42	+7 34.3	1.735	2.573	14.9	18.7
10 8	3 0.97	+11 16.1	1.713	2.617	11.6	21.3	10 8	2 59.77	+6 44.1	1.666	2.574	11.6	18.5
10 18	2 54.56	+10 7.6	1.663	2.621	7.6	21.0	10 18	2 53.82	+5 50.3	1.619	2.576	7.8	18.3
10 28	2 46.53	+8 55.6	1.640	2.624	3.7	20.8	10 28	2 46.25	+4 58.2	1.598	2.578	4.6	18.1
11 7	2 37.85	+7 46.5	1.645	2.628	3.4	20.8	11 7	2 38.01	+4 13.8	1.604	2.580	4.7	18.1
11 17	2 29.59	+6 46.9	1.677	2.632	7.0	21.0	11 17	2 30.15	+3 42.6	1.636	2.583	7.9	18.3
11 27	2 22.73	+6 2.2	1.737	2.635	10.9	21.3	11 27	2 23.66	+3 28.2	1.695	2.587	11.6	18.5
12 7	2 17.98	+5 35.5	1.819	2.639	14.3	21.5	12 7	2 19.26	+3 32.0	1.775	2.591	14.8	18.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
74145	1998 QO ₈₄	11 4.7 60°55'	5.7/ 9.1	18			190216	2006 BD ₁₁₄	11 4.7 124°05'	1°8/ 3.1	18		
9 28	3 12.06	+32 34.9	1.616	2.379	19.1	18.2	9 28	3 3.97	+11 31.6	2.435	3.249	11.9	21.0
10 8	3 6.70	+32 42.7	1.566	2.413	15.7	18.0	10 8	2 59.52	+11 0.6	2.360	3.256	9.2	20.8
10 18	2 58.41	+32 27.0	1.534	2.446	11.9	17.9	10 18	2 53.35	+10 24.8	2.308	3.262	6.0	20.7
10 28	2 48.20	+31 46.3	1.525	2.479	8.1	17.8	10 28	2 45.99	+ 9 47.2	2.284	3.268	2.9	20.5
11 7	2 37.46	+30 43.1	1.542	2.513	5.7	17.7	11 7	2 38.15	+ 9 11.2	2.289	3.274	2.3	20.4
11 17	2 27.60	+29 24.1	1.586	2.546	6.7	17.8	11 17	2 30.60	+ 8 40.6	2.324	3.280	5.2	20.6
11 27	2 19.81	+27 58.8	1.657	2.579	9.8	18.1	11 27	2 24.07	+ 8 18.5	2.388	3.286	8.4	20.9
12 7	2 14.78	+26 36.8	1.753	2.611	13.0	18.4	12 7	2 19.12	+ 8 7.2	2.476	3.291	11.1	21.0
245370	2005 GL ₃₉	11 4.7 80°39'	0°5/ 5.0	18			308853	2006 RZ ₉₅	11 4.7 295°90'	1°6/ 5.7	18		
9 28	3 7.52	+18 25.1	1.834	2.644	15.4	21.2	9 28	3 6.74	+20 32.6	1.891	2.695	15.2	20.6
10 8	3 2.90	+18 17.1	1.763	2.653	12.0	21.0	10 8	3 2.57	+20 41.7	1.797	2.682	12.1	20.3
10 18	2 55.88	+17 58.4	1.713	2.663	8.1	20.8	10 18	2 55.90	+20 39.6	1.725	2.670	8.4	20.1
10 28	2 47.15	+17 30.4	1.688	2.672	3.7	20.5	10 28	2 47.30	+20 26.3	1.677	2.658	4.3	19.8
11 7	2 37.75	+16 56.3	1.691	2.681	1.0	20.3	11 7	2 37.73	+20 3.6	1.657	2.646	1.7	19.6
11 17	2 28.76	+16 20.7	1.723	2.690	5.4	20.7	11 17	2 28.34	+19 34.8	1.665	2.634	5.4	19.9
11 27	2 21.25	+15 48.9	1.782	2.700	9.5	20.9	11 27	2 20.28	+19 5.2	1.701	2.623	9.6	20.1
12 7	2 15.94	+15 25.2	1.865	2.709	13.0	21.2	12 7	2 14.42	+18 40.3	1.761	2.611	13.3	20.3
192976	2000 DB ₃₇	11 4.7 286°88'	1°2/ 3.7	17			153815	2001 WC ₇	11 4.7 145°91'	0°4/ 4.4	18		
9 28	3 3.27	+13 41.6	2.279	3.094	12.6	20.7	9 28	3 7.32	+17 57.8	1.778	2.591	15.7	20.3
10 8	2 59.31	+13 14.9	2.183	3.079	9.8	20.5	10 8	3 2.82	+17 16.9	1.703	2.596	12.2	20.1
10 18	2 53.41	+12 41.2	2.110	3.064	6.5	20.2	10 18	2 55.87	+16 23.2	1.648	2.601	8.1	19.8
10 28	2 46.08	+12 3.1	2.063	3.049	2.9	20.0	10 28	2 47.19	+15 19.7	1.620	2.605	3.5	19.6
11 7	2 38.05	+11 23.9	2.046	3.034	1.8	19.9	11 7	2 37.80	+14 11.6	1.619	2.609	1.3	19.4
11 17	2 30.19	+10 48.0	2.058	3.019	5.4	20.1	11 17	2 28.84	+13 5.5	1.648	2.613	5.9	19.7
11 27	2 23.34	+10 19.4	2.098	3.004	8.9	20.3	11 27	2 21.39	+12 8.0	1.703	2.617	10.2	20.0
12 7	2 18.18	+10 1.3	2.163	2.989	12.1	20.5	12 7	2 16.17	+11 24.3	1.783	2.620	13.8	20.2
301953	2000 CL ₁₃₀	11 4.7 317°72'	6°6/30.9	18			469906	2005 WL ₁₉₁	11 4.7 350°99'	5°2/ 2.1	18		
9 28	3 3.88	+ 1 50.9	1.710	2.550	15.0	20.5	9 28	3 2.53	+ 7 20.3	1.137	2.003	19.2	20.1
10 8	3 0.20	+ 0 38.1	1.639	2.544	11.9	20.3	10 8	3 0.32	+ 6 37.6	1.072	1.995	15.0	19.8
10 18	2 54.17	- 0 34.9	1.590	2.538	8.8	20.1	10 18	2 54.85	+ 5 50.4	1.025	1.988	10.3	19.5
10 28	2 46.43	- 1 40.3	1.566	2.532	6.7	20.0	10 28	2 46.92	+ 5 6.0	1.000	1.983	6.1	19.3
11 7	2 37.96	- 2 30.8	1.568	2.526	7.3	20.0	11 7	2 37.86	+ 4 32.7	0.999	1.979	6.0	19.2
11 17	2 29.81	- 3 0.6	1.597	2.520	10.1	20.2	11 17	2 29.26	+ 4 17.4	1.020	1.976	10.2	19.5
11 27	2 23.04	- 3 6.7	1.649	2.515	13.3	20.4	11 27	2 22.61	+ 4 24.8	1.064	1.975	15.1	19.7
12 7	2 18.39	- 2 49.3	1.723	2.510	16.4	20.6	12 7	2 18.91	+ 4 55.2	1.127	1.975	19.4	20.0
517812	2015 QO ₁₄	11 4.7 119°00'	1°0/ 5.5	18			387932	2005 CQ ₃₂	11 4.7 99°84'	0°9/ 4.1	18		
9 28	3 6.74	+20 26.3	2.034	2.833	14.5	22.0	9 28	3 7.74	+14 42.6	1.834	2.651	15.1	21.1
10 8	3 2.11	+20 12.3	1.957	2.840	11.4	21.8	10 8	3 3.03	+14 23.9	1.763	2.659	11.7	20.9
10 18	2 55.28	+19 46.6	1.901	2.847	7.7	21.6	10 18	2 55.96	+13 57.1	1.713	2.667	7.7	20.6
10 28	2 46.88	+19 10.3	1.872	2.854	3.7	21.4	10 28	2 47.22	+13 24.7	1.690	2.675	3.4	20.4
11 7	2 37.85	+18 26.6	1.870	2.860	1.2	21.2	11 7	2 37.81	+12 50.6	1.694	2.683	1.6	20.3
11 17	2 29.18	+17 39.9	1.898	2.867	4.9	21.5	11 17	2 28.81	+12 19.4	1.727	2.691	5.9	20.6
11 27	2 21.85	+16 55.8	1.955	2.873	8.8	21.7	11 27	2 21.26	+11 55.7	1.787	2.698	9.9	20.9
12 7	2 16.53	+16 19.1	2.036	2.879	12.1	22.0	12 7	2 15.87	+11 42.9	1.872	2.706	13.4	21.1
43762	1986 WC ₁	11 4.7 357°98'	0°4/ 4.4	18			85228	1993 FU ₄₅	11 4.7 127°35'	0°2/ 4.9	18		
9 28	3 3.09	+15 39.9	1.857	2.680	14.7	18.1	9 28	3 6.48	+17 51.3	2.498	3.292	12.2	20.7
10 8	2 59.54	+15 30.3	1.778	2.678	11.4	17.9	10 8	3 1.42	+17 37.0	2.422	3.305	9.5	20.5
10 18	2 53.71	+15 12.3	1.721	2.676	7.6	17.7	10 18	2 54.59	+17 14.6	2.370	3.318	6.3	20.4
10 28	2 46.24	+14 47.9	1.689	2.675	3.3	17.4	10 28	2 46.54	+16 45.6	2.346	3.330	2.8	20.2
11 7	2 38.03	+14 20.5	1.684	2.674	1.2	17.2	11 7	2 38.01	+16 12.6	2.352	3.342	0.8	20.0
11 17	2 30.12	+13 54.2	1.708	2.675	5.6	17.5	11 17	2 29.81	+15 38.9	2.388	3.353	4.3	20.3
11 27	2 23.51	+13 33.7	1.758	2.675	9.6	17.8	11 27	2 22.69	+15 8.4	2.453	3.364	7.5	20.5
12 7	2 18.94	+13 22.5	1.832	2.677	13.1	18.0	12 7	2 17.22	+14 44.4	2.544	3.375	10.4	20.7
210600	2000 AM ₁	11 4.7 321°90'	9°0/31.5	18			515328	2013 AE ₈	11 4.7 213°89'	3°2/ 2.1	18		
9 28	3 8.23	- 4 26.7	1.453	2.291	17.3	19.5	9 28	3 5.87	+ 7 48.0	2.295	3.112	12.5	22.0
10 8	3 4.25	- 5 2.5	1.370	2.268	14.3	19.3	10 8	3 1.18	+ 7 6.3	2.210	3.106	9.6	21.8
10 18	2 57.29	- 5 29.6	1.308	2.246	11.3	19.0	10 18	2 54.57	+ 6 21.2	2.148	3.100	6.5	21.6
10 28	2 47.98	- 5 39.7	1.269	2.225	9.2	18.9	10 28	2 46.59	+ 5 36.7	2.114	3.093	3.7	21.4
11 7	2 37.49	- 5 25.7	1.253	2.204	9.6	18.8	11 7	2 38.00	+ 4 57.2	2.109	3.086	3.7	21.4
11 17	2 27.18	- 4 43.6	1.263	2.184	12.4	18.9	11 17	2 29.63	+ 4 26.7	2.133	3.078	6.5	21.6
11 27	2 18.48	- 3 33.3	1.295	2.165	16.0	19.1	11 27	2 22.34	+ 4 8.7	2.185	3.070	9.7	21.8
12 7	2 12.43	- 1 58.5	1.348	2.147	19.5	19.3	12 7	2 16.73	+ 4 4.9	2.262	3.061	12.6	21.9
43921	1996 CW ₃	11 4.7 334°42'	6°7/ 9.5	18			409073	2003 SU ₂₇₇	11 4.7 331°21'	1°3/ 5.8	17		
9 28	3 9.22	+33 51.8	1.860	2.609	17.4	18.3	9 28	3 0.63	+22 39.4	1.836	2.647	15.4	20.2
10 8	3 4.81	+34 29.7	1.774	2.608	14.7	18.2	10 8	2 57.88	+22 8.1	1.741	2.631	12.2	19.9
10 18	2 57.52	+34 47.9	1.708	2.608	11.7	18.0	10 18	2 52.77	+21 20.2	1.668	2.615	8.5	19.7
10 28	2 48.03	+34 42.5	1.664	2.607	8.7	17.8	10 28	2 45.90	+20 17.0	1.619	2.600	4.3	19.4
11 7	2 37.49	+34 12.7	1.646	2.606	6.8	17.7	11 7	2 38.19	+19 2.5	1.597	2.586	1.5	19.2
11 17	2 27.28	+33 21.1	1.654	2.605	7.5	17.7	11 17	2 30.70	+17 43.2	1.603	2.573	5.4	19.4
11 27	2 18.72	+32 15.0	1.689	2.605	10.1	17.9	11 27	2 24.51	+16 26.7	1.636	2.560	9.7	19.6
12 7	2 12.77	+31 3.4	1.749	2.604	13.2	18.1	12 7	2 20.41	+15 20.2	1.693	2.548	13.5	19.9
29429	1997 GO ₁₃	11 4.7 60°20'	0°4/ 4.9	18			321027	2008 NR ₁	11 4.7 338°92'	1°1/ 3.7	18		
9 28	3 11.52	+18 40.7	1.116	1.954	21.5								

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V		
38524	1999 TS ₂₈₇		11	4.7	51 $^{\circ}$ 89	0 $^{\circ}$ 6/ 4.3	18	331016	2009 UW ₁₃₄		11	4.7	272 $^{\circ}$ 09	0 $^{\circ}$ 3/ 4.5	17
9 28	3 5.42	+15 13.6	1.982	2.798	14.2	18.9	9 28	3 4.36	+15 57.0	2.372	3.178	12.4	21.2		
10 8	3 1.07	+14 59.8	1.912	2.808	11.0	18.7	10 8	3 0.07	+15 45.7	2.282	3.172	9.7	21.0		
75491	1999 XZ ₁₇₈		11	4.7	238 $^{\circ}$ 30	7 $^{\circ}$ 2/30.9	18	25306	1998 XQ ₇₃		11	4.7	53 $^{\circ}$ 28	4 $^{\circ}$ 1/ 2.3	18
9 28	3 8.14	- 3 37.0	1.975	2.795	14.1	19.5	9 28	3 8.76	+ 2 56.5	2.101	2.919	13.4	17.0		
10 8	3 3.17	- 4 23.7	1.902	2.789	11.4	19.3	10 8	3 3.37	+ 2 50.3	2.038	2.932	10.5	16.8		
182327	2001 PJ ₁₁		11	4.7	44 $^{\circ}$ 61	4 $^{\circ}$ 5/ 2.7	18	324144	2005 YH ₁₁₇		11	4.7	334 $^{\circ}$ 86	8 $^{\circ}$ 1/29.5	18
9 28	3 10.07	+ 7 35.1	1.152	2.005	20.0	19.6	9 28	3 4.55	- 6 47.3	2.077	2.897	13.5	20.0		
10 8	3 5.55	+ 7 2.5	1.114	2.029	15.3	19.4	10 8	3 0.28	- 7 47.9	2.013	2.894	11.2	19.8		
53898	2000 FU ₄₈		11	4.7	266 $^{\circ}$ 55	3 $^{\circ}$ 7/ 7.2	18	350500	1999 VE ₂₀₇		11	4.7	4 $^{\circ}$ 69	1 $^{\circ}$ 4/ 3.9	16
9 28	3 8.00	+26 38.4	1.628	2.421	17.8	18.9	9 28	2 58.88	+14 50.0	1.050	1.918	20.3	20.7		
10 8	3 4.02	+26 40.2	1.541	2.414	14.5	18.7	10 8	2 57.70	+14 29.4	0.992	1.917	15.8	20.5		
131443	2001 QH ₈₈		11	4.7	109 $^{\circ}$ 11	0 $^{\circ}$ 7/ 4.0	18	389578	2011 AP ₇₃		11	4.7	263 $^{\circ}$ 16	9 $^{\circ}$ 7/15.4	18
9 28	3 3.49	+14 51.5	2.718	3.521	11.1	20.9	9 28	3 11.87	+50 19.7	2.706	3.315	15.3	20.9		
10 8	2 58.97	+14 26.2	2.644	3.534	8.5	20.7	10 8	3 6.76	+51 5.6	2.600	3.300	14.0	20.8		
166305	2002 JX ₂₂		11	4.7	136 $^{\circ}$ 42	0 $^{\circ}$ 8/ 3.9	18	278899	2008 TO ₁₁₃		11	4.7	68 $^{\circ}$ 31	2 $^{\circ}$ 1/ 3.4	18
9 28	3 7.19	+16 55.4	2.244	3.045	13.2	21.2	9 28	3 7.79	+12 59.4	1.552	2.383	16.8	21.0		
10 8	3 2.10	+16 2.1	2.170	3.059	10.2	21.1	10 8	3 3.34	+12 22.5	1.493	2.397	12.9	20.8		
431705	2008 EZ ₇₆		11	4.7	293 $^{\circ}$ 00	2 $^{\circ}$ 0/ 3.6	18	224188	2005 RL ₆		11	4.7	324 $^{\circ}$ 31	0 $^{\circ}$ 8/ 4.2	18
9 28	3 6.99	+13 29.7	1.401	2.239	17.8	21.6	9 28	3 2.61	+16 47.5	1.276	2.122	18.8	20.4		
10 8	3 3.48	+13 0.6	1.316	2.224	14.0	21.3	10 8	3 0.41	+16 18.1	1.191	2.104	14.8	20.1		
267560	2002 QV ₂₅		11	4.7	242 $^{\circ}$ 68	1 $^{\circ}$ 3/ 5.9	17	241998	2002 NB ₇₄		11	4.7	178 $^{\circ}$ 41	3 $^{\circ}$ 2/ 1.7	18
9 28	3 4.37	+21 23.8	2.594	3.380	12.0	21.5	9 28	3 2.45	+ 7 29.2	2.476	3.296	11.5	20.6		
10 8	2 59.98	+21 18.3	2.497	3.372	9.5	21.4	10 8	2 58.38	+ 6 36.8	2.398	3.297	8.9	20.4		
171084	2005 EO ₁₉₃		11	4.7	337 $^{\circ}$ 37	0 $^{\circ}$ 1/ 4.6	18	442169	2010 VG ₂₁₂		11	4.7	310 $^{\circ}$ 79	1 $^{\circ}$ 0/ 4.1	18
9 28	3 4.58	+17 23.5	1.567	2.395	16.8	20.6	9 28	3 7.14	+12 48.8	2.048	2.862	13.8	20.8		
10 8	3 1.20	+17 3.8	1.487	2.389	13.1	20.3	10 8	3 2.53	+12 51.9	1.960	2.856	10.8	20.6		

EPHEMERIDES

11 4.7

11 4.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
220583	2004 <i>JF</i> ₂₃		11 4.7	80°37	1°1 / 4.2	18	148386	2000 <i>TM</i> ₁₉		11 4.7	57°19	1°0 / 3.9	18
9 28	3 11.46	+13 29.8	1.533	2.356	17.3	20.3	9 28	3 5.17	+14 57.3	1.898	2.717	14.6	20.3
10 8	3 6.34	+13 28.3	1.468	2.368	13.4	20.1	10 8	3 0.98	+14 28.7	1.829	2.727	11.2	20.1
10 18	2 58.39	+13 19.6	1.425	2.380	8.8	19.9	10 18	2 54.61	+13 51.6	1.783	2.738	7.4	19.9
10 28	2 48.42	+13 6.1	1.406	2.392	3.9	19.6	10 28	2 46.71	+13 9.1	1.763	2.748	3.2	19.6
11 7	2 37.65	+12 51.1	1.414	2.403	1.8	19.5	11 7	2 38.22	+12 25.5	1.770	2.759	1.7	19.6
11 17	2 27.43	+12 39.0	1.450	2.415	6.6	19.8	11 17	2 30.14	+11 45.6	1.807	2.770	5.7	19.9
11 27	2 19.01	+12 34.0	1.512	2.427	11.1	20.1	11 27	2 23.42	+11 14.2	1.870	2.781	9.5	20.1
12 7	2 13.21	+12 39.3	1.598	2.438	15.0	20.4	12 7	2 18.70	+10 54.5	1.958	2.793	12.8	20.3
187603	2006 <i>XK</i> ₃₈		11 4.7	42°53	5°9 / 2.0	18	413722	2006 <i>BO</i> ₇₀		11 4.7	150°29	3°1 / 7.5	18
9 28	3 9.16	+ 4 15.0	1.248	2.098	18.9	19.5	9 28	3 6.93	+26 50.2	2.583	3.344	12.7	21.5
10 8	3 4.88	+ 3 36.3	1.197	2.110	14.7	19.2	10 8	3 2.02	+27 4.7	2.496	3.349	10.3	21.4
10 18	2 57.53	+ 2 58.5	1.167	2.122	10.3	19.0	10 18	2 55.18	+27 7.1	2.431	3.353	7.6	21.2
10 28	2 48.03	+ 2 28.6	1.159	2.136	6.6	18.9	10 28	2 46.97	+26 56.7	2.392	3.357	4.8	21.0
11 7	2 37.78	+ 2 13.3	1.175	2.150	6.5	18.9	11 7	2 38.14	+26 34.4	2.381	3.360	3.1	20.9
11 17	2 28.25	+ 2 17.0	1.217	2.164	10.1	19.2	11 17	2 29.55	+26 2.7	2.401	3.364	4.5	21.0
11 27	2 20.75	+ 2 41.4	1.282	2.179	14.2	19.4	11 27	2 22.03	+25 25.7	2.450	3.367	7.3	21.2
12 7	2 16.08	+ 3 25.1	1.368	2.194	17.8	19.7	12 7	2 16.23	+24 48.3	2.525	3.370	10.0	21.4
339128	2004 <i>RM</i> ₃₂₅		11 4.7	25°72	4°7 / 7.5	18	19924	1979 <i>MQ</i> ₆		11 4.7	183°17	2°3 / 6.2	18 R
9 28	3 4.70	+26 41.4	1.087	1.918	22.4	18.5	9 28	3 10.72	+23 37.7	1.682	2.477	17.2	19.2
10 8	3 2.22	+26 57.7	1.040	1.934	18.1	18.3	10 8	3 5.90	+23 27.3	1.599	2.477	13.7	19.0
10 18	2 56.14	+26 49.3	1.009	1.953	13.1	18.0	10 18	2 58.22	+23 0.1	1.537	2.478	9.6	18.7
10 28	2 47.49	+26 15.3	0.999	1.973	7.9	17.8	10 28	2 48.43	+22 16.2	1.499	2.477	5.2	18.5
11 7	2 37.95	+25 19.7	1.010	1.995	4.7	17.7	11 7	2 37.71	+21 18.4	1.488	2.476	2.3	18.3
11 17	2 29.27	+24 10.9	1.046	2.018	7.3	18.0	11 17	2 27.39	+20 12.8	1.506	2.475	5.8	18.5
11 27	2 22.98	+23 0.3	1.105	2.042	11.9	18.3	11 27	2 18.76	+19 7.5	1.551	2.473	10.3	18.8
12 7	2 19.91	+21 58.1	1.186	2.067	16.2	18.6	12 7	2 12.71	+18 9.9	1.620	2.471	14.3	19.0
60746	2000 <i>GA</i> ₉₅		11 4.7	45°63	3°7 / 6.6	18	133049	2003 <i>DU</i> ₇		11 4.7	281°86	17°0 / 21.1	17
9 28	3 10.22	+24 5.9	1.156	1.980	21.7	18.4	9 28	3 5.07	- 9 56.8	1.062	1.920	20.9	19.1
10 8	3 6.50	+24 24.6	1.096	1.989	17.4	18.1	10 8	3 2.42	-13 49.9	1.022	1.915	18.4	18.9
10 18	2 59.07	+24 22.9	1.053	1.999	12.4	17.9	10 18	2 56.32	-17 30.4	1.002	1.910	17.1	18.8
10 28	2 48.87	+23 59.4	1.031	2.009	7.0	17.6	10 28	2 47.66	-20 35.5	1.004	1.906	17.4	18.8
11 7	2 37.53	+23 16.8	1.033	2.020	3.7	17.4	11 7	2 37.95	-22 47.2	1.027	1.901	19.2	18.9
11 17	2 26.91	+22 21.9	1.059	2.030	7.3	17.7	11 17	2 28.84	-23 56.9	1.067	1.897	21.8	19.1
11 27	2 18.69	+21 25.0	1.110	2.042	12.4	18.0	11 27	2 21.89	-24 5.9	1.122	1.892	24.5	19.3
12 7	2 13.88	+20 36.0	1.182	2.053	16.9	18.3	12 7	2 18.03	-23 23.4	1.189	1.888	26.8	19.5
426444	2013 <i>QT</i> ₄₈		11 4.7	0°01	5°1 / 1.5	18	514506	2016 <i>WA</i> ₃₀		11 4.7	28°18	5°9 / 1.4	18
9 28	2 52.99	+13 12.7	0.838	1.731	21.8	19.4	9 28	3 3.10	+ 7 22.3	1.093	1.961	19.7	19.8
10 8	2 53.70	+11 31.7	0.785	1.725	16.8	19.1	10 8	3 0.40	+ 6 5.3	1.056	1.980	15.2	19.6
10 18	2 50.83	+ 9 30.7	0.750	1.721	11.1	18.7	10 18	2 54.60	+ 4 44.9	1.038	2.000	10.3	19.4
10 28	2 45.28	+ 7 22.2	0.734	1.720	6.0	18.5	10 28	2 46.74	+ 3 31.0	1.042	2.022	6.5	19.3
11 7	2 38.59	+ 5 23.0	0.738	1.721	6.4	18.5	11 7	2 38.27	+ 2 33.2	1.070	2.045	6.7	19.4
11 17	2 32.51	+ 3 48.7	0.764	1.725	11.7	18.8	11 17	2 30.63	+ 1 58.5	1.121	2.070	10.5	19.7
11 27	2 28.62	+ 2 50.2	0.809	1.731	17.1	19.1	11 27	2 25.05	+ 1 50.2	1.194	2.095	14.6	20.0
12 7	2 27.86	+ 2 29.8	0.871	1.739	21.8	19.5	12 7	2 22.22	+ 2 7.0	1.287	2.122	18.2	20.3
289572	2005 <i>EJ</i> ₂₉₂		11 4.7	266°58	2°6 / 2.9	18	431665	2008 <i>CZ</i> ₇₅		11 4.7	326°46	4°5 / 6.7	18
9 28	3 6.56	+10 31.0	1.932	2.755	14.2	20.7	9 28	3 10.76	+23 37.0	1.314	2.128	20.1	20.7
10 8	3 2.25	+ 9 59.5	1.840	2.740	11.1	20.5	10 8	3 6.99	+24 28.3	1.234	2.120	16.4	20.5
10 18	2 55.61	+ 9 22.2	1.771	2.726	7.4	20.3	10 18	2 59.61	+25 5.4	1.172	2.113	11.9	20.2
10 28	2 47.24	+ 8 42.7	1.728	2.711	3.7	20.0	10 28	2 49.30	+25 24.6	1.131	2.106	7.2	19.9
11 7	2 38.00	+ 8 5.6	1.712	2.696	3.2	19.9	11 7	2 37.44	+25 24.5	1.116	2.099	4.5	19.7
11 17	2 28.95	+ 7 35.7	1.726	2.681	6.8	20.1	11 17	2 25.83	+25 7.9	1.125	2.093	7.5	19.9
11 27	2 21.14	+ 7 17.4	1.766	2.666	10.7	20.3	11 27	2 16.26	+24 41.7	1.159	2.088	12.3	20.2
12 7	2 15.35	+ 7 13.5	1.830	2.651	14.2	20.5	12 7	2 9.99	+24 15.0	1.215	2.083	16.8	20.4
168171	2006 <i>HM</i> ₇₇		11 4.7	15°38	10°1 / 30.9	18	274890	2009 <i>SV</i> ₆₂		11 4.7	327°71	1°0 / 5.3	18
9 28	3 5.95	- 5 30.7	1.307	2.155	18.3	18.9	9 28	3 6.83	+19 19.8	1.357	2.187	18.8	20.9
10 8	3 2.32	- 6 29.9	1.259	2.160	15.0	18.7	10 8	3 3.50	+19 14.7	1.279	2.180	14.9	20.7
10 18	2 55.80	- 7 18.1	1.230	2.166	12.0	18.6	10 18	2 56.98	+18 54.7	1.219	2.173	10.1	20.4
10 28	2 47.28	- 7 45.8	1.223	2.174	10.2	18.5	10 28	2 48.01	+18 20.9	1.183	2.167	4.8	20.1
11 7	2 38.03	- 7 46.0	1.240	2.182	10.7	18.5	11 7	2 37.85	+17 37.1	1.171	2.161	1.4	19.8
11 17	2 29.41	- 7 15.8	1.279	2.191	13.1	18.7	11 17	2 28.04	+16 49.5	1.186	2.156	6.7	20.1
11 27	2 22.63	- 6 16.5	1.340	2.201	16.1	18.9	11 27	2 20.09	+16 6.3	1.225	2.151	12.0	20.4
12 7	2 18.47	- 4 53.1	1.421	2.213	19.0	19.2	12 7	2 15.02	+15 34.3	1.286	2.147	16.5	20.7
174695	2003 <i>UG</i> ₄₇		11 4.7	32°92	6°8 / 1.2	18	112980	2002 <i>RT</i> ₂₄		11 4.7	6°98	1°3 / 5.5	18
9 28	3 6.06	+ 5 12.0	1.116	1.978	19.8	19.3	9 28	3 2.94	+19 49.2	1.330	2.166	18.7	18.4
10 8	3 2.81	+ 4 0.3	1.068	1.987	15.4	19.1	10 8	3 0.37	+19 49.7	1.263	2.167	14.8	18.1
10 18	2 56.32	+ 2 46.8	1.039	1.997	10.8	18.9	10 18	2 54.79	+19 35.2	1.215	2.170	10.1	17.9
10 28	2 47.55	+ 1 41.2	1.031	2.008	7.2	18.7	10 28	2 46.97	+19 7.1	1.189	2.173	4.9	17.6
11 7	2 37.96	+ 0 53.1	1.048	2.020	7.6	18.8	11 7	2 38.18	+18 29.1	1.188	2.178	1.6	17.4
11 17	2 29.12	+ 0 29.4	1.087	2.032	11.3	19.0	11 17	2 29.85	+17 47.4	1.212	2.184	6.4	17.7
11 27	2 22.40	+ 0 33.3	1.149	2.045	15.5	19.3	11 27	2 23.35	+17 9.3	1.261	2.191	11.3	18.0
12 7	2 18.60	+ 1 3.2	1.230	2.058	19.3	19.6	12 7	2 19.58	+16 41.3	1.331	2.200	15.6	18.3
297972	2002 <i>JN</i> ₅₄												

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
441232 2007 VT ₁₆₂ 11 4.8 359°89 0°8/ 5.2 15							72726 2001 FY ₉₄ 11 4.8 53°87 8°3/28.4 18						
9 28	3 6.04	+18 23.4	1.550	2.374	17.1	21.7	9 28	3 2.64	- 6 0.2	2.035	2.861	13.5	18.3
10 8	3 2.42	+18 25.8	1.474	2.372	13.5	21.5	10 8	2 58.74	- 7 37.0	1.991	2.877	11.1	18.2
10 18	2 56.00	+18 16.6	1.419	2.371	9.1	21.2	10 18	2 52.98	- 9 6.2	1.972	2.892	9.2	18.1
10 28	2 47.51	+17 56.7	1.387	2.371	4.3	21.0	10 28	2 45.98	-10 20.1	1.977	2.908	8.3	18.1
11 7	2 38.06	+17 29.3	1.381	2.371	1.2	20.8	11 7	2 38.57	-11 12.6	2.009	2.924	9.0	18.2
11 17	2 28.98	+16 59.1	1.402	2.372	6.0	21.1	11 17	2 31.58	-11 40.1	2.067	2.940	10.8	18.3
11 27	2 21.53	+16 32.0	1.449	2.374	10.7	21.4	11 27	2 25.79	-11 41.8	2.147	2.956	12.9	18.5
12 7	2 16.59	+16 13.4	1.519	2.376	14.7	21.6	12 7	2 21.73	-11 19.8	2.248	2.973	14.8	18.7
472655 2015 DH ₂₁₈ 11 4.8 324°14 3°8/ 6.9 18							452777 2006 DT ₄₅ 11 4.8 327°16 1°5/ 5.7 15						
9 28	3 5.78	+25 14.1	1.250	2.072	20.5	21.2	9 28	3 4.20	+20 5.3	1.837	2.648	15.3	21.4
10 8	3 3.18	+25 21.7	1.169	2.061	16.7	20.9	10 8	3 0.76	+20 12.1	1.743	2.633	12.2	21.1
10 18	2 57.07	+25 7.8	1.106	2.051	12.1	20.6	10 18	2 54.84	+20 7.7	1.670	2.618	8.4	20.9
10 28	2 48.16	+24 30.7	1.064	2.041	7.0	20.3	10 28	2 47.02	+19 52.3	1.621	2.603	4.2	20.6
11 7	2 37.85	+23 32.4	1.046	2.032	3.8	20.1	11 7	2 38.23	+19 28.0	1.600	2.589	1.6	20.4
11 17	2 27.87	+22 20.0	1.052	2.023	7.2	20.3	11 17	2 29.59	+18 58.4	1.606	2.576	5.4	20.6
11 27	2 19.93	+21 4.3	1.082	2.016	12.4	20.5	11 27	2 22.24	+18 28.9	1.639	2.563	9.7	20.9
12 7	2 15.21	+19 56.5	1.134	2.009	17.3	20.8	12 7	2 17.07	+18 4.8	1.696	2.551	13.5	21.1
202961 1999 RU ₁₅₇ 11 4.8 15°71 6°2/ 1.9 18							152299 Vanautgaerden 11 4.8 68°27 4°8/ 1.9 18						
9 28	3 0.83	+ 6 1.1	0.979	1.857	20.6	18.9	9 28	3 8.05	+ 7 12.1	1.454	2.294	17.2	19.9
10 8	2 59.10	+ 5 10.9	0.938	1.867	16.0	18.7	10 8	3 3.66	+ 6 13.0	1.400	2.309	13.3	19.7
10 18	2 54.01	+ 4 19.3	0.916	1.880	11.0	18.5	10 18	2 56.58	+ 5 10.6	1.368	2.324	9.0	19.5
10 28	2 46.60	+ 3 35.4	0.913	1.894	6.8	18.3	10 28	2 47.66	+ 4 11.8	1.360	2.339	5.4	19.4
11 7	2 38.37	+ 3 7.7	0.933	1.911	6.9	18.4	11 7	2 38.10	+ 3 23.8	1.378	2.354	5.5	19.4
11 17	2 30.93	+ 3 2.2	0.975	1.930	10.8	18.7	11 17	2 29.17	+ 2 52.4	1.422	2.368	9.0	19.6
11 27	2 25.65	+ 3 21.2	1.039	1.950	15.3	19.0	11 27	2 22.00	+ 2 41.3	1.491	2.383	12.8	19.9
12 7	2 23.31	+ 4 2.7	1.121	1.973	19.2	19.3	12 7	2 17.32	+ 2 50.8	1.582	2.398	16.3	20.2
227183 2005 GQ ₅₄ 11 4.8 60°58 0°3/ 4.5 18							65736 1993 QH ₇ 11 4.8 64°51 2°2/ 3.6 18 R						
9 28	3 9.82	+17 25.8	1.333	2.162	19.1	20.6	9 28	3 9.69	+13 38.1	1.256	2.097	19.3	19.0
10 8	3 5.29	+16 58.1	1.282	2.185	14.7	20.4	10 8	3 5.42	+13 0.9	1.202	2.111	14.9	18.8
10 18	2 57.74	+16 17.0	1.251	2.207	9.7	20.1	10 18	2 57.98	+12 13.3	1.167	2.126	9.8	18.5
10 28	2 48.16	+15 26.0	1.244	2.230	4.2	19.9	10 28	2 48.34	+11 20.3	1.155	2.141	4.4	18.3
11 7	2 37.93	+14 31.2	1.262	2.252	1.4	19.8	11 7	2 37.91	+10 28.9	1.169	2.157	2.9	18.2
11 17	2 28.49	+13 39.7	1.307	2.275	6.7	20.2	11 17	2 28.22	+ 9 46.2	1.208	2.172	7.9	18.6
11 27	2 21.10	+12 58.4	1.378	2.298	11.5	20.5	11 27	2 20.62	+ 9 18.6	1.273	2.187	12.7	18.9
12 7	2 16.49	+12 32.1	1.471	2.321	15.5	20.8	12 7	2 15.92	+ 9 9.1	1.358	2.203	16.9	19.2
359315 2009 JW ₆ 11 4.8 233°88 3°9/ 1.4 18							191984 2005 WQ ₁₀₇ 11 4.8 172°74 0°8/ 5.5 18						
9 28	3 5.13	+ 6 22.1	2.215	3.037	12.7	21.8	9 28	3 4.71	+20 4.5	2.443	3.236	12.5	20.5
10 8	3 0.76	+ 5 27.5	2.129	3.028	9.9	21.6	10 8	3 0.32	+19 50.3	2.357	3.237	9.8	20.4
10 18	2 54.43	+ 4 29.7	2.067	3.018	6.8	21.4	10 18	2 54.08	+19 26.4	2.293	3.238	6.7	20.2
10 28	2 46.69	+ 3 33.5	2.032	3.008	4.3	21.2	10 28	2 46.53	+18 53.7	2.257	3.239	3.2	19.9
11 7	2 38.31	+ 2 44.1	2.026	2.997	4.5	21.2	11 7	2 38.41	+18 14.9	2.249	3.239	1.0	19.8
11 17	2 30.14	+ 2 6.1	2.048	2.987	7.2	21.4	11 17	2 30.53	+17 33.6	2.272	3.239	4.3	20.0
11 27	2 23.05	+ 1 43.3	2.098	2.975	10.4	21.5	11 27	2 23.70	+16 54.1	2.323	3.240	7.6	20.2
12 7	2 17.67	+ 1 37.1	2.171	2.964	13.2	21.7	12 7	2 18.52	+16 20.4	2.401	3.240	10.6	20.4
320455 2007 VZ ₂₂₁ 11 4.8 312°21 3°5/ 7.4 18							175047 2004 FK ₉₃ 11 4.8 279°08 3°2/ 6.8 18						
9 28	3 3.23	+27 54.4	1.659	2.453	17.4	20.1	9 28	3 8.84	+24 8.1	1.993	2.778	15.2	20.2
10 8	3 0.45	+27 34.0	1.557	2.432	14.3	19.8	10 8	3 4.29	+24 34.5	1.895	2.765	12.3	19.9
10 18	2 54.86	+26 51.1	1.475	2.410	10.5	19.5	10 18	2 57.18	+24 48.8	1.818	2.752	8.9	19.7
10 28	2 47.08	+25 44.7	1.417	2.389	6.3	19.2	10 28	2 48.07	+24 49.5	1.766	2.739	5.3	19.5
11 7	2 38.18	+24 17.4	1.384	2.369	3.5	19.0	11 7	2 37.93	+24 36.9	1.742	2.725	3.2	19.3
11 17	2 29.46	+22 36.0	1.378	2.349	6.1	19.1	11 17	2 27.91	+24 13.4	1.746	2.712	5.5	19.4
11 27	2 22.28	+20 50.9	1.399	2.329	10.5	19.3	11 27	2 19.18	+23 43.9	1.778	2.699	9.3	19.6
12 7	2 17.60	+19 12.6	1.444	2.310	14.8	19.5	12 7	2 12.67	+23 14.4	1.834	2.685	12.8	19.8
493321 2014 UC ₂₀₂ 11 4.8 342°23 2°3/ 3.1 18							14489 1994 UW 11 4.8 20°76 3°0/ 6.1 18						
9 28	3 3.47	+10 15.1	2.133	2.956	13.1	21.0	9 28	3 9.20	+20 56.5	1.217	2.046	20.5	18.0
10 8	2 59.56	+ 9 52.0	2.051	2.952	10.1	20.8	10 8	3 5.61	+21 34.8	1.154	2.052	16.3	17.8
10 18	2 53.67	+ 9 24.6	1.993	2.948	6.7	20.5	10 18	2 58.50	+21 58.8	1.109	2.059	11.4	17.5
10 28	2 46.36	+ 8 56.2	1.960	2.944	3.3	20.3	10 28	2 48.73	+22 6.8	1.086	2.066	6.2	17.2
11 7	2 38.42	+ 8 30.6	1.956	2.941	2.7	20.3	11 7	2 37.79	+22 0.0	1.087	2.075	3.0	17.1
11 17	2 30.72	+ 8 11.3	1.981	2.938	5.9	20.5	11 17	2 27.40	+21 42.4	1.113	2.084	7.0	17.3
11 27	2 24.12	+ 8 1.7	2.033	2.935	9.4	20.7	11 27	2 19.20	+21 21.3	1.163	2.094	12.0	17.7
12 7	2 19.28	+ 8 3.9	2.109	2.932	12.5	20.9	12 7	2 14.23	+21 4.2	1.235	2.105	16.5	18.0
316802 1999 UA ₃₂ 11 4.8 238°38 0°5/ 5.1 18							509413 2007 EO ₂ 11 4.8 194°23 0°9/ 5.4 18						
9 28	3 7.49	+17 11.1	2.291	3.090	13.1	20.7	9 28	3 9.87	+19 59.0	2.002	2.797	14.8	22.2
10 8	3 2.63	+17 19.7	2.202	3.087	10.2	20.5	10 8	3 4.78	+19 47.6	1.914	2.796	11.7	22.0
10 18	2 55.71	+17 21.2	2.136	3.083	6.9	20.3	10 18	2 57.29	+19 24.5	1.848	2.793	8.0	21.7
10 28	2 47.29	+17 16.1	2.096	3.080	3.2	20.1	10 28	2 48.05	+18 50.5	1.808	2.790	3.8	21.5
11 7	2 38.16	+17 6.3	2.086	3.076	0.9	19.9	11 7	2 38.00	+18 8.6	1.797	2.787	1.2	21.3
11 17	2 29.22	+16 54.3	2.105	3.072	4.6	20.2	11 17	2 28.24	+17 23.0	1.815	2.783	5.2	21.5
11 27	2 21.40	+16 43.5	2.154	3.069	8.2	20.4	11 27	2 19.84	+16 39.6	1.862	2.778	9.2	21.8
12 7	2 15.38	+16 37.3	2.228	3.065	11.4	20.6	12 7	2 13.57	+16 3.5	1.933	2.773	12.8	22.0
158117 2001 CN ₈ 11 4.8 198°00 4°4/30.9 18							20830 Luyajia 11 4.8 171°23 1°4/ 3.6 18						
9 28	3 3.27	+ 0 13.8	3.044	3.854	9.9	21.3	9 28	3 4.75	+13 30.5	2.168	2.983	13.2	19.0
10 8	2 58.72	- 0 38.3	2.964	3.851	7.8	21.1	10 8	3 0.51	+13 0.0	2.087	2.983	10.2	18.8
10 18	2 52.79	- 1 29.0	2.910	3.846	5.8	21.0	10 18	2 54.28	+12 22.6	2.029	2.984	6.7	18.6
10 28	2 45.89	- 2 14.4	2.884	3.842	4.5	20.9	10 28	2 46.65	+11 41.2	1.999	2.984	3.0	18.4
11 7	2 38.58	- 2 50.8	2.887	3.837	4.9	20.9	11 7	2 38.42	+10 59.6	1.997	2.984	1.9	18.3
11 17	2 31.45	- 3 15.2	2.920	3.831	6.6	21.0	11 17	2 30.46	+10 22.3	2.024	2.984	5.5	18.5
11 27	2 25.09	- 3 25.8	2.981	3.825	8.7	21.2	11 27	2 23.64	+ 9 53.3	2.079	2.984	9.0	18.8
12 7	2 19.97	- 3 22.0	3.066	3.818	10.7	21.3	12 7	2 18.60	+ 9 35.6	2.159	2.984	12.2	19.0

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Table with 14 columns: Year, Alpha_2000, Delta_2000, Delta, r, beta, V, Year, Alpha_2000, Delta_2000, Delta, r, beta, V. It lists astronomical data for various objects like 355485, 483769, 85510, 137280, 271024, 388254, 254896, 377023, 177712, 137328, 195850, 330371, 351845, 457883, 196716, 334282, 449719, and 481044.

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
113629	2002 TU_{70}	11	4.8	$126^{\circ}10'$	$5^{\circ}4'/9.5$	18	279229	2009 UK_{121}	11	4.8	$48^{\circ}71'$	$0^{\circ}0'/4.6$	18
9 28	3 9.42	+33 40.3	2.101	2.842	15.9	19.9	9 28	3 7.47	+18 49.5	1.289	2.122	19.4	20.8
10 8	3 4.53	+33 48.8	2.020	2.850	13.3	19.8	10 8	3 3.76	+18 16.7	1.232	2.136	15.1	20.5
10 18	2 57.15	+33 37.8	1.958	2.859	10.3	19.6	10 18	2 56.95	+17 27.9	1.195	2.151	10.0	20.3
10 28	2 48.01	+33 5.1	1.921	2.867	7.4	19.4	10 28	2 47.98	+16 26.6	1.181	2.167	4.5	20.0
11 7	2 38.13	+32 11.6	1.910	2.875	5.5	19.3	11 7	2 38.22	+15 19.5	1.192	2.182	1.3	19.9
11 17	2 28.69	+31 1.5	1.927	2.883	6.2	19.4	11 17	2 29.18	+14 14.7	1.229	2.199	6.8	20.3
11 27	2 20.75	+29 41.8	1.973	2.890	8.7	19.6	11 27	2 22.15	+13 20.6	1.291	2.215	11.8	20.6
12 7	2 15.08	+28 20.7	2.044	2.897	11.6	19.8	12 7	2 17.94	+12 42.9	1.376	2.232	16.0	20.9
217682	1999 RO_{26}	11	4.8	$115^{\circ}12'$	$9^{\circ}6'/10.9$	18	450630	2006 TJ_{86}	11	4.8	$318^{\circ}20'$	$1^{\circ}7'/6.1$	18
9 28	3 26.11	+39 7.5	1.879	2.572	19.0	20.0	9 28	3 5.99	+22 6.1	1.929	2.728	15.1	21.5
10 8	3 18.38	+40 44.5	1.811	2.594	16.5	19.8	10 8	3 1.94	+21 59.9	1.844	2.726	12.0	21.3
10 18	3 6.92	+42 0.4	1.762	2.616	13.7	19.7	10 18	2 55.52	+21 40.4	1.780	2.723	8.4	21.1
10 28	2 52.56	+42 47.3	1.736	2.637	11.2	19.6	10 28	2 47.35	+21 8.1	1.740	2.720	4.4	20.9
11 7	2 36.83	+43 0.3	1.735	2.657	9.7	19.6	11 7	2 38.38	+20 25.6	1.729	2.718	1.8	20.7
11 17	2 21.61	+42 40.4	1.762	2.677	9.9	19.6	11 17	2 29.69	+19 37.5	1.746	2.715	5.1	20.9
11 27	2 8.67	+41 54.6	1.815	2.695	11.6	19.8	11 27	2 22.35	+18 49.7	1.790	2.713	9.1	21.1
12 7	1 59.16	+40 54.1	1.892	2.713	13.8	19.9	12 7	2 17.12	+18 8.1	1.859	2.711	12.7	21.4
523359	2017 CE_9	11	4.8	$183^{\circ}36'$	$6^{\circ}8'/29.5$	18	382053	2011 DW_{31}	11	4.8	$295^{\circ}46'$	$1^{\circ}3'/5.5$	18
9 28	3 3.12	- 3 39.6	2.338	3.159	12.1	21.5	9 28	3 8.09	+19 43.7	1.443	2.265	18.2	21.8
10 8	2 59.03	- 4 54.0	2.273	3.159	9.9	21.3	10 8	3 4.58	+19 46.5	1.352	2.248	14.6	21.5
10 18	2 53.21	- 6 4.1	2.231	3.159	7.8	21.2	10 18	2 57.88	+19 35.4	1.280	2.231	10.1	21.2
10 28	2 46.19	- 7 4.0	2.217	3.159	6.8	21.1	10 28	2 48.62	+19 10.4	1.231	2.214	5.0	20.9
11 7	2 38.68	- 7 48.1	2.229	3.159	7.4	21.2	11 7	2 37.99	+18 34.1	1.208	2.198	1.6	20.6
11 17	2 31.44	- 8 12.8	2.268	3.159	9.2	21.3	11 17	2 27.50	+17 51.8	1.211	2.182	6.7	20.9
11 27	2 25.22	- 8 16.4	2.333	3.158	11.4	21.4	11 27	2 18.72	+17 11.1	1.239	2.165	11.9	21.2
12 7	2 20.56	- 7 59.6	2.419	3.158	13.5	21.6	12 7	2 12.78	+16 39.4	1.290	2.150	16.6	21.4
130162	1999 YM	11	4.8	$308^{\circ}09'$	$24^{\circ}5'/19.4$	17	50049	2000 AQ_{62}	11	4.8	$189^{\circ}92'$	$4^{\circ}4'/2.1$	18
9 28	3 14.25	-31 43.1	1.081	1.860	25.7	19.4	9 28	3 9.37	+ 6 32.3	1.681	2.510	15.7	18.3
10 8	3 9.99	-34 4.8	1.053	1.851	24.9	19.3	10 8	3 4.62	+ 5 48.5	1.607	2.509	12.3	18.1
10 18	3 1.56	-35 46.2	1.037	1.843	24.5	19.2	10 18	2 57.31	+ 5 1.9	1.556	2.509	8.4	17.8
10 28	2 50.12	-36 30.3	1.034	1.834	24.7	19.2	10 28	2 48.15	+ 4 17.9	1.530	2.508	5.1	17.6
11 7	2 37.58	-36 7.4	1.045	1.826	25.5	19.3	11 7	2 38.18	+ 3 42.5	1.531	2.507	5.0	17.6
11 17	2 26.01	-34 36.6	1.068	1.819	26.7	19.3	11 17	2 28.59	+ 3 20.8	1.559	2.505	8.4	17.8
11 27	2 17.18	-32 5.2	1.103	1.812	28.1	19.4	11 27	2 20.51	+ 3 16.4	1.614	2.503	12.2	18.1
12 7	2 12.08	-28 46.9	1.148	1.805	29.6	19.6	12 7	2 14.75	+ 3 30.2	1.691	2.501	15.7	18.3
45814	2000 QJ_{61}	11	4.8	$134^{\circ}71'$	$3^{\circ}0'/2.9$	18	295292	2008 GB_{105}	11	4.8	$250^{\circ}22'$	$3^{\circ}5'/2.5$	18
9 28	3 11.87	+10 53.2	1.621	2.443	16.5	19.7	9 28	3 7.21	+10 43.2	1.529	2.365	16.7	21.1
10 8	3 6.50	+10 8.8	1.556	2.456	12.8	19.5	10 8	3 3.27	+ 9 46.1	1.454	2.361	13.0	20.8
10 18	2 58.47	+ 9 17.8	1.513	2.467	8.5	19.2	10 18	2 56.58	+ 8 40.5	1.399	2.357	8.7	20.6
10 28	2 48.59	+ 8 24.9	1.495	2.478	4.2	19.0	10 28	2 47.87	+ 7 32.0	1.369	2.353	4.6	20.3
11 7	2 38.01	+ 7 36.1	1.505	2.489	3.6	19.0	11 7	2 38.26	+ 6 28.1	1.366	2.348	4.3	20.3
11 17	2 27.98	+ 6 57.4	1.543	2.498	7.5	19.3	11 17	2 29.02	+ 5 36.1	1.390	2.344	8.3	20.5
11 27	2 19.65	+ 6 33.4	1.608	2.507	11.6	19.5	11 27	2 21.38	+ 5 2.0	1.439	2.339	12.6	20.8
12 7	2 13.78	+ 6 26.4	1.696	2.515	15.2	19.8	12 7	2 16.22	+ 4 48.7	1.510	2.335	16.5	21.0
406939	2009 HO_{74}	11	4.8	$212^{\circ}37'$	$3^{\circ}6'/8.3$	18	142362	2002 RD_{226}	11	4.8	$84^{\circ}55'$	$2^{\circ}5'/3.4$	18
9 28	3 8.97	+30 28.7	2.831	3.566	12.3	22.6	9 28	3 13.23	+11 34.2	1.501	2.326	17.5	20.2
10 8	3 3.60	+30 27.8	2.723	3.556	10.2	22.4	10 8	3 7.51	+11 1.1	1.452	2.352	13.4	20.0
10 18	2 56.31	+30 13.0	2.638	3.546	7.7	22.2	10 18	2 59.07	+10 21.7	1.424	2.379	8.8	19.8
10 28	2 47.62	+29 43.0	2.580	3.535	5.2	22.0	10 28	2 48.82	+ 9 40.3	1.421	2.405	4.2	19.6
11 7	2 38.26	+28 58.7	2.551	3.523	3.6	21.9	11 7	2 38.04	+ 9 2.5	1.445	2.431	3.1	19.6
11 17	2 29.08	+28 2.8	2.552	3.511	4.6	22.0	11 17	2 28.03	+ 8 33.6	1.497	2.456	7.2	20.0
11 27	2 20.92	+27 0.0	2.584	3.498	7.1	22.1	11 27	2 19.93	+ 8 17.9	1.576	2.481	11.4	20.3
12 7	2 14.43	+25 55.9	2.643	3.484	9.7	22.3	12 7	2 14.42	+ 8 17.2	1.677	2.505	15.0	20.5
398788	2013 AU_{126}	11	4.8	$256^{\circ}85'$	$0^{\circ}2'/4.9$	18	55340	2001 ST_{125}	11	4.8	$288^{\circ}84'$	$1^{\circ}1'/5.5$	18
9 28	3 6.32	+18 28.9	1.955	2.763	14.7	21.9	9 28	3 7.25	+20 14.7	1.562	2.378	17.3	19.7
10 8	3 2.15	+18 6.2	1.863	2.753	11.5	21.7	10 8	3 3.56	+20 2.5	1.474	2.368	13.8	19.4
10 18	2 55.64	+17 31.9	1.794	2.744	7.8	21.4	10 18	2 56.96	+19 35.4	1.407	2.357	9.5	19.1
10 28	2 47.40	+16 47.8	1.749	2.734	3.5	21.1	10 28	2 48.13	+18 54.4	1.363	2.346	4.6	18.8
11 7	2 38.32	+15 57.3	1.733	2.724	1.0	20.9	11 7	2 38.19	+18 2.9	1.345	2.335	1.3	18.6
11 17	2 29.47	+15 5.7	1.746	2.714	5.4	21.2	11 17	2 28.50	+17 7.0	1.355	2.325	6.2	18.9
11 27	2 21.90	+14 18.7	1.787	2.703	9.5	21.4	11 27	2 20.42	+16 14.4	1.390	2.314	11.1	19.1
12 7	2 16.39	+13 41.5	1.852	2.693	13.2	21.7	12 7	2 14.94	+15 32.2	1.449	2.304	15.4	19.4
389413	2010 AM_{56}	11	4.8	$244^{\circ}99'$	$3^{\circ}0'/2.9$	18	42601	1998 AN_{10}	11	4.8	$317^{\circ}04'$	$0^{\circ}4'/5.1$	18
9 28	3 9.12	+ 9 12.3	1.898	2.719	14.6	21.6	9 28	3 6.46	+19 23.8	1.303	2.136	19.2	18.4
10 8	3 4.33	+ 8 43.9	1.808	2.706	11.4	21.3	10 8	3 3.40	+19 1.2	1.224	2.128	15.2	18.1
10 18	2 57.12	+ 8 11.0	1.739	2.693	7.7	21.1	10 18	2 57.07	+18 21.5	1.165	2.120	10.3	17.8
10 28	2 48.08	+ 7 37.3	1.697	2.679	4.0	20.9	10 28	2 48.23	+17 26.5	1.127	2.113	4.8	17.5
11 7	2 38.14	+ 7 7.3	1.683	2.665	3.5	20.8	11 7	2 38.18	+16 21.5	1.115	2.106	1.2	17.2
11 17	2 28.39	+ 6 45.7	1.698	2.651	7.1	21.0	11 17	2 28.49	+15 14.7	1.129	2.099	7.1	17.6
11 27	2 19.92	+ 6 36.4	1.739	2.636	11.0	21.2	11 27	2 20.71	+14 15.5	1.166	2.093	12.5	17.9
12 7	2 13.57	+ 6 41.7	1.805	2.621	14.6	21.4	12 7	2 15.87	+13 31.5	1.226	2.087	17.2	18.1
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
478814	2012 <i>VN</i> ₁₀	11	4.8 299°83	2°6/ 6.9	18		138145	2000 <i>EO</i> ₅₉	11	4.8 125°82	0°7/ 4.4	18	
9 28	3 5.83	+26 54.2	1.713	2.504	17.1	21.0	9 28	3 9.19	+16 8.7	1.631	2.451	16.6	20.6
10 8	3 2.16	+26 16.6	1.626	2.501	13.8	20.7	10 8	3 4.64	+15 43.2	1.559	2.456	12.9	20.4
10 18	2 55.83	+25 17.3	1.560	2.497	9.8	20.5	10 18	2 57.41	+15 6.8	1.507	2.461	8.6	20.1
10 28	2 47.54	+23 57.1	1.518	2.494	5.5	20.2	10 28	2 48.25	+14 22.4	1.481	2.466	3.8	19.9
11 7	2 38.42	+22 20.4	1.504	2.491	2.6	20.0	11 7	2 38.28	+13 34.5	1.481	2.471	1.5	19.7
11 17	2 29.69	+20 34.9	1.517	2.488	5.6	20.2	11 17	2 28.76	+12 49.1	1.510	2.476	6.3	20.0
11 27	2 22.55	+18 50.8	1.559	2.485	9.9	20.5	11 27	2 20.86	+12 12.2	1.565	2.480	10.8	20.3
12 7	2 17.81	+17 17.4	1.624	2.482	13.9	20.7	12 7	2 15.40	+11 48.3	1.644	2.484	14.6	20.6
369161	2008 <i>SH</i> ₉₆	11	4.8 130°67	0°1/ 4.7	18		84611	2002 <i>VA</i> ₃₇	11	4.8 254°20	2°8/ 2.7	18	
9 28	3 3.16	+17 53.7	2.552	3.352	11.9	21.5	9 28	3 5.40	+10 25.6	1.965	2.789	14.0	19.9
10 8	2 59.04	+17 22.1	2.469	3.355	9.2	21.3	10 8	3 1.29	+9 41.5	1.883	2.784	10.8	19.7
10 18	2 53.23	+16 41.6	2.410	3.359	6.1	21.1	10 18	2 55.01	+8 51.4	1.824	2.779	7.2	19.5
10 28	2 46.25	+15 54.5	2.378	3.363	2.7	20.9	10 28	2 47.16	+7 59.5	1.791	2.774	3.7	19.2
11 7	2 38.79	+15 3.9	2.376	3.366	0.8	20.8	11 7	2 38.60	+7 10.9	1.786	2.769	3.4	19.2
11 17	2 31.59	+14 13.8	2.404	3.370	4.3	21.0	11 17	2 30.30	+6 30.8	1.810	2.763	6.7	19.4
11 27	2 25.35	+13 28.4	2.461	3.373	7.5	21.2	11 27	2 23.23	+6 3.6	1.861	2.758	10.4	19.6
12 7	2 20.64	+12 51.4	2.544	3.376	10.3	21.4	12 7	2 18.10	+5 51.8	1.935	2.753	13.7	19.8
395866	2013 <i>AU</i> ₁₈	11	4.8 349°46	2°1/ 3.6	18		434318	2004 <i>GT</i> ₆₃	11	4.8 183°48	0°2/ 4.6	18	
9 28	3 5.18	+12 24.7	1.492	2.330	16.9	20.9	9 28	3 9.61	+17 29.0	1.884	2.690	15.2	22.6
10 8	3 1.82	+12 1.5	1.417	2.326	13.1	20.7	10 8	3 4.70	+17 1.5	1.801	2.690	11.9	22.3
10 18	2 55.71	+11 30.6	1.363	2.322	8.7	20.4	10 18	2 57.35	+16 22.7	1.740	2.691	7.9	22.1
10 28	2 47.53	+10 55.6	1.333	2.318	4.0	20.1	10 28	2 48.22	+15 34.8	1.705	2.690	3.5	21.8
11 7	2 38.42	+10 21.7	1.328	2.316	2.8	20.0	11 7	2 38.32	+14 42.0	1.699	2.689	1.1	21.7
11 17	2 29.66	+9 54.5	1.350	2.314	7.2	20.3	11 17	2 28.76	+13 49.7	1.722	2.688	5.6	22.0
11 27	2 22.50	+9 39.2	1.397	2.312	11.8	20.6	11 27	2 20.61	+13 3.9	1.772	2.685	9.8	22.2
12 7	2 17.81	+9 38.9	1.467	2.311	15.8	20.8	12 7	2 14.66	+12 29.3	1.848	2.683	13.5	22.5
209807	2005 <i>GK</i> ₆₆	11	4.8 111°34	0°4/ 5.1	18		286937	2002 <i>PN</i> ₁₃₉	11	4.8 68°81	5°3/ 8.4	18	
9 28	3 7.74	+18 7.6	1.918	2.724	14.9	21.0	9 28	3 15.19	+29 33.9	1.757	2.519	17.8	19.5
10 8	3 3.18	+17 57.8	1.840	2.729	11.7	20.8	10 8	3 9.19	+30 15.1	1.701	2.550	14.6	19.3
10 18	2 56.28	+17 37.7	1.784	2.733	7.9	20.6	10 18	3 0.34	+30 38.1	1.665	2.580	10.9	19.2
10 28	2 47.70	+17 8.8	1.754	2.738	3.6	20.3	10 28	2 49.52	+30 40.1	1.654	2.610	7.4	19.0
11 7	2 38.40	+16 34.2	1.751	2.742	0.9	20.2	11 7	2 38.01	+30 21.5	1.669	2.640	5.3	19.0
11 17	2 29.44	+15 58.3	1.778	2.746	5.2	20.5	11 17	2 27.17	+29 46.0	1.712	2.670	6.5	19.1
11 27	2 21.86	+15 26.2	1.832	2.750	9.3	20.7	11 27	2 18.25	+29 0.7	1.782	2.699	9.5	19.3
12 7	2 16.38	+15 2.2	1.912	2.754	12.8	21.0	12 7	2 12.01	+28 13.6	1.877	2.728	12.6	19.6
44717	1999 <i>TY</i> ₆	11	4.8 117°45	1°2/ 5.5	18		309625	2008 <i>CA</i> ₈₅	11	4.8 271°78	0°3/ 5.0	18	
9 28	3 13.33	+19 55.7	1.672	2.473	17.0	19.0	9 28	3 6.27	+17 59.1	2.040	2.846	14.2	21.4
10 8	3 7.74	+19 53.6	1.605	2.489	13.4	18.8	10 8	3 2.08	+17 47.0	1.947	2.835	11.1	21.2
10 18	2 59.39	+19 38.7	1.558	2.504	9.1	18.6	10 18	2 55.63	+17 24.8	1.875	2.825	7.5	21.0
10 28	2 49.08	+19 12.0	1.537	2.519	4.4	18.3	10 28	2 47.49	+16 54.0	1.830	2.814	3.5	20.7
11 7	2 38.03	+18 36.4	1.543	2.533	1.4	18.1	11 7	2 38.53	+16 17.4	1.813	2.803	0.9	20.5
11 17	2 27.52	+17 56.9	1.578	2.547	5.7	18.5	11 17	2 29.76	+15 39.3	1.825	2.793	5.2	20.8
11 27	2 18.78	+17 19.7	1.641	2.560	10.1	18.8	11 27	2 22.19	+15 4.6	1.865	2.782	9.2	21.0
12 7	2 12.60	+16 50.5	1.727	2.572	13.8	19.0	12 7	2 16.59	+14 38.0	1.929	2.771	12.7	21.2
229639	2006 <i>FZ</i> ₈	11	4.8 171°65	0°6/ 4.3	18		484449	2008 <i>BM</i> ₁₅	11	4.8 321°06	4°3/ 2.0	18	
9 28	3 4.33	+15 1.9	2.565	3.368	11.7	21.2	9 28	3 4.13	+7 24.8	1.628	2.469	15.6	21.2
10 8	2 59.94	+14 43.8	2.480	3.369	9.0	21.0	10 8	3 0.85	+6 39.5	1.545	2.454	12.2	20.9
10 18	2 53.85	+14 19.2	2.419	3.370	6.0	20.8	10 18	2 55.02	+5 49.8	1.483	2.440	8.4	20.7
10 28	2 46.55	+13 50.2	2.386	3.371	2.6	20.6	10 28	2 47.27	+5 1.2	1.446	2.426	5.0	20.4
11 7	2 38.73	+13 19.5	2.382	3.371	1.1	20.5	11 7	2 38.59	+4 20.0	1.436	2.413	5.0	20.4
11 17	2 31.13	+12 50.3	2.408	3.372	4.5	20.7	11 17	2 30.13	+3 52.3	1.451	2.401	8.5	20.6
11 27	2 24.48	+12 26.0	2.464	3.372	7.7	20.9	11 27	2 23.06	+3 42.4	1.492	2.389	12.5	20.8
12 7	2 19.36	+12 9.5	2.545	3.372	10.5	21.1	12 7	2 18.24	+3 52.0	1.554	2.377	16.2	21.0
280460	2004 <i>EH</i> ₈₆	11	4.8 245°75	4°6/ 1.7	18		177591	2004 <i>GV</i> ₃₇	11	4.8 224°12	2°6/ 6.8	18	
9 28	3 7.79	+7 24.9	1.692	2.523	15.6	21.3	9 28	3 8.79	+24 26.7	2.353	3.126	13.5	21.2
10 8	3 3.54	+6 23.9	1.608	2.512	12.2	21.1	10 8	3 3.83	+24 39.0	2.255	3.118	10.9	21.0
10 18	2 56.72	+5 17.5	1.547	2.501	8.4	20.8	10 18	2 56.71	+24 39.6	2.179	3.110	7.8	20.8
10 28	2 47.97	+4 11.6	1.512	2.490	5.1	20.6	10 28	2 47.95	+24 27.9	2.129	3.101	4.6	20.6
11 7	2 38.32	+3 13.4	1.503	2.478	5.3	20.6	11 7	2 38.40	+24 4.7	2.108	3.092	2.6	20.5
11 17	2 28.92	+2 29.5	1.522	2.466	8.7	20.8	11 17	2 29.01	+23 32.7	2.117	3.083	4.7	20.6
11 27	2 20.95	+2 4.9	1.567	2.453	12.7	21.0	11 27	2 20.74	+22 56.4	2.155	3.073	8.0	20.8
12 7	2 15.26	+2 1.6	1.633	2.441	16.2	21.2	12 7	2 14.35	+22 21.1	2.219	3.063	11.2	21.0
516718	2009 <i>BR</i> ₃₉	11	4.8 243°75	1°4/ 3.8	18		297517	2001 <i>BO</i> ₄₀	11	4.8 283°56	0°7/ 5.3	18	
9 28	3 7.38	+13 27.4	2.044	2.858	13.9	22.2	9 28	3 6.72	+19 32.7	1.790	2.600	15.7	21.0
10 8	3 2.85	+13 3.7	1.953	2.847	10.8	22.0	10 8	3 2.90	+19 16.6	1.690	2.580	12.5	20.7
10 18	2 56.08	+12 32.8	1.884	2.837	7.2	21.8	10 18	2 56.45	+18 47.3	1.611	2.561	8.5	20.5
10 28	2 47.65	+11 57.1	1.841	2.826	3.3	21.5	10 28	2 47.95	+18 5.7	1.557	2.541	4.1	20.2
11 7	2 38.42	+11 20.6	1.827	2.815	2.0	21.4	11 7	2 38.39	+17 15.2	1.530	2.521	1.1	19.9
11 17	2 29.39	+10 47.6	1.842	2.803	5.8	21.6	11 17	2 28.94	+16 21.0	1.532	2.501	5.8	20.2
11 27	2 21.55	+10 22.6	1.885	2.791	9.7	21.8	11 27	2 20.84	+15 29.9	1.560	2.480	10.4	20.4
12 7	2 15.66	+10 9.0	1.952	2.779	13.2	22.0	12 7	2 15.01	+14 48.3	1.612	2.460	14.5	20.6
487073	2014 <i>OL</i> ₁₀₀	11	4.8 345°83	5°7/ 31.1	18		283637	2002 <i>EX</i> ₁₆₀	11	4.8 220°37	7°0/ 30.7	18	
9 28</													

EPHEMERIDES

11 4.8

11 4.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
417341	2006 <i>DW</i> ₁₁₂	11	4.8 101°06	4°3/ 8.6 17			485473	2011 <i>SD</i> ₅₈	11	4.8 271°72	2°8/ 2.5 18		
9 28	3 8.14	+30 24.1	2.513	3.258	13.4	21.5	9 28	3 4.51	+13 4.5	1.819	2.646	14.8	21.3
10 8	3 3.16	+30 48.5	2.432	3.269	11.1	21.4	10 8	3 0.86	+11 50.7	1.732	2.635	11.5	21.1
10 18	2 56.13	+30 59.0	2.373	3.280	8.5	21.2	10 18	2 54.88	+10 25.6	1.668	2.625	7.6	20.9
10 28	2 47.65	+30 53.9	2.338	3.290	5.9	21.1	10 28	2 47.19	+8 54.5	1.630	2.614	3.8	20.6
11 7	2 38.53	+30 33.8	2.332	3.301	4.3	21.0	11 7	2 38.71	+7 24.5	1.620	2.603	3.5	20.6
11 17	2 29.69	+30 1.0	2.355	3.311	5.2	21.1	11 17	2 30.49	+6 3.5	1.639	2.592	7.3	20.8
11 27	2 22.03	+29 19.9	2.406	3.321	7.5	21.3	11 27	2 23.58	+4 58.5	1.684	2.582	11.3	21.0
12 7	2 16.21	+28 36.0	2.484	3.331	10.0	21.4	12 7	2 18.72	+4 13.6	1.753	2.571	14.9	21.2
174751	2003 <i>UQ</i> ₂₇₆	11	4.8 46°90	3°2/ 6.7 18			128956	2004 <i>TH</i> ₁₃₄	11	4.8 307°65	0°7/ 4.2 18		
9 28	3 9.38	+25 10.6	1.115	1.941	22.3	19.0	9 28	3 2.92	+17 21.0	2.176	2.987	13.3	19.7
10 8	3 5.78	+25 1.4	1.067	1.961	17.7	18.8	10 8	2 59.23	+16 32.1	2.090	2.983	10.3	19.5
10 18	2 58.55	+24 28.3	1.036	1.982	12.5	18.6	10 18	2 53.59	+15 32.1	2.026	2.979	6.8	19.3
10 28	2 48.81	+23 32.2	1.026	2.004	6.9	18.4	10 28	2 46.55	+14 24.1	1.989	2.975	3.0	19.1
11 7	2 38.25	+22 18.6	1.039	2.027	3.2	18.2	11 7	2 38.90	+13 12.8	1.981	2.971	1.3	18.9
11 17	2 28.64	+20 57.4	1.077	2.050	6.9	18.5	11 17	2 31.51	+12 3.8	2.003	2.967	5.2	19.2
11 27	2 21.47	+19 40.0	1.140	2.073	12.0	18.9	11 27	2 25.23	+11 2.7	2.052	2.963	8.8	19.4
12 7	2 17.57	+18 36.0	1.224	2.097	16.4	19.2	12 7	2 20.70	+10 14.0	2.127	2.959	12.1	19.6
366120	2012 <i>DZ</i> ₃₃	11	4.8 152°88	2°6/ 2.5 18			157538	2005 <i>TB</i> ₁₃₃	11	4.8 233°12	4°2/ 8.7 18		
9 28	3 4.42	+9 12.9	2.524	3.337	11.6	21.8	9 28	3 6.49	+30 55.9	2.485	3.231	13.6	20.1
10 8	2 59.97	+8 32.1	2.447	3.342	8.9	21.7	10 8	3 2.03	+31 2.9	2.387	3.225	11.2	19.9
10 18	2 53.85	+7 47.7	2.395	3.347	5.9	21.5	10 18	2 55.50	+30 54.7	2.310	3.219	8.6	19.7
10 28	2 46.59	+7 3.1	2.370	3.351	3.2	21.3	10 28	2 47.43	+30 29.8	2.258	3.212	5.9	19.6
11 7	2 38.85	+6 22.3	2.376	3.355	3.0	21.3	11 7	2 38.65	+29 49.0	2.235	3.206	4.2	19.5
11 17	2 31.38	+5 48.9	2.410	3.359	5.6	21.5	11 17	2 30.08	+28 55.3	2.240	3.199	5.1	19.5
11 27	2 24.87	+5 25.9	2.474	3.363	8.5	21.7	11 27	2 22.63	+27 53.7	2.274	3.192	7.7	19.7
12 7	2 19.87	+5 15.2	2.562	3.366	11.1	21.9	12 7	2 17.01	+26 50.6	2.335	3.185	10.5	19.8
280643	2005 <i>AY</i> ₃₇	11	4.8 230°27	4°6/ 31.5 17			224628	2005 <i>YF</i> ₁₄₁	11	4.8 58°34	0°7/ 5.4 17		
9 28	3 4.14	+0 26.6	2.778	3.591	10.6	21.4	9 28	3 5.70	+19 16.8	2.110	2.912	13.9	21.7
10 8	2 59.65	-0 14.7	2.694	3.582	8.4	21.2	10 8	3 1.44	+19 7.6	2.032	2.918	10.9	21.5
10 18	2 53.62	-0 54.3	2.635	3.573	6.2	21.1	10 18	2 55.07	+18 48.1	1.976	2.924	7.4	21.3
10 28	2 46.50	-1 28.2	2.603	3.564	4.7	20.9	10 28	2 47.21	+18 19.7	1.947	2.929	3.5	21.1
11 7	2 38.88	-1 52.8	2.600	3.555	5.0	21.0	11 7	2 38.73	+17 45.2	1.945	2.935	1.0	20.9
11 17	2 31.44	-2 5.1	2.627	3.545	6.9	21.1	11 17	2 30.55	+17 8.5	1.973	2.941	4.7	21.2
11 27	2 24.82	-2 3.3	2.681	3.535	9.2	21.2	11 27	2 23.60	+16 34.3	2.029	2.948	8.4	21.5
12 7	2 19.56	-1 47.1	2.759	3.525	11.4	21.3	12 7	2 18.53	+16 6.8	2.110	2.954	11.7	21.7
205210	2000 <i>GK</i> ₈₆	11	4.8 202°29	2°3/ 3.2 18			42124	2001 <i>BA</i> ₉	11	4.8 107°64	5°5/ 31.3 18		
9 28	3 10.26	+8 17.9	2.445	3.249	12.2	20.6	9 28	3 5.26	-0 40.0	2.368	3.186	12.1	19.1
10 8	3 4.62	+8 8.6	2.356	3.245	9.5	20.4	10 8	3 0.63	-1 31.4	2.308	3.197	9.6	19.0
10 18	2 57.04	+7 57.5	2.290	3.240	6.4	20.2	10 18	2 54.28	-2 19.6	2.271	3.208	7.2	18.8
10 28	2 48.07	+7 46.9	2.253	3.234	3.3	20.0	10 28	2 46.78	-2 59.6	2.262	3.219	5.6	18.8
11 7	2 38.45	+7 39.6	2.246	3.229	2.7	20.0	11 7	2 38.86	-3 27.2	2.280	3.230	6.0	18.8
11 17	2 29.03	+7 38.1	2.270	3.222	5.6	20.2	11 17	2 31.27	-3 39.2	2.327	3.240	7.9	18.9
11 27	2 20.65	+7 44.7	2.322	3.215	8.8	20.4	11 27	2 24.73	-3 34.3	2.400	3.250	10.3	19.1
12 7	2 13.96	+8 0.9	2.401	3.208	11.7	20.5	12 7	2 19.79	-3 13.0	2.497	3.260	12.5	19.3
53895	2000 <i>FB</i> ₄₆	11	4.8 230°05	5°1/ 1.6 18			336767	2011 <i>BU</i> ₁₉	11	4.8 205°72	0°4/ 4.5 18		
9 28	3 8.05	+5 43.9	1.629	2.463	15.9	19.3	9 28	3 9.54	+16 55.8	1.905	2.712	15.0	22.1
10 8	3 3.75	+4 48.4	1.556	2.460	12.5	19.1	10 8	3 4.70	+16 27.7	1.818	2.708	11.8	21.9
10 18	2 56.85	+3 50.0	1.504	2.457	8.7	18.8	10 18	2 57.42	+15 48.7	1.752	2.703	7.9	21.6
10 28	2 48.07	+2 55.0	1.477	2.453	5.6	18.6	10 28	2 48.34	+15 1.0	1.712	2.697	3.5	21.4
11 7	2 38.46	+2 10.4	1.477	2.450	5.7	18.7	11 7	2 38.42	+14 8.7	1.701	2.691	1.2	21.2
11 17	2 29.20	+1 41.8	1.504	2.446	9.0	18.8	11 17	2 28.79	+13 17.3	1.719	2.685	5.7	21.5
11 27	2 21.45	+1 33.2	1.556	2.442	12.8	19.1	11 27	2 20.53	+12 32.5	1.766	2.677	9.9	21.7
12 7	2 16.03	+1 45.4	1.630	2.438	16.3	19.3	12 7	2 14.43	+11 59.2	1.836	2.670	13.6	21.9
289044	2004 <i>TA</i> ₁₆₀	11	4.8 328°24	0°0/ 4.7 18			170672	2003 <i>YT</i> ₁₇₀	11	4.8 205°81	4°2/ 1.9 18		
9 28	3 2.61	+18 50.2	1.940	2.755	14.5	20.4	9 28	3 8.49	+3 59.4	2.243	3.058	12.8	20.3
10 8	2 59.33	+18 16.3	1.852	2.745	11.4	20.1	10 8	3 3.38	+3 28.2	2.162	3.054	10.0	20.1
10 18	2 53.83	+17 29.8	1.785	2.736	7.6	19.9	10 18	2 56.29	+2 57.0	2.103	3.050	7.0	20.0
10 28	2 46.71	+16 33.0	1.743	2.728	3.5	19.6	10 28	2 47.76	+2 30.0	2.072	3.045	4.6	19.8
11 7	2 38.83	+15 30.3	1.729	2.720	0.9	19.4	11 7	2 38.59	+2 11.3	2.070	3.040	4.6	19.8
11 17	2 31.20	+14 27.2	1.744	2.712	5.3	19.7	11 17	2 29.67	+2 4.0	2.097	3.034	7.1	19.9
11 27	2 24.78	+13 30.2	1.786	2.705	9.4	19.9	11 27	2 21.85	+2 10.5	2.151	3.028	10.2	20.1
12 7	2 20.33	+12 44.4	1.852	2.698	13.0	20.2	12 7	2 15.80	+2 31.3	2.230	3.022	13.0	20.3
455062	2015 <i>UC</i> ₃₁	11	4.8 297°70	0°2/ 4.9 17			134838	2000 <i>JF</i> ₂₀	11	4.8 243°78	2°9/ 6.9 18		
9 28	3 8.77	+15 52.5	1.967	2.775	14.6	21.4	9 28	3 9.80	+24 50.4	2.287	3.058	13.9	20.8
10 8	3 4.14	+16 6.6	1.875	2.765	11.4	21.2	10 8	3 4.80	+25 7.8	2.183	3.044	11.3	20.6
10 18	2 57.10	+16 14.1	1.805	2.755	7.7	20.9	10 18	2 57.49	+25 13.4	2.100	3.029	8.2	20.4
10 28	2 48.21	+16 15.6	1.761	2.746	3.5	20.7	10 28	2 48.40	+25 6.0	2.044	3.014	4.9	20.2
11 7	2 38.41	+16 12.7	1.746	2.736	0.9	20.4	11 7	2 38.39	+24 46.0	2.016	2.999	2.9	20.0
11 17	2 28.75	+16 8.2	1.759	2.726	5.3	20.7	11 17	2 28.47	+24 16.0	2.018	2.983	5.0	20.1
11 27	2 20.36	+16 5.7	1.800	2.717	9.4	21.0	11 27	2 19.69	+23 40.5	2.048	2.967	8.4	20.3
12 7	2 14.05	+16 8.6	1.866	2.708	13.1	21.2	12 7	2 12.87	+23 5.0	2.105	2.950	11.7	20.5
225453	2000 <i>ED</i> ₁₃	11	4.8 300°04	3°2/ 2.6 17			378561	2008 <i>CC</i> ₁₈₃	11	4.9 251°05	3°2/ 3.1 18		
9 28	3 5.95	+7 3.7											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
385736	2005 <i>VP</i> ₇₁	11	4.9 297°20	2°6/ 3.4 18			492823	2014 <i>QL</i> ₂₈₃	11	4.9 307°14	8°9/28.6 18		
9 28	3 7.49	+11 23.6	1.525	2.360	16.8	21.3	9 28	3 4.78	- 9 14.6	2.098	2.913	13.5	21.0
10 8	3 3.78	+10 58.3	1.438	2.345	13.2	21.0	10 8	3 0.67	-10 23.7	2.030	2.904	11.5	20.9
10 18	2 57.20	+10 25.7	1.372	2.329	8.8	20.7	10 18	2 54.57	-11 24.0	1.985	2.895	9.7	20.7
10 28	2 48.38	+ 9 49.5	1.329	2.314	4.3	20.4	10 28	2 47.03	-12 8.3	1.965	2.887	8.9	20.7
11 7	2 38.43	+ 9 15.1	1.313	2.300	3.2	20.3	11 7	2 38.88	-12 30.9	1.970	2.878	9.6	20.7
11 17	2 28.66	+ 8 48.2	1.324	2.285	7.7	20.6	11 17	2 31.00	-12 28.5	2.001	2.870	11.3	20.8
11 27	2 20.43	+ 8 34.2	1.360	2.270	12.4	20.8	11 27	2 24.26	-12 0.5	2.055	2.862	13.4	20.9
12 7	2 14.74	+ 8 36.4	1.417	2.256	16.6	21.0	12 7	2 19.30	-11 9.0	2.129	2.854	15.5	21.1
364510	2007 <i>EG</i> ₉₆	11	4.9 147°42	2°2/ 2.6 18			224165	2005 <i>QJ</i> ₉₄	11	4.9 28°68	0°5/ 5.1 18		
9 28	3 3.61	+10 52.6	2.676	3.487	11.1	22.0	9 28	3 6.61	+18 29.2	1.116	1.962	20.9	19.6
10 8	2 59.25	+10 0.2	2.600	3.494	8.5	21.9	10 8	3 3.65	+18 21.2	1.063	1.974	16.4	19.4
10 18	2 53.35	+ 9 3.1	2.549	3.501	5.6	21.7	10 18	2 57.24	+17 57.7	1.029	1.987	11.0	19.1
10 28	2 46.39	+ 8 4.6	2.525	3.507	2.9	21.5	10 28	2 48.37	+17 20.8	1.016	2.001	5.0	18.9
11 7	2 39.02	+ 7 8.8	2.532	3.514	2.7	21.5	11 7	2 38.55	+16 36.2	1.026	2.017	1.3	18.7
11 17	2 31.90	+ 6 19.7	2.570	3.519	5.2	21.7	11 17	2 29.48	+15 51.3	1.061	2.033	7.1	19.1
11 27	2 25.70	+ 5 40.9	2.636	3.525	8.0	21.9	11 27	2 22.63	+15 14.4	1.120	2.050	12.4	19.4
12 7	2 20.91	+ 5 14.4	2.727	3.530	10.6	22.1	12 7	2 18.88	+14 51.3	1.199	2.068	16.9	19.8
199231	2006 <i>AB</i> ₆₆	11	4.9 26°06	5°6/31.9 18			227711	2006 <i>DP</i> ₁₁₄	11	4.9 229°08	1°7/ 6.3 17		
9 28	3 4.07	+ 6 54.7	1.447	2.295	16.8	19.1	9 28	3 8.57	+21 38.9	2.860	3.631	11.4	21.1
10 8	3 0.83	+ 5 29.2	1.387	2.300	13.1	18.9	10 8	3 3.29	+21 56.2	2.755	3.620	9.1	20.9
10 18	2 54.96	+ 3 58.8	1.349	2.305	9.1	18.7	10 18	2 56.22	+22 5.5	2.675	3.609	6.4	20.7
10 28	2 47.24	+ 2 31.8	1.335	2.311	6.0	18.5	10 28	2 47.79	+22 6.6	2.622	3.597	3.5	20.5
11 7	2 38.79	+ 1 17.4	1.346	2.317	6.4	18.6	11 7	2 38.69	+22 0.1	2.599	3.585	1.7	20.4
11 17	2 30.84	+ 0 23.3	1.384	2.324	9.8	18.8	11 17	2 29.67	+21 47.8	2.607	3.573	3.9	20.5
11 27	2 24.51	- 0 5.9	1.445	2.331	13.6	19.0	11 27	2 21.51	+21 32.6	2.645	3.560	6.9	20.7
12 7	2 20.54	- 0 9.6	1.527	2.339	17.0	19.3	12 7	2 14.86	+21 18.1	2.711	3.547	9.6	20.8
214831	2006 <i>VX</i> ₉₂	11	4.9 350°18	2°5/ 3.4 18			323682	2005 <i>EJ</i> ₃₂₄	11	4.9 128°91	0°2/ 4.8 16		
9 28	3 3.40	+14 11.2	1.177	2.032	19.5	20.4	9 28	3 14.29	+16 10.6	1.793	2.595	16.0	21.7
10 8	3 1.15	+13 21.1	1.109	2.027	15.1	20.1	10 8	3 8.31	+16 5.0	1.724	2.611	12.4	21.5
10 18	2 55.66	+12 16.9	1.059	2.022	10.1	19.8	10 18	2 59.75	+15 50.5	1.677	2.626	8.3	21.3
10 28	2 47.71	+11 4.4	1.032	2.018	4.6	19.5	10 28	2 49.38	+15 28.5	1.656	2.640	3.7	21.1
11 7	2 38.66	+ 9 52.2	1.028	2.015	3.4	19.4	11 7	2 38.30	+15 2.3	1.664	2.654	1.1	20.9
11 17	2 30.06	+ 8 50.0	1.049	2.013	8.6	19.7	11 17	2 27.72	+14 36.1	1.701	2.667	5.7	21.2
11 27	2 23.39	+ 8 6.1	1.093	2.013	13.8	20.0	11 27	2 18.77	+14 14.7	1.766	2.679	9.9	21.5
12 7	2 19.64	+ 7 45.0	1.157	2.013	18.4	20.3	12 7	2 12.22	+14 2.0	1.856	2.690	13.5	21.8
244965	2004 <i>AL</i> ₁₉	11	4.9 136°65	5°6/ 9.9 18			17657	Himawari	11	4.9 47°35	5°9/ 4.5 17 R		
9 28	3 11.21	+34 48.9	2.370	3.091	14.8	20.9	9 28	3 31.08	- 1 36.8	0.968	1.798	24.6	17.3
10 8	3 5.77	+35 10.1	2.287	3.103	12.5	20.8	10 8	3 23.43	- 0 25.3	0.908	1.806	19.7	17.1
10 18	2 58.01	+35 13.6	2.225	3.113	9.8	20.6	10 18	3 10.94	+ 1 5.1	0.865	1.814	14.0	16.8
10 28	2 48.57	+34 57.2	2.187	3.123	7.3	20.5	10 28	2 54.70	+ 2 57.2	0.844	1.822	8.1	16.5
11 7	2 38.44	+34 20.8	2.177	3.133	5.7	20.4	11 7	2 36.84	+ 5 8.5	0.850	1.831	6.2	16.4
11 17	2 28.67	+33 27.4	2.195	3.143	6.1	20.5	11 17	2 19.94	+ 7 31.3	0.882	1.841	10.8	16.7
11 27	2 20.29	+32 22.7	2.241	3.151	8.2	20.6	11 27	2 6.29	+ 9 57.8	0.939	1.851	16.5	17.1
12 7	2 14.02	+31 13.8	2.315	3.160	10.7	20.8	12 7	1 57.17	+12 22.2	1.018	1.861	21.4	17.4
387939	2005 <i>EO</i> ₄₇	11	4.9 148°44	4°0/ 1.3 18			515301	2012 <i>UV</i> ₈₇	11	4.9 45°45	0°4/ 5.1 18		
9 28	3 6.09	+ 6 41.0	2.215	3.035	12.8	21.7	9 28	3 7.69	+18 39.1	1.666	2.481	16.5	21.3
10 8	3 1.45	+ 5 33.7	2.145	3.042	9.9	21.5	10 8	3 3.58	+18 23.9	1.590	2.483	12.9	21.0
10 18	2 54.94	+ 4 23.4	2.100	3.050	6.8	21.3	10 18	2 56.83	+17 56.2	1.535	2.486	8.7	20.8
10 28	2 47.14	+ 3 15.2	2.082	3.057	4.3	21.2	10 28	2 48.15	+17 17.9	1.504	2.488	4.0	20.5
11 7	2 38.84	+ 2 14.8	2.093	3.063	4.6	21.2	11 7	2 38.62	+16 32.8	1.500	2.490	1.0	20.3
11 17	2 30.88	+ 1 26.9	2.133	3.069	7.1	21.4	11 17	2 29.48	+15 46.3	1.524	2.493	5.8	20.7
11 27	2 24.06	+ 0 55.1	2.201	3.075	10.1	21.6	11 27	2 21.89	+15 4.9	1.575	2.495	10.3	20.9
12 7	2 18.95	+ 0 40.6	2.293	3.080	12.8	21.8	12 7	2 16.68	+14 33.9	1.649	2.498	14.1	21.2
135075	2001 <i>PL</i> ₄₅	11	4.9 34°17	8°5/10.1 18			435130	2007 <i>EU</i> ₁₃₀	11	4.9 271°51	3°5/ 2.4 18		
9 28	3 12.22	+34 23.6	1.546	2.305	20.0	18.5	9 28	3 6.33	+10 50.7	1.594	2.429	16.2	21.0
10 8	3 7.85	+35 40.9	1.483	2.319	17.0	18.3	10 8	3 2.57	+ 9 49.1	1.517	2.423	12.6	20.8
10 18	3 0.06	+36 36.7	1.438	2.334	13.7	18.1	10 18	2 56.20	+ 8 38.6	1.460	2.418	8.4	20.5
10 28	2 49.68	+37 5.0	1.414	2.350	10.5	18.0	10 28	2 47.88	+ 7 25.1	1.429	2.412	4.5	20.3
11 7	2 38.13	+37 3.3	1.414	2.366	8.6	17.9	11 7	2 38.70	+ 6 15.9	1.425	2.407	4.2	20.3
11 17	2 27.10	+36 34.0	1.439	2.384	9.1	18.0	11 17	2 29.85	+ 5 18.4	1.448	2.401	8.1	20.5
11 27	2 18.16	+35 44.9	1.489	2.401	11.4	18.2	11 27	2 22.52	+ 4 38.8	1.496	2.395	12.3	20.7
12 7	2 12.36	+34 46.6	1.562	2.420	14.3	18.4	12 7	2 17.52	+ 4 20.1	1.567	2.390	16.1	20.9
117720	2005 <i>GB</i> ₈	11	4.9 300°76	1°2/ 4.1 18			225046	2007 <i>GY</i> ₁₆	11	4.9 217°42	1°2/ 5.8 17		
9 28	3 4.86	+15 40.5	1.687	2.513	15.8	20.2	9 28	3 7.43	+19 48.9	2.485	3.272	12.5	21.5
10 8	3 1.52	+15 5.2	1.593	2.494	12.4	19.9	10 8	3 2.60	+19 56.8	2.392	3.268	9.9	21.3
10 18	2 55.59	+14 18.0	1.520	2.476	8.3	19.7	10 18	2 55.82	+19 56.4	2.322	3.264	6.8	21.1
10 28	2 47.65	+13 21.8	1.471	2.457	3.7	19.3	10 28	2 47.63	+19 47.9	2.279	3.259	3.4	20.9
11 7	2 38.68	+12 21.8	1.450	2.439	1.9	19.2	11 7	2 38.77	+19 32.8	2.266	3.255	1.3	20.7
11 17	2 29.87	+11 24.5	1.456	2.421	6.6	19.4	11 17	2 30.07	+19 13.5	2.282	3.250	4.3	20.9
11 27	2 22.42	+10 36.9	1.488	2.403	11.2	19.7	11 27	2 22.40	+18 53.7	2.328	3.245	7.6	21.1
12 7	2 17.26	+10 4.2	1.543	2.385	15.3	19.9	12 7	2 16.40	+18 37.1	2.400	3.240	10.6	21.3
440385	2005 <i>ED</i> ₂₄₃	11	4.9 119°36	3°3/ 7.2 18			21870	1999 <i>UD</i> ₁	11	4.9 140°89	0°1/ 4.8 18		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
273618	2007 <i>DH</i> ₁₉	11	4.9 265°32	1°5/ 3.9 18			51387	2001 <i>DU</i> ₆	11	4.9 74°40	6°7/31.9 18		
9 28	3 8.22	+14 26.4	1.662	2.485	16.2	21.5	9 28	3 9.86	- 1 20.1	1.787	2.611	15.2	17.9
10 8	3 4.14	+13 57.1	1.572	2.472	12.7	21.2	10 8	3 4.62	- 2 5.5	1.737	2.630	12.1	17.7
10 18	2 57.35	+13 17.6	1.503	2.459	8.5	20.9	10 18	2 57.14	- 2 45.4	1.710	2.649	9.0	17.6
10 28	2 48.47	+12 30.9	1.460	2.445	3.8	20.6	10 28	2 48.17	- 3 13.9	1.709	2.668	6.9	17.5
11 7	2 38.54	+11 41.9	1.443	2.431	2.1	20.5	11 7	2 38.71	- 3 25.8	1.734	2.687	7.2	17.6
11 17	2 28.82	+10 56.7	1.454	2.417	6.8	20.7	11 17	2 29.82	- 3 18.5	1.786	2.706	9.5	17.7
11 27	2 20.56	+10 21.5	1.491	2.403	11.4	21.0	11 27	2 22.42	- 2 51.3	1.864	2.725	12.3	18.0
12 7	2 14.69	+10 0.8	1.552	2.389	15.5	21.2	12 7	2 17.15	- 2 6.3	1.964	2.744	14.9	18.2
456150	2006 <i>FE</i> ₂	11	4.9 185°93	0°7/ 5.5 17			271981	2005 <i>CG</i> ₆	11	4.9 285°79	1°8/ 6.4 18		
9 28	3 5.50	+19 9.4	2.870	3.655	11.0	22.6	9 28	3 4.98	+22 36.2	2.388	3.174	13.0	20.8
10 8	3 0.78	+19 3.3	2.779	3.655	8.6	22.4	10 8	3 0.90	+22 35.8	2.287	3.160	10.4	20.6
10 18	2 54.45	+18 49.6	2.711	3.654	5.9	22.2	10 18	2 54.82	+22 24.3	2.209	3.147	7.3	20.3
10 28	2 46.97	+18 29.0	2.672	3.653	2.8	22.0	10 28	2 47.24	+22 2.0	2.156	3.133	4.0	20.1
11 7	2 38.97	+18 3.6	2.662	3.652	0.8	21.9	11 7	2 38.92	+21 30.4	2.132	3.120	1.8	19.9
11 17	2 31.16	+17 35.8	2.683	3.650	3.8	22.1	11 17	2 30.73	+20 52.7	2.138	3.107	4.4	20.1
11 27	2 24.21	+17 9.0	2.734	3.648	6.7	22.3	11 27	2 23.56	+20 13.5	2.172	3.093	7.8	20.3
12 7	2 18.69	+16 46.4	2.812	3.646	9.4	22.5	12 7	2 18.11	+19 37.4	2.232	3.080	11.0	20.5
493127	2014 <i>TV</i> ₃₈	11	4.9 301°90	1°5/ 5.9 17			485943	2012 <i>HK</i> ₃₇	11	4.9 212°69	0°0/ 4.9 18		
9 28	3 6.92	+20 5.2	2.281	3.074	13.3	21.0	9 28	3 3.69	+19 46.7	2.655	3.446	11.7	21.3
10 8	3 2.44	+20 20.4	2.188	3.066	10.5	20.8	10 8	2 59.51	+18 58.4	2.561	3.442	9.1	21.1
10 18	2 55.85	+20 26.9	2.117	3.059	7.3	20.6	10 18	2 53.66	+17 59.2	2.490	3.437	6.1	20.9
10 28	2 47.69	+20 24.6	2.072	3.051	3.8	20.4	10 28	2 46.64	+16 51.2	2.448	3.432	2.8	20.7
11 7	2 38.77	+20 14.9	2.056	3.044	1.5	20.2	11 7	2 39.11	+15 38.3	2.436	3.426	0.7	20.5
11 17	2 29.99	+20 0.1	2.069	3.037	4.6	20.4	11 17	2 31.81	+14 25.0	2.455	3.421	4.2	20.8
11 27	2 22.29	+19 43.9	2.111	3.030	8.1	20.6	11 27	2 25.44	+13 16.6	2.504	3.415	7.4	21.0
12 7	2 16.42	+19 30.4	2.178	3.023	11.3	20.8	12 7	2 20.55	+12 17.3	2.579	3.409	10.3	21.2
135839	2002 <i>SA</i> ₂₁	11	4.9 54°42	2°6/ 2.9 18			494346	2016 <i>TS</i> ₅₇	11	4.9 25°83	1°3/ 5.6 18		
9 28	3 5.38	+11 55.1	1.798	2.625	14.9	19.9	9 28	3 5.21	+20 49.8	1.235	2.070	19.9	20.5
10 8	3 1.45	+11 4.0	1.726	2.629	11.5	19.7	10 8	3 2.36	+20 35.9	1.177	2.081	15.7	20.3
10 18	2 55.23	+10 5.3	1.676	2.632	7.6	19.5	10 18	2 56.32	+20 4.3	1.139	2.093	10.7	20.1
10 28	2 47.39	+ 9 3.4	1.652	2.636	3.8	19.2	10 28	2 47.99	+19 17.0	1.122	2.105	5.2	19.8
11 7	2 38.87	+ 8 4.5	1.655	2.639	3.2	19.2	11 7	2 38.77	+18 19.4	1.129	2.119	1.5	19.6
11 17	2 30.72	+ 7 14.3	1.687	2.643	6.8	19.5	11 17	2 30.19	+17 19.4	1.162	2.134	6.6	20.0
11 27	2 23.94	+ 6 38.0	1.745	2.646	10.7	19.7	11 27	2 23.64	+16 25.7	1.219	2.150	11.6	20.3
12 7	2 19.23	+ 6 18.4	1.826	2.650	14.1	19.9	12 7	2 19.96	+15 45.2	1.298	2.166	15.9	20.6
141632	2002 <i>JT</i> ₄₉	11	4.9 124°23	0°8/ 5.4 18			398762	2013 <i>AB</i> ₅₈	11	4.9 69°90	3°3/ 7.2 18		
9 28	3 11.57	+20 16.4	1.608	2.414	17.4	20.5	9 28	3 8.21	+25 48.5	1.881	2.665	16.0	21.2
10 8	3 6.59	+19 56.1	1.538	2.426	13.6	20.2	10 8	3 3.89	+25 56.8	1.799	2.667	13.0	21.0
10 18	2 58.80	+19 21.2	1.489	2.437	9.3	20.0	10 18	2 57.02	+25 49.6	1.737	2.669	9.4	20.8
10 28	2 49.01	+18 33.4	1.464	2.447	4.4	19.8	10 28	2 48.27	+25 26.0	1.699	2.670	5.6	20.5
11 7	2 38.44	+17 37.0	1.467	2.457	1.2	19.6	11 7	2 38.67	+24 47.7	1.688	2.672	3.3	20.4
11 17	2 28.40	+16 38.3	1.498	2.467	5.9	19.9	11 17	2 29.39	+23 58.8	1.706	2.673	5.5	20.5
11 27	2 20.12	+15 44.6	1.556	2.476	10.4	20.2	11 27	2 21.57	+23 5.7	1.751	2.675	9.2	20.8
12 7	2 14.41	+15 2.1	1.638	2.485	14.3	20.5	12 7	2 16.04	+22 15.4	1.821	2.677	12.7	21.0
133755	2003 <i>WB</i> ₃₁	11	4.9 332°86	1°2/ 5.7 17			184461	2005 <i>NR</i> ₆₀	11	4.9 55°99	0°5/ 5.2 18		
9 28	3 4.83	+19 31.6	1.983	2.789	14.5	19.9	9 28	3 12.70	+18 5.0	1.260	2.088	20.1	20.2
10 8	3 1.13	+19 36.8	1.892	2.780	11.5	19.7	10 8	3 7.83	+18 2.6	1.214	2.113	15.6	20.0
10 18	2 55.13	+19 31.8	1.823	2.770	7.9	19.5	10 18	2 59.72	+17 46.8	1.186	2.139	10.4	19.8
10 28	2 47.41	+19 17.3	1.779	2.761	3.9	19.2	10 28	2 49.41	+17 19.5	1.181	2.166	4.8	19.5
11 7	2 38.85	+18 55.1	1.763	2.753	1.3	19.0	11 7	2 38.41	+16 45.2	1.202	2.192	1.2	19.4
11 17	2 30.46	+18 28.9	1.775	2.745	5.0	19.3	11 17	2 28.30	+16 10.1	1.249	2.219	6.6	19.8
11 27	2 23.29	+18 3.3	1.815	2.738	9.0	19.5	11 27	2 20.40	+15 41.0	1.321	2.246	11.5	20.2
12 7	2 18.12	+17 42.9	1.879	2.731	12.6	19.7	12 7	2 15.50	+15 23.1	1.416	2.273	15.6	20.5
40225	1998 <i>SX</i> ₁₄₄	11	4.9 54°08	1°2/ 3.9 18			523376	2017 <i>DJ</i> ₂	11	4.9 264°68	0°4/ 5.2 18		
9 28	3 5.69	+14 3.1	1.983	2.801	14.1	18.9	9 28	3 6.01	+18 10.7	2.181	2.983	13.5	21.8
10 8	3 1.38	+13 38.3	1.921	2.818	10.9	18.7	10 8	3 1.74	+18 1.2	2.093	2.979	10.6	21.6
10 18	2 55.01	+13 6.6	1.881	2.835	7.1	18.6	10 18	2 55.37	+17 42.5	2.027	2.975	7.2	21.4
10 28	2 47.23	+12 30.7	1.867	2.852	3.2	18.3	10 28	2 47.48	+17 15.7	1.988	2.971	3.3	21.2
11 7	2 38.93	+11 54.7	1.881	2.870	1.7	18.3	11 7	2 38.89	+16 43.6	1.977	2.967	0.8	21.0
11 17	2 31.06	+11 22.7	1.925	2.888	5.4	18.6	11 17	2 30.52	+16 9.8	1.995	2.963	4.8	21.3
11 27	2 24.46	+10 58.9	1.995	2.906	9.1	18.8	11 27	2 23.28	+15 38.9	2.042	2.959	8.5	21.5
12 7	2 19.81	+10 46.0	2.091	2.924	12.2	19.1	12 7	2 17.89	+15 15.0	2.114	2.955	11.8	21.7
5345	Boynton	11	4.9 14°16	5°3/ 8.2 18			451352	2010 <i>WN</i> ₄₃	11	4.9 6°04	2°1/ 6.3 18		
9 28	3 4.00	+28 12.4	1.313	2.124	20.3	17.2	9 28	3 6.16	+22 13.7	1.867	2.667	15.5	21.3
10 8	3 1.60	+28 39.4	1.249	2.130	16.7	17.0	10 8	3 2.26	+22 22.1	1.786	2.667	12.4	21.1
10 18	2 55.94	+28 44.3	1.204	2.138	12.4	16.8	10 18	2 55.92	+22 17.8	1.726	2.668	8.7	20.9
10 28	2 47.86	+28 25.0	1.179	2.147	8.1	16.6	10 28	2 47.78	+22 0.9	1.691	2.669	4.7	20.7
11 7	2 38.75	+27 43.0	1.178	2.157	5.3	16.5	11 7	2 38.82	+21 33.2	1.683	2.671	2.2	20.5
11 17	2 30.18	+26 44.3	1.201	2.169	7.1	16.6	11 17	2 30.15	+20 58.7	1.703	2.673	5.2	20.7
11 27	2 23.61	+25 38.4	1.249	2.182	11.1	16.9	11 27	2 22.86	+20 22.7	1.750	2.675	9.1	21.0
12 7	2 19.98	+24 35.3	1.319	2.197	15.1	17.1	12 7	2 17.75	+19 51.0	1.822	2.678	12.7	21.2
41929	2000 <i>WC</i> ₁₇₅	11	4.9 315°30	5°8/31.8 18			3061	Cook	11	4.9 41°25	1°6/ 3.8 18		
9 28	3 3.41	+ 6 28.6											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
119947	2002 JZ ₇₁	11	4.9 104°97	4.4/ 1.3 18			439683	2014 JN ₃₅	11	4.9 111°67	1.7/ 3.7 18		
9 28	3 5.38	+ 2 58.8	2.336	3.155	12.2	19.7	9 28	3 8.71	+12 0.1	2.086	2.897	13.7	21.6
10 8	3 0.83	+ 2 16.0	2.270	3.164	9.5	19.5	10 8	3 3.66	+11 40.6	2.016	2.910	10.6	21.4
10 18	2 54.53	+ 1 34.0	2.228	3.173	6.8	19.4	10 18	2 56.54	+11 16.0	1.969	2.922	7.0	21.2
10 28	2 47.03	+ 0 57.3	2.213	3.182	4.7	19.2	10 28	2 47.98	+10 48.9	1.949	2.933	3.2	21.0
11 7	2 39.07	+ 0 29.9	2.226	3.191	4.9	19.3	11 7	2 38.85	+10 22.9	1.958	2.945	2.1	21.0
11 17	2 31.41	+ 0 15.1	2.268	3.199	7.1	19.4	11 17	2 30.10	+10 1.7	1.996	2.956	5.6	21.2
11 27	2 24.82	+ 0 14.8	2.338	3.207	9.8	19.6	11 27	2 22.61	+ 9 48.6	2.063	2.967	9.2	21.4
12 7	2 19.83	+ 0 29.4	2.431	3.215	12.2	19.8	12 7	2 17.03	+ 9 46.0	2.154	2.977	12.3	21.7
515709	2014 QZ ₄₄₉	11	4.9 102°66	0°5/ 4.4 18			227892	2007 EA ₇₀	11	4.9 73°42	0°2/ 5.0 18		
9 28	3 7.09	+14 55.0	2.614	3.411	11.7	22.1	9 28	3 7.28	+17 14.6	2.183	2.985	13.5	20.6
10 8	3 1.96	+14 42.6	2.546	3.431	9.0	21.9	10 8	3 2.51	+17 8.4	2.116	3.002	10.5	20.4
10 18	2 55.19	+14 24.4	2.502	3.451	5.9	21.7	10 18	2 55.75	+16 54.2	2.071	3.019	7.0	20.2
10 28	2 47.30	+14 2.2	2.486	3.470	2.6	21.6	10 28	2 47.62	+16 33.2	2.052	3.036	3.2	20.0
11 7	2 39.00	+13 38.4	2.500	3.489	1.0	21.5	11 7	2 38.96	+16 8.3	2.062	3.053	0.8	19.8
11 17	2 31.03	+13 16.0	2.544	3.508	4.2	21.7	11 17	2 30.68	+15 42.8	2.102	3.070	4.6	20.1
11 27	2 24.09	+12 58.0	2.619	3.526	7.3	22.0	11 27	2 23.62	+15 20.6	2.171	3.086	8.1	20.4
12 7	2 18.68	+12 46.8	2.719	3.544	9.9	22.2	12 7	2 18.40	+15 5.1	2.265	3.103	11.2	20.6
365795	2011 AS ₅₄	11	4.9 35°46	6°5/ 31.7 18			243593	1998 RO ₁₀	11	4.9 73°78	2°2/ 3.3 18		
9 28	3 6.08	- 1 30.6	1.896	2.724	14.3	20.4	9 28	3 6.50	+12 38.2	1.766	2.591	15.3	20.8
10 8	3 1.74	- 2 13.6	1.839	2.734	11.4	20.2	10 8	3 2.36	+11 54.5	1.697	2.598	11.8	20.6
10 18	2 55.28	- 2 51.7	1.805	2.744	8.6	20.1	10 18	2 55.87	+11 3.0	1.650	2.606	7.8	20.4
10 28	2 47.40	- 3 18.9	1.795	2.754	6.7	20.0	10 28	2 47.73	+10 7.9	1.628	2.613	3.7	20.2
11 7	2 38.98	- 3 30.4	1.813	2.765	7.0	20.0	11 7	2 38.93	+ 9 14.8	1.635	2.620	2.8	20.2
11 17	2 30.98	- 3 23.5	1.857	2.776	9.2	20.2	11 17	2 30.54	+ 8 29.3	1.669	2.628	6.6	20.4
11 27	2 24.29	- 2 57.2	1.927	2.788	11.9	20.4	11 27	2 23.57	+ 7 56.3	1.730	2.635	10.5	20.7
12 7	2 19.53	- 2 13.1	2.018	2.800	14.5	20.6	12 7	2 18.73	+ 7 38.9	1.814	2.643	14.0	20.9
187240	2005 SK ₁₈₀	11	4.9 41°56	2°5/ 3.5 18			445306	2010 DN ₇₉	11	4.9 143°48	1°2/ 5.8 18		
9 28	3 7.51	+13 28.4	1.182	2.031	19.8	19.6	9 28	3 9.77	+21 7.2	2.190	2.976	14.0	22.6
10 8	3 3.96	+12 43.8	1.134	2.048	15.2	19.4	10 8	3 4.53	+20 56.1	2.111	2.987	11.0	22.4
10 18	2 57.25	+11 48.7	1.106	2.067	10.0	19.1	10 18	2 57.16	+20 33.5	2.055	2.996	7.6	22.2
10 28	2 48.36	+10 49.0	1.100	2.086	4.6	18.9	10 28	2 48.28	+20 0.4	2.025	3.005	3.8	22.0
11 7	2 38.75	+ 9 52.6	1.119	2.106	3.2	18.9	11 7	2 38.78	+19 19.5	2.025	3.014	1.3	21.8
11 17	2 29.92	+ 9 7.1	1.163	2.127	8.0	19.2	11 17	2 29.64	+18 34.7	2.054	3.022	4.6	22.1
11 27	2 23.19	+ 8 38.6	1.231	2.148	12.9	19.6	11 27	2 21.77	+17 51.2	2.112	3.030	8.2	22.3
12 7	2 19.31	+ 8 29.7	1.320	2.170	16.9	19.9	12 7	2 15.85	+17 13.8	2.197	3.036	11.4	22.5
5015	Litke	11	4.9 352°74	3°5/ 3.1 18			356735	2011 UP ₁₉₅	11	4.9 23°64	3°1/ 6.9 18		
9 28	3 4.84	+11 47.7	1.056	1.919	20.6	16.6	9 28	3 8.35	+24 38.5	1.850	2.639	16.1	21.2
10 8	3 2.62	+11 5.2	0.992	1.914	16.1	16.3	10 8	3 4.06	+24 53.3	1.768	2.640	13.0	21.0
10 18	2 56.86	+10 11.8	0.946	1.910	10.7	16.0	10 18	2 57.19	+24 53.9	1.707	2.641	9.3	20.8
10 28	2 48.40	+ 9 13.7	0.921	1.907	5.3	15.7	10 28	2 48.41	+24 39.2	1.670	2.643	5.5	20.6
11 7	2 38.70	+ 8 19.9	0.920	1.906	4.3	15.6	11 7	2 38.74	+24 10.6	1.660	2.645	3.1	20.4
11 17	2 29.49	+ 7 39.3	0.941	1.905	9.5	15.9	11 17	2 29.38	+23 31.9	1.678	2.646	5.5	20.6
11 27	2 22.43	+ 7 19.1	0.984	1.905	14.9	16.2	11 27	2 21.48	+22 49.1	1.724	2.648	9.3	20.8
12 7	2 18.56	+ 7 22.2	1.047	1.906	19.6	16.5	12 7	2 15.89	+22 8.7	1.794	2.650	12.8	21.0
386785	2010 EM ₂₁	11	4.9 136°88	1°3/ 5.9 18			61450	2000 QC ₂₈	11	4.9 46°13	3°1/ 2.7 18		
9 28	3 10.27	+21 10.9	2.217	3.001	13.9	22.1	9 28	3 5.63	+10 32.5	1.648	2.482	15.8	18.9
10 8	3 4.87	+21 2.5	2.140	3.014	10.9	21.9	10 8	3 1.65	+ 9 41.0	1.596	2.502	12.1	18.7
10 18	2 57.35	+20 43.1	2.086	3.026	7.5	21.7	10 18	2 55.33	+ 8 43.8	1.565	2.522	8.0	18.5
10 28	2 48.34	+20 13.2	2.058	3.038	3.8	21.5	10 28	2 47.44	+ 7 46.4	1.560	2.543	4.1	18.4
11 7	2 38.75	+19 35.4	2.060	3.049	1.3	21.4	11 7	2 39.03	+ 6 54.9	1.582	2.564	3.7	18.4
11 17	2 29.52	+18 53.5	2.092	3.059	4.6	21.6	11 17	2 31.17	+ 6 14.6	1.631	2.586	7.2	18.7
11 27	2 21.57	+18 12.6	2.152	3.069	8.1	21.9	11 27	2 24.83	+ 5 49.9	1.706	2.607	10.9	18.9
12 7	2 15.56	+17 37.3	2.239	3.079	11.3	22.1	12 7	2 20.64	+ 5 42.4	1.804	2.629	14.2	19.2
401564	2013 FJ ₅	11	4.9 126°45	0°5/ 4.5 18			409725	2006 BQ ₂₈₀	11	4.9 50°95	9°6/ 13.1 17		
9 28	3 8.40	+14 34.3	2.139	2.946	13.6	21.2	9 28	3 14.34	+44 9.9	2.284	2.949	16.6	21.3
10 8	3 3.53	+14 32.7	2.059	2.949	10.6	21.0	10 8	3 9.09	+45 29.5	2.203	2.955	14.8	21.2
10 18	2 56.53	+14 24.9	2.002	2.953	7.0	20.8	10 18	3 0.81	+46 29.2	2.140	2.961	12.9	21.1
10 28	2 48.02	+14 12.4	1.971	2.956	3.1	20.5	10 28	2 50.15	+47 3.1	2.098	2.967	11.1	21.0
11 7	2 38.83	+13 57.7	1.969	2.959	1.1	20.4	11 7	2 38.26	+47 7.8	2.079	2.973	9.9	20.9
11 17	2 29.92	+13 43.9	1.997	2.962	5.0	20.7	11 17	2 26.58	+46 43.5	2.086	2.980	9.7	20.9
11 27	2 22.20	+13 34.5	2.053	2.965	8.7	20.9	11 27	2 16.55	+45 55.1	2.118	2.987	10.7	21.0
12 7	2 16.38	+13 32.4	2.135	2.968	12.0	21.1	12 7	2 9.20	+44 50.7	2.174	2.993	12.3	21.1
98887	2001 BQ ₃₄	11	4.9 209°09	5°6/ 31.0 18			409190	2003 UM ₃₁₇	11	4.9 68°92	0°8/ 5.5 18		
9 28	3 6.33	+ 1 42.3	2.228	3.048	12.7	19.9	9 28	3 8.07	+18 2.3	2.266	3.062	13.3	20.9
10 8	3 1.78	+ 0 30.0	2.149	3.042	10.1	19.7	10 8	3 3.21	+18 15.3	2.185	3.067	10.4	20.7
10 18	2 55.30	- 0 42.5	2.095	3.036	7.4	19.6	10 18	2 56.30	+18 20.7	2.127	3.073	7.1	20.5
10 28	2 47.44	- 1 49.3	2.068	3.030	5.7	19.4	10 28	2 47.92	+18 19.0	2.096	3.078	3.4	20.3
11 7	2 38.98	- 2 44.4	2.069	3.023	6.2	19.5	11 7	2 38.89	+18 11.8	2.094	3.084	1.0	20.1
11 17	2 30.76	- 3 23.1	2.099	3.016	8.5	19.6	11 17	2 30.11	+18 1.4	2.121	3.089	4.5	20.4
11 27	2 23.62	- 3 42.3	2.155	3.008	11.2	19.8	11 27	2 22.47	+17 51.4	2.177	3.095	8.0	20.6
12 7	2 18.18	- 3 41.7	2.234	2.999	13.8	19.9	12 7	2 16.66	+17 45.2	2.259	3.100	11.1	20.8
221952	1994 PU ₁₅	11	4.9 102°83	1°1/ 5.6 17			295017	2008 ES ₅₇	11	4.9 115°87	4°2/ 1.4 18		
9 28	3 13.39	+20 34.8	1.754	2.550	16.6	21.0							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
32529	2001 <i>PD</i> ₇		11 4.9 38°51'	2°9/ 2.8 18			214556	2006 <i>PD</i> ₃₅		11 4.9 124°97'	3°3/ 3.1 18		
9 28	3 4.59	+12 40.9	1.467	2.308	17.0	18.2	9 28	3 13.92	+ 8 55.3	1.647	2.466	16.4	21.1
10 8	3 1.13	+11 35.1	1.417	2.327	13.0	18.0	10 8	3 8.16	+ 8 25.1	1.584	2.481	12.7	20.9
10 18	2 55.12	+10 20.3	1.387	2.346	8.6	17.8	10 18	2 59.76	+ 7 51.0	1.543	2.496	8.5	20.7
10 28	2 47.38	+ 9 3.0	1.382	2.367	4.2	17.6	10 28	2 49.51	+ 7 17.4	1.528	2.510	4.5	20.5
11 7	2 39.08	+ 7 51.1	1.404	2.388	3.6	17.6	11 7	2 38.58	+ 6 49.3	1.541	2.523	3.8	20.5
11 17	2 31.40	+ 6 51.6	1.452	2.410	7.5	17.9	11 17	2 28.21	+ 6 31.4	1.582	2.535	7.5	20.8
11 27	2 25.37	+ 6 10.1	1.526	2.432	11.6	18.2	11 27	2 19.54	+ 6 27.0	1.650	2.547	11.5	21.0
12 7	2 21.67	+ 5 48.8	1.621	2.455	15.1	18.4	12 7	2 13.32	+ 6 37.6	1.741	2.558	15.0	21.3
351820	2006 <i>PK</i> ₁₂		11 4.9 152°31'	5°8/ 9.5 18			459467	2013 <i>BZ</i> ₁₆		11 4.9 89°09'	12°9/ 14.6 17		
9 28	3 11.52	+33 19.7	2.178	2.913	15.5	21.1	9 28	3 18.02	+45 1.9	1.256	1.976	25.6	20.8
10 8	3 6.35	+33 51.8	2.092	2.918	13.1	20.9	10 8	3 13.78	+46 1.6	1.195	1.989	22.7	20.7
10 18	2 58.65	+34 6.7	2.027	2.923	10.3	20.7	10 18	3 4.76	+46 25.5	1.147	2.003	19.4	20.5
10 28	2 49.06	+34 1.4	1.985	2.927	7.5	20.6	10 28	2 52.08	+46 3.2	1.115	2.016	16.1	20.3
11 7	2 38.60	+33 35.5	1.971	2.931	5.8	20.5	11 7	2 37.91	+44 50.6	1.104	2.029	13.6	20.2
11 17	2 28.45	+32 51.4	1.984	2.934	6.5	20.5	11 17	2 24.82	+42 52.6	1.114	2.043	12.9	20.2
11 27	2 19.72	+31 54.9	2.025	2.938	8.8	20.7	11 27	2 14.97	+40 24.4	1.148	2.055	14.5	20.4
12 7	2 13.26	+30 53.5	2.092	2.941	11.6	20.9	12 7	2 9.48	+37 45.9	1.204	2.068	17.2	20.6
175868	1999 <i>VH</i> ₉₁		11 4.9 63°93'	1°1/ 5.4 18			22737	1998 <i>SY</i> ₁₃₉		11 4.9 148°18'	1°1/ 5.9 18		
9 28	3 14.82	+17 30.9	1.321	2.143	19.6	20.0	9 28	3 4.28	+22 11.1	2.359	3.148	13.0	17.8
10 8	3 9.64	+17 57.1	1.263	2.159	15.4	19.8	10 8	3 0.25	+21 40.7	2.273	3.150	10.3	17.6
10 18	3 1.13	+18 12.6	1.225	2.176	10.4	19.6	10 18	2 54.32	+20 57.9	2.209	3.151	7.1	17.4
10 28	2 50.21	+18 17.2	1.209	2.193	5.0	19.3	10 28	2 47.06	+20 4.1	2.171	3.152	3.5	17.2
11 7	2 38.34	+18 12.8	1.219	2.210	1.5	19.1	11 7	2 39.23	+19 2.7	2.163	3.153	1.1	17.0
11 17	2 27.16	+18 3.4	1.257	2.227	6.5	19.5	11 17	2 31.68	+17 58.1	2.185	3.154	4.3	17.3
11 27	2 18.14	+17 54.8	1.319	2.244	11.5	19.9	11 27	2 25.20	+16 56.0	2.235	3.154	7.7	17.5
12 7	2 12.19	+17 52.3	1.405	2.261	15.7	20.2	12 7	2 20.42	+16 1.2	2.312	3.155	10.8	17.7
24014	1999 <i>RB</i> ₁₁₈		11 4.9 350°51'	10°1/ 11.4 18			516055	2015 <i>TA</i> ₁₅₇		11 4.9 344°67'	1°0/ 4.2 18		
9 28	3 4.96	+37 18.3	1.336	2.107	22.0	16.4	9 28	3 4.80	+15 44.0	1.840	2.660	14.9	21.4
10 8	3 3.07	+38 21.6	1.259	2.099	19.2	16.2	10 8	3 1.13	+15 9.4	1.760	2.658	11.6	21.2
10 18	2 57.45	+38 58.3	1.197	2.092	15.9	16.0	10 18	2 55.16	+14 24.7	1.701	2.656	7.7	20.9
10 28	2 48.83	+39 1.0	1.153	2.086	12.6	15.8	10 28	2 47.51	+13 32.7	1.668	2.654	3.4	20.7
11 7	2 38.65	+38 26.4	1.131	2.082	10.4	15.6	11 7	2 39.11	+12 38.4	1.663	2.652	1.6	20.5
11 17	2 28.80	+37 17.1	1.131	2.079	10.6	15.6	11 17	2 31.01	+11 47.4	1.686	2.651	5.9	20.8
11 27	2 21.14	+35 43.1	1.154	2.077	13.0	15.8	11 27	2 24.23	+11 5.2	1.736	2.649	10.0	21.1
12 7	2 16.92	+33 58.8	1.199	2.076	16.3	16.0	12 7	2 19.51	+10 36.1	1.809	2.648	13.5	21.3
259566	2003 <i>UO</i> ₁₇₀		11 4.9 48°25'	1°2/ 4.3 18			509251	2006 <i>UC</i> ₃₃		11 4.9 107°38'	1°2/ 4.1 17		
9 28	3 10.90	+14 37.4	1.140	1.984	20.7	20.4	9 28	3 11.16	+16 4.6	1.605	2.422	16.9	21.8
10 8	3 6.81	+14 23.2	1.091	2.002	16.0	20.2	10 8	3 6.13	+15 21.3	1.543	2.439	13.1	21.6
10 18	2 59.28	+13 58.2	1.061	2.020	10.6	19.9	10 18	2 58.44	+14 26.4	1.502	2.456	8.6	21.4
10 28	2 49.35	+13 26.0	1.052	2.039	4.7	19.7	10 28	2 48.93	+13 24.0	1.487	2.472	3.8	21.2
11 7	2 38.59	+12 52.3	1.068	2.058	2.0	19.6	11 7	2 38.77	+12 19.9	1.499	2.488	1.9	21.1
11 17	2 28.66	+12 23.7	1.109	2.078	7.6	20.0	11 17	2 29.21	+11 20.9	1.539	2.503	6.4	21.4
11 27	2 21.00	+12 6.3	1.175	2.098	12.8	20.3	11 27	2 21.37	+10 33.5	1.607	2.518	10.8	21.7
12 7	2 16.47	+12 3.8	1.261	2.118	17.1	20.6	12 7	2 15.99	+10 1.7	1.698	2.532	14.5	22.0
331884	2004 <i>ED</i> ₃		11 4.9 244°57'	2°0/ 6.1 18			518271	2016 <i>WZ</i> ₅₆		11 4.9 203°50'	6°4/ 30.4 18		
9 28	3 11.53	+20 41.2	2.171	2.955	14.1	20.9	9 28	3 6.18	- 1 35.3	2.273	3.090	12.5	21.9
10 8	3 6.26	+21 7.8	2.072	2.944	11.3	20.7	10 8	3 1.63	- 2 45.7	2.199	3.087	10.1	21.7
10 18	2 58.60	+21 25.8	1.995	2.934	7.9	20.5	10 18	2 55.21	- 3 53.5	2.150	3.083	7.8	21.6
10 28	2 49.09	+21 34.1	1.945	2.923	4.3	20.3	10 28	2 47.46	- 4 52.7	2.127	3.078	6.4	21.5
11 7	2 38.62	+21 33.2	1.924	2.911	2.0	20.1	11 7	2 39.15	- 5 37.7	2.132	3.073	6.9	21.5
11 17	2 28.24	+21 25.1	1.932	2.900	4.9	20.3	11 17	2 31.08	- 6 4.4	2.165	3.068	9.0	21.6
11 27	2 19.05	+21 13.6	1.970	2.888	8.7	20.5	11 27	2 24.07	- 6 10.5	2.224	3.062	11.4	21.8
12 7	2 11.88	+21 3.1	2.033	2.876	12.1	20.7	12 7	2 18.73	- 5 56.5	2.305	3.056	13.8	21.9
402507	2006 <i>DN</i> ₈₂		11 4.9 268°27'	3°7/ 7.9 17			442930	2013 <i>CQ</i> ₆₄		11 4.9 25°78'	2°8/ 6.9 18		
9 28	3 7.34	+27 48.5	2.373	3.135	13.7	20.6	9 28	3 7.33	+24 41.2	1.816	2.609	16.2	21.2
10 8	3 2.84	+28 9.7	2.280	3.131	11.2	20.5	10 8	3 3.30	+24 41.9	1.735	2.610	13.0	20.9
10 18	2 56.20	+28 17.9	2.208	3.127	8.4	20.3	10 18	2 56.72	+24 27.1	1.675	2.612	9.3	20.7
10 28	2 47.95	+28 11.7	2.161	3.123	5.5	20.1	10 28	2 48.25	+23 56.5	1.639	2.614	5.3	20.5
11 7	2 38.93	+27 51.5	2.142	3.118	3.7	20.0	11 7	2 38.95	+23 12.3	1.630	2.616	2.8	20.3
11 17	2 30.09	+27 19.7	2.152	3.114	5.0	20.1	11 17	2 29.98	+22 19.1	1.649	2.618	5.4	20.5
11 27	2 22.38	+26 40.7	2.191	3.110	7.9	20.2	11 27	2 22.49	+21 23.9	1.695	2.621	9.3	20.8
12 7	2 16.53	+26 0.2	2.256	3.106	10.8	20.4	12 7	2 17.29	+20 33.3	1.766	2.623	13.0	21.0
311830	2006 <i>VX</i> ₁₀		11 4.9 290°31'	1°1/ 4.2 18			96277	1995 <i>WN</i> ₄		11 4.9 358°73'	3°7/ 2.9 18		
9 28	3 7.03	+13 50.1	1.964	2.780	14.3	21.0	9 28	3 4.01	+ 9 31.6	1.288	2.142	18.2	18.6
10 8	3 2.75	+13 37.0	1.879	2.774	11.1	20.8	10 8	3 1.37	+ 8 58.5	1.222	2.139	14.1	18.4
10 18	2 56.19	+13 17.0	1.816	2.769	7.4	20.5	10 18	2 55.74	+ 8 19.4	1.175	2.136	9.5	18.1
10 28	2 47.96	+12 52.4	1.778	2.764	3.3	20.3	10 28	2 47.89	+ 7 40.1	1.151	2.135	5.0	17.9
11 7	2 38.94	+12 26.5	1.769	2.758	1.6	20.2	11 7	2 39.05	+ 7 7.2	1.151	2.135	4.4	17.8
11 17	2 30.15	+12 3.2	1.789	2.753	5.7	20.4	11 17	2 30.62	+ 6 46.8	1.177	2.136	8.6	18.1
11 27	2 22.60	+11 46.8	1.836	2.748	9.6	20.6	11 27	2 23.96	+ 6 43.7	1.225	2.138	13.3	18.4
12 7	2 17.05	+11 40.5	1.907	2.743	13.1	20.9	12 7	2 19.97	+ 6 59.6	1.295	2.142	17.4	18.6
191573	2003 <i>XZ</i> ₁₀		11 4.9 20°90'	3°6/ 7.9 18			472609	2015 <i>DQ</i> ₁₅₇		11 4.9 226°83'			

EPHEMERIDES

11 4.9

11 4.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
8421	Montanari		11 4.9 316°02	1.2°/ 4.1	18		215708	2004 AQ ₂₆		11 4.9 266°01	0°8'/ 5.6	18	
9 28	3 5.44	+14 32.0	1.997	2.814	14.1	18.0	9 28	3 6.20	+21 44.8	2.098	2.892	14.3	20.2
10 8	3 1.45	+14 3.9	1.915	2.811	10.9	17.8	10 8	3 2.18	+21 6.1	1.993	2.873	11.3	20.0
10 18	2 55.30	+13 27.5	1.855	2.809	7.2	17.6	10 18	2 55.90	+20 12.3	1.910	2.854	7.8	19.7
10 28	2 47.57	+12 45.8	1.821	2.806	3.2	17.4	10 28	2 47.92	+19 4.7	1.853	2.835	3.8	19.5
11 7	2 39.15	+12 2.7	1.815	2.804	1.7	17.2	11 7	2 39.09	+17 47.2	1.825	2.815	1.0	19.2
11 17	2 30.98	+11 23.0	1.838	2.801	5.6	17.5	11 17	2 30.40	+16 25.6	1.826	2.795	5.0	19.5
11 27	2 24.03	+10 51.4	1.888	2.799	9.5	17.7	11 27	2 22.89	+15 7.1	1.856	2.774	9.1	19.7
12 7	2 19.00	+10 31.4	1.963	2.797	12.9	18.0	12 7	2 17.32	+13 58.3	1.912	2.754	12.8	19.9
159125	2004 VQ ₆₂		11 4.9 25°29	10°7'/30.6	18		481907	2009 BC ₂₆		11 4.9 358°71	0°6'/ 4.6	18	
9 28	3 3.18	- 1 41.3	0.991	1.864	20.8	18.5	9 28	3 3.75	+15 2.4	1.191	2.043	19.5	20.0
10 8	3 0.85	- 3 24.3	0.964	1.884	16.7	18.3	10 8	3 1.55	+15 3.3	1.124	2.039	15.2	19.7
10 18	2 55.26	- 4 57.4	0.956	1.905	13.0	18.2	10 18	2 56.09	+14 53.8	1.075	2.036	10.2	19.5
10 28	2 47.54	- 6 7.4	0.968	1.927	10.8	18.1	10 28	2 48.14	+14 36.3	1.047	2.034	4.6	19.1
11 7	2 39.21	- 6 44.8	1.001	1.952	11.5	18.3	11 7	2 39.03	+14 15.2	1.044	2.034	1.5	18.9
11 17	2 31.79	- 6 45.6	1.056	1.977	14.2	18.5	11 17	2 30.33	+13 56.2	1.064	2.035	7.3	19.3
11 27	2 26.52	- 6 11.2	1.130	2.005	17.5	18.8	11 27	2 23.54	+13 45.3	1.109	2.038	12.6	19.6
12 7	2 24.06	- 5 7.8	1.222	2.033	20.5	19.1	12 7	2 19.69	+13 47.0	1.173	2.043	17.2	19.9
269885	2000 GG ₃₄		11 4.9 153°00	0°3'/ 5.1	18		402253	2005 ME ₄₈		11 4.9 138°16	3°7'/ 8.6	18	
9 28	3 11.06	+18 14.8	1.881	2.682	15.4	21.9	9 28	3 9.44	+30 37.3	2.558	3.298	13.4	22.2
10 8	3 5.92	+18 1.0	1.803	2.689	12.1	21.7	10 8	3 4.14	+30 33.0	2.475	3.311	11.0	22.1
10 18	2 58.31	+17 36.3	1.747	2.695	8.1	21.4	10 18	2 56.87	+30 13.3	2.415	3.324	8.3	21.9
10 28	2 48.93	+17 2.3	1.717	2.701	3.7	21.2	10 28	2 48.22	+29 37.7	2.379	3.336	5.5	21.7
11 7	2 38.80	+16 22.3	1.715	2.706	0.9	21.0	11 7	2 39.04	+28 47.5	2.373	3.347	3.7	21.7
11 17	2 29.05	+15 41.0	1.743	2.710	5.4	21.3	11 17	2 30.21	+27 46.4	2.397	3.358	4.7	21.7
11 27	2 20.75	+15 3.9	1.798	2.714	9.5	21.6	11 27	2 22.58	+26 39.6	2.451	3.368	7.3	21.9
12 7	2 14.68	+14 35.8	1.879	2.718	13.1	21.8	12 7	2 16.76	+25 33.3	2.531	3.377	9.9	22.1
19596	Spegolarson		11 4.9 165°54	1°0'/ 4.2	18		433523	2013 WE ₇₆		11 4.9 164°38	3°1'/ 3.2	18	
9 28	3 8.53	+15 4.9	1.883	2.696	14.9	18.6	9 28	3 11.63	+ 9 4.7	1.732	2.553	15.7	21.5
10 8	3 3.94	+14 36.6	1.804	2.698	11.6	18.3	10 8	3 6.48	+ 8 39.9	1.658	2.556	12.2	21.3
10 18	2 56.99	+13 59.2	1.747	2.700	7.7	18.1	10 18	2 58.76	+ 8 11.1	1.606	2.559	8.2	21.0
10 28	2 48.35	+13 15.6	1.717	2.702	3.4	17.9	10 28	2 49.17	+ 7 42.4	1.580	2.562	4.3	20.8
11 7	2 38.97	+12 30.0	1.714	2.703	1.6	17.7	11 7	2 38.78	+ 7 18.2	1.581	2.564	3.6	20.8
11 17	2 29.93	+11 47.5	1.741	2.705	5.8	18.0	11 17	2 28.77	+ 7 3.0	1.611	2.566	7.2	21.0
11 27	2 22.26	+11 13.3	1.795	2.706	9.9	18.3	11 27	2 20.28	+ 7 0.3	1.667	2.567	11.2	21.3
12 7	2 16.69	+10 51.2	1.873	2.706	13.4	18.5	12 7	2 14.09	+ 7 11.9	1.747	2.568	14.8	21.5
511116	2013 WL ₄₃		11 4.9 257°49	1°7'/ 5.9	18		210627	2000 EC ₁₀₂		11 4.9 122°49	2°3'/ 2.9	18	
9 28	3 9.95	+21 23.0	1.682	2.485	16.9	22.0	9 28	3 7.00	+11 36.7	2.241	3.053	12.9	21.5
10 8	3 5.69	+21 22.5	1.589	2.474	13.5	21.8	10 8	3 2.20	+10 46.1	2.173	3.067	9.9	21.4
10 18	2 58.57	+21 8.0	1.517	2.462	9.4	21.5	10 18	2 55.54	+ 9 49.7	2.129	3.081	6.5	21.2
10 28	2 49.21	+20 39.4	1.470	2.450	4.9	21.2	10 28	2 47.61	+ 8 51.5	2.112	3.095	3.3	21.0
11 7	2 38.72	+19 59.0	1.449	2.438	1.8	21.0	11 7	2 39.21	+ 7 56.0	2.125	3.108	2.8	21.0
11 17	2 28.41	+19 11.5	1.456	2.425	5.9	21.2	11 17	2 31.18	+ 7 8.1	2.168	3.121	5.8	21.2
11 27	2 19.64	+18 24.0	1.489	2.413	10.5	21.4	11 27	2 24.31	+ 6 31.5	2.239	3.134	9.0	21.4
12 7	2 13.38	+17 43.4	1.547	2.400	14.7	21.7	12 7	2 19.18	+ 6 8.7	2.335	3.145	11.9	21.6
280399	2003 UO ₃₂₄		11 4.9 188°08	6°9'/30.5	17		399753	2005 GM ₂₂₀		11 4.9 232°83	3°9'/ 1.8	18	
9 28	3 9.16	+10 35.0	1.254	2.099	19.1	20.7	9 28	3 7.18	+ 6 19.7	2.201	3.018	12.9	22.1
10 8	3 5.34	+ 7 49.5	1.187	2.099	14.8	20.4	10 8	3 2.60	+ 5 31.1	2.112	3.007	10.1	21.9
10 18	2 58.35	+ 4 46.4	1.142	2.099	10.2	20.2	10 18	2 56.00	+ 4 39.6	2.046	2.996	7.0	21.7
10 28	2 49.04	+ 1 39.8	1.123	2.098	7.0	20.0	10 28	2 47.91	+ 3 49.5	2.008	2.984	4.4	21.5
11 7	2 38.80	- 1 12.5	1.131	2.097	8.2	20.0	11 7	2 39.12	+ 3 6.1	1.998	2.971	4.4	21.5
11 17	2 29.14	- 3 34.6	1.166	2.095	12.4	20.3	11 17	2 30.51	+ 2 33.7	2.018	2.958	7.2	21.6
11 27	2 21.44	- 5 16.5	1.224	2.093	16.8	20.5	11 27	2 22.97	+ 2 16.0	2.065	2.945	10.4	21.8
12 7	2 16.61	- 6 16.5	1.302	2.090	20.6	20.8	12 7	2 17.19	+ 2 14.6	2.136	2.931	13.3	22.0
393122	2013 BH ₃₃		11 4.9 305°33	0°9'/ 4.3	16		75213	1999 VD ₂₀₂		11 4.9 357°41	5°3'/ 7.7	18	
9 28	3 5.41	+15 48.1	1.655	2.481	16.1	22.1	9 28	3 8.19	+26 44.5	1.235	2.049	21.2	19.0
10 8	3 2.09	+15 20.5	1.563	2.464	12.6	21.9	10 8	3 5.33	+27 20.8	1.163	2.047	17.4	18.7
10 18	2 56.12	+14 41.4	1.491	2.447	8.5	21.6	10 18	2 58.83	+27 36.8	1.108	2.045	12.9	18.4
10 28	2 48.10	+13 53.6	1.444	2.430	3.8	21.3	10 28	2 49.46	+27 28.9	1.073	2.044	8.2	18.2
11 7	2 39.02	+13 1.7	1.424	2.413	1.7	21.1	11 7	2 38.70	+26 57.3	1.062	2.043	5.3	18.0
11 17	2 30.10	+12 11.8	1.430	2.397	6.5	21.4	11 17	2 28.33	+26 7.0	1.075	2.044	7.6	18.2
11 27	2 22.57	+11 30.7	1.463	2.381	11.2	21.6	11 27	2 20.13	+25 7.6	1.112	2.045	12.2	18.4
12 7	2 17.37	+11 3.5	1.519	2.365	15.3	21.8	12 7	2 15.25	+24 10.3	1.170	2.047	16.7	18.7
20734	1999 XA ₁₆₉		11 4.9 74°17	6°9'/ 1.1	18		148576	2001 QU ₂₇₄		11 4.9 111°48	3°5'/ 2.3	18	
9 28	3 12.46	- 6 29.8	2.183	2.984	13.5	17.3	9 28	3 8.60	+ 6 40.5	2.222	3.036	12.9	20.7
10 8	3 6.26	- 6 49.5	2.131	3.003	11.0	17.1	10 8	3 3.38	+ 5 59.8	2.161	3.055	10.0	20.5
10 18	2 58.12	- 7 0.3	2.102	3.023	8.7	17.0	10 18	2 56.29	+ 5 17.6	2.124	3.074	6.8	20.4
10 28	2 48.72	- 6 57.5	2.099	3.042	7.1	16.9	10 28	2 47.94	+ 4 37.9	2.115	3.092	4.0	20.2
11 7	2 38.92	- 6 38.1	2.125	3.062	7.3	17.0	11 7	2 39.16	+ 4 4.9	2.134	3.109	3.9	20.3
11 17	2 29.61	- 6 1.0	2.179	3.081	9.0	17.1	11 17	2 30.78	+ 3 42.2	2.183	3.126	6.5	20.5
11 27	2 21.62	- 5 7.0	2.260	3.100	11.2	17.3	11 27	2 23.59	+ 3 32.4	2.260	3.143	9.5	20.7
12 7	2 15.52	- 3 58.4	2.364	3.119	13.4	17.5	12 7	2 18.16	+ 3 36.4	2.361	3.159	12.2	20.9
197927	2004 RW ₅₉		11 4.9 61°62	3°4'/ 6.9	18		481909	2009 BH ₃₂		11 4.9 303°97	0°5'/ 5.3	16	
9 28	3 11.32	+24 34.1	1.512	2.311	18.6	20.3	9 28						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
208327	2001 <i>PB</i> ₆₀		11 4.9 109°49	2°8/ 7.1 18			432942	2012 <i>DE</i> ₁₆		11 4.9 238°01	0°7/ 4.6 17		
9 28	3 10.87	+25 10.4	2.176	2.947	14.5	21.1	9 28	3 12.61	+14 47.2	1.502	2.323	17.7	22.1
10 8	3 5.50	+25 20.0	2.103	2.964	11.7	20.9	10 8	3 7.95	+14 44.4	1.420	2.317	13.9	21.9
10 18	2 57.90	+25 16.3	2.051	2.980	8.4	20.7	10 18	3 0.18	+14 32.8	1.357	2.310	9.4	21.6
10 28	2 48.75	+24 58.9	2.026	2.996	4.9	20.5	10 28	2 50.02	+14 14.2	1.318	2.303	4.2	21.3
11 7	2 38.97	+24 29.4	2.029	3.012	2.8	20.4	11 7	2 38.67	+13 51.9	1.306	2.296	1.5	21.1
11 17	2 29.59	+23 51.2	2.061	3.028	4.8	20.6	11 17	2 27.58	+13 30.7	1.322	2.289	6.8	21.4
11 27	2 21.56	+23 9.5	2.123	3.043	8.1	20.8	11 27	2 18.22	+13 16.1	1.363	2.281	11.8	21.7
12 7	2 15.57	+22 29.8	2.210	3.057	11.1	21.0	12 7	2 11.60	+13 12.6	1.427	2.273	16.1	21.9
97273	1999 <i>XZ</i> ₁₄₀		11 4.9 354°70	3°9/ 8.1 17			265564	2005 <i>QT</i> ₄₆		11 4.9 125°57	1°0/ 4.3 17		
9 28	3 4.73	+28 20.6	1.944	2.722	15.8	19.2	9 28	3 11.84	+15 3.5	1.776	2.587	15.8	21.6
10 8	3 1.27	+28 24.2	1.858	2.720	12.9	19.0	10 8	3 6.53	+14 39.6	1.708	2.600	12.3	21.4
10 18	2 55.39	+28 10.5	1.792	2.717	9.6	18.8	10 18	2 58.72	+14 6.7	1.661	2.613	8.1	21.2
10 28	2 47.72	+27 38.7	1.750	2.716	6.1	18.6	10 28	2 49.17	+13 27.7	1.641	2.626	3.6	20.9
11 7	2 39.23	+26 50.3	1.735	2.715	3.9	18.4	11 7	2 38.93	+12 46.8	1.648	2.638	1.6	20.8
11 17	2 31.02	+25 49.6	1.748	2.714	5.5	18.5	11 17	2 29.17	+12 9.0	1.685	2.649	5.9	21.1
11 27	2 24.18	+24 43.4	1.787	2.714	8.8	18.7	11 27	2 20.96	+11 39.5	1.749	2.660	10.1	21.4
12 7	2 19.48	+23 39.1	1.852	2.714	12.2	18.9	12 7	2 15.05	+11 21.8	1.837	2.670	13.6	21.6
456003	2005 <i>YV</i> ₆		11 4.9 7°51	1°2/ 5.7 16			485847	2012 <i>EY</i>		11 4.9 40°78	4°7/ 31.9 17		
9 28	3 3.67	+19 54.9	1.532	2.357	17.2	21.1	9 28	3 3.53	+ 5 13.4	2.089	2.918	13.1	21.6
10 8	3 0.81	+19 51.8	1.460	2.358	13.6	20.9	10 8	2 59.76	+ 4 3.4	2.019	2.920	10.2	21.4
10 18	2 55.23	+19 35.1	1.409	2.361	9.3	20.6	10 18	2 54.08	+ 2 51.2	1.973	2.922	7.2	21.2
10 28	2 47.68	+19 6.1	1.381	2.364	4.5	20.4	10 28	2 47.05	+ 1 42.5	1.953	2.925	4.9	21.1
11 7	2 39.25	+18 28.4	1.379	2.369	1.4	20.2	11 7	2 39.47	+ 0 43.3	1.961	2.928	5.3	21.1
11 17	2 31.19	+17 47.2	1.404	2.375	5.8	20.5	11 17	2 32.19	- 0 1.4	1.998	2.931	7.8	21.3
11 27	2 24.73	+17 9.2	1.454	2.382	10.3	20.8	11 27	2 26.02	- 0 28.0	2.061	2.933	10.7	21.5
12 7	2 20.68	+16 40.0	1.527	2.390	14.3	21.0	12 7	2 21.58	- 0 35.7	2.147	2.936	13.5	21.7
491524	2012 <i>KK</i> ₁₀		11 4.9 266°54	4°2/ 1.9 17			73033	2002 <i>EM</i> ₈₁		11 4.9 76°15	4°4/ 7.5 15		
9 28	3 6.81	+ 2 24.9	2.434	3.248	11.9	21.1	9 28	3 14.26	+26 30.1	1.357	2.154	20.5	19.9
10 8	3 2.05	+ 2 3.8	2.353	3.245	9.4	20.9	10 8	3 9.40	+26 52.4	1.297	2.172	16.6	19.7
10 18	2 55.49	+ 1 44.4	2.297	3.241	6.7	20.8	10 18	3 1.11	+26 54.5	1.256	2.190	12.0	19.5
10 28	2 47.67	+ 1 30.2	2.267	3.237	4.5	20.6	10 28	2 50.35	+26 34.4	1.237	2.208	7.3	19.3
11 7	2 39.28	+ 1 24.7	2.267	3.234	4.6	20.6	11 7	2 38.63	+25 53.9	1.243	2.226	4.4	19.2
11 17	2 31.10	+ 1 30.2	2.295	3.230	6.8	20.8	11 17	2 27.65	+24 58.9	1.276	2.244	6.8	19.4
11 27	2 23.91	+ 1 48.4	2.352	3.227	9.5	20.9	11 27	2 18.89	+23 58.9	1.334	2.262	11.1	19.7
12 7	2 18.30	+ 2 19.4	2.433	3.223	12.0	21.1	12 7	2 13.28	+23 3.3	1.415	2.279	15.1	20.0
154505	2003 <i>FM</i> ₄₁		11 4.9 112°04	4°7/ 7.6 18			304209	2006 <i>QD</i> ₁₂₀		11 4.9 15°03	6°7/ 9.2 17		
9 28	3 16.68	+26 35.8	1.801	2.569	17.2	19.8	9 28	3 4.09	+30 32.8	1.240	2.047	21.5	19.5
10 8	3 10.72	+27 28.3	1.726	2.582	14.0	19.6	10 8	3 2.01	+31 11.3	1.181	2.055	17.9	19.3
10 18	3 1.80	+28 6.6	1.672	2.594	10.4	19.5	10 18	2 56.47	+31 25.1	1.138	2.065	13.7	19.0
10 28	2 50.66	+28 27.4	1.643	2.606	6.8	19.3	10 28	2 48.35	+31 10.8	1.115	2.076	9.5	18.8
11 7	2 38.50	+28 29.6	1.641	2.618	4.7	19.2	11 7	2 39.13	+30 29.2	1.115	2.089	6.8	18.7
11 17	2 26.73	+28 15.5	1.668	2.629	6.4	19.3	11 17	2 30.50	+29 26.2	1.138	2.104	7.9	18.9
11 27	2 16.70	+27 50.7	1.722	2.640	9.8	19.5	11 27	2 24.01	+28 12.4	1.186	2.120	11.5	19.1
12 7	2 9.34	+27 22.3	1.801	2.650	13.1	19.8	12 7	2 20.63	+26 59.3	1.255	2.137	15.4	19.4
217175	2002 <i>RE</i> ₄₂		11 4.9 65°02	1°1/ 4.4 18			488393	2016 <i>WX</i> ₅₁		11 4.9 304°12	6°6/ 1.7 18		
9 28	3 13.38	+14 58.9	1.302	2.132	19.4	20.5	9 28	3 11.39	- 0 40.8	1.694	2.519	15.8	20.6
10 8	3 8.25	+14 38.8	1.256	2.158	15.0	20.3	10 8	3 6.40	- 1 6.3	1.620	2.514	12.7	20.4
10 18	3 0.03	+14 8.3	1.229	2.185	9.9	20.1	10 18	2 58.80	- 1 26.7	1.567	2.509	9.4	20.2
10 28	2 49.73	+13 31.1	1.226	2.212	4.3	19.9	10 28	2 49.28	- 1 36.2	1.539	2.504	6.9	20.0
11 7	2 38.79	+12 52.5	1.249	2.238	1.9	19.8	11 7	2 38.89	- 1 29.8	1.538	2.499	7.0	20.0
11 17	2 28.72	+12 18.9	1.298	2.265	7.0	20.2	11 17	2 28.83	- 1 4.5	1.563	2.495	9.7	20.2
11 27	2 20.77	+11 55.7	1.373	2.291	11.7	20.5	11 27	2 20.26	- 0 19.6	1.614	2.490	13.0	20.4
12 7	2 15.71	+11 46.7	1.470	2.317	15.7	20.8	12 7	2 14.01	+ 0 43.2	1.688	2.486	16.2	20.6
404378	2013 <i>GM</i> ₃₂		11 4.9 250°52	1°9/ 3.4 18			284029	<i>Esplugafanconi</i>		11 4.9 35°12	3°1/ 2.9 18		
9 28	3 5.93	+12 22.9	2.184	2.998	13.1	21.9	9 28	3 7.25	+ 7 7.8	2.045	2.866	13.6	20.2
10 8	3 1.72	+11 44.6	2.091	2.987	10.2	21.7	10 8	3 2.69	+ 6 52.6	1.973	2.871	10.6	20.0
10 18	2 55.48	+10 59.4	2.022	2.975	6.8	21.5	10 18	2 56.06	+ 6 36.2	1.924	2.877	7.1	19.8
10 28	2 47.73	+10 10.3	1.979	2.963	3.2	21.3	10 28	2 47.96	+ 6 21.8	1.902	2.882	4.0	19.7
11 7	2 39.26	+ 9 21.9	1.965	2.951	2.4	21.2	11 7	2 39.25	+ 6 13.0	1.907	2.888	3.5	19.6
11 17	2 30.96	+ 8 38.7	1.980	2.938	5.8	21.4	11 17	2 30.84	+ 6 12.7	1.941	2.894	6.5	19.8
11 27	2 23.74	+ 8 5.3	2.024	2.925	9.5	21.6	11 27	2 23.65	+ 6 23.2	2.003	2.900	9.8	20.1
12 7	2 18.29	+ 7 44.8	2.092	2.912	12.7	21.8	12 7	2 18.32	+ 6 45.4	2.089	2.906	12.8	20.3
173505	2000 <i>UH</i> ₇		11 4.9 351°53	1°5/ 4.1 18			260177	2004 <i>RC</i> ₁₀₅		11 4.9 359°14	0°8/ 5.7 18		
9 28	3 0.51	+17 37.9	1.015	1.879	21.2	19.0	9 28	3 4.07	+21 19.3	2.015	2.817	14.5	19.8
10 8	2 59.52	+16 42.7	0.949	1.871	16.6	18.7	10 8	3 0.46	+20 46.3	1.931	2.816	11.4	19.6
10 18	2 55.00	+15 26.2	0.901	1.865	11.1	18.4	10 18	2 54.70	+19 59.5	1.869	2.816	7.8	19.4
10 28	2 47.75	+13 53.9	0.873	1.860	4.9	18.1	10 28	2 47.38	+19 0.8	1.833	2.815	3.8	19.1
11 7	2 39.25	+12 16.2	0.868	1.857	2.5	17.9	11 7	2 39.39	+17 54.2	1.825	2.815	1.0	18.9
11 17	2 31.23	+10 45.7	0.885	1.855	8.6	18.3	11 17	2 31.70	+16 45.3	1.846	2.816	4.9	19.2
11 27	2 25.32	+ 9 34.4	0.925	1.854	14.5	18.6	11 27	2 25.24	+15 40.6	1.895	2.816	8.8	19.4
12 7	2 22.58	+ 8 49.6	0.983	1.855	19.5	18.9	12 7	2 20.72	+14 45.6	1.969	2.817	12.2	19.7
346584	2008 <i>VB</i> ₇₄		11 4.9 177°32	2°1/ 3.6 18			242803	2006 <i>BO</i> ₇₉		11 4.9 161°53	2°0/ 6.8 18		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
325501	2009 <i>RP</i> ₃₅	11	4.9 144°81	2°1/ 6.5 17			75521	1999 <i>XO</i> ₂₀₆	11	4.9 265°72	2°3/ 6.1 18		
9 28	3 10.43	+21 48.2	2.468	3.243	12.9	21.1	9 28	3 12.48	+20 47.2	1.573	2.377	17.8	19.0
10 8	3 5.04	+22 16.3	2.381	3.247	10.3	20.9	10 8	3 7.91	+21 13.8	1.487	2.371	14.2	18.7
10 18	2 57.61	+22 35.7	2.317	3.251	7.2	20.7	10 18	3 0.23	+21 28.5	1.421	2.365	10.0	18.5
10 28	2 48.68	+22 45.7	2.279	3.254	4.0	20.5	10 28	2 50.11	+21 30.3	1.379	2.358	5.3	18.2
11 7	2 39.06	+22 46.8	2.271	3.257	2.1	20.4	11 7	2 38.74	+21 19.8	1.364	2.352	2.4	18.0
11 17	2 29.62	+22 40.8	2.294	3.261	4.4	20.6	11 17	2 27.59	+21 0.3	1.376	2.346	6.2	18.2
11 27	2 21.27	+22 31.0	2.346	3.264	7.5	20.8	11 27	2 18.12	+20 37.6	1.414	2.339	10.9	18.5
12 7	2 14.70	+22 21.1	2.425	3.266	10.4	21.0	12 7	2 11.40	+20 18.2	1.476	2.332	15.1	18.7
295130	2008 <i>FF</i> ₂₈	11	4.9 233°79	0°8/ 5.4 18			383130	2005 <i>TE</i> ₁₇₉	11	4.9 0°87	2°2/ 6.2 18		
9 28	3 12.63	+18 14.2	1.695	2.500	16.7	21.8	9 28	3 6.57	+21 51.6	1.280	2.108	19.8	21.0
10 8	3 7.73	+18 21.8	1.605	2.492	13.2	21.6	10 8	3 3.73	+21 55.4	1.209	2.107	15.8	20.8
10 18	2 59.94	+18 19.1	1.536	2.483	9.0	21.3	10 18	2 57.59	+21 41.8	1.156	2.106	11.0	20.5
10 28	2 49.91	+18 6.2	1.491	2.474	4.3	21.0	10 28	2 48.92	+21 10.8	1.124	2.106	5.8	20.2
11 7	2 38.73	+17 45.3	1.474	2.465	1.2	20.8	11 7	2 39.08	+20 25.8	1.117	2.106	2.3	20.0
11 17	2 27.74	+17 20.2	1.486	2.455	5.9	21.1	11 17	2 29.66	+19 33.3	1.135	2.108	6.6	20.3
11 27	2 18.29	+16 56.5	1.524	2.444	10.6	21.3	11 27	2 22.20	+18 42.1	1.178	2.110	11.8	20.6
12 7	2 11.37	+16 39.6	1.587	2.434	14.7	21.6	12 7	2 17.71	+18 0.3	1.242	2.113	16.3	20.9
409740	2006 <i>DS</i> ₁₈	11	4.9 156°27	0°8/ 4.2 18			485022	2009 <i>WL</i> ₈₄	11	4.9 250°11	2°9/ 7.7 17		
9 28	3 5.28	+14 28.1	2.786	3.585	11.0	22.1	9 28	3 5.46	+27 14.9	2.546	3.308	12.8	21.7
10 8	3 0.67	+14 7.1	2.704	3.590	8.5	21.9	10 8	3 1.26	+27 10.5	2.446	3.300	10.5	21.5
10 18	2 54.48	+13 40.4	2.646	3.595	5.6	21.7	10 18	2 55.14	+26 52.6	2.369	3.293	7.7	21.3
10 28	2 47.20	+13 10.0	2.615	3.600	2.5	21.5	10 28	2 47.61	+26 20.9	2.318	3.285	4.8	21.1
11 7	2 39.46	+12 38.6	2.615	3.604	1.2	21.4	11 7	2 39.42	+25 37.0	2.296	3.277	2.9	21.0
11 17	2 31.93	+12 9.0	2.646	3.608	4.2	21.7	11 17	2 31.40	+24 43.9	2.303	3.269	4.4	21.1
11 27	2 25.30	+11 44.5	2.706	3.612	7.2	21.9	11 27	2 24.41	+23 46.7	2.339	3.260	7.3	21.2
12 7	2 20.07	+11 27.6	2.793	3.616	9.8	22.1	12 7	2 19.09	+22 50.7	2.402	3.252	10.2	21.4
441204	2007 <i>UG</i> ₈₈	11	4.9 111°53	1°7/ 6.5 18			274520	2008 <i>SN</i> ₁₇₈	11	4.9 42°65	0°7/ 4.5 18		
9 28	3 8.42	+24 38.7	2.101	2.881	14.7	21.1	9 28	3 8.09	+15 36.3	1.749	2.567	15.7	20.1
10 8	3 3.60	+24 1.3	2.027	2.897	11.7	21.0	10 8	3 3.41	+15 13.8	1.705	2.601	12.0	20.0
10 18	2 56.62	+23 8.4	1.975	2.912	8.1	20.8	10 18	2 56.49	+14 42.8	1.683	2.636	7.9	19.8
10 28	2 48.19	+22 1.4	1.950	2.927	4.3	20.6	10 28	2 48.12	+14 6.4	1.686	2.672	3.5	19.6
11 7	2 39.23	+20 44.5	1.953	2.942	1.7	20.4	11 7	2 39.34	+13 28.9	1.717	2.707	1.3	19.5
11 17	2 30.72	+19 23.4	1.987	2.956	4.6	20.6	11 17	2 31.19	+12 54.8	1.777	2.743	5.5	19.9
11 27	2 23.58	+18 5.0	2.049	2.970	8.3	20.9	11 27	2 24.60	+12 28.7	1.863	2.779	9.3	20.2
12 7	2 18.43	+16 55.5	2.138	2.983	11.5	21.1	12 7	2 20.12	+12 13.4	1.974	2.815	12.5	20.5
329214	2012 <i>DT</i> ₇₅	11	4.9 155°13	1°0/ 4.0 18			33026	1997 <i>PD</i> ₆	11	4.9 70°19	4°4/ 7.5 18		
9 28	3 4.43	+14 43.1	2.473	3.279	12.0	21.3	9 28	3 14.81	+26 51.0	1.257	2.059	21.5	18.3
10 8	3 0.23	+14 9.6	2.391	3.282	9.3	21.1	10 8	3 9.95	+27 4.9	1.205	2.082	17.4	18.1
10 18	2 54.30	+13 29.0	2.332	3.284	6.1	20.9	10 18	3 1.51	+26 56.4	1.169	2.105	12.6	17.9
10 28	2 47.15	+12 43.9	2.301	3.286	2.7	20.7	10 28	2 50.55	+26 24.0	1.156	2.128	7.6	17.7
11 7	2 39.48	+11 57.8	2.300	3.288	1.5	20.6	11 7	2 38.72	+25 30.7	1.167	2.151	4.4	17.6
11 17	2 32.05	+11 14.7	2.328	3.290	4.7	20.8	11 17	2 27.79	+24 23.8	1.205	2.174	6.9	17.8
11 27	2 25.61	+10 38.6	2.385	3.292	8.0	21.0	11 27	2 19.27	+23 14.0	1.267	2.197	11.4	18.1
12 7	2 20.71	+10 12.3	2.468	3.294	10.8	21.2	12 7	2 14.03	+22 11.2	1.352	2.219	15.5	18.4
517481	2014 <i>QW</i> ₁₃₈	11	4.9 116°47	2°0/ 3.1 18			523584	2018 <i>FE</i> ₂₇	11	4.9 214°20	4°9/ 8.6 18		
9 28	3 5.37	+11 4.0	2.519	3.328	11.7	22.6	9 28	3 13.10	+30 50.3	2.358	3.096	14.4	22.0
10 8	3 0.80	+10 24.3	2.449	3.342	9.0	22.5	10 8	3 7.57	+31 23.4	2.257	3.088	12.1	21.8
10 18	2 54.58	+9 40.1	2.403	3.355	5.9	22.3	10 18	2 59.59	+31 42.2	2.177	3.080	9.3	21.7
10 28	2 47.24	+8 54.6	2.385	3.368	3.0	22.1	10 28	2 49.72	+31 43.9	2.122	3.071	6.6	21.5
11 7	2 39.48	+8 11.7	2.397	3.381	2.5	22.1	11 7	2 38.88	+31 27.9	2.095	3.061	4.9	21.4
11 17	2 32.02	+7 34.9	2.439	3.393	5.2	22.3	11 17	2 28.15	+30 55.7	2.097	3.051	5.9	21.4
11 27	2 25.55	+7 7.5	2.510	3.405	8.1	22.5	11 27	2 18.65	+30 12.1	2.128	3.041	8.5	21.5
12 7	2 20.61	+6 51.5	2.606	3.417	10.8	22.7	12 7	2 11.23	+29 23.7	2.186	3.029	11.4	21.7
49126	1998 <i>SF</i> ₂₂	11	4.9 41°59	0°7/ 5.4 18			494300	2016 <i>SQ</i> ₄	11	4.9 316°72	3°8/ 7.9 18		
9 28	3 7.86	+20 16.2	1.200	2.035	20.4	18.9	9 28	3 6.75	+29 19.4	1.516	2.306	19.0	21.0
10 8	3 4.50	+19 50.4	1.147	2.051	16.0	18.6	10 8	3 3.54	+28 49.2	1.431	2.301	15.5	20.7
10 18	2 57.85	+19 6.7	1.112	2.067	10.8	18.4	10 18	2 57.27	+27 53.3	1.365	2.296	11.4	20.5
10 28	2 48.88	+18 8.0	1.099	2.084	5.1	18.1	10 28	2 48.72	+26 31.0	1.321	2.292	7.0	20.2
11 7	2 39.08	+17 0.7	1.111	2.102	1.2	17.9	11 7	2 39.15	+24 46.4	1.303	2.287	3.8	20.0
11 17	2 30.02	+15 53.6	1.148	2.120	6.7	18.3	11 17	2 30.00	+22 48.1	1.312	2.283	6.2	20.2
11 27	2 23.11	+14 55.8	1.210	2.139	11.9	18.7	11 27	2 22.65	+20 48.4	1.348	2.279	10.7	20.4
12 7	2 19.15	+14 13.7	1.293	2.158	16.3	19.0	12 7	2 18.03	+18 59.1	1.408	2.275	15.0	20.7
380727	2005 <i>QE</i> ₁₈₃	11	4.9 19°89	3°2/ 6.9 18			503262	2015 <i>KE</i> ₁₂₇	11	4.9 146°51	0°7/ 3.9 18		
9 28	3 5.39	+24 35.5	1.162	1.992	21.3	20.2	9 28	2 57.62	+12 34.5	4.850	5.647	6.7	21.9
10 8	3 2.99	+24 35.0	1.102	1.998	17.1	19.9	10 8	2 54.19	+12 19.0	4.764	5.651	5.1	21.8
10 18	2 57.12	+24 12.2	1.058	2.006	12.1	19.7	10 18	2 49.94	+12 1.0	4.704	5.654	3.3	21.7
10 28	2 48.66	+23 27.1	1.036	2.014	6.8	19.4	10 28	2 45.13	+11 41.7	4.673	5.657	1.5	21.5
11 7	2 39.13	+22 24.1	1.036	2.024	3.2	19.2	11 7	2 40.08	+11 22.6	4.673	5.661	0.9	21.5
11 17	2 30.22	+21 11.4	1.062	2.035	6.8	19.5	11 17	2 35.12	+11 5.1	4.704	5.664	2.7	21.6
11 27	2 23.48	+20 0.1	1.111	2.047	11.9	19.8	11 27	2 30.60	+10 50.8	4.766	5.667	4.4	21.7
12 7	2 19.86	+18 59.8	1.181	2.059	16.5	20.1	12 7	2 26.81	+10 40.9	4.855	5.670	6.0	21.9
324283	2006 <i>CM</i> ₅₄	11	4.9 132°31	0°8/ 4.3 18			277281	2005 <i>SQ</i> ₇₇	11	4.9 99°48	2°9/ 3.0 18		

EPHEMERIDES

11 4.9

11 5.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
320073	2007 <i>EF</i> ₅₁	11	4.9 173°58	0°2/ 5.2 18			318536	2005 <i>EX</i> ₃₂₂	11	4.9 300°39	5°1/ 2.4 18		
9 28	3 5.86	+18 4.9	2.448	3.243	12.4	21.5	9 28	3 10.40	+3 18.9	1.686	2.514	15.8	20.0
10 8	3 1.44	+17 47.7	2.362	3.245	9.7	21.4	10 8	3 5.84	+3 0.5	1.602	2.501	12.5	19.8
10 18	2 55.19	+17 21.9	2.299	3.246	6.5	21.2	10 18	2 58.62	+2 43.8	1.539	2.488	8.9	19.5
10 28	2 47.62	+16 48.9	2.263	3.246	3.0	20.9	10 28	2 49.36	+2 33.5	1.501	2.476	5.7	19.3
11 7	2 39.48	+16 11.6	2.256	3.247	0.7	20.7	11 7	2 39.08	+2 34.6	1.490	2.463	5.5	19.3
11 17	2 31.57	+15 33.4	2.280	3.247	4.3	21.0	11 17	2 29.01	+2 50.4	1.506	2.451	8.7	19.4
11 27	2 24.67	+14 58.4	2.333	3.247	7.7	21.2	11 27	2 20.35	+3 22.9	1.548	2.439	12.5	19.6
12 7	2 19.40	+14 30.5	2.411	3.247	10.7	21.4	12 7	2 14.02	+4 11.8	1.612	2.427	16.1	19.8
362385	2010 <i>NW</i> ₁₁₃	11	4.9 95°73	2°7/ 7.4 18			391936	2008 <i>UQ</i> ₃₅₄	11	5.0 111°29	2°1/ 3.7 18		
9 28	3 6.41	+26 50.6	2.097	2.873	14.8	20.4	9 28	3 11.49	+11 0.5	1.850	2.665	15.1	20.8
10 8	3 2.28	+26 30.9	2.014	2.878	12.0	20.2	10 8	3 6.19	+10 45.1	1.782	2.677	11.7	20.6
10 18	2 55.92	+25 54.8	1.952	2.882	8.6	20.0	10 18	2 58.51	+10 25.0	1.737	2.689	7.8	20.4
10 28	2 47.99	+25 2.5	1.915	2.886	5.1	19.8	10 28	2 49.18	+10 3.3	1.718	2.701	3.7	20.2
11 7	2 39.39	+23 56.8	1.906	2.890	2.7	19.7	11 7	2 39.18	+9 43.5	1.727	2.713	2.5	20.1
11 17	2 31.14	+22 42.9	1.926	2.895	4.8	19.8	11 17	2 29.61	+9 29.5	1.765	2.724	6.2	20.4
11 27	2 24.19	+21 27.6	1.975	2.899	8.3	20.1	11 27	2 21.50	+9 24.7	1.830	2.735	10.1	20.6
12 7	2 19.24	+20 17.5	2.049	2.903	11.6	20.3	12 7	2 15.56	+9 31.2	1.920	2.746	13.4	20.9
97691	2000 <i>GL</i> ₃₁	11	4.9 250°20	1°5/ 3.6 17			370490	2003 <i>RR</i> ₂₀	11	5.0 163°37	3°6/ 6.3 18		
9 28	3 3.79	+12 58.6	2.538	3.348	11.6	20.1	9 28	3 9.83	+20 16.4	0.982	1.829	23.0	20.0
10 8	2 59.79	+12 22.1	2.447	3.340	9.0	19.9	10 8	3 7.11	+21 16.7	0.927	1.834	18.5	19.7
10 18	2 54.08	+11 39.4	2.379	3.332	6.0	19.7	10 18	3 0.30	+22 2.9	0.888	1.841	13.0	19.4
10 28	2 47.13	+10 53.1	2.339	3.323	2.8	19.4	10 28	2 50.32	+22 31.7	0.869	1.849	7.2	19.2
11 7	2 39.62	+10 7.1	2.328	3.315	2.0	19.4	11 7	2 38.88	+22 42.8	0.871	1.859	3.7	19.0
11 17	2 32.27	+9 25.1	2.347	3.306	5.0	19.6	11 17	2 28.09	+22 39.7	0.897	1.870	7.8	19.3
11 27	2 25.83	+8 51.0	2.395	3.297	8.2	19.8	11 27	2 19.87	+22 30.0	0.945	1.883	13.3	19.6
12 7	2 20.88	+8 27.6	2.469	3.288	11.0	19.9	12 7	2 15.39	+22 22.1	1.013	1.896	18.1	20.0
211617	2003 <i>UO</i> ₅₉	11	4.9 44°25	7°7/10.5 18			297185	2010 <i>WO</i> ₆₉	11	5.0 49°65	3°1/ 3.2 18		
9 28	3 10.87	+35 0.0	1.482	2.244	20.6	19.9	9 28	3 9.05	+7 17.0	1.915	2.737	14.4	20.1
10 8	3 6.87	+35 39.5	1.422	2.262	17.4	19.8	10 8	3 4.20	+7 7.4	1.850	2.748	11.2	19.9
10 18	2 59.52	+35 53.7	1.379	2.280	13.8	19.6	10 18	2 57.15	+6 56.7	1.807	2.760	7.5	19.7
10 28	2 49.73	+35 38.4	1.357	2.299	10.2	19.4	10 28	2 48.55	+6 48.1	1.791	2.772	4.1	19.5
11 7	2 38.98	+34 53.7	1.359	2.319	7.9	19.4	11 7	2 39.35	+6 45.0	1.802	2.784	3.5	19.5
11 17	2 28.91	+33 44.5	1.385	2.339	8.3	19.4	11 17	2 30.54	+6 50.2	1.842	2.796	6.6	19.8
11 27	2 20.99	+32 21.0	1.438	2.359	11.0	19.6	11 27	2 23.07	+7 5.7	1.910	2.809	10.0	20.0
12 7	2 16.12	+30 54.6	1.513	2.380	14.2	19.9	12 7	2 17.62	+7 32.4	2.001	2.822	13.2	20.2
154002	2002 <i>AD</i> ₁₉₃	11	4.9 82°37	3°8/ 8.1 18			449466	2013 <i>ME</i> ₂	11	5.0 198°94	3°9/ 1.5 18		
9 28	3 8.39	+28 18.2	2.132	2.897	15.0	20.1	9 28	3 4.21	+6 23.3	2.305	3.127	12.3	21.4
10 8	3 3.84	+28 30.3	2.053	2.906	12.2	19.9	10 8	3 0.19	+5 24.1	2.228	3.126	9.5	21.2
10 18	2 56.99	+28 27.1	1.995	2.915	9.1	19.7	10 18	2 54.37	+4 22.1	2.175	3.125	6.6	21.1
10 28	2 48.49	+28 7.4	1.962	2.925	5.9	19.6	10 28	2 47.29	+3 22.1	2.149	3.124	4.2	20.9
11 7	2 39.29	+27 32.5	1.956	2.934	3.9	19.5	11 7	2 39.66	+2 29.1	2.152	3.123	4.4	20.9
11 17	2 30.43	+26 45.9	1.979	2.943	5.2	19.6	11 17	2 32.28	+1 47.6	2.183	3.121	6.9	21.1
11 27	2 22.90	+25 53.3	2.030	2.952	8.2	19.8	11 27	2 25.90	+1 21.1	2.242	3.120	9.8	21.3
12 7	2 17.44	+25 1.1	2.107	2.961	11.3	20.0	12 7	2 21.13	+1 10.9	2.325	3.118	12.5	21.4
510311	2011 <i>QN</i> ₆₃	11	4.9 95°55	5°8/ 9.1 18			7501	Farra	11	5.0 8°35	0°4/ 4.7 18		
9 28	3 15.48	+31 48.6	1.996	2.738	16.6	21.1	9 28	3 3.65	+16 25.7	2.148	2.960	13.4	17.5
10 8	3 9.56	+32 34.2	1.927	2.759	13.8	20.9	10 8	3 0.00	+16 3.8	2.068	2.961	10.4	17.3
10 18	3 0.92	+33 2.4	1.878	2.779	10.7	20.8	10 18	2 54.37	+15 33.4	2.011	2.963	6.9	17.1
10 28	2 50.29	+33 10.0	1.853	2.799	7.7	20.6	10 28	2 47.32	+14 56.6	1.979	2.964	3.1	16.9
11 7	2 38.85	+32 56.4	1.855	2.819	5.8	20.6	11 7	2 39.66	+14 16.8	1.976	2.966	1.0	16.7
11 17	2 27.86	+32 24.3	1.886	2.838	6.6	20.6	11 17	2 32.26	+13 38.3	2.002	2.969	4.9	17.0
11 27	2 18.54	+31 39.7	1.944	2.857	9.1	20.8	11 27	2 25.97	+13 5.5	2.056	2.972	8.5	17.2
12 7	2 11.72	+30 50.3	2.028	2.875	12.0	21.1	12 7	2 21.43	+12 41.9	2.134	2.975	11.7	17.4
318860	2005 <i>TO</i> ₅₆	11	4.9 356°76	0°0/ 4.8 18			521962	2015 <i>VJ</i> ₁₅₉	11	5.0 337°59	5°5/31.8 18		
9 28	3 6.22	+16 43.7	1.817	2.634	15.3	21.3	9 28	3 4.84	+1 53.4	2.044	2.872	13.4	21.4
10 8	3 2.40	+16 35.9	1.737	2.632	11.9	21.1	10 8	3 0.91	+1 0.3	1.972	2.869	10.6	21.2
10 18	2 56.18	+16 18.8	1.679	2.631	8.0	20.9	10 18	2 54.97	+0 8.1	1.922	2.867	7.7	21.1
10 28	2 48.18	+15 53.9	1.645	2.630	3.6	20.6	10 28	2 47.60	-0 37.7	1.898	2.864	5.7	20.9
11 7	2 39.38	+15 24.7	1.639	2.629	0.9	20.4	11 7	2 39.61	-1 11.5	1.902	2.862	6.0	21.0
11 17	2 30.86	+14 55.2	1.661	2.629	5.5	20.7	11 17	2 31.88	-1 29.4	1.933	2.860	8.4	21.1
11 27	2 23.68	+14 30.6	1.710	2.630	9.7	21.0	11 27	2 25.29	-1 28.8	1.990	2.858	11.3	21.3
12 7	2 18.63	+14 14.9	1.783	2.630	13.3	21.2	12 7	2 20.49	-1 9.9	2.069	2.857	14.0	21.5
78004	2002 <i>JK</i> ₅₁	11	4.9 155°33	0°3/ 5.2 18			42474	1981 <i>EJ</i> ₂₇	11	5.0 147°69	0°4/ 5.3 18 R		
9 28	3 13.27	+18 14.2	1.806	2.606	16.0	20.2	9 28	3 12.90	+18 56.2	1.850	2.647	15.8	20.7
10 8	3 7.80	+18 0.9	1.729	2.614	12.5	20.0	10 8	3 7.42	+18 36.4	1.774	2.657	12.4	20.5
10 18	2 59.73	+17 36.4	1.674	2.621	8.5	19.8	10 18	2 59.43	+18 4.6	1.721	2.667	8.3	20.3
10 28	2 49.76	+17 2.2	1.644	2.627	3.9	19.5	10 28	2 49.63	+17 22.6	1.693	2.676	3.9	20.0
11 7	2 39.00	+16 21.5	1.643	2.633	0.9	19.3	11 7	2 39.11	+16 34.0	1.694	2.685	0.9	19.8
11 17	2 28.64	+15 39.4	1.671	2.638	5.6	19.7	11 17	2 29.01	+15 44.1	1.725	2.692	5.4	20.2
11 27	2 19.84	+15 1.7	1.727	2.643	9.8	19.9	11 27	2 20.45	+14 58.8	1.783	2.699	9.6	20.4
12 7	2 13.40	+14 33.3	1.807	2.647	13.6	20.2	12 7	2 14.19	+14 23.3	1.867	2.705	13.2	20.7
99033	2001 <i>DQ</i> ₁₀₁	11	4.9 117°03	2°6/ 6.8 18			179731	2002 <i>RW</i> ₉₉	11	5.0 60°54	2°5/ 3.5 18		
9 28	3 13.23	+23 28.0	2.										