

EPHEMERIDES

10 17.9

10 18.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
411118	2009 WE ₁₂₄	10 17.9 288°07		2°9/15.1 18			322677	1999 TC ₃₀₁	10 18.0 263°03		0°1/18.1 18		
9 8	1 56.17	+ 1 37.3	2.376	3.188	12.4	21.0	9 8	1 53.63	+10 57.3	2.212	3.089	10.8	21.0
9 18	1 52.32	+ 1 9.3	2.290	3.183	9.8	20.9	9 28	1 47.67	+10 44.9	2.139	3.083	7.5	20.8
9 28	1 46.65	+ 0 37.3	2.227	3.178	6.8	20.7	10 8	1 40.19	+10 24.8	2.092	3.076	3.9	20.6
10 8	1 39.61	+ 0 5.0	2.191	3.173	3.9	20.5	10 18	1 31.85	+ 9 59.8	2.074	3.070	0.1	20.3
10 18	1 31.83	- 0 23.5	2.182	3.168	3.1	20.4	10 28	1 23.51	+ 9 33.5	2.085	3.064	3.8	20.6
10 28	1 24.11	- 0 44.0	2.203	3.163	5.5	20.6	11 7	1 16.02	+ 9 10.3	2.124	3.057	7.5	20.8
11 7	1 17.19	- 0 53.2	2.251	3.158	8.6	20.7	11 17	1 10.05	+ 8 53.8	2.190	3.051	10.8	21.0
11 17	1 11.71	- 0 49.3	2.325	3.153	11.4	20.9	11 27	1 6.11	+ 8 47.2	2.278	3.044	13.6	21.2
494489	2016 WR ₄₁	10 17.9 312°00		2°0/16.6 18			478845	2012 VC ₅₂	10 18.0 339°31		1°9/16.6 17		
9 8	1 57.75	+ 6 18.8	1.631	2.455	16.7	20.9	9 18	1 50.68	+ 8 6.2	1.232	2.143	15.0	20.1
9 18	1 54.64	+ 6 3.0	1.542	2.441	13.3	20.7	9 28	1 46.46	+ 7 18.9	1.169	2.129	10.4	19.8
9 28	1 48.87	+ 5 37.6	1.473	2.428	9.2	20.4	10 8	1 39.86	+ 6 20.5	1.127	2.116	5.3	19.5
10 8	1 40.98	+ 5 6.2	1.427	2.415	4.7	20.1	10 18	1 31.85	+ 5 17.8	1.109	2.104	2.0	19.3
10 18	1 31.83	+ 4 34.0	1.408	2.402	2.1	19.9	10 28	1 23.80	+ 4 20.4	1.116	2.093	6.8	19.6
10 28	1 22.62	+ 4 6.9	1.415	2.389	6.1	20.1	11 7	1 17.08	+ 3 37.0	1.147	2.084	12.0	19.8
11 7	1 14.57	+ 3 50.7	1.448	2.377	10.7	20.4	11 17	1 12.74	+ 3 13.5	1.199	2.075	16.7	20.1
11 17	1 8.62	+ 3 49.1	1.505	2.366	14.8	20.6	11 27	1 11.43	+ 3 12.8	1.268	2.068	20.5	20.3
14244	Labnow	10 17.9 51°68		1°1/17.1 18			228125	2008 YV ₃₀	10 18.0 319°11		2°4/13.8 18		
9 8	1 58.78	+ 8 17.7	1.754	2.566	16.2	18.9	9 18	1 45.87	- 2 8.5	4.109	4.999	5.9	19.5
9 18	1 55.03	+ 8 2.0	1.678	2.571	12.8	18.7	9 28	1 41.78	- 2 38.9	4.050	4.996	4.2	19.4
9 28	1 48.84	+ 7 36.2	1.624	2.576	8.8	18.5	10 8	1 37.00	- 3 7.9	4.018	4.994	2.7	19.3
10 8	1 40.82	+ 7 3.4	1.594	2.581	4.4	18.3	10 18	1 31.87	- 3 33.2	4.017	4.992	2.6	19.3
10 18	1 31.84	+ 6 28.2	1.591	2.586	1.2	18.0	10 28	1 26.77	- 3 52.5	4.045	4.990	3.9	19.4
10 28	1 23.00	+ 5 56.2	1.615	2.592	5.2	18.3	11 7	1 22.08	- 4 4.1	4.102	4.988	5.6	19.5
11 7	1 15.35	+ 5 32.5	1.667	2.597	9.4	18.6	11 17	1 18.12	- 4 6.8	4.185	4.985	7.3	19.6
11 17	1 9.69	+ 5 21.1	1.742	2.603	13.1	18.8	11 27	1 15.17	- 4 0.2	4.292	4.983	8.7	19.7
518261	2016 WE ₅	10 17.9 344°75		2°0/16.8 18			267527	2002 PX ₁₀	10 18.0 156°30		7°2/25.5 18		
9 8	1 56.35	+ 6 14.1	1.366	2.205	18.5	20.6	9 18	1 57.73	+33 16.4	2.181	2.955	14.5	20.8
9 18	1 53.96	+ 6 5.8	1.288	2.196	14.7	20.4	9 28	1 50.76	+33 39.7	2.108	2.960	12.1	20.6
9 28	1 48.62	+ 5 47.4	1.230	2.188	10.2	20.1	10 8	1 41.86	+33 39.8	2.056	2.965	9.7	20.5
10 8	1 40.91	+ 5 22.9	1.193	2.181	5.2	19.8	10 18	1 31.87	+33 15.3	2.030	2.969	7.7	20.4
10 18	1 31.84	+ 4 57.6	1.180	2.175	2.1	19.6	10 28	1 21.90	+32 27.9	2.030	2.974	7.3	20.3
10 28	1 22.78	+ 4 38.2	1.193	2.169	6.5	19.9	11 7	1 13.03	+31 23.3	2.058	2.977	8.6	20.4
11 7	1 15.11	+ 4 30.5	1.230	2.165	11.5	20.1	11 17	1 6.12	+30 9.0	2.112	2.981	10.8	20.6
11 17	1 9.86	+ 4 38.2	1.289	2.162	16.0	20.4	11 27	1 1.72	+28 53.6	2.189	2.984	13.2	20.7
74951	1999 TX ₁₉₀	10 17.9 81°78		8°8/24.8 18			411167	2010 DV ₁₉	10 18.0 8°67		0°5/18.7 18		
9 8	2 3.57	+30 10.1	1.536	2.264	21.5	19.9	9 18	1 49.33	+15 48.4	2.261	3.130	10.9	20.5
9 18	1 59.89	+31 15.7	1.460	2.272	18.7	19.7	9 28	1 44.62	+14 32.4	2.192	3.130	7.7	20.3
9 28	1 52.86	+31 56.8	1.401	2.280	15.4	19.5	10 8	1 38.59	+13 3.0	2.149	3.131	4.1	20.1
10 8	1 43.12	+32 7.9	1.360	2.288	12.1	19.3	10 18	1 31.87	+11 25.0	2.135	3.131	0.6	19.8
10 18	1 31.84	+31 46.1	1.343	2.296	9.4	19.2	10 28	1 25.25	+ 9 45.1	2.152	3.132	3.6	20.1
10 28	1 20.61	+30 54.2	1.349	2.304	8.9	19.2	11 7	1 19.46	+ 8 10.4	2.198	3.132	7.2	20.3
11 7	1 11.04	+29 40.6	1.381	2.312	10.9	19.3	11 17	1 15.08	+ 6 47.1	2.271	3.133	10.4	20.5
11 17	1 4.26	+28 17.0	1.437	2.320	14.0	19.5	11 27	1 12.54	+ 5 39.5	2.367	3.134	13.1	20.7
390525	1996 VB ₂₆	10 17.9 239°82		3°1/15.1 18			441758	2009 CN ₂₂	10 18.0 106°10		4°7/22.8 18		
9 8	1 57.21	+ 4 35.2	1.942	2.759	14.6	21.9	9 18	1 56.69	+25 48.0	2.107	2.927	13.4	21.3
9 18	1 53.66	+ 3 40.2	1.853	2.750	11.5	21.6	9 28	1 49.81	+25 50.7	2.049	2.945	10.5	21.2
9 28	1 47.87	+ 2 35.8	1.786	2.740	8.0	21.4	10 8	1 41.27	+25 34.1	2.015	2.962	7.5	21.0
10 8	1 40.34	+ 1 26.9	1.745	2.730	4.4	21.2	10 18	1 31.88	+24 59.1	2.007	2.980	5.1	20.9
10 18	1 31.84	+ 0 19.9	1.731	2.719	3.4	21.1	10 28	1 22.66	+24 9.3	2.028	2.997	5.2	20.9
10 28	1 23.35	- 0 38.0	1.746	2.709	6.5	21.3	11 7	1 14.57	+23 10.7	2.077	3.013	7.5	21.1
11 7	1 15.85	- 1 21.1	1.788	2.698	10.3	21.5	11 17	1 8.34	+22 10.1	2.153	3.029	10.3	21.3
11 17	1 10.12	- 1 45.7	1.853	2.686	13.7	21.7	11 27	1 4.42	+21 14.1	2.253	3.045	12.9	21.5
403765	2011 CE ₂₀	10 18.0 14°34		4°5/22.2 17			521399	2015 MV ₁₄₃	10 18.0 250°89		5°2/12.9 18		
9 18	1 54.26	+23 53.7	2.111	2.944	13.0	20.7	9 18	1 52.89	- 4 18.1	2.062	2.959	10.5	20.6
9 28	1 48.26	+24 13.6	2.041	2.945	10.1	20.5	9 28	1 47.16	- 5 17.8	2.005	2.952	7.7	20.4
10 8	1 40.54	+24 16.7	1.994	2.947	7.1	20.4	10 8	1 39.93	- 6 14.0	1.974	2.945	5.5	20.3
10 18	1 31.85	+24 2.9	1.974	2.949	4.8	20.2	10 18	1 31.88	- 7 0.6	1.970	2.938	5.6	20.3
10 28	1 23.15	+23 34.7	1.981	2.951	5.1	20.3	10 28	1 23.89	- 7 32.0	1.994	2.931	7.8	20.4
11 7	1 15.41	+22 57.2	2.016	2.954	7.5	20.4	11 7	1 16.82	- 7 44.9	2.044	2.924	10.7	20.6
11 17	1 9.40	+22 16.1	2.078	2.957	10.5	20.6	11 17	1 11.34	- 7 38.2	2.117	2.917	13.4	20.7
11 27	1 5.67	+21 37.6	2.162	2.959	13.2	20.8	11 27	1 7.91	- 7 12.6	2.210	2.909	15.8	20.9
184916	2005 UW ₄₀₇	10 18.0 346°03		1°4/16.8 18			183543	2003 HN ₂₅	10 18.0 144°85		0°3/17.7 18		
9 18	1 52.76	+ 7 20.7	1.915	2.806	11.5	20.7	9 18	1 52.33	+10 44.9	2.168	3.049	10.8	21.2
9 28	1 47.16	+ 6 46.8	1.853	2.805	7.9	20.4	9 28	1 46.72	+10 7.3	2.106	3.052	7.5	21.0
10 8	1 39.94	+ 6 7.0	1.817	2.804	4.0	20.2	10 8	1 39.68	+ 9 21.5	2.070	3.055	3.8	20.8
10 18	1 31.85	+ 5 25.5	1.808	2.802	1.5	20.0	10 18	1 31.89	+ 8 31.2	2.062	3.058	0.4	20.5
10 28	1 23.82	+ 4 47.8	1.827	2.801	4.9	20.3	10 28	1 24.18	+ 7 41.7	2.083	3.061	4.0	20.8
11 7	1 16.78	+ 4 18.8	1.874	2.801	8.8	20.5	11 7	1 17.37	+ 6 57.8	2.133	3.063	7.6	21.0
11 17	1 11.45	+ 4 2.2	1.946	2.800	12.2	20.7	11 17	1 12.09	+ 6 23.8	2.208	3.065	10.9	21.2
11 27	1 8.30	+ 3 59.9	2.039	2.799	15.1	20.9	11 27	1 8.79	+ 6 2.6	2.306	3.068	13.6	21.4
22026	1999 XS ₁₁₉	10 18.0 25°41		0°9/17.4 18			515000	2009 PC ₈	10 18.0 49°65		3°4/14.5 18		
9 18	1 55.11	+ 7 31.9	1.630	2.525	13.0	17.7	9 18	1 50.70	+ 3 26.7	1.785	2.688		

EPHEMERIDES

10 18.0

10 18.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
374787	2006 <i>TJ</i> ₃₈		10 18.0 120°71	1°0/17.3	16		176688	2002 <i>PM</i> ₁₃₂		10 18.0 84°63	7°4/23.7	17	
9 18	1 59.00	+ 8 23.1	1.573	2.461	13.7	21.2	9 18	2 0.29	+28 21.6	1.449	2.275	18.1	19.9
9 28	1 51.65	+ 7 59.0	1.523	2.472	9.5	21.0	9 28	1 52.98	+28 49.1	1.396	2.291	14.5	19.7
10 8	1 42.28	+ 7 27.3	1.497	2.483	4.8	20.8	10 8	1 43.13	+28 48.4	1.364	2.306	10.8	19.6
10 18	1 31.90	+ 6 52.5	1.498	2.494	1.1	20.5	10 18	1 31.93	+28 18.3	1.356	2.322	7.9	19.4
10 28	1 21.76	+ 6 20.7	1.528	2.504	5.4	20.9	10 28	1 20.95	+27 23.1	1.373	2.337	7.7	19.5
11 7	1 13.02	+ 5 57.3	1.584	2.514	9.8	21.1	11 7	1 11.67	+26 11.8	1.415	2.352	10.2	19.7
11 17	1 6.52	+ 5 46.3	1.665	2.524	13.7	21.4	11 17	1 5.12	+24 55.3	1.482	2.367	13.5	19.9
11 27	1 2.76	+ 5 49.9	1.766	2.533	16.9	21.7	11 27	1 1.83	+23 44.2	1.570	2.382	16.7	20.2
19511	1998 <i>MC</i> ₄₅		10 18.0 352°18	0°6/18.6	18		274937	2009 <i>SU</i> ₂₁₂		10 18.0 333°91	0°3/17.8	18	
9 18	1 48.50	+16 29.6	1.316	2.209	15.6	16.7	9 18	1 55.22	+10 28.1	1.314	2.212	15.2	21.1
9 28	1 44.78	+15 1.9	1.254	2.203	11.1	16.4	9 28	1 49.52	+10 5.2	1.253	2.206	10.6	20.8
10 8	1 38.93	+13 10.8	1.213	2.198	5.9	16.1	10 8	1 41.42	+ 9 30.4	1.214	2.201	5.5	20.5
10 18	1 31.90	+11 4.4	1.198	2.194	0.7	15.7	10 18	1 31.93	+ 8 48.4	1.199	2.195	0.4	20.1
10 28	1 24.95	+ 8 55.1	1.210	2.192	5.3	16.1	10 28	1 22.45	+ 8 6.5	1.210	2.190	5.7	20.5
11 7	1 19.31	+ 6 56.1	1.247	2.190	10.5	16.3	11 7	1 14.37	+ 7 32.4	1.246	2.186	10.9	20.8
11 17	1 15.87	+ 5 18.0	1.307	2.189	15.2	16.6	11 17	1 8.75	+ 7 11.8	1.305	2.182	15.5	21.0
11 27	1 15.18	+ 4 6.9	1.386	2.189	19.0	16.9	11 27	1 6.19	+ 7 8.6	1.382	2.179	19.3	21.3
268351	2005 <i>SV</i> ₂₅₃		10 18.0 55°29	4°6/14.6	17		185524	2007 <i>VK</i> ₁₆₂		10 18.0 298°51	1°1/18.9	18	
9 18	1 54.52	+ 2 30.1	1.265	2.177	14.7	20.2	9 18	1 53.58	+14 27.1	1.769	2.646	13.0	20.5
9 28	1 48.70	+ 1 8.6	1.233	2.192	10.1	20.0	9 28	1 47.96	+14 2.8	1.699	2.640	9.3	20.3
10 8	1 40.79	- 0 14.6	1.223	2.208	5.8	19.8	10 8	1 40.48	+13 25.1	1.652	2.634	5.1	20.0
10 18	1 31.91	- 1 29.6	1.238	2.224	4.9	19.8	10 18	1 31.93	+12 37.4	1.633	2.628	1.1	19.7
10 28	1 23.41	- 2 27.1	1.278	2.240	8.5	20.1	10 28	1 23.39	+11 45.3	1.641	2.622	4.3	20.0
11 7	1 16.50	- 3 1.3	1.343	2.257	12.7	20.4	11 7	1 15.90	+10 55.4	1.677	2.616	8.6	20.2
11 17	1 11.97	- 3 10.2	1.429	2.273	16.4	20.6	11 17	1 10.30	+10 13.7	1.737	2.611	12.5	20.4
11 27	1 10.23	- 2 55.1	1.533	2.290	19.4	20.9	11 27	1 7.14	+ 9 44.9	1.819	2.605	15.7	20.6
398553	2011 <i>US</i> ₃₈₆		10 18.0 50°47	6°2/13.4	18		6695	Barrettduff		10 18.0 342°23	11°3/ 7.4	18	
9 18	1 55.16	- 4 40.8	1.539	2.443	13.0	20.3	9 18	1 48.81	-11 53.2	1.236	2.150	14.7	17.1
9 28	1 48.84	- 5 36.1	1.511	2.461	9.5	20.2	9 28	1 45.07	-14 7.5	1.195	2.138	12.2	17.0
10 8	1 40.76	- 6 24.4	1.506	2.480	6.7	20.1	10 8	1 39.12	-16 8.2	1.176	2.126	11.3	16.9
10 18	1 31.91	- 6 58.7	1.528	2.499	6.5	20.1	10 18	1 31.93	-17 41.3	1.180	2.115	12.5	16.9
10 28	1 23.44	- 7 13.5	1.576	2.519	9.0	20.3	10 28	1 24.82	-18 36.2	1.205	2.106	15.1	17.1
11 7	1 16.37	- 7 6.5	1.648	2.538	12.2	20.5	11 7	1 19.06	-18 49.1	1.250	2.097	18.2	17.2
11 17	1 11.38	- 6 38.4	1.742	2.558	15.2	20.8	11 17	1 15.58	-18 21.7	1.311	2.090	21.2	17.4
11 27	1 8.87	- 5 51.4	1.855	2.579	17.6	21.0	11 27	1 14.93	-17 19.5	1.386	2.085	23.6	17.6
132818	2002 <i>QK</i> ₆₀		10 18.0 118°56	1°6/16.1	18		509439	2007 <i>EO</i> ₁₉₆		10 18.0 228°89	0°3/18.3	18	
9 18	1 49.73	+ 7 26.1	2.371	3.259	9.7	20.2	9 18	1 56.32	+12 15.5	1.877	2.754	12.4	22.3
9 28	1 44.82	+ 6 21.9	2.311	3.262	6.6	20.0	9 28	1 49.81	+11 48.6	1.801	2.744	8.8	22.1
10 8	1 38.68	+ 5 11.9	2.278	3.265	3.3	19.8	10 8	1 41.42	+11 10.6	1.750	2.734	4.6	21.8
10 18	1 31.91	+ 4 1.1	2.274	3.267	1.7	19.7	10 18	1 31.94	+10 24.9	1.727	2.723	0.3	21.4
10 28	1 25.23	+ 2 54.9	2.300	3.270	4.5	19.9	10 28	1 22.41	+ 9 36.9	1.733	2.712	4.4	21.7
11 7	1 19.32	+ 1 58.5	2.354	3.272	7.7	20.1	11 7	1 13.90	+ 8 52.8	1.767	2.700	8.7	22.0
11 17	1 14.75	+ 1 15.4	2.435	3.275	10.6	20.3	11 17	1 7.24	+ 8 17.8	1.826	2.688	12.5	22.2
11 27	1 11.92	+ 0 47.6	2.537	3.277	13.0	20.5	11 27	1 3.01	+ 7 56.1	1.907	2.676	15.7	22.4
163209	2002 <i>EC</i> ₄₉		10 18.0 101°90	2°6/15.7	16		246457	2007 <i>VU</i> ₂₄₄		10 18.0 51°38	2°2/19.9	18	
9 18	1 55.69	+ 4 42.0	1.891	2.782	11.6	20.9	9 18	1 53.56	+17 49.4	1.713	2.582	13.8	20.5
9 28	1 48.98	+ 3 43.7	1.854	2.805	7.9	20.7	9 28	1 47.91	+17 23.9	1.653	2.587	10.1	20.3
10 8	1 40.78	+ 2 42.3	1.842	2.827	4.2	20.6	10 8	1 40.41	+16 41.7	1.616	2.592	5.9	20.1
10 18	1 31.92	+ 1 43.7	1.859	2.849	2.7	20.5	10 18	1 31.94	+15 46.2	1.605	2.598	2.4	19.9
10 28	1 23.36	+ 0 54.0	1.905	2.870	5.7	20.7	10 28	1 23.58	+14 43.3	1.622	2.604	4.3	20.0
11 7	1 15.98	+ 0 17.8	1.978	2.891	9.3	21.0	11 7	1 16.39	+13 40.5	1.666	2.609	8.4	20.3
11 17	1 10.41	- 0 2.3	2.077	2.911	12.4	21.2	11 17	1 11.18	+12 44.7	1.736	2.615	12.2	20.5
11 27	1 7.04	- 0 5.6	2.196	2.931	14.9	21.5	11 27	1 8.43	+12 1.5	1.827	2.621	15.4	20.7
477886	2011 <i>JA</i> ₁₃		10 18.0 71°02	11°7/ 9.9	18		37663	1994 <i>PT</i> ₃₂		10 18.0 344°16	2°5/15.5	18	
9 18	1 59.66	-20 29.1	1.568	2.438	14.8	20.0	9 18	1 49.68	+ 6 23.9	1.795	2.696	11.6	18.9
9 28	1 51.79	-21 38.7	1.561	2.464	12.7	20.0	9 28	1 45.13	+ 5 5.0	1.735	2.691	8.0	18.7
10 8	1 42.16	-22 23.9	1.577	2.490	11.8	20.0	10 8	1 38.97	+ 3 39.0	1.700	2.687	4.1	18.5
10 18	1 31.92	-22 38.1	1.616	2.515	12.2	20.1	10 18	1 31.93	+ 2 12.8	1.692	2.684	2.7	18.4
10 28	1 22.31	-22 18.6	1.678	2.541	13.7	20.2	10 28	1 24.97	+ 0 54.4	1.713	2.680	6.0	18.6
11 7	1 14.36	-21 27.7	1.762	2.566	15.6	20.4	11 7	1 18.99	- 0 9.2	1.760	2.677	9.9	18.8
11 17	1 8.73	-20 10.6	1.865	2.591	17.6	20.6	11 17	1 14.69	- 0 53.7	1.831	2.675	13.3	19.0
11 27	1 5.73	-18 33.4	1.984	2.616	19.1	20.8	11 27	1 12.56	- 1 17.1	1.922	2.673	16.2	19.2
73374	2002 <i>KC</i> ₁₄		10 18.0 72°85	4°3/13.7	18		105169	2000 <i>OC</i> ₁₅		10 18.0 358°75	3°4/20.2	18	
9 18	1 51.47	+ 2 35.1	1.693	2.597	12.0	19.2	9 18	1 54.19	+18 32.3	1.080	1.969	18.4	18.7
9 28	1 46.37	+ 0 48.9	1.643	2.599	8.3	19.0	9 28	1 49.20	+18 21.1	1.023	1.967	13.6	18.4
10 8	1 39.58	- 1 1.0	1.618	2.601	5.0	18.8	10 8	1 41.39	+17 45.3	0.987	1.965	8.3	18.1
10 18	1 31.92	- 2 45.4	1.620	2.602	4.7	18.8	10 18	1 31.95	+16 47.8	0.972	1.965	3.6	17.9
10 28	1 24.40	- 4 14.9	1.651	2.604	7.8	19.0	10 28	1 22.57	+15 37.2	0.982	1.965	5.9	18.0
11 7	1 17.98	- 5 22.7	1.708	2.606	11.4	19.2	11 7	1 14.91	+14 24.9	1.014	1.966	11.3	18.3
11 17	1 13.38	- 6 5.5	1.787	2.608	14.7	19.5	11 17	1 10.13	+13 22.2	1.068	1.967	16.3	18.6
11 27	1 11.06	- 6 22.9	1.885	2.610	17.4	19.7	11 27	1 8.88	+12 37.2	1.140	1.970	20.5	18.9
9882	Stallman		10 18.0 58°90	0°7/17.5	18		64921	2001 <i>YY</i> ₁₀₃		10 18.0 347°5			

EPHEMERIDES

10 18.0

10 18.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
277823	2006 <i>GV</i> ₅₀		10 18.0 212°07	5°8/12.1	18		118194	Sabinagarroni		10 18.0 62°07	2°8/19.9	18	
9 18	1 53.92	- 9 52.7	2.472	3.356	9.5	20.2	9 18	1 58.56	+17 14.8	1.334	2.211	16.5	19.7
9 28	1 47.66	-10 30.2	2.421	3.354	7.4	20.1	9 28	1 51.64	+17 14.6	1.291	2.228	12.0	19.5
10 8	1 40.13	-10 59.9	2.396	3.351	5.9	20.0	10 8	1 42.40	+16 56.0	1.269	2.246	7.1	19.3
10 18	1 31.95	-11 17.4	2.399	3.349	6.1	20.0	10 18	1 32.02	+16 21.8	1.272	2.264	3.0	19.1
10 28	1 23.89	-11 19.2	2.431	3.347	7.7	20.1	10 28	1 21.96	+15 38.1	1.301	2.283	5.1	19.3
11 7	1 16.65	-11 3.7	2.488	3.344	9.9	20.2	11 7	1 13.58	+14 53.2	1.356	2.301	9.7	19.6
11 17	1 10.82	-10 31.2	2.570	3.341	12.1	20.4	11 17	1 7.78	+14 14.5	1.435	2.320	13.9	19.9
11 27	1 6.80	- 9 43.1	2.672	3.339	14.0	20.6	11 27	1 5.05	+13 47.9	1.534	2.338	17.4	20.2
443088	2013 <i>GH</i> ₁₁₇		10 18.0 334°84	1°6/16.6	18		64369	2001 <i>UW</i> ₁₁₀		10 18.0 287°29	0°0/18.1	18	
9 18	1 52.12	+ 7 18.9	1.812	2.706	11.9	20.9	9 18	1 54.59	+12 2.4	1.541	2.430	13.9	20.7
9 28	1 46.83	+ 6 34.9	1.749	2.702	8.2	20.6	9 28	1 48.98	+11 27.6	1.465	2.414	9.9	20.4
10 8	1 39.85	+ 5 44.2	1.712	2.699	4.1	20.4	10 8	1 41.17	+10 39.3	1.412	2.398	5.1	20.1
10 18	1 31.95	+ 4 51.8	1.701	2.695	1.7	20.2	10 18	1 32.02	+ 9 41.7	1.385	2.382	0.0	19.6
10 28	1 24.10	+ 4 4.0	1.718	2.692	5.3	20.5	10 28	1 22.75	+ 8 42.1	1.386	2.366	5.2	20.0
11 7	1 17.26	+ 3 26.4	1.763	2.689	9.3	20.7	11 7	1 14.61	+ 7 48.3	1.412	2.350	10.1	20.3
11 17	1 12.18	+ 3 3.1	1.831	2.686	12.9	20.9	11 17	1 8.61	+ 7 7.1	1.462	2.334	14.5	20.5
11 27	1 9.36	+ 2 56.2	1.920	2.683	15.8	21.1	11 27	1 5.39	+ 6 43.2	1.532	2.318	18.2	20.7
333624	2007 <i>VW</i> ₉₃		10 18.0 144°11	2°4/21.2	17		15094	Polymele		10 18.0 332°76	1°6/15.5	18	
9 18	1 49.89	+20 50.5	2.761	3.601	10.0	20.6	9 18	1 47.11	+ 2 9.8	3.870	4.756	6.3	18.4
9 28	1 44.90	+20 27.9	2.687	3.602	7.5	20.5	9 28	1 42.71	+ 1 50.9	3.803	4.752	4.3	18.3
10 8	1 38.74	+19 52.7	2.638	3.603	4.8	20.3	10 8	1 37.56	+ 1 31.5	3.765	4.748	2.4	18.1
10 18	1 31.96	+19 6.7	2.618	3.604	2.6	20.2	10 18	1 32.01	+ 1 13.9	3.756	4.744	1.8	18.1
10 28	1 25.22	+18 13.3	2.627	3.605	3.3	20.2	10 28	1 26.49	+ 1 0.2	3.778	4.740	3.3	18.2
11 7	1 19.17	+17 16.9	2.666	3.606	5.8	20.4	11 7	1 21.40	+ 0 52.3	3.829	4.736	5.4	18.3
11 17	1 14.35	+16 22.3	2.733	3.607	8.4	20.6	11 17	1 17.10	+ 0 51.6	3.908	4.733	7.3	18.5
11 27	1 11.16	+15 33.7	2.824	3.608	10.8	20.7	11 27	1 13.88	+ 0 59.0	4.010	4.729	8.9	18.6
29677	1998 <i>XL</i> ₁₇		10 18.0 214°52	2°5/16.1	18		252119	2000 <i>WS</i> ₇₄		10 18.0 293°87	1°7/16.6	18	
9 18	1 56.86	+ 4 35.4	1.688	2.582	12.6	18.3	9 18	1 54.64	+ 5 19.9	2.024	2.913	11.0	20.1
9 28	1 50.22	+ 4 0.2	1.626	2.578	8.7	18.1	9 28	1 48.48	+ 5 2.3	1.958	2.908	7.6	19.9
10 8	1 41.63	+ 3 21.0	1.589	2.575	4.6	17.9	10 8	1 40.70	+ 4 41.2	1.917	2.903	3.9	19.7
10 18	1 31.98	+ 2 42.8	1.579	2.571	2.7	17.7	10 18	1 32.03	+ 4 20.2	1.904	2.898	1.8	19.5
10 28	1 22.38	+ 2 11.9	1.597	2.567	6.1	17.9	10 28	1 23.38	+ 4 3.5	1.920	2.893	5.0	19.7
11 7	1 13.96	+ 1 53.2	1.642	2.563	10.3	18.2	11 7	1 15.66	+ 3 55.1	1.964	2.888	8.7	20.0
11 17	1 7.56	+ 1 49.8	1.712	2.558	14.0	18.4	11 17	1 9.60	+ 3 57.6	2.034	2.883	12.0	20.2
11 27	1 3.72	+ 2 3.0	1.801	2.553	17.1	18.6	11 27	1 5.71	+ 4 12.5	2.125	2.878	14.8	20.4
193745	2001 <i>HX</i> ₅₈		10 18.0 103°63	7°2/11.1	18		263014	2007 <i>ED</i> ₁₇₀		10 18.0 180°15	0°5/17.4	18	
9 18	1 55.53	-14 54.1	2.400	3.272	10.2	19.8	9 18	1 51.67	+ 9 25.7	2.900	3.775	8.6	21.5
9 28	1 48.72	-15 31.4	2.364	3.281	8.3	19.7	9 28	1 46.04	+ 8 51.7	2.832	3.776	5.9	21.3
10 8	1 40.63	-15 56.8	2.355	3.290	7.3	19.7	10 8	1 39.32	+ 8 12.2	2.791	3.776	3.0	21.1
10 18	1 31.98	-16 5.6	2.372	3.298	7.5	19.7	10 18	1 32.03	+ 7 30.1	2.781	3.777	0.6	20.9
10 28	1 23.54	-15 55.1	2.417	3.307	9.0	19.8	10 28	1 24.79	+ 6 49.0	2.801	3.776	3.3	21.1
11 7	1 16.08	-15 24.7	2.487	3.315	10.9	20.0	11 7	1 18.20	+ 6 12.5	2.851	3.776	6.2	21.3
11 17	1 10.14	-14 35.9	2.580	3.324	12.8	20.1	11 17	1 12.77	+ 5 43.7	2.929	3.774	8.8	21.5
11 27	1 6.10	-13 31.3	2.693	3.332	14.4	20.3	11 27	1 8.88	+ 5 24.7	3.030	3.773	11.0	21.7
486956	2014 <i>MA</i> ₆₄		10 18.0 4°88	3°1/21.1	17		303496	2005 <i>EA</i> ₁₂₉		10 18.0 227°74	0°2/18.2	18	
9 18	1 51.74	+20 52.0	1.911	2.766	13.2	21.4	9 18	1 53.90	+12 17.4	1.834	2.715	12.4	21.5
9 28	1 46.60	+20 33.6	1.843	2.766	9.9	21.2	9 28	1 48.11	+11 43.4	1.768	2.713	8.7	21.3
10 8	1 39.76	+19 57.6	1.798	2.766	6.3	21.0	10 8	1 40.56	+10 58.3	1.727	2.711	4.5	21.0
10 18	1 31.98	+19 6.3	1.780	2.767	3.4	20.8	10 18	1 32.04	+10 6.0	1.713	2.709	0.2	20.7
10 28	1 24.25	+18 4.4	1.789	2.768	4.3	20.9	10 28	1 23.58	+ 9 12.5	1.727	2.707	4.4	21.0
11 7	1 17.54	+16 58.9	1.825	2.769	7.7	21.1	11 7	1 16.16	+ 8 24.0	1.769	2.705	8.6	21.3
11 17	1 12.59	+15 56.6	1.888	2.771	11.1	21.3	11 17	1 10.56	+ 7 45.8	1.837	2.703	12.3	21.5
11 27	1 9.91	+15 3.7	1.973	2.773	14.2	21.5	11 27	1 7.30	+ 7 21.8	1.925	2.700	15.4	21.7
49330	1998 <i>VE</i> ₃₆		10 18.0 353°29	2°0/16.6	18		255136	2005 <i>UE</i> ₁₄₁		10 18.0 19°83	0°8/18.9	18	
9 18	1 50.53	+ 7 37.7	1.266	2.177	14.7	18.9	9 18	1 50.60	+15 26.2	1.816	2.694	12.7	19.7
9 28	1 46.26	+ 6 51.9	1.210	2.170	10.1	18.6	9 28	1 45.79	+14 31.5	1.755	2.697	9.0	19.5
10 8	1 39.76	+ 5 56.6	1.176	2.165	5.1	18.4	10 8	1 39.34	+13 22.0	1.718	2.700	4.9	19.2
10 18	1 32.00	+ 4 58.8	1.166	2.160	2.1	18.2	10 18	1 32.04	+12 2.8	1.708	2.704	0.9	19.0
10 28	1 24.29	+ 4 7.2	1.181	2.157	6.6	18.4	10 28	1 24.84	+10 40.9	1.726	2.708	4.1	19.2
11 7	1 17.92	+ 3 29.7	1.219	2.155	11.5	18.7	11 7	1 18.68	+ 9 24.0	1.772	2.712	8.2	19.5
11 17	1 13.85	+ 3 11.4	1.280	2.154	15.9	19.0	11 17	1 14.27	+ 8 18.7	1.844	2.717	11.9	19.7
11 27	1 12.65	+ 3 14.3	1.358	2.155	19.6	19.2	11 27	1 12.07	+ 7 29.4	1.937	2.722	15.0	19.9
515193	2011 <i>UA</i> ₂₂₆		10 18.0 353°52	0°9/17.2	18		313134	2001 <i>BJ</i> ₈₃		10 18.0 197°49	5°3/10.7	18	
9 18	1 51.96	+10 18.3	1.707	2.599	12.6	21.3	9 18	1 51.35	-10 38.4	3.064	3.944	8.0	21.7
9 28	1 46.80	+ 9 22.5	1.647	2.598	8.7	21.1	9 28	1 45.76	-11 38.1	3.013	3.940	6.3	21.6
10 8	1 39.87	+ 8 16.1	1.610	2.597	4.4	20.8	10 8	1 39.17	-12 31.4	2.989	3.936	5.3	21.5
10 18	1 32.00	+ 7 4.9	1.601	2.596	1.0	20.5	10 18	1 32.04	-13 14.0	2.994	3.931	5.6	21.5
10 28	1 24.21	+ 5 56.3	1.619	2.596	5.1	20.8	10 28	1 24.98	-13 42.4	3.027	3.926	7.1	21.6
11 7	1 17.50	+ 4 57.3	1.664	2.595	9.3	21.1	11 7	1 18.54	-13 54.7	3.088	3.920	8.9	21.7
11 17	1 12.65	+ 4 13.4	1.734	2.595	13.1	21.3	11 17	1 13.19	-13 50.4	3.172	3.914	10.6	21.8
11 27	1 10.16	+ 3 47.6	1.824	2.595	16.2	21.6	11 27	1 9.31	-13 30.3	3.276	3.907	12.2	22.0
365738	2010 <i>WX</i> ₉		10 18.0 316°36	0°5/18.5	17		339074	2004 <i>QQ</i> ₂₁		10 18.0 37°20	3°3/20.2	18	

EPHEMERIDES

10 18.0

10 18.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
496857	1999 <i>VD</i> ₁₄₇		10 18.0	21°09'	4°0'/21.8	16	124596	2001 <i>SG</i> ₂₆		10 18.1	262°09'	2°9'/15.3	18
9 18	1 51.08	+23 48.3	1.433	2.293	16.5	20.4	9 18	1 53.08	+6 32.2	1.675	2.573	12.5	19.7
9 28	1 46.51	+22 56.8	1.374	2.298	12.6	20.1	9 28	1 47.74	+4 59.8	1.603	2.558	8.6	19.5
10 8	1 39.83	+21 38.1	1.336	2.303	8.2	19.9	10 8	1 40.48	+3 17.5	1.556	2.543	4.6	19.2
10 18	1 32.05	+19 56.4	1.322	2.309	4.4	19.7	10 18	1 32.12	+1 33.3	1.537	2.527	3.2	19.1
10 28	1 24.44	+18 0.6	1.335	2.316	5.1	19.8	10 28	1 23.71	-0 2.9	1.546	2.512	6.8	19.3
11 7	1 18.21	+16 3.0	1.374	2.323	9.1	20.0	11 7	1 16.34	-1 22.6	1.582	2.496	11.1	19.5
11 17	1 14.21	+14 14.8	1.438	2.331	13.3	20.3	11 17	1 10.87	-2 19.8	1.641	2.479	14.9	19.7
11 27	1 12.93	+12 44.8	1.523	2.340	16.9	20.6	11 27	1 7.87	-2 52.2	1.719	2.463	18.1	19.9
245294	2005 <i>CL</i> ₆₃		10 18.1	204°25'	5°2'/12.4	18	99011	2001 <i>DO</i> ₅₉		10 18.1	288°32'	7°9'/24.8	18
9 18	1 52.34	-2 21.7	1.972	2.871	10.8	20.7	9 18	1 56.34	+31 28.0	1.765	2.566	16.4	19.4
9 28	1 46.88	-3 57.4	1.919	2.869	7.8	20.6	9 28	1 50.34	+31 57.3	1.681	2.554	13.6	19.1
10 8	1 39.88	-5 31.8	1.892	2.866	5.5	20.4	10 8	1 41.98	+32 0.9	1.618	2.542	10.8	18.9
10 18	1 32.08	-6 57.1	1.894	2.863	5.7	20.4	10 18	1 32.13	+31 36.2	1.578	2.530	8.5	18.8
10 28	1 24.36	-8 6.0	1.923	2.859	8.1	20.6	10 28	1 22.07	+30 44.6	1.564	2.517	8.1	18.7
11 7	1 17.58	-8 53.6	1.979	2.855	11.1	20.8	11 7	1 13.16	+29 32.6	1.575	2.505	9.9	18.8
11 17	1 12.44	-9 18.0	2.057	2.851	14.0	20.9	11 17	1 6.50	+28 9.6	1.611	2.493	12.8	19.0
11 27	1 9.38	-9 19.4	2.155	2.847	16.3	21.1	11 27	1 2.79	+26 46.1	1.669	2.481	15.8	19.1
241390	2008 <i>SF</i> ₂₇₃		10 18.1	290°35'	4°3'/21.2	18	517460	2014 <i>OC</i> ₃₆₉		10 18.1	120°99'	2°0'/20.2	18
9 18	1 56.66	+21 9.5	1.661	2.515	14.9	19.8	9 18	1 53.45	+18 2.0	2.300	3.155	11.3	21.8
9 28	1 50.51	+21 26.4	1.578	2.499	11.4	19.6	9 28	1 47.52	+17 43.5	2.238	3.164	8.2	21.6
10 8	1 42.03	+21 24.8	1.518	2.483	7.6	19.3	10 8	1 40.19	+17 12.5	2.200	3.173	4.9	21.4
10 18	1 32.09	+21 4.4	1.483	2.467	4.6	19.1	10 18	1 32.12	+16 31.0	2.191	3.182	2.2	21.3
10 28	1 21.93	+20 28.3	1.474	2.451	5.5	19.1	10 28	1 24.16	+15 43.1	2.211	3.191	3.5	21.4
11 7	1 12.84	+19 42.8	1.493	2.435	9.2	19.3	11 7	1 17.09	+14 54.1	2.260	3.199	6.7	21.6
11 17	1 5.93	+18 55.6	1.536	2.420	13.2	19.5	11 17	1 11.55	+14 8.8	2.336	3.207	9.8	21.8
11 27	1 1.90	+18 14.7	1.600	2.404	16.8	19.7	11 27	1 7.97	+13 31.7	2.435	3.215	12.4	22.0
184272	2004 <i>XR</i> ₁₁₄		10 18.1	71°73'	1°0'/18.7	17	7693	Hoshitakuhei		10 18.1	309°13'	5°6'/14.5	18
9 18	1 59.55	+13 34.9	1.204	2.094	16.9	20.0	9 18	1 57.96	-3 41.9	1.549	2.449	13.2	17.0
9 28	1 52.43	+13 15.5	1.164	2.112	11.9	19.8	9 28	1 51.28	-4 6.0	1.481	2.431	9.6	16.7
10 8	1 42.85	+12 40.3	1.147	2.131	6.4	19.5	10 8	1 42.37	-4 25.1	1.437	2.414	6.4	16.5
10 18	1 32.10	+11 54.3	1.153	2.149	1.1	19.2	10 18	1 32.14	-4 32.9	1.419	2.397	5.8	16.4
10 28	1 21.77	+11 5.2	1.186	2.168	5.4	19.6	10 28	1 21.84	-4 23.8	1.427	2.381	8.7	16.5
11 7	1 13.27	+10 21.6	1.243	2.186	10.6	19.9	11 7	1 12.73	-3 55.1	1.461	2.365	12.5	16.7
11 17	1 7.55	+9 50.3	1.324	2.204	15.1	20.3	11 17	1 5.81	-3 6.4	1.517	2.349	16.3	16.9
11 27	1 5.04	+9 35.3	1.423	2.223	18.7	20.6	11 27	1 1.73	-1 59.5	1.592	2.334	19.4	17.1
333342	2001 <i>SE</i> ₂₁₀		10 18.1	1°44'	2°8'/16.5	18	90704	1988 <i>RO</i> ₁₂		10 18.1	276°75'	0°2'/17.8	17
9 18	1 52.57	+5 24.3	1.016	1.937	16.5	19.3	9 18	1 48.75	+10 21.3	3.068	3.944	8.1	19.4
9 28	1 48.02	+4 57.5	0.970	1.934	11.5	19.0	9 28	1 44.04	+9 53.8	2.997	3.941	5.6	19.2
10 8	1 40.80	+4 24.5	0.943	1.932	5.9	18.7	10 8	1 38.35	+9 20.8	2.953	3.938	2.9	19.0
10 18	1 32.09	+3 52.3	0.938	1.932	2.9	18.5	10 18	1 32.12	+8 44.7	2.939	3.935	0.2	18.8
10 28	1 23.53	+3 29.6	0.957	1.934	7.6	18.8	10 28	1 25.92	+8 8.8	2.955	3.933	3.0	19.0
11 7	1 16.65	+3 23.1	0.998	1.937	13.0	19.1	11 7	1 20.28	+7 36.3	3.000	3.930	5.7	19.2
11 17	1 12.54	+3 36.1	1.058	1.942	17.8	19.4	11 17	1 15.68	+7 10.1	3.073	3.927	8.2	19.4
11 27	1 11.77	+4 9.5	1.136	1.948	21.7	19.7	11 27	1 12.46	+6 52.5	3.170	3.924	10.3	19.5
268178	2004 <i>XW</i> ₆₇		10 18.1	333°00'	0°3'/17.8	18	296519	2009 <i>LG</i> ₆		10 18.1	133°96'	4°0'/21.3	18
9 18	1 50.32	+11 8.4	1.688	2.581	12.7	20.2	9 18	1 57.95	+21 53.6	1.564	2.417	15.7	20.9
9 28	1 45.86	+10 34.0	1.612	2.564	8.9	20.0	9 28	1 51.23	+21 44.0	1.503	2.423	11.9	20.7
10 8	1 39.53	+9 48.2	1.561	2.547	4.6	19.7	10 8	1 42.30	+21 12.6	1.464	2.430	7.8	20.5
10 18	1 32.10	+8 55.4	1.535	2.532	0.3	19.3	10 18	1 32.16	+20 21.2	1.450	2.436	4.4	20.3
10 28	1 24.59	+8 2.1	1.537	2.517	4.8	19.6	10 28	1 22.15	+19 15.5	1.464	2.442	5.3	20.4
11 7	1 18.06	+7 14.9	1.565	2.503	9.3	19.9	11 7	1 13.54	+18 4.2	1.505	2.448	9.1	20.6
11 17	1 13.34	+6 39.7	1.617	2.490	13.3	20.1	11 17	1 7.27	+16 56.1	1.570	2.453	13.0	20.9
11 27	1 11.05	+6 20.4	1.689	2.478	16.7	20.3	11 27	1 3.88	+15 59.0	1.657	2.458	16.4	21.1
356910	2012 <i>AA</i> ₁₇		10 18.1	109°83'	3°0'/24.0	18	165513	2001 <i>CT</i> ₈		10 18.1	250°13'	1°2'/17.1	18
9 18	1 46.50	+27 47.5	4.562	5.351	7.2	20.8	9 18	1 55.41	+7 50.3	1.879	2.767	11.9	20.1
9 28	1 42.30	+27 41.9	4.483	5.355	5.8	20.7	9 28	1 49.21	+7 20.7	1.807	2.757	8.2	19.9
10 8	1 37.39	+27 26.6	4.430	5.359	4.3	20.6	10 8	1 41.20	+6 44.1	1.760	2.746	4.2	19.6
10 18	1 32.09	+27 1.9	4.404	5.363	3.2	20.5	10 18	1 32.15	+6 4.8	1.741	2.736	1.3	19.4
10 28	1 26.82	+26 29.5	4.408	5.367	3.1	20.5	10 28	1 23.08	+5 28.2	1.750	2.725	5.0	19.6
11 7	1 21.96	+25 51.6	4.442	5.371	4.0	20.6	11 7	1 14.98	+4 59.4	1.787	2.714	9.1	19.8
11 17	1 17.84	+25 10.9	4.504	5.375	5.5	20.7	11 17	1 8.68	+4 42.6	1.849	2.703	12.8	20.0
11 27	1 14.76	+24 30.2	4.593	5.379	6.9	20.8	11 27	1 4.73	+4 40.3	1.932	2.692	15.9	20.2
474124	1995 <i>MR</i> ₄		10 18.1	32°83'	1°7'/19.4	16	351161	2003 <i>YT</i> ₁₇₃		10 18.1	9°88'	10°4'/12.6	16
9 18	1 52.55	+16 46.3	1.132	2.026	17.4	20.5	9 18	1 57.60	-13 20.5	1.233	2.134	15.8	20.1
9 28	1 47.62	+16 0.6	1.098	2.046	12.4	20.3	9 28	1 51.05	-13 55.4	1.198	2.136	12.7	19.9
10 8	1 40.40	+14 54.2	1.084	2.067	6.9	20.1	10 8	1 42.17	-14 11.2	1.185	2.140	10.6	19.8
10 18	1 32.11	+13 34.0	1.094	2.089	1.9	19.8	10 18	1 32.16	-14 0.0	1.194	2.144	10.7	19.8
10 28	1 24.23	+12 10.4	1.129	2.112	5.2	20.1	10 28	1 22.52	-13 17.6	1.226	2.151	12.9	20.0
11 7	1 18.08	+10 54.5	1.188	2.137	10.3	20.5	11 7	1 14.61	-12 5.1	1.281	2.158	15.9	20.2
11 17	1 14.48	+9 54.4	1.269	2.161	14.8	20.8	11 17	1 9.30	-10 27.5	1.355	2.166	19.0	20.4
11 27	1 13.82	+9 15.0	1.370	2.187	18.4	21.1	11 27	1 7.05	-8 31.0	1.446	2.176	21.6	20.6
354270	2002 <i>RL</i> ₇₆		10 18.1	344°88'	6°9'/11.3	18	65326	2002 <i>LZ</i> ₁₈		10 18.1	67°53'	1°2'/16.8	18
9 18	1 48.61												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
26424	Jacquelhug		10 18.1 282°60	1°9/16.6	18		383060	2005 QV ₁₄₆		10 18.1 15°11	1°5/17.3	18	
9 18	1 54.76	+ 8 10.1	1.438	2.337	14.1	18.9	9 18	1 53.77	+ 7 42.5	0.957	1.876	17.5	19.4
9 28	1 49.19	+ 7 14.1	1.368	2.323	9.8	18.6	9 28	1 48.87	+ 7 28.4	0.919	1.882	12.1	19.1
10 8	1 41.35	+ 6 7.2	1.321	2.309	5.0	18.3	10 8	1 41.24	+ 7 5.0	0.900	1.889	6.1	18.8
10 18	1 32.16	+ 4 56.0	1.300	2.294	2.0	18.1	10 18	1 32.17	+ 6 38.7	0.903	1.899	1.5	18.6
10 28	1 22.88	+ 3 49.3	1.305	2.280	6.4	18.4	10 28	1 23.40	+ 6 17.5	0.929	1.909	6.9	19.0
11 7	1 14.83	+ 2 55.6	1.336	2.265	11.4	18.6	11 7	1 16.51	+ 6 8.5	0.977	1.922	12.5	19.3
11 17	1 9.01	+ 2 21.0	1.390	2.251	15.8	18.8	11 17	1 12.53	+ 6 15.9	1.045	1.936	17.4	19.6
11 27	1 6.07	+ 2 8.4	1.462	2.237	19.5	19.1	11 27	1 11.94	+ 6 41.2	1.130	1.951	21.3	20.0
327608	2006 EC ₄₇		10 18.1 156°15	0°8/18.9	18		436560	2011 HB ₂₃		10 18.1 252°05	7°4/12.3	18	
9 18	1 53.12	+13 21.0	2.458	3.325	10.2	21.0	9 18	1 57.59	- 8 1.7	1.644	2.539	12.8	21.4
9 28	1 47.26	+13 8.2	2.390	3.328	7.2	20.8	9 28	1 50.85	- 9 3.2	1.588	2.529	9.8	21.2
10 8	1 40.06	+12 46.8	2.349	3.330	3.9	20.6	10 8	1 42.08	- 9 56.5	1.555	2.518	7.7	21.0
10 18	1 32.15	+12 19.2	2.337	3.332	0.8	20.4	10 18	1 32.19	-10 33.8	1.549	2.507	7.9	21.0
10 28	1 24.29	+11 48.8	2.354	3.334	3.3	20.6	10 28	1 22.35	-10 48.6	1.568	2.496	10.3	21.1
11 7	1 17.21	+11 19.6	2.400	3.336	6.6	20.8	11 7	1 13.72	-10 37.7	1.612	2.485	13.5	21.3
11 17	1 11.53	+10 55.3	2.474	3.338	9.6	21.0	11 17	1 7.18	-10 1.8	1.678	2.473	16.6	21.5
11 27	1 7.67	+10 39.2	2.571	3.339	12.1	21.2	11 27	1 3.28	- 9 3.4	1.761	2.461	19.2	21.7
298070	2002 QC ₁₀₇		10 18.1 4°34	1°4/19.1	18		23613	1996 EK ₆		10 18.1 76°22	2°2/16.0	18	
9 18	1 51.70	+14 47.5	1.284	2.179	15.7	20.5	9 18	1 52.94	+ 6 50.3	1.735	2.631	12.2	17.7
9 28	1 47.12	+14 28.0	1.229	2.178	11.3	20.2	9 28	1 47.38	+ 5 42.3	1.688	2.642	8.3	17.5
10 8	1 40.27	+13 51.5	1.195	2.179	6.3	20.0	10 8	1 40.18	+ 4 28.1	1.666	2.653	4.3	17.3
10 18	1 32.15	+13 2.3	1.185	2.180	1.6	19.7	10 18	1 32.17	+ 3 14.4	1.672	2.665	2.4	17.2
10 28	1 24.12	+12 7.7	1.200	2.183	5.1	19.9	10 28	1 24.37	+ 2 8.4	1.706	2.676	5.8	17.5
11 7	1 17.49	+11 16.5	1.240	2.187	10.1	20.2	11 7	1 17.71	+ 1 16.4	1.767	2.687	9.7	17.7
11 17	1 13.22	+10 36.2	1.302	2.193	14.6	20.5	11 17	1 12.88	+ 0 42.2	1.851	2.698	13.1	18.0
11 27	1 11.88	+10 11.9	1.384	2.199	18.3	20.8	11 27	1 10.32	+ 0 27.2	1.957	2.710	15.9	18.2
323652	2005 BX ₂₈		10 18.1 195°96	3°8/20.9	18		475317	2005 YX ₁₁₃		10 18.1 336°69	1°0/17.5	18	
9 18	1 59.85	+20 26.8	1.646	2.498	15.1	21.1	9 18	1 54.04	+ 8 41.1	1.199	2.106	15.6	20.4
9 28	1 52.61	+20 33.3	1.575	2.497	11.4	20.9	9 28	1 49.02	+ 8 26.0	1.134	2.092	11.0	20.1
10 8	1 43.06	+20 20.9	1.527	2.494	7.4	20.6	10 8	1 41.39	+ 8 1.0	1.091	2.079	5.6	19.7
10 18	1 32.17	+19 50.3	1.505	2.492	4.1	20.4	10 18	1 32.19	+ 7 30.7	1.072	2.068	1.0	19.4
10 28	1 21.25	+19 5.6	1.511	2.488	5.2	20.5	10 28	1 22.88	+ 7 2.5	1.077	2.057	6.3	19.7
11 7	1 11.61	+18 13.9	1.544	2.485	9.1	20.7	11 7	1 14.98	+ 6 43.5	1.106	2.048	11.8	20.0
11 17	1 4.27	+17 23.2	1.602	2.480	13.1	21.0	11 17	1 9.65	+ 6 39.2	1.156	2.039	16.6	20.3
11 27	0 59.86	+16 40.8	1.682	2.476	16.5	21.2	11 27	1 7.59	+ 6 52.8	1.224	2.032	20.7	20.5
254198	2004 RM ₄₈		10 18.1 359°25	1°6/16.7	18		320179	2007 GJ ₂₈		10 18.1 107°74	1°9/15.8	18	
9 18	1 52.13	+ 7 6.5	1.863	2.757	11.6	20.2	9 18	1 50.53	+ 6 11.7	2.309	3.199	9.8	20.4
9 28	1 46.85	+ 6 28.6	1.803	2.756	8.0	19.9	9 28	1 45.45	+ 5 7.1	2.254	3.206	6.7	20.2
10 8	1 39.94	+ 5 44.6	1.769	2.756	4.0	19.7	10 8	1 39.13	+ 3 57.9	2.226	3.212	3.5	20.0
10 18	1 32.15	+ 4 59.4	1.761	2.755	1.7	19.5	10 18	1 32.17	+ 2 49.1	2.227	3.218	2.1	19.9
10 28	1 24.44	+ 4 18.5	1.781	2.755	5.1	19.8	10 28	1 25.32	+ 1 46.2	2.257	3.225	4.8	20.1
11 7	1 17.72	+ 3 47.3	1.829	2.756	9.0	20.0	11 7	1 19.29	+ 0 54.3	2.316	3.231	8.0	20.3
11 17	1 12.71	+ 3 29.2	1.901	2.756	12.4	20.2	11 17	1 14.64	+ 0 16.4	2.400	3.237	10.9	20.5
11 27	1 9.89	+ 3 26.4	1.994	2.757	15.3	20.4	11 27	1 11.76	- 0 5.6	2.507	3.243	13.2	20.7
258693	2002 FW ₄₀		10 18.1 84°62	6°5/11.8	18		367017	2006 BN ₁₁₃		10 18.1 167°81	0°8/19.1	18	
9 18	1 54.50	-10 41.3	2.225	3.110	10.4	19.8	9 18	1 52.22	+14 20.7	2.776	3.638	9.3	22.0
9 28	1 48.08	-11 31.4	2.196	3.128	8.1	19.6	9 28	1 46.52	+13 59.3	2.707	3.641	6.6	21.9
10 8	1 40.40	-12 11.7	2.194	3.146	6.6	19.6	10 8	1 39.66	+13 29.3	2.665	3.644	3.6	21.7
10 18	1 32.16	-12 37.3	2.219	3.164	6.8	19.6	10 18	1 32.18	+12 53.1	2.652	3.647	0.9	21.5
10 28	1 24.18	-12 44.6	2.272	3.182	8.5	19.8	10 28	1 24.76	+12 14.0	2.669	3.649	3.0	21.6
11 7	1 17.22	-12 32.4	2.350	3.200	10.7	20.0	11 7	1 18.03	+11 36.0	2.716	3.651	6.0	21.9
11 17	1 11.81	-12 1.5	2.451	3.217	12.8	20.1	11 17	1 12.53	+11 2.5	2.791	3.653	8.7	22.0
11 27	1 8.33	-11 14.2	2.571	3.234	14.6	20.3	11 27	1 8.66	+10 36.8	2.890	3.654	11.0	22.2
458496	2011 CT ₈		10 18.1 174°45	3°8/22.6	18		48562	1993 UZ ₆		10 18.1 183°80	2°7/15.5	18	
9 18	1 52.80	+24 53.1	2.678	3.496	11.0	21.4	9 18	1 53.46	+ 3 59.3	1.929	2.824	11.2	19.0
9 28	1 47.05	+24 51.2	2.601	3.497	8.6	21.3	9 28	1 47.71	+ 3 6.8	1.871	2.824	7.7	18.8
10 8	1 39.97	+24 34.4	2.549	3.498	6.0	21.1	10 8	1 40.37	+ 2 10.9	1.839	2.824	4.2	18.6
10 18	1 32.16	+24 3.4	2.525	3.499	4.1	21.0	10 18	1 32.19	+ 1 17.1	1.834	2.824	2.9	18.5
10 28	1 24.35	+23 20.7	2.530	3.499	4.2	21.0	10 28	1 24.10	+ 0 31.4	1.858	2.823	5.9	18.7
11 7	1 17.31	+22 30.8	2.563	3.500	6.2	21.1	11 7	1 17.00	- 0 1.3	1.909	2.823	9.5	18.9
11 17	1 11.62	+21 38.7	2.625	3.500	8.7	21.3	11 17	1 11.59	- 0 18.0	1.985	2.822	12.7	19.1
11 27	1 7.75	+20 49.4	2.711	3.500	11.0	21.5	11 27	1 8.34	- 0 17.5	2.081	2.822	15.5	19.3
217856	2001 QH ₈₇		10 18.1 300°31	18°4/29.5	17		281240	2007 LG ₄		10 18.1 59°22	3°6/15.3	18	
9 18	2 3.79	+43 14.4	1.126	1.890	25.9	19.8	9 18	1 55.04	+ 3 21.4	1.449	2.353	13.6	20.3
9 28	1 57.55	+45 25.7	1.059	1.879	23.6	19.6	9 28	1 49.00	+ 2 21.8	1.412	2.368	9.4	20.1
10 8	1 46.62	+46 57.3	1.006	1.868	21.2	19.4	10 8	1 41.05	+ 1 19.7	1.398	2.383	5.2	19.9
10 18	1 32.20	+47 35.2	0.968	1.857	19.3	19.3	10 18	1 32.19	+ 0 22.7	1.410	2.399	3.8	19.9
10 28	1 16.81	+47 11.5	0.947	1.847	18.4	19.2	10 28	1 23.65	- 0 21.7	1.449	2.414	7.2	20.1
11 7	1 3.54	+45 51.0	0.945	1.837	18.9	19.2	11 7	1 16.52	- 0 48.4	1.513	2.430	11.2	20.4
11 17	0 54.77	+43 49.0	0.960	1.827	20.7	19.2	11 17	1 11.56	- 0 55.0	1.599	2.446	14.8	20.7
11 27	0 51.66	+41 27.3	0.992	1.818	23.2	19.4	11 27	1 9.21	- 0 41.6	1.705	2.462	17.8	20.9
320119	2007 EQ ₁₇₃		10 18.1 118°13	0°3/17.7	18		127584	2003 AD ₆₇		10 18.1 101°71	9°1/7.3	18	
9 18	1 51.04	+11 29.6	2.351										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
65229	2002 <i>EE</i> ₆₁	10 18.1 325°31		0°5/17.2 18			355064	2006 <i>SF</i> ₁₉₄	10 18.1 45°79		1°8/19.6 18		
9 18	1 45.42	+ 8 44.7	4.081	4.959	6.2	19.6	9 18	1 54.60	+16 7.8	1.756	2.628	13.4	21.2
9 28	1 41.58	+ 8 11.9	4.012	4.957	4.3	19.5	9 28	1 48.69	+15 56.0	1.697	2.633	9.7	21.0
10 8	1 37.06	+ 7 35.5	3.970	4.956	2.1	19.3	10 8	1 40.96	+15 30.2	1.661	2.639	5.6	20.8
10 18	1 32.17	+ 6 57.7	3.958	4.954	0.5	19.2	10 18	1 32.24	+14 53.1	1.652	2.646	2.0	20.5
10 28	1 27.30	+ 6 20.9	3.977	4.952	2.5	19.3	10 28	1 23.62	+14 9.6	1.670	2.652	4.2	20.7
11 7	1 22.83	+ 5 47.7	4.026	4.950	4.6	19.5	11 7	1 16.15	+13 26.0	1.716	2.658	8.2	21.0
11 17	1 19.10	+ 5 20.1	4.103	4.949	6.5	19.6	11 17	1 10.62	+12 48.3	1.787	2.665	12.0	21.2
11 27	1 16.37	+ 4 59.7	4.205	4.947	8.2	19.8	11 27	1 7.53	+12 21.3	1.880	2.672	15.1	21.4
148187	2000 <i>BP</i> ₁₈	10 18.1 246°87		1°3/19.1 18			509168	2006 <i>FJ</i> ₁₈	10 18.1 146°50		0°0/18.1 18		
9 18	1 56.89	+14 53.7	1.646	2.521	14.0	20.3	9 18	1 58.74	+10 11.0	2.179	3.050	11.2	21.9
9 28	1 50.54	+14 34.0	1.571	2.510	10.1	20.0	9 28	1 51.22	+10 5.3	2.119	3.060	7.8	21.7
10 8	1 42.02	+13 59.6	1.519	2.500	5.6	19.7	10 8	1 42.14	+ 9 52.7	2.086	3.069	4.0	21.5
10 18	1 32.22	+13 13.3	1.494	2.489	1.5	19.4	10 18	1 32.26	+ 9 35.6	2.082	3.078	0.0	21.2
10 28	1 22.34	+12 20.8	1.496	2.477	4.6	19.6	10 28	1 22.49	+ 9 17.8	2.108	3.087	3.9	21.5
11 7	1 13.60	+11 29.4	1.526	2.466	9.3	19.9	11 7	1 13.74	+ 9 3.0	2.164	3.094	7.6	21.8
11 17	1 6.97	+10 46.0	1.580	2.454	13.5	20.1	11 17	1 6.69	+ 8 54.5	2.247	3.102	10.8	22.0
11 27	1 3.08	+10 16.1	1.656	2.442	17.1	20.3	11 27	1 1.81	+ 8 55.1	2.353	3.108	13.5	22.2
231242	2005 <i>YW</i> ₄₇	10 18.1 278°39		1°0/17.3 18			386779	2010 <i>DS</i> ₄₂	10 18.1 117°38		4°5/22.4 18		
9 18	1 55.25	+ 9 7.5	1.621	2.513	13.2	20.8	9 18	1 58.98	+24 39.8	2.157	2.977	13.2	21.5
9 28	1 49.38	+ 8 32.4	1.548	2.499	9.2	20.6	9 28	1 51.49	+24 51.1	2.099	2.996	10.2	21.3
10 8	1 41.42	+ 7 47.5	1.498	2.485	4.7	20.3	10 8	1 42.31	+24 44.5	2.065	3.014	7.1	21.2
10 18	1 32.22	+ 6 57.7	1.475	2.471	1.1	20.0	10 18	1 32.26	+24 20.4	2.058	3.032	4.8	21.1
10 28	1 22.93	+ 6 9.6	1.480	2.457	5.4	20.2	10 28	1 22.36	+23 42.0	2.080	3.049	5.0	21.1
11 7	1 14.74	+ 5 29.9	1.511	2.443	10.1	20.5	11 7	1 13.59	+22 54.8	2.131	3.066	7.4	21.3
11 17	1 8.59	+ 5 4.0	1.566	2.429	14.2	20.7	11 17	1 6.69	+22 5.1	2.209	3.082	10.2	21.5
11 27	1 5.09	+ 4 55.2	1.641	2.414	17.7	20.9	11 27	1 2.12	+21 19.0	2.311	3.097	12.8	21.7
69815	1998 <i>RC</i> ₅₄	10 18.1 348°08		4°0/21.6 18			45768	2000 <i>LF</i> ₂₈	10 18.1 41°22		2°6/19.9 18		
9 18	1 53.52	+21 51.8	1.901	2.750	13.5	18.8	9 18	1 55.39	+17 53.5	1.028	1.921	18.9	17.4
9 28	1 48.00	+22 2.7	1.829	2.745	10.4	18.6	9 28	1 49.91	+17 22.4	0.989	1.935	13.7	17.2
10 8	1 40.64	+21 56.5	1.780	2.742	7.0	18.4	10 8	1 41.74	+16 26.9	0.970	1.951	7.9	16.9
10 18	1 32.21	+21 33.7	1.756	2.739	4.3	18.2	10 18	1 32.25	+15 12.9	0.973	1.967	2.8	16.7
10 28	1 23.75	+20 57.6	1.760	2.736	4.9	18.2	10 28	1 23.15	+13 51.1	1.000	1.984	5.7	16.9
11 7	1 16.28	+20 13.7	1.791	2.733	7.9	18.4	11 7	1 15.99	+12 33.7	1.051	2.001	11.1	17.3
11 17	1 10.65	+19 28.8	1.847	2.731	11.3	18.6	11 17	1 11.74	+11 30.9	1.123	2.020	15.9	17.6
11 27	1 7.42	+18 49.0	1.926	2.730	14.3	18.8	11 27	1 10.84	+10 48.7	1.214	2.038	19.9	18.0
445211	2009 <i>DC</i> ₁₁₆	10 18.1 286°77		0°7/18.7 18			169096	2001 <i>KP</i> ₄₉	10 18.1 104°15		6°2/13.0 18		
9 18	1 54.21	+13 32.6	1.750	2.630	13.0	21.9	9 18	1 57.19	- 7 51.1	1.937	2.826	11.5	20.0
9 28	1 48.59	+13 7.7	1.671	2.614	9.3	21.6	9 28	1 50.13	- 8 35.7	1.901	2.840	8.6	19.9
10 8	1 41.00	+12 29.7	1.616	2.599	5.0	21.3	10 8	1 41.54	- 9 12.0	1.890	2.853	6.6	19.8
10 18	1 32.22	+11 42.1	1.588	2.583	0.8	21.0	10 18	1 32.25	- 9 34.3	1.907	2.867	6.6	19.8
10 28	1 23.33	+10 50.3	1.587	2.568	4.5	21.2	10 28	1 23.24	- 9 38.5	1.951	2.880	8.5	19.9
11 7	1 15.45	+10 1.1	1.614	2.552	9.0	21.5	11 7	1 15.39	- 9 23.0	2.021	2.892	11.2	20.1
11 17	1 9.45	+ 9 20.9	1.665	2.537	13.0	21.7	11 17	1 9.37	- 8 48.6	2.115	2.905	13.8	20.3
11 27	1 5.98	+ 8 54.2	1.737	2.522	16.4	21.9	11 27	1 5.57	- 7 57.4	2.228	2.917	15.9	20.5
482452	2012 <i>DF</i> ₇₉	10 18.1 200°76		8°6/ 5.1 18			407951	2012 <i>DU</i> ₆	10 18.1 222°20		3°4/21.4 18		
9 18	1 53.24	-25 38.2	3.037	3.867	9.5	21.9	9 18	1 54.71	+21 18.7	2.265	3.105	11.9	21.0
9 28	1 47.17	-26 46.3	3.005	3.862	8.7	21.8	9 28	1 48.59	+21 27.2	2.191	3.104	9.1	20.8
10 8	1 39.98	-27 39.2	2.998	3.857	8.6	21.8	10 8	1 40.88	+21 21.2	2.141	3.102	6.0	20.6
10 18	1 32.22	-28 12.5	3.016	3.852	9.1	21.8	10 18	1 32.26	+21 1.5	2.118	3.101	3.6	20.4
10 28	1 24.56	-28 23.3	3.058	3.846	10.1	21.9	10 28	1 23.61	+20 30.7	2.124	3.099	4.2	20.5
11 7	1 17.64	-28 11.2	3.123	3.840	11.3	22.0	11 7	1 15.83	+19 53.4	2.158	3.097	7.0	20.6
11 17	1 11.97	-27 37.6	3.207	3.833	12.5	22.1	11 17	1 9.65	+19 15.1	2.220	3.096	10.0	20.8
11 27	1 7.92	-26 45.2	3.308	3.825	13.6	22.2	11 27	1 5.58	+18 41.0	2.305	3.094	12.7	21.0
30613	2678 <i>P-L</i>	10 18.1 247°51		1°4/16.9 18			232237	2002 <i>NK</i> ₃₇	10 18.1 108°27		2°8/15.3 18		
9 18	1 55.74	+ 8 25.2	1.705	2.595	12.8	19.2	9 18	1 53.68	+ 4 41.1	1.919	2.813	11.3	20.5
9 28	1 49.61	+ 7 41.6	1.633	2.584	8.9	18.9	9 28	1 47.76	+ 3 27.0	1.875	2.828	7.7	20.3
10 8	1 41.50	+ 6 49.0	1.586	2.572	4.5	18.6	10 8	1 40.36	+ 2 9.2	1.858	2.843	4.2	20.1
10 18	1 32.24	+ 5 52.6	1.566	2.561	1.4	18.4	10 18	1 32.25	+ 0 54.4	1.868	2.857	3.0	20.0
10 28	1 22.93	+ 4 59.2	1.574	2.549	5.5	18.7	10 28	1 24.36	- 0 10.8	1.908	2.871	5.9	20.3
11 7	1 14.70	+ 4 15.4	1.609	2.536	9.9	18.9	11 7	1 17.54	- 1 0.9	1.975	2.885	9.4	20.5
11 17	1 8.43	+ 3 46.3	1.668	2.524	13.9	19.1	11 17	1 12.43	- 1 33.1	2.067	2.899	12.5	20.7
11 27	1 4.71	+ 3 34.6	1.748	2.511	17.2	19.3	11 27	1 9.43	- 1 46.3	2.179	2.912	15.1	20.9
309563	2008 <i>AX</i> ₁₁	10 18.1 329°43		2°2/16.1 18			41941	2000 <i>XF</i>	10 18.1 160°83		6°2/12.5 18		
9 18	1 52.31	+ 6 15.1	1.683	2.582	12.4	21.3	9 18	1 55.72	- 6 49.4	1.921	2.814	11.4	18.8
9 28	1 47.16	+ 5 22.1	1.621	2.576	8.5	21.1	9 28	1 49.23	- 7 51.2	1.876	2.818	8.5	18.6
10 8	1 40.20	+ 4 22.4	1.583	2.570	4.4	20.8	10 8	1 41.15	- 8 46.3	1.856	2.821	6.5	18.5
10 18	1 32.23	+ 3 22.2	1.572	2.565	2.4	20.7	10 18	1 32.26	- 9 28.1	1.863	2.824	6.6	18.5
10 28	1 24.31	+ 2 28.6	1.588	2.560	5.9	20.9	10 28	1 23.55	- 9 51.2	1.898	2.826	8.8	18.6
11 7	1 17.45	+ 1 47.8	1.631	2.555	10.1	21.1	11 7	1 15.91	- 9 53.2	1.958	2.829	11.6	18.8
11 17	1 12.45	+ 1 23.9	1.697	2.550	13.8	21.4	11 17	1 10.05	- 9 33.8	2.041	2.831	14.2	19.0
11 27	1 9.84	+ 1 18.9	1.783	2.546	16.9	21.6	11 27	1 6.42	- 8 55.0	2.143	2.832	16.5	19.2
151550	2002 <i>TV</i> ₈	10 18.1 33°93		2°1/16.6 18			255331	2005 <i>WY</i> ₄₀					

EPHEMERIDES

10 18.1

10 18.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
138959	2001 CZ ₂	10 18.1 315°56' 2°0/19.3 18					227636	2006 BX ₉₄	10 18.1 133°45' 0°8/17.1 18				
9 18	1 57.90	+14 24.3	1.270	2.157	16.4	19.3	9 18	1 51.70	+8 28.9	2.638	3.518	9.1	21.1
9 28	1 51.74	+14 34.2	1.202	2.147	11.9	19.0	9 28	1 46.18	+7 52.2	2.581	3.527	6.3	20.9
10 8	1 42.86	+14 28.7	1.156	2.138	6.8	18.7	10 8	1 39.52	+7 10.4	2.550	3.536	3.1	20.7
10 18	1 32.29	+14 9.7	1.134	2.128	2.1	18.4	10 18	1 32.29	+6 26.9	2.549	3.544	0.9	20.5
10 28	1 21.57	+13 42.1	1.137	2.119	5.5	18.6	10 28	1 25.16	+5 45.6	2.578	3.552	3.7	20.8
11 7	1 12.30	+13 13.5	1.165	2.111	10.8	18.8	11 7	1 18.76	+5 10.3	2.636	3.560	6.7	21.0
11 17	1 5.69	+12 51.2	1.215	2.102	15.7	19.1	11 17	1 13.62	+4 44.0	2.721	3.568	9.4	21.2
11 27	1 2.48	+12 41.4	1.285	2.095	19.8	19.3	11 27	1 10.12	+4 28.8	2.829	3.575	11.7	21.3
73045	2002 EY ₁₀₅	10 18.1 69°40' 4°3/15.1 18					494377	2016 UT ₃₃	10 18.1 307°30' 1°4/19.1 16				
9 18	1 57.53	+0 6.9	1.549	2.448	13.2	19.1	9 18	1 54.94	+14 14.3	1.562	2.444	14.2	21.2
9 28	1 50.59	-0 35.1	1.516	2.469	9.2	18.9	9 28	1 49.36	+14 6.0	1.483	2.426	10.2	20.9
10 8	1 41.84	-1 15.4	1.507	2.489	5.5	18.7	10 8	1 41.54	+13 43.7	1.427	2.409	5.7	20.6
10 18	1 32.28	-1 47.7	1.525	2.509	4.5	18.7	10 18	1 32.32	+13 9.9	1.396	2.392	1.5	20.3
10 28	1 23.09	-2 6.4	1.570	2.530	7.4	18.9	10 28	1 22.91	+12 29.7	1.393	2.375	4.8	20.5
11 7	1 15.34	-2 8.2	1.641	2.550	11.1	19.2	11 7	1 14.60	+11 50.2	1.415	2.358	9.6	20.7
11 17	1 9.74	-1 52.3	1.735	2.570	14.4	19.5	11 17	1 8.41	+11 17.8	1.462	2.342	14.0	21.0
11 27	1 6.70	-1 19.5	1.848	2.590	17.1	19.7	11 27	1 5.04	+10 58.1	1.529	2.326	17.7	21.2
389385	2009 WY ₁₅₇	10 18.1 280°15' 2°5/16.1 18					363685	2004 TQ ₁₃₂	10 18.1 35°15' 4°3/22.6 18				
9 18	1 54.97	+6 12.1	1.600	2.497	13.0	21.3	9 18	1 52.12	+24 41.7	1.870	2.709	14.1	19.9
9 28	1 49.28	+5 15.8	1.521	2.475	9.1	21.0	9 28	1 46.96	+24 23.0	1.809	2.717	10.9	19.7
10 8	1 41.44	+4 10.8	1.466	2.453	4.8	20.7	10 8	1 40.08	+23 43.4	1.770	2.726	7.5	19.6
10 18	1 32.28	+3 3.8	1.438	2.431	2.7	20.5	10 18	1 32.30	+22 44.8	1.756	2.736	4.8	19.4
10 28	1 22.95	+2 2.7	1.437	2.408	6.5	20.7	10 28	1 24.64	+21 32.3	1.770	2.745	4.9	19.4
11 7	1 14.65	+1 15.0	1.463	2.385	11.1	20.9	11 7	1 18.08	+20 13.5	1.811	2.756	7.7	19.6
11 17	1 8.39	+0 46.1	1.511	2.362	15.3	21.1	11 17	1 13.36	+18 56.2	1.879	2.766	11.0	19.9
11 27	1 4.82	+0 38.5	1.579	2.339	18.8	21.3	11 27	1 10.97	+17 47.5	1.969	2.777	13.9	20.1
428609	2008 EY ₁₄₈	10 18.1 62°03' 3°2/20.2 17					77035	2001 CU ₃₃	10 18.1 129°39' 1°5/19.2 18				
9 18	1 59.10	+17 48.5	1.342	2.215	16.6	20.7	9 18	1 59.67	+13 52.4	1.869	2.736	12.9	19.4
9 28	1 52.21	+17 57.9	1.293	2.228	12.2	20.4	9 28	1 52.17	+14 7.1	1.807	2.743	9.3	19.2
10 8	1 42.89	+17 48.6	1.265	2.240	7.4	20.2	10 8	1 42.78	+14 11.3	1.770	2.749	5.2	19.0
10 18	1 32.29	+17 22.3	1.262	2.253	3.4	20.0	10 18	1 32.33	+14 6.3	1.760	2.754	1.6	18.7
10 28	1 21.92	+16 44.6	1.285	2.266	5.3	20.2	10 28	1 21.96	+13 55.4	1.779	2.760	4.2	18.9
11 7	1 13.18	+16 3.4	1.334	2.279	9.8	20.5	11 7	1 12.74	+13 43.0	1.827	2.765	8.2	19.2
11 17	1 7.05	+15 26.4	1.406	2.292	14.0	20.7	11 17	1 5.51	+13 33.7	1.902	2.770	11.8	19.4
11 27	1 4.06	+15 0.2	1.499	2.305	17.6	21.0	11 27	1 0.80	+13 31.4	1.998	2.775	14.8	19.6
4771	Hayashi	10 18.1 40°50' 3°3/20.8 18					201078	2002 FU ₂₁	10 18.1 192°12' 1°9/19.8 18				
9 18	1 54.59	+19 51.3	1.495	2.362	15.5	16.2	9 18	1 55.65	+17 13.5	2.002	2.862	12.5	21.1
9 28	1 48.89	+19 40.4	1.444	2.374	11.5	16.0	9 28	1 49.35	+16 51.1	1.930	2.860	9.1	20.9
10 8	1 41.12	+19 9.7	1.415	2.387	7.2	15.8	10 8	1 41.31	+16 14.3	1.883	2.859	5.3	20.7
10 18	1 32.28	+18 21.9	1.410	2.400	3.6	15.6	10 18	1 32.32	+15 25.8	1.864	2.857	2.0	20.5
10 28	1 23.64	+17 23.1	1.433	2.413	4.9	15.7	10 28	1 23.36	+14 30.4	1.874	2.854	3.9	20.6
11 7	1 16.38	+16 21.6	1.481	2.427	8.9	16.0	11 7	1 15.39	+13 34.3	1.912	2.852	7.7	20.8
11 17	1 11.36	+15 25.3	1.554	2.442	12.8	16.3	11 17	1 9.19	+12 43.6	1.977	2.848	11.3	21.1
11 27	1 9.08	+14 40.9	1.648	2.457	16.1	16.5	11 27	1 5.28	+12 3.4	2.064	2.844	14.3	21.3
177738	2005 JT ₃₁	10 18.1 132°73' 2°1/19.9 18					34491	2000 SB ₁₃₈	10 18.1 146°26' 2°7/20.4 18				
9 18	1 57.30	+18 5.8	1.661	2.524	14.4	20.8	9 18	1 58.51	+19 27.5	1.667	2.524	14.7	19.0
9 28	1 50.60	+17 29.3	1.603	2.535	10.5	20.6	9 28	1 51.49	+18 56.9	1.607	2.534	10.8	18.8
10 8	1 41.95	+16 35.0	1.570	2.546	6.1	20.4	10 8	1 42.44	+18 7.1	1.571	2.544	6.6	18.6
10 18	1 32.29	+15 26.6	1.563	2.556	2.3	20.2	10 18	1 32.34	+17 1.5	1.561	2.552	2.9	18.4
10 28	1 22.83	+14 11.2	1.584	2.566	4.4	20.3	10 28	1 22.41	+15 46.4	1.579	2.560	4.6	18.5
11 7	1 14.69	+12 57.1	1.633	2.575	8.7	20.6	11 7	1 13.82	+14 30.6	1.626	2.567	8.7	18.8
11 17	1 8.69	+11 52.0	1.708	2.583	12.6	20.9	11 17	1 7.43	+13 22.0	1.698	2.574	12.6	19.0
11 27	1 5.33	+11 1.4	1.804	2.591	15.8	21.1	11 27	1 3.75	+12 27.1	1.792	2.580	15.9	19.3
467832	2010 RR ₅₁	10 18.1 76°91' 0°8/18.6 17					99376	2001 YR ₆₀	10 18.1 101°90' 0°9/18.7 18				
9 18	2 0.53	+12 46.3	1.253	2.142	16.5	20.9	9 18	1 58.07	+13 50.9	1.310	2.197	16.0	19.2
9 28	1 53.13	+12 34.5	1.212	2.160	11.6	20.7	9 28	1 51.56	+13 26.3	1.255	2.202	11.4	18.9
10 8	1 43.30	+12 8.6	1.193	2.177	6.2	20.5	10 8	1 42.61	+12 45.7	1.222	2.206	6.1	18.6
10 18	1 32.30	+11 32.8	1.199	2.195	0.9	20.1	10 18	1 32.34	+11 53.5	1.214	2.210	1.0	18.3
10 28	1 21.69	+10 54.1	1.231	2.213	5.3	20.5	10 28	1 22.21	+10 57.4	1.233	2.214	5.3	18.6
11 7	1 12.87	+10 20.1	1.289	2.231	10.5	20.9	11 7	1 13.64	+10 6.1	1.276	2.218	10.5	18.9
11 17	1 6.77	+9 57.0	1.370	2.248	14.9	21.2	11 17	1 7.64	+9 26.9	1.343	2.222	15.0	19.2
11 27	1 3.86	+9 48.7	1.470	2.265	18.4	21.5	11 27	1 4.77	+9 4.6	1.429	2.226	18.8	19.5
187115	2005 QU ₆₉	10 18.1 125°66' 0°8/18.8 17					61981	2000 RB ₃₀	10 18.1 230°81' 4°5/22.5 18				
9 18	1 57.04	+14 19.1	1.673	2.548	13.7	20.4	9 18	1 55.23	+24 42.3	2.227	3.051	12.7	19.0
9 28	1 50.38	+13 43.3	1.619	2.559	9.7	20.2	9 28	1 49.06	+24 52.0	2.147	3.046	9.9	18.8
10 8	1 41.82	+12 53.7	1.588	2.570	5.2	20.0	10 8	1 41.20	+24 44.5	2.091	3.041	7.0	18.6
10 18	1 32.30	+11 54.8	1.585	2.581	0.9	19.7	10 18	1 32.33	+24 20.0	2.062	3.036	4.8	18.5
10 28	1 22.97	+10 53.0	1.610	2.591	4.5	20.0	10 28	1 23.40	+23 40.9	2.061	3.030	5.0	18.5
11 7	1 14.93	+9 55.8	1.662	2.600	8.8	20.3	11 7	1 15.37	+22 52.3	2.088	3.025	7.4	18.6
11 17	1 8.97	+9 9.2	1.740	2.609	12.7	20.5	11 17	1 9.00	+22 0.4	2.142	3.019	10.3	18.8
11 27	1 5.58	+8 37.5	1.839	2.618	15.9	20.8	11 27	1 4.85	+21 11.5	2.219	3.013	13.0	19.0
156331	2001 XF ₁₁₅	10 18.1 0°05' 2°8/16.6 18					67603	2000 SR ₁₄₈	10 18.1 70°91' 1°1/18.8 17				
9 18	1 54.46	+4 27.2	1.061	1.978	16.3	18.9	9 18	1 59.76	+13 49.2	1.223	2.111	16.8	19.3
9 28	1 49.36	+4 15.9	1.012	1.974	11.3	18.6	9 28	1 52.63	+13 31.7	1.184	2.131	11.9	19.0
10 8	1 41.59	+4 0.6	0.983	1.972									

EPHEMERIDES

10 18.1

10 18.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
226545	2003 <i>UL</i> ₂₅₃	10 18.1 343°49 10°7/ 8.2 18					366984	2005 <i>YE</i> ₂₀	10 18.1 200°93 4°2/23.8 17				
9 18	1 54.39	-20 37.7	1.873	2.742	12.8	19.3	9 18	1 53.26	+28 26.8	3.115	3.905	10.2	22.2
9 28	1 48.45	-21 37.6	1.834	2.734	11.3	19.2	9 28	1 47.34	+28 21.5	3.027	3.900	8.2	22.0
10 8	1 40.82	-22 18.5	1.818	2.728	10.7	19.2	10 8	1 40.21	+28 1.2	2.964	3.895	6.1	21.9
10 18	1 32.33	-22 33.6	1.826	2.721	11.2	19.2	10 18	1 32.38	+27 26.1	2.928	3.889	4.5	21.8
10 28	1 24.01	-22 18.8	1.857	2.716	12.8	19.3	10 28	1 24.54	+26 38.3	2.922	3.883	4.3	21.8
11 7	1 16.84	-21 34.0	1.910	2.711	14.7	19.4	11 7	1 17.35	+25 41.6	2.946	3.876	5.8	21.9
11 17	1 11.52	-20 22.3	1.982	2.706	16.7	19.5	11 17	1 11.39	+24 40.7	2.998	3.869	7.9	22.0
11 27	1 8.51	-18 48.2	2.071	2.702	18.4	19.7	11 27	1 7.07	+23 40.8	3.076	3.861	10.0	22.1
124384	2001 <i>QE</i> ₁₆₈	10 18.1 55°29 0°2/17.9 18					384939	2012 <i>TG</i> ₁₀₆	10 18.1 334°00 0°5/18.7 17				
9 18	1 57.65	+11 35.7	1.099	2.000	17.2	19.8	9 18	1 49.74	+12 38.7	2.753	3.624	9.1	21.3
9 28	1 51.43	+10 59.9	1.055	2.010	12.0	19.6	9 28	1 44.92	+12 20.9	2.680	3.619	6.4	21.1
10 8	1 42.57	+10 9.2	1.032	2.019	6.2	19.3	10 8	1 38.96	+11 55.8	2.632	3.615	3.4	20.9
10 18	1 32.35	+9 10.1	1.033	2.029	0.2	18.9	10 18	1 32.37	+11 25.6	2.614	3.610	0.5	20.7
10 28	1 22.43	+8 12.1	1.059	2.040	6.1	19.3	10 28	1 25.78	+10 53.6	2.625	3.605	3.0	20.9
11 7	1 14.35	+7 24.6	1.108	2.050	11.7	19.7	11 7	1 19.83	+10 23.3	2.666	3.601	6.0	21.1
11 17	1 9.10	+6 54.3	1.179	2.061	16.5	20.0	11 17	1 15.03	+9 58.1	2.733	3.597	8.8	21.3
11 27	1 7.21	+6 44.5	1.268	2.072	20.3	20.3	11 27	1 11.80	+9 40.8	2.824	3.593	11.1	21.4
189957	2003 <i>UZ</i> ₆₂	10 18.1 7°53 4°4/13.5 18					136180	2003 <i>UJ</i> ₁₈₃	10 18.1 109°74 1°4/17.1 18				
9 18	1 50.61	-1 7.9	2.025	2.926	10.5	19.3	9 18	1 57.47	+8 48.6	1.423	2.317	14.5	20.2
9 28	1 45.71	-2 16.1	1.974	2.927	7.4	19.1	9 28	1 50.91	+8 1.6	1.373	2.326	10.0	20.0
10 8	1 39.38	-3 23.2	1.949	2.927	4.9	19.0	10 8	1 42.21	+7 5.0	1.347	2.334	5.0	19.7
10 18	1 32.32	-4 23.0	1.952	2.928	4.7	19.0	10 18	1 32.41	+6 5.3	1.347	2.343	1.5	19.5
10 28	1 25.35	-5 9.5	1.982	2.930	7.1	19.1	10 28	1 22.84	+5 10.4	1.374	2.351	5.9	19.8
11 7	1 19.29	-5 38.7	2.038	2.931	10.1	19.3	11 7	1 14.72	+4 27.5	1.428	2.359	10.6	20.1
11 17	1 14.75	-5 48.8	2.118	2.933	12.9	19.5	11 17	1 8.93	+4 1.4	1.504	2.366	14.7	20.4
11 27	1 12.17	-5 39.7	2.218	2.935	15.3	19.7	11 27	1 5.98	+3 54.3	1.600	2.374	18.1	20.6
323536	2004 <i>RR</i> ₂₂₈	10 18.1 342°14 3°1/20.2 18					185182	2006 <i>SY</i> ₃₄₄	10 18.1 265°46 1°9/19.7 17				
9 18	1 56.83	+17 2.7	1.744	2.609	13.8	19.8	9 18	1 56.13	+16 5.6	2.110	2.970	11.9	21.1
9 28	1 50.51	+17 38.8	1.670	2.601	10.2	19.5	9 28	1 49.79	+16 6.6	2.023	2.953	8.7	20.9
10 8	1 42.07	+18 2.3	1.620	2.593	6.4	19.3	10 8	1 41.66	+15 55.8	1.961	2.936	5.1	20.6
10 18	1 32.35	+18 12.9	1.596	2.586	3.3	19.1	10 18	1 32.42	+15 34.6	1.926	2.919	2.0	20.4
10 28	1 22.49	+18 12.7	1.600	2.579	4.8	19.2	10 28	1 23.02	+15 6.1	1.921	2.901	3.9	20.5
11 7	1 13.69	+18 6.0	1.631	2.573	8.6	19.4	11 7	1 14.46	+14 35.1	1.945	2.883	7.7	20.7
11 17	1 6.92	+17 58.1	1.687	2.568	12.4	19.6	11 17	1 7.55	+14 6.7	1.994	2.865	11.2	20.9
11 27	1 2.82	+17 54.2	1.765	2.564	15.7	19.8	11 27	1 2.91	+13 45.7	2.067	2.847	14.3	21.1
19039	4844 <i>P-L</i>	10 18.1 218°95 1°8/16.7 18					35458	1998 <i>DU</i> ₁₅	10 18.1 148°71 6°3/11.9 18				
9 18	1 56.83	+8 0.2	1.515	2.408	13.8	19.5	9 18	1 53.43	-4 7.3	1.762	2.663	11.8	18.9
9 28	1 50.51	+7 5.5	1.451	2.404	9.6	19.2	9 28	1 47.81	-5 51.0	1.719	2.667	8.7	18.7
10 8	1 42.04	+6 1.1	1.412	2.398	4.9	19.0	10 8	1 40.53	-7 30.7	1.701	2.671	6.5	18.6
10 18	1 32.35	+4 53.6	1.399	2.393	2.0	18.8	10 18	1 32.40	-8 57.6	1.711	2.674	6.8	18.6
10 28	1 22.70	+3 51.3	1.413	2.387	6.1	19.0	10 28	1 24.43	-10 3.8	1.747	2.677	9.3	18.8
11 7	1 14.32	+3 1.6	1.454	2.381	10.8	19.3	11 7	1 17.56	-10 44.7	1.809	2.680	12.3	19.0
11 17	1 8.14	+2 29.8	1.518	2.374	15.0	19.5	11 17	1 12.51	-10 59.4	1.893	2.683	15.2	19.2
11 27	1 4.75	+2 18.5	1.602	2.367	18.4	19.7	11 27	1 9.72	-10 49.3	1.994	2.685	17.5	19.4
266176	2006 <i>UA</i> ₃₂₉	10 18.1 225°31 1°0/17.4 18					473616	2015 <i>XT</i> ₂₇₇	10 18.1 55°05 2°3/20.6 18				
9 18	1 58.01	+8 37.4	1.710	2.595	12.9	21.5	9 18	1 51.55	+19 33.3	2.145	2.999	12.0	20.6
9 28	1 51.21	+8 10.2	1.640	2.588	9.0	21.2	9 28	1 46.39	+19 1.4	2.081	3.006	8.8	20.4
10 8	1 42.37	+7 34.8	1.594	2.580	4.6	21.0	10 8	1 39.78	+18 14.3	2.041	3.012	5.4	20.2
10 18	1 32.36	+6 55.5	1.576	2.572	1.0	20.7	10 18	1 32.39	+17 15.0	2.029	3.019	2.5	20.0
10 28	1 22.32	+6 18.0	1.586	2.563	5.2	21.0	10 28	1 25.10	+16 8.4	2.045	3.026	3.7	20.1
11 7	1 13.40	+5 48.3	1.624	2.553	9.7	21.2	11 7	1 18.74	+15 0.7	2.090	3.033	7.0	20.3
11 17	1 6.52	+5 30.7	1.686	2.543	13.7	21.4	11 17	1 13.93	+13 58.0	2.162	3.040	10.2	20.5
11 27	1 2.26	+5 28.3	1.769	2.533	17.0	21.7	11 27	1 11.13	+13 5.3	2.257	3.047	12.9	20.7
57098	2001 <i>OB</i> ₆₆	10 18.1 315°67 4°3/21.4 18					192628	1999 <i>KK</i> ₃	10 18.1 219°20 0°1/18.1 18				
9 18	1 55.75	+21 27.1	1.784	2.634	14.2	18.1	9 18	1 55.15	+12 6.3	1.915	2.793	12.1	21.3
9 28	1 49.78	+21 47.0	1.706	2.624	10.9	17.8	9 28	1 49.07	+11 22.7	1.842	2.786	8.5	21.0
10 8	1 41.71	+21 49.5	1.652	2.615	7.4	17.6	10 8	1 41.24	+10 27.6	1.795	2.779	4.4	20.8
10 18	1 32.37	+21 34.6	1.623	2.606	4.6	17.4	10 18	1 32.41	+9 25.5	1.775	2.771	0.1	20.4
10 28	1 22.90	+21 5.0	1.621	2.597	5.2	17.5	10 28	1 23.58	+8 22.3	1.784	2.763	4.4	20.8
11 7	1 14.47	+20 26.5	1.646	2.588	8.5	17.6	11 7	1 15.74	+7 24.8	1.822	2.754	8.6	21.0
11 17	1 8.04	+19 45.8	1.696	2.580	12.2	17.8	11 17	1 9.67	+6 38.4	1.885	2.745	12.3	21.2
11 27	1 4.26	+19 9.9	1.768	2.572	15.4	18.0	11 27	1 5.90	+6 7.1	1.970	2.736	15.4	21.4
47628	2000 <i>CJ</i> ₂	10 18.1 343°74 3°7/15.8 18					308930	2006 <i>SW</i> ₃₅₂	10 18.1 33°32 3°2/20.2 18				
9 18	1 57.32	+2 20.5	1.332	2.238	14.5	17.6	9 18	1 57.66	+17 14.8	1.513	2.384	15.2	19.8
9 28	1 51.01	+1 48.6	1.278	2.234	10.1	17.3	9 28	1 51.09	+17 40.3	1.462	2.395	11.2	19.6
10 8	1 42.35	+1 14.9	1.246	2.232	5.7	17.1	10 8	1 42.34	+17 50.0	1.433	2.407	6.8	19.4
10 18	1 32.38	+0 45.9	1.240	2.229	3.9	17.0	10 18	1 32.43	+17 45.0	1.430	2.420	3.3	19.2
10 28	1 22.52	+0 28.6	1.259	2.227	7.6	17.2	10 28	1 22.67	+17 28.9	1.453	2.433	4.9	19.4
11 7	1 14.10	+0 27.9	1.303	2.226	12.2	17.4	11 7	1 14.32	+17 7.8	1.503	2.447	9.0	19.6
11 17	1 8.12	+0 45.8	1.369	2.224	16.3	17.7	11 17	1 8.28	+16 47.8	1.577	2.461	12.9	19.9
11 27	1 5.15	+1 22.5	1.453	2.223	19.7	17.9	11 27	1 5.09	+16 34.6	1.672	2.476	16.2	20.2
308604	2005 <i>VX</i> ₁₁₂	10 18.1 322°57 3°0/19.9 17					451633	2012 <i>GR</i> ₂₆	10 18.1 199°23 0°4/18.5 17				
9 18	1 48.68	+18 3.9	0.877	1.785	19.7	21.8	9 18	1 53.48	+11 57.6	2.802	3.668	9.1	21.7
9 28	1 46.39	+17 40.1	0.790	1.745	14.9	21.3	9 28	1 47.48	+11 45.6	2.728	3.665	6.4	21.5

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
97308	1999 <i>XT</i> ₁₉₂	10 18.1 257°45		2°7/15.5 18			249728	2000 <i>SO</i> ₃₅	10 18.1 55°98		2°9/16.1 18		
9 18	1 54.47	+ 1 24.5	2.345	3.233	9.8	19.7	9 18	1 56.79	+ 7 45.0	1.047	1.958	17.0	20.1
9 28	1 48.33	+ 1 1.0	2.274	3.223	6.8	19.5	9 28	1 50.58	+ 6 19.8	1.023	1.983	11.6	19.8
10 8	1 40.77	+ 0 37.1	2.231	3.213	3.9	19.3	10 8	1 42.01	+ 4 46.4	1.021	2.009	5.8	19.6
10 18	1 32.42	+ 0 16.6	2.216	3.203	2.9	19.3	10 18	1 32.46	+ 3 16.0	1.042	2.035	3.1	19.5
10 28	1 24.06	+ 0 3.3	2.231	3.193	5.3	19.4	10 28	1 23.51	+ 2 0.0	1.088	2.062	7.6	19.9
11 7	1 16.49	+ 0 0.2	2.274	3.183	8.4	19.6	11 7	1 16.52	+ 1 6.8	1.158	2.088	12.6	20.3
11 17	1 10.35	+ 0 9.2	2.343	3.172	11.3	19.8	11 17	1 12.27	+ 0 39.7	1.249	2.115	16.9	20.6
11 27	1 6.10	+ 0 31.0	2.433	3.162	13.8	19.9	11 27	1 11.10	+ 0 38.4	1.357	2.142	20.2	20.9
38220	1999 <i>NV</i> ₂₃	10 18.1 60°86		7°5/13.4 18			327704	2006 <i>SZ</i> ₃₆	10 18.1 111°56		2°8/20.1 17		
9 18	1 58.23	- 4 24.6	1.166	2.077	15.7	17.7	9 18	1 59.48	+17 24.6	1.469	2.338	15.6	20.3
9 28	1 51.43	- 5 41.7	1.144	2.098	11.4	17.5	9 28	1 52.47	+17 27.6	1.411	2.344	11.5	20.1
10 8	1 42.40	- 6 49.8	1.144	2.119	8.1	17.4	10 8	1 43.12	+17 13.2	1.375	2.351	6.9	19.9
10 18	1 32.44	- 7 39.1	1.168	2.140	7.9	17.5	10 18	1 32.48	+16 43.3	1.365	2.357	3.0	19.6
10 28	1 23.03	- 8 2.1	1.217	2.162	10.8	17.7	10 28	1 21.96	+16 3.0	1.382	2.363	5.0	19.8
11 7	1 15.46	- 7 56.5	1.288	2.184	14.5	18.0	11 7	1 12.89	+15 19.9	1.425	2.369	9.5	20.1
11 17	1 10.52	- 7 24.3	1.379	2.205	17.9	18.2	11 17	1 6.27	+14 41.3	1.493	2.374	13.7	20.3
11 27	1 8.57	- 6 29.3	1.487	2.227	20.7	18.5	11 27	1 2.67	+14 13.5	1.581	2.380	17.2	20.6
297171	2010 <i>VD</i> ₁₁₂	10 18.1 11°87		0°2/17.9 18			326115	2011 <i>UF</i> ₂₂₄	10 18.1 288°77		0°8/17.5 18		
9 18	1 51.60	+11 24.4	1.644	2.535	13.0	20.2	9 18	1 54.99	+ 8 54.4	1.814	2.701	12.2	21.4
9 28	1 46.72	+10 46.4	1.588	2.538	9.1	19.9	9 28	1 49.05	+ 8 31.7	1.745	2.694	8.5	21.1
10 8	1 40.04	+ 9 57.4	1.555	2.541	4.7	19.7	10 8	1 41.28	+ 8 1.3	1.700	2.686	4.3	20.9
10 18	1 32.41	+ 9 2.4	1.549	2.545	0.2	19.3	10 18	1 32.46	+ 7 27.1	1.683	2.679	0.8	20.6
10 28	1 24.89	+ 8 7.9	1.570	2.550	4.7	19.7	10 28	1 23.63	+ 6 54.3	1.694	2.672	4.8	20.9
11 7	1 18.48	+ 7 20.6	1.617	2.555	9.0	20.0	11 7	1 15.81	+ 6 28.2	1.733	2.665	9.0	21.1
11 17	1 13.97	+ 6 45.8	1.688	2.561	12.9	20.2	11 17	1 9.83	+ 6 12.9	1.796	2.657	12.7	21.3
11 27	1 11.83	+ 6 26.9	1.781	2.567	16.0	20.5	11 27	1 6.23	+ 6 11.2	1.880	2.650	15.9	21.6
209409	2004 <i>FU</i> ₈	10 18.1 150°40		2°1/15.9 18			352908	2008 <i>YV</i> ₁₁₄	10 18.1 343°09		9°4/10.1 18		
9 18	1 53.66	+ 5 1.4	2.185	3.073	10.4	20.7	9 18	1 55.05	-13 22.9	1.625	2.517	13.1	20.3
9 28	1 47.75	+ 4 12.5	2.129	3.079	7.1	20.5	9 28	1 49.09	-14 42.0	1.586	2.515	10.8	20.2
10 8	1 40.44	+ 3 20.1	2.099	3.085	3.7	20.3	10 8	1 41.26	-15 46.9	1.570	2.513	9.5	20.1
10 18	1 32.42	+ 2 28.7	2.099	3.090	2.3	20.2	10 18	1 32.47	-16 29.1	1.578	2.512	10.0	20.1
10 28	1 24.51	+ 1 43.5	2.127	3.095	5.1	20.4	10 28	1 23.86	-16 42.6	1.611	2.510	12.1	20.3
11 7	1 17.51	+ 1 9.1	2.184	3.099	8.4	20.6	11 7	1 16.50	-16 25.9	1.667	2.509	14.7	20.4
11 17	1 12.02	+ 0 48.2	2.266	3.103	11.4	20.8	11 17	1 11.17	-15 41.0	1.742	2.508	17.2	20.6
11 27	1 8.49	+ 0 42.4	2.370	3.107	13.9	21.0	11 27	1 8.35	-14 31.9	1.834	2.507	19.4	20.8
441256	2007 <i>VY</i> ₂₈₇	10 18.1 15°62		0°8/18.7 18			91497	1999 <i>RF</i> ₁₄₂	10 18.1 39°45		0°2/17.9 18		
9 18	1 56.08	+12 32.6	1.712	2.592	13.2	21.2	9 18	1 52.82	+10 55.3	1.932	2.816	11.8	19.3
9 28	1 49.84	+12 26.4	1.649	2.593	9.4	21.0	9 28	1 47.36	+10 23.4	1.874	2.821	8.2	19.1
10 8	1 41.68	+12 9.5	1.611	2.594	5.0	20.7	10 8	1 40.32	+ 9 42.6	1.841	2.826	4.2	18.9
10 18	1 32.44	+11 44.7	1.599	2.595	0.8	20.4	10 18	1 32.46	+ 8 56.9	1.835	2.831	0.2	18.5
10 28	1 23.25	+11 16.6	1.615	2.596	4.4	20.7	10 28	1 24.69	+ 8 11.6	1.858	2.837	4.2	18.9
11 7	1 15.21	+10 50.7	1.659	2.598	8.7	21.0	11 7	1 17.92	+ 7 32.2	1.908	2.842	8.1	19.1
11 17	1 9.16	+10 32.1	1.727	2.599	12.6	21.2	11 17	1 12.83	+ 7 2.9	1.984	2.848	11.6	19.4
11 27	1 5.64	+10 24.4	1.816	2.601	15.8	21.4	11 27	1 9.88	+ 6 46.8	2.081	2.854	14.5	19.6
448646	2010 <i>VO</i> ₉₆	10 18.1 2°31		0°7/17.6 18			166418	2002 <i>OP</i> ₁₈	10 18.1 26°40		6°3/12.6 18		
9 18	1 50.83	+ 9 29.0	1.331	2.237	14.5	19.6	9 18	1 50.40	- 0 51.0	1.303	2.220	13.9	18.6
9 28	1 46.50	+ 9 5.7	1.278	2.235	10.1	19.3	9 28	1 46.03	- 2 45.5	1.271	2.231	9.8	18.4
10 8	1 40.05	+ 8 32.4	1.247	2.235	5.1	19.1	10 8	1 39.71	- 4 37.6	1.263	2.242	6.8	18.3
10 18	1 32.42	+ 7 54.1	1.239	2.236	0.8	18.7	10 18	1 32.45	- 6 15.8	1.280	2.255	6.9	18.3
10 28	1 24.88	+ 7 18.0	1.258	2.238	5.5	19.1	10 28	1 25.47	- 7 29.8	1.322	2.268	10.0	18.5
11 7	1 18.63	+ 6 50.6	1.301	2.242	10.4	19.4	11 7	1 19.86	- 8 14.1	1.386	2.282	13.7	18.8
11 17	1 14.59	+ 6 37.1	1.366	2.248	14.7	19.7	11 17	1 16.38	- 8 27.7	1.472	2.297	17.0	19.0
11 27	1 13.29	+ 6 40.1	1.450	2.254	18.2	19.9	11 27	1 15.46	- 8 13.0	1.574	2.313	19.7	19.3
145493	2005 <i>WA</i> ₇	10 18.1 321°94		0°6/17.5 17			390910	2005 <i>EQ</i> ₁₀₅	10 18.1 127°28		5°0/12.6 15		
9 18	1 49.35	+ 9 8.7	2.744	3.626	8.8	20.1	9 18	1 54.19	- 4 36.0	2.338	3.228	9.8	22.3
9 28	1 44.66	+ 8 40.6	2.672	3.618	6.1	19.9	9 28	1 47.95	- 5 53.4	2.303	3.246	7.1	22.2
10 8	1 38.84	+ 8 7.0	2.626	3.611	3.1	19.7	10 8	1 40.50	- 7 6.4	2.295	3.263	5.2	22.1
10 18	1 32.41	+ 7 30.8	2.608	3.604	0.6	19.5	10 18	1 32.47	- 8 9.1	2.317	3.280	5.3	22.1
10 28	1 25.98	+ 6 55.6	2.621	3.598	3.4	19.7	10 28	1 24.65	- 8 56.4	2.367	3.296	7.2	22.3
11 7	1 20.17	+ 6 25.0	2.663	3.591	6.4	19.9	11 7	1 17.75	- 9 25.5	2.444	3.311	9.7	22.5
11 17	1 15.49	+ 6 2.0	2.731	3.585	9.1	20.1	11 17	1 12.30	- 9 35.6	2.546	3.326	12.0	22.7
11 27	1 12.36	+ 5 48.9	2.822	3.579	11.4	20.2	11 27	1 8.69	- 9 27.5	2.667	3.340	13.9	22.8
244019	2001 <i>SP</i> ₁₃₁	10 18.1 37°11		0°3/18.4 18			299205	2005 <i>HN</i> ₉	10 18.1 206°30		0°4/17.8 18		
9 18	1 53.43	+12 39.2	1.534	2.423	14.0	20.3	9 18	1 53.64	+11 11.9	1.962	2.843	11.7	20.9
9 28	1 48.00	+12 5.6	1.487	2.435	9.8	20.1	9 28	1 47.96	+10 27.3	1.896	2.841	8.2	20.7
10 8	1 40.69	+11 19.8	1.463	2.448	5.1	19.9	10 8	1 40.66	+ 9 32.8	1.854	2.839	4.2	20.5
10 18	1 32.43	+10 26.5	1.466	2.462	0.3	19.6	10 18	1 32.47	+ 8 32.8	1.841	2.837	0.4	20.2
10 28	1 24.39	+ 9 32.6	1.495	2.476	4.7	19.9	10 28	1 24.33	+ 7 33.1	1.856	2.834	4.3	20.5
11 7	1 17.64	+ 8 45.3	1.551	2.491	9.1	20.2	11 7	1 17.15	+ 6 40.0	1.900	2.832	8.3	20.7
11 17	1 12.95	+ 8 9.9	1.630	2.506	13.0	20.5	11 17	1 11.66	+ 5 58.4	1.969	2.829	11.9	20.9
11 27	1 10.79	+ 7 50.0	1.731	2.522	16.2	20.8	11 27	1 8.34	+ 5 31.6	2.060	2.826	14.8	21.2
239962	2001 <i>KB</i> ₅₂	10 18.1 70°98		12°2/ 5.4 17			486233	2013 <i>BK</i> ₅	10 18.1 306°37		10°3/ 7.4 18		
9 18	1 55.31												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
71628	2000 EJ ₆₉		10 18.1 285°88	1.2°/19.3	17		200483	2000 YZ ₂₅		10 18.1 242°67	9.1°/10.3	18	
9 18	1 53.02	+14 36.7	2.283	3.150	10.9	19.0	9 18	1 58.16	-15 30.4	1.882	2.758	12.4	20.5
9 28	1 47.49	+14 25.2	2.200	3.136	7.8	18.7	9 28	1 51.14	-16 31.0	1.832	2.749	10.3	20.4
10 8	1 40.43	+14 3.5	2.143	3.122	4.4	18.5	10 8	1 42.32	-17 17.3	1.806	2.740	9.2	20.3
10 18	1 32.48	+13 33.4	2.113	3.108	1.3	18.3	10 18	1 32.54	-17 42.1	1.806	2.730	9.6	20.3
10 28	1 24.44	+12 58.8	2.113	3.094	3.5	18.4	10 28	1 22.86	-17 40.2	1.832	2.720	11.4	20.4
11 7	1 17.16	+12 24.2	2.141	3.080	7.1	18.6	11 7	1 14.33	-17 10.6	1.881	2.710	13.8	20.5
11 17	1 11.33	+11 54.0	2.196	3.066	10.4	18.8	11 17	1 7.71	-16 15.4	1.951	2.699	16.2	20.7
11 27	1 7.49	+11 32.3	2.274	3.052	13.2	19.0	11 27	1 3.53	-14 58.3	2.039	2.688	18.3	20.8
14624	Prymachenko		10 18.1 322°80	0.2°/18.0	18		332223	2006 GU ₅₄		10 18.1 226°02	0.5°/17.5	17	
9 18	1 51.65	+12 35.4	1.588	2.478	13.5	18.3	9 18	1 51.47	+ 9 44.8	2.708	3.584	9.1	22.6
9 28	1 46.94	+11 41.3	1.518	2.467	9.5	18.0	9 28	1 46.16	+ 9 9.7	2.632	3.576	6.3	22.5
10 8	1 40.27	+10 32.7	1.471	2.457	4.9	17.7	10 8	1 39.66	+ 8 28.3	2.584	3.568	3.2	22.2
10 18	1 32.47	+ 9 15.2	1.451	2.447	0.2	17.3	10 18	1 32.50	+ 7 43.6	2.564	3.560	0.5	22.0
10 28	1 24.65	+ 7 56.7	1.458	2.438	5.0	17.7	10 28	1 25.34	+ 6 59.6	2.575	3.552	3.5	22.2
11 7	1 17.91	+ 6 45.9	1.491	2.429	9.6	17.9	11 7	1 18.83	+ 6 20.4	2.616	3.543	6.6	22.4
11 17	1 13.14	+ 5 49.6	1.548	2.420	13.8	18.2	11 17	1 13.52	+ 5 49.2	2.683	3.533	9.4	22.6
11 27	1 10.90	+ 5 12.6	1.625	2.412	17.3	18.4	11 27	1 9.83	+ 5 28.6	2.774	3.524	11.8	22.8
355324	2007 TT ₂₆		10 18.1 331°13	0.5°/17.8	18		258752	2002 GW ₁₈₄		10 18.1 154°07	1.5°/16.4	18	
9 18	1 51.45	+11 28.8	1.414	2.312	14.3	21.0	9 18	1 52.12	+ 6 30.7	2.479	3.364	9.5	21.4
9 28	1 47.01	+10 41.9	1.345	2.298	10.1	20.7	9 28	1 46.60	+ 5 44.0	2.420	3.369	6.5	21.3
10 8	1 40.39	+ 9 40.7	1.298	2.285	5.2	20.4	10 8	1 39.87	+ 4 52.9	2.388	3.374	3.3	21.1
10 18	1 32.49	+ 8 30.9	1.276	2.272	0.5	20.0	10 18	1 32.50	+ 4 1.5	2.385	3.378	1.6	20.9
10 28	1 24.51	+ 7 20.9	1.280	2.260	5.5	20.4	10 28	1 25.23	+ 3 14.5	2.412	3.382	4.3	21.1
11 7	1 17.71	+ 6 19.7	1.309	2.249	10.5	20.6	11 7	1 18.72	+ 2 35.8	2.468	3.386	7.4	21.3
11 17	1 13.06	+ 5 34.4	1.361	2.239	15.0	20.9	11 17	1 13.53	+ 2 8.6	2.550	3.390	10.2	21.5
11 27	1 11.19	+ 5 9.4	1.433	2.229	18.7	21.1	11 27	1 10.07	+ 1 54.6	2.655	3.393	12.5	21.7
315029	2007 BT ₇₄		10 18.1 138°49	1.0°/17.1	18		41013	1999 UH ₂₂		10 18.1 66°39	0.6°/17.6	18	
9 18	1 53.15	+ 7 57.2	2.501	3.381	9.6	21.7	9 18	1 55.85	+10 0.0	1.579	2.469	13.6	19.7
9 28	1 47.28	+ 7 24.1	2.443	3.390	6.6	21.5	9 28	1 49.63	+ 9 26.7	1.533	2.483	9.4	19.5
10 8	1 40.20	+ 6 46.1	2.413	3.398	3.3	21.3	10 8	1 41.54	+ 8 44.0	1.511	2.497	4.7	19.3
10 18	1 32.49	+ 6 6.5	2.411	3.406	1.0	21.1	10 18	1 32.53	+ 7 57.2	1.515	2.511	0.7	19.0
10 28	1 24.88	+ 5 29.5	2.440	3.414	3.9	21.4	10 28	1 23.75	+ 7 12.5	1.547	2.525	5.0	19.4
11 7	1 18.06	+ 4 58.8	2.498	3.422	7.0	21.6	11 7	1 16.28	+ 6 36.2	1.605	2.540	9.4	19.7
11 17	1 12.60	+ 4 37.5	2.582	3.429	9.9	21.8	11 17	1 10.90	+ 6 12.7	1.688	2.554	13.2	19.9
11 27	1 8.87	+ 4 27.5	2.690	3.436	12.2	22.0	11 27	1 8.07	+ 6 4.6	1.791	2.569	16.3	20.2
112226	2002 KO ₁₂		10 18.1 73°12	1.4°/19.2	17		291820	2006 KN ₁₁₇		10 18.1 110°39	2.8°/15.1	16	
9 18	1 58.06	+15 38.3	1.303	2.186	16.4	20.2	9 18	1 54.15	+ 4 26.5	2.040	2.931	10.9	21.8
9 28	1 51.41	+15 4.2	1.262	2.205	11.6	19.9	9 28	1 48.07	+ 3 5.1	2.000	2.951	7.4	21.6
10 8	1 42.50	+14 12.5	1.243	2.225	6.4	19.7	10 8	1 40.61	+ 1 40.7	1.986	2.971	4.1	21.4
10 18	1 32.52	+13 8.4	1.249	2.245	1.6	19.4	10 18	1 32.52	+ 0 19.8	2.002	2.990	3.1	21.4
10 28	1 22.91	+12 0.4	1.282	2.264	5.0	19.7	10 28	1 24.66	- 0 50.9	2.047	3.008	5.8	21.6
11 7	1 14.99	+10 57.7	1.340	2.283	10.0	20.1	11 7	1 17.84	- 1 46.4	2.120	3.026	9.1	21.8
11 17	1 9.61	+10 7.8	1.422	2.303	14.3	20.4	11 17	1 12.65	- 2 23.8	2.218	3.043	12.0	22.1
11 27	1 7.21	+ 9 35.3	1.524	2.322	17.7	20.7	11 27	1 9.47	- 2 42.2	2.337	3.060	14.4	22.3
2690	Ristina		10 18.1 345°93	5.9°/12.4	18		298155	2002 TV ₂₂		10 18.1 28°99	1.3°/19.0	18	
9 18	1 50.97	- 4 16.3	1.820	2.723	11.3	15.5	9 18	1 57.57	+13 7.9	1.665	2.542	13.7	20.1
9 28	1 46.15	- 5 34.4	1.769	2.719	8.3	15.3	9 28	1 50.95	+13 17.6	1.604	2.546	9.8	19.9
10 8	1 39.74	- 6 48.8	1.744	2.715	6.1	15.2	10 8	1 42.31	+13 16.5	1.568	2.549	5.4	19.6
10 18	1 32.48	- 7 52.0	1.745	2.712	6.3	15.2	10 18	1 32.54	+13 6.3	1.558	2.553	1.4	19.4
10 28	1 25.30	- 8 37.1	1.772	2.708	8.7	15.3	10 28	1 22.84	+12 51.2	1.576	2.558	4.4	19.6
11 7	1 19.10	- 9 0.2	1.825	2.706	11.7	15.5	11 7	1 14.35	+12 36.0	1.621	2.562	8.8	19.9
11 17	1 14.58	- 9 0.0	1.899	2.704	14.6	15.7	11 17	1 7.96	+12 25.8	1.691	2.567	12.7	20.1
11 27	1 12.22	- 8 37.6	1.992	2.702	17.0	15.9	11 27	1 4.21	+12 24.5	1.783	2.572	15.9	20.4
391661	2007 XM ₂₇		10 18.1 116°62	7.0°/12.1	18		31364	1998 WM ₆		10 18.1 82°95	2.1°/16.8	18	
9 18	1 56.36	-10 17.9	1.981	2.868	11.4	20.6	9 18	1 58.40	+ 7 26.3	1.231	2.133	15.7	19.1
9 28	1 49.68	-11 9.8	1.942	2.876	8.9	20.4	9 28	1 51.82	+ 6 41.5	1.185	2.140	10.9	18.8
10 8	1 41.46	-11 51.7	1.929	2.883	7.2	20.4	10 8	1 42.81	+ 5 48.0	1.161	2.148	5.5	18.5
10 18	1 32.51	-12 17.7	1.942	2.891	7.4	20.4	10 18	1 32.55	+ 4 53.1	1.162	2.156	2.2	18.3
10 28	1 23.78	-12 23.4	1.983	2.898	9.2	20.5	10 28	1 22.55	+ 4 5.2	1.189	2.164	6.7	18.7
11 7	1 16.15	-12 7.4	2.048	2.905	11.7	20.7	11 7	1 14.20	+ 3 32.0	1.240	2.172	11.8	19.0
11 17	1 10.28	-11 30.7	2.136	2.912	14.1	20.9	11 17	1 8.48	+ 3 17.6	1.314	2.180	16.2	19.3
11 27	1 6.60	-10 35.7	2.244	2.919	16.2	21.1	11 27	1 5.89	+ 3 23.7	1.406	2.188	19.7	19.5
253503	2003 SX ₁₂₅		10 18.1 70°16	2.2°/19.7	18		330283	2006 SG ₃₀₄		10 18.1 298°17	2.8°/20.3	17	
9 18	1 58.73	+16 40.4	1.252	2.133	17.0	20.2	9 18	1 55.11	+19 3.4	1.380	2.253	16.2	20.1
9 28	1 52.03	+16 22.7	1.208	2.149	12.3	20.0	9 28	1 49.67	+18 34.1	1.311	2.247	12.0	19.9
10 8	1 42.89	+15 45.7	1.186	2.165	7.0	19.8	10 8	1 41.81	+17 42.3	1.264	2.240	7.3	19.6
10 18	1 32.54	+14 53.5	1.187	2.181	2.4	19.5	10 18	1 32.54	+16 31.2	1.241	2.234	3.1	19.3
10 28	1 22.52	+13 54.0	1.215	2.198	5.2	19.8	10 28	1 23.24	+15 8.5	1.245	2.227	5.1	19.4
11 7	1 14.24	+12 56.4	1.268	2.214	10.1	20.1	11 7	1 15.29	+13 44.5	1.274	2.221	10.0	19.7
11 17	1 8.63	+12 8.9	1.345	2.230	14.6	20.4	11 17	1 9.77	+12 29.4	1.327	2.215	14.6	20.0
11 27	1 6.18	+11 37.2	1.441	2.246	18.2	20.7	11 27	1 7.28	+11 31.0	1.400	2.209	18.5	20.2
515434	2013 JU ₆₀		10 18.1 107°73	0.5°/17.6	18		103441	2000 AN ₁₈₇		10			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
482939	2014 <i>JM</i> ₅₉		10 18.2 182°43	5°8/13.6	18		430660	2003 <i>SG</i> ₃₆₂		10 18.2 331°34	0°6/18.5	18	
9 18	1 58.47	- 7 15.1	2.010	2.896	11.3	21.4	9 18	1 56.27	+11 27.9	1.109	2.011	17.0	20.8
9 28	1 51.20	- 7 45.6	1.957	2.896	8.4	21.2	9 28	1 50.94	+11 29.2	1.044	1.998	12.1	20.5
10 8	1 42.30	- 8 8.6	1.931	2.896	6.2	21.1	10 8	1 42.70	+11 17.0	1.000	1.986	6.5	20.2
10 18	1 32.56	- 8 19.3	1.932	2.896	6.1	21.1	10 18	1 32.63	+10 54.6	0.978	1.975	0.7	19.7
10 28	1 22.97	- 8 13.4	1.961	2.896	8.1	21.2	10 28	1 22.39	+10 28.5	0.981	1.964	6.0	20.1
11 7	1 14.45	- 7 49.4	2.018	2.895	10.9	21.4	11 7	1 13.68	+10 6.6	1.007	1.954	11.9	20.4
11 17	1 7.72	- 7 7.7	2.098	2.895	13.6	21.6	11 17	1 7.81	+ 9 55.8	1.054	1.946	17.1	20.7
11 27	1 3.24	- 6 10.2	2.198	2.893	16.0	21.8	11 27	1 5.55	+10 1.1	1.118	1.938	21.5	20.9
116081	2003 <i>WM</i> ₁₂₄		10 18.2 43°09	1°2/17.3	18		155853	2001 <i>BA</i> ₂₅		10 18.2 227°14	6°7/ 9.4	18	
9 18	1 56.50	+ 7 32.2	1.618	2.510	13.2	19.5	9 18	1 51.99	-12 55.8	2.593	3.473	9.3	20.4
9 28	1 50.15	+ 7 14.8	1.564	2.515	9.1	19.3	9 28	1 46.56	-14 13.1	2.542	3.464	7.6	20.3
10 8	1 41.87	+ 6 51.1	1.535	2.521	4.6	19.0	10 8	1 39.91	-15 21.8	2.518	3.454	6.8	20.2
10 18	1 32.56	+ 6 25.3	1.532	2.527	1.3	18.8	10 18	1 32.59	-16 16.4	2.521	3.445	7.3	20.2
10 28	1 23.40	+ 6 2.6	1.556	2.533	5.2	19.1	10 28	1 25.31	-16 52.1	2.551	3.435	8.8	20.3
11 7	1 15.47	+ 5 48.2	1.608	2.539	9.6	19.4	11 7	1 18.75	-17 6.8	2.606	3.424	10.7	20.4
11 17	1 9.61	+ 5 45.3	1.683	2.546	13.4	19.6	11 17	1 13.47	-17 0.4	2.684	3.413	12.7	20.6
11 27	1 6.33	+ 5 56.2	1.779	2.553	16.5	19.9	11 27	1 9.88	-16 34.3	2.780	3.402	14.3	20.7
472406	2015 <i>BM</i> ₂₄₂		10 18.2 205°92	3°5/20.9	17		97726	2000 <i>GE</i> ₁₆₁		10 18.2 261°55	3°4/14.8	17	
9 18	1 58.25	+20 42.2	1.636	2.489	15.1	21.6	9 18	1 53.94	- 1 1.9	2.420	3.310	9.5	19.7
9 28	1 51.62	+20 28.7	1.563	2.486	11.4	21.3	9 28	1 47.97	- 1 29.7	2.354	3.301	6.7	19.6
10 8	1 42.75	+19 54.9	1.514	2.482	7.2	21.1	10 8	1 40.66	- 1 56.1	2.314	3.293	4.2	19.4
10 18	1 32.58	+19 2.4	1.490	2.478	3.8	20.9	10 18	1 32.61	- 2 17.2	2.303	3.284	3.6	19.3
10 28	1 22.40	+17 56.6	1.493	2.473	5.0	21.0	10 28	1 24.58	- 2 29.2	2.321	3.276	5.7	19.5
11 7	1 13.45	+16 45.7	1.525	2.468	9.0	21.2	11 7	1 17.31	- 2 29.4	2.367	3.267	8.6	19.6
11 17	1 6.74	+15 38.5	1.581	2.462	13.1	21.4	11 17	1 11.41	- 2 16.5	2.439	3.258	11.3	19.8
11 27	1 2.88	+14 42.5	1.659	2.455	16.6	21.6	11 27	1 7.33	- 1 50.1	2.532	3.249	13.6	20.0
183480	2003 <i>DP</i> ₅		10 18.2 194°12	0°7/17.4	18		378042	2006 <i>TN</i> ₁₂		10 18.2 342°64	3°5/20.5	18	
9 18	1 52.68	+10 8.7	2.104	2.986	11.0	20.9	9 18	1 52.90	+18 34.7	1.084	1.975	18.3	20.4
9 28	1 47.22	+ 9 20.8	2.039	2.986	7.6	20.7	9 28	1 48.61	+18 29.3	1.021	1.965	13.6	20.1
10 8	1 40.29	+ 8 24.5	1.999	2.985	3.8	20.4	10 8	1 41.49	+17 59.5	0.977	1.955	8.4	19.8
10 18	1 32.55	+ 7 24.1	1.988	2.984	0.7	20.2	10 18	1 32.63	+17 7.4	0.955	1.947	3.8	19.5
10 28	1 24.87	+ 6 25.3	2.006	2.983	4.3	20.5	10 28	1 23.65	+16 0.7	0.957	1.940	5.9	19.6
11 7	1 18.07	+ 5 33.7	2.052	2.981	8.0	20.7	11 7	1 16.24	+14 50.5	0.981	1.934	11.3	19.9
11 17	1 12.83	+ 4 53.8	2.125	2.980	11.3	20.9	11 17	1 11.65	+13 48.3	1.026	1.930	16.4	20.2
11 27	1 9.60	+ 4 28.4	2.219	2.978	14.1	21.1	11 27	1 10.59	+13 2.9	1.090	1.926	20.8	20.4
480495	2015 <i>LS</i> ₃₂		10 18.2 154°35	5°8/23.9	18		261675	2005 <i>YY</i> ₁₇₃		10 18.2 231°78	6°1/ 9.9	18	
9 18	1 57.88	+28 51.8	2.093	2.895	14.1	21.8	9 18	1 51.03	-10 29.9	2.630	3.515	9.0	20.1
9 28	1 51.03	+29 0.0	2.022	2.902	11.4	21.6	9 28	1 45.89	-11 51.7	2.576	3.506	7.1	20.0
10 8	1 42.32	+28 46.6	1.974	2.908	8.5	21.5	10 8	1 39.57	-13 6.8	2.550	3.496	6.1	19.9
10 18	1 32.58	+28 11.4	1.952	2.914	6.3	21.4	10 18	1 32.60	-14 9.5	2.551	3.487	6.6	19.9
10 28	1 22.89	+27 17.3	1.957	2.919	6.0	21.4	10 28	1 25.65	-14 55.1	2.581	3.476	8.2	20.0
11 7	1 14.29	+26 10.4	1.991	2.923	8.0	21.5	11 7	1 19.38	-15 20.9	2.636	3.466	10.3	20.2
11 17	1 7.62	+24 58.4	2.051	2.928	10.7	21.7	11 17	1 14.34	-15 26.1	2.713	3.455	12.3	20.3
11 27	1 3.39	+23 49.1	2.135	2.931	13.4	21.9	11 27	1 10.94	-15 11.8	2.810	3.444	14.0	20.4
127253	2002 <i>JQ</i> ₃₉		10 18.2 74°12	10°1/ 9.9	18		445346	2010 <i>MS</i> ₇₁		10 18.2 32°72	3°9/15.2	18	
9 18	2 0.33	-24 10.1	2.225	3.063	12.2	18.7	9 18	1 55.72	- 0 15.7	1.771	2.669	11.9	20.1
9 28	1 52.13	-24 46.4	2.212	3.086	10.8	18.6	9 28	1 49.46	- 0 44.0	1.722	2.674	8.4	19.9
10 8	1 42.59	-25 2.4	2.224	3.110	10.1	18.6	10 8	1 41.48	- 1 10.7	1.697	2.679	5.0	19.7
10 18	1 32.59	-24 53.9	2.260	3.133	10.4	18.7	10 18	1 32.63	- 1 30.9	1.700	2.684	4.1	19.7
10 28	1 23.05	-24 19.1	2.322	3.156	11.5	18.8	10 28	1 23.93	- 1 39.7	1.730	2.690	6.8	19.8
11 7	1 14.81	-23 19.9	2.408	3.179	12.9	19.0	11 7	1 16.37	- 1 34.0	1.787	2.696	10.3	20.1
11 17	1 8.42	-21 59.8	2.514	3.201	14.4	19.1	11 17	1 10.68	- 1 12.8	1.867	2.703	13.5	20.3
11 27	1 4.21	-20 23.6	2.639	3.224	15.7	19.3	11 27	1 7.34	- 0 36.2	1.968	2.709	16.2	20.5
282734	2006 <i>DC</i> ₁₉₆		10 18.2 143°28	6°8/11.9	18		486567	2013 <i>HP</i> ₁₂₉		10 18.2 325°15	1°2/18.9	17	
9 18	1 56.05	- 8 36.5	1.958	2.848	11.3	20.6	9 18	1 59.52	+11 43.4	1.749	2.625	13.2	20.7
9 28	1 49.51	- 9 45.9	1.919	2.856	8.7	20.5	9 28	1 52.45	+12 15.8	1.674	2.615	9.5	20.4
10 8	1 41.43	-10 46.9	1.906	2.864	6.9	20.4	10 8	1 43.21	+12 40.4	1.624	2.605	5.2	20.2
10 18	1 32.60	-11 32.8	1.919	2.871	7.2	20.4	10 18	1 32.66	+12 57.9	1.601	2.596	1.3	19.9
10 28	1 23.96	-11 58.3	1.960	2.878	9.2	20.6	10 28	1 21.96	+13 10.4	1.606	2.587	4.5	20.1
11 7	1 16.42	-12 1.3	2.026	2.884	11.8	20.7	11 7	1 12.33	+13 21.5	1.640	2.579	8.8	20.3
11 17	1 10.64	-11 42.0	2.114	2.890	14.2	20.9	11 17	1 4.75	+13 34.8	1.699	2.571	12.8	20.6
11 27	1 7.03	-11 2.8	2.222	2.896	16.3	21.1	11 27	0 59.86	+13 54.0	1.779	2.563	16.1	20.8
326506	2002 <i>LB</i> ₄₅		10 18.2 203°37	1°1/19.7	18		116216	2003 <i>XA</i> ₄₁		10 18.2 119°04	2°8/20.5	18	
9 18	1 51.40	+17 38.2	2.769	3.620	9.7	21.4	9 18	1 58.28	+19 34.6	1.590	2.449	15.2	20.4
9 28	1 46.11	+16 38.7	2.689	3.616	7.0	21.3	9 28	1 51.47	+19 8.6	1.535	2.463	11.2	20.2
10 8	1 39.65	+15 27.0	2.635	3.611	4.0	21.1	10 8	1 42.59	+18 23.0	1.503	2.475	6.8	20.0
10 18	1 32.57	+14 6.1	2.612	3.606	1.2	20.8	10 18	1 32.65	+17 21.1	1.497	2.487	3.1	19.8
10 28	1 25.53	+12 41.0	2.619	3.600	3.0	21.0	10 28	1 22.93	+16 9.6	1.518	2.499	4.6	19.9
11 7	1 19.17	+11 17.2	2.658	3.594	6.0	21.2	11 7	1 14.60	+14 57.1	1.567	2.511	8.8	20.2
11 17	1 14.03	+10 0.0	2.725	3.587	8.9	21.4	11 17	1 8.53	+13 51.6	1.642	2.521	12.7	20.4
11 27	1 10.51	+ 8 53.6	2.817	3.580	11.3	21.5	11 27	1 5.21	+12 59.7	1.738	2.532	16.0	20.7
7663	1994 <i>RX</i> ₁		10 18.2 93°49	6°8/11.4	18		454516	2014 <i>ON</i> ₂₁₄		1			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
70459	1999 TX ₂₅	10 18.2 315°01		0°9/19.2 18			342486	2008 UC ₁₅₈	10 18.2 21°47		1°0/19.0 18		
9 18	1 51.70	+18 21.0	1.659	2.531	14.0	18.8	9 18	1 51.88	+15 35.2	1.241	2.134	16.2	19.3
9 28	1 46.90	+16 41.2	1.588	2.526	10.1	18.6	9 28	1 47.37	+14 43.3	1.192	2.141	11.6	19.0
10 8	1 40.26	+14 38.9	1.541	2.522	5.6	18.3	10 8	1 40.60	+13 31.9	1.165	2.149	6.3	18.8
10 18	1 32.62	+12 21.1	1.522	2.518	1.1	18.0	10 18	1 32.67	+12 7.6	1.162	2.158	1.2	18.5
10 28	1 25.05	+9 58.7	1.532	2.514	4.5	18.2	10 28	1 24.93	+10 40.5	1.185	2.168	5.1	18.8
11 7	1 18.62	+7 43.8	1.571	2.510	9.1	18.5	11 7	1 18.68	+9 21.3	1.232	2.178	10.3	19.1
11 17	1 14.11	+5 46.4	1.635	2.506	13.3	18.7	11 17	1 14.80	+8 18.3	1.302	2.190	14.8	19.4
11 27	1 12.02	+4 13.2	1.722	2.503	16.7	19.0	11 27	1 13.78	+7 36.7	1.391	2.202	18.5	19.7
335511	2005 YA ₁₄₅	10 18.2 333°45		3°1/16.1 18			252774	2002 EH ₁₀₈	10 18.2 102°78		2°0/19.5 17		
9 18	1 53.63	+4 51.2	1.243	2.154	14.9	20.7	9 18	2 1.13	+15 43.2	1.442	2.315	15.7	20.6
9 28	1 48.75	+4 8.1	1.181	2.141	10.4	20.4	9 28	1 53.56	+15 37.0	1.394	2.331	11.3	20.4
10 8	1 41.43	+3 18.5	1.141	2.128	5.6	20.1	10 8	1 43.72	+15 14.8	1.368	2.347	6.4	20.1
10 18	1 32.65	+2 29.8	1.124	2.117	3.3	19.9	10 18	1 32.73	+14 39.5	1.368	2.362	2.1	19.9
10 28	1 23.80	+1 50.6	1.133	2.106	7.5	20.1	10 28	1 22.01	+13 57.0	1.396	2.377	4.8	20.1
11 7	1 16.31	+1 28.2	1.165	2.096	12.5	20.4	11 7	1 12.88	+13 15.0	1.450	2.392	9.5	20.4
11 17	1 11.24	+1 26.6	1.219	2.087	17.0	20.6	11 17	1 6.25	+12 40.1	1.529	2.406	13.6	20.7
11 27	1 9.25	+1 47.2	1.290	2.079	20.8	20.9	11 27	1 2.63	+12 17.6	1.628	2.420	17.1	21.0
185015	2006 QS ₂₁	10 18.2 66°94		4°4/21.2 15			137338	1999 TH ₇₇	10 18.2 217°04		0°0/18.2 18		
9 18	1 59.64	+20 46.7	1.272	2.138	17.8	20.7	9 18	1 58.43	+11 33.7	1.857	2.732	12.6	20.7
9 28	1 52.79	+20 52.8	1.225	2.154	13.3	20.5	9 28	1 51.54	+11 7.5	1.782	2.724	8.9	20.4
10 8	1 43.39	+20 35.8	1.199	2.169	8.6	20.3	10 8	1 42.69	+10 30.8	1.731	2.715	4.6	20.2
10 18	1 32.68	+19 57.1	1.197	2.184	4.7	20.1	10 18	1 32.72	+9 47.0	1.709	2.705	0.1	19.8
10 28	1 22.24	+19 3.2	1.220	2.200	5.8	20.2	10 28	1 22.69	+9 1.6	1.716	2.695	4.5	20.1
11 7	1 13.56	+18 3.5	1.269	2.216	10.0	20.5	11 7	1 13.69	+8 20.6	1.751	2.684	8.8	20.4
11 17	1 7.62	+17 7.7	1.341	2.231	14.3	20.8	11 17	1 6.61	+7 49.2	1.812	2.673	12.7	20.6
11 27	1 4.96	+16 23.5	1.433	2.247	17.9	21.1	11 27	1 2.01	+7 31.2	1.895	2.660	15.9	20.8
214689	2006 SV ₂₆₁	10 18.2 76°82		0°6/17.6 18			183968	2004 EW ₆	10 18.2 101°25		1°3/17.1 16		
9 18	1 55.30	+9 18.9	1.858	2.743	12.1	20.5	9 18	1 55.60	+9 48.6	1.523	2.415	13.8	20.2
9 28	1 49.15	+8 54.9	1.804	2.752	8.4	20.3	9 28	1 49.59	+8 42.6	1.474	2.426	9.5	20.0
10 8	1 41.33	+8 23.5	1.775	2.760	4.2	20.0	10 8	1 41.63	+7 26.0	1.449	2.436	4.8	19.7
10 18	1 32.65	+7 48.6	1.773	2.769	0.6	19.8	10 18	1 32.70	+6 5.9	1.451	2.446	1.4	19.5
10 28	1 24.11	+7 15.2	1.800	2.777	4.5	20.1	10 28	1 23.99	+4 50.9	1.480	2.456	5.6	19.9
11 7	1 16.65	+6 48.3	1.854	2.786	8.5	20.3	11 7	1 16.61	+3 48.9	1.536	2.466	10.1	20.1
11 17	1 11.00	+6 31.8	1.933	2.795	12.0	20.6	11 17	1 11.36	+3 5.0	1.616	2.476	14.0	20.4
11 27	1 7.62	+6 28.0	2.034	2.803	14.9	20.8	11 27	1 8.70	+2 41.7	1.716	2.485	17.2	20.7
373947	2003 VC ₁₀	10 18.2 213°64		3°5/16.3 18			301196	2008 YO ₁₆₈	10 18.2 208°73		5°3/13.1 18		
9 18	2 6.67	-0 15.0	1.753	2.633	13.0	20.4	9 18	1 55.46	-5 13.9	2.121	3.012	10.6	21.0
9 28	1 57.30	-0 9.3	1.683	2.627	9.2	20.1	9 28	1 49.16	-6 9.2	2.064	3.007	7.8	20.8
10 8	1 45.67	-0 1.0	1.639	2.620	5.3	19.9	10 8	1 41.34	-7 0.0	2.034	3.003	5.7	20.7
10 18	1 32.73	+0 13.6	1.624	2.612	3.6	19.8	10 18	1 32.71	-7 40.6	2.031	2.997	5.7	20.7
10 28	1 19.79	+0 37.8	1.640	2.604	6.6	20.0	10 28	1 24.15	-8 5.8	2.057	2.992	7.8	20.8
11 7	1 8.13	+1 13.6	1.684	2.595	10.7	20.2	11 7	1 16.51	-8 12.6	2.109	2.986	10.6	21.0
11 17	0 58.74	+2 1.2	1.754	2.586	14.4	20.4	11 17	1 10.47	-8 0.3	2.185	2.980	13.2	21.1
11 27	0 52.22	+3 0.5	1.846	2.576	17.5	20.6	11 27	1 6.49	-7 29.7	2.281	2.973	15.5	21.3
209872	2005 JE ₇₇	10 18.2 93°30		3°4/21.2 18			113583	2002 TS ₄₅	10 18.2 91°91		1°4/19.5 18		
9 18	1 58.86	+20 37.6	2.006	2.848	13.2	20.8	9 18	1 53.44	+16 22.1	1.866	2.736	12.8	19.7
9 28	1 51.57	+20 48.5	1.953	2.868	9.9	20.6	9 28	1 47.97	+15 43.8	1.801	2.738	9.2	19.5
10 8	1 42.56	+20 43.7	1.925	2.889	6.4	20.4	10 8	1 40.80	+14 50.7	1.760	2.739	5.2	19.2
10 18	1 32.70	+20 24.2	1.924	2.909	3.7	20.3	10 18	1 32.70	+13 46.6	1.746	2.741	1.5	19.0
10 28	1 23.01	+19 53.5	1.952	2.928	4.4	20.4	10 28	1 24.67	+12 37.5	1.761	2.743	4.0	19.2
11 7	1 14.49	+19 17.1	2.009	2.948	7.5	20.6	11 7	1 17.68	+11 30.5	1.803	2.744	8.0	19.4
11 17	1 7.88	+18 40.6	2.092	2.967	10.6	20.8	11 17	1 12.46	+10 32.1	1.871	2.746	11.7	19.7
11 27	1 3.64	+18 9.5	2.198	2.986	13.3	21.1	11 27	1 9.53	+9 47.2	1.962	2.748	14.8	19.9
91742	1999 TE ₁₇₉	10 18.2 149°72		0°8/19.1 18			483886	2005 YO ₂₄₆	10 18.2 297°29		3°9/14.2 17		
9 18	1 52.80	+14 44.0	2.594	3.456	9.9	20.2	9 18	1 51.54	+0 56.7	2.010	2.909	10.7	21.7
9 28	1 47.11	+14 13.1	2.529	3.463	7.0	20.0	9 28	1 46.64	-0 12.0	1.935	2.888	7.5	21.5
10 8	1 40.20	+13 32.7	2.491	3.470	3.9	19.8	10 8	1 40.14	-1 23.3	1.886	2.867	4.6	21.3
10 18	1 32.66	+12 45.4	2.481	3.477	0.9	19.6	10 18	1 32.69	-2 30.7	1.865	2.846	4.2	21.2
10 28	1 25.19	+11 55.5	2.502	3.483	3.1	19.8	10 28	1 25.17	-3 27.5	1.871	2.826	6.9	21.3
11 7	1 18.48	+11 7.2	2.553	3.489	6.3	20.0	11 7	1 18.45	-4 8.2	1.904	2.805	10.3	21.5
11 17	1 13.09	+10 24.8	2.631	3.494	9.1	20.2	11 17	1 13.26	-4 29.6	1.961	2.784	13.5	21.7
11 27	1 9.42	+9 51.6	2.733	3.499	11.5	20.4	11 27	1 10.15	-4 30.8	2.038	2.763	16.2	21.8
72464	2001 DU ₂₁	10 18.2 1°06		10°7/ 8.9 18			438518	2007 RS ₂₆₅	10 18.2 27°08		0°2/18.3 18		
9 18	1 52.44	-13 13.0	1.378	2.281	14.3	17.6	9 18	1 53.31	+12 26.1	1.212	2.112	16.0	20.1
9 28	1 47.56	-14 58.4	1.344	2.279	11.8	17.5	9 28	1 48.31	+11 51.3	1.172	2.126	11.2	19.9
10 8	1 40.64	-16 27.7	1.333	2.278	10.7	17.4	10 8	1 41.07	+11 2.2	1.154	2.140	5.8	19.6
10 18	1 32.66	-17 30.1	1.346	2.278	11.5	17.4	10 18	1 32.71	+10 4.9	1.159	2.155	0.2	19.3
10 28	1 24.88	-17 58.3	1.381	2.279	13.7	17.6	10 28	1 24.65	+9 7.9	1.190	2.172	5.4	19.7
11 7	1 18.47	-17 50.2	1.436	2.281	16.5	17.8	11 7	1 18.15	+8 19.9	1.245	2.190	10.4	20.0
11 17	1 14.23	-17 8.6	1.510	2.283	19.1	18.0	11 17	1 14.08	+7 46.8	1.323	2.208	14.8	20.4
11 27	1 12.66	-15 58.7	1.599	2.286	21.4	18.2	11 27	1 12.89	+7 32.2	1.419	2.227	18.3	20.6
176333	2001 SN ₂₉₄	10 18.2 6°97		0°6/17.7 18			80384	1999 XG ₁₆₃	10 18.2 232°63		2°2/16.4 18		
9 18	1 52.42	+10 56.7	1.659	2.550	13.0	20.1	9 18	1 56.81	+6 20.6	1.741	2.631	12.5	20.4
9 28													

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
15080	1999 <i>CR</i> ₂₀		10 18.2 303°47	2°2/16.4	18		364085	2005 <i>YL</i> ₈₅		10 18.2 304°63	3°6/14.7	18	
9 18	1 54.57	+ 5 21.5	1.759	2.654	12.1	17.8	9 18	1 52.76	+ 0 26.0	2.101	2.997	10.4	20.7
9 28	1 48.87	+ 4 47.4	1.691	2.644	8.4	17.5	9 28	1 47.33	- 0 22.2	2.042	2.994	7.3	20.5
10 8	1 41.33	+ 4 8.5	1.649	2.635	4.4	17.3	10 8	1 40.44	- 1 10.5	2.009	2.990	4.4	20.3
10 18	1 32.73	+ 3 29.6	1.633	2.626	2.3	17.1	10 18	1 32.76	- 1 53.8	2.004	2.987	3.8	20.2
10 28	1 24.11	+ 2 56.6	1.645	2.616	5.7	17.3	10 28	1 25.14	- 2 26.8	2.027	2.984	6.3	20.4
11 7	1 16.50	+ 2 34.7	1.683	2.608	9.8	17.6	11 7	1 18.39	- 2 45.8	2.077	2.981	9.4	20.6
11 17	1 10.74	+ 2 27.3	1.746	2.599	13.5	17.8	11 17	1 13.16	- 2 48.8	2.152	2.978	12.3	20.8
11 27	1 7.38	+ 2 36.1	1.829	2.590	16.6	18.0	11 27	1 9.92	- 2 35.2	2.247	2.975	14.8	21.0
355346	2007 <i>TK</i> ₁₃₆		10 18.2 346°90	1°0/17.4	18		404330	2013 <i>FP</i> ₁₇		10 18.2 125°05	0°7/17.4	18	
9 18	1 52.02	+ 9 52.5	1.361	2.263	14.5	21.0	9 18	1 53.04	+ 9 27.9	2.512	3.389	9.6	22.2
9 28	1 47.46	+ 9 8.3	1.300	2.256	10.1	20.7	9 28	1 47.26	+ 8 45.8	2.459	3.403	6.6	22.0
10 8	1 40.72	+ 8 12.0	1.261	2.249	5.1	20.4	10 8	1 40.31	+ 7 57.6	2.432	3.417	3.3	21.8
10 18	1 32.72	+ 7 10.0	1.247	2.243	1.1	20.1	10 18	1 32.76	+ 7 7.1	2.434	3.430	0.7	21.6
10 28	1 24.74	+ 6 10.6	1.259	2.238	5.8	20.4	10 28	1 25.34	+ 6 18.5	2.467	3.443	3.7	21.9
11 7	1 18.01	+ 5 21.9	1.296	2.234	10.7	20.7	11 7	1 18.73	+ 5 36.3	2.529	3.455	6.9	22.1
11 17	1 13.50	+ 4 50.1	1.355	2.231	15.1	20.9	11 17	1 13.46	+ 5 3.6	2.618	3.467	9.7	22.3
11 27	1 11.77	+ 4 38.3	1.433	2.229	18.8	21.2	11 27	1 9.90	+ 4 42.8	2.730	3.478	12.0	22.5
252123	2000 <i>WU</i> ₁₁₈		10 18.2 325°98	2°1/16.6	18		476933	2008 <i>WQ</i> ₁₂₆		10 18.2 294°06	2°0/19.7	18	
9 18	1 55.81	+ 4 13.9	1.849	2.741	11.8	19.6	9 18	1 54.99	+16 31.0	1.665	2.537	14.0	21.6
9 28	1 49.66	+ 4 2.1	1.782	2.734	8.2	19.4	9 28	1 49.48	+16 14.9	1.580	2.517	10.2	21.4
10 8	1 41.71	+ 3 47.8	1.741	2.726	4.3	19.2	10 8	1 41.82	+15 42.5	1.518	2.496	6.0	21.1
10 18	1 32.75	+ 3 34.7	1.726	2.719	2.2	19.0	10 18	1 32.79	+14 56.2	1.482	2.476	2.1	20.8
10 28	1 23.77	+ 3 27.2	1.740	2.712	5.4	19.2	10 28	1 23.55	+14 1.0	1.474	2.456	4.5	20.9
11 7	1 15.79	+ 3 28.9	1.781	2.706	9.3	19.4	11 7	1 15.32	+13 4.3	1.492	2.436	9.1	21.1
11 17	1 9.61	+ 3 42.3	1.847	2.699	12.9	19.6	11 17	1 9.09	+12 13.7	1.535	2.416	13.4	21.3
11 27	1 5.78	+ 4 8.6	1.934	2.693	15.9	19.8	11 27	1 5.56	+11 35.5	1.599	2.396	17.1	21.5
71720	2000 <i>GK</i> ₁₆₇		10 18.2 299°65	7°4/24.2	18		312483	2008 <i>TD</i> ₁₇₄		10 18.2 339°28	0°7/16.9	18	
9 18	1 56.61	+29 46.8	1.773	2.583	16.0	18.7	9 18	1 46.67	+ 7 15.1	3.919	4.799	6.4	20.7
9 28	1 50.74	+30 20.0	1.687	2.568	13.2	18.5	9 28	1 42.64	+ 6 50.1	3.850	4.797	4.4	20.5
10 8	1 42.51	+30 29.5	1.622	2.552	10.3	18.2	10 8	1 37.88	+ 6 22.3	3.809	4.794	2.2	20.4
10 18	1 32.76	+30 12.6	1.580	2.537	7.9	18.1	10 18	1 32.72	+ 5 53.7	3.797	4.792	0.8	20.2
10 28	1 22.75	+29 30.7	1.565	2.523	7.6	18.0	10 28	1 27.58	+ 5 26.6	3.816	4.790	2.7	20.4
11 7	1 13.80	+28 29.5	1.575	2.508	9.7	18.1	11 7	1 22.85	+ 5 3.5	3.865	4.788	4.8	20.5
11 17	1 7.03	+27 17.8	1.610	2.493	12.7	18.3	11 17	1 18.89	+ 4 46.2	3.941	4.786	6.8	20.7
11 27	1 3.17	+26 5.6	1.667	2.479	15.8	18.4	11 27	1 15.97	+ 4 36.2	4.042	4.784	8.5	20.8
185505	2007 <i>TU</i> ₂₅₁		10 18.2 67°20	5°1/22.5	18		2068	Dangreen		10 18.2 328°79	7°9/11.7	18	
9 18	1 57.96	+24 19.0	1.670	2.508	15.6	19.8	9 18	1 54.73	- 9 36.4	1.671	2.568	12.5	15.1
9 28	1 51.29	+24 32.1	1.618	2.525	12.1	19.6	9 28	1 48.98	-10 40.1	1.622	2.561	9.8	14.9
10 8	1 42.57	+24 23.6	1.587	2.542	8.4	19.4	10 8	1 41.38	-11 33.9	1.596	2.555	8.0	14.8
10 18	1 32.77	+23 54.1	1.582	2.559	5.5	19.3	10 18	1 32.79	-12 10.3	1.596	2.548	8.3	14.8
10 28	1 23.15	+23 7.7	1.603	2.576	5.7	19.3	10 28	1 24.29	-12 23.0	1.621	2.542	10.5	14.9
11 7	1 14.90	+22 11.8	1.652	2.593	8.6	19.5	11 7	1 16.94	-12 9.6	1.670	2.537	13.4	15.1
11 17	1 8.88	+21 14.5	1.726	2.610	11.9	19.8	11 17	1 11.52	-11 31.0	1.740	2.532	16.2	15.3
11 27	1 5.58	+20 23.4	1.822	2.627	15.0	20.0	11 27	1 8.56	-10 30.2	1.828	2.527	18.7	15.5
17366	1979 <i>OV</i> ₄		10 18.2 266°66	0°4/18.6	18		60604	2000 <i>EP</i> ₁₆₄		10 18.2 353°15	1°9/16.7	18	
9 18	1 53.42	+12 45.4	2.073	2.949	11.4	18.1	9 18	1 52.21	+ 9 35.3	1.220	2.127	15.4	18.5
9 28	1 47.87	+12 18.3	2.003	2.944	8.1	17.9	9 28	1 47.72	+ 8 20.5	1.165	2.124	10.7	18.2
10 8	1 40.75	+11 41.0	1.957	2.940	4.3	17.7	10 8	1 40.90	+ 6 51.7	1.132	2.121	5.4	17.9
10 18	1 32.74	+10 56.7	1.939	2.935	0.5	17.4	10 18	1 32.78	+ 5 17.9	1.124	2.118	2.0	17.7
10 28	1 24.73	+10 10.4	1.950	2.931	3.9	17.6	10 28	1 24.75	+ 3 50.4	1.140	2.117	6.7	18.0
11 7	1 17.61	+ 9 27.3	1.989	2.926	7.7	17.9	11 7	1 18.13	+ 2 39.7	1.181	2.116	11.9	18.3
11 17	1 12.09	+ 8 52.3	2.055	2.921	11.1	18.1	11 17	1 13.91	+ 1 52.4	1.244	2.116	16.5	18.6
11 27	1 8.66	+ 8 28.9	2.142	2.917	14.1	18.3	11 27	1 12.64	+ 1 31.4	1.324	2.117	20.2	18.8
441917	2010 <i>GT</i> ₁₂₃		10 18.2 78°80	5°1/13.4	18		333359	2001 <i>XY</i> ₁₁₀		10 18.2 5°57	1°1/19.1	18	
9 18	1 53.78	- 1 11.9	1.735	2.637	11.9	20.5	9 18	1 52.02	+15 15.2	1.174	2.071	16.7	20.0
9 28	1 48.08	- 2 39.2	1.701	2.653	8.4	20.4	9 28	1 47.68	+14 34.2	1.120	2.070	12.0	19.7
10 8	1 40.79	- 4 4.1	1.692	2.669	5.6	20.2	10 8	1 40.91	+13 33.1	1.087	2.071	6.6	19.5
10 18	1 32.76	- 5 18.6	1.711	2.686	5.5	20.3	10 18	1 32.79	+12 17.9	1.077	2.073	1.3	19.1
10 28	1 24.99	- 6 15.8	1.756	2.702	8.0	20.4	10 28	1 24.77	+10 58.2	1.092	2.076	5.3	19.4
11 7	1 18.38	- 6 51.4	1.828	2.718	11.2	20.7	11 7	1 18.25	+ 9 45.1	1.131	2.080	10.8	19.7
11 17	1 13.60	- 7 4.1	1.922	2.734	14.1	20.9	11 17	1 14.23	+ 8 47.5	1.192	2.085	15.5	20.0
11 27	1 11.04	- 6 55.0	2.035	2.750	16.5	21.1	11 27	1 13.28	+ 8 11.0	1.272	2.091	19.5	20.3
29986	Shunsuke		10 18.2 169°90	3°0/15.8	18		161018	2002 <i>EU</i> ₁₀₇		10 18.2 320°43	3°0/12.9	18	R
9 18	1 58.28	+ 3 28.7	1.704	2.597	12.6	19.5	9 18	1 46.27	- 4 21.6	4.024	4.913	6.0	19.4
9 28	1 51.38	+ 2 44.3	1.649	2.600	8.7	19.3	9 28	1 42.34	- 5 1.5	3.967	4.910	4.4	19.2
10 8	1 42.59	+ 1 56.8	1.618	2.602	4.8	19.0	10 8	1 37.72	- 5 39.2	3.938	4.907	3.2	19.1
10 18	1 32.80	+ 1 12.1	1.615	2.604	3.2	18.9	10 18	1 32.73	- 6 11.9	3.938	4.905	3.2	19.1
10 28	1 23.13	+ 0 36.6	1.640	2.606	6.4	19.1	10 28	1 27.77	- 6 37.3	3.968	4.902	4.4	19.2
11 7	1 14.67	+ 0 15.0	1.692	2.607	10.4	19.4	11 7	1 23.21	- 6 53.4	4.026	4.899	6.1	19.3
11 17	1 8.22	+ 0 10.2	1.768	2.608	14.0	19.6	11 17	1 19.39	- 6 59.3	4.110	4.896	7.7	19.5
11 27	1 4.31	+ 0 22.9	1.864	2.608	16.9	19.8	11 27	1 16.58	- 6 54.6	4.216	4.894	9.1	19.6
254919	2005 <i>SP</i> ₁₁₁		10 18.2 245°52	2°6/20.4	18		304165	2006 <i>PG</i> ₁₂		10 18.2 77°88	4		

EPHEMERIDES

10 18.2

10 18.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
50103	2000 AR ₁₁₁	10 18.2 116°22		4°2/14.6 17			225259	2009 RH ₁₇	10 18.2 353°63		0°5/17.8 17		
9 18	1 55.88	+ 2 17.3	1.545	2.446	13.1	18.9	9 18	1 52.15	+ 9 59.5	1.712	2.604	12.6	20.1
9 28	1 49.77	+ 0 56.2	1.500	2.455	9.1	18.6	9 28	1 47.24	+ 9 32.9	1.649	2.600	8.8	19.9
10 8	1 41.77	- 0 27.2	1.480	2.463	5.4	18.4	10 8	1 40.55	+ 8 57.3	1.610	2.596	4.5	19.6
10 18	1 32.82	- 1 44.4	1.487	2.472	4.5	18.4	10 18	1 32.85	+ 8 16.9	1.597	2.593	0.5	19.3
10 28	1 24.10	- 2 46.9	1.521	2.480	7.7	18.6	10 28	1 25.17	+ 7 37.4	1.611	2.591	4.7	19.6
11 7	1 16.67	- 3 28.9	1.581	2.488	11.6	18.9	11 7	1 18.52	+ 7 4.5	1.652	2.589	8.9	19.9
11 17	1 11.33	- 3 47.8	1.664	2.496	15.1	19.1	11 17	1 13.70	+ 6 42.9	1.718	2.589	12.7	20.1
11 27	1 8.53	- 3 43.9	1.765	2.503	17.9	19.4	11 27	1 11.22	+ 6 35.7	1.804	2.589	15.9	20.3
315061	2007 DQ ₂₈	10 18.2 84°26		5°0/22.6 18			291716	2006 JQ ₂₃	10 18.2 53°91		1°2/17.3 18		
9 18	1 57.87	+24 58.3	2.178	2.998	13.1	20.3	9 18	1 55.95	+ 8 24.7	1.522	2.417	13.7	20.5
9 28	1 51.07	+25 31.0	2.108	3.003	10.3	20.2	9 28	1 49.85	+ 7 51.3	1.478	2.430	9.5	20.3
10 8	1 42.47	+25 46.8	2.062	3.007	7.4	20.0	10 8	1 41.84	+ 7 10.1	1.457	2.444	4.8	20.1
10 18	1 32.85	+25 45.0	2.042	3.012	5.3	19.9	10 18	1 32.87	+ 6 26.6	1.463	2.458	1.3	19.9
10 28	1 23.18	+25 27.5	2.051	3.016	5.4	19.9	10 28	1 24.15	+ 5 47.2	1.496	2.473	5.4	20.2
11 7	1 14.48	+24 58.5	2.087	3.021	7.6	20.0	11 7	1 16.77	+ 5 17.7	1.555	2.488	9.7	20.5
11 17	1 7.56	+24 23.9	2.151	3.026	10.4	20.2	11 17	1 11.51	+ 5 2.2	1.637	2.503	13.6	20.7
11 27	1 2.96	+23 49.8	2.238	3.030	13.0	20.4	11 27	1 8.83	+ 5 2.5	1.740	2.518	16.7	21.0
66578	1999 RS ₁₅₃	10 18.2 295°51		2°5/20.3 18			485397	2011 LS ₁₉	10 18.2 63°65		5°3/13.1 18		
9 18	1 54.26	+18 29.7	1.639	2.507	14.4	18.8	9 18	1 52.76	+ 0 4.4	1.587	2.493	12.5	20.5
9 28	1 49.04	+18 5.6	1.551	2.484	10.7	18.5	9 28	1 47.52	- 1 47.1	1.554	2.509	8.8	20.4
10 8	1 41.64	+17 22.1	1.486	2.461	6.5	18.2	10 8	1 40.59	- 3 37.5	1.545	2.524	5.8	20.2
10 18	1 32.83	+16 21.5	1.447	2.439	2.8	17.9	10 18	1 32.85	- 5 17.2	1.563	2.539	5.8	20.3
10 28	1 23.80	+15 9.5	1.434	2.416	4.6	18.0	10 28	1 25.38	- 6 37.1	1.609	2.555	8.6	20.5
11 7	1 15.77	+13 54.4	1.449	2.394	9.2	18.2	11 7	1 19.13	- 7 31.9	1.679	2.570	12.0	20.7
11 17	1 9.78	+12 45.0	1.488	2.371	13.5	18.4	11 17	1 14.78	- 7 59.8	1.772	2.586	15.1	20.9
11 27	1 6.53	+11 48.9	1.548	2.349	17.3	18.6	11 27	1 12.75	- 8 2.1	1.883	2.602	17.6	21.2
244592	2002 XX ₆₉	10 18.2 225°26		6°4/12.7 18			48856	1998 FO ₁₀₃	10 18.2 71°18		3°7/20.9 18		
9 18	1 57.62	- 6 30.3	1.865	2.756	11.8	20.3	9 18	2 0.14	+19 50.7	1.315	2.181	17.3	17.6
9 28	1 50.91	- 7 34.3	1.805	2.747	8.9	20.1	9 28	1 53.06	+19 49.0	1.272	2.201	12.8	17.4
10 8	1 42.39	- 8 32.5	1.772	2.737	6.7	19.9	10 8	1 43.59	+19 25.5	1.250	2.222	8.0	17.2
10 18	1 32.86	- 9 18.0	1.765	2.727	6.8	19.9	10 18	1 32.92	+18 42.7	1.252	2.242	4.0	17.0
10 28	1 23.37	- 9 44.4	1.786	2.716	9.1	20.0	10 28	1 22.60	+17 47.3	1.281	2.262	5.4	17.2
11 7	1 14.92	- 9 48.5	1.832	2.705	12.1	20.2	11 7	1 14.02	+16 48.5	1.336	2.282	9.7	17.5
11 17	1 8.33	- 9 29.8	1.902	2.693	15.1	20.4	11 17	1 8.10	+15 55.2	1.414	2.302	13.9	17.8
11 27	1 4.12	- 8 49.9	1.990	2.681	17.5	20.6	11 27	1 5.33	+15 14.2	1.513	2.322	17.3	18.0
515702	2014 QU ₃₃₉	10 18.2 89°74		5°2/12.4 18			95593	Azusiensis	10 18.2 63°25		3°3/14.5 18		
9 18	1 51.47	- 3 56.8	2.149	3.047	10.1	21.4	9 18	1 50.91	+ 3 40.4	2.010	2.908	10.7	19.0
9 28	1 46.37	- 5 18.1	2.105	3.052	7.4	21.3	9 28	1 46.04	+ 2 8.8	1.963	2.917	7.4	18.8
10 8	1 39.93	- 6 36.0	2.087	3.057	5.4	21.2	10 8	1 39.79	+ 0 34.0	1.943	2.927	4.2	18.7
10 18	1 32.81	- 7 43.9	2.096	3.062	5.6	21.2	10 18	1 32.85	- 0 56.8	1.951	2.936	3.6	18.6
10 28	1 25.81	- 8 36.0	2.134	3.067	7.7	21.3	10 28	1 26.05	- 2 16.5	1.988	2.946	6.2	18.8
11 7	1 19.68	- 9 8.7	2.198	3.072	10.3	21.5	11 7	1 20.17	- 3 19.3	2.053	2.956	9.5	19.0
11 17	1 15.02	- 9 20.8	2.285	3.077	12.8	21.7	11 17	1 15.83	- 4 2.2	2.141	2.966	12.4	19.3
11 27	1 12.22	- 9 12.8	2.391	3.082	14.9	21.9	11 27	1 13.42	- 4 24.4	2.251	2.976	14.8	19.5
151302	2002 CZ ₈₃	10 18.2 147°77		4°1/13.7 18			39635	Kusatoo	10 18.2 294°98		3°2/15.5 18		
9 18	1 52.04	- 0 52.3	2.233	3.128	9.9	20.0	9 18	1 55.41	+ 0 39.6	2.091	2.982	10.7	18.6
9 28	1 46.74	- 2 2.0	2.182	3.131	7.0	19.8	9 28	1 49.24	+ 0 17.0	2.026	2.975	7.5	18.4
10 8	1 40.12	- 3 10.8	2.157	3.134	4.6	19.6	10 8	1 41.50	- 0 5.4	1.986	2.968	4.4	18.2
10 18	1 32.83	- 4 13.2	2.161	3.137	4.4	19.6	10 18	1 32.89	- 0 23.2	1.975	2.962	3.3	18.2
10 28	1 25.62	- 5 3.4	2.193	3.140	6.6	19.8	10 28	1 24.30	- 0 32.3	1.993	2.955	5.9	18.3
11 7	1 19.26	- 5 37.6	2.253	3.143	9.4	20.0	11 7	1 16.60	- 0 29.7	2.038	2.948	9.2	18.5
11 17	1 14.32	- 5 53.9	2.337	3.145	12.1	20.2	11 17	1 10.50	- 0 13.7	2.109	2.942	12.3	18.7
11 27	1 11.22	- 5 52.1	2.441	3.147	14.3	20.3	11 27	1 6.49	+ 0 16.1	2.200	2.936	14.9	18.9
410628	2008 RS ₃	10 18.2 341°66		1°8/16.2 18			38561	1999 VA ₁₃₃	10 18.2 57°50		0°2/18.1 18		
9 18	1 50.14	+ 7 18.8	2.130	3.022	10.5	20.4	9 18	1 56.37	+12 33.7	1.398	2.287	15.0	19.2
9 28	1 45.54	+ 6 13.3	2.066	3.018	7.2	20.2	9 28	1 50.10	+11 36.8	1.367	2.316	10.4	19.0
10 8	1 39.55	+ 5 1.4	2.029	3.015	3.7	20.0	10 8	1 41.90	+10 27.3	1.359	2.345	5.3	18.8
10 18	1 32.81	+ 3 48.2	2.020	3.013	1.9	19.9	10 18	1 32.90	+ 9 12.2	1.378	2.374	0.2	18.4
10 28	1 26.12	+ 2 40.2	2.039	3.010	4.9	20.1	10 28	1 24.34	+ 8 0.2	1.424	2.404	5.0	18.9
11 7	1 20.25	+ 1 42.9	2.087	3.008	8.4	20.3	11 7	1 17.33	+ 6 59.3	1.495	2.433	9.6	19.2
11 17	1 15.82	+ 1 0.4	2.160	3.006	11.5	20.5	11 17	1 12.59	+ 6 14.7	1.591	2.462	13.6	19.5
11 27	1 13.27	+ 0 34.8	2.254	3.004	14.2	20.7	11 27	1 10.49	+ 5 49.2	1.707	2.491	16.7	19.8
76305	2000 EH ₁₃₅	10 18.2 59°69		1°5/17.0 18			70669	1999 TT ₂₉₀	10 18.2 24°69		3°2/15.7 18		
9 18	1 56.16	+ 6 38.5	1.765	2.656	12.3	18.2	9 18	1 53.31	+ 4 53.8	1.364	2.272	14.1	18.7
9 28	1 49.90	+ 6 15.9	1.710	2.661	8.5	18.0	9 28	1 48.21	+ 3 52.3	1.320	2.278	9.7	18.4
10 8	1 41.85	+ 5 48.0	1.680	2.666	4.4	17.7	10 8	1 41.07	+ 2 45.6	1.298	2.285	5.2	18.2
10 18	1 32.87	+ 5 19.2	1.677	2.672	1.6	17.6	10 18	1 32.89	+ 1 41.7	1.302	2.293	3.4	18.1
10 28	1 24.01	+ 4 54.6	1.702	2.677	5.1	17.8	10 28	1 24.90	+ 0 49.0	1.332	2.302	7.1	18.4
11 7	1 16.27	+ 4 38.8	1.754	2.683	9.2	18.1	11 7	1 18.28	+ 0 14.1	1.387	2.311	11.4	18.6
11 17	1 10.43	+ 4 34.9	1.831	2.688	12.8	18.3	11 17	1 13.84	+ 0 0.1	1.463	2.321	15.3	18.9
11 27	1 6.98	+ 4 44.7	1.929	2.694	15.7	18.5	11 27	1 12.07	+ 0 7.8	1.558	2.331	18.5	19.2
374896	2006 WU ₁₀₀	10 18.2 1°10		1°1/17.7 18			46946	1998 SR ₁₁₁	10 18.2 277°04		1°3/19.1 18		
9 18	1 56.68	+ 7 33.9	1.013										

EPHEMERIDES

10 18.2

10 18.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
181195	2005 <i>SN</i> ₁₃₂		10 18.2 82°24	0°1/18.3	18		159965	2006 <i>BT</i> ₁₂		10 18.2 274°24	1°4/16.8	18	
9 18	1 54.95	+11 12.7	2.034	2.912	11.5	20.5	9 18	1 52.22	+7 31.2	2.244	3.130	10.3	20.4
9 28	1 48.94	+10 56.3	1.973	2.916	8.1	20.3	9 28	1 47.02	+6 48.1	2.169	3.118	7.1	20.2
10 8	1 41.35	+10 31.6	1.937	2.920	4.2	20.0	10 8	1 40.38	+5 58.8	2.120	3.106	3.6	19.9
10 18	1 32.91	+10 1.6	1.928	2.925	0.2	19.7	10 18	1 32.92	+5 7.5	2.100	3.094	1.4	19.8
10 28	1 24.53	+9 30.6	1.949	2.929	3.9	20.0	10 28	1 25.43	+4 19.3	2.109	3.082	4.5	20.0
11 7	1 17.12	+9 3.3	1.998	2.933	7.8	20.3	11 7	1 18.71	+3 39.0	2.146	3.070	8.0	20.2
11 17	1 11.37	+8 43.8	2.073	2.938	11.1	20.5	11 17	1 13.39	+3 10.4	2.209	3.058	11.2	20.3
11 27	1 7.76	+8 34.9	2.170	2.942	14.0	20.7	11 27	1 9.99	+2 55.9	2.294	3.046	13.9	20.5
477027	2008 <i>YE</i> ₁₇₂		10 18.2 313°89	1°6/17.1	18		114963	2003 <i>QN</i> ₆₁		10 18.2 17°82	1°1/18.8	18	
9 18	1 55.22	+7 15.4	1.492	2.390	13.7	20.6	9 18	1 57.57	+11 16.8	0.907	1.819	19.0	18.5
9 28	1 49.75	+6 49.9	1.418	2.372	9.6	20.4	9 28	1 51.99	+11 39.8	0.868	1.825	13.5	18.2
10 8	1 42.03	+6 16.6	1.367	2.355	5.0	20.1	10 8	1 43.33	+11 48.9	0.846	1.833	7.2	17.9
10 18	1 32.92	+5 40.6	1.343	2.338	1.7	19.8	10 18	1 33.00	+11 46.9	0.847	1.843	1.2	17.5
10 28	1 23.67	+5 8.2	1.344	2.321	5.9	20.0	10 28	1 22.93	+11 39.9	0.870	1.854	6.2	17.9
11 7	1 15.53	+4 45.8	1.371	2.305	10.7	20.3	11 7	1 14.91	+11 35.3	0.915	1.867	12.1	18.3
11 17	1 9.53	+4 38.0	1.422	2.289	15.1	20.5	11 17	1 10.12	+11 39.3	0.980	1.881	17.3	18.6
11 27	1 6.35	+4 47.6	1.491	2.274	18.8	20.7	11 27	1 9.08	+11 56.1	1.062	1.896	21.4	19.0
233518	2007 <i>GT</i> ₂₇		10 18.2 39°51	7°2/11.9	18		252880	2002 <i>JA</i> ₆₂		10 18.2 167°70	3°4/15.6	18	
9 18	1 55.19	-11 24.3	2.033	2.919	11.2	19.4	9 18	1 57.56	+3 56.8	1.543	2.441	13.4	20.4
9 28	1 48.99	-12 9.7	1.993	2.924	8.8	19.2	9 28	1 51.08	+2 53.2	1.490	2.443	9.3	20.1
10 8	1 41.31	-12 44.5	1.979	2.930	7.3	19.1	10 8	1 42.57	+1 45.1	1.461	2.446	5.1	19.9
10 18	1 32.91	-13 3.0	1.991	2.935	7.5	19.2	10 18	1 33.00	+0 40.1	1.458	2.448	3.6	19.8
10 28	1 24.70	-13 1.4	2.029	2.941	9.3	19.3	10 28	1 23.55	-0 14.0	1.484	2.449	7.0	20.0
11 7	1 17.53	-12 38.5	2.093	2.947	11.6	19.5	11 7	1 15.40	-0 51.0	1.535	2.450	11.2	20.3
11 17	1 12.03	-11 55.3	2.179	2.953	13.9	19.6	11 17	1 9.40	-1 7.5	1.609	2.451	15.0	20.5
11 27	1 8.62	-10 54.5	2.284	2.960	15.9	19.8	11 27	1 6.06	-1 2.9	1.703	2.451	18.1	20.7
30710	4137 <i>T</i> ₋₃		10 18.2 27°79	2°9/16.1	18		113864	2002 <i>TN</i> ₂₅₅		10 18.2 7°96	0°7/18.8	18	
9 18	1 53.80	+4 32.8	1.447	2.352	13.6	18.2	9 18	1 53.94	+13 31.7	1.613	2.497	13.7	19.5
9 28	1 48.44	+3 49.9	1.406	2.363	9.3	18.0	9 28	1 48.60	+13 4.1	1.553	2.498	9.7	19.3
10 8	1 41.15	+3 3.2	1.388	2.374	5.0	17.8	10 8	1 41.32	+12 23.3	1.515	2.498	5.2	19.0
10 18	1 32.92	+2 19.3	1.395	2.387	3.0	17.7	10 18	1 32.97	+11 33.3	1.504	2.500	0.8	18.7
10 28	1 24.91	+1 44.9	1.429	2.400	6.5	18.0	10 28	1 24.68	+10 40.5	1.520	2.501	4.5	19.0
11 7	1 18.23	+1 25.3	1.488	2.414	10.7	18.3	11 7	1 17.55	+9 51.8	1.562	2.503	9.0	19.3
11 17	1 13.65	+1 23.1	1.570	2.429	14.4	18.5	11 17	1 12.41	+9 13.3	1.629	2.506	13.0	19.5
11 27	1 11.63	+1 38.9	1.671	2.444	17.5	18.8	11 27	1 9.81	+8 49.2	1.716	2.509	16.3	19.7
125979	2001 <i>YU</i> ₂₁		10 18.2 100°75	0°9/17.6	17 R		67043	1999 <i>XS</i> ₁₈₈		10 18.2 330°69	4°3/22.3	18	
9 18	2 1.08	+9 4.0	1.324	2.216	15.5	20.0	9 18	1 53.57	+23 33.0	1.970	2.809	13.5	18.8
9 28	1 53.67	+8 38.9	1.279	2.230	10.8	19.8	9 28	1 48.26	+23 36.1	1.893	2.802	10.5	18.6
10 8	1 43.91	+8 4.3	1.257	2.243	5.5	19.5	10 8	1 41.15	+23 20.9	1.838	2.795	7.3	18.4
10 18	1 32.98	+7 25.4	1.260	2.256	1.0	19.2	10 18	1 32.97	+22 47.8	1.810	2.789	4.7	18.2
10 28	1 22.35	+6 49.5	1.290	2.269	5.8	19.6	10 28	1 24.72	+22 0.3	1.808	2.783	4.9	18.2
11 7	1 13.36	+6 22.9	1.346	2.281	10.8	19.9	11 7	1 17.41	+21 4.2	1.835	2.777	7.8	18.4
11 17	1 6.96	+6 10.4	1.425	2.293	15.0	20.2	11 17	1 11.88	+20 6.5	1.887	2.772	11.0	18.6
11 27	1 3.65	+6 14.4	1.524	2.305	18.5	20.5	11 27	1 8.68	+19 14.1	1.961	2.767	14.0	18.8
90046	2002 <i>VF</i> ₁₂		10 18.2 338°74	1°6/17.2	18		389508	2010 <i>GY</i> ₁₀₁		10 18.2 104°57	3°8/15.2	18	
9 18	1 54.23	+8 36.8	1.202	2.109	15.6	19.2	9 18	1 56.83	+0 18.2	1.843	2.737	11.7	20.9
9 28	1 49.30	+7 56.9	1.142	2.100	10.9	18.9	9 28	1 50.26	-0 21.3	1.796	2.746	8.2	20.7
10 8	1 41.86	+7 5.8	1.104	2.092	5.6	18.6	10 8	1 42.03	-1 0.0	1.775	2.756	4.9	20.6
10 18	1 32.94	+6 9.9	1.089	2.085	1.6	18.3	10 18	1 32.99	-1 32.5	1.781	2.765	4.0	20.5
10 28	1 24.00	+5 18.2	1.100	2.078	6.5	18.6	10 28	1 24.13	-1 53.8	1.816	2.775	6.6	20.7
11 7	1 16.49	+4 39.4	1.134	2.073	11.9	18.9	11 7	1 16.41	-2 0.3	1.877	2.784	10.0	20.9
11 17	1 11.49	+4 19.2	1.189	2.068	16.6	19.1	11 17	1 10.52	-1 50.7	1.962	2.793	13.2	21.2
11 27	1 9.64	+4 20.5	1.263	2.064	20.6	19.4	11 27	1 6.91	-1 25.0	2.068	2.801	15.8	21.4
262256	2006 <i>SC</i> ₃₂₄		10 18.2 272°70	1°2/17.4	18		224185	2005 <i>QW</i> ₁₇₇		10 18.2 91°93	0°3/18.0	16	
9 18	1 57.91	+8 25.7	1.461	2.354	14.3	20.9	9 18	1 57.99	+11 32.0	1.532	2.417	14.2	21.4
9 28	1 51.65	+7 57.3	1.390	2.342	10.0	20.6	9 28	1 51.27	+10 49.6	1.488	2.435	9.9	21.2
10 8	1 43.02	+7 19.5	1.342	2.329	5.1	20.3	10 8	1 42.60	+9 55.9	1.469	2.454	5.1	21.0
10 18	1 32.97	+6 37.3	1.320	2.316	1.3	20.0	10 18	1 33.00	+8 56.4	1.475	2.471	0.3	20.7
10 28	1 22.80	+5 57.5	1.326	2.303	5.8	20.3	10 28	1 23.70	+7 58.4	1.510	2.489	4.9	21.1
11 7	1 13.86	+5 27.0	1.356	2.290	10.8	20.5	11 7	1 15.81	+7 9.0	1.571	2.506	9.5	21.4
11 17	1 7.20	+5 11.1	1.411	2.277	15.3	20.8	11 17	1 10.13	+6 33.3	1.657	2.523	13.4	21.7
11 27	1 3.50	+5 12.7	1.484	2.264	19.0	21.0	11 27	1 7.09	+6 14.4	1.763	2.540	16.5	21.9
366378	2000 <i>SP</i> ₂₉₇		10 18.2 353°36	6°1/22.1	18		398564	2011 <i>VT</i> ₁₅		10 18.2 71°71	0°5/17.9	18	
9 18	1 48.87	+22 6.7	0.855	1.753	21.2	19.2	9 18	1 54.65	+10 26.3	1.821	2.706	12.3	21.3
9 28	1 46.33	+22 24.0	0.799	1.743	16.4	18.9	9 28	1 48.86	+9 52.7	1.764	2.711	8.6	21.1
10 8	1 40.62	+22 8.6	0.761	1.735	11.2	18.6	10 8	1 41.37	+9 10.0	1.731	2.716	4.4	20.8
10 18	1 32.91	+21 20.6	0.741	1.729	6.7	18.3	10 18	1 32.98	+8 22.6	1.726	2.722	0.5	20.6
10 28	1 25.09	+20 7.2	0.742	1.725	7.3	18.4	10 28	1 24.70	+7 36.2	1.749	2.727	4.5	20.9
11 7	1 19.07	+18 42.5	0.763	1.723	12.2	18.6	11 7	1 17.48	+6 56.6	1.799	2.733	8.6	21.1
11 17	1 16.25	+17 21.6	0.802	1.724	17.6	18.9	11 17	1 12.07	+6 28.3	1.874	2.738	12.2	21.4
11 27	1 17.35	+16 17.1	0.859	1.726	22.2	19.2	11 27	1 8.95	+6 14.1	1.971	2.744	15.2	21.6
481799	2008 <i>TT</i> ₉₀		10 18.2 318°05	1°4/17.1	16		365378	2009 <i>UZ</i> ₉₅		10 18.3 42°72	2°8/21.6	18	
9 18	1 51.33	+10 27											

EPHEMERIDES

10 18.3

10 18.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
224782	2006 <i>JB</i> ₄₂		10 18.3 330°38	0°9/16.7	18		367622	2009 <i>UC</i> ₁₀₉		10 18.3 193°34	2°1/16.1	18	
9 18	1 46.24	+ 6 45.1	3.935	4.816	6.4	20.1	9 18	1 53.12	+ 3 54.0	2.482	3.368	9.4	21.2
9 28	1 42.41	+ 6 11.2	3.866	4.813	4.3	19.9	9 28	1 47.49	+ 3 22.0	2.419	3.368	6.5	21.0
10 8	1 37.86	+ 5 34.5	3.824	4.809	2.2	19.8	10 8	1 40.61	+ 2 47.7	2.382	3.367	3.5	20.9
10 18	1 32.93	+ 4 57.3	3.812	4.806	1.0	19.7	10 18	1 33.05	+ 2 14.9	2.375	3.366	2.2	20.8
10 28	1 28.00	+ 4 22.2	3.831	4.802	2.8	19.8	10 28	1 25.53	+ 1 47.4	2.397	3.364	4.6	20.9
11 7	1 23.48	+ 3 51.6	3.879	4.799	4.9	20.0	11 7	1 18.75	+ 1 28.7	2.448	3.363	7.6	21.1
11 17	1 19.71	+ 3 27.6	3.955	4.796	6.9	20.1	11 17	1 13.29	+ 1 21.1	2.525	3.362	10.4	21.3
11 27	1 16.97	+ 3 11.6	4.056	4.793	8.5	20.2	11 27	1 9.57	+ 1 25.9	2.625	3.360	12.7	21.5
446305	2014 <i>EH</i> ₁₇		10 18.3 179°69	5°7/12.3	18		252108	2000 <i>WU</i> ₁₇		10 18.3 339°30	4°1/22.4	18	
9 18	1 54.57	- 5 32.3	2.085	2.977	10.6	21.6	9 18	1 52.32	+24 3.3	1.885	2.726	13.9	19.7
9 28	1 48.62	- 6 50.3	2.036	2.979	7.9	21.5	9 28	1 47.43	+23 40.5	1.810	2.721	10.8	19.5
10 8	1 41.20	- 8 3.7	2.013	2.979	6.0	21.4	10 8	1 40.75	+22 56.7	1.758	2.717	7.3	19.3
10 18	1 33.01	- 9 5.6	2.019	2.980	6.2	21.4	10 18	1 33.05	+21 53.7	1.731	2.713	4.5	19.2
10 28	1 24.92	- 9 50.4	2.052	2.979	8.3	21.5	10 28	1 25.34	+20 36.4	1.732	2.709	4.7	19.2
11 7	1 17.77	-10 14.4	2.111	2.979	11.0	21.7	11 7	1 18.64	+19 12.4	1.760	2.706	7.8	19.3
11 17	1 12.21	-10 16.8	2.193	2.978	13.5	21.9	11 17	1 13.74	+17 50.1	1.815	2.703	11.3	19.5
11 27	1 8.68	- 9 58.7	2.295	2.976	15.7	22.0	11 27	1 11.18	+16 36.9	1.892	2.700	14.4	19.8
216528	2001 <i>OQ</i> ₆₆		10 18.3 83°28	6°4/24.2	17		270103	2001 <i>QU</i> ₂₈₄		10 18.3 167°6	3°2/20.0	18	
9 18	1 56.16	+31 42.8	1.067	1.906	22.3	19.6	9 18	1 56.75	+15 53.2	1.043	1.938	18.4	18.9
9 28	1 50.92	+30 6.7	1.008	1.913	17.8	19.4	9 28	1 51.30	+16 21.1	0.998	1.945	13.5	18.6
10 8	1 42.73	+27 40.7	0.966	1.920	12.5	19.1	10 8	1 42.99	+16 30.0	0.972	1.952	8.1	18.4
10 18	1 33.05	+24 29.7	0.947	1.927	7.6	18.9	10 18	1 33.11	+16 21.5	0.968	1.961	3.4	18.1
10 28	1 23.73	+20 50.3	0.954	1.934	6.9	18.8	10 28	1 23.39	+16 0.8	0.989	1.972	5.8	18.3
11 7	1 16.45	+17 7.0	0.988	1.942	11.1	19.1	11 7	1 15.49	+15 36.3	1.032	1.984	11.0	18.6
11 17	1 12.26	+13 43.0	1.045	1.948	16.2	19.4	11 17	1 10.56	+15 16.0	1.096	1.997	15.8	19.0
11 27	1 11.61	+10 54.4	1.124	1.955	20.7	19.7	11 27	1 9.14	+15 6.7	1.179	2.012	19.8	19.3
108843	2001 <i>OE</i> ₉₀		10 18.3 101°14	2°6/16.2	18		286890	2002 <i>PU</i> ₂₁		10 18.3 1°39	9°4/25.7	18	
9 18	1 57.65	+ 5 19.7	1.555	2.450	13.4	19.9	9 18	1 54.54	+31 40.7	1.364	2.186	19.3	19.5
9 28	1 51.04	+ 4 28.6	1.511	2.464	9.2	19.7	9 28	1 49.73	+32 25.9	1.300	2.184	16.1	19.3
10 8	1 42.52	+ 3 32.7	1.491	2.477	4.9	19.4	10 8	1 42.23	+32 40.2	1.254	2.183	12.8	19.1
10 18	1 33.05	+ 2 38.6	1.497	2.489	2.8	19.3	10 18	1 33.09	+32 20.4	1.230	2.183	10.2	19.0
10 28	1 23.83	+ 1 53.2	1.532	2.502	6.3	19.6	10 28	1 23.86	+31 28.3	1.228	2.184	9.5	19.0
11 7	1 15.96	+ 1 22.3	1.592	2.514	10.4	19.9	11 7	1 16.10	+30 12.5	1.250	2.186	11.2	19.1
11 17	1 10.23	+ 1 8.8	1.677	2.526	14.1	20.1	11 17	1 11.01	+28 44.6	1.294	2.190	14.3	19.3
11 27	1 7.09	+ 1 13.8	1.781	2.538	17.1	20.4	11 27	1 9.27	+27 17.3	1.359	2.195	17.5	19.5
24488	Eliebochner		10 18.3 61°68	5°4/15.1	18		508766	1991 <i>VX</i> ₁₀		10 18.3 342°43	3°6/16.3	18	
9 18	2 0.40	- 0 41.8	1.187	2.094	15.8	17.7	9 18	1 54.60	+ 3 35.5	1.044	1.962	16.4	20.4
9 28	1 53.15	- 1 29.2	1.160	2.115	11.1	17.5	9 28	1 49.90	+ 3 11.4	0.986	1.948	11.5	20.1
10 8	1 43.61	- 2 13.1	1.154	2.136	6.8	17.4	10 8	1 42.37	+ 2 43.4	0.948	1.936	6.3	19.8
10 18	1 33.08	- 2 45.4	1.174	2.157	5.7	17.4	10 18	1 33.11	+ 2 18.7	0.933	1.925	3.8	19.6
10 28	1 23.07	- 2 59.5	1.218	2.179	8.9	17.6	10 28	1 23.75	+ 2 5.5	0.941	1.916	8.1	19.8
11 7	1 14.90	- 2 52.1	1.287	2.201	13.1	17.9	11 7	1 15.95	+ 2 10.2	0.970	1.908	13.6	20.1
11 17	1 9.41	- 2 23.4	1.376	2.222	16.8	18.2	11 17	1 10.95	+ 2 35.7	1.020	1.901	18.5	20.4
11 27	1 6.98	- 1 35.6	1.484	2.244	19.9	18.5	11 27	1 9.45	+ 3 22.3	1.086	1.896	22.6	20.7
59311	1999 <i>CJ</i> ₈₇		10 18.3 278°94	0°6/17.8	18		316552	2010 <i>XF</i> ₈₇		10 18.3 229°21	1°3/15.9	18	
9 18	1 56.67	+10 6.2	1.567	2.456	13.7	19.3	9 18	1 46.70	+ 3 19.2	4.443	5.327	5.6	20.9
9 28	1 50.71	+ 9 37.8	1.493	2.442	9.7	19.0	9 28	1 42.67	+ 2 55.7	4.377	5.325	3.9	20.8
10 8	1 42.55	+ 8 58.5	1.442	2.428	5.0	18.7	10 8	1 38.00	+ 2 31.4	4.340	5.323	2.1	20.7
10 18	1 33.06	+ 8 13.0	1.418	2.414	0.6	18.4	10 18	1 33.00	+ 2 8.1	4.332	5.321	1.4	20.6
10 28	1 23.44	+ 7 27.5	1.421	2.400	5.2	18.7	10 28	1 28.00	+ 1 47.8	4.355	5.320	2.8	20.7
11 7	1 14.94	+ 6 49.1	1.450	2.386	10.1	18.9	11 7	1 23.37	+ 1 32.5	4.408	5.318	4.6	20.9
11 17	1 8.56	+ 6 23.3	1.503	2.371	14.4	19.2	11 17	1 19.41	+ 1 23.3	4.488	5.316	6.3	21.0
11 27	1 4.94	+ 6 14.0	1.576	2.357	18.0	19.4	11 27	1 16.38	+ 1 21.4	4.593	5.314	7.8	21.1
208413	2001 <i>SV</i> ₂₆₈		10 18.3 119°65	2°2/15.9	18		182057	2000 <i>DY</i> ₁₀₃		10 18.3 75°67	6°8/12.9	16	
9 18	1 53.37	+ 6 1.3	2.057	2.947	10.9	20.8	9 18	1 57.61	- 3 55.7	1.440	2.343	13.8	19.5
9 28	1 47.78	+ 4 53.9	2.006	2.957	7.4	20.6	9 28	1 50.90	- 5 31.5	1.421	2.370	10.0	19.4
10 8	1 40.75	+ 3 41.6	1.981	2.967	3.9	20.4	10 8	1 42.37	- 6 59.7	1.425	2.397	7.2	19.3
10 18	1 33.01	+ 2 30.2	1.985	2.976	2.4	20.3	10 18	1 33.11	- 8 10.9	1.456	2.424	7.2	19.4
10 28	1 25.42	+ 1 26.0	2.018	2.985	5.3	20.5	10 28	1 24.31	- 8 58.1	1.513	2.451	9.8	19.6
11 7	1 18.77	+ 0 34.2	2.079	2.994	8.7	20.8	11 7	1 17.05	- 9 18.1	1.594	2.477	13.0	19.8
11 17	1 13.70	- 0 1.6	2.165	3.003	11.8	21.0	11 17	1 12.00	- 9 11.7	1.697	2.503	16.0	20.1
11 27	1 10.62	- 0 20.0	2.272	3.012	14.4	21.2	11 27	1 9.52	- 8 42.0	1.817	2.528	18.4	20.4
439710	2014 <i>LK</i> ₁₁		10 18.3 139°08	4°9/23.8	18		381167	2007 <i>HV</i> ₇₆		10 18.3 170°18	5°1/14.8	18	
9 18	1 55.43	+28 3.8	2.274	3.079	13.0	20.6	9 18	2 0.53	- 3 34.0	1.749	2.639	12.5	20.5
9 28	1 49.30	+27 50.4	2.204	3.088	10.4	20.4	9 28	1 53.00	- 4 1.9	1.696	2.641	9.0	20.3
10 8	1 41.59	+27 17.1	2.158	3.097	7.6	20.3	10 8	1 43.57	- 4 25.2	1.667	2.642	6.0	20.1
10 18	1 33.04	+26 24.5	2.137	3.105	5.3	20.1	10 18	1 33.15	- 4 38.2	1.667	2.644	5.3	20.1
10 28	1 24.57	+25 16.3	2.146	3.112	5.1	20.1	10 28	1 22.87	- 4 36.3	1.694	2.645	7.8	20.2
11 7	1 17.08	+23 58.8	2.183	3.119	7.1	20.3	11 7	1 13.81	- 4 17.2	1.748	2.645	11.2	20.4
11 17	1 11.28	+22 39.1	2.247	3.126	9.8	20.5	11 17	1 6.80	- 3 40.8	1.826	2.646	14.4	20.6
11 27	1 7.62	+21 24.2	2.336	3.133	12.3	20.7	11 27	1 2.34	- 2 48.4	1.923	2.646	17.1	20.8
17986	1999 <i>JF</i> ₆₂		10 18.3 64°74	7°5/13.3	18		279359	2010 <i>AO</i> ₅₀		10 18			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
391586	2007 <i>TA</i> ₃₈₁		10 18.3	92°79	3°1/16.2	18	191183	2002 <i>NZ</i> ₅₅		10 18.3	359°37	4°3/22.7	18
9 18	1 59.60	+ 1 28.9	1.784	2.674	12.3	20.4	9 18	1 52.55	+24 27.3	2.041	2.876	13.3	19.2
9 28	1 52.36	+ 1 19.3	1.727	2.676	8.6	20.2	9 28	1 47.51	+24 19.5	1.969	2.875	10.3	19.0
10 8	1 43.25	+ 1 9.9	1.695	2.678	4.8	20.0	10 8	1 40.79	+23 52.8	1.919	2.874	7.2	18.8
10 18	1 33.15	+ 1 4.9	1.691	2.680	3.2	19.9	10 18	1 33.13	+23 8.2	1.895	2.874	4.7	18.7
10 28	1 23.15	+ 1 8.1	1.715	2.682	6.1	20.1	10 28	1 25.46	+22 9.8	1.899	2.874	4.8	18.7
11 7	1 14.31	+ 1 22.6	1.767	2.684	9.9	20.3	11 7	1 18.74	+21 3.6	1.931	2.874	7.4	18.9
11 17	1 7.45	+ 1 49.7	1.844	2.686	13.3	20.5	11 17	1 13.71	+19 56.7	1.988	2.875	10.5	19.1
11 27	1 3.07	+ 2 29.7	1.941	2.688	16.2	20.8	11 27	1 10.88	+18 55.8	2.069	2.876	13.4	19.2
85974	1999 <i>GF</i> ₂₁		10 18.3	73°69	1°0/17.4	18	229729	2007 <i>GB</i> ₃₅		10 18.3	263°15	3°3/15.9	18
9 18	1 55.76	+11 27.1	1.529	2.417	14.0	18.3	9 18	1 57.97	+ 2 55.7	1.586	2.483	13.1	20.4
9 28	1 49.66	+10 7.4	1.493	2.443	9.6	18.1	9 28	1 51.52	+ 2 20.2	1.522	2.475	9.2	20.2
10 8	1 41.78	+ 8 36.4	1.481	2.467	4.8	17.9	10 8	1 42.96	+ 1 41.9	1.482	2.467	5.1	19.9
10 18	1 33.11	+ 7 2.1	1.497	2.492	1.0	17.7	10 18	1 33.19	+ 1 6.7	1.468	2.458	3.4	19.8
10 28	1 24.81	+ 5 33.7	1.540	2.517	5.3	18.1	10 28	1 23.41	+ 0 40.9	1.482	2.450	6.8	20.0
11 7	1 17.90	+ 4 19.2	1.610	2.541	9.6	18.4	11 7	1 14.80	+ 0 29.6	1.522	2.441	11.0	20.2
11 17	1 13.08	+ 3 23.7	1.705	2.566	13.4	18.7	11 17	1 8.30	+ 0 35.4	1.585	2.433	14.9	20.5
11 27	1 10.74	+ 2 49.6	1.820	2.589	16.4	18.9	11 27	1 4.50	+ 0 59.3	1.668	2.424	18.1	20.7
103847	2000 <i>DW</i> ₃₄		10 18.3	28°53	2°9/15.8	18	184942	2005 <i>VP</i> ₁₁₂		10 18.3	27°52	2°3/16.5	18
9 18	1 53.60	+ 4 53.3	1.649	2.549	12.5	19.2	9 18	1 56.04	+ 3 51.1	1.855	2.747	11.8	19.3
9 28	1 48.28	+ 3 52.7	1.597	2.552	8.6	18.9	9 28	1 49.84	+ 3 34.2	1.800	2.751	8.1	19.0
10 8	1 41.16	+ 2 47.3	1.569	2.555	4.6	18.7	10 8	1 41.95	+ 3 15.0	1.770	2.755	4.3	18.8
10 18	1 33.11	+ 1 43.6	1.568	2.558	3.1	18.6	10 18	1 33.16	+ 2 57.7	1.767	2.759	2.4	18.7
10 28	1 25.17	+ 0 49.2	1.594	2.562	6.3	18.8	10 28	1 24.48	+ 2 46.7	1.793	2.764	5.4	18.9
11 7	1 18.36	+ 0 9.8	1.646	2.566	10.3	19.1	11 7	1 16.86	+ 2 45.6	1.846	2.769	9.2	19.2
11 17	1 13.44	- 0 11.0	1.722	2.570	13.9	19.3	11 17	1 11.03	+ 2 56.5	1.924	2.774	12.5	19.4
11 27	1 10.90	- 0 12.1	1.817	2.574	16.8	19.5	11 27	1 7.48	+ 3 20.4	2.023	2.780	15.3	19.6
392656	2011 <i>UU</i> ₂₀₆		10 18.3	10°12	5°2/15.1	18	173491	2000 <i>SY</i> ₁₈₅		10 18.3	291°88	0°0/18.3	18
9 18	1 56.70	- 2 2.9	1.392	2.298	14.0	19.7	9 18	1 55.75	+12 49.0	1.313	2.205	15.6	20.0
9 28	1 50.65	- 2 27.5	1.346	2.300	10.0	19.5	9 28	1 50.52	+12 4.0	1.234	2.184	11.1	19.6
10 8	1 42.45	- 2 48.0	1.322	2.303	6.3	19.3	10 8	1 42.69	+11 1.0	1.178	2.163	5.9	19.3
10 18	1 33.14	- 2 58.2	1.324	2.306	5.4	19.3	10 18	1 33.19	+ 9 45.3	1.146	2.142	0.2	18.8
10 28	1 24.01	- 2 52.6	1.351	2.311	8.3	19.4	10 28	1 23.42	+ 8 25.8	1.139	2.121	5.7	19.2
11 7	1 16.27	- 2 28.6	1.403	2.317	12.2	19.7	11 7	1 14.89	+ 7 13.1	1.158	2.100	11.4	19.4
11 17	1 10.82	- 1 46.1	1.477	2.323	15.9	19.9	11 17	1 8.79	+ 6 16.5	1.200	2.079	16.5	19.7
11 27	1 8.15	- 0 46.7	1.569	2.330	18.9	20.2	11 27	1 5.89	+ 5 41.9	1.259	2.058	20.7	19.9
78526	2002 <i>RH</i> ₉₈		10 18.3	335°26	0°2/18.1	18	359965	2012 <i>BA</i> ₉₇		10 18.3	9°85	0°1/18.4	18
9 18	1 58.18	+10 36.6	1.426	2.316	14.8	19.1	9 18	1 47.58	+10 49.5	4.236	5.103	6.3	20.7
9 28	1 51.82	+10 17.7	1.366	2.315	10.4	18.9	9 28	1 43.34	+10 36.8	4.165	5.104	4.4	20.5
10 8	1 43.15	+ 9 47.8	1.329	2.314	5.4	18.6	10 8	1 38.39	+10 20.3	4.121	5.104	2.3	20.4
10 18	1 33.19	+ 9 11.1	1.317	2.314	0.2	18.2	10 18	1 33.07	+10 1.3	4.108	5.104	0.1	20.1
10 28	1 23.26	+ 8 34.0	1.333	2.313	5.3	18.6	10 28	1 27.76	+ 9 41.9	4.125	5.104	2.1	20.4
11 7	1 14.69	+ 8 3.4	1.374	2.312	10.2	18.9	11 7	1 22.84	+ 9 24.0	4.173	5.105	4.2	20.5
11 17	1 8.46	+ 7 44.6	1.438	2.312	14.6	19.1	11 17	1 18.64	+ 9 9.6	4.249	5.105	6.1	20.7
11 27	1 5.18	+ 7 41.3	1.523	2.311	18.2	19.4	11 27	1 15.43	+ 9 0.2	4.350	5.105	7.7	20.8
254802	2005 <i>QP</i> ₉₄		10 18.3	82°88	1°9/19.9	18	33795	1999 <i>TR</i> ₆		10 18.3	49°45	1°7/16.9	18
9 18	1 55.83	+16 18.0	1.961	2.824	12.5	20.5	9 18	1 56.13	+ 5 6.1	1.999	2.887	11.2	17.8
9 28	1 49.72	+16 11.7	1.897	2.829	9.1	20.3	9 28	1 49.81	+ 4 52.6	1.942	2.892	7.8	17.6
10 8	1 41.90	+15 52.6	1.858	2.834	5.3	20.0	10 8	1 41.91	+ 4 36.0	1.912	2.897	4.0	17.4
10 18	1 33.15	+15 23.0	1.846	2.839	2.0	19.8	10 18	1 33.17	+ 4 20.0	1.909	2.902	1.8	17.2
10 28	1 24.46	+14 46.8	1.863	2.844	3.9	20.0	10 28	1 24.52	+ 4 8.4	1.935	2.908	4.9	17.5
11 7	1 16.78	+14 9.6	1.908	2.850	7.6	20.2	11 7	1 16.86	+ 4 4.8	1.988	2.913	8.5	17.7
11 17	1 10.86	+13 36.5	1.979	2.855	11.1	20.4	11 17	1 10.90	+ 4 11.5	2.068	2.919	11.8	17.9
11 27	1 7.22	+13 12.1	2.072	2.860	14.0	20.7	11 27	1 7.09	+ 4 30.0	2.169	2.925	14.5	18.1
239103	2006 <i>HB</i> ₅₆		10 18.3	238°34	7°4/24.9	18	123920	2001 <i>DW</i> ₉₉		10 18.3	315°64	7°5/18.7	16
9 18	1 58.48	+31 30.9	1.919	2.711	15.6	20.1	9 18	2 20.39	+12 53.4	0.869	1.751	22.5	17.3
9 28	1 51.99	+31 57.8	1.838	2.705	12.9	19.9	9 28	2 10.19	+16 4.6	0.794	1.732	17.3	16.9
10 8	1 43.28	+32 0.7	1.777	2.698	10.2	19.8	10 8	1 54.22	+19 22.5	0.741	1.715	11.4	16.5
10 18	1 33.19	+31 37.2	1.741	2.690	8.0	19.6	10 18	1 33.55	+22 30.3	0.712	1.698	7.5	16.3
10 28	1 22.95	+30 48.9	1.731	2.683	7.5	19.6	10 28	1 11.00	+25 9.5	0.710	1.682	10.7	16.4
11 7	1 13.81	+29 41.8	1.747	2.675	9.2	19.7	11 7	0 50.30	+27 11.3	0.732	1.667	17.1	16.6
11 17	1 6.77	+28 24.5	1.789	2.667	11.9	19.8	11 17	0 34.52	+28 40.2	0.774	1.653	23.1	16.9
11 27	1 2.51	+27 6.5	1.854	2.659	14.8	20.0	11 27	0 25.25	+29 50.1	0.832	1.640	28.0	17.2
397552	2007 <i>TN</i> ₃₆₇		10 18.3	344°74	8°8/12.5	18	515632	2014 <i>LG</i> ₂₉		10 18.3	60°22	4°4/13.7	18
9 18	1 56.42	-10 2.9	1.390	2.292	14.3	19.7	9 18	1 52.04	- 0 28.4	1.967	2.867	10.8	20.6
9 28	1 50.55	-10 52.7	1.342	2.284	11.2	19.5	9 28	1 46.89	- 1 47.4	1.930	2.882	7.6	20.5
10 8	1 42.47	-11 30.1	1.315	2.276	9.1	19.4	10 8	1 40.34	- 3 5.0	1.920	2.898	4.9	20.3
10 18	1 33.17	-11 46.5	1.312	2.270	9.2	19.4	10 18	1 33.13	- 4 14.5	1.936	2.914	4.7	20.4
10 28	1 23.98	-11 36.0	1.334	2.264	11.6	19.5	10 28	1 26.11	- 5 9.7	1.981	2.930	7.1	20.5
11 7	1 16.16	-10 56.8	1.378	2.259	14.8	19.7	11 7	1 20.08	- 5 46.5	2.053	2.946	10.0	20.8
11 17	1 10.65	- 9 51.1	1.443	2.255	18.0	19.9	11 17	1 15.63	- 6 3.3	2.147	2.962	12.8	21.0
11 27	1 7.97	- 8 23.1	1.525	2.252	20.7	20.1	11 27	1 13.14	- 6 0.5	2.262	2.978	15.0	21.2
441594	2008 <i>UA</i> ₁₆₇		10 18.3										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
323533	2004 <i>RF</i> ₁₈₇		10 18.3	3°14	4°9/22.9	18	446133	2013 <i>EV</i> ₄₈		10 18.3	40°92	0°1/18.4	18
9 18	1 54.20	+24 59.2	1.887	2.721	14.2	20.0	9 18	1 53.81	+12 10.4	1.817	2.699	12.5	21.1
9 28	1 48.80	+25 6.9	1.817	2.720	11.2	19.8	9 28	1 48.37	+11 36.1	1.759	2.704	8.8	20.9
10 8	1 41.52	+24 54.7	1.769	2.720	7.9	19.6	10 8	1 41.24	+10 51.0	1.725	2.709	4.6	20.6
10 18	1 33.17	+24 22.7	1.746	2.721	5.4	19.4	10 18	1 33.20	+9 59.5	1.718	2.714	0.2	20.3
10 28	1 24.79	+23 34.5	1.750	2.722	5.4	19.4	10 28	1 25.26	+9 7.3	1.739	2.720	4.2	20.7
11 7	1 17.46	+22 36.3	1.781	2.723	8.0	19.6	11 7	1 18.36	+8 20.6	1.788	2.725	8.3	20.9
11 17	1 12.00	+21 35.5	1.838	2.725	11.2	19.8	11 17	1 13.25	+7 44.5	1.862	2.731	12.0	21.2
11 27	1 8.97	+20 39.5	1.917	2.727	14.2	20.0	11 27	1 10.40	+7 22.3	1.957	2.737	15.0	21.4
329207	2012 <i>DT</i> ₅₄		10 18.3	280°39	0°7/17.5	17	415483	2014 <i>OZ</i> ₂₀₆		10 18.3	85°46	3°4/21.9	18
9 18	1 52.68	+9 34.4	2.148	3.031	10.8	21.4	9 18	1 54.30	+22 35.4	2.255	3.090	12.2	20.7
9 28	1 47.43	+8 55.3	2.079	3.026	7.5	21.2	9 28	1 48.52	+22 26.6	2.193	3.102	9.3	20.6
10 8	1 40.70	+8 8.5	2.036	3.021	3.8	21.0	10 8	1 41.26	+22 1.9	2.155	3.114	6.2	20.4
10 18	1 33.15	+7 18.0	2.021	3.017	0.8	20.8	10 18	1 33.22	+21 22.9	2.144	3.126	3.7	20.3
10 28	1 25.61	+6 29.0	2.035	3.012	4.2	21.0	10 28	1 25.26	+20 33.2	2.161	3.138	4.1	20.3
11 7	1 18.90	+5 46.6	2.077	3.007	7.8	21.2	11 7	1 18.24	+19 38.2	2.208	3.149	6.7	20.5
11 17	1 13.68	+5 14.9	2.145	3.002	11.1	21.4	11 17	1 12.79	+18 43.8	2.281	3.161	9.6	20.7
11 27	1 10.44	+4 56.7	2.235	2.998	13.9	21.6	11 27	1 9.37	+17 55.4	2.378	3.172	12.2	20.9
127399	2002 <i>LT</i> ₂₁		10 18.3	181°91	1°8/20.4	18	10664	Phemios		10 18.3	276°91	1°1/20.4	18
9 18	1 53.16	+18 4.5	2.573	3.423	10.4	20.4	9 18	1 46.45	+17 25.6	4.339	5.184	6.6	18.6
9 28	1 47.59	+17 41.3	2.499	3.423	7.6	20.2	9 28	1 42.59	+17 3.4	4.260	5.182	4.8	18.4
10 8	1 40.73	+17 6.3	2.451	3.423	4.6	20.0	10 8	1 38.04	+16 34.4	4.208	5.180	2.9	18.3
10 18	1 33.15	+16 21.6	2.432	3.423	2.0	19.8	10 18	1 33.12	+16 0.2	4.186	5.178	1.2	18.2
10 28	1 25.59	+15 31.0	2.442	3.423	3.2	19.9	10 28	1 28.21	+15 22.7	4.195	5.175	2.0	18.2
11 7	1 18.78	+14 39.0	2.482	3.422	6.2	20.1	11 7	1 23.68	+14 44.5	4.234	5.173	3.9	18.4
11 17	1 13.29	+13 50.4	2.550	3.421	9.1	20.3	11 17	1 19.85	+14 7.9	4.302	5.171	5.7	18.5
11 27	1 9.57	+13 9.4	2.641	3.419	11.6	20.5	11 27	1 17.01	+13 35.3	4.395	5.168	7.4	18.6
453720	2011 <i>AP</i> ₅₈		10 18.3	251°15	4°5/13.3	18	511917	2015 <i>HD</i> ₉₅		10 18.3	204°19	3°2/15.9	18
9 18	1 52.09	-3 23.5	2.326	3.220	9.6	21.5	9 18	1 58.52	+2 56.0	1.683	2.576	12.7	21.7
9 28	1 46.88	-4 23.6	2.270	3.216	7.0	21.3	9 28	1 51.78	+2 17.9	1.623	2.574	8.9	21.5
10 8	1 40.36	-5 21.0	2.240	3.212	4.9	21.2	10 8	1 43.07	+1 37.2	1.588	2.572	4.9	21.3
10 18	1 33.14	-6 10.6	2.238	3.209	4.8	21.2	10 18	1 33.28	+0 59.7	1.579	2.569	3.3	21.2
10 28	1 25.97	-6 47.4	2.265	3.205	6.9	21.3	10 28	1 23.53	+0 31.4	1.599	2.565	6.5	21.4
11 7	1 19.58	-7 7.9	2.318	3.201	9.5	21.5	11 7	1 14.95	+0 17.0	1.645	2.562	10.5	21.6
11 17	1 14.55	-7 10.9	2.396	3.197	12.0	21.6	11 17	1 8.40	+0 19.2	1.715	2.558	14.2	21.8
11 27	1 11.31	-6 56.5	2.494	3.193	14.2	21.8	11 27	1 4.41	+0 38.6	1.805	2.553	17.2	22.0
173190	1998 <i>KC</i> ₄₆		10 18.3	120°65	3°3/15.7	17	267869	2003 <i>WC</i> ₁₁₅		10 18.3	354°02	0°4/18.6	18
9 18	1 59.51	+3 10.1	1.689	2.580	12.8	20.5	9 18	1 54.06	+11 18.6	1.798	2.682	12.5	19.3
9 28	1 52.22	+2 16.9	1.647	2.597	8.8	20.4	9 28	1 48.66	+11 16.1	1.732	2.678	8.8	19.0
10 8	1 43.14	+1 21.7	1.631	2.614	4.9	20.2	10 8	1 41.46	+11 4.7	1.690	2.674	4.7	18.8
10 18	1 33.23	+0 30.7	1.642	2.630	3.4	20.1	10 18	1 33.23	+10 47.2	1.675	2.671	0.5	18.4
10 28	1 23.59	-0 9.7	1.682	2.646	6.5	20.3	10 28	1 24.99	+10 27.6	1.688	2.669	4.2	18.7
11 7	1 15.28	-0 34.8	1.748	2.661	10.3	20.6	11 7	1 17.75	+10 10.8	1.728	2.668	8.4	19.0
11 17	1 9.03	-0 42.5	1.839	2.675	13.7	20.8	11 17	1 12.30	+10 0.9	1.792	2.667	12.1	19.2
11 27	1 5.27	-0 32.3	1.950	2.689	16.4	21.1	11 27	1 9.20	+10 1.4	1.878	2.667	15.2	19.4
259469	2003 <i>SQ</i> ₁₄₅		10 18.3	7°06	5°9/22.6	18	2587	Gardner		10 18.3	95°70	1°0/17.2	18
9 18	1 54.35	+24 14.2	1.098	1.968	19.7	20.0	9 18	1 53.43	+8 2.7	2.362	3.244	10.0	16.6
9 28	1 49.76	+24 13.4	1.042	1.968	15.3	19.7	9 28	1 47.73	+7 27.6	2.312	3.258	6.9	16.4
10 8	1 42.32	+23 41.6	1.004	1.969	10.6	19.4	10 8	1 40.78	+6 47.5	2.287	3.272	3.5	16.2
10 18	1 33.21	+22 39.6	0.988	1.971	6.6	19.2	10 18	1 33.21	+6 5.9	2.292	3.287	1.1	16.0
10 28	1 24.15	+21 14.8	0.994	1.974	6.8	19.3	10 28	1 25.78	+5 27.3	2.326	3.301	4.0	16.3
11 7	1 16.80	+19 40.0	1.024	1.978	10.9	19.5	11 7	1 19.18	+4 55.6	2.389	3.314	7.2	16.5
11 17	1 12.34	+18 8.7	1.076	1.982	15.6	19.8	11 17	1 13.99	+4 33.8	2.478	3.328	10.1	16.7
11 27	1 11.38	+16 52.2	1.147	1.988	19.7	20.1	11 27	1 10.58	+4 23.9	2.590	3.341	12.5	16.9
198566	2004 <i>XB</i> ₁₆₂		10 18.3	28°43	1°4/18.9	18	312576	2009 <i>HR</i> ₆₉		10 18.3	14°78	0°5/17.8	18
9 18	2 2.12	+10 59.9	1.155	2.049	17.2	18.3	9 18	1 52.69	+11 7.3	1.594	2.486	13.4	20.8
9 28	1 54.78	+11 47.3	1.114	2.062	12.2	18.0	9 28	1 47.77	+10 19.5	1.538	2.488	9.3	20.5
10 8	1 44.74	+12 23.9	1.094	2.078	6.7	17.8	10 8	1 40.99	+9 20.3	1.505	2.491	4.8	20.3
10 18	1 33.29	+12 50.5	1.098	2.094	1.6	17.5	10 18	1 33.22	+8 15.4	1.499	2.495	0.6	20.0
10 28	1 22.13	+13 9.9	1.128	2.111	5.4	17.8	10 28	1 25.54	+7 12.0	1.520	2.499	4.9	20.3
11 7	1 12.83	+13 26.8	1.183	2.129	10.7	18.2	11 7	1 19.01	+6 17.4	1.567	2.504	9.3	20.6
11 17	1 6.45	+13 46.0	1.261	2.149	15.2	18.5	11 17	1 14.41	+5 37.2	1.638	2.509	13.2	20.8
11 27	1 3.52	+14 11.6	1.358	2.169	18.8	18.8	11 27	1 12.25	+5 14.7	1.730	2.515	16.5	21.1
99345	2001 <i>XX</i> ₁₀₀		10 18.3	358°88	2°7/19.9	18	45308	2000 <i>AR</i> ₅₃		10 18.3	0°75	12°0/10.7	18
9 18	1 57.42	+16 23.5	1.100	1.991	18.1	18.8	9 18	1 50.73	-10 13.7	0.880	1.808	17.6	17.0
9 28	1 51.86	+16 25.8	1.043	1.989	13.3	18.6	9 28	1 47.24	-11 50.0	0.848	1.803	14.1	16.8
10 8	1 43.41	+16 7.7	1.007	1.987	7.8	18.3	10 8	1 40.98	-13 8.5	0.835	1.800	12.1	16.7
10 18	1 33.26	+15 31.7	0.993	1.987	3.0	18.0	10 18	1 33.22	-13 55.0	0.842	1.800	12.8	16.8
10 28	1 23.11	+14 44.6	1.003	1.987	5.7	18.2	10 28	1 25.70	-13 59.6	0.868	1.802	15.6	16.9
11 7	1 14.65	+13 56.3	1.037	1.988	11.2	18.5	11 7	1 19.99	-13 21.0	0.912	1.805	19.2	17.2
11 17	1 9.09	+13 15.9	1.092	1.989	16.2	18.8	11 17	1 17.11	-12 4.0	0.972	1.811	22.7	17.4
11 27	1 7.09	+12 50.7	1.166	1.991	20.4	19.0	11 27	1 17.55	-10 16.5	1.046	1.819	25.7	17.7
356917	2012 <i>BX</i> ₁₀₅		10 18.3	220°42	0°7/17.5	18	72751	2001 <i>FW</i> ₁₂₈		10 18.3	291°65	5°0/13.9	18
9 18	1 52.01	+10 41.1											

EPHEMERIDES

10 18.3

10 18.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
152410	2005 <i>UY</i> ₃₃₃		10 18.3	38° 95'	0° 3'/17.9	18	26455	Priyamshah		10 18.3	120° 46'	2° 1'/16.5	18
9 18	1 53.03	+11 0.1	2.020	2.901	11.4	20.3	9 18	1 54.96	+6 3.1	1.866	2.757	11.8	18.8
9 28	1 47.73	+10 20.7	1.958	2.903	8.0	20.1	9 28	1 49.13	+5 16.2	1.810	2.762	8.1	18.6
10 8	1 40.89	+9 32.3	1.920	2.905	4.1	19.9	10 8	1 41.66	+4 24.0	1.780	2.765	4.2	18.3
10 18	1 33.23	+8 39.0	1.911	2.907	0.3	19.6	10 18	1 33.31	+3 31.9	1.777	2.769	2.2	18.2
10 28	1 25.63	+7 46.2	1.930	2.909	4.1	19.9	10 28	1 25.06	+2 46.0	1.802	2.773	5.4	18.4
11 7	1 18.95	+6 59.6	1.978	2.912	7.9	20.2	11 7	1 17.84	+2 11.3	1.854	2.777	9.2	18.7
11 17	1 13.87	+6 23.6	2.051	2.914	11.3	20.4	11 17	1 12.37	+1 51.4	1.932	2.780	12.6	18.9
11 27	1 10.84	+6 1.3	2.146	2.916	14.2	20.6	11 27	1 9.13	+1 47.9	2.030	2.784	15.4	19.1
36094	1999 <i>RM</i> ₁₀₈		10 18.3	113° 62'	4° 1'/22.7	18	12955	2162 <i>T</i> ₋₂		10 18.3	97° 54'	0° 5'/17.8	18
9 18	1 54.42	+24 36.2	2.198	3.024	12.7	18.9	9 18	1 54.92	+11 8.3	1.761	2.646	12.7	19.3
9 28	1 48.73	+24 28.6	2.127	3.028	9.9	18.7	9 28	1 49.17	+10 17.7	1.707	2.654	8.8	19.1
10 8	1 41.44	+24 3.1	2.080	3.032	6.9	18.5	10 8	1 41.68	+9 16.7	1.677	2.662	4.5	18.8
10 18	1 33.28	+23 20.8	2.059	3.036	4.5	18.4	10 18	1 33.31	+8 10.6	1.675	2.671	0.5	18.6
10 28	1 25.14	+22 25.3	2.066	3.040	4.6	18.4	10 28	1 25.08	+7 6.2	1.700	2.679	4.6	18.9
11 7	1 17.93	+21 22.4	2.102	3.043	7.1	18.6	11 7	1 17.96	+6 10.2	1.754	2.687	8.8	19.2
11 17	1 12.36	+20 18.5	2.165	3.047	10.0	18.7	11 17	1 12.70	+5 27.7	1.832	2.695	12.5	19.4
11 27	1 8.91	+19 19.9	2.252	3.050	12.7	18.9	11 27	1 9.77	+5 1.8	1.931	2.703	15.5	19.6
315938	2008 <i>TV</i> ₄₉		10 18.3	355° 90'	0° 1'/18.5	18	341067	2007 <i>HD</i> ₄₆		10 18.3	37° 60'	7° 4'/15.2	18
9 18	1 47.40	+11 12.4	3.982	4.850	6.6	20.5	9 18	2 3.59	-7 26.2	1.195	2.096	16.2	19.2
9 28	1 43.29	+10 55.2	3.911	4.850	4.6	20.4	9 28	1 55.43	-7 30.3	1.168	2.115	12.0	19.0
10 8	1 38.44	+10 33.6	3.867	4.849	2.4	20.2	10 8	1 44.92	-7 21.8	1.162	2.134	8.4	18.9
10 18	1 33.19	+10 9.3	3.852	4.849	0.1	20.0	10 18	1 33.41	-6 55.0	1.181	2.155	7.6	18.9
10 28	1 27.95	+9 44.4	3.869	4.848	2.2	20.2	10 28	1 22.49	-6 7.2	1.225	2.177	10.1	19.1
11 7	1 23.11	+9 21.3	3.915	4.848	4.4	20.4	11 7	1 13.53	-4 59.4	1.294	2.199	13.7	19.4
11 17	1 19.04	+9 2.0	3.990	4.848	6.4	20.5	11 17	1 7.37	-3 35.0	1.384	2.222	17.2	19.6
11 27	1 16.03	+8 48.4	4.090	4.847	8.1	20.7	11 27	1 4.39	-1 58.0	1.492	2.245	20.1	19.9
515006	2009 <i>QA</i> ₅₇		10 18.3	157° 20'	1° 5'/16.5	18	12269	1990 <i>QR</i>		10 18.3	70° 19'	4° 7'/13.9	18
9 18	1 51.58	+8 11.7	2.437	3.320	9.7	21.8	9 18	1 54.09	+1 33.2	1.578	2.482	12.8	16.9
9 28	1 46.50	+7 1.0	2.376	3.324	6.6	21.6	9 28	1 48.56	+0 11.6	1.546	2.500	8.9	16.7
10 8	1 40.19	+5 44.0	2.342	3.327	3.4	21.4	10 8	1 41.33	-1 56.6	1.538	2.519	5.5	16.6
10 18	1 33.24	+4 25.4	2.337	3.331	1.5	21.3	10 18	1 33.31	-3 32.5	1.558	2.538	5.1	16.6
10 28	1 26.37	+3 11.2	2.363	3.334	4.3	21.5	10 28	1 25.58	-4 50.6	1.605	2.557	8.0	16.8
11 7	1 20.25	+2 6.5	2.418	3.336	7.5	21.7	11 7	1 19.12	-5 45.1	1.677	2.576	11.5	17.1
11 17	1 15.44	+1 15.2	2.499	3.339	10.4	21.9	11 17	1 14.59	-6 14.1	1.772	2.595	14.7	17.3
11 27	1 12.33	+0 39.4	2.603	3.341	12.7	22.0	11 27	1 12.41	-6 18.5	1.886	2.614	17.3	17.6
142180	2002 <i>RN</i> ₄₃		10 18.3	75° 68'	2° 8'/20.2	18	371859	2008 <i>AJ</i> ₁₁₁		10 18.3	337° 65'	5° 0'/21.4	18
9 18	2 0.98	+17 1.0	1.379	2.250	16.3	19.7	9 18	1 56.45	+20 56.8	1.157	2.033	18.5	20.5
9 28	1 53.81	+17 10.6	1.329	2.263	12.0	19.5	9 28	1 51.31	+21 12.9	1.092	2.025	14.2	20.2
10 8	1 44.23	+17 2.7	1.301	2.276	7.1	19.3	10 8	1 43.26	+21 4.4	1.047	2.017	9.4	19.9
10 18	1 33.37	+16 39.2	1.298	2.290	3.1	19.1	10 18	1 33.38	+20 31.2	1.023	2.010	5.4	19.7
10 28	1 22.70	+16 5.3	1.321	2.303	5.1	19.2	10 28	1 23.34	+19 38.5	1.023	2.004	6.4	19.7
11 7	1 13.63	+15 28.4	1.371	2.316	9.6	19.5	11 7	1 14.85	+18 36.1	1.047	1.999	11.0	20.0
11 17	1 7.14	+14 55.9	1.445	2.329	13.8	19.8	11 17	1 9.21	+17 35.3	1.093	1.994	15.8	20.3
11 27	1 3.76	+14 33.9	1.539	2.342	17.4	20.1	11 27	1 7.16	+16 46.0	1.157	1.990	20.0	20.5
450457	2005 <i>UG</i> ₅₂₉		10 18.3	341° 44'	1° 5'/19.6	17	151394	2002 <i>EX</i> ₇₉		10 18.3	248° 27'	0° 9'/17.4	18
9 18	1 52.83	+15 35.2	1.699	2.577	13.5	21.3	9 18	1 53.42	+8 45.6	2.289	3.171	10.3	20.8
9 28	1 47.95	+15 15.0	1.629	2.569	9.7	21.0	9 28	1 47.95	+8 7.7	2.214	3.161	7.1	20.5
10 8	1 41.16	+14 40.3	1.582	2.562	5.6	20.8	10 8	1 41.04	+7 23.0	2.165	3.150	3.6	20.3
10 18	1 33.27	+13 54.0	1.561	2.556	1.7	20.5	10 18	1 33.31	+6 35.2	2.145	3.140	1.0	20.1
10 28	1 25.34	+13 1.7	1.567	2.550	4.2	20.7	10 28	1 25.55	+5 49.2	2.154	3.130	4.1	20.3
11 7	1 18.44	+12 10.4	1.600	2.544	8.5	20.9	11 7	1 18.55	+5 9.7	2.192	3.119	7.7	20.5
11 17	1 13.42	+11 26.3	1.657	2.540	12.5	21.2	11 17	1 12.97	+4 40.4	2.255	3.108	10.9	20.7
11 27	1 10.85	+10 54.8	1.736	2.536	15.8	21.4	11 27	1 9.28	+4 24.2	2.342	3.097	13.5	20.9
410953	2009 <i>ST</i> ₃₄₅		10 18.3	99° 46'	0° 3'/18.0	18	271586	2004 <i>NU</i> ₄		10 18.3	26° 15'	0° 5'/17.9	18
9 18	1 55.19	+9 39.1	2.301	3.177	10.4	21.5	9 18	1 53.12	+12 12.6	1.232	2.133	15.8	19.8
9 28	1 49.04	+9 24.3	2.245	3.188	7.3	21.3	9 28	1 48.41	+11 10.5	1.186	2.140	11.0	19.5
10 8	1 41.52	+9 3.3	2.214	3.198	3.7	21.1	10 8	1 41.45	+9 53.0	1.162	2.149	5.7	19.2
10 18	1 33.29	+8 38.9	2.212	3.208	0.3	20.8	10 18	1 33.32	+8 27.9	1.162	2.158	0.5	18.9
10 28	1 25.16	+8 15.0	2.240	3.219	3.7	21.1	10 28	1 25.40	+7 5.6	1.188	2.168	5.7	19.3
11 7	1 17.90	+7 55.2	2.297	3.229	7.1	21.4	11 7	1 18.96	+5 56.1	1.238	2.179	10.8	19.6
11 17	1 12.13	+7 42.7	2.380	3.238	10.1	21.6	11 17	1 14.89	+5 6.1	1.310	2.191	15.3	19.9
11 27	1 8.26	+7 39.8	2.487	3.248	12.7	21.8	11 27	1 13.68	+4 39.0	1.402	2.203	18.9	20.2
293491	2007 <i>FE</i> ₃₇		10 18.3	105° 48'	1° 1'/17.5	17	115128	2003 <i>SC</i> ₅₁		10 18.3	10° 49'	4° 3'/21.7	18
9 18	1 58.13	+11 1.9	1.229	2.125	16.2	20.9	9 18	1 58.14	+21 41.8	2.045	2.883	13.1	18.7
9 28	1 51.91	+9 55.9	1.180	2.133	11.2	20.6	9 28	1 51.50	+22 18.9	1.974	2.884	10.1	18.5
10 8	1 43.25	+8 35.5	1.155	2.141	5.7	20.3	10 8	1 43.00	+22 41.1	1.927	2.885	6.9	18.3
10 18	1 33.34	+7 8.7	1.154	2.149	1.1	20.0	10 18	1 33.38	+22 47.7	1.907	2.886	4.5	18.2
10 28	1 23.66	+5 46.3	1.179	2.157	6.2	20.4	10 28	1 23.69	+22 40.5	1.916	2.888	5.0	18.2
11 7	1 15.61	+4 38.4	1.229	2.165	11.5	20.7	11 7	1 14.97	+22 23.6	1.952	2.891	7.7	18.4
11 17	1 10.16	+3 51.4	1.302	2.172	16.0	21.0	11 17	1 8.06	+22 2.3	2.015	2.893	10.8	18.6
11 27	1 7.81	+3 28.3	1.393	2.180	19.7	21.3	11 27	1 3.55	+21 42.3	2.101	2.896	13.6	18.8
521804	2015 <i>TJ</i> ₁₂₄		10 18.3	305° 25'	2° 9'/15.3	18	117583	2005 <i>EN</i> ₄₁		10 18.3	208° 11'	0° 1'/18.2	18
9 18	1 51.81</												

EPHEMERIDES

10 18.3

10 18.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
35323	1997 <i>CD</i> ₂₆		10 18.3 141°41'	4.6/13.3	18	R	392561	2011 <i>SQ</i> ₇₉		10 18.3 96°13'	0.9/17.5	18	
9 18	1 52.93	- 2 45.2	2.196	3.091	10.1	19.4	9 18	1 54.61	+10 3.2	1.805	2.691	12.4	21.4
9 28	1 47.53	- 3 53.6	2.147	3.094	7.3	19.2	9 28	1 48.94	+ 9 12.7	1.750	2.698	8.6	21.2
10 8	1 40.77	- 4 59.5	2.124	3.098	5.0	19.1	10 8	1 41.60	+ 8 13.0	1.719	2.705	4.3	20.9
10 18	1 33.32	- 5 57.1	2.130	3.101	4.9	19.1	10 18	1 33.37	+ 7 9.4	1.716	2.712	0.9	20.7
10 28	1 25.96	- 6 41.1	2.164	3.104	7.1	19.3	10 28	1 25.26	+ 6 8.4	1.741	2.718	4.7	21.0
11 7	1 19.47	- 7 7.8	2.224	3.107	9.8	19.4	11 7	1 18.23	+ 5 16.5	1.794	2.725	8.8	21.2
11 17	1 14.43	- 7 15.8	2.308	3.110	12.4	19.6	11 17	1 13.00	+ 4 38.2	1.871	2.732	12.4	21.5
11 27	1 11.26	- 7 5.4	2.413	3.113	14.6	19.8	11 27	1 10.04	+ 4 16.4	1.970	2.738	15.3	21.7
388264	2006 <i>QV</i> ₅₈		10 18.3 67°95'	5°5/13.1	15		443702	2015 <i>KA</i> ₁₁₁		10 18.3 29°04'	11°9/11.7	17	
9 18	1 54.52	- 1 29.1	1.666	2.568	12.3	21.1	9 18	1 57.53	-15 43.0	1.154	2.054	16.7	19.9
9 28	1 48.73	- 3 12.4	1.643	2.594	8.7	20.9	9 28	1 51.24	-16 43.6	1.142	2.074	13.8	19.8
10 8	1 41.37	- 4 51.8	1.645	2.620	6.0	20.8	10 8	1 42.76	-17 20.0	1.151	2.095	12.1	19.7
10 18	1 33.34	- 6 18.5	1.674	2.646	5.9	20.9	10 18	1 33.40	-17 24.2	1.181	2.118	12.3	19.8
10 28	1 25.65	- 7 25.1	1.731	2.672	8.4	21.1	10 28	1 24.66	-16 52.8	1.233	2.141	14.2	20.0
11 7	1 19.20	- 8 7.5	1.812	2.698	11.5	21.4	11 7	1 17.77	-15 48.3	1.306	2.166	16.8	20.3
11 17	1 14.62	- 8 24.9	1.917	2.724	14.4	21.6	11 17	1 13.46	-14 16.8	1.397	2.192	19.3	20.5
11 27	1 12.27	- 8 19.0	2.040	2.749	16.7	21.8	11 27	1 12.06	-12 25.4	1.505	2.218	21.5	20.8
73787	1994 <i>WL</i> ₄		10 18.3 60°95'	2°0/16.5	18		481581	2007 <i>TA</i> ₁₃₂		10 18.3 272°44'	1°6/16.9	16	
9 18	1 53.68	+ 7 49.0	1.682	2.577	12.6	19.6	9 18	1 56.91	+ 6 21.4	1.942	2.828	11.6	21.8
9 28	1 48.36	+ 6 42.0	1.630	2.583	8.7	19.4	9 28	1 50.70	+ 5 56.1	1.860	2.808	8.1	21.6
10 8	1 41.30	+ 5 27.1	1.603	2.590	4.4	19.2	10 8	1 42.63	+ 5 25.4	1.803	2.788	4.2	21.3
10 18	1 33.34	+ 4 11.1	1.603	2.597	2.1	19.0	10 18	1 33.41	+ 4 53.1	1.773	2.768	1.7	21.1
10 28	1 25.52	+ 3 1.6	1.631	2.604	5.6	19.3	10 28	1 24.04	+ 4 24.4	1.773	2.747	5.1	21.3
11 7	1 18.82	+ 2 5.6	1.685	2.611	9.7	19.6	11 7	1 15.52	+ 4 4.0	1.800	2.726	9.2	21.5
11 17	1 13.98	+ 1 27.4	1.764	2.618	13.3	19.8	11 17	1 8.73	+ 3 55.7	1.853	2.704	12.9	21.7
11 27	1 11.48	+ 1 8.9	1.863	2.625	16.3	20.0	11 27	1 4.25	+ 4 1.7	1.927	2.683	16.0	21.8
189	<i>Phthia</i>		10 18.3 12°43'	0°1/18.2	18		114071	2002 <i>VC</i> ₃₂		10 18.3 69°77'	2°3/20.2	17	
9 18	1 54.71	+12 46.7	1.474	2.363	14.4	12.9	9 18	1 56.73	+18 27.4	1.389	2.262	16.1	19.1
9 28	1 49.36	+11 53.4	1.415	2.363	10.2	12.6	9 28	1 50.78	+17 47.7	1.341	2.277	11.8	18.8
10 8	1 41.94	+10 45.4	1.379	2.364	5.3	12.3	10 8	1 42.65	+16 47.4	1.314	2.291	6.9	18.6
10 18	1 33.36	+ 9 28.7	1.369	2.365	0.2	11.9	10 18	1 33.41	+15 31.4	1.312	2.306	2.6	18.4
10 28	1 24.87	+ 8 11.7	1.385	2.366	5.0	12.3	10 28	1 24.42	+14 8.0	1.337	2.320	4.7	18.6
11 7	1 17.63	+ 7 3.2	1.428	2.367	9.9	12.6	11 7	1 16.93	+12 47.3	1.389	2.335	9.4	18.9
11 17	1 12.55	+ 6 10.3	1.495	2.368	14.1	12.9	11 17	1 11.82	+11 38.1	1.464	2.350	13.6	19.2
11 27	1 10.15	+ 5 37.0	1.581	2.370	17.6	13.1	11 27	1 9.54	+10 46.2	1.560	2.364	17.1	19.4
440115	2003 <i>SH</i> ₅₈		10 18.3 44°69'	2°4/20.7	18		446	<i>Aeternitas</i>		10 18.3 50°31'	2°1/16.9	18	R
9 18	1 53.23	+20 30.8	1.486	2.353	15.6	19.8	9 18	1 58.34	+ 4 29.2	1.666	2.558	12.9	12.8
9 28	1 48.27	+19 27.1	1.431	2.363	11.5	19.6	9 28	1 51.60	+ 4 18.4	1.618	2.569	8.9	12.6
10 8	1 41.32	+18 0.5	1.399	2.374	6.9	19.3	10 8	1 42.99	+ 4 4.9	1.595	2.581	4.7	12.4
10 18	1 33.34	+16 16.6	1.392	2.385	2.8	19.1	10 18	1 33.45	+ 3 52.6	1.599	2.592	2.2	12.2
10 28	1 25.57	+14 24.7	1.413	2.396	4.5	19.2	10 28	1 24.09	+ 3 46.2	1.630	2.604	5.5	12.5
11 7	1 19.12	+12 36.2	1.461	2.408	8.9	19.5	11 7	1 15.98	+ 3 49.3	1.689	2.616	9.6	12.8
11 17	1 14.80	+11 0.7	1.533	2.420	13.0	19.8	11 17	1 9.90	+ 4 3.9	1.772	2.628	13.2	13.0
11 27	1 13.10	+ 9 45.0	1.627	2.432	16.5	20.1	11 27	1 6.34	+ 4 31.2	1.875	2.640	16.1	13.2
177868	2005 <i>QR</i> ₃₃		10 18.3 59°59'	0°5/18.8	18		404093	2012 <i>FK</i> ₂₂		10 18.3 50°36'	3°0/15.1	18	
9 18	1 54.72	+13 7.3	1.884	2.760	12.4	20.4	9 18	1 51.50	+ 3 14.0	2.100	2.995	10.4	20.5
9 28	1 49.01	+12 42.2	1.824	2.766	8.7	20.2	9 28	1 46.60	+ 2 5.5	2.049	3.002	7.2	20.3
10 8	1 41.64	+12 6.2	1.789	2.772	4.7	20.0	10 8	1 40.33	+ 0 54.5	2.025	3.008	4.1	20.1
10 18	1 33.37	+11 22.7	1.782	2.778	0.7	19.7	10 18	1 33.36	- 0 13.2	2.028	3.015	3.2	20.1
10 28	1 25.18	+10 37.0	1.802	2.784	4.0	20.0	10 28	1 26.50	- 1 11.5	2.060	3.021	5.8	20.2
11 7	1 18.02	+ 9 54.9	1.851	2.790	8.0	20.2	11 7	1 20.50	- 1 55.7	2.120	3.028	9.0	20.4
11 17	1 12.61	+ 9 21.3	1.925	2.796	11.6	20.5	11 17	1 15.98	- 2 23.0	2.204	3.035	11.9	20.6
11 27	1 9.46	+ 8 59.9	2.021	2.802	14.5	20.7	11 27	1 13.34	- 2 32.4	2.309	3.042	14.3	20.8
272353	2005 <i>ST</i> ₁₆₂		10 18.3 304°75'	1°0/19.1	18		410101	2007 <i>EF</i> ₁₂₀		10 18.3 177°11'	1°9/16.5	18	
9 18	1 57.32	+13 55.6	1.498	2.379	14.7	20.7	9 18	1 55.00	+ 4 22.3	2.335	3.220	10.0	21.0
9 28	1 51.27	+13 37.9	1.433	2.376	10.5	20.4	9 28	1 48.97	+ 3 59.8	2.272	3.220	6.9	20.8
10 8	1 42.98	+13 5.9	1.392	2.374	5.8	20.2	10 8	1 41.56	+ 3 35.0	2.236	3.221	3.7	20.6
10 18	1 33.41	+12 23.1	1.376	2.371	1.2	19.8	10 18	1 33.41	+ 3 11.1	2.229	3.221	2.0	20.5
10 28	1 23.84	+11 35.5	1.387	2.369	4.7	20.1	10 28	1 25.31	+ 2 52.2	2.251	3.221	4.6	20.7
11 7	1 15.53	+10 50.6	1.424	2.367	9.6	20.4	11 7	1 18.01	+ 2 41.4	2.302	3.221	7.8	20.9
11 17	1 9.46	+10 15.1	1.486	2.365	13.9	20.6	11 17	1 12.15	+ 2 41.0	2.379	3.221	10.7	21.1
11 27	1 6.23	+ 9 53.8	1.567	2.362	17.5	20.9	11 27	1 8.16	+ 2 52.4	2.478	3.221	13.2	21.3
267104	2000 <i>AR</i> ₁₉		10 18.3 305°45'	2°6/16.6	18		295186	2008 <i>FT</i> ₉₆		10 18.3 164°91'	3°9/16.1	16	
9 18	1 56.18	+ 6 16.1	1.293	2.197	14.9	20.3	9 18	2 6.74	- 1 31.0	1.823	2.701	12.6	20.8
9 28	1 50.88	+ 5 34.3	1.219	2.175	10.5	20.0	9 28	1 57.39	- 1 30.5	1.764	2.706	9.0	20.6
10 8	1 42.98	+ 4 43.6	1.166	2.154	5.6	19.6	10 8	1 46.01	- 1 26.5	1.732	2.710	5.4	20.4
10 18	1 33.42	+ 3 50.5	1.139	2.132	2.7	19.4	10 18	1 33.57	- 1 15.3	1.729	2.714	4.0	20.3
10 28	1 23.59	+ 3 3.7	1.136	2.111	7.1	19.6	10 28	1 21.28	- 0 53.5	1.757	2.717	6.6	20.5
11 7	1 14.99	+ 2 31.5	1.158	2.090	12.4	19.9	11 7	1 10.32	- 0 19.5	1.813	2.720	10.3	20.7
11 17	1 8.80	+ 2 19.2	1.201	2.070	17.2	20.1	11 17	1 1.53	+ 0 26.7	1.895	2.722	13.7	21.0
11 27	1 5.81	+ 2 29.4	1.262	2.050	21.3	20.3	11 27	0 55.45	+ 1 24.5	1.999	2.723	16.5	21.2
511312	2014 <i>DH</i> ₁₀₉		10 18.3 80°97'	3°3/15.1	18		211606	2003 <i>SN</i> ₄₂₃		10 18.3 294°46'	1		

EPHEMERIDES

10 18.3

10 18.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
109010	2001 <i>QR</i> ₃	10 18.3 62°47'			3°8'/15.4 17		410974	2009 <i>TJ</i> ₄₁	10 18.4 354°33'			2°0'/19.6 17	
9 18	1 56.02	+ 4 16.9	1.334	2.240	14.5	19.5	9 18	1 57.04	+13 55.0	1.608	2.486	14.0	19.8
9 28	1 50.19	+ 2 58.8	1.298	2.255	10.0	19.3	9 28	1 51.07	+14 27.8	1.540	2.480	10.2	19.6
10 8	1 42.31	+ 1 36.6	1.285	2.271	5.5	19.1	10 8	1 42.93	+14 50.1	1.496	2.475	5.9	19.3
10 18	1 33.45	+ 0 19.5	1.298	2.287	4.0	19.0	10 18	1 33.50	+15 2.3	1.478	2.472	2.2	19.1
10 28	1 24.90	- 0 43.2	1.336	2.303	7.6	19.3	10 28	1 23.97	+15 7.0	1.487	2.469	4.5	19.2
11 7	1 17.84	- 1 25.2	1.400	2.319	11.8	19.6	11 7	1 15.57	+15 8.4	1.523	2.467	8.9	19.5
11 17	1 13.07	- 1 43.7	1.486	2.335	15.6	19.9	11 17	1 9.26	+15 11.3	1.583	2.467	12.9	19.7
11 27	1 11.01	- 1 38.8	1.590	2.351	18.7	20.1	11 27	1 5.70	+15 20.0	1.664	2.467	16.3	19.9
69557	1997 <i>SY</i> ₃₁	10 18.3 48°31'			2°9'/21.0 18		425767	2011 <i>CD</i> ₂₆	10 18.4 176°25'			2°9'/15.7 16	
9 18	1 55.39	+19 21.2	2.154	3.003	12.1	19.0	9 18	1 57.37	+ 3 58.7	1.888	2.778	11.7	22.3
9 28	1 49.43	+19 27.9	2.089	3.009	9.1	18.8	9 28	1 50.85	+ 2 59.7	1.831	2.780	8.1	22.1
10 8	1 41.88	+19 21.1	2.047	3.015	5.8	18.6	10 8	1 42.63	+ 1 56.9	1.798	2.782	4.5	21.9
10 18	1 33.44	+19 1.8	2.033	3.021	3.1	18.5	10 18	1 33.49	+ 0 56.3	1.794	2.783	3.1	21.8
10 28	1 25.02	+18 33.2	2.048	3.027	3.9	18.5	10 28	1 24.45	+ 0 4.5	1.819	2.784	6.1	22.0
11 7	1 17.52	+18 0.0	2.091	3.033	7.0	18.7	11 7	1 16.46	- 0 33.4	1.872	2.784	9.7	22.2
11 17	1 11.66	+17 27.3	2.161	3.039	10.1	18.9	11 17	1 10.27	- 0 54.1	1.949	2.783	13.1	22.4
11 27	1 7.91	+16 59.9	2.253	3.046	12.9	19.1	11 27	1 6.36	- 0 56.7	2.047	2.782	15.9	22.6
147581	2004 <i>FR</i> ₁₂₆	10 18.3 324°45'			1°0'/18.9 18		263022	2007 <i>EV</i> ₂₀₆	10 18.4 21°92'			0°9'/17.5 18	
9 18	1 57.61	+12 45.7	1.299	2.189	15.9	20.1	9 18	1 51.96	+ 9 47.1	1.812	2.703	12.1	19.7
9 28	1 51.82	+12 42.1	1.232	2.180	11.4	19.8	9 28	1 47.14	+ 8 58.3	1.758	2.708	8.4	19.5
10 8	1 43.45	+12 24.7	1.188	2.171	6.2	19.5	10 8	1 40.71	+ 8 0.7	1.728	2.714	4.2	19.2
10 18	1 33.49	+11 56.4	1.167	2.163	1.1	19.2	10 18	1 33.43	+ 6 59.5	1.724	2.720	1.0	19.0
10 28	1 23.42	+11 23.2	1.173	2.155	5.3	19.4	10 28	1 26.25	+ 6 1.3	1.749	2.727	4.7	19.3
11 7	1 14.72	+10 52.6	1.203	2.148	10.6	19.7	11 7	1 20.08	+ 5 12.1	1.801	2.734	8.6	19.6
11 17	1 8.53	+10 31.3	1.256	2.141	15.4	20.0	11 17	1 15.61	+ 4 36.4	1.878	2.742	12.2	19.8
11 27	1 5.56	+10 24.5	1.328	2.135	19.4	20.2	11 27	1 13.30	+ 4 16.9	1.976	2.750	15.1	20.0
364505	2007 <i>EF</i> ₇₅	10 18.3 48°22'			0°9'/17.3 18		217184	2002 <i>RF</i> ₂₀₄	10 18.4 57°54'			4°1'/15.0 16	
9 18	1 51.65	+10 15.6	2.029	2.914	11.2	20.6	9 18	1 54.99	+ 4 59.8	1.240	2.149	15.1	19.9
9 28	1 46.78	+ 9 12.1	1.972	2.920	7.7	20.4	9 28	1 49.60	+ 3 18.0	1.204	2.163	10.3	19.6
10 8	1 40.46	+ 7 59.7	1.941	2.926	3.9	20.1	10 8	1 42.07	+ 1 30.5	1.191	2.177	5.7	19.4
10 18	1 33.40	+ 6 43.8	1.937	2.933	1.0	19.9	10 18	1 33.49	- 0 11.4	1.203	2.192	4.4	19.4
10 28	1 26.43	+ 5 31.0	1.963	2.939	4.4	20.2	10 28	1 25.22	- 1 36.4	1.241	2.206	8.2	19.7
11 7	1 20.38	+ 4 27.3	2.017	2.946	8.1	20.4	11 7	1 18.50	- 2 36.5	1.304	2.221	12.6	20.0
11 17	1 15.86	+ 3 37.5	2.096	2.953	11.4	20.7	11 17	1 14.14	- 3 8.7	1.387	2.237	16.5	20.2
11 27	1 13.31	+ 3 4.2	2.198	2.960	14.1	20.9	11 27	1 12.58	- 3 13.3	1.489	2.252	19.7	20.5
122929	2000 <i>SO</i> ₁₇₇	10 18.3 238°75'			3°1'/21.7 18		177882	2005 <i>QH</i> ₁₁₃	10 18.4 73°91'			0°4'/18.7 18	
9 18	1 53.52	+22 8.7	2.231	3.070	12.1	19.6	9 18	1 56.13	+12 37.7	1.912	2.787	12.3	20.6
9 28	1 48.16	+21 43.4	2.152	3.065	9.2	19.4	9 28	1 49.90	+12 15.6	1.864	2.805	8.6	20.4
10 8	1 41.23	+21 1.2	2.096	3.059	6.1	19.2	10 8	1 42.09	+11 43.5	1.841	2.824	4.6	20.2
10 18	1 33.43	+20 4.0	2.068	3.053	3.4	19.0	10 18	1 33.49	+11 5.1	1.846	2.842	0.5	19.9
10 28	1 25.61	+18 56.1	2.069	3.048	3.9	19.1	10 28	1 25.09	+10 25.2	1.880	2.860	3.9	20.2
11 7	1 18.63	+17 43.6	2.099	3.042	6.9	19.2	11 7	1 17.78	+ 9 49.1	1.941	2.879	7.8	20.5
11 17	1 13.20	+16 33.1	2.155	3.036	10.1	19.4	11 17	1 12.26	+ 9 21.3	2.028	2.897	11.2	20.7
11 27	1 9.82	+15 30.5	2.236	3.029	12.9	19.6	11 27	1 8.94	+ 9 5.0	2.138	2.915	14.0	21.0
395599	2011 <i>UH</i> ₃₂₅	10 18.3 66°99'			0°9'/19.2 18		487996	2015 <i>TW</i> ₃₄₁	10 18.4 328°23'			11°7'/ 7.9 17	
9 18	1 55.41	+14 29.3	1.741	2.616	13.3	21.2	9 18	1 54.99	-18 34.9	1.556	2.439	14.2	20.6
9 28	1 49.58	+14 0.7	1.687	2.627	9.5	21.0	9 28	1 49.62	-19 55.2	1.507	2.420	12.4	20.5
10 8	1 41.98	+13 19.2	1.656	2.637	5.2	20.7	10 8	1 42.15	-20 56.6	1.480	2.403	11.7	20.4
10 18	1 33.45	+12 28.5	1.653	2.648	1.1	20.5	10 18	1 33.50	-21 29.7	1.476	2.386	12.5	20.4
10 28	1 25.07	+11 34.6	1.677	2.659	4.1	20.7	10 28	1 24.87	-21 27.9	1.494	2.369	14.4	20.5
11 7	1 17.83	+10 44.0	1.729	2.670	8.3	21.0	11 7	1 17.45	-20 50.1	1.533	2.354	16.8	20.6
11 17	1 12.50	+10 2.5	1.806	2.681	12.0	21.3	11 17	1 12.13	-19 39.0	1.590	2.339	19.3	20.7
11 27	1 9.56	+ 9 34.3	1.905	2.692	15.1	21.5	11 27	1 9.49	-18 0.2	1.662	2.325	21.4	20.9
516523	2006 <i>QX</i> ₁₄₅	10 18.3 151°46'			5°8'/23.3 18		431187	2006 <i>SM</i> ₇₆	10 18.4 19°84'			2°4'/16.7 18	
9 18	2 0.66	+26 59.5	2.084	2.892	14.0	21.3	9 18	1 54.02	+ 8 3.0	1.058	1.972	16.7	20.3
9 28	1 53.35	+27 38.6	2.012	2.896	11.2	21.1	9 28	1 49.32	+ 7 1.2	1.016	1.977	11.5	20.0
10 8	1 44.04	+27 58.8	1.963	2.899	8.4	21.0	10 8	1 42.08	+ 5 48.4	0.995	1.983	5.9	19.7
10 18	1 33.53	+27 58.7	1.940	2.902	6.2	20.8	10 18	1 33.50	+ 4 33.9	0.996	1.990	2.5	19.6
10 28	1 22.94	+27 39.6	1.945	2.905	6.1	20.8	10 28	1 25.14	+ 3 28.7	1.022	1.999	7.2	19.9
11 7	1 13.38	+27 6.2	1.978	2.908	8.2	21.0	11 7	1 18.44	+ 2 42.1	1.070	2.008	12.5	20.2
11 17	1 5.76	+26 24.9	2.037	2.911	10.9	21.1	11 17	1 14.39	+ 2 19.0	1.139	2.018	17.2	20.5
11 27	1 0.69	+25 43.1	2.120	2.913	13.6	21.3	11 27	1 13.50	+ 2 20.8	1.225	2.029	20.9	20.8
171081	2005 <i>EG</i> ₁₈₅	10 18.3 138°42'			2°3'/20.9 18		436474	2011 <i>DB</i> ₄₉	10 18.4 238°83'			5°6'/13.9 18	
9 18	1 54.68	+20 33.9	2.134	2.980	12.4	20.5	9 18	1 58.66	- 3 17.2	1.728	2.622	12.4	21.2
9 28	1 48.88	+19 48.1	2.069	2.989	9.2	20.3	9 28	1 51.99	- 4 14.5	1.665	2.611	9.0	21.0
10 8	1 41.55	+18 45.6	2.028	2.997	5.7	20.1	10 8	1 43.34	- 5 9.0	1.626	2.600	6.2	20.8
10 18	1 33.44	+17 29.7	2.015	3.005	2.6	19.9	10 18	1 33.55	- 5 53.5	1.614	2.587	5.9	20.8
10 28	1 25.45	+16 6.1	2.032	3.013	3.7	20.0	10 28	1 23.74	- 6 21.5	1.629	2.575	8.5	20.9
11 7	1 18.43	+14 41.8	2.078	3.020	7.0	20.2	11 7	1 15.01	- 6 28.7	1.670	2.562	12.0	21.1
11 17	1 13.04	+13 23.7	2.151	3.027	10.3	20.4	11 17	1 8.25	- 6 13.9	1.734	2.548	15.4	21.3
11 27	1 9.74	+12 17.3	2.248	3.033	13.1	20.6	11 27	1 4.03	- 5 38.1	1.817	2.534	18.2	21.5
308314	2005 <i>LZ</i> ₄₅	10 18.4 22°61'			5°7'/ 7.8 18		104598	2000 <i>GW</i> ₉₂	10 18.4 188°59'			0°1'/18.3 18	
9 18	1 47.78	-19 7.6	3.929	4.786	6.9	19.7	9 18	1 57.99	+1				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
177880	2005 <i>QD</i> ₁₀₉		10 18.4 101°56	2°5/20.7	18		450936	2008 <i>FN</i> ₂₃		10 18.4 65°77	2°5/16.3	18	
9 18	1 55.57	+18 43.2	2.044	2.897	12.5	20.2	9 18	1 56.38	+3 30.2	1.937	2.828	11.4	20.7
9 28	1 49.62	+18 33.5	1.979	2.903	9.3	20.0	9 28	1 50.02	+3 1.1	1.898	2.848	7.9	20.5
10 8	1 42.02	+18 9.3	1.938	2.909	5.7	19.8	10 8	1 42.16	+2 30.4	1.884	2.868	4.2	20.3
10 18	1 33.52	+17 32.7	1.925	2.915	2.7	19.6	10 18	1 33.59	+2 2.5	1.898	2.888	2.6	20.3
10 28	1 25.07	+16 47.8	1.940	2.920	3.9	19.7	10 28	1 25.26	+1 41.9	1.940	2.908	5.4	20.5
11 7	1 17.60	+16 0.2	1.983	2.926	7.3	19.9	11 7	1 18.02	+1 32.1	2.010	2.929	8.8	20.7
11 17	1 11.83	+15 15.6	2.053	2.931	10.6	20.2	11 17	1 12.51	+1 35.0	2.105	2.949	11.9	21.0
11 27	1 8.26	+14 39.1	2.146	2.937	13.5	20.4	11 27	1 9.13	+1 51.3	2.221	2.969	14.4	21.2
164259	2004 <i>TH</i> ₂₈₃		10 18.4 348°96	0°7/17.9	18		112487	2002 <i>PO</i> ₂		10 18.4 223°88	5°5/24.1	18	
9 18	1 52.47	+11 47.4	0.971	1.884	17.8	18.8	9 18	1 55.60	+28 37.8	1.974	2.785	14.5	20.0
9 28	1 48.62	+10 53.4	0.917	1.877	12.6	18.5	9 28	1 49.89	+28 23.0	1.895	2.781	11.7	19.8
10 8	1 41.92	+9 40.3	0.882	1.871	6.5	18.2	10 8	1 42.29	+27 44.5	1.838	2.777	8.6	19.6
10 18	1 33.53	+8 16.1	0.869	1.865	0.7	17.8	10 18	1 33.61	+26 42.9	1.806	2.773	6.1	19.5
10 28	1 25.13	+6 53.4	0.879	1.862	6.7	18.2	10 28	1 24.91	+25 22.0	1.801	2.769	5.7	19.4
11 7	1 18.39	+5 44.7	0.911	1.859	12.8	18.5	11 7	1 17.25	+23 49.3	1.825	2.765	8.0	19.6
11 17	1 14.50	+4 58.9	0.963	1.858	18.2	18.8	11 17	1 11.47	+22 13.9	1.874	2.760	11.1	19.8
11 27	1 14.09	+4 40.4	1.032	1.857	22.5	19.1	11 27	1 8.13	+20 44.3	1.948	2.755	14.1	19.9
5895	1982 <i>UF</i> ₂		10 18.4 2°91	1°8/19.7	18		471005	2009 <i>SY</i> ₂₃₀		10 18.4 17°78	1°7/17.7	18	
9 18	1 52.93	+17 0.1	1.091	1.986	17.8	16.5	9 18	1 59.03	+5 23.3	0.919	1.836	18.2	19.3
9 28	1 48.72	+16 15.8	1.036	1.984	13.0	16.2	9 28	1 53.09	+5 46.7	0.883	1.844	12.7	19.0
10 8	1 41.88	+15 7.3	1.001	1.984	7.4	15.9	10 8	1 44.16	+6 5.7	0.866	1.855	6.6	18.7
10 18	1 33.53	+13 40.5	0.989	1.984	2.1	15.6	10 18	1 33.68	+6 24.0	0.871	1.867	1.7	18.5
10 28	1 25.25	+12 6.4	1.001	1.986	5.4	15.8	10 28	1 23.53	+6 46.2	0.900	1.881	6.8	18.9
11 7	1 18.57	+10 37.9	1.037	1.988	11.1	16.2	11 7	1 15.43	+7 16.5	0.950	1.896	12.6	19.2
11 17	1 14.55	+9 25.6	1.094	1.992	16.1	16.5	11 17	1 10.49	+7 57.2	1.021	1.913	17.5	19.6
11 27	1 13.79	+8 36.5	1.170	1.996	20.3	16.8	11 27	1 9.19	+8 49.3	1.109	1.932	21.4	19.9
213741	2002 <i>WR</i> ₂₈		10 18.4 245°66	0°2/18.2	18		168100	2006 <i>DD</i> ₂₁₀		10 18.4 91°83	1°2/17.4	18	
9 18	1 54.04	+11 59.3	1.925	2.804	12.0	20.5	9 18	1 57.02	+8 56.3	1.787	2.672	12.5	21.2
9 28	1 48.62	+11 14.7	1.857	2.801	8.4	20.3	9 28	1 50.57	+8 9.4	1.744	2.692	8.6	21.0
10 8	1 41.54	+10 19.2	1.814	2.798	4.4	20.0	10 8	1 42.49	+7 15.1	1.727	2.712	4.4	20.8
10 18	1 33.53	+9 17.1	1.798	2.794	0.2	19.7	10 18	1 33.63	+6 18.8	1.736	2.732	1.2	20.7
10 28	1 25.54	+8 14.6	1.811	2.791	4.2	20.0	10 28	1 25.01	+5 26.6	1.775	2.751	4.8	21.0
11 7	1 18.49	+7 18.1	1.852	2.788	8.3	20.2	11 7	1 17.59	+4 44.2	1.842	2.770	8.8	21.2
11 17	1 13.13	+6 32.9	1.919	2.784	11.9	20.5	11 17	1 12.05	+4 15.5	1.933	2.789	12.2	21.5
11 27	1 9.96	+6 2.7	2.007	2.780	14.9	20.7	11 27	1 8.81	+4 2.5	2.046	2.807	15.0	21.7
137546	1999 <i>VY</i> ₇₆		10 18.4 48°47	3°0/16.6	15		478854	2012 <i>VS</i> ₇₁		10 18.4 38°23	1°9/17.1	16	
9 18	1 58.92	+5 17.2	1.115	2.024	16.5	20.1	9 18	1 57.06	+7 1.1	1.259	2.162	15.3	21.3
9 28	1 52.46	+4 36.6	1.085	2.043	11.3	19.8	9 28	1 51.08	+6 31.0	1.223	2.179	10.6	21.1
10 8	1 43.59	+3 51.2	1.075	2.062	5.9	19.6	10 8	1 42.90	+5 54.2	1.208	2.196	5.4	20.9
10 18	1 33.60	+3 8.5	1.089	2.083	3.1	19.5	10 18	1 33.64	+5 16.7	1.219	2.213	2.0	20.7
10 28	1 24.06	+2 36.6	1.129	2.103	7.2	19.8	10 28	1 24.71	+4 45.8	1.255	2.232	6.1	21.0
11 7	1 16.36	+2 21.4	1.192	2.124	12.1	20.1	11 7	1 17.37	+4 27.3	1.315	2.251	10.9	21.3
11 17	1 11.37	+2 25.4	1.277	2.146	16.4	20.5	11 17	1 12.46	+4 24.6	1.398	2.270	15.0	21.6
11 27	1 9.50	+2 48.8	1.379	2.168	19.8	20.8	11 27	1 10.43	+4 39.1	1.501	2.291	18.3	21.9
424422	2008 <i>AD</i> ₁₀₉		10 18.4 217°68	4°0/15.3	18		323676	2005 <i>EA</i> ₁₈₅		10 18.4 55°21	3°4/20.5	17	
9 18	1 57.83	+2 31.4	1.480	2.380	13.7	21.2	9 18	2 1.47	+17 42.8	1.211	2.087	17.8	19.7
9 28	1 51.59	+1 29.3	1.424	2.377	9.6	21.0	9 28	1 54.42	+17 59.7	1.168	2.104	13.1	19.5
10 8	1 43.19	+0 24.0	1.391	2.374	5.5	20.7	10 8	1 44.75	+17 56.7	1.146	2.121	8.0	19.3
10 18	1 33.60	-0 36.9	1.384	2.371	4.3	20.7	10 18	1 33.72	+17 35.5	1.148	2.139	3.7	19.1
10 28	1 24.07	-1 25.1	1.404	2.367	7.6	20.9	10 28	1 22.99	+17 1.8	1.176	2.157	5.5	19.3
11 7	1 15.81	-1 54.6	1.449	2.363	11.9	21.1	11 7	1 14.06	+16 23.9	1.228	2.176	10.2	19.6
11 17	1 9.76	-2 2.3	1.517	2.359	15.7	21.3	11 17	1 7.98	+15 50.1	1.304	2.194	14.6	19.9
11 27	1 6.48	-1 48.1	1.604	2.355	18.9	21.6	11 27	1 5.23	+15 27.1	1.399	2.213	18.2	20.2
106711	2000 <i>WE</i> ₁₇₃		10 18.4 0°54	7°0/22.8	18		15651	<i>Tlepolemos</i>		10 18.4 313°32	0°2/17.9	18	
9 18	1 57.87	+24 28.7	1.158	2.019	19.5	18.3	9 18	1 47.05	+9 32.9	4.292	5.164	6.1	18.5
9 28	1 52.40	+25 5.9	1.098	2.017	15.4	18.1	9 28	1 43.11	+9 12.3	4.220	5.161	4.2	18.4
10 8	1 43.94	+25 15.5	1.057	2.016	11.0	17.8	10 8	1 38.48	+8 48.2	4.175	5.159	2.2	18.2
10 18	1 33.64	+24 55.6	1.038	2.016	7.5	17.6	10 18	1 33.49	+8 22.3	4.160	5.157	0.2	18.0
10 28	1 23.24	+24 9.9	1.042	2.017	7.6	17.7	10 28	1 28.50	+7 56.7	4.177	5.154	2.2	18.2
11 7	1 14.50	+23 7.9	1.069	2.018	11.2	17.9	11 7	1 23.88	+7 33.6	4.223	5.152	4.2	18.4
11 17	1 8.73	+22 1.7	1.118	2.020	15.5	18.1	11 17	1 19.96	+7 14.7	4.297	5.150	6.1	18.5
11 27	1 6.64	+21 2.5	1.187	2.023	19.4	18.4	11 27	1 16.99	+7 1.7	4.397	5.148	7.7	18.6
449834	2014 <i>QR</i> ₂₄₁		10 18.4 107°84	5°6/11.7	18		407184	2009 <i>UR</i> ₈₆		10 18.4 9°33	1°4/19.3	15	
9 18	1 51.92	-6 46.6	2.349	3.241	9.6	21.0	9 18	1 54.80	+12 56.5	1.436	2.325	14.7	19.9
9 28	1 46.81	-8 6.4	2.308	3.248	7.3	20.9	9 28	1 49.56	+13 11.6	1.383	2.329	10.5	19.7
10 8	1 40.48	-9 20.8	2.294	3.255	5.7	20.8	10 8	1 42.19	+13 15.1	1.352	2.335	5.9	19.5
10 18	1 33.52	-10 23.7	2.308	3.262	6.0	20.9	10 18	1 33.63	+13 9.0	1.346	2.342	1.5	19.2
10 28	1 26.67	-11 10.1	2.350	3.269	7.8	21.0	10 28	1 25.14	+12 57.6	1.366	2.350	4.6	19.4
11 7	1 20.63	-11 37.0	2.418	3.276	10.1	21.1	11 7	1 17.93	+12 46.5	1.412	2.359	9.2	19.7
11 17	1 15.93	-11 43.7	2.509	3.283	12.3	21.3	11 17	1 12.92	+12 40.6	1.481	2.370	13.3	20.0
11 27	1 12.97	-11 31.2	2.619	3.289	14.2	21.5	11 27	1 10.66	+12 44.0	1.571	2.382	16.7	20.3
403192	2008 <i>KM</i> ₃₉		10 18.4 48°09	2°8/15.5	18		185504	2007 <i>TQ</i> ₂₃₀		10 18.4 22°73	2°1/16.8	18	
9 18	1 51.82	+5 18.											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
154209	2002 <i>JV</i> ₂₃		10 18.4 158°84	0°5/17.7	18		234091	1999 <i>TC</i> ₁₆₇		10 18.4 76°45	4°4/21.7	18	
9 18	1 52.00	+11 35.9	2.410	3.285	10.1	20.0	9 18	2 1.24	+21 43.6	1.662	2.506	15.3	20.5
9 28	1 46.92	+10 29.2	2.345	3.288	7.0	19.9	9 28	1 53.83	+22 3.8	1.613	2.527	11.7	20.4
10 8	1 40.59	+9 13.4	2.307	3.291	3.6	19.6	10 8	1 44.33	+22 4.8	1.587	2.548	7.8	20.2
10 18	1 33.59	+7 53.2	2.298	3.294	0.5	19.4	10 18	1 33.76	+21 47.2	1.586	2.569	4.7	20.1
10 28	1 26.66	+6 34.3	2.319	3.296	3.7	19.7	10 28	1 23.40	+21 14.8	1.614	2.590	5.2	20.1
11 7	1 20.49	+5 22.5	2.370	3.299	7.1	19.9	11 7	1 14.45	+20 34.3	1.668	2.610	8.5	20.4
11 17	1 15.66	+4 22.1	2.448	3.301	10.1	20.1	11 17	1 7.77	+19 52.9	1.748	2.630	12.0	20.6
11 27	1 12.57	+3 36.5	2.549	3.302	12.6	20.3	11 27	1 3.88	+19 17.3	1.851	2.651	15.0	20.9
97590	2000 <i>EQ</i> ₃₃		10 18.4 58°29	5°0/15.0	18		233411	2006 <i>GM</i> ₂₁		10 18.4 108°77	1°4/19.6	18	
9 18	1 58.47	-0 29.9	1.393	2.296	14.2	19.1	9 18	1 58.35	+15 7.4	1.842	2.708	13.1	21.1
9 28	1 52.02	-1 18.6	1.349	2.302	10.0	18.9	9 28	1 51.64	+14 54.5	1.786	2.721	9.4	20.9
10 8	1 43.42	-2 5.6	1.328	2.309	6.2	18.7	10 8	1 43.15	+14 29.0	1.755	2.733	5.3	20.6
10 18	1 33.71	-2 43.4	1.333	2.316	5.3	18.7	10 18	1 33.72	+13 53.7	1.751	2.745	1.6	20.4
10 28	1 24.21	-3 5.2	1.363	2.323	8.3	18.9	10 28	1 24.43	+13 13.4	1.776	2.757	4.0	20.6
11 7	1 16.16	-3 6.8	1.419	2.330	12.3	19.1	11 7	1 16.29	+12 33.9	1.829	2.769	8.0	20.9
11 17	1 10.42	-2 47.3	1.496	2.337	16.0	19.4	11 17	1 10.08	+12 0.5	1.907	2.780	11.6	21.1
11 27	1 7.50	-2 8.0	1.592	2.345	19.0	19.6	11 27	1 6.27	+11 37.6	2.008	2.792	14.6	21.4
255180	2005 <i>UT</i> ₂₄₆		10 18.4 340°12	0°6/17.8	18		518082	2016 <i>AB</i> ₂₂₈		10 18.4 321°06	5°0/12.9	18	
9 18	1 54.14	+9 36.8	1.938	2.823	11.7	20.5	9 18	1 51.70	-4 29.7	2.267	3.162	9.8	21.1
9 28	1 48.71	+9 9.3	1.873	2.820	8.2	20.3	9 28	1 46.81	-5 32.2	2.212	3.157	7.2	20.9
10 8	1 41.64	+8 33.9	1.832	2.817	4.2	20.0	10 8	1 40.58	-6 31.3	2.182	3.151	5.3	20.8
10 18	1 33.64	+7 54.5	1.819	2.815	0.6	19.8	10 18	1 33.63	-7 21.4	2.180	3.146	5.3	20.8
10 28	1 25.66	+7 16.1	1.834	2.813	4.3	20.0	10 28	1 26.71	-7 57.4	2.205	3.141	7.3	20.9
11 7	1 18.60	+6 44.0	1.877	2.811	8.3	20.3	11 7	1 20.56	-8 16.1	2.257	3.136	9.9	21.1
11 17	1 13.21	+6 22.2	1.945	2.809	11.8	20.5	11 17	1 15.78	-8 16.2	2.333	3.131	12.4	21.3
11 27	1 9.99	+6 13.5	2.034	2.807	14.7	20.7	11 27	1 12.81	-7 58.0	2.428	3.126	14.5	21.4
336609	2009 <i>UV</i> ₅₆		10 18.4 77°24	1°1/19.2	18		379647	2011 <i>EG</i> ₁₉		10 18.4 257°95	3°3/15.7	18	
9 18	1 58.45	+14 30.1	1.448	2.328	15.2	21.0	9 18	1 56.91	+4 9.2	1.657	2.552	12.8	21.0
9 28	1 52.00	+14 5.4	1.399	2.341	10.8	20.8	9 28	1 50.97	+3 6.8	1.584	2.536	8.9	20.7
10 8	1 43.41	+13 25.7	1.373	2.355	6.0	20.5	10 8	1 42.97	+1 58.5	1.536	2.520	5.0	20.5
10 18	1 33.71	+12 35.3	1.373	2.369	1.3	20.2	10 18	1 33.74	+0 51.1	1.514	2.504	3.5	20.3
10 28	1 24.23	+11 41.1	1.400	2.382	4.7	20.5	10 28	1 24.39	-0 7.5	1.521	2.487	6.9	20.5
11 7	1 16.20	+10 50.9	1.453	2.396	9.4	20.8	11 7	1 16.08	-0 50.3	1.554	2.469	11.1	20.7
11 17	1 10.48	+10 11.1	1.530	2.409	13.5	21.1	11 17	1 9.73	-1 13.3	1.610	2.452	15.0	20.9
11 27	1 7.58	+9 46.3	1.628	2.423	16.9	21.4	11 27	1 5.98	-1 14.6	1.685	2.434	18.3	21.1
377018	2002 <i>RK</i> ₈₀		10 18.4 11°86	3°9/20.4	18		376422	2012 <i>GP</i> ₃₁		10 18.4 189°34	0°6/18.9	17	
9 18	1 57.68	+16 42.4	1.004	1.898	19.1	19.8	9 18	2 0.13	+13 1.6	1.664	2.538	13.9	21.9
9 28	1 52.31	+17 20.7	0.956	1.901	14.2	19.5	9 28	1 53.17	+12 41.9	1.598	2.538	9.9	21.7
10 8	1 43.91	+17 39.0	0.927	1.905	8.7	19.2	10 8	1 44.08	+12 9.9	1.555	2.537	5.3	21.4
10 18	1 33.74	+17 37.6	0.919	1.911	4.2	19.0	10 18	1 33.78	+11 28.8	1.539	2.535	0.8	21.1
10 28	1 23.63	+17 21.2	0.935	1.918	6.1	19.1	10 28	1 23.49	+10 44.3	1.552	2.533	4.5	21.4
11 7	1 15.37	+16 58.1	0.974	1.927	11.3	19.5	11 7	1 14.40	+10 2.9	1.593	2.531	9.1	21.6
11 17	1 10.20	+16 37.2	1.033	1.937	16.3	19.8	11 17	1 7.43	+9 30.5	1.658	2.528	13.2	21.9
11 27	1 8.74	+16 25.9	1.110	1.948	20.4	20.1	11 27	1 3.19	+9 11.5	1.744	2.524	16.6	22.1
476948	2008 <i>XT</i> ₁₆		10 18.4 346°21	3°6/21.0	17		398604	2011 <i>WH</i> ₁₁₆		10 18.4 348°76	1°5/19.7	18	
9 18	1 49.99	+19 47.0	1.127	2.016	17.9	20.5	9 18	1 53.84	+15 55.9	1.628	2.505	14.0	20.4
9 28	1 46.82	+19 29.3	1.061	2.002	13.5	20.2	9 28	1 48.81	+15 30.8	1.562	2.501	10.1	20.2
10 8	1 41.04	+18 45.1	1.013	1.990	8.5	19.9	10 8	1 41.82	+14 50.1	1.518	2.498	5.8	20.0
10 18	1 33.63	+17 37.3	0.988	1.979	4.0	19.6	10 18	1 33.70	+13 57.2	1.500	2.495	1.7	19.7
10 28	1 26.08	+16 13.8	0.985	1.970	5.5	19.7	10 28	1 25.57	+12 58.1	1.509	2.492	4.3	19.9
11 7	1 19.91	+14 46.8	1.006	1.962	10.7	20.0	11 7	1 18.54	+12 0.5	1.545	2.490	8.7	20.1
11 17	1 16.32	+13 28.3	1.049	1.956	15.7	20.2	11 17	1 13.47	+11 11.1	1.606	2.489	12.8	20.4
11 27	1 16.01	+12 27.9	1.110	1.952	20.1	20.5	11 27	1 10.94	+10 35.3	1.687	2.488	16.2	20.6
383031	2005 <i>NS</i> ₁₂₅		10 18.4 33°19	18°5/13.3	17		360888	2005 <i>SY</i> ₁₀₂		10 18.4 331°13	3°1/20.9	18	R
9 18	2 8.84	-30 33.9	1.062	1.910	21.8	19.6	9 18	1 57.67	+19 7.5	2.033	2.882	12.7	20.3
9 28	1 59.20	-31 0.0	1.055	1.929	19.8	19.5	9 28	1 51.26	+19 24.1	1.961	2.881	9.6	20.1
10 8	1 46.91	-30 41.9	1.066	1.949	18.7	19.5	10 8	1 43.03	+19 26.8	1.914	2.881	6.1	19.9
10 18	1 33.83	-29 33.2	1.094	1.970	18.6	19.6	10 18	1 33.75	+19 16.3	1.893	2.880	3.3	19.7
10 28	1 21.96	-27 35.5	1.142	1.992	19.6	19.8	10 28	1 24.41	+18 55.3	1.901	2.879	4.2	19.8
11 7	1 12.76	-24 58.3	1.209	2.016	21.2	20.0	11 7	1 16.02	+18 28.5	1.937	2.879	7.5	20.0
11 17	1 6.97	-21 54.3	1.293	2.040	23.0	20.2	11 17	1 9.40	+18 1.1	2.000	2.878	10.9	20.2
11 27	1 4.75	-18 35.3	1.393	2.065	24.6	20.4	11 27	1 5.10	+17 38.4	2.085	2.878	13.8	20.4
507643	2013 <i>NF</i> ₁₂		10 18.4 79°59	4°1/15.5	17		130883	2000 <i>VU</i> ₁₅		10 18.4 23°80	3°0/16.7	16	
9 18	1 59.25	+3 36.8	1.257	2.161	15.3	20.8	9 18	1 54.38	+6 39.3	0.865	1.789	18.3	18.8
9 28	1 52.54	+2 23.4	1.225	2.181	10.6	20.6	9 28	1 49.85	+5 49.7	0.835	1.800	12.6	18.5
10 8	1 43.64	+1 7.3	1.216	2.201	5.9	20.4	10 8	1 42.49	+4 51.6	0.823	1.813	6.5	18.3
10 18	1 33.73	-0 2.4	1.232	2.220	4.3	20.4	10 18	1 33.72	+3 54.7	0.833	1.827	3.1	18.1
10 28	1 24.24	-0 56.7	1.274	2.240	7.9	20.6	10 28	1 25.34	+3 10.1	0.864	1.842	7.9	18.5
11 7	1 16.42	-1 29.4	1.340	2.259	12.3	20.9	11 7	1 18.94	+2 45.9	0.917	1.860	13.5	18.8
11 17	1 11.11	-1 38.6	1.429	2.278	16.1	21.2	11 17	1 15.52	+2 45.6	0.989	1.878	18.3	19.2
11 27	1 8.71	-1 25.0	1.535	2.297	19.2	21.5	11 27	1 15.49	+3 8.9	1.078	1.897	22.1	19.5
8027	Robertrushworth		10 18.4 88°23	2°5/21.3	18		236411	2006 <i>DU</i>					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V	
521677	2015 <i>RP</i> ₂₅₆	10 18.4 238°64 4°1/13.7 18						92980	2000 <i>RG</i> ₆₉	10 18.4 330°33 0°1/18.3 18				
9 18	1 52.80	- 2 1.0	2.467	3.358	9.3	21.8	9 18	1 54.34	+11 59.5	1.375	2.269	14.9	18.3	
9 28	1 47.52	- 3 2.8	2.402	3.348	6.7	21.6	9 28	1 49.47	+11 23.8	1.308	2.259	10.6	18.0	
10 8	1 40.96	- 4 3.6	2.363	3.338	4.5	21.5	10 8	1 42.30	+10 33.7	1.264	2.249	5.6	17.7	
10 18	1 33.67	- 4 58.3	2.354	3.327	4.3	21.5	10 18	1 33.76	+ 9 34.5	1.244	2.240	0.2	17.3	
10 28	1 26.38	- 5 41.9	2.373	3.317	6.4	21.6	10 28	1 25.14	+ 8 33.8	1.250	2.231	5.3	17.7	
11 7	1 19.79	- 6 10.8	2.420	3.306	9.0	21.7	11 7	1 17.75	+ 7 40.3	1.281	2.223	10.4	17.9	
11 17	1 14.49	- 6 22.9	2.491	3.294	11.6	21.9	11 17	1 12.61	+ 7 1.1	1.335	2.216	15.0	18.2	
11 27	1 10.90	- 6 18.1	2.584	3.283	13.7	22.0	11 27	1 10.36	+ 6 40.6	1.408	2.210	18.8	18.4	
104077	2000 <i>EF</i> ₂₈	10 18.4 216°45 2°7/20.6 18						356804	2011 <i>UZ</i> ₃₃₇	10 18.4 6°85 9°2/10.7 18				
9 18	2 0.07	+17 53.6	2.129	2.976	12.3	19.8	9 18	1 50.48	- 7 23.5	1.219	2.137	14.6	19.5	
9 28	1 52.92	+18 13.1	2.050	2.971	9.2	19.6	9 28	1 46.67	- 9 15.9	1.186	2.138	11.3	19.3	
10 8	1 43.91	+18 20.3	1.996	2.965	5.7	19.4	10 8	1 40.74	-10 58.0	1.175	2.140	9.3	19.2	
10 18	1 33.80	+18 15.5	1.971	2.960	2.9	19.2	10 18	1 33.69	-12 17.6	1.187	2.144	10.0	19.3	
10 28	1 23.56	+18 1.2	1.975	2.953	4.1	19.3	10 28	1 26.83	-13 5.3	1.222	2.149	12.7	19.4	
11 7	1 14.23	+17 41.4	2.008	2.947	7.5	19.5	11 7	1 21.34	-13 17.4	1.277	2.155	15.9	19.7	
11 17	1 6.64	+17 21.1	2.068	2.940	10.8	19.7	11 17	1 18.06	-12 55.2	1.352	2.163	19.0	19.9	
11 27	1 1.38	+17 5.3	2.152	2.933	13.8	19.9	11 27	1 17.46	-12 3.2	1.441	2.172	21.6	20.1	
274296	2008 <i>QJ</i> ₁₉	10 18.4 343°88 3°4/14.7 18						35615	1998 <i>HE</i> ₁₄₈	10 18.4 95°78 0°1/18.5 18				
9 18	1 49.96	+ 3 52.8	1.840	2.742	11.3	19.7	9 18	1 57.19	+12 48.6	1.832	2.707	12.8	18.6	
9 28	1 45.86	+ 2 25.8	1.779	2.735	7.8	19.5	9 28	1 50.74	+12 5.4	1.786	2.728	8.9	18.4	
10 8	1 40.19	+ 0 53.7	1.744	2.728	4.5	19.3	10 8	1 42.65	+11 11.3	1.766	2.748	4.7	18.2	
10 18	1 33.64	- 0 35.9	1.736	2.722	3.7	19.2	10 18	1 33.78	+10 11.0	1.772	2.769	0.3	17.9	
10 28	1 27.12	- 1 55.1	1.755	2.716	6.6	19.4	10 28	1 25.15	+ 9 10.8	1.808	2.788	4.1	18.3	
11 7	1 21.48	- 2 57.2	1.801	2.711	10.2	19.6	11 7	1 17.69	+ 8 16.8	1.872	2.808	8.2	18.6	
11 17	1 17.43	- 3 38.4	1.871	2.707	13.5	19.8	11 17	1 12.10	+ 7 34.2	1.962	2.827	11.7	18.8	
11 27	1 15.45	- 3 57.2	1.960	2.703	16.2	20.0	11 27	1 8.80	+ 7 6.2	2.073	2.846	14.5	19.1	
510934	2013 <i>EU</i> ₉₀	10 18.4 141°09 5°5/12.9 18						164923	1999 <i>XC</i> ₇₇	10 18.4 334°92 2°6/20.5 18				
9 18	1 55.87	- 7 25.8	2.321	3.206	10.0	20.9	9 18	1 53.37	+18 16.6	1.440	2.317	15.5	18.8	
9 28	1 49.58	- 8 15.7	2.278	3.214	7.5	20.8	9 28	1 48.79	+17 53.8	1.369	2.306	11.5	18.5	
10 8	1 41.98	- 8 59.2	2.260	3.222	5.8	20.7	10 8	1 41.95	+17 10.7	1.319	2.296	7.0	18.2	
10 18	1 33.72	- 9 31.3	2.271	3.229	5.8	20.7	10 18	1 33.76	+16 10.2	1.294	2.287	2.9	18.0	
10 28	1 25.60	- 9 47.9	2.310	3.236	7.6	20.8	10 28	1 25.46	+14 59.2	1.295	2.278	4.7	18.1	
11 7	1 18.37	- 9 46.9	2.376	3.242	9.9	21.0	11 7	1 18.36	+13 46.6	1.321	2.270	9.4	18.3	
11 17	1 12.61	- 9 28.1	2.465	3.248	12.2	21.2	11 17	1 13.44	+12 41.7	1.371	2.263	13.9	18.6	
11 27	1 8.73	- 8 53.0	2.575	3.254	14.2	21.3	11 27	1 11.37	+11 51.6	1.441	2.257	17.7	18.8	
319344	2006 <i>BQ</i> ₂₈₃	10 18.4 0°90 4°7/13.5 18						288113	2003 <i>WC</i> ₆₂	10 18.4 255°09 6°2/13.7 18				
9 18	1 52.24	- 1 55.7	2.040	2.938	10.6	19.9	9 18	1 59.04	- 6 56.0	1.849	2.738	12.0	20.4	
9 28	1 47.27	- 3 5.9	1.988	2.938	7.6	19.7	9 28	1 52.18	- 7 33.2	1.791	2.731	9.0	20.3	
10 8	1 40.86	- 4 14.5	1.962	2.938	5.2	19.5	10 8	1 43.50	- 8 3.3	1.759	2.725	6.7	20.1	
10 18	1 33.68	- 5 15.1	1.964	2.938	5.0	19.5	10 18	1 33.82	- 8 20.3	1.753	2.719	6.5	20.1	
10 28	1 26.56	- 6 1.9	1.993	2.938	7.3	19.7	10 28	1 24.20	- 8 19.3	1.775	2.712	8.6	20.2	
11 7	1 20.32	- 6 30.6	2.048	2.938	10.2	19.9	11 7	1 15.67	- 7 58.2	1.823	2.706	11.7	20.4	
11 17	1 15.60	- 6 39.7	2.127	2.939	13.0	20.0	11 17	1 9.00	- 7 17.2	1.894	2.699	14.6	20.6	
11 27	1 12.84	- 6 29.3	2.226	2.939	15.3	20.2	11 27	1 4.73	- 6 18.4	1.985	2.692	17.1	20.7	
31245	1998 <i>DR</i> ₁₁	10 18.4 299°02 1°4/17.1 18						346541	2008 <i>UW</i> ₂₈₄	10 18.4 307°44 0°9/17.7 18				
9 18	1 53.99	+ 7 46.4	1.945	2.834	11.5	18.5	9 18	1 55.65	+ 9 33.7	1.528	2.420	13.8	21.0	
9 28	1 48.62	+ 7 4.3	1.880	2.830	8.0	18.3	9 28	1 50.23	+ 8 59.2	1.458	2.409	9.7	20.8	
10 8	1 41.62	+ 6 15.4	1.840	2.826	4.1	18.1	10 8	1 42.65	+ 8 14.2	1.412	2.398	5.0	20.5	
10 18	1 33.71	+ 5 24.4	1.827	2.822	1.5	17.9	10 18	1 33.79	+ 7 23.8	1.391	2.387	0.9	20.2	
10 28	1 25.81	+ 4 37.0	1.843	2.818	4.8	18.1	10 28	1 24.84	+ 6 34.7	1.397	2.376	5.3	20.4	
11 7	1 18.83	+ 3 58.5	1.886	2.814	8.7	18.3	11 7	1 17.01	+ 5 54.3	1.430	2.366	10.1	20.7	
11 17	1 13.49	+ 3 33.1	1.954	2.810	12.1	18.5	11 17	1 11.28	+ 5 28.0	1.485	2.356	14.4	20.9	
11 27	1 10.30	+ 3 23.0	2.044	2.806	15.0	18.7	11 27	1 8.26	+ 5 19.2	1.561	2.346	18.0	21.2	
285391	1999 <i>TM</i> ₂₁₂	10 18.4 13°86 2°0/19.8 18						316177	2010 <i>BW</i> ₇₀	10 18.4 3°34 2°5/13.8 18				
9 18	1 57.42	+14 54.5	1.748	2.619	13.5	19.7	9 18	1 46.68	- 2 0.6	4.195	5.083	5.8	20.0	
9 28	1 51.21	+15 13.7	1.686	2.622	9.8	19.5	9 28	1 42.89	- 2 41.5	4.138	5.083	4.2	19.9	
10 8	1 43.05	+15 21.3	1.648	2.625	5.7	19.2	10 8	1 38.43	- 3 21.2	4.108	5.083	2.8	19.8	
10 18	1 33.78	+15 18.5	1.636	2.629	2.2	19.0	10 18	1 33.62	- 3 57.3	4.109	5.083	2.6	19.8	
10 28	1 24.51	+15 8.3	1.652	2.634	4.2	19.2	10 28	1 28.83	- 4 27.2	4.139	5.083	3.9	19.9	
11 7	1 16.35	+14 55.7	1.695	2.639	8.2	19.4	11 7	1 24.42	- 4 49.1	4.198	5.083	5.5	20.0	
11 17	1 10.15	+14 45.3	1.764	2.644	11.9	19.7	11 17	1 20.71	- 5 1.6	4.284	5.083	7.2	20.1	
11 27	1 6.48	+14 41.7	1.854	2.651	15.1	19.9	11 27	1 17.96	- 5 4.3	4.393	5.083	8.6	20.2	
321006	2008 <i>KO</i> ₂₆	10 18.4 228°05 2°5/15.7 18						441237	2007 <i>VS</i> ₂₀₈	10 18.4 271°84 8°9/ 9.0 18				
9 18	1 52.33	+ 5 9.2	2.158	3.049	10.4	21.0	9 18	1 55.75	-15 23.5	2.025	2.903	11.6	20.9	
9 28	1 47.31	+ 4 1.0	2.096	3.047	7.2	20.8	9 28	1 49.88	-16 43.9	1.969	2.885	9.8	20.7	
10 8	1 40.88	+ 2 48.1	2.060	3.045	3.9	20.5	10 8	1 42.32	-17 52.1	1.938	2.867	8.9	20.6	
10 18	1 33.69	+ 1 36.0	2.053	3.043	2.6	20.5	10 18	1 33.80	-18 40.5	1.932	2.849	9.5	20.6	
10 28	1 26.54	+ 0 31.0	2.075	3.041	5.3	20.6	10 28	1 25.24	-19 3.3	1.951	2.830	11.3	20.7	
11 7	1 20.21	- 0 21.6	2.125	3.038	8.7	20.8	11 7	1 17.61	-18 58.1	1.994	2.811	13.6	20.8	
11 17	1 15.33	- 0 58.3	2.200	3.036	11.7	21.0	11 17	1 11.64	-18 25.8	2.057	2.792	15.9	21.0	
11 27	1 12.34	- 1 17.4	2.296	3.034	14.3	21.2	11 27	1 7.87	-17 29.4	2.137	2.773	17.8	21.1	
22855	Donnajones	10 18.4 330°06 0°1/18.5 18						177166	2003 <i>SJ</i> ₁₂₈	10 18.4 331°76 1°4/19.3 18				
9 18	1 54.06	+12 38.2	1.466	2.356	14.4	18.3	9 18	1 55.16	+15 1.9	1.156	2.050	17.1	19.9	
9 28	1 49.14	+11 57.2	1.399	2.348	10.2	18.0	9 28	1 50.42						

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
40372	1999 <i>NG</i> ₃₄		10 18.4 28°55'	4.3/15.5	18		319453	2006 <i>KN</i> ₈₁		10 18.4 152°73'	4.4/15.2	17	
9 18	1 56.07	+ 1 50.4	1.305	2.214	14.5	18.0	9 18	2 0.56	+ 0 45.3	1.598	2.491	13.2	21.3
9 28	1 50.45	+ 1 2.2	1.265	2.222	10.1	17.8	9 28	1 53.34	- 0 11.8	1.549	2.499	9.3	21.1
10 8	1 42.68	+ 0 13.2	1.247	2.231	5.9	17.6	10 8	1 44.14	- 1 9.0	1.525	2.506	5.6	20.9
10 18	1 33.81	- 0 29.2	1.253	2.241	4.5	17.5	10 18	1 33.90	- 1 59.5	1.528	2.512	4.6	20.8
10 28	1 25.17	- 0 57.5	1.285	2.251	7.8	17.8	10 28	1 23.85	- 2 36.1	1.559	2.518	7.5	21.0
11 7	1 17.98	- 1 6.8	1.341	2.263	12.0	18.0	11 7	1 15.13	- 2 54.5	1.616	2.523	11.4	21.3
11 17	1 13.12	- 0 55.5	1.419	2.274	15.9	18.3	11 17	1 8.56	- 2 52.6	1.697	2.528	14.9	21.5
11 27	1 11.05	- 0 24.1	1.516	2.287	19.0	18.6	11 27	1 4.65	- 2 31.1	1.797	2.531	17.8	21.7
254508	2005 <i>EJ</i> ₈₃		10 18.4 243°44'	1.6/17.1	18		218330	2004 <i>BL</i> ₃₆		10 18.4 91°44'	3.4/20.9	18	
9 18	1 56.83	+ 9 11.7	1.443	2.337	14.4	20.7	9 18	2 0.20	+19 46.2	1.484	2.344	16.0	20.2
9 28	1 51.08	+ 8 9.8	1.380	2.332	10.0	20.4	9 28	1 53.34	+19 42.5	1.431	2.357	12.0	20.0
10 8	1 43.09	+ 6 56.2	1.340	2.326	5.1	20.1	10 8	1 44.22	+19 18.9	1.401	2.371	7.5	19.7
10 18	1 33.83	+ 5 37.7	1.326	2.321	1.7	19.9	10 18	1 33.91	+18 37.6	1.395	2.385	3.8	19.6
10 28	1 24.58	+ 4 23.6	1.339	2.315	6.0	20.1	10 28	1 23.77	+17 44.2	1.417	2.398	5.0	19.7
11 7	1 16.58	+ 3 22.4	1.378	2.309	10.9	20.4	11 7	1 15.11	+16 46.9	1.466	2.411	9.1	19.9
11 17	1 10.81	+ 2 40.3	1.440	2.303	15.2	20.6	11 17	1 8.85	+15 53.9	1.539	2.424	13.1	20.2
11 27	1 7.86	+ 2 20.4	1.521	2.297	18.8	20.9	11 27	1 5.53	+15 12.0	1.633	2.437	16.5	20.5
9772	1993 <i>MB</i>		10 18.4 96°98'	0.2/18.2	18		465998	2011 <i>FB</i> ₅₀		10 18.4 293°36'	9.6/20.8	16	
9 18	1 55.02	+13 22.1	1.894	2.770	12.4	17.2	9 18	2 15.28	+21 44.9	1.043	1.898	21.6	20.7
9 28	1 49.21	+12 8.0	1.846	2.788	8.6	17.0	9 28	2 5.91	+24 13.6	0.973	1.888	17.3	20.4
10 8	1 41.87	+10 42.1	1.823	2.807	4.5	16.8	10 8	1 51.84	+26 27.0	0.924	1.879	12.8	20.2
10 18	1 33.79	+ 9 10.3	1.829	2.825	0.2	16.5	10 18	1 34.26	+28 12.0	0.899	1.870	9.8	20.0
10 28	1 25.92	+ 7 40.2	1.864	2.843	4.2	16.9	10 28	1 15.60	+29 20.1	0.898	1.861	10.8	20.0
11 7	1 19.16	+ 6 19.3	1.927	2.860	8.2	17.2	11 7	0 58.78	+29 52.9	0.921	1.853	14.9	20.2
11 17	1 14.13	+ 5 13.1	2.017	2.877	11.6	17.4	11 17	0 46.11	+30 0.8	0.965	1.844	19.6	20.4
11 27	1 11.25	+ 4 24.9	2.129	2.894	14.4	17.7	11 27	0 38.84	+29 58.6	1.026	1.836	23.7	20.7
205088	1999 <i>TC</i> ₈₂		10 18.4 338°80'	0.0/18.4	18		183755	2004 <i>AR</i> ₃		10 18.4 206°34'	4.6/21.9	18	
9 18	1 55.89	+10 39.7	1.344	2.240	15.1	19.3	9 18	2 0.02	+22 41.9	1.641	2.484	15.6	20.3
9 28	1 50.64	+10 33.2	1.278	2.229	10.7	19.0	9 28	1 53.33	+22 49.6	1.569	2.482	12.0	20.1
10 8	1 42.98	+10 15.8	1.233	2.219	5.7	18.7	10 8	1 44.32	+22 36.5	1.518	2.479	8.1	19.8
10 18	1 33.84	+ 9 50.9	1.213	2.210	0.2	18.3	10 18	1 33.92	+22 2.6	1.493	2.476	5.0	19.7
10 28	1 24.58	+ 9 24.6	1.219	2.201	5.3	18.7	10 28	1 23.43	+21 11.9	1.496	2.472	5.5	19.7
11 7	1 16.59	+ 9 3.3	1.250	2.194	10.4	19.0	11 7	1 14.17	+20 11.9	1.525	2.468	9.0	19.9
11 17	1 10.94	+ 8 52.8	1.303	2.187	15.1	19.2	11 17	1 7.18	+19 11.0	1.579	2.464	12.8	20.1
11 27	1 8.32	+ 8 56.9	1.376	2.182	18.9	19.5	11 27	1 3.09	+18 17.6	1.656	2.460	16.3	20.3
421776	2014 <i>QU</i> ₁₉		10 18.4 84°84'	1.8/16.3	18		317231	2002 <i>CJ</i> ₁₈₀		10 18.4 190°04'	4.2/15.3	17	
9 18	1 51.73	+ 7 14.3	2.253	3.140	10.2	20.7	9 18	1 58.79	+ 2 15.8	1.485	2.383	13.7	21.4
9 28	1 46.80	+ 6 1.5	2.200	3.150	7.0	20.5	9 28	1 52.31	+ 1 10.2	1.430	2.383	9.6	21.2
10 8	1 40.59	+ 4 43.2	2.174	3.159	3.6	20.3	10 8	1 43.69	+ 0 1.8	1.399	2.382	5.6	21.0
10 18	1 33.74	+ 3 24.7	2.177	3.169	1.9	20.2	10 18	1 33.89	- 1 1.7	1.395	2.381	4.4	20.9
10 28	1 26.99	+ 2 12.1	2.209	3.179	4.7	20.4	10 28	1 24.18	- 1 51.8	1.417	2.379	7.7	21.1
11 7	1 21.07	+ 1 10.8	2.270	3.189	7.9	20.7	11 7	1 15.77	- 2 22.6	1.465	2.377	11.9	21.3
11 17	1 16.53	+ 0 24.4	2.357	3.198	10.9	20.9	11 17	1 9.58	- 2 31.2	1.536	2.375	15.7	21.6
11 27	1 13.78	- 0 5.3	2.466	3.208	13.3	21.1	11 27	1 6.16	- 2 17.6	1.625	2.372	18.9	21.8
345837	2007 <i>LZ</i> ₅		10 18.4 78°34'	9.4/10.1	18		165991	2001 <i>YL</i> ₁₄₉		10 18.4 207°16'	2.8/21.8	17	
9 18	1 56.28	-12 16.0	1.577	2.470	13.4	20.6	9 18	1 53.30	+21 21.1	2.776	3.608	10.2	20.1
9 28	1 50.26	-13 58.9	1.554	2.485	10.8	20.5	9 28	1 47.88	+21 20.9	2.699	3.608	7.8	19.9
10 8	1 42.45	-15 26.9	1.555	2.499	9.5	20.5	10 8	1 41.19	+21 8.5	2.647	3.607	5.2	19.7
10 18	1 33.82	-16 30.9	1.581	2.514	10.0	20.5	10 18	1 33.79	+20 44.9	2.623	3.606	3.1	19.6
10 28	1 25.48	-17 4.6	1.631	2.528	12.1	20.7	10 28	1 26.36	+20 12.6	2.629	3.605	3.4	19.6
11 7	1 18.48	-17 6.7	1.704	2.543	14.6	20.9	11 7	1 19.60	+19 35.3	2.664	3.604	5.8	19.8
11 17	1 13.51	-16 39.4	1.796	2.557	16.9	21.1	11 17	1 14.08	+18 57.3	2.727	3.603	8.4	19.9
11 27	1 10.99	-15 47.2	1.905	2.571	18.9	21.3	11 27	1 10.24	+18 22.8	2.814	3.602	10.7	20.1
107086	2001 <i>AE</i> ₂₅		10 18.4 209°37'	5.0/13.1	18		265271	2004 <i>FT</i> ₃₈		10 18.4 176°84'	1.6/19.9	18	
9 18	1 55.83	- 4 16.2	2.256	3.145	10.1	20.3	9 18	1 57.18	+17 7.5	1.709	2.575	14.0	20.4
9 28	1 49.73	- 5 22.6	2.196	3.139	7.4	20.1	9 28	1 51.08	+16 27.6	1.643	2.576	10.2	20.2
10 8	1 42.17	- 6 26.0	2.163	3.132	5.4	20.0	10 8	1 43.02	+15 30.7	1.600	2.577	5.9	19.9
10 18	1 33.81	- 7 20.5	2.158	3.124	5.3	20.0	10 18	1 33.87	+14 20.6	1.584	2.578	1.8	19.7
10 28	1 25.48	- 8 0.7	2.181	3.116	7.4	20.1	10 28	1 24.76	+13 3.9	1.596	2.578	4.2	19.8
11 7	1 17.97	- 8 23.1	2.232	3.107	10.1	20.3	11 7	1 16.81	+11 49.1	1.636	2.578	8.6	20.1
11 17	1 11.93	- 8 26.3	2.306	3.098	12.7	20.4	11 17	1 10.87	+10 43.5	1.701	2.578	12.5	20.4
11 27	1 7.85	- 8 10.8	2.401	3.088	14.9	20.6	11 27	1 7.48	+ 9 52.9	1.789	2.577	15.9	20.6
24184	1999 <i>XS</i> ₁₃		10 18.4 319°59'	1.6/17.0	18		74439	Brenden		10 18.4 336°82'	2.8/15.8	18	
9 18	1 52.08	+ 9 55.7	1.460	2.359	13.9	17.4	9 18	1 51.56	+ 4 19.9	1.809	2.708	11.6	19.1
9 28	1 47.82	+ 8 42.7	1.388	2.342	9.7	17.1	9 28	1 47.07	+ 3 26.0	1.742	2.697	8.1	18.8
10 8	1 41.44	+ 7 15.5	1.338	2.326	5.0	16.8	10 8	1 40.91	+ 2 27.5	1.701	2.686	4.4	18.6
10 18	1 33.78	+ 5 41.3	1.315	2.310	1.7	16.5	10 18	1 33.78	+ 1 30.3	1.686	2.676	3.0	18.5
10 28	1 26.01	+ 4 10.2	1.318	2.294	6.0	16.8	10 28	1 26.62	+ 0 41.1	1.698	2.666	6.0	18.7
11 7	1 19.33	+ 2 52.0	1.346	2.279	10.9	17.0	11 7	1 20.37	+ 0 5.3	1.737	2.657	9.8	18.9
11 17	1 14.68	+ 1 54.1	1.397	2.265	15.3	17.2	11 17	1 15.77	- 0 13.4	1.799	2.649	13.3	19.1
11 27	1 12.71	+ 1 20.4	1.468	2.251	19.0	17.5	11 27	1 13.35	- 0 13.4	1.882	2.641	16.3	19.3
229902	2009 <i>VA</i> ₈₁		10 18.4 321°68'	1.9/14.9	18		323579	2004 <i>TM</i> ₁₈₈		10 18.4 8°85'			

EPHEMERIDES

10 18.4

10 18.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
237332	2009 <i>UN</i> ₈₇		10 18.4 277°45	2.4/14.1	18	R	18068	2000 <i>AF</i> ₁₈₄		10 18.4 265°27	1.4/20.1	17	
9 18	1 47.60	- 2 52.2	4.418	5.303	5.6	20.2	9 18	1 52.99	+17 21.4	2.509	3.362	10.5	18.9
9 28	1 43.52	- 3 18.6	4.353	5.295	4.0	20.1	9 28	1 47.83	+16 45.6	2.416	3.343	7.7	18.7
10 8	1 38.79	- 3 43.4	4.315	5.288	2.7	20.0	10 8	1 41.27	+15 57.0	2.349	3.324	4.5	18.5
10 18	1 33.70	- 4 4.6	4.307	5.281	2.6	20.0	10 18	1 33.87	+14 58.0	2.311	3.304	1.6	18.2
10 28	1 28.61	- 4 20.0	4.330	5.273	3.7	20.0	10 28	1 26.37	+13 52.9	2.302	3.284	3.2	18.3
11 7	1 23.89	- 4 28.0	4.381	5.266	5.3	20.2	11 7	1 19.53	+12 47.0	2.323	3.263	6.5	18.5
11 17	1 19.83	- 4 27.8	4.459	5.258	6.9	20.3	11 17	1 13.99	+11 45.7	2.372	3.243	9.7	18.7
11 27	1 16.70	- 4 18.7	4.561	5.251	8.3	20.4	11 27	1 10.25	+10 53.7	2.445	3.222	12.4	18.8
54607	2000 <i>RX</i> ₂₈		10 18.4 161°82	3.8/22.7	18		508876	2003 <i>HY</i> ₃₆		10 18.5 84°00	8.3/9.9	18	
9 18	1 55.15	+24 26.5	2.307	3.130	12.3	18.5	9 18	1 56.30	-16 40.5	2.227	3.096	11.0	20.8
9 28	1 49.35	+24 12.6	2.233	3.134	9.5	18.4	9 28	1 49.86	-17 51.4	2.214	3.122	9.2	20.7
10 8	1 42.02	+23 41.5	2.184	3.136	6.6	18.2	10 8	1 42.15	-18 47.4	2.226	3.147	8.4	20.7
10 18	1 33.83	+22 54.3	2.161	3.139	4.2	18.0	10 18	1 33.91	-19 23.2	2.264	3.172	8.8	20.8
10 28	1 25.67	+21 54.6	2.167	3.141	4.3	18.0	10 28	1 25.96	-19 35.4	2.328	3.197	10.1	20.9
11 7	1 18.38	+20 48.2	2.202	3.143	6.8	18.2	11 7	1 19.07	-19 23.7	2.416	3.222	11.9	21.1
11 17	1 12.66	+19 41.3	2.265	3.145	9.7	18.4	11 17	1 13.76	-18 50.0	2.525	3.246	13.6	21.3
11 27	1 8.99	+18 40.1	2.351	3.146	12.3	18.6	11 27	1 10.38	-17 57.5	2.652	3.269	15.0	21.4
353009	2009 <i>BJ</i> ₁₅₂		10 18.4 309°90	3.4/20.8	18		480978	2003 <i>WR</i> ₁₄₉		10 18.5 300°35	2.0/20.3	18	
9 18	1 57.22	+18 40.4	1.564	2.429	15.1	20.9	9 18	1 53.66	+18 38.5	1.673	2.540	14.2	20.8
9 28	1 51.55	+18 53.3	1.483	2.412	11.4	20.7	9 28	1 48.95	+17 50.1	1.579	2.512	10.5	20.6
10 8	1 43.50	+18 49.1	1.425	2.396	7.2	20.4	10 8	1 42.12	+16 40.2	1.508	2.484	6.3	20.3
10 18	1 33.93	+18 28.4	1.391	2.380	3.7	20.1	10 18	1 33.92	+15 11.9	1.462	2.456	2.3	19.9
10 28	1 24.09	+17 54.5	1.384	2.365	5.0	20.2	10 28	1 25.45	+13 32.0	1.445	2.428	4.4	20.0
11 7	1 15.33	+17 14.1	1.403	2.350	9.3	20.4	11 7	1 17.90	+11 50.6	1.455	2.400	9.1	20.2
11 17	1 8.75	+16 34.7	1.447	2.335	13.6	20.6	11 17	1 12.28	+10 17.5	1.490	2.373	13.6	20.4
11 27	1 5.10	+16 3.5	1.511	2.321	17.3	20.8	11 27	1 9.30	+9 0.9	1.546	2.345	17.5	20.6
16294	4758 <i>P-L</i>		10 18.4 328°77	0.9/19.1	18		316217	2010 <i>NV</i> ₂₃		10 18.5 10°71	3.0/15.5	18	
9 18	1 54.55	+13 7.3	1.878	2.755	12.4	19.2	9 18	1 52.97	+ 4 3.2	1.869	2.766	11.4	20.7
9 28	1 49.22	+12 59.9	1.803	2.744	8.9	19.0	9 28	1 47.96	+ 2 56.2	1.813	2.766	7.9	20.5
10 8	1 42.08	+12 42.0	1.753	2.734	4.9	18.7	10 8	1 41.35	+ 1 45.3	1.782	2.767	4.4	20.3
10 18	1 33.86	+12 16.0	1.729	2.724	1.0	18.4	10 18	1 33.90	+ 0 36.8	1.779	2.768	3.2	20.2
10 28	1 25.56	+11 46.1	1.733	2.715	4.0	18.6	10 28	1 26.50	- 0 22.5	1.804	2.769	6.1	20.4
11 7	1 18.16	+11 17.6	1.764	2.706	8.1	18.9	11 7	1 20.06	- 1 6.9	1.856	2.770	9.7	20.6
11 17	1 12.49	+10 55.4	1.821	2.697	11.8	19.1	11 17	1 15.28	- 1 33.3	1.932	2.771	12.9	20.8
11 27	1 9.12	+10 43.4	1.899	2.689	15.0	19.3	11 27	1 12.61	- 1 40.4	2.028	2.773	15.7	21.0
262604	2006 <i>VP</i> ₁₂₃		10 18.4 308°37	0.2/18.6	18		443443	2014 <i>HX</i> ₁₅₆		10 18.5 129°66	2.6/16.2	18	
9 18	1 55.54	+11 42.6	1.947	2.824	12.0	20.8	9 18	1 56.54	+ 3 49.9	1.919	2.809	11.5	21.4
9 28	1 49.76	+11 21.9	1.880	2.823	8.5	20.6	9 28	1 50.39	+ 3 11.0	1.864	2.814	8.0	21.2
10 8	1 42.29	+10 51.8	1.838	2.821	4.5	20.4	10 8	1 42.61	+ 2 29.2	1.834	2.818	4.4	21.0
10 18	1 33.87	+10 15.4	1.824	2.820	0.3	20.0	10 18	1 33.96	+ 1 49.7	1.832	2.823	2.7	20.9
10 28	1 25.46	+ 9 37.7	1.838	2.819	4.0	20.3	10 28	1 25.40	+ 1 17.7	1.859	2.827	5.6	21.1
11 7	1 17.99	+ 9 3.8	1.880	2.818	8.0	20.6	11 7	1 17.87	+ 0 57.5	1.913	2.831	9.2	21.3
11 17	1 12.23	+ 8 38.3	1.948	2.816	11.6	20.8	11 17	1 12.05	+ 0 51.7	1.992	2.835	12.5	21.5
11 27	1 8.68	+ 8 24.5	2.038	2.815	14.6	21.0	11 27	1 8.44	+ 1 1.4	2.092	2.839	15.2	21.7
159578	2001 <i>VX</i> ₇₂		10 18.4 239°24	1.2/19.6	18		220524	2004 <i>EH</i> ₇₈		10 18.5 138°62	1.6/17.2	17	
9 18	1 55.86	+16 56.3	1.851	2.715	13.1	21.2	9 18	1 58.71	+ 7 40.0	1.658	2.545	13.2	20.6
9 28	1 50.16	+16 2.6	1.770	2.704	9.5	20.9	9 28	1 52.10	+ 6 59.1	1.604	2.553	9.1	20.4
10 8	1 42.59	+14 51.6	1.714	2.692	5.4	20.7	10 8	1 43.56	+ 6 11.1	1.574	2.559	4.7	20.1
10 18	1 33.90	+13 27.1	1.685	2.679	1.4	20.4	10 18	1 34.01	+ 5 21.3	1.571	2.566	1.7	19.9
10 28	1 25.14	+11 56.2	1.684	2.666	4.1	20.5	10 28	1 24.58	+ 4 36.1	1.597	2.572	5.4	20.2
11 7	1 17.35	+10 27.3	1.713	2.653	8.4	20.8	11 7	1 16.38	+ 4 1.4	1.649	2.578	9.7	20.5
11 17	1 11.38	+ 9 8.3	1.767	2.639	12.4	21.0	11 17	1 10.22	+ 3 41.3	1.727	2.583	13.4	20.7
11 27	1 7.82	+ 8 5.2	1.844	2.625	15.7	21.2	11 27	1 6.60	+ 3 37.9	1.824	2.588	16.5	21.0
319212	2005 <i>YH</i> ₂₁₄		10 18.4 208°94	3.1/21.4	18		304421	2006 <i>TY</i> ₆₄		10 18.5 349°12	2.3/20.6	18	
9 18	1 56.50	+20 33.2	2.407	3.244	11.4	20.6	9 18	1 55.03	+18 26.5	1.835	2.696	13.4	20.4
9 28	1 50.30	+20 42.2	2.329	3.241	8.7	20.4	9 28	1 49.56	+18 4.4	1.766	2.695	9.9	20.2
10 8	1 42.55	+20 38.0	2.277	3.239	5.7	20.2	10 8	1 42.27	+17 26.2	1.721	2.694	6.0	20.0
10 18	1 33.91	+20 21.4	2.252	3.236	3.3	20.0	10 18	1 33.95	+16 34.2	1.702	2.694	2.6	19.8
10 28	1 25.20	+19 54.8	2.256	3.233	3.9	20.1	10 28	1 25.64	+15 33.9	1.712	2.694	4.0	19.9
11 7	1 17.28	+19 22.3	2.290	3.230	6.6	20.2	11 7	1 18.34	+14 32.0	1.748	2.693	7.9	20.1
11 17	1 10.85	+18 48.9	2.351	3.227	9.6	20.4	11 17	1 12.88	+13 35.5	1.811	2.693	11.6	20.4
11 27	1 6.41	+18 19.2	2.436	3.223	12.2	20.6	11 27	1 9.78	+12 50.0	1.896	2.693	14.8	20.6
516336	2017 <i>BZ</i> ₄₅		10 18.4 14°25	5.6/13.3	18		33189	Ritzdorf		10 18.5 246°74	0.1/18.3	18	
9 18	1 54.33	- 4 56.3	1.965	2.861	11.0	20.6	9 18	1 54.41	+11 34.8	2.296	3.169	10.6	19.7
9 28	1 48.80	- 5 53.7	1.916	2.861	8.2	20.5	9 28	1 48.87	+10 58.6	2.215	3.156	7.5	19.5
10 8	1 41.74	- 6 46.4	1.893	2.862	5.9	20.3	10 8	1 41.84	+10 13.2	2.160	3.143	3.9	19.2
10 18	1 33.88	- 7 28.3	1.896	2.863	5.9	20.3	10 18	1 33.94	+ 9 22.1	2.133	3.130	0.2	18.9
10 28	1 26.10	- 7 53.8	1.927	2.865	8.0	20.5	10 28	1 25.96	+ 8 30.0	2.137	3.116	3.7	19.2
11 7	1 19.29	- 8 0.2	1.983	2.866	10.8	20.7	11 7	1 18.73	+ 7 41.9	2.169	3.102	7.4	19.4
11 17	1 14.10	- 7 46.6	2.063	2.868	13.6	20.8	11 17	1 12.92	+ 7 2.6	2.227	3.087	10.7	19.6
11 27	1 10.99	- 7 14.1	2.162	2.869	15.9	21.0	11 27	1 9.03	+ 6 35.3	2.309	3.073	13.5	19.7
174340	2002 <i>TP</i> ₁₉₃		10 18.4 28°47	1.2/17.6	18		313990	2004 <i>TT</i> ₁₄₇		10 18.5 201°25			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
80779	2000 <i>CP</i> ₇₆	10 18.5 252°88		1.9°/16.9 18			140593	2001 <i>TA</i> ₂₃₅	10 18.5 247°24		3.5°/21.8 18		
9 18	1 57.50	+ 7 17.3	1.631	2.522	13.2	19.6	9 18	1 57.34	+21 56.7	2.355	3.185	11.9	19.9
9 28	1 51.47	+ 6 29.7	1.560	2.510	9.2	19.4	9 28	1 51.05	+22 1.4	2.263	3.170	9.1	19.7
10 8	1 43.36	+ 5 33.7	1.512	2.498	4.8	19.1	10 8	1 43.07	+21 51.3	2.196	3.154	6.2	19.5
10 18	1 34.01	+ 4 35.1	1.492	2.486	2.0	18.9	10 18	1 34.03	+21 26.9	2.156	3.138	3.7	19.3
10 28	1 24.56	+ 3 41.1	1.499	2.473	5.8	19.1	10 28	1 24.82	+20 50.5	2.145	3.121	4.2	19.3
11 7	1 16.19	+ 2 58.7	1.533	2.460	10.3	19.3	11 7	1 16.35	+20 6.8	2.164	3.103	7.0	19.5
11 17	1 9.84	+ 2 32.6	1.591	2.447	14.4	19.6	11 17	1 9.41	+19 21.2	2.210	3.086	10.1	19.6
11 27	1 6.12	+ 2 25.5	1.669	2.434	17.8	19.8	11 27	1 4.57	+18 39.4	2.280	3.068	12.9	19.8
517859	2015 <i>RO</i> ₂₃₆	10 18.5 344°62		4.6°/13.9 18			373240	2012 <i>FK</i> ₈₀	10 18.5 100°83		3.7°/15.8 17		
9 18	1 51.99	+ 0 3.9	1.807	2.710	11.5	20.5	9 18	1 59.22	+ 3 15.5	1.439	2.337	14.1	20.7
9 28	1 47.34	- 1 15.4	1.752	2.706	8.1	20.2	9 28	1 52.55	+ 2 16.3	1.397	2.350	9.8	20.5
10 8	1 41.07	- 2 35.3	1.722	2.702	5.2	20.1	10 8	1 43.82	+ 1 14.3	1.378	2.362	5.5	20.3
10 18	1 33.90	- 3 48.5	1.719	2.698	4.9	20.0	10 18	1 34.06	+ 0 17.2	1.386	2.375	3.9	20.2
10 28	1 26.78	- 4 47.7	1.743	2.695	7.5	20.2	10 28	1 24.56	- 0 27.4	1.421	2.387	7.2	20.5
11 7	1 20.60	- 5 27.5	1.793	2.692	10.9	20.4	11 7	1 16.50	- 0 54.0	1.481	2.399	11.4	20.8
11 17	1 16.09	- 5 45.4	1.866	2.690	14.0	20.6	11 17	1 10.71	- 1 0.1	1.564	2.410	15.1	21.0
11 27	1 13.72	- 5 41.4	1.958	2.688	16.6	20.8	11 27	1 7.66	- 0 45.8	1.667	2.422	18.2	21.3
176665	2002 <i>PG</i> ₂₅	10 18.5 41°02		2.2°/16.9 17			286796	2002 <i>JM</i> ₁₂₉	10 18.5 174°71		1.3°/17.5 17		
9 18	1 56.38	+ 8 13.9	1.093	2.002	16.7	19.3	9 18	2 0.93	+ 8 5.5	1.662	2.545	13.4	21.6
9 28	1 50.93	+ 7 14.1	1.059	2.017	11.5	19.1	9 28	1 53.74	+ 7 36.5	1.601	2.548	9.3	21.4
10 8	1 43.05	+ 6 4.4	1.045	2.033	5.9	18.8	10 8	1 44.49	+ 7 0.1	1.565	2.550	4.8	21.1
10 18	1 33.99	+ 4 53.7	1.055	2.050	2.3	18.6	10 18	1 34.10	+ 6 20.6	1.556	2.551	1.3	20.9
10 28	1 25.28	+ 3 52.5	1.090	2.067	6.8	19.0	10 28	1 23.77	+ 5 44.2	1.576	2.552	5.2	21.2
11 7	1 18.31	+ 3 8.8	1.149	2.086	12.0	19.3	11 7	1 14.67	+ 5 16.5	1.623	2.552	9.7	21.4
11 17	1 13.97	+ 2 47.2	1.228	2.104	16.4	19.6	11 17	1 7.68	+ 5 1.6	1.694	2.552	13.6	21.7
11 27	1 12.71	+ 2 48.6	1.326	2.123	19.9	19.9	11 27	1 3.36	+ 5 2.0	1.787	2.551	16.8	21.9
116002	2003 <i>WH</i> ₇₅	10 18.5 307°06		0.9°/17.8 18			31976	Niyatidesai	10 18.5 77°80		0.5°/18.9 18		
9 18	1 55.39	+11 21.4	1.309	2.205	15.4	19.3	9 18	1 55.39	+13 20.9	1.856	2.732	12.6	18.8
9 28	1 50.34	+10 23.1	1.243	2.196	10.8	19.1	9 28	1 49.67	+12 47.6	1.800	2.741	8.9	18.6
10 8	1 42.88	+ 9 9.2	1.200	2.187	5.6	18.7	10 8	1 42.28	+12 2.9	1.768	2.751	4.8	18.3
10 18	1 33.99	+ 7 46.4	1.182	2.178	0.9	18.4	10 18	1 34.00	+11 10.7	1.764	2.760	0.6	18.0
10 28	1 25.04	+ 6 24.7	1.190	2.169	5.9	18.7	10 28	1 25.84	+10 16.8	1.788	2.769	4.0	18.3
11 7	1 17.40	+ 5 14.3	1.222	2.161	11.2	19.0	11 7	1 18.73	+ 9 27.2	1.840	2.779	8.0	18.6
11 17	1 12.13	+ 4 22.8	1.277	2.153	15.9	19.3	11 17	1 13.40	+ 8 47.3	1.917	2.788	11.6	18.8
11 27	1 9.85	+ 3 54.7	1.351	2.146	19.8	19.5	11 27	1 10.32	+ 8 20.6	2.016	2.797	14.6	19.1
394084	2006 <i>BO</i> ₅	10 18.5 353°09		22.9°/23.3 17			234744	2002 <i>NT</i> ₁₅	10 18.5 96°26		7.8°/11.7 18		
9 18	1 50.57	-28 15.9	0.758	1.656	23.1	19.1	9 18	1 58.62	-11 44.6	1.901	2.783	12.0	20.6
9 28	1 47.84	-32 13.3	0.754	1.651	23.1	19.1	9 28	1 51.66	-12 51.9	1.878	2.805	9.5	20.5
10 8	1 41.78	-35 13.8	0.765	1.647	24.2	19.1	10 8	1 43.18	-13 46.8	1.879	2.826	7.9	20.5
10 18	1 33.94	-37 0.2	0.791	1.643	26.1	19.3	10 18	1 34.05	-14 22.9	1.908	2.847	8.2	20.5
10 28	1 26.43	-37 26.8	0.828	1.642	28.3	19.4	10 28	1 25.24	-14 35.9	1.963	2.867	9.9	20.7
11 7	1 21.08	-36 40.1	0.874	1.641	30.4	19.6	11 7	1 17.64	-14 24.8	2.042	2.887	12.2	20.9
11 17	1 18.97	-34 52.4	0.929	1.642	32.2	19.8	11 17	1 11.89	-13 51.3	2.144	2.907	14.5	21.1
11 27	1 20.53	-32 17.7	0.989	1.645	33.6	20.0	11 27	1 8.35	-12 58.5	2.263	2.926	16.3	21.3
33543	1999 <i>JR</i> ₈	10 18.5 209°30		0.7°/17.8 18			461190	2015 <i>VH</i> ₉₇	10 18.5 174°24		1.4°/20.2 18		
9 18	1 55.50	+ 9 4.3	2.280	3.158	10.5	19.7	9 18	1 53.28	+17 22.1	2.691	3.541	10.0	21.6
9 28	1 49.57	+ 8 36.2	2.210	3.154	7.3	19.4	9 28	1 47.88	+16 49.2	2.618	3.543	7.2	21.5
10 8	1 42.18	+ 8 1.5	2.165	3.150	3.8	19.2	10 8	1 41.25	+16 5.2	2.571	3.545	4.3	21.3
10 18	1 33.97	+ 7 23.6	2.149	3.145	0.7	19.0	10 18	1 33.97	+15 12.5	2.553	3.546	1.6	21.1
10 28	1 25.75	+ 6 46.9	2.163	3.140	3.9	19.2	10 28	1 26.72	+14 14.9	2.566	3.547	2.9	21.2
11 7	1 18.33	+ 6 15.8	2.206	3.135	7.5	19.4	11 7	1 20.16	+13 17.3	2.608	3.548	5.9	21.4
11 17	1 12.37	+ 5 53.8	2.275	3.130	10.7	19.6	11 17	1 14.86	+12 24.1	2.678	3.548	8.7	21.6
11 27	1 8.35	+ 5 43.5	2.366	3.124	13.4	19.8	11 27	1 11.22	+11 39.3	2.773	3.548	11.2	21.8
397954	2008 <i>YX</i> ₇₆	10 18.5 148°62		5.0°/13.7 18			127144	2002 <i>GK</i> ₁₁₇	10 18.5 47°17		3.4°/16.3 18		
9 18	1 55.43	- 2 15.2	1.906	2.802	11.3	21.0	9 18	1 59.12	+ 3 23.9	1.285	2.189	15.1	18.9
9 28	1 49.61	- 3 26.3	1.858	2.806	8.2	20.9	9 28	1 52.43	+ 2 44.9	1.261	2.216	10.4	18.7
10 8	1 42.21	- 4 35.2	1.835	2.809	5.6	20.7	10 8	1 43.69	+ 2 4.3	1.259	2.244	5.6	18.5
10 18	1 33.97	- 5 35.1	1.839	2.813	5.3	20.7	10 18	1 34.08	+ 1 29.0	1.282	2.272	3.6	18.5
10 28	1 25.85	- 6 19.6	1.871	2.816	7.7	20.9	10 28	1 24.95	+ 1 5.4	1.331	2.301	7.0	18.7
11 7	1 18.73	- 6 44.8	1.930	2.819	10.8	21.1	11 7	1 17.48	+ 0 57.8	1.405	2.330	11.2	19.1
11 17	1 13.31	- 6 49.3	2.011	2.822	13.7	21.3	11 17	1 12.43	+ 1 7.8	1.501	2.360	15.0	19.4
11 27	1 10.04	- 6 33.5	2.113	2.824	16.1	21.4	11 27	1 10.17	+ 1 35.0	1.617	2.389	18.0	19.7
183744	2003 <i>YP</i> ₁₃₄	10 18.5 173°39		4.3°/21.8 18			98025	2000 <i>RE</i> ₂	10 18.5 258°99		2.9°/20.2 18		
9 18	2 1.88	+22 17.7	1.838	2.673	14.5	21.0	9 18	2 1.22	+16 53.1	1.383	2.255	16.3	19.1
9 28	1 54.46	+22 31.4	1.767	2.676	11.1	20.8	9 28	1 54.49	+17 4.3	1.316	2.250	12.1	18.9
10 8	1 44.90	+22 26.6	1.720	2.679	7.5	20.6	10 8	1 45.13	+16 58.5	1.270	2.246	7.3	18.6
10 18	1 34.10	+22 3.5	1.699	2.681	4.6	20.4	10 18	1 34.16	+16 36.5	1.250	2.242	3.1	18.4
10 28	1 23.25	+21 25.3	1.707	2.682	5.1	20.4	10 28	1 23.07	+16 3.0	1.256	2.238	5.2	18.5
11 7	1 13.57	+20 38.1	1.742	2.682	8.3	20.6	11 7	1 13.37	+15 25.4	1.287	2.233	10.0	18.7
11 17	1 6.00	+19 49.2	1.804	2.682	11.9	20.8	11 17	1 6.22	+14 51.6	1.343	2.229	14.6	19.0
11 27	1 1.13	+19 5.8	1.888	2.681	15.0	21.1	11 27	1 2.33	+14 28.2	1.418	2.224	18.4	19.2
352971	2009 <i>BV</i> ₆₁	10 18.5 19°79		5.2°/22.2 17			190454	2000 <i>BR</i> ₁₂	10 18.5 189°59		0.0°/18.5 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
434787	2006 <i>QW</i> ₁₉		10 18.5	93°72	9°1/7.8	16	154950	2004 <i>TX</i> ₈₇		10 18.5	46°91	0°2/18.3	18
9 18	1 56.97	-16 43.2	2.136	3.006	11.4	20.9	9 18	1 54.33	+11 5.9	2.067	2.945	11.4	20.8
9 28	1 50.40	-18 49.6	2.133	3.038	9.7	20.9	9 28	1 48.87	+10 37.4	2.005	2.948	8.0	20.6
10 8	1 42.50	-20 38.9	2.156	3.069	9.1	20.9	10 8	1 41.88	+10 0.2	1.968	2.951	4.2	20.4
10 18	1 34.04	-22 3.5	2.207	3.100	9.7	21.0	10 18	1 34.07	+9 18.1	1.958	2.954	0.2	20.1
10 28	1 25.89	-22 59.1	2.284	3.130	11.2	21.2	10 28	1 26.29	+8 35.9	1.978	2.958	3.9	20.4
11 7	1 18.83	-23 25.1	2.383	3.159	12.9	21.3	11 7	1 19.42	+7 58.6	2.025	2.961	7.6	20.6
11 17	1 13.44	-23 23.5	2.502	3.187	14.5	21.5	11 17	1 14.11	+7 30.3	2.099	2.964	11.0	20.9
11 27	1 10.06	-22 58.3	2.638	3.215	15.8	21.7	11 27	1 10.85	+7 14.1	2.195	2.968	13.8	21.1
342390	2008 <i>UP</i> ₄₀		10 18.5	11°45	0°9/17.9	18	36568	2000 <i>QO</i> ₁₂₀		10 18.5	241°97	1°4/19.6	18
9 18	1 58.08	+7 59.2	1.205	2.107	16.0	20.1	9 18	1 57.94	+16 12.4	1.455	2.330	15.4	19.5
9 28	1 52.25	+8 2.6	1.155	2.110	11.2	19.8	9 28	1 52.05	+15 33.9	1.385	2.324	11.2	19.2
10 8	1 43.89	+7 58.3	1.127	2.114	5.8	19.5	10 8	1 43.81	+14 36.5	1.337	2.317	6.4	18.9
10 18	1 34.12	+7 50.3	1.122	2.118	0.9	19.2	10 18	1 34.17	+13 24.1	1.314	2.309	1.7	18.6
10 28	1 24.45	+7 44.1	1.143	2.124	5.8	19.6	10 28	1 24.46	+12 4.7	1.319	2.302	4.8	18.8
11 7	1 16.33	+7 45.1	1.188	2.131	11.0	19.9	11 7	1 16.01	+10 47.9	1.350	2.294	9.8	19.1
11 17	1 10.80	+7 57.2	1.255	2.139	15.6	20.2	11 17	1 9.87	+9 42.4	1.405	2.286	14.4	19.3
11 27	1 8.45	+8 22.9	1.341	2.148	19.3	20.5	11 27	1 6.67	+8 54.8	1.480	2.277	18.2	19.6
71564	2000 <i>DG</i> ₂₈		10 18.5	0°83	0°1/18.5	18	174869	2004 <i>BX</i> ₃₈		10 18.5	2°79	11°6/9.5	18
9 18	1 53.19	+11 45.2	1.811	2.695	12.4	18.7	9 18	1 54.58	-15 22.3	1.332	2.229	15.1	18.8
9 28	1 48.26	+11 19.6	1.748	2.694	8.7	18.5	9 28	1 49.56	-16 50.7	1.300	2.228	12.7	18.7
10 8	1 41.62	+10 43.9	1.709	2.693	4.6	18.2	10 8	1 42.39	-18 0.0	1.289	2.228	11.6	18.6
10 18	1 34.02	+10 1.9	1.697	2.693	0.3	17.9	10 18	1 34.11	-18 39.8	1.300	2.229	12.2	18.6
10 28	1 26.44	+9 18.8	1.712	2.693	4.1	18.2	10 28	1 26.03	-18 43.8	1.334	2.230	14.3	18.8
11 7	1 19.83	+8 40.6	1.755	2.695	8.3	18.4	11 7	1 19.37	-18 11.4	1.388	2.233	16.9	19.0
11 17	1 14.95	+8 12.0	1.822	2.696	12.0	18.7	11 17	1 14.97	-17 6.2	1.460	2.237	19.5	19.2
11 27	1 12.32	+7 56.4	1.911	2.699	15.0	18.9	11 27	1 13.33	-15 34.1	1.548	2.242	21.7	19.4
248181	2005 <i>AH</i> ₁₇		10 18.5	175°13	7°1/11.1	18	316666	1995 <i>DG</i> ₁₀		10 18.5	132°54	2°0/15.9	18
9 18	1 56.22	-10 30.2	2.150	3.034	10.7	20.9	9 18	1 52.65	+4 28.8	2.753	3.636	8.7	21.4
9 28	1 50.06	-11 47.8	2.107	3.036	8.5	20.8	9 28	1 47.34	+3 35.1	2.700	3.648	6.0	21.2
10 8	1 42.44	-12 56.5	2.090	3.038	7.1	20.7	10 8	1 40.96	+2 39.0	2.676	3.659	3.2	21.1
10 18	1 34.06	-13 49.8	2.099	3.039	7.5	20.8	10 18	1 34.05	+1 44.3	2.680	3.670	2.1	21.0
10 28	1 25.79	-14 22.5	2.136	3.040	9.3	20.9	10 28	1 27.22	+0 55.5	2.716	3.680	4.3	21.2
11 7	1 18.45	-14 32.2	2.198	3.041	11.6	21.0	11 7	1 21.08	+0 16.0	2.780	3.691	7.0	21.4
11 17	1 12.68	-14 19.1	2.283	3.040	13.9	21.2	11 17	1 16.11	-0 11.6	2.871	3.700	9.5	21.6
11 27	1 8.93	-13 45.2	2.386	3.040	15.8	21.4	11 27	1 12.67	-0 26.1	2.984	3.710	11.5	21.7
509042	2005 <i>SQ</i> ₁₃₈		10 18.5	28°55	0°8/18.0	18	289587	<i>Chantdugros</i>		10 18.5	157°67	0°0/18.5	17
9 18	1 56.97	+9 42.3	1.087	1.993	17.0	20.8	9 18	2 0.43	+11 51.8	1.799	2.672	13.0	21.7
9 28	1 51.49	+9 20.0	1.048	2.004	11.8	20.5	9 28	1 53.29	+11 22.8	1.739	2.680	9.2	21.5
10 8	1 43.46	+8 46.3	1.030	2.017	6.1	20.3	10 8	1 44.25	+10 43.3	1.704	2.686	4.9	21.2
10 18	1 34.11	+8 7.3	1.035	2.031	0.8	19.9	10 18	1 34.20	+9 57.0	1.696	2.693	0.3	20.9
10 28	1 25.05	+7 30.9	1.064	2.046	6.0	20.4	10 28	1 24.25	+9 9.6	1.718	2.698	4.3	21.2
11 7	1 17.72	+7 4.9	1.117	2.061	11.3	20.7	11 7	1 15.47	+8 27.3	1.768	2.703	8.6	21.5
11 17	1 13.09	+6 54.3	1.191	2.078	16.0	21.0	11 17	1 8.66	+7 55.1	1.843	2.707	12.4	21.7
11 27	1 11.66	+7 1.6	1.284	2.095	19.7	21.3	11 27	1 4.36	+7 36.5	1.941	2.710	15.5	22.0
47859	2000 <i>EJ</i> ₁₅₈		10 18.5	282°25	4°5/22.9	18	410924	2009 <i>SY</i> ₂₃₁		10 18.5	25°58	1°6/16.8	18
9 18	1 54.79	+25 20.8	1.878	2.709	14.4	18.8	9 18	1 51.73	+8 46.4	1.901	2.792	11.6	20.8
9 28	1 49.58	+24 58.8	1.792	2.696	11.3	18.6	9 28	1 47.12	+7 33.9	1.845	2.796	8.0	20.6
10 8	1 42.42	+24 14.2	1.729	2.683	7.9	18.4	10 8	1 40.99	+6 13.3	1.815	2.801	4.1	20.4
10 18	1 34.08	+23 7.9	1.692	2.670	5.0	18.2	10 18	1 34.05	+4 50.5	1.812	2.806	1.7	20.2
10 28	1 25.62	+21 44.5	1.682	2.657	5.1	18.2	10 28	1 27.20	+3 33.0	1.838	2.812	5.0	20.5
11 7	1 18.15	+20 11.9	1.699	2.644	8.0	18.3	11 7	1 21.28	+2 27.2	1.891	2.817	8.8	20.7
11 17	1 12.53	+18 39.2	1.743	2.632	11.6	18.5	11 17	1 16.96	+1 37.9	1.969	2.823	12.1	21.0
11 27	1 9.38	+17 15.0	1.810	2.619	14.9	18.7	11 27	1 14.68	+1 7.3	2.069	2.830	14.9	21.2
143067	2002 <i>WM</i> ₁₄		10 18.5	336°18	6°3/12.9	18	351070	2003 <i>TE</i> ₅₉		10 18.5	332°68	3°4/15.1	18
9 18	1 54.26	-4 24.0	1.659	2.561	12.3	19.1	9 18	1 50.86	+7 20.3	1.418	2.324	13.7	20.1
9 28	1 49.08	-5 37.1	1.607	2.556	9.1	18.9	9 28	1 47.00	+5 20.7	1.355	2.314	9.5	19.8
10 8	1 42.07	-6 45.9	1.579	2.551	6.7	18.7	10 8	1 41.12	+3 8.1	1.316	2.303	5.1	19.5
10 18	1 34.07	-7 42.6	1.578	2.546	6.7	18.7	10 18	1 34.06	+0 53.6	1.304	2.293	3.8	19.4
10 28	1 26.12	-8 20.0	1.602	2.542	9.2	18.9	10 28	1 26.98	-1 10.0	1.318	2.284	7.6	19.6
11 7	1 19.24	-8 34.0	1.651	2.538	12.4	19.1	11 7	1 21.03	-2 51.4	1.358	2.276	12.2	19.9
11 17	1 14.22	-8 23.7	1.722	2.535	15.5	19.3	11 17	1 17.08	-4 4.0	1.420	2.268	16.3	20.1
11 27	1 11.58	-7 50.6	1.811	2.532	18.1	19.4	11 27	1 15.71	-4 45.4	1.500	2.262	19.6	20.3
480995	2004 <i>CW</i> ₁₂₇		10 18.5	320°30	0°9/17.9	17	253982	2004 <i>EU</i> ₃₉		10 18.5	215°65	0°1/18.6	18
9 18	1 58.10	+7 46.8	1.504	2.396	14.0	20.7	9 18	1 54.37	+13 4.5	2.045	2.919	11.7	20.6
9 28	1 52.22	+7 49.9	1.426	2.376	9.9	20.4	9 28	1 48.97	+12 15.9	1.975	2.916	8.2	20.4
10 8	1 43.96	+7 46.7	1.370	2.356	5.2	20.1	10 8	1 41.98	+11 15.8	1.930	2.913	4.4	20.1
10 18	1 34.17	+7 40.3	1.341	2.337	0.9	19.7	10 18	1 34.11	+10 8.5	1.913	2.909	0.3	19.8
10 28	1 24.11	+7 35.3	1.338	2.318	5.3	20.0	10 28	1 26.24	+8 59.8	1.925	2.906	3.9	20.1
11 7	1 15.11	+7 36.6	1.361	2.300	10.3	20.2	11 7	1 19.26	+7 56.1	1.966	2.902	7.8	20.3
11 17	1 8.28	+7 48.0	1.408	2.283	14.8	20.5	11 17	1 13.87	+7 3.0	2.032	2.898	11.3	20.5
11 27	1 4.37	+8 12.4	1.475	2.266	18.6	20.7	11 27	1 10.57	+6 24.3	2.122	2.893	14.3	20.7
8651	<i>Alineraynal</i>		10 18.5	4°43	2°8/20.1	18	322502	2011 <i>WW</i> ₂		10 18.5	22°70	0°3/18.3	18
9 18	1 47.29	+15 55.7											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
349638	2008 <i>UP</i> ₂₁₆		10 18.5	0°35	9°1/25.6	18	237562	2000 <i>YP</i> ₈₀		10 18.5	346°24	2°4/20.1	18
9 18	1 53.74	+30 35.5	1.243	2.078	20.0	19.3	9 18	1 50.88	+16 30.5	1.082	1.981	17.6	19.1
9 28	1 49.63	+31 12.0	1.181	2.075	16.6	19.0	9 28	1 47.68	+16 19.1	1.017	1.966	13.0	18.8
10 8	1 42.75	+31 15.9	1.136	2.073	13.0	18.8	10 8	1 41.78	+15 45.6	0.971	1.953	7.7	18.4
10 18	1 34.15	+30 44.2	1.112	2.073	10.0	18.7	10 18	1 34.17	+14 53.4	0.947	1.941	2.7	18.1
10 28	1 25.44	+29 40.0	1.110	2.074	9.2	18.6	10 28	1 26.36	+13 50.1	0.945	1.931	5.4	18.2
11 7	1 18.26	+28 13.1	1.131	2.076	11.3	18.8	11 7	1 19.96	+12 46.8	0.967	1.922	11.1	18.5
11 17	1 13.81	+26 36.3	1.175	2.080	14.7	19.0	11 17	1 16.18	+11 53.7	1.009	1.916	16.3	18.8
11 27	1 12.78	+25 3.2	1.238	2.085	18.2	19.2	11 27	1 15.76	+11 18.7	1.070	1.912	20.7	19.1
144325	2004 <i>DX</i> ₂₀		10 18.5	279°16	0°4/18.2	18	494790	2006 <i>UR</i> ₁₆₉		10 18.5	16°78	5°8/16.0	18
9 18	1 59.92	+ 9 40.6	1.461	2.349	14.6	19.8	9 18	2 7.01	- 6 44.1	1.559	2.442	14.1	20.0
9 28	1 53.47	+ 9 29.8	1.391	2.339	10.3	19.5	9 28	1 58.03	- 6 22.1	1.507	2.446	10.4	19.8
10 8	1 44.60	+ 9 9.3	1.344	2.329	5.4	19.2	10 8	1 46.80	- 5 49.5	1.479	2.450	7.0	19.6
10 18	1 34.24	+ 8 43.0	1.322	2.319	0.5	18.8	10 18	1 34.41	- 5 2.6	1.478	2.455	5.9	19.6
10 28	1 23.75	+ 8 16.4	1.328	2.308	5.3	19.2	10 28	1 22.24	- 3 59.6	1.506	2.461	8.2	19.7
11 7	1 14.49	+ 7 55.7	1.360	2.298	10.3	19.4	11 7	1 11.58	- 2 41.5	1.562	2.467	11.8	19.9
11 17	1 7.53	+ 7 46.1	1.415	2.288	14.8	19.7	11 17	1 3.38	- 1 10.7	1.642	2.473	15.3	20.2
11 27	1 3.57	+ 7 51.1	1.490	2.278	18.6	19.9	11 27	0 58.14	+ 0 29.7	1.743	2.480	18.1	20.4
478953	2012 <i>XO</i> ₅₄		10 18.5	356°46	10°7/11.3	18	350515	2000 <i>BK</i> ₃₈		10 18.5	249°48	0°7/19.1	18
9 18	1 59.42	-15 32.5	1.442	2.328	14.8	19.9	9 18	1 56.41	+13 39.9	2.024	2.893	12.0	22.1
9 28	1 52.85	-16 28.5	1.402	2.326	12.3	19.7	9 28	1 50.53	+13 15.7	1.944	2.881	8.6	21.8
10 8	1 44.10	-17 5.8	1.385	2.325	10.9	19.6	10 8	1 42.90	+12 40.2	1.889	2.869	4.7	21.6
10 18	1 34.22	-17 16.3	1.391	2.323	11.2	19.6	10 18	1 34.23	+11 56.1	1.861	2.857	0.8	21.3
10 28	1 24.56	-16 54.6	1.420	2.323	13.1	19.8	10 28	1 25.45	+11 8.2	1.863	2.845	3.8	21.5
11 7	1 16.35	-16 0.9	1.471	2.323	15.8	19.9	11 7	1 17.54	+10 22.4	1.893	2.832	7.9	21.7
11 17	1 10.47	-14 39.0	1.543	2.323	18.4	20.1	11 17	1 11.28	+ 9 43.8	1.949	2.819	11.5	21.9
11 27	1 7.43	-12 54.7	1.631	2.325	20.8	20.3	11 27	1 7.24	+ 9 16.8	2.028	2.805	14.6	22.1
278471	2007 <i>TF</i> ₂₄₂		10 18.5	47°12	2°0/20.6	16	23869	1998 <i>RF</i> ₇₄		10 18.5	59°09	3°0/20.9	18
9 18	1 58.36	+24 5.8	1.258	2.115	18.5	19.3	9 18	1 57.62	+19 6.5	1.766	2.622	14.0	18.1
9 28	1 51.78	+21 29.0	1.233	2.161	13.4	19.1	9 28	1 51.52	+19 6.8	1.700	2.625	10.5	17.9
10 8	1 43.28	+18 25.3	1.232	2.206	7.7	18.9	10 8	1 43.45	+18 50.7	1.658	2.628	6.6	17.7
10 18	1 34.17	+15 8.2	1.258	2.252	2.5	18.7	10 18	1 34.25	+18 19.7	1.642	2.631	3.3	17.5
10 28	1 25.85	+11 55.3	1.314	2.298	4.7	19.0	10 28	1 25.06	+17 38.2	1.653	2.634	4.4	17.6
11 7	1 19.40	+ 9 2.9	1.399	2.343	9.5	19.4	11 7	1 16.98	+16 52.3	1.692	2.637	8.1	17.8
11 17	1 15.40	+ 6 41.1	1.509	2.388	13.7	19.8	11 17	1 10.87	+16 8.8	1.757	2.640	11.8	18.1
11 27	1 14.10	+ 4 53.9	1.642	2.433	17.0	20.1	11 27	1 7.31	+15 33.6	1.844	2.644	15.0	18.3
427835	2005 <i>JG</i> ₁₂₀		10 18.5	174°47	1°7/17.0	17	513262	2006 <i>SE</i> ₁₈		10 18.5	338°84	4°5/16.0	18
9 18	1 58.68	+ 7 56.6	1.787	2.671	12.6	22.5	9 18	1 51.91	+ 3 15.3	0.896	1.824	17.3	20.4
9 28	1 52.08	+ 7 2.0	1.727	2.674	8.7	22.3	9 28	1 48.76	+ 2 37.7	0.834	1.801	12.3	20.0
10 8	1 43.65	+ 5 59.6	1.691	2.676	4.5	22.1	10 8	1 42.51	+ 1 54.4	0.791	1.780	7.0	19.7
10 18	1 34.21	+ 4 54.9	1.684	2.678	1.8	21.9	10 18	1 34.22	+ 1 14.6	0.768	1.760	4.7	19.5
10 28	1 24.85	+ 3 54.9	1.705	2.679	5.3	22.1	10 28	1 25.60	+ 0 49.5	0.767	1.742	9.3	19.6
11 7	1 16.60	+ 3 6.0	1.755	2.679	9.4	22.4	11 7	1 18.51	+ 0 47.6	0.785	1.727	15.2	19.9
11 17	1 10.26	+ 2 32.6	1.829	2.679	13.1	22.6	11 17	1 14.38	+ 1 12.9	0.821	1.714	20.6	20.2
11 27	1 6.34	+ 2 17.0	1.924	2.678	16.1	22.8	11 27	1 14.06	+ 2 5.5	0.872	1.703	25.2	20.4
418922	2009 <i>CL</i> ₃₆		10 18.5	80°21	5°7/21.9	17	37214	2000 <i>WG</i> ₁₃₀		10 18.5	57°31	2°9/16.5	18
9 18	2 2.81	+22 29.1	1.294	2.149	18.2	21.1	9 18	1 59.25	+ 4 28.6	1.391	2.290	14.5	17.9
9 28	1 55.84	+23 3.9	1.233	2.151	14.1	20.8	9 28	1 52.55	+ 3 48.4	1.361	2.314	10.0	17.7
10 8	1 45.97	+23 15.3	1.192	2.154	9.7	20.6	10 8	1 43.86	+ 3 5.2	1.353	2.339	5.3	17.5
10 18	1 34.35	+23 1.8	1.174	2.156	6.2	20.4	10 18	1 34.27	+ 2 25.3	1.372	2.363	3.0	17.5
10 28	1 22.64	+22 26.9	1.182	2.158	6.7	20.4	10 28	1 25.08	+ 1 55.4	1.417	2.388	6.5	17.7
11 7	1 12.54	+21 38.7	1.215	2.160	10.5	20.7	11 7	1 17.43	+ 1 40.1	1.488	2.413	10.7	18.1
11 17	1 5.29	+20 47.6	1.271	2.162	14.8	20.9	11 17	1 12.08	+ 1 41.8	1.581	2.439	14.4	18.3
11 27	1 1.60	+20 3.1	1.346	2.165	18.6	21.2	11 27	1 9.44	+ 2 0.5	1.695	2.464	17.4	18.6
26585	2000 <i>ED</i> ₁₁₆		10 18.5	18°81	0°1/18.4	18	511300	2014 <i>DM</i> ₇₀		10 18.5	185°74	1°8/16.8	18
9 18	1 53.14	+11 19.9	1.762	2.649	12.6	17.9	9 18	1 56.74	+ 6 15.0	2.138	3.021	10.8	22.6
9 28	1 48.23	+10 51.0	1.708	2.655	8.8	17.7	9 28	1 50.54	+ 5 32.9	2.074	3.021	7.5	22.4
10 8	1 41.63	+10 12.3	1.678	2.662	4.6	17.4	10 8	1 42.81	+ 4 45.8	2.036	3.020	3.9	22.2
10 18	1 34.13	+ 9 28.1	1.674	2.670	0.2	17.1	10 18	1 34.23	+ 3 58.3	2.026	3.019	1.9	22.1
10 28	1 26.72	+ 8 44.0	1.698	2.679	4.2	17.5	10 28	1 25.69	+ 3 15.4	2.046	3.018	4.8	22.3
11 7	1 20.34	+ 8 5.8	1.749	2.688	8.3	17.7	11 7	1 18.03	+ 2 41.8	2.095	3.016	8.3	22.5
11 17	1 15.72	+ 7 38.0	1.824	2.698	12.0	18.0	11 17	1 11.94	+ 2 20.9	2.169	3.014	11.5	22.7
11 27	1 13.34	+ 7 23.9	1.921	2.709	15.0	18.2	11 27	1 7.90	+ 2 14.4	2.265	3.011	14.2	22.9
399696	2004 <i>TM</i> ₁₄₈		10 18.5	51°64	1°2/19.7	18	95678	2002 <i>HM</i>		10 18.5	132°34	2°6/16.1	18
9 18	1 54.49	+15 37.3	1.873	2.743	12.7	20.8	9 18	1 56.07	+ 2 26.7	2.200	3.087	10.4	19.5
9 28	1 49.06	+15 7.2	1.822	2.758	9.1	20.6	9 28	1 50.01	+ 2 0.4	2.141	3.089	7.2	19.3
10 8	1 42.02	+14 24.1	1.795	2.774	5.1	20.4	10 8	1 42.50	+ 1 33.0	2.108	3.091	4.1	19.1
10 18	1 34.17	+13 31.7	1.794	2.789	1.4	20.2	10 18	1 34.22	+ 1 8.5	2.104	3.093	2.7	19.1
10 28	1 26.46	+12 35.5	1.823	2.805	3.7	20.4	10 28	1 25.98	+ 0 51.0	2.128	3.094	5.2	19.2
11 7	1 19.80	+11 41.9	1.879	2.822	7.6	20.7	11 7	1 18.62	+ 0 43.8	2.181	3.096	8.4	19.4
11 17	1 14.90	+10 56.3	1.961	2.838	11.1	20.9	11 17	1 12.76	+ 0 48.8	2.260	3.098	11.4	19.6
11 27	1 12.17	+10 22.9	2.065	2.855	14.0	21.1	11 27	1 8.86	+ 1 6.8	2.360	3.100	13.9	19.8
76345	2000 <i>ES</i> ₁₅₇		10 18.5	193°87	0°8/19.4	18	195073	2002 <i>CP</i> ₉₉					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
441743	2009 <i>BH</i> ₁₃₄		10 18.5 317°63	3°6/21.4	18		306353	2011 <i>SY</i> ₁₇₈		10 18.5 43°78	1°9/19.9	17	
9 18	1 56.91	+20 25.1	1.677	2.533	14.7	21.1	9 18	1 57.29	+15 48.4	1.615	2.487	14.3	20.8
9 28	1 51.20	+20 26.2	1.605	2.528	11.1	20.8	9 28	1 51.32	+15 42.1	1.560	2.496	10.4	20.6
10 8	1 43.37	+20 8.8	1.555	2.522	7.2	20.6	10 8	1 43.35	+15 21.4	1.527	2.505	6.0	20.4
10 18	1 34.26	+19 34.1	1.530	2.517	3.9	20.4	10 18	1 34.29	+14 48.9	1.521	2.514	2.1	20.2
10 28	1 25.06	+18 46.3	1.533	2.513	4.8	20.4	10 28	1 25.33	+14 9.7	1.541	2.524	4.3	20.3
11 7	1 16.97	+17 52.3	1.562	2.508	8.5	20.7	11 7	1 17.60	+13 30.4	1.589	2.534	8.5	20.6
11 17	1 10.93	+16 59.9	1.616	2.504	12.4	20.9	11 17	1 11.94	+12 57.0	1.661	2.544	12.4	20.9
11 27	1 7.56	+16 15.9	1.692	2.500	15.8	21.1	11 27	1 8.89	+12 34.5	1.755	2.555	15.7	21.1
312752	2010 <i>TT</i> ₉₆		10 18.5 358°88	1°7/17.0	18		106512	2000 <i>WP</i> ₄₂		10 18.5 327°55	0°3/18.7	18	
9 18	1 54.27	+7 15.7	1.801	2.693	12.1	20.7	9 18	1 55.76	+13 34.2	1.208	2.102	16.5	19.6
9 28	1 49.04	+6 33.8	1.741	2.692	8.4	20.4	9 28	1 50.84	+12 49.6	1.145	2.095	11.8	19.3
10 8	1 42.09	+5 45.4	1.705	2.691	4.3	20.2	10 8	1 43.34	+11 46.5	1.103	2.088	6.3	19.0
10 18	1 34.20	+4 55.5	1.697	2.691	1.7	20.0	10 18	1 34.30	+10 30.7	1.085	2.082	0.5	18.6
10 28	1 26.34	+4 10.3	1.716	2.691	5.1	20.2	10 28	1 25.19	+9 11.9	1.093	2.076	5.5	18.9
11 7	1 19.47	+3 35.2	1.762	2.691	9.1	20.5	11 7	1 17.50	+8 1.0	1.124	2.070	11.2	19.2
11 17	1 14.35	+3 14.0	1.833	2.692	12.7	20.7	11 17	1 12.36	+7 6.7	1.178	2.065	16.1	19.5
11 27	1 11.48	+3 9.1	1.924	2.693	15.6	20.9	11 27	1 10.41	+6 34.6	1.250	2.060	20.2	19.8
148518	2001 <i>PW</i> ₂₈		10 18.5 79°66	4°1/21.9	18		29104	1981 <i>EO</i> ₂₂		10 18.5 159°99	0°5/18.9	18	
9 18	1 58.37	+22 21.6	1.499	2.352	16.3	20.0	9 18	1 58.51	+13 23.7	1.847	2.717	12.9	20.6
9 28	1 52.22	+22 7.2	1.443	2.363	12.4	19.8	9 28	1 51.98	+12 50.6	1.784	2.723	9.1	20.3
10 8	1 43.85	+21 30.0	1.409	2.374	8.1	19.6	10 8	1 43.64	+12 5.4	1.746	2.727	4.9	20.1
10 18	1 34.29	+20 32.2	1.400	2.385	4.6	19.4	10 18	1 34.31	+11 12.1	1.736	2.732	0.6	19.8
10 28	1 24.86	+19 20.0	1.417	2.397	5.1	19.5	10 28	1 25.05	+10 16.5	1.754	2.736	4.1	20.1
11 7	1 16.85	+18 2.8	1.461	2.408	8.9	19.7	11 7	1 16.88	+9 24.9	1.801	2.739	8.3	20.3
11 17	1 11.17	+16 49.8	1.529	2.419	12.9	20.0	11 17	1 10.59	+8 42.9	1.874	2.742	12.0	20.6
11 27	1 8.34	+15 48.8	1.619	2.430	16.3	20.3	11 27	1 6.69	+8 14.5	1.969	2.744	15.1	20.8
60035	1999 <i>TO</i> ₉₃		10 18.5 28°40	2°0/17.2	18		359950	2012 <i>BF</i> ₂		10 18.5 347°15	2°5/16.7	18	
9 18	1 57.57	+6 13.8	1.334	2.235	14.8	18.3	9 18	1 55.80	+4 27.0	1.646	2.543	12.7	20.2
9 28	1 51.67	+5 51.9	1.289	2.243	10.3	18.1	9 28	1 50.27	+4 0.8	1.585	2.538	8.9	19.9
10 8	1 43.55	+5 24.3	1.266	2.253	5.3	17.8	10 8	1 42.82	+3 31.0	1.548	2.534	4.8	19.7
10 18	1 34.28	+4 56.4	1.268	2.263	2.1	17.6	10 18	1 34.28	+3 2.6	1.537	2.530	2.6	19.5
10 28	1 25.18	+4 34.6	1.296	2.273	6.0	17.9	10 28	1 25.73	+2 41.1	1.554	2.527	5.9	19.7
11 7	1 17.54	+4 24.3	1.350	2.285	10.7	18.2	11 7	1 18.27	+2 31.2	1.597	2.524	10.0	20.0
11 17	1 12.24	+4 28.6	1.426	2.297	14.9	18.5	11 17	1 12.73	+2 35.9	1.663	2.522	13.7	20.2
11 27	1 9.78	+4 49.0	1.521	2.309	18.2	18.8	11 27	1 9.66	+2 56.2	1.750	2.520	16.9	20.4
55636	2002 <i>TX</i> ₃₀₀		10 18.5 77°61	0°6/29.1	18		328662	2009 <i>SG</i> ₂₆₅		10 18.5 289°27	0°6/19.1	17	
9 18	1 36.53	+37 4.2	42.132	42.822	1.0	19.8	9 18	1 57.47	+11 51.9	2.226	3.094	11.1	20.4
9 28	1 35.69	+37 3.9	42.046	42.826	0.8	19.8	9 28	1 51.14	+11 58.8	2.150	3.087	7.9	20.2
10 8	1 34.79	+37 2.3	41.983	42.829	0.7	19.8	10 8	1 43.20	+11 58.3	2.100	3.081	4.3	19.9
10 18	1 33.85	+36 59.3	41.945	42.832	0.6	19.8	10 18	1 34.30	+11 52.0	2.078	3.074	0.8	19.7
10 28	1 32.91	+36 55.3	41.935	42.836	0.6	19.8	10 28	1 25.33	+11 42.7	2.086	3.067	3.5	19.9
11 7	1 32.00	+36 50.2	41.952	42.839	0.6	19.8	11 7	1 17.15	+11 34.0	2.123	3.061	7.2	20.1
11 17	1 31.16	+36 44.4	41.996	42.842	0.7	19.8	11 17	1 10.52	+11 29.4	2.186	3.054	10.5	20.3
11 27	1 30.42	+36 37.9	42.066	42.846	0.8	19.8	11 27	1 5.95	+11 31.9	2.273	3.048	13.3	20.5
158863	2004 <i>PV</i> ₉		10 18.5 64°25	0°1/18.5	18		136292	2004 <i>AU</i> ₁₀		10 18.5 104°59	0°4/18.9	18	
9 18	1 58.65	+12 11.7	1.397	2.284	15.2	20.1	9 18	1 56.53	+12 38.0	1.868	2.743	12.5	20.0
9 28	1 52.21	+11 30.6	1.360	2.307	10.6	19.9	9 28	1 50.60	+12 14.0	1.806	2.747	8.9	19.8
10 8	1 43.73	+10 37.1	1.346	2.331	5.5	19.6	10 8	1 42.92	+11 39.3	1.769	2.751	4.8	19.5
10 18	1 34.29	+9 37.0	1.358	2.355	0.3	19.3	10 18	1 34.29	+10 57.4	1.759	2.755	0.5	19.2
10 28	1 25.20	+8 38.2	1.397	2.378	4.9	19.7	10 28	1 25.70	+10 13.5	1.777	2.759	4.0	19.5
11 7	1 17.63	+7 48.3	1.462	2.402	9.6	20.1	11 7	1 18.15	+9 33.4	1.824	2.763	8.1	19.8
11 17	1 12.38	+7 12.6	1.551	2.426	13.7	20.4	11 17	1 12.38	+9 2.0	1.896	2.766	11.7	20.0
11 27	1 9.87	+6 54.2	1.660	2.449	16.9	20.6	11 27	1 8.90	+8 42.9	1.990	2.770	14.8	20.2
196567	2003 <i>QP</i> ₂₅		10 18.5 252°15	6°6/25.5	17		44097	1998 <i>FK</i> ₁₁₅		10 18.5 10°95	3°9/21.4	18	
9 18	1 57.18	+32 7.9	2.375	3.151	13.4	19.8	9 18	1 53.93	+20 54.5	1.073	1.957	19.0	16.9
9 28	1 51.10	+32 34.7	2.292	3.147	11.2	19.7	9 28	1 49.73	+20 30.2	1.020	1.958	14.3	16.6
10 8	1 43.23	+32 41.3	2.231	3.142	8.9	19.5	10 8	1 42.79	+19 37.6	0.986	1.961	9.1	16.3
10 18	1 34.27	+32 26.5	2.196	3.138	7.1	19.4	10 18	1 34.28	+18 20.2	0.974	1.965	4.4	16.1
10 28	1 25.19	+31 51.2	2.187	3.133	6.6	19.4	10 28	1 25.85	+16 47.6	0.986	1.970	5.6	16.2
11 7	1 16.96	+31 0.0	2.206	3.129	7.9	19.5	11 7	1 19.07	+15 13.2	1.020	1.976	10.7	16.5
11 17	1 10.39	+29 59.0	2.251	3.124	10.0	19.6	11 17	1 15.05	+13 49.3	1.077	1.983	15.6	16.8
11 27	1 6.07	+28 55.6	2.320	3.119	12.3	19.7	11 27	1 14.37	+12 45.0	1.153	1.991	19.8	17.1
262516	2006 <i>UR</i> ₂₇₇		10 18.5 223°58	0°7/19.0	18		364225	2006 <i>SC</i> ₂₉		10 18.5 232°36	5°9/24.6	16	
9 18	1 59.25	+13 33.1	1.726	2.598	13.5	21.8	9 18	1 58.11	+29 58.9	2.265	3.056	13.5	21.3
9 28	1 52.75	+13 7.5	1.652	2.591	9.7	21.6	9 28	1 51.81	+30 9.1	2.175	3.045	11.1	21.1
10 8	1 44.16	+12 28.8	1.601	2.582	5.3	21.3	10 8	1 43.64	+29 58.7	2.108	3.034	8.5	20.9
10 18	1 34.33	+11 40.4	1.578	2.574	0.8	21.0	10 18	1 34.33	+29 26.7	2.066	3.023	6.4	20.8
10 28	1 24.40	+10 47.9	1.583	2.564	4.4	21.2	10 28	1 24.87	+28 35.0	2.053	3.011	6.1	20.7
11 7	1 15.55	+9 58.3	1.616	2.555	8.9	21.5	11 7	1 16.27	+27 28.7	2.067	2.998	7.8	20.8
11 17	1 8.71	+9 17.8	1.674	2.545	13.0	21.7	11 17	1 9.39	+26 15.0	2.108	2.985	10.4	21.0
11 27	1 4.49	+8 51.1	1.753	2.534	16.5	21.9	11 27	1 4.83	+25 1.8	2.173	2.972	13.1	21.1
308852	2006 <i>RW</i> ₈₈		10 18.5 292°27	0°8/19.3	18		208126						

EPHEMERIDES

10 18.5

10 18.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
478603	2012 <i>TD</i> ₁₃₇		10 18.5	47°12	0°8/17.9	18	107813	2001 <i>FS</i> ₅₉		10 18.5	81°89	0°4/18.8	18
9 18	1 56.91	+10 3.7	1.524	2.414	14.0	21.5	9 18	2 2.31	+11 53.9	1.411	2.292	15.4	19.2
9 28	1 51.12	+9 27.1	1.469	2.418	9.8	21.3	9 28	1 54.87	+11 42.5	1.369	2.313	10.9	19.0
10 8	1 43.27	+8 40.3	1.437	2.422	5.1	21.0	10 8	1 45.22	+11 19.5	1.349	2.333	5.8	18.8
10 18	1 34.31	+7 48.5	1.431	2.427	0.8	20.7	10 18	1 34.48	+10 48.5	1.356	2.352	0.6	18.4
10 28	1 25.44	+6 58.6	1.452	2.432	5.1	21.1	10 28	1 24.04	+10 15.8	1.390	2.372	4.8	18.8
11 7	1 17.82	+6 17.4	1.499	2.436	9.7	21.3	11 7	1 15.18	+9 47.6	1.451	2.391	9.6	19.1
11 17	1 12.30	+5 50.2	1.571	2.441	13.8	21.6	11 17	1 8.79	+9 29.3	1.535	2.410	13.7	19.4
11 27	1 9.43	+5 39.7	1.662	2.446	17.1	21.9	11 27	1 5.32	+9 24.4	1.640	2.429	17.1	19.7
521810	2015 <i>TM</i> ₁₄₁		10 18.5	289°51	4°8/13.7	18	320038	2007 <i>DV</i> ₁₀₈		10 18.5	319°60	1°8/16.9	17
9 18	1 53.68	-2 41.2	2.077	2.972	10.5	21.0	9 18	1 54.32	+6 44.3	1.882	2.773	11.7	21.4
9 28	1 48.47	-3 44.0	2.018	2.965	7.6	20.8	9 28	1 49.10	+6 2.4	1.816	2.766	8.1	21.2
10 8	1 41.77	-4 44.9	1.985	2.958	5.3	20.7	10 8	1 42.20	+5 14.4	1.775	2.760	4.2	20.9
10 18	1 34.24	-5 37.7	1.979	2.952	5.1	20.7	10 18	1 34.34	+4 25.3	1.761	2.755	1.9	20.8
10 28	1 26.72	-6 16.8	2.001	2.945	7.3	20.8	10 28	1 26.46	+3 40.8	1.775	2.749	5.1	21.0
11 7	1 20.04	-6 38.3	2.049	2.938	10.2	21.0	11 7	1 19.50	+3 6.3	1.817	2.744	9.0	21.2
11 17	1 14.86	-6 40.5	2.121	2.931	13.0	21.1	11 17	1 14.22	+2 45.8	1.883	2.738	12.5	21.4
11 27	1 11.67	-6 23.7	2.213	2.925	15.4	21.3	11 27	1 11.12	+2 41.2	1.970	2.733	15.5	21.6
259623	2003 <i>WP</i> ₁₆		10 18.5	33°74	2°2/17.3	15	360421	2002 <i>GO</i> ₁₅₈		10 18.5	91°43	4°0/14.9	18
9 18	1 59.11	+6 35.7	0.970	1.883	17.9	19.9	9 18	1 57.20	-2 27.2	2.274	3.160	10.1	20.3
9 28	1 53.15	+6 14.2	0.938	1.898	12.4	19.7	9 28	1 50.68	-2 56.7	2.232	3.176	7.2	20.2
10 8	1 44.44	+5 45.4	0.925	1.913	6.4	19.4	10 8	1 42.84	-3 23.2	2.217	3.192	4.7	20.1
10 18	1 34.37	+5 16.2	0.936	1.930	2.3	19.2	10 18	1 34.37	-3 42.4	2.230	3.207	4.1	20.0
10 28	1 24.71	+4 54.7	0.969	1.949	7.0	19.6	10 28	1 26.07	-3 50.8	2.272	3.223	6.1	20.2
11 7	1 17.03	+4 47.3	1.026	1.968	12.4	20.0	11 7	1 18.71	-3 46.1	2.342	3.239	8.8	20.4
11 17	1 12.32	+4 57.2	1.102	1.987	17.1	20.3	11 17	1 12.85	-3 27.7	2.438	3.254	11.4	20.6
11 27	1 11.01	+5 25.3	1.197	2.008	20.9	20.6	11 27	1 8.90	-2 56.1	2.555	3.269	13.5	20.8
38224	1999 <i>NC</i> ₄₁		10 18.5	90°17	0°9/17.8	18	449843	2014 <i>QK</i> ₄₁₈		10 18.5	219°49	1°2/16.9	18
9 18	1 57.62	+9 34.2	1.667	2.553	13.2	18.6	9 18	1 51.75	+8 50.1	2.668	3.546	9.1	21.5
9 28	1 51.42	+8 57.9	1.616	2.563	9.2	18.4	9 28	1 46.91	+7 39.6	2.595	3.541	6.3	21.3
10 8	1 43.36	+8 12.8	1.589	2.574	4.7	18.2	10 8	1 40.91	+6 22.1	2.550	3.535	3.2	21.1
10 18	1 34.33	+7 23.9	1.589	2.585	0.9	17.9	10 18	1 34.27	+5 2.3	2.534	3.529	1.3	20.9
10 28	1 25.46	+6 37.5	1.617	2.595	4.8	18.2	10 28	1 27.64	+3 45.3	2.550	3.522	3.9	21.1
11 7	1 17.78	+5 59.7	1.672	2.605	9.1	18.5	11 7	1 21.64	+2 36.3	2.595	3.515	7.0	21.3
11 17	1 12.09	+5 34.7	1.751	2.616	12.9	18.8	11 17	1 16.81	+1 39.3	2.667	3.508	9.7	21.5
11 27	1 8.87	+5 25.2	1.852	2.626	15.9	19.0	11 27	1 13.55	+0 56.8	2.762	3.501	12.1	21.7
448640	2010 <i>VW</i> ₈₂		10 18.5	282°00	2°1/16.7	18	157198	2004 <i>RU</i> ₁		10 18.5	37°33	2°5/20.7	18
9 18	1 56.16	+4 20.6	2.109	2.996	10.8	20.7	9 18	1 57.34	+17 36.9	1.954	2.811	12.9	20.1
9 28	1 50.25	+3 57.8	2.039	2.987	7.5	20.5	9 28	1 51.21	+17 47.2	1.889	2.816	9.5	19.9
10 8	1 42.74	+3 32.3	1.995	2.979	4.1	20.2	10 8	1 43.31	+17 44.2	1.849	2.821	5.9	19.7
10 18	1 34.33	+3 7.7	1.979	2.971	2.2	20.1	10 18	1 34.40	+17 29.3	1.836	2.826	2.8	19.5
10 28	1 25.87	+2 48.4	1.992	2.963	5.0	20.3	10 28	1 25.51	+17 5.6	1.851	2.832	4.0	19.6
11 7	1 18.25	+2 38.1	2.032	2.954	8.5	20.5	11 7	1 17.61	+16 38.0	1.894	2.838	7.5	19.8
11 17	1 12.19	+2 39.6	2.099	2.946	11.8	20.7	11 17	1 11.49	+16 11.9	1.963	2.844	10.9	20.0
11 27	1 8.19	+2 54.0	2.187	2.938	14.5	20.9	11 27	1 7.68	+15 52.0	2.055	2.850	13.9	20.2
95527	2002 <i>EN</i> ₇₃		10 18.5	253°19	0°5/19.1	18	519401	2011 <i>SK</i> ₂₇₉		10 18.5	280°53	1°0/17.7	18
9 18	1 54.59	+13 16.3	2.213	3.083	11.1	19.9	9 18	1 57.56	+8 0.5	1.838	2.722	12.2	21.6
9 28	1 49.12	+12 50.6	2.139	3.077	7.9	19.6	9 28	1 51.41	+7 42.1	1.773	2.720	8.6	21.4
10 8	1 42.14	+12 15.0	2.089	3.070	4.3	19.4	10 8	1 43.43	+7 17.2	1.732	2.717	4.4	21.2
10 18	1 34.30	+11 32.3	2.068	3.064	0.7	19.1	10 18	1 34.41	+6 49.7	1.718	2.714	1.0	20.9
10 28	1 26.41	+10 46.9	2.076	3.057	3.5	19.4	10 28	1 25.38	+6 24.3	1.733	2.711	4.7	21.2
11 7	1 19.31	+10 3.9	2.113	3.051	7.2	19.6	11 7	1 17.36	+6 5.8	1.776	2.708	8.8	21.4
11 17	1 13.70	+9 27.9	2.176	3.044	10.5	19.8	11 17	1 11.14	+5 57.8	1.843	2.705	12.5	21.6
11 27	1 10.06	+9 2.6	2.262	3.038	13.4	20.0	11 27	1 7.29	+6 2.7	1.932	2.702	15.5	21.8
218329	2004 <i>BJ</i> ₁₀		10 18.5	178°73	2°6/20.5	18	202325	2005 <i>EK</i> ₇₄		10 18.6	167°16	0°2/18.4	18
9 18	2 0.72	+17 38.9	1.662	2.522	14.6	20.0	9 18	1 56.32	+11 32.2	2.154	3.027	11.2	21.2
9 28	1 53.85	+17 38.4	1.595	2.523	10.8	19.8	9 28	1 50.29	+10 53.1	2.090	3.030	7.9	21.0
10 8	1 44.78	+17 21.9	1.550	2.523	6.6	19.6	10 8	1 42.75	+10 5.0	2.051	3.034	4.1	20.7
10 18	1 34.45	+16 50.8	1.532	2.524	2.9	19.3	10 18	1 34.38	+9 11.5	2.040	3.036	0.2	20.4
10 28	1 24.08	+16 9.9	1.542	2.524	4.5	19.4	10 28	1 26.06	+8 18.0	2.059	3.039	3.8	20.7
11 7	1 14.93	+15 25.6	1.580	2.523	8.7	19.7	11 7	1 18.63	+7 29.6	2.107	3.041	7.6	21.0
11 17	1 7.94	+14 45.0	1.643	2.523	12.7	19.9	11 17	1 12.77	+6 51.0	2.182	3.042	10.9	21.2
11 27	1 3.72	+14 14.1	1.727	2.522	16.1	20.2	11 27	1 8.94	+6 25.2	2.279	3.043	13.6	21.4
107466	2001 <i>DV</i> ₂₈		10 18.5	274°04	1°2/17.6	18	86460	2000 <i>CC</i> ₅₂		10 18.6	230°65	1°6/19.8	18
9 18	1 57.15	+8 24.1	1.786	2.672	12.5	20.0	9 18	1 59.03	+16 0.8	1.785	2.649	13.6	20.6
9 28	1 51.27	+7 53.5	1.709	2.656	8.8	19.8	9 28	1 52.63	+15 41.3	1.706	2.639	9.9	20.3
10 8	1 43.43	+7 14.9	1.656	2.641	4.6	19.5	10 8	1 44.17	+15 7.0	1.652	2.629	5.7	20.0
10 18	1 34.39	+6 32.5	1.629	2.625	1.2	19.2	10 18	1 34.47	+14 20.4	1.625	2.619	1.8	19.8
10 28	1 25.20	+5 52.0	1.632	2.609	5.0	19.5	10 28	1 24.64	+13 26.6	1.626	2.608	4.2	19.9
11 7	1 16.95	+5 19.3	1.661	2.593	9.3	19.7	11 7	1 15.83	+12 32.5	1.655	2.597	8.5	20.2
11 17	1 10.54	+4 59.0	1.715	2.577	13.3	19.9	11 17	1 8.98	+11 44.9	1.710	2.585	12.6	20.4
11 27	1 6.58	+4 54.2	1.790	2.560	16.6	20.1	11 27	1 4.71	+11 9.1	1.786	2.573	16.0	20.6
149904	2005 <i>SB</i> ₃₈		10 18.5	359°33	0°7/17.9	18	158761	2003 <i>QK</i> ₁₀₂		10 18.6	349°20	3°0/15.4	18
9 18	1 54.99	+9 30.4											

EPHEMERIDES

10 18.6

10 18.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V	
507952	2015 <i>BE</i> ₁₅	10 18.6 264°02			6°1/14.1 18			112020	2002 <i>GW</i> ₁₆₈	10 18.6 195°74			0°2/18.4 18	
9 18	1 58.09	- 1 19.0	1.355	2.260	14.3	21.1	9 18	2 1.84	+10 13.9	1.438	2.323	15.0	19.8	
9 28	1 52.18	- 2 37.5	1.302	2.255	10.4	20.9	9 28	1 54.83	+10 5.8	1.376	2.322	10.6	19.5	
10 8	1 43.97	- 3 55.2	1.273	2.251	6.9	20.7	10 8	1 45.40	+ 9 47.7	1.337	2.321	5.6	19.2	
10 18	1 34.46	- 5 2.5	1.268	2.246	6.4	20.7	10 18	1 34.56	+ 9 23.1	1.324	2.320	0.3	18.8	
10 28	1 25.00	- 5 50.0	1.289	2.242	9.5	20.8	10 28	1 23.72	+ 8 57.6	1.338	2.319	5.1	19.2	
11 7	1 16.90	- 6 11.9	1.334	2.237	13.6	21.1	11 7	1 14.23	+ 8 37.3	1.379	2.318	10.2	19.5	
11 17	1 11.11	- 6 6.7	1.400	2.232	17.4	21.3	11 17	1 7.16	+ 8 27.3	1.443	2.317	14.6	19.7	
11 27	1 8.24	- 5 35.8	1.483	2.228	20.5	21.5	11 27	1 3.12	+ 8 31.1	1.528	2.315	18.2	20.0	
167085	2003 <i>SC</i> ₈	10 18.6 310°87			1°1/17.6 18			12433	<i>Barbieri</i>	10 18.6 328°04			0°9/19.2 18	
9 18	1 53.92	+10 21.9	1.536	2.429	13.7	19.8	9 18	1 51.78	+15 7.8	1.314	2.206	15.6	18.2	
9 28	1 49.24	+ 9 24.6	1.462	2.413	9.6	19.6	9 28	1 48.10	+14 22.6	1.235	2.183	11.3	17.9	
10 8	1 42.46	+ 8 14.3	1.411	2.397	5.0	19.3	10 8	1 42.02	+13 16.6	1.178	2.161	6.3	17.5	
10 18	1 34.40	+ 6 56.9	1.386	2.382	1.1	19.0	10 18	1 34.39	+11 54.7	1.144	2.140	1.1	17.1	
10 28	1 26.21	+ 5 41.0	1.388	2.367	5.4	19.2	10 28	1 26.51	+10 25.6	1.135	2.119	5.1	17.3	
11 7	1 19.06	+ 4 35.1	1.416	2.352	10.3	19.5	11 7	1 19.75	+ 9 0.6	1.152	2.100	10.6	17.6	
11 17	1 13.91	+ 3 46.0	1.468	2.338	14.6	19.7	11 17	1 15.25	+ 7 49.8	1.190	2.082	15.6	17.8	
11 27	1 11.39	+ 3 17.9	1.539	2.324	18.2	19.9	11 27	1 13.74	+ 7 0.3	1.248	2.065	19.8	18.0	
443512	2014 <i>JB</i> ₄₆	10 18.6 212°80			0°7/17.9 18			402399	2005 <i>YJ</i> ₁₁₆	10 18.6 344°95			0°1/18.5 17	
9 18	1 57.70	+ 9 1.6	1.875	2.756	12.2	21.6	9 18	1 54.16	+11 4.0	1.682	2.569	13.0	20.8	
9 28	1 51.48	+ 8 42.1	1.810	2.755	8.5	21.4	9 28	1 49.22	+10 44.8	1.614	2.561	9.2	20.6	
10 8	1 43.47	+ 8 15.4	1.769	2.754	4.4	21.1	10 8	1 42.37	+10 15.7	1.570	2.554	4.9	20.3	
10 18	1 34.45	+ 7 44.9	1.756	2.752	0.7	20.8	10 18	1 34.40	+ 9 40.1	1.551	2.548	0.2	19.9	
10 28	1 25.43	+ 7 15.6	1.772	2.751	4.4	21.1	10 28	1 26.38	+ 9 3.6	1.561	2.542	4.4	20.3	
11 7	1 17.41	+ 6 52.4	1.816	2.749	8.5	21.4	11 7	1 19.36	+ 8 32.0	1.596	2.537	8.9	20.5	
11 17	1 11.17	+ 6 39.0	1.885	2.748	12.2	21.6	11 17	1 14.20	+ 8 10.4	1.656	2.533	12.8	20.8	
11 27	1 7.27	+ 6 38.3	1.975	2.746	15.2	21.8	11 27	1 11.47	+ 8 2.2	1.737	2.529	16.1	21.0	
161048	2002 <i>JA</i> ₆	10 18.6 51°18			6°8/13.0 18			220266	2003 <i>AN</i> ₂₈	10 18.6 300°54			1°5/17.4 18	
9 18	1 55.69	- 3 53.3	1.429	2.335	13.7	19.3	9 18	1 56.16	+ 9 1.0	1.401	2.298	14.5	20.4	
9 28	1 50.14	- 5 24.1	1.402	2.353	10.0	19.1	9 28	1 51.02	+ 8 14.0	1.326	2.279	10.2	20.1	
10 8	1 42.71	- 6 48.4	1.398	2.370	7.2	19.0	10 8	1 43.50	+ 7 14.9	1.274	2.260	5.3	19.7	
10 18	1 34.40	- 7 57.0	1.420	2.389	7.2	19.1	10 18	1 34.47	+ 6 9.8	1.247	2.242	1.6	19.4	
10 28	1 26.41	- 8 42.2	1.467	2.407	9.8	19.3	10 28	1 25.23	+ 5 7.1	1.246	2.224	6.0	19.7	
11 7	1 19.78	- 9 0.6	1.537	2.426	13.1	19.5	11 7	1 17.12	+ 4 15.6	1.270	2.206	11.2	19.9	
11 17	1 15.26	- 8 52.3	1.629	2.445	16.1	19.8	11 17	1 11.24	+ 3 41.8	1.317	2.188	15.8	20.2	
11 27	1 13.25	- 8 20.1	1.739	2.464	18.6	20.0	11 27	1 8.30	+ 3 29.4	1.383	2.171	19.7	20.4	
477442	2009 <i>WM</i> ₁₇₀	10 18.6 311°52			2°8/20.6 18			252046	2000 <i>RP</i> ₂₄	10 18.6 61°87			3°0/20.8 17	
9 18	1 56.76	+18 11.1	1.411	2.284	15.9	21.1	9 18	1 58.57	+19 44.6	1.194	2.068	18.1	19.7	
9 28	1 51.48	+18 0.9	1.338	2.272	11.9	20.8	9 28	1 52.68	+19 11.5	1.148	2.083	13.4	19.5	
10 8	1 43.74	+17 31.0	1.285	2.261	7.3	20.5	10 8	1 44.24	+18 13.9	1.122	2.097	8.1	19.2	
10 18	1 34.47	+16 43.3	1.258	2.250	3.2	20.3	10 18	1 34.50	+16 56.5	1.120	2.112	3.5	19.0	
10 28	1 25.02	+15 43.6	1.256	2.239	4.9	20.4	10 28	1 25.02	+15 28.6	1.144	2.127	5.2	19.2	
11 7	1 16.79	+14 40.7	1.280	2.228	9.7	20.6	11 7	1 17.26	+14 2.1	1.192	2.143	10.1	19.5	
11 17	1 10.89	+13 43.7	1.327	2.218	14.3	20.9	11 17	1 12.18	+12 47.3	1.264	2.158	14.7	19.8	
11 27	1 8.03	+13 0.0	1.394	2.209	18.3	21.1	11 27	1 10.30	+11 51.4	1.355	2.173	18.5	20.1	
255366	2005 <i>WZ</i> ₁₀₅	10 18.6 347°77			5°4/13.4 18			326379	2001 <i>FM</i> ₈₈	10 18.6 240°80			5°2/24.8 18	
9 18	1 51.94	- 1 12.9	1.642	2.548	12.2	19.6	9 18	1 56.72	+30 37.6	2.875	3.649	11.3	21.4	
9 28	1 47.58	- 2 37.5	1.588	2.542	8.8	19.4	9 28	1 50.61	+30 48.4	2.776	3.633	9.4	21.2	
10 8	1 41.45	- 4 1.6	1.559	2.537	6.0	19.3	10 8	1 42.99	+30 42.4	2.700	3.617	7.3	21.1	
10 18	1 34.34	- 5 16.9	1.556	2.532	5.8	19.2	10 18	1 34.44	+30 18.8	2.651	3.600	5.6	21.0	
10 28	1 27.26	- 6 15.3	1.580	2.528	8.5	19.4	10 28	1 25.74	+29 39.0	2.631	3.583	5.3	20.9	
11 7	1 21.20	- 6 51.3	1.628	2.525	11.9	19.6	11 7	1 17.67	+28 46.6	2.639	3.565	6.6	21.0	
11 17	1 16.91	- 7 2.7	1.697	2.522	15.2	19.8	11 17	1 10.94	+27 46.6	2.676	3.546	8.7	21.1	
11 27	1 14.92	- 6 49.9	1.786	2.520	17.9	20.0	11 27	1 6.06	+26 45.2	2.737	3.528	10.9	21.2	
309732	2008 <i>QD</i> ₃₅	10 18.6 358°57			2°3/16.5 18			233414	2006 <i>GE</i> ₄₀	10 18.6 141°90			1°7/20.2 18	
9 18	1 52.74	+ 5 22.4	1.762	2.659	12.0	19.7	9 18	1 59.30	+16 41.3	2.243	3.093	11.7	20.8	
9 28	1 48.05	+ 4 41.9	1.703	2.657	8.3	19.5	9 28	1 52.34	+16 31.0	2.181	3.106	8.5	20.6	
10 8	1 41.67	+ 3 56.6	1.669	2.655	4.4	19.2	10 8	1 43.82	+16 8.9	2.144	3.117	5.0	20.4	
10 18	1 34.36	+ 3 12.0	1.662	2.654	2.4	19.1	10 18	1 34.49	+15 36.9	2.136	3.128	1.9	20.3	
10 28	1 27.06	+ 2 33.9	1.682	2.654	5.5	19.3	10 28	1 25.24	+14 58.8	2.158	3.139	3.5	20.4	
11 7	1 20.74	+ 2 7.6	1.728	2.654	9.4	19.5	11 7	1 16.93	+14 19.6	2.209	3.149	6.9	20.6	
11 17	1 16.14	+ 1 56.2	1.798	2.656	12.9	19.8	11 17	1 10.27	+13 43.9	2.288	3.158	10.0	20.8	
11 27	1 13.74	+ 2 1.4	1.888	2.658	15.9	20.0	11 27	1 5.70	+13 16.1	2.391	3.166	12.7	21.0	
440011	2002 <i>KL</i> ₁₆	10 18.6 162°24			6°3/25.8 18			53868	2000 <i>FP</i> ₃₀	10 18.6 194°74			1°6/17.3 18	
9 18	1 59.94	+33 3.3	2.466	3.230	13.3	22.0	9 18	1 58.74	+ 7 33.1	1.795	2.680	12.5	19.4	
9 28	1 52.93	+33 14.1	2.390	3.237	11.1	21.8	9 28	1 52.26	+ 6 52.7	1.731	2.678	8.7	19.1	
10 8	1 44.19	+33 3.8	2.336	3.243	8.7	21.7	10 8	1 43.91	+ 6 5.2	1.691	2.676	4.5	18.9	
10 18	1 34.49	+32 31.5	2.308	3.248	6.9	21.6	10 18	1 34.50	+ 5 15.6	1.679	2.674	1.6	18.7	
10 28	1 24.79	+31 39.3	2.307	3.253	6.4	21.6	10 28	1 25.11	+ 4 29.9	1.696	2.671	5.2	18.9	
11 7	1 16.05	+30 32.0	2.336	3.258	7.6	21.6	11 7	1 16.78	+ 3 53.9	1.740	2.667	9.3	19.2	
11 17	1 9.02	+29 16.7	2.391	3.261	9.7	21.8	11 17	1 10.33	+ 3 31.7	1.809	2.663	13.0	19.4	
11 27	1 4.23	+28 0.7	2.472	3.264	11.9	22.0	11 27	1 6.30	+ 3 25.7	1.900	2.659	16.1	19.6	
2189	<i>Zaragoza</i>	10 18.6 21°46			13°4/ 8.9 18 A			380995	2006 <i>TT</i> ₁₉	10 18.6 48°28			1°1/19.3 15	
9 18	1 52.95	-13 51.0	0.969	1.885	17.5	15.2	9 18	1 58.38	+14 47.2	1.153				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
216688	2004 GA ₈₂	10 18.6 243°47'		4°3'/14.7 18			289540	2005 EM ₂₁₃	10 18.6 242°56'		0°4'/18.9 18		
9 18	1 56.56	- 1 36.5	2.074	2.965	10.8	20.7	9 18	1 57.09	+12 33.9	1.976	2.848	12.1	21.7
9 28	1 50.56	- 2 21.7	2.010	2.957	7.7	20.5	9 28	1 51.11	+12 10.4	1.900	2.839	8.6	21.4
10 8	1 42.97	- 3 5.5	1.972	2.949	5.0	20.3	10 8	1 43.35	+11 36.3	1.848	2.830	4.7	21.2
10 18	1 34.48	- 3 42.4	1.962	2.940	4.5	20.3	10 18	1 34.54	+10 54.8	1.824	2.820	0.5	20.9
10 28	1 25.99	- 4 7.5	1.980	2.932	6.8	20.4	10 28	1 25.64	+10 10.6	1.829	2.810	3.9	21.1
11 7	1 18.36	- 4 17.1	2.025	2.923	9.9	20.6	11 7	1 17.64	+ 9 29.5	1.862	2.800	8.0	21.4
11 17	1 12.31	- 4 9.6	2.095	2.914	12.9	20.8	11 17	1 11.33	+ 8 56.4	1.921	2.789	11.7	21.6
11 27	1 8.35	- 3 45.1	2.185	2.905	15.4	21.0	11 27	1 7.28	+ 8 35.3	2.002	2.778	14.8	21.8
438477	2007 ED ₁₂₈	10 18.6 257°74'		0°5'/18.2 18			317332	2002 JB ₇₂	10 18.6 107°98'		8°7'/10.3 18		
9 18	1 57.39	+11 3.1	1.642	2.525	13.5	21.7	9 18	2 0.08	-21 2.1	2.476	3.321	10.9	20.4
9 28	1 51.58	+10 22.0	1.568	2.514	9.5	21.4	9 28	1 52.61	-21 41.4	2.450	3.336	9.4	20.3
10 8	1 43.68	+ 9 28.9	1.518	2.503	5.0	21.1	10 8	1 43.87	-22 4.6	2.450	3.350	8.7	20.3
10 18	1 34.53	+ 8 28.6	1.495	2.491	0.5	20.8	10 18	1 34.57	-22 7.5	2.476	3.364	9.0	20.3
10 28	1 25.27	+ 7 28.1	1.500	2.480	4.9	21.1	10 28	1 25.55	-21 47.5	2.528	3.378	10.1	20.4
11 7	1 17.07	+ 6 34.7	1.532	2.468	9.6	21.3	11 7	1 17.55	-21 5.3	2.604	3.391	11.6	20.5
11 17	1 10.86	+ 5 54.6	1.588	2.456	13.8	21.5	11 17	1 11.14	-20 3.1	2.703	3.405	13.2	20.7
11 27	1 7.28	+ 5 31.7	1.664	2.443	17.3	21.8	11 27	1 6.67	-18 44.5	2.820	3.418	14.5	20.8
73483	2002 PB ₇₂	10 18.6 335°33'		5°4'/12.5 18			134813	2000 FB ₃	10 18.6 149°23'		16°9'/2.9 17		
9 18	1 50.14	- 0 51.5	1.805	2.710	11.3	18.2	9 18	2 0.56	-24 11.8	1.188	2.061	18.3	19.7
9 28	1 46.27	- 2 41.5	1.745	2.698	8.1	18.0	9 28	1 54.12	-27 8.4	1.177	2.066	17.0	19.6
10 8	1 40.78	- 4 32.9	1.710	2.686	5.7	17.9	10 8	1 45.04	-29 29.9	1.186	2.071	17.0	19.7
10 18	1 34.37	- 6 16.9	1.703	2.675	5.9	17.9	10 18	1 34.63	-31 2.3	1.215	2.075	18.2	19.8
10 28	1 27.93	- 7 44.3	1.723	2.664	8.5	18.0	10 28	1 24.58	-31 39.1	1.262	2.079	20.1	19.9
11 7	1 22.35	- 8 48.7	1.768	2.654	11.7	18.2	11 7	1 16.37	-31 22.7	1.325	2.082	22.2	20.1
11 17	1 18.37	- 9 26.9	1.835	2.645	14.8	18.4	11 17	1 10.98	-30 20.7	1.402	2.085	24.1	20.3
11 27	1 16.48	- 9 38.8	1.921	2.637	17.4	18.5	11 27	1 8.88	-28 42.9	1.488	2.087	25.7	20.4
56285	1999 LJ ₃	10 18.6 191°97'		1°6'/17.0 18			103999	2000 DB ₉₉	10 18.6 31°48'		6°5'/14.3 18		
9 18	1 55.10	+ 7 1.6	2.004	2.891	11.3	19.8	9 18	1 56.90	- 1 44.8	1.182	2.095	15.4	18.4
9 28	1 49.56	+ 6 20.0	1.942	2.891	7.8	19.6	9 28	1 51.40	- 2 56.6	1.147	2.103	11.1	18.2
10 8	1 42.44	+ 5 32.7	1.905	2.891	4.1	19.4	10 8	1 43.57	- 4 4.8	1.132	2.112	7.4	18.0
10 18	1 34.46	+ 4 44.2	1.896	2.890	1.7	19.2	10 18	1 34.56	- 4 59.4	1.142	2.121	6.8	18.0
10 28	1 26.51	+ 3 59.9	1.916	2.890	4.8	19.4	10 28	1 25.80	- 5 31.9	1.176	2.131	9.9	18.2
11 7	1 19.47	+ 3 25.0	1.964	2.890	8.5	19.7	11 7	1 18.63	- 5 37.8	1.233	2.142	13.9	18.5
11 17	1 14.02	+ 3 3.0	2.037	2.890	11.8	19.9	11 17	1 13.94	- 5 16.9	1.310	2.154	17.6	18.8
11 27	1 10.67	+ 2 55.9	2.131	2.889	14.6	20.1	11 27	1 12.19	- 4 32.0	1.404	2.166	20.7	19.0
6897	Tabei	10 18.6 308°54'		0°3'/18.3 18 R			436620	2011 LF ₁₂	10 18.6 77°03'		2°8'/16.4 18		
9 18	1 55.87	+11 37.0	1.338	2.232	15.3	17.4	9 18	1 58.54	+ 4 52.9	1.587	2.481	13.3	20.8
9 28	1 50.96	+10 59.7	1.262	2.213	10.9	17.1	9 28	1 52.05	+ 4 3.2	1.550	2.501	9.2	20.7
10 8	1 43.54	+10 7.3	1.208	2.194	5.8	16.8	10 8	1 43.75	+ 3 9.8	1.536	2.521	4.9	20.5
10 18	1 34.54	+ 9 4.9	1.179	2.175	0.4	16.3	10 18	1 34.58	+ 2 19.1	1.550	2.541	2.9	20.4
10 28	1 25.27	+ 8 0.6	1.175	2.157	5.5	16.7	10 28	1 25.69	+ 1 37.5	1.591	2.561	6.1	20.6
11 7	1 17.19	+ 7 3.7	1.197	2.139	11.0	16.9	11 7	1 18.13	+ 1 10.3	1.659	2.581	10.0	20.9
11 17	1 11.42	+ 6 22.0	1.240	2.122	15.9	17.2	11 17	1 12.62	+ 0 59.9	1.750	2.601	13.6	21.2
11 27	1 8.73	+ 6 0.6	1.303	2.105	20.0	17.4	11 27	1 9.60	+ 1 7.2	1.862	2.620	16.4	21.4
381076	2007 AH ₂₄	10 18.6 237°56'		1°2'/19.6 18			90383	Johnloiacono	10 18.6 32°06'		0°6'/18.9 18		
9 18	1 58.27	+15 18.7	1.748	2.616	13.6	21.6	9 18	1 56.84	+12 43.4	1.263	2.156	16.0	19.2
9 28	1 52.15	+14 50.8	1.671	2.606	9.9	21.3	9 28	1 51.31	+12 25.9	1.222	2.171	11.3	19.0
10 8	1 43.97	+14 7.9	1.617	2.596	5.6	21.1	10 8	1 43.52	+11 54.8	1.203	2.187	6.1	18.8
10 18	1 34.56	+13 13.3	1.590	2.586	1.4	20.8	10 18	1 34.58	+11 14.5	1.209	2.205	0.8	18.5
10 28	1 25.03	+12 12.7	1.592	2.574	4.2	20.9	10 28	1 25.88	+10 32.4	1.240	2.223	4.9	18.8
11 7	1 16.53	+11 13.4	1.621	2.563	8.7	21.2	11 7	1 18.72	+ 9 55.9	1.295	2.242	9.9	19.2
11 17	1 9.98	+10 22.2	1.676	2.551	12.8	21.4	11 17	1 13.98	+ 9 31.0	1.374	2.261	14.2	19.5
11 27	1 6.01	+ 9 44.7	1.752	2.539	16.2	21.6	11 27	1 12.13	+ 9 21.3	1.473	2.282	17.7	19.8
469731	2005 NO ₁₇	10 18.6 17°70'		0°0'/18.6 16			399859	2005 UY ₃₀₀	10 18.6 331°34'		0°4'/18.1 18		
9 18	1 54.54	+11 56.4	0.990	1.899	17.9	20.4	9 18	1 52.26	+12 18.3	1.817	2.701	12.4	20.3
9 28	1 50.15	+11 28.9	0.949	1.906	12.6	20.1	9 28	1 47.79	+11 14.7	1.747	2.693	8.7	20.1
10 8	1 43.06	+10 45.5	0.928	1.915	6.7	19.9	10 8	1 41.62	+ 9 58.2	1.702	2.686	4.5	19.8
10 18	1 34.50	+ 9 52.5	0.929	1.925	0.4	19.4	10 18	1 34.48	+ 8 34.5	1.683	2.680	0.5	19.5
10 28	1 26.16	+ 8 59.8	0.953	1.936	5.9	19.9	10 28	1 27.32	+ 7 10.9	1.694	2.673	4.4	19.8
11 7	1 19.55	+ 8 16.9	0.999	1.949	11.6	20.3	11 7	1 21.08	+ 5 55.2	1.731	2.667	8.7	20.0
11 17	1 15.72	+ 7 50.8	1.067	1.964	16.5	20.6	11 17	1 16.52	+ 4 53.6	1.794	2.662	12.4	20.2
11 27	1 15.18	+ 7 45.1	1.152	1.979	20.5	20.9	11 27	1 14.16	+ 4 10.3	1.878	2.657	15.6	20.4
446106	2013 DQ ₄	10 18.6 242°20'		1°7'/20.1 18			319189	2005 YZ ₁₄₄	10 18.6 213°48'		0°6'/17.9 18		
9 18	1 57.07	+16 3.6	1.999	2.861	12.4	21.3	9 18	1 54.25	+ 9 24.3	2.553	3.427	9.6	21.9
9 28	1 51.08	+15 54.2	1.925	2.856	9.1	21.1	9 28	1 48.77	+ 8 52.6	2.480	3.423	6.7	21.7
10 8	1 43.32	+15 32.0	1.874	2.850	5.3	20.9	10 8	1 42.00	+ 8 14.7	2.434	3.418	3.5	21.5
10 18	1 34.53	+14 59.3	1.851	2.845	1.9	20.6	10 18	1 34.51	+ 7 33.7	2.417	3.412	0.6	21.3
10 28	1 25.66	+14 20.0	1.857	2.839	3.8	20.8	10 28	1 27.00	+ 6 53.6	2.429	3.407	3.5	21.5
11 7	1 17.71	+13 39.7	1.891	2.834	7.6	21.0	11 7	1 20.17	+ 6 18.5	2.472	3.401	6.8	21.7
11 17	1 11.46	+13 3.6	1.952	2.828	11.2	21.2	11 17	1 14.62	+ 5 51.8	2.541	3.395	9.7	21.9
11 27	1 7.48	+12 36.7	2.034	2.822	14.3	21.4	11 27	1 10.77	+ 5 35.9	2.633	3.389	12.2	22.1
488129	2015 VH ₁₂₀	10 18.6 327°02'		1°6'/17.4 18			8317	Eurysaces	10 18.6 57°63'		0°0'/18.6 18		
9 18	1 57.41	+ 5 33.5	1.956	2.842	11.5	20.5	9 18	1 47.67	+11 13.0	4.306	5.172		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
450496	2005 <i>YE</i> ₁₄₂	10 18.6 155°33		3°8/22.8 18			146330	2001 <i>NK</i> ₁₇	10 18.6 118°83		4°8/15.1 18		
9 18	1 55.73	+24 8.4	2.397	3.219	11.9	20.7	9 18	2 1.57	-1 38.1	1.710	2.600	12.7	20.4
9 28	1 49.96	+24 6.6	2.323	3.221	9.3	20.5	9 28	1 54.11	-2 23.3	1.669	2.615	9.1	20.2
10 8	1 42.69	+23 48.8	2.272	3.224	6.5	20.3	10 8	1 44.85	-3 5.5	1.654	2.631	5.8	20.1
10 18	1 34.56	+23 15.9	2.249	3.226	4.2	20.2	10 18	1 34.71	-3 38.6	1.666	2.645	5.0	20.0
10 28	1 26.42	+22 30.7	2.255	3.228	4.3	20.2	10 28	1 24.82	-3 57.3	1.706	2.660	7.5	20.2
11 7	1 19.09	+21 38.1	2.289	3.230	6.6	20.3	11 7	1 16.24	-3 58.4	1.772	2.673	10.9	20.5
11 17	1 13.25	+20 43.9	2.351	3.231	9.4	20.5	11 17	1 9.70	-3 41.3	1.863	2.686	14.0	20.7
11 27	1 9.40	+19 53.5	2.437	3.233	11.9	20.7	11 27	1 5.65	-3 7.1	1.973	2.699	16.7	20.9
394965	2008 <i>YO</i> ₁₃₅	10 18.6 238°14		0°4/18.9 18			387658	2002 <i>RX</i> ₂₂₀	10 18.6 125°05		5°3/13.1 18		
9 18	1 57.27	+12 54.5	1.970	2.841	12.2	22.1	9 18	1 55.14	-2 38.3	1.970	2.864	11.1	20.5
9 28	1 51.26	+12 29.4	1.893	2.832	8.7	21.8	9 28	1 49.53	-4 8.0	1.927	2.874	8.0	20.4
10 8	1 43.47	+11 53.3	1.841	2.822	4.7	21.6	10 8	1 42.43	-5 35.1	1.911	2.883	5.6	20.3
10 18	1 34.61	+11 9.4	1.817	2.813	0.6	21.3	10 18	1 34.57	-6 52.1	1.923	2.892	5.6	20.3
10 28	1 25.67	+10 22.5	1.821	2.803	3.9	21.5	10 28	1 26.85	-7 52.5	1.962	2.900	7.9	20.4
11 7	1 17.62	+9 38.5	1.854	2.792	8.0	21.7	11 7	1 20.10	-8 31.9	2.028	2.909	10.7	20.6
11 17	1 11.28	+9 2.6	1.913	2.782	11.8	21.9	11 17	1 14.97	-8 49.0	2.117	2.917	13.4	20.8
11 27	1 7.21	+8 38.9	1.994	2.771	14.9	22.1	11 27	1 11.89	-8 44.6	2.226	2.924	15.7	21.0
374745	2006 <i>SH</i> ₁₆₇	10 18.6 343°92		0°1/18.6 18			146255	2000 <i>YA</i> ₆₃	10 18.6 159°42		6°6/9.9 18		
9 18	1 48.82	+13 58.1	0.935	1.850	18.2	20.2	9 18	1 54.25	-14 16.8	2.809	3.680	9.0	19.9
9 28	1 46.52	+12 57.4	0.874	1.834	13.0	19.9	9 28	1 48.60	-15 24.3	2.772	3.686	7.4	19.8
10 8	1 41.40	+11 31.5	0.832	1.820	7.0	19.5	10 8	1 41.85	-16 22.3	2.762	3.691	6.6	19.7
10 18	1 34.50	+9 48.4	0.811	1.807	0.4	19.0	10 18	1 34.55	-17 6.0	2.779	3.696	7.0	19.8
10 28	1 27.43	+8 1.9	0.812	1.796	6.4	19.4	10 28	1 27.33	-17 31.8	2.824	3.701	8.3	19.9
11 7	1 21.86	+6 27.4	0.835	1.788	12.8	19.7	11 7	1 20.82	-17 38.1	2.893	3.705	10.0	20.0
11 17	1 19.05	+5 17.0	0.877	1.781	18.4	20.0	11 17	1 15.52	-17 25.3	2.986	3.709	11.6	20.1
11 27	1 19.71	+4 37.3	0.935	1.776	23.1	20.3	11 27	1 11.79	-16 54.9	3.097	3.713	13.1	20.3
409058	2003 <i>SU</i> ₁₅₀	10 18.6 352°98		2°6/16.6 17			407267	2010 <i>CW</i> ₅₄	10 18.6 331°18		7°6/24.9 16		
9 18	1 54.39	+4 5.4	1.645	2.544	12.6	20.1	9 18	1 55.59	+30 11.3	1.797	2.606	15.9	20.4
9 28	1 49.39	+3 40.3	1.584	2.538	8.8	19.8	9 28	1 50.63	+30 51.3	1.709	2.587	13.2	20.2
10 8	1 42.51	+3 12.0	1.548	2.533	4.8	19.6	10 8	1 43.39	+31 8.4	1.642	2.569	10.4	20.0
10 18	1 34.57	+2 45.6	1.537	2.529	2.7	19.4	10 18	1 34.66	+30 59.8	1.598	2.552	8.2	19.8
10 28	1 26.61	+2 26.4	1.553	2.526	5.9	19.6	10 28	1 25.58	+30 26.3	1.579	2.535	7.8	19.8
11 7	1 19.70	+2 19.1	1.595	2.524	9.9	19.9	11 7	1 17.46	+29 33.0	1.585	2.519	9.5	19.8
11 17	1 14.64	+2 26.3	1.661	2.522	13.6	20.1	11 17	1 11.36	+28 27.8	1.616	2.504	12.4	20.0
11 27	1 12.00	+2 49.2	1.747	2.522	16.7	20.3	11 27	1 8.05	+27 20.2	1.669	2.490	15.4	20.1
149142	2002 <i>EH</i> ₁₀₄	10 18.6 146°00		1°9/16.3 18			379692	2011 <i>FT</i> ₅₈	10 18.6 258°84		0°0/18.6 18		
9 18	1 54.86	+4 5.3	2.868	3.747	8.5	20.7	9 18	1 58.05	+12 13.2	1.635	2.515	13.7	21.9
9 28	1 48.99	+3 29.3	2.813	3.758	5.9	20.6	9 28	1 52.14	+11 38.7	1.559	2.503	9.8	21.6
10 8	1 42.04	+2 51.2	2.785	3.768	3.2	20.4	10 8	1 44.07	+10 51.3	1.506	2.490	5.2	21.3
10 18	1 34.54	+2 14.6	2.788	3.778	1.9	20.3	10 18	1 34.70	+9 55.0	1.480	2.477	0.3	20.9
10 28	1 27.12	+1 42.8	2.821	3.787	4.0	20.5	10 28	1 25.17	+8 56.5	1.482	2.463	4.7	21.2
11 7	1 20.37	+1 19.0	2.883	3.796	6.7	20.7	11 7	1 16.70	+8 3.2	1.511	2.449	9.5	21.5
11 17	1 14.79	+1 5.1	2.973	3.804	9.1	20.9	11 17	1 10.25	+7 21.5	1.564	2.435	13.7	21.7
11 27	1 10.75	+1 2.4	3.086	3.812	11.2	21.0	11 27	1 6.48	+6 56.1	1.638	2.421	17.3	21.9
460382	2014 <i>SG</i> ₄₃	10 18.6 226°19		5°0/12.9 18			351455	2005 <i>LU</i> ₈	10 18.6 28°46		3°5/15.7 18		
9 18	1 53.28	-5 0.1	2.374	3.265	9.6	21.2	9 18	1 56.89	+1 45.3	1.808	2.701	11.9	20.5
9 28	1 48.12	-6 4.3	2.320	3.262	7.1	21.0	9 28	1 50.96	+1 4.7	1.752	2.702	8.4	20.3
10 8	1 41.67	-7 4.8	2.292	3.259	5.3	20.9	10 8	1 43.28	+0 23.0	1.721	2.703	4.9	20.1
10 18	1 34.52	-7 56.2	2.293	3.257	5.3	20.9	10 18	1 34.65	-0 14.2	1.717	2.704	3.6	20.0
10 28	1 27.41	-8 33.6	2.321	3.254	7.2	21.0	10 28	1 26.08	-0 41.5	1.741	2.704	6.4	20.2
11 7	1 21.04	-8 53.8	2.377	3.251	9.6	21.2	11 7	1 18.55	-0 54.5	1.791	2.705	10.0	20.4
11 17	1 16.00	-8 55.7	2.456	3.248	12.0	21.3	11 17	1 12.81	-0 51.2	1.866	2.706	13.3	20.6
11 27	1 12.72	-8 39.7	2.555	3.245	14.1	21.5	11 27	1 9.36	-0 31.1	1.961	2.707	16.0	20.8
78278	2002 <i>PX</i> ₃₅	10 18.6 98°57		0°7/17.9 18			220648	2004 <i>RP</i> ₈₃	10 18.6 349°52		2°4/20.4 17		
9 18	1 53.53	+9 57.4	2.424	3.301	10.0	20.5	9 18	1 59.47	+16 4.7	1.962	2.820	12.8	19.9
9 28	1 48.22	+9 13.9	2.370	3.313	6.9	20.3	9 28	1 52.87	+16 32.0	1.890	2.818	9.4	19.7
10 8	1 41.69	+8 23.8	2.342	3.326	3.6	20.1	10 8	1 44.36	+16 48.2	1.843	2.816	5.7	19.4
10 18	1 34.52	+7 30.8	2.342	3.338	0.7	19.9	10 18	1 34.72	+16 53.7	1.823	2.814	2.6	19.2
10 28	1 27.45	+6 39.7	2.373	3.350	3.6	20.1	10 28	1 24.98	+16 50.8	1.832	2.812	4.0	19.3
11 7	1 21.16	+5 54.9	2.432	3.362	6.9	20.4	11 7	1 16.20	+16 43.3	1.869	2.811	7.7	19.6
11 17	1 16.21	+5 19.9	2.519	3.374	9.7	20.6	11 17	1 9.21	+16 35.7	1.932	2.810	11.2	19.8
11 27	1 12.98	+4 57.1	2.628	3.386	12.2	20.8	11 27	1 4.63	+16 32.6	2.019	2.810	14.2	20.0
382055	2011 <i>ES</i> ₁₃	10 18.6 246°06		0°7/19.2 18			155331	2006 <i>BD</i> ₁₀₄	10 18.6 3°01		14°3/4.1 18		
9 18	1 58.51	+14 4.8	1.747	2.619	13.4	21.9	9 18	1 56.08	-28 40.6	1.675	2.516	15.4	18.7
9 28	1 52.38	+13 33.8	1.667	2.605	9.7	21.6	9 28	1 50.53	-30 9.4	1.656	2.516	14.5	18.6
10 8	1 44.17	+12 48.8	1.611	2.591	5.4	21.3	10 8	1 43.05	-31 9.8	1.658	2.516	14.4	18.6
10 18	1 34.67	+11 53.1	1.581	2.577	0.9	21.0	10 18	1 34.64	-31 34.0	1.680	2.517	15.1	18.7
10 28	1 25.02	+10 52.7	1.580	2.562	4.3	21.2	10 28	1 26.47	-31 18.7	1.721	2.518	16.4	18.8
11 7	1 16.37	+9 54.9	1.607	2.547	8.9	21.5	11 7	1 19.64	-30 25.2	1.781	2.521	17.9	18.9
11 17	1 9.65	+9 6.3	1.659	2.531	13.1	21.7	11 17	1 14.89	-28 58.6	1.856	2.524	19.4	19.0
11 27	1 5.52	+8 32.3	1.732	2.515	16.6	21.9	11 27	1 12.67	-27 5.5	1.945	2.528	20.7	19.2
518049	2015 <i>XA</i> ₁₁₀	10 18.6 49°79		5°0/13.6 18			98712	2000 <i>XT</i> ₄₂	10 18.6 8°77		6°8/21.9 18		
9 18	1 53.83	-3 46.9	2.116	3.010	10.4	21.1	9 18	2 1.8					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
106493	2000 <i>WM</i> ₂₉	10 18.6 150°17' 9.9"/12.6 18					268175	2004 <i>XO</i> ₃₄	10 18.6 319°14' 5.4"/13.5 18				
9 18	2 8.34	-17 6.9	1.735	2.595	14.1	19.5	9 18	1 55.00	-5 59.6	2.146	3.037	10.5	19.7
9 28	1 58.85	-17 46.6	1.698	2.604	11.6	19.3	9 28	1 49.49	-6 43.2	2.087	3.029	7.8	19.6
10 8	1 47.35	-18 7.8	1.684	2.613	10.1	19.3	10 8	1 42.49	-7 21.7	2.054	3.021	5.8	19.4
10 18	1 34.91	-18 3.7	1.697	2.621	10.2	19.3	10 18	1 34.67	-7 49.7	2.048	3.013	5.7	19.4
10 28	1 22.85	-17 31.1	1.737	2.628	11.8	19.4	10 28	1 26.86	-8 2.7	2.070	3.006	7.6	19.5
11 7	1 12.33	-16 30.8	1.801	2.634	14.2	19.6	11 7	1 19.88	-7 58.0	2.117	2.999	10.3	19.7
11 17	1 4.18	-15 7.1	1.888	2.640	16.5	19.8	11 17	1 14.40	-7 35.0	2.189	2.992	12.9	19.8
11 27	0 58.82	-13 25.5	1.994	2.645	18.6	20.0	11 27	1 10.88	-6 54.7	2.280	2.985	15.2	20.0
342632	2008 <i>UV</i> ₃₄₉	10 18.6 138°31' 0.2"/18.4 18					12411	Tannokayo	10 18.6 293°13' 4.1"/21.7 18				
9 18	1 56.66	+11 59.3	1.736	2.616	13.1	21.5	9 18	1 57.91	+21 34.4	1.433	2.292	16.6	17.3
9 28	1 50.90	+11 13.4	1.675	2.619	9.2	21.2	9 28	1 52.38	+21 26.8	1.360	2.283	12.7	17.0
10 8	1 43.30	+10 15.9	1.639	2.623	4.8	21.0	10 8	1 44.36	+20 56.0	1.307	2.274	8.3	16.7
10 18	1 34.69	+9 11.6	1.629	2.626	0.3	20.6	10 18	1 34.79	+20 3.1	1.279	2.266	4.6	16.5
10 28	1 26.14	+8 7.4	1.648	2.628	4.4	21.0	10 28	1 25.05	+18 53.7	1.276	2.257	5.3	16.5
11 7	1 18.67	+7 10.3	1.694	2.631	8.8	21.2	11 7	1 16.58	+17 37.0	1.300	2.249	9.6	16.8
11 17	1 13.10	+6 25.8	1.766	2.634	12.6	21.5	11 17	1 10.48	+16 23.1	1.347	2.240	14.0	17.0
11 27	1 9.92	+5 57.6	1.858	2.636	15.8	21.7	11 27	1 7.47	+15 21.2	1.415	2.232	17.9	17.2
203661	2002 <i>JY</i> ₄₄	10 18.6 143°93' 0.5"/19.0 18					304198	2006 <i>QA</i> ₉₈	10 18.6 367°2' 2.7"/20.9 16				
9 18	1 58.03	+13 6.0	1.915	2.786	12.5	20.9	9 18	1 54.79	+19 43.3	1.418	2.289	16.0	20.2
9 28	1 51.73	+12 39.6	1.853	2.792	8.9	20.7	9 28	1 49.81	+19 5.4	1.373	2.305	11.8	20.0
10 8	1 43.69	+12 2.2	1.817	2.798	4.8	20.4	10 8	1 42.77	+18 6.3	1.348	2.323	7.2	19.8
10 18	1 34.71	+11 17.4	1.807	2.803	0.7	20.1	10 18	1 34.69	+16 50.9	1.349	2.341	3.1	19.6
10 28	1 25.79	+10 30.2	1.827	2.809	3.9	20.4	10 28	1 26.83	+15 27.1	1.376	2.359	4.5	19.7
11 7	1 17.91	+9 46.6	1.875	2.814	8.0	20.7	11 7	1 20.34	+14 4.8	1.429	2.378	8.8	20.1
11 17	1 11.81	+9 11.4	1.949	2.818	11.5	20.9	11 17	1 16.05	+12 52.7	1.506	2.398	12.9	20.3
11 27	1 7.99	+8 48.5	2.046	2.823	14.5	21.1	11 27	1 14.41	+11 56.8	1.604	2.418	16.3	20.6
407132	2009 <i>SH</i> ₃₅₇	10 18.6 304°22' 0.2"/18.8 17					352929	2009 <i>AK</i> ₁₃	10 18.6 340°24' 0.9"/19.3 18				
9 18	1 53.23	+12 47.5	2.129	3.003	11.2	21.2	9 18	1 54.56	+14 24.8	1.389	2.277	15.2	20.5
9 28	1 48.35	+12 10.3	2.053	2.994	8.0	21.0	9 28	1 49.92	+13 55.6	1.322	2.268	11.0	20.3
10 8	1 41.93	+11 22.6	2.001	2.984	4.3	20.8	10 8	1 43.00	+13 9.9	1.278	2.260	6.1	20.0
10 18	1 34.61	+10 27.8	1.978	2.974	0.4	20.4	10 18	1 34.72	+12 11.9	1.257	2.253	1.2	19.6
10 28	1 27.24	+9 31.1	1.983	2.965	3.7	20.7	10 28	1 26.34	+11 8.9	1.263	2.247	4.8	19.9
11 7	1 20.65	+8 38.3	2.017	2.955	7.5	20.9	11 7	1 19.17	+10 9.7	1.294	2.241	9.8	20.2
11 17	1 15.54	+7 54.4	2.077	2.946	10.9	21.1	11 17	1 14.21	+9 22.1	1.348	2.236	14.4	20.4
11 27	1 12.42	+7 23.0	2.159	2.937	13.8	21.3	11 27	1 12.11	+8 51.5	1.422	2.232	18.2	20.6
217228	2003 <i>AL</i> ₄₂	10 18.6 123°12' 16.9"/ 2.4 17					105886	2000 <i>SP</i> ₁₈₁	10 18.6 350°92' 4.7"/15.1 18				
9 18	2 7.81	+46 44.5	1.228	1.955	25.9	20.1	9 18	1 56.21	-1 15.7	1.663	2.562	12.5	18.9
9 28	2 0.74	+48 12.4	1.170	1.960	23.5	19.9	9 28	1 50.64	-1 54.0	1.607	2.558	8.9	18.7
10 8	1 49.32	+48 55.0	1.125	1.966	20.9	19.8	10 8	1 43.20	-2 30.2	1.576	2.555	5.7	18.5
10 18	1 35.06	+48 41.6	1.095	1.971	18.6	19.6	10 18	1 34.73	-2 58.4	1.571	2.552	4.9	18.4
10 28	1 20.55	+47 28.8	1.083	1.976	17.1	19.6	10 28	1 26.29	-3 12.9	1.592	2.550	7.5	18.6
11 7	1 8.51	+45 25.1	1.091	1.980	17.1	19.6	11 7	1 18.93	-3 9.9	1.639	2.548	11.1	18.8
11 17	1 0.75	+42 47.9	1.119	1.985	18.4	19.7	11 17	1 13.46	-2 48.5	1.709	2.547	14.4	19.0
11 27	0 58.00	+39 58.4	1.166	1.989	20.6	19.8	11 27	1 10.42	-2 9.1	1.798	2.547	17.3	19.2
512841	2016 <i>UW</i> ₁₄₂	10 18.6 126°28' 6.9"/24.8 18					345519	2006 <i>KA</i> ₅₈	10 18.6 251°03' 7.0"/12.9 18				
9 18	2 1.58	+30 9.0	1.927	2.722	15.4	21.0	9 18	1 59.19	-8 30.4	1.862	2.749	12.0	21.1
9 28	1 54.52	+30 42.4	1.859	2.730	12.6	20.9	9 28	1 52.63	-9 23.9	1.803	2.738	9.3	20.9
10 8	1 45.31	+30 52.9	1.813	2.738	9.8	20.7	10 8	1 44.23	-10 9.4	1.768	2.728	7.3	20.7
10 18	1 34.83	+30 38.8	1.792	2.745	7.5	20.6	10 18	1 34.79	-10 40.3	1.760	2.717	7.3	20.7
10 28	1 24.30	+30 1.8	1.797	2.752	7.1	20.6	10 28	1 25.35	-10 51.0	1.780	2.706	9.4	20.8
11 7	1 14.94	+29 7.9	1.830	2.759	8.8	20.7	11 7	1 16.93	-10 38.7	1.824	2.695	12.3	21.0
11 17	1 7.70	+28 4.9	1.888	2.766	11.4	20.9	11 17	1 10.34	-10 3.9	1.891	2.683	15.1	21.2
11 27	1 3.19	+27 1.8	1.970	2.772	14.1	21.1	11 27	1 6.11	-9 8.6	1.977	2.671	17.6	21.3
370429	2002 <i>UZ</i> ₇₈	10 18.6 74°20' 0.2"/18.5 18					516138	2015 <i>VJ</i> ₁₁₁	10 18.6 30°04' 2.3"/20.4 18				
9 18	2 2.07	+10 2.8	1.385	2.271	15.3	20.5	9 18	1 57.44	+16 23.1	1.720	2.587	13.8	20.2
9 28	1 54.93	+9 56.0	1.338	2.284	10.8	20.3	9 28	1 51.52	+16 31.2	1.663	2.595	10.1	20.0
10 8	1 45.49	+9 39.5	1.313	2.298	5.7	20.1	10 8	1 43.67	+16 25.7	1.629	2.604	6.1	19.8
10 18	1 34.84	+9 17.1	1.315	2.311	0.3	19.7	10 18	1 34.77	+16 8.3	1.621	2.614	2.5	19.6
10 28	1 24.39	+8 54.5	1.343	2.325	5.1	20.1	10 28	1 25.91	+15 42.9	1.641	2.624	4.1	19.7
11 7	1 15.47	+8 37.5	1.398	2.338	10.0	20.4	11 7	1 18.19	+15 15.1	1.688	2.634	8.1	20.0
11 17	1 9.01	+8 30.8	1.476	2.351	14.2	20.7	11 17	1 12.44	+14 50.4	1.761	2.645	11.8	20.3
11 27	1 5.53	+8 37.3	1.575	2.365	17.6	21.0	11 27	1 9.18	+14 33.8	1.855	2.656	14.9	20.5
152147	2005 <i>LD</i> ₁₆	10 18.6 48°22' 7.0"/13.3 17					431368	2007 <i>DN</i> ₁₀₃	10 18.6 306°91' 0.1"/18.5 16				
9 18	1 57.68	-3 57.3	1.383	2.287	14.1	19.7	9 18	1 51.18	+11 6.0	2.843	3.715	8.8	21.8
9 28	1 51.84	-5 19.1	1.340	2.290	10.4	19.5	9 28	1 46.64	+10 39.4	2.761	3.702	6.2	21.6
10 8	1 43.86	-6 36.0	1.320	2.293	7.5	19.3	10 8	1 40.95	+10 6.1	2.705	3.688	3.3	21.4
10 18	1 34.74	-7 38.3	1.326	2.296	7.4	19.4	10 18	1 34.61	+9 28.7	2.678	3.675	0.2	21.1
10 28	1 25.78	-8 17.6	1.356	2.299	10.1	19.5	10 28	1 28.20	+8 50.6	2.681	3.662	3.0	21.4
11 7	1 18.18	-8 29.7	1.410	2.303	13.7	19.7	11 7	1 22.35	+8 15.6	2.714	3.648	6.0	21.5
11 17	1 12.84	-8 14.3	1.485	2.306	17.1	20.0	11 17	1 17.57	+7 46.8	2.773	3.635	8.7	21.7
11 27	1 10.25	-7 34.1	1.578	2.310	19.9	20.2	11 27	1 14.28	+7 27.0	2.857	3.622	11.1	21.9
390561	2001 <i>AR</i> ₂₅	10 18.6 2°23' 24.0"/ 7.8 16					57109	2001 <i>OW</i> ₇₄	10 18.6 142°43' 17.6"/30.9 17				
9 18	2 3.26	+49 42.9	0.886	1.640	32.0	19.7	9 18	1 57.95	-22 39.0	1.063	1.950	18.9	18.3
9 28	1 59.13	+52 40.4	0.841	1.638	30.0	19.5	9 28	1 52.60	-26 17.2	1.051	1.951</		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
495328	2014 <i>KP</i> ₃₁		10 18.6 125°24	0°9/17.7 18			23574	1995 <i>BX</i>		10 18.6 338°02	0°1/18.5 18	R	
9 18	1 55.52	+ 9 36.9	2.166	3.044	10.9	21.6	9 18	1 54.02	+11 2.5	1.703	2.590	12.9	17.8
9 28	1 49.77	+ 8 46.1	2.111	3.056	7.6	21.4	9 28	1 49.24	+10 40.8	1.631	2.579	9.1	17.5
10 8	1 42.61	+ 7 47.9	2.082	3.066	3.9	21.2	10 8	1 42.56	+10 9.0	1.583	2.568	4.9	17.3
10 18	1 34.71	+ 6 46.8	2.081	3.077	0.9	21.0	10 18	1 34.74	+ 9 30.7	1.561	2.558	0.3	16.9
10 28	1 26.92	+ 5 48.4	2.110	3.087	4.1	21.2	10 28	1 26.82	+ 8 51.4	1.566	2.548	4.4	17.2
11 7	1 20.03	+ 4 58.0	2.168	3.097	7.7	21.5	11 7	1 19.86	+ 8 17.2	1.598	2.539	8.8	17.4
11 17	1 14.66	+ 4 19.4	2.252	3.106	10.8	21.7	11 17	1 14.72	+ 7 53.2	1.654	2.531	12.8	17.7
11 27	1 11.23	+ 3 55.2	2.359	3.115	13.4	21.9	11 27	1 11.98	+ 7 43.0	1.731	2.524	16.2	17.9
412834	2014 <i>PQ</i> ₄₆		10 18.6 72°30	2°9/15.8 18			144894	2004 <i>SY</i> ₅		10 18.6 317°43	0°8/19.6 17		
9 18	1 54.72	+ 2 52.9	2.087	2.978	10.7	20.6	9 18	1 51.66	+14 17.5	2.723	3.587	9.4	19.5
9 28	1 49.20	+ 2 2.9	2.042	2.991	7.4	20.5	9 28	1 47.03	+13 57.8	2.642	3.576	6.8	19.3
10 8	1 42.30	+ 1 11.3	2.023	3.005	4.2	20.3	10 8	1 41.20	+13 29.5	2.587	3.565	3.8	19.1
10 18	1 34.69	+ 0 23.3	2.031	3.019	3.0	20.2	10 18	1 34.67	+12 54.6	2.560	3.555	0.9	18.8
10 28	1 27.23	+ 0 16.1	2.069	3.033	5.5	20.4	10 28	1 28.08	+12 16.6	2.563	3.545	2.9	19.0
11 7	1 20.68	+ 0 42.7	2.134	3.047	8.7	20.7	11 7	1 22.08	+11 39.3	2.595	3.535	5.9	19.2
11 17	1 15.66	+ 0 54.5	2.224	3.060	11.6	20.9	11 17	1 17.22	+11 6.4	2.654	3.525	8.8	19.4
11 27	1 12.58	+ 0 50.7	2.335	3.074	14.0	21.1	11 27	1 13.94	+10 41.2	2.737	3.516	11.2	19.5
353125	2009 <i>FK</i> ₅₁		10 18.6 29°37	2°3/16.5 18			207892	2008 <i>SG</i> ₁₈₂		10 18.6 292°34	0°5/17.7 18		
9 18	1 54.83	+ 6 35.2	1.809	2.701	12.0	21.4	9 18	1 48.08	+ 7 52.8	4.420	5.293	5.9	20.0
9 28	1 49.56	+ 5 32.8	1.750	2.701	8.3	21.2	9 28	1 44.14	+ 7 32.8	4.349	5.291	4.1	19.9
10 8	1 42.60	+ 4 23.8	1.716	2.702	4.4	20.9	10 8	1 39.54	+ 7 10.2	4.305	5.289	2.1	19.7
10 18	1 34.71	+ 3 14.4	1.710	2.702	2.4	20.8	10 18	1 34.57	+ 6 46.6	4.292	5.287	0.5	19.6
10 28	1 26.87	+ 2 11.6	1.731	2.703	5.5	21.0	10 28	1 29.60	+ 6 24.0	4.309	5.285	2.2	19.7
11 7	1 20.02	+ 1 21.6	1.780	2.703	9.4	21.2	11 7	1 24.97	+ 6 4.4	4.356	5.283	4.2	19.9
11 17	1 14.89	+ 0 48.5	1.853	2.704	12.9	21.5	11 17	1 21.02	+ 5 49.4	4.432	5.281	6.0	20.0
11 27	1 11.99	+ 0 34.2	1.947	2.704	15.8	21.7	11 27	1 17.99	+ 5 40.4	4.533	5.279	7.6	20.1
113944	2002 <i>TP</i> ₂₉₆		10 18.6 112°24	2°4/16.3 18			267657	2002 <i>TL</i> ₇₄		10 18.6 15°07	5°1/21.8 18		
9 18	1 55.48	+ 5 43.0	1.915	2.805	11.6	19.9	9 18	1 58.73	+20 51.7	1.157	2.030	18.7	19.4
9 28	1 49.88	+ 4 39.3	1.863	2.813	8.0	19.7	9 28	1 53.25	+21 18.1	1.103	2.033	14.3	19.2
10 8	1 42.71	+ 3 30.6	1.837	2.822	4.3	19.5	10 8	1 44.91	+21 20.8	1.068	2.037	9.5	18.9
10 18	1 34.73	+ 2 23.0	1.839	2.830	2.5	19.4	10 18	1 34.90	+20 59.6	1.055	2.041	5.5	18.7
10 28	1 26.85	+ 1 22.9	1.869	2.838	5.5	19.6	10 28	1 24.87	+20 19.5	1.067	2.047	6.3	18.8
11 7	1 19.97	+ 0 36.0	1.927	2.845	9.1	19.8	11 7	1 16.48	+19 29.6	1.102	2.054	10.5	19.0
11 17	1 14.76	+ 0 5.5	2.009	2.853	12.4	20.0	11 17	1 10.93	+18 40.1	1.160	2.061	15.1	19.3
11 27	1 11.66	+ 0 6.9	2.113	2.860	15.0	20.2	11 27	1 8.86	+18 0.2	1.236	2.070	19.0	19.6
117536	2005 <i>CT</i> ₆₇		10 18.6 355°99	4°9/23.8 18			242920	2006 <i>OB</i> ₁₇		10 18.6 51°37	4°7/14.5 18		
9 18	1 55.24	+26 54.2	2.259	3.072	12.9	19.8	9 18	1 54.97	+ 1 23.1	1.533	2.437	13.1	19.7
9 28	1 49.81	+27 0.3	2.183	3.071	10.3	19.6	9 28	1 49.67	+ 0 5.7	1.502	2.456	9.1	19.5
10 8	1 42.75	+26 47.9	2.130	3.070	7.6	19.4	10 8	1 42.62	+ 1 34.4	1.496	2.477	5.6	19.4
10 18	1 34.73	+26 17.4	2.102	3.070	5.4	19.3	10 18	1 34.75	+ 2 54.2	1.516	2.498	5.0	19.4
10 28	1 26.66	+25 31.2	2.103	3.070	5.1	19.3	10 28	1 27.16	+ 3 57.0	1.562	2.519	7.8	19.6
11 7	1 19.45	+24 34.6	2.131	3.070	7.1	19.4	11 7	1 20.82	+ 4 37.9	1.634	2.540	11.3	19.9
11 17	1 13.82	+23 33.8	2.186	3.070	9.8	19.6	11 17	1 16.43	+ 4 55.0	1.728	2.561	14.6	20.1
11 27	1 10.30	+22 35.5	2.265	3.070	12.4	19.8	11 27	1 14.39	+ 4 49.2	1.842	2.583	17.2	20.4
476499	2008 <i>FG</i> ₁₃₆		10 18.6 139°14	3°7/15.5 16			266056	2006 <i>QO</i> ₈₃		10 18.6 5°00	0°1/18.6 18		
9 18	1 59.98	+ 1 30.3	1.878	2.766	11.9	22.0	9 18	1 50.90	+11 43.7	0.820	1.743	19.1	19.8
9 28	1 52.99	+ 0 34.0	1.832	2.779	8.3	21.8	9 28	1 48.11	+11 19.2	0.778	1.741	13.6	19.5
10 8	1 44.32	+ 0 23.0	1.811	2.791	4.9	21.6	10 8	1 42.30	+10 36.5	0.753	1.742	7.2	19.2
10 18	1 34.83	+ 1 14.6	1.819	2.803	3.8	21.6	10 18	1 34.75	+ 9 42.7	0.748	1.745	0.4	18.8
10 28	1 25.51	+ 1 54.9	1.855	2.814	6.5	21.8	10 28	1 27.27	+ 8 49.0	0.765	1.750	6.4	19.2
11 7	1 17.32	+ 2 19.8	1.919	2.825	9.9	22.0	11 7	1 21.60	+ 8 6.6	0.802	1.757	12.7	19.6
11 17	1 10.98	+ 2 27.1	2.007	2.834	13.0	22.2	11 17	1 18.92	+ 7 43.5	0.857	1.767	18.1	19.9
11 27	1 6.92	+ 2 16.8	2.116	2.843	15.6	22.5	11 27	1 19.79	+ 7 43.5	0.929	1.779	22.5	20.3
242506	2004 <i>XV</i> ₈₅		10 18.6 277°61	7°8/ 9.9 17			47613	2000 <i>BP</i> ₁₂		10 18.6 179°16	0°2/18.9 18		
9 18	1 55.67	+15 4.1	2.355	3.227	10.4	20.1	9 18	1 54.00	+12 26.4	2.846	3.709	9.1	20.2
9 28	1 49.93	+16 5.3	2.296	3.210	8.7	19.9	9 28	1 48.55	+11 59.3	2.775	3.710	6.4	20.1
10 8	1 42.75	+16 55.8	2.263	3.193	7.8	19.8	10 8	1 41.95	+11 25.0	2.730	3.711	3.4	19.9
10 18	1 34.75	+17 29.6	2.256	3.176	8.2	19.8	10 18	1 34.73	+10 45.8	2.715	3.711	0.4	19.6
10 28	1 26.72	+17 42.1	2.275	3.158	9.8	19.9	10 28	1 27.51	+10 5.3	2.731	3.711	2.9	19.8
11 7	1 19.46	+17 31.3	2.319	3.141	11.8	20.0	11 7	1 20.92	+ 9 27.2	2.776	3.711	5.9	20.0
11 17	1 13.63	+16 58.0	2.385	3.123	13.8	20.2	11 17	1 15.48	+ 8 54.9	2.849	3.710	8.6	20.2
11 27	1 9.69	+16 4.1	2.469	3.105	15.7	20.3	11 27	1 11.60	+ 8 31.1	2.947	3.709	10.9	20.4
135892	2002 <i>TY</i> ₆₅		10 18.6 83°54	0°2/18.8 18			261111	2005 <i>SQ</i> ₂₈₆		10 18.6 37°65	3°8/15.5 18		
9 18	1 57.23	+11 53.4	1.826	2.703	12.7	19.9	9 18	1 57.08	+ 0 2.4	1.904	2.797	11.5	20.6
9 28	1 51.26	+11 31.0	1.767	2.709	9.0	19.7	9 28	1 51.05	+ 0 35.2	1.851	2.800	8.1	20.4
10 8	1 43.51	+10 58.5	1.731	2.714	4.8	19.5	10 8	1 43.37	+ 1 7.0	1.823	2.803	4.9	20.3
10 18	1 34.79	+10 19.5	1.723	2.719	0.4	19.1	10 18	1 34.82	+ 1 32.8	1.823	2.807	3.9	20.2
10 28	1 26.13	+ 9 39.3	1.743	2.724	4.1	19.5	10 28	1 26.34	+ 1 47.9	1.850	2.810	6.4	20.4
11 7	1 18.51	+ 9 3.3	1.791	2.730	8.2	19.7	11 7	1 18.87	+ 1 49.0	1.904	2.814	9.7	20.6
11 17	1 12.71	+ 8 36.4	1.864	2.735	11.9	20.0	11 17	1 13.12	+ 1 34.6	1.983	2.818	12.9	20.8
11 27	1 9.25	+ 8 22.0	1.959	2.740	15.0	20.2	11 27	1 9.56	+ 1 4.8	2.082	2.822	15.5	21.0
21942	Subramanian		10 18.6 161°04										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
122071	2000 <i>HZ</i> ₉		10 18.6 155°09	1°0/17.8 17			401828	1998 <i>SC</i> ₃₁		10 18.7 71°88	3°2/21.6 18		
9 18	1 59.57	+ 8 50.8	1.876	2.755	12.3	20.6	9 18	1 57.26	+20 29.2	2.162	3.004	12.4	21.0
9 28	1 52.83	+ 8 15.4	1.817	2.762	8.6	20.4	9 28	1 51.20	+20 37.7	2.095	3.009	9.4	20.8
10 8	1 44.33	+ 7 32.5	1.784	2.768	4.4	20.2	10 8	1 43.50	+20 31.8	2.052	3.015	6.1	20.6
10 18	1 34.88	+ 6 46.5	1.778	2.774	1.0	19.9	10 18	1 34.86	+20 12.5	2.035	3.020	3.5	20.5
10 28	1 25.51	+ 6 2.9	1.802	2.779	4.6	20.2	10 28	1 26.22	+19 42.7	2.048	3.026	4.0	20.5
11 7	1 17.21	+ 5 27.3	1.853	2.783	8.7	20.5	11 7	1 18.48	+19 7.1	2.089	3.031	7.0	20.7
11 17	1 10.75	+ 5 3.5	1.930	2.787	12.2	20.7	11 17	1 12.37	+18 31.2	2.156	3.037	10.1	20.9
11 27	1 6.63	+ 4 54.2	2.029	2.790	15.2	20.9	11 27	1 8.41	+18 0.0	2.247	3.043	12.8	21.1
177835	2005 <i>NM</i> ₅₉		10 18.6 281°55	1°4/17.4 18			60900	2000 <i>JR</i> ₂₆		10 18.7 245°38	2°5/20.6 18		
9 18	1 55.62	+ 7 49.3	1.915	2.801	11.7	20.7	9 18	1 59.72	+18 7.1	1.795	2.651	13.9	19.7
9 28	1 50.15	+ 7 10.7	1.847	2.795	8.2	20.4	9 28	1 53.34	+17 57.7	1.712	2.637	10.3	19.4
10 8	1 42.96	+ 6 25.2	1.803	2.789	4.3	20.2	10 8	1 44.82	+17 32.1	1.651	2.624	6.4	19.2
10 18	1 34.80	+ 5 37.3	1.788	2.782	1.4	20.0	10 18	1 34.96	+16 51.7	1.618	2.609	2.8	18.9
10 28	1 26.60	+ 4 52.7	1.800	2.776	4.8	20.2	10 28	1 24.89	+16 1.0	1.613	2.594	4.3	19.0
11 7	1 19.32	+ 4 16.7	1.840	2.770	8.7	20.4	11 7	1 15.80	+15 6.6	1.635	2.579	8.5	19.2
11 17	1 13.70	+ 3 53.5	1.906	2.764	12.3	20.6	11 17	1 8.67	+14 15.6	1.683	2.563	12.5	19.4
11 27	1 10.28	+ 3 45.6	1.992	2.758	15.3	20.8	11 27	1 4.16	+13 34.6	1.754	2.547	16.0	19.6
509189	2006 <i>KQ</i> ₇₀		10 18.6 121°92	1°2/19.9 18			76800	2000 <i>OQ</i> ₃₅		10 18.7 302°01	2°0/24.9 17	R	
9 18	1 56.20	+17 7.6	1.992	2.852	12.5	21.7	9 18	2 20.12	+39 22.0	1.031	1.807	27.0	17.5
9 28	1 50.39	+16 10.3	1.933	2.864	9.0	21.5	9 28	2 11.22	+43 2.8	0.972	1.802	24.4	17.3
10 8	1 43.00	+14 58.2	1.899	2.876	5.1	21.3	10 8	1 56.11	+46 11.0	0.929	1.798	22.0	17.1
10 18	1 34.80	+13 35.6	1.893	2.888	1.4	21.1	10 18	1 35.75	+48 24.6	0.904	1.793	20.4	17.0
10 28	1 26.73	+12 9.2	1.917	2.899	3.6	21.3	10 28	1 13.18	+49 28.1	0.899	1.788	20.1	16.9
11 7	1 19.68	+10 46.5	1.969	2.910	7.5	21.5	11 7	0 52.65	+49 22.9	0.912	1.784	21.2	17.0
11 17	1 14.33	+ 9 33.8	2.049	2.921	10.9	21.8	11 17	0 37.69	+48 26.3	0.941	1.780	23.3	17.1
11 27	1 11.12	+ 8 36.0	2.151	2.931	13.8	22.0	11 27	0 30.02	+47 3.2	0.985	1.776	25.7	17.3
357012	1999 <i>VS</i> ₁₃		10 18.6 330°12	3°6/18.1 18			14746	2164 <i>P-L</i>		10 18.7 31°07	2°0/20.0 18		
9 18	2 17.45	- 3 5.2	1.244	2.124	17.2	19.2	9 18	1 57.15	+16 7.8	1.125	2.016	17.8	17.7
9 28	2 7.05	- 1 38.0	1.155	2.096	12.7	18.9	9 28	1 51.90	+15 52.0	1.083	2.028	12.9	17.5
10 8	1 52.68	+ 0 7.0	1.089	2.069	7.4	18.5	10 8	1 44.09	+15 16.3	1.060	2.041	7.4	17.2
10 18	1 35.44	+ 2 10.8	1.051	2.043	3.6	18.2	10 18	1 34.92	+14 25.3	1.061	2.056	2.4	17.0
10 28	1 17.31	+ 4 30.5	1.043	2.018	7.6	18.4	10 28	1 25.97	+13 27.2	1.086	2.071	5.1	17.2
11 7	1 0.57	+ 6 59.8	1.065	1.994	13.5	18.6	11 7	1 18.70	+12 31.9	1.136	2.087	10.3	17.5
11 17	0 47.12	+ 9 31.9	1.113	1.973	19.0	18.9	11 17	1 14.11	+11 47.8	1.207	2.104	15.0	17.9
11 27	0 38.05	+12 3.3	1.181	1.952	23.4	19.1	11 27	1 12.69	+11 20.4	1.297	2.121	18.8	18.2
482898	2014 <i>GW</i> ₄₁		10 18.6 263°20	0°5/18.3 18			108463	2001 <i>KP</i> ₅₅		10 18.7 67°89	3°9/15.8 17		
9 18	2 1.09	+ 8 33.8	1.828	2.706	12.6	20.6	9 18	1 59.78	+ 3 49.8	1.317	2.218	15.0	19.6
9 28	1 54.16	+ 8 36.4	1.753	2.696	8.9	20.4	9 28	1 53.15	+ 2 36.7	1.290	2.244	10.3	19.4
10 8	1 45.18	+ 8 33.0	1.702	2.685	4.7	20.1	10 8	1 44.49	+ 1 21.3	1.287	2.271	5.8	19.2
10 18	1 34.96	+ 8 25.9	1.679	2.675	0.5	19.8	10 18	1 34.94	+ 0 12.4	1.309	2.297	4.1	19.2
10 28	1 24.59	+ 8 18.9	1.684	2.664	4.5	20.1	10 28	1 25.82	- 0 41.6	1.357	2.324	7.4	19.4
11 7	1 15.21	+ 8 16.2	1.718	2.653	8.8	20.3	11 7	1 18.32	- 1 15.1	1.431	2.350	11.6	19.7
11 17	1 7.72	+ 8 21.1	1.778	2.642	12.7	20.5	11 17	1 13.18	- 1 26.2	1.527	2.376	15.3	20.0
11 27	1 2.77	+ 8 36.5	1.859	2.631	16.0	20.7	11 27	1 10.79	- 1 15.6	1.642	2.402	18.2	20.3
208078	1999 <i>VB</i> ₁₆₇		10 18.6 336°32	3°0/20.9 18			420808	2013 <i>HX</i> ₁₆		10 18.7 67°57	2°4/17.3 17		
9 18	1 53.57	+18 56.2	1.337	2.215	16.3	19.9	9 18	2 2.70	+ 6 26.3	1.130	2.031	16.9	20.3
9 28	1 49.45	+18 39.7	1.264	2.201	12.3	19.7	9 28	1 55.60	+ 5 53.2	1.095	2.049	11.7	20.1
10 8	1 42.90	+18 1.2	1.212	2.187	7.6	19.4	10 8	1 45.94	+ 5 13.5	1.081	2.067	6.1	19.8
10 18	1 34.82	+17 3.1	1.183	2.175	3.4	19.1	10 18	1 35.04	+ 4 34.1	1.091	2.086	2.4	19.7
10 28	1 26.56	+15 52.0	1.180	2.163	5.0	19.2	10 28	1 24.54	+ 4 2.8	1.127	2.104	6.7	20.0
11 7	1 19.50	+14 37.7	1.201	2.153	9.8	19.4	11 7	1 15.90	+ 3 46.0	1.188	2.123	11.8	20.3
11 17	1 14.74	+13 30.1	1.245	2.144	14.5	19.6	11 17	1 10.07	+ 3 47.0	1.270	2.141	16.3	20.6
11 27	1 13.00	+12 37.5	1.309	2.135	18.5	19.9	11 27	1 7.51	+ 4 6.5	1.370	2.160	19.8	20.9
301096	2008 <i>UF</i> ₃₅₈		10 18.6 120°37	5°5/24.5 18			378627	2008 <i>FP</i> ₉₇		10 18.7 187°06	0°8/19.3 18		
9 18	1 58.36	+29 11.5	1.967	2.771	14.8	20.7	9 18	1 59.66	+14 23.8	1.794	2.661	13.3	21.7
9 28	1 52.10	+28 55.1	1.902	2.783	11.9	20.5	9 28	1 53.10	+13 51.0	1.725	2.661	9.6	21.4
10 8	1 43.98	+28 14.9	1.859	2.795	8.8	20.4	10 8	1 44.59	+13 4.7	1.681	2.661	5.3	21.2
10 18	1 34.88	+27 11.8	1.841	2.807	6.2	20.2	10 18	1 34.96	+12 8.4	1.664	2.659	1.0	20.9
10 28	1 25.89	+25 50.3	1.851	2.818	5.7	20.2	10 28	1 25.33	+11 8.1	1.676	2.658	4.1	21.1
11 7	1 18.06	+24 18.0	1.889	2.828	7.8	20.4	11 7	1 16.79	+10 10.9	1.716	2.655	8.5	21.4
11 17	1 12.16	+22 43.9	1.953	2.839	10.7	20.6	11 17	1 10.18	+ 9 22.9	1.781	2.652	12.4	21.6
11 27	1 8.70	+21 16.3	2.042	2.849	13.5	20.8	11 27	1 6.08	+ 8 48.9	1.869	2.648	15.6	21.8
359725	2011 <i>UE</i> ₂₅		10 18.7 333°37	0°0/18.7 18			70053	1999 <i>HO</i> ₁		10 18.7 71°08	0°7/18.9 18		
9 18	1 56.87	+11 4.1	1.654	2.538	13.4	20.8	9 18	2 15.52	+ 8 41.5	1.251	2.124	17.5	18.6
9 28	1 51.28	+10 49.8	1.586	2.531	9.5	20.5	9 28	2 4.38	+ 9 42.0	1.215	2.155	12.4	18.4
10 8	1 43.67	+10 25.5	1.542	2.526	5.1	20.3	10 8	1 50.49	+10 34.5	1.204	2.185	6.6	18.2
10 18	1 34.87	+ 9 54.6	1.524	2.520	0.3	19.9	10 18	1 35.32	+11 18.4	1.220	2.216	0.9	17.9
10 28	1 26.00	+ 9 22.4	1.534	2.515	4.5	20.2	10 28	1 20.75	+11 55.3	1.264	2.246	5.3	18.3
11 7	1 18.19	+ 8 54.7	1.570	2.511	9.0	20.5	11 7	1 8.40	+12 28.6	1.337	2.275	10.5	18.7
11 17	1 12.34	+ 8 36.3	1.631	2.506	13.0	20.7	11 17	0 59.31	+13 2.0	1.434	2.305	14.8	19.0
11 27	1 9.04	+ 8 31.0	1.712	2.502	16.4	20.9	11 27	0 53.88	+13 39.2	1.552	2.333	18.2	19.3
395913	2013 <i>AR</i> ₈₇		10 18.7 354°00	3°7/15.7 18			157392	2004 <i>TR</i> ₂₀₇		10 18			

EPHEMERIDES

10 18.7

10 18.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
37940	1998 HA ₄		10 18.7 220°90	2°3/16.6	18		367048	2006 FV ₄₃		10 18.7 248°80	0°4/18.2	17	
9 18	1 58.08	+ 5 0.1	2.016	2.900	11.3	19.7	9 18	1 55.40	+ 9 44.5	2.578	3.450	9.6	21.5
9 28	1 51.83	+ 4 18.4	1.945	2.892	7.9	19.5	9 28	1 49.73	+ 9 23.5	2.496	3.436	6.8	21.3
10 8	1 43.87	+ 3 32.3	1.900	2.884	4.3	19.3	10 8	1 42.71	+ 8 56.2	2.440	3.423	3.6	21.0
10 18	1 34.93	+ 2 46.5	1.884	2.875	2.4	19.1	10 18	1 34.88	+ 8 25.4	2.413	3.409	0.4	20.8
10 28	1 25.94	+ 2 6.5	1.896	2.866	5.3	19.3	10 28	1 26.97	+ 7 54.5	2.416	3.394	3.4	21.0
11 7	1 17.84	+ 1 37.2	1.937	2.857	9.0	19.5	11 7	1 19.69	+ 7 27.4	2.448	3.380	6.7	21.2
11 17	1 11.39	+ 1 21.9	2.003	2.847	12.4	19.7	11 17	1 13.67	+ 7 7.4	2.508	3.365	9.7	21.4
11 27	1 7.13	+ 1 22.3	2.090	2.836	15.3	19.9	11 27	1 9.38	+ 6 57.1	2.591	3.350	12.3	21.5
228116	2008 TK ₈₂		10 18.7 337°86	0°8/20.0	18		152399	2005 UT ₂₈₇		10 18.7 357°46	1°5/17.3	18	
9 18	1 48.99	+15 4.0	4.259	5.110	6.6	20.6	9 18	1 54.44	+ 7 52.3	1.751	2.642	12.4	20.4
9 28	1 44.84	+14 52.6	4.183	5.109	4.7	20.5	9 28	1 49.42	+ 7 10.4	1.690	2.641	8.6	20.1
10 8	1 39.96	+14 35.6	4.134	5.109	2.7	20.3	10 8	1 42.64	+ 6 21.2	1.654	2.640	4.5	19.9
10 18	1 34.69	+14 14.3	4.115	5.109	0.9	20.2	10 18	1 34.88	+ 5 29.8	1.644	2.639	1.6	19.7
10 28	1 29.40	+13 50.5	4.127	5.108	1.9	20.2	10 28	1 27.12	+ 4 42.5	1.662	2.639	5.0	19.9
11 7	1 24.50	+13 26.4	4.169	5.108	3.9	20.4	11 7	1 20.37	+ 4 5.1	1.707	2.639	9.1	20.2
11 17	1 20.30	+13 4.2	4.240	5.108	5.8	20.5	11 17	1 15.38	+ 3 41.8	1.776	2.639	12.8	20.4
11 27	1 17.11	+12 45.9	4.336	5.108	7.5	20.7	11 27	1 12.67	+ 3 34.8	1.866	2.640	15.8	20.6
493647	2015 RB ₃		10 18.7 58°35	5°4/23.1	18		172146	2002 JJ ₁₄₉		10 18.7 158°79	10°3/30.9	18	
9 18	1 59.94	+24 59.5	1.809	2.637	15.0	20.7	9 18	2 4.24	+43 56.2	2.014	2.711	17.8	20.2
9 28	1 53.45	+25 28.1	1.743	2.642	11.8	20.5	9 28	1 56.61	+44 3.2	1.938	2.719	15.7	20.1
10 8	1 44.84	+25 36.9	1.700	2.648	8.5	20.4	10 8	1 46.53	+43 37.1	1.880	2.726	13.5	19.9
10 18	1 35.00	+25 24.9	1.682	2.655	5.9	20.2	10 18	1 35.12	+42 34.5	1.843	2.733	11.4	19.8
10 28	1 25.11	+24 54.8	1.691	2.661	5.8	20.2	10 28	1 23.83	+40 56.9	1.830	2.738	10.3	19.8
11 7	1 16.37	+24 12.3	1.727	2.667	8.4	20.4	11 7	1 14.05	+38 51.8	1.844	2.743	10.6	19.8
11 17	1 9.69	+23 24.8	1.789	2.674	11.6	20.6	11 17	1 6.79	+36 30.5	1.884	2.747	12.2	19.9
11 27	1 5.68	+22 39.9	1.873	2.680	14.6	20.8	11 27	1 2.60	+34 5.9	1.949	2.750	14.3	20.1
346485	2008 UY ₃₈		10 18.7 40°11	3°3/21.6	18		516053	2015 TO ₁₅₁		10 18.7 56°79	2°5/20.6	18	
9 18	1 55.10	+21 48.5	1.375	2.239	16.8	20.7	9 18	2 0.22	+16 51.4	1.879	2.735	13.3	21.0
9 28	1 50.21	+21 0.8	1.323	2.251	12.6	20.5	9 28	1 53.47	+17 12.0	1.814	2.741	9.8	20.8
10 8	1 43.12	+19 48.2	1.293	2.264	7.9	20.3	10 8	1 44.80	+17 19.9	1.774	2.746	6.0	20.6
10 18	1 34.89	+18 15.3	1.287	2.277	3.8	20.1	10 18	1 35.03	+17 15.9	1.761	2.752	2.8	20.4
10 28	1 26.84	+16 31.4	1.307	2.290	4.7	20.2	10 28	1 25.23	+17 2.7	1.776	2.757	4.1	20.5
11 7	1 20.20	+14 47.9	1.353	2.304	9.1	20.5	11 7	1 16.49	+16 45.1	1.820	2.763	7.8	20.8
11 17	1 15.85	+13 15.3	1.424	2.319	13.2	20.8	11 17	1 9.66	+16 28.1	1.889	2.769	11.3	21.0
11 27	1 14.27	+12 1.1	1.516	2.334	16.9	21.0	11 27	1 5.30	+16 16.6	1.982	2.775	14.4	21.2
479759	2014 EN ₂₃		10 18.7 175°36	3°2/15.9	18		481362	2006 FT ₅₀		10 18.7 198°92	6°7/28.7	18	
9 18	1 59.65	+ 0 36.0	2.260	3.141	10.4	21.9	9 18	1 57.82	+39 48.1	3.311	4.010	11.4	22.2
9 28	1 52.68	+ 0 7.3	2.200	3.144	7.3	21.7	9 28	1 51.44	+40 6.3	3.220	4.006	9.9	22.1
10 8	1 44.22	+ 0 21.1	2.167	3.146	4.3	21.6	10 8	1 43.62	+40 6.0	3.149	4.001	8.4	22.0
10 18	1 34.96	+ 0 45.2	2.162	3.147	3.3	21.5	10 18	1 34.96	+39 45.8	3.104	3.996	7.2	21.9
10 28	1 25.75	+ 1 0.8	2.188	3.148	5.6	21.6	10 28	1 26.20	+39 6.2	3.085	3.991	6.7	21.9
11 7	1 17.43	+ 1 4.9	2.242	3.149	8.6	21.8	11 7	1 18.13	+38 10.4	3.093	3.985	7.1	21.9
11 17	1 10.65	+ 0 55.9	2.322	3.148	11.5	22.0	11 17	1 11.40	+37 2.9	3.129	3.978	8.2	21.9
11 27	1 5.89	+ 0 33.6	2.424	3.147	14.0	22.2	11 27	1 6.49	+35 49.7	3.191	3.971	9.7	22.1
356998	1998 SD ₁₆₃		10 18.7 51°25	1°8/17.6	18		448534	2010 PP ₃₃		10 18.7 29°64	5°4/23.7	18	
9 18	2 5.38	+ 3 15.4	1.857	2.734	12.5	19.1	9 18	1 55.65	+26 19.1	1.717	2.548	15.5	20.2
9 28	1 56.77	+ 3 43.3	1.812	2.755	8.7	18.9	9 28	1 50.44	+26 19.4	1.656	2.557	12.3	20.0
10 8	1 46.37	+ 4 10.6	1.793	2.776	4.6	18.7	10 8	1 43.24	+25 56.6	1.617	2.566	8.8	19.8
10 18	1 35.09	+ 4 39.1	1.803	2.797	1.8	18.5	10 18	1 34.93	+25 11.6	1.602	2.575	6.0	19.6
10 28	1 24.07	+ 5 10.7	1.844	2.819	4.8	18.8	10 28	1 26.67	+24 8.6	1.613	2.585	5.7	19.7
11 7	1 14.34	+ 5 47.1	1.913	2.840	8.6	19.1	11 7	1 19.59	+22 55.3	1.651	2.596	8.3	19.8
11 17	1 6.65	+ 6 29.3	2.010	2.862	12.0	19.3	11 17	1 14.52	+21 40.4	1.714	2.607	11.5	20.1
11 27	1 1.47	+ 7 18.1	2.129	2.884	14.7	19.6	11 27	1 12.00	+20 32.1	1.800	2.618	14.6	20.3
358968	2008 RM ₉₄		10 18.7 351°43	0°5/17.9	18		455100	2015 UC ₇₇		10 18.7 310°25	3°5/15.8	17	
9 18	1 48.11	+ 9 12.0	3.831	4.704	6.7	20.9	9 18	1 56.63	+ 0 40.4	1.940	2.832	11.3	20.7
9 28	1 44.28	+ 8 41.6	3.761	4.703	4.6	20.7	9 28	1 50.93	+ 0 13.3	1.867	2.816	8.0	20.5
10 8	1 39.69	+ 8 7.2	3.717	4.701	2.4	20.6	10 8	1 43.47	+ 0 13.8	1.819	2.800	4.8	20.2
10 18	1 34.68	+ 7 31.1	3.704	4.700	0.5	20.4	10 18	1 34.96	+ 0 36.3	1.798	2.784	3.6	20.1
10 28	1 29.67	+ 6 55.9	3.721	4.699	2.4	20.6	10 28	1 26.34	+ 0 49.3	1.805	2.768	6.2	20.3
11 7	1 25.07	+ 6 24.0	3.768	4.698	4.7	20.7	11 7	1 18.58	+ 0 49.1	1.839	2.753	9.8	20.5
11 17	1 21.23	+ 5 57.7	3.843	4.697	6.7	20.9	11 17	1 12.47	+ 0 33.8	1.898	2.738	13.1	20.6
11 27	1 18.45	+ 5 38.9	3.943	4.696	8.5	21.0	11 27	1 8.57	+ 0 2.8	1.977	2.724	16.0	20.8
127373	2002 JT ₁₄₅		10 18.7 57°75	7°8/10.1	18		184963	2005 WK ₁₅₆		10 18.7 288°32	2°6/14.9	18	
9 18	1 53.63	-11 41.0	2.017	2.906	11.1	19.1	9 18	1 50.33	+ 1 32.3	3.032	3.920	7.8	20.1
9 28	1 48.54	-13 14.5	1.989	2.917	9.0	19.0	9 28	1 46.02	+ 0 39.0	2.957	3.905	5.5	20.0
10 8	1 42.03	-14 36.9	1.986	2.929	7.8	19.0	10 8	1 40.69	+ 0 15.6	2.910	3.890	3.3	19.8
10 18	1 34.82	-15 41.1	2.009	2.941	8.3	19.0	10 18	1 34.78	+ 1 7.8	2.892	3.875	2.7	19.7
10 28	1 27.77	-16 21.7	2.058	2.953	10.1	19.2	10 28	1 28.83	+ 1 53.6	2.903	3.860	4.6	19.8
11 7	1 21.67	-16 36.6	2.131	2.965	12.2	19.3	11 7	1 23.37	+ 2 29.7	2.943	3.845	7.0	20.0
11 17	1 17.13	-16 26.6	2.225	2.977	14.3	19.5	11 17	1 18.89	+ 2 53.7	3.010	3.830	9.3	20.1
11 27	1 14.54	-15 54.2	2.336	2.989	16.1	19.7	11 27	1 15.77	+ 3 4.4	3.099	3.815	11.3	20.3
380238	2001 TY ₁₄₀		10 18.7 33°37	3°3/16.6	18		238586	2004 YK ₂		10 18.7 265			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
295643	2008 <i>SR</i> ₂₇₃		10 18.7 284°52	5°1/14.8	18		221005	2005 <i>NH</i> ₁₂₂		10 18.7 97°05	0°5/18.3	16	
9 18	1 58.34	- 2 10.6	1.738	2.632	12.3	20.3	9 18	2 0.00	+11 18.2	1.536	2.418	14.3	21.1
9 28	1 52.27	- 2 54.7	1.670	2.618	8.9	20.1	9 28	1 53.34	+10 34.5	1.491	2.436	10.0	20.8
10 8	1 44.23	- 3 36.8	1.627	2.603	5.9	19.9	10 8	1 44.70	+ 9 39.6	1.469	2.453	5.2	20.6
10 18	1 35.02	- 4 10.5	1.610	2.589	5.3	19.8	10 18	1 35.05	+ 8 39.1	1.474	2.470	0.5	20.3
10 28	1 25.72	- 4 29.7	1.621	2.575	7.9	20.0	10 28	1 25.65	+ 7 40.3	1.507	2.487	4.8	20.7
11 7	1 17.41	- 4 30.4	1.658	2.560	11.4	20.1	11 7	1 17.62	+ 6 50.4	1.566	2.503	9.4	21.0
11 17	1 10.98	- 4 11.1	1.718	2.546	14.8	20.3	11 17	1 11.76	+ 6 14.5	1.650	2.519	13.3	21.3
11 27	1 7.03	- 3 32.3	1.797	2.531	17.8	20.5	11 27	1 8.56	+ 5 55.6	1.755	2.534	16.5	21.5
192285	1981 <i>EU</i> ₁₂		10 18.7 230°29	0°6/19.3	18		165593	2001 <i>FU</i> ₃₁		10 18.7 307°91	4°3/15.8	18	
9 18	1 57.15	+14 11.3	2.013	2.880	12.1	20.8	9 18	2 1.04	- 1 20.7	1.694	2.585	12.8	19.8
9 28	1 51.27	+13 36.4	1.935	2.871	8.7	20.6	9 28	1 54.13	- 1 36.9	1.632	2.579	9.2	19.5
10 8	1 43.64	+12 49.0	1.881	2.861	4.8	20.4	10 8	1 45.19	- 1 50.2	1.595	2.574	5.7	19.3
10 18	1 34.98	+11 52.5	1.855	2.851	0.8	20.1	10 18	1 35.10	- 1 55.8	1.585	2.569	4.5	19.2
10 28	1 26.24	+10 52.3	1.859	2.841	3.8	20.3	10 28	1 25.00	- 1 49.1	1.602	2.563	7.1	19.4
11 7	1 18.37	+ 9 54.5	1.891	2.830	7.9	20.5	11 7	1 16.03	- 1 27.3	1.646	2.558	10.8	19.6
11 17	1 12.16	+ 9 5.1	1.949	2.818	11.5	20.7	11 17	1 9.08	- 0 49.8	1.714	2.553	14.4	19.8
11 27	1 8.17	+ 8 28.6	2.030	2.806	14.6	20.9	11 27	1 4.71	+ 0 2.8	1.803	2.549	17.3	20.0
487348	2014 <i>QT</i> ₂₀₇		10 18.7 138°73	0°8/19.5	18		461193	2015 <i>VK</i> ₁₀₀		10 18.7 279°96	3°4/15.4	18	
9 18	1 54.68	+14 24.1	2.316	3.180	10.8	21.5	9 18	1 55.11	+ 1 8.6	2.149	3.040	10.4	21.5
9 28	1 49.28	+13 55.4	2.249	3.183	7.8	21.3	9 28	1 49.69	+ 0 24.8	2.082	3.030	7.4	21.3
10 8	1 42.47	+13 16.4	2.208	3.187	4.3	21.1	10 8	1 42.75	- 0 19.8	2.040	3.020	4.4	21.1
10 18	1 34.91	+12 30.0	2.194	3.190	0.9	20.9	10 18	1 34.94	- 1 0.6	2.026	3.011	3.5	21.1
10 28	1 27.36	+11 40.6	2.210	3.192	3.2	21.1	10 28	1 27.10	- 1 32.3	2.040	3.001	5.9	21.2
11 7	1 20.60	+10 53.2	2.255	3.195	6.7	21.3	11 7	1 20.04	- 1 51.0	2.083	2.991	9.1	21.4
11 17	1 15.26	+10 12.3	2.327	3.198	9.9	21.5	11 17	1 14.46	- 1 54.5	2.149	2.981	12.1	21.6
11 27	1 11.79	+ 9 41.6	2.423	3.200	12.5	21.7	11 27	1 10.84	- 1 42.0	2.237	2.972	14.7	21.7
460248	2014 <i>QV</i> ₂₇₃		10 18.7 42°37	4°3/14.6	18		132471	2002 <i>JL</i> ₁₁		10 18.7 33°62	3°6/21.2	18	
9 18	1 55.56	- 2 40.0	2.186	3.076	10.3	20.8	9 18	1 56.93	+19 55.1	1.031	1.916	19.5	18.4
9 28	1 49.88	- 3 19.8	2.133	3.079	7.4	20.6	9 28	1 51.96	+19 35.8	0.990	1.930	14.5	18.1
10 8	1 42.77	- 3 56.8	2.107	3.081	5.0	20.5	10 8	1 44.23	+18 49.9	0.968	1.944	9.0	17.9
10 18	1 34.92	- 4 26.2	2.108	3.084	4.5	20.5	10 18	1 35.03	+17 41.7	0.968	1.960	4.1	17.7
10 28	1 27.14	- 4 43.6	2.137	3.086	6.5	20.6	10 28	1 26.10	+16 20.9	0.992	1.976	5.5	17.8
11 7	1 20.21	- 4 46.2	2.193	3.089	9.4	20.8	11 7	1 19.01	+15 0.3	1.039	1.994	10.6	18.2
11 17	1 14.76	- 4 33.0	2.274	3.092	12.0	21.0	11 17	1 14.78	+13 50.7	1.108	2.012	15.4	18.5
11 27	1 11.22	- 4 4.3	2.376	3.094	14.3	21.1	11 27	1 13.90	+13 0.0	1.195	2.031	19.4	18.8
40121	1998 <i>QA</i> ₂₉		10 18.7 89°63	4°1/14.5	18		49150	1998 <i>SO</i> ₅₀		10 18.7 249°51	0°8/19.3	18	
9 18	1 54.64	- 1 7.3	2.175	3.067	10.3	18.9	9 18	2 0.29	+13 24.3	1.753	2.623	13.5	19.2
9 28	1 49.19	- 2 5.5	2.130	3.077	7.3	18.7	9 28	1 53.79	+13 10.4	1.671	2.609	9.7	18.9
10 8	1 42.39	- 3 2.2	2.110	3.087	4.8	18.6	10 8	1 45.13	+12 44.2	1.614	2.594	5.4	18.7
10 18	1 34.90	- 3 52.0	2.119	3.096	4.3	18.6	10 18	1 35.11	+12 8.3	1.583	2.579	1.0	18.3
10 28	1 27.52	- 4 29.8	2.156	3.106	6.4	18.7	10 28	1 24.88	+11 27.5	1.581	2.563	4.3	18.5
11 7	1 21.01	- 4 52.0	2.220	3.116	9.2	18.9	11 7	1 15.63	+10 48.2	1.606	2.547	8.9	18.8
11 17	1 15.96	- 4 57.4	2.309	3.125	11.9	19.1	11 17	1 8.35	+10 16.3	1.657	2.530	13.0	19.0
11 27	1 12.78	- 4 45.8	2.418	3.135	14.1	19.3	11 27	1 3.70	+ 9 56.5	1.730	2.513	16.5	19.2
393727	2004 <i>XL</i> ₁₃₆		10 18.7 238°27	5°4/23.9	18		428671	2008 <i>GM</i> ₁₄₆		10 18.7 98°63	4°6/14.9	16	
9 18	1 58.26	+27 37.0	2.014	2.825	14.3	21.4	9 18	1 58.32	+ 1 15.4	1.525	2.424	13.4	21.5
9 28	1 52.25	+27 35.3	1.928	2.815	11.5	21.0	9 28	1 52.17	+ 0 1.4	1.484	2.436	9.4	21.3
10 8	1 44.25	+27 11.7	1.864	2.805	8.4	21.2	10 8	1 44.09	- 1 13.3	1.466	2.447	5.7	21.1
10 18	1 35.03	+26 25.9	1.825	2.794	5.9	20.8	10 18	1 35.03	- 2 20.6	1.475	2.458	4.8	21.1
10 28	1 25.65	+25 21.0	1.814	2.783	5.7	20.8	10 28	1 26.17	- 3 12.5	1.510	2.469	7.8	21.3
11 7	1 17.23	+24 3.4	1.831	2.771	8.0	20.9	11 7	1 18.61	- 3 43.9	1.572	2.480	11.5	21.6
11 17	1 10.66	+22 41.4	1.875	2.759	11.1	21.1	11 17	1 13.14	- 3 52.7	1.655	2.490	15.0	21.8
11 27	1 6.56	+21 23.5	1.942	2.747	14.2	21.2	11 27	1 10.23	- 3 39.6	1.758	2.501	17.8	22.0
3782	Celle		10 18.7 134°90	2°9/21.2	18		506283	2016 <i>UR</i> ₉₁		10 18.7 161°99	0°9/17.9	18	
9 18	1 59.13	+20 5.9	1.712	2.564	14.6	16.6	9 18	1 58.69	+ 8 55.7	1.974	2.852	11.8	21.7
9 28	1 52.81	+19 45.0	1.649	2.571	10.9	16.4	9 28	1 52.23	+ 8 24.9	1.913	2.856	8.3	21.5
10 8	1 44.48	+19 5.3	1.609	2.578	6.8	16.2	10 8	1 44.10	+ 7 46.8	1.876	2.860	4.3	21.2
10 18	1 35.04	+18 9.3	1.595	2.585	3.3	16.0	10 18	1 35.04	+ 7 5.6	1.868	2.864	0.9	21.0
10 28	1 25.66	+17 2.7	1.609	2.591	4.3	16.1	10 28	1 26.03	+ 6 26.3	1.889	2.867	4.4	21.3
11 7	1 17.47	+15 53.3	1.651	2.597	8.2	16.3	11 7	1 18.00	+ 5 53.9	1.939	2.869	8.3	21.5
11 17	1 11.34	+14 49.0	1.719	2.602	12.0	16.6	11 17	1 11.70	+ 5 32.4	2.014	2.872	11.7	21.7
11 27	1 7.81	+13 56.1	1.809	2.608	15.3	16.8	11 27	1 7.62	+ 5 24.2	2.111	2.873	14.6	21.9
380122	1996 <i>AZ</i> ₁₅		10 18.7 78°33	6°5/13.9	18		90309	2003 <i>FZ</i> ₁₅		10 18.7 81°01	4°4/23.1	18	
9 18	1 59.40	- 3 45.1	1.431	2.331	14.0	20.7	9 18	1 59.42	+24 50.6	2.171	2.989	13.1	20.0
9 28	1 52.96	- 4 55.3	1.396	2.345	10.2	20.5	9 28	1 52.66	+25 1.2	2.118	3.013	10.2	19.9
10 8	1 44.49	- 5 59.7	1.385	2.358	7.2	20.4	10 8	1 44.27	+24 54.3	2.089	3.037	7.2	19.7
10 18	1 35.03	- 6 50.0	1.399	2.371	6.8	20.4	10 18	1 35.05	+24 30.4	2.087	3.060	4.8	19.6
10 28	1 25.85	- 7 19.0	1.439	2.384	9.4	20.6	10 28	1 25.96	+23 52.6	2.113	3.083	4.8	19.7
11 7	1 18.10	- 7 23.4	1.503	2.398	12.9	20.8	11 7	1 17.93	+23 6.4	2.167	3.106	7.0	19.9
11 17	1 12.58	- 7 3.5	1.589	2.411	16.1	21.1	11 17	1 11.65	+22 17.8	2.249	3.129	9.8	20.1
11 27	1 9.74	- 6 21.7	1.693	2.424	18.8	21.3	11 27	1 7.59	+21 32.6	2.355	3.151	12.3	20.3
109284	2001 <i>QP</i> ₁₂₀		10 18.7 59°90	4°8/23.2	18		99792	2002 <i>KN</i> ₄		10 18.7 127°65			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
60436	2000 <i>CY</i> ₇₀	10 18.7 252°65		1°3/17.3 18			154473	2003 <i>DM</i> ₂₄	10 18.7 250°47		0°2/18.9 18		
9 18	1 54.46	+10 3.1	1.938	2.821	11.8	18.9	9 18	1 58.72	+12 32.0	1.735	2.611	13.3	21.6
9 28	1 49.38	+8 50.3	1.866	2.813	8.2	18.7	9 28	1 52.65	+12 4.3	1.658	2.599	9.5	21.3
10 8	1 42.64	+7 26.9	1.820	2.805	4.2	18.4	10 8	1 44.52	+11 24.4	1.605	2.587	5.2	21.0
10 18	1 34.95	+5 58.6	1.801	2.796	1.3	18.2	10 18	1 35.12	+10 35.8	1.578	2.574	0.5	20.6
10 28	1 27.22	+4 33.0	1.812	2.787	4.8	18.4	10 28	1 25.58	+9 44.3	1.580	2.561	4.4	20.9
11 7	1 20.38	+3 17.4	1.850	2.778	8.8	18.7	11 7	1 17.03	+8 56.7	1.609	2.548	9.0	21.2
11 17	1 15.15	+2 17.4	1.915	2.769	12.4	18.9	11 17	1 10.41	+8 19.0	1.663	2.535	13.1	21.4
11 27	1 12.06	+1 36.4	2.000	2.760	15.4	19.1	11 27	1 6.36	+7 55.6	1.739	2.521	16.5	21.6
523297	2017 <i>BK</i> ₈₂	10 18.7 27°71		3°6/22.2 18			484280	2007 <i>LF</i> ₆	10 18.7 159°77		11°0/4.1 18		
9 18	1 56.30	+22 15.3	2.128	2.964	12.7	20.7	9 18	1 57.18	-30 15.9	2.533	3.342	11.8	21.4
9 28	1 50.64	+22 16.5	2.056	2.965	9.8	20.5	9 28	1 50.94	-31 27.6	2.514	3.344	11.1	21.3
10 8	1 43.30	+21 1.6	2.007	2.966	6.6	20.3	10 8	1 43.32	-32 18.5	2.518	3.346	11.0	21.3
10 18	1 35.00	+21 31.4	1.985	2.967	4.0	20.1	10 18	1 35.03	-32 43.5	2.544	3.348	11.6	21.4
10 28	1 26.65	+20 49.1	1.992	2.969	4.3	20.1	10 28	1 26.91	-32 39.7	2.592	3.350	12.5	21.4
11 7	1 19.19	+20 0.2	2.026	2.970	7.1	20.3	11 7	1 19.74	-32 7.9	2.659	3.351	13.6	21.5
11 17	1 13.37	+19 10.7	2.087	2.971	10.2	20.5	11 17	1 14.11	-31 10.7	2.745	3.353	14.8	21.6
11 27	1 9.72	+18 26.3	2.172	2.973	13.0	20.7	11 27	1 10.42	-29 52.2	2.845	3.354	15.7	21.8
67214	2000 <i>DC</i> ₄₇	10 18.7 0°80		0°4/18.4 18			66557	1999 <i>RN</i> ₁₃₃	10 18.7 66°48		1°9/16.9 18		
9 18	1 53.44	+10 52.2	1.742	2.630	12.6	18.4	9 18	1 55.90	+9 45.3	1.514	2.406	13.9	18.8
9 28	1 48.77	+10 20.5	1.681	2.628	8.9	18.1	9 28	1 50.45	+8 10.6	1.475	2.426	9.6	18.6
10 8	1 42.35	+9 39.1	1.643	2.628	4.7	17.9	10 8	1 43.17	+6 26.0	1.460	2.446	4.9	18.4
10 18	1 34.93	+8 52.1	1.631	2.628	0.4	17.5	10 18	1 35.03	+4 40.3	1.473	2.467	2.0	18.2
10 28	1 27.52	+8 5.5	1.647	2.628	4.3	17.9	10 28	1 27.16	+3 3.4	1.513	2.488	5.8	18.5
11 7	1 21.09	+7 25.2	1.690	2.630	8.6	18.1	11 7	1 20.59	+1 43.7	1.581	2.508	10.0	18.8
11 17	1 16.41	+6 56.3	1.757	2.632	12.3	18.4	11 17	1 16.03	+0 46.0	1.672	2.529	13.8	19.1
11 27	1 14.01	+6 41.8	1.846	2.635	15.4	18.6	11 27	1 13.91	+0 12.2	1.783	2.549	16.8	19.4
55214	2001 <i>RJ</i> ₄₉	10 18.7 232°94		4°3/22.1 18			116687	2004 <i>CE</i> ₇₈	10 18.7 103°32		2°1/16.9 18		
9 18	2 1.17	+22 23.4	1.821	2.658	14.5	19.6	9 18	2 0.05	+6 53.0	1.599	2.487	13.5	19.6
9 28	1 54.44	+22 36.9	1.740	2.649	11.3	19.4	9 28	1 53.31	+6 0.3	1.556	2.505	9.4	19.4
10 8	1 45.49	+22 32.0	1.681	2.639	7.7	19.2	10 8	1 44.69	+5 1.5	1.537	2.522	4.9	19.2
10 18	1 35.15	+22 8.3	1.648	2.629	4.7	19.0	10 18	1 35.14	+4 2.7	1.546	2.539	2.2	19.0
10 28	1 24.59	+21 28.8	1.643	2.619	5.1	19.0	10 28	1 25.83	+3 11.1	1.583	2.556	5.7	19.3
11 7	1 15.06	+20 39.5	1.666	2.608	8.4	19.2	11 7	1 17.84	+2 32.6	1.646	2.572	9.8	19.6
11 17	1 7.55	+19 47.8	1.715	2.597	12.1	19.4	11 17	1 11.94	+2 10.8	1.734	2.588	13.5	19.8
11 27	1 2.77	+19 1.4	1.786	2.586	15.5	19.6	11 27	1 8.57	+2 7.0	1.842	2.603	16.5	20.1
77413	2001 <i>FO</i> ₁₇₅	10 18.7 138°17		6°7/13.5 18			69430	1996 <i>GA</i> ₁	10 18.7 147°85		0°3/18.4 18		
9 18	1 59.99	-8 19.2	1.857	2.743	12.1	18.9	9 18	1 54.74	+10 39.9	2.782	3.649	9.1	20.5
9 28	1 53.15	-9 2.7	1.810	2.746	9.2	18.7	9 28	1 49.11	+10 9.9	2.719	3.658	6.4	20.4
10 8	1 44.57	-9 37.6	1.788	2.749	7.1	18.6	10 8	1 42.35	+9 33.7	2.683	3.666	3.3	20.2
10 18	1 35.09	-9 57.9	1.793	2.752	7.0	18.6	10 18	1 34.99	+8 54.1	2.677	3.673	0.3	19.9
10 28	1 25.74	-9 58.9	1.825	2.755	8.9	18.7	10 28	1 27.67	+8 14.6	2.701	3.680	3.1	20.2
11 7	1 17.51	-9 38.7	1.882	2.757	11.7	18.9	11 7	1 21.03	+7 39.1	2.755	3.687	6.1	20.4
11 17	1 11.14	-8 58.2	1.963	2.760	14.4	19.1	11 17	1 15.58	+7 10.5	2.837	3.693	8.8	20.6
11 27	1 7.10	-7 59.6	2.063	2.762	16.8	19.3	11 27	1 11.70	+6 51.4	2.943	3.699	11.0	20.8
331885	2004 <i>ET</i> ₆	10 18.7 123°83		0°8/18.0 17			79952	1999 <i>CZ</i> ₉₅	10 18.7 276°21		3°7/21.6 18		
9 18	1 58.27	+11 7.3	1.621	2.504	13.7	21.3	9 18	1 59.41	+20 45.4	1.987	2.828	13.3	19.7
9 28	1 52.15	+10 10.4	1.567	2.513	9.6	21.1	9 28	1 53.12	+21 3.8	1.898	2.812	10.2	19.5
10 8	1 44.11	+9 2.1	1.538	2.522	5.0	20.9	10 8	1 44.80	+21 6.9	1.833	2.795	6.8	19.3
10 18	1 35.06	+7 48.3	1.535	2.531	0.8	20.6	10 18	1 35.17	+20 54.6	1.795	2.779	4.0	19.1
10 28	1 26.13	+6 36.8	1.560	2.539	4.9	20.9	10 28	1 25.26	+20 29.1	1.785	2.762	4.6	19.1
11 7	1 18.43	+5 35.1	1.613	2.547	9.3	21.2	11 7	1 16.19	+19 55.2	1.803	2.745	7.9	19.2
11 17	1 12.75	+4 49.0	1.690	2.555	13.2	21.4	11 17	1 8.91	+19 19.1	1.847	2.728	11.5	19.4
11 27	1 9.59	+4 21.4	1.788	2.562	16.4	21.7	11 27	1 4.09	+18 46.9	1.914	2.711	14.7	19.6
227041	2005 <i>AL</i> ₈₂	10 18.7 310°11		2°5/16.1 18			173711	2001 <i>QR</i> ₁₂₄	10 18.7 9°74		2°5/16.7 18		
9 18	1 53.07	+4 45.8	2.062	2.954	10.8	20.6	9 18	1 55.93	+5 23.9	1.619	2.515	12.9	19.5
9 28	1 48.36	+3 51.4	1.989	2.940	7.5	20.4	9 28	1 50.58	+4 43.4	1.563	2.516	9.0	19.3
10 8	1 42.11	+2 52.2	1.941	2.926	4.1	20.1	10 8	1 43.34	+3 57.9	1.532	2.517	4.8	19.0
10 18	1 34.94	+1 53.5	1.922	2.912	2.6	20.0	10 18	1 35.06	+3 13.1	1.527	2.519	2.5	18.9
10 28	1 27.71	+1 1.1	1.930	2.898	5.4	20.2	10 28	1 26.82	+2 35.5	1.548	2.521	5.8	19.1
11 7	1 21.24	+0 20.4	1.966	2.885	8.9	20.4	11 7	1 19.70	+2 10.5	1.596	2.524	10.0	19.4
11 17	1 16.24	-0 5.0	2.027	2.872	12.2	20.6	11 17	1 14.49	+2 1.4	1.668	2.527	13.7	19.6
11 27	1 13.23	-0 13.2	2.109	2.859	15.0	20.7	11 27	1 11.72	+2 9.7	1.760	2.531	16.8	19.8
147073	2002 <i>SJ</i> ₁₀	10 18.7 83°90		1°3/17.8 18			390121	2012 <i>VL</i> ₄₅	10 18.7 341°18		1°5/17.8 18		
9 18	2 1.67	+8 48.8	1.429	2.316	14.9	20.3	9 18	1 56.60	+7 20.7	1.239	2.143	15.5	19.8
9 28	1 54.56	+8 12.2	1.390	2.338	10.3	20.1	9 28	1 51.69	+7 9.6	1.175	2.131	10.9	19.5
10 8	1 45.36	+7 27.3	1.375	2.360	5.3	19.9	10 8	1 44.20	+6 50.9	1.132	2.119	5.8	19.2
10 18	1 35.15	+6 39.7	1.386	2.381	1.3	19.7	10 18	1 35.13	+6 29.3	1.112	2.108	1.5	18.9
10 28	1 25.28	+5 56.4	1.424	2.403	5.4	20.0	10 28	1 25.88	+6 11.3	1.118	2.098	6.0	19.1
11 7	1 16.93	+5 23.7	1.489	2.424	10.0	20.3	11 7	1 17.94	+6 3.2	1.148	2.090	11.4	19.4
11 17	1 10.93	+5 5.8	1.578	2.444	13.9	20.6	11 17	1 12.43	+6 9.4	1.199	2.083	16.1	19.7
11 27	1 7.71	+5 4.5	1.687	2.464	17.1	20.9	11 27	1 10.08	+6 32.6	1.269	2.077	20.1	19.9
390675	2002 <i>TP</i> ₁₆₁	10 18.7 314°37		12°5/15.9 17			447174	2005 <i>QH</i> ₂₂	10 18.7 18°94		0°4/18.4 17		
9 18	2 14.94	-14 26.0	0.873	1.767	21.3	19.6	9 18	1 56.18	+10 25.8				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
355269	2007 PH ₄₇		10 18.7 58°62	2.8/13.2	18		487428	2014 QR ₄₂₇		10 18.7 152°25	4.3/13.2	18	
9 18	1 47.24	- 3 16.6	4.249	5.135	5.8	20.7	9 18	1 53.12	- 2 37.0	2.570	3.459	9.0	21.5
9 28	1 43.65	- 4 12.4	4.196	5.138	4.2	20.5	9 28	1 48.06	- 3 58.1	2.521	3.465	6.5	21.3
10 8	1 39.40	- 5 6.7	4.172	5.142	3.0	20.5	10 8	1 41.84	- 5 17.5	2.499	3.470	4.6	21.2
10 18	1 34.81	- 5 56.5	4.178	5.145	3.0	20.5	10 18	1 35.02	- 6 29.5	2.506	3.475	4.6	21.2
10 28	1 30.23	- 6 39.3	4.214	5.148	4.2	20.6	10 28	1 28.26	- 7 28.9	2.543	3.479	6.4	21.3
11 7	1 26.02	- 7 12.9	4.279	5.152	5.7	20.7	11 7	1 22.19	- 8 12.3	2.607	3.483	8.8	21.5
11 17	1 22.49	- 7 36.0	4.369	5.155	7.2	20.8	11 17	1 17.34	- 8 37.9	2.696	3.487	11.1	21.7
11 27	1 19.88	- 7 48.1	4.482	5.159	8.6	20.9	11 27	1 14.09	- 8 45.5	2.806	3.491	13.0	21.8
409325	2004 TA ₃₅₁		10 18.7 315°75	2.5/16.6	18		86183	1999 RY ₂₂₃		10 18.7 98°57	4.1/22.9	18	
9 18	1 56.76	+ 3 7.4	2.021	2.909	11.1	21.0	9 18	1 56.66	+24 22.8	2.177	3.001	12.9	19.3
9 28	1 50.96	+ 2 46.3	1.953	2.901	7.8	20.8	9 28	1 50.89	+24 21.5	2.107	3.007	10.1	19.2
10 8	1 43.50	+ 2 23.5	1.910	2.893	4.3	20.6	10 8	1 43.48	+24 2.8	2.061	3.012	7.0	19.0
10 18	1 35.09	+ 2 2.9	1.895	2.886	2.6	20.5	10 18	1 35.14	+23 27.3	2.041	3.018	4.5	18.8
10 28	1 26.64	+ 1 48.9	1.909	2.878	5.3	20.6	10 28	1 26.79	+22 38.5	2.049	3.023	4.6	18.9
11 7	1 19.05	+ 1 45.1	1.950	2.871	8.9	20.8	11 7	1 19.35	+21 41.8	2.086	3.028	7.0	19.0
11 17	1 13.06	+ 1 53.8	2.017	2.864	12.1	21.0	11 17	1 13.56	+20 43.5	2.150	3.034	10.0	19.2
11 27	1 9.20	+ 2 16.0	2.104	2.858	14.9	21.2	11 27	1 9.92	+19 50.0	2.237	3.039	12.7	19.4
356913	2012 BQ ₅₀		10 18.7 249°98	1.9/15.1	18		175964	2000 JD ₇₉		10 18.7 193°59	4.6/23.9	18	
9 18	1 47.88	+ 0 24.2	4.423	5.307	5.7	21.1	9 18	1 57.35	+27 18.8	2.295	3.101	12.9	20.2
9 28	1 44.08	- 0 9.4	4.358	5.303	4.0	21.0	9 28	1 51.38	+27 6.9	2.215	3.100	10.3	20.0
10 8	1 39.65	- 0 42.8	4.321	5.300	2.4	20.9	10 8	1 43.75	+26 35.4	2.157	3.098	7.5	19.9
10 18	1 34.85	- 1 14.0	4.314	5.296	2.0	20.8	10 18	1 35.16	+25 45.0	2.126	3.095	5.1	19.7
10 28	1 30.06	- 1 40.6	4.337	5.292	3.3	20.9	10 28	1 26.53	+24 38.9	2.123	3.092	4.9	19.7
11 7	1 25.61	- 2 0.8	4.390	5.289	5.0	21.0	11 7	1 18.77	+23 23.0	2.150	3.089	7.0	19.8
11 17	1 21.81	- 2 13.2	4.470	5.285	6.6	21.2	11 17	1 12.64	+22 4.3	2.203	3.085	9.8	20.0
11 27	1 18.93	- 2 17.0	4.574	5.281	8.0	21.3	11 27	1 8.64	+20 50.0	2.282	3.081	12.5	20.2
243210	2007 UP ₄₀		10 18.7 72°58	0.8/19.4	18		114811	2003 OR ₅		10 18.7 8°46	2.5/20.3	18	
9 18	1 56.81	+14 33.7	1.729	2.602	13.5	21.2	9 18	1 58.18	+16 7.9	1.336	2.216	16.2	18.8
9 28	1 51.13	+14 0.8	1.672	2.611	9.6	21.0	9 28	1 52.64	+16 17.9	1.278	2.217	11.9	18.6
10 8	1 43.62	+13 14.5	1.638	2.619	5.3	20.8	10 8	1 44.65	+16 11.4	1.241	2.219	7.1	18.3
10 18	1 35.12	+12 18.7	1.632	2.627	1.1	20.5	10 18	1 35.22	+15 50.3	1.228	2.221	2.8	18.1
10 28	1 26.70	+11 19.8	1.653	2.636	4.0	20.8	10 28	1 25.76	+15 19.4	1.241	2.224	4.9	18.2
11 7	1 19.40	+10 24.5	1.702	2.644	8.3	21.0	11 7	1 17.67	+14 46.1	1.279	2.228	9.6	18.5
11 17	1 13.99	+ 9 38.8	1.776	2.653	12.1	21.3	11 17	1 12.01	+14 17.7	1.340	2.233	14.1	18.8
11 27	1 10.98	+ 9 7.1	1.871	2.661	15.2	21.5	11 27	1 9.40	+14 0.0	1.421	2.239	17.8	19.0
177599	2004 GJ ₅₇		10 18.7 301°97	0.3/18.9	18		251674	1995 SP ₂₂		10 18.7 358°03	0.9/17.9	18	
9 18	1 55.46	+13 3.6	1.831	2.708	12.7	20.7	9 18	1 55.96	+ 9 0.1	1.820	2.706	12.3	21.1
9 28	1 50.22	+12 27.8	1.760	2.702	9.0	20.5	9 28	1 50.52	+ 8 32.9	1.758	2.705	8.6	20.9
10 8	1 43.18	+11 39.9	1.714	2.696	4.9	20.2	10 8	1 43.32	+ 7 58.2	1.719	2.704	4.5	20.6
10 18	1 35.09	+10 43.8	1.694	2.690	0.5	19.9	10 18	1 35.13	+ 7 19.9	1.708	2.704	0.9	20.4
10 28	1 26.96	+ 9 45.4	1.703	2.685	4.1	20.2	10 28	1 26.94	+ 6 43.5	1.725	2.704	4.5	20.6
11 7	1 19.77	+ 8 51.4	1.739	2.679	8.3	20.4	11 7	1 19.73	+ 6 14.2	1.769	2.704	8.6	20.9
11 17	1 14.33	+ 8 7.5	1.800	2.674	12.1	20.6	11 17	1 14.27	+ 5 56.0	1.837	2.704	12.2	21.1
11 27	1 11.19	+ 7 37.9	1.883	2.668	15.3	20.9	11 27	1 11.08	+ 5 51.6	1.928	2.705	15.3	21.3
108948	2001 PC ₂₈		10 18.7 15°40	9.4/11.6	18		113549	2002 TF ₂₈		10 18.7 6°57	1.0/17.9	18	
9 18	1 53.20	- 5 40.3	1.050	1.971	16.0	18.3	9 18	1 53.61	+10 59.4	1.486	2.380	14.0	19.3
9 28	1 49.19	- 7 38.5	1.020	1.976	12.2	18.2	9 28	1 49.13	+ 9 57.1	1.429	2.380	9.8	19.1
10 8	1 42.76	- 9 27.1	1.011	1.982	9.7	18.0	10 8	1 42.66	+ 8 42.2	1.395	2.381	5.1	18.8
10 18	1 35.06	-10 52.3	1.025	1.989	10.1	18.1	10 18	1 35.09	+ 7 21.2	1.387	2.383	1.0	18.6
10 28	1 27.60	-11 43.3	1.060	1.997	13.0	18.3	10 28	1 27.56	+ 6 3.1	1.406	2.385	5.2	18.9
11 7	1 21.71	-11 55.9	1.116	2.007	16.7	18.5	11 7	1 21.19	+ 4 56.3	1.450	2.388	9.9	19.1
11 17	1 18.31	-11 32.0	1.190	2.018	20.1	18.8	11 17	1 16.81	+ 4 7.0	1.518	2.392	14.0	19.4
11 27	1 17.86	-10 36.8	1.279	2.030	22.9	19.1	11 27	1 14.96	+ 3 38.5	1.606	2.396	17.3	19.6
272521	2005 UL ₂₆₂		10 18.7 146°72	1.4/17.5	18		326058	2011 AW ₃₁		10 18.7 134°38	6.5/11.2	18	
9 18	1 59.18	+ 8 24.9	1.797	2.679	12.6	21.3	9 18	1 55.18	-12 34.5	2.563	3.438	9.5	20.5
9 28	1 52.71	+ 7 40.9	1.741	2.687	8.8	21.0	9 28	1 49.48	-13 31.1	2.523	3.444	7.7	20.3
10 8	1 44.43	+ 6 49.3	1.709	2.694	4.6	20.8	10 8	1 42.58	-14 18.6	2.510	3.450	6.6	20.3
10 18	1 35.19	+ 5 55.2	1.706	2.701	1.4	20.6	10 18	1 35.09	-14 51.9	2.525	3.456	6.9	20.3
10 28	1 26.05	+ 5 4.9	1.731	2.707	4.9	20.9	10 28	1 27.69	-15 7.4	2.566	3.462	8.3	20.4
11 7	1 18.00	+ 4 24.0	1.783	2.712	9.0	21.1	11 7	1 21.07	-15 3.6	2.633	3.467	10.2	20.6
11 17	1 11.84	+ 3 56.9	1.861	2.717	12.6	21.4	11 17	1 15.75	-14 40.9	2.723	3.472	12.0	20.7
11 27	1 8.05	+ 3 45.8	1.960	2.722	15.6	21.6	11 27	1 12.12	-14 1.1	2.833	3.478	13.7	20.9
521956	2015 VH ₁₅₆		10 18.7 266°27	5.7/11.9	18		331418	2012 FD ₆₈		10 18.7 147°80	1.6/16.9	18	
9 18	1 53.05	- 6 5.8	2.270	3.162	9.9	21.3	9 18	1 55.00	+ 5 26.2	2.597	3.477	9.3	21.2
9 28	1 48.19	- 7 28.8	2.216	3.157	7.5	21.2	9 28	1 49.38	+ 4 53.8	2.538	3.483	6.4	21.0
10 8	1 41.98	- 8 47.7	2.189	3.151	5.9	21.1	10 8	1 42.56	+ 4 18.3	2.504	3.488	3.4	20.8
10 18	1 35.03	- 9 55.9	2.190	3.146	6.1	21.1	10 18	1 35.09	+ 3 43.1	2.501	3.493	1.7	20.7
10 28	1 28.09	-10 47.7	2.218	3.141	8.0	21.2	10 28	1 27.66	+ 3 12.0	2.527	3.498	4.0	20.9
11 7	1 21.90	-11 19.5	2.272	3.135	10.5	21.3	11 7	1 20.95	+ 2 48.5	2.582	3.502	7.0	21.1
11 17	1 17.07	-11 30.1	2.349	3.130	12.8	21.5	11 17	1 15.48	+ 2 35.0	2.664	3.507	9.7	21.3
11 27	1 14.03	-11 20.1	2.446	3.125	14.9	21.6	11 27	1 11.68	+ 2 33.0	2.769	3.511	12.0	21.5
71313	2000 AS ₇₆		10 18.7 269°17	3.7/14.9	18		157683	2005 YX ₁₇₈		10 18.7 164°38	0.0/18.7	18	
9 18	1 54.75	- 0 15.9											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
115774	2003 <i>UG</i> ₂₁₀		10 18.7	90°19	1°5/20.1	18	250997	2006 <i>MW</i> ₁₁		10 18.7	3°95	6°6/14.6	18
9 18	1 56.57	+16 57.0	1.771	2.636	13.6	19.4	9 18	1 55.75	+0 1.6	0.981	1.903	16.9	19.5
9 28	1 50.97	+16 19.6	1.710	2.643	9.9	19.2	9 28	1 51.26	-1 15.5	0.940	1.901	12.1	19.2
10 8	1 43.56	+15 26.4	1.673	2.650	5.7	19.0	10 8	1 44.02	-2 32.5	0.918	1.901	7.8	19.0
10 18	1 35.16	+14 21.4	1.663	2.657	1.8	18.7	10 18	1 35.24	-3 37.6	0.918	1.902	6.9	18.9
10 28	1 26.83	+13 10.7	1.681	2.664	3.9	18.9	10 28	1 26.57	-4 19.3	0.941	1.904	10.5	19.1
11 7	1 19.59	+12 2.0	1.727	2.671	8.0	19.2	11 7	1 19.60	-4 31.2	0.985	1.907	15.2	19.4
11 17	1 14.23	+11 2.1	1.798	2.678	11.8	19.4	11 17	1 15.38	-4 12.3	1.048	1.912	19.6	19.7
11 27	1 11.23	+10 16.0	1.891	2.685	15.0	19.7	11 27	1 14.49	-3 25.3	1.126	1.917	23.2	20.0
145124	2005 <i>GT</i> ₁₃₉		10 18.7	38°72	1°7/17.3	18	230199	2001 <i>SK</i> ₂₁₄		10 18.7	24°18	3°0/16.8	18
9 18	1 55.24	+8 26.9	1.571	2.465	13.4	19.9	9 18	1 55.68	+6 16.0	1.019	1.934	17.0	19.5
9 28	1 50.10	+7 30.2	1.522	2.474	9.3	19.7	9 28	1 50.99	+5 26.1	0.985	1.946	11.8	19.2
10 8	1 43.10	+6 25.1	1.497	2.483	4.8	19.5	10 8	1 43.76	+4 29.0	0.971	1.959	6.2	19.0
10 18	1 35.13	+5 18.0	1.498	2.493	1.7	19.3	10 18	1 35.22	+3 33.5	0.980	1.973	3.1	18.8
10 28	1 27.28	+4 16.6	1.526	2.503	5.4	19.6	10 28	1 26.96	+2 49.2	1.012	1.989	7.3	19.2
11 7	1 20.61	+3 27.6	1.581	2.513	9.7	19.8	11 7	1 20.42	+2 23.6	1.067	2.006	12.4	19.5
11 17	1 15.87	+2 55.5	1.659	2.524	13.5	20.1	11 17	1 16.53	+2 20.0	1.142	2.024	16.9	19.8
11 27	1 13.57	+2 42.4	1.758	2.535	16.6	20.3	11 27	1 15.76	+2 38.8	1.235	2.043	20.6	20.1
444518	2006 <i>SD</i> ₇₉		10 18.7	65°33	13°0/1.7	17	515894	2015 <i>PR</i> ₄₅		10 18.7	347°67	2°7/16.6	18
9 18	1 59.10	+47 13.9	1.983	2.652	18.8	20.9	9 18	1 57.89	+3 43.5	1.738	2.630	12.4	20.9
9 28	1 59.10	+48 43.7	1.917	2.660	17.1	20.7	9 28	1 51.93	+3 15.2	1.679	2.629	8.7	20.7
10 8	1 48.33	+49 42.6	1.869	2.668	15.4	20.6	10 8	1 44.11	+2 44.2	1.643	2.627	4.8	20.5
10 18	1 35.52	+50 4.1	1.840	2.677	14.0	20.6	10 18	1 35.25	+2 15.3	1.635	2.626	2.8	20.4
10 28	1 22.35	+49 46.1	1.831	2.685	13.1	20.5	10 28	1 26.40	+1 53.9	1.654	2.625	5.8	20.6
11 7	1 10.62	+48 52.6	1.845	2.694	13.2	20.6	11 7	1 18.59	+1 44.4	1.700	2.624	9.7	20.8
11 17	1 1.75	+47 32.2	1.881	2.703	14.0	20.6	11 17	1 12.66	+1 49.3	1.770	2.623	13.3	21.0
11 27	0 56.56	+45 56.9	1.938	2.712	15.4	20.7	11 27	1 9.12	+2 9.7	1.861	2.623	16.3	21.2
352623	2008 <i>FH</i> ₇		10 18.7	243°33	8°8/15.7	17	390650	2002 <i>PW</i> ₁₀₃		10 18.7	119°29	5°8/25.1	18
9 18	2 14.22	-9 38.3	1.186	2.069	17.6	20.2	9 18	2 0.23	+30 30.8	2.208	2.994	14.0	21.4
9 28	2 4.25	-9 42.4	1.127	2.062	13.5	19.9	9 28	1 53.38	+30 32.2	2.145	3.012	11.4	21.3
10 8	1 50.95	-9 30.1	1.089	2.054	9.9	19.7	10 8	1 44.80	+30 11.9	2.105	3.029	8.6	21.1
10 18	1 35.69	-8 53.4	1.077	2.046	8.9	19.6	10 18	1 35.30	+29 29.9	2.090	3.045	6.4	21.0
10 28	1 20.45	-7 48.0	1.091	2.038	11.5	19.7	10 28	1 25.90	+28 29.4	2.103	3.062	5.9	21.0
11 7	1 7.14	-6 15.5	1.130	2.030	15.8	20.0	11 7	1 17.58	+27 16.5	2.145	3.077	7.5	21.1
11 17	0 57.13	-4 21.4	1.191	2.021	19.9	20.2	11 17	1 11.10	+25 58.6	2.214	3.092	9.9	21.3
11 27	0 51.10	-2 12.0	1.270	2.012	23.5	20.4	11 27	1 6.93	+24 43.4	2.307	3.106	12.4	21.5
90750	1993 <i>QJ</i> ₈		10 18.7	143°18	2°1/20.8	18	27087	Tillmannmohr		10 18.7	267°91	2°1/17.3	18
9 18	1 57.10	+17 41.7	2.313	3.162	11.4	19.6	9 18	2 0.18	+6 9.3	1.533	2.424	13.9	18.5
9 28	1 51.10	+17 39.9	2.243	3.165	8.4	19.4	9 28	1 53.84	+5 42.7	1.467	2.416	9.7	18.3
10 8	1 43.57	+17 26.2	2.198	3.168	5.2	19.2	10 8	1 45.26	+5 10.2	1.424	2.409	5.2	18.0
10 18	1 35.19	+17 2.1	2.181	3.171	2.3	19.1	10 18	1 35.34	+4 36.6	1.407	2.401	2.1	17.8
10 28	1 26.79	+16 30.9	2.193	3.174	3.4	19.1	10 28	1 25.34	+4 8.2	1.418	2.394	5.8	18.0
11 7	1 19.20	+15 56.9	2.235	3.177	6.6	19.4	11 7	1 16.51	+3 50.7	1.455	2.386	10.5	18.3
11 17	1 13.12	+15 24.7	2.303	3.180	9.7	19.6	11 17	1 9.84	+3 48.0	1.516	2.379	14.6	18.5
11 27	1 9.01	+14 58.8	2.395	3.182	12.4	19.7	11 27	1 5.95	+4 1.8	1.597	2.371	18.1	18.7
147069	2002 <i>RA</i> ₂₁₅		10 18.7	17°92	6°6/14.1	18	505477	2013 <i>UM</i> ₁₅		10 18.7	80°70	0°0/18.0	17
9 18	1 56.14	-1 3.0	1.135	2.050	15.7	19.3	9 18	1 36.70	+8 3.5	44.016	44.888	0.6	23.5
9 28	1 51.22	-2 27.3	1.096	2.053	11.3	19.1	9 28	1 36.07	+7 59.6	43.948	44.890	0.4	23.5
10 8	1 43.86	-3 49.7	1.078	2.058	7.5	18.9	10 8	1 35.38	+7 55.5	43.908	44.892	0.2	23.4
10 18	1 35.21	-4 59.1	1.083	2.063	7.0	18.9	10 18	1 34.66	+7 51.3	43.898	44.894	0.0	23.4
10 28	1 26.73	-5 45.2	1.113	2.069	10.2	19.1	10 28	1 33.95	+7 47.2	43.918	44.896	0.2	23.4
11 7	1 19.80	-6 2.5	1.164	2.075	14.4	19.3	11 7	1 33.25	+7 43.3	43.968	44.898	0.4	23.5
11 17	1 15.36	-5 50.3	1.236	2.083	18.3	19.6	11 17	1 32.61	+7 39.8	44.046	44.900	0.6	23.5
11 27	1 13.93	-5 11.1	1.324	2.091	21.5	19.9	11 27	1 32.05	+7 36.7	44.151	44.902	0.8	23.5
171739	2000 <i>WG</i> ₁₁₅		10 18.7	303°03	4°8/21.9	18	129037	2004 <i>UL</i> ₄		10 18.7	336°89	7°8/26.3	17
9 18	1 59.25	+21 43.1	1.312	2.174	17.6	19.5	9 18	1 57.80	+33 20.4	2.044	2.822	15.2	19.8
9 28	1 53.75	+21 53.6	1.238	2.162	13.6	19.2	9 28	1 52.11	+33 55.5	1.965	2.818	12.8	19.7
10 8	1 45.45	+21 40.5	1.184	2.150	9.1	18.9	10 8	1 44.35	+34 7.4	1.906	2.813	10.4	19.5
10 18	1 35.34	+21 3.4	1.153	2.139	5.3	18.7	10 18	1 35.29	+33 53.7	1.871	2.809	8.4	19.4
10 28	1 24.93	+20 6.9	1.147	2.127	6.0	18.7	10 28	1 26.06	+33 15.5	1.861	2.805	7.8	19.3
11 7	1 15.84	+19 0.0	1.166	2.116	10.3	18.9	11 7	1 17.80	+32 17.7	1.878	2.801	9.0	19.4
11 17	1 9.35	+17 53.4	1.208	2.106	14.9	19.2	11 17	1 11.45	+31 7.9	1.920	2.798	11.2	19.5
11 27	1 6.25	+16 57.0	1.270	2.095	19.1	19.4	11 27	1 7.67	+29 54.9	1.984	2.795	13.7	19.7
407135	2009 <i>SJ</i> ₃₆₂		10 18.7	69°30	1°3/17.7	18	37912	1998 <i>FG</i> ₉₀		10 18.7	40°09	2°8/16.8	18
9 18	1 58.80	+5 58.3	2.168	3.047	10.9	20.9	9 18	1 58.29	+4 53.6	1.414	2.313	14.3	17.9
9 28	1 52.21	+5 54.8	2.113	3.057	7.6	20.7	9 28	1 52.41	+4 15.5	1.368	2.321	9.9	17.7
10 8	1 44.11	+5 48.0	2.085	3.068	4.0	20.5	10 8	1 44.41	+3 33.0	1.345	2.330	5.4	17.4
10 18	1 35.23	+5 40.8	2.084	3.079	1.3	20.3	10 18	1 35.29	+2 52.4	1.347	2.340	2.9	17.3
10 28	1 26.44	+5 36.3	2.114	3.090	4.2	20.6	10 28	1 26.33	+2 20.4	1.376	2.349	6.4	17.5
11 7	1 18.57	+5 37.7	2.173	3.101	7.6	20.8	11 7	1 18.72	+2 2.7	1.430	2.359	10.8	17.8
11 17	1 12.29	+5 47.1	2.257	3.112	10.8	21.0	11 17	1 13.32	+2 2.0	1.507	2.370	14.7	18.1
11 27	1 8.04	+6 6.1	2.365	3.123	13.3	21.2	11 27	1 10.64	+2 19.3	1.604	2.381	17.9	18.3
32394	2000 <i>QL</i> ₂₁₀		10 18.7	25°80	2°6/15.7	18	466300	2013 <i>QK</</i>					

EPHEMERIDES

10 18.7

10 18.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
284575	2007 <i>TC</i> ₇₁	10 18.7 357°49		7.6/23.4 18			475891	2007 <i>DT</i> ₂₇	10 18.8 266°34		1.9/17.3 18		
9 18	2 0.39	+25 36.4	1.370	2.213	18.1	19.4	9 18	1 58.57	+7 21.7	1.620	2.509	13.3	21.5
9 28	1 54.56	+26 45.0	1.305	2.209	14.6	19.2	9 28	1 52.72	+6 37.1	1.545	2.494	9.4	21.3
10 8	1 45.90	+27 30.7	1.259	2.206	11.0	19.0	10 8	1 44.72	+5 44.0	1.494	2.479	5.0	21.0
10 18	1 35.42	+27 49.7	1.236	2.205	8.1	18.8	10 18	1 35.40	+4 48.0	1.470	2.464	2.0	20.7
10 28	1 24.66	+27 42.4	1.238	2.204	8.0	18.8	10 28	1 25.91	+3 56.1	1.474	2.449	5.7	20.9
11 7	1 15.25	+27 14.7	1.263	2.204	10.7	19.0	11 7	1 17.45	+3 15.3	1.504	2.433	10.3	21.2
11 17	1 8.49	+26 35.8	1.312	2.206	14.3	19.2	11 17	1 10.99	+2 50.6	1.558	2.418	14.4	21.4
11 27	1 5.17	+25 55.7	1.380	2.208	17.7	19.4	11 27	1 7.18	+2 44.8	1.632	2.402	17.9	21.6
395007	2009 <i>BD</i> ₁₃₉	10 18.7 79°12		1°0/19.6 18			388987	2008 <i>UG</i> ₇₂	10 18.8 136°09		6°0/24.9 18		
9 18	1 57.29	+14 36.7	1.768	2.639	13.3	21.4	9 18	1 57.75	+29 53.4	1.837	2.642	15.7	20.4
9 28	1 51.53	+14 10.8	1.707	2.644	9.6	21.2	9 28	1 52.01	+29 36.5	1.765	2.646	12.7	20.2
10 8	1 43.92	+13 31.9	1.669	2.649	5.4	21.0	10 8	1 44.26	+28 53.6	1.714	2.649	9.5	20.0
10 18	1 35.29	+12 43.3	1.658	2.654	1.2	20.7	10 18	1 35.36	+27 45.1	1.687	2.652	6.7	19.9
10 28	1 26.69	+11 50.8	1.676	2.659	3.9	20.9	10 28	1 26.48	+26 15.4	1.688	2.655	6.1	19.8
11 7	1 19.17	+11 0.8	1.721	2.664	8.2	21.2	11 7	1 18.77	+24 33.2	1.716	2.658	8.3	20.0
11 17	1 13.52	+10 19.2	1.791	2.669	12.0	21.4	11 17	1 13.07	+22 48.2	1.771	2.661	11.4	20.2
11 27	1 10.26	+9 50.4	1.883	2.674	15.1	21.6	11 27	1 9.95	+21 10.2	1.849	2.664	14.4	20.4
400314	2007 <i>TT</i> ₂₈₁	10 18.7 238°95		5°8/25.0 17			330229	2006 <i>KZ</i> ₁₁	10 18.8 275°64		5°6/12.1 17		
9 18	1 57.65	+30 26.1	2.299	3.087	13.4	21.5	9 18	1 53.67	-6 41.4	2.368	3.256	9.7	20.9
9 28	1 51.77	+30 27.4	2.209	3.076	11.0	21.3	9 28	1 48.70	-7 53.7	2.303	3.241	7.4	20.7
10 8	1 44.08	+30 7.7	2.141	3.065	8.5	21.2	10 8	1 42.36	-9 1.9	2.265	3.226	5.8	20.6
10 18	1 35.31	+29 26.3	2.098	3.054	6.4	21.0	10 18	1 35.23	-10 0.1	2.254	3.210	6.0	20.6
10 28	1 26.38	+28 25.3	2.083	3.042	5.9	21.0	10 28	1 28.05	-10 42.9	2.272	3.195	7.8	20.7
11 7	1 18.30	+27 10.3	2.096	3.030	7.6	21.1	11 7	1 21.55	-11 6.7	2.315	3.179	10.3	20.8
11 17	1 11.88	+25 48.5	2.136	3.017	10.1	21.2	11 17	1 16.36	-11 10.2	2.382	3.163	12.7	20.9
11 27	1 7.69	+24 27.7	2.201	3.004	12.8	21.4	11 27	1 12.95	-10 54.0	2.469	3.147	14.8	21.1
407034	2009 <i>SY</i> ₆₄	10 18.7 348°40		0°1/18.7 17			200516	2001 <i>BS</i> ₆₄	10 18.8 270°04		1°2/19.8 18		
9 18	1 53.77	+11 32.8	1.643	2.531	13.3	21.1	9 18	1 57.11	+15 42.0	1.854	2.720	13.0	20.6
9 28	1 49.24	+11 5.3	1.576	2.523	9.4	20.8	9 28	1 51.58	+15 9.9	1.768	2.702	9.5	20.3
10 8	1 42.79	+10 26.6	1.532	2.516	5.0	20.6	10 8	1 44.09	+14 22.8	1.705	2.683	5.5	20.0
10 18	1 35.22	+9 40.9	1.514	2.510	0.3	20.2	10 18	1 35.36	+13 23.5	1.670	2.665	1.5	19.7
10 28	1 27.58	+8 54.2	1.523	2.505	4.4	20.5	10 28	1 26.44	+12 17.8	1.663	2.646	4.0	19.9
11 7	1 20.94	+8 13.1	1.559	2.501	8.9	20.8	11 7	1 18.39	+11 12.7	1.684	2.626	8.3	20.1
11 17	1 16.16	+7 43.0	1.618	2.498	12.9	21.0	11 17	1 12.12	+10 15.2	1.730	2.607	12.4	20.3
11 27	1 13.79	+7 27.7	1.699	2.495	16.3	21.2	11 27	1 8.27	+9 31.1	1.799	2.587	15.8	20.5
396349	2014 <i>DB</i> ₇₉	10 18.7 353°13		2°0/17.2 18			322737	2000 <i>SU</i> ₂₈₇	10 18.8 4°20		0°9/18.3 17		
9 18	1 57.30	+6 42.7	1.532	2.427	13.6	20.5	9 18	2 0.15	+8 24.7	1.042	1.948	17.6	19.9
9 28	1 51.74	+6 6.3	1.473	2.425	9.5	20.3	9 28	1 54.48	+8 23.5	0.991	1.947	12.4	19.6
10 8	1 44.12	+5 23.2	1.438	2.424	5.0	20.0	10 8	1 45.85	+8 13.0	0.960	1.947	6.6	19.3
10 18	1 35.32	+4 38.9	1.428	2.422	2.1	19.8	10 18	1 35.49	+7 57.5	0.952	1.948	1.0	18.9
10 28	1 26.52	+4 0.2	1.446	2.422	5.7	20.1	10 28	1 25.13	+7 43.9	0.967	1.949	6.2	19.3
11 7	1 18.89	+3 33.1	1.489	2.421	10.2	20.3	11 7	1 16.48	+7 38.8	1.006	1.952	12.0	19.6
11 17	1 13.32	+3 21.5	1.556	2.421	14.2	20.6	11 17	1 10.74	+7 47.1	1.065	1.956	17.1	19.9
11 27	1 10.36	+3 27.4	1.643	2.421	17.5	20.8	11 27	1 8.58	+8 11.5	1.142	1.961	21.2	20.2
218236	2002 <i>WV</i> ₄	10 18.7 5°17		2°9/20.4 18			108085	2001 <i>FP</i> ₁₇₂	10 18.8 39°99		12°3/9.5 18		
9 18	2 0.23	+15 46.3	1.174	2.058	17.6	19.6	9 18	1 57.15	-16 41.1	1.287	2.179	15.8	17.9
9 28	1 54.43	+16 11.2	1.117	2.058	13.0	19.4	9 28	1 51.46	-18 30.3	1.284	2.206	13.4	17.8
10 8	1 45.80	+16 19.0	1.080	2.058	7.8	19.1	10 8	1 43.80	-19 54.3	1.303	2.233	12.3	17.9
10 18	1 35.45	+16 10.8	1.067	2.060	3.2	18.8	10 18	1 35.32	-20 43.9	1.345	2.261	12.9	18.0
10 28	1 25.03	+15 51.1	1.078	2.062	5.4	19.0	10 28	1 27.36	-20 54.7	1.408	2.290	14.6	18.2
11 7	1 16.17	+15 27.2	1.113	2.065	10.5	19.3	11 7	1 21.01	-20 28.4	1.491	2.319	16.8	18.4
11 17	1 10.08	+15 6.9	1.171	2.068	15.3	19.6	11 17	1 16.96	-19 30.4	1.592	2.349	18.9	18.6
11 27	1 7.44	+14 56.8	1.248	2.073	19.4	19.8	11 27	1 15.52	-18 7.3	1.708	2.379	20.7	18.9
6948	Gouelle	10 18.8 286°37		0°0/18.7 18			323220	2003 <i>SJ</i> ₇₈	10 18.8 291°32		0°3/19.1 18		
9 18	1 59.07	+11 27.6	1.516	2.400	14.4	18.1	9 18	1 53.21	+13 54.4	2.211	3.081	11.1	20.2
9 28	1 53.28	+11 6.5	1.437	2.382	10.3	17.8	9 28	1 48.47	+13 3.9	2.136	3.074	7.9	19.9
10 8	1 45.11	+10 33.3	1.381	2.364	5.6	17.5	10 8	1 42.27	+12 1.8	2.085	3.067	4.3	19.7
10 18	1 35.42	+9 51.4	1.350	2.346	0.4	17.1	10 18	1 35.23	+10 52.0	2.063	3.059	0.5	19.4
10 28	1 25.46	+9 7.1	1.346	2.328	4.9	17.4	10 28	1 28.16	+9 40.1	2.070	3.052	3.5	19.6
11 7	1 16.55	+8 27.6	1.369	2.310	10.0	17.6	11 7	1 21.84	+8 32.1	2.106	3.045	7.2	19.9
11 17	1 9.81	+7 59.2	1.415	2.292	14.6	17.9	11 17	1 16.94	+7 33.5	2.169	3.038	10.5	20.1
11 27	1 5.95	+7 46.6	1.482	2.275	18.4	18.1	11 27	1 13.94	+6 48.3	2.254	3.031	13.4	20.2
303775	2005 <i>QU</i> ₁₈₂	10 18.8 14°54		0°2/14.0 17			329259	1998 <i>RW</i> ₁₄	10 18.8 45°86		0°8/19.3 16		
9 18	1 36.43	-2 59.2	52.958	53.843	0.5	21.0	9 18	2 0.80	+12 59.1	1.153	2.044	17.4	20.8
9 28	1 35.90	-3 3.0	52.915	53.858	0.4	21.0	9 28	1 54.46	+12 48.3	1.116	2.063	12.3	20.5
10 8	1 35.32	-3 6.7	52.900	53.872	0.2	20.9	10 8	1 45.59	+12 22.5	1.100	2.083	6.7	20.3
10 18	1 34.72	-3 10.0	52.915	53.887	0.2	20.9	10 18	1 35.46	+11 46.4	1.107	2.103	1.1	20.0
10 28	1 34.12	-3 13.0	52.958	53.901	0.3	21.0	10 28	1 25.66	+11 7.3	1.140	2.124	5.1	20.3
11 7	1 33.55	-3 15.4	53.031	53.916	0.5	21.0	11 7	1 17.62	+10 33.2	1.198	2.145	10.4	20.7
11 17	1 33.01	-3 17.1	53.130	53.930	0.6	21.0	11 17	1 12.29	+10 10.4	1.278	2.167	14.9	21.0
11 27	1 32.53	-3 18.1	53.255	53.945	0.8	21.0	11 27	1 10.15	+10 3.0	1.377	2.189	18.6	21.3
103729	2000 <i>CW</i> ₁₀₀	10 18.8 15°72		7°2/13.9 18			75676	2000 <i>AL</i> ₉₆	10 18.8 297°97		8°9/10.2 18		
9 18	1 55.98	-2 13.4	1.087	2.005	16								

EPHEMERIDES

10 18.8

10 18.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
14015	Senancour		10 18.8 286°13	2°1/16.5 18			180184	2003 <i>ML</i> ₅		10 18.8 80°93	6°7/11.6 18		
9 18	1 53.68	+ 5 42.6	2.233	3.120	10.3	18.4	9 18	1 56.81	-10 56.5	2.282	3.162	10.4	20.1
9 28	1 48.76	+ 4 51.5	2.162	3.111	7.1	18.2	9 28	1 50.63	-12 11.9	2.267	3.193	8.2	20.0
10 8	1 42.42	+ 3 55.5	2.117	3.101	3.8	17.9	10 8	1 43.24	-13 16.9	2.278	3.223	6.8	19.9
10 18	1 35.25	+ 2 59.2	2.100	3.092	2.1	17.8	10 18	1 35.34	-14 6.1	2.317	3.254	7.1	20.0
10 28	1 28.03	+ 2 8.0	2.112	3.082	4.8	18.0	10 28	1 27.70	-14 35.3	2.383	3.283	8.6	20.2
11 7	1 21.55	+ 1 26.8	2.152	3.073	8.2	18.2	11 7	1 21.03	-14 43.3	2.474	3.313	10.6	20.3
11 17	1 16.44	+ 0 59.0	2.217	3.063	11.3	18.4	11 17	1 15.84	-14 30.9	2.588	3.341	12.5	20.5
11 27	1 13.19	+ 0 46.6	2.305	3.054	13.9	18.5	11 27	1 12.48	-14 0.2	2.721	3.370	14.1	20.7
469495	2002 <i>XE</i> ₅₁		10 18.8 330°01	1°1/19.5 18			195361	2002 <i>FO</i> ₁₃		10 18.8 184°92	0°5/19.2 18		
9 18	1 54.50	+14 18.8	1.132	2.030	17.1	20.5	9 18	1 59.55	+12 45.0	2.071	2.936	11.9	21.3
9 28	1 50.59	+13 56.1	1.061	2.011	12.5	20.2	9 28	1 52.98	+12 27.1	2.001	2.936	8.5	21.1
10 8	1 43.89	+13 13.9	1.009	1.993	7.0	19.8	10 8	1 44.71	+11 59.2	1.956	2.936	4.6	20.9
10 18	1 35.37	+12 16.1	0.980	1.975	1.4	19.4	10 18	1 35.46	+11 24.3	1.939	2.935	0.7	20.6
10 28	1 26.52	+11 10.9	0.974	1.959	5.4	19.6	10 28	1 26.19	+10 46.7	1.952	2.934	3.7	20.8
11 7	1 18.98	+10 9.1	0.992	1.944	11.4	19.9	11 7	1 17.84	+10 11.3	1.994	2.932	7.6	21.1
11 17	1 14.04	+ 9 20.5	1.031	1.931	16.7	20.2	11 17	1 11.16	+ 9 43.0	2.063	2.930	11.1	21.3
11 27	1 12.51	+ 8 52.2	1.088	1.918	21.3	20.4	11 27	1 6.68	+ 9 25.2	2.154	2.927	14.0	21.5
103706	2000 <i>CS</i> ₈₃		10 18.8 232°31	7°0/24.7 18			207063	2004 <i>XD</i> ₉₈		10 18.8 158°65	6°3/12.6 18		
9 18	2 1.41	+29 46.4	1.939	2.735	15.3	19.4	9 18	1 58.79	- 9 6.2	2.234	3.114	10.6	20.7
9 28	1 54.72	+30 28.2	1.862	2.734	12.6	19.2	9 28	1 52.20	-10 6.0	2.191	3.121	8.2	20.5
10 8	1 45.81	+30 48.3	1.808	2.732	9.8	19.0	10 8	1 44.17	-10 58.1	2.173	3.127	6.5	20.5
10 18	1 35.50	+30 44.4	1.777	2.730	7.6	18.9	10 18	1 35.42	-11 36.8	2.183	3.133	6.6	20.5
10 28	1 25.00	+30 17.4	1.774	2.729	7.2	18.9	10 28	1 26.78	-11 57.4	2.221	3.138	8.3	20.6
11 7	1 15.53	+29 32.5	1.797	2.727	8.9	19.0	11 7	1 19.07	-11 58.0	2.286	3.142	10.7	20.8
11 17	1 8.12	+28 37.1	1.846	2.725	11.6	19.1	11 17	1 12.91	-11 38.6	2.374	3.146	13.0	20.9
11 27	1 3.43	+27 39.9	1.918	2.723	14.3	19.3	11 27	1 8.73	-11 1.1	2.481	3.149	14.9	21.1
324823	2007 <i>HL</i> ₈₆		10 18.8 322°08	6°5/13.4 18			334436	2002 <i>GL</i> ₁₄₂		10 18.8 109°50	0°1/18.9 18		
9 18	1 58.61	- 9 22.0	2.034	2.917	11.3	20.3	9 18	1 54.14	+13 59.3	2.480	3.344	10.2	20.8
9 28	1 52.26	- 9 53.9	1.977	2.910	8.7	20.1	9 28	1 48.87	+12 56.5	2.424	3.359	7.2	20.6
10 8	1 44.27	-10 17.1	1.946	2.903	6.9	20.0	10 8	1 42.39	+11 44.0	2.394	3.375	3.9	20.4
10 18	1 35.39	-10 26.2	1.940	2.897	6.8	20.0	10 18	1 35.30	+10 25.8	2.393	3.390	0.3	20.1
10 28	1 26.53	-10 17.2	1.963	2.890	8.6	20.1	10 28	1 28.32	+ 9 7.4	2.424	3.404	3.2	20.4
11 7	1 18.61	- 9 48.3	2.011	2.884	11.2	20.2	11 7	1 22.12	+ 7 54.4	2.484	3.419	6.5	20.6
11 17	1 12.36	- 9 0.3	2.083	2.878	13.8	20.4	11 17	1 17.24	+ 6 51.3	2.571	3.433	9.4	20.9
11 27	1 8.26	- 7 55.3	2.175	2.872	16.1	20.5	11 27	1 14.06	+ 6 1.4	2.683	3.446	11.8	21.0
229356	2005 <i>QA</i> ₈₄		10 18.8 10°70	0°3/18.9 18			65232	2002 <i>EO</i> ₈₇		10 18.8 29°55	0°3/18.2 18		
9 18	1 55.22	+12 30.9	1.051	1.955	17.6	19.5	9 18	1 49.08	+ 9 15.0	4.215	5.084	6.2	19.3
9 28	1 50.90	+12 6.5	1.003	1.958	12.5	19.2	9 28	1 45.03	+ 8 57.1	4.145	5.085	4.3	19.2
10 8	1 43.89	+11 25.7	0.976	1.961	6.8	18.9	10 8	1 40.29	+ 8 35.8	4.104	5.087	2.3	19.1
10 18	1 35.37	+10 34.3	0.970	1.966	0.7	18.5	10 18	1 35.15	+ 8 12.9	4.092	5.088	0.3	18.9
10 28	1 26.92	+ 9 41.2	0.989	1.973	5.5	18.9	10 28	1 30.02	+ 7 50.4	4.111	5.090	2.2	19.1
11 7	1 20.07	+ 8 56.0	1.030	1.981	11.2	19.2	11 7	1 25.26	+ 7 30.3	4.160	5.091	4.2	19.2
11 17	1 15.91	+ 8 26.2	1.092	1.990	16.2	19.6	11 17	1 21.20	+ 7 14.5	4.238	5.093	6.1	19.3
11 27	1 15.01	+ 8 16.1	1.173	2.000	20.2	19.9	11 27	1 18.12	+ 7 4.6	4.341	5.095	7.8	19.5
120749	1997 <i>WR</i> ₁₂		10 18.8 284°50	0°6/19.2 18			12699	1990 <i>DD</i> ₂		10 18.8 147°07	0°8/18.1 18		
9 18	1 57.86	+13 31.6	1.573	2.452	14.2	20.0	9 18	1 59.77	+10 39.8	1.756	2.634	13.1	19.1
9 28	1 52.31	+13 3.8	1.498	2.440	10.3	19.8	9 28	1 53.24	+ 9 49.6	1.699	2.643	9.2	18.9
10 8	1 44.55	+12 21.7	1.447	2.429	5.7	19.5	10 8	1 44.85	+ 8 49.2	1.667	2.651	4.8	18.6
10 18	1 35.44	+11 29.1	1.422	2.418	0.9	19.1	10 18	1 35.49	+ 7 43.9	1.663	2.659	0.8	18.4
10 28	1 26.17	+10 32.3	1.424	2.406	4.5	19.4	10 28	1 26.22	+ 6 40.4	1.687	2.666	4.6	18.7
11 7	1 17.98	+ 9 39.1	1.452	2.395	9.4	19.6	11 7	1 18.10	+ 5 45.7	1.740	2.673	8.9	18.9
11 17	1 11.85	+ 8 56.2	1.505	2.384	13.7	19.9	11 17	1 11.91	+ 5 4.7	1.817	2.679	12.6	19.2
11 27	1 8.45	+ 8 28.9	1.578	2.373	17.4	20.1	11 27	1 8.16	+ 4 40.5	1.916	2.684	15.7	19.4
264117	2009 <i>SX</i> ₃₆₂		10 18.8 74°19	1°6/17.2 18			458703	2011 <i>HU</i> ₇₃		10 18.8 118°64	2°9/15.0 18		
9 18	1 55.00	+ 7 16.1	2.104	2.989	10.9	20.9	9 18	1 52.91	- 0 13.0	2.990	3.875	8.0	21.6
9 28	1 49.65	+ 6 32.1	2.050	2.997	7.6	20.7	9 28	1 47.85	- 0 55.1	2.940	3.884	5.7	21.4
10 8	1 42.86	+ 5 42.7	2.022	3.006	3.9	20.5	10 8	1 41.81	- 1 36.4	2.917	3.894	3.5	21.3
10 18	1 35.31	+ 4 52.5	2.021	3.015	1.6	20.3	10 18	1 35.27	- 2 13.5	2.923	3.903	3.0	21.3
10 28	1 27.84	+ 4 6.6	2.050	3.024	4.5	20.6	10 28	1 28.78	- 2 43.0	2.959	3.912	4.7	21.4
11 7	1 21.25	+ 3 29.7	2.106	3.033	8.0	20.8	11 7	1 22.90	- 3 2.3	3.024	3.921	7.0	21.6
11 17	1 16.16	+ 3 5.3	2.188	3.042	11.1	21.0	11 17	1 18.07	- 3 9.9	3.114	3.930	9.2	21.8
11 27	1 13.03	+ 2 55.2	2.293	3.051	13.7	21.2	11 27	1 14.64	- 3 5.2	3.228	3.939	11.0	21.9
474616	2004 <i>TV</i> ₄₄		10 18.8 0°94	0°6/19.0 18			183045	2002 <i>QZ</i> ₆₃		10 18.8 46°37	6°5/14.5 18		
9 18	2 2.42	+ 9 55.0	1.297	2.186	16.0	20.3	9 18	1 58.98	- 1 53.3	1.185	2.095	15.6	19.7
9 28	1 55.78	+10 26.5	1.238	2.185	11.4	20.1	9 28	1 53.10	- 3 5.5	1.152	2.107	11.2	19.5
10 8	1 46.48	+10 50.0	1.200	2.184	6.2	19.8	10 8	1 44.87	- 4 13.4	1.141	2.120	7.5	19.4
10 18	1 35.58	+11 6.8	1.188	2.184	0.8	19.4	10 18	1 35.48	- 5 7.4	1.154	2.133	6.8	19.4
10 28	1 24.60	+11 20.1	1.201	2.184	5.1	19.7	10 28	1 26.40	- 5 38.9	1.191	2.146	9.8	19.6
11 7	1 15.05	+11 34.3	1.240	2.186	10.3	20.0	11 7	1 18.93	- 5 43.9	1.251	2.160	13.8	19.9
11 17	1 8.09	+11 53.3	1.303	2.188	14.9	20.3	11 17	1 13.97	- 5 22.5	1.332	2.175	17.5	20.1
11 27	1 4.40	+12 21.0	1.384	2.192	18.8	20.6	11 27	1 11.97	- 4 37.5	1.430	2.189	20.5	20.4
108141	2001 <i>HB</i> ₁		10 18.8 170°										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
353144	2009 <i>HV</i> ₁₂	10 18.8 206°27' 0.6/19.4 18					42761	1998 <i>SK</i> ₁₀₄	10 18.8 178°73' 0.9/18.1 18				
9 18	1 56.58	+13 57.6	2.178	3.043	11.4	21.3	9 18	1 59.82	+ 8 13.5	1.992	2.868	11.8	18.9
9 28	1 50.87	+13 24.7	2.105	3.040	8.2	21.1	9 28	1 53.20	+ 7 58.9	1.926	2.869	8.3	18.7
10 8	1 43.59	+12 40.8	2.056	3.036	4.5	20.9	10 8	1 44.85	+ 7 38.4	1.886	2.870	4.3	18.5
10 18	1 35.41	+11 49.0	2.036	3.032	0.8	20.6	10 18	1 35.53	+ 7 15.1	1.874	2.870	0.9	18.2
10 28	1 27.20	+10 54.2	2.046	3.027	3.5	20.8	10 28	1 26.19	+ 6 53.3	1.892	2.870	4.3	18.5
11 7	1 19.81	+10 1.9	2.084	3.023	7.2	21.0	11 7	1 17.81	+ 6 37.2	1.938	2.870	8.2	18.7
11 17	1 13.94	+ 9 17.2	2.149	3.018	10.6	21.2	11 17	1 11.14	+ 6 30.3	2.010	2.869	11.7	18.9
11 27	1 10.10	+ 8 44.1	2.237	3.012	13.5	21.4	11 27	1 6.72	+ 6 34.9	2.104	2.869	14.6	19.1
300669	2007 <i>VM</i> ₅	10 18.8 292°62' 7.3/13.0 18					321103	2008 <i>TL</i> ₅₇	10 18.8 320°53' 0.1/18.6 15				
9 18	1 59.15	- 8 32.1	1.745	2.634	12.5	20.5	9 18	1 48.81	+10 30.7	4.135	5.002	6.4	22.0
9 28	1 52.97	- 9 23.6	1.682	2.619	9.7	20.3	9 28	1 44.89	+10 9.5	4.060	4.998	4.5	21.8
10 8	1 44.81	-10 7.0	1.644	2.604	7.6	20.1	10 8	1 40.24	+ 9 44.3	4.013	4.995	2.4	21.7
10 18	1 35.51	-10 35.1	1.632	2.590	7.6	20.1	10 18	1 35.19	+ 9 16.8	3.995	4.991	0.2	21.5
10 28	1 26.14	-10 41.8	1.646	2.575	9.8	20.2	10 28	1 30.12	+ 8 49.2	4.008	4.988	2.1	21.7
11 7	1 17.79	-10 24.3	1.684	2.560	12.8	20.3	11 7	1 25.43	+ 8 23.6	4.051	4.985	4.2	21.8
11 17	1 11.34	- 9 43.0	1.745	2.546	15.8	20.5	11 17	1 21.44	+ 8 2.2	4.123	4.981	6.2	21.9
11 27	1 7.37	- 8 40.3	1.825	2.531	18.4	20.7	11 27	1 18.45	+ 7 46.7	4.220	4.978	7.9	22.1
449978	2015 <i>PA</i> ₄₇	10 18.8 112°45' 3.0/16.1 18					76668	2000 <i>HA</i> ₄₅	10 18.8 136°61' 2.0/16.8 18 R				
9 18	1 57.38	+ 3 10.7	1.884	2.774	11.7	21.1	9 18	1 57.10	+ 5 32.9	2.149	3.032	10.8	19.8
9 28	1 51.47	+ 2 24.7	1.831	2.780	8.2	20.9	9 28	1 51.11	+ 4 48.8	2.094	3.040	7.5	19.7
10 8	1 43.90	+ 1 36.3	1.802	2.785	4.6	20.7	10 8	1 43.66	+ 4 0.7	2.065	3.048	4.0	19.5
10 18	1 35.44	+ 0 51.0	1.801	2.790	3.1	20.6	10 18	1 35.45	+ 3 13.1	2.064	3.056	2.1	19.3
10 28	1 27.06	+ 0 14.5	1.829	2.795	5.9	20.8	10 28	1 27.31	+ 2 31.3	2.093	3.064	4.8	19.5
11 7	1 19.69	- 0 8.8	1.884	2.800	9.4	21.0	11 7	1 20.07	+ 1 59.5	2.150	3.071	8.2	19.8
11 17	1 14.03	- 0 16.5	1.963	2.805	12.7	21.3	11 17	1 14.36	+ 1 40.6	2.233	3.078	11.3	20.0
11 27	1 10.56	- 0 7.5	2.063	2.810	15.4	21.5	11 27	1 10.63	+ 1 36.3	2.338	3.084	13.8	20.2
45971	2001 <i>BF</i> ₂₉	10 18.8 121°41' 3.0/21.1 18					390935	2005 <i>GR</i> ₇₃	10 18.8 154°41' 4.5/14.9 18				
9 18	2 1.48	+19 25.2	1.554	2.411	15.6	19.7	9 18	2 0.25	- 3 25.8	2.154	3.037	10.8	20.7
9 28	1 54.74	+19 12.0	1.496	2.421	11.6	19.5	9 28	1 53.29	- 3 57.9	2.102	3.042	7.8	20.5
10 8	1 45.77	+18 39.6	1.461	2.431	7.2	19.3	10 8	1 44.81	- 4 26.2	2.075	3.048	5.2	20.3
10 18	1 35.58	+17 50.4	1.451	2.441	3.4	19.1	10 18	1 35.53	- 4 46.1	2.078	3.053	4.7	20.3
10 28	1 25.48	+16 50.1	1.468	2.450	4.6	19.2	10 28	1 26.35	- 4 53.6	2.109	3.057	6.7	20.5
11 7	1 16.73	+15 47.1	1.513	2.459	8.8	19.4	11 7	1 18.12	- 4 46.4	2.168	3.061	9.5	20.6
11 17	1 10.27	+14 49.3	1.583	2.468	12.8	19.7	11 17	1 11.51	- 4 23.7	2.252	3.065	12.3	20.8
11 27	1 6.65	+14 3.4	1.674	2.476	16.2	20.0	11 27	1 6.98	- 3 46.2	2.357	3.068	14.6	21.0
270164	2001 <i>SN</i> ₁₇₁	10 18.8 344°62' 0.1/18.8 18					439299	2012 <i>VH</i> ₁₈	10 18.8 38°68' 3.6/16.2 18				
9 18	1 56.20	+11 5.9	1.130	2.033	16.7	19.7	9 18	1 57.58	+ 3 41.3	1.341	2.245	14.6	20.2
9 28	1 51.70	+10 56.1	1.068	2.022	12.0	19.4	9 28	1 51.99	+ 2 50.2	1.302	2.257	10.1	20.0
10 8	1 44.45	+10 32.9	1.027	2.012	6.5	19.1	10 8	1 44.28	+ 1 55.9	1.285	2.270	5.7	19.8
10 18	1 35.50	+10 0.5	1.008	2.004	0.5	18.6	10 18	1 35.49	+ 1 6.1	1.293	2.283	3.7	19.7
10 28	1 26.36	+ 9 26.2	1.013	1.997	5.6	19.0	10 28	1 26.92	+ 0 28.2	1.327	2.297	7.1	19.9
11 7	1 18.63	+ 8 58.1	1.041	1.991	11.3	19.3	11 7	1 19.75	+ 0 7.8	1.386	2.311	11.3	20.2
11 17	1 13.52	+ 8 42.9	1.091	1.986	16.4	19.6	11 17	1 14.84	+ 0 7.3	1.467	2.326	15.2	20.5
11 27	1 11.76	+ 8 45.2	1.159	1.983	20.6	19.8	11 27	1 12.65	+ 0 26.7	1.567	2.342	18.3	20.8
267694	2002 <i>WP</i> ₄	10 18.8 222°34' 3.4/16.3 18					57363	2001 <i>RD</i> ₂₅	10 18.8 322°33' 0.8/18.2 18				
9 18	2 0.59	+ 2 40.9	1.620	2.512	13.2	20.6	9 18	1 56.65	+10 45.8	1.370	2.263	15.0	19.2
9 28	1 54.04	+ 2 2.7	1.559	2.508	9.3	20.4	9 28	1 51.62	+10 1.0	1.305	2.255	10.6	18.9
10 8	1 45.40	+ 1 22.2	1.521	2.504	5.3	20.1	10 8	1 44.26	+ 9 2.9	1.261	2.247	5.6	18.6
10 18	1 35.56	+ 0 45.0	1.511	2.500	3.5	20.0	10 18	1 35.50	+ 7 57.4	1.243	2.239	0.8	18.3
10 28	1 25.70	+ 0 17.7	1.528	2.495	6.6	20.2	10 28	1 26.65	+ 6 52.7	1.251	2.232	5.5	18.6
11 7	1 17.00	+ 0 5.0	1.571	2.490	10.7	20.4	11 7	1 19.01	+ 5 57.8	1.285	2.225	10.6	18.9
11 17	1 10.35	+ 0 9.5	1.638	2.485	14.5	20.7	11 17	1 13.62	+ 5 19.2	1.341	2.219	15.1	19.1
11 27	1 6.33	+ 0 31.9	1.725	2.480	17.7	20.9	11 27	1 11.12	+ 5 0.9	1.416	2.213	18.9	19.3
415797	2001 <i>EP</i> ₁₈	10 18.8 222°12' 9.3/25.2 18					148353	2000 <i>RE</i> ₁₀₀	10 18.8 14°01' 1.7/20.1 18				
9 18	2 8.75	+33 26.8	1.847	2.616	16.9	21.2	9 18	1 57.94	+14 59.0	1.686	2.557	13.8	19.5
9 28	2 0.41	+34 42.2	1.762	2.608	14.4	21.0	9 28	1 52.18	+15 3.5	1.624	2.560	10.1	19.2
10 8	1 49.14	+35 33.9	1.698	2.599	11.8	20.8	10 8	1 44.42	+14 55.4	1.585	2.563	5.9	19.0
10 18	1 35.86	+35 56.4	1.658	2.589	9.8	20.7	10 18	1 35.51	+14 36.6	1.572	2.566	2.0	18.8
10 28	1 22.02	+35 47.6	1.645	2.579	9.4	20.7	10 28	1 26.59	+14 11.3	1.587	2.570	4.1	18.9
11 7	1 9.28	+35 11.7	1.657	2.568	10.9	20.7	11 7	1 18.75	+13 44.9	1.628	2.574	8.3	19.2
11 17	0 59.01	+34 17.0	1.695	2.557	13.4	20.9	11 17	1 12.89	+13 23.0	1.695	2.579	12.1	19.4
11 27	0 52.12	+33 14.7	1.755	2.545	16.1	21.0	11 27	1 9.56	+13 10.2	1.783	2.584	15.4	19.7
515920	2015 <i>PU</i> ₃₁₄	10 18.8 24°19' 1.8/19.8 18					72453	2001 <i>DO</i> ₆	10 18.8 96°39' 2.7/15.7 18				
9 18	2 2.23	+12 55.5	1.465	2.342	15.2	20.2	9 18	1 54.56	+ 3 2.5	2.441	3.326	9.6	19.2
9 28	1 55.36	+13 33.2	1.411	2.351	11.0	20.0	9 28	1 49.14	+ 2 2.5	2.398	3.345	6.6	19.0
10 8	1 46.15	+14 0.2	1.381	2.360	6.3	19.8	10 8	1 42.54	+ 1 1.0	2.383	3.364	3.8	18.9
10 18	1 35.61	+14 17.0	1.376	2.370	2.0	19.5	10 18	1 35.37	+ 0 3.0	2.397	3.383	2.8	18.8
10 28	1 25.13	+14 26.3	1.398	2.381	4.5	19.7	10 28	1 28.33	- 0 47.0	2.440	3.401	5.0	19.0
11 7	1 16.01	+14 32.6	1.447	2.393	9.1	20.0	11 7	1 22.09	- 1 25.0	2.512	3.420	7.8	19.2
11 17	1 9.25	+14 40.4	1.520	2.405	13.2	20.3	11 17	1 17.15	- 1 48.8	2.609	3.437	10.3	19.4
11 27	1 5.44	+14 54.2	1.614	2.418	16.7	20.5	11 27	1 13.90	- 1 57.7	2.729	3.455	12.5	19.6
329918	2005 <i>MN</i> ₄₁	10 18.8 70°65' 3.9/16.0 16					59563	1999 <i>JO</i> ₄₅	10 18.8 88°61' 2.9/16.6 18</				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V	
145107	2005 <i>GG</i> ₁₀₅	10 18.8 178°29'			1°9/17.2 17			177301	2003 <i>YA</i> ₅	10 18.8 2°51'			3°1/16.6 18	
9 18	1 57.93	+ 9 12.2	1.484	2.375	14.2	20.4	9 18	1 53.29	+ 7 50.5	0.989	1.906	17.1	19.4	
9 28	1 52.27	+ 7 58.4	1.426	2.376	9.9	20.2	9 28	1 49.66	+ 6 33.8	0.942	1.904	11.9	19.1	
10 8	1 44.49	+ 6 33.1	1.391	2.377	5.2	19.9	10 8	1 43.34	+ 5 4.2	0.915	1.903	6.3	18.8	
10 18	1 35.52	+ 5 3.9	1.382	2.377	1.9	19.7	10 18	1 35.47	+ 3 32.5	0.910	1.904	3.2	18.6	
10 28	1 26.60	+ 3 40.2	1.401	2.377	5.9	20.0	10 28	1 27.66	+ 2 12.1	0.929	1.906	7.8	18.9	
11 7	1 18.91	+ 2 30.9	1.446	2.377	10.6	20.3	11 7	1 21.44	+ 1 13.7	0.969	1.909	13.3	19.2	
11 17	1 13.35	+ 1 41.8	1.515	2.376	14.7	20.5	11 17	1 17.87	+ 0 43.4	1.030	1.913	18.2	19.5	
11 27	1 10.47	+ 1 15.7	1.603	2.376	18.1	20.7	11 27	1 17.53	+ 0 42.4	1.106	1.919	22.1	19.8	
220636	2004 <i>RL</i> ₁₉	10 18.8 348°30'			0°3/19.1 18			348326	2005 <i>CW</i> ₄₈	10 18.8 286°63'			3°2/21.3 18	
9 18	1 55.96	+12 28.9	2.001	2.875	11.9	20.5	9 18	1 59.30	+19 35.9	1.803	2.654	14.0	21.1	
9 28	1 50.53	+12 7.4	1.934	2.873	8.5	20.3	9 28	1 53.43	+19 38.3	1.706	2.627	10.7	20.8	
10 8	1 43.46	+11 36.1	1.891	2.872	4.6	20.1	10 8	1 45.30	+19 23.9	1.632	2.599	6.9	20.6	
10 18	1 35.45	+10 58.0	1.875	2.871	0.6	19.8	10 18	1 35.65	+18 53.0	1.583	2.572	3.6	20.3	
10 28	1 27.42	+10 17.9	1.888	2.870	3.7	20.0	10 28	1 25.58	+18 8.8	1.563	2.544	4.6	20.3	
11 7	1 20.26	+ 9 41.0	1.929	2.870	7.6	20.3	11 7	1 16.32	+17 17.4	1.570	2.516	8.6	20.5	
11 17	1 14.73	+ 9 11.8	1.996	2.869	11.1	20.5	11 17	1 8.96	+16 26.2	1.603	2.487	12.7	20.7	
11 27	1 11.32	+ 8 54.0	2.086	2.869	14.1	20.7	11 27	1 4.27	+15 42.5	1.657	2.459	16.4	20.8	
245820	2006 <i>JC</i> ₃₃	10 18.8 229°73'			6°8/12.8 18			23347	5567 <i>P-L</i>	10 18.8 108°38'			1°1/18.0 17	
9 18	1 58.78	- 7 55.3	1.892	2.780	11.8	20.9	9 18	2 3.98	+ 8 18.4	1.603	2.483	14.0	18.7	
9 28	1 52.52	- 8 57.9	1.837	2.774	9.1	20.7	9 28	1 56.23	+ 7 56.8	1.558	2.502	9.8	18.5	
10 8	1 44.51	- 9 53.4	1.807	2.767	7.1	20.6	10 8	1 46.47	+ 7 28.1	1.538	2.522	5.1	18.3	
10 18	1 35.53	-10 34.8	1.804	2.761	7.2	20.6	10 18	1 35.71	+ 6 56.5	1.545	2.540	1.1	18.0	
10 28	1 26.56	-10 56.4	1.828	2.754	9.2	20.7	10 28	1 25.21	+ 6 27.9	1.580	2.559	5.0	18.4	
11 7	1 18.59	-10 55.2	1.877	2.746	12.0	20.9	11 7	1 16.10	+ 6 7.2	1.643	2.576	9.3	18.7	
11 17	1 12.37	-10 31.1	1.948	2.739	14.8	21.1	11 17	1 9.21	+ 5 58.2	1.731	2.593	13.1	18.9	
11 27	1 8.43	- 9 46.2	2.038	2.731	17.1	21.2	11 27	1 5.02	+ 6 2.9	1.840	2.609	16.2	19.2	
136039	2002 <i>WR</i> ₄	10 18.8 43°36'			5°0/23.3 18			118342	1999 <i>CW</i> ₂₆	10 18.8 277°88'			0°7/18.3 18	
9 18	1 57.25	+25 0.5	1.532	2.374	16.5	19.1	9 18	1 59.23	+ 9 54.5	1.600	2.484	13.8	20.2	
9 28	1 51.80	+24 51.9	1.480	2.389	12.9	18.9	9 28	1 53.34	+ 9 27.1	1.521	2.467	9.8	19.9	
10 8	1 44.22	+24 19.0	1.450	2.406	8.9	18.7	10 8	1 45.20	+ 8 49.3	1.465	2.449	5.2	19.6	
10 18	1 35.52	+23 23.5	1.443	2.422	5.6	18.6	10 18	1 35.64	+ 8 5.3	1.436	2.432	0.7	19.2	
10 28	1 26.95	+22 11.1	1.463	2.440	5.5	18.6	10 28	1 25.84	+ 7 21.2	1.434	2.414	5.0	19.5	
11 7	1 19.74	+20 51.0	1.509	2.457	8.6	18.8	11 7	1 17.04	+ 6 43.8	1.459	2.396	9.9	19.8	
11 17	1 14.74	+19 32.6	1.580	2.475	12.2	19.1	11 17	1 10.29	+ 6 18.9	1.508	2.378	14.2	20.0	
11 27	1 12.46	+18 24.2	1.672	2.493	15.4	19.3	11 27	1 6.28	+ 6 10.2	1.577	2.361	17.9	20.2	
307495	2002 <i>XV</i> ₉₅	10 18.8 298°98'			2°8/16.5 18			16195	2000 <i>AQ</i> ₂₃₆	10 18.8 302°40'			7°1/26.4 18	
9 18	1 57.20	+ 4 3.7	1.754	2.646	12.3	20.8	9 18	1 57.47	+33 37.5	2.306	3.075	14.0	18.3	
9 28	1 51.71	+ 3 26.6	1.675	2.626	8.7	20.5	9 28	1 51.77	+34 2.7	2.223	3.069	11.8	18.1	
10 8	1 44.24	+ 2 45.1	1.621	2.605	4.8	20.2	10 8	1 44.24	+34 6.4	2.160	3.064	9.5	17.9	
10 18	1 35.53	+ 2 4.6	1.594	2.585	2.9	20.1	10 18	1 35.56	+33 46.9	2.122	3.059	7.7	17.8	
10 28	1 26.62	+ 1 31.2	1.594	2.564	6.0	20.2	10 28	1 26.74	+33 5.4	2.111	3.053	7.1	17.8	
11 7	1 18.60	+ 1 10.2	1.621	2.544	10.2	20.4	11 7	1 18.77	+32 6.4	2.126	3.048	8.2	17.8	
11 17	1 12.37	+ 1 5.3	1.671	2.524	14.0	20.6	11 17	1 12.49	+30 56.7	2.167	3.043	10.2	18.0	
11 27	1 8.58	+ 1 18.2	1.742	2.504	17.3	20.8	11 27	1 8.51	+29 44.0	2.232	3.038	12.6	18.1	
353643	2011 <i>UD</i> ₉₅	10 18.8 45°01'			0°6/18.3 18			150901	2001 <i>SB</i> ₃₁₈	10 18.8 67°96'			1°7/17.6 18	
9 18	1 58.44	+ 9 34.9	1.637	2.522	13.5	19.9	9 18	2 0.36	+ 7 56.2	1.402	2.294	14.8	20.3	
9 28	1 52.45	+ 9 16.6	1.583	2.530	9.4	19.6	9 28	1 53.87	+ 7 18.1	1.362	2.312	10.3	20.0	
10 8	1 44.52	+ 8 50.1	1.554	2.538	5.0	19.4	10 8	1 45.27	+ 6 32.4	1.344	2.330	5.4	19.8	
10 18	1 35.54	+ 8 19.2	1.551	2.547	0.6	19.1	10 18	1 35.63	+ 5 45.0	1.353	2.348	1.7	19.6	
10 28	1 26.65	+ 7 49.4	1.575	2.556	4.6	19.4	10 28	1 26.25	+ 5 3.2	1.389	2.367	5.6	19.9	
11 7	1 18.94	+ 7 26.0	1.627	2.565	8.9	19.7	11 7	1 18.34	+ 4 33.2	1.450	2.385	10.2	20.2	
11 17	1 13.21	+ 7 13.3	1.703	2.575	12.8	20.0	11 17	1 12.72	+ 4 18.7	1.535	2.403	14.2	20.5	
11 27	1 9.98	+ 7 13.8	1.800	2.584	15.9	20.2	11 27	1 9.86	+ 4 21.5	1.640	2.421	17.4	20.8	
473485	2015 <i>XN</i> ₈₅	10 18.8 322°72'			3°1/15.3 18			491403	2012 <i>DC</i> ₁₁	10 18.8 318°74'			1°9/22.2 18	
9 18	1 52.81	+ 3 29.4	2.117	3.010	10.5	21.0	9 18	1 49.71	+21 9.2	4.191	5.015	7.2	21.1	
9 28	1 48.22	+ 2 14.6	2.055	3.005	7.3	20.8	9 28	1 45.57	+21 3.0	4.108	5.012	5.5	21.0	
10 8	1 42.20	+ 0 56.1	2.019	3.001	4.2	20.6	10 8	1 40.66	+20 48.8	4.051	5.008	3.7	20.9	
10 18	1 35.38	- 0 20.0	2.010	2.997	3.3	20.5	10 18	1 35.30	+20 27.4	4.023	5.005	2.2	20.8	
10 28	1 28.56	- 1 27.3	2.031	2.993	5.8	20.7	10 28	1 29.90	+20 0.5	4.025	5.001	2.3	20.8	
11 7	1 22.52	- 2 20.2	2.079	2.989	9.1	20.9	11 7	1 24.89	+19 30.3	4.057	4.998	3.9	20.9	
11 17	1 17.90	- 2 55.6	2.152	2.985	12.1	21.1	11 17	1 20.63	+18 59.5	4.117	4.995	5.8	21.0	
11 27	1 15.16	- 3 11.9	2.246	2.981	14.6	21.2	11 27	1 17.41	+18 30.7	4.204	4.991	7.5	21.1	
247651	2002 <i>WK</i> ₁₅	10 18.8 277°26'			8°4/10.9 18 R			323633	2004 <i>XV</i>	10 18.8 334°27'			1°7/20.1 18	
9 18	1 58.18	-13 14.2	1.942	2.822	11.9	20.0	9 18	1 58.44	+14 38.4	1.882	2.748	12.9	20.1	
9 28	1 52.16	-14 21.1	1.884	2.807	9.8	19.9	9 28	1 52.51	+14 54.3	1.807	2.740	9.4	19.9	
10 8	1 44.36	-15 16.8	1.851	2.791	8.5	19.8	10 8	1 44.65	+14 59.6	1.756	2.732	5.5	19.7	
10 18	1 35.55	-15 54.0	1.844	2.776	8.9	19.7	10 18	1 35.61	+14 55.4	1.732	2.725	2.0	19.4	
10 28	1 26.70	-16 7.0	1.862	2.761	10.7	19.8	10 28	1 26.42	+14 44.5	1.736	2.718	3.9	19.5	
11 7	1 18.79	-15 53.6	1.904	2.745	13.2	20.0	11 7	1 18.14	+14 31.4	1.768	2.712	7.9	19.8	
11 17	1 12.60	-15 14.4	1.968	2.729	15.6	20.1	11 17	1 11.64	+14 20.7	1.825	2.706	11.6	20.0	
11 27	1 8.67	-14 12.5	2.049	2.714	17.8	20.3	11 27	1 7.54	+14 16.6	1.905	2.701	14.8	20.2	
203654	2002 <i>GW</i> ₁₇₅	10 18.8 62°27'			5°0/14.9 18			204778	2006 <i>KS</i> ₄₆	10 18.8 49°31'			2°1/17.1 18	
9 18	1 58.44	- 1 6.2	1.584	2.482	13.1	19.7	9 18	1 57.50	+ 6 37.6	1.557				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
228437	2001 <i>QV</i> ₈₆		10 18.8	33°16'	7.7/25.4	18	515947	2015 <i>RX</i> ₄₇		10 18.8	304°32'	1.2/17.6	18
9 18	1 57.88	+30 26.2	1.360	2.184	19.2	19.8	9 18	1 54.47	+10 0.8	1.897	2.781	11.9	20.9
9 28	1 52.69	+30 30.3	1.300	2.191	15.7	19.6	9 28	1 49.58	+8 57.3	1.830	2.777	8.3	20.7
10 8	1 44.90	+30 1.9	1.260	2.198	11.9	19.4	10 8	1 43.03	+7 43.8	1.788	2.773	4.3	20.5
10 18	1 35.63	+29 0.6	1.241	2.206	8.6	19.3	10 18	1 35.54	+6 25.9	1.774	2.770	1.2	20.2
10 28	1 26.39	+27 31.4	1.246	2.214	7.8	19.3	10 28	1 28.04	+5 10.6	1.789	2.766	4.6	20.5
11 7	1 18.67	+25 45.3	1.277	2.222	10.1	19.4	11 7	1 21.43	+4 4.9	1.831	2.763	8.6	20.7
11 17	1 13.56	+23 55.3	1.331	2.232	13.6	19.6	11 17	1 16.46	+3 14.0	1.899	2.759	12.2	20.9
11 27	1 11.62	+22 13.9	1.406	2.241	17.0	19.9	11 27	1 13.62	+2 41.0	1.988	2.756	15.2	21.1
161520	2004 <i>SO</i> ₃₂		10 18.8	46°13'	3.2/15.3	18	358317	2006 <i>UX</i> ₂₇₅		10 18.8	268°59'	1.5/17.5	18
9 18	1 53.16	+4 22.7	1.921	2.816	11.3	19.3	9 18	1 57.33	+7 8.0	1.945	2.829	11.7	21.2
9 28	1 48.50	+2 53.2	1.872	2.824	7.8	19.1	9 28	1 51.56	+6 38.6	1.878	2.824	8.2	21.0
10 8	1 42.36	+1 19.7	1.850	2.833	4.4	18.9	10 8	1 44.09	+6 3.4	1.835	2.820	4.3	20.8
10 18	1 35.43	-0 10.7	1.855	2.842	3.4	18.8	10 18	1 35.62	+5 26.5	1.820	2.815	1.5	20.5
10 28	1 28.61	-1 30.3	1.889	2.851	6.1	19.0	10 28	1 27.11	+4 53.0	1.834	2.810	4.7	20.8
11 7	1 22.70	-2 33.3	1.950	2.860	9.5	19.3	11 7	1 19.50	+4 27.7	1.875	2.805	8.6	21.0
11 17	1 18.35	-3 16.1	2.035	2.870	12.6	19.5	11 17	1 13.56	+4 14.3	1.941	2.800	12.1	21.2
11 27	1 15.99	-3 37.9	2.141	2.880	15.1	19.7	11 27	1 9.81	+4 14.8	2.029	2.795	15.0	21.4
471012	2009 <i>SF</i> ₂₆₅		10 18.8	39°90'	1.5/19.9	17	75221	1999 <i>VN</i> ₂₂₂		10 18.8	180°51'	1.4/17.7	16
9 18	1 56.86	+16 45.3	1.255	2.138	16.8	20.8	9 18	1 59.79	+8 45.7	1.561	2.447	13.9	20.7
9 28	1 51.78	+15 59.1	1.206	2.148	12.2	20.6	9 28	1 53.57	+8 2.4	1.500	2.448	9.7	20.5
10 8	1 44.32	+14 52.4	1.178	2.158	6.9	20.3	10 8	1 45.24	+7 9.9	1.463	2.448	5.1	20.2
10 18	1 35.60	+13 31.0	1.174	2.169	1.8	20.1	10 18	1 35.71	+6 13.6	1.453	2.448	1.4	19.9
10 28	1 27.02	+12 4.4	1.196	2.180	4.8	20.3	10 28	1 26.19	+5 20.7	1.470	2.448	5.3	20.2
11 7	1 19.94	+10 43.6	1.243	2.192	9.9	20.6	11 7	1 17.87	+4 38.3	1.514	2.448	9.9	20.5
11 17	1 15.29	+9 37.3	1.313	2.204	14.5	20.9	11 17	1 11.66	+4 11.1	1.583	2.447	14.0	20.7
11 27	1 13.58	+8 51.2	1.403	2.217	18.2	21.2	11 27	1 8.13	+4 2.0	1.671	2.446	17.4	21.0
382738	2003 <i>BY</i> ₅		10 18.8	228°85'	6.7/23.9	18	457893	2009 <i>TJ</i> ₁₉		10 18.8	2°05'	0.1/18.8	16
9 18	2 3.85	+28 26.9	1.922	2.723	15.3	21.4	9 18	1 54.62	+11 34.1	1.796	2.678	12.6	21.6
9 28	1 56.62	+29 6.3	1.836	2.713	12.5	21.2	9 28	1 49.76	+11 7.3	1.733	2.678	8.9	21.3
10 8	1 47.00	+29 24.8	1.773	2.704	9.5	21.0	10 8	1 43.15	+10 30.5	1.694	2.677	4.8	21.1
10 18	1 35.83	+29 19.6	1.735	2.693	7.2	20.9	10 18	1 35.55	+9 47.5	1.682	2.678	0.3	20.7
10 28	1 24.33	+28 51.6	1.724	2.683	6.9	20.8	10 28	1 27.94	+9 3.7	1.697	2.679	4.1	21.1
11 7	1 13.82	+28 5.7	1.740	2.671	9.0	20.9	11 7	1 21.29	+8 25.1	1.739	2.680	8.2	21.3
11 17	1 5.41	+27 9.7	1.782	2.659	12.0	21.1	11 17	1 16.36	+7 56.4	1.806	2.682	12.0	21.6
11 27	0 59.84	+26 12.5	1.847	2.647	15.0	21.3	11 27	1 13.67	+7 41.0	1.895	2.685	15.1	21.8
27914	1996 <i>TN</i> ₄₁		10 18.8	11°84'	1.7/17.4	18	80949	2000 <i>DG</i> ₉₆		10 18.8	143°82'	2.6/21.1	18
9 18	1 56.43	+7 7.8	1.706	2.597	12.7	18.2	9 18	2 1.10	+19 7.6	1.822	2.671	14.0	19.7
9 28	1 51.04	+6 32.6	1.648	2.598	8.8	18.0	9 28	1 54.30	+18 52.9	1.759	2.681	10.4	19.5
10 8	1 43.82	+5 51.1	1.614	2.599	4.7	17.7	10 8	1 45.55	+18 21.5	1.720	2.690	6.4	19.3
10 18	1 35.58	+5 8.2	1.607	2.601	1.7	17.5	10 18	1 35.74	+17 35.6	1.708	2.698	3.0	19.1
10 28	1 27.36	+4 29.9	1.627	2.603	5.1	17.8	10 28	1 25.97	+16 40.2	1.724	2.705	4.1	19.2
11 7	1 20.19	+4 1.6	1.674	2.606	9.3	18.0	11 7	1 17.35	+15 42.1	1.768	2.712	7.9	19.5
11 17	1 14.86	+3 47.1	1.745	2.609	13.0	18.3	11 17	1 10.71	+14 48.2	1.839	2.719	11.6	19.7
11 27	1 11.89	+3 48.4	1.837	2.612	16.0	18.5	11 27	1 6.59	+14 4.4	1.932	2.725	14.7	19.9
276434	2003 <i>BT</i> ₈₉		10 18.8	241°51'	3.3/15.6	18	30449	2000 <i>NH</i> ₁₃		10 18.8	210°84'	4.7/23.9	18
9 18	1 56.64	+5 7.9	1.717	2.610	12.5	20.8	9 18	1 57.71	+27 18.2	2.375	3.178	12.6	18.4
9 28	1 51.25	+3 39.2	1.650	2.601	8.7	20.6	9 28	1 51.78	+27 16.8	2.291	3.173	10.1	18.3
10 8	1 43.97	+2 2.9	1.608	2.591	4.9	20.3	10 8	1 44.20	+26 57.0	2.230	3.168	7.4	18.1
10 18	1 35.59	+0 27.1	1.593	2.582	3.5	20.2	10 18	1 35.64	+26 18.9	2.196	3.163	5.2	17.9
10 28	1 27.15	-0 59.3	1.607	2.571	6.7	20.4	10 28	1 26.98	+25 25.1	2.190	3.157	5.0	17.9
11 7	1 19.70	-2 8.5	1.647	2.561	10.7	20.6	11 7	1 19.14	+24 20.8	2.213	3.151	6.9	18.0
11 17	1 14.06	-2 55.6	1.711	2.550	14.4	20.8	11 17	1 12.85	+23 12.4	2.263	3.145	9.6	18.2
11 27	1 10.82	-3 18.8	1.795	2.538	17.5	21.0	11 27	1 8.65	+22 6.7	2.338	3.138	12.2	18.4
106364	2000 <i>VO</i> ₈		10 18.8	330°33'	0.8/18.2	18	35833	1999 <i>JN</i> ₅₇		10 18.8	33°63'	8.3/14.5	18 R
9 18	1 56.09	+9 20.2	1.858	2.741	12.2	19.5	9 18	2 2.47	-8 34.7	1.248	2.147	15.7	17.8
9 28	1 50.77	+8 53.7	1.790	2.736	8.6	19.2	9 28	1 55.49	-9 5.9	1.217	2.160	12.0	17.6
10 8	1 43.68	+8 19.2	1.746	2.730	4.5	19.0	10 8	1 46.19	-9 23.9	1.207	2.173	9.0	17.5
10 18	1 35.58	+7 40.6	1.729	2.725	0.8	18.7	10 18	1 35.77	-9 21.5	1.221	2.187	8.5	17.5
10 28	1 27.41	+7 3.3	1.741	2.721	4.4	19.0	10 28	1 25.73	-8 54.2	1.260	2.203	10.8	17.7
11 7	1 20.17	+6 32.5	1.780	2.716	8.5	19.2	11 7	1 17.39	-8 1.8	1.322	2.218	14.2	17.9
11 17	1 14.63	+6 12.5	1.844	2.712	12.2	19.4	11 17	1 11.61	-6 47.7	1.405	2.235	17.5	18.2
11 27	1 11.34	+6 6.1	1.929	2.708	15.2	19.6	11 27	1 8.84	-5 16.3	1.506	2.252	20.2	18.5
475312	2005 <i>YU</i> ₄₅		10 18.8	315°13'	0.5/18.5	18	166136	2002 <i>CN</i> ₂₉₆		10 18.8	115°91'	0.3/18.3	18
9 18	1 56.64	+11 7.0	1.382	2.274	15.0	21.5	9 18	1 48.72	+9 35.8	4.363	5.231	6.1	20.5
9 28	1 51.74	+10 32.1	1.309	2.259	10.7	21.2	9 28	1 44.83	+9 12.3	4.294	5.233	4.2	20.3
10 8	1 44.45	+9 43.6	1.259	2.244	5.7	20.9	10 8	1 40.26	+8 45.4	4.252	5.235	2.2	20.2
10 18	1 35.64	+8 46.6	1.233	2.229	0.6	20.5	10 18	1 35.34	+8 16.7	4.241	5.237	0.3	20.0
10 28	1 26.62	+7 48.7	1.233	2.215	5.3	20.8	10 28	1 30.41	+7 48.4	4.260	5.239	2.1	20.2
11 7	1 18.75	+6 58.4	1.258	2.201	10.5	21.1	11 7	1 25.84	+7 22.6	4.310	5.241	4.1	20.3
11 17	1 13.10	+6 22.7	1.306	2.188	15.2	21.3	11 17	1 21.94	+7 1.2	4.388	5.243	5.9	20.5
11 27	1 10.40	+6 6.2	1.374	2.175	19.2	21.5	11 27	1 18.98	+6 45.7	4.491	5.245	7.5	20.6
456626	2007 <i>JL</i> ₂₅		10 18.8	129°39'	4.2/14.4	18	361018	2005 <i>WN</i> ₂₉		10 18.8	239°41'	3.4/15.8	18
9 18	1 55.66	-2 56.0	2.										

EPHEMERIDES

10 18.8

10 18.8

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
452068	2014 <i>OE</i> ₃₃₃	10 18.8 342°08		4.8/23.0 17			75560	1999 <i>YN</i> ₂₂	10 18.8 349°93		9.7/24.6 18		
9 18	1 58.73	+24 22.3	2.049	2.874	13.6	21.5	9 18	1 59.90	+29 0.0	1.303	2.135	19.5	18.8
9 28	1 52.68	+24 44.5	1.974	2.872	10.7	21.3	9 28	1 54.63	+30 24.4	1.234	2.126	16.2	18.6
10 8	1 44.75	+24 49.3	1.922	2.871	7.6	21.2	10 8	1 46.29	+31 23.1	1.184	2.118	12.9	18.4
10 18	1 35.69	+24 36.2	1.896	2.870	5.2	21.0	10 18	1 35.86	+31 50.2	1.155	2.111	10.3	18.2
10 28	1 26.50	+24 7.5	1.898	2.869	5.2	21.0	10 28	1 24.96	+31 44.5	1.149	2.106	9.9	18.2
11 7	1 18.22	+23 28.0	1.927	2.868	7.6	21.2	11 7	1 15.42	+31 11.6	1.166	2.102	11.9	18.3
11 17	1 11.72	+22 44.1	1.983	2.867	10.7	21.3	11 17	1 8.70	+30 21.5	1.205	2.100	15.2	18.5
11 27	1 7.57	+22 2.4	2.062	2.866	13.5	21.5	11 27	1 5.71	+29 26.4	1.263	2.098	18.6	18.7
476452	2008 <i>EY</i> ₅₀	10 18.8 149°28		1.9/20.4 16			452055	2014 <i>ON</i> ₂₇₄	10 18.8 60°29		8.2/10.5 18		
9 18	2 1.91	+17 1.5	1.857	2.711	13.5	22.5	9 18	1 56.29	-14 16.0	2.080	2.958	11.3	20.3
9 28	1 54.82	+16 46.7	1.795	2.721	9.9	22.3	9 28	1 50.63	-15 25.1	2.045	2.963	9.3	20.2
10 8	1 45.82	+16 17.3	1.756	2.730	5.9	22.1	10 8	1 43.50	-16 21.7	2.034	2.968	8.3	20.2
10 18	1 35.77	+15 35.8	1.745	2.738	2.2	21.8	10 18	1 35.62	-16 59.5	2.049	2.974	8.6	20.2
10 28	1 25.77	+14 47.0	1.763	2.746	3.9	22.0	10 28	1 27.86	-17 14.0	2.090	2.979	10.2	20.3
11 7	1 16.90	+13 57.3	1.810	2.752	7.9	22.2	11 7	1 21.06	-17 3.9	2.155	2.984	12.3	20.5
11 17	1 9.99	+13 12.8	1.883	2.759	11.6	22.5	11 17	1 15.84	-16 30.5	2.241	2.990	14.3	20.6
11 27	1 5.56	+12 38.6	1.979	2.764	14.7	22.7	11 27	1 12.63	-15 36.4	2.345	2.996	16.1	20.8
444512	2006 <i>SH</i> ₅₄	10 18.8 43°59		8.3/27.1 16			139800	2001 <i>RV</i> ₁₂	10 18.8 290°01		0.6/18.3 18 R		
9 18	1 58.04	+34 2.5	1.644	2.434	17.9	20.4	9 18	1 55.32	+11 18.9	1.882	2.762	12.2	19.8
9 28	1 52.52	+34 14.3	1.586	2.448	14.9	20.3	9 28	1 50.20	+10 26.2	1.814	2.759	8.6	19.6
10 8	1 44.73	+33 56.0	1.547	2.462	11.8	20.1	10 8	1 43.40	+9 22.8	1.772	2.756	4.5	19.3
10 18	1 35.69	+33 6.4	1.530	2.476	9.2	20.0	10 18	1 35.62	+8 13.4	1.757	2.753	0.6	19.0
10 28	1 26.73	+31 49.2	1.538	2.490	8.3	20.0	10 28	1 27.83	+7 4.8	1.771	2.750	4.3	19.3
11 7	1 19.15	+30 13.1	1.572	2.506	9.6	20.1	11 7	1 20.96	+6 3.7	1.812	2.748	8.4	19.6
11 17	1 13.87	+28 28.9	1.630	2.521	12.1	20.3	11 17	1 15.77	+5 15.4	1.879	2.745	12.0	19.8
11 27	1 11.45	+26 47.9	1.711	2.537	14.9	20.5	11 27	1 12.76	+4 43.5	1.967	2.742	15.1	20.0
212560	2006 <i>SF</i> ₆₆	10 18.8 125°21		2.3/20.8 18			429767	2012 <i>DA</i> ₅₆	10 18.8 254°91		2.4/17.0 17		
9 18	1 59.85	+17 36.7	2.070	2.920	12.5	20.9	9 18	2 0.15	+7 2.8	1.479	2.371	14.2	22.0
9 28	1 53.27	+17 38.0	2.006	2.929	9.2	20.7	9 28	1 54.11	+6 7.8	1.406	2.356	10.0	21.7
10 8	1 44.97	+17 26.4	1.967	2.938	5.7	20.5	10 8	1 45.70	+5 3.2	1.356	2.341	5.4	21.4
10 18	1 35.72	+17 3.2	1.955	2.946	2.5	20.3	10 18	1 35.81	+3 55.7	1.333	2.326	2.5	21.2
10 28	1 26.48	+16 32.1	1.972	2.954	3.7	20.4	10 28	1 25.73	+2 53.6	1.336	2.310	6.4	21.4
11 7	1 18.22	+15 58.0	2.018	2.961	7.1	20.6	11 7	1 16.77	+2 5.2	1.366	2.294	11.2	21.7
11 17	1 11.67	+15 26.1	2.091	2.969	10.5	20.8	11 17	1 10.01	+1 35.9	1.418	2.278	15.6	21.9
11 27	1 7.36	+15 1.0	2.187	2.976	13.3	21.0	11 27	1 6.15	+1 28.5	1.490	2.261	19.3	22.1
122092	2000 <i>HZ</i> ₅₀	10 18.8 111°42		0.8/19.4 18			289842	2005 <i>LS</i> ₃₄	10 18.8 110°40		1.8/17.3 16		
9 18	2 2.05	+14 31.2	1.394	2.270	15.9	20.4	9 18	2 0.25	+8 27.7	1.596	2.482	13.7	21.4
9 28	1 55.24	+13 53.9	1.344	2.284	11.4	20.1	9 28	1 53.67	+7 25.9	1.551	2.499	9.5	21.2
10 8	1 46.13	+13 0.4	1.317	2.298	6.3	19.9	10 8	1 45.19	+6 15.9	1.531	2.515	4.9	20.9
10 18	1 35.81	+11 55.9	1.315	2.311	1.1	19.6	10 18	1 35.75	+5 4.4	1.537	2.531	1.8	20.8
10 28	1 25.67	+10 48.4	1.341	2.324	4.7	19.9	10 28	1 26.54	+3 59.1	1.572	2.547	5.4	21.1
11 7	1 17.04	+9 46.6	1.393	2.336	9.7	20.2	11 7	1 18.62	+3 6.8	1.634	2.562	9.7	21.3
11 17	1 10.84	+8 57.7	1.469	2.348	14.0	20.5	11 17	1 12.77	+2 31.9	1.720	2.577	13.5	21.6
11 27	1 7.59	+8 26.3	1.566	2.359	17.5	20.8	11 27	1 9.47	+2 16.2	1.827	2.591	16.5	21.9
472139	2014 <i>BW</i> ₆₃	10 18.8 279°93		0.2/18.6 18			36416	2000 <i>OO</i> ₅₀	10 18.8 41°68		6.8/13.6 18		
9 18	1 57.70	+11 54.0	1.622	2.504	13.7	21.2	9 18	1 56.21	-1 21.9	1.184	2.097	15.3	17.0
9 28	1 52.25	+11 15.4	1.544	2.489	9.8	21.0	9 28	1 51.11	-3 8.5	1.162	2.118	11.0	16.8
10 8	1 44.65	+10 23.7	1.490	2.473	5.3	20.7	10 8	1 43.87	-4 50.3	1.163	2.140	7.5	16.7
10 18	1 35.71	+9 23.4	1.461	2.458	0.4	20.3	10 18	1 35.65	-6 15.5	1.187	2.163	7.2	16.8
10 28	1 26.58	+8 21.3	1.461	2.442	4.7	20.6	10 28	1 27.81	-7 14.7	1.236	2.186	10.2	17.0
11 7	1 18.45	+7 25.0	1.486	2.426	9.5	20.8	11 7	1 21.53	-7 43.5	1.308	2.210	13.9	17.3
11 17	1 12.30	+6 41.3	1.537	2.410	13.8	21.0	11 17	1 17.59	-7 42.1	1.400	2.234	17.3	17.6
11 27	1 8.79	+6 14.7	1.608	2.395	17.4	21.2	11 27	1 16.36	-7 13.8	1.509	2.259	20.0	17.9
237465	1999 <i>YG</i> ₁₉	10 18.8 81°19		1.9/17.6 17			188826	2005 <i>YZ</i> ₁₉₄	10 18.8 13°00		5.9/13.3 18		
9 18	2 4.36	+8 36.1	1.204	2.096	16.7	21.3	9 18	1 54.61	-4 32.5	1.828	2.726	11.6	19.4
9 28	1 56.77	+7 43.0	1.174	2.124	11.6	21.1	9 28	1 49.64	-5 42.9	1.782	2.727	8.6	19.2
10 8	1 46.84	+6 40.9	1.166	2.152	6.0	20.9	10 8	1 43.05	-6 48.9	1.760	2.730	6.3	19.1
10 18	1 35.85	+5 37.5	1.184	2.179	1.9	20.7	10 18	1 35.60	-7 43.3	1.765	2.732	6.2	19.1
10 28	1 25.38	+4 41.9	1.228	2.205	6.2	21.0	10 28	1 28.23	-8 20.0	1.797	2.735	8.4	19.2
11 7	1 16.75	+4 1.3	1.297	2.232	11.1	21.4	11 7	1 21.82	-8 35.3	1.854	2.739	11.3	19.4
11 17	1 10.83	+3 39.8	1.389	2.257	15.4	21.7	11 17	1 17.08	-8 28.4	1.933	2.743	14.1	19.6
11 27	1 8.01	+3 38.7	1.500	2.282	18.7	22.0	11 27	1 14.46	-8 0.6	2.031	2.747	16.5	19.8
875	<i>Nymphe</i>	10 18.8 55°86		1.5/17.4 18 R			412743	2014 <i>OV</i> ₃₆₀	10 18.8 261°36		3.2/21.9 17		
9 18	1 55.26	+11 39.4	1.444	2.335	14.5	14.7	9 18	1 57.64	+20 55.3	2.297	3.133	11.9	21.6
9 28	1 50.32	+9 55.1	1.400	2.350	10.0	14.4	9 28	1 51.77	+21 2.6	2.215	3.125	9.1	21.4
10 8	1 43.45	+7 57.2	1.379	2.365	5.1	14.2	10 8	1 44.25	+20 56.0	2.156	3.117	6.1	21.2
10 18	1 35.60	+5 55.3	1.386	2.381	1.6	14.0	10 18	1 35.72	+20 36.0	2.125	3.108	3.5	21.0
10 28	1 27.97	+4 0.8	1.420	2.397	5.7	14.3	10 28	1 27.05	+20 5.2	2.122	3.100	3.9	21.1
11 7	1 21.64	+2 23.7	1.481	2.413	10.2	14.6	11 7	1 19.14	+19 28.0	2.148	3.091	6.8	21.2
11 17	1 17.35	+1 10.4	1.565	2.429	14.2	14.9	11 17	1 12.73	+18 49.6	2.202	3.083	9.9	21.4
11 27	1 15.56	+0 23.4	1.670	2.445	17.4	15.2	11 27	1 8.40	+18 15.3	2.279	3.074	12.7	21.6
514231	2015 <i>OH</i> ₈₆	10 18.8 323°74		4.7/22.3 18			168692	2000 <i>GY</i> ₅₆	10 18.8 243°15		0.5/18.5 18		
9 18	2 1.79	+22 21.4	1.867	2.701	14.3	21.0	9 18						

EPHEMERIDES

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10 18.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
220751	2004 <i>TH</i> ₇₂		10 18.8	18° 87'	0° 5'/18.4	16	18647	Václavhübner		10 18.8	205° 30'	2° 0'/17.1	18 R
9 18	1 54.33	+10 55.2	1.600	2.490	13.4	20.5	9 18	1 57.75	+7 3.7	1.757	2.645	12.6	19.4
9 28	1 49.66	+10 16.6	1.548	2.497	9.4	20.3	9 28	1 52.00	+6 12.9	1.695	2.643	8.8	19.2
10 8	1 43.14	+9 27.7	1.520	2.504	5.0	20.0	10 8	1 44.40	+5 15.2	1.657	2.642	4.6	18.9
10 18	1 35.63	+8 33.4	1.517	2.513	0.6	19.7	10 18	1 35.76	+4 16.0	1.646	2.640	2.0	18.7
10 28	1 28.20	+7 40.5	1.541	2.522	4.5	20.0	10 28	1 27.11	+3 22.1	1.664	2.638	5.4	19.0
11 7	1 21.87	+6 55.6	1.592	2.533	8.9	20.3	11 7	1 19.49	+2 39.6	1.709	2.636	9.5	19.2
11 17	1 17.41	+6 23.7	1.667	2.544	12.7	20.6	11 17	1 13.69	+2 12.8	1.778	2.634	13.1	19.4
11 27	1 15.33	+6 7.9	1.762	2.555	15.9	20.8	11 27	1 10.27	+2 3.8	1.868	2.631	16.2	19.6
288511	2004 <i>FS</i> ₁₀₈		10 18.8	209° 44'	0° 8'/17.9	18	410970	2009 <i>TK</i> ₁₉		10 18.8	18° 39'	0° 4'/19.3	18
9 18	1 56.14	+9 49.6	2.267	3.142	10.6	21.6	9 18	1 53.69	+14 20.2	2.193	3.062	11.2	21.4
9 28	1 50.57	+9 4.3	2.195	3.137	7.5	21.4	9 28	1 48.89	+13 28.8	2.125	3.062	8.0	21.2
10 8	1 43.54	+8 11.2	2.149	3.132	3.9	21.2	10 8	1 42.66	+12 25.7	2.082	3.063	4.4	21.0
10 18	1 35.67	+7 14.2	2.131	3.127	0.8	21.0	10 18	1 35.63	+11 15.1	2.068	3.064	0.6	20.7
10 28	1 27.77	+6 18.5	2.144	3.121	3.9	21.2	10 28	1 28.62	+10 2.4	2.082	3.064	3.4	21.0
11 7	1 20.63	+5 29.3	2.185	3.115	7.5	21.4	11 7	1 22.40	+8 54.0	2.126	3.065	7.1	21.2
11 17	1 14.93	+4 50.7	2.253	3.109	10.7	21.6	11 17	1 17.61	+7 55.0	2.196	3.066	10.4	21.4
11 27	1 11.13	+4 25.7	2.343	3.102	13.4	21.8	11 27	1 14.71	+7 9.4	2.289	3.067	13.1	21.6
305154	2007 <i>VY</i> ₂₁₃		10 18.8	117° 00'	4° 6'/14.9	18	484815	2009 <i>FC</i> ₂₅		10 18.8	232° 05'	3° 4'/15.2	18
9 18	1 59.10	-2 15.8	1.934	2.822	11.5	20.5	9 18	1 56.34	+1 56.0	2.248	3.134	10.2	21.6
9 28	1 52.67	-3 0.0	1.886	2.831	8.3	20.3	9 28	1 50.75	+0 48.7	2.176	3.122	7.2	21.4
10 8	1 44.63	-3 41.3	1.864	2.839	5.5	20.2	10 8	1 43.67	-0 21.2	2.130	3.110	4.4	21.2
10 18	1 35.75	-4 14.2	1.870	2.847	4.8	20.1	10 18	1 35.72	-1 28.2	2.113	3.097	3.6	21.1
10 28	1 26.99	-4 33.7	1.904	2.855	7.0	20.3	10 28	1 27.70	-2 26.2	2.126	3.083	5.9	21.3
11 7	1 19.27	-4 36.7	1.965	2.863	10.1	20.5	11 7	1 20.41	-3 10.4	2.167	3.069	9.1	21.4
11 17	1 13.27	-4 22.4	2.049	2.871	13.0	20.7	11 17	1 14.54	-3 37.7	2.232	3.055	12.1	21.6
11 27	1 9.45	-3 51.5	2.155	2.878	15.5	20.9	11 27	1 10.59	-3 46.8	2.319	3.040	14.6	21.8
219502	2001 <i>FJ</i> ₁₅₈		10 18.8	298° 21'	6° 1'/23.7	17	431756	2008 <i>GJ</i> ₈₈		10 18.8	90° 48'	1° 3'/17.8	16
9 18	2 04.9	+27 11.1	2.114	2.920	13.9	19.8	9 18	2 05.8	+9 30.2	1.529	2.414	14.2	21.8
9 28	1 54.15	+27 56.1	2.022	2.904	11.3	19.6	9 28	1 53.96	+8 38.6	1.487	2.434	9.9	21.6
10 8	1 45.70	+28 23.6	1.954	2.887	8.6	19.4	10 8	1 45.38	+7 37.8	1.470	2.454	5.1	21.4
10 18	1 35.86	+28 31.4	1.911	2.871	6.5	19.3	10 18	1 35.84	+6 34.2	1.479	2.474	1.3	21.2
10 28	1 25.65	+28 19.8	1.895	2.855	6.3	19.3	10 28	1 26.57	+5 35.2	1.516	2.494	5.2	21.5
11 7	1 16.22	+27 52.5	1.907	2.839	8.3	19.3	11 7	1 18.67	+4 47.7	1.580	2.513	9.6	21.8
11 17	1 8.55	+27 15.5	1.945	2.824	11.1	19.5	11 17	1 12.93	+4 16.0	1.668	2.532	13.4	22.1
11 27	1 3.38	+26 36.1	2.006	2.808	13.9	19.6	11 27	1 9.80	+4 2.5	1.777	2.551	16.5	22.4
89524	2001 <i>XU</i> ₆₆		10 18.8	312° 74'	2° 2'/17.2	18	402052	2003 <i>SU</i> ₃₂₃		10 18.9	17° 72'	3° 0'/21.4	14 C
9 18	1 57.25	+6 56.0	1.411	2.309	14.4	18.9	9 18	1 56.67	+19 4.3	1.798	2.655	13.8	21.1
9 28	1 52.13	+6 13.8	1.341	2.294	10.1	18.6	9 28	1 51.30	+19 11.0	1.736	2.660	10.3	20.9
10 8	1 44.68	+5 23.1	1.294	2.280	5.4	18.3	10 8	1 44.06	+19 2.2	1.697	2.666	6.6	20.7
10 18	1 35.77	+4 29.8	1.272	2.266	2.3	18.1	10 18	1 35.76	+18 39.1	1.684	2.672	3.4	20.5
10 28	1 26.69	+3 41.9	1.276	2.252	6.2	18.3	10 28	1 27.44	+18 5.8	1.698	2.679	4.2	20.6
11 7	1 18.74	+3 6.8	1.305	2.239	11.1	18.5	11 7	1 20.16	+17 27.8	1.739	2.687	7.7	20.8
11 17	1 12.96	+2 49.7	1.357	2.226	15.6	18.8	11 17	1 14.72	+16 51.3	1.806	2.695	11.3	21.0
11 27	1 10.05	+2 53.0	1.427	2.214	19.3	19.0	11 27	1 11.66	+16 21.9	1.895	2.703	14.4	21.3
222148	1999 <i>XW</i> ₆₂		10 18.8	321° 49'	2° 6'/21.6	18	386933	2011 <i>NL</i> ₃		10 18.9	62° 38'	17° 3'/1.7	18
9 18	1 54.54	+20 40.1	2.096	2.942	12.5	20.2	9 18	2 2.93	-38 31.1	1.681	2.463	17.8	19.9
9 28	1 49.63	+20 10.9	2.020	2.938	9.4	20.0	9 28	1 55.63	-40 5.6	1.688	2.477	17.4	19.9
10 8	1 43.11	+19 25.2	1.968	2.934	6.0	19.8	10 8	1 46.21	-41 2.2	1.712	2.491	17.4	20.0
10 18	1 35.65	+18 25.1	1.942	2.931	3.0	19.6	10 18	1 35.91	-41 15.1	1.754	2.505	18.0	20.0
10 28	1 28.15	+17 15.5	1.945	2.927	3.7	19.6	10 28	1 26.15	-40 42.9	1.812	2.520	18.8	20.2
11 7	1 21.49	+16 2.9	1.977	2.923	7.0	19.8	11 7	1 18.12	-39 29.8	1.885	2.534	19.7	20.3
11 17	1 16.39	+14 53.9	2.035	2.920	10.4	20.0	11 17	1 12.58	-37 42.8	1.971	2.549	20.6	20.4
11 27	1 13.38	+13 54.5	2.117	2.917	13.3	20.2	11 27	1 9.87	-35 29.9	2.068	2.563	21.4	20.6
127599	2003 <i>BE</i> ₁₈		10 18.8	336° 52'	0° 2'/18.7	18 R	175715	1996 <i>XR</i> ₃		10 18.9	173° 98'	2° 6'/20.8	18
9 18	1 55.61	+11 17.5	1.137	2.040	16.7	18.9	9 18	2 2.36	+17 57.5	1.672	2.528	14.7	21.0
9 28	1 51.40	+10 54.4	1.071	2.026	11.9	18.6	9 28	1 55.46	+17 52.6	1.604	2.530	10.9	20.7
10 8	1 44.46	+10 16.5	1.026	2.012	6.4	18.3	10 8	1 46.35	+17 31.2	1.560	2.532	6.7	20.5
10 18	1 35.77	+9 28.7	1.003	1.999	0.5	17.8	10 18	1 35.95	+16 55.0	1.542	2.533	2.9	20.3
10 28	1 26.84	+8 39.2	1.004	1.988	5.7	18.2	10 28	1 25.50	+16 8.7	1.552	2.534	4.4	20.4
11 7	1 19.26	+7 57.4	1.029	1.978	11.5	18.4	11 7	1 16.24	+15 19.3	1.589	2.534	8.6	20.6
11 17	1 14.24	+7 30.9	1.074	1.969	16.7	18.7	11 17	1 9.14	+14 33.9	1.653	2.534	12.6	20.9
11 27	1 12.56	+7 24.3	1.138	1.961	21.0	19.0	11 27	1 4.79	+13 58.7	1.738	2.533	16.0	21.1
407629	2011 <i>CA</i> ₇₆		10 18.8	257° 60'	2° 0'/20.9	18	508395	2016 <i>GJ</i> ₁₇₀		10 18.9	88° 13'	3° 8'/16.5	17
9 18	1 57.17	+17 43.8	2.656	3.499	10.3	21.3	9 18	2 4.56	+2 45.4	1.296	2.191	15.6	20.6
9 28	1 51.29	+17 44.7	2.563	3.482	7.7	21.1	9 28	1 56.94	+2 4.6	1.261	2.212	10.9	20.4
10 8	1 43.96	+17 35.1	2.496	3.465	4.8	20.9	10 8	1 47.01	+1 22.3	1.249	2.232	6.1	20.2
10 18	1 35.73	+17 16.0	2.458	3.448	2.2	20.7	10 18	1 35.99	+0 45.6	1.262	2.252	3.9	20.1
10 28	1 27.33	+16 49.7	2.450	3.430	3.1	20.7	10 28	1 25.34	+0 21.4	1.302	2.271	7.3	20.4
11 7	1 19.53	+16 20.1	2.471	3.413	6.1	20.9	11 7	1 16.39	+0 14.3	1.367	2.290	11.7	20.7
11 17	1 13.00	+15 51.0	2.521	3.395	9.1	21.1	11 17	1 10.01	+0 25.8	1.455	2.309	15.6	21.0
11 27	1 8.25	+15 26.7	2.594	3.376	11.7	21.2	11 27	1 6.65	+0 55.5	1.562	2.328	18.8	21.3
364680	2007 <i>TY</i> ₃₆₆		10 18.8	134° 31'	3°								

EPHEMERIDES

10 18.9

10 18.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
351154	2003 <i>YJ</i> ₈₀		10 18.9 284°41'	4°0'/15.5 18			403190	2008 <i>KO</i> ₃₁		10 18.9 15°64'	6°2'/13.3 17		
9 18	1 57.93	+ 0 53.5	1.833	2.725	11.9	20.6	9 18	1 56.18	- 6 16.4	1.887	2.781	11.5	20.7
9 28	1 52.24	+ 0 5.1	1.755	2.704	8.5	20.4	9 28	1 50.73	- 7 13.9	1.841	2.782	8.7	20.5
10 8	1 44.63	- 0 45.2	1.702	2.682	5.2	20.1	10 8	1 43.67	- 8 5.3	1.819	2.784	6.5	20.4
10 18	1 35.82	- 1 31.2	1.676	2.660	4.2	20.0	10 18	1 35.75	- 8 44.1	1.823	2.787	6.5	20.4
10 28	1 26.82	- 2 6.6	1.677	2.638	6.9	20.1	10 28	1 27.91	- 9 4.9	1.855	2.789	8.5	20.6
11 7	1 18.67	- 2 26.2	1.705	2.616	10.6	20.3	11 7	1 21.05	- 9 5.0	1.911	2.792	11.3	20.7
11 17	1 12.25	- 2 27.2	1.757	2.594	14.2	20.5	11 17	1 15.85	- 8 44.1	1.991	2.795	14.0	20.9
11 27	1 8.18	- 2 8.8	1.829	2.571	17.2	20.7	11 27	1 12.79	- 8 3.7	2.089	2.799	16.3	21.1
279517	2011 <i>BS</i> ₉		10 18.9 31°70'	4°5'/23.2 17			345268	2005 <i>VX</i> ₆₁		10 18.9 87°69'	1°0'/19.7 16		
9 18	1 56.69	+24 33.5	2.041	2.869	13.5	20.1	9 18	2 0.90	+16 0.7	1.564	2.432	14.9	21.4
9 28	1 51.21	+24 39.8	1.974	2.874	10.6	19.9	9 28	1 54.16	+15 10.6	1.523	2.458	10.7	21.2
10 8	1 43.99	+24 28.0	1.929	2.880	7.5	19.8	10 8	1 45.48	+14 4.9	1.505	2.483	5.9	21.0
10 18	1 35.77	+23 58.4	1.910	2.885	4.9	19.6	10 18	1 35.89	+12 48.8	1.513	2.509	1.3	20.8
10 28	1 27.52	+23 14.3	1.918	2.891	4.9	19.6	10 28	1 26.61	+11 30.2	1.550	2.534	4.2	21.0
11 7	1 20.21	+22 21.3	1.954	2.898	7.3	19.8	11 7	1 18.74	+10 17.7	1.615	2.558	8.6	21.4
11 17	1 14.62	+21 26.0	2.017	2.904	10.3	20.0	11 17	1 13.05	+ 9 17.8	1.705	2.582	12.5	21.7
11 27	1 11.27	+20 34.9	2.102	2.911	13.1	20.2	11 27	1 9.96	+ 8 34.8	1.817	2.605	15.7	21.9
40480	1999 <i>RK</i> ₆₁		10 18.9 245°10'	4°3'/14.8 18			155838	2000 <i>YV</i> ₄₈		10 18.9 253°13'	1°8'/16.9 17		
9 18	1 57.06	+ 0 53.1	1.862	2.755	11.7	18.5	9 18	1 55.91	+ 5 40.9	2.471	3.350	9.7	21.1
9 28	1 51.49	- 0 19.4	1.796	2.744	8.3	18.2	9 28	1 50.40	+ 5 2.4	2.389	3.334	6.8	20.9
10 8	1 44.16	- 1 33.9	1.755	2.734	5.2	18.0	10 8	1 43.49	+ 4 19.6	2.334	3.317	3.7	20.7
10 18	1 35.78	- 2 43.6	1.741	2.723	4.5	18.0	10 18	1 35.75	+ 3 36.1	2.308	3.300	1.8	20.5
10 28	1 27.34	- 3 41.2	1.756	2.712	7.1	18.1	10 28	1 27.90	+ 2 56.5	2.312	3.283	4.4	20.7
11 7	1 19.82	- 4 21.0	1.798	2.700	10.6	18.3	11 7	1 20.68	+ 2 24.9	2.345	3.265	7.6	20.9
11 17	1 13.98	- 4 40.2	1.863	2.689	13.9	18.5	11 17	1 14.75	+ 2 4.4	2.404	3.247	10.6	21.0
11 27	1 10.40	- 4 38.0	1.947	2.677	16.7	18.7	11 27	1 10.59	+ 1 57.1	2.486	3.229	13.1	21.2
401748	2013 <i>JT</i> ₅₇		10 18.9 36°28'	5°2'/14.2 18			379566	2011 <i>BA</i> ₂		10 18.9 204°55'	0°8'/19.6 16		
9 18	1 57.05	- 4 46.5	2.054	2.943	10.9	20.7	9 18	2 0.55	+14 19.1	1.785	2.651	13.4	21.9
9 28	1 51.23	- 5 29.8	2.004	2.946	8.1	20.5	9 28	1 54.09	+13 53.0	1.712	2.647	9.7	21.6
10 8	1 43.90	- 6 8.4	1.979	2.948	5.7	20.4	10 8	1 45.60	+13 13.4	1.664	2.643	5.4	21.4
10 18	1 35.76	- 6 37.0	1.981	2.951	5.4	20.4	10 18	1 35.93	+12 23.8	1.643	2.638	1.1	21.1
10 28	1 27.69	- 6 50.9	2.011	2.954	7.4	20.5	10 28	1 26.18	+11 29.6	1.650	2.633	4.1	21.3
11 7	1 20.53	- 6 47.6	2.068	2.957	10.2	20.7	11 7	1 17.46	+10 37.6	1.686	2.627	8.5	21.5
11 17	1 14.95	- 6 26.5	2.148	2.960	12.9	20.9	11 17	1 10.68	+ 9 54.0	1.747	2.621	12.4	21.7
11 27	1 11.40	- 5 48.6	2.249	2.963	15.2	21.1	11 27	1 6.43	+ 9 23.5	1.831	2.614	15.8	22.0
197098	2003 <i>UU</i> ₁₉₀		10 18.9 23°34'	0°6'/18.3 18			247048	2000 <i>HJ</i> ₁₀₁		10 18.9 227°78'	1°5'/20.4 17		
9 18	1 53.49	+11 15.8	2.007	2.887	11.5	19.7	9 18	1 58.32	+15 53.2	2.794	3.639	9.8	21.1
9 28	1 48.82	+10 23.7	1.947	2.891	8.1	19.5	9 28	1 52.01	+15 59.8	2.708	3.630	7.2	20.9
10 8	1 42.65	+ 9 22.0	1.912	2.896	4.2	19.3	10 8	1 44.33	+15 57.6	2.649	3.620	4.3	20.7
10 18	1 35.66	+ 8 15.5	1.904	2.900	0.6	19.0	10 18	1 35.83	+15 47.8	2.618	3.611	1.7	20.5
10 28	1 28.71	+ 7 10.2	1.926	2.905	4.0	19.3	10 28	1 27.21	+15 32.5	2.619	3.600	2.9	20.6
11 7	1 22.62	+ 6 12.2	1.975	2.911	7.8	19.6	11 7	1 19.19	+15 14.8	2.650	3.590	5.8	20.8
11 17	1 18.06	+ 5 26.2	2.050	2.916	11.2	19.8	11 17	1 12.40	+14 58.1	2.710	3.579	8.7	20.9
11 27	1 15.48	+ 4 55.5	2.147	2.922	14.0	20.0	11 27	1 7.33	+14 45.9	2.794	3.568	11.1	21.1
125487	2001 <i>WH</i> ₂₅		10 18.9 249°56'	3°5'/16.0 18			125857	2001 <i>XX</i> ₁₈₈		10 18.9 321°31'	0°7'/19.5 18		
9 18	1 59.78	+ 2 24.1	1.832	2.720	12.1	19.6	9 18	1 54.93	+14 28.4	1.815	2.690	12.9	19.9
9 28	1 53.50	+ 1 37.8	1.757	2.705	8.6	19.4	9 28	1 50.11	+13 52.4	1.742	2.681	9.3	19.7
10 8	1 45.29	+ 0 48.7	1.708	2.690	5.0	19.1	10 8	1 43.47	+13 2.8	1.692	2.672	5.2	19.4
10 18	1 35.88	+ 0 2.4	1.686	2.674	3.6	19.0	10 18	1 35.76	+12 3.3	1.668	2.664	1.0	19.1
10 28	1 26.34	- 0 34.7	1.693	2.658	6.4	19.2	10 28	1 27.96	+10 59.7	1.673	2.656	3.9	19.3
11 7	1 17.71	- 0 57.6	1.727	2.641	10.3	19.4	11 7	1 21.07	+ 9 59.3	1.704	2.648	8.2	19.5
11 17	1 10.88	- 1 3.1	1.785	2.624	13.9	19.5	11 17	1 15.91	+ 9 8.1	1.761	2.641	12.0	19.8
11 27	1 6.45	- 0 50.2	1.863	2.606	16.9	19.7	11 27	1 13.03	+ 8 31.1	1.840	2.634	15.3	20.0
408076	2012 <i>HR</i> ₁₀		10 18.9 216°27'	5°1'/12.1 18			84914	2003 <i>UP</i> ₂₃₅		10 18.9 19°33'	2°5'/20.9 18		
9 18	1 53.28	- 4 56.3	2.509	3.398	9.2	21.2	9 18	1 57.05	+18 10.5	1.583	2.449	14.9	18.7
9 28	1 48.45	- 6 28.7	2.453	3.393	6.9	21.0	9 28	1 51.76	+17 56.9	1.521	2.452	11.0	18.4
10 8	1 42.39	- 7 58.5	2.425	3.389	5.3	20.9	10 8	1 44.39	+17 25.8	1.482	2.455	6.7	18.2
10 18	1 35.65	- 9 19.3	2.426	3.384	5.5	20.9	10 18	1 35.83	+16 39.8	1.467	2.459	2.9	18.0
10 28	1 28.90	-10 25.4	2.456	3.379	7.3	21.0	10 28	1 27.27	+15 44.6	1.480	2.464	4.3	18.1
11 7	1 22.82	-11 13.0	2.513	3.374	9.6	21.2	11 7	1 19.87	+14 47.6	1.520	2.468	8.5	18.4
11 17	1 17.96	-11 40.3	2.593	3.369	11.9	21.3	11 17	1 14.53	+13 56.2	1.584	2.474	12.5	18.6
11 27	1 14.75	-11 47.5	2.693	3.363	13.8	21.5	11 27	1 11.81	+13 16.6	1.669	2.479	15.9	18.8
316174	2009 <i>WM</i> ₂₅₀		10 18.9 349°39'	1°7'/16.1 18			25222	1998 <i>TT</i> ₁₃		10 18.9 65°31'	1°3'/20.2 18		
9 18	1 49.68	+ 2 31.1	3.878	4.760	6.4	20.1	9 18	1 56.57	+18 11.5	1.642	2.507	14.5	17.9
9 28	1 45.60	+ 2 5.9	3.813	4.758	4.5	20.0	9 28	1 51.12	+17 1.7	1.596	2.528	10.5	17.7
10 8	1 40.77	+ 1 40.0	3.775	4.756	2.5	19.8	10 8	1 43.89	+15 33.9	1.573	2.550	6.0	17.5
10 18	1 35.52	+ 1 15.7	3.767	4.755	1.8	19.8	10 18	1 35.79	+13 54.2	1.577	2.571	1.7	17.3
10 28	1 30.26	+ 0 55.3	3.789	4.753	3.2	19.9	10 28	1 27.92	+12 11.2	1.609	2.593	3.9	17.5
11 7	1 25.41	+ 0 40.9	3.840	4.752	5.2	20.0	11 7	1 21.28	+10 34.5	1.669	2.614	8.2	17.8
11 17	1 21.31	+ 0 34.0	3.919	4.750	7.1	20.2	11 17	1 16.59	+ 9 11.6	1.755	2.635	12.0	18.1
11 27	1 18.25	+ 0 35.5	4.022	4.749	8.7	20.3	11 27	1 14.28	+ 8 7.5	1.863	2.657	15.1	18.3
291630	2006 <i>HS</i> ₁₄		10 18.9 341°48'	1°2'/18.2 18			402796	2007 <i>DQ</i> ₅₁					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
189838	2003 <i>AM</i> ₇₉		10 18.9 104°26'	8°5/11.3	16		402468	2006 <i>BK</i> ₁₈₅		10 18.9 303°32'	4°6/14.3	18	
9 18	1 58.58	- 9 32.4	1.615	2.507	13.2	20.5	9 18	1 54.98	- 1 45.2	2.046	2.939	10.8	20.8
9 28	1 52.53	-11 15.0	1.584	2.519	10.4	20.4	9 28	1 49.93	- 2 44.4	1.982	2.929	7.8	20.6
10 8	1 44.65	-12 46.4	1.578	2.531	8.6	20.3	10 8	1 43.32	- 3 42.5	1.944	2.920	5.2	20.4
10 18	1 35.86	-13 57.3	1.598	2.543	9.0	20.4	10 18	1 35.82	- 4 33.6	1.934	2.910	4.8	20.4
10 28	1 27.29	-14 40.9	1.643	2.554	11.1	20.5	10 28	1 28.27	- 5 11.8	1.951	2.900	7.1	20.5
11 7	1 19.96	-14 54.5	1.712	2.565	13.8	20.7	11 7	1 21.53	- 5 33.2	1.995	2.891	10.1	20.7
11 17	1 14.62	-14 39.4	1.801	2.576	16.4	20.9	11 17	1 16.30	- 5 35.7	2.062	2.882	13.0	20.8
11 27	1 11.71	-13 59.1	1.907	2.587	18.5	21.1	11 27	1 13.07	- 5 19.2	2.150	2.873	15.5	21.0
82119	2001 <i>FA</i> ₇₆		10 18.9 23°69'	3°1/16.8	18		243906	2001 <i>FG</i> ₈₈		10 18.9 52°94'	1°7/19.9	18	
9 18	1 56.23	+ 6 42.6	1.065	1.977	16.7	17.9	9 18	2 3.97	+13 30.2	1.623	2.491	14.5	19.5
9 28	1 51.59	+ 5 38.4	1.025	1.985	11.6	17.7	9 28	1 56.58	+14 0.7	1.566	2.500	10.5	19.3
10 8	1 44.40	+ 4 25.4	1.006	1.993	6.2	17.4	10 8	1 46.97	+14 20.4	1.532	2.510	6.1	19.1
10 18	1 35.85	+ 3 13.2	1.010	2.003	3.2	17.2	10 18	1 36.12	+14 30.0	1.525	2.519	2.0	18.9
10 28	1 27.49	+ 2 12.5	1.037	2.013	7.4	17.5	10 28	1 25.28	+14 32.5	1.547	2.529	4.3	19.0
11 7	1 20.74	+ 1 32.0	1.088	2.025	12.5	17.9	11 7	1 15.71	+14 32.0	1.596	2.540	8.6	19.3
11 17	1 16.59	+ 1 15.6	1.159	2.037	17.0	18.2	11 17	1 8.36	+14 33.3	1.670	2.550	12.6	19.6
11 27	1 15.53	+ 1 24.2	1.248	2.050	20.7	18.5	11 27	1 3.82	+14 40.7	1.766	2.561	15.8	19.8
262193	2006 <i>SG</i> ₁₅₅		10 18.9 348°65'	9°6/27.6	17		333140	2011 <i>YY</i> ₄₆		10 18.9 90°23'	4°9/15.8	17	
9 18	2 1.01	+36 27.2	1.849	2.611	17.2	20.0	9 18	2 3.80	+ 0 30.6	1.329	2.226	15.2	20.4
9 28	1 54.85	+37 18.8	1.774	2.609	14.8	19.9	9 28	1 56.39	- 0 23.0	1.296	2.246	10.7	20.2
10 8	1 46.22	+37 43.5	1.718	2.608	12.4	19.7	10 8	1 46.76	- 1 15.3	1.285	2.266	6.5	20.0
10 18	1 36.02	+37 37.4	1.684	2.606	10.4	19.6	10 18	1 36.09	- 1 58.5	1.301	2.285	5.0	20.0
10 28	1 25.57	+37 0.5	1.675	2.605	9.6	19.5	10 28	1 25.78	- 2 25.6	1.342	2.304	8.1	20.2
11 7	1 16.28	+35 58.2	1.690	2.604	10.5	19.6	11 7	1 17.10	- 2 32.5	1.409	2.323	12.1	20.5
11 17	1 9.26	+34 39.3	1.730	2.604	12.5	19.7	11 17	1 10.91	- 2 18.2	1.498	2.342	15.8	20.8
11 27	1 5.24	+33 14.5	1.792	2.603	14.9	19.9	11 27	1 7.63	- 1 44.3	1.606	2.360	18.8	21.1
267302	2001 <i>SH</i> ₂₂₈		10 18.9 85°39'	1°8/17.4	16		417266	2006 <i>AD</i> ₁₅		10 18.9 33°21'	5°5/22.4	18	
9 18	1 58.96	+ 8 44.2	1.517	2.407	14.1	20.5	9 18	2 0.76	+22 34.4	1.090	1.958	19.9	20.3
9 28	1 52.89	+ 7 38.4	1.475	2.424	9.7	20.3	9 28	1 55.15	+22 46.3	1.037	1.964	15.4	20.1
10 8	1 44.88	+ 6 23.8	1.456	2.441	5.1	20.1	10 8	1 46.51	+22 30.2	1.003	1.970	10.4	19.8
10 18	1 35.90	+ 5 7.7	1.464	2.458	1.9	19.9	10 18	1 36.08	+21 46.4	0.991	1.976	6.1	19.6
10 28	1 27.15	+ 3 58.2	1.499	2.475	5.6	20.2	10 28	1 25.68	+20 41.3	1.003	1.984	6.5	19.7
11 7	1 19.72	+ 3 2.8	1.561	2.492	9.9	20.5	11 7	1 17.04	+19 26.6	1.038	1.991	10.8	20.0
11 17	1 14.38	+ 2 25.7	1.647	2.508	13.7	20.8	11 17	1 11.41	+18 14.4	1.095	1.999	15.5	20.3
11 27	1 11.60	+ 2 8.9	1.753	2.524	16.8	21.0	11 27	1 9.43	+17 15.3	1.171	2.008	19.6	20.5
83123	2001 <i>QL</i> ₂₅₀		10 18.9 15°66'	2°2/17.6	18		25533	1999 <i>XC</i> ₁₄₀		10 18.9 87°70'	2°0/17.1	18	
9 18	1 59.70	+ 4 46.5	1.422	2.319	14.4	18.4	9 18	1 57.79	+ 6 32.9	1.774	2.662	12.4	18.9
9 28	1 53.65	+ 4 44.2	1.372	2.323	10.1	18.2	9 28	1 51.97	+ 5 47.3	1.722	2.671	8.6	18.7
10 8	1 45.41	+ 4 38.8	1.344	2.329	5.4	17.9	10 8	1 44.40	+ 4 56.1	1.694	2.679	4.6	18.5
10 18	1 35.95	+ 4 34.4	1.342	2.336	2.2	17.7	10 18	1 35.91	+ 4 4.6	1.694	2.687	2.1	18.3
10 28	1 26.58	+ 4 35.7	1.366	2.343	5.7	18.0	10 28	1 27.50	+ 3 19.1	1.722	2.696	5.2	18.6
11 7	1 18.52	+ 4 46.6	1.416	2.352	10.3	18.3	11 7	1 20.17	+ 2 44.9	1.777	2.704	9.2	18.8
11 17	1 12.69	+ 5 9.4	1.489	2.361	14.3	18.5	11 17	1 14.64	+ 2 25.5	1.856	2.712	12.7	19.1
11 27	1 9.65	+ 5 45.2	1.582	2.371	17.6	18.8	11 27	1 11.40	+ 2 22.6	1.957	2.720	15.6	19.3
39075	2000 <i>VA</i> ₂₁		10 18.9 71°15'	1°4/17.6	18		436143	2009 <i>US</i> ₈₁		10 18.9 325°66'	0°6/19.9	18	
9 18	1 56.64	+ 7 36.9	2.007	2.890	11.4	19.5	9 18	1 49.12	+14 45.9	4.074	4.927	6.8	20.9
9 28	1 51.04	+ 7 3.6	1.949	2.895	8.0	19.3	9 28	1 45.25	+14 21.7	3.997	4.925	4.9	20.8
10 8	1 43.86	+ 6 24.5	1.916	2.900	4.2	19.1	10 8	1 40.63	+13 51.5	3.947	4.923	2.8	20.6
10 18	1 35.83	+ 5 43.7	1.911	2.905	1.4	18.9	10 18	1 35.60	+13 16.8	3.927	4.922	0.8	20.5
10 28	1 27.84	+ 5 6.3	1.934	2.910	4.4	19.1	10 28	1 30.56	+12 40.1	3.938	4.920	1.9	20.6
11 7	1 20.75	+ 4 37.1	1.985	2.915	8.1	19.4	11 7	1 25.90	+12 3.8	3.978	4.918	4.1	20.7
11 17	1 15.27	+ 4 19.4	2.062	2.921	11.5	19.6	11 17	1 21.96	+11 30.5	4.048	4.917	6.1	20.9
11 27	1 11.86	+ 4 15.3	2.160	2.926	14.2	19.8	11 27	1 19.05	+11 2.2	4.143	4.915	7.8	21.0
513799	2013 <i>CP</i> ₉₂		10 18.9 168°82'	1°3/20.2	18		479422	2013 <i>YR</i> ₇₈		10 18.9 282°40'	0°9/19.5	18	
9 18	1 57.31	+16 2.9	2.318	3.173	11.2	21.9	9 18	1 59.57	+13 47.3	1.547	2.423	14.6	21.4
9 28	1 51.41	+15 39.3	2.248	3.176	8.1	21.7	9 28	1 53.77	+13 31.8	1.470	2.410	10.6	21.1
10 8	1 44.05	+15 4.2	2.203	3.178	4.7	21.5	10 8	1 45.64	+13 2.2	1.415	2.396	6.0	20.8
10 18	1 35.85	+14 20.1	2.187	3.181	1.5	21.3	10 18	1 36.03	+12 21.6	1.387	2.382	1.2	20.5
10 28	1 27.65	+13 31.2	2.200	3.183	3.2	21.4	10 28	1 26.19	+11 35.5	1.385	2.369	4.5	20.7
11 7	1 20.26	+12 42.6	2.243	3.184	6.6	21.7	11 7	1 17.41	+10 51.1	1.410	2.355	9.4	20.9
11 17	1 14.33	+11 58.9	2.312	3.185	9.8	21.9	11 17	1 10.78	+10 15.3	1.460	2.341	13.9	21.2
11 27	1 10.34	+11 24.5	2.406	3.186	12.5	22.1	11 27	1 6.97	+ 9 53.4	1.530	2.328	17.7	21.4
518754	2009 <i>SW</i> ₃₇₁		10 18.9 57°19'	1°3/17.9	18		358993	2008 <i>SQ</i> ₂₇₅		10 18.9 346°29'	1°4/21.4	18	
9 18	2 0.20	+ 5 58.8	2.067	2.946	11.4	20.5	9 18	1 49.84	+18 29.6	4.295	5.130	6.8	21.4
9 28	1 53.50	+ 5 59.8	2.009	2.953	7.9	20.3	9 28	1 45.73	+18 20.3	4.216	5.130	5.1	21.3
10 8	1 45.17	+ 5 57.6	1.976	2.959	4.2	20.1	10 8	1 40.89	+18 4.1	4.164	5.129	3.2	21.2
10 18	1 35.96	+ 5 54.8	1.972	2.966	1.3	19.9	10 18	1 35.63	+17 42.0	4.141	5.129	1.6	21.0
10 28	1 26.79	+ 5 54.6	1.997	2.974	4.3	20.1	10 28	1 30.36	+17 15.9	4.148	5.129	2.0	21.1
11 7	1 18.56	+ 6 0.1	2.050	2.981	7.9	20.4	11 7	1 25.45	+16 48.0	4.186	5.129	3.8	21.2
11 17	1 12.00	+ 6 13.5	2.130	2.988	11.2	20.6	11 17	1 21.25	+16 20.6	4.253	5.128	5.6	21.3
11 27	1 7.58	+ 6 36.4	2.233	2.996	13.9	20.8	11 27	1 18.06	+15 56.0	4.346	5.128	7.3	21.5
454886	2015 <i>TW</i> ₇₇		10 18.9 319°12'	2°0/17.4	17		78571	2002 <i>RQ</i> ₂₁₁					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
100266	Sadamisaki		10 18.9	10°82	4.6/14.8	18	45296	2000 AZ ₃₇		10 18.9	6.46	0.5/19.3	18
9 18	1 50.45	+ 5 48.9	1.155	2.072	15.2	18.4	9 18	1 57.62	+12 49.5	1.513	2.396	14.5	18.7
9 28	1 47.41	+ 3 42.9	1.113	2.075	10.5	18.2	9 28	1 52.26	+12 31.3	1.452	2.396	10.4	18.5
10 8	1 42.17	+ 1 27.9	1.094	2.080	6.0	18.0	10 8	1 44.76	+12 0.4	1.414	2.396	5.7	18.2
10 18	1 35.74	- 0 42.6	1.099	2.087	4.9	17.9	10 18	1 36.03	+11 20.5	1.402	2.398	0.8	17.9
10 28	1 29.42	- 2 34.6	1.129	2.095	8.7	18.2	10 28	1 27.28	+10 37.7	1.416	2.399	4.4	18.1
11 7	1 24.44	- 3 57.5	1.182	2.104	13.2	18.4	11 7	1 19.70	+ 9 58.9	1.456	2.402	9.1	18.4
11 17	1 21.63	- 4 47.0	1.256	2.115	17.3	18.7	11 17	1 14.21	+ 9 29.9	1.521	2.404	13.3	18.7
11 27	1 21.51	- 5 3.3	1.347	2.127	20.6	19.0	11 27	1 11.40	+ 9 14.9	1.606	2.407	16.8	18.9
97847	2000 PV ₂₈		10 18.9	331°08	6.7/15.1	18	480554	2015 MK ₅₉		10 18.9	123°28	7.2/25.9	18
9 18	2 0.25	- 2 11.1	1.099	2.010	16.4	17.9	9 18	2 1.30	+32 16.7	1.994	2.774	15.5	21.1
9 28	1 54.67	- 2 58.6	1.044	2.000	12.0	17.6	9 28	1 54.70	+32 38.6	1.925	2.783	12.8	20.9
10 8	1 46.25	- 3 42.7	1.011	1.990	8.0	17.4	10 8	1 46.02	+32 36.4	1.877	2.792	10.1	20.7
10 18	1 36.09	- 4 14.0	0.999	1.981	6.9	17.3	10 18	1 36.14	+32 8.6	1.853	2.800	7.8	20.6
10 28	1 25.85	- 4 23.5	1.012	1.973	10.2	17.5	10 28	1 26.22	+31 17.3	1.856	2.808	7.2	20.6
11 7	1 17.14	- 4 6.5	1.047	1.966	14.8	17.7	11 7	1 17.42	+30 8.8	1.887	2.815	8.6	20.7
11 17	1 11.17	- 3 22.8	1.101	1.959	19.2	17.9	11 17	1 10.66	+28 51.3	1.943	2.823	11.0	20.9
11 27	1 8.64	- 2 14.9	1.172	1.953	23.0	18.2	11 27	1 6.51	+27 33.7	2.022	2.830	13.6	21.1
44760	1999 TJ ₁₁₄		10 18.9	309°43	1.5/17.8	18	178035	2006 RG ₆₀		10 18.9	319°47	0.8/19.5	18
9 18	1 56.69	+10 18.5	1.293	2.190	15.5	18.6	9 18	1 59.45	+12 37.5	1.824	2.695	12.9	19.8
9 28	1 51.93	+ 9 16.5	1.226	2.178	10.9	18.3	9 28	1 53.34	+12 38.0	1.753	2.691	9.3	19.6
10 8	1 44.71	+ 7 59.7	1.180	2.167	5.8	18.0	10 8	1 45.29	+12 28.7	1.707	2.687	5.2	19.3
10 18	1 35.97	+ 6 35.1	1.160	2.155	1.5	17.7	10 18	1 36.08	+12 11.5	1.688	2.684	1.0	19.0
10 28	1 27.08	+ 5 13.1	1.165	2.145	6.1	18.0	10 28	1 26.78	+11 50.6	1.697	2.680	3.9	19.2
11 7	1 19.44	+ 4 3.9	1.195	2.134	11.4	18.2	11 7	1 18.45	+11 30.6	1.734	2.676	8.1	19.5
11 17	1 14.12	+ 3 15.1	1.248	2.124	16.1	18.5	11 17	1 11.95	+11 16.4	1.796	2.673	12.0	19.7
11 27	1 11.82	+ 2 50.6	1.318	2.115	20.1	18.7	11 27	1 7.89	+11 11.6	1.881	2.670	15.2	19.9
457131	2008 FB ₆₈		10 18.9	264°85	2°1/16.9	17	28719	Sahoolahan		10 18.9	247°08	1°4/17.8	18
9 18	1 57.04	+14 29.1	1.139	2.033	17.3	20.5	9 18	1 59.39	+ 8 46.9	1.686	2.570	13.2	19.4
9 28	1 52.39	+11 49.5	1.070	2.022	12.2	20.2	9 28	1 53.42	+ 8 4.1	1.613	2.559	9.3	19.1
10 8	1 45.02	+ 8 38.3	1.025	2.011	6.3	19.9	10 8	1 45.39	+ 7 11.8	1.564	2.548	4.9	18.8
10 18	1 36.00	+ 5 9.9	1.005	2.000	2.3	19.6	10 18	1 36.10	+ 6 15.1	1.541	2.537	1.4	18.5
10 28	1 26.88	+ 1 45.5	1.013	1.988	7.7	19.9	10 28	1 26.67	+ 5 20.9	1.547	2.525	5.1	18.8
11 7	1 19.22	- 1 13.7	1.047	1.976	13.7	20.2	11 7	1 18.25	+ 4 35.9	1.580	2.513	9.7	19.0
11 17	1 14.16	- 3 33.9	1.103	1.965	19.0	20.4	11 17	1 11.77	+ 4 5.3	1.637	2.500	13.7	19.2
11 27	1 12.37	- 5 9.7	1.177	1.953	23.2	20.7	11 27	1 7.85	+ 3 52.4	1.715	2.487	17.1	19.5
446293	2014 DJ ₁₀₈		10 18.9	126°18	1°3/17.7	18	352220	2007 TB ₃₃		10 18.9	234°77	0°2/18.7	18
9 18	1 57.83	+ 8 43.0	1.970	2.850	11.8	21.9	9 18	1 58.69	+10 53.2	1.871	2.747	12.5	21.2
9 28	1 51.87	+ 7 53.7	1.915	2.860	8.2	21.7	9 28	1 52.72	+10 31.8	1.803	2.744	8.8	21.0
10 8	1 44.32	+ 6 57.2	1.886	2.870	4.3	21.4	10 8	1 44.92	+10 1.2	1.759	2.741	4.7	20.7
10 18	1 35.93	+ 5 58.4	1.885	2.880	1.3	21.3	10 18	1 36.06	+ 9 24.9	1.742	2.738	0.4	20.4
10 28	1 27.63	+ 5 3.2	1.913	2.889	4.5	21.5	10 28	1 27.14	+ 8 47.9	1.754	2.735	4.1	20.7
11 7	1 20.31	+ 4 17.2	1.969	2.898	8.3	21.8	11 7	1 19.17	+ 8 15.5	1.793	2.731	8.3	20.9
11 17	1 14.66	+ 3 44.2	2.050	2.906	11.6	22.0	11 17	1 12.97	+ 7 52.3	1.858	2.728	12.0	21.1
11 27	1 11.13	+ 3 26.7	2.154	2.915	14.4	22.2	11 27	1 9.08	+ 7 41.7	1.945	2.724	15.1	21.4
322963	2002 JE ₁₂₈		10 18.9	173°07	3°2/16.4	18	478727	2012 UV ₆₃		10 18.9	351°62	0°6/18.4	18
9 18	1 59.12	+ 5 37.7	1.417	2.313	14.4	20.3	9 18	1 54.38	+13 38.9	1.477	2.364	14.5	20.2
9 28	1 53.31	+ 4 27.9	1.362	2.314	10.1	20.0	9 28	1 49.98	+12 13.0	1.414	2.361	10.3	20.0
10 8	1 45.29	+ 3 10.8	1.330	2.315	5.5	19.8	10 8	1 43.54	+10 29.5	1.375	2.359	5.4	19.7
10 18	1 36.02	+ 1 54.5	1.324	2.315	3.3	19.7	10 18	1 35.94	+ 8 35.9	1.361	2.357	0.6	19.3
10 28	1 26.78	+ 0 48.4	1.345	2.315	6.9	19.9	10 28	1 28.35	+ 6 43.2	1.375	2.356	5.0	19.7
11 7	1 18.84	- 0 0.1	1.391	2.316	11.4	20.1	11 7	1 21.90	+ 5 2.0	1.416	2.355	9.9	20.0
11 17	1 13.11	- 0 26.6	1.460	2.316	15.5	20.4	11 17	1 17.46	+ 3 40.8	1.481	2.355	14.2	20.2
11 27	1 10.16	- 0 29.9	1.548	2.315	18.9	20.6	11 27	1 15.58	+ 2 44.1	1.565	2.355	17.7	20.5
323648	2005 AP ₃		10 18.9	212°53	4°1/22.0	18	268818	2006 VB ₇₀		10 18.9	327°14	0°9/19.5	18
9 18	2 1.05	+22 2.8	1.510	2.359	16.4	21.2	9 18	1 55.13	+14 17.3	1.127	2.024	17.2	19.9
9 28	1 54.87	+21 51.8	1.439	2.356	12.5	21.0	9 28	1 51.26	+13 48.5	1.055	2.005	12.6	19.6
10 8	1 46.24	+21 18.1	1.389	2.353	8.3	20.7	10 8	1 44.59	+12 59.4	1.002	1.986	7.1	19.2
10 18	1 36.12	+20 22.7	1.363	2.349	4.6	20.5	10 18	1 36.05	+11 54.3	0.972	1.968	1.3	18.8
10 28	1 25.89	+19 11.2	1.365	2.346	5.1	20.6	10 28	1 27.17	+10 42.1	0.967	1.952	5.4	19.0
11 7	1 16.93	+17 52.6	1.393	2.341	9.2	20.8	11 7	1 19.58	+ 9 34.2	0.984	1.936	11.4	19.3
11 17	1 10.30	+16 36.9	1.446	2.337	13.4	21.0	11 17	1 14.58	+ 8 40.6	1.022	1.921	16.9	19.6
11 27	1 6.67	+15 32.8	1.520	2.332	17.1	21.3	11 27	1 13.00	+ 8 8.6	1.078	1.908	21.4	19.8
72495	2001 DX ₅₉		10 18.9	221°95	5°6/23.7	18	305182	2007 VZ ₃₀₆		10 18.9	41°54	4°1/15.6	18
9 18	2 0.63	+26 32.1	1.909	2.725	14.8	19.8	9 18	1 58.20	+ 0 19.1	1.740	2.634	12.3	20.2
9 28	1 54.30	+26 50.5	1.831	2.721	11.8	19.6	9 28	1 52.32	- 0 23.2	1.689	2.638	8.7	20.0
10 8	1 45.86	+26 48.2	1.775	2.718	8.7	19.4	10 8	1 44.66	- 1 4.9	1.662	2.642	5.3	19.9
10 18	1 36.11	+26 24.3	1.745	2.714	6.1	19.3	10 18	1 36.04	- 1 40.4	1.662	2.647	4.2	19.8
10 28	1 26.20	+25 41.3	1.741	2.709	5.9	19.2	10 28	1 27.49	- 2 3.9	1.690	2.651	6.8	20.0
11 7	1 17.29	+24 44.9	1.765	2.705	8.3	19.4	11 7	1 20.02	- 2 11.6	1.744	2.656	10.3	20.2
11 17	1 10.35	+23 43.0	1.815	2.701	11.4	19.6	11 17	1 14.38	- 2 1.8	1.822	2.661	13.6	20.4
11 27	1 6.01	+22 43.6	1.888	2.696	14.4	19.7	11 27	1 11.07	- 1 34.7	1.920	2.667	16.4	20.6
28290	1999 CY ₅₁		10 18.9	163°70	1°3/20.1	18	429503	2011 BP ₃		10 18.9	134°58	2°5/21.1	16
9 18	1 59.53	+14 54.7	2.15										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
172849	2005 <i>EN</i> ₂₁	10 18.9 158°97'			2°0/17.3 18		145004	2005 <i>ER</i> ₂₀₆	10 18.9 230°97'			1°6/20.1 18	
9 18	2 1.42	+ 7 4.0	1.629	2.514	13.5	20.5	9 18	2 1.03	+15 48.2	1.499	2.370	15.3	20.5
9 28	1 54.73	+ 6 17.7	1.572	2.519	9.4	20.3	9 28	1 54.83	+15 31.1	1.430	2.365	11.2	20.2
10 8	1 46.01	+ 5 24.3	1.540	2.524	5.0	20.1	10 8	1 46.24	+14 57.4	1.383	2.361	6.5	20.0
10 18	1 36.17	+ 4 29.6	1.534	2.528	2.1	19.9	10 18	1 36.21	+14 10.1	1.361	2.356	2.0	19.7
10 28	1 26.39	+ 3 40.6	1.557	2.532	5.6	20.1	10 28	1 26.06	+13 15.2	1.367	2.350	4.5	19.8
11 7	1 17.82	+ 3 3.4	1.607	2.535	9.9	20.4	11 7	1 17.12	+12 20.6	1.399	2.345	9.4	20.1
11 17	1 11.31	+ 2 42.1	1.681	2.538	13.7	20.6	11 17	1 10.45	+11 33.9	1.456	2.339	13.8	20.4
11 27	1 7.41	+ 2 38.7	1.776	2.540	16.9	20.9	11 27	1 6.69	+11 1.2	1.533	2.334	17.5	20.6
25329	1999 <i>JO</i> ₈₄	10 18.9 35°01'			3°5/15.7 18		311556	2006 <i>BF</i> ₁₆₅	10 18.9 327°71'			6°0/15.3 18	
9 18	1 55.07	+ 6 18.7	1.453	2.354	13.8	17.4	9 18	1 56.59	+ 1 33.1	0.967	1.888	17.2	19.6
9 28	1 50.37	+ 4 33.6	1.404	2.359	9.6	17.1	9 28	1 52.45	+ 0 24.1	0.909	1.871	12.3	19.3
10 8	1 43.71	+ 2 40.0	1.378	2.363	5.3	16.9	10 8	1 45.28	- 0 49.7	0.870	1.855	7.6	19.0
10 18	1 35.97	+ 0 48.1	1.379	2.369	3.7	16.8	10 18	1 36.15	- 1 56.8	0.853	1.840	6.2	18.9
10 28	1 28.33	- 0 51.2	1.407	2.374	7.2	17.0	10 28	1 26.77	- 2 44.4	0.859	1.827	10.3	19.0
11 7	1 21.88	- 2 9.1	1.461	2.380	11.4	17.3	11 7	1 18.91	- 3 3.5	0.885	1.814	15.6	19.3
11 17	1 17.45	- 3 1.0	1.537	2.386	15.2	17.6	11 17	1 13.91	- 2 50.8	0.929	1.802	20.6	19.5
11 27	1 15.52	- 3 25.6	1.633	2.393	18.3	17.8	11 27	1 12.54	- 2 7.4	0.988	1.792	24.8	19.8
177427	2004 <i>CX</i> ₅₀	10 18.9 273°49'			5°6/13.5 18		25404	Shansample	10 18.9 231°21'			0°9/19.7 18 R	
9 18	1 56.32	- 3 26.3	1.873	2.768	11.5	19.9	9 18	2 0.11	+14 55.4	1.765	2.631	13.6	19.3
9 28	1 51.02	- 4 40.4	1.813	2.759	8.5	19.7	9 28	1 53.94	+14 21.7	1.686	2.621	9.9	19.1
10 8	1 44.00	- 5 52.3	1.779	2.750	6.1	19.5	10 8	1 45.69	+13 33.1	1.631	2.610	5.6	18.8
10 18	1 36.00	- 6 54.5	1.771	2.741	5.9	19.5	10 18	1 36.18	+12 33.1	1.603	2.598	1.2	18.5
10 28	1 27.97	- 7 40.4	1.791	2.732	8.2	19.6	10 28	1 26.50	+11 27.7	1.603	2.586	4.1	18.7
11 7	1 20.84	- 8 5.3	1.836	2.723	11.3	19.8	11 7	1 17.82	+10 24.4	1.632	2.573	8.6	18.9
11 17	1 15.37	- 8 7.7	1.904	2.714	14.3	20.0	11 17	1 11.06	+ 9 30.0	1.686	2.560	12.8	19.1
11 27	1 12.09	- 7 48.2	1.992	2.705	16.9	20.2	11 27	1 6.85	+ 8 50.1	1.762	2.547	16.2	19.3
296331	2009 <i>EO</i> ₂₁	10 18.9 152°68'			1°4/17.8 17		195547	2002 <i>JN</i> ₆₂	10 18.9 194°01'			6°3/13.9 18	
9 18	2 0.26	+ 9 57.5	1.493	2.379	14.5	21.6	9 18	2 1.16	- 7 9.1	1.921	2.805	11.8	20.4
9 28	1 54.05	+ 8 54.0	1.437	2.384	10.1	21.3	9 28	1 54.32	- 7 54.2	1.868	2.804	9.0	20.2
10 8	1 45.69	+ 7 38.9	1.404	2.389	5.3	21.1	10 8	1 45.72	- 8 32.2	1.839	2.802	6.7	20.1
10 18	1 36.14	+ 6 19.1	1.398	2.393	1.4	20.8	10 18	1 36.17	- 8 57.2	1.838	2.801	6.5	20.1
10 28	1 26.67	+ 5 3.3	1.419	2.397	5.5	21.1	10 28	1 26.68	- 9 4.3	1.865	2.799	8.5	20.2
11 7	1 18.49	+ 4 0.0	1.467	2.400	10.2	21.4	11 7	1 18.22	- 8 51.0	1.917	2.796	11.3	20.3
11 17	1 12.49	+ 3 14.8	1.539	2.404	14.4	21.7	11 17	1 11.55	- 8 17.7	1.993	2.794	14.1	20.5
11 27	1 9.21	+ 2 50.8	1.632	2.406	17.7	21.9	11 27	1 7.17	- 7 26.1	2.089	2.791	16.5	20.7
272479	2005 <i>UH</i> ₁₀₂	10 18.9 201°02'			3°5/16.2 18		216088	2006 <i>QL</i> ₁₃₅	10 18.9 82°54'			5°9/23.6 17	
9 18	2 0.54	+ 2 12.3	1.753	2.642	12.5	20.9	9 18	2 4.70	+26 19.8	1.420	2.250	18.2	20.7
9 28	1 54.05	+ 1 29.6	1.692	2.639	8.8	20.6	9 28	1 57.28	+26 23.1	1.376	2.276	14.3	20.5
10 8	1 45.64	+ 0 45.1	1.656	2.637	5.1	20.4	10 8	1 47.41	+25 59.3	1.352	2.302	10.1	20.3
10 18	1 36.14	+ 0 4.4	1.647	2.634	3.6	20.3	10 18	1 36.31	+25 9.1	1.352	2.327	6.6	20.2
10 28	1 26.64	- 0 26.4	1.666	2.631	6.4	20.5	10 28	1 25.52	+23 58.6	1.379	2.353	6.3	20.2
11 7	1 18.19	- 0 42.7	1.712	2.628	10.2	20.7	11 7	1 16.43	+22 37.8	1.432	2.377	9.3	20.5
11 17	1 11.64	- 0 41.9	1.782	2.624	13.8	20.9	11 17	1 9.99	+21 17.4	1.510	2.401	12.9	20.8
11 27	1 7.54	- 0 23.6	1.873	2.620	16.7	21.1	11 27	1 6.68	+20 6.6	1.610	2.425	16.2	21.0
57752	2001 <i>VX</i> ₈	10 18.9 89°84'			0°1/18.9 18		304325	2006 <i>SM</i> ₁₈₆	10 18.9 241°69'			0°3/19.3 18	
9 18	2 1.07	+11 39.6	1.582	2.460	14.2	18.9	9 18	1 55.15	+14 56.7	2.057	2.924	11.9	20.3
9 28	1 54.49	+11 18.5	1.531	2.473	10.1	18.6	9 28	1 50.13	+13 53.1	1.982	2.918	8.5	20.1
10 8	1 45.87	+10 46.6	1.503	2.486	5.4	18.4	10 8	1 43.52	+12 35.5	1.932	2.912	4.7	19.9
10 18	1 36.16	+10 7.9	1.502	2.498	0.5	18.1	10 18	1 35.99	+11 8.6	1.910	2.906	0.6	19.5
10 28	1 26.58	+ 9 28.2	1.529	2.511	4.4	18.4	10 28	1 28.43	+ 9 38.9	1.918	2.900	3.7	19.8
11 7	1 18.27	+ 8 53.8	1.583	2.523	9.0	18.7	11 7	1 21.70	+ 8 13.9	1.955	2.894	7.6	20.0
11 17	1 12.10	+ 8 29.7	1.661	2.535	12.9	19.0	11 17	1 16.52	+ 7 0.1	2.018	2.887	11.2	20.2
11 27	1 8.57	+ 8 19.3	1.760	2.547	16.2	19.2	11 27	1 13.39	+ 6 2.2	2.104	2.881	14.2	20.4
182768	2001 <i>XD</i> ₂₁₆	10 18.9 323°56'			0°5/19.3 18		475970	2007 <i>JM</i> ₃₆	10 18.9 58°00'			1°4/19.9 16	
9 18	1 56.48	+13 13.6	1.924	2.797	12.3	20.5	9 18	2 1.75	+14 42.0	1.410	2.285	15.8	20.6
9 28	1 51.14	+12 46.8	1.855	2.794	8.8	20.3	9 28	1 55.03	+14 31.8	1.371	2.309	11.3	20.4
10 8	1 44.08	+12 8.8	1.811	2.791	4.9	20.0	10 8	1 46.15	+14 6.8	1.354	2.334	6.4	20.2
10 18	1 36.01	+11 23.0	1.793	2.789	0.7	19.7	10 18	1 36.21	+13 30.8	1.363	2.358	1.7	20.0
10 28	1 27.90	+10 34.5	1.804	2.786	3.8	20.0	10 28	1 26.55	+12 50.0	1.399	2.383	4.4	20.2
11 7	1 20.70	+ 9 49.2	1.842	2.784	7.8	20.2	11 7	1 18.42	+12 11.5	1.462	2.408	9.0	20.5
11 17	1 15.16	+ 9 12.3	1.907	2.782	11.5	20.4	11 17	1 12.65	+11 41.3	1.548	2.433	13.1	20.8
11 27	1 11.82	+ 8 47.6	1.993	2.780	14.5	20.6	11 27	1 9.70	+11 23.8	1.655	2.457	16.4	21.1
517552	2014 <i>SE</i> ₃₅₃	10 18.9 32°59'			3°3/15.6 18		151675	2003 <i>AW</i> ₇	10 18.9 308°47'			0°5/18.5 18	
9 18	1 55.12	+ 1 19.9	2.126	3.017	10.5	20.8	9 18	1 57.04	+11 31.6	1.349	2.241	15.3	20.2
9 28	1 49.94	+ 0 34.4	2.073	3.021	7.4	20.6	9 28	1 52.28	+10 50.7	1.273	2.222	10.9	19.9
10 8	1 43.33	- 0 11.5	2.045	3.025	4.4	20.4	10 8	1 45.02	+ 9 54.7	1.219	2.204	5.9	19.6
10 18	1 35.95	- 0 53.1	2.045	3.030	3.4	20.4	10 18	1 36.15	+ 8 48.8	1.189	2.185	0.6	19.2
10 28	1 28.61	- 1 25.4	2.073	3.035	5.7	20.6	10 28	1 27.00	+ 7 41.2	1.185	2.167	5.4	19.5
11 7	1 22.12	- 1 44.7	2.129	3.039	8.8	20.8	11 7	1 18.96	+ 6 41.5	1.206	2.150	10.8	19.7
11 17	1 17.08	- 1 48.9	2.209	3.045	11.7	21.0	11 17	1 13.20	+ 5 57.5	1.250	2.133	15.7	20.0
11 27	1 13.95	- 1 37.5	2.311	3.050	14.1	21.1	11 27	1 10.46	+ 5 34.2	1.313	2.116	19.8	20.2
41353	2000 <i>AB</i> ₃₃	10 18.9 339°79'			2°4/14.9 18		346568	2008 <i>VZ</i> ₁₇	10 18.9 235°24'			1°8/17.4 18	
9 18	1 49.58	- 1 17.2	3.966	4.850	6.3	18.9	9 18	1 58.87	+ 6 57.5	1.802</			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
376822	2001 <i>DD</i> ₅₆	10 18.9 176°57'		1°8'/17.4 17			98666	2000 <i>WC</i> ₁₆₁	10 18.9 263°28'		0°7'/18.3 18		
9 18	2 0.45	+ 7 41.6	1.801	2.682	12.6	21.8	9 18	1 56.16	+12 20.2	1.749	2.628	13.0	19.6
9 28	1 53.95	+ 6 48.0	1.739	2.684	8.8	21.5	9 28	1 51.11	+11 8.6	1.675	2.619	9.2	19.3
10 8	1 45.59	+ 5 46.7	1.702	2.686	4.7	21.3	10 8	1 44.17	+ 9 42.7	1.625	2.609	4.9	19.1
10 18	1 36.20	+ 4 43.5	1.693	2.687	1.8	21.1	10 18	1 36.12	+ 8 8.6	1.603	2.599	0.7	18.7
10 28	1 26.82	+ 3 45.0	1.714	2.688	5.2	21.3	10 28	1 27.99	+ 6 34.5	1.609	2.589	4.7	19.0
11 7	1 18.51	+ 2 57.6	1.761	2.688	9.3	21.6	11 7	1 20.81	+ 5 9.1	1.643	2.579	9.1	19.2
11 17	1 12.07	+ 2 25.5	1.834	2.687	13.0	21.8	11 17	1 15.42	+ 3 59.5	1.702	2.568	13.1	19.5
11 27	1 8.02	+ 2 11.2	1.929	2.685	16.0	22.0	11 27	1 12.39	+ 3 10.1	1.783	2.558	16.4	19.7
521534	2015 <i>OK</i> ₁₀₀	10 18.9 211°39'		1°2'/20.1 18			98916	2001 <i>BU</i> ₆₈	10 18.9 78°33'		7°8'/11.6 18		
9 18	1 57.36	+15 41.7	1.980	2.842	12.5	22.1	9 18	1 56.95	- 8 10.9	1.694	2.589	12.5	18.5
9 28	1 51.75	+15 15.7	1.909	2.841	9.1	21.9	9 28	1 51.45	- 9 49.1	1.661	2.599	9.7	18.3
10 8	1 44.43	+14 36.7	1.862	2.839	5.2	21.6	10 8	1 44.22	-11 18.4	1.652	2.609	7.9	18.2
10 18	1 36.10	+13 47.5	1.843	2.837	1.5	21.4	10 18	1 36.12	-12 29.8	1.669	2.619	8.2	18.3
10 28	1 27.73	+12 53.1	1.852	2.835	3.6	21.5	10 28	1 28.17	-13 16.6	1.712	2.629	10.3	18.4
11 7	1 20.27	+11 59.7	1.890	2.833	7.5	21.8	11 7	1 21.35	-13 35.6	1.778	2.639	13.0	18.6
11 17	1 14.48	+11 12.9	1.953	2.831	11.1	22.0	11 17	1 16.37	-13 27.3	1.866	2.649	15.6	18.8
11 27	1 10.89	+10 37.4	2.040	2.829	14.2	22.2	11 27	1 13.67	-12 54.6	1.972	2.659	17.8	19.0
302793	2002 <i>XM</i> ₉₈	10 18.9 48°07'		9°2'/14.4 18			444208	2005 <i>TR</i> ₃₄	10 18.9 41°16'		1°2'/17.8 18		
9 18	2 6.25	-13 24.6	1.461	2.341	15.1	19.0	9 18	1 56.19	+ 8 44.4	1.828	2.714	12.2	21.3
9 28	1 57.85	-13 46.0	1.441	2.367	11.9	18.9	9 28	1 50.92	+ 8 2.2	1.773	2.720	8.5	21.1
10 8	1 47.48	-13 50.0	1.444	2.393	9.6	18.8	10 8	1 43.97	+ 7 12.4	1.741	2.726	4.5	20.9
10 18	1 36.34	-13 31.2	1.472	2.420	9.3	18.9	10 18	1 36.10	+ 6 20.0	1.737	2.732	1.3	20.7
10 28	1 25.77	-12 47.1	1.526	2.447	11.0	19.0	10 28	1 28.28	+ 5 30.8	1.761	2.738	4.6	20.9
11 7	1 16.90	-11 39.4	1.604	2.475	13.6	19.3	11 7	1 21.45	+ 4 50.6	1.812	2.745	8.6	21.2
11 17	1 10.47	-10 12.6	1.704	2.503	16.2	19.5	11 17	1 16.33	+ 4 23.5	1.888	2.752	12.1	21.4
11 27	1 6.83	- 8 31.4	1.824	2.531	18.4	19.8	11 27	1 13.40	+ 4 11.9	1.985	2.759	15.0	21.6
118607	2000 <i>GG</i> ₁₃₀	10 18.9 30°97'		0°4'/18.7 18			309552	2007 <i>YA</i> ₅₅	10 18.9 336°64'		3°2'/16.5 18		
9 18	1 57.07	+11 57.6	1.076	1.978	17.4	19.3	9 18	1 57.17	+ 3 33.4	1.595	2.492	13.1	20.1
9 28	1 52.21	+11 15.0	1.039	1.993	12.3	19.0	9 28	1 51.90	+ 2 54.7	1.533	2.485	9.2	19.8
10 8	1 44.82	+10 17.3	1.022	2.008	6.5	18.8	10 8	1 44.62	+ 2 12.6	1.494	2.478	5.2	19.6
10 18	1 36.13	+ 9 11.9	1.029	2.025	0.6	18.4	10 18	1 36.16	+ 1 33.0	1.482	2.472	3.3	19.4
10 28	1 27.70	+ 8 8.6	1.059	2.043	5.6	18.8	10 28	1 27.65	+ 1 2.2	1.496	2.466	6.4	19.6
11 7	1 20.93	+ 7 17.0	1.114	2.061	11.0	19.2	11 7	1 20.19	+ 0 45.6	1.536	2.461	10.5	19.9
11 17	1 16.78	+ 6 43.4	1.190	2.081	15.6	19.5	11 17	1 14.67	+ 0 46.2	1.599	2.457	14.3	20.1
11 27	1 15.71	+ 6 30.9	1.284	2.101	19.4	19.8	11 27	1 11.66	+ 1 4.9	1.682	2.452	17.5	20.3
485732	2012 <i>BF</i> ₅₉	10 18.9 181°81'		6°8'/11.6 18			198586	2004 <i>YQ</i> ₃₁	10 18.9 345°28'		4°3'/15.2 18		
9 18	1 56.40	-10 33.4	2.259	3.141	10.4	21.4	9 18	1 54.99	+ 3 45.2	1.433	2.337	13.7	19.1
9 28	1 50.80	-11 40.7	2.213	3.141	8.2	21.3	9 28	1 50.46	+ 2 15.1	1.378	2.333	9.6	18.9
10 8	1 43.80	-12 39.7	2.193	3.141	6.9	21.2	10 8	1 43.87	+ 0 39.0	1.346	2.330	5.7	18.6
10 18	1 36.06	-13 24.4	2.200	3.141	7.1	21.2	10 18	1 36.10	+ 0 53.5	1.340	2.326	4.5	18.6
10 28	1 28.36	-13 50.0	2.233	3.141	8.8	21.3	10 28	1 28.32	- 2 12.4	1.360	2.324	7.8	18.8
11 7	1 21.50	-13 54.3	2.293	3.140	11.0	21.5	11 7	1 21.69	- 3 9.7	1.405	2.321	12.0	19.0
11 17	1 16.07	-13 37.3	2.374	3.140	13.2	21.6	11 17	1 17.09	- 3 41.3	1.471	2.319	15.8	19.2
11 27	1 12.52	-13 0.9	2.475	3.139	15.1	21.8	11 27	1 15.07	- 3 46.7	1.557	2.318	19.0	19.5
268925	2007 <i>CP</i> ₅₁	10 18.9 144°28'		3°1'/15.9 17			252725	2002 <i>CG</i> ₂₃₅	10 18.9 294°59'		0°3'/19.2 18		
9 18	1 58.17	+ 5 3.8	1.756	2.645	12.4	20.7	9 18	1 56.68	+12 24.6	1.965	2.839	12.1	21.6
9 28	1 52.31	+ 3 42.8	1.703	2.652	8.7	20.5	9 28	1 51.36	+12 1.4	1.888	2.827	8.6	21.3
10 8	1 44.69	+ 2 16.5	1.676	2.659	4.8	20.3	10 8	1 44.28	+11 27.9	1.835	2.816	4.7	21.1
10 18	1 36.14	+ 0 52.2	1.676	2.665	3.3	20.2	10 18	1 36.14	+10 47.0	1.809	2.805	0.6	20.7
10 28	1 27.67	- 0 22.1	1.706	2.671	6.3	20.4	10 28	1 27.87	+10 3.7	1.811	2.793	3.8	21.0
11 7	1 20.28	- 1 19.8	1.762	2.677	10.0	20.6	11 7	1 20.42	+ 9 23.6	1.842	2.782	7.9	21.2
11 17	1 14.71	- 1 57.2	1.842	2.682	13.5	20.8	11 17	1 14.60	+ 8 51.5	1.898	2.771	11.6	21.4
11 27	1 11.45	- 2 13.2	1.943	2.687	16.3	21.1	11 27	1 10.98	+ 8 31.5	1.976	2.760	14.7	21.6
513930	2014 <i>DZ</i> ₁₉	10 18.9 166°57'		3°3'/22.1 18			70720	Davidskillman	10 18.9 203°07'		12°2'/ 6.7 18		
9 18	2 1.51	+21 43.4	2.380	3.204	12.0	22.2	9 18	2 0.16	-24 31.6	1.872	2.718	13.8	17.9
9 28	1 54.49	+21 51.2	2.307	3.210	9.2	22.1	9 28	1 53.72	-25 58.2	1.843	2.717	12.6	17.8
10 8	1 45.84	+21 44.6	2.258	3.214	6.1	21.9	10 8	1 45.44	-27 2.3	1.837	2.716	12.2	17.8
10 18	1 36.24	+21 24.3	2.237	3.218	3.6	21.7	10 18	1 36.23	-27 36.5	1.854	2.715	12.8	17.9
10 28	1 26.59	+20 52.7	2.246	3.222	4.0	21.8	10 28	1 27.18	-27 36.2	1.893	2.714	14.2	18.0
11 7	1 17.79	+20 14.4	2.284	3.225	6.6	21.9	11 7	1 19.31	-27 1.9	1.952	2.712	15.9	18.1
11 17	1 10.57	+19 34.5	2.351	3.227	9.6	22.1	11 17	1 13.38	-25 57.1	2.029	2.711	17.6	18.2
11 27	1 5.45	+18 58.4	2.442	3.228	12.2	22.3	11 27	1 9.86	-24 27.3	2.122	2.710	19.0	18.4
177565	2004 <i>FZ</i> ₁₁₅	10 18.9 293°87'		5°4'/13.7 18			319391	2006 <i>EH</i> ₄₆	10 18.9 110°05'		3°8'/22.9 18		
9 18	1 55.66	- 2 12.2	1.814	2.711	11.7	20.0	9 18	1 57.50	+23 30.2	2.351	3.174	12.1	20.9
9 28	1 50.64	- 3 30.5	1.754	2.701	8.6	19.8	9 28	1 51.72	+23 34.2	2.279	3.179	9.4	20.7
10 8	1 43.86	- 4 47.9	1.718	2.692	6.0	19.6	10 8	1 44.38	+23 22.7	2.231	3.184	6.5	20.6
10 18	1 36.08	- 5 56.8	1.709	2.682	5.7	19.6	10 18	1 36.16	+22 56.4	2.210	3.188	4.1	20.4
10 28	1 28.24	- 6 49.7	1.727	2.672	8.2	19.7	10 28	1 27.89	+22 18.0	2.218	3.192	4.2	20.4
11 7	1 21.32	- 7 21.8	1.770	2.663	11.4	19.9	11 7	1 20.44	+21 32.2	2.255	3.197	6.6	20.6
11 17	1 16.07	- 7 30.8	1.837	2.653	14.5	20.1	11 17	1 14.49	+20 44.5	2.318	3.201	9.4	20.8
11 27	1 13.05	- 7 17.0	1.922	2.644	17.2	20.2	11 27	1 10.55	+20 0.3	2.406	3.205	12.0	21.0
401838	1999 <i>UO</i> ₃₂	10 18.9 306°92'		1°2'/17.9 18			8						

EPHEMERIDES

10 18.9

10 18.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
268867	2006 YL ₃₈		10 18.9 232°61	3°0/21.4	18		7969	1997 RP ₃		10 18.9 337°10	1°4/17.7	18	
9 18	2 0.88	+19 37.1	1.742	2.592	14.5	21.0	9 18	1 54.40	+ 8 13.1	1.847	2.736	12.0	17.1
9 28	1 54.60	+19 30.6	1.663	2.584	10.9	20.8	9 28	1 49.79	+ 7 36.0	1.777	2.726	8.4	16.9
10 8	1 46.14	+19 6.4	1.608	2.576	7.0	20.5	10 8	1 43.45	+ 6 51.4	1.731	2.716	4.4	16.7
10 18	1 36.32	+18 25.6	1.578	2.567	3.4	20.3	10 18	1 36.10	+ 6 3.8	1.712	2.707	1.4	16.4
10 28	1 26.32	+17 32.7	1.576	2.558	4.4	20.3	10 28	1 28.65	+ 5 19.0	1.721	2.699	4.7	16.6
11 7	1 17.35	+16 34.7	1.602	2.548	8.4	20.5	11 7	1 22.07	+ 4 42.8	1.756	2.691	8.7	16.9
11 17	1 10.40	+15 39.2	1.654	2.539	12.4	20.8	11 17	1 17.11	+ 4 19.3	1.817	2.684	12.4	17.1
11 27	1 6.13	+14 53.0	1.728	2.528	15.9	21.0	11 27	1 14.34	+ 4 11.3	1.898	2.677	15.4	17.3
447217	2005 TH ₁₆₉		10 18.9 350°56	0°6/19.5	17		518343	2017 CG ₂₄		10 18.9 225°13	0°4/18.5	18	
9 18	1 56.38	+13 27.9	1.865	2.738	12.6	21.8	9 18	1 56.31	+10 13.0	2.409	3.280	10.2	22.0
9 28	1 51.15	+13 4.2	1.798	2.737	9.1	21.6	9 28	1 50.79	+ 9 46.1	2.335	3.274	7.2	21.8
10 8	1 44.16	+12 28.9	1.754	2.735	5.0	21.3	10 8	1 43.87	+ 9 12.3	2.287	3.269	3.8	21.6
10 18	1 36.14	+11 45.4	1.738	2.733	0.9	21.0	10 18	1 36.14	+ 8 34.4	2.267	3.263	0.4	21.3
10 28	1 28.08	+10 58.9	1.749	2.732	3.8	21.2	10 28	1 28.35	+ 7 56.6	2.278	3.257	3.5	21.6
11 7	1 20.95	+10 15.2	1.788	2.731	7.9	21.5	11 7	1 21.26	+ 7 23.1	2.317	3.251	6.9	21.8
11 17	1 15.53	+ 9 39.7	1.853	2.731	11.6	21.7	11 17	1 15.51	+ 6 57.6	2.383	3.245	10.0	22.0
11 27	1 12.36	+ 9 16.4	1.940	2.730	14.7	21.9	11 27	1 11.57	+ 6 42.8	2.473	3.238	12.6	22.2
139688	2001 QT ₂₁₂		10 18.9 33°67	1°2/17.9	18		216433	Milianleo		10 18.9 171°49	0°4/19.3	18	
9 18	1 56.13	+ 9 29.0	1.688	2.575	13.0	20.1	9 18	1 58.51	+12 51.3	2.229	3.093	11.2	21.4
9 28	1 51.00	+ 8 40.6	1.632	2.580	9.1	19.8	9 28	1 52.40	+12 28.5	2.161	3.096	8.0	21.2
10 8	1 44.06	+ 7 43.1	1.601	2.586	4.7	19.6	10 8	1 44.74	+11 56.2	2.118	3.098	4.4	21.0
10 18	1 36.13	+ 6 42.1	1.596	2.592	1.2	19.4	10 18	1 36.23	+11 17.5	2.104	3.100	0.6	20.7
10 28	1 28.26	+ 5 44.3	1.620	2.598	4.8	19.6	10 28	1 27.69	+10 36.5	2.119	3.101	3.4	20.9
11 7	1 21.44	+ 4 56.2	1.669	2.605	9.0	19.9	11 7	1 20.00	+ 9 58.1	2.163	3.102	7.0	21.2
11 17	1 16.46	+ 4 22.7	1.744	2.612	12.7	20.1	11 17	1 13.81	+ 9 26.5	2.235	3.102	10.3	21.4
11 27	1 13.80	+ 4 6.3	1.839	2.619	15.8	20.4	11 27	1 9.63	+ 9 5.2	2.329	3.103	13.1	21.6
209977	2006 HO ₄₂		10 18.9 181°41	2°0/17.6	18		393008	2012 XC ₁₃₈		10 18.9 14°88	1°1/19.8	18	
9 18	2 3.67	+ 6 34.5	1.473	2.360	14.6	20.5	9 18	1 56.24	+14 50.7	1.283	2.171	16.2	20.2
9 28	1 56.60	+ 6 7.4	1.413	2.361	10.3	20.3	9 28	1 51.58	+14 24.2	1.230	2.175	11.7	20.0
10 8	1 47.18	+ 5 33.8	1.377	2.361	5.5	20.0	10 8	1 44.56	+13 40.6	1.198	2.180	6.6	19.7
10 18	1 36.41	+ 4 58.9	1.367	2.361	2.0	19.8	10 18	1 36.21	+12 44.5	1.190	2.186	1.5	19.4
10 28	1 25.63	+ 4 29.0	1.384	2.361	5.8	20.0	10 28	1 27.90	+11 43.6	1.208	2.192	4.7	19.6
11 7	1 16.17	+ 4 10.0	1.428	2.360	10.5	20.3	11 7	1 20.96	+10 47.1	1.250	2.200	9.8	19.9
11 17	1 9.02	+ 4 5.8	1.496	2.359	14.8	20.6	11 17	1 16.34	+10 2.4	1.315	2.208	14.3	20.2
11 27	1 4.80	+ 4 18.3	1.583	2.357	18.2	20.8	11 27	1 14.62	+ 9 34.8	1.400	2.218	18.0	20.5
476845	2008 UC ₃₀₈		10 18.9 358°61	1°1/18.4	18		293150	2006 YG ₇		10 18.9 334°55	10°6/11.3	18	
9 18	2 5.33	+ 5 51.0	1.355	2.244	15.4	20.2	9 18	1 55.04	- 8 8.3	1.060	1.977	16.3	19.5
9 28	1 58.01	+ 6 23.6	1.294	2.242	11.0	19.9	9 28	1 51.15	- 9 51.6	1.009	1.960	12.9	19.2
10 8	1 48.05	+ 6 53.4	1.256	2.240	5.9	19.6	10 8	1 44.53	-11 25.8	0.978	1.944	10.7	19.1
10 18	1 36.50	+ 7 22.3	1.244	2.240	1.1	19.3	10 18	1 36.22	-12 36.8	0.969	1.929	11.3	19.1
10 28	1 24.85	+ 7 52.9	1.259	2.240	5.4	19.6	10 28	1 27.78	-13 12.6	0.982	1.915	14.2	19.2
11 7	1 14.62	+ 8 28.0	1.300	2.240	10.5	19.9	11 7	1 20.76	-13 7.6	1.013	1.903	18.1	19.4
11 17	1 6.92	+ 9 9.7	1.365	2.242	15.0	20.2	11 17	1 16.33	-12 22.9	1.062	1.892	21.9	19.6
11 27	1 2.46	+ 9 59.8	1.449	2.244	18.7	20.4	11 27	1 15.19	-11 4.0	1.125	1.883	25.1	19.8
423439	2005 RY ₁₈		10 18.9 91°51	0°2/19.1	16		77405	2001 FH ₁₆₉		10 18.9 177°24	4°7/15.2	18	
9 18	2 2.54	+12 23.6	1.556	2.431	14.6	21.6	9 18	2 0.01	+ 0 38.2	1.592	2.486	13.2	19.7
9 28	1 55.49	+11 56.0	1.512	2.452	10.3	21.4	9 28	1 53.82	- 0 29.6	1.538	2.487	9.4	19.4
10 8	1 46.42	+11 16.7	1.492	2.473	5.6	21.2	10 8	1 45.62	- 1 38.3	1.509	2.488	5.9	19.2
10 18	1 36.34	+10 30.1	1.498	2.494	0.6	20.9	10 18	1 36.31	- 2 40.3	1.506	2.489	4.9	19.2
10 28	1 26.51	+ 9 42.7	1.533	2.515	4.4	21.2	10 28	1 27.04	- 3 27.7	1.531	2.489	7.7	19.4
11 7	1 18.06	+ 9 1.1	1.594	2.535	8.9	21.5	11 7	1 18.94	- 3 55.3	1.581	2.489	11.5	19.6
11 17	1 11.83	+ 8 30.5	1.681	2.555	12.8	21.8	11 17	1 12.87	- 4 0.8	1.654	2.488	15.0	19.8
11 27	1 8.27	+ 8 14.3	1.789	2.574	16.0	22.1	11 27	1 9.37	- 3 44.5	1.746	2.487	18.0	20.0
400619	2009 CE ₅₇		10 18.9 244°40	2°6/16.5	18		197856	Tafelmusik		10 18.9 126°90	0°4/18.6	18	
9 18	1 58.05	+ 4 21.3	2.062	2.946	11.1	21.6	9 18	2 1.42	+10 36.5	1.841	2.714	12.8	20.8
9 28	1 52.23	+ 3 34.0	1.987	2.933	7.8	21.4	9 28	1 54.57	+10 9.6	1.786	2.727	9.0	20.6
10 8	1 44.72	+ 2 42.5	1.938	2.920	4.4	21.1	10 8	1 45.93	+ 9 34.0	1.757	2.739	4.8	20.4
10 18	1 36.21	+ 1 51.6	1.916	2.906	2.7	21.0	10 18	1 36.33	+ 8 53.4	1.755	2.751	0.5	20.1
10 28	1 27.58	+ 1 7.2	1.924	2.892	5.4	21.2	10 28	1 26.84	+ 8 13.2	1.783	2.763	4.2	20.4
11 7	1 19.76	+ 0 34.1	1.960	2.878	9.0	21.4	11 7	1 18.47	+ 7 38.8	1.838	2.774	8.3	20.7
11 17	1 13.50	+ 0 15.9	2.021	2.863	12.4	21.6	11 17	1 11.98	+ 7 14.5	1.919	2.785	11.9	21.0
11 27	1 9.35	+ 0 14.1	2.103	2.848	15.2	21.7	11 27	1 7.87	+ 7 3.2	2.023	2.795	14.9	21.2
200112	1995 UP ₅₇		10 18.9 235°72	1°8/20.4	18		456130	2006 DO ₁₀₀		10 18.9 263°19	3°9/14.5	18	
9 18	1 59.64	+16 19.2	1.829	2.690	13.4	20.7	9 18	1 54.22	- 0 5.6	2.291	3.181	9.9	21.9
9 28	1 53.57	+16 9.7	1.756	2.685	9.9	20.5	9 28	1 49.35	- 1 15.0	2.227	3.174	7.1	21.7
10 8	1 45.52	+15 46.3	1.705	2.680	5.9	20.3	10 8	1 43.11	- 2 25.1	2.189	3.166	4.6	21.5
10 18	1 36.28	+15 11.0	1.682	2.675	2.1	20.0	10 18	1 36.09	- 3 30.1	2.180	3.159	4.1	21.5
10 28	1 26.92	+14 28.3	1.687	2.670	3.9	20.1	10 28	1 29.04	- 4 24.3	2.200	3.151	6.3	21.6
11 7	1 18.55	+13 44.2	1.719	2.664	8.0	20.4	11 7	1 22.70	- 5 3.4	2.247	3.143	9.1	21.8
11 17	1 12.03	+13 4.9	1.778	2.659	11.9	20.6	11 17	1 17.69	- 5 25.0	2.318	3.135	11.9	21.9
11 27	1 7.97	+12 35.6	1.859	2.653	15.2	20.8	11 27	1 14.47	- 5 28.3	2.411	3.128	14.2	22.1
232838	2004 TE ₅₂		10 18.9 55°17	0°5/19.3	18		460566	2014 TA ₇₅		10 18.9 344°46	2°4/16.8	17	
9 18	1 58.86	+13 15.3	1.513	2									

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10 18.9

10 18.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
481919	2009 <i>BT</i> ₇₇		10 18.9 331°82	10°9/25.0	17		135868	2002 <i>TM</i> ₂₅		10 18.9 31°88	0°6/19.4	18	
9 18	2 1.15	+31 10.0	1.348	2.165	19.7	20.2	9 18	1 55.87	+14 33.3	1.480	2.362	14.8	19.6
9 28	1 55.93	+32 44.1	1.267	2.145	16.8	20.0	9 28	1 51.03	+13 46.4	1.429	2.372	10.6	19.4
10 8	1 47.43	+33 53.2	1.204	2.126	13.8	19.7	10 8	1 44.18	+12 44.0	1.400	2.382	5.8	19.2
10 18	1 36.52	+34 29.7	1.162	2.108	11.5	19.6	10 18	1 36.24	+11 31.5	1.396	2.392	0.9	18.9
10 28	1 24.83	+34 30.4	1.143	2.092	11.0	19.5	10 28	1 28.40	+10 17.1	1.420	2.403	4.3	19.1
11 7	1 14.29	+33 59.2	1.147	2.076	12.8	19.5	11 7	1 21.79	+9 9.3	1.469	2.415	9.0	19.5
11 17	1 6.57	+33 5.7	1.172	2.062	15.9	19.7	11 17	1 17.23	+8 14.9	1.543	2.427	13.1	19.7
11 27	1 2.76	+32 3.0	1.216	2.049	19.3	19.9	11 27	1 15.22	+7 38.3	1.638	2.440	16.5	20.0
509173	2006 <i>HH</i> ₄₅		10 18.9 209°96	0°6/18.4	18		198381	2004 <i>VB</i> ₂₉		10 18.9 85°22	1°8/17.6	18	
9 18	1 57.53	+11 30.0	2.008	2.881	11.9	22.2	9 18	1 59.57	+7 9.8	1.641	2.528	13.3	20.1
9 28	1 51.87	+10 34.3	1.936	2.876	8.4	22.0	9 28	1 53.52	+6 36.4	1.583	2.531	9.3	19.8
10 8	1 44.54	+9 27.8	1.889	2.871	4.4	21.8	10 8	1 45.49	+5 56.5	1.550	2.534	4.9	19.6
10 18	1 36.24	+8 15.2	1.870	2.866	0.6	21.5	10 18	1 36.36	+5 15.0	1.543	2.537	1.8	19.4
10 28	1 27.89	+7 2.8	1.880	2.860	4.1	21.7	10 28	1 27.26	+4 38.1	1.564	2.541	5.2	19.6
11 7	1 20.41	+5 57.4	1.920	2.853	8.1	22.0	11 7	1 19.28	+4 11.3	1.612	2.544	9.5	19.9
11 17	1 14.55	+5 4.3	1.985	2.846	11.7	22.2	11 17	1 13.28	+3 58.5	1.684	2.547	13.4	20.1
11 27	1 10.84	+4 27.3	2.072	2.839	14.7	22.4	11 27	1 9.81	+4 1.7	1.776	2.550	16.5	20.4
138297	2000 <i>GQ</i> ₄₁		10 18.9 126°47	0°8/19.6	18		323689	2005 <i>GL</i> ₇₉		10 18.9 107°46	1°0/18.1	16	
9 18	2 0.35	+13 11.2	2.072	2.935	12.0	20.3	9 18	2 0.47	+10 54.5	1.533	2.415	14.4	21.6
9 28	1 53.77	+13 5.5	2.010	2.943	8.6	20.1	9 28	1 54.12	+9 52.3	1.485	2.431	10.0	21.3
10 8	1 45.51	+12 50.3	1.973	2.951	4.8	19.9	10 8	1 45.76	+8 38.6	1.462	2.446	5.2	21.1
10 18	1 36.33	+12 27.8	1.964	2.959	1.0	19.7	10 18	1 36.38	+7 20.2	1.465	2.461	1.0	20.8
10 28	1 27.18	+12 1.9	1.985	2.967	3.5	19.9	10 28	1 27.19	+6 5.5	1.496	2.475	5.0	21.2
11 7	1 18.97	+11 37.0	2.034	2.975	7.3	20.1	11 7	1 19.32	+5 2.2	1.554	2.489	9.6	21.5
11 17	1 12.44	+11 17.3	2.110	2.982	10.7	20.4	11 17	1 13.58	+4 16.0	1.637	2.503	13.5	21.7
11 27	1 8.09	+11 6.4	2.209	2.989	13.5	20.6	11 27	1 10.46	+3 49.5	1.740	2.516	16.8	22.0
81009	2000 <i>EQ</i> ₃₄		10 18.9 137°70	0°4/18.6	18		259800	2004 <i>BV</i> ₇₉		10 18.9 345°66	2°7/20.6	18	
9 18	2 1.15	+10 57.7	1.820	2.693	12.9	20.9	9 18	1 57.25	+16 37.8	1.085	1.976	18.3	20.1
9 28	1 54.43	+10 22.2	1.763	2.704	9.1	20.7	9 28	1 52.87	+16 40.2	1.023	1.967	13.6	19.8
10 8	1 45.89	+9 37.1	1.732	2.714	4.8	20.5	10 8	1 45.56	+16 21.7	0.980	1.959	8.2	19.5
10 18	1 36.38	+8 46.7	1.728	2.724	0.5	20.2	10 18	1 36.38	+15 44.6	0.959	1.952	3.2	19.2
10 28	1 26.96	+7 56.9	1.754	2.734	4.2	20.5	10 28	1 26.99	+14 55.4	0.961	1.947	5.4	19.3
11 7	1 18.66	+7 13.6	1.807	2.743	8.4	20.8	11 7	1 19.07	+14 4.0	0.987	1.942	10.9	19.6
11 17	1 12.24	+6 41.5	1.887	2.751	12.1	21.0	11 17	1 13.91	+13 20.3	1.034	1.939	16.2	19.9
11 27	1 8.21	+6 23.8	1.988	2.759	15.1	21.2	11 27	1 12.29	+12 52.1	1.099	1.937	20.6	20.2
477529	2010 <i>EH</i> ₈₆		10 18.9 265°81	2°7/20.9	18		490461	2009 <i>SV</i> ₂₇₁		10 18.9 336°77	2°4/20.7	17	
9 18	2 1.33	+17 24.2	1.751	2.608	14.1	20.5	9 18	1 59.02	+16 6.1	1.804	2.667	13.5	21.0
9 28	1 54.92	+17 36.1	1.676	2.602	10.5	20.3	9 28	1 53.28	+16 30.1	1.727	2.656	10.0	20.8
10 8	1 46.35	+17 33.7	1.624	2.596	6.5	20.0	10 8	1 45.48	+16 42.2	1.673	2.646	6.1	20.5
10 18	1 36.44	+17 17.9	1.599	2.589	3.0	19.8	10 18	1 36.38	+16 42.9	1.645	2.637	2.7	20.3
10 28	1 26.34	+16 51.8	1.601	2.583	4.3	19.9	10 28	1 27.07	+16 34.9	1.646	2.628	4.1	20.4
11 7	1 17.26	+16 21.1	1.631	2.577	8.3	20.1	11 7	1 18.67	+16 22.4	1.673	2.620	8.0	20.6
11 17	1 10.18	+15 51.9	1.687	2.571	12.2	20.3	11 17	1 12.11	+16 10.5	1.726	2.612	11.9	20.8
11 27	1 5.74	+15 29.9	1.764	2.564	15.6	20.5	11 27	1 8.06	+16 4.2	1.801	2.605	15.2	21.0
516143	2015 <i>WE</i> ₁₈		10 18.9 52°47	2°6/16.8	18		223417	2003 <i>SB</i> ₂₀₆		10 18.9 51°90	1°0/17.9	18	
9 18	1 58.32	+2 49.9	2.061	2.947	11.1	21.0	9 18	1 54.29	+10 20.4	2.004	2.885	11.5	19.8
9 28	1 52.28	+2 29.2	2.007	2.953	7.8	20.8	9 28	1 49.49	+9 16.3	1.950	2.896	8.0	19.6
10 8	1 44.69	+2 7.3	1.978	2.960	4.4	20.6	10 8	1 43.21	+8 3.5	1.922	2.906	4.2	19.4
10 18	1 36.28	+1 48.1	1.977	2.967	2.6	20.5	10 18	1 36.17	+6 47.4	1.922	2.917	1.0	19.2
10 28	1 27.92	+1 35.8	2.005	2.974	5.1	20.7	10 28	1 29.20	+5 34.5	1.951	2.928	4.2	19.5
11 7	1 20.48	+1 33.4	2.061	2.981	8.5	20.9	11 7	1 23.13	+4 31.0	2.007	2.940	7.9	19.7
11 17	1 14.62	+1 43.0	2.142	2.989	11.6	21.1	11 17	1 18.59	+3 41.5	2.090	2.951	11.2	19.9
11 27	1 10.82	+2 5.2	2.245	2.996	14.2	21.3	11 27	1 16.00	+3 8.6	2.195	2.963	13.9	20.2
36036	Bonucci		10 18.9 171°58	0°1/19.0	18		327603	2006 <i>EF</i> ₃		10 18.9 242°80	2°7/15.9	18	
9 18	1 57.02	+11 54.5	2.226	3.095	11.0	19.7	9 18	1 54.75	+3 7.5	2.468	3.353	9.5	21.7
9 28	1 51.37	+11 29.2	2.158	3.096	7.8	19.5	9 28	1 49.68	+2 13.1	2.398	3.344	6.7	21.5
10 8	1 44.23	+10 55.2	2.116	3.097	4.2	19.3	10 8	1 43.31	+1 16.1	2.354	3.335	3.8	21.3
10 18	1 36.24	+10 15.7	2.102	3.098	0.4	19.0	10 18	1 36.18	+0 20.8	2.339	3.326	2.8	21.2
10 28	1 28.24	+9 34.9	2.117	3.098	3.4	19.2	10 28	1 29.01	-0 27.6	2.353	3.316	5.0	21.4
11 7	1 21.03	+8 57.6	2.161	3.099	7.1	19.5	11 7	1 22.49	-1 5.0	2.396	3.306	8.0	21.6
11 17	1 15.29	+8 28.0	2.231	3.099	10.3	19.7	11 17	1 17.22	-1 28.7	2.464	3.297	10.7	21.7
11 27	1 11.51	+8 9.1	2.325	3.099	13.1	19.9	11 27	1 13.65	-1 37.1	2.555	3.287	13.1	21.9
422101	2014 <i>QD</i> ₄₀₅		10 18.9 118°68	6°0/26.5	18		142705	2002 <i>TE</i> ₂₅₇		10 18.9 14°72	0°1/18.9	18	
9 18	1 59.66	+33 14.0	2.651	3.409	12.6	21.3	9 18	1 56.00	+12 46.8	1.636	2.518	13.6	19.5
9 28	1 53.20	+33 30.1	2.582	3.424	10.5	21.2	9 28	1 51.05	+12 0.8	1.576	2.520	9.7	19.2
10 8	1 45.19	+33 26.9	2.536	3.438	8.3	21.1	10 8	1 44.20	+11 1.7	1.539	2.522	5.2	19.0
10 18	1 36.33	+33 3.6	2.515	3.452	6.6	21.0	10 18	1 36.27	+9 54.7	1.528	2.524	0.4	18.6
10 28	1 27.47	+32 22.1	2.523	3.466	6.1	21.0	10 28	1 28.34	+8 47.0	1.544	2.526	4.3	18.9
11 7	1 19.46	+31 26.6	2.558	3.479	7.0	21.1	11 7	1 21.49	+7 46.0	1.588	2.530	8.8	19.2
11 17	1 13.00	+30 23.1	2.621	3.492	8.9	21.2	11 17	1 16.52	+6 58.0	1.656	2.533	12.8	19.5
11 27	1 8.56	+29 17.9	2.708	3.504	10.9	21.4	11 27	1 13.98	+6 27.0	1.745	2.537	16.1	19.7
255288	2005 <i>VE</i> ₈₅		10 18.9 287°60	5°4/14.1	18		266825	2009 <i>TP</i> ₃₄		10 18.9 300°97	2°8/16.5	18	
9 18	1 57.71												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
240673	2005 <i>EB</i> ₉₅	10 18.9 318°27'		6°3'/13.0 18			234705	2002 <i>GG</i> ₁₆₉	10 18.9 95°26'		0°7'/19.7 18		
9 18	1 56.00	- 3 33.4	1.674	2.574	12.4	20.2	9 18	1 59.61	+14 51.0	1.845	2.710	13.1	20.8
9 28	1 50.99	- 5 4.8	1.623	2.570	9.2	20.0	9 28	1 53.29	+14 10.6	1.797	2.731	9.4	20.6
10 8	1 44.14	- 6 33.6	1.595	2.566	6.7	19.9	10 8	1 45.28	+13 17.6	1.773	2.752	5.2	20.4
10 18	1 36.27	- 7 50.9	1.594	2.562	6.7	19.9	10 18	1 36.42	+12 16.0	1.777	2.773	1.0	20.1
10 28	1 28.41	- 8 48.6	1.620	2.559	9.2	20.0	10 28	1 27.74	+11 12.2	1.810	2.793	3.7	20.4
11 7	1 21.57	- 9 21.7	1.670	2.555	12.4	20.2	11 7	1 20.20	+10 12.8	1.871	2.812	7.7	20.7
11 17	1 16.54	- 9 28.6	1.742	2.552	15.5	20.4	11 17	1 14.50	+ 9 23.3	1.958	2.832	11.3	20.9
11 27	1 13.83	- 9 10.6	1.832	2.549	18.1	20.6	11 27	1 11.07	+ 8 47.5	2.068	2.851	14.2	21.2
141697	2002 <i>KQ</i> ₅	10 18.9 98°95'		0°5'/18.6 18			66980	1999 <i>XK</i> ₈₈	10 18.9 337°93'		3°8'/22.9 18		
9 18	2 1.86	+11 19.6	1.445	2.327	15.1	20.5	9 18	1 55.51	+23 55.9	2.074	2.905	13.2	19.1
9 28	1 55.22	+10 38.9	1.398	2.342	10.6	20.2	9 28	1 50.57	+23 40.0	1.997	2.902	10.3	18.9
10 8	1 46.41	+ 9 46.5	1.374	2.357	5.6	20.0	10 8	1 43.94	+23 5.4	1.943	2.899	7.1	18.7
10 18	1 36.47	+ 8 47.8	1.376	2.372	0.6	19.7	10 18	1 36.31	+22 13.4	1.915	2.896	4.3	18.5
10 28	1 26.72	+ 7 50.5	1.405	2.386	4.9	20.0	10 28	1 28.61	+21 8.1	1.916	2.893	4.3	18.5
11 7	1 18.39	+ 7 1.9	1.461	2.400	9.7	20.4	11 7	1 21.78	+19 55.9	1.944	2.890	7.1	18.7
11 17	1 12.35	+ 6 27.8	1.541	2.414	13.8	20.6	11 17	1 16.56	+18 43.9	1.998	2.888	10.3	18.9
11 27	1 9.11	+ 6 11.1	1.642	2.427	17.2	20.9	11 27	1 13.50	+17 38.7	2.077	2.886	13.2	19.1
36286	2000 <i>EL</i> ₁₄	10 18.9 54°79'		3°0'/16.8 18			385087	2012 <i>UB</i> ₁₆₃	10 18.9 106°98'		7°7'/13.2 18		
9 18	1 59.39	+ 5 43.7	1.302	2.202	15.2	18.8	9 18	2 2.74	-10 40.5	1.799	2.679	12.7	20.3
9 28	1 53.59	+ 4 46.5	1.262	2.215	10.6	18.6	9 28	1 55.43	-11 33.6	1.767	2.695	9.9	20.1
10 8	1 45.57	+ 3 43.4	1.243	2.229	5.7	18.4	10 8	1 46.39	-12 15.2	1.758	2.710	8.0	20.1
10 18	1 36.40	+ 2 42.2	1.250	2.243	3.1	18.3	10 18	1 36.52	-12 38.8	1.777	2.725	8.0	20.1
10 28	1 27.44	+ 1 51.5	1.283	2.257	6.7	18.5	10 28	1 26.92	-12 40.0	1.822	2.739	9.8	20.2
11 7	1 19.94	+ 1 17.7	1.341	2.271	11.3	18.8	11 7	1 18.56	-12 17.7	1.892	2.754	12.3	20.4
11 17	1 14.77	+ 1 4.5	1.421	2.285	15.3	19.1	11 17	1 12.16	-11 33.7	1.984	2.767	14.8	20.6
11 27	1 12.43	+ 1 12.3	1.520	2.300	18.6	19.4	11 27	1 8.13	-10 31.1	2.096	2.781	16.9	20.8
220497	2004 <i>DD</i> ₁	10 18.9 225°08'		1°1'/19.8 18			126796	2002 <i>EX</i> ₂₄	10 18.9 100°42'		0°4'/18.6 18		
9 18	2 1.06	+14 48.4	1.702	2.569	14.0	21.3	9 18	1 59.19	+11 2.2	1.701	2.580	13.3	20.4
9 28	1 54.74	+14 26.2	1.627	2.562	10.2	21.1	9 28	1 53.22	+10 27.3	1.644	2.587	9.4	20.2
10 8	1 46.26	+13 49.8	1.576	2.554	5.8	20.8	10 8	1 45.35	+ 9 42.1	1.611	2.594	5.0	19.9
10 18	1 36.48	+13 2.0	1.551	2.546	1.4	20.5	10 18	1 36.44	+ 8 51.3	1.605	2.602	0.5	19.6
10 28	1 26.55	+12 8.5	1.554	2.537	4.1	20.7	10 28	1 27.59	+ 8 1.0	1.628	2.609	4.4	19.9
11 7	1 17.67	+11 16.3	1.585	2.528	8.7	20.9	11 7	1 19.85	+ 7 17.6	1.677	2.616	8.7	20.2
11 17	1 10.79	+10 32.0	1.642	2.519	12.9	21.1	11 17	1 14.04	+ 6 45.9	1.752	2.622	12.5	20.5
11 27	1 6.55	+10 1.0	1.720	2.509	16.4	21.4	11 27	1 10.66	+ 6 29.4	1.848	2.629	15.7	20.7
487584	2015 <i>FD</i> ₃₀₄	10 18.9 54°73'		4°9'/14.7 17			167942	2005 <i>EQ</i> ₁₈₅	10 18.9 274°71'		0°3'/18.7 18		
9 18	1 57.47	+ 2 34.8	1.411	2.314	14.1	20.5	9 18	1 57.10	+11 53.9	1.763	2.642	13.0	20.7
9 28	1 51.91	+ 0 42.5	1.390	2.343	9.8	20.3	9 28	1 51.82	+11 8.5	1.693	2.636	9.2	20.5
10 8	1 44.52	- 1 9.7	1.392	2.373	6.0	20.2	10 8	1 44.66	+10 11.1	1.647	2.630	4.9	20.2
10 18	1 36.32	- 2 51.4	1.421	2.403	5.2	20.2	10 18	1 36.38	+ 9 6.5	1.627	2.623	0.5	19.8
10 28	1 28.50	- 4 13.2	1.477	2.434	8.1	20.4	10 28	1 28.04	+ 8 1.2	1.636	2.617	4.3	20.1
11 7	1 22.07	- 5 9.3	1.557	2.464	11.7	20.7	11 7	1 20.66	+ 7 2.5	1.672	2.611	8.7	20.4
11 17	1 17.72	- 5 38.2	1.660	2.494	15.0	21.0	11 17	1 15.07	+ 6 16.2	1.734	2.605	12.6	20.6
11 27	1 15.81	- 5 41.4	1.782	2.524	17.6	21.3	11 27	1 11.85	+ 5 46.4	1.816	2.599	15.9	20.8
273598	2007 <i>CN</i> ₅₉	10 18.9 188°17'		1°2'/20.1 18			282553	2004 <i>TF</i> ₃₄₆	10 18.9 128°44'		2°1'/21.1 18		
9 18	1 59.29	+16 15.2	1.811	2.673	13.5	21.1	9 18	1 57.47	+20 15.5	1.762	2.615	14.2	20.1
9 28	1 53.31	+15 35.7	1.742	2.673	9.8	20.9	9 28	1 52.03	+19 16.0	1.696	2.620	10.6	19.9
10 8	1 45.42	+14 40.7	1.696	2.673	5.6	20.6	10 8	1 44.72	+17 56.2	1.654	2.625	6.4	19.7
10 18	1 36.43	+13 34.0	1.677	2.671	1.5	20.4	10 18	1 36.39	+16 20.6	1.638	2.630	2.6	19.5
10 28	1 27.41	+12 21.7	1.686	2.670	3.8	20.5	10 28	1 28.12	+14 36.7	1.652	2.635	3.8	19.6
11 7	1 19.41	+11 11.4	1.725	2.668	8.1	20.8	11 7	1 20.94	+12 54.0	1.693	2.640	7.9	19.8
11 17	1 13.27	+10 10.1	1.788	2.665	12.0	21.0	11 17	1 15.64	+11 21.2	1.761	2.644	11.8	20.1
11 27	1 9.56	+ 9 23.0	1.875	2.662	15.3	21.2	11 27	1 12.73	+10 4.9	1.852	2.649	15.1	20.3
324106	2005 <i>XB</i> ₅₁	10 18.9 219°00'		3°8'/15.5 18			168081	2006 <i>DB</i> ₅₉	10 18.9 169°34'		1°1'/19.8 17		
9 18	1 57.71	- 0 52.4	2.183	3.070	10.5	20.5	9 18	2 2.75	+14 45.5	1.500	2.371	15.3	20.8
9 28	1 51.85	- 1 27.1	2.125	3.069	7.5	20.3	9 28	1 56.05	+14 20.4	1.437	2.374	11.1	20.6
10 8	1 44.51	- 2 0.4	2.092	3.069	4.7	20.1	10 8	1 47.00	+13 39.6	1.397	2.376	6.3	20.3
10 18	1 36.35	- 2 27.9	2.087	3.068	3.9	20.1	10 18	1 36.61	+12 46.9	1.383	2.378	1.4	20.0
10 28	1 28.20	- 2 45.1	2.111	3.067	6.0	20.2	10 28	1 26.19	+11 49.0	1.396	2.379	4.5	20.2
11 7	1 20.88	- 2 48.9	2.162	3.067	9.0	20.4	11 7	1 17.08	+10 53.7	1.436	2.380	9.4	20.5
11 17	1 15.04	- 2 38.1	2.238	3.066	11.8	20.6	11 17	1 10.26	+10 8.4	1.501	2.381	13.7	20.8
11 27	1 11.16	- 2 12.5	2.336	3.065	14.3	20.8	11 27	1 6.35	+ 9 38.2	1.587	2.381	17.3	21.0
127328	2002 <i>JH</i> ₁₀₅	10 18.9 22°07'		3°3'/16.1 18			146317	2001 <i>KT</i> ₆₁	10 18.9 101°84'		2°3'/17.3 18		
9 18	1 57.85	+ 0 55.4	2.024	2.912	11.1	19.1	9 18	2 1.93	+ 6 28.8	1.567	2.454	13.8	20.0
9 28	1 52.02	+ 0 27.6	1.968	2.914	7.9	18.9	9 28	1 55.10	+ 5 41.1	1.524	2.472	9.6	19.8
10 8	1 44.62	- 0 0.1	1.936	2.917	4.7	18.8	10 8	1 46.31	+ 4 47.7	1.505	2.489	5.1	19.6
10 18	1 36.36	- 0 23.1	1.933	2.919	3.4	18.7	10 18	1 36.54	+ 3 54.6	1.513	2.507	2.3	19.5
10 28	1 28.13	- 0 37.1	1.958	2.922	5.8	18.8	10 28	1 26.98	+ 3 8.8	1.549	2.523	5.7	19.7
11 7	1 20.79	- 0 38.9	2.010	2.925	9.0	19.1	11 7	1 18.76	+ 2 36.0	1.612	2.540	9.9	20.0
11 17	1 15.05	- 0 26.8	2.087	2.928	12.1	19.3	11 17	1 12.66	+ 2 19.5	1.699	2.555	13.6	20.3
11 27	1 11.37	- 0 0.5	2.186	2.931	14.7	19.5	11 27	1 9.15	+ 2 20.7	1.806	2.571	16.6	20.5
28522	2000 <i>DP</i> ₃₄	10 18.9 79°83'		0°2'/19.1 18			229254	2004 <i>YL</i> ₁₄	10 18.9 284°00'		0°4'/18.6 17		
9 18	2 3.2												

EPHEMERIDES

10 18.9

10 19.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
218554	2005 <i>EV</i> ₈₄		10 18.9 168°96	3°2/20.8	18		460460	2014 <i>SY</i> ₂₃₅		10 19.0 342°88	2°2/20.9	17	
9 18	2 12.09	+17 11.0	1.872	2.708	14.2	20.0	9 18	1 56.22	+16 58.7	1.833	2.697	13.3	21.0
9 28	2 2.49	+17 59.5	1.799	2.713	10.7	19.8	9 28	1 51.27	+16 59.8	1.758	2.688	9.8	20.8
10 8	1 50.47	+18 35.7	1.751	2.717	6.7	19.6	10 8	1 44.44	+16 47.2	1.706	2.680	6.0	20.6
10 18	1 36.96	+18 58.2	1.732	2.720	3.4	19.4	10 18	1 36.45	+16 22.4	1.681	2.672	2.6	20.3
10 28	1 23.28	+19 8.0	1.745	2.723	4.6	19.5	10 28	1 28.31	+15 49.4	1.682	2.666	3.9	20.4
11 7	1 10.77	+19 8.8	1.787	2.725	8.4	19.7	11 7	1 21.07	+15 13.5	1.711	2.660	7.7	20.6
11 17	1 0.51	+19 5.7	1.858	2.726	12.1	20.0	11 17	1 15.57	+14 40.6	1.766	2.654	11.5	20.9
11 27	0 53.18	+19 4.5	1.951	2.726	15.2	20.2	11 27	1 12.41	+14 15.9	1.842	2.649	14.8	21.1
437305	2013 <i>CX</i> ₃₉		10 18.9 192°34	2°2/14.8	18		482580	2012 <i>XH</i> ₄₃		10 19.0 60°83	8°4/13.5	18	
9 18	1 49.10	- 1 17.7	4.449	5.330	5.7	21.6	9 18	2 2.66	-11 7.0	1.572	2.457	13.9	20.1
9 28	1 45.31	- 1 52.2	4.388	5.330	4.0	21.5	9 28	1 55.56	-11 52.9	1.542	2.473	10.9	20.0
10 8	1 40.87	- 2 25.9	4.355	5.330	2.6	21.4	10 8	1 46.55	-12 25.3	1.535	2.488	8.8	19.9
10 18	1 36.07	- 2 56.5	4.352	5.329	2.3	21.4	10 18	1 36.63	-12 37.4	1.553	2.504	8.7	19.9
10 28	1 31.28	- 3 21.9	4.380	5.329	3.5	21.5	10 28	1 27.01	-12 25.0	1.597	2.519	10.5	20.1
11 7	1 26.82	- 3 40.1	4.436	5.328	5.1	21.6	11 7	1 18.79	-11 47.7	1.665	2.535	13.2	20.3
11 17	1 23.01	- 3 50.1	4.519	5.328	6.7	21.7	11 17	1 12.74	-10 47.9	1.755	2.551	15.9	20.5
11 27	1 20.09	- 3 51.1	4.626	5.327	8.0	21.8	11 27	1 9.26	- 9 29.7	1.863	2.567	18.2	20.7
114561	2003 <i>BP</i> ₅₂		10 18.9 307°71	0°8/18.4	18	R	254223	2004 <i>RX</i> ₉₆		10 19.0 54°95	3°7/22.8	18	
9 18	1 58.04	+10 29.7	1.357	2.249	15.2	19.4	9 18	1 56.78	+23 20.0	1.992	2.826	13.6	20.1
9 28	1 53.10	+ 9 55.3	1.280	2.230	10.9	19.1	9 28	1 51.45	+23 5.6	1.928	2.835	10.4	20.0
10 8	1 45.64	+ 9 7.5	1.225	2.210	5.8	18.7	10 8	1 44.42	+22 32.7	1.887	2.844	7.1	19.8
10 18	1 36.53	+ 8 11.5	1.195	2.191	0.8	18.3	10 18	1 36.44	+21 43.1	1.872	2.854	4.2	19.6
10 28	1 27.11	+ 7 15.0	1.191	2.172	5.5	18.6	10 28	1 28.49	+20 41.0	1.885	2.863	4.3	19.6
11 7	1 18.79	+ 6 26.6	1.212	2.154	10.9	18.9	11 7	1 21.51	+19 33.2	1.926	2.873	7.1	19.8
11 17	1 12.73	+ 5 53.5	1.255	2.136	15.7	19.1	11 17	1 16.24	+18 26.5	1.994	2.883	10.3	20.1
11 27	1 9.72	+ 5 40.3	1.317	2.119	19.8	19.3	11 27	1 13.18	+17 27.3	2.085	2.893	13.2	20.3
69977	Saurodonati		10 18.9 272°00	1°9/20.9	17		28190	1998 <i>WU</i> ₂₃		10 19.0 244°43	0°7/19.6	18	
9 18	1 56.23	+17 53.7	2.435	3.283	11.0	19.6	9 18	2 0.07	+12 38.2	2.032	2.897	12.1	17.5
9 28	1 50.92	+17 40.5	2.346	3.267	8.2	19.4	9 28	1 53.80	+12 35.3	1.956	2.891	8.7	17.3
10 8	1 44.12	+17 15.2	2.282	3.252	5.0	19.2	10 8	1 45.73	+12 23.1	1.906	2.885	4.9	17.0
10 18	1 36.38	+16 39.4	2.245	3.236	2.2	19.0	10 18	1 36.58	+12 3.8	1.883	2.879	0.9	16.7
10 28	1 28.49	+15 56.3	2.238	3.220	3.2	19.0	10 28	1 27.30	+11 40.9	1.890	2.872	3.6	16.9
11 7	1 21.25	+15 10.6	2.260	3.204	6.4	19.2	11 7	1 18.88	+11 19.0	1.925	2.866	7.6	17.2
11 17	1 15.35	+14 27.1	2.309	3.188	9.6	19.4	11 17	1 12.13	+11 2.4	1.986	2.859	11.2	17.4
11 27	1 11.32	+13 50.5	2.382	3.172	12.4	19.5	11 27	1 7.62	+10 54.9	2.070	2.852	14.2	17.6
522007	2015 <i>XV</i> ₁₄₃		10 18.9 49°70	3°9/15.4	18		412313	2013 <i>JT</i> ₆₁		10 19.0 57°35	4°5/14.9	18	
9 18	1 57.08	- 1 1.9	2.145	3.034	10.6	21.4	9 18	1 57.33	- 2 47.7	2.090	2.979	10.8	20.0
9 28	1 51.42	- 1 39.5	2.092	3.037	7.6	21.3	9 28	1 51.61	- 3 29.3	2.041	2.985	7.8	19.9
10 8	1 44.30	- 2 15.6	2.064	3.041	4.8	21.1	10 8	1 44.41	- 4 7.7	2.019	2.992	5.3	19.7
10 18	1 36.39	- 2 45.4	2.064	3.045	4.0	21.1	10 18	1 36.44	- 4 38.0	2.023	2.999	4.7	19.7
10 28	1 28.53	- 3 4.5	2.092	3.048	6.1	21.2	10 28	1 28.55	- 4 55.6	2.056	3.006	6.7	19.9
11 7	1 21.52	- 3 9.7	2.148	3.052	9.1	21.4	11 7	1 21.56	- 4 57.7	2.116	3.013	9.6	20.1
11 17	1 15.99	- 2 59.9	2.229	3.056	11.9	21.6	11 17	1 16.10	- 4 43.3	2.200	3.021	12.3	20.2
11 27	1 12.41	- 2 35.0	2.330	3.061	14.3	21.8	11 27	1 12.61	- 4 13.1	2.305	3.028	14.6	20.4
69746	1998 <i>KC</i> ₅₈		10 18.9 107°20	4°1/15.1	18		365328	2009 <i>SL</i> ₁₄₆		10 19.0 53°47	0°9/18.2	18	
9 18	1 58.33	+ 1 10.3	1.880	2.770	11.7	19.4	9 18	1 57.70	+ 8 31.6	2.011	2.890	11.6	20.8
9 28	1 52.34	- 0 5.8	1.839	2.787	8.3	19.2	9 28	1 51.94	+ 8 11.8	1.958	2.902	8.1	20.6
10 8	1 44.78	- 1 22.3	1.824	2.803	5.1	19.1	10 8	1 44.62	+ 7 46.0	1.929	2.913	4.3	20.4
10 18	1 36.44	- 2 32.3	1.837	2.819	4.3	19.1	10 18	1 36.47	+ 7 17.7	1.929	2.924	0.9	20.2
10 28	1 28.26	- 3 29.0	1.879	2.834	6.7	19.2	10 28	1 28.38	+ 6 51.4	1.957	2.936	4.0	20.5
11 7	1 21.13	- 4 7.9	1.947	2.850	10.0	19.5	11 7	1 21.24	+ 6 31.1	2.013	2.948	7.7	20.7
11 17	1 15.71	- 4 27.0	2.039	2.864	12.9	19.7	11 17	1 15.70	+ 6 20.2	2.095	2.960	11.0	21.0
11 27	1 12.43	- 4 26.2	2.152	2.878	15.4	19.9	11 27	1 12.24	+ 6 20.9	2.199	2.972	13.8	21.2
218497	2004 <i>TD</i> ₆₆		10 18.9 15°69	3°8/15.6	18		170642	2003 <i>YX</i> ₉₅		10 19.0 248°32	3°4/22.4	18	
9 18	1 53.70	+ 3 25.1	1.583	2.485	12.8	19.2	9 18	1 57.65	+22 55.3	2.059	2.892	13.2	20.3
9 28	1 49.41	+ 2 12.1	1.536	2.491	8.9	19.0	9 28	1 52.18	+22 29.0	1.972	2.880	10.2	20.1
10 8	1 43.34	+ 0 55.7	1.514	2.497	5.2	18.8	10 8	1 44.90	+21 43.5	1.909	2.869	6.8	19.9
10 18	1 36.31	- 0 16.3	1.517	2.504	3.9	18.8	10 18	1 36.51	+20 40.5	1.872	2.856	3.9	19.7
10 28	1 29.36	- 1 16.1	1.547	2.512	6.8	19.0	10 28	1 27.98	+19 24.2	1.864	2.844	4.1	19.7
11 7	1 23.47	- 1 57.7	1.602	2.521	10.6	19.2	11 7	1 20.30	+18 1.7	1.885	2.831	7.3	19.9
11 17	1 19.39	- 2 18.1	1.681	2.531	14.1	19.4	11 17	1 14.29	+16 40.8	1.933	2.818	10.8	20.1
11 27	1 17.58	- 2 16.8	1.779	2.541	16.9	19.7	11 27	1 10.53	+15 28.5	2.004	2.805	14.0	20.2
217695	1999 <i>RT</i> ₂₄₂		10 19.0 109°18	6°9/23.1	16		364120	2006 <i>AM</i> ₉₁		10 19.0 9°95	3°3/16.1	17	
9 18	2 14.48	+25 43.1	1.665	2.472	17.0	19.2	9 18	1 54.58	+ 3 50.2	1.606	2.506	12.8	20.3
9 28	2 4.41	+26 59.3	1.609	2.493	13.5	19.0	9 28	1 50.06	+ 2 53.3	1.555	2.508	8.9	20.1
10 8	1 51.57	+27 53.8	1.576	2.514	10.0	18.8	10 8	1 43.73	+ 1 52.8	1.527	2.511	5.1	19.8
10 18	1 37.10	+28 22.7	1.570	2.534	7.3	18.7	10 18	1 36.39	+ 0 55.3	1.526	2.515	3.5	19.8
10 28	1 22.61	+28 26.0	1.593	2.553	7.2	18.8	10 28	1 29.10	+ 0 8.0	1.552	2.520	6.4	20.0
11 7	1 9.69	+28 9.3	1.643	2.572	9.7	19.0	11 7	1 22.86	- 0 23.4	1.603	2.526	10.3	20.2
11 17	0 59.52	+27 41.0	1.720	2.589	12.8	19.2	11 17	1 18.43	- 0 36.0	1.677	2.532	13.8	20.4
11 27	0 52.75	+27 10.3	1.819	2.607	15.7	19.4	11 27	1 16.32	- 0 29.0	1.771	2.539	16.8	20.7
347265	2011 <i>KB</i> ₂₈		10 19.0 68°95	4°4/23.3	17		38000	1998 <i>KK</i> ₃₅		10 19.			