

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
95275	2002 <i>CN</i> ₇₃		9 8.9 113°30	0.7/ 9.7 18			295080	2008 <i>EH</i> ₁₃₅		9 9.0 7°79	1.7/ 7.3 18		
8 9	23 31.31	- 1 43.4	2.221	3.098	11.1	19.8	8 9	23 30.28	- 8 2.7	1.931	2.831	11.5	21.0
8 19	23 25.77	- 2 2.2	2.158	3.104	8.0	19.6	8 19	23 25.26	- 8 47.0	1.871	2.832	8.0	20.8
8 29	23 18.80	- 2 30.4	2.120	3.110	4.5	19.4	8 29	23 18.62	- 9 37.4	1.836	2.832	4.2	20.6
9 8	23 11.06	- 3 4.4	2.110	3.116	0.9	19.1	9 8	23 11.08	-10 28.4	1.828	2.833	1.7	20.4
9 18	23 3.27	- 3 40.3	2.128	3.122	3.2	19.3	9 18	23 3.47	-11 14.2	1.847	2.833	4.7	20.6
9 28	22 56.21	- 4 13.5	2.174	3.128	6.7	19.6	9 28	22 56.67	-11 49.7	1.892	2.834	8.5	20.8
10 8	22 50.55	- 4 40.2	2.247	3.134	9.9	19.8	10 8	22 51.44	-12 11.4	1.963	2.836	11.8	21.0
10 18	22 46.72	- 4 57.7	2.342	3.139	12.7	20.0	10 18	22 48.24	-12 18.0	2.054	2.837	14.7	21.2
395039	2009 <i>DY</i> ₈₆		9 9.0 154°84	0°6/ 9.7 18			445675	2011 <i>UF</i> ₉₆		9 9.0 276°68	1°2/ 7.8 18		
8 9	23 31.82	- 1 24.0	2.276	3.150	11.0	22.2	8 9	23 31.89	- 7 2.1	1.924	2.820	11.7	21.7
8 19	23 26.11	- 1 51.9	2.211	3.156	7.9	22.0	8 19	23 26.46	- 7 35.4	1.855	2.813	8.2	21.5
8 29	23 19.00	- 2 29.6	2.171	3.161	4.4	21.8	8 29	23 19.32	- 8 15.8	1.810	2.805	4.3	21.2
9 8	23 11.09	- 3 13.4	2.160	3.166	0.9	21.5	9 8	23 11.16	- 8 58.1	1.791	2.797	1.2	21.0
9 18	23 3.14	- 3 58.7	2.177	3.171	3.2	21.7	9 18	23 2.84	- 9 37.0	1.800	2.790	4.5	21.2
9 28	22 55.89	- 4 41.0	2.223	3.175	6.7	21.9	9 28	22 55.32	-10 7.4	1.837	2.782	8.4	21.4
10 8	22 50.02	- 4 16.1	2.295	3.179	9.9	22.2	10 8	22 49.40	-10 25.6	1.898	2.774	12.0	21.6
10 18	22 45.97	- 5 41.2	2.390	3.183	12.6	22.4	10 18	22 45.60	-10 29.8	1.980	2.767	15.0	21.8
518706	2009 <i>AM</i> ₅₂		9 9.0 332°05	3°7/ 5.5 18			289606	2005 <i>GB</i> ₁₉		9 9.0 197°14	2°3/ 6.9 18		
8 9	23 30.56	-11 49.7	1.661	2.572	12.3	21.0	8 9	23 34.35	-10 44.2	1.946	2.844	11.5	20.5
8 19	23 25.69	-13 0.5	1.604	2.569	8.6	20.8	8 19	23 28.12	-11 14.2	1.884	2.843	8.0	20.3
8 29	23 18.94	-14 15.7	1.571	2.566	5.0	20.5	8 29	23 20.16	-11 47.4	1.847	2.842	4.4	20.1
9 8	23 11.10	-15 27.1	1.564	2.562	3.8	20.5	9 8	23 11.24	-12 18.4	1.838	2.841	2.4	20.0
9 18	23 3.14	-16 26.9	1.583	2.560	6.8	20.6	9 18	23 2.24	-12 42.4	1.856	2.839	5.2	20.1
9 28	22 56.13	-17 9.0	1.628	2.557	10.6	20.9	9 28	22 54.14	-12 55.2	1.901	2.838	8.8	20.4
10 8	22 50.93	-17 30.3	1.696	2.554	14.1	21.1	10 8	22 47.72	-12 54.6	1.972	2.836	12.2	20.6
10 18	22 48.08	-17 30.5	1.782	2.552	17.1	21.3	10 18	22 43.48	-12 40.1	2.063	2.834	15.0	20.8
350910	2002 <i>RX</i> ₂₄₄		9 9.0 291°15	0°4/ 9.3 16			42617	1998 <i>FJ</i> ₁		9 9.0 206°28	4°0/ 12.5 18		
8 9	23 34.98	- 3 51.1	1.814	2.699	12.8	21.2	8 9	23 33.16	+ 7 8.1	1.533	2.393	16.1	19.3
8 19	23 28.87	- 3 50.1	1.728	2.679	9.2	20.9	8 19	23 27.72	+ 6 53.4	1.464	2.391	12.4	19.1
8 29	23 20.73	- 3 57.9	1.665	2.658	5.1	20.7	8 29	23 20.13	+ 6 15.9	1.415	2.389	8.3	18.8
9 8	23 11.28	- 4 11.3	1.630	2.637	0.7	20.3	9 8	23 11.24	+ 5 18.3	1.391	2.387	4.6	18.6
9 18	23 1.48	- 4 26.2	1.621	2.616	4.0	20.5	9 18	23 2.14	+ 4 6.6	1.392	2.385	4.9	18.6
9 28	22 52.44	- 4 38.0	1.641	2.595	8.5	20.7	9 28	22 54.03	+ 2 49.3	1.420	2.382	8.7	18.8
10 8	22 45.12	- 4 42.8	1.685	2.574	12.6	20.9	10 8	22 47.90	+ 1 35.3	1.472	2.379	12.8	19.1
10 18	22 40.20	- 4 37.8	1.750	2.553	16.0	21.1	10 18	22 44.40	+ 0 32.1	1.545	2.376	16.5	19.3
386853	2010 <i>UM</i> ₇₉		9 9.0 240°96	0°5/ 10.1 16			78369	2002 <i>PP</i> ₁₂₀		9 9.0 61°16	1°6/ 10.6 18		
8 9	23 23.94	- 1 18.5	4.489	5.354	6.2	21.6	8 9	23 30.23	+ 1 52.9	1.787	2.664	13.4	19.7
8 19	23 20.12	- 1 33.2	4.412	5.351	4.4	21.5	8 19	23 25.33	+ 1 16.4	1.723	2.666	9.8	19.5
8 29	23 15.64	- 1 52.7	4.362	5.349	2.5	21.3	8 29	23 18.71	+ 0 24.1	1.682	2.669	5.8	19.2
9 8	23 10.80	- 2 15.4	4.341	5.347	0.7	21.1	9 8	23 11.11	+ 0 39.5	1.667	2.672	1.9	19.0
9 18	23 5.91	- 2 39.5	4.350	5.344	1.7	21.2	9 18	23 3.40	- 1 48.1	1.680	2.675	3.7	19.1
9 28	23 1.31	- 3 3.0	4.389	5.342	3.7	21.4	9 28	22 56.56	- 2 54.6	1.719	2.678	7.7	19.4
10 8	22 57.32	- 3 24.0	4.456	5.339	5.5	21.5	10 8	22 51.36	- 3 52.7	1.784	2.682	11.5	19.6
10 18	22 54.19	- 3 40.7	4.549	5.337	7.1	21.6	10 18	22 48.32	- 4 37.9	1.870	2.685	14.7	19.8
220364	2003 <i>NT</i> ₁₂		9 9.0 16°66	2°8/ 6.1 18			322758	2001 <i>DV</i> ₂₃		9 9.0 201°26	3°4/ 3.8 18		
8 9	23 27.72	- 9 44.7	1.694	2.606	12.1	19.4	8 9	23 28.66	-14 44.6	2.771	3.671	8.4	21.3
8 19	23 23.58	-10 53.4	1.645	2.611	8.4	19.1	8 19	23 23.82	-16 13.1	2.709	3.667	5.9	21.2
8 29	23 17.75	-12 7.5	1.621	2.617	4.6	18.9	8 29	23 17.77	-17 42.8	2.675	3.663	3.9	21.0
9 8	23 10.99	-13 19.6	1.622	2.624	2.9	18.8	9 8	23 11.03	-19 8.0	2.671	3.658	3.7	21.0
9 18	23 4.21	-14 22.2	1.650	2.632	5.9	19.1	9 18	23 4.17	-20 23.1	2.696	3.653	5.6	21.1
9 28	22 58.34	-15 9.3	1.704	2.640	9.7	19.3	9 28	22 57.84	-21 24.0	2.749	3.648	8.0	21.3
10 8	22 54.15	-15 37.6	1.780	2.649	13.1	19.5	10 8	22 52.61	-22 8.2	2.828	3.642	10.4	21.4
10 18	22 52.10	-15 46.2	1.877	2.658	15.9	19.8	10 18	22 48.89	-22 35.1	2.928	3.636	12.3	21.6
510722	2012 <i>VC</i> ₆₀		9 9.0 219°26	3°5/ 5.5 18			455009	2015 <i>TY</i> ₂₆₅		9 9.0 20°54	4°1/ 13.4 15		
8 9	23 33.12	-13 27.1	1.985	2.887	11.1	22.1	8 9	23 27.90	+ 8 51.7	1.782	2.633	14.6	21.2
8 19	23 27.27	-14 20.7	1.923	2.883	7.8	21.9	8 19	23 23.70	+ 8 28.3	1.717	2.637	11.3	21.0
8 29	23 19.72	-15 16.1	1.886	2.878	4.7	21.7	8 29	23 17.85	+ 7 43.3	1.673	2.642	7.8	20.8
9 8	23 11.18	-16 6.8	1.876	2.872	3.7	21.6	9 8	23 11.03	+ 6 39.9	1.655	2.647	4.7	20.6
9 18	23 2.53	-16 47.0	1.893	2.866	6.2	21.8	9 18	23 4.13	+ 5 23.4	1.662	2.653	4.5	20.6
9 28	22 54.72	-17 12.0	1.938	2.860	9.5	21.9	9 28	22 58.05	+ 4 1.5	1.696	2.659	7.5	20.8
10 8	22 48.54	-17 19.9	2.007	2.854	12.7	22.1	10 8	22 53.57	+ 2 42.3	1.756	2.666	10.9	21.0
10 18	22 44.50	-17 10.5	2.096	2.848	15.4	22.3	10 18	22 51.19	+ 1 32.3	1.838	2.673	14.1	21.3
91835	1999 <i>TV</i> ₃₁₀		9 9.0 10°68	1°0/ 10.1 18			230322	2002 <i>CQ</i> ₇₇		9 9.0 87°30	1°8/ 7.3 16		
8 9	23 29.10	+ 0 12.5	2.092	2.968	11.7	20.0	8 9	23 31.60	- 6 35.1	1.657	2.558	12.9	20.2
8 19	23 24.34	- 0 19.2	2.024	2.969	8.5	19.8	8 19	23 26.31	- 7 43.4	1.608	2.569	9.0	20.0
8 29	23 18.11	- 1 3.2	1.980	2.969	4.9	19.6	8 29	23 19.22	- 9 0.3	1.584	2.580	4.7	19.8
9 8	23 11.03	- 1 55.4	1.964	2.970	1.3	19.3	9 8	23 11.17	-10 18.1	1.586	2.592	1.8	19.6
9 18	23 3.86	- 2 50.9	1.975	2.970	3.3	19.5	9 18	23 3.11	-11 29.1	1.615	2.603	5.3	19.9
9 28	22 57.39	- 3 44.1	2.014	2.971	7.0	19.7	9 28	22 56.08	-12 26.5	1.671	2.614	9.3	20.1
10 8	22 52.33	- 4 29.9	2.079	2.972	10.3	19.9	10 8	22 50.87	-13 6.1	1.751	2.624	13.0	20.4
10 18	22 49.13	- 5 4.9	2.166	2.973	13.2	20.1	10 18	22 47.96	-13 26.4	1.850	2.635	16.0	20.6
45197	1999 <i>XY</i> ₁₆₇		9 9.0 219°19	2°4/ 6.6 18			379572	2011 <i>BD</i> ₃₂					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
515654	2014 <i>OL</i> ₇₉		9 9.0 330°10	2°6/ 6.5 18			335723	2007 <i>CJ</i> ₅₉		9 9.0 246°07	3°5/12.1 18		
8 9	23 30.41	-11 1.1	1.949	2.853	11.1	20.8	8 9	23 32.91	+ 5 36.5	1.660	2.522	15.0	20.5
8 19	23 25.40	-11 41.3	1.884	2.846	7.8	20.6	8 19	23 27.47	+ 5 27.6	1.586	2.516	11.5	20.3
8 29	23 18.74	-12 25.1	1.844	2.839	4.3	20.4	8 29	23 20.00	+ 4 59.1	1.533	2.510	7.5	20.1
9 8	23 11.13	-13 6.9	1.831	2.833	2.7	20.3	9 8	23 11.29	+ 4 13.6	1.505	2.503	4.0	19.8
9 18	23 3.40	-13 41.2	1.844	2.826	5.4	20.4	9 18	23 2.32	+ 3 16.1	1.503	2.496	4.5	19.9
9 28	22 56.47	-14 3.5	1.885	2.820	8.9	20.6	9 28	22 54.24	+ 2 13.7	1.528	2.489	8.3	20.1
10 8	22 51.09	-14 11.0	1.949	2.815	12.2	20.8	10 8	22 47.99	+ 1 14.1	1.578	2.482	12.3	20.3
10 18	22 47.77	-14 3.1	2.034	2.809	15.0	21.0	10 18	22 44.20	+ 0 23.6	1.649	2.475	15.8	20.5
468791	2012 <i>EO</i> ₇		9 9.0 81°68	0°9/ 8.2 17			420359	2012 <i>BX</i> ₈₉		9 9.0 277°20	1°0/ 8.3 17		
8 9	23 33.99	- 3 26.6	1.379	2.278	15.2	21.3	8 9	23 34.58	- 5 0.4	1.345	2.248	15.2	21.8
8 19	23 28.13	- 4 37.2	1.340	2.299	10.6	21.1	8 19	23 29.13	- 5 41.2	1.270	2.230	10.9	21.5
8 29	23 20.22	- 6 0.7	1.325	2.320	5.5	20.9	8 29	23 21.11	- 6 35.9	1.216	2.212	5.8	21.2
9 8	23 11.27	- 7 28.1	1.334	2.342	0.9	20.6	9 8	23 11.41	- 7 37.6	1.186	2.193	1.0	20.8
9 18	23 2.46	- 8 49.9	1.371	2.362	5.1	21.0	9 18	23 1.25	- 8 37.8	1.182	2.174	5.6	21.1
9 28	22 54.97	- 9 57.7	1.433	2.383	9.8	21.3	9 28	22 52.11	- 9 27.5	1.202	2.155	11.1	21.4
10 8	22 49.66	-10 46.4	1.518	2.403	13.9	21.6	10 8	22 45.23	-10 0.3	1.245	2.136	15.9	21.6
10 18	22 46.99	-11 14.3	1.623	2.423	17.2	21.9	10 18	22 41.38	-10 13.1	1.306	2.116	20.1	21.8
75206	1999 <i>VY</i> ₁₈₄		9 9.0 192°44	1°3/10.2 18			220228	2002 <i>VQ</i> ₁₃₄		9 9.0 346°75	0°3/ 9.2 18		
8 9	23 32.48	+ 1 32.4	1.654	2.532	14.2	19.3	8 9	23 28.16	- 3 54.7	0.942	1.867	17.9	19.9
8 19	23 27.09	+ 0 45.1	1.587	2.531	10.4	19.1	8 19	23 25.04	- 3 55.8	0.882	1.852	13.0	19.5
8 29	23 19.74	- 0 19.8	1.542	2.530	6.0	18.8	8 29	23 19.04	- 4 12.7	0.841	1.839	7.2	19.2
9 8	23 11.24	- 1 36.9	1.523	2.529	1.7	18.5	9 8	23 11.21	- 4 39.8	0.821	1.828	0.8	18.7
9 18	23 2.58	- 2 58.9	1.531	2.527	4.0	18.7	9 18	23 3.02	- 5 9.1	0.821	1.819	5.7	19.0
9 28	22 54.84	- 4 17.2	1.567	2.524	8.5	19.0	9 28	22 56.18	- 5 31.9	0.843	1.811	11.9	19.3
10 8	22 48.93	- 5 24.5	1.627	2.522	12.6	19.2	10 8	22 52.07	- 5 40.8	0.883	1.806	17.4	19.6
10 18	22 45.43	- 6 16.1	1.708	2.519	16.1	19.4	10 18	22 51.41	- 5 32.2	0.940	1.803	22.0	19.9
339176	2004 <i>TW</i> ₁₁₄		9 9.0 314°75	1°0/ 9.9 18			478912	2012 <i>XS</i>		9 9.0 296°39	0°6/ 9.5 18		
8 9	23 29.92	+ 0 27.0	1.580	2.468	14.3	20.7	8 9	23 31.68	- 1 49.7	1.664	2.553	13.6	21.3
8 19	23 25.36	- 0 18.5	1.511	2.462	10.3	20.4	8 19	23 26.60	- 2 15.4	1.589	2.541	9.8	21.1
8 29	23 18.85	- 1 21.2	1.465	2.456	5.9	20.1	8 29	23 19.54	- 2 54.5	1.537	2.529	5.5	20.8
9 8	23 11.16	- 2 35.7	1.444	2.450	1.4	19.8	9 8	23 11.26	- 3 42.3	1.510	2.517	0.9	20.4
9 18	23 3.27	- 3 54.4	1.449	2.445	4.1	20.0	9 18	23 2.71	- 4 32.9	1.510	2.505	4.1	20.7
9 28	22 56.28	- 5 8.7	1.480	2.439	8.8	20.3	9 28	22 55.02	- 5 19.5	1.537	2.494	8.7	20.9
10 8	22 51.11	- 6 11.3	1.536	2.434	13.0	20.5	10 8	22 49.10	- 5 56.2	1.587	2.482	12.8	21.1
10 18	22 48.35	- 6 57.3	1.612	2.430	16.5	20.8	10 18	22 45.59	- 6 19.4	1.658	2.471	16.4	21.3
395906	2013 <i>AK</i> ₇₇		9 9.0 259°06	3°2/ 5.8 18			23061	Blueglass		9 9.0 190°57	0°4/ 8.5 18 R		
8 9	23 31.92	-12 16.6	1.942	2.846	11.2	21.2	8 9	23 29.98	- 4 52.1	2.614	3.496	9.5	19.3
8 19	23 26.51	-13 11.8	1.876	2.837	7.9	21.0	8 19	23 24.75	- 5 25.0	2.544	3.495	6.7	19.1
8 29	23 19.37	-14 10.2	1.835	2.828	4.6	20.8	8 29	23 18.29	- 6 4.5	2.500	3.494	3.5	18.9
9 8	23 11.21	-15 5.3	1.821	2.819	3.4	20.7	9 8	23 11.13	- 6 46.8	2.485	3.492	0.4	18.7
9 18	23 2.89	-15 50.9	1.834	2.810	6.0	20.8	9 18	23 3.89	- 7 28.1	2.499	3.490	3.2	18.9
9 28	22 55.38	-16 22.0	1.874	2.801	9.5	21.0	9 28	22 57.23	- 8 4.4	2.542	3.488	6.3	19.1
10 8	22 49.48	-16 35.8	1.937	2.791	12.8	21.2	10 8	22 51.73	- 8 32.5	2.611	3.486	9.2	19.3
10 18	22 45.72	-16 32.0	2.021	2.782	15.6	21.4	10 18	22 47.80	- 8 50.3	2.704	3.483	11.6	19.5
82103	2001 <i>FB</i> ₂₂		9 9.0 49°13	2°1/ 7.4 17			514504	2016 <i>WU</i> ₂₄		9 9.0 352°14	2°6/10.5 18		
8 9	23 33.05	- 6 13.2	1.129	2.045	16.5	18.4	8 9	23 37.58	- 0 43.5	1.470	2.353	15.4	20.3
8 19	23 27.68	- 7 23.6	1.102	2.069	11.4	18.2	8 19	23 30.92	+ 0 0.6	1.403	2.349	11.4	20.1
8 29	23 20.01	- 8 44.3	1.095	2.093	5.9	18.0	8 29	23 21.91	+ 0 33.3	1.358	2.345	6.9	19.8
9 8	23 11.25	-10 4.5	1.113	2.118	2.1	17.8	9 8	23 11.49	+ 0 55.9	1.339	2.342	2.9	19.6
9 18	23 2.75	-11 14.0	1.154	2.144	6.3	18.2	9 18	23 0.86	+ 1 10.5	1.346	2.340	4.6	19.7
9 28	22 55.83	-12 4.8	1.220	2.170	11.2	18.5	9 28	22 51.35	+ 1 21.1	1.379	2.339	9.2	20.0
10 8	22 51.37	-12 33.3	1.307	2.196	15.4	18.8	10 8	22 44.05	+ 1 31.8	1.435	2.338	13.4	20.2
10 18	22 49.77	-12 39.2	1.412	2.223	18.8	19.1	10 18	22 39.60	+ 1 46.4	1.513	2.338	17.1	20.4
219294	2000 <i>DO</i> ₃₀		9 9.0 296°01	0°4/ 9.5 18			116340	2003 <i>YC</i> ₈₁		9 9.0 88°05	6°9/16.3 18		
8 9	23 28.26	- 1 26.1	2.180	3.062	11.1	20.1	8 9	23 33.69	+16 13.0	1.982	2.777	15.4	19.2
8 19	23 23.82	- 2 6.1	2.098	3.047	8.0	19.9	8 19	23 27.66	+16 38.1	1.922	2.794	12.7	19.0
8 29	23 17.90	- 2 57.7	2.040	3.032	4.4	19.6	8 29	23 19.95	+16 40.1	1.883	2.811	10.0	18.9
9 8	23 11.07	- 3 56.7	2.010	3.017	0.7	19.3	9 8	23 11.30	+16 19.1	1.869	2.828	7.7	18.8
9 18	23 4.05	- 4 58.0	2.007	3.002	3.4	19.5	9 18	23 2.59	+15 37.6	1.880	2.844	7.0	18.8
9 28	22 57.62	- 5 55.8	2.033	2.987	7.1	19.7	9 28	22 54.77	+14 41.1	1.917	2.861	8.3	18.9
10 8	22 52.49	- 6 45.1	2.084	2.972	10.6	19.9	10 8	22 48.62	+13 36.9	1.980	2.877	10.6	19.0
10 18	22 49.18	- 7 22.2	2.158	2.957	13.5	20.1	10 18	22 44.64	+12 32.2	2.067	2.893	13.1	19.2
164177	2004 <i>BM</i> ₄₆		9 9.0 243°50	1°6/10.6 18			115521	2003 <i>UL</i> ₃₈		9 9.0 353°50	2°2/10.3 18		
8 9	23 30.70	+ 1 39.2	1.988	2.859	12.5	20.1	8 9	23 34.65	- 0 56.1	1.101	2.004	17.8	18.4
8 19	23 25.61	+ 1 11.6	1.914	2.854	9.2	19.9	8 19	23 29.33	- 0 34.7	1.043	2.000	13.1	18.2
8 29	23 18.87	+ 0 29.9	1.863	2.849	5.5	19.7	8 29	23 21.23	- 0 29.5	1.004	1.996	7.7	17.9
9 8	23 11.17	- 0 22.3	1.839	2.843	1.9	19.4	9 8	23 11.43	- 0 37.5	0.988	1.993	2.6	17.6
9 18	23 3.30	- 1 19.9	1.843	2.838	3.5	19.5	9 18	23 1.40	- 0 53.2	0.995	1.992	5.2	17.7
9 28	22 56.15	- 2 16.9	1.874	2.832	7.3	19.8	9 28	22 52.76	- 1 9.8	1.025	1.991	10.7	18.0
10 8	22 50.51	- 3 7.5	1.931	2.826	10.9	20.0	10 8	22 46.78	- 1 20.6	1.076	1.991	15.8	18.3
10 18	22 46.89	- 3 47.4	2.011	2.821	14.0	20.2	10 18	22 44.13	- 1 20.9	1.145	1.992	20.0	18.6
221628	Hyatt		9 9.0 156°88	3°4/ 5.2 18			266813	2009 <i>SW</i> ₃₆₃		9 9.0 248°11			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
208096	2000 AT ₈₈		9 9.0 296°25	6°1/13.9	18	R	171183	Haleakala		9 9.0 345°05	2°5/ 6.9	18	
8 9	23 33.04	+10 49.4	1.759	2.593	15.5	19.7	8 9	23 31.50	- 9 43.2	1.603	2.512	12.9	19.9
8 19	23 27.65	+11 21.5	1.671	2.576	12.5	19.5	8 19	23 26.45	-10 24.7	1.543	2.507	9.0	19.6
8 29	23 20.19	+11 33.3	1.604	2.558	9.3	19.3	8 29	23 19.44	-11 11.9	1.507	2.503	4.9	19.4
9 8	23 11.34	+11 24.0	1.560	2.540	6.7	19.1	9 8	23 11.30	-11 58.1	1.496	2.500	2.6	19.2
9 18	23 2.08	+10 55.5	1.543	2.523	6.4	19.0	9 18	23 3.04	-12 36.6	1.511	2.496	5.8	19.4
9 28	22 53.52	+10 12.4	1.551	2.506	8.9	19.1	9 28	22 55.76	-13 1.8	1.551	2.494	9.9	19.7
10 8	22 46.69	+ 9 22.1	1.584	2.489	12.3	19.3	10 8	22 50.36	-13 10.4	1.615	2.491	13.7	19.9
10 18	22 42.32	+ 8 32.0	1.638	2.472	15.6	19.5	10 18	22 47.38	-13 1.7	1.698	2.490	16.9	20.1
318284	2004 TX ₃₆		9 9.0 358°62	0°1/ 9.1	17		2622	Bolzano		9 9.0 354°37	3°2/ 5.5	18	
8 9	23 28.60	- 3 8.7	1.653	2.551	13.2	20.6	8 9	23 28.07	-10 27.2	1.802	2.712	11.6	16.0
8 19	23 24.32	- 3 38.7	1.591	2.549	9.4	20.4	8 19	23 23.87	-11 48.5	1.745	2.710	8.1	15.7
8 29	23 18.25	- 4 20.4	1.552	2.547	5.1	20.1	8 29	23 18.00	-13 15.4	1.713	2.708	4.5	15.5
9 8	23 11.15	- 5 8.6	1.539	2.546	0.5	19.8	9 8	23 11.17	-14 40.2	1.707	2.707	3.3	15.5
9 18	23 3.93	- 5 57.2	1.551	2.546	4.1	20.1	9 18	23 4.24	-15 54.9	1.729	2.706	6.2	15.6
9 28	22 57.59	- 6 39.8	1.589	2.546	8.5	20.3	9 28	22 58.13	-16 53.2	1.776	2.706	9.8	15.8
10 8	22 52.97	- 7 11.3	1.651	2.548	12.4	20.6	10 8	22 53.61	-17 31.4	1.847	2.705	13.1	16.1
10 18	22 50.58	- 7 28.7	1.734	2.550	15.6	20.8	10 18	22 51.19	-17 48.4	1.938	2.706	15.9	16.3
299669	2006 QW ₆		9 9.0 292°15	0°4/ 9.4	18		231336	2006 DL ₁₉₇		9 9.0 180°08	4°0/13.4	18	R
8 9	23 33.51	- 3 18.0	1.847	2.733	12.6	20.3	8 9	23 33.74	+ 9 18.6	2.332	3.156	12.5	21.5
8 19	23 27.79	- 3 24.6	1.766	2.716	9.1	20.0	8 19	23 27.58	+ 9 18.5	2.254	3.158	9.8	21.3
8 29	23 20.17	- 3 40.9	1.708	2.700	5.0	19.7	8 29	23 19.92	+ 9 1.9	2.200	3.159	6.9	21.1
9 8	23 11.34	- 4 3.3	1.676	2.683	0.8	19.4	9 8	23 11.36	+ 8 30.3	2.173	3.159	4.5	21.0
9 18	23 2.24	- 4 27.5	1.672	2.667	3.9	19.6	9 18	23 2.66	+ 7 46.7	2.174	3.159	4.4	21.0
9 28	22 53.89	- 4 48.6	1.695	2.650	8.2	19.8	9 28	22 54.64	+ 6 55.7	2.204	3.158	6.7	21.1
10 8	22 47.21	- 5 2.2	1.743	2.634	12.1	20.0	10 8	22 47.99	+ 6 2.9	2.261	3.156	9.5	21.3
10 18	22 42.81	- 5 5.6	1.813	2.618	15.5	20.2	10 18	22 43.22	+ 5 13.5	2.342	3.154	12.2	21.5
518609	2008 AC ₅₆		9 9.0 179°81	0°2/ 9.2	18		306691	2000 UO ₉₄		9 9.0 297°63	0°6/ 9.5	18	
8 9	23 30.51	- 2 15.3	1.996	2.880	11.9	21.6	8 9	23 33.62	- 2 32.8	1.576	2.467	14.1	20.4
8 19	23 25.42	- 2 52.4	1.930	2.880	8.5	21.4	8 19	23 28.19	- 2 43.1	1.494	2.447	10.2	20.1
8 29	23 18.76	- 3 40.3	1.888	2.881	4.6	21.2	8 29	23 20.53	- 3 5.8	1.435	2.428	5.7	19.8
9 8	23 11.20	- 4 34.5	1.873	2.881	0.6	20.9	9 8	23 11.44	- 3 36.9	1.401	2.408	1.0	19.4
9 18	23 3.53	- 5 29.5	1.886	2.881	3.6	21.1	9 18	23 1.96	- 4 11.0	1.394	2.389	4.4	19.6
9 28	22 56.63	- 6 19.6	1.927	2.880	7.5	21.4	9 28	22 53.33	- 4 41.9	1.412	2.370	9.2	19.8
10 8	22 51.23	- 6 59.9	1.993	2.880	11.0	21.6	10 8	22 46.61	- 5 4.0	1.454	2.351	13.7	20.1
10 18	22 47.81	- 7 27.6	2.082	2.880	14.0	21.8	10 18	22 42.52	- 5 13.7	1.517	2.333	17.5	20.3
219132	1998 VP ₆		9 9.0 325°15	3°5/11.2	18		291695	2006 HL ₁₁₁		9 9.0 84°11	2°6/11.5	16	
8 9	23 30.48	+ 2 13.0	1.146	2.044	17.7	19.4	8 9	23 34.34	+ 3 30.8	1.806	2.669	13.9	20.8
8 19	23 26.60	+ 2 30.0	1.065	2.017	13.5	19.0	8 19	23 28.11	+ 3 23.2	1.756	2.689	10.3	20.6
8 29	23 19.95	+ 2 26.8	1.004	1.991	8.6	18.7	8 29	23 20.19	+ 3 0.1	1.729	2.709	6.4	20.4
9 8	23 11.35	+ 2 5.0	0.964	1.966	4.0	18.4	9 8	23 11.39	+ 2 24.8	1.727	2.728	3.0	20.3
9 18	23 2.09	+ 1 29.2	0.946	1.943	5.5	18.4	9 18	23 2.63	+ 1 42.2	1.754	2.748	3.9	20.4
9 28	22 53.79	+ 0 47.4	0.951	1.920	10.9	18.6	9 28	22 54.89	+ 0 58.0	1.808	2.767	7.4	20.6
10 8	22 47.90	+ 0 9.0	0.977	1.899	16.3	18.8	10 8	22 48.91	+ 0 17.9	1.887	2.786	10.9	20.9
10 18	22 45.36	- 0 18.5	1.020	1.879	21.0	19.0	10 18	22 45.16	- 0 13.8	1.989	2.804	13.9	21.1
316939	2001 CW ₂₀		9 9.0 164°43	9°6/28.1	18		468014	2013 BN ₃₅		9 9.1 274°87	1°1/ 6.7	17	
8 9	23 37.02	-31 24.1	1.988	2.874	11.8	20.6	8 9	23 23.51	- 9 50.6	4.328	5.219	5.8	21.0
8 19	23 30.21	-33 31.9	1.961	2.881	10.2	20.5	8 19	23 19.91	-10 26.2	4.260	5.217	4.0	20.9
8 29	23 21.40	-35 24.9	1.959	2.887	9.6	20.5	8 29	23 15.62	-11 3.7	4.221	5.215	2.2	20.8
9 8	23 11.45	-36 53.5	1.983	2.892	10.4	20.6	9 8	23 10.97	-11 40.8	4.210	5.213	1.2	20.7
9 18	23 1.46	-37 51.5	2.032	2.896	12.1	20.7	9 18	23 6.27	-12 15.1	4.229	5.211	2.6	20.8
9 28	22 52.57	-38 16.9	2.103	2.900	14.1	20.8	9 28	23 1.88	-12 44.4	4.278	5.209	4.5	20.9
10 8	22 45.66	-38 11.8	2.193	2.903	16.0	21.0	10 8	22 58.13	-13 7.1	4.354	5.207	6.3	21.1
10 18	22 41.29	-37 40.8	2.298	2.905	17.6	21.1	10 18	22 45.26	-13 22.0	4.454	5.205	7.8	21.2
355559	2008 CN ₂₀		9 9.0 299°99	1°4/ 7.7	18		426097	2012 EU ₄		9 9.1 142°50	1°8/ 7.7	17	
8 9	23 29.73	- 6 4.9	1.806	2.706	12.1	21.3	8 9	23 37.17	- 8 2.1	1.497	2.397	14.2	21.7
8 19	23 25.12	- 6 58.7	1.732	2.692	8.5	21.0	8 19	23 30.50	- 8 34.5	1.442	2.402	9.9	21.4
8 29	23 18.73	- 8 2.5	1.681	2.677	4.5	20.8	8 29	23 21.64	- 9 14.0	1.410	2.406	5.3	21.2
9 8	23 11.23	- 9 10.1	1.657	2.663	1.4	20.5	9 8	23 11.56	- 9 53.9	1.405	2.410	1.8	21.0
9 18	23 3.50	-10 14.5	1.660	2.649	4.8	20.7	9 18	23 1.44	-10 27.5	1.425	2.414	5.5	21.2
9 28	22 56.53	-11 9.1	1.690	2.636	9.0	20.9	9 28	22 52.53	-10 49.3	1.472	2.418	10.1	21.5
10 8	22 51.17	-11 48.7	1.743	2.622	12.8	21.2	10 8	22 45.80	-10 56.0	1.542	2.421	14.1	21.8
10 18	22 48.00	-12 10.9	1.818	2.609	16.0	21.3	10 18	22 41.81	-10 46.7	1.632	2.424	17.5	22.0
508914	2004 BT ₁₆		9 9.0 226°19	4°9/ 2.9	18		362297	2009 SK ₂₆₃		9 9.1 1°21	4°6/ 4.6	18	
8 9	23 32.97	-20 3.2	2.517	3.414	9.2	22.1	8 9	23 33.60	-18 40.6	2.134	3.036	10.4	20.1
8 19	23 27.02	-21 11.5	2.451	3.401	6.9	21.9	8 19	23 27.53	-19 15.3	2.080	3.035	7.6	19.9
8 29	23 19.60	-22 17.0	2.411	3.388	5.1	21.8	8 29	23 19.89	-19 46.4	2.051	3.035	5.2	19.8
9 8	23 11.31	-23 13.8	2.400	3.374	5.2	21.8	9 8	23 11.39	-20 8.5	2.049	3.035	4.8	19.8
9 18	23 2.86	-23 56.8	2.417	3.359	7.0	21.9	9 18	23 2.90	-20 17.4	2.075	3.035	6.8	19.9
9 28	22 55.06	-24 22.3	2.461	3.344	9.5	22.0	9 28	22 55.27	-20 10.3	2.127	3.036	9.5	20.1
10 8	22 48.59	-24 29.3	2.529	3.328	11.9	22.1	10 8	22 49.23	-19 47.0	2.203	3.036	12.2	20.3
10 18	22 43.94	-24 18.3	2.617	3.312	13.9	22.3	10 18	22 45.23	-19 8.7	2.300	3.037	14.6	20.4
516960	2012 DX ₄₅		9 9.0 269°35	3°0/ 6.2	18		445276	2009 TH ₃₄		9 9.1 317°88	2°1/11.6	17	
8 9	23 34.81	-14 44.3	2.326	3.221									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
325695	2009 <i>UF</i> ₂₃		9 9.1 290°46	1.6°/ 6.0	16		408347	2013 <i>GK</i> ₈₃		9 9.1 142°91	5°0/ 3.2	18	
8 9	23 24.56	-12 39.8	4.281	5.174	5.8	20.6	8 9	23 32.03	-20 42.3	2.361	3.262	9.6	20.9
8 19	23 20.65	-13 7.6	4.212	5.168	4.1	20.5	8 19	23 26.34	-21 36.9	2.313	3.264	7.2	20.7
8 29	23 16.04	-13 36.2	4.170	5.162	2.3	20.3	8 29	23 19.24	-22 27.1	2.290	3.267	5.3	20.6
9 8	23 11.04	-14 3.2	4.158	5.156	1.6	20.3	9 8	23 11.38	-23 7.1	2.295	3.270	5.3	20.6
9 18	23 5.99	-14 26.3	4.175	5.150	3.0	20.4	9 18	23 3.51	-23 32.6	2.327	3.272	7.1	20.7
9 28	23 1.26	-14 43.6	4.221	5.144	4.8	20.5	9 28	22 56.42	-23 40.9	2.385	3.275	9.5	20.9
10 8	22 57.19	-14 53.7	4.294	5.138	6.5	20.6	10 8	22 50.75	-23 31.6	2.467	3.277	11.8	21.1
10 18	22 54.04	-14 55.8	4.392	5.132	8.0	20.7	10 18	22 46.93	-23 5.7	2.570	3.279	13.8	21.2
3765	Texereau		9 9.1 276°51	0°6/ 9.6	18		275982	2001 <i>XR</i> ₇₈		9 9.1 340°93	6°1/ 14.6	18	
8 9	23 30.86	- 1 32.0	1.964	2.846	12.1	17.3	8 9	23 25.72	+11 41.3	1.218	2.083	19.1	19.3
8 19	23 25.76	- 2 1.4	1.894	2.842	8.7	17.0	8 19	23 22.94	+11 22.5	1.146	2.071	15.3	19.0
8 29	23 19.03	- 2 42.4	1.847	2.838	4.9	16.8	8 29	23 17.85	+10 29.5	1.093	2.060	11.1	18.8
9 8	23 11.33	- 3 30.7	1.828	2.835	0.9	16.5	9 8	23 11.27	+ 9 4.2	1.060	2.050	7.2	18.5
9 18	23 3.50	- 4 21.1	1.836	2.831	3.6	16.7	9 18	23 4.34	+ 7 13.4	1.050	2.041	6.4	18.4
9 28	22 56.42	- 5 7.8	1.871	2.827	7.5	17.0	9 28	22 58.44	+ 5 9.5	1.063	2.033	9.8	18.6
10 8	22 50.86	- 5 46.1	1.932	2.823	11.1	17.2	10 8	22 54.69	+ 3 7.3	1.099	2.027	14.3	18.8
10 18	22 47.33	- 6 12.5	2.015	2.819	14.2	17.4	10 18	22 53.81	+ 1 18.9	1.155	2.021	18.5	19.1
316149	2009 <i>ST</i> ₃₅₅		9 9.1 303°10	2°1/ 4.9	17		292949	2006 <i>VC</i> ₁₀₀		9 9.1 310°49	9°4/ 30.6	18	
8 9	23 24.16	-15 17.8	4.297	5.193	5.7	20.7	8 9	23 34.86	-29 49.0	1.796	2.692	12.4	20.3
8 19	23 20.38	-15 52.6	4.233	5.189	4.0	20.6	8 19	23 28.89	-31 3.7	1.747	2.680	10.4	20.1
8 29	23 15.90	-16 27.1	4.196	5.185	2.5	20.5	8 29	23 20.82	-32 5.3	1.721	2.668	9.4	20.0
9 8	23 11.03	-16 58.8	4.189	5.181	2.2	20.4	9 8	23 11.55	-32 45.2	1.719	2.656	9.9	20.0
9 18	23 6.12	-17 25.3	4.211	5.177	3.4	20.5	9 18	23 2.20	-32 57.4	1.741	2.644	11.8	20.1
9 28	23 1.54	-17 44.7	4.262	5.172	5.1	20.6	9 28	22 53.95	-32 39.8	1.786	2.633	14.2	20.3
10 8	22 57.61	-17 55.9	4.339	5.168	6.8	20.8	10 8	22 47.74	-31 54.3	1.850	2.622	16.6	20.4
10 18	22 54.61	-17 58.1	4.440	5.164	8.2	20.9	10 18	22 44.12	-30 45.0	1.931	2.611	18.7	20.6
243494	2009 <i>UF</i> ₇₄		9 9.1 314°37	0°9/ 7.5	15		446244	2013 <i>HE</i> ₁₇		9 9.1 211°43	7°2/ 18.8	18	
8 9	23 24.94	- 8 48.6	4.003	4.891	6.3	20.4	8 9	23 28.91	+21 12.2	2.393	3.149	14.1	20.6
8 19	23 20.96	- 9 10.5	3.928	4.883	4.4	20.3	8 19	23 24.28	+21 15.8	2.311	3.148	12.1	20.4
8 29	23 16.23	- 9 34.8	3.880	4.875	2.3	20.1	8 29	23 18.22	+20 56.2	2.248	3.147	9.9	20.3
9 8	23 11.07	- 9 59.2	3.862	4.867	0.9	20.0	9 8	23 11.30	+20 13.2	2.209	3.146	8.1	20.2
9 18	23 5.85	-10 21.4	3.873	4.859	2.6	20.1	9 18	23 4.22	+19 8.9	2.196	3.145	7.2	20.1
9 28	23 0.97	-10 39.4	3.914	4.851	4.6	20.3	9 28	22 57.77	+17 48.0	2.209	3.144	7.8	20.2
10 8	22 56.79	-10 51.4	3.981	4.844	6.6	20.4	10 8	22 52.61	+16 17.4	2.248	3.143	9.6	20.3
10 18	22 53.58	-10 56.2	4.074	4.836	8.3	20.5	10 18	22 49.23	+14 44.4	2.312	3.141	11.8	20.4
501820	2014 <i>WA</i> ₇₁		9 9.1 79°13	3°9/ 6.1	17		263244	2008 <i>AE</i> ₁₀₈		9 9.1 183°22	2°3/ 11.1	17	
8 9	23 36.25	-10 54.1	1.227	2.141	15.5	21.1	8 9	23 35.53	+ 2 50.4	1.753	2.618	14.2	21.4
8 19	23 30.01	-12 5.9	1.192	2.158	10.8	20.9	8 19	23 29.23	+ 2 35.3	1.683	2.619	10.5	21.2
8 29	23 21.39	-13 22.0	1.179	2.175	6.0	20.7	8 29	23 20.99	+ 2 3.9	1.636	2.619	6.5	21.0
9 8	23 11.57	-14 32.0	1.190	2.191	4.1	20.7	9 8	23 11.58	+ 1 19.6	1.616	2.619	2.7	20.7
9 18	23 1.92	-15 26.6	1.227	2.208	7.6	20.9	9 18	23 2.01	+ 0 27.7	1.623	2.618	4.0	20.8
9 28	22 53.81	-15 59.5	1.287	2.224	12.0	21.2	9 28	22 53.35	- 0 25.3	1.658	2.616	8.0	21.1
10 8	22 48.20	-16 8.7	1.369	2.240	16.0	21.5	10 8	22 46.53	- 1 13.0	1.717	2.614	11.9	21.3
10 18	22 45.56	-15 55.5	1.468	2.256	19.3	21.8	10 18	22 42.10	- 1 50.5	1.799	2.611	15.3	21.5
141906	2002 <i>PJ</i> ₇₃		9 9.1 24°22	0°6/ 9.5	18		227692	2006 <i>DZ</i> ₃₃		9 9.1 288°45	0°7/ 9.9	18	
8 9	23 29.37	- 0 14.5	1.101	2.009	17.4	19.0	8 9	23 27.34	+ 0 32.5	2.324	3.198	10.8	20.3
8 19	23 25.42	- 1 8.7	1.055	2.016	12.5	18.8	8 19	23 23.12	- 0 22.5	2.249	3.193	7.8	20.1
8 29	23 19.07	- 2 23.9	1.029	2.024	6.9	18.5	8 29	23 17.57	- 1 30.1	2.199	3.188	4.4	19.9
9 8	23 11.35	- 3 51.2	1.026	2.033	1.1	18.2	9 8	23 11.24	- 2 45.8	2.176	3.183	1.0	19.7
9 18	23 3.61	- 5 19.8	1.046	2.043	5.1	18.5	9 18	23 4.79	- 4 4.4	2.183	3.178	3.1	19.8
9 28	22 57.22	- 6 38.0	1.090	2.053	10.6	18.8	9 28	22 58.92	- 5 19.6	2.217	3.172	6.6	20.0
10 8	22 53.22	- 7 37.5	1.155	2.065	15.4	19.1	10 8	22 54.26	- 6 26.2	2.279	3.167	9.8	20.2
10 18	22 52.14	- 8 14.2	1.238	2.077	19.3	19.4	10 18	22 51.27	- 7 20.4	2.364	3.163	12.5	20.4
220698	2004 <i>RF</i> ₃₂₂		9 9.1 68°21	0°1/ 9.0	18		322566	2011 <i>YH</i> ₆₃		9 9.1 28°79	4°6/ 13.7	18	
8 9	23 40.29	- 6 22.1	2.030	2.908	12.0	19.5	8 9	23 30.87	+ 9 24.0	2.026	2.862	13.7	20.3
8 19	23 32.07	- 6 2.4	1.983	2.931	8.4	19.3	8 19	23 25.75	+ 9 32.7	1.956	2.865	10.8	20.1
8 29	23 22.24	- 5 47.7	1.962	2.954	4.5	19.1	8 29	23 19.04	+ 9 23.3	1.908	2.868	7.7	19.9
9 8	23 11.65	- 5 35.2	1.969	2.976	0.4	18.8	9 8	23 11.39	+ 8 57.0	1.886	2.871	5.1	19.8
9 18	23 1.23	- 5 22.5	2.007	2.999	3.6	19.1	9 18	23 3.61	+ 8 16.9	1.890	2.875	4.9	19.8
9 28	22 51.90	- 5 7.1	2.073	3.022	7.4	19.4	9 28	22 56.58	+ 7 28.4	1.921	2.878	7.2	19.9
10 8	22 44.38	- 4 47.0	2.167	3.045	10.6	19.7	10 8	22 51.04	+ 6 37.5	1.978	2.882	10.2	20.1
10 18	22 39.09	- 4 21.3	2.283	3.067	13.3	19.9	10 18	22 47.50	+ 5 49.9	2.058	2.886	13.1	20.3
469977	2006 <i>EF</i> ₅₅		9 9.1 244°44	2°1/ 10.4	18		30353	Carothers		9 9.1 50°66	1°4/ 7.8	18	
8 9	23 40.76	- 0 52.3	1.829	2.696	13.6	21.1	8 9	23 31.92	- 7 10.8	1.805	2.704	12.2	18.6
8 19	23 32.95	- 0 18.5	1.750	2.689	10.0	20.9	8 19	23 26.55	- 7 49.0	1.750	2.709	8.5	18.4
8 29	23 23.01	+ 0 5.9	1.696	2.681	6.0	20.7	8 29	23 19.46	- 8 34.1	1.719	2.714	4.5	18.1
9 8	23 11.76	+ 0 22.2	1.669	2.673	2.3	20.4	9 8	23 11.43	- 9 20.5	1.714	2.720	1.4	17.9
9 18	23 0.23	+ 0 32.7	1.671	2.664	4.1	20.5	9 18	23 3.35	-10 2.4	1.736	2.725	4.7	18.2
9 28	22 49.62	+ 0 40.6	1.701	2.656	8.2	20.7	9 28	22 56.20	-10 34.4	1.785	2.731	8.6	18.4
10 8	22 40.92	+ 0 49.4	1.758	2.647	12.1	21.0	10 8	22 50.74	-10 53.2	1.859	2.737	12.1	18.7
10 18	22 34.76	+ 1 2.2	1.837	2.638	15.4	21.2	10 18	22 47.45	-10 57.3	1.953	2.743	15.1	18.9
475389	2006 <i>GR</i> ₅₁		9 9.1 169°08	2°8/ 5.6	18		243861	2000 <i>WJ</i> ₁₃₁		9 9.1 287°84	4°6/		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
433786	2015 <i>BM</i> ₈₅		9 9.1 236°97	1.3°/10.2	17		346354	2008 <i>RO</i> ₁₂₉		9 9.1 305°50	0.7°/ 9.7	18	
8 9	23 33.06	+ 1 19.9	1.552	2.433	14.8	22.2	8 9	23 31.44	- 1 5.0	1.650	2.538	13.7	21.4
8 19	23 27.75	+ 0 36.9	1.479	2.425	10.9	22.0	8 19	23 26.46	- 1 38.2	1.582	2.533	9.9	21.2
8 29	23 20.30	- 0 24.9	1.428	2.417	6.3	21.7	8 29	23 19.55	- 2 25.8	1.536	2.528	5.6	20.9
9 8	23 11.53	- 1 40.1	1.402	2.408	1.8	21.4	9 8	23 11.49	- 3 22.6	1.516	2.523	1.0	20.6
9 18	23 2.48	- 3 1.3	1.403	2.399	4.2	21.5	9 18	23 3.24	- 4 22.3	1.522	2.518	4.0	20.8
9 28	22 54.36	- 4 19.3	1.431	2.390	9.0	21.8	9 28	22 55.87	- 5 17.6	1.555	2.513	8.5	21.0
10 8	22 48.18	- 5 26.2	1.482	2.380	13.4	22.0	10 8	22 50.30	- 6 2.4	1.612	2.508	12.6	21.3
10 18	22 44.57	- 6 16.6	1.555	2.370	17.2	22.2	10 18	22 47.09	- 6 32.8	1.690	2.504	16.1	21.5
346563	2008 <i>UO</i> ₃₆₈		9 9.1 301°97	7.4°/15.5	18		478644	2012 <i>TJ</i> ₁₉₉		9 9.1 354°63	2°1'/ 7.8	18	
8 9	23 31.17	+14 32.4	1.676	2.497	16.7	20.2	8 9	23 30.91	- 8 52.6	1.060	1.985	16.4	19.6
8 19	23 26.48	+14 57.7	1.588	2.479	13.9	20.0	8 19	23 26.77	- 9 1.8	1.006	1.977	11.6	19.3
8 29	23 19.68	+14 57.7	1.519	2.461	10.8	19.7	8 29	23 19.95	- 9 18.4	0.971	1.970	6.2	19.0
9 8	23 11.48	+14 31.4	1.473	2.444	8.2	19.6	9 8	23 11.53	- 9 35.6	0.959	1.965	2.1	18.7
9 18	23 2.84	+13 40.6	1.452	2.426	7.5	19.5	9 18	23 2.93	- 9 46.0	0.969	1.962	6.4	19.0
9 28	22 54.93	+12 31.0	1.455	2.409	9.4	19.5	9 28	22 55.72	- 9 43.6	1.002	1.961	11.9	19.3
10 8	22 48.79	+11 11.8	1.483	2.392	12.6	19.7	10 8	22 51.08	- 9 25.0	1.054	1.961	16.7	19.6
10 18	22 45.17	+ 9 52.1	1.532	2.375	16.0	19.9	10 18	22 49.65	- 8 49.5	1.124	1.964	20.8	19.8
41351	2000 <i>AS</i> ₂₇		9 9.1 183°14	1°8'/ 6.4	18		342367	2008 <i>TK</i> ₁₈₉		9 9.1 29°21	10°8'/31.9	18	
8 9	23 27.69	-11 14.7	3.123	4.017	7.7	19.0	8 9	23 34.91	-27 49.9	1.241	2.156	15.3	18.9
8 19	23 23.05	-11 50.3	3.060	4.017	5.4	18.9	8 19	23 29.19	-29 14.2	1.220	2.168	12.5	18.8
8 29	23 17.42	-12 27.7	3.024	4.017	3.0	18.7	8 29	23 21.00	-30 20.8	1.219	2.181	10.9	18.7
9 8	23 11.24	-13 3.5	3.016	4.017	1.9	18.6	9 8	23 11.61	-30 59.1	1.241	2.195	11.3	18.8
9 18	23 5.01	-13 34.5	3.038	4.017	3.7	18.8	9 18	23 2.50	-31 3.1	1.285	2.209	13.4	18.9
9 28	22 59.27	-13 57.8	3.088	4.017	6.1	18.9	9 28	22 55.08	-30 32.4	1.349	2.225	16.1	19.2
10 8	22 54.47	-14 11.6	3.165	4.017	8.4	19.1	10 8	22 50.28	-29 31.5	1.431	2.241	18.8	19.4
10 18	22 50.98	-14 14.9	3.265	4.016	10.4	19.2	10 18	22 48.48	-28 6.7	1.530	2.258	21.1	19.6
228158	2009 <i>SZ</i> ₉₆		9 9.1 1°43	5°7'/16.6	18		112126	2002 <i>JV</i> ₄₇		9 9.1 36°44	5°4'/13.0	17	
8 9	23 27.73	+16 30.2	2.277	3.071	13.7	19.8	8 9	23 33.16	+ 7 29.8	1.132	2.009	19.4	19.4
8 19	23 23.46	+16 9.6	2.198	3.071	11.3	19.6	8 19	23 28.12	+ 7 41.6	1.084	2.020	15.0	19.1
8 29	23 17.78	+15 26.5	2.139	3.071	8.7	19.5	8 29	23 20.57	+ 7 25.9	1.056	2.031	10.2	18.9
9 8	23 11.28	+14 22.1	2.105	3.071	6.5	19.3	9 8	23 11.60	+ 6 45.5	1.049	2.044	6.1	18.7
9 18	23 4.66	+13 0.0	2.098	3.071	5.7	19.3	9 18	23 2.59	+ 5 46.9	1.065	2.057	6.1	18.8
9 28	22 58.66	+11 26.2	2.119	3.071	7.0	19.4	9 28	22 55.02	+ 4 40.1	1.104	2.071	10.0	19.0
10 8	22 53.97	+ 9 48.1	2.167	3.072	9.4	19.5	10 8	22 49.95	+ 3 35.9	1.165	2.085	14.4	19.3
10 18	22 51.04	+ 8 13.1	2.239	3.072	12.0	19.7	10 18	22 47.96	+ 2 42.3	1.246	2.100	18.2	19.6
432963	2012 <i>JO</i> ₂₈		9 9.1 145°11	4°4'/ 5.6	17		403988	2012 <i>BW</i> ₁₁₃		9 9.1 190°32	1°1'/ 7.7	18	
8 9	23 36.65	-14 15.5	1.520	2.428	13.5	21.4	8 9	23 29.63	- 6 37.8	2.405	3.295	9.9	21.5
8 19	23 30.16	-15 9.2	1.469	2.431	9.6	21.2	8 19	23 24.68	- 7 26.0	2.339	3.295	6.9	21.3
8 29	23 21.51	-16 3.5	1.442	2.434	5.8	21.0	8 29	23 18.41	- 8 20.5	2.299	3.294	3.6	21.1
9 8	23 11.65	-16 50.3	1.441	2.437	4.6	20.9	9 8	23 11.39	- 9 16.6	2.287	3.293	1.1	21.0
9 18	23 1.77	-17 22.4	1.466	2.440	7.5	21.1	9 18	23 4.28	-10 9.5	2.304	3.292	3.8	21.2
9 28	22 53.11	-17 35.1	1.516	2.442	11.4	21.3	9 28	22 57.80	-10 54.6	2.349	3.291	7.1	21.4
10 8	22 46.63	-17 27.2	1.588	2.444	15.0	21.6	10 8	22 52.56	-11 28.5	2.420	3.289	10.0	21.6
10 18	22 42.87	-16 59.9	1.679	2.446	18.0	21.8	10 18	22 49.00	-11 49.4	2.514	3.287	12.5	21.7
23477	Wallenstadt		9 9.1 178°07	3°7'/13.4	18		437520	2013 <i>YQ</i> ₉₆		9 9.1 252°23	1°7'/ 7.4	18	
8 9	23 30.44	+ 9 28.6	2.167	3.000	13.0	18.5	8 9	23 31.69	- 6 14.4	1.711	2.610	12.7	21.3
8 19	23 25.38	+ 8 56.5	2.091	3.001	10.1	18.3	8 19	23 26.64	- 7 21.8	1.641	2.601	8.9	21.1
8 29	23 18.83	+ 8 5.1	2.038	3.002	7.0	18.2	8 29	23 19.67	- 8 39.9	1.595	2.591	4.7	20.8
9 8	23 11.40	+ 6 57.3	2.011	3.002	4.2	18.0	9 8	23 11.53	-10 1.5	1.576	2.582	1.7	20.6
9 18	23 3.84	+ 5 37.6	2.013	3.002	4.1	18.0	9 18	23 3.16	-11 18.5	1.584	2.572	5.3	20.8
9 28	22 56.97	+ 4 12.7	2.043	3.002	6.7	18.1	9 28	22 55.64	-12 23.3	1.618	2.561	9.6	21.0
10 8	22 51.49	+ 2 49.6	2.100	3.002	9.8	18.3	10 8	22 49.86	-13 10.6	1.677	2.551	13.4	21.2
10 18	22 47.88	+ 1 34.3	2.181	3.000	12.7	18.5	10 18	22 46.42	-13 38.0	1.756	2.540	16.7	21.4
178266	2007 <i>YJ</i> ₅₆		9 9.1 267°68	0°4'/ 8.7	18		104021	2000 <i>DW</i> ₁₁₀		9 9.1 222°96	8°9'/30.9	18	
8 9	23 34.20	- 3 36.2	1.510	2.405	14.4	21.2	8 9	23 41.47	-33 42.7	2.266	3.134	11.3	20.2
8 19	23 28.71	- 4 16.6	1.431	2.387	10.3	20.9	8 19	23 33.21	-34 35.8	2.216	3.125	9.7	20.0
8 29	23 20.92	- 5 11.1	1.375	2.370	5.6	20.6	8 29	23 23.04	-35 14.0	2.191	3.116	8.9	20.0
9 8	23 11.62	- 6 13.7	1.344	2.352	0.6	20.2	9 8	23 11.85	-35 30.6	2.192	3.107	9.3	20.0
9 18	23 1.93	- 7 16.7	1.340	2.333	4.9	20.5	9 18	23 0.69	-35 21.6	2.218	3.097	10.7	20.1
9 28	22 53.13	- 8 12.0	1.361	2.314	10.0	20.7	9 28	22 50.65	-34 46.2	2.269	3.086	12.6	20.2
10 8	22 46.34	- 8 53.0	1.406	2.296	14.6	21.0	10 8	22 42.56	-33 47.0	2.341	3.075	14.5	20.3
10 18	22 42.29	- 9 16.1	1.470	2.276	18.4	21.2	10 18	22 36.94	-32 28.3	2.432	3.064	16.2	20.4
183564	2003 <i>MA</i> ₁₂		9 9.1 20°16	9°7'/21.9	18		452007	2014 <i>OB</i> ₆₇		9 9.1 18°59	2°1'/ 6.8	18	
8 9	23 26.18	+25 39.1	1.728	2.483	18.8	18.5	8 9	23 29.87	- 9 39.4	2.156	3.055	10.5	20.7
8 19	23 22.74	+25 34.9	1.662	2.491	16.4	18.4	8 19	23 24.95	-10 26.1	2.096	3.056	7.3	20.5
8 29	23 17.51	+24 55.9	1.613	2.501	13.8	18.2	8 29	23 18.59	-11 17.1	2.062	3.057	3.9	20.3
9 8	23 11.27	+23 41.8	1.584	2.511	11.4	18.1	9 8	23 11.41	-12 7.2	2.056	3.059	2.1	20.1
9 18	23 4.94	+21 56.0	1.578	2.522	9.9	18.0	9 18	23 4.18	-12 51.0	2.077	3.060	4.7	20.3
9 28	22 59.51	+19 46.6	1.597	2.535	10.1	18.1	9 28	22 57.67	-13 24.2	2.126	3.062	8.0	20.5
10 8	22 55.80	+17 25.3	1.640	2.547	11.8	18.2	10 8	22 52.56	-13 43.9	2.199	3.063	11.1	20.7
10 18	22 54.32	+15 3.8	1.707	2.561	14.1	18.4	10 18	22 49.29	-13 49.0	2.294	3.065	13.7	20.9
211102	2002 <i>EE</i> ₁₃₀		9 9.1 123°76	4°2'/12.8	17		468499	2005 <i>JH</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
512814	2016 UC ₉₉	9 9.1 146°16'	1°9/11.1 18				137393	1999 TW ₁₅₉	9 9.1 268°72'	1°7/10.5 18			
8 9	23 30.73	+ 3 3.2	2.020	2.885	12.6	21.5	8 9	23 33.80	+ 1 4.1	1.502	2.384	15.2	20.2
8 19	23 25.64	+ 2 29.3	1.953	2.889	9.3	21.3	8 19	23 28.42	+ 0 43.2	1.425	2.372	11.2	19.9
8 29	23 19.00	+ 1 40.2	1.909	2.892	5.6	21.1	8 29	23 20.78	+ 0 4.7	1.371	2.359	6.6	19.7
9 8	23 11.47	+ 0 40.0	1.892	2.896	2.3	20.8	9 8	23 11.69	- 0 47.3	1.342	2.347	2.2	19.3
9 18	23 3.84	- 0 26.1	1.903	2.899	3.4	20.9	9 18	23 2.26	- 1 46.5	1.338	2.334	4.3	19.5
9 28	22 56.97	- 1 31.7	1.942	2.901	7.0	21.2	9 28	22 53.76	- 2 44.8	1.360	2.321	9.2	19.7
10 8	22 51.57	- 2 30.9	2.007	2.904	10.5	21.4	10 8	22 47.26	- 3 34.9	1.406	2.308	13.7	19.9
10 18	22 48.13	- 3 19.3	2.095	2.907	13.5	21.6	10 18	22 43.45	- 4 11.2	1.473	2.295	17.6	20.2
387528	2000 CF ₁₄₉	9 9.1 142°87'	0°9/10.3 14 C				340452	2006 GS ₄₂	9 9.1 202°73'	4°7/14.4 18			
8 9	23 30.62	+ 1 17.6	2.430	3.293	10.8	22.5	8 9	23 32.46	+ 11 52.4	2.263	3.077	13.1	21.4
8 19	23 25.31	+ 0 24.6	2.367	3.305	7.8	22.3	8 19	23 26.86	+ 11 43.4	2.178	3.072	10.5	21.2
8 29	23 18.73	- 0 40.1	2.329	3.316	4.5	22.1	8 29	23 19.69	+ 11 15.1	2.117	3.067	7.7	21.0
9 8	23 11.44	- 1 52.4	2.320	3.326	1.2	21.9	9 8	23 11.58	+ 10 28.9	2.081	3.062	5.3	20.9
9 18	23 4.12	- 3 7.0	2.341	3.336	2.9	22.1	9 18	23 3.27	+ 9 27.8	2.074	3.055	4.9	20.8
9 28	22 57.46	- 4 18.3	2.391	3.345	6.2	22.3	9 28	22 55.59	+ 8 17.5	2.094	3.048	6.9	20.9
10 8	22 52.06	- 5 21.6	2.469	3.354	9.2	22.5	10 8	22 49.30	+ 7 4.4	2.142	3.041	9.8	21.1
10 18	22 48.31	- 6 13.3	2.570	3.362	11.8	22.7	10 18	22 44.90	+ 5 54.9	2.214	3.033	12.6	21.3
435689	2008 TM ₁₀₃	9 9.1 107°89'	6°4/ 3.9 16				36059	1999 RT ₃₉	9 9.1 64°98'	4°6/14.2 18 R			
8 9	23 38.84	- 21 53.5	1.753	2.654	12.4	20.8	8 9	23 29.91	+ 10 43.5	2.079	2.908	13.6	18.3
8 19	23 31.44	- 22 39.2	1.712	2.663	9.3	20.6	8 19	23 25.07	+ 10 36.0	2.009	2.914	10.8	18.1
8 29	23 22.10	- 23 17.1	1.696	2.672	6.9	20.5	8 29	23 18.71	+ 10 9.0	1.963	2.920	7.7	17.9
9 8	23 11.77	- 23 40.1	1.705	2.681	6.7	20.5	9 8	23 11.48	+ 9 24.5	1.942	2.927	5.2	17.8
9 18	23 1.58	- 23 43.3	1.741	2.690	8.7	20.6	9 18	23 4.15	+ 8 26.2	1.948	2.933	4.8	17.8
9 28	22 52.65	- 23 24.8	1.802	2.699	11.6	20.8	9 28	22 57.55	+ 7 20.0	1.982	2.940	7.0	17.9
10 8	22 45.82	- 22 45.9	1.886	2.708	14.5	21.1	10 8	22 52.40	+ 6 12.5	2.041	2.946	9.9	18.1
10 18	22 41.54	- 21 49.6	1.990	2.716	16.9	21.3	10 18	22 49.16	+ 5 9.8	2.124	2.953	12.7	18.3
478492	2012 RR ₃₁	9 9.1 346°10'	1°0/ 8.3 18				424512	2008 EH ₂₂	9 9.1 205°11'	0°3/ 9.3 17			
8 9	23 27.52	- 4 1.5	1.183	2.100	15.8	20.6	8 9	23 35.34	- 2 16.3	1.831	2.711	13.0	22.1
8 19	23 24.23	- 4 56.2	1.123	2.090	11.2	20.3	8 19	23 29.11	- 2 49.8	1.758	2.707	9.3	21.9
8 29	23 18.57	- 6 7.5	1.083	2.080	6.0	20.0	8 29	23 20.99	- 3 35.2	1.710	2.702	5.1	21.6
9 8	23 11.45	- 7 27.2	1.065	2.073	1.0	19.7	9 8	23 11.72	- 4 27.8	1.689	2.696	0.7	21.3
9 18	23 4.08	- 8 44.7	1.072	2.066	5.7	20.0	9 18	23 2.25	- 5 21.7	1.695	2.689	4.0	21.6
9 28	22 57.84	- 9 49.8	1.102	2.060	11.1	20.3	9 28	22 53.64	- 6 10.6	1.730	2.682	8.3	21.8
10 8	22 53.82	- 10 34.8	1.152	2.056	15.9	20.5	10 8	22 46.76	- 6 49.2	1.789	2.674	12.2	22.0
10 18	22 52.67	- 10 56.5	1.221	2.053	19.9	20.8	10 18	22 42.20	- 7 14.3	1.871	2.666	15.5	22.2
85108	3475 T ₋₃	9 9.1 274°31'	1°0/10.2 18				44294	1998 QE ₈₉	9 9.1 14°48'	8°4/16.3 18			
8 9	23 29.47	+ 0 55.1	1.979	2.855	12.3	19.6	8 9	23 29.84	+ 14 35.8	1.316	2.156	19.4	17.6
8 19	23 24.83	+ 0 10.3	1.908	2.852	9.0	19.4	8 19	23 25.70	+ 15 13.3	1.259	2.161	16.0	17.4
8 29	23 18.61	- 0 48.7	1.861	2.849	5.2	19.2	8 29	23 19.29	+ 15 20.4	1.221	2.167	12.4	17.3
9 8	23 11.46	- 1 57.6	1.840	2.846	1.4	18.9	9 8	23 11.55	+ 14 56.5	1.203	2.175	9.4	17.1
9 18	23 4.16	- 3 10.2	1.847	2.843	3.4	19.0	9 18	23 3.64	+ 14 5.0	1.208	2.183	8.5	17.1
9 28	22 57.59	- 4 19.9	1.882	2.840	7.3	19.3	9 28	22 56.86	+ 12 54.0	1.235	2.193	10.3	17.2
10 8	22 52.48	- 5 20.7	1.943	2.837	10.9	19.5	10 8	22 52.25	+ 11 34.5	1.286	2.204	13.4	17.4
10 18	22 49.33	- 6 8.5	2.026	2.834	14.0	19.7	10 18	22 50.42	+ 10 17.0	1.356	2.216	16.7	17.7
193409	2000 WF ₃₈	9 9.1 290°46'	1°7/ 7.5 18				361514	2007 EA ₂₁₂	9 9.1 159°51'	1°7/ 7.4 18			
8 9	23 31.19	- 6 29.1	1.629	2.531	13.1	19.7	8 9	23 33.40	- 9 54.1	2.323	3.214	10.1	20.3
8 19	23 26.41	- 7 27.2	1.556	2.517	9.2	19.5	8 19	23 27.34	- 10 14.8	2.260	3.216	7.1	20.1
8 29	23 19.61	- 8 36.2	1.506	2.503	4.9	19.2	8 29	23 19.87	- 10 38.4	2.223	3.217	3.8	19.9
9 8	23 11.57	- 9 49.1	1.483	2.489	1.7	19.0	9 8	23 11.60	- 11 1.0	2.215	3.219	1.7	19.8
9 18	23 3.24	- 10 57.7	1.486	2.474	5.4	19.2	9 18	23 3.29	- 11 18.6	2.235	3.220	4.2	20.0
9 28	22 55.77	- 11 54.5	1.515	2.460	9.8	19.4	9 28	22 55.72	- 11 28.0	2.283	3.222	7.4	20.2
10 8	22 50.09	- 12 34.2	1.567	2.446	13.9	19.6	10 8	22 49.54	- 11 27.1	2.358	3.223	10.4	20.4
10 18	22 46.85	- 12 54.1	1.639	2.433	17.4	19.8	10 18	22 45.20	- 11 15.2	2.455	3.224	12.9	20.6
220756	2004 TQ ₉₄	9 9.1 296°31'	0°5/ 9.6 18				105942	2000 SM ₂₃₃	9 9.1 349°87'	5°7/ 4.7 18			
8 9	23 29.63	- 1 40.3	2.128	3.009	11.4	20.6	8 9	23 25.69	- 11 34.4	0.879	1.821	17.0	19.1
8 19	23 24.91	- 2 9.7	2.048	2.997	8.2	20.4	8 19	23 23.45	- 13 9.4	0.831	1.810	12.0	18.8
8 29	23 18.65	- 2 49.9	1.994	2.985	4.6	20.2	8 29	23 18.34	- 14 54.2	0.803	1.801	7.2	18.5
9 8	23 11.47	- 3 37.2	1.966	2.973	0.8	19.9	9 8	23 11.47	- 16 33.7	0.794	1.794	6.1	18.4
9 18	23 4.09	- 4 26.8	1.966	2.961	3.4	20.1	9 18	23 4.35	- 17 52.7	0.807	1.788	10.3	18.7
9 28	22 57.35	- 5 13.3	1.994	2.949	7.2	20.3	9 28	22 58.70	- 18 40.0	0.839	1.785	15.5	18.9
10 8	22 51.97	- 5 52.0	2.048	2.938	10.6	20.5	10 8	22 55.80	- 18 51.3	0.888	1.783	20.3	19.2
10 18	22 48.47	- 6 19.6	2.124	2.926	13.6	20.7	10 18	22 56.27	- 18 28.2	0.952	1.783	24.3	19.5
104078	2000 EK ₂₉	9 9.1 306°13'	0°0/ 9.1 18				7066	Nessus	9 9.1 84°01'	0°4/ 3.8 04 CR			
8 9	23 30.26	- 3 38.2	2.161	3.047	11.0	19.4	8 9	23 14.11	- 18 31.1	28.427	29.324	0.9	24.4
8 19	23 25.29	- 4 2.2	2.087	3.038	7.9	19.2	8 19	23 13.08	- 18 38.5	28.385	29.338	0.7	24.3
8 29	23 18.83	- 4 35.0	2.038	3.030	4.3	18.9	8 29	23 11.97	- 18 45.6	28.370	29.352	0.5	24.3
9 8	23 11.48	- 5 12.6	2.015	3.023	0.4	18.6	9 8	23 10.81	- 18 52.2	28.385	29.366	0.4	24.3
9 18	23 3.98	- 5 50.7	2.021	3.015	3.5	18.9	9 18	23 9.65	- 18 57.9	28.428	29.380	0.6	24.3
9 28	22 57.14	- 6 24.6	2.054	3.007	7.2	19.1	9 28	23 8.53	- 19 2.5	28.499	29.394	0.9	24.4
10 8	22 51.67	- 6 50.2	2.114	3.000	10.5	19.3	10 8	23 7.49	- 19 5.9	28.598	29.408	1.2	24.4
10 18	22 48.06	- 7 5.0	2.195	2.992	13.4	19.5	10 18	23 6.57	- 19 7.8	28.720	29.422	1.4	24.4
321570	2009 SE ₃₆₁	9 9.1 19°35'	1°0/11.3 17				53295	1999 GX ₂₀	9 9.1 57°44'	11°4/30.8 18</			

EPHEMERIDES

9 9.1

9 9.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
490165	2008 <i>UP</i> ₂₄₅		9 9.1 340°25	0°2/ 9.2 18			120145	2003 <i>GZ</i> ₄₇		9 9.1 7°13 12°9/28.3 18			
8 9	23 31.79	- 3 40.9	1.308	2.213	15.4	20.9	8 9	23 39.16	-40 0.9	1.686	2.553	14.6	18.4
8 19	23 27.15	- 3 51.7	1.242	2.202	11.1	20.6	8 19	23 32.03	-41 5.6	1.661	2.554	13.3	18.3
8 29	23 20.14	- 4 15.4	1.198	2.193	6.1	20.3	8 29	23 22.54	-41 45.8	1.657	2.555	12.9	18.3
9 8	23 11.66	- 4 46.9	1.176	2.184	0.7	19.9	9 8	23 11.92	-41 53.3	1.674	2.558	13.5	18.3
9 18	23 2.92	- 5 19.9	1.180	2.176	4.8	20.2	9 18	23 1.57	-41 24.9	1.713	2.561	14.8	18.4
9 28	22 55.26	- 5 47.1	1.208	2.169	10.1	20.4	9 28	22 52.86	-40 21.6	1.771	2.565	16.5	18.6
10 8	22 49.80	- 6 3.0	1.257	2.162	14.7	20.7	10 8	22 46.69	-38 48.9	1.847	2.569	18.2	18.7
10 18	22 47.20	- 6 4.2	1.326	2.157	18.7	20.9	10 18	22 43.48	-36 53.5	1.939	2.574	19.8	18.9
227269	2005 <i>SJ</i> ₁₂₅		9 9.1 307°64	0°2/ 9.2 18			82613	2001 <i>OE</i> ₁₀₁		9 9.1 120°94 2°9/11.8 18			
8 9	23 31.52	- 2 22.4	1.378	2.278	15.1	21.1	8 9	23 34.87	+ 4 44.5	1.734	2.594	14.6	19.6
8 19	23 27.00	- 2 55.6	1.300	2.258	11.0	20.8	8 19	23 28.73	+ 4 26.7	1.676	2.607	10.9	19.4
8 29	23 20.11	- 3 45.1	1.245	2.239	6.1	20.5	8 29	23 20.75	+ 3 51.0	1.641	2.619	6.9	19.2
9 8	23 11.67	- 4 45.2	1.213	2.220	0.7	20.1	9 8	23 11.76	+ 3 1.1	1.631	2.632	3.4	19.0
9 18	23 2.81	- 5 48.2	1.206	2.201	4.8	20.3	9 18	23 2.73	+ 2 2.4	1.649	2.643	4.1	19.1
9 28	22 54.86	- 6 45.1	1.224	2.183	10.2	20.6	9 28	22 54.70	+ 1 2.0	1.695	2.655	7.8	19.3
10 8	22 49.00	- 7 28.5	1.264	2.165	15.0	20.8	10 8	22 48.50	+ 0 6.5	1.765	2.665	11.5	19.6
10 18	22 45.97	- 7 53.9	1.324	2.148	19.1	21.0	10 18	22 44.63	- 0 39.0	1.858	2.676	14.7	19.8
71144	1999 <i>XW</i> ₁₈₂		9 9.1 337°58	1°7/ 8.1 18			385118	2012 <i>XW</i> ₅₂		9 9.1 91°41 2°8/ 6.3 18			
8 9	23 34.16	- 9 14.7	1.214	2.130	15.6	18.0	8 9	23 31.60	-10 33.4	1.877	2.781	11.6	20.4
8 19	23 29.08	- 9 7.5	1.144	2.110	11.1	17.7	8 19	23 26.38	-11 31.7	1.821	2.782	8.1	20.2
8 29	23 21.31	- 9 5.3	1.095	2.093	6.0	17.4	8 29	23 19.48	-12 34.3	1.789	2.784	4.5	20.0
9 8	23 11.80	- 9 2.8	1.069	2.076	1.7	17.0	9 8	23 11.64	-13 34.7	1.785	2.786	2.9	19.9
9 18	23 1.91	- 8 54.6	1.068	2.061	6.0	17.3	9 18	23 3.72	-14 26.4	1.807	2.788	5.6	20.1
9 28	22 53.20	- 8 35.8	1.089	2.047	11.4	17.5	9 28	22 56.66	-15 4.1	1.857	2.789	9.2	20.3
10 8	22 46.94	- 8 3.8	1.132	2.034	16.3	17.8	10 8	22 51.23	-15 25.0	1.930	2.791	12.5	20.5
10 18	22 43.88	- 7 18.0	1.193	2.023	20.4	18.0	10 18	22 47.93	-15 28.3	2.023	2.793	15.3	20.7
315427	2007 <i>VS</i> ₂₆₃		9 9.1 41°80	5°9/13.2 17			509359	2007 <i>AR</i> ₂₉		9 9.1 159°69 0°2/ 9.3 17			
8 9	23 34.47	+ 7 59.7	1.101	1.976	20.0	19.9	8 9	23 34.27	- 2 12.2	1.967	2.846	12.3	22.8
8 19	23 29.13	+ 8 19.2	1.055	1.988	15.5	19.7	8 19	23 28.18	- 2 51.8	1.905	2.852	8.7	22.6
8 29	23 21.19	+ 8 10.3	1.028	2.001	10.7	19.4	8 29	23 20.43	- 3 42.4	1.867	2.858	4.8	22.3
9 8	23 11.77	+ 7 35.4	1.021	2.015	6.6	19.3	9 8	23 11.74	- 4 39.1	1.856	2.864	0.6	22.0
9 18	23 2.34	+ 6 40.5	1.038	2.029	6.5	19.3	9 18	23 2.97	- 5 36.1	1.874	2.868	3.7	22.3
9 28	22 54.41	+ 5 35.9	1.077	2.044	10.3	19.6	9 28	22 55.06	- 6 27.6	1.921	2.872	7.7	22.6
10 8	22 49.09	+ 4 32.5	1.139	2.059	14.6	19.9	10 8	22 48.76	- 7 8.9	1.993	2.876	11.2	22.8
10 18	22 46.95	+ 3 38.8	1.220	2.075	18.5	20.2	10 18	22 44.57	- 7 37.0	2.087	2.878	14.2	23.0
39278	2001 <i>BK</i> ₉		9 9.1 287°78	1°0/ 7.2 16			291132	2005 <i>YL</i> ₂₀₈		9 9.1 285°93 7°6/30.8 18			
8 9	23 24.60	- 9 26.3	4.296	5.184	5.9	19.1	8 9	23 32.03	-27 37.5	2.188	3.084	10.5	19.7
8 19	23 20.75	- 9 51.1	4.223	5.178	4.1	19.0	8 19	23 26.64	-28 57.4	2.142	3.079	8.6	19.6
8 29	23 16.20	-10 18.0	4.178	5.172	2.2	18.8	8 29	23 19.61	-30 7.8	2.122	3.074	7.6	19.5
9 8	23 11.27	-10 44.6	4.162	5.166	1.0	18.7	9 8	23 11.66	-31 1.7	2.127	3.068	8.1	19.5
9 18	23 6.27	-11 9.0	4.176	5.160	2.5	18.8	9 18	23 3.63	-31 33.8	2.158	3.063	9.7	19.6
9 28	23 1.59	-11 28.9	4.219	5.154	4.4	19.0	9 28	22 56.45	-31 41.5	2.212	3.058	11.9	19.8
10 8	22 57.56	-11 42.8	4.290	5.148	6.2	19.1	10 8	22 50.85	-31 25.4	2.288	3.052	14.0	19.9
10 18	22 54.42	-11 49.8	4.385	5.142	7.8	19.2	10 18	22 47.33	-30 48.0	2.381	3.047	15.8	20.1
478566	2012 <i>TK</i> ₆₇		9 9.1 325°61	2°1/10.8 18			432617	2010 <i>UL</i> ₉₇		9 9.1 282°87 1°4/ 6.4 17			
8 9	23 30.82	+ 1 18.2	1.407	2.297	15.6	20.9	8 9	23 24.19	-11 12.2	4.289	5.181	5.9	20.8
8 19	23 26.41	+ 1 7.7	1.333	2.282	11.6	20.6	8 19	23 20.49	-11 45.4	4.217	5.173	4.1	20.7
8 29	23 19.75	+ 0 39.2	1.280	2.268	7.0	20.3	8 29	23 16.09	-12 20.2	4.173	5.166	2.2	20.5
9 8	23 11.65	- 0 3.7	1.250	2.255	2.6	20.0	9 8	23 11.30	-12 53.9	4.158	5.158	1.4	20.4
9 18	23 3.20	- 0 55.1	1.245	2.242	4.4	20.1	9 18	23 6.45	-13 24.5	4.172	5.151	2.8	20.6
9 28	22 55.68	- 1 47.0	1.265	2.230	9.3	20.4	9 28	23 1.90	-13 49.5	4.216	5.143	4.7	20.7
10 8	22 50.19	- 2 31.7	1.308	2.219	13.9	20.6	10 8	22 58.00	-14 7.6	4.287	5.136	6.4	20.8
10 18	22 47.41	- 3 3.6	1.371	2.208	17.9	20.8	10 18	22 55.00	-14 17.6	4.382	5.129	8.0	20.9
355448	2007 <i>VQ</i> ₁₃₅		9 9.1 283°42	4°9/ 5.1 18			479107	2013 <i>AS</i> ₁₆₃		9 9.1 320°92 2°2/ 6.8 18			
8 9	23 36.91	-17 51.5	1.842	2.744	11.8	20.8	8 9	23 27.02	- 5 7.6	1.498	2.407	13.6	20.6
8 19	23 30.30	-18 24.9	1.773	2.729	8.6	20.6	8 19	23 23.63	- 6 49.7	1.425	2.390	9.5	20.3
8 29	23 21.68	-18 55.4	1.728	2.714	5.8	20.4	8 29	23 18.22	- 8 48.3	1.376	2.373	5.0	20.0
9 8	23 11.84	-19 16.5	1.709	2.699	5.0	20.3	9 8	23 11.53	-10 53.7	1.352	2.357	2.3	19.8
9 18	23 1.83	-19 22.9	1.718	2.684	7.4	20.5	9 18	23 4.54	-12 54.3	1.355	2.342	6.2	20.0
9 28	22 52.75	-19 11.1	1.753	2.669	10.8	20.6	9 28	22 58.37	-14 39.0	1.384	2.327	10.8	20.2
10 8	22 45.54	-18 40.7	1.811	2.654	14.1	20.8	10 8	22 54.01	-15 59.7	1.435	2.312	15.1	20.4
10 18	22 40.79	-17 53.3	1.889	2.639	16.9	21.0	10 18	22 52.10	-16 53.1	1.506	2.299	18.6	20.7
298167	2002 <i>TK</i> ₁₁₉		9 9.1 326°55	7°3/16.7 18			269512	2009 <i>UL</i> ₁₀₉		9 9.1 312°50 0°2/ 9.3 18			
8 9	23 28.31	+16 24.1	1.678	2.493	17.0	20.3	8 9	23 29.69	- 2 54.9	2.162	3.046	11.1	21.1
8 19	23 24.41	+16 23.9	1.597	2.482	14.1	20.1	8 19	23 24.94	- 3 20.0	2.086	3.036	7.9	20.9
8 29	23 18.58	+15 55.1	1.534	2.472	11.0	19.9	8 29	23 18.71	- 3 54.5	2.034	3.026	4.4	20.6
9 8	23 11.53	+14 57.5	1.494	2.463	8.3	19.7	9 8	23 11.57	- 4 34.6	2.009	3.016	0.6	20.3
9 18	23 4.19	+13 34.7	1.479	2.453	7.3	19.6	9 18	23 4.27	- 5 15.9	2.012	3.007	3.4	20.5
9 28	22 57.63	+11 54.1	1.488	2.445	9.0	19.7	9 28	22 57.61	- 5 53.5	2.043	2.997	7.1	20.8
10 8	22 52.79	+10 6.3	1.522	2.437	12.0	19.9	10 8	22 52.30	- 6 23.2	2.100	2.988	10.5	21.0
10 18	22 50.31	+ 8 21.5	1.579	2.429	15.3	20.1	10 18	22 48.82	- 6 42.1	2.179	2.979	13.4	21.1
301713	2010 <i>GD</i> ₉₇		9 9.1 120°14	1°1/ 8.0 18			168184	2006 <i>HH</i>					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
470521	2008 <i>CC</i> ₁₆₁		9 9.1 115°22	1°3/10.2	17		215127	1999 <i>RG</i> ₁₃₅		9 9.1 36°52	2°5/10.2	16	
8 9	23 36.91	- 0 2.0	1.710	2.585	14.0	21.9	8 9	23 43.13	- 2 48.2	0.991	1.893	19.4	19.2
8 19	23 30.13	- 0 21.9	1.659	2.602	10.1	21.7	8 19	23 35.27	- 1 44.7	0.955	1.911	14.1	19.0
8 29	23 21.49	- 0 55.2	1.631	2.619	5.8	21.5	8 29	23 24.48	- 0 55.0	0.938	1.930	8.2	18.8
9 8	23 11.87	- 1 37.4	1.629	2.635	1.6	21.3	9 8	23 12.21	- 0 17.7	0.945	1.950	2.9	18.5
9 18	23 2.28	- 2 22.9	1.655	2.650	3.8	21.5	9 18	23 0.24	+ 0 9.8	0.975	1.971	5.5	18.8
9 28	22 53.79	- 3 5.6	1.709	2.665	8.0	21.8	9 28	22 50.30	+ 0 32.0	1.029	1.993	10.9	19.1
10 8	22 47.21	- 3 40.4	1.787	2.679	11.8	22.0	10 8	22 43.52	+ 0 53.8	1.104	2.016	15.7	19.5
10 18	22 43.04	- 4 3.8	1.888	2.693	14.9	22.3	10 18	22 40.37	+ 1 19.0	1.197	2.039	19.6	19.8
18755	Meduna		9 9.1 88°59	5°0/ 5.1	18		92501	2000 <i>NF</i> ₁₅		9 9.1 133°76	1°0/ 8.3	18	
8 9	23 35.04	-13 13.5	1.317	2.233	14.6	17.8	8 9	23 36.41	- 4 50.4	1.499	2.394	14.5	19.1
8 19	23 29.26	-14 37.8	1.276	2.242	10.3	17.5	8 19	23 30.05	- 5 39.6	1.447	2.404	10.2	18.9
8 29	23 21.18	-16 4.6	1.258	2.251	6.3	17.3	8 29	23 21.57	- 6 39.7	1.418	2.413	5.4	18.6
9 8	23 11.84	-17 22.8	1.265	2.261	5.2	17.3	9 8	23 11.92	- 7 43.8	1.415	2.422	1.0	18.3
9 18	23 2.53	-18 22.9	1.297	2.270	8.4	17.5	9 18	23 2.25	- 8 44.0	1.439	2.430	5.0	18.6
9 28	22 54.59	-18 58.8	1.352	2.279	12.5	17.8	9 28	22 53.77	- 9 33.0	1.489	2.438	9.6	18.9
10 8	22 49.00	-19 8.7	1.429	2.288	16.2	18.0	10 8	22 47.40	-10 6.1	1.562	2.445	13.7	19.2
10 18	22 46.25	-18 54.2	1.524	2.297	19.3	18.3	10 18	22 43.69	-10 21.5	1.656	2.452	17.1	19.4
139312	2001 <i>KO</i> ₂₃		9 9.1 77°08	5°0/ 5.4	17	R	474496	2003 <i>UX</i> ₉		9 9.1 309°12	7°4/ 3.2	18	
8 9	23 36.93	-15 12.0	1.412	2.324	14.1	19.7	8 9	23 36.27	-22 16.2	1.568	2.476	13.1	20.2
8 19	23 30.46	-16 6.7	1.371	2.334	10.0	19.5	8 19	23 30.22	-23 9.9	1.503	2.457	10.1	20.0
8 29	23 21.76	-17 0.4	1.353	2.344	6.2	19.3	8 29	23 21.81	-23 57.0	1.461	2.438	7.8	19.8
9 8	23 11.90	-17 44.4	1.359	2.354	5.1	19.3	9 8	23 11.96	-24 28.3	1.444	2.419	7.7	19.8
9 18	23 2.13	-18 11.7	1.392	2.364	8.0	19.4	9 18	23 1.87	-24 37.0	1.452	2.401	10.1	19.9
9 28	22 53.73	-18 18.0	1.448	2.374	11.8	19.7	9 28	22 52.87	-24 19.2	1.483	2.383	13.4	20.0
10 8	22 47.63	-18 2.8	1.527	2.384	15.4	20.0	10 8	22 46.06	-23 35.6	1.535	2.366	16.8	20.2
10 18	22 44.33	-17 28.1	1.624	2.394	18.4	20.2	10 18	22 42.08	-22 29.5	1.605	2.349	19.7	20.4
353059	2009 <i>DV</i> ₅₈		9 9.1 257°66	1°5/ 7.5	18		91749	1999 <i>TV</i> ₁₈₆		9 9.1 333°81	3°5/12.7	18	
8 9	23 31.15	- 6 38.7	1.971	2.866	11.5	21.1	8 9	23 31.36	+ 6 22.0	2.100	2.948	12.8	19.8
8 19	23 26.13	- 7 35.2	1.897	2.855	8.1	20.8	8 19	23 26.16	+ 6 27.2	2.025	2.946	9.9	19.6
8 29	23 19.42	- 8 40.4	1.848	2.843	4.3	20.6	8 29	23 19.40	+ 6 16.9	1.973	2.943	6.7	19.4
9 8	23 11.69	- 9 48.3	1.826	2.832	1.5	20.4	9 8	23 11.70	+ 5 52.8	1.948	2.941	4.0	19.3
9 18	23 3.75	-10 52.5	1.832	2.820	4.7	20.6	9 18	23 3.84	+ 5 18.1	1.949	2.939	4.1	19.3
9 28	22 56.52	-11 46.7	1.865	2.808	8.5	20.8	9 28	22 56.67	+ 4 37.6	1.978	2.938	6.9	19.4
10 8	22 50.80	-12 26.5	1.923	2.795	12.1	21.0	10 8	22 50.92	+ 3 56.6	2.033	2.936	10.1	19.6
10 18	22 47.14	-12 49.5	2.003	2.783	15.1	21.2	10 18	22 47.12	+ 3 20.1	2.112	2.934	13.0	19.8
116930	2004 <i>GE</i> ₂₉		9 9.1 35°21	2°5/14.5	18		446559	2014 <i>OC</i> ₄₃		9 9.1 69°47	5°0/14.6	18	
8 9	23 23.32	+10 28.1	4.331	5.140	7.4	19.4	8 9	23 31.87	+11 26.9	2.162	2.982	13.5	20.4
8 19	23 19.89	+10 6.1	4.248	5.140	5.9	19.3	8 19	23 26.44	+11 41.5	2.096	2.992	10.8	20.3
8 29	23 15.79	+ 9 34.2	4.190	5.141	4.2	19.1	8 29	23 19.50	+11 37.9	2.053	3.003	7.9	20.1
9 8	23 11.31	+ 8 53.9	4.160	5.141	2.8	19.0	9 8	23 11.71	+11 16.8	2.036	3.014	5.6	20.0
9 18	23 6.77	+ 8 7.1	4.159	5.142	2.6	19.0	9 18	23 3.83	+10 41.2	2.045	3.024	5.2	20.0
9 28	23 2.54	+ 7 16.3	4.187	5.142	3.8	19.1	9 28	22 56.69	+ 9 55.6	2.082	3.035	7.0	20.1
10 8	22 58.92	+ 6 24.4	4.245	5.143	5.4	19.2	10 8	22 51.00	+ 9 6.0	2.144	3.046	9.7	20.3
10 18	22 56.19	+ 5 34.2	4.328	5.143	7.0	19.4	10 18	22 47.21	+ 8 17.9	2.231	3.056	12.3	20.5
427837	2005 <i>JQ</i> ₁₃₂		9 9.1 25°63	7°2/ 3.6	17		441713	2009 <i>BB</i> ₅		9 9.1 195°55	9°9/27.6	18	
8 9	23 32.62	-17 22.3	1.135	2.062	15.4	20.3	8 9	23 33.72	-32 9.9	1.937	2.827	11.9	21.1
8 19	23 27.83	-18 53.7	1.100	2.068	11.2	20.1	8 19	23 28.11	-34 7.1	1.905	2.826	10.4	21.0
8 29	23 20.49	-20 21.8	1.087	2.075	7.9	19.9	8 29	23 20.53	-35 49.4	1.898	2.825	9.9	21.0
9 8	23 11.80	-21 34.1	1.096	2.083	7.6	19.9	9 8	23 11.83	-37 7.6	1.915	2.824	10.7	21.0
9 18	23 3.16	-22 20.8	1.128	2.092	10.6	20.1	9 18	23 3.05	-37 55.8	1.956	2.823	12.4	21.2
9 28	22 56.04	-22 36.6	1.182	2.101	14.5	20.4	9 28	22 55.29	-38 11.8	2.018	2.821	14.4	21.3
10 8	22 51.47	-22 21.8	1.255	2.111	18.2	20.7	10 8	22 49.45	-37 57.5	2.099	2.820	16.4	21.4
10 18	22 49.93	-21 40.4	1.344	2.122	21.3	20.9	10 18	22 46.05	-37 16.9	2.195	2.818	18.0	21.6
17501	Tetsuro		9 9.1 67°17	2°7/ 7.4	18		302185	2001 <i>TO</i> ₁₇₆		9 9.1 242°57	4°3/14.4	18	
8 9	23 39.03	- 9 46.8	1.216	2.126	16.0	17.0	8 9	23 29.36	+11 33.0	2.243	3.065	13.0	20.9
8 19	23 32.05	-10 16.9	1.179	2.143	11.2	16.8	8 19	23 24.74	+11 6.2	2.156	3.056	10.4	20.8
8 29	23 22.64	-10 52.1	1.164	2.161	6.0	16.6	8 29	23 18.65	+10 19.3	2.093	3.048	7.5	20.6
9 8	23 12.01	-11 24.5	1.174	2.178	2.7	16.4	9 8	23 11.65	+ 9 14.1	2.055	3.039	4.9	20.4
9 18	23 1.60	-11 47.1	1.208	2.196	6.4	16.7	9 18	23 4.46	+ 7 54.6	2.044	3.030	4.5	20.4
9 28	22 52.81	-11 54.7	1.266	2.214	11.2	17.0	9 28	22 57.86	+ 6 27.1	2.062	3.021	6.7	20.5
10 8	22 46.63	-11 45.4	1.347	2.231	15.4	17.3	10 8	22 52.58	+ 4 58.7	2.107	3.012	9.7	20.6
10 18	22 43.52	-11 19.6	1.446	2.249	18.8	17.6	10 18	22 49.10	+ 3 36.0	2.177	3.002	12.5	20.8
165552	2001 <i>DS</i> ₄₂		9 9.1 156°97	1°6/10.5	18	R	15652	1048 <i>T</i> ₋₁		9 9.1 257°60	3°7/14.5	18	
8 9	23 36.37	- 0 0.4	2.044	2.910	12.4	20.4	8 9	23 27.43	+11 47.2	2.509	3.327	11.9	18.0
8 19	23 29.65	+ 0 3.2	1.977	2.915	9.1	20.2	8 19	23 23.24	+11 2.0	2.422	3.320	9.4	17.9
8 29	23 21.25	- 0 3.9	1.934	2.919	5.4	20.0	8 29	23 17.77	+ 9 57.7	2.357	3.312	6.7	17.7
9 8	23 11.88	- 0 19.3	1.918	2.923	1.9	19.8	9 8	23 11.55	+ 8 36.5	2.320	3.305	4.3	17.5
9 18	23 2.43	- 0 39.3	1.932	2.926	3.5	19.9	9 18	23 5.19	+ 7 2.9	2.311	3.298	3.9	17.5
9 28	22 53.80	- 0 59.8	1.974	2.929	7.2	20.1	9 28	22 59.36	+ 5 23.0	2.331	3.291	6.0	17.6
10 8	22 46.79	- 1 16.6	2.042	2.932	10.6	20.4	10 8	22 54.66	+ 3 43.7	2.380	3.283	8.8	17.8
10 18	22 41.90	- 1 26.6	2.133	2.935	13.6	20.6	10 18	22 51.55	+ 2 11.1	2.454	3.276	11.4	17.9
63139	2000 <i>WR</i> ₁₉₁		9 9.1 320°16										

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
290443	2005 <i>TM</i> ₁₂₅		9 9.2 327°52	0°3/ 9.4	18		517395	2014 <i>KG</i> ₁₀₅		9 9.2 112°02	2°9/13.6	18	
8 9	23 30.58	- 2 36.3	1.885	2.773	12.3	21.0	8 9	23 28.77	+10 14.5	2.624	3.446	11.3	21.4
8 19	23 25.75	- 3 3.4	1.815	2.766	8.8	20.8	8 19	23 24.03	+ 9 9.1	2.556	3.461	8.8	21.2
8 29	23 19.24	- 3 41.4	1.768	2.760	4.9	20.6	8 29	23 18.14	+ 7 46.5	2.514	3.476	5.9	21.1
9 8	23 11.73	- 4 26.0	1.747	2.755	0.7	20.2	9 8	23 11.63	+ 6 10.5	2.499	3.491	3.4	20.9
9 18	23 4.05	- 5 11.9	1.754	2.749	3.7	20.5	9 18	23 5.10	+ 4 26.1	2.515	3.506	3.2	20.9
9 28	22 57.14	- 5 53.5	1.788	2.744	7.8	20.7	9 28	22 59.18	+ 2 39.8	2.561	3.520	5.5	21.1
10 8	22 51.77	- 6 25.8	1.847	2.739	11.5	20.9	10 8	22 54.40	+ 0 58.1	2.636	3.534	8.2	21.3
10 18	22 48.49	- 6 45.9	1.927	2.734	14.6	21.1	10 18	22 51.14	- 0 33.9	2.737	3.547	10.7	21.5
151357	2002 <i>CN</i> ₃₀₄		9 9.2 44°22	5°1/14.7	18 R		222194	2000 <i>DE</i> ₅₅		9 9.2 137°58	0°6/ 8.6	17	
8 9	23 30.53	+11 32.8	1.998	2.825	14.2	19.8	8 9	23 34.72	- 3 59.4	1.822	2.708	12.7	21.0
8 19	23 25.62	+11 37.0	1.931	2.831	11.3	19.6	8 19	23 28.60	- 4 47.8	1.767	2.719	9.0	20.8
8 29	23 19.13	+11 20.9	1.885	2.838	8.3	19.4	8 29	23 20.73	- 5 46.3	1.736	2.730	4.8	20.6
9 8	23 11.72	+10 45.9	1.864	2.845	5.8	19.3	9 8	23 11.91	- 6 49.0	1.732	2.740	0.6	20.3
9 18	23 4.19	+ 9 55.4	1.870	2.852	5.3	19.3	9 18	23 3.06	- 7 49.4	1.757	2.749	4.2	20.6
9 28	22 57.43	+ 8 55.2	1.902	2.859	7.3	19.4	9 28	22 55.16	- 8 41.2	1.809	2.758	8.3	20.9
10 8	22 52.17	+ 7 51.9	1.960	2.866	10.2	19.6	10 8	22 49.01	- 9 19.9	1.886	2.766	11.9	21.1
10 18	22 48.91	+ 6 52.0	2.042	2.874	13.0	19.8	10 18	22 45.09	- 9 43.4	1.985	2.774	14.9	21.3
98690	2000 <i>XD</i> ₁₀		9 9.2 295°47	5°6/ 4.5	18		248304	2005 <i>MS</i> ₁		9 9.2 28°57	6°9/ 1.8	18	
8 9	23 35.77	-18 10.1	1.649	2.557	12.6	18.7	8 9	23 30.45	-20 31.2	1.663	2.578	12.1	19.7
8 19	23 29.64	-19 0.4	1.591	2.550	9.2	18.5	8 19	23 25.80	-22 12.3	1.626	2.584	9.1	19.5
8 29	23 21.41	-19 47.7	1.557	2.543	6.3	18.3	8 29	23 19.29	-23 47.9	1.613	2.590	7.1	19.4
9 8	23 11.96	-20 24.2	1.548	2.536	5.8	18.2	9 8	23 11.76	-25 8.5	1.625	2.597	7.4	19.5
9 18	23 2.40	-20 43.4	1.566	2.529	8.3	18.4	9 18	23 4.21	-26 6.6	1.663	2.604	9.7	19.6
9 28	22 53.91	-20 41.6	1.608	2.522	11.7	18.6	9 28	22 57.70	-26 37.7	1.724	2.611	12.6	19.8
10 8	22 47.44	-20 18.1	1.673	2.516	15.0	18.8	10 8	22 53.03	-26 41.8	1.806	2.619	15.3	20.0
10 18	22 43.57	-19 35.1	1.756	2.509	17.9	19.0	10 18	22 50.70	-26 21.2	1.906	2.627	17.7	20.2
173047	2006 <i>QJ</i> ₁₂₁		9 9.2 59°27	2°0/11.2	18		114623	2003 <i>EJ</i> ₈		9 9.2 243°31	1°5/11.0	18	
8 9	23 31.27	+ 2 45.6	1.778	2.649	13.7	20.3	8 9	23 29.19	+ 3 18.4	2.193	3.056	11.8	20.2
8 19	23 26.22	+ 2 20.5	1.718	2.658	10.1	20.1	8 19	23 24.63	+ 2 27.8	2.112	3.048	8.7	20.0
8 29	23 19.47	+ 1 39.5	1.682	2.666	6.2	19.8	8 29	23 18.61	+ 1 21.6	2.057	3.040	5.3	19.8
9 8	23 11.75	+ 0 46.5	1.672	2.675	2.5	19.6	9 8	23 11.70	+ 0 3.9	2.028	3.032	2.0	19.6
9 18	23 3.98	+ 0 12.6	1.688	2.684	3.7	19.7	9 18	23 4.61	+ 1 19.8	2.028	3.023	3.1	19.7
9 28	22 57.09	- 1 11.3	1.731	2.692	7.5	20.0	9 28	22 58.14	- 2 42.7	2.056	3.015	6.7	19.9
10 8	22 51.86	- 2 3.4	1.800	2.701	11.2	20.2	10 8	22 52.98	- 3 58.4	2.112	3.006	10.1	20.1
10 18	22 48.80	- 2 44.3	1.891	2.711	14.4	20.5	10 18	22 49.62	- 5 2.3	2.190	2.997	13.1	20.3
243735	2000 <i>OT</i> ₁		9 9.2 29°69	8°1/14.1	18		344684	2003 <i>SY</i> ₂₇₀		9 9.2 1°38	4°6/ 5.8	18	
8 9	23 36.00	+ 9 42.4	1.007	1.880	21.6	19.0	8 9	23 30.47	-13 0.3	1.177	2.103	15.1	20.1
8 19	23 30.50	+10 46.1	0.963	1.891	17.2	18.8	8 19	23 26.33	-13 51.7	1.130	2.101	10.6	19.8
8 29	23 22.11	+11 19.5	0.936	1.902	12.6	18.6	8 29	23 19.77	-14 46.0	1.104	2.099	6.3	19.6
9 8	23 12.04	+11 21.5	0.928	1.914	8.9	18.5	9 8	23 11.82	-15 33.8	1.100	2.100	4.7	19.5
9 18	23 1.90	+10 55.6	0.943	1.928	8.4	18.5	9 18	23 3.80	-16 6.3	1.120	2.101	8.1	19.7
9 28	22 53.39	+10 10.6	0.979	1.942	11.5	18.7	9 28	22 57.09	-16 17.5	1.162	2.104	12.6	20.0
10 8	22 47.75	+ 9 18.3	1.036	1.958	15.5	19.0	10 8	22 52.74	-16 5.4	1.225	2.108	16.7	20.3
10 18	22 45.59	+ 8 29.1	1.111	1.974	19.4	19.3	10 18	22 51.30	-15 31.1	1.305	2.114	20.2	20.5
304318	2006 <i>SU</i> ₁₆₉		9 9.2 100°53	1°5/10.7	18		95605	2002 <i>FL</i> ₃₀		9 9.2 97°42	3°2/ 5.3	18	
8 9	23 32.09	+ 1 7.7	1.959	2.830	12.6	20.7	8 9	23 29.68	-12 23.0	2.196	3.100	10.1	19.6
8 19	23 26.70	+ 0 47.8	1.895	2.836	9.2	20.5	8 19	23 24.90	-13 34.2	2.143	3.104	7.1	19.4
8 29	23 19.70	+ 0 14.8	1.855	2.841	5.5	20.3	8 29	23 18.69	-14 47.8	2.116	3.108	4.2	19.3
9 8	23 11.78	- 0 27.8	1.842	2.846	1.9	20.0	9 8	23 11.70	-15 57.5	2.116	3.112	3.3	19.2
9 18	23 3.78	- 1 15.0	1.856	2.852	3.4	20.2	9 18	23 4.66	-16 57.5	2.144	3.116	5.6	19.4
9 28	22 56.59	- 2 1.3	1.898	2.857	7.2	20.4	9 28	22 58.32	-17 43.1	2.199	3.120	8.6	19.6
10 8	22 50.95	- 2 41.5	1.966	2.862	10.7	20.6	10 8	22 53.36	-18 11.7	2.279	3.124	11.5	19.8
10 18	22 47.34	- 3 12.0	2.056	2.867	13.7	20.8	10 18	22 50.21	-18 22.8	2.380	3.128	13.8	20.0
99600	2002 <i>GM</i> ₄₂		9 9.2 81°30	0°2/ 9.4	18		479297	2013 <i>HS</i> ₁₅		9 9.2 162°55	7°7/27.7	18	
8 9	23 30.82	- 2 28.0	2.200	3.081	11.1	19.6	8 9	23 32.55	-33 27.1	2.802	3.676	9.2	21.3
8 19	23 25.60	- 3 2.1	2.148	3.096	7.9	19.5	8 19	23 26.83	-35 2.5	2.774	3.681	8.1	21.2
8 29	23 19.01	- 3 45.1	2.120	3.111	4.3	19.3	8 29	23 19.72	-36 25.9	2.772	3.686	7.7	21.2
9 8	23 11.71	- 4 33.0	2.119	3.126	0.5	19.0	9 8	23 11.82	-37 31.5	2.796	3.690	8.3	21.2
9 18	23 4.41	- 5 21.0	2.147	3.141	3.2	19.3	9 18	23 3.87	-38 15.4	2.845	3.694	9.5	21.3
9 28	22 57.86	- 6 4.2	2.204	3.156	6.7	19.5	9 28	22 56.63	-38 35.8	2.918	3.697	11.0	21.5
10 8	22 52.70	- 6 38.8	2.286	3.171	9.9	19.7	10 8	22 50.74	-38 33.6	3.011	3.701	12.4	21.6
10 18	22 49.31	- 7 2.3	2.391	3.186	12.5	20.0	10 18	22 46.65	-38 11.4	3.121	3.703	13.7	21.7
439608	2014 <i>EC</i> ₂₇		9 9.2 141°76	1°6/ 7.4	18		380769	2005 <i>UZ</i> ₆₅		9 9.2 270°86	3°3/12.1	18	
8 9	23 31.85	- 7 7.3	2.017	2.911	11.3	21.7	8 9	23 32.39	+ 5 30.3	1.633	2.497	15.1	20.5
8 19	23 26.49	- 8 5.1	1.959	2.917	7.9	21.5	8 19	23 27.36	+ 5 14.0	1.555	2.487	11.5	20.2
8 29	23 19.57	- 9 9.8	1.927	2.922	4.2	21.3	8 29	23 20.28	+ 4 37.3	1.499	2.477	7.5	20.0
9 8	23 11.78	-10 15.5	1.922	2.928	1.6	21.2	9 8	23 11.90	+ 3 43.1	1.467	2.466	3.9	19.8
9 18	23 3.93	-11 16.0	1.946	2.933	4.6	21.4	9 18	23 3.23	+ 2 36.6	1.462	2.456	4.4	19.8
9 28	22 56.89	-12 5.8	1.997	2.938	8.2	21.6	9 28	22 55.39	+ 1 25.8	1.483	2.446	8.4	20.0
10 8	22 51.36	-12 41.2	2.073	2.942	11.5	21.8	10 8	22 49.35	+ 0 18.7	1.528	2.435	12.5	20.2
10 18	22 47.82	-13 0.7	2.171	2.946	14.2	22.0	10 18	22 45.79	- 0 37.9	1.595	2.425	16.1	20.4
291126	2005 <i>YF</i> ₂												

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
248520	2005 WY ₂₅		9 9.2 234 ^o .72	3 ^o .7/13.5	18		353181	2009 RW ₃₁		9 9.2 265 ^o .76	0 ^o .1/9.4	18	
8 9	23 30.54	+ 8 43.5	2.431	3.262	11.9	20.9	8 9	23 24.67	- 3 22.1	4.485	5.356	6.1	21.3
8 19	23 25.50	+ 8 38.5	2.347	3.255	9.3	20.7	8 19	23 20.86	- 3 39.8	4.403	5.347	4.3	21.1
8 29	23 19.06	+ 8 18.0	2.287	3.248	6.5	20.6	8 29	23 16.37	- 4 1.8	4.347	5.337	2.4	21.0
9 8	23 11.77	+ 7 43.3	2.253	3.241	4.2	20.4	9 8	23 11.50	- 4 26.1	4.321	5.328	0.3	20.8
9 18	23 4.31	+ 6 57.5	2.247	3.234	4.0	20.4	9 18	23 6.57	- 4 51.0	4.325	5.319	1.8	20.9
9 28	22 57.41	+ 6 5.1	2.269	3.226	6.3	20.5	9 28	23 1.91	- 5 14.4	4.359	5.309	3.8	21.1
10 8	22 51.72	+ 5 11.3	2.318	3.218	9.1	20.7	10 8	22 57.85	- 5 34.3	4.421	5.300	5.6	21.2
10 18	22 47.74	+ 4 21.1	2.391	3.210	11.8	20.8	10 18	22 54.65	- 5 49.4	4.509	5.290	7.3	21.3
99369	2001 XN ₂₂₈		9 9.2 70 ^o .88	0 ^o .6/8.7	17		367550	2009 RH ₇₁		9 9.2 139 ^o .49	5 ^o .5/17.7	18	
8 9	23 37.17	- 4 30.8	1.198	2.102	16.6	19.0	8 9	23 28.42	+ 18 50.4	2.654	3.421	12.6	21.3
8 19	23 30.87	- 5 3.3	1.156	2.117	11.7	18.8	8 19	23 23.88	+ 18 19.4	2.574	3.427	10.5	21.2
8 29	23 22.12	- 5 48.3	1.136	2.132	6.2	18.5	8 29	23 18.13	+ 17 27.2	2.516	3.433	8.3	21.1
9 8	23 12.09	- 6 38.3	1.140	2.147	0.8	18.2	9 8	23 11.70	+ 16 15.1	2.483	3.438	6.3	20.9
9 18	23 2.16	- 7 24.9	1.169	2.163	5.3	18.5	9 18	23 5.18	+ 14 46.4	2.478	3.443	5.5	20.9
9 28	22 53.76	- 8 0.8	1.222	2.178	10.5	18.9	9 28	22 59.25	+ 13 6.6	2.501	3.448	6.4	21.0
10 8	22 47.88	- 8 21.1	1.297	2.193	15.0	19.2	10 8	22 54.46	+ 11 22.5	2.553	3.453	8.4	21.1
10 18	22 45.04	- 8 23.9	1.391	2.209	18.7	19.5	10 18	22 51.23	+ 9 40.6	2.631	3.458	10.6	21.3
511219	2014 AG ₄₉		9 9.2 78 ^o .56	2 ^o .6/6.8	18		352351	2007 VQ ₁₃₃		9 9.2 328 ^o .48	4 ^o .3/12.6	18	
8 9	23 33.40	- 9 47.2	1.681	2.585	12.7	21.0	8 9	23 31.57	+ 6 13.8	1.563	2.428	15.6	20.7
8 19	23 27.85	- 10 37.7	1.626	2.588	8.8	20.8	8 19	23 26.87	+ 6 25.8	1.487	2.416	12.1	20.4
8 29	23 20.41	- 11 33.4	1.595	2.591	4.8	20.6	8 29	23 20.07	+ 6 18.1	1.431	2.405	8.2	20.2
9 8	23 11.92	- 12 27.5	1.591	2.594	2.7	20.5	9 8	23 11.93	+ 5 51.9	1.400	2.395	4.9	19.9
9 18	23 3.36	- 13 13.2	1.613	2.597	5.7	20.7	9 18	23 3.47	+ 5 11.3	1.393	2.385	5.0	19.9
9 28	22 55.79	- 13 45.1	1.661	2.600	9.7	20.9	9 28	22 55.87	+ 4 22.5	1.412	2.376	8.6	20.1
10 8	22 50.06	- 13 59.9	1.733	2.603	13.3	21.1	10 8	22 50.12	+ 3 33.4	1.455	2.367	12.6	20.3
10 18	22 46.70	- 13 57.1	1.825	2.606	16.3	21.4	10 18	22 46.90	+ 2 50.6	1.519	2.359	16.3	20.5
516270	2016 VP ₁₈		9 9.2 354 ^o .83	8 ^o .8/16.9	18		333166	2012 CF ₁₉		9 9.2 248 ^o .26	6 ^o .9/31.0	18	
8 9	23 30.78	+ 16 41.2	1.480	2.299	18.7	20.8	8 9	23 31.51	- 25 58.1	2.334	3.232	9.9	20.2
8 19	23 26.41	+ 17 17.5	1.410	2.296	15.7	20.6	8 19	23 26.29	- 27 24.5	2.284	3.224	7.9	20.1
8 29	23 19.83	+ 17 24.5	1.359	2.293	12.5	20.4	8 29	23 19.53	- 28 43.4	2.259	3.215	6.9	20.0
9 8	23 11.87	+ 17 0.6	1.329	2.291	9.8	20.3	9 8	23 11.86	- 29 48.1	2.261	3.207	7.4	20.0
9 18	23 3.62	+ 16 8.0	1.321	2.290	8.8	20.2	9 18	23 4.07	- 30 32.9	2.289	3.199	9.1	20.1
9 28	22 56.31	+ 14 53.7	1.338	2.289	10.3	20.3	9 28	22 57.01	- 30 55.0	2.342	3.190	11.2	20.3
10 8	22 51.02	+ 13 27.9	1.377	2.290	13.1	20.5	10 8	22 51.40	- 30 54.1	2.416	3.181	13.3	20.4
10 18	22 48.39	+ 12 1.4	1.437	2.290	16.3	20.7	10 18	22 47.72	- 30 32.0	2.508	3.172	15.1	20.5
262017	2006 QS ₉₅		9 9.2 332 ^o .59	1 ^o .3/8.2	18		248132	2004 SJ ₃₆		9 9.2 163 ^o .33	2 ^o .3/11.8	18	
8 9	23 28.54	- 4 40.6	1.043	1.965	16.9	20.0	8 9	23 31.74	+ 3 51.7	2.423	3.275	11.2	20.5
8 19	23 25.39	- 5 27.6	0.977	1.946	12.1	19.6	8 19	23 26.28	+ 3 45.1	2.351	3.277	8.4	20.3
8 29	23 19.52	- 6 32.5	0.930	1.929	6.5	19.3	8 29	23 19.46	+ 3 26.4	2.303	3.279	5.4	20.1
9 8	23 11.86	- 7 46.9	0.906	1.913	1.3	18.9	9 8	23 11.86	+ 2 57.6	2.282	3.281	2.7	20.0
9 18	23 3.75	- 8 59.8	0.903	1.898	6.3	19.2	9 18	23 4.15	+ 2 22.0	2.290	3.283	3.2	20.0
9 28	22 56.81	- 9 59.4	0.923	1.884	12.3	19.4	9 28	22 57.07	+ 1 43.9	2.327	3.285	6.1	20.2
10 8	22 52.38	- 10 37.4	0.961	1.872	17.7	19.7	10 8	22 51.25	+ 1 7.6	2.391	3.286	9.1	20.4
10 18	22 51.24	- 10 49.9	1.017	1.861	22.2	20.0	10 18	22 47.13	+ 0 36.8	2.478	3.287	11.7	20.6
366239	2012 UJ ₁₆₀		9 9.2 252 ^o .75	1 ^o .0/10.0	18		310103	2010 TL ₁₇₁		9 9.2 215 ^o .47	0 ^o .8/7.6	17	
8 9	23 33.06	- 0 43.4	1.809	2.689	13.1	21.2	8 9	23 24.68	- 8 25.4	4.362	5.248	5.9	20.6
8 19	23 27.61	- 1 5.7	1.737	2.683	9.5	21.0	8 19	23 20.87	- 8 51.1	4.293	5.247	4.1	20.4
8 29	23 20.33	- 1 41.0	1.687	2.677	5.4	20.7	8 29	23 16.39	- 9 19.2	4.252	5.246	2.2	20.3
9 8	23 11.92	- 2 25.2	1.664	2.670	1.3	20.4	9 8	23 11.53	- 9 47.5	4.240	5.246	0.8	20.2
9 18	23 3.32	- 3 13.0	1.668	2.664	3.7	20.6	9 18	23 6.63	- 10 13.8	4.258	5.245	2.3	20.3
9 28	22 55.53	- 3 58.3	1.700	2.657	8.0	20.8	9 28	23 2.04	- 10 36.2	4.306	5.244	4.3	20.4
10 8	22 49.41	- 4 35.6	1.756	2.651	11.8	21.1	10 8	22 58.08	- 10 52.9	4.381	5.243	6.0	20.6
10 18	22 45.54	- 5 1.2	1.834	2.644	15.2	21.3	10 18	22 55.01	- 11 2.9	4.481	5.242	7.6	20.7
63249	2001 BW ₃₅		9 9.2 69 ^o .63	2 ^o .2/6.3	18		437292	2013 BG ₁₇		9 9.2 234 ^o .03	1 ^o .5/5.9	16	
8 9	23 29.53	- 12 32.6	2.880	3.775	8.3	18.7	8 9	23 23.56	- 11 56.2	4.657	5.549	5.4	21.5
8 19	23 24.48	- 13 3.1	2.828	3.785	5.8	18.5	8 19	23 20.09	- 12 40.0	4.587	5.544	3.8	21.4
8 29	23 18.37	- 13 34.4	2.803	3.795	3.3	18.4	8 29	23 15.97	- 13 25.0	4.546	5.539	2.1	21.3
9 8	23 11.71	- 14 2.9	2.806	3.806	2.2	18.3	9 8	23 11.49	- 14 8.8	4.535	5.533	1.5	21.2
9 18	23 5.05	- 14 25.4	2.838	3.816	4.1	18.4	9 18	23 6.96	- 14 49.0	4.554	5.528	2.8	21.3
9 28	22 58.96	- 14 39.3	2.899	3.826	6.5	18.6	9 28	23 2.71	- 15 23.6	4.602	5.522	4.5	21.4
10 8	22 53.96	- 14 43.0	2.986	3.836	8.9	18.8	10 8	22 59.03	- 15 50.8	4.677	5.517	6.1	21.5
10 18	22 50.38	- 14 35.9	3.095	3.847	10.9	19.0	10 18	22 56.17	- 16 9.8	4.776	5.511	7.5	21.6
481026	2004 VL ₅₆		9 9.2 248 ^o .98	7 ^o .7/29.7	18		37047	2000 UU ₃₅		9 9.2 209 ^o .20	3 ^o .3/13.1	18	
8 9	23 34.72	- 32 27.7	2.623	3.499	9.7	21.3	8 9	23 29.84	+ 7 53.9	2.253	3.092	12.4	19.0
8 19	23 28.45	- 33 31.8	2.572	3.486	8.3	21.2	8 19	23 25.07	+ 7 33.9	2.176	3.091	9.6	18.8
8 29	23 20.64	- 34 24.6	2.546	3.472	7.7	21.2	8 29	23 18.86	+ 6 57.1	2.122	3.089	6.5	18.6
9 8	23 11.95	- 35 0.2	2.545	3.459	8.2	21.2	9 8	23 11.81	+ 6 5.9	2.095	3.088	3.8	18.4
9 18	23 3.19	- 35 14.6	2.570	3.445	9.5	21.3	9 18	23 4.62	+ 5 4.1	2.095	3.086	3.8	18.4
9 28	22 55.18	- 35 6.2	2.619	3.431	11.3	21.4	9 28	22 58.05	+ 3 57.5	2.124	3.084	6.4	18.6
10 8	22 48.65	- 34 35.8	2.690	3.417	13.0	21.5	10 8	22 52.79	+ 2 52.0	2.179	3.082	9.5	18.8
10 18	22 44.07	- 33 46.1	2.778	3.402	14.5	21.6	10 18	22 49.31	+ 1 52.8	2.258	3.079		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
224251	2005 <i>SQ</i> ₁₉₁		9 9.2 250°15	1°0/ 8.3	18		451174	2009 <i>SL</i> ₂₆₈		9 9.2 311°93	3°5/13.7	18	
8 9	23 34.29	- 5 29.4	1.762	2.654	12.8	21.6	8 9	23 27.48	+ 9 41.9	2.173	3.009	12.9	21.4
8 19	23 28.60	- 6 9.4	1.686	2.641	9.1	21.4	8 19	23 23.50	+ 9 1.0	2.090	3.002	10.1	21.2
8 29	23 20.94	- 6 59.2	1.634	2.629	4.8	21.1	8 29	23 18.08	+ 8 0.1	2.029	2.994	7.0	21.0
9 8	23 12.05	- 7 53.5	1.608	2.615	1.0	20.8	9 8	23 11.78	+ 6 41.8	1.995	2.986	4.2	20.9
9 18	23 2.88	- 8 45.7	1.610	2.602	4.6	21.0	9 18	23 5.32	+ 5 11.2	1.988	2.979	3.9	20.8
9 28	22 54.53	- 9 29.3	1.639	2.588	9.0	21.2	9 28	22 59.45	+ 3 35.1	2.010	2.972	6.6	21.0
10 8	22 47.93	- 9 59.5	1.693	2.574	13.0	21.5	10 8	22 54.88	+ 2 1.2	2.058	2.965	9.7	21.2
10 18	22 43.70	-10 14.0	1.767	2.559	16.3	21.7	10 18	22 52.09	+ 0 35.8	2.131	2.958	12.7	21.3
294007	2007 <i>TL</i> ₉₅		9 9.2 11°55 10°3/	1.5	18		263375	2008 <i>CH</i> ₁₇₅		9 9.2 194°44	5°6/ 4.4	18	
8 9	23 35.45	-27 42.9	1.313	2.226	14.9	18.7	8 9	23 35.74	-16 3.9	1.511	2.422	13.4	20.6
8 19	23 29.73	-28 50.0	1.281	2.229	12.1	18.5	8 19	23 29.79	-17 22.8	1.460	2.422	9.6	20.4
8 29	23 21.55	-29 41.3	1.270	2.233	10.4	18.4	8 29	23 21.62	-18 41.6	1.432	2.421	6.4	20.2
9 8	23 12.09	-30 6.8	1.281	2.238	10.7	18.5	9 8	23 12.17	-19 50.4	1.430	2.419	5.9	20.2
9 18	23 2.79	-30 0.4	1.315	2.244	12.8	18.6	9 18	23 2.63	-20 40.9	1.454	2.418	8.6	20.3
9 28	22 55.04	-29 21.4	1.369	2.251	15.6	18.8	9 28	22 54.23	-21 7.4	1.502	2.416	12.3	20.5
10 8	22 49.83	-28 13.6	1.443	2.259	18.4	19.0	10 8	22 47.99	-21 8.9	1.571	2.414	15.8	20.8
10 18	22 47.61	-26 42.9	1.533	2.268	20.8	19.2	10 18	22 44.46	-20 46.9	1.659	2.412	18.8	21.0
343534	2010 <i>EG</i> ₁₃₉		9 9.2 70°47	0°8/10.5	18		316151	2009 <i>SJ</i> ₃₅₆		9 9.2 57°45	1°6/10.9	18	
8 9	23 26.91	+ 0 41.8	2.944	3.809	9.1	21.0	8 9	23 30.71	+ 1 19.0	2.163	3.031	11.7	20.6
8 19	23 22.65	+ 0 3.5	2.887	3.825	6.5	20.8	8 19	23 25.64	+ 1 2.5	2.103	3.041	8.6	20.4
8 29	23 17.42	- 0 43.5	2.856	3.842	3.8	20.7	8 29	23 19.16	+ 0 34.1	2.067	3.051	5.1	20.2
9 8	23 11.67	- 1 36.2	2.852	3.858	1.1	20.5	9 8	23 11.90	- 0 2.8	2.057	3.061	1.9	20.0
9 18	23 5.91	- 2 30.8	2.879	3.874	2.4	20.6	9 18	23 4.60	- 0 44.2	2.076	3.072	3.1	20.1
9 28	23 0.66	- 3 23.5	2.935	3.890	5.1	20.8	9 28	22 58.03	- 1 25.1	2.123	3.082	6.5	20.4
10 8	22 56.38	- 4 10.7	3.018	3.907	7.6	21.0	10 8	22 52.84	- 2 1.2	2.196	3.092	9.7	20.6
10 18	22 53.40	- 4 49.6	3.126	3.923	9.8	21.2	10 18	22 49.46	- 2 28.9	2.292	3.103	12.5	20.8
144059	2004 <i>BL</i> ₄₀		9 9.2 329°68	3°9/11.5	18		400738	2009 <i>TP</i> ₄₅		9 9.2 327°42	1°3/10.7	17	
8 9	23 30.77	+ 2 40.0	1.069	1.969	18.5	19.3	8 9	23 26.07	+ 3 5.1	1.815	2.693	13.2	20.6
8 19	23 27.09	+ 3 0.7	0.995	1.947	14.1	18.9	8 19	23 22.77	+ 1 58.9	1.731	2.675	9.7	20.4
8 29	23 20.56	+ 2 59.7	0.939	1.926	9.1	18.6	8 29	23 17.80	+ 0 32.8	1.669	2.657	5.8	20.1
9 8	23 12.05	+ 2 38.6	0.904	1.906	4.5	18.3	9 8	23 11.77	- 1 8.3	1.634	2.639	1.8	19.8
9 18	23 2.92	+ 2 2.2	0.891	1.888	5.7	18.3	9 18	23 5.48	- 2 56.8	1.626	2.623	3.6	19.9
9 28	22 54.86	+ 1 18.9	0.900	1.871	11.0	18.5	9 28	22 59.83	- 4 43.3	1.645	2.607	7.8	20.1
10 8	22 49.34	+ 0 38.8	0.930	1.855	16.5	18.8	10 8	22 55.66	- 6 19.2	1.690	2.591	11.8	20.3
10 18	22 47.26	+ 0 9.7	0.976	1.841	21.2	19.0	10 18	22 53.53	- 7 38.4	1.757	2.577	15.3	20.5
12478	Suzukiseiji		9 9.2 219°88	0°9/ 8.4	18		167459	2003 <i>YY</i> ₆		9 9.2 349°93	5°4/13.1	18	
8 9	23 34.47	- 4 39.7	1.794	2.683	12.8	19.0	8 9	23 35.45	+ 7 27.2	1.616	2.467	15.8	19.0
8 19	23 28.67	- 5 30.6	1.722	2.676	9.0	18.7	8 19	23 29.57	+ 8 10.5	1.545	2.464	12.5	18.7
8 29	23 20.96	- 6 32.5	1.673	2.668	4.8	18.5	8 29	23 21.54	+ 8 35.3	1.495	2.461	8.8	18.5
9 8	23 12.07	- 7 39.4	1.652	2.659	0.9	18.2	9 8	23 12.19	+ 8 41.6	1.470	2.459	5.9	18.4
9 18	23 2.96	- 8 44.3	1.658	2.649	4.5	18.4	9 18	23 2.56	+ 8 31.3	1.471	2.457	5.8	18.4
9 28	22 54.67	- 9 40.3	1.692	2.639	8.9	18.6	9 28	22 53.86	+ 8 9.2	1.497	2.455	8.8	18.5
10 8	22 48.11	-10 22.3	1.751	2.629	12.7	18.9	10 8	22 47.09	+ 7 41.8	1.548	2.454	12.4	18.7
10 18	22 43.88	-10 47.6	1.830	2.618	16.0	19.1	10 18	22 42.91	+ 7 15.4	1.620	2.454	15.7	19.0
523200	2016 <i>VB</i> ₂₀		9 9.2 315°36	3°1/ 6.0	18		59561	1999 <i>JQ</i> ₄₂		9 9.2 52°41	1°8/10.7	18	
8 9	23 30.97	-11 13.5	1.842	2.748	11.6	21.0	8 9	23 33.54	+ 1 28.6	1.367	2.254	16.1	19.5
8 19	23 26.12	-12 15.6	1.780	2.743	8.1	20.8	8 19	23 28.10	+ 1 1.0	1.326	2.274	11.7	19.3
8 29	23 19.53	-13 22.1	1.743	2.738	4.6	20.6	8 29	23 20.62	+ 0 15.5	1.306	2.295	6.9	19.1
9 8	23 11.92	-14 26.1	1.733	2.733	3.2	20.5	9 8	23 12.06	- 0 41.9	1.311	2.316	2.3	18.9
9 18	23 4.18	-15 20.7	1.750	2.728	6.0	20.7	9 18	23 3.61	- 1 43.9	1.341	2.338	4.2	19.1
9 28	22 57.26	-16 0.4	1.793	2.724	9.6	20.9	9 28	22 56.42	- 2 42.1	1.397	2.359	8.8	19.4
10 8	22 51.97	-16 22.0	1.859	2.720	13.0	21.1	10 8	22 51.37	- 3 29.8	1.476	2.381	12.9	19.7
10 18	22 48.82	-16 24.8	1.946	2.716	15.8	21.3	10 18	22 48.91	- 4 3.0	1.575	2.403	16.4	20.0
268815	2006 <i>VC</i> ₅₀		9 9.2 313°93	2°7/ 7.3	18		362998	2013 <i>CU</i> ₁₆₆		9 9.2 291°12	1°3/ 8.1	18	
8 9	23 33.10	- 8 44.9	1.223	2.139	15.4	20.6	8 9	23 34.43	- 7 51.2	1.865	2.760	12.1	21.2
8 19	23 28.51	- 9 25.3	1.149	2.116	11.0	20.3	8 19	23 28.62	- 8 9.4	1.790	2.746	8.5	20.9
8 29	23 21.23	-10 15.9	1.096	2.093	6.0	20.0	8 29	23 20.94	- 8 33.6	1.738	2.733	4.6	20.7
9 8	23 12.13	-11 8.5	1.066	2.071	2.7	19.7	9 8	23 12.12	- 8 59.1	1.714	2.720	1.3	20.4
9 18	23 2.53	-11 54.0	1.061	2.050	6.9	19.9	9 18	23 3.07	- 9 21.0	1.717	2.707	4.5	20.6
9 28	22 53.97	-12 23.9	1.078	2.029	12.3	20.1	9 28	22 54.81	- 9 34.7	1.747	2.694	8.6	20.9
10 8	22 47.78	-12 32.8	1.116	2.009	17.2	20.4	10 8	22 48.22	- 9 37.0	1.802	2.681	12.4	21.1
10 18	22 44.79	-12 19.2	1.171	1.990	21.5	20.6	10 18	22 43.90	- 9 26.5	1.878	2.668	15.6	21.3
449196	2013 <i>CN</i> ₃₄		9 9.2 275°35	0°9/ 8.2	18		35574	1998 <i>HE</i> ₁₂		9 9.2 163°50	2°9/ 6.7	18	
8 9	23 30.17	- 4 15.7	1.977	2.868	11.7	21.3	8 9	23 36.32	-11 55.2	1.836	2.735	12.0	18.5
8 19	23 25.56	- 5 19.3	1.895	2.851	8.3	21.0	8 19	23 29.84	-12 29.5	1.779	2.737	8.5	18.3
8 29	23 19.26	- 6 34.6	1.838	2.833	4.4	20.8	8 29	23 21.52	-13 6.1	1.746	2.739	4.8	18.1
9 8	23 11.91	- 7 55.8	1.809	2.815	0.9	20.5	9 8	23 12.17	-13 39.0	1.740	2.741	3.0	18.0
9 18	23 4.28	- 9 15.8	1.807	2.798	4.3	20.7	9 18	23 2.77	-14 3.0	1.761	2.742	5.7	18.2
9 28	22 57.30	-10 27.7	1.833	2.780	8.3	20.9	9 28	22 54.35	-14 13.8	1.810	2.744	9.4	18.4
10 8	22 51.77	-11 25.7	1.884	2.762	12.0	21.1	10 8	22 47.73	-14 9.7	1.883	2.745	12.8	18.6
10 18	22 48.26	-12 6.4	1.957	2.743	15.2	21.3	10 18	22 43.43	-13 50.5	1.976	2.746	15.6	18.8
137508	1999 <i>VV</i> ₂₇		9 9.2 296°88	3°7/ 6.6	18		219834	2002 <i>CK</i> ₈₀		9 9.2 201°			

EPHEMERIDES

9 9.2

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
18763	1999 <i>JV</i> ₂		9 9.2 92°78	0°3/ 9.5	18		296665	2009 <i>SS</i> ₁₅₅		9 9.2 246°71	0°4/ 9.9	17	
8 9	23 31.40	+ 0 20.1	1.682	2.564	13.8	18.4	8 9	23 23.99	- 1 40.6	4.433	5.299	6.2	20.8
8 19	23 26.40	- 0 58.3	1.630	2.579	9.8	18.2	8 19	23 20.43	- 2 5.2	4.356	5.297	4.5	20.7
8 29	23 19.66	- 2 32.6	1.602	2.593	5.4	17.9	8 29	23 16.21	- 2 34.8	4.306	5.294	2.5	20.6
9 8	23 11.97	- 4 15.3	1.601	2.608	0.8	17.6	9 8	23 11.63	- 3 7.6	4.285	5.292	0.5	20.4
9 18	23 4.27	- 5 57.8	1.627	2.622	4.0	17.9	9 18	23 6.98	- 3 41.4	4.295	5.290	1.7	20.5
9 28	22 57.53	- 7 31.0	1.681	2.636	8.3	18.2	9 28	23 2.63	- 4 14.1	4.334	5.287	3.7	20.6
10 8	22 52.53	- 8 48.3	1.761	2.650	12.1	18.5	10 8	22 58.87	- 4 43.5	4.402	5.285	5.6	20.8
10 18	22 49.74	- 9 46.0	1.861	2.663	15.3	18.7	10 18	22 55.96	- 5 7.9	4.495	5.282	7.2	20.9
342592	2008 <i>UP</i> ₃₀₀		9 9.2 244°36	4°4/ 4.6	18		123853	2001 <i>CP</i> ₃₇		9 9.2 180°06	9°2/ 27.5	18	
8 9	23 33.55	-14 58.5	1.936	2.840	11.2	20.6	8 9	23 35.37	-37 0.2	2.483	3.346	10.6	19.8
8 19	23 27.98	-16 10.5	1.868	2.827	8.1	20.4	8 19	23 29.01	-38 16.9	2.453	3.347	9.5	19.7
8 29	23 20.59	-17 24.1	1.826	2.815	5.2	20.2	8 29	23 21.02	-39 18.2	2.448	3.347	9.2	19.7
9 8	23 12.09	-18 31.8	1.811	2.802	4.6	20.1	9 8	23 12.15	-39 57.8	2.466	3.347	9.8	19.7
9 18	23 3.37	-19 26.7	1.823	2.789	7.1	20.3	9 18	23 3.29	-40 12.3	2.509	3.347	11.0	19.8
9 28	22 55.45	-20 3.3	1.862	2.775	10.4	20.4	9 28	22 55.36	-40 0.6	2.573	3.347	12.5	19.9
10 8	22 49.16	-20 19.3	1.924	2.761	13.6	20.6	10 8	22 49.11	-39 24.7	2.657	3.346	13.9	20.0
10 18	22 45.09	-20 14.7	2.005	2.747	16.3	20.8	10 18	22 44.97	-38 28.3	2.758	3.346	15.2	20.2
80937	2000 <i>DU</i> ₈₀		9 9.2 87°98	2°2/ 7.4	17		512635	2016 <i>TN</i> ₄₇		9 9.2 32°44	1°5/ 7.7	18	
8 9	23 36.05	- 8 4.7	1.525	2.426	13.9	19.3	8 9	23 30.84	- 6 11.8	1.738	2.637	12.5	20.7
8 19	23 29.73	- 8 58.8	1.486	2.446	9.6	19.1	8 19	23 26.06	- 7 9.1	1.681	2.640	8.8	20.4
8 29	23 21.44	- 9 59.4	1.470	2.465	5.1	18.9	8 29	23 19.52	- 8 15.3	1.648	2.643	4.6	20.2
9 8	23 12.16	-10 58.9	1.479	2.484	2.2	18.8	9 8	23 12.00	- 9 24.0	1.641	2.647	1.5	20.0
9 18	23 3.00	-11 49.9	1.516	2.503	5.6	19.0	9 18	23 4.38	-10 27.8	1.661	2.651	4.8	20.2
9 28	22 55.07	-12 26.7	1.579	2.521	9.8	19.3	9 28	22 57.65	-11 20.4	1.708	2.654	8.9	20.5
10 8	22 49.21	-12 46.1	1.665	2.539	13.5	19.6	10 8	22 52.61	-11 57.3	1.779	2.658	12.5	20.7
10 18	22 45.88	-12 47.7	1.771	2.557	16.5	19.9	10 18	22 49.75	-12 16.6	1.870	2.662	15.6	20.9
238611	2005 <i>BM</i> ₂		9 9.2 229°01	10°0/ 28.9	18		439321	2012 <i>VA</i> ₁₀₇		9 9.2 1°63	0°5/ 9.6	18	
8 9	23 40.22	-35 51.1	2.150	3.017	11.9	20.7	8 9	23 31.93	- 2 11.3	1.405	2.303	15.0	20.6
8 19	23 32.67	-37 4.3	2.106	3.007	10.5	20.6	8 19	23 27.17	- 2 33.0	1.345	2.301	10.8	20.3
8 29	23 23.08	-38 1.1	2.086	2.997	10.0	20.5	8 29	23 20.26	- 3 8.8	1.307	2.301	6.0	20.1
9 8	23 12.35	-38 33.8	2.090	2.986	10.6	20.5	9 8	23 12.09	- 3 53.4	1.294	2.301	1.0	19.7
9 18	23 1.59	-38 37.7	2.118	2.975	12.0	20.6	9 18	23 3.76	- 4 40.0	1.306	2.302	4.4	20.0
9 28	22 51.96	-38 12.0	2.169	2.964	13.8	20.7	9 28	22 56.50	- 5 21.4	1.342	2.303	9.3	20.3
10 8	22 44.35	-37 19.2	2.239	2.952	15.6	20.9	10 8	22 51.28	- 5 51.6	1.402	2.305	13.6	20.5
10 18	22 39.30	-36 4.1	2.326	2.940	17.3	21.0	10 18	22 48.70	- 6 7.0	1.482	2.308	17.3	20.8
461586	2004 <i>RR</i> ₁₄₅		9 9.2 32°38	2°1/ 8.3	17		298252	2002 <i>VE</i> ₆₁		9 9.2 333°75	2°9/ 11.9	18	
8 9	23 39.94	- 9 40.1	0.852	1.778	19.4	20.1	8 9	23 31.22	+ 4 24.1	1.726	2.593	14.3	20.2
8 19	23 33.35	- 9 26.9	0.822	1.793	13.6	19.8	8 19	23 26.44	+ 4 13.7	1.654	2.588	10.8	19.9
8 29	23 23.63	- 9 19.5	0.811	1.809	7.3	19.6	8 29	23 19.80	+ 3 45.7	1.604	2.583	6.9	19.7
9 8	23 12.40	- 9 11.4	0.821	1.827	2.1	19.3	9 8	23 12.04	+ 3 2.8	1.579	2.579	3.4	19.5
9 18	23 1.54	- 8 56.6	0.852	1.846	6.7	19.7	9 18	23 4.07	+ 2 9.9	1.580	2.575	4.1	19.5
9 28	22 52.84	- 8 31.1	0.905	1.867	12.5	20.1	9 28	22 56.92	+ 1 13.7	1.608	2.571	7.8	19.7
10 8	22 47.44	- 7 53.2	0.978	1.888	17.5	20.4	10 8	22 51.46	+ 0 21.2	1.661	2.568	11.7	20.0
10 18	22 45.71	- 7 3.5	1.068	1.910	21.5	20.8	10 18	22 48.26	- 0 22.3	1.736	2.565	15.0	20.2
385779	2006 <i>AJ</i> ₇₉		9 9.2 50°57	14°6/ 24.9	17		258566	2002 <i>CS</i> ₉₃		9 9.2 270°28	0°4/ 9.5	18	
8 9	23 31.98	-26 1.3	0.895	1.829	17.7	19.7	8 9	23 36.22	- 2 33.0	1.403	2.296	15.4	20.8
8 19	23 28.24	-30 30.5	0.880	1.836	15.1	19.6	8 19	23 30.46	- 2 52.5	1.328	2.282	11.2	20.5
8 29	23 21.18	-34 36.3	0.888	1.842	14.8	19.6	8 29	23 22.20	- 3 26.5	1.275	2.268	6.2	20.2
9 8	23 12.16	-37 52.7	0.917	1.849	16.9	19.7	9 8	23 12.34	- 4 9.8	1.246	2.253	0.9	19.8
9 18	23 3.04	-40 4.7	0.966	1.856	20.0	20.0	9 18	23 2.06	- 4 55.9	1.243	2.238	4.7	20.0
9 28	22 55.79	-41 9.8	1.031	1.864	23.2	20.2	9 28	22 52.78	- 5 36.9	1.265	2.224	10.0	20.3
10 8	22 51.78	-41 16.3	1.108	1.871	25.9	20.5	10 8	22 45.68	- 6 6.5	1.311	2.209	14.8	20.5
10 18	22 51.55	-40 35.5	1.196	1.879	28.0	20.7	10 18	22 41.52	- 6 20.9	1.375	2.194	18.8	20.8
10238	1998 <i>SO</i> ₁₄₀		9 9.2 357°92	3°5/ 11.6	18		479741	2014 <i>EE</i> ₅		9 9.2 245°94	0°4/ 8.9	18	
8 9	23 29.24	+ 3 47.8	0.936	1.842	20.0	17.0	8 9	23 37.53	- 5 43.7	2.007	2.889	11.9	22.1
8 19	23 25.98	+ 3 36.3	0.882	1.837	15.1	16.7	8 19	23 30.78	- 5 53.7	1.924	2.874	8.5	21.9
8 29	23 19.88	+ 2 56.3	0.846	1.835	9.5	16.4	8 29	23 22.15	- 6 10.6	1.865	2.858	4.6	21.6
9 8	23 12.03	+ 1 52.5	0.830	1.833	4.2	16.1	9 8	23 12.32	- 6 30.7	1.835	2.842	0.6	21.3
9 18	23 3.91	+ 0 34.6	0.835	1.833	5.4	16.2	9 18	23 2.21	- 6 49.7	1.833	2.825	4.0	21.5
9 28	22 57.19	- 0 44.7	0.862	1.834	11.0	16.5	9 28	22 52.84	- 7 3.4	1.859	2.808	8.1	21.8
10 8	22 53.18	- 1 53.1	0.908	1.836	16.4	16.8	10 8	22 45.09	- 7 8.4	1.912	2.790	11.8	22.0
10 18	22 52.55	- 2 42.4	0.972	1.840	21.0	17.1	10 18	22 39.58	- 7 2.7	1.986	2.772	15.0	22.1
385363	2002 <i>PW</i> ₁₇₀		9 9.2 157°79	0°0/ 9.4	14	C	231666	<i>Aisymnos</i>		9 9.2 270°55	1°1/ 11.6	16	
8 9	23 13.01	- 4 30.8	47.088	47.961	0.6	23.1	8 9	23 23.98	+ 2 33.8	4.484	5.333	6.5	20.1
8 19	23 12.43	- 4 34.3	47.016	47.962	0.4	23.1	8 19	23 20.43	+ 2 16.0	4.402	5.329	4.8	20.0
8 29	23 11.79	- 4 38.2	46.972	47.963	0.2	23.0	8 29	23 16.23	+ 1 51.7	4.347	5.325	3.0	19.8
9 8	23 11.13	- 4 42.2	46.956	47.963	0.0	23.0	9 8	23 11.65	+ 1 22.5	4.320	5.321	1.4	19.7
9 18	23 10.47	- 4 46.2	46.970	47.964	0.2	23.0	9 18	23 7.02	+ 0 50.3	4.323	5.317	1.8	19.7
9 28	23 9.83	- 4 50.2	47.013	47.964	0.4	23.0	9 28	23 2.66	+ 0 17.3	4.356	5.313	3.5	19.9
10 8	23 9.23	- 4 53.9	47.084	47.965	0.6	23.1	10 8	22 58.89	- 0 14.4	4.417	5.309	5.3	20.0
10 18	23 8.70	- 4 57.2	47.182	47.965	0.7	23.1	10 18	22 55.96	- 0 42.7	4.505	5.305	7.0	20.1
50138	2000 <i>AY</i> ₁₂₈		9 9.2 210°43	1°1/ 10.2	18	R	316251	2010 <i>OV</</i>					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
346536	2008 <i>UO</i> ₂₆₀		9 9.2 24 ^o .06	1 ^o / 8.4	18		173495	2000 <i>SW</i> ₂₇₂		9 9.2 22 ^o .59	4 ^o /12.1	17	
8 9	23 31.23	- 4 36.0	1.392	2.297	14.7	21.0	8 9	23 29.29	+ 5 14.2	0.916	1.818	20.6	19.3
8 19	23 26.63	- 5 27.3	1.341	2.302	10.3	20.8	8 19	23 25.88	+ 4 57.7	0.875	1.827	15.6	19.1
8 29	23 19.94	- 6 31.0	1.312	2.308	5.5	20.5	8 29	23 19.75	+ 4 10.9	0.852	1.838	9.9	18.8
9 8	23 12.08	- 7 39.5	1.307	2.314	1.0	20.3	9 8	23 12.09	+ 2 59.8	0.848	1.850	4.8	18.6
9 18	23 4.14	- 8 44.3	1.328	2.321	5.1	20.6	9 18	23 4.41	+ 1 35.0	0.866	1.864	5.5	18.7
9 28	22 57.32	- 9 37.6	1.374	2.328	9.8	20.9	9 28	22 58.27	+ 0 9.9	0.906	1.879	10.6	19.0
10 8	22 52.53	-10 13.9	1.442	2.335	14.0	21.1	10 8	22 54.81	- 1 3.4	0.966	1.895	15.6	19.4
10 18	22 50.31	-10 30.9	1.530	2.344	17.5	21.4	10 18	22 54.54	- 1 57.4	1.044	1.912	19.9	19.7
287127	2002 <i>RZ</i> ₁₈₄		9 9.2 313 ^o .76	6 ^o /14.3	18		260271	2004 <i>SK</i> ₅₅		9 9.2 56 ^o .97	0 ^o / 8.7	18	
8 9	23 29.65	+11 5.3	1.586	2.431	16.4	19.8	8 9	23 37.91	- 7 22.4	1.889	2.777	12.3	19.9
8 19	23 25.78	+11 9.3	1.485	2.397	13.3	19.5	8 19	23 30.76	- 7 17.1	1.844	2.796	8.6	19.8
8 29	23 19.71	+10 47.8	1.403	2.364	9.8	19.2	8 29	23 21.95	- 7 16.6	1.823	2.816	4.6	19.6
9 8	23 12.09	+10 0.3	1.345	2.330	6.7	19.0	9 8	23 12.33	- 7 17.5	1.830	2.837	0.8	19.3
9 18	23 3.84	+ 8 49.8	1.311	2.298	6.3	18.9	9 18	23 2.82	- 7 16.1	1.865	2.857	3.9	19.6
9 28	22 56.19	+ 7 23.2	1.302	2.265	9.2	19.0	9 28	22 54.38	- 7 9.6	1.928	2.877	7.8	19.9
10 8	22 50.29	+ 5 50.7	1.316	2.233	13.3	19.1	10 8	22 47.75	- 6 55.9	2.017	2.898	11.2	20.1
10 18	22 46.97	+ 4 22.5	1.352	2.202	17.3	19.3	10 18	22 43.35	- 6 34.0	2.127	2.919	14.0	20.4
486561	2013 <i>HR</i> ₇₈		9 9.2 321 ^o .10	3 ^o /13.4	17		514796	2007 <i>PY</i> ₄₂		9 9.2 358 ^o .11	4 ^o /11.3	18	
8 9	23 28.95	+ 8 26.9	1.968	2.814	13.6	21.5	8 9	23 37.23	+ 0 46.0	1.095	1.991	18.5	19.4
8 19	23 24.70	+ 8 7.5	1.889	2.806	10.6	21.3	8 19	23 31.53	+ 2 15.2	1.036	1.984	14.1	19.2
8 29	23 18.83	+ 7 28.5	1.831	2.799	7.3	21.1	8 29	23 22.91	+ 3 30.9	0.996	1.980	9.2	18.9
9 8	23 11.97	+ 6 32.1	1.799	2.792	4.4	20.9	9 8	23 12.47	+ 4 31.4	0.978	1.977	5.2	18.7
9 18	23 4.90	+ 5 22.9	1.794	2.785	4.3	20.9	9 18	23 1.70	+ 5 16.2	0.984	1.977	6.3	18.7
9 28	22 58.51	+ 4 7.4	1.815	2.778	7.1	21.0	9 28	22 52.31	+ 5 48.3	1.013	1.978	10.9	19.0
10 8	22 53.56	+ 2 53.0	1.863	2.771	10.5	21.2	10 8	22 45.66	+ 6 12.8	1.062	1.981	15.5	19.3
10 18	22 50.59	+ 1 45.9	1.934	2.765	13.6	21.4	10 18	22 42.47	+ 6 35.3	1.131	1.986	19.6	19.5
160227	2002 <i>GK</i> ₁₀₇		9 9.2 152 ^o .40	4 ^o / 3.5	18		304227	2006 <i>QD</i> ₁₆₈		9 9.2 312 ^o .89	3 ^o / 6.1	18	
8 9	23 31.06	-18 12.3	2.762	3.659	8.5	21.6	8 9	23 29.07	- 9 2.0	1.623	2.534	12.6	20.4
8 19	23 25.72	-19 21.5	2.714	3.667	6.2	21.5	8 19	23 25.15	-10 23.4	1.546	2.511	8.9	20.1
8 29	23 19.18	-20 28.6	2.694	3.675	4.4	21.4	8 29	23 19.25	-11 55.1	1.493	2.489	4.9	19.9
9 8	23 12.00	-21 28.3	2.702	3.682	4.3	21.4	9 8	23 12.06	-13 28.7	1.465	2.467	3.2	19.7
9 18	23 4.78	-22 16.2	2.739	3.688	5.9	21.5	9 18	23 4.52	-14 54.8	1.464	2.446	6.5	19.9
9 28	22 58.17	-22 49.1	2.804	3.694	8.2	21.6	9 28	22 57.73	-16 4.7	1.488	2.425	10.8	20.1
10 8	22 52.74	-23 5.9	2.893	3.700	10.3	21.8	10 8	22 52.67	-16 52.8	1.535	2.404	14.8	20.3
10 18	22 48.86	-23 6.9	3.003	3.705	12.2	22.0	10 18	22 50.01	-17 16.9	1.601	2.384	18.1	20.4
229418	2005 <i>TY</i> ₁₀		9 9.2 306 ^o .23	0 ^o / 9.7	18		140138	2001 <i>SE</i> ₁₅₂		9 9.2 86 ^o .90	3 ^o /12.6	18	
8 9	23 32.93	- 1 57.6	1.401	2.297	15.2	21.0	8 9	23 30.15	+ 6 54.0	1.987	2.837	13.3	19.2
8 19	23 28.16	- 2 18.2	1.321	2.276	11.1	20.7	8 19	23 25.42	+ 6 18.0	1.922	2.846	10.2	19.0
8 29	23 20.99	- 2 54.3	1.263	2.256	6.3	20.4	8 29	23 19.16	+ 5 23.6	1.881	2.854	6.6	18.9
9 8	23 12.24	- 3 41.2	1.229	2.236	1.1	20.0	9 8	23 12.03	+ 4 14.5	1.865	2.863	3.5	18.7
9 18	23 3.03	- 4 32.0	1.221	2.217	4.6	20.2	9 18	23 4.82	+ 2 56.1	1.877	2.871	3.7	18.7
9 28	22 54.71	- 5 18.8	1.237	2.198	9.9	20.4	9 28	22 58.38	+ 1 35.5	1.917	2.879	6.8	18.9
10 8	22 48.46	- 5 54.5	1.276	2.179	14.7	20.6	10 8	22 53.41	+ 0 19.7	1.983	2.887	10.2	19.1
10 18	22 45.04	- 6 14.5	1.334	2.161	18.8	20.9	10 18	22 50.38	- 0 45.9	2.073	2.896	13.2	19.4
380755	2005 <i>SG</i> ₂₀₀		9 9.2 221 ^o .20	1 ^o / 8.4	16		224084	2005 <i>NM</i> ₈₃		9 9.2 36 ^o .84	1 ^o /10.5	17	
8 9	23 34.78	- 5 31.3	1.821	2.711	12.5	21.9	8 9	23 32.56	+ 1 21.3	1.392	2.280	15.8	20.9
8 19	23 28.90	- 6 11.3	1.750	2.705	8.9	21.7	8 19	23 27.64	+ 0 46.0	1.334	2.283	11.6	20.6
8 29	23 21.14	- 7 0.6	1.704	2.698	4.7	21.4	8 29	23 20.55	- 0 8.1	1.297	2.286	6.8	20.4
9 8	23 12.24	- 7 53.6	1.684	2.691	1.0	21.1	9 8	23 12.19	- 1 15.6	1.284	2.290	2.0	20.1
9 18	23 3.13	- 8 44.2	1.692	2.683	4.5	21.4	9 18	23 3.70	- 2 28.6	1.297	2.294	4.2	20.2
9 28	22 54.86	- 9 26.4	1.727	2.675	8.7	21.6	9 28	22 56.31	- 3 37.9	1.335	2.298	9.1	20.5
10 8	22 48.31	- 9 55.6	1.787	2.666	12.5	21.8	10 8	22 50.99	- 4 35.8	1.397	2.302	13.5	20.8
10 18	22 44.04	-10 9.7	1.868	2.657	15.7	22.0	10 18	22 48.32	- 5 17.3	1.479	2.307	17.3	21.1
4248	Ranald		9 9.2 294 ^o .76	3 ^o /11.5	18		471246	2011 <i>BC</i> ₆₁		9 9.2 183 ^o .19	3 ^o /12.3	18	
8 9	23 35.38	+ 3 5.0	1.383	2.261	16.5	17.5	8 9	23 36.42	+ 5 41.0	1.725	2.579	14.9	21.5
8 19	23 29.88	+ 3 14.7	1.309	2.249	12.5	17.2	8 19	23 30.15	+ 5 48.9	1.654	2.579	11.4	21.3
8 29	23 21.92	+ 3 5.7	1.255	2.238	8.0	16.9	8 29	23 21.86	+ 5 38.9	1.606	2.579	7.6	21.0
9 8	23 12.35	+ 2 40.1	1.225	2.226	3.8	16.6	9 8	23 12.35	+ 5 13.0	1.583	2.579	4.3	20.8
9 18	23 2.37	+ 2 2.5	1.220	2.215	4.9	16.7	9 18	23 2.63	+ 4 34.8	1.587	2.579	4.6	20.9
9 28	22 53.39	+ 1 20.2	1.240	2.204	9.5	16.9	9 28	22 53.82	+ 3 50.6	1.618	2.578	8.1	21.1
10 8	22 46.59	+ 0 40.9	1.283	2.193	14.1	17.1	10 8	22 46.86	+ 3 6.9	1.674	2.576	11.9	21.3
10 18	22 42.71	+ 0 10.9	1.346	2.182	18.2	17.4	10 18	22 42.35	+ 2 29.4	1.752	2.575	15.2	21.5
342185	2008 <i>SD</i> ₁₉₅		9 9.2 46 ^o .16	1 ^o /10.7	17		432653	2010 <i>XR</i> ₅₄		9 9.2 288 ^o .60	0 ^o /3/ 9.4	17	
8 9	23 31.47	+ 1 58.9	1.511	2.393	15.1	20.5	8 9	23 34.38	- 2 30.1	1.380	2.276	15.4	21.7
8 19	23 26.69	+ 1 21.0	1.455	2.401	11.0	20.3	8 19	23 29.20	- 2 57.1	1.304	2.259	11.1	21.4
8 29	23 19.95	+ 0 24.9	1.421	2.409	6.5	20.1	8 29	23 21.57	- 3 39.5	1.250	2.243	6.2	21.1
9 8	23 12.11	- 0 43.9	1.412	2.417	2.1	19.8	9 8	23 12.33	- 4 31.9	1.220	2.227	0.8	20.7
9 18	23 4.19	- 1 57.9	1.429	2.426	4.0	20.0	9 18	23 2.68	- 5 26.9	1.215	2.211	4.8	21.0
9 28	22 57.29	- 3 8.7	1.473	2.435	8.5	20.3	9 28	22 53.98	- 6 16.2	1.236	2.195	10.1	21.2
10 8	22 52.30	- 4 9.0	1.540	2.444	12.6	20.5	10 8	22 47.43	- 6 52.8	1.279	2.179	15.0	21.5
10 18	22 49.74	- 4 54.0	1.628	2.453	16.1	20.8	10 18	22 43.78	- 7 12.5	1.341	2.1		

EPHEMERIDES

9 9.2

9 9.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
152514	2005 YJ ₁₃₇		9 9.2 59°81	0.7/ 8.5	18		208599	2002 CS ₁₆₀		9 9.2 151°42	4.6/ 5.6	18	
8 9	23 31.43	- 5 22.6	2.055	2.945	11.3	20.2	8 9	23 37.67	-13 50.9	1.468	2.376	13.9	20.1
8 19	23 26.20	- 5 56.4	2.005	2.960	7.9	20.0	8 19	23 31.19	-14 55.9	1.419	2.380	9.9	19.9
8 29	23 19.52	- 6 37.4	1.980	2.974	4.2	19.8	8 29	23 22.45	-16 2.4	1.393	2.385	6.0	19.7
9 8	23 12.08	- 7 20.9	1.982	2.989	0.7	19.6	9 8	23 12.45	-17 1.4	1.393	2.389	4.8	19.6
9 18	23 4.65	- 8 1.9	2.012	3.004	3.7	19.9	9 18	23 2.41	-17 44.7	1.418	2.392	7.7	19.8
9 28	22 58.03	- 8 35.9	2.070	3.019	7.4	20.1	9 28	22 53.62	-18 7.1	1.469	2.395	11.7	20.0
10 8	22 52.88	- 8 59.3	2.153	3.034	10.6	20.3	10 8	22 47.07	-18 6.9	1.542	2.398	15.4	20.3
10 18	22 49.63	- 9 10.5	2.258	3.049	13.2	20.6	10 18	22 43.31	-17 45.6	1.634	2.401	18.5	20.5
274906	2009 SR ₁₁₁		9 9.2 206°73	3.3/12.3	18		18966	2000 QO ₁₄₅		9 9.2 66°47	3.4/ 7.0	18	
8 9	23 33.41	+ 5 58.7	1.678	2.537	15.0	20.4	8 9	23 39.43	-10 27.7	1.160	2.073	16.4	18.6
8 19	23 28.07	+ 5 39.4	1.606	2.535	11.5	20.2	8 19	23 32.47	-11 14.7	1.132	2.096	11.4	18.4
8 29	23 20.75	+ 4 59.9	1.557	2.533	7.5	19.9	8 29	23 23.07	-12 5.9	1.124	2.120	6.2	18.2
9 8	23 12.24	+ 4 3.2	1.532	2.530	3.9	19.7	9 8	23 12.51	-12 51.9	1.140	2.144	3.4	18.1
9 18	23 3.51	+ 2 54.9	1.534	2.527	4.3	19.7	9 18	23 2.26	-13 24.9	1.182	2.167	7.0	18.4
9 28	22 55.66	+ 1 42.7	1.562	2.524	8.1	19.9	9 28	22 53.74	-13 39.5	1.247	2.191	11.7	18.7
10 8	22 49.60	+ 0 34.5	1.616	2.521	12.0	20.2	10 8	22 47.89	-13 34.2	1.334	2.215	15.8	19.0
10 18	22 45.94	- 0 23.2	1.691	2.518	15.5	20.4	10 18	22 45.12	-13 10.3	1.439	2.238	19.1	19.3
479734	2014 DN ₁₄₀		9 9.2 125°73	1.1/ 8.3	18		294549	2007 YM ₁₈		9 9.2 72°59	5.6/13.8	17	
8 9	23 35.54	- 7 11.8	1.982	2.871	11.7	21.1	8 9	23 35.24	+ 9 41.4	1.340	2.194	18.3	20.3
8 19	23 29.19	- 7 33.6	1.925	2.879	8.2	20.9	8 19	23 29.56	+ 9 44.3	1.288	2.208	14.4	20.1
8 29	23 21.18	- 8 1.1	1.892	2.886	4.4	20.7	8 29	23 21.61	+ 9 20.5	1.256	2.223	10.1	19.9
9 8	23 12.28	- 8 29.7	1.887	2.893	1.1	20.4	9 8	23 12.36	+ 8 32.3	1.247	2.237	6.4	19.7
9 18	23 3.34	- 8 55.0	1.910	2.900	4.1	20.7	9 18	23 3.07	+ 7 25.8	1.262	2.251	6.0	19.7
9 28	22 55.29	- 9 12.7	1.961	2.907	7.9	20.9	9 28	22 55.05	+ 6 10.2	1.302	2.266	9.2	20.0
10 8	22 48.88	- 9 20.0	2.037	2.913	11.3	21.2	10 8	22 49.28	+ 4 55.7	1.366	2.280	13.1	20.2
10 18	22 44.59	- 9 15.5	2.135	2.919	14.1	21.4	10 18	22 46.33	+ 3 50.4	1.451	2.294	16.7	20.5
451373	2011 AS ₃₄		9 9.2 256°54	6.3/16.9	18		255224	2005 UD ₃₉₉		9 9.3 219°86	4.4/ 4.4	18	
8 9	23 31.43	+17 54.6	2.634	3.402	12.7	20.9	8 9	23 33.39	-18 16.7	2.329	3.228	9.8	20.5
8 19	23 26.25	+18 17.1	2.538	3.389	10.7	20.7	8 19	23 27.60	-19 3.9	2.270	3.224	7.2	20.3
8 29	23 19.64	+18 21.2	2.464	3.375	8.7	20.6	8 29	23 20.33	-19 48.7	2.237	3.220	4.9	20.2
9 8	23 12.12	+18 6.1	2.415	3.361	7.0	20.5	9 8	23 12.22	-20 25.4	2.232	3.217	4.6	20.2
9 18	23 4.34	+17 33.0	2.392	3.347	6.3	20.4	9 18	23 4.05	-20 49.6	2.255	3.213	6.5	20.3
9 28	22 57.03	+16 45.2	2.397	3.333	7.3	20.4	9 28	22 56.61	-20 58.2	2.305	3.209	9.1	20.5
10 8	22 50.88	+15 47.7	2.428	3.318	9.2	20.5	10 8	22 50.59	-20 50.2	2.378	3.204	11.7	20.6
10 18	22 46.39	+14 46.4	2.483	3.303	11.3	20.7	10 18	22 46.45	-20 26.3	2.473	3.200	13.9	20.8
5906	1989 SN ₅		9 9.2 313°26	2.3/10.9	18		141391	2002 AA ₁₀₆		9 9.3 313°87	1.4/ 7.8	18	
8 9	23 30.67	+ 2 3.3	1.186	2.082	17.3	17.4	8 9	23 31.35	- 7 18.8	2.016	2.911	11.3	20.0
8 19	23 26.95	+ 1 43.2	1.104	2.056	13.0	17.0	8 19	23 26.31	- 8 0.5	1.951	2.908	7.9	19.8
8 29	23 20.55	+ 0 59.3	1.040	2.030	8.0	16.7	8 29	23 19.69	- 8 48.8	1.911	2.906	4.2	19.6
9 8	23 12.26	- 0 4.8	0.999	2.004	2.9	16.3	9 8	23 12.15	- 9 38.7	1.898	2.903	1.4	19.4
9 18	23 3.31	- 1 21.5	0.982	1.979	5.0	16.4	9 18	23 4.50	-10 24.4	1.912	2.901	4.4	19.6
9 28	22 55.26	- 2 39.8	0.987	1.955	10.7	16.6	9 28	22 57.59	-11 1.0	1.954	2.899	8.1	19.8
10 8	22 49.50	- 3 48.7	1.014	1.932	16.2	16.8	10 8	22 52.16	-11 25.0	2.021	2.897	11.4	20.0
10 18	22 46.97	- 4 39.8	1.059	1.909	21.0	17.1	10 18	22 48.71	-11 34.5	2.110	2.894	14.3	20.2
261613	2005 XA ₁₁₅		9 9.2 358°46	7.5/17.2	18		80592	2000 AM ₁₄₃		9 9.3 215°76	3.0/11.9	18	
8 9	23 31.77	+17 49.3	2.082	2.867	15.1	20.0	8 9	23 33.84	+ 4 57.7	1.676	2.538	14.9	19.8
8 19	23 26.71	+18 23.0	2.006	2.866	12.7	19.9	8 19	23 28.40	+ 4 38.0	1.603	2.535	11.3	19.5
8 29	23 19.95	+18 34.2	1.949	2.866	10.3	19.7	8 29	23 20.96	+ 3 58.9	1.552	2.531	7.2	19.3
9 8	23 12.16	+18 22.0	1.916	2.866	8.3	19.6	9 8	23 12.31	+ 3 3.6	1.526	2.527	3.5	19.1
9 18	23 4.14	+17 47.9	1.908	2.866	7.5	19.5	9 18	23 3.42	+ 1 57.8	1.528	2.522	4.2	19.1
9 28	22 56.82	+16 56.2	1.926	2.866	8.5	19.6	9 28	22 55.39	+ 0 49.0	1.556	2.518	8.1	19.3
10 8	22 50.98	+15 53.7	1.969	2.866	10.6	19.7	10 8	22 49.18	- 0 15.0	1.609	2.513	12.1	19.6
10 18	22 47.19	+14 47.5	2.035	2.867	13.0	19.9	10 18	22 45.38	- 1 8.3	1.683	2.507	15.7	19.8
111893	2002 FW ₂		9 9.2 104°70	2.9/ 7.2	18		129525	1996 AG ₁₁		9 9.3 77°62	2.8/11.3	18	
8 9	23 38.28	-10 12.1	1.394	2.299	14.7	19.7	8 9	23 35.58	+ 3 2.3	1.298	2.179	17.1	19.8
8 19	23 31.63	-10 50.4	1.346	2.307	10.3	19.4	8 19	23 29.99	+ 2 52.2	1.237	2.180	12.8	19.5
8 29	23 22.68	-11 33.6	1.320	2.315	5.6	19.2	8 29	23 21.94	+ 2 21.2	1.196	2.181	7.9	19.2
9 8	23 12.46	-12 14.0	1.319	2.322	2.9	19.0	9 8	23 12.42	+ 1 33.2	1.180	2.182	3.4	19.0
9 18	23 2.25	-12 44.7	1.344	2.329	6.3	19.3	9 18	23 2.69	+ 0 35.0	1.188	2.184	4.7	19.1
9 28	22 53.36	-13 0.2	1.394	2.337	10.8	19.5	9 28	22 54.16	- 0 24.5	1.221	2.185	9.6	19.4
10 8	22 46.80	-12 58.0	1.467	2.344	14.9	19.8	10 8	22 47.94	- 1 16.7	1.276	2.186	14.2	19.6
10 18	22 43.09	-12 38.4	1.559	2.350	18.2	20.1	10 18	22 44.68	- 1 55.7	1.352	2.187	18.2	19.9
522890	2016 OQ ₈		9 9.2 13°95	5.5/ 4.2	18		311967	2007 EB		9 9.3 191°49	3.4/14.2	18	
8 9	23 32.76	-16 10.7	1.513	2.428	13.1	20.7	8 9	23 30.60	+10 31.2	3.205	4.011	9.8	21.7
8 19	23 27.69	-17 27.8	1.466	2.429	9.4	20.5	8 19	23 25.35	+10 22.2	3.118	4.009	7.8	21.5
8 29	23 20.54	-18 44.4	1.442	2.431	6.3	20.3	8 29	23 19.03	+10 0.3	3.056	4.007	5.6	21.4
9 8	23 12.23	-19 50.9	1.443	2.433	5.8	20.3	9 8	23 12.09	+ 9 26.6	3.022	4.003	3.8	21.3
9 18	23 3.86	-20 39.4	1.470	2.435	8.5	20.5	9 18	23 5.02	+ 8 43.4	3.017	3.999	3.5	21.2
9 28	22 56.59	-21 4.6	1.521	2.438	12.1	20.7	9 28	22 58.39	+ 7 54.1	3.042	3.995	5.1	21.3
10 8	22 51.35	-21 5.2	1.593	2.440	15.4	20.9	10 8	22 52.69	+ 7 2.7	3.096	3.990	7.3	21.5
10 18	22 48.66	-20 42.8	1.684	2.444	18.3	21.1	10 18	22 48.32	+ 6 13.1	3.175	3.984	9.4	21.6
388045	2005 SF ₂₁₈		9 9.2 324°54	1.4/ 8.1	18		12966	1102 T-3		9 9.3 197°04	4.4/15.2	18	
8 9	23 29.11	- 4 39.2											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
188516	2004 <i>RV</i> ₅₄		9 9.3 275°41	0°7/ 8.4	18		78416	2002 <i>QU</i> ₃₅		9 9.3 29°46	3°1/ 7.3	17	
8 9	23 28.93	- 3 58.3	2.193	3.081	10.8	19.9	8 9	23 35.56	-10 4.8	1.126	2.044	16.3	18.6
8 19	23 24.55	- 5 0.8	2.120	3.074	7.6	19.7	8 19	23 30.02	-10 39.2	1.085	2.052	11.4	18.3
8 29	23 18.73	- 6 13.3	2.074	3.068	4.0	19.5	8 29	23 21.92	-11 19.3	1.064	2.061	6.2	18.1
9 8	23 12.06	- 7 30.5	2.054	3.061	0.7	19.2	9 8	23 12.43	-11 56.6	1.067	2.071	3.1	17.9
9 18	23 5.23	- 8 46.2	2.064	3.055	3.8	19.5	9 18	23 3.00	-12 23.1	1.093	2.081	6.9	18.2
9 28	22 59.02	- 9 54.4	2.101	3.048	7.4	19.7	9 28	22 55.10	-12 32.8	1.143	2.093	11.8	18.5
10 8	22 54.11	-10 50.2	2.164	3.042	10.7	19.9	10 8	22 49.79	-12 23.3	1.213	2.105	16.2	18.8
10 18	22 50.98	-11 30.8	2.250	3.035	13.5	20.1	10 18	22 47.58	-11 55.2	1.301	2.117	19.8	19.1
46623	1994 <i>GV</i> ₁₀		9 9.3 157°96	5°9/ 4.0	18 R		305128	2007 <i>VU</i> ₁₄₁		9 9.3 286°77	0°4/ 9.7	18	
8 9	23 38.22	-18 57.0	1.728	2.631	12.4	18.9	8 9	23 31.26	- 1 26.7	1.830	2.715	12.8	21.4
8 19	23 31.34	-20 6.1	1.682	2.637	9.2	18.7	8 19	23 26.47	- 2 4.5	1.755	2.704	9.2	21.2
8 29	23 22.45	-21 11.3	1.660	2.642	6.5	18.6	8 29	23 19.89	- 2 55.6	1.702	2.694	5.2	20.9
9 8	23 12.47	-22 4.0	1.665	2.647	6.2	18.6	9 8	23 12.21	- 3 55.1	1.676	2.683	0.8	20.6
9 18	23 2.49	-22 37.7	1.697	2.651	8.5	18.7	9 18	23 4.31	- 4 57.1	1.678	2.673	3.8	20.8
9 28	22 53.65	-22 48.8	1.754	2.655	11.6	19.0	9 28	22 57.14	- 5 54.7	1.706	2.663	8.0	21.1
10 8	22 46.83	-22 37.2	1.833	2.658	14.7	19.2	10 8	22 51.56	- 6 42.2	1.759	2.652	11.9	21.3
10 18	22 42.56	-22 5.1	1.931	2.661	17.2	19.4	10 18	22 48.14	- 7 15.8	1.834	2.642	15.2	21.5
369844	2012 <i>JO</i> ₃₈		9 9.3 212°74	0°2/ 9.1	17		42597	1997 <i>SR</i> ₅		9 9.3 349°37	0°3/ 9.1	18	
8 9	23 34.77	- 2 21.4	1.761	2.644	13.2	21.8	8 9	23 36.21	- 4 27.6	1.182	2.087	16.7	18.5
8 19	23 29.00	- 3 14.3	1.688	2.638	9.5	21.6	8 19	23 30.61	- 4 43.2	1.124	2.085	11.9	18.2
8 29	23 21.28	- 4 20.7	1.639	2.631	5.2	21.3	8 29	23 22.36	- 5 11.9	1.088	2.083	6.5	17.9
9 8	23 12.35	- 5 34.8	1.616	2.624	0.5	20.9	9 8	23 12.50	- 5 47.5	1.074	2.081	0.7	17.5
9 18	23 3.19	- 6 49.4	1.622	2.615	4.2	21.2	9 18	23 2.44	- 6 22.4	1.085	2.080	5.3	17.8
9 28	22 54.86	- 7 56.9	1.655	2.606	8.7	21.5	9 28	22 53.71	- 6 49.2	1.119	2.079	10.8	18.1
10 8	22 48.28	- 8 51.1	1.713	2.596	12.7	21.7	10 8	22 47.51	- 7 2.4	1.176	2.079	15.7	18.4
10 18	22 44.05	- 9 28.5	1.792	2.586	16.1	21.9	10 18	22 44.48	- 6 59.3	1.250	2.079	19.8	18.7
270286	2001 <i>VY</i> ₇₆		9 9.3 321°36	21°5/ 13.9	17		240667	2005 <i>EA</i> ₇₅		9 9.3 350°42	0°4/ 8.9	18	
8 9	23 38.34	-47 9.0	0.996	1.871	21.6	19.2	8 9	23 32.49	- 4 15.6	1.672	2.566	13.2	20.6
8 19	23 33.61	-50 22.4	0.988	1.863	21.6	19.2	8 19	23 27.38	- 4 47.3	1.609	2.564	9.4	20.4
8 29	23 24.49	-52 48.9	0.996	1.855	22.6	19.2	8 29	23 20.38	- 5 29.6	1.569	2.563	5.1	20.1
9 8	23 12.71	-54 13.0	1.019	1.847	24.1	19.3	9 8	23 12.27	- 6 17.1	1.555	2.562	0.6	19.8
9 18	23 0.87	-54 28.9	1.054	1.840	26.0	19.4	9 18	23 4.02	- 7 3.6	1.567	2.561	4.3	20.1
9 28	22 51.61	-53 40.2	1.100	1.834	27.8	19.6	9 28	22 56.68	- 7 42.9	1.606	2.560	8.7	20.4
10 8	22 46.58	-51 58.0	1.154	1.828	29.4	19.7	10 8	22 51.11	- 8 10.3	1.669	2.560	12.6	20.6
10 18	22 46.20	-49 34.3	1.215	1.823	30.8	19.8	10 18	22 47.87	- 8 23.2	1.753	2.559	15.9	20.8
311971	2007 <i>EF</i> ₃₉		9 9.3 150°27	3°3/ 13.1	18		90131	2002 <i>XB</i> ₈₅		9 9.3 250°19	0°3/ 9.0	18	
8 9	23 32.37	+ 7 25.4	2.558	3.390	11.3	20.5	8 9	23 35.88	- 4 20.2	1.659	2.548	13.6	19.8
8 19	23 26.76	+ 7 29.3	2.485	3.395	8.8	20.3	8 19	23 29.91	- 4 44.2	1.585	2.538	9.7	19.6
8 29	23 19.85	+ 7 19.8	2.436	3.400	6.0	20.2	8 29	23 21.83	- 5 18.9	1.535	2.528	5.3	19.3
9 8	23 12.18	+ 6 58.2	2.414	3.404	3.7	20.0	9 8	23 12.45	- 5 59.2	1.510	2.518	0.6	18.9
9 18	23 4.41	+ 6 27.1	2.421	3.409	3.7	20.0	9 18	23 2.78	- 6 39.3	1.513	2.507	4.4	19.2
9 28	22 57.23	+ 5 50.5	2.457	3.413	5.9	20.2	9 28	22 54.01	- 7 12.8	1.543	2.496	9.0	19.4
10 8	22 51.27	+ 5 12.6	2.519	3.417	8.6	20.4	10 8	22 47.12	- 7 35.2	1.596	2.485	13.2	19.7
10 18	22 46.94	+ 4 37.7	2.607	3.420	11.1	20.5	10 18	22 42.76	- 7 43.5	1.671	2.473	16.7	19.9
342342	2008 <i>TM</i> ₁₃₂		9 9.3 195°92	2°3/ 7.1	18		38609	2000 <i>AB</i> ₂₆		9 9.3 266°15	2°3/ 4.2	18	
8 9	23 36.84	-11 6.8	2.114	3.005	11.0	20.9	8 9	23 24.62	-16 58.9	4.513	5.409	5.5	19.6
8 19	23 30.13	-11 36.6	2.048	3.003	7.7	20.7	8 19	23 20.94	-17 39.0	4.447	5.401	4.0	19.5
8 29	23 21.75	-12 9.1	2.007	3.000	4.3	20.5	8 29	23 16.58	-18 18.3	4.409	5.393	2.7	19.4
9 8	23 12.40	-12 39.2	1.995	2.997	2.4	20.3	9 8	23 11.83	-18 54.2	4.399	5.385	2.5	19.3
9 18	23 2.94	-13 2.4	2.011	2.993	4.9	20.5	9 18	23 7.03	-19 24.5	4.420	5.377	3.6	19.4
9 28	22 54.30	-13 14.6	2.055	2.989	8.4	20.7	9 28	23 2.52	-19 47.2	4.468	5.369	5.1	19.5
10 8	22 47.25	-13 14.0	2.125	2.984	11.6	20.9	10 8	22 58.63	-20 1.2	4.543	5.361	6.7	19.6
10 18	22 42.30	-13 0.1	2.216	2.979	14.3	21.1	10 18	22 55.61	-20 5.8	4.641	5.353	8.0	19.7
57599	2001 <i>TK</i> ₉₆		9 9.3 327°86	1°5/ 10.4	18		92287	2000 <i>EX</i> ₁₄		9 9.3 232°80	0°2/ 8.9	17	
8 9	23 32.66	+ 0 24.7	1.429	2.318	15.4	19.0	8 9	23 28.59	- 4 51.6	3.355	4.231	7.8	19.7
8 19	23 27.80	+ 0 3.7	1.362	2.312	11.3	18.8	8 19	23 23.89	- 5 10.8	3.278	4.225	5.5	19.6
8 29	23 20.73	- 0 34.5	1.316	2.306	6.6	18.5	8 29	23 18.23	- 5 34.9	3.227	4.219	3.0	19.4
9 8	23 12.30	- 1 25.3	1.295	2.301	2.0	18.2	9 8	23 12.03	- 6 1.3	3.206	4.213	0.3	19.1
9 18	23 3.62	- 2 22.0	1.299	2.295	4.3	18.4	9 18	23 5.74	- 6 27.4	3.214	4.207	2.4	19.3
9 28	22 55.93	- 3 16.5	1.328	2.291	9.1	18.6	9 28	22 59.86	- 6 50.5	3.252	4.201	5.0	19.5
10 8	22 50.28	- 4 1.7	1.381	2.287	13.6	18.9	10 8	22 54.84	- 7 8.2	3.318	4.194	7.4	19.7
10 18	22 47.30	- 4 32.6	1.453	2.283	17.4	19.1	10 18	22 51.02	- 7 18.8	3.408	4.188	9.4	19.8
299667	2006 <i>PC</i> ₄₀		9 9.3 344°76	3°4/ 6.2	18		228163	2009 <i>SN</i> ₁₄₃		9 9.3 78°74	1°8/ 11.5	18	
8 9	23 22.78	- 7 51.5	1.082	2.015	15.4	18.5	8 9	23 29.21	+ 3 24.8	2.317	3.177	11.4	20.5
8 19	23 21.27	- 9 13.7	1.016	1.992	10.9	18.2	8 19	23 24.65	+ 2 53.2	2.247	3.179	8.4	20.4
8 29	23 17.37	-10 51.7	0.971	1.971	5.9	17.9	8 29	23 18.75	+ 2 8.1	2.201	3.182	5.2	20.2
9 8	23 11.92	-12 34.4	0.948	1.952	3.6	17.7	9 8	23 12.09	+ 1 12.9	2.183	3.185	2.2	20.0
9 18	23 6.11	-14 8.4	0.948	1.935	7.8	17.9	9 18	23 5.33	+ 0 12.1	2.192	3.187	3.0	20.0
9 28	23 1.33	-15 21.3	0.968	1.921	13.1	18.1	9 28	22 59.19	- 0 49.0	2.230	3.190	6.2	20.2
10 8	22 58.78	-16 5.1	1.009	1.909	18.0	18.4	10 8	22 54.29	- 1 45.3	2.295	3.193	9.3	20.4
10 18	22 59.17	-16 17.2	1.065	1.899	22.1	18.6	10 18	22 51.07	- 2 32.7	2.383	3.195	12.0	20.6
433270	2013 <i>AA</i> ₃₉		9 9.3 252°11	2°3/ 4.3	17		389569	2010 <i>VG</i> ₁₅₇					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
353967	1999 <i>XM</i> ₁₃₆		9 9.3 340°75	23°0/ 3.9	17		356197	2009 <i>OB</i> ₁		9 9.3 42°74	6°8/ 1.4	18	
8 9	23 45.54	+20 20.3	0.999	1.813	26.0	18.2	8 9	23 29.85	-18 50.9	1.617	2.534	12.2	19.3
8 19	23 39.76	+25 31.4	0.912	1.770	24.4	17.9	8 19	23 25.45	-21 5.8	1.597	2.558	9.0	19.2
8 29	23 29.06	+30 42.2	0.844	1.729	23.2	17.6	8 29	23 19.27	-23 14.4	1.602	2.581	7.0	19.1
9 8	23 13.50	+35 29.6	0.798	1.691	23.1	17.4	9 8	23 12.18	-25 5.8	1.634	2.605	7.4	19.2
9 18	22 54.23	+39 26.9	0.772	1.656	24.3	17.4	9 18	23 5.17	-26 31.7	1.691	2.630	9.7	19.4
9 28	22 34.02	+42 15.6	0.763	1.624	26.6	17.4	9 28	22 59.24	-27 27.8	1.772	2.655	12.5	19.6
10 8	22 16.40	+43 55.2	0.769	1.596	29.3	17.4	10 8	22 55.13	-27 54.0	1.874	2.680	15.1	19.8
10 18	22 4.36	+44 39.6	0.786	1.572	32.0	17.5	10 18	22 53.26	-27 53.3	1.994	2.706	17.2	20.1
280044	2002 <i>AT</i> ₅₄		9 9.3 133°04	0°8/10.1	17		65856	1997 <i>GX</i> ₁₁		9 9.3 339°27	5°1/14.4	18	
8 9	23 33.28	- 0 5.1	1.799	2.676	13.3	20.7	8 9	23 26.99	+11 7.5	1.424	2.280	17.4	18.7
8 19	23 27.80	- 0 43.7	1.738	2.683	9.6	20.5	8 19	23 23.86	+10 34.0	1.349	2.270	13.8	18.4
8 29	23 20.55	- 1 36.1	1.700	2.689	5.5	20.2	8 29	23 18.65	+ 9 30.1	1.293	2.260	9.8	18.2
9 8	23 12.31	- 2 37.4	1.689	2.695	1.3	20.0	9 8	23 12.14	+ 7 58.4	1.260	2.251	6.1	17.9
9 18	23 3.97	- 3 41.4	1.706	2.701	3.6	20.2	9 18	23 5.33	+ 6 5.9	1.251	2.243	5.5	17.9
9 28	22 56.53	+ 4 41.2	1.750	2.707	7.8	20.4	9 28	22 59.39	+ 4 3.9	1.267	2.236	8.8	18.1
10 8	22 50.77	- 5 31.1	1.819	2.712	11.6	20.7	10 8	22 55.34	+ 2 4.9	1.308	2.229	13.0	18.3
10 18	22 47.21	- 6 7.5	1.910	2.717	14.7	20.9	10 18	22 53.82	+ 0 19.5	1.369	2.224	16.9	18.5
206002	2002 <i>PJ</i> ₄₉		9 9.3 49°12	7°1/15.0	18		388614	2007 <i>SE</i> ₅		9 9.3 312°12	16°7/ 4.1	15	
8 9	23 36.77	+12 20.1	1.582	2.410	17.2	19.2	8 9	0 3.47	-38 51.0	1.013	1.885	21.6	19.9
8 19	23 30.46	+13 10.2	1.529	2.426	14.0	19.0	8 19	23 50.67	-39 24.2	0.973	1.882	18.9	19.7
8 29	23 22.06	+13 36.7	1.496	2.443	10.6	18.9	8 29	23 33.30	-39 19.3	0.951	1.880	17.0	19.6
9 8	23 12.48	+13 38.9	1.486	2.459	7.8	18.8	9 8	23 13.76	-38 21.0	0.949	1.877	16.8	19.6
9 18	23 2.83	+13 19.1	1.502	2.477	7.2	18.8	9 18	22 55.07	-36 25.1	0.968	1.875	18.5	19.6
9 28	22 54.29	+12 43.0	1.543	2.494	9.2	18.9	9 28	22 39.89	-33 40.4	1.008	1.873	21.2	19.8
10 8	22 47.80	+11 58.6	1.608	2.512	12.1	19.2	10 8	22 29.65	-30 23.5	1.067	1.871	24.2	20.0
10 18	22 43.92	+11 13.5	1.694	2.530	15.1	19.4	10 18	22 24.51	-26 50.8	1.142	1.869	26.9	20.3
357185	2002 <i>ET</i> ₁₀₉		9 9.3 84°60	1°4/ 7.8	18		444266	2005 <i>UD</i> ₂₉₆		9 9.3 296°48	1°2/ 8.1	17	
8 9	23 34.53	- 8 33.1	2.267	3.155	10.5	21.1	8 9	23 31.43	- 6 44.5	2.042	2.936	11.2	21.8
8 19	23 28.24	- 8 58.3	2.224	3.178	7.3	21.0	8 19	23 26.43	- 7 20.5	1.971	2.927	7.9	21.6
8 29	23 20.60	- 9 27.1	2.207	3.201	3.9	20.8	8 29	23 19.83	- 8 3.7	1.923	2.918	4.2	21.3
9 8	23 12.30	- 9 55.4	2.218	3.223	1.4	20.7	9 8	23 12.27	- 8 49.1	1.903	2.910	1.2	21.1
9 18	23 4.09	-10 19.1	2.258	3.245	3.9	20.9	9 18	23 4.53	- 9 31.6	1.911	2.901	4.2	21.3
9 28	22 56.73	-10 35.1	2.326	3.267	7.1	21.1	9 28	22 57.50	-10 6.1	1.946	2.893	7.9	21.5
10 8	22 50.81	-10 41.0	2.420	3.289	10.0	21.4	10 8	22 51.92	-10 28.9	2.006	2.884	11.4	21.7
10 18	22 46.73	-10 36.2	2.537	3.310	12.5	21.6	10 18	22 48.30	-10 38.1	2.088	2.876	14.3	21.9
320875	2008 <i>GC</i> ₁₃		9 9.3 152°70	2°4/ 7.0	17		336193	2008 <i>RO</i> ₁₃₈		9 9.3 322°25	0°4/ 8.9	16	
8 9	23 35.60	- 8 49.8	1.766	2.662	12.5	21.4	8 9	23 32.42	- 4 42.0	1.301	2.208	15.4	21.2
8 19	23 29.45	- 9 49.5	1.711	2.669	8.7	21.2	8 19	23 27.99	- 4 59.5	1.224	2.185	11.1	20.9
8 29	23 21.45	-10 55.4	1.681	2.676	4.7	21.0	8 29	23 21.05	- 5 29.8	1.168	2.164	6.1	20.6
9 8	23 12.41	-12 0.4	1.678	2.682	2.4	20.8	9 8	23 12.43	- 6 7.4	1.135	2.142	0.7	20.2
9 18	23 3.32	-12 57.3	1.703	2.687	5.5	21.0	9 18	23 3.33	- 6 45.4	1.127	2.122	5.2	20.4
9 28	22 55.20	-13 40.5	1.755	2.692	9.4	21.3	9 28	22 55.17	- 7 16.0	1.143	2.103	10.6	20.7
10 8	22 48.91	-14 6.6	1.831	2.697	12.9	21.5	10 8	22 49.19	- 7 33.1	1.180	2.084	15.6	20.9
10 18	22 44.94	-14 14.6	1.928	2.700	15.9	21.7	10 18	22 46.20	- 7 33.2	1.236	2.066	19.8	21.1
367976	2012 <i>EH</i> ₁₁		9 9.3 238°21	0°8/10.5	18		257702	1999 <i>XR</i> ₂₀		9 9.3 353°28	8°1/ 3.9	18	
8 9	23 28.68	+ 1 39.0	2.587	3.450	10.2	21.5	8 9	23 27.73	-17 28.7	0.840	1.784	17.3	18.6
8 19	23 24.23	+ 0 40.3	2.502	3.440	7.5	21.3	8 19	23 25.25	-18 38.9	0.796	1.773	12.8	18.3
8 29	23 18.54	- 0 31.1	2.444	3.429	4.3	21.1	8 29	23 19.68	-19 46.9	0.771	1.764	9.0	18.1
9 8	23 12.08	- 1 51.3	2.413	3.419	1.2	20.9	9 8	23 12.27	-20 38.4	0.765	1.757	8.5	18.0
9 18	23 5.47	- 3 15.2	2.412	3.408	2.8	21.0	9 18	23 4.65	-21 1.5	0.778	1.753	12.0	18.2
9 28	22 59.34	- 4 37.0	2.441	3.396	6.0	21.2	9 28	22 58.65	-20 49.6	0.810	1.751	16.7	18.4
10 8	22 54.31	- 5 51.5	2.498	3.385	9.1	21.3	10 8	22 55.57	-20 3.4	0.858	1.751	21.1	18.7
10 18	22 50.80	- 6 54.6	2.578	3.373	11.7	21.5	10 18	22 56.01	-18 47.5	0.921	1.754	24.9	19.0
374821	2006 <i>UJ</i> ₁₆₈		9 9.3 198°73	1°5/10.7	17		39647	1995 <i>SV</i> ₆		9 9.3 326°99	0°2/ 9.1	18	
8 9	23 32.93	+ 2 15.3	1.602	2.478	14.7	21.7	8 9	23 32.49	- 3 45.9	1.485	2.384	14.3	19.4
8 19	23 27.81	+ 1 26.8	1.534	2.477	10.8	21.5	8 19	23 27.66	- 4 13.4	1.418	2.375	10.3	19.1
8 29	23 20.67	+ 0 19.3	1.488	2.475	6.4	21.2	8 29	23 20.68	- 4 53.4	1.372	2.366	5.6	18.8
9 8	23 12.34	- 1 1.8	1.468	2.473	2.0	20.9	9 8	23 12.38	- 5 40.4	1.351	2.358	0.6	18.4
9 18	23 3.80	- 2 28.7	1.475	2.471	3.9	21.1	9 18	23 3.83	- 6 27.6	1.356	2.350	4.5	18.7
9 28	22 56.19	- 3 52.4	1.509	2.469	8.5	21.3	9 28	22 56.23	- 7 7.9	1.386	2.343	9.4	19.0
10 8	22 50.42	- 5 5.1	1.567	2.466	12.7	21.6	10 8	22 50.60	- 7 35.7	1.439	2.336	13.8	19.2
10 18	22 47.09	- 6 1.4	1.647	2.464	16.3	21.8	10 18	22 47.55	- 7 47.8	1.512	2.330	17.4	19.5
295380	2008 <i>HT</i> ₆₅		9 9.3 44°42	6°4/ 3.1	18		231664	2009 <i>YL</i> ₆		9 9.3 311°27	1°0/ 7.4	17	R
8 9	23 33.44	-21 45.4	1.818	2.725	11.7	19.7	8 9	23 25.35	- 9 13.3	4.090	4.978	6.2	20.2
8 19	23 27.81	-22 48.9	1.788	2.741	8.8	19.5	8 19	23 21.50	- 9 40.9	4.021	4.975	4.3	20.1
8 29	23 20.48	-23 45.1	1.783	2.759	6.7	19.5	8 29	23 16.92	-10 10.8	3.978	4.972	2.3	19.9
9 8	23 12.31	-24 26.8	1.803	2.776	6.7	19.5	9 8	23 11.93	-10 40.5	3.965	4.969	1.0	19.8
9 18	23 4.26	-24 48.9	1.849	2.794	8.7	19.7	9 18	23 6.89	-11 7.8	3.982	4.967	2.6	20.0
9 28	22 57.30	-24 49.1	1.920	2.812	11.3	19.9	9 28	23 2.17	-11 30.4	4.028	4.964	4.6	20.1
10 8	22 52.14	-24 28.1	2.013	2.830	13.8	20.1	10 8	22 58.13	-11 46.6	4.101	4.961	6.5	20.2
10 18	22 49.20	-23 48.2	2.124	2.849	16.0	20.3	10 18	22 55.04	-11 55.4	4.199	4.959	8.1	20.4
39768	1997 <i>GB</i> ₁₃		9 9.3 333°52	2°0/11.6	18		476121	2007 <i>TC</</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
327712	2006 SZ ₉₇		9 9.3 116°15	3°0/ 6.9	17		342027	2008 RV ₁₀₀		9 9.3 279°66	0°9/10.2	18	
8 9	23 37.92	-10 52.1	1.503	2.406	13.9	21.0	8 9	23 30.41	+ 1 40.1	1.657	2.538	14.1	20.8
8 19	23 31.32	-11 32.3	1.452	2.413	9.8	20.8	8 19	23 26.04	+ 0 35.8	1.584	2.531	10.3	20.6
8 29	23 22.55	-12 16.4	1.426	2.420	5.4	20.5	8 29	23 19.77	- 0 47.8	1.534	2.524	5.9	20.3
9 8	23 12.59	-12 57.2	1.424	2.427	3.1	20.4	9 8	23 12.34	- 2 24.4	1.510	2.516	1.4	20.0
9 18	23 2.62	-13 27.8	1.450	2.433	6.2	20.6	9 18	23 4.67	- 4 5.9	1.513	2.509	3.9	20.2
9 28	22 53.88	-13 43.4	1.501	2.440	10.5	20.9	9 28	22 57.81	- 5 42.7	1.543	2.502	8.5	20.4
10 8	22 47.31	-13 41.5	1.575	2.446	14.3	21.1	10 8	22 52.66	- 7 6.5	1.598	2.495	12.6	20.7
10 18	22 43.44	-13 22.6	1.668	2.452	17.5	21.4	10 18	22 49.81	- 8 11.8	1.674	2.488	16.2	20.9
155893	2001 FL ₁₀₀		9 9.3 107°80	4°0/14.3	18		378211	2007 AK ₉		9 9.3 245°00	0°3/ 9.0	17	
8 9	23 32.20	+10 32.0	2.601	3.416	11.6	20.6	8 9	23 35.73	- 4 6.5	1.753	2.640	13.1	22.0
8 19	23 26.62	+10 36.9	2.537	3.431	9.2	20.4	8 19	23 29.79	- 4 36.5	1.676	2.627	9.4	21.7
8 29	23 19.79	+10 26.6	2.496	3.446	6.7	20.3	8 29	23 21.83	- 5 17.3	1.622	2.615	5.1	21.5
9 8	23 12.27	+10 2.5	2.481	3.461	4.5	20.2	9 8	23 12.58	- 6 4.0	1.594	2.601	0.6	21.1
9 18	23 4.71	+ 9 27.1	2.495	3.476	4.2	20.2	9 18	23 3.04	- 6 50.5	1.594	2.588	4.3	21.4
9 28	22 57.77	+ 8 44.4	2.537	3.490	6.0	20.3	9 28	22 54.31	- 7 30.7	1.621	2.573	8.8	21.6
10 8	22 52.03	+ 7 59.1	2.607	3.505	8.3	20.5	10 8	22 47.36	- 7 59.6	1.673	2.559	12.8	21.8
10 18	22 47.91	+ 7 15.7	2.701	3.518	10.6	20.7	10 18	22 42.81	- 8 14.1	1.746	2.544	16.3	22.0
483630	2004 TE ₂₄₉		9 9.3 326°99	4°0/ 5.7	18		58699	1998 BK ₄₂		9 9.3 282°07	9°6/30.4	18	
8 9	23 33.41	-15 10.6	1.871	2.776	11.5	20.6	8 9	23 35.58	-27 7.9	1.608	2.512	13.1	18.7
8 19	23 27.98	-15 44.8	1.805	2.765	8.2	20.4	8 19	23 30.01	-28 52.2	1.553	2.495	10.8	18.5
8 29	23 20.72	-16 18.7	1.764	2.755	5.1	20.2	8 29	23 22.05	-30 26.8	1.522	2.477	9.6	18.4
9 8	23 12.40	-16 46.5	1.749	2.744	4.1	20.1	9 8	23 12.62	-31 40.3	1.514	2.460	10.3	18.4
9 18	23 3.93	-17 2.7	1.760	2.734	6.5	20.2	9 18	23 2.90	-32 24.1	1.530	2.442	12.6	18.5
9 28	22 56.30	-17 3.6	1.798	2.725	9.9	20.4	9 28	22 54.25	-32 34.1	1.569	2.424	15.4	18.6
10 8	22 50.35	-16 47.7	1.859	2.716	13.2	20.6	10 8	22 47.76	-32 11.1	1.626	2.406	18.1	18.8
10 18	22 46.64	-16 15.5	1.941	2.707	16.0	20.8	10 18	22 44.11	-31 19.3	1.699	2.389	20.6	19.0
63069	2000 WG ₁₂₅		9 9.3 9°73	0°5/ 8.8	18		296902	2010 CN ₁₃		9 9.3 121°62	5°0/14.7	17	
8 9	23 30.14	- 3 57.3	1.861	2.754	12.2	19.4	8 9	23 34.35	+11 43.0	2.142	2.957	13.8	21.0
8 19	23 25.58	- 4 41.8	1.799	2.755	8.6	19.2	8 19	23 28.40	+11 50.2	2.076	2.970	11.0	20.8
8 29	23 19.39	- 5 36.5	1.762	2.756	4.6	18.9	8 29	23 20.88	+11 38.5	2.033	2.982	8.1	20.7
9 8	23 12.25	- 6 36.1	1.750	2.757	0.6	18.6	9 8	23 12.47	+11 8.9	2.016	2.994	5.6	20.6
9 18	23 5.00	- 7 34.3	1.766	2.759	4.0	18.9	9 18	23 3.97	+10 24.5	2.026	3.006	5.2	20.6
9 28	22 58.55	- 8 25.1	1.809	2.761	8.0	19.2	9 28	22 56.26	+ 9 30.5	2.064	3.018	7.1	20.7
10 8	22 53.64	- 9 3.7	1.876	2.764	11.6	19.4	10 8	22 50.04	+ 8 33.2	2.129	3.029	9.8	20.9
10 18	22 50.77	- 9 27.5	1.965	2.766	14.6	19.6	10 18	22 45.80	+ 7 38.3	2.217	3.039	12.4	21.1
132675	2002 NG ₁₄		9 9.3 27°41	3°8/ 6.2	18		188621	2005 QZ ₃₂		9 9.3 321°90	0°1/ 9.3	18	
8 9	23 29.85	- 9 49.6	1.125	2.051	15.7	18.5	8 9	23 30.32	- 2 20.9	1.209	2.117	16.2	19.7
8 19	23 25.87	-11 8.9	1.098	2.070	10.8	18.3	8 19	23 26.64	- 2 56.7	1.133	2.095	11.8	19.4
8 29	23 19.64	-12 33.8	1.092	2.090	6.0	18.1	8 29	23 20.40	- 3 51.0	1.078	2.073	6.6	19.0
9 8	23 12.27	-13 53.1	1.109	2.111	3.9	18.0	9 8	23 12.45	- 4 57.8	1.046	2.053	0.8	18.6
9 18	23 5.06	-14 56.7	1.150	2.134	7.5	18.3	9 18	23 3.99	- 6 8.1	1.037	2.033	5.2	18.8
9 28	22 59.26	-15 37.6	1.214	2.158	11.9	18.6	9 28	22 56.49	- 7 11.3	1.052	2.015	10.9	19.1
10 8	22 55.75	-15 53.3	1.298	2.183	15.8	18.9	10 8	22 51.25	- 7 58.9	1.087	1.997	16.2	19.4
10 18	22 54.93	-15 45.0	1.400	2.208	19.1	19.2	10 18	22 49.06	- 8 25.6	1.141	1.980	20.6	19.6
216381	2008 BF ₄₁		9 9.3 272°54	0°7/ 8.6	18		171119	2005 GA ₃		9 9.3 270°26	0°8/ 8.5	18	
8 9	23 31.42	- 4 32.8	2.022	2.911	11.5	20.9	8 9	23 32.03	- 4 50.0	1.852	2.744	12.3	20.3
8 19	23 26.52	- 5 18.7	1.942	2.896	8.2	20.6	8 19	23 26.99	- 5 34.8	1.784	2.740	8.7	20.0
8 29	23 19.95	- 6 14.6	1.886	2.880	4.4	20.4	8 29	23 20.22	- 6 29.4	1.741	2.735	4.6	19.8
9 8	23 12.34	- 7 15.5	1.857	2.864	0.7	20.1	9 8	23 12.40	- 7 28.5	1.723	2.730	0.8	19.5
9 18	23 4.47	- 8 15.6	1.857	2.849	4.0	20.3	9 18	23 4.42	- 8 25.6	1.734	2.726	4.2	19.8
9 28	22 57.26	- 9 8.7	1.884	2.833	8.0	20.5	9 28	22 57.23	- 9 14.5	1.771	2.721	8.3	20.0
10 8	22 51.49	- 9 50.0	1.936	2.817	11.6	20.7	10 8	22 51.63	- 9 50.7	1.833	2.716	12.0	20.2
10 18	22 47.72	-10 16.6	2.010	2.800	14.7	20.9	10 18	22 48.18	-10 11.5	1.917	2.712	15.1	20.4
80873	2000 DS ₃₃		9 9.3 76°16	1°1/10.2	17		15279	1991 PY ₇		9 9.3 289°32	1°7/ 8.0	18	
8 9	23 35.23	+ 0 17.6	1.459	2.343	15.4	19.6	8 9	23 34.95	- 6 9.2	1.250	2.159	15.8	18.0
8 19	23 29.34	- 0 18.2	1.415	2.363	11.1	19.4	8 19	23 29.81	- 6 56.3	1.184	2.147	11.2	17.7
8 29	23 21.44	- 1 9.9	1.393	2.383	6.3	19.2	8 29	23 22.05	- 7 56.3	1.140	2.136	6.0	17.4
9 8	23 12.49	- 2 11.4	1.396	2.403	1.6	18.9	9 8	23 12.63	- 9 1.3	1.119	2.125	1.7	17.1
9 18	23 3.62	- 3 15.5	1.426	2.422	4.1	19.2	9 18	23 2.86	-10 1.9	1.123	2.114	6.0	17.3
9 28	22 55.95	- 4 14.1	1.482	2.442	8.7	19.5	9 28	22 54.23	-10 49.0	1.150	2.103	11.4	17.6
10 8	22 50.37	- 5 1.0	1.562	2.461	12.7	19.8	10 8	22 47.96	-11 16.6	1.200	2.093	16.3	17.9
10 18	22 47.34	- 5 32.8	1.663	2.481	16.1	20.0	10 18	22 44.78	-11 22.5	1.267	2.082	20.3	18.1
168725	2000 OH ₁₆		9 9.3 22°81	2°0/10.4	18		345979	2007 TQ ₁₃₅		9 9.3 292°92	2°4/ 7.1	18	
8 9	23 35.80	- 1 9.8	0.959	1.869	19.2	18.7	8 9	23 33.64	- 9 34.2	1.726	2.628	12.5	20.5
8 19	23 30.56	- 0 51.9	0.916	1.876	14.1	18.5	8 19	23 28.25	-10 17.2	1.661	2.621	8.8	20.3
8 29	23 22.42	- 0 52.1	0.892	1.884	8.2	18.2	8 29	23 20.94	-11 5.9	1.620	2.615	4.8	20.0
9 8	23 12.64	- 1 6.2	0.888	1.894	2.6	17.9	9 8	23 12.49	-11 54.0	1.604	2.608	2.5	19.9
9 18	23 2.84	- 1 27.5	0.907	1.905	5.2	18.1	9 18	23 3.86	-12 35.0	1.616	2.601	5.5	20.1
9 28	22 54.72	- 1 48.1	0.948	1.917	10.9	18.5	9 28	22 56.12	-13 3.4	1.654	2.595	9.5	20.3
10 8	22 49.47	- 2 0.8	1.010	1.930	16.0	18.8	10 8	22 50.15	-13 15.8	1.716	2.589	13.2	20.5
10 18	22 47.65	- 2 1.4	1.089	1.944	20.3	19.1	10 18	22 46.52	-13 11.3	1.797	2.582	16.4	20.7
331116	2010 TE ₁₁₆		9 9.3 176°43	10°8/ 1.1	18		402193	2004 TR ₁₈₅		9 9.3 289°65	0°9/ 8.4	18	
8 9	23 48.82	-34											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
182745	2001 XY ₁₀₄	9 9.3 182°85	0°7/ 8.4 18				149148	2002 EJ ₁₂₉	9 9.3 60°19	1°5/10.9 18			
8 9	23 31.24	- 5 20.7	2.398	3.282	10.1	20.9	8 9	23 31.50	+ 1 20.7	2.012	2.882	12.4	19.6
8 19	23 26.09	- 6 3.2	2.331	3.283	7.1	20.7	8 19	23 26.38	+ 0 57.5	1.958	2.898	9.1	19.4
8 29	23 19.60	- 6 52.8	2.289	3.283	3.8	20.5	8 29	23 19.78	+ 0 21.7	1.929	2.914	5.4	19.2
9 8	23 12.33	- 7 45.2	2.276	3.282	0.8	20.3	9 8	23 12.39	- 0 23.1	1.926	2.930	1.9	19.0
9 18	23 4.97	- 8 35.5	2.291	3.282	3.5	20.5	9 18	23 4.98	- 1 11.9	1.951	2.947	3.2	19.1
9 28	22 58.22	- 9 19.3	2.335	3.281	6.8	20.7	9 28	22 58.39	- 1 59.4	2.003	2.963	6.8	19.4
10 8	22 52.73	- 9 53.0	2.405	3.280	9.9	20.9	10 8	22 53.28	- 2 40.6	2.082	2.979	10.1	19.6
10 18	22 48.93	- 10 14.5	2.499	3.278	12.4	21.1	10 18	22 50.08	- 3 12.1	2.183	2.996	12.9	19.8
389421	2010 BP ₁₂₇	9 9.3 165°86	2°7/12.5 18				227375	2005 UA ₂₂₇	9 9.3 33°41	3°1/11.9 16			
8 9	23 31.46	+ 6 38.2	2.110	2.956	12.8	21.4	8 9	23 31.66	+ 4 48.8	1.299	2.179	17.2	20.2
8 19	23 26.41	+ 6 0.2	2.038	2.960	9.8	21.2	8 19	23 27.16	+ 4 24.1	1.246	2.188	12.9	19.9
8 29	23 19.84	+ 5 4.5	1.989	2.963	6.4	21.0	8 29	23 20.45	+ 3 36.0	1.214	2.196	8.2	19.7
9 8	23 12.37	+ 3 54.7	1.967	2.965	3.3	20.9	9 8	23 12.47	+ 2 29.6	1.204	2.206	3.8	19.5
9 18	23 4.78	+ 2 35.8	1.973	2.967	3.5	20.9	9 18	23 4.41	+ 1 12.6	1.219	2.216	4.5	19.6
9 28	22 57.89	+ 1 14.7	2.008	2.969	6.7	21.1	9 28	22 57.52	- 0 4.9	1.260	2.226	9.0	19.8
10 8	22 52.41	- 0 1.9	2.070	2.970	10.0	21.3	10 8	22 52.77	- 1 13.7	1.323	2.238	13.4	20.1
10 18	22 48.83	- 1 8.8	2.155	2.971	13.0	21.5	10 18	22 50.73	- 2 7.5	1.406	2.249	17.2	20.4
477495	2010 CH ₅₆	9 9.3 159°32	5°3/14.4 18 R				392200	2009 SE ₂₅₂	9 9.3 291°33	1°5/12.4 15			
8 9	23 36.07	+ 11 10.1	2.053	2.871	14.2	21.0	8 9	23 24.55	+ 4 33.4	4.305	5.144	6.9	21.5
8 19	23 29.76	+ 11 30.7	1.981	2.876	11.4	20.8	8 19	23 20.98	+ 4 17.8	4.219	5.138	5.2	21.4
8 29	23 21.70	+ 11 32.5	1.930	2.880	8.4	20.6	8 29	23 16.71	+ 3 54.7	4.160	5.132	3.4	21.3
9 8	23 12.59	+ 11 15.9	1.906	2.884	5.9	20.5	9 8	23 12.04	+ 3 25.7	4.129	5.126	1.8	21.2
9 18	23 3.31	+ 10 43.4	1.908	2.888	5.5	20.5	9 18	23 7.30	+ 2 52.5	4.128	5.120	2.0	21.2
9 28	22 54.81	+ 9 59.7	1.938	2.891	7.6	20.6	9 28	23 2.84	+ 2 17.4	4.156	5.114	3.6	21.3
10 8	22 47.09	+ 9 11.2	1.995	2.893	10.4	20.8	10 8	22 58.99	+ 1 43.0	4.213	5.108	5.5	21.4
10 18	22 43.89	+ 8 23.8	2.074	2.896	13.2	21.0	10 18	22 56.02	+ 1 11.5	4.296	5.103	7.2	21.5
158137	2001 FB ₇₁	9 9.3 143°32	0°7/ 8.3 18				322413	2011 SO ₈₃	9 9.3 326°63	0°2/ 9.5 18			
8 9	23 29.85	- 5 13.8	2.742	3.623	9.1	20.7	8 9	23 31.67	- 2 29.3	1.676	2.567	13.4	20.6
8 19	23 24.94	- 6 2.9	2.681	3.632	6.4	20.5	8 19	23 26.93	- 2 57.4	1.606	2.559	9.6	20.4
8 29	23 18.91	- 6 58.2	2.646	3.640	3.4	20.3	8 29	23 20.28	- 3 37.9	1.559	2.551	5.3	20.1
9 8	23 12.26	- 7 55.6	2.640	3.647	0.7	20.1	9 8	23 12.47	- 4 26.1	1.537	2.544	0.8	19.8
9 18	23 5.56	- 8 50.8	2.664	3.654	3.2	20.4	9 18	23 4.45	- 5 16.0	1.542	2.537	4.0	20.0
9 28	22 59.41	- 9 39.8	2.717	3.661	6.1	20.6	9 28	22 57.26	- 6 0.9	1.573	2.531	8.5	20.3
10 8	22 54.35	- 10 19.2	2.797	3.668	8.8	20.8	10 8	22 51.79	- 6 35.3	1.628	2.524	12.5	20.5
10 18	22 50.74	- 10 47.2	2.901	3.674	11.0	20.9	10 18	22 48.64	- 6 55.9	1.704	2.519	15.9	20.7
403904	2011 YJ ₃₆	9 9.3 175°53	3°6/ 4.6 18				479878	2014 HX ₃	9 9.3 159°95	2°3/12.1 18			
8 9	23 30.94	- 15 19.0	2.530	3.429	9.1	21.2	8 9	23 31.74	+ 5 10.2	2.249	3.099	12.0	22.0
8 19	23 25.84	- 16 24.4	2.474	3.430	6.5	21.0	8 19	23 26.53	+ 4 38.3	2.179	3.104	9.1	21.9
8 29	23 19.45	- 17 29.8	2.444	3.432	4.2	20.9	8 29	23 19.89	+ 3 51.3	2.132	3.108	5.8	21.7
9 8	23 12.33	- 18 29.8	2.443	3.432	3.7	20.9	9 8	23 12.42	+ 2 52.3	2.112	3.112	2.8	21.5
9 18	23 5.14	- 19 19.4	2.470	3.433	5.7	21.0	9 18	23 4.84	+ 1 45.9	2.121	3.116	3.2	21.5
9 28	22 58.56	- 19 55.0	2.525	3.433	8.2	21.2	9 28	22 57.93	+ 0 38.1	2.159	3.119	6.4	21.7
10 8	22 53.22	- 20 14.7	2.604	3.433	10.7	21.3	10 8	22 52.36	- 0 25.5	2.224	3.122	9.5	21.9
10 18	22 49.52	- 20 18.3	2.705	3.433	12.8	21.5	10 18	22 48.58	- 1 20.3	2.312	3.124	12.3	22.1
483591	2004 JZ ₃₁	9 9.3 82°03	4°1/12.5 17				284152	2005 XC ₄	9 9.3 124°47	8°2/19.5 18			
8 9	23 40.42	+ 8 18.4	0.992	1.865	21.8	21.9	8 9	23 39.90	+ 24 12.7	2.571	3.279	14.3	20.3
8 19	23 33.44	+ 7 21.3	0.962	1.898	16.4	21.7	8 19	23 32.23	+ 24 59.8	2.505	3.302	12.5	20.2
8 29	23 23.76	+ 5 51.7	0.951	1.931	10.4	21.5	8 29	23 22.97	+ 25 24.6	2.461	3.323	10.5	20.1
9 8	23 12.82	+ 3 58.4	0.962	1.963	5.0	21.3	9 8	23 12.79	+ 25 25.5	2.441	3.344	9.0	20.1
9 18	23 2.27	+ 1 55.3	0.998	1.994	5.4	21.4	9 18	23 2.49	+ 25 3.2	2.447	3.364	8.2	20.1
9 28	22 53.66	- 0 2.4	1.057	2.024	10.4	21.8	9 28	22 52.95	+ 24 21.1	2.481	3.383	8.6	20.1
10 8	22 48.01	- 1 42.5	1.139	2.053	15.2	22.2	10 8	22 44.90	+ 23 25.2	2.540	3.401	9.9	20.2
10 18	22 45.71	- 2 58.7	1.241	2.082	19.1	22.5	10 18	22 38.86	+ 22 22.0	2.624	3.418	11.5	20.4
327045	2004 SO ₄₇	9 9.3 300°87	6°6/ 2.8 18				514958	2009 BP ₄₇	9 9.3 223°38	2°6/ 6.4 18			
8 9	23 36.41	- 24 58.2	2.147	3.041	10.7	19.8	8 9	23 32.29	- 10 1.6	2.071	2.969	10.9	22.2
8 19	23 29.93	- 25 40.4	2.091	3.034	8.4	19.6	8 19	23 27.08	- 11 8.2	2.004	2.962	7.6	22.0
8 29	23 21.74	- 26 14.2	2.061	3.027	6.8	19.5	8 29	23 20.26	- 12 20.2	1.962	2.956	4.3	21.8
9 8	23 12.61	- 26 33.6	2.057	3.020	6.8	19.5	9 8	23 12.47	- 13 31.2	1.947	2.949	2.7	21.7
9 18	23 3.43	- 26 34.3	2.080	3.013	8.5	19.6	9 18	23 4.51	- 14 34.8	1.961	2.941	5.3	21.8
9 28	22 55.16	- 26 14.1	2.128	3.007	10.9	19.7	9 28	22 57.26	- 15 25.1	2.003	2.933	8.8	22.0
10 8	22 48.58	- 25 34.1	2.199	3.000	13.4	19.9	10 8	22 51.48	- 15 58.9	2.069	2.925	12.0	22.2
10 18	22 44.17	- 24 36.5	2.290	2.994	15.5	20.0	10 18	22 47.67	- 16 14.9	2.156	2.917	14.7	22.4
474702	2005 GA ₈₇	9 9.3 123°47	2°8/ 6.6 18				253471	2003 SS ₄₃	9 9.3 324°57	0°3/ 9.1 17			
8 9	23 35.02	- 11 53.7	2.052	2.949	11.1	21.4	8 9	23 35.14	- 5 7.4	1.122	2.033	16.9	20.1
8 19	23 28.86	- 12 34.8	2.001	2.958	7.7	21.2	8 19	23 30.22	- 5 11.3	1.054	2.017	12.2	19.8
8 29	23 21.12	- 13 17.9	1.975	2.968	4.4	21.0	8 29	23 22.43	- 5 27.4	1.006	2.002	6.7	19.4
9 8	23 12.54	- 13 57.4	1.977	2.977	2.8	20.9	9 8	23 12.75	- 5 50.3	0.981	1.988	0.8	19.0
9 18	23 3.96	- 14 28.3	2.006	2.986	5.3	21.1	9 18	23 2.61	- 6 13.2	0.978	1.974	5.5	19.3
9 28	22 56.25	- 14 46.9	2.064	2.994	8.6	21.3	9 28	22 53.67	- 6 28.5	0.999	1.962	11.4	19.6
10 8	22 50.13	- 14 51.1	2.146	3.003	11.6	21.6	10 8	22 47.32	- 6 30.6	1.041	1.950	16.7	19.8
10 18	22 46.06	- 14 40.8	2.249	3.011	14.2	21.8	10 18	22 44.35	- 6 16.7	1.100	1.939	21.2	20.1
357754	2005 SV ₈₅	9 9.3 92°30	3°3/ 6.2 18				274905	2009 SR ₁₁₀	9 9.3 306°84	1°7/12.4 15			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
299694	2006 <i>QU</i> ₁₂₀		9 9.3 346°29	5°6/13.9	18		448028	2008 <i>EC</i> ₄₇		9 9.3 35°43	6°2/3.9	18	
8 9	23 31.08	+ 9 5.6	1.502	2.357	16.6	19.8	8 9	23 35.10	-21 9.7	1.774	2.680	12.0	20.2
8 19	23 26.75	+ 9 27.9	1.429	2.349	13.2	19.6	8 19	23 29.11	-21 56.9	1.736	2.690	9.0	20.1
8 29	23 20.29	+ 9 27.5	1.377	2.342	9.5	19.4	8 29	23 21.32	-22 37.4	1.722	2.701	6.6	19.9
9 8	23 12.49	+ 9 5.1	1.348	2.336	6.4	19.2	9 8	23 12.62	-23 4.3	1.734	2.712	6.4	20.0
9 18	23 4.39	+ 8 23.9	1.343	2.331	6.0	19.1	9 18	23 4.01	-23 12.9	1.772	2.724	8.4	20.1
9 28	22 57.17	+ 7 30.6	1.363	2.326	8.9	19.3	9 28	22 56.51	-23 0.8	1.834	2.736	11.2	20.3
10 8	22 51.85	+ 6 33.6	1.406	2.323	12.6	19.5	10 8	22 50.90	-22 28.7	1.919	2.749	13.9	20.5
10 18	22 49.09	+ 5 40.9	1.470	2.320	16.2	19.7	10 18	22 47.61	-21 39.1	2.024	2.761	16.3	20.7
518304	2017 <i>BG</i> ₂₇		9 9.3 218°01	4°4/3.2	18		56104	1999 <i>BA</i> ₂₀		9 9.3 273°89	3°6/6.3	18	
8 9	23 29.52	-16 49.7	2.380	3.284	9.4	21.3	8 9	23 36.05	-12 3.3	1.627	2.531	13.0	18.8
8 19	23 24.97	-18 19.9	2.325	3.282	6.8	21.1	8 19	23 30.25	-12 53.4	1.552	2.512	9.2	18.6
8 29	23 19.05	-19 49.7	2.297	3.280	4.8	21.0	8 29	23 22.22	-13 48.2	1.500	2.493	5.4	18.3
9 8	23 12.33	-21 12.4	2.297	3.279	4.7	21.0	9 8	23 12.76	-14 40.1	1.474	2.474	3.7	18.2
9 18	23 5.50	-22 22.0	2.325	3.277	6.7	21.1	9 18	23 2.94	-15 21.6	1.475	2.455	6.7	18.3
9 28	22 59.29	-23 14.0	2.380	3.275	9.3	21.3	9 28	22 54.00	-15 46.5	1.502	2.435	10.9	18.5
10 8	22 54.35	-23 46.4	2.459	3.273	11.7	21.4	10 8	22 47.00	-15 51.7	1.551	2.415	14.9	18.7
10 18	22 51.12	-23 59.1	2.558	3.271	13.8	21.6	10 18	22 42.62	-15 36.9	1.620	2.395	18.3	18.9
198429	2004 <i>VC</i> ₉₀		9 9.3 194°74	1°7/7.5	18		11715	Harperclark		9 9.3 327°20	0°1/9.4	18	
8 9	23 35.12	- 8 50.3	2.337	3.224	10.3	20.8	8 9	23 32.78	- 2 8.4	1.282	2.183	16.0	17.3
8 19	23 28.89	- 9 28.2	2.268	3.221	7.2	20.6	8 19	23 28.16	- 2 49.5	1.219	2.177	11.5	17.0
8 29	23 21.18	-10 10.6	2.225	3.218	3.9	20.4	8 29	23 21.14	- 3 47.7	1.177	2.171	6.3	16.7
9 8	23 12.59	-10 52.8	2.210	3.214	1.7	20.3	9 8	23 12.63	- 4 56.2	1.158	2.166	0.8	16.3
9 18	23 3.87	-11 30.2	2.224	3.210	4.2	20.4	9 18	23 3.85	- 6 6.0	1.165	2.161	4.9	16.6
9 28	22 55.85	-11 58.8	2.268	3.205	7.5	20.6	9 28	22 56.18	- 7 7.8	1.196	2.156	10.2	16.9
10 8	22 49.20	-12 15.6	2.337	3.199	10.6	20.8	10 8	22 50.72	- 7 54.0	1.249	2.152	15.0	17.2
10 18	22 44.41	-12 19.6	2.429	3.192	13.2	21.0	10 18	22 48.15	- 8 20.6	1.321	2.148	19.0	17.4
480771	2016 <i>PF</i> ₉		9 9.3 84°08	3°2/6.5	17		104445	2000 <i>GA</i> ₄		9 9.3 356°18	0°5/8.9	18	
8 9	23 34.00	- 9 51.6	1.524	2.431	13.5	20.6	8 9	23 30.31	- 3 45.2	1.516	2.417	14.0	18.9
8 19	23 28.57	-11 1.9	1.477	2.440	9.4	20.4	8 19	23 26.07	- 4 25.9	1.455	2.414	9.9	18.7
8 29	23 21.13	-12 18.0	1.454	2.449	5.2	20.2	8 29	23 19.85	- 5 19.2	1.416	2.411	5.4	18.4
9 8	23 12.58	-13 31.3	1.456	2.458	3.2	20.1	9 8	23 12.47	- 6 18.9	1.402	2.410	0.7	18.1
9 18	23 4.01	-14 33.5	1.485	2.467	6.4	20.3	9 18	23 4.92	- 7 17.6	1.414	2.409	4.5	18.4
9 28	22 56.54	-15 18.2	1.539	2.476	10.5	20.6	9 28	22 58.32	- 8 8.0	1.452	2.408	9.1	18.6
10 8	22 51.07	-15 42.2	1.616	2.485	14.2	20.8	10 8	22 53.56	- 8 44.4	1.512	2.409	13.3	18.9
10 18	22 48.09	-15 45.3	1.713	2.493	17.2	21.1	10 18	22 51.20	- 9 3.8	1.593	2.410	16.7	19.1
191078	2002 <i>CE</i> ₂₁₆		9 9.3 301°16	0°7/7.9	17		347530	1999 <i>VF</i> ₅₂		9 9.3 294°80	8°5/1.7	18	
8 9	23 24.53	- 7 12.2	4.207	5.090	6.2	19.8	8 9	23 38.16	-25 48.9	1.692	2.592	12.8	20.3
8 19	23 20.98	- 7 45.6	4.134	5.086	4.3	19.7	8 19	23 31.83	-26 55.5	1.623	2.566	10.3	20.1
8 29	23 16.72	- 8 22.2	4.088	5.082	2.3	19.5	8 29	23 23.11	-27 53.2	1.578	2.541	8.7	19.9
9 8	23 12.06	- 8 59.6	4.072	5.077	0.7	19.4	9 8	23 12.88	-28 32.6	1.557	2.516	9.0	19.9
9 18	23 7.34	- 9 35.4	4.085	5.073	2.3	19.5	9 18	23 2.31	-28 46.2	1.561	2.490	11.1	19.9
9 28	23 2.93	-10 7.3	4.128	5.069	4.3	19.7	9 28	22 52.75	-28 30.4	1.588	2.465	14.1	20.1
10 8	22 59.14	-10 33.4	4.199	5.065	6.2	19.8	10 8	22 45.31	-27 46.1	1.636	2.439	17.1	20.2
10 18	22 56.26	-10 52.2	4.294	5.061	7.8	19.9	10 18	22 40.68	-26 36.9	1.702	2.414	19.8	20.4
395283	2010 <i>VS</i> ₁₇₁		9 9.3 27°59	5°9/3.1	18		243859	2000 <i>WS</i> ₁₂₉		9 9.3 292°46	15°8/30.2	17	
8 9	23 32.85	-21 10.6	2.016	2.921	10.8	20.0	8 9	23 32.21	+40 26.6	1.898	2.507	21.4	20.7
8 19	23 27.45	-22 11.7	1.971	2.924	8.2	19.9	8 19	23 27.87	+41 26.1	1.804	2.488	20.3	20.6
8 29	23 20.42	-23 7.4	1.951	2.927	6.2	19.8	8 29	23 21.11	+41 49.7	1.721	2.470	18.9	20.4
9 8	23 12.50	-23 51.0	1.957	2.931	6.2	19.8	9 8	23 12.66	+41 30.9	1.653	2.451	17.6	20.3
9 18	23 4.57	-24 17.4	1.990	2.935	8.1	19.9	9 18	23 3.62	+40 25.5	1.601	2.433	16.4	20.1
9 28	22 57.53	-24 23.5	2.047	2.939	10.7	20.1	9 28	22 55.37	+38 34.3	1.569	2.415	15.9	20.1
10 8	22 52.11	-24 9.1	2.127	2.943	13.2	20.3	10 8	22 49.14	+36 5.0	1.557	2.396	16.1	20.0
10 18	22 48.77	-23 36.0	2.227	2.948	15.4	20.4	10 18	22 45.78	+33 9.3	1.565	2.378	17.2	20.1
451184	2009 <i>SF</i> ₃₂₂		9 9.3 285°21	2°6/6.8	18		339236	2004 <i>UK</i> ₉		9 9.3 273°28	5°4/4.7	18	
8 9	23 33.88	-12 25.9	2.234	3.129	10.3	21.1	8 9	23 36.38	-17 40.7	1.711	2.616	12.4	20.4
8 19	23 28.09	-12 51.3	2.166	3.122	7.3	20.9	8 19	23 30.32	-18 34.1	1.649	2.606	9.1	20.2
8 29	23 20.76	-13 18.1	2.123	3.116	4.2	20.7	8 29	23 22.17	-19 25.5	1.610	2.596	6.2	20.0
9 8	23 12.55	-13 41.9	2.108	3.109	2.6	20.6	9 8	23 12.77	-20 7.1	1.598	2.585	5.6	19.9
9 18	23 4.22	-13 58.4	2.122	3.102	4.9	20.7	9 18	23 3.20	-20 32.4	1.612	2.575	8.0	20.1
9 28	22 56.60	-14 4.2	2.163	3.095	8.1	20.9	9 28	22 54.60	-20 37.0	1.651	2.565	11.5	20.2
10 8	22 50.41	-13 57.5	2.229	3.089	11.1	21.1	10 8	22 47.94	-20 20.0	1.712	2.554	14.8	20.4
10 18	22 46.13	-13 38.0	2.317	3.082	13.7	21.3	10 18	22 43.80	-19 43.1	1.793	2.543	17.6	20.6
388879	2008 <i>RE</i> ₅₆		9 9.3 302°74	1°5/12.1	15		449943	2015 <i>OF</i> ₄₅		9 9.3 350°55	2°3/7.5	18	
8 9	23 26.01	+ 3 30.1	4.134	4.977	7.1	21.4	8 9	23 33.45	- 9 33.1	1.547	2.453	13.4	20.7
8 19	23 22.04	+ 3 25.4	4.048	4.969	5.4	21.3	8 19	23 28.29	-10 1.2	1.486	2.449	9.4	20.4
8 29	23 17.31	+ 3 13.6	3.988	4.962	3.4	21.1	8 29	23 21.07	-10 34.8	1.449	2.445	5.1	20.2
9 8	23 12.14	+ 2 56.1	3.956	4.954	1.8	21.0	9 8	23 12.64	-11 7.6	1.437	2.442	2.3	20.0
9 18	23 6.89	+ 2 34.5	3.954	4.947	2.0	21.0	9 18	23 4.08	-11 33.5	1.451	2.439	5.6	20.2
9 28	23 1.94	+ 2 11.1	3.982	4.939	3.8	21.1	9 28	22 56.52	-11 47.3	1.490	2.437	9.9	20.4
10 8	22 57.64	+ 1 48.1	4.038	4.932	5.7	21.3	10 8	22 50.90	-11 45.9	1.553	2.436	13.8	20.7
10 18	22 54.28	+ 1 27.6	4.120	4.925	7.5	21.4	10 18	22 47.78	-11 28.6	1.635	2.435	17.1	20.9
123867	2001 <i>DE</i> ₁₂		9 9.3 275°08	1°9/7.6	18		224207	2005 <i>ST</i> ₁₂		9 9.3 299°06			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
380300	2002 <i>CY</i> ₂₅₂		9 9.3 200°60	2°1/11.6	18		515337	2013 <i>AD</i> ₁₂₈		9 9.3 239°31	1°1/ 8.2	18	
8 9	23 33.97	+ 3 44.5	2.188	3.041	12.2	22.1	8 9	23 34.68	- 7 9.9	2.121	3.009	11.1	22.4
8 19	23 28.23	+ 3 21.4	2.109	3.037	9.1	21.9	8 19	23 28.80	- 7 37.2	2.046	2.999	7.9	22.2
8 29	23 20.91	+ 2 43.9	2.054	3.033	5.7	21.7	8 29	23 21.26	- 8 10.7	1.995	2.989	4.2	22.0
9 8	23 12.63	+ 1 54.9	2.027	3.028	2.6	21.5	9 8	23 12.71	- 8 45.9	1.972	2.978	1.2	21.7
9 18	23 4.16	+ 0 58.7	2.028	3.022	3.3	21.6	9 18	23 3.97	- 9 18.2	1.978	2.967	4.1	21.9
9 28	22 56.35	+ 0 1.0	2.057	3.016	6.7	21.8	9 28	22 55.92	- 9 43.0	2.011	2.956	7.8	22.1
10 8	22 49.94	- 0 52.7	2.114	3.009	10.1	22.0	10 8	22 49.35	- 9 57.0	2.070	2.945	11.2	22.3
10 18	22 45.45	- 1 37.9	2.194	3.001	13.1	22.2	10 18	22 44.78	- 9 58.6	2.152	2.933	14.1	22.5
184881	2005 <i>UR</i> ₂₁₁		9 9.3 87°57	0°4/ 8.8	18		104531	2000 <i>GK</i> ₅₃		9 9.3 189°55	0°4/ 9.7	17	
8 9	23 31.57	- 4 10.4	2.157	3.041	11.1	21.0	8 9	23 34.96	- 1 36.1	1.883	2.761	12.8	21.0
8 19	23 26.40	- 4 51.1	2.103	3.054	7.8	20.8	8 19	23 29.10	- 2 14.0	1.814	2.760	9.2	20.8
8 29	23 19.83	- 5 39.9	2.074	3.067	4.2	20.6	8 29	23 21.45	- 3 4.2	1.769	2.759	5.1	20.6
9 8	23 12.49	- 6 32.2	2.072	3.079	0.5	20.3	9 8	23 12.74	- 4 2.0	1.750	2.757	0.8	20.3
9 18	23 5.13	- 7 22.9	2.099	3.092	3.5	20.6	9 18	23 3.85	- 5 1.3	1.760	2.755	3.7	20.5
9 28	22 58.52	- 8 6.9	2.154	3.104	7.1	20.8	9 28	22 55.79	- 5 55.7	1.798	2.752	7.9	20.7
10 8	22 53.31	- 8 40.7	2.235	3.116	10.2	21.1	10 8	22 49.36	- 6 40.1	1.861	2.749	11.6	21.0
10 18	22 49.91	- 9 1.9	2.338	3.128	12.9	21.3	10 18	22 45.14	- 7 10.9	1.946	2.745	14.8	21.2
389317	2009 <i>ST</i> ₁₄₀		9 9.3 332°60	1°6/12.3	17		134860	2000 <i>OJ</i> ₆₇		9 9.3 80°70	0°0/ 8.9	12	C
8 9	23 25.10	+ 4 20.2	3.990	4.832	7.4	20.6	8 9	23 13.70	- 6 7.8	42.106	42.983	0.7	22.5
8 19	23 21.43	+ 4 5.2	3.909	4.829	5.6	20.4	8 19	23 13.06	- 6 11.9	42.035	42.984	0.5	22.5
8 29	23 17.01	+ 3 42.3	3.853	4.826	3.6	20.3	8 29	23 12.36	- 6 16.4	41.992	42.985	0.3	22.4
9 8	23 12.16	+ 3 13.1	3.826	4.823	1.9	20.2	9 8	23 11.64	- 6 21.0	41.978	42.985	0.0	22.4
9 18	23 7.24	+ 2 39.5	3.828	4.820	2.1	20.2	9 18	23 10.91	- 6 25.6	41.993	42.986	0.2	22.4
9 28	23 2.63	+ 2 4.1	3.859	4.818	3.9	20.3	9 28	23 10.20	- 6 30.0	42.038	42.986	0.4	22.5
10 8	22 58.70	+ 1 29.6	3.919	4.815	5.8	20.4	10 8	23 9.55	- 6 34.0	42.111	42.987	0.6	22.5
10 18	22 55.71	+ 0 58.2	4.005	4.813	7.6	20.6	10 18	23 8.97	- 6 37.5	42.210	42.988	0.8	22.5
91061	1998 <i>FN</i> ₆₁		9 9.3 190°53	4°3/14.8	18		477075	2009 <i>BT</i> ₇₈		9 9.3 237°73	2°4/11.4	18	
8 9	23 31.35	+13 10.1	2.097	2.910	14.1	19.6	8 9	23 36.21	+ 2 20.2	2.083	2.940	12.6	21.2
8 19	23 26.45	+12 14.5	2.015	2.909	11.2	19.4	8 19	23 29.95	+ 2 28.0	2.000	2.931	9.4	21.0
8 29	23 19.96	+10 54.5	1.955	2.908	8.0	19.2	8 29	23 21.92	+ 2 23.5	1.941	2.921	5.9	20.7
9 8	23 12.53	+ 9 13.2	1.921	2.906	5.1	19.1	9 8	23 12.80	+ 2 8.6	1.909	2.910	2.8	20.5
9 18	23 4.94	+ 7 16.3	1.916	2.904	4.5	19.0	9 18	23 3.42	+ 1 46.2	1.906	2.900	3.6	20.6
9 28	22 58.03	+ 5 12.3	1.941	2.901	6.9	19.2	9 28	22 54.71	+ 1 20.8	1.931	2.889	7.1	20.8
10 8	22 52.55	+ 3 10.4	1.993	2.898	10.1	19.4	10 8	22 47.51	+ 0 56.9	1.982	2.877	10.6	21.0
10 18	22 49.01	+ 1 18.7	2.070	2.894	13.1	19.6	10 18	22 42.40	+ 0 38.5	2.056	2.866	13.7	21.1
293892	2007 <i>RO</i> ₂₉₆		9 9.3 327°53	4°1/ 6.4	18		485019	2009 <i>WC</i> ₆₅		9 9.3 268°05	4°4/ 4.4	17	
8 9	23 30.10	- 9 18.6	1.002	1.931	16.7	20.1	8 9	23 35.07	-19 33.2	2.532	3.425	9.3	21.9
8 19	23 26.85	-10 31.3	0.939	1.913	11.9	19.8	8 19	23 28.92	-20 10.8	2.456	3.406	6.9	21.7
8 29	23 20.71	-11 57.4	0.897	1.895	6.7	19.5	8 29	23 21.27	-20 45.3	2.406	3.386	4.9	21.6
9 8	23 12.66	-13 25.1	0.876	1.879	4.2	19.3	9 8	23 12.72	-21 11.6	2.384	3.366	4.6	21.5
9 18	23 4.13	-14 41.0	0.876	1.863	8.5	19.4	9 18	23 3.99	-21 25.7	2.391	3.345	6.4	21.6
9 28	22 56.83	-15 33.3	0.898	1.849	14.1	19.7	9 28	22 55.88	-21 24.6	2.425	3.324	8.9	21.7
10 8	22 52.18	-15 55.7	0.939	1.836	19.3	20.0	10 8	22 49.09	-21 7.6	2.484	3.303	11.4	21.9
10 18	22 50.97	-15 47.4	0.994	1.824	23.6	20.2	10 18	22 44.12	-20 35.3	2.564	3.282	13.7	22.0
220273	2003 <i>AS</i> ₇₄		9 9.3 282°61	0°3/ 9.1	18		256536	2007 <i>GK</i> ₄		9 9.3 171°53	5°0/16.7	18	
8 9	23 36.52	- 4 47.1	1.535	2.428	14.3	20.6	8 9	23 30.35	+16 19.4	2.899	3.675	11.5	20.5
8 19	23 30.68	- 5 2.1	1.458	2.413	10.3	20.3	8 19	23 25.40	+16 14.6	2.817	3.677	9.5	20.4
8 29	23 22.52	- 5 27.6	1.403	2.397	5.6	20.0	8 29	23 19.28	+15 52.7	2.757	3.680	7.4	20.3
9 8	23 12.87	- 5 58.8	1.374	2.381	0.7	19.6	9 8	23 12.48	+15 14.2	2.723	3.682	5.6	20.2
9 18	23 2.83	- 6 29.8	1.371	2.365	4.6	19.9	9 18	23 5.55	+14 21.6	2.717	3.683	5.0	20.1
9 28	22 53.70	- 6 54.5	1.394	2.349	9.6	20.1	9 28	22 59.13	+13 18.5	2.740	3.685	6.0	20.2
10 8	22 46.58	- 7 7.9	1.440	2.333	14.0	20.3	10 8	22 53.75	+12 10.2	2.790	3.685	7.9	20.3
10 18	22 42.18	- 7 7.2	1.507	2.317	17.8	20.5	10 18	22 49.83	+11 1.7	2.865	3.686	10.0	20.5
255226	2005 <i>UU</i> ₄₁₁		9 9.3 240°67	1°6/ 7.5	18		389414	2010 <i>AP</i> ₆₆		9 9.3 178°11	1°3/10.7	18	
8 9	23 31.22	- 8 9.9	2.369	3.260	10.0	21.2	8 9	23 34.63	+ 0 48.7	2.244	3.106	11.6	22.2
8 19	23 26.20	- 8 56.3	2.296	3.252	7.0	21.0	8 19	23 28.63	+ 0 26.3	2.172	3.108	8.5	22.0
8 29	23 19.78	- 9 48.3	2.249	3.243	3.8	20.8	8 29	23 21.11	- 0 7.7	2.125	3.109	5.0	21.8
9 8	23 12.52	-10 41.0	2.230	3.235	1.6	20.6	9 8	23 12.71	- 0 50.0	2.105	3.110	1.7	21.6
9 18	23 5.11	-11 29.6	2.240	3.226	4.1	20.8	9 18	23 4.17	- 1 36.3	2.115	3.110	3.1	21.7
9 28	22 58.30	-12 9.6	2.278	3.217	7.4	21.0	9 28	22 56.33	- 2 21.7	2.153	3.110	6.6	21.9
10 8	22 52.74	-12 37.5	2.341	3.207	10.4	21.1	10 8	22 49.88	- 3 1.6	2.219	3.109	9.9	22.1
10 18	22 48.90	-12 51.8	2.427	3.198	13.0	21.3	10 18	22 45.32	- 3 32.5	2.308	3.107	12.8	22.3
514164	2015 <i>LV</i> ₄₁		9 9.3 10°53	1°3/ 8.1	18		59778	1999 <i>NO</i> ₃₉		9 9.4 358°52	3°1/11.1	18	R
8 9	23 31.52	- 5 49.3	1.643	2.543	13.1	21.2	8 9	23 34.53	+ 0 20.4	1.180	2.076	17.4	17.8
8 19	23 26.80	- 6 38.0	1.585	2.544	9.2	20.9	8 19	23 29.57	+ 0 58.6	1.120	2.072	13.0	17.5
8 29	23 20.23	- 7 36.4	1.550	2.545	4.9	20.7	8 29	23 22.00	+ 1 20.9	1.081	2.069	8.1	17.2
9 8	23 12.58	- 8 37.9	1.541	2.547	1.3	20.4	9 8	23 12.83	+ 1 29.2	1.064	2.067	3.6	17.0
9 18	23 4.81	- 9 35.6	1.558	2.549	4.8	20.7	9 18	23 3.42	+ 1 27.0	1.071	2.067	5.0	17.0
9 28	22 57.96	-10 22.8	1.601	2.551	9.0	21.0	9 28	22 55.24	+ 1 20.1	1.101	2.068	9.9	17.3
10 8	22 52.88	-10 54.7	1.668	2.554	12.9	21.2	10 8	22 49.49	+ 1 14.7	1.153	2.071	14.6	17.6
10 18	22 50.08	-11 9.5	1.756	2.557	16.1	21.4	10 18	22 46.85	+ 1 15.9	1.223	2.075	18.7	17.9
333566	2006 <i>AY</i> ₇₄		9 9.3 305°97	8°7/11.4	16		127033	2002 <i>GU</i>					

EPHEMERIDES

9 9.4

9 9.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
192388	1996 <i>RD</i> ₂₉		9 9.4 262°11	0°7/10.8	16		315075	2007 <i>DO</i> ₅₂		9 9.4 103°86	1°4/10.8	18	
8 9	23 24.18	+ 0 20.8	4.550	5.407	6.3	20.4	8 9	23 33.22	+ 0 17.0	2.280	3.146	11.3	20.7
8 19	23 20.73	- 0 3.7	4.467	5.401	4.5	20.3	8 19	23 27.60	+ 0 11.7	2.214	3.151	8.3	20.5
8 29	23 16.64	- 0 34.0	4.412	5.396	2.7	20.2	8 29	23 20.54	- 0 3.9	2.172	3.157	4.9	20.3
9 8	23 12.18	- 1 8.2	4.385	5.390	0.9	20.0	9 8	23 12.68	- 0 26.9	2.158	3.162	1.7	20.1
9 18	23 7.66	- 1 44.4	4.389	5.384	1.6	20.1	9 18	23 4.73	- 0 54.1	2.172	3.167	3.0	20.2
9 28	23 3.39	- 2 20.3	4.422	5.378	3.5	20.2	9 28	22 57.47	- 1 21.3	2.215	3.173	6.4	20.4
10 8	22 59.70	- 2 53.8	4.484	5.372	5.3	20.3	10 8	22 51.56	- 1 44.5	2.284	3.178	9.5	20.6
10 18	22 56.83	- 3 22.9	4.572	5.366	7.0	20.5	10 18	22 47.44	- 2 0.9	2.377	3.183	12.2	20.8
282401	2003 <i>SF</i> ₃₀₅		9 9.4 36°46	1°3/ 8.6	18		516714	2009 <i>AE</i> ₃₁		9 9.4 280°32	5°7/ 2.9	18	
8 9	23 40.06	- 8 54.1	1.432	2.332	14.7	19.0	8 9	23 32.38	- 17 1.4	1.811	2.720	11.6	21.5
8 19	23 32.93	- 8 42.7	1.384	2.342	10.4	18.8	8 19	23 27.58	- 18 43.9	1.739	2.698	8.5	21.2
8 29	23 23.57	- 8 35.8	1.358	2.353	5.6	18.6	8 29	23 20.80	- 20 28.6	1.692	2.675	6.1	21.1
9 8	23 13.02	- 8 28.8	1.358	2.365	1.4	18.3	9 8	23 12.73	- 22 5.9	1.671	2.653	6.2	21.0
9 18	23 2.53	- 8 17.8	1.384	2.377	5.0	18.6	9 18	23 4.30	- 23 26.7	1.677	2.630	8.8	21.1
9 28	22 53.40	- 7 59.4	1.437	2.389	9.6	18.9	9 28	22 56.60	- 24 23.9	1.709	2.606	12.1	21.3
10 8	22 46.57	- 7 31.7	1.513	2.403	13.7	19.2	10 8	22 50.58	- 24 54.6	1.762	2.583	15.3	21.4
10 18	22 42.56	- 6 54.5	1.609	2.416	17.0	19.5	10 18	22 46.90	- 24 59.1	1.833	2.560	18.1	21.6
387485	2013 <i>YS</i> ₁₀₂		9 9.4 156°87	13°5/25.6	18		146033	2000 <i>DS</i> ₈₃		9 9.4 260°89	3°5/ 6.4	18	
8 9	23 39.77	+ 35 36.9	2.166	2.793	18.6	20.4	8 9	23 35.69	- 11 20.1	1.560	2.466	13.3	20.0
8 19	23 32.93	+ 37 9.4	2.093	2.797	17.3	20.2	8 19	23 30.01	- 12 15.8	1.494	2.456	9.5	19.7
8 29	23 23.79	+ 38 12.5	2.035	2.801	15.8	20.1	8 29	23 22.13	- 13 16.8	1.452	2.446	5.4	19.5
9 8	23 13.08	+ 38 41.4	1.995	2.804	14.6	20.1	9 8	23 12.89	- 14 15.0	1.435	2.436	3.6	19.4
9 18	23 1.87	+ 38 33.4	1.975	2.807	13.7	20.0	9 18	23 3.40	- 15 2.8	1.445	2.426	6.7	19.5
9 28	22 51.42	+ 37 50.5	1.976	2.810	13.5	20.0	9 28	22 54.89	- 15 33.6	1.480	2.415	10.9	19.7
10 8	22 42.85	+ 36 39.2	1.999	2.813	14.0	20.0	10 8	22 48.38	- 15 44.2	1.537	2.404	14.8	20.0
10 18	22 36.92	+ 35 8.7	2.042	2.815	15.1	20.1	10 18	22 44.50	- 15 34.4	1.614	2.394	18.2	20.2
408707	2014 <i>NB</i> ₄₈		9 9.4 286°20	5°5/ 2.7	18		89930	2002 <i>EN</i> ₈₀		9 9.4 354°01	0°3/ 9.1	18	
8 9	23 31.37	- 19 44.1	2.129	3.034	10.3	20.3	8 9	23 28.40	- 1 54.8	1.833	2.724	12.5	19.2
8 19	23 26.51	- 21 2.4	2.070	3.024	7.7	20.1	8 19	23 24.51	- 3 0.8	1.768	2.721	8.9	19.0
8 29	23 20.04	- 22 18.0	2.036	3.014	5.8	20.0	8 29	23 18.98	- 4 20.3	1.726	2.719	4.8	18.8
9 8	23 12.61	- 23 23.9	2.029	3.004	5.9	20.0	9 8	23 12.50	- 5 47.2	1.710	2.718	0.5	18.4
9 18	23 5.02	- 24 13.8	2.049	2.994	7.9	20.1	9 18	23 5.87	- 7 14.0	1.722	2.717	3.9	18.7
9 28	22 58.15	- 24 43.5	2.094	2.984	10.6	20.2	9 28	22 59.98	- 8 32.9	1.762	2.716	8.0	19.0
10 8	22 52.75	- 24 51.7	2.162	2.975	13.2	20.4	10 8	22 55.58	- 9 38.0	1.826	2.715	11.7	19.2
10 18	22 49.32	- 24 39.2	2.250	2.965	15.4	20.6	10 18	22 53.20	- 10 25.4	1.911	2.716	14.8	19.4
518944	2010 <i>GH</i> ₁₆₆		9 9.4 158°74	3°0/11.7	18		262948	2007 <i>DG</i> ₄₈		9 9.4 331°82	0°2/ 9.2	18	
8 9	23 39.52	+ 2 53.7	1.859	2.714	13.9	21.1	8 9	23 27.64	- 1 3.4	1.784	2.674	12.8	20.0
8 19	23 32.37	+ 3 18.6	1.789	2.717	10.5	20.9	8 19	23 24.06	- 2 17.9	1.711	2.664	9.1	19.8
8 29	23 23.27	+ 3 30.2	1.743	2.720	6.7	20.7	8 29	23 18.79	- 3 48.4	1.661	2.654	5.0	19.5
9 8	23 13.01	+ 3 29.8	1.724	2.723	3.4	20.5	9 8	23 12.49	- 5 28.3	1.637	2.644	0.6	19.2
9 18	23 2.58	+ 3 20.1	1.733	2.726	4.1	20.5	9 18	23 5.96	- 7 9.5	1.641	2.635	4.0	19.4
9 28	22 53.06	+ 3 5.5	1.770	2.728	7.7	20.8	9 28	23 0.14	- 8 43.1	1.672	2.627	8.3	19.7
10 8	22 45.34	+ 2 50.6	1.833	2.730	11.3	21.0	10 8	22 55.83	- 10 1.9	1.728	2.619	12.2	19.9
10 18	22 40.01	+ 2 39.8	1.919	2.731	14.5	21.2	10 18	22 53.58	- 11 1.5	1.805	2.612	15.5	20.1
361079	2006 <i>BQ</i> ₇₈		9 9.4 58°77	2°3/10.9	17		94195	2001 <i>BU</i> ₁₃		9 9.4 64°97	2°2/ 6.7	18	
8 9	23 37.89	+ 1 11.0	1.099	1.993	18.6	20.1	8 9	23 30.13	- 9 4.1	2.145	3.044	10.6	19.1
8 19	23 31.78	+ 1 3.6	1.060	2.011	13.7	19.8	8 19	23 25.49	- 10 8.3	2.089	3.048	7.3	19.0
8 29	23 23.06	+ 0 35.8	1.040	2.029	8.1	19.6	8 29	23 19.43	- 11 17.8	2.058	3.053	4.0	18.8
9 8	23 12.97	- 0 6.8	1.042	2.047	2.9	19.3	9 8	23 12.55	- 12 26.4	2.055	3.057	2.3	18.6
9 18	23 2.99	- 0 56.3	1.069	2.066	4.8	19.5	9 18	23 5.60	- 13 28.4	2.080	3.062	4.8	18.8
9 28	22 54.61	- 1 43.7	1.120	2.085	10.1	19.9	9 28	22 59.36	- 14 18.4	2.132	3.067	8.1	19.0
10 8	22 48.90	- 2 21.3	1.192	2.104	14.8	20.2	10 8	22 54.48	- 14 53.2	2.209	3.071	11.1	19.2
10 18	22 46.35	- 2 44.4	1.283	2.123	18.7	20.5	10 18	22 51.41	- 15 11.6	2.307	3.076	13.7	19.4
160237	2002 <i>JX</i> ₁₀₀		9 9.4 5°02	21°9/11.7	18		520133	2014 <i>BT</i> ₆₇		9 9.4 114°34	1°9/11.1	18	
8 9	23 41.16	- 56 21.9	1.232	2.047	21.9	18.2	8 9	23 37.18	+ 1 6.2	1.964	2.827	13.0	21.5
8 19	23 35.29	- 58 13.2	1.237	2.046	22.0	18.2	8 19	23 30.53	+ 1 9.6	1.904	2.839	9.6	21.3
8 29	23 25.24	- 59 16.4	1.255	2.047	22.5	18.2	8 29	23 22.18	+ 1 0.9	1.868	2.851	5.8	21.1
9 8	23 13.20	- 59 23.3	1.286	2.050	23.3	18.3	9 8	23 12.89	+ 0 42.9	1.859	2.862	2.3	20.9
9 18	23 1.79	- 58 32.7	1.328	2.054	24.3	18.4	9 18	23 3.56	+ 0 19.1	1.879	2.874	3.5	21.0
9 28	22 53.32	- 56 49.7	1.382	2.060	25.3	18.5	9 28	22 55.12	- 0 5.8	1.927	2.885	7.1	21.2
10 8	22 48.91	- 54 24.6	1.445	2.067	26.1	18.7	10 8	22 48.35	- 0 27.4	2.001	2.895	10.6	21.5
10 18	22 48.68	- 51 27.7	1.518	2.076	26.9	18.8	10 18	22 43.74	- 0 42.1	2.097	2.906	13.5	21.7
386464	2008 <i>YW</i> ₉		9 9.4 186°96	4°9/ 4.0	18		253983	2004 <i>EA</i> ₄₃		9 9.4 177°31	2°1/ 7.5	17	
8 9	23 33.29	- 16 44.2	1.953	2.858	11.1	20.4	8 9	23 35.63	- 7 59.1	1.775	2.670	12.6	20.9
8 19	23 27.90	- 18 2.8	1.900	2.858	8.0	20.2	8 19	23 29.65	- 8 54.1	1.714	2.672	8.8	20.7
8 29	23 20.80	- 19 20.6	1.872	2.858	5.5	20.1	8 29	23 21.80	- 9 56.2	1.678	2.673	4.7	20.5
9 8	23 12.71	- 20 30.0	1.872	2.857	5.2	20.1	9 8	23 12.85	- 10 58.9	1.669	2.674	2.1	20.3
9 18	23 4.52	- 21 24.2	1.898	2.856	7.4	20.2	9 18	23 3.78	- 11 55.2	1.688	2.674	5.2	20.5
9 28	22 57.17	- 21 58.7	1.950	2.855	10.5	20.4	9 28	22 55.63	- 12 39.0	1.733	2.674	9.2	20.7
10 8	22 51.45	- 22 11.7	2.026	2.854	13.3	20.6	10 8	22 49.26	- 13 6.5	1.803	2.673	12.8	21.0
10 18	22 47.85	- 22 4.1	2.120	2.853	15.8	20.8	10 18	22 45.20	- 13 16.5	1.893	2.672	15.9	21.2
294061	2007 <i>TM</i> ₁₆₄		9 9.4 29°10										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
219775	2002 <i>AU</i> ₂		9 9.4 236°65	5°4/11.7	17		103220	Kwongchuiquen		9 9.4 262°34	3°9/12.9	18	
8 9	23 47.37	+ 3 31.6	1.238	2.103	18.9	20.2	8 9	23 35.01	+ 6 50.8	2.043	2.884	13.4	19.8
8 19	23 39.00	+ 4 44.8	1.165	2.096	14.6	20.0	8 19	23 29.27	+ 7 1.7	1.951	2.867	10.4	19.6
8 29	23 27.38	+ 5 42.3	1.114	2.089	9.8	19.7	8 29	23 21.69	+ 6 56.5	1.883	2.850	7.2	19.4
9 8	23 13.57	+ 6 22.2	1.086	2.082	5.9	19.4	9 8	23 12.92	+ 6 36.2	1.840	2.832	4.4	19.2
9 18	22 59.18	+ 6 44.6	1.084	2.074	6.7	19.5	9 18	23 3.78	+ 6 3.4	1.824	2.814	4.4	19.1
9 28	22 46.09	+ 6 53.1	1.108	2.066	11.2	19.7	9 28	22 55.24	+ 5 22.9	1.837	2.795	7.4	19.3
10 8	22 35.84	+ 6 54.4	1.155	2.057	16.0	19.9	10 8	22 48.18	+ 4 40.5	1.876	2.777	10.9	19.5
10 18	22 29.33	+ 6 55.1	1.221	2.049	20.2	20.2	10 18	22 43.23	+ 4 1.6	1.937	2.758	14.0	19.6
129745	1999 <i>CX</i> ₁₀₉		9 9.4 221°43	4°2/12.8	18		155896	2001 <i>FT</i> ₁₀₈		9 9.4 48°78	1°3/11.2	18	
8 9	23 35.48	+ 7 5.1	1.479	2.337	16.7	19.8	8 9	23 28.16	+ 4 16.2	2.116	2.978	12.2	19.2
8 19	23 29.97	+ 6 56.2	1.407	2.333	12.9	19.5	8 19	23 24.14	+ 2 57.8	2.051	2.986	9.0	19.0
8 29	23 22.16	+ 6 24.1	1.355	2.329	8.7	19.3	8 29	23 18.73	+ 1 22.5	2.011	2.994	5.4	18.8
9 8	23 12.92	+ 5 31.2	1.328	2.324	4.9	19.1	9 8	23 12.54	+ 0 24.3	1.998	3.003	1.8	18.6
9 18	23 3.36	+ 4 23.0	1.326	2.319	5.0	19.1	9 18	23 6.26	+ 2 15.2	2.015	3.011	3.0	18.7
9 28	22 54.78	+ 3 8.1	1.350	2.314	8.9	19.3	9 28	23 0.66	+ 4 2.4	2.060	3.020	6.6	19.0
10 8	22 48.24	+ 1 55.9	1.399	2.309	13.2	19.5	10 8	22 56.38	+ 5 39.0	2.133	3.029	10.0	19.2
10 18	22 44.44	+ 0 54.0	1.468	2.303	17.0	19.7	10 18	22 53.84	+ 6 59.9	2.230	3.038	12.9	19.4
69955	1998 <i>VK</i> ₂₁		9 9.4 224°79	3°4/ 5.1	18		162092	1998 <i>QA</i> ₄		9 9.4 0°97	0°3/ 9.2	18	
8 9	23 32.85	+ 16 26.6	2.725	3.619	8.7	19.4	8 9	23 37.66	+ 8 30.8	1.040	1.957	17.4	18.2
8 19	23 27.23	+ 17 8.2	2.657	3.611	6.3	19.2	8 19	23 32.01	+ 7 37.2	0.987	1.953	12.5	17.9
8 29	23 20.33	+ 17 48.8	2.617	3.603	4.1	19.0	8 29	23 23.43	+ 6 47.4	0.954	1.950	6.9	17.6
9 8	23 12.69	+ 18 23.9	2.605	3.594	3.6	19.0	9 8	23 13.13	+ 5 58.7	0.943	1.950	0.8	17.2
9 18	23 4.94	+ 18 49.6	2.621	3.585	5.3	19.1	9 18	23 2.69	+ 5 9.2	0.956	1.952	5.4	17.5
9 28	22 57.77	+ 19 3.1	2.666	3.576	7.8	19.3	9 28	22 53.81	+ 4 16.6	0.991	1.956	11.1	17.8
10 8	22 51.77	+ 19 2.9	2.736	3.566	10.2	19.4	10 8	22 47.76	+ 3 19.6	1.048	1.962	16.1	18.1
10 18	22 47.38	+ 18 48.9	2.828	3.557	12.3	19.5	10 18	22 45.15	+ 2 17.4	1.122	1.971	20.2	18.4
169087	2001 <i>HL</i> ₅₉		9 9.4 115°01	2°5/ 7.5	18		107004	2000 <i>YC</i> ₁₁₂		9 9.4 262°37	2°9/ 3.2	17	
8 9	23 38.09	+ 9 31.4	1.545	2.445	13.8	20.1	8 9	23 25.59	+ 19 49.2	4.395	5.290	5.7	19.9
8 19	23 31.51	+ 10 10.2	1.495	2.454	9.7	19.9	8 19	23 21.80	+ 20 32.6	4.332	5.282	4.2	19.8
8 29	23 22.83	+ 10 54.3	1.469	2.464	5.3	19.6	8 29	23 17.28	+ 21 14.1	4.297	5.274	3.1	19.7
9 8	23 13.00	+ 11 36.6	1.468	2.472	2.5	19.5	9 8	23 12.36	+ 21 50.8	4.291	5.266	3.1	19.7
9 18	23 3.17	+ 12 10.6	1.495	2.481	5.7	19.7	9 18	23 7.37	+ 22 20.6	4.314	5.259	4.1	19.8
9 28	22 54.52	+ 12 31.1	1.547	2.490	9.9	20.0	9 28	23 2.70	+ 22 41.4	4.365	5.251	5.6	19.9
10 8	22 47.98	+ 12 35.5	1.623	2.498	13.8	20.2	10 8	22 58.67	+ 22 52.1	4.442	5.243	7.1	20.0
10 18	22 44.05	+ 12 23.3	1.719	2.506	16.9	20.5	10 18	22 55.56	+ 22 52.6	4.541	5.235	8.4	20.1
302774	2002 <i>VS</i> ₁₄₄		9 9.4 251°20	1°6/11.0	18		36058	1999 <i>RM</i> ₃₅		9 9.4 57°17	0°7/10.1	18	
8 9	23 31.75	+ 1 57.4	1.998	2.866	12.6	21.2	8 9	23 31.19	+ 0 40.5	1.951	2.830	12.3	18.0
8 19	23 26.82	+ 1 28.3	1.922	2.860	9.3	21.0	8 19	23 26.32	+ 1 16.4	1.896	2.842	8.9	17.9
8 29	23 20.26	+ 0 44.8	1.870	2.855	5.6	20.8	8 29	23 19.93	+ 2 4.1	1.865	2.854	5.0	17.7
9 8	23 12.70	+ 0 9.5	1.845	2.849	2.0	20.5	9 8	23 12.69	+ 2 59.1	1.860	2.867	1.1	17.4
9 18	23 4.95	+ 1 9.6	1.847	2.843	3.3	20.6	9 18	23 5.41	+ 3 55.8	1.883	2.879	3.3	17.6
9 28	22 57.88	+ 2 9.2	1.877	2.837	7.1	20.9	9 28	22 58.94	+ 4 48.4	1.934	2.892	7.1	17.9
10 8	22 52.28	+ 3 2.5	1.933	2.831	10.7	21.1	10 8	22 53.97	+ 5 32.0	2.010	2.904	10.6	18.1
10 18	22 48.67	+ 3 45.2	2.011	2.825	13.9	21.3	10 18	22 50.94	+ 6 3.4	2.108	2.917	13.5	18.3
190689	2001 <i>DO</i> ₉₃		9 9.4 274°03	0°7/ 7.9	18		72485	2001 <i>DS</i> ₄₁		9 9.4 76°15	0°5/ 8.8	18	
8 9	23 24.18	+ 6 37.3	4.420	5.302	5.9	19.9	8 9	23 31.34	+ 4 25.6	2.196	3.081	10.9	19.3
8 19	23 20.79	+ 7 23.1	4.339	5.290	4.1	19.8	8 19	23 26.28	+ 5 5.9	2.144	3.096	7.7	19.2
8 29	23 16.72	+ 8 12.7	4.285	5.279	2.2	19.6	8 29	23 19.84	+ 5 54.0	2.117	3.110	4.1	19.0
9 8	23 12.26	+ 9 3.5	4.262	5.268	0.7	19.5	9 8	23 12.68	+ 6 45.2	2.117	3.125	0.6	18.7
9 18	23 7.72	+ 9 52.9	4.268	5.256	2.2	19.6	9 18	23 5.50	+ 7 34.5	2.146	3.139	3.5	19.0
9 28	23 3.44	+ 10 38.4	4.305	5.245	4.2	19.7	9 28	22 59.06	+ 8 17.2	2.203	3.153	6.9	19.2
10 8	22 59.75	+ 11 17.9	4.370	5.233	6.0	19.9	10 8	22 53.98	+ 8 49.7	2.286	3.168	10.0	19.4
10 18	22 56.90	+ 11 49.8	4.459	5.222	7.6	20.0	10 18	22 50.68	+ 9 9.8	2.392	3.182	12.6	19.7
468784	2012 <i>BQ</i> ₅₂		9 9.4 126°02	3°2/ 6.6	17		258330	2001 <i>VQ</i> ₂₁		9 9.4 276°65	4°4/14.2	18	
8 9	23 34.71	+ 8 44.6	1.407	2.315	14.4	21.0	8 9	23 30.74	+ 10 14.9	2.079	2.910	13.6	20.3
8 19	23 29.34	+ 10 6.7	1.356	2.319	10.0	20.7	8 19	23 26.14	+ 10 2.7	1.994	2.900	10.8	20.1
8 29	23 21.76	+ 11 37.4	1.328	2.324	5.5	20.5	8 29	23 19.93	+ 9 30.6	1.931	2.890	7.7	19.9
9 8	23 12.90	+ 13 6.8	1.326	2.328	3.3	20.4	9 8	23 12.71	+ 8 40.4	1.893	2.880	5.0	19.7
9 18	23 3.95	+ 14 25.0	1.349	2.332	6.7	20.6	9 18	23 5.24	+ 7 35.7	1.882	2.869	4.6	19.7
9 28	22 56.14	+ 15 23.9	1.398	2.336	11.1	20.9	9 28	22 58.38	+ 6 22.4	1.899	2.859	7.0	19.8
10 8	22 50.47	+ 15 59.4	1.469	2.340	15.1	21.1	10 8	22 52.92	+ 5 7.8	1.942	2.849	10.2	20.0
10 18	22 47.49	+ 16 10.9	1.558	2.344	18.5	21.4	10 18	22 49.40	+ 3 58.2	2.008	2.839	13.2	20.2
355777	2008 <i>RV</i> ₁₂₃		9 9.4 311°39	0°1/ 9.5	16		70880	1999 <i>VL</i> ₁₆₂		9 9.4 63°92	0°6/ 8.9	18	
8 9	23 25.70	+ 3 39.1	4.053	4.926	6.6	21.3	8 9	23 34.76	+ 4 49.7	1.640	2.533	13.5	19.3
8 19	23 21.88	+ 3 59.1	3.976	4.921	4.7	21.2	8 19	23 29.08	+ 5 18.2	1.587	2.542	9.6	19.1
8 29	23 17.33	+ 4 23.5	3.925	4.916	2.6	21.0	8 29	23 21.51	+ 5 56.2	1.558	2.552	5.1	18.8
9 8	23 12.36	+ 4 50.6	3.904	4.911	0.3	20.8	9 8	23 12.90	+ 6 38.2	1.554	2.561	0.7	18.5
9 18	23 7.31	+ 5 18.0	3.912	4.906	1.9	20.9	9 18	23 4.25	+ 7 18.2	1.578	2.571	4.3	18.8
9 28	23 2.58	+ 5 43.4	3.950	4.901	4.1	21.1	9 28	22 56.62	+ 7 50.5	1.627	2.581	8.6	19.1
10 8	22 58.51	+ 6 4.8	4.016	4.896	6.1	21.2	10 8	22 50.85	+ 8 10.9	1.701	2.591	12.4	19.4
10 18	22 55.38	+ 6 20.6	4.106	4.891	7.8	21.4	10 18	22 47.46	+ 8 17.5	1.796	2.601	15.6	19.6
20173	1996 <i>XO</i> _{19</}												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
259858	2004 CQ ₉₅	9 9.4 185°05'	0°2'/9.2 17				9652	1996 AF ₂	9 9.4 133°03'	1°7'/10.9 18			
8 9	23 36.34	- 3 33.6	1.852	2.734	12.8	21.4	8 9	23 37.39	+ 1 16.0	1.824	2.690	13.7	17.5
8 19	23 30.15	- 4 8.9	1.785	2.734	9.1	21.2	8 19	23 30.82	+ 1 1.8	1.765	2.702	10.0	17.3
8 29	23 22.12	- 4 54.6	1.742	2.734	5.0	20.9	8 29	23 22.44	+ 0 33.9	1.730	2.714	6.0	17.1
9 8	23 12.99	- 5 45.8	1.725	2.733	0.6	20.6	9 8	23 13.04	- 0 4.2	1.721	2.725	2.2	16.9
9 18	23 3.69	- 6 36.5	1.737	2.731	3.9	20.8	9 18	23 3.59	- 0 47.4	1.740	2.735	3.6	17.0
9 28	22 55.26	- 7 20.8	1.777	2.729	8.2	21.1	9 28	22 55.09	- 1 30.0	1.787	2.745	7.6	17.3
10 8	22 48.54	- 7 54.1	1.842	2.726	11.9	21.3	10 8	22 48.37	- 2 6.7	1.859	2.755	11.3	17.5
10 18	22 44.08	- 8 13.6	1.929	2.723	15.1	21.5	10 18	22 43.93	- 2 33.5	1.955	2.763	14.4	17.8
164361	2005 EV ₁₁	9 9.4 305°13'	2°7'/6.8 18				350201	2012 HC ₂₃	9 9.4 279°04'	0°3'/9.7 18			
8 9	23 32.01	- 9 2.0	1.725	2.628	12.4	19.7	8 9	23 28.33	- 0 2.9	2.369	3.243	10.6	20.4
8 19	23 27.20	-10 8.8	1.663	2.625	8.7	19.5	8 19	23 24.26	- 1 11.8	2.287	3.232	7.7	20.2
8 29	23 20.54	-11 22.7	1.626	2.621	4.8	19.3	8 29	23 18.84	- 2 33.8	2.230	3.220	4.3	20.0
9 8	23 12.79	-12 36.3	1.615	2.617	2.7	19.1	9 8	23 12.60	- 4 4.0	2.202	3.209	0.7	19.7
9 18	23 4.88	-13 42.0	1.631	2.614	5.7	19.3	9 18	23 6.18	- 5 36.5	2.203	3.197	3.1	19.8
9 28	22 57.82	-14 33.1	1.673	2.611	9.7	19.5	9 28	23 0.28	- 7 4.7	2.233	3.186	6.6	20.1
10 8	22 52.46	-15 5.6	1.738	2.607	13.3	19.8	10 8	22 55.54	- 8 22.8	2.289	3.174	9.9	20.2
10 18	22 49.37	-15 18.3	1.824	2.604	16.3	20.0	10 18	22 52.43	- 9 26.9	2.370	3.163	12.6	20.4
65157	2002 CB ₁₄₇	9 9.4 83°10'	1°4'/11.1 18				493668	2015 RT ₁₀₈	9 9.4 282°09'	5°5'/3.8 18			
8 9	23 29.89	+ 2 35.7	2.175	3.040	11.8	19.5	8 9	23 36.56	-21 41.8	2.274	3.168	10.2	20.8
8 19	23 25.33	+ 1 50.0	2.112	3.048	8.7	19.3	8 19	23 30.21	-22 22.7	2.198	3.145	7.8	20.7
8 29	23 19.38	+ 0 50.5	2.073	3.057	5.2	19.1	8 29	23 22.14	-22 58.8	2.148	3.123	5.9	20.5
9 8	23 12.64	+ 0 18.8	2.061	3.065	1.8	18.9	9 8	23 13.02	-23 24.0	2.125	3.100	5.7	20.4
9 18	23 5.84	+ 1 32.2	2.078	3.074	3.0	19.0	9 18	23 3.67	-23 33.8	2.129	3.076	7.5	20.5
9 28	22 59.71	- 2 43.8	2.123	3.082	6.5	19.3	9 28	22 55.04	-23 25.0	2.160	3.053	10.2	20.7
10 8	22 54.90	- 3 47.8	2.194	3.091	9.7	19.5	10 8	22 47.91	-22 57.5	2.215	3.030	12.8	20.8
10 18	22 51.86	- 4 40.4	2.289	3.099	12.5	19.7	10 18	22 42.86	-22 12.5	2.291	3.006	15.2	20.9
385316	2001 YY ₆₆	9 9.4 286°00'	6°6'/3.3 18				218217	2002 UB ₃₉	9 9.4 308°44'	0°3'/9.6 18			
8 9	23 35.40	-18 58.9	1.609	2.519	12.8	20.7	8 9	23 32.99	- 2 9.3	1.325	2.224	15.7	20.8
8 19	23 29.97	-20 19.3	1.538	2.496	9.6	20.5	8 19	23 28.52	- 2 37.8	1.247	2.204	11.4	20.5
8 29	23 22.25	-21 38.8	1.491	2.473	7.0	20.3	8 29	23 21.58	- 3 23.0	1.191	2.185	6.4	20.2
9 8	23 13.02	-22 47.5	1.470	2.450	7.0	20.2	9 8	23 12.97	- 4 19.5	1.158	2.165	1.0	19.7
9 18	23 3.41	-23 36.5	1.473	2.427	9.6	20.3	9 18	23 3.88	- 5 19.6	1.150	2.146	4.8	20.0
9 28	22 54.70	-23 59.7	1.501	2.404	13.1	20.5	9 28	22 55.70	- 6 14.3	1.167	2.128	10.3	20.2
10 8	22 47.97	-23 55.4	1.550	2.381	16.6	20.6	10 8	22 49.67	- 6 55.8	1.205	2.110	15.2	20.5
10 18	22 43.96	-23 25.4	1.616	2.358	19.6	20.8	10 18	22 46.56	- 7 19.4	1.262	2.093	19.5	20.7
393631	2004 HQ ₅₇	9 9.4 29°10'	7°6'/2.8 18				186785	2004 DG ₆₂	9 9.4 171°02'	0°8'/8.6 17			
8 9	23 35.60	-24 4.9	1.646	2.552	12.7	20.4	8 9	23 35.29	- 4 22.3	1.788	2.675	12.9	21.4
8 19	23 29.71	-25 4.2	1.611	2.560	9.9	20.2	8 19	23 29.44	- 5 13.5	1.725	2.678	9.1	21.1
8 29	23 21.83	-25 53.6	1.599	2.569	7.9	20.1	8 29	23 21.74	- 6 15.2	1.687	2.680	4.9	20.9
9 8	23 12.94	-26 25.3	1.611	2.578	8.0	20.2	9 8	23 12.97	- 7 21.5	1.675	2.682	0.9	20.6
9 18	23 4.14	-26 33.9	1.649	2.588	9.9	20.3	9 18	23 4.06	- 8 25.3	1.692	2.684	4.3	20.9
9 28	22 56.55	-26 17.5	1.710	2.598	12.6	20.5	9 28	22 56.04	- 9 20.1	1.735	2.684	8.5	21.1
10 8	22 51.00	-25 37.6	1.792	2.609	15.3	20.7	10 8	22 49.76	-10 1.1	1.804	2.685	12.3	21.4
10 18	22 47.95	-24 37.7	1.892	2.620	17.6	20.9	10 18	22 45.76	-10 25.7	1.894	2.684	15.5	21.6
136247	2003 XU ₅	9 9.4 327°36'	0°4'/9.1 17				455001	2015 TQ ₂₄₈	9 9.4 299°09'	1°7'/11.2 17			
8 9	23 30.78	- 3 3.4	1.117	2.030	16.9	19.6	8 9	23 30.04	+ 2 27.6	2.058	2.926	12.3	20.9
8 19	23 27.17	- 3 45.4	1.050	2.014	12.2	19.3	8 19	23 25.69	+ 1 57.8	1.970	2.908	9.1	20.7
8 29	23 20.89	- 4 46.1	1.002	1.999	6.7	18.9	8 29	23 19.72	+ 1 12.9	1.906	2.890	5.6	20.5
9 8	23 12.87	- 5 58.2	0.977	1.984	0.8	18.5	9 8	23 12.73	+ 0 16.3	1.868	2.872	2.2	20.2
9 18	23 4.40	- 7 11.6	0.975	1.971	5.5	18.8	9 18	23 5.45	- 0 47.3	1.858	2.854	3.3	20.2
9 28	22 57.03	- 8 15.1	0.995	1.958	11.4	19.1	9 28	22 58.75	- 1 51.5	1.875	2.836	7.0	20.4
10 8	22 52.07	- 9 0.1	1.036	1.946	16.7	19.3	10 8	22 53.41	- 2 50.4	1.918	2.818	10.7	20.6
10 18	22 50.27	- 9 22.2	1.095	1.936	21.1	19.6	10 18	22 49.99	- 3 38.9	1.984	2.801	13.9	20.8
198334	2004 UQ ₁	9 9.4 304°02'	19°2'/13.3 18				291571	2006 FO ₃₂	9 9.4 54°00'	2°2'/11.6 16			
8 9	0 4.73	-58 33.0	1.695	2.446	19.3	20.1	8 9	23 31.52	+ 4 16.8	1.546	2.419	15.3	21.1
8 19	23 52.35	-59 55.8	1.653	2.412	19.3	20.0	8 19	23 26.85	+ 3 30.9	1.496	2.435	11.4	20.9
8 29	23 34.87	-60 40.2	1.627	2.379	19.7	19.9	8 29	23 20.32	+ 2 25.1	1.468	2.452	7.0	20.7
9 8	23 14.56	-60 33.0	1.616	2.345	20.6	19.9	9 8	23 12.79	+ 1 5.0	1.466	2.469	2.8	20.5
9 18	22 54.61	-59 27.9	1.620	2.311	21.7	19.9	9 18	23 5.25	- 0 21.4	1.489	2.486	3.8	20.6
9 28	22 38.10	-57 27.4	1.638	2.278	23.0	20.0	9 28	22 58.73	- 1 45.4	1.539	2.503	8.0	20.9
10 8	22 26.74	-54 41.6	1.669	2.244	24.4	20.0	10 8	22 54.05	- 2 59.0	1.614	2.521	11.9	21.2
10 18	22 20.82	-51 22.2	1.712	2.211	25.6	20.1	10 18	22 51.68	- 3 57.1	1.710	2.539	15.3	21.4
362553	2010 UH ₁₀₀	9 9.4 0°66'	2°1'/7.7 18				513867	2013 HR ₁₂₄	9 9.4 78°49'	0°5'/8.9 18			
8 9	23 35.64	-10 33.5	1.855	2.753	12.0	19.9	8 9	23 34.92	- 6 9.2	2.192	3.075	11.0	21.6
8 19	23 29.61	-10 45.6	1.794	2.752	8.4	19.7	8 19	23 28.82	- 6 19.7	2.136	3.086	7.8	21.4
8 29	23 21.79	-11 0.6	1.758	2.752	4.6	19.4	8 29	23 21.27	- 6 35.8	2.105	3.097	4.2	21.2
9 8	23 12.95	-11 13.7	1.747	2.752	2.1	19.3	9 8	23 12.93	- 6 54.0	2.102	3.109	0.6	21.0
9 18	23 4.03	-11 20.6	1.765	2.752	4.9	19.4	9 18	23 4.57	- 7 10.6	2.127	3.120	3.5	21.2
9 28	22 56.01	-11 17.9	1.809	2.753	8.7	19.7	9 28	22 57.01	- 7 22.0	2.181	3.131	7.0	21.5
10 8	22 49.72	-11 3.5	1.878	2.754	12.1	19.9	10 8	22 50.92	- 7 25.7	2.261	3.142	10.1	21.7
10 18	22 45.66	-10 37.0	1.968	2.755	15.1	20.1	10 18	22 46.71	- 7 20.1	2.364	3.153	12.8	21.9
247447	2002 GE ₁₉	9 9.4 160°77'	3°7'/5.2 18				393160	2013 CN ₂₃	9 9.4 317°84'	2°6'/6.6 18			
8 9	23 34.45	-16 53.7	2.										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
231850	2000 <i>SB</i> ₄₈		9 9.4 16°49'	8°8'/15.4	18		157419	2004 <i>TJ</i> ₂₉₆		9 9.4 208°83'	3°8'/5.1	18	
8 9	23 37.96	+13 38.9	1.435	2.262	18.7	19.4	8 9	23 33.01	-16 23.3	2.399	3.297	9.6	20.1
8 19	23 31.88	+14 53.2	1.371	2.264	15.5	19.2	8 19	23 27.51	-17 8.5	2.340	3.295	6.9	19.9
8 29	23 23.33	+15 42.6	1.327	2.267	12.2	19.0	8 29	23 20.60	-17 52.7	2.307	3.294	4.5	19.8
9 8	23 13.22	+16 4.1	1.304	2.271	9.5	18.9	9 8	23 12.90	-18 30.5	2.302	3.292	3.9	19.8
9 18	23 2.78	+15 58.1	1.306	2.275	8.9	18.9	9 18	23 5.12	-18 57.8	2.325	3.290	5.8	19.9
9 28	22 53.41	+15 29.7	1.331	2.279	10.7	19.0	9 28	22 58.03	-19 11.1	2.375	3.288	8.5	20.0
10 8	22 46.28	+14 47.3	1.379	2.284	13.7	19.2	10 8	22 52.27	-19 9.3	2.450	3.286	11.1	20.2
10 18	22 42.09	+14 0.3	1.448	2.290	16.8	19.4	10 18	22 48.28	-18 52.5	2.546	3.283	13.3	20.4
362264	2009 <i>OP</i> ₂₅		9 9.4 36°49'	3°1'/12.9	18		4494	Marimo		9 9.4 200°45'	1°3'/10.5	18	
8 9	23 29.63	+ 7 0.4	1.973	2.825	13.4	20.8	8 9	23 36.19	+ 0 21.4	1.745	2.619	13.8	17.6
8 19	23 25.31	+ 6 30.2	1.908	2.831	10.2	20.6	8 19	23 30.22	- 0 3.3	1.674	2.616	10.1	17.4
8 29	23 19.46	+ 5 41.6	1.864	2.837	6.8	20.4	8 29	23 22.28	- 0 42.5	1.626	2.613	5.9	17.1
9 8	23 12.72	+ 4 37.9	1.847	2.843	3.7	20.2	9 8	23 13.14	- 1 32.1	1.604	2.609	1.7	16.8
9 18	23 5.87	+ 3 24.5	1.856	2.850	3.7	20.3	9 18	23 3.78	- 2 26.4	1.609	2.605	3.7	17.0
9 28	22 59.75	+ 2 8.0	1.893	2.857	6.8	20.5	9 28	22 55.28	- 3 18.7	1.642	2.601	8.1	17.2
10 8	22 55.07	+ 0 55.5	1.956	2.864	10.1	20.7	10 8	22 48.56	- 4 3.0	1.700	2.596	12.1	17.5
10 18	22 52.31	- 0 7.6	2.043	2.871	13.1	20.9	10 18	22 44.22	- 4 35.0	1.780	2.590	15.5	17.7
80585	2000 <i>AV</i> ₁₂₈		9 9.4 305°69'	3°2'/11.5	18		371424	2006 <i>SD</i> ₁₁₀		9 9.4 323°17'	1°3'/10.4	15	
8 9	23 34.30	+ 2 46.8	1.337	2.219	16.7	19.2	8 9	23 31.33	+ 0 32.2	1.209	2.107	16.9	20.5
8 19	23 29.56	+ 2 52.7	1.252	2.195	12.7	18.8	8 19	23 27.45	- 0 1.3	1.139	2.094	12.5	20.2
8 29	23 22.24	+ 2 39.1	1.188	2.172	8.1	18.5	8 29	23 21.05	- 0 56.3	1.089	2.081	7.3	19.9
9 8	23 13.11	+ 2 8.0	1.146	2.148	3.7	18.2	9 8	23 13.01	- 2 7.4	1.062	2.068	1.9	19.5
9 18	23 3.35	+ 1 24.1	1.129	2.125	4.9	18.2	9 18	23 4.55	- 3 25.6	1.059	2.056	4.7	19.7
9 28	22 54.42	+ 0 35.2	1.137	2.103	9.9	18.4	9 28	22 57.12	- 4 40.1	1.079	2.045	10.3	20.0
10 8	22 47.63	- 0 10.1	1.166	2.081	14.9	18.7	10 8	22 51.95	- 5 41.4	1.122	2.035	15.4	20.2
10 18	22 43.87	- 0 44.8	1.215	2.059	19.3	18.9	10 18	22 49.78	- 6 23.2	1.182	2.025	19.8	20.5
144127	2004 <i>BM</i> ₈₈		9 9.4 21°18'	2°6'/12.0	18		292835	2006 <i>UW</i> ₂₈₂		9 9.4 272°41'	1°2'/10.4	18	
8 9	23 32.27	+ 4 26.0	1.887	2.748	13.5	20.1	8 9	23 35.07	- 0 5.2	1.555	2.437	14.7	20.9
8 19	23 27.28	+ 4 8.1	1.817	2.748	10.2	19.8	8 19	23 29.76	- 0 29.7	1.473	2.420	10.9	20.6
8 29	23 20.58	+ 3 33.7	1.770	2.748	6.5	19.6	8 29	23 22.20	- 1 10.6	1.414	2.403	6.3	20.3
9 8	23 12.87	+ 2 45.8	1.748	2.749	3.1	19.4	9 8	23 13.16	- 2 3.7	1.379	2.385	1.7	20.0
9 18	23 4.98	+ 1 49.2	1.754	2.749	3.7	19.5	9 18	23 3.68	- 3 2.5	1.371	2.368	4.1	20.1
9 28	22 57.87	+ 0 50.2	1.787	2.749	7.2	19.7	9 28	22 55.01	- 3 59.3	1.389	2.350	9.1	20.4
10 8	22 52.31	- 0 4.6	1.845	2.749	10.8	19.9	10 8	22 48.25	- 4 46.9	1.431	2.332	13.6	20.6
10 18	22 48.85	- 0 50.4	1.926	2.750	14.0	20.1	10 18	22 44.12	- 5 20.3	1.494	2.313	17.5	20.8
81396	2000 <i>GO</i> ₈₃		9 9.4 146°80'	2°7'/6.8	18		48837	1998 <i>AR</i> ₆		9 9.4 253°54'	2°7'/5.9	18	
8 9	23 34.42	- 8 41.3	1.667	2.567	12.9	19.8	8 9	23 30.36	-12 38.5	2.666	3.562	8.8	19.7
8 19	23 28.91	- 9 54.6	1.612	2.572	9.0	19.6	8 19	23 25.59	-13 30.1	2.595	3.552	6.2	19.5
8 29	23 21.50	-11 15.2	1.582	2.577	4.9	19.4	8 29	23 19.56	-14 23.8	2.551	3.542	3.7	19.3
9 8	23 12.98	-12 34.9	1.579	2.582	2.7	19.2	9 8	23 12.80	-15 15.0	2.534	3.531	2.7	19.2
9 18	23 4.37	-13 45.7	1.602	2.586	5.8	19.4	9 18	23 5.89	-15 59.2	2.547	3.521	4.7	19.4
9 28	22 56.73	-14 40.7	1.653	2.590	9.8	19.7	9 28	22 59.51	-16 32.6	2.587	3.510	7.4	19.5
10 8	22 50.92	-15 16.1	1.726	2.593	13.5	19.9	10 8	22 54.23	-16 52.8	2.653	3.499	10.0	19.7
10 18	22 47.48	-15 30.9	1.820	2.596	16.5	20.2	10 18	22 50.50	-16 59.0	2.741	3.488	12.2	19.8
404015	2012 <i>CY</i> ₁₂		9 9.4 266°73'	0°2'/9.2	18		93522	2000 <i>TK</i> ₆₇		9 9.4 356°85'	2°0'/7.8	18	
8 9	23 33.45	- 4 49.3	2.233	3.115	10.9	20.7	8 9	23 33.30	- 7 21.9	1.408	2.316	14.4	19.5
8 19	23 27.88	- 5 4.0	2.163	3.113	7.7	20.5	8 19	23 28.44	- 8 6.5	1.351	2.314	10.1	19.2
8 29	23 20.83	- 5 25.8	2.118	3.110	4.2	20.3	8 29	23 21.39	- 9 0.3	1.316	2.313	5.4	19.0
9 8	23 12.90	- 5 51.0	2.101	3.108	0.5	20.0	9 8	23 13.05	- 9 56.0	1.306	2.312	2.0	18.7
9 18	23 4.85	- 6 15.8	2.112	3.105	3.3	20.2	9 18	23 4.54	-10 45.7	1.321	2.311	5.6	19.0
9 28	22 57.48	- 6 36.2	2.151	3.103	6.9	20.4	9 28	22 57.11	-11 22.3	1.361	2.311	10.3	19.2
10 8	22 51.48	- 6 49.0	2.217	3.101	10.2	20.6	10 8	22 51.74	-11 41.4	1.423	2.312	14.5	19.5
10 18	22 47.32	- 6 52.2	2.305	3.098	12.9	20.8	10 18	22 49.02	-11 41.6	1.505	2.313	18.0	19.7
97406	2000 <i>AY</i> ₁₃₅		9 9.4 134°56'	0°6'/8.5	18		309735	2008 <i>RK</i> ₅₀		9 9.4 250°19'	1°6'/12.8	15	
8 9	23 31.07	- 5 43.1	3.054	3.931	8.4	20.4	8 9	23 25.16	+ 5 11.1	4.534	5.367	6.7	21.1
8 19	23 25.82	- 6 18.9	2.996	3.945	5.9	20.2	8 19	23 21.51	+ 4 59.3	4.449	5.362	5.1	21.0
8 29	23 19.55	- 6 59.4	2.965	3.958	3.1	20.1	8 29	23 17.20	+ 4 40.2	4.389	5.357	3.4	20.9
9 8	23 12.74	- 7 41.5	2.964	3.971	0.6	19.9	9 8	23 12.51	+ 4 15.2	4.357	5.352	1.9	20.8
9 18	23 5.90	- 8 21.7	2.993	3.983	2.8	20.1	9 18	23 7.74	+ 3 45.9	4.356	5.347	1.9	20.8
9 28	22 59.59	- 8 56.7	3.051	3.995	5.5	20.3	9 28	23 3.24	+ 3 14.5	4.384	5.342	3.5	20.9
10 8	22 54.28	- 9 24.1	3.137	4.007	8.0	20.5	10 8	22 59.32	+ 2 43.2	4.441	5.337	5.2	21.0
10 18	22 50.32	- 9 42.1	3.247	4.018	10.0	20.6	10 18	22 56.23	+ 2 14.2	4.524	5.332	6.8	21.1
313266	2001 <i>XG</i> ₁₇₄		9 9.4 273°98'	0°6'/8.9	18		29197	Gleim		9 9.4 257°71'	0°1'/9.5	18	
8 9	23 34.98	- 3 12.2	1.386	2.283	15.3	21.1	8 9	23 34.82	- 2 37.8	1.785	2.668	13.1	19.2
8 19	23 29.90	- 4 0.6	1.308	2.265	11.0	20.8	8 19	23 29.34	- 3 12.7	1.703	2.652	9.5	18.9
8 29	23 22.34	- 5 5.3	1.253	2.247	6.0	20.5	8 29	23 21.87	- 4 0.2	1.644	2.636	5.3	18.6
9 8	23 13.14	- 6 19.9	1.221	2.229	0.8	20.1	9 8	23 13.12	- 4 55.5	1.612	2.619	0.7	18.2
9 18	23 3.45	- 7 35.3	1.216	2.210	5.1	20.4	9 18	23 4.02	- 5 52.5	1.607	2.602	4.0	18.5
9 28	22 54.67	- 8 41.9	1.236	2.191	10.5	20.6	9 28	22 55.66	- 6 44.4	1.630	2.584	8.5	18.7
10 8	22 48.02	- 9 32.1	1.278	2.172	15.4	20.9	10 8	22 48.97	- 7 25.5	1.677	2.567	12.6	18.9
10 18	22 44.26	-10 1.7	1.339	2.153	19.5	21.1	10 18	22 44.61	- 7 52.1	1.746	2.548	16.1	19.1
195533	2002 <i>JQ</i> ₃₇		9 9.4 151°90'	1°7'/11.2	18		349914	2009 <i>KX</i> ₁₃		9 9.4 117°03'	2°1'/7.4	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
452108	2014 QZ ₃₀₉	9 9.4 358°31	2.7/ 7.3	18			107026	2000 YQ ₁₁₈	9 9.4 169°15	0.8/ 9.9	18	R	
8 9	23 37.12	-12 57.9	1.911	2.807	11.7	20.4	8 9	23 38.66	-2 13.7	1.502	2.386	15.0	19.7
8 19	23 30.67	-13 4.3	1.849	2.806	8.3	20.2	8 19	23 32.18	-2 21.4	1.439	2.387	10.9	19.5
8 29	23 22.43	-13 11.0	1.813	2.805	4.7	19.9	8 29	23 23.44	-2 41.6	1.398	2.389	6.2	19.2
9 8	23 13.18	-13 13.5	1.803	2.805	2.8	19.8	9 8	23 13.36	-3 10.1	1.383	2.390	1.3	18.9
9 18	23 3.86	-13 8.0	1.821	2.804	5.2	20.0	9 18	23 3.09	-3 41.3	1.394	2.390	4.2	19.1
9 28	22 55.47	-12 51.6	1.866	2.805	8.8	20.2	9 28	22 53.92	-4 9.0	1.432	2.391	9.0	19.4
10 8	22 48.82	-12 23.4	1.937	2.805	12.2	20.4	10 8	22 46.87	-4 28.1	1.494	2.391	13.4	19.6
10 18	22 44.40	-11 43.6	2.028	2.806	15.0	20.6	10 18	22 42.55	-4 35.4	1.576	2.391	17.0	19.9
240395	2003 UY ₇₅	9 9.4 200°00	4.4/14.6	18			382117	2011 HN ₅₆	9 9.4 148°44	8.2/ 1.1	17		
8 9	23 32.27	+11 32.0	2.206	3.024	13.3	21.1	8 9	23 38.29	-27 2.3	1.907	2.800	11.9	21.9
8 19	23 27.17	+11 12.0	2.124	3.021	10.6	20.9	8 19	23 31.57	-28 24.4	1.871	2.807	9.6	21.7
8 29	23 20.53	+10 32.1	2.064	3.018	7.7	20.7	8 29	23 22.94	-29 35.3	1.859	2.813	8.3	21.7
9 8	23 12.95	+9 33.9	2.031	3.014	5.1	20.6	9 8	23 13.28	-30 26.9	1.873	2.820	8.6	21.7
9 18	23 5.17	+8 21.4	2.024	3.010	4.6	20.5	9 18	23 3.64	-30 53.5	1.913	2.825	10.4	21.8
9 28	22 58.02	+7 0.6	2.047	3.005	6.8	20.7	9 28	22 55.10	-30 53.2	1.976	2.831	12.7	22.0
10 8	22 52.23	+5 38.6	2.096	3.000	9.7	20.8	10 8	22 48.51	-30 27.5	2.061	2.835	15.0	22.2
10 18	22 48.32	+4 21.9	2.170	2.995	12.6	21.0	10 18	22 44.35	-29 39.9	2.163	2.840	17.0	22.3
12562	Briargrazer	9 9.4 116°55	2.7/ 6.6	18			199365	2006 BN ₁₉₂	9 9.4 179°88	1.1/10.5	18		
8 9	23 34.74	-13 17.4	2.405	3.298	9.8	16.9	8 9	23 34.69	+0 1.3	1.851	2.725	13.1	21.4
8 19	23 28.65	-13 45.5	2.351	3.306	6.9	16.8	8 19	23 29.05	-0 22.4	1.783	2.726	9.6	21.2
8 29	23 21.20	-14 14.0	2.323	3.314	4.0	16.6	8 29	23 21.62	-0 59.3	1.739	2.726	5.6	20.9
9 8	23 13.02	-14 38.6	2.324	3.322	2.7	16.5	9 8	23 13.13	-1 45.5	1.720	2.726	1.6	20.7
9 18	23 4.84	-14 55.4	2.353	3.330	4.8	16.7	9 18	23 4.48	-2 35.5	1.730	2.726	3.5	20.8
9 28	22 57.39	-15 1.6	2.410	3.338	7.6	16.9	9 28	22 56.65	-3 23.4	1.767	2.726	7.6	21.1
10 8	22 51.31	-14 55.8	2.493	3.346	10.4	17.1	10 8	22 50.46	-4 3.7	1.830	2.725	11.4	21.3
10 18	22 47.02	-14 37.8	2.598	3.353	12.7	17.2	10 18	22 46.47	-4 32.7	1.914	2.724	14.6	21.5
261611	2005 XQ ₁₁₄	9 9.4 259°24	1.6/11.3	18			445395	2010 SV ₁₈	9 9.4 343°73	0.7/ 8.8	17		
8 9	23 31.33	+2 14.1	2.487	3.345	10.8	21.6	8 9	23 30.08	-4 41.0	1.541	2.444	13.7	21.3
8 19	23 26.40	+1 52.8	2.397	3.329	8.0	21.4	8 19	23 26.10	-5 15.1	1.474	2.433	9.7	21.0
8 29	23 20.09	+1 19.7	2.332	3.313	4.9	21.2	8 29	23 20.14	-6 0.8	1.428	2.423	5.3	20.7
9 8	23 12.90	+0 37.3	2.293	3.296	2.0	20.9	9 8	23 12.97	-6 52.2	1.407	2.414	0.8	20.4
9 18	23 5.49	+0 10.8	2.284	3.280	2.9	21.0	9 18	23 5.55	-7 42.6	1.412	2.406	4.5	20.7
9 28	22 58.57	-0 59.8	2.304	3.263	6.1	21.2	9 28	22 58.99	-8 24.8	1.442	2.399	9.2	20.9
10 8	22 52.80	-1 45.3	2.351	3.246	9.2	21.3	10 8	22 54.22	-8 53.5	1.495	2.393	13.3	21.1
10 18	22 48.67	-2 23.3	2.422	3.228	12.0	21.5	10 18	22 51.84	-9 5.8	1.569	2.388	16.8	21.4
47824	2000 ED ₁₀₃	9 9.4 356°37	0.6/10.1	18			243588	1998 MA ₆	9 9.4 220°37	5.2/15.7	18		
8 9	23 27.92	+1 38.7	1.508	2.397	14.7	17.7	8 9	23 31.38	+13 55.0	2.334	3.137	13.2	20.3
8 19	23 23.53	+0 19.6	1.443	2.394	10.7	17.5	8 19	23 26.52	+13 54.0	2.252	3.133	10.7	20.1
8 29	23 19.24	-1 20.3	1.401	2.392	6.1	17.2	8 29	23 20.19	+13 33.6	2.191	3.130	8.1	19.9
9 8	23 12.80	-3 13.8	1.384	2.390	1.2	16.9	9 8	23 12.97	+12 54.6	2.155	3.126	5.9	19.8
9 18	23 6.16	-5 10.6	1.393	2.390	4.0	17.1	9 18	23 5.55	+11 59.5	2.146	3.122	5.3	19.8
9 28	23 0.40	-6 59.9	1.429	2.390	8.8	17.4	9 28	22 58.71	+10 53.3	2.165	3.118	6.8	19.9
10 8	22 56.39	-8 32.5	1.488	2.390	13.1	17.6	10 8	22 53.15	+9 42.4	2.210	3.114	9.3	20.0
10 18	22 54.70	-9 43.1	1.569	2.391	16.7	17.9	10 18	22 49.36	+8 32.8	2.280	3.109	11.9	20.2
328121	2008 AY ₀₆	9 9.4 137°22	0.1/ 9.5	17			102867	1999 WE ₅	9 9.4 333°78	1.9/ 7.9	18		
8 9	23 38.83	-3 36.3	1.536	2.423	14.6	21.2	8 9	23 27.42	-4 32.3	1.044	1.967	16.8	18.3
8 19	23 32.20	-3 49.7	1.478	2.429	10.5	20.9	8 19	23 24.95	-5 44.3	0.978	1.948	12.0	17.9
8 29	23 23.39	-4 14.0	1.442	2.434	5.8	20.7	8 29	23 19.83	-7 16.8	0.931	1.930	6.4	17.6
9 8	23 13.32	-4 44.6	1.431	2.438	0.8	20.3	9 8	23 12.95	-8 59.8	0.906	1.913	1.9	17.2
9 18	23 3.15	-5 15.5	1.448	2.443	4.3	20.6	9 18	23 5.61	-10 40.1	0.904	1.898	6.7	17.5
9 28	22 54.09	-5 41.1	1.491	2.447	9.0	20.9	9 28	22 59.36	-12 4.0	0.924	1.884	12.6	17.8
10 8	22 47.13	-5 56.7	1.558	2.451	13.2	21.2	10 8	22 55.51	-13 1.7	0.963	1.871	17.9	18.0
10 18	22 42.84	-5 59.8	1.646	2.455	16.6	21.4	10 18	22 54.85	-13 29.2	1.019	1.860	22.4	18.3
23552	1994 NB	9 9.4 90°86	8.5/31.3	18			457854	2009 SQ ₁₇₀	9 9.4 346°94	1.3/10.3	17		
8 9	23 37.43	-22 18.4	1.554	2.461	13.3	17.2	8 9	23 37.14	-3 10.7	1.662	2.546	13.8	20.1
8 19	23 31.09	-24 57.4	1.541	2.490	10.3	17.1	8 19	23 31.03	-2 35.6	1.589	2.537	10.1	19.9
8 29	23 22.67	-27 24.6	1.553	2.519	8.6	17.1	8 29	23 22.83	-2 8.6	1.539	2.529	5.9	19.6
9 8	23 13.21	-29 27.4	1.592	2.547	9.2	17.2	9 8	23 13.33	-1 47.8	1.515	2.521	1.7	19.3
9 18	23 3.90	-30 57.5	1.657	2.574	11.4	17.4	9 18	23 3.57	-1 30.8	1.518	2.515	3.9	19.5
9 28	22 55.91	-31 51.5	1.746	2.601	14.1	17.6	9 28	22 54.71	-1 14.4	1.548	2.509	8.3	19.7
10 8	22 50.10	-32 11.6	1.854	2.627	16.5	17.8	10 8	22 47.73	-0 55.5	1.603	2.504	12.4	20.0
10 18	22 46.93	-32 2.6	1.978	2.652	18.4	18.0	10 18	22 43.27	-0 31.5	1.679	2.500	15.8	20.2
211789	2004 CR ₅₈	9 9.4 256°53	2.4/ 6.9	18			131439	2001 QK ₆₈	9 9.4 0°18	3.9/13.6	17		
8 9	23 33.45	-9 43.2	2.048	2.944	11.1	21.0	8 9	23 26.24	+14 50.4	0.927	1.797	23.3	18.6
8 19	23 28.13	-10 34.5	1.973	2.931	7.8	20.8	8 19	23 24.20	+12 20.8	0.863	1.795	18.2	18.3
8 29	23 21.12	-11 31.4	1.923	2.917	4.3	20.5	8 29	23 19.41	+8 50.1	0.817	1.794	12.1	18.0
9 8	23 13.05	-12 28.0	1.900	2.902	2.4	20.4	9 8	23 12.90	+4 28.8	0.793	1.794	5.8	17.6
9 18	23 4.75	-13 18.4	1.905	2.888	5.1	20.5	9 18	23 6.07	-0 18.4	0.795	1.794	5.2	17.6
9 28	22 57.12	-13 57.2	1.937	2.873	8.7	20.7	9 28	23 0.56	-4 58.2	0.823	1.795	11.4	17.9
10 8	22 50.98	-14 20.9	1.994	2.858	12.1	20.9	10 8	22 57.65	-9 1.4	0.874	1.797	17.5	18.3
10 18	22 46.86	-14 28.1	2.072	2.843	15.0	21.1	10 18	22 58.00	-12 12.1	0.944	1.800	22.6	18.6
304254	2006 RR ₅₆	9 9.4 268°44	0.7/ 8.7	18			369890	2012 TN ₂₇	9 9.4 115°73	4.1/14.3	18		
8 9	23 33.14	-5 20.2	1.955	2.844	11.9	20.8	8 9	23 33.01	+11				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
428618	2008 <i>FA</i> ₁₅		9 9.5 208°21	4°0/ 5.7 18			230377	2002 <i>GP</i> ₁₈		9 9.5 239°37	5°8/ 3.5 18		
8 9	23 36.64	-13 12.2	1.782	2.682	12.2	21.6	8 9	23 37.60	-20 41.6	2.061	2.957	11.0	20.6
8 19	23 30.57	-14 20.3	1.719	2.678	8.7	21.4	8 19	23 31.16	-21 45.2	1.994	2.943	8.3	20.4
8 29	23 22.53	-15 31.2	1.682	2.672	5.3	21.2	8 29	23 22.85	-22 44.9	1.952	2.928	6.2	20.3
9 8	23 13.31	-16 37.3	1.671	2.667	4.1	21.1	9 8	23 13.39	-23 33.6	1.938	2.913	6.1	20.2
9 18	23 3.89	-17 31.0	1.687	2.660	6.8	21.3	9 18	23 3.72	-24 5.2	1.950	2.897	8.1	20.3
9 28	22 55.38	-18 6.8	1.730	2.653	10.4	21.5	9 28	22 54.84	-24 15.7	1.989	2.880	11.0	20.5
10 8	22 48.68	-18 22.0	1.797	2.646	13.9	21.7	10 8	22 47.64	-24 4.6	2.051	2.863	13.8	20.6
10 18	22 44.38	-18 16.9	1.883	2.638	16.8	21.9	10 18	22 42.68	-23 33.5	2.132	2.845	16.2	20.8
247145	2000 <i>XG</i> ₇		9 9.5 289°38	3°0/ 6.6 18			118630	2000 <i>HA</i> ₄₇		9 9.5 140°12	0°6/ 10.1 18		
8 9	23 34.61	-12 36.7	2.083	2.980	10.9	20.1	8 9	23 35.58	- 0 44.5	1.816	2.692	13.3	20.3
8 19	23 29.01	-13 10.9	2.001	2.958	7.7	19.9	8 19	23 29.67	- 1 22.0	1.757	2.701	9.6	20.1
8 29	23 21.66	-13 47.4	1.945	2.937	4.5	19.7	8 29	23 21.98	- 2 12.5	1.721	2.710	5.4	19.9
9 8	23 13.20	-14 21.0	1.915	2.915	3.0	19.5	9 8	23 13.27	- 3 11.0	1.712	2.718	1.1	19.6
9 18	23 4.46	-14 46.5	1.914	2.893	5.5	19.7	9 18	23 4.49	- 4 11.4	1.730	2.726	3.6	19.8
9 28	22 56.38	-14 59.6	1.940	2.872	9.0	19.8	9 28	22 56.60	- 5 7.1	1.777	2.733	7.8	20.1
10 8	22 49.79	-14 57.9	1.990	2.850	12.3	20.0	10 8	22 50.42	- 5 52.7	1.849	2.740	11.5	20.3
10 18	22 45.26	-14 40.9	2.062	2.828	15.2	20.2	10 18	22 46.47	- 6 25.0	1.943	2.746	14.7	20.6
479728	2014 <i>DR</i> ₁₃₆		9 9.5 294°57	1°3/ 8.2 18			480422	2015 <i>KY</i> ₁₁₂		9 9.5 217°87	4°6/ 14.4 18		
8 9	23 31.27	- 4 29.9	1.692	2.588	13.0	20.9	8 9	23 32.52	+11 8.4	1.886	2.715	14.8	21.4
8 19	23 26.82	- 5 40.0	1.624	2.582	9.2	20.6	8 19	23 27.62	+10 44.0	1.806	2.711	11.8	21.2
8 29	23 20.51	- 7 2.8	1.580	2.575	4.9	20.4	8 29	23 20.94	+ 9 56.6	1.748	2.706	8.4	21.0
9 8	23 13.05	- 8 30.9	1.563	2.569	1.3	20.1	9 8	23 13.15	+ 8 48.2	1.714	2.701	5.4	20.8
9 18	23 5.38	- 9 56.0	1.572	2.563	4.8	20.3	9 18	23 5.12	+ 7 23.6	1.708	2.696	4.9	20.7
9 28	22 58.51	-11 10.1	1.608	2.557	9.1	20.6	9 28	22 57.81	+ 5 50.4	1.729	2.690	7.5	20.9
10 8	22 53.33	-12 7.1	1.668	2.551	13.0	20.8	10 8	22 52.08	+ 4 17.3	1.776	2.684	10.9	21.1
10 18	22 50.40	-12 44.0	1.749	2.545	16.3	21.0	10 18	22 48.49	+ 2 51.9	1.846	2.678	14.2	21.3
92071	1999 <i>WJ</i> ₁₈		9 9.5 285°88	7°8/ 30.7 18			513953	2014 <i>DJ</i> ₁₄₇		9 9.5 293°72	3°5/ 6.3 18		
8 9	23 33.92	-28 15.4	2.200	3.092	10.6	19.2	8 9	23 34.73	-12 32.3	1.734	2.638	12.3	21.3
8 19	23 28.51	-29 34.5	2.143	3.076	8.8	19.1	8 19	23 29.25	-13 21.4	1.672	2.633	8.7	21.1
8 29	23 21.36	-30 44.4	2.112	3.060	7.8	19.0	8 29	23 21.83	-14 13.3	1.635	2.627	5.1	20.9
9 8	23 13.16	-31 37.9	2.106	3.044	8.3	19.0	9 8	23 13.27	-15 1.1	1.623	2.622	3.6	20.8
9 18	23 4.78	-32 9.2	2.125	3.027	10.0	19.1	9 18	23 4.54	-15 38.4	1.638	2.617	6.3	20.9
9 28	22 57.17	-32 15.5	2.168	3.011	12.2	19.2	9 28	22 56.73	-16 0.0	1.680	2.612	10.1	21.2
10 8	22 51.14	-31 57.1	2.232	2.995	14.3	19.3	10 8	22 50.70	-16 3.6	1.744	2.607	13.6	21.4
10 18	22 47.22	-31 16.4	2.314	2.979	16.2	19.5	10 18	22 47.02	-15 49.0	1.829	2.602	16.5	21.6
517797	2015 <i>PD</i> ₃₀₄		9 9.5 310°12	3°8/ 5.1 18			228130	2009 <i>PE</i> ₁₇		9 9.5 27°06	0°2/ 9.6 18		
8 9	23 30.45	-12 27.9	1.943	2.849	11.1	20.7	8 9	23 32.41	- 2 8.1	1.047	1.959	17.8	19.3
8 19	23 26.06	-13 53.2	1.882	2.844	7.8	20.5	8 19	23 28.17	- 2 43.7	1.007	1.970	12.7	19.0
8 29	23 20.02	-15 22.5	1.847	2.839	4.8	20.3	8 29	23 21.39	- 3 36.9	0.986	1.982	7.0	18.8
9 8	23 12.99	-16 48.1	1.839	2.834	4.0	20.2	9 8	23 13.20	- 4 39.8	0.988	1.995	1.0	18.4
9 18	23 5.80	-18 2.5	1.858	2.829	6.5	20.4	9 18	23 5.03	- 5 42.3	1.012	2.009	5.0	18.8
9 28	22 59.35	-18 59.5	1.903	2.824	9.8	20.6	9 28	22 58.29	- 6 34.9	1.060	2.024	10.6	19.1
10 8	22 54.38	-19 36.0	1.972	2.819	12.9	20.8	10 8	22 54.06	- 7 10.5	1.128	2.041	15.4	19.5
10 18	22 51.43	-19 51.3	2.061	2.814	15.6	21.0	10 18	22 52.82	- 7 26.2	1.214	2.058	19.3	19.8
116643	2004 <i>CB</i> ₄		9 9.5 330°96	0°6/ 8.9 18			170901	2004 <i>VP</i> ₈₄		9 9.5 106°69	2°0/ 11.2 17		
8 9	23 33.27	- 4 46.6	1.684	2.578	13.2	19.8	8 9	23 35.93	+ 3 12.6	1.412	2.288	16.4	20.2
8 19	23 28.23	- 5 14.5	1.617	2.572	9.4	19.5	8 19	23 30.25	+ 2 28.7	1.360	2.301	12.1	20.0
8 29	23 21.27	- 5 52.4	1.573	2.567	5.1	19.3	8 29	23 22.40	+ 1 24.2	1.329	2.314	7.3	19.8
9 8	23 13.16	- 6 35.0	1.555	2.562	0.7	18.9	9 8	23 13.34	+ 0 5.0	1.323	2.327	2.6	19.5
9 18	23 4.85	- 7 16.7	1.563	2.557	4.2	19.2	9 18	23 4.22	- 1 20.4	1.342	2.339	4.1	19.7
9 28	22 57.40	- 7 51.2	1.598	2.553	8.6	19.4	9 28	22 56.27	- 2 42.2	1.389	2.351	8.8	20.0
10 8	22 51.70	- 8 14.0	1.657	2.549	12.6	19.7	10 8	22 50.45	- 3 52.3	1.459	2.363	13.1	20.3
10 18	22 48.32	- 8 22.5	1.737	2.545	15.9	19.9	10 18	22 47.30	- 4 45.4	1.550	2.374	16.8	20.5
441329	2008 <i>CJ</i> ₆₁		9 9.5 279°72	0°7/ 8.9 18			335012	2004 <i>HX</i> ₅₂		9 9.5 113°64	1°9/ 11.2 17		
8 9	23 37.25	- 6 54.4	1.994	2.879	11.8	21.3	8 9	23 37.62	+ 1 47.0	1.722	2.589	14.3	20.9
8 19	23 30.88	- 6 56.8	1.916	2.867	8.5	21.1	8 19	23 31.14	+ 1 33.6	1.667	2.604	10.5	20.7
8 29	23 22.68	- 7 4.7	1.861	2.854	4.6	20.8	8 29	23 22.79	+ 1 5.2	1.635	2.619	6.4	20.4
9 8	23 13.35	- 7 14.4	1.834	2.841	0.8	20.5	9 8	23 13.40	+ 0 25.8	1.629	2.633	2.4	20.2
9 18	23 3.77	- 7 22.3	1.836	2.829	3.9	20.7	9 18	23 3.98	- 0 19.4	1.651	2.647	3.7	20.4
9 28	22 54.93	- 7 24.4	1.866	2.816	8.0	21.0	9 28	22 55.58	- 1 4.2	1.700	2.660	7.7	20.6
10 8	22 47.70	- 7 18.1	1.921	2.803	11.6	21.2	10 8	22 49.05	- 1 43.0	1.775	2.673	11.5	20.9
10 18	22 42.65	- 7 1.9	1.998	2.790	14.7	21.4	10 18	22 44.88	- 2 11.7	1.871	2.686	14.7	21.1
263462	2008 <i>EO</i> ₃₄		9 9.5 177°48	0°3/ 9.8 17			206438	2003 <i>SS</i> ₂₀₄		9 9.5 343°65	6°3/ 5.1 18		
8 9	23 35.77	- 1 18.8	1.826	2.703	13.2	21.9	8 9	23 33.60	-17 15.5	1.229	2.151	14.8	18.1
8 19	23 29.86	- 2 1.7	1.759	2.705	9.5	21.7	8 19	23 29.09	-18 0.8	1.171	2.138	10.9	17.9
8 29	23 22.11	- 2 57.7	1.716	2.706	5.3	21.5	8 29	23 21.99	-18 44.1	1.135	2.126	7.3	17.6
9 8	23 13.27	- 4 1.5	1.700	2.707	0.9	21.2	9 8	23 13.32	-19 15.6	1.122	2.114	6.5	17.6
9 18	23 4.27	- 5 6.9	1.713	2.708	3.7	21.4	9 18	23 4.40	-19 27.3	1.132	2.105	9.4	17.7
9 28	22 56.13	- 6 6.8	1.752	2.707	8.0	21.6	9 28	22 56.71	-19 14.3	1.164	2.096	13.5	17.9
10 8	22 49.68	- 6 55.8	1.818	2.706	11.8	21.9	10 8	22 51.42	-18 36.0	1.216	2.089	17.5	18.1
10 18	22 45.48	- 7 30.4	1.905	2.705	15.1	22.1	10 18	22 49.17	-17 35.1	1.285	2.083	21.0	18.4
133971	2004 <i>TJ</i> ₂₀₇		9 9.5 226°78	3°9/ 5.6 18			103758	2000					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
246612	2008 <i>VJ</i> ₆₉		9 9.5 36°84	4.1/ 6.2	18		13182	1996 <i>SO</i> ₈		9 9.5 343°59	1°0/11.2	18	
8 9	23 35.58	-13 15.8	1.481	2.391	13.6	19.7	8 9	23 26.26	+ 0 55.9	3.805	4.661	7.4	17.5
8 19	23 29.97	-14 4.9	1.434	2.397	9.7	19.5	8 19	23 22.46	+ 0 42.6	3.726	4.658	5.4	17.3
8 29	23 22.24	-14 55.6	1.411	2.403	5.8	19.3	8 29	23 17.86	+ 0 22.5	3.673	4.655	3.3	17.2
9 8	23 13.35	-15 39.9	1.412	2.410	4.2	19.2	9 8	23 12.81	- 0 2.5	3.648	4.651	1.3	17.0
9 18	23 4.44	-16 11.0	1.439	2.418	7.0	19.4	9 18	23 7.68	- 0 30.4	3.653	4.648	1.9	17.1
9 28	22 56.70	-16 24.0	1.491	2.425	10.9	19.7	9 28	23 2.87	- 0 58.6	3.687	4.646	4.1	17.2
10 8	22 51.05	-16 17.3	1.566	2.433	14.6	19.9	10 8	22 58.77	- 1 24.7	3.750	4.643	6.2	17.4
10 18	22 47.99	-15 51.7	1.659	2.442	17.6	20.2	10 18	22 55.67	- 1 46.5	3.838	4.640	8.0	17.5
223321	2003 <i>QB</i> ₂₈		9 9.5 350°32	5°8/15.0	18		316133	2009 <i>SX</i> ₃₃		9 9.5 280°23	0°2/ 9.8	18	
8 9	23 30.78	+11 31.2	1.817	2.649	15.2	19.2	8 9	23 25.85	- 3 6.6	4.425	5.293	6.2	20.9
8 19	23 26.47	+11 52.3	1.741	2.643	12.3	19.0	8 19	23 22.09	- 3 24.3	4.340	5.282	4.4	20.8
8 29	23 20.35	+11 52.3	1.686	2.638	9.2	18.8	8 29	23 17.64	- 3 46.3	4.281	5.270	2.5	20.6
9 8	23 13.12	+11 31.6	1.655	2.634	6.5	18.6	9 8	23 12.78	- 4 11.1	4.252	5.259	0.4	20.4
9 18	23 5.63	+10 52.6	1.649	2.630	5.9	18.6	9 18	23 7.84	- 4 36.5	4.252	5.247	1.7	20.6
9 28	22 58.86	+10 9.9	1.668	2.627	8.0	18.7	9 28	23 3.17	- 5 0.5	4.283	5.235	3.8	20.7
10 8	22 53.66	+ 9 3.7	1.713	2.625	11.0	18.9	10 8	22 59.09	- 5 21.2	4.341	5.223	5.7	20.8
10 18	22 50.63	+ 8 7.9	1.779	2.623	14.1	19.0	10 18	22 55.87	- 5 37.0	4.426	5.212	7.3	20.9
516949	2012 <i>BZ</i> ₁₅₅		9 9.5 279°89	1°8/ 7.5	18		461957	2006 <i>UY</i> ₂₈		9 9.5 26°07	3°3/ 7.7	17	
8 9	23 31.56	- 7 51.7	2.101	2.995	10.9	21.6	8 9	23 35.80	-10 21.5	0.892	1.821	18.3	19.5
8 19	23 26.79	- 8 42.6	2.027	2.984	7.7	21.4	8 19	23 30.76	-10 42.9	0.864	1.836	12.9	19.3
8 29	23 20.45	- 9 40.5	1.978	2.972	4.2	21.1	8 29	23 22.83	-11 9.9	0.854	1.852	7.0	19.0
9 8	23 13.14	-10 39.7	1.956	2.961	1.8	20.9	9 8	23 13.46	-11 33.1	0.864	1.869	3.3	18.9
9 18	23 5.62	-11 34.6	1.963	2.950	4.5	21.1	9 18	23 4.31	-11 44.8	0.897	1.888	7.2	19.2
9 28	22 58.75	-12 19.7	1.997	2.938	8.1	21.3	9 28	22 57.01	-11 39.3	0.951	1.909	12.5	19.5
10 8	22 53.26	-12 51.1	2.055	2.927	11.4	21.5	10 8	22 52.65	-11 15.2	1.025	1.931	17.2	19.9
10 18	22 49.68	-13 7.0	2.136	2.915	14.3	21.7	10 18	22 51.61	-10 33.7	1.115	1.954	21.0	20.2
75695	2000 <i>AK</i> ₁₀₆		9 9.5 359°99	1°6/10.7	18		266781	2009 <i>SR</i> ₂₃₇		9 9.5 313°77	7°7/ 2.1	18	
8 9	23 29.38	+ 1 51.2	1.101	2.003	17.9	17.2	8 9	23 37.45	-26 59.7	1.980	2.873	11.5	19.4
8 19	23 26.13	+ 1 6.8	1.044	2.000	13.2	17.0	8 19	23 31.16	-27 46.3	1.918	2.856	9.3	19.2
8 29	23 20.40	- 0 2.4	1.007	1.999	7.8	16.7	8 29	23 22.90	-28 23.0	1.880	2.838	7.9	19.1
9 8	23 13.14	- 1 29.1	0.992	1.998	2.3	16.3	9 8	23 13.49	-28 42.5	1.867	2.821	8.0	19.1
9 18	23 5.64	- 3 2.9	1.000	1.999	4.7	16.5	9 18	23 3.93	-28 39.8	1.879	2.804	9.8	19.1
9 28	22 59.33	- 4 31.2	1.032	2.000	10.3	16.8	9 28	22 55.30	-28 12.6	1.916	2.788	12.3	19.3
10 8	22 55.35	- 5 43.6	1.084	2.003	15.3	17.1	10 8	22 48.49	-27 22.0	1.975	2.772	14.8	19.4
10 18	22 54.32	- 6 33.8	1.156	2.007	19.6	17.4	10 18	22 44.07	-26 11.4	2.052	2.756	17.1	19.6
387062	2012 <i>TQ</i> ₅₄		9 9.5 11°85	2°0/10.9	18		106959	2000 <i>YR</i> ₇₉		9 9.5 232°02	0°4/ 9.9	18	
8 9	23 34.65	+ 0 27.7	1.404	2.290	15.8	19.8	8 9	23 34.45	- 1 27.7	2.167	3.039	11.6	20.6
8 19	23 29.47	+ 0 30.7	1.345	2.292	11.6	19.6	8 19	23 28.84	- 2 0.6	2.084	3.027	8.4	20.4
8 29	23 22.07	+ 0 18.0	1.307	2.295	7.0	19.3	8 29	23 21.60	- 2 44.8	2.025	3.014	4.8	20.1
9 8	23 13.35	- 0 6.9	1.293	2.298	2.6	19.0	9 8	23 13.33	- 3 36.3	1.994	3.000	0.9	19.8
9 18	23 4.47	- 0 38.8	1.304	2.301	4.2	19.2	9 18	23 4.80	- 4 30.3	1.991	2.986	3.3	20.0
9 28	22 56.67	- 1 11.0	1.341	2.306	8.8	19.5	9 28	22 56.88	- 5 21.0	2.017	2.972	7.2	20.2
10 8	22 50.96	- 1 37.3	1.401	2.311	13.2	19.7	10 8	22 50.35	- 6 3.8	2.070	2.956	10.7	20.4
10 18	22 47.92	- 1 53.1	1.481	2.316	16.9	20.0	10 18	22 45.75	- 6 35.2	2.145	2.941	13.7	20.6
389906	2012 <i>TL</i> ₅₄		9 9.5 309°28	1°5/10.7	18		392127	2009 <i>FY</i> ₅₅		9 9.5 215°33	21°4/18.9	17	
8 9	23 35.19	- 0 19.9	1.633	2.513	14.3	20.3	8 9	23 49.56	-49 9.1	1.098	1.947	21.8	19.9
8 19	23 29.73	- 0 23.5	1.560	2.506	10.5	20.0	8 19	23 41.75	-51 43.2	1.090	1.945	21.4	19.9
8 29	23 22.20	- 0 40.5	1.511	2.498	6.2	19.8	8 29	23 29.31	-53 31.3	1.099	1.944	21.8	19.9
9 8	23 13.38	- 1 7.6	1.486	2.492	2.0	19.5	9 8	23 14.32	-54 19.2	1.122	1.941	22.9	20.0
9 18	23 4.30	- 1 40.2	1.488	2.485	3.9	19.6	9 18	22 59.63	-54 2.6	1.160	1.939	24.4	20.1
9 28	22 56.08	- 2 12.2	1.517	2.478	8.3	19.9	9 28	22 47.98	-52 46.1	1.209	1.937	26.0	20.2
10 8	22 49.70	- 2 38.1	1.569	2.472	12.5	20.1	10 8	22 40.89	-50 41.7	1.269	1.934	27.5	20.4
10 18	22 45.79	- 2 53.9	1.643	2.466	16.1	20.3	10 18	22 38.65	-48 2.2	1.337	1.931	28.8	20.5
469514	2003 <i>QA</i> ₉₁		9 9.5 283°55	0°0/ 8.6	15		232173	2002 <i>EQ</i> ₃₈		9 9.5 287°32	0°2/ 9.3	18	
8 9	23 14.16	- 7 16.2	43.282	44.162	0.7	22.1	8 9	23 34.96	- 3 50.4	1.624	2.515	13.8	20.8
8 19	23 13.54	- 7 20.4	43.210	44.161	0.5	22.1	8 19	23 29.59	- 4 15.5	1.552	2.505	9.9	20.6
8 29	23 12.86	- 7 24.9	43.166	44.159	0.2	22.1	8 29	23 22.15	- 4 52.0	1.503	2.496	5.4	20.3
9 8	23 12.15	- 7 29.4	43.150	44.157	0.1	22.0	9 8	23 13.41	- 5 34.9	1.480	2.487	0.7	20.0
9 18	23 11.44	- 7 33.9	43.164	44.155	0.2	22.1	9 18	23 4.40	- 6 18.0	1.483	2.478	4.2	20.2
9 28	23 10.75	- 7 38.1	43.208	44.154	0.4	22.1	9 28	22 56.25	- 6 55.0	1.513	2.469	8.9	20.5
10 8	23 10.11	- 7 41.9	43.279	44.152	0.6	22.1	10 8	22 49.95	- 7 20.7	1.566	2.460	13.1	20.7
10 18	23 9.54	- 7 45.2	43.376	44.150	0.8	22.1	10 18	22 46.13	- 7 32.1	1.640	2.451	16.6	20.9
305289	2008 <i>AB</i> ₄		9 9.5 179°16	0°7/10.4	18		137147	1999 <i>CW</i> ₁₄₅		9 9.5 14°26	0°5/ 9.9	18	
8 9	23 33.12	- 0 38.4	2.675	3.537	9.9	21.6	8 9	23 32.95	- 1 45.6	1.926	2.806	12.4	19.7
8 19	23 27.55	- 1 4.0	2.601	3.539	7.2	21.4	8 19	23 27.82	- 2 13.3	1.859	2.806	9.0	19.5
8 29	23 20.73	- 1 38.5	2.554	3.540	4.1	21.3	8 29	23 21.03	- 2 52.4	1.816	2.807	5.0	19.3
9 8	23 13.19	- 2 19.0	2.534	3.540	1.1	21.0	9 8	23 13.25	- 3 38.5	1.800	2.807	0.9	19.0
9 18	23 5.53	- 3 1.8	2.545	3.540	2.6	21.2	9 18	23 5.34	- 4 26.4	1.811	2.807	3.4	19.2
9 28	22 58.43	- 3 42.8	2.585	3.540	5.8	21.4	9 28	22 58.18	- 5 10.5	1.850	2.808	7.5	19.4
10 8	22 52.46	- 4 18.4	2.653	3.539	8.7	21.6	10 8	22 52.56	- 5 45.9	1.914	2.808	11.1	19.6
10 18	22 48.05	- 4 45.8	2.745	3.537	11.1	21.7	10 18	22 48.99	- 6 9.5	2.001	2.808	14.1	19.9
129380	6839 <i>P-L</i>		9 9.5 35°13	2°2/ 7.7	18		159639	2002 <i>CJ</i> ₉₃					

EPHEMERIDES

9 9.5

9 9.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
274200	2008 <i>HP</i> ₃₃		9 9.5 42°59	3.6/ 6.4	17		61518	2000 <i>QZ</i> ₅₈		9 9.5 268°14	2.1/ 7.4	18	
8 9	23 32.47	- 8 49.8	1.217	2.134	15.4	19.9	8 9	23 33.56	- 9 30.6	2.080	2.975	11.0	19.3
8 19	23 28.00	-10 21.5	1.180	2.148	10.7	19.7	8 19	23 28.23	-10 9.5	2.009	2.965	7.8	19.1
8 29	23 21.26	-12 1.2	1.166	2.162	5.9	19.5	8 29	23 21.27	-10 53.2	1.962	2.956	4.3	18.9
9 8	23 13.29	-13 37.3	1.175	2.177	3.7	19.4	9 8	23 13.33	-11 36.5	1.943	2.946	2.1	18.7
9 18	23 5.35	-14 59.0	1.209	2.193	7.3	19.6	9 18	23 5.19	-12 14.3	1.951	2.937	4.7	18.9
9 28	22 58.72	-15 57.8	1.267	2.209	11.8	20.0	9 28	22 57.75	-12 41.8	1.987	2.927	8.3	19.1
10 8	22 54.34	-16 30.2	1.346	2.225	15.8	20.2	10 8	22 51.77	-12 56.0	2.048	2.917	11.6	19.3
10 18	22 52.69	-16 36.6	1.443	2.242	19.1	20.5	10 18	22 47.77	-12 55.5	2.131	2.907	14.4	19.5
506946	2008 <i>HS</i> ₆₃		9 9.5 148°03	2.8/ 6.9	17		247903	2003 <i>UO</i> ₂₉₆		9 9.5 42°55	0.5/ 9.9	17	
8 9	23 34.87	- 8 48.1	1.626	2.527	13.2	21.8	8 9	23 34.41	- 1 1.0	1.141	2.043	17.4	20.3
8 19	23 29.41	-10 1.3	1.571	2.531	9.2	21.6	8 19	23 29.53	- 1 39.6	1.097	2.054	12.6	20.0
8 29	23 21.97	-11 21.9	1.541	2.535	5.1	21.4	8 29	23 22.18	- 2 36.5	1.073	2.066	7.0	19.7
9 8	23 13.39	-12 41.6	1.537	2.539	2.8	21.3	9 8	23 13.45	- 3 44.2	1.071	2.078	1.3	19.4
9 18	23 4.70	-13 52.1	1.559	2.543	6.0	21.5	9 18	23 4.69	- 4 53.2	1.094	2.091	4.8	19.7
9 28	22 57.00	-14 46.4	1.608	2.546	10.0	21.7	9 28	22 57.31	- 5 53.6	1.140	2.104	10.2	20.1
10 8	22 51.17	-15 20.7	1.681	2.549	13.7	21.9	10 8	22 52.35	- 6 38.2	1.208	2.117	14.9	20.4
10 18	22 47.75	-15 34.0	1.773	2.552	16.8	22.2	10 18	22 50.35	- 7 3.4	1.295	2.131	18.8	20.7
129430	4305 <i>T</i> -3		9 9.5 264°37	6.0/ 2.5	18		169448	2002 <i>BY</i> ₁₁		9 9.5 155°67	0.7/ 10.1	17	
8 9	23 36.24	-24 30.9	2.434	3.324	9.8	20.6	8 9	23 37.70	- 0 57.8	1.591	2.471	14.6	20.6
8 19	23 30.02	-25 20.7	2.367	3.307	7.7	20.4	8 19	23 31.46	- 1 29.1	1.530	2.476	10.6	20.4
8 29	23 22.20	-26 4.2	2.325	3.290	6.2	20.3	8 29	23 23.14	- 2 14.8	1.492	2.482	6.0	20.1
9 8	23 13.43	-26 35.2	2.311	3.272	6.3	20.3	9 8	23 13.59	- 3 9.5	1.480	2.487	1.2	19.8
9 18	23 4.49	-26 49.4	2.324	3.254	7.9	20.4	9 18	23 3.91	- 4 6.7	1.495	2.491	4.0	20.0
9 28	22 56.25	-26 44.2	2.363	3.236	10.2	20.5	9 28	22 55.26	- 4 59.0	1.537	2.494	8.6	20.3
10 8	22 49.45	-26 19.4	2.425	3.218	12.5	20.6	10 8	22 48.58	- 5 40.6	1.603	2.498	12.8	20.6
10 18	22 44.61	-25 36.8	2.508	3.199	14.6	20.7	10 18	22 44.46	- 6 7.8	1.691	2.500	16.2	20.8
134915	2000 <i>YV</i> ₅₁		9 9.5 244°66	4.2/ 12.7	18		161910	2007 <i>DE</i> ₈₆		9 9.5 355°17	0.2/ 9.6	18	
8 9	23 37.14	+ 5 57.6	1.491	2.351	16.5	19.6	8 9	23 39.36	- 6 24.2	1.133	2.040	17.1	18.4
8 19	23 31.32	+ 6 9.1	1.420	2.347	12.7	19.4	8 19	23 33.33	- 5 46.6	1.074	2.035	12.4	18.1
8 29	23 23.19	+ 6 0.3	1.369	2.343	8.6	19.1	8 29	23 24.43	- 5 16.2	1.036	2.030	6.9	17.8
9 8	23 13.57	+ 5 32.6	1.342	2.338	4.9	18.9	9 8	23 13.78	- 4 49.7	1.020	2.027	1.0	17.4
9 18	23 3.62	+ 4 50.3	1.341	2.333	5.1	18.9	9 18	23 2.88	- 4 23.9	1.029	2.026	5.1	17.7
9 28	22 54.64	+ 4 0.3	1.365	2.328	8.9	19.1	9 28	22 53.37	- 3 55.0	1.061	2.025	10.7	18.0
10 8	22 47.72	+ 3 10.7	1.414	2.323	13.1	19.3	10 8	22 46.56	- 3 20.1	1.115	2.026	15.7	18.3
10 18	22 43.55	+ 2 28.4	1.483	2.318	16.8	19.6	10 18	22 43.11	- 2 37.5	1.188	2.028	19.9	18.6
66233	1999 <i>CC</i> ₁₅₆		9 9.5 96°08	3.7/ 12.7	18		493511	2015 <i>BM</i> ₅₁₉		9 9.5 276°15	4.0/ 1.6	15	
8 9	23 38.25	+ 6 44.1	1.462	2.318	16.9	19.2	8 9	23 29.19	-26 48.5	4.382	5.264	6.0	21.1
8 19	23 31.80	+ 6 24.1	1.415	2.341	12.9	19.0	8 19	23 24.48	-27 19.0	4.322	5.253	4.8	21.0
8 29	23 23.24	+ 5 41.7	1.389	2.364	8.4	18.8	8 29	23 18.98	-27 44.4	4.289	5.241	4.1	20.9
9 8	23 13.55	+ 4 40.9	1.388	2.385	4.4	18.6	9 8	23 13.03	-28 2.2	4.284	5.230	4.2	20.9
9 18	23 3.91	+ 3 28.8	1.413	2.407	4.6	18.7	9 18	23 7.04	-28 10.2	4.308	5.219	5.1	21.0
9 28	22 55.53	+ 2 14.3	1.464	2.428	8.4	18.9	9 28	23 1.41	-28 7.1	4.358	5.207	6.4	21.1
10 8	22 49.29	+ 1 5.8	1.541	2.448	12.4	19.2	10 8	22 56.52	-27 52.6	4.433	5.196	7.7	21.2
10 18	22 45.71	+ 0 9.5	1.638	2.467	15.8	19.5	10 18	22 52.66	-27 27.1	4.529	5.185	8.9	21.3
45404	2000 <i>AP</i> ₁₄₁		9 9.5 137°40	2.8/ 12.9	18		399898	2005 <i>WA</i> ₁₄₁		9 9.5 279°02	3.3/ 12.9	18	
8 9	23 31.13	+ 6 31.4	2.553	3.391	11.1	20.1	8 9	23 32.45	+ 6 29.2	2.260	3.102	12.2	20.7
8 19	23 26.22	+ 6 18.4	2.481	3.396	8.5	19.9	8 19	23 27.42	+ 6 30.6	2.173	3.090	9.5	20.5
8 29	23 20.05	+ 5 51.9	2.432	3.400	5.7	19.7	8 29	23 20.84	+ 6 17.2	2.109	3.077	6.5	20.3
9 8	23 13.14	+ 5 13.9	2.411	3.405	3.3	19.6	9 8	23 13.30	+ 5 50.4	2.071	3.064	3.8	20.1
9 18	23 6.13	+ 4 27.7	2.418	3.409	3.3	19.6	9 18	23 5.49	+ 5 13.2	2.060	3.051	3.8	20.0
9 28	22 59.69	+ 3 37.8	2.453	3.413	5.7	19.8	9 28	22 58.23	+ 4 30.1	2.078	3.038	6.5	20.2
10 8	22 54.39	+ 2 48.7	2.516	3.417	8.5	20.0	10 8	22 52.26	+ 3 46.3	2.122	3.026	9.7	20.4
10 18	22 50.66	+ 2 4.6	2.604	3.421	11.0	20.1	10 18	22 48.10	+ 3 6.6	2.190	3.013	12.6	20.5
321098	2008 <i>SZ</i> ₃₀₃		9 9.5 280°21	0.2/ 9.7	18		15512	<i>Snyder</i>		9 9.5 44°31	4.1/ 4.5	18	
8 9	23 39.63	- 4 43.4	1.724	2.606	13.5	19.6	8 9	23 30.80	-14 13.6	2.085	2.990	10.5	16.8
8 19	23 32.87	- 4 32.3	1.647	2.596	9.8	19.4	8 19	23 26.24	-15 38.7	2.031	2.991	7.5	16.7
8 29	23 23.95	- 4 28.7	1.594	2.585	5.5	19.1	8 29	23 20.16	-17 5.3	2.004	2.993	4.8	16.5
9 8	23 13.68	- 4 29.7	1.567	2.574	0.8	18.8	9 8	23 13.20	-18 26.2	2.003	2.994	4.3	16.5
9 18	23 3.11	- 4 31.4	1.568	2.563	4.0	19.0	9 18	23 6.12	-19 34.6	2.031	2.996	6.5	16.6
9 28	22 53.42	- 4 29.9	1.597	2.553	8.5	19.2	9 28	22 59.77	-20 25.6	2.085	2.997	9.5	16.8
10 8	22 45.62	- 4 21.9	1.650	2.542	12.6	19.5	10 8	22 54.84	-20 56.5	2.162	2.999	12.3	17.0
10 18	22 40.36	- 4 5.1	1.725	2.531	16.1	19.7	10 18	22 51.80	-21 7.2	2.260	3.000	14.7	17.2
321419	2009 <i>QR</i> ₁₈		9 9.5 306°51	2.6/ 12.2	18		256570	2007 <i>TH</i> ₁₆		9 9.5 8°06	0.9/ 9.1	18	
8 9	23 31.68	+ 4 25.0	2.164	3.019	12.2	20.9	8 9	23 38.17	- 8 13.0	0.858	1.784	19.3	19.0
8 19	23 26.84	+ 4 15.2	2.087	3.014	9.3	20.7	8 19	23 32.86	- 7 40.9	0.814	1.784	13.8	18.7
8 29	23 20.49	+ 3 51.2	2.034	3.010	6.0	20.5	8 29	23 24.26	- 7 16.0	0.788	1.786	7.6	18.4
9 8	23 13.22	+ 3 15.2	2.006	3.005	3.0	20.3	9 8	23 13.75	- 6 53.3	0.783	1.790	1.2	18.0
9 18	23 5.76	+ 2 31.1	2.007	3.001	3.4	20.3	9 18	23 3.17	- 6 28.0	0.799	1.796	6.0	18.4
9 28	22 58.92	+ 1 43.8	2.035	2.997	6.5	20.5	9 28	22 54.42	- 5 55.9	0.836	1.803	12.3	18.7
10 8	22 53.43	+ 0 58.6	2.089	2.992	9.8	20.7	10 8	22 48.87	- 5 14.4	0.892	1.812	17.6	19.1
10 18	22 49.77	+ 0 20.1	2.167	2.988	12.7	20.9	10 18	22 47.09	- 4 22.8	0.965	1.822	22.0	19.4
453216	2008 <i>HQ</i> ₁₇		9 9.5										

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
400495	2008 JF_9		9 9.5	91°99	5°0/ 3.5	18	379378	2009 WT_{262}		9 9.5	278°71	8°9/31.4	18
8 9	23 32.49	-18 50.0	2.194	3.096	10.2	20.8	8 9	23 35.34	-25 22.8	1.632	2.537	12.8	20.4
8 19	23 27.33	-20 4.8	2.152	3.106	7.5	20.7	8 19	23 29.94	-27 7.4	1.589	2.534	10.3	20.3
8 29	23 20.70	-21 16.4	2.136	3.116	5.4	20.6	8 29	23 22.37	-28 42.6	1.570	2.531	8.9	20.2
9 8	23 13.28	-22 18.2	2.147	3.125	5.3	20.6	9 8	23 13.53	-29 57.8	1.576	2.528	9.4	20.2
9 18	23 5.82	-23 4.8	2.185	3.135	7.2	20.7	9 18	23 4.57	-30 45.2	1.605	2.525	11.6	20.3
9 28	22 59.15	-23 32.6	2.249	3.144	9.7	20.9	9 28	22 56.69	-31 1.2	1.658	2.522	14.3	20.5
10 8	22 53.92	-23 40.8	2.337	3.154	12.2	21.1	10 8	22 50.87	-30 46.7	1.730	2.519	16.9	20.7
10 18	22 50.57	-23 30.2	2.445	3.163	14.3	21.2	10 18	22 47.67	-30 5.4	1.818	2.516	19.2	20.9
404991	2000 EU_4		9 9.5	207°90	1°3/10.9	17	132585	2002 JG_{120}		9 9.5	266°91	0°6/ 8.9	18
8 9	23 33.42	+ 0 6.6	2.551	3.412	10.4	21.6	8 9	23 31.83	- 1 42.3	1.862	2.746	12.6	19.5
8 19	23 27.87	+ 0 2.5	2.475	3.410	7.6	21.4	8 19	23 27.30	- 3 4.0	1.776	2.727	9.1	19.2
8 29	23 20.99	- 0 10.7	2.424	3.407	4.6	21.2	8 29	23 20.93	- 4 42.3	1.714	2.707	4.9	19.0
9 8	23 13.33	- 0 30.8	2.400	3.405	1.6	21.0	9 8	23 13.36	- 6 30.5	1.680	2.687	0.7	18.6
9 18	23 5.52	- 0 54.6	2.406	3.402	2.7	21.1	9 18	23 5.43	- 8 20.1	1.674	2.667	4.2	18.8
9 28	22 58.28	- 1 18.7	2.441	3.399	5.9	21.3	9 28	22 58.12	-10 2.0	1.696	2.646	8.6	19.1
10 8	22 52.22	- 1 39.5	2.504	3.396	8.8	21.4	10 8	22 52.33	-11 28.4	1.744	2.625	12.6	19.3
10 18	22 47.79	- 1 54.2	2.590	3.392	11.4	21.6	10 18	22 48.68	-12 34.7	1.813	2.604	16.0	19.4
305004	2007 TR_{290}		9 9.5	342°19	4°3/ 5.5	18	431852	2008 SA_{72}		9 9.5	357°99	10°8/ 2.5	18
8 9	23 33.48	-13 48.1	1.656	2.565	12.5	20.1	8 9	23 38.82	-28 0.2	1.210	2.121	15.9	19.4
8 19	23 28.46	-14 51.1	1.600	2.562	8.9	19.9	8 19	23 32.85	-28 54.3	1.170	2.117	13.0	19.2
8 29	23 21.50	-15 56.2	1.568	2.559	5.5	19.7	8 29	23 24.07	-29 31.5	1.151	2.115	11.1	19.1
9 8	23 13.40	-16 55.4	1.561	2.557	4.4	19.6	9 8	23 13.76	-29 41.2	1.153	2.113	11.2	19.1
9 18	23 5.15	-17 41.4	1.581	2.554	7.1	19.8	9 18	23 3.50	-29 17.1	1.176	2.113	13.3	19.2
9 28	22 57.85	-18 8.8	1.626	2.552	10.7	20.0	9 28	22 54.90	-28 18.5	1.221	2.113	16.3	19.4
10 8	22 52.38	-18 15.4	1.693	2.551	14.2	20.2	10 8	22 49.08	-26 50.2	1.285	2.115	19.4	19.7
10 18	22 47.27	-18 1.5	1.780	2.549	17.1	20.4	10 18	22 46.56	-24 59.1	1.365	2.118	22.1	19.9
330605	2008 DA_{37}		9 9.5	167°50	5°2/ 4.5	17	188562	2004 TA_{118}		9 9.5	32°03	3°0/ 6.4	18
8 9	23 35.35	-14 27.2	1.575	2.484	13.0	20.6	8 9	23 31.40	-10 53.9	1.839	2.744	11.7	19.5
8 19	23 29.87	-16 2.8	1.525	2.486	9.3	20.4	8 19	23 26.76	-11 53.8	1.790	2.751	8.2	19.3
8 29	23 22.30	-17 40.4	1.499	2.488	6.1	20.2	8 29	23 20.47	-12 57.4	1.766	2.760	4.6	19.1
9 8	23 13.51	-19 9.8	1.499	2.489	5.4	20.2	9 8	23 13.28	-13 58.1	1.767	2.768	3.1	19.1
9 18	23 4.59	-20 22.0	1.525	2.491	8.2	20.4	9 18	23 6.04	-14 49.5	1.796	2.777	5.6	19.2
9 28	22 56.71	-21 10.5	1.576	2.492	11.8	20.6	9 28	22 59.65	-15 26.3	1.852	2.786	9.1	19.5
10 8	22 50.80	-21 33.1	1.650	2.492	15.2	20.8	10 8	22 54.86	-15 45.8	1.930	2.796	12.3	19.7
10 18	22 47.44	-21 30.8	1.742	2.493	18.1	21.0	10 18	22 52.11	-15 47.6	2.030	2.806	15.1	19.9
161380	2003 SD_{304}		9 9.5	16°99	6°3/13.9	18	383273	2006 DD_{114}		9 9.5	157°48	0°7/ 8.7	16
8 9	23 37.68	+ 8 58.3	1.519	2.364	17.0	18.9	8 9	23 32.54	- 2 51.2	1.908	2.793	12.3	21.3
8 19	23 31.65	+ 9 52.5	1.455	2.367	13.6	18.7	8 19	23 27.57	- 4 5.3	1.845	2.797	8.7	21.1
8 29	23 23.35	+10 26.3	1.411	2.371	9.9	18.5	8 29	23 20.95	- 5 31.5	1.807	2.800	4.7	20.8
9 8	23 13.66	+10 38.7	1.391	2.375	6.9	18.3	9 8	23 13.37	- 7 3.4	1.797	2.804	0.8	20.5
9 18	23 3.71	+10 31.4	1.396	2.379	6.6	18.3	9 18	23 5.65	- 8 33.2	1.814	2.807	4.0	20.8
9 28	22 54.78	+10 9.4	1.427	2.384	9.2	18.5	9 28	22 58.70	- 9 53.6	1.860	2.809	8.1	21.1
10 8	22 47.92	+ 9 39.8	1.481	2.390	12.7	18.7	10 8	22 53.29	-10 58.8	1.931	2.811	11.6	21.3
10 18	22 43.77	+ 9 9.8	1.556	2.396	16.0	18.9	10 18	22 49.92	-11 46.0	2.024	2.813	14.6	21.5
99490	2002 CD_{220}		9 9.5	53°31	2°4/ 7.5	18	323643	2004 XQ_{130}		9 9.5	255°25	1°6/11.6	18
8 9	23 33.12	- 5 15.4	1.154	2.067	16.4	19.0	8 9	23 29.90	+ 3 17.2	2.380	3.238	11.2	21.0
8 19	23 28.57	- 6 49.9	1.116	2.081	11.4	18.7	8 19	23 25.50	+ 2 39.9	2.302	3.234	8.3	20.8
8 29	23 21.64	- 8 38.0	1.099	2.096	6.1	18.5	8 29	23 19.75	+ 1 49.0	2.248	3.229	5.1	20.6
9 8	23 13.41	-10 27.7	1.106	2.112	2.4	18.3	9 8	23 13.21	+ 0 47.9	2.221	3.224	2.1	20.4
9 18	23 5.21	-12 6.5	1.138	2.127	6.5	18.6	9 18	23 6.50	- 0 18.9	2.223	3.219	2.8	20.5
9 28	22 58.37	-13 24.2	1.194	2.143	11.5	18.9	9 28	23 0.34	- 1 26.0	2.253	3.214	6.1	20.7
10 8	22 53.88	-14 15.2	1.271	2.160	15.8	19.3	10 8	22 55.36	- 2 27.9	2.311	3.209	9.2	20.9
10 18	22 52.24	-14 38.9	1.366	2.176	19.4	19.5	10 18	22 52.02	- 3 20.5	2.392	3.204	12.0	21.0
483313	2015 VR_{126}		9 9.5	293°88	3°7/14.0	17	13986	1992 WA_4		9 9.5	330°52	3°5/ 5.9	18
8 9	23 29.94	+ 9 23.1	2.298	3.129	12.4	21.2	8 9	23 31.61	-13 11.6	1.957	2.862	11.1	17.5
8 19	23 25.58	+ 9 4.5	2.217	3.124	9.8	21.0	8 19	23 26.96	-14 1.9	1.892	2.852	7.9	17.3
8 29	23 19.81	+ 8 28.4	2.158	3.119	6.9	20.9	8 29	23 20.64	-14 54.5	1.851	2.843	4.7	17.1
9 8	23 13.18	+ 7 36.7	2.125	3.113	4.3	20.7	9 8	23 13.33	-15 43.1	1.837	2.834	3.6	17.0
9 18	23 6.36	+ 6 33.2	2.119	3.108	4.0	20.7	9 18	23 5.85	-16 22.0	1.850	2.826	6.0	17.2
9 28	23 0.12	+ 5 23.3	2.142	3.103	6.3	20.8	9 28	22 59.10	-16 46.3	1.889	2.818	9.3	17.4
10 8	22 55.10	+ 4 13.1	2.191	3.098	9.2	21.0	10 8	22 53.86	-16 53.6	1.951	2.810	12.5	17.5
10 18	22 51.80	+ 3 8.3	2.265	3.093	12.0	21.2	10 18	22 50.65	-16 43.5	2.035	2.803	15.3	17.7
175117	2004 SE_2		9 9.5	93°12	0°3/ 9.9	18	128201	2003 SZ_{46}		9 9.5	5°62	1°1/10.7	18
8 9	23 28.45	- 2 18.7	3.149	4.019	8.4	20.1	8 9	23 31.27	- 0 4.7	1.939	2.816	12.5	18.7
8 19	23 24.15	- 2 45.5	3.079	4.022	6.0	19.9	8 19	23 26.67	- 0 23.0	1.872	2.816	9.1	18.5
8 29	23 18.88	- 3 19.0	3.036	4.025	3.3	19.8	8 29	23 20.46	- 0 53.5	1.830	2.817	5.3	18.3
9 8	23 13.05	- 3 56.5	3.021	4.027	0.6	19.5	9 8	23 13.31	- 1 32.6	1.813	2.818	1.6	18.0
9 18	23 7.16	- 4 34.9	3.035	4.030	2.3	19.7	9 18	23 6.02	- 2 15.6	1.824	2.820	3.2	18.2
9 28	23 1.69	- 5 10.8	3.079	4.033	5.0	19.9	9 28	22 59.46	- 2 57.1	1.861	2.822	7.1	18.4
10 8	22 57.12	- 5 41.5	3.150	4.035	7.4	20.1	10 8	22 54.38	- 3 32.0	1.924	2.825	10.7	18.6
10 18	22 53.78	- 6 4.8	3.246	4.038	9.6	20.2	10 18	22 51.27	- 3 56.9	2.010	2.828	13.7	18.9
300462	2007 TK_{86}		9 9.5	257°09	1°7/ 7.9	18	509402	2007 DB_{51}		9 9.5	108°14	1°7/ 7.1	18
8 9	23 33.24</												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
36933	2000 <i>SF</i> ₂₂₂	9 9.5 242°13	0°4/ 9.1 18				147107	2002 <i>TL</i> ₄₃	9 9.5 228°08	3°0/12.3 18			
8 9	23 32.03	- 1 43.2	1.887	2.770	12.5	19.1	8 9	23 34.50	+ 5 36.5	1.733	2.590	14.7	20.1
8 19	23 27.34	- 2 57.5	1.811	2.761	9.0	18.9	8 19	23 29.25	+ 5 11.1	1.655	2.583	11.2	19.8
8 29	23 20.91	- 4 26.5	1.758	2.751	4.9	18.6	8 29	23 22.03	+ 4 25.7	1.599	2.576	7.3	19.6
9 8	23 13.38	- 6 3.9	1.733	2.741	0.6	18.3	9 8	23 13.58	+ 3 23.5	1.569	2.568	3.6	19.4
9 18	23 5.60	- 7 41.9	1.737	2.730	4.0	18.5	9 18	23 4.82	+ 2 10.1	1.565	2.560	4.0	19.4
9 28	22 58.51	- 9 12.0	1.768	2.720	8.2	18.8	9 28	22 56.85	+ 0 53.3	1.589	2.552	7.9	19.6
10 8	22 52.93	-10 27.7	1.825	2.709	12.0	19.0	10 8	22 50.59	- 0 18.9	1.638	2.543	11.9	19.8
10 18	22 49.45	-11 24.8	1.904	2.697	15.3	19.2	10 18	22 46.67	- 1 20.1	1.709	2.534	15.4	20.0
154237	2002 <i>JA</i> ₁₂₃	9 9.5 55°40	4°7/ 4.2 18				33879	Kierstendeen	9 9.5 29°07	3°3/ 7.5 18			
8 9	23 32.20	-17 19.0	2.122	3.026	10.4	19.7	8 9	23 36.32	- 9 45.7	0.946	1.871	17.9	17.4
8 19	23 27.21	-18 27.1	2.073	3.030	7.6	19.5	8 19	23 31.23	-10 23.2	0.911	1.881	12.6	17.1
8 29	23 20.70	-19 33.4	2.049	3.034	5.2	19.4	8 29	23 23.25	-11 7.7	0.894	1.892	6.9	16.9
9 8	23 13.34	-20 31.5	2.053	3.038	4.9	19.4	9 8	23 13.72	-11 49.3	0.899	1.904	3.4	16.7
9 18	23 5.92	-21 15.7	2.084	3.042	6.9	19.5	9 18	23 4.27	-12 18.7	0.927	1.917	7.3	17.0
9 28	22 59.26	-21 42.2	2.140	3.046	9.6	19.7	9 28	22 56.55	-12 29.0	0.976	1.931	12.7	17.3
10 8	22 54.07	-21 49.5	2.221	3.050	12.3	19.9	10 8	22 51.70	-12 17.8	1.044	1.946	17.4	17.7
10 18	22 50.79	-21 38.4	2.321	3.054	14.6	20.1	10 18	22 50.20	-11 46.3	1.130	1.962	21.2	18.0
448723	2011 <i>BX</i> ₃₀	9 9.5 257°99	2°9/12.6 18				520198	2014 <i>DA</i> ₁₅₀	9 9.5 200°41	1°6/11.4 18			
8 9	23 33.78	+ 5 16.8	2.506	3.346	11.3	21.1	8 9	23 34.36	+ 2 23.3	2.285	3.141	11.6	22.5
8 19	23 28.24	+ 5 27.9	2.420	3.337	8.7	20.9	8 19	23 28.72	+ 1 58.8	2.206	3.137	8.7	22.3
8 29	23 21.27	+ 5 26.9	2.359	3.328	5.8	20.7	8 29	23 21.57	+ 1 21.3	2.152	3.133	5.3	22.1
9 8	23 13.43	+ 5 15.1	2.324	3.319	3.3	20.6	9 8	23 13.51	+ 0 34.0	2.125	3.128	2.1	21.9
9 18	23 5.37	+ 4 54.6	2.319	3.310	3.5	20.6	9 18	23 5.25	- 0 18.9	2.127	3.122	3.0	21.9
9 28	22 57.84	+ 4 29.1	2.342	3.300	6.0	20.7	9 28	22 57.61	- 1 12.2	2.158	3.116	6.5	22.1
10 8	22 51.49	+ 4 2.6	2.393	3.291	8.9	20.9	10 8	22 51.29	- 2 0.8	2.216	3.109	9.8	22.3
10 18	22 46.83	+ 3 38.9	2.467	3.281	11.6	21.1	10 18	22 46.80	- 2 40.8	2.297	3.102	12.6	22.5
139319	2001 <i>KL</i> ₂₆	9 9.5 70°08	1°8/ 8.1 17				351128	2003 <i>WP</i> ₈₆	9 9.5 319°35	10°8/19.7 17			
8 9	23 37.00	- 6 42.3	1.363	2.265	15.1	19.7	8 9	23 31.12	+22 23.4	1.615	2.391	19.1	20.7
8 19	23 31.05	- 7 30.1	1.323	2.283	10.6	19.5	8 19	23 27.23	+23 8.0	1.527	2.373	16.8	20.5
8 29	23 22.91	- 8 26.9	1.305	2.300	5.7	19.2	8 29	23 21.12	+23 21.8	1.456	2.356	14.2	20.3
9 8	23 13.64	- 9 24.7	1.312	2.318	1.8	19.0	9 8	23 13.47	+23 1.1	1.405	2.339	12.0	20.1
9 18	23 4.44	-10 15.5	1.345	2.336	5.4	19.3	9 18	23 5.30	+22 5.6	1.375	2.322	10.8	20.0
9 28	22 56.54	-10 52.8	1.403	2.353	10.0	19.6	9 28	22 57.83	+20 39.9	1.369	2.306	11.4	20.0
10 8	22 50.87	-11 12.8	1.484	2.371	14.1	19.9	10 8	22 52.20	+18 54.1	1.385	2.291	13.6	20.1
10 18	22 47.89	-11 14.5	1.584	2.389	17.4	20.2	10 18	22 49.20	+17 0.0	1.423	2.276	16.4	20.2
123704	2000 <i>YL</i> ₁₁₁	9 9.5 230°36	4°8/ 3.4 18				266588	2008 <i>HO</i> ₅₅	9 9.5 346°47	17°8/20.5 18			
8 9	23 32.20	-18 48.5	2.373	3.273	9.6	19.7	8 9	23 37.98	-46 51.3	1.339	2.195	18.2	18.0
8 19	23 27.17	-20 1.4	2.314	3.267	7.1	19.5	8 19	23 32.79	-48 18.3	1.306	2.173	17.8	17.9
8 29	23 20.68	-21 12.3	2.282	3.262	5.2	19.4	8 29	23 24.27	-49 11.5	1.289	2.153	18.1	17.9
9 8	23 13.36	-22 14.9	2.278	3.256	5.1	19.4	9 8	23 13.86	-49 19.4	1.290	2.135	19.0	17.9
9 18	23 5.89	-23 3.8	2.301	3.250	6.9	19.5	9 18	23 3.48	-48 36.6	1.307	2.119	20.5	17.9
9 28	22 59.07	-23 35.2	2.350	3.243	9.4	19.6	9 28	22 55.03	-47 4.2	1.338	2.105	22.1	18.0
10 8	22 53.56	-23 47.6	2.423	3.237	11.9	19.8	10 8	22 49.78	-44 49.5	1.384	2.094	23.9	18.1
10 18	22 49.84	-23 41.4	2.517	3.230	14.0	19.9	10 18	22 48.21	-42 1.8	1.442	2.084	25.4	18.3
239124	2006 <i>HA</i> ₁₁₇	9 9.5 84°64	1°9/ 7.7 18				223150	2002 <i>XA</i> ₁	9 9.5 321°49	1°1/10.2 18			
8 9	23 33.37	- 7 13.2	1.749	2.647	12.6	20.3	8 9	23 34.89	- 1 50.7	1.233	2.133	16.6	20.2
8 19	23 28.24	- 8 12.7	1.696	2.654	8.8	20.1	8 19	23 30.19	- 1 52.5	1.161	2.116	12.2	19.9
8 29	23 21.34	- 9 19.9	1.666	2.661	4.7	19.8	8 29	23 22.83	- 2 9.8	1.109	2.101	7.1	19.6
9 8	23 13.44	-10 28.1	1.663	2.668	1.9	19.7	9 8	23 13.71	- 2 38.4	1.079	2.086	1.7	19.2
9 18	23 5.46	-11 30.1	1.687	2.675	5.0	19.9	9 18	23 4.10	- 3 12.3	1.074	2.071	4.7	19.3
9 28	22 58.39	-12 19.7	1.738	2.682	8.9	20.1	9 28	22 55.51	- 3 43.6	1.092	2.057	10.3	19.6
10 8	22 53.01	-12 52.8	1.813	2.689	12.5	20.4	10 8	22 49.24	- 4 5.4	1.132	2.045	15.4	19.9
10 18	22 49.83	-13 8.2	1.909	2.696	15.5	20.6	10 18	22 46.08	- 4 13.1	1.191	2.033	19.7	20.1
220516	2004 <i>ES</i> ₂₉	9 9.5 53°06	0°8/ 8.9 17				71868	2000 <i>VX</i> ₃₀	9 9.5 71°41	2°6/11.8 18			
8 9	23 36.35	- 4 39.6	1.275	2.177	16.0	20.4	8 9	23 35.59	+ 4 35.1	1.290	2.166	17.5	18.1
8 19	23 30.69	- 5 15.1	1.234	2.193	11.3	20.2	8 19	23 30.16	+ 3 55.0	1.246	2.186	13.1	17.8
8 29	23 22.76	- 6 2.3	1.215	2.210	6.1	19.9	8 29	23 22.50	+ 2 51.9	1.222	2.206	8.1	17.6
9 8	23 13.63	- 6 53.9	1.221	2.228	0.9	19.6	9 8	23 13.63	+ 1 32.0	1.223	2.226	3.4	17.4
9 18	23 4.57	- 7 42.0	1.251	2.246	4.9	20.0	9 18	23 4.80	+ 0 4.4	1.248	2.245	4.3	17.5
9 28	22 56.87	- 8 19.3	1.307	2.264	9.9	20.3	9 28	22 57.28	- 1 20.5	1.300	2.265	8.9	17.8
10 8	22 51.46	- 8 41.3	1.384	2.282	14.2	20.6	10 8	22 51.99	- 2 33.5	1.374	2.285	13.3	18.2
10 18	22 48.83	- 8 46.1	1.482	2.301	17.7	20.9	10 18	22 49.45	- 3 29.3	1.470	2.305	17.0	18.5
519450	2011 <i>YX</i> ₇₉	9 9.5 207°07	0°1/ 9.5 17				55913	1998 <i>FL</i> ₁₂	9 9.5 150°22	13°5/ 3.6 18			
8 9	23 33.34	- 4 8.6	2.752	3.624	9.4	21.9	8 9	23 58.83	-33 59.9	1.187	2.064	18.7	18.2
8 19	23 27.77	- 4 26.4	2.675	3.620	6.7	21.7	8 19	23 47.18	-34 48.1	1.151	2.070	15.8	18.0
8 29	23 20.96	- 4 50.5	2.625	3.615	3.7	21.5	8 29	23 31.90	-35 9.0	1.135	2.075	13.8	18.0
9 8	23 13.41	- 5 18.0	2.602	3.609	0.5	21.3	9 8	23 14.88	-34 49.9	1.142	2.080	13.7	18.0
9 18	23 5.73	- 5 45.5	2.610	3.604	2.8	21.5	9 18	22 58.43	-33 46.2	1.172	2.085	15.4	18.1
9 28	22 58.57	- 6 9.8	2.647	3.598	5.9	21.7	9 28	22 44.68	-32 2.3	1.224	2.089	18.2	18.3
10 8	22 52.51	- 6 27.9	2.711	3.591	8.7	21.8	10 8	22 34.90	-29 48.5	1.296	2.092	21.1	18.5
10 18	22 47.97	- 6 37.8	2.800	3.585	11.1	22.0	10 18	22 29.43	-27 16.4	1.384	2.095	23.7	18.7
58803	1998 <i>FX</i> ₁₀₉	9 9.5 253°21	7°1/17.9 18				483888	2005 <i>YW</i> ₂₇₁ </					

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
365943	2012 <i>AJ</i> ₁₂		9 9.5 331°27	3°2/ 5.9	18		88326	2001 <i>OA</i> ₅₂		9 9.6 298°76	5°6/ 4.9	18	
8 9	23 30.48	-10 42.2	1.943	2.847	11.2	20.4	8 9	23 35.31	-15 30.5	1.435	2.349	13.8	19.1
8 19	23 26.17	-12 3.2	1.882	2.844	7.9	20.2	8 19	23 30.21	-16 42.7	1.372	2.335	10.0	18.9
8 29	23 20.24	-13 29.5	1.847	2.840	4.5	20.0	8 29	23 22.72	-17 56.7	1.332	2.322	6.6	18.7
9 8	23 13.35	-14 53.8	1.838	2.837	3.3	19.9	9 8	23 13.75	-19 2.7	1.316	2.308	5.8	18.6
9 18	23 6.30	-16 8.7	1.857	2.834	5.9	20.1	9 18	23 4.46	-19 51.4	1.326	2.295	8.7	18.7
9 28	22 59.97	-17 8.0	1.903	2.831	9.3	20.3	9 28	22 56.19	-20 16.4	1.359	2.282	12.7	18.9
10 8	22 55.12	-17 48.0	1.973	2.829	12.5	20.5	10 8	22 50.06	-20 15.4	1.413	2.269	16.5	19.1
10 18	22 52.25	-18 7.6	2.063	2.826	15.2	20.7	10 18	22 46.74	-19 49.6	1.485	2.257	19.8	19.3
145974	2000 <i>AK</i> ₅₅		9 9.5 321°93	4°8/ 5.8	18		346616	2008 <i>WG</i> ₉₀		9 9.6 276°09	8°2/31.8	18	
8 9	23 31.13	-11 6.0	1.140	2.065	15.6	18.8	8 9	23 35.72	-25 11.7	1.797	2.699	12.1	20.8
8 19	23 27.69	-12 25.3	1.071	2.042	11.1	18.5	8 19	23 30.22	-26 43.0	1.741	2.684	9.7	20.6
8 29	23 21.55	-13 55.2	1.023	2.020	6.6	18.2	8 29	23 22.62	-28 6.9	1.708	2.669	8.3	20.5
9 8	23 13.57	-15 24.5	0.998	1.998	4.9	18.0	9 8	23 13.73	-29 13.6	1.700	2.655	8.7	20.5
9 18	23 5.05	-16 40.5	0.995	1.977	8.8	18.2	9 18	23 4.59	-29 55.8	1.718	2.639	10.8	20.6
9 28	22 57.58	-17 32.4	1.015	1.957	13.9	18.4	9 28	22 56.37	-30 9.5	1.759	2.624	13.5	20.7
10 8	22 52.50	-17 54.4	1.054	1.939	18.7	18.6	10 8	22 50.03	-29 54.6	1.820	2.609	16.2	20.9
10 18	22 50.62	-17 45.9	1.109	1.921	22.8	18.8	10 18	22 46.19	-29 14.3	1.898	2.594	18.5	21.0
470959	2009 <i>QM</i> ₁₂		9 9.5 14°02	1°8/10.9	16		240652	2005 <i>CQ</i> ₁₈		9 9.6 194°81	1°0/ 8.5	18	
8 9	23 27.39	+ 1 34.8	0.885	1.802	19.7	20.4	8 9	23 33.68	- 5 21.1	2.061	2.947	11.5	20.8
8 19	23 25.01	+ 1 2.8	0.845	1.808	14.5	20.1	8 19	23 28.37	- 6 11.8	1.993	2.946	8.1	20.6
8 29	23 19.94	+ 0 4.5	0.823	1.817	8.5	19.9	8 29	23 21.45	- 7 11.1	1.951	2.944	4.4	20.4
9 8	23 13.32	- 1 11.7	0.821	1.827	2.6	19.6	9 8	23 13.58	- 8 13.7	1.935	2.942	1.0	20.1
9 18	23 6.62	- 2 34.3	0.840	1.839	4.9	19.8	9 18	23 5.55	- 9 13.7	1.948	2.939	4.0	20.4
9 28	23 1.37	- 3 50.1	0.880	1.853	10.7	20.1	9 28	22 58.23	-10 5.4	1.990	2.936	7.8	20.6
10 8	22 58.67	- 4 48.8	0.940	1.869	15.9	20.5	10 8	22 52.37	-10 44.4	2.056	2.933	11.2	20.8
10 18	22 59.05	- 5 24.9	1.017	1.887	20.2	20.8	10 18	22 48.47	-11 8.6	2.145	2.930	14.1	21.0
281571	2008 <i>UM</i> ₉₈		9 9.5 358°63	2°3/ 7.6	18		512790	2016 <i>UV</i> ₇₃		9 9.6 240°34	6°6/17.9	18	
8 9	23 32.34	- 7 26.2	1.423	2.331	14.2	19.1	8 9	23 31.94	+19 11.7	2.210	2.981	14.7	22.0
8 19	23 27.91	- 8 24.8	1.366	2.329	10.0	18.9	8 19	23 27.23	+18 56.0	2.116	2.970	12.4	21.8
8 29	23 21.34	- 9 33.1	1.332	2.328	5.4	18.6	8 29	23 20.89	+18 15.0	2.042	2.958	9.9	21.6
9 8	23 13.52	-10 43.1	1.323	2.328	2.3	18.4	9 8	23 13.51	+17 8.7	1.992	2.946	7.7	21.5
9 18	23 5.52	-11 46.2	1.339	2.328	5.8	18.6	9 18	23 5.86	+15 39.9	1.969	2.934	6.6	21.4
9 28	22 58.54	-12 34.5	1.380	2.328	10.3	18.9	9 28	22 58.78	+13 54.7	1.973	2.921	7.7	21.5
10 8	22 53.55	-13 3.4	1.443	2.329	14.4	19.1	10 8	22 53.07	+12 1.5	2.004	2.908	10.1	21.6
10 18	22 51.13	-13 11.4	1.525	2.331	17.9	19.4	10 18	22 49.29	+10 9.0	2.060	2.895	12.8	21.7
193312	2000 <i>SK</i> ₃₀₅		9 9.6 319°46	1°5/10.5	18		33376	Medi		9 9.6 150°45	4°0/ 6.1	18	
8 9	23 33.91	- 1 8.1	1.322	2.218	16.0	19.4	8 9	23 38.09	-11 42.3	1.530	2.433	13.7	18.7
8 19	23 29.50	- 1 6.4	1.238	2.191	11.9	19.1	8 19	23 31.86	-12 57.4	1.480	2.440	9.7	18.5
8 29	23 22.51	- 1 19.9	1.174	2.164	7.0	18.7	8 29	23 23.47	-14 16.7	1.454	2.447	5.7	18.3
9 8	23 13.72	- 1 45.6	1.132	2.138	2.0	18.4	9 8	23 13.86	-15 31.0	1.454	2.453	4.1	18.2
9 18	23 4.29	- 2 18.1	1.116	2.113	4.5	18.5	9 18	23 4.16	-16 31.8	1.481	2.458	7.0	18.4
9 28	22 55.67	- 2 50.1	1.123	2.089	10.0	18.7	9 28	22 55.60	-17 12.8	1.533	2.463	11.0	18.7
10 8	22 49.16	- 3 14.5	1.153	2.065	15.1	18.9	10 8	22 49.13	-17 31.4	1.608	2.467	14.7	18.9
10 18	22 45.66	- 3 26.0	1.201	2.043	19.6	19.1	10 18	22 45.31	-17 28.0	1.702	2.471	17.8	19.1
253348	2003 <i>FP</i> ₇₁		9 9.6 262°57	1°9/ 5.8	18	R	93453	2000 <i>SZ</i> ₃₅₁		9 9.6 65°85	1°1/ 8.5	17	
8 9	23 27.04	-14 44.4	4.384	5.275	5.8	20.2	8 9	23 33.98	- 4 35.8	1.510	2.408	14.2	19.6
8 19	23 23.00	-15 11.0	4.316	5.270	4.1	20.1	8 19	23 28.87	- 5 34.5	1.462	2.420	10.0	19.4
8 29	23 18.24	-15 37.5	4.276	5.264	2.5	19.9	8 29	23 21.79	- 6 44.5	1.438	2.432	5.3	19.2
9 8	23 13.09	-16 1.5	4.265	5.259	2.0	19.9	9 8	23 13.62	- 7 58.3	1.438	2.445	1.2	18.9
9 18	23 7.87	-16 20.8	4.284	5.254	3.2	20.0	9 18	23 5.42	- 9 7.7	1.465	2.457	4.8	19.2
9 28	23 2.97	-16 33.7	4.331	5.248	4.9	20.1	9 28	22 58.28	-10 5.1	1.518	2.470	9.2	19.5
10 8	22 58.71	-16 39.0	4.406	5.243	6.5	20.2	10 8	22 53.08	-10 45.7	1.595	2.483	13.2	19.8
10 18	22 55.36	-16 36.0	4.504	5.237	8.0	20.3	10 18	22 50.30	-11 7.4	1.691	2.496	16.5	20.0
356523	2011 <i>SQ</i> ₉₀		9 9.6 97°39	1°5/11.1	18		351794	2006 <i>HH</i> ₇₄		9 9.6 356°18	11°5/31.4	18	
8 9	23 33.21	+ 1 25.6	1.952	2.821	12.8	20.8	8 9	23 36.55	-29 55.3	1.312	2.220	15.2	19.7
8 19	23 28.04	+ 1 1.7	1.887	2.825	9.4	20.6	8 19	23 31.21	-31 13.4	1.275	2.215	12.8	19.5
8 29	23 21.25	+ 0 24.2	1.846	2.830	5.6	20.3	8 29	23 23.25	-32 14.1	1.259	2.212	11.5	19.4
9 8	23 13.50	- 0 23.2	1.831	2.835	2.0	20.1	9 8	23 13.83	-32 46.3	1.265	2.210	12.0	19.5
9 18	23 5.64	- 1 15.5	1.844	2.840	3.3	20.2	9 18	23 4.41	-32 43.3	1.292	2.208	14.0	19.6
9 28	22 58.54	- 2 6.8	1.884	2.845	7.1	20.5	9 28	22 56.48	-32 3.8	1.339	2.208	16.7	19.7
10 8	22 52.96	- 2 51.7	1.950	2.849	10.6	20.7	10 8	22 51.11	-30 52.0	1.405	2.209	19.4	19.9
10 18	22 49.40	- 3 26.3	2.039	2.854	13.6	20.9	10 18	22 48.82	-29 14.2	1.486	2.211	21.7	20.1
291787	2006 <i>KQ</i> ₅₀		9 9.6 99°77	2°0/ 7.7	18		97393	2000 <i>AK</i> ₁₀₁		9 9.6 213°76	8°0/31.9	18	
8 9	23 34.47	- 8 2.9	1.779	2.676	12.4	20.8	8 9	23 36.15	-25 58.2	1.915	2.812	11.7	19.6
8 19	23 29.04	- 8 51.4	1.723	2.681	8.7	20.6	8 19	23 30.33	-27 26.0	1.870	2.810	9.4	19.4
8 29	23 21.82	- 9 46.6	1.691	2.686	4.7	20.4	8 29	23 22.59	-28 44.7	1.849	2.807	8.1	19.3
9 8	23 13.58	-10 42.1	1.686	2.691	2.0	20.2	9 8	23 13.75	-29 45.8	1.854	2.804	8.4	19.4
9 18	23 5.26	-11 31.4	1.708	2.696	4.9	20.4	9 18	23 4.80	-30 23.0	1.884	2.800	10.3	19.5
9 28	22 57.83	-12 9.0	1.757	2.701	8.9	20.7	9 28	22 56.80	-30 33.2	1.938	2.797	12.7	19.6
10 8	22 52.10	-12 31.4	1.830	2.705	12.4	20.9	10 8	22 50.62	-30 17.1	2.013	2.793	15.1	19.8
10 18	22 48.60	-12 37.3	1.924	2.710	15.4	21.1	10 18	22 46.79	-29 37.8	2.105	2.789	17.2	20.0
147006	2002 <i>PC</i> ₁₂₇		9 9.6 0°19	5°6/ 5.8	18		173624	2001 <i>FA</i> ₅₃		9 9.			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
265330	2004 <i>PS</i> ₁₁		9 9.6 41°17'	5°0'/13.9	18		185798	1999 <i>VU</i> ₁₅₅		9 9.6 236°56'	2°0'/7.8	17	
8 9	23 35.91	+ 8 37.4	1.822	2.660	14.9	19.8	8 9	23 37.15	- 7 56.2	1.772	2.664	12.7	21.0
8 19	23 30.07	+ 9 10.3	1.762	2.672	11.7	19.6	8 19	23 31.19	- 8 44.8	1.696	2.652	9.0	20.8
8 29	23 22.42	+ 9 24.9	1.725	2.684	8.4	19.4	8 29	23 23.20	- 9 41.4	1.645	2.639	4.9	20.5
9 8	23 13.73	+ 9 21.8	1.712	2.697	5.6	19.3	9 8	23 13.91	-10 39.6	1.621	2.626	2.0	20.3
9 18	23 4.93	+ 9 3.5	1.725	2.710	5.3	19.3	9 18	23 4.31	-11 32.6	1.624	2.612	5.2	20.5
9 28	22 57.02	+ 8 35.0	1.766	2.724	7.7	19.5	9 28	22 55.51	-12 13.9	1.655	2.597	9.4	20.7
10 8	22 50.82	+ 8 2.2	1.831	2.738	10.8	19.7	10 8	22 48.47	-12 39.4	1.709	2.582	13.3	20.9
10 18	22 46.85	+ 7 30.9	1.919	2.752	13.7	19.9	10 18	22 43.83	-12 47.3	1.785	2.567	16.6	21.1
516065	2015 <i>TC</i> ₂₀₆		9 9.6 272°52'	0°9'/8.6	18		73611	2127 <i>T</i> ₋₃		9 9.6 245°25'	2°0'/7.8	18	
8 9	23 32.56	- 5 57.4	2.224	3.110	10.7	21.6	8 9	23 37.73	- 9 55.9	2.040	2.929	11.4	19.0
8 19	23 27.56	- 6 32.4	2.145	3.098	7.6	21.4	8 19	23 31.37	-10 20.5	1.963	2.917	8.1	18.8
8 29	23 21.03	- 7 14.8	2.092	3.085	4.1	21.1	8 29	23 23.20	-10 49.0	1.911	2.904	4.5	18.5
9 8	23 13.57	- 8 0.2	2.066	3.072	0.9	20.9	9 8	23 13.91	-11 16.6	1.887	2.891	2.0	18.3
9 18	23 5.88	- 8 43.8	2.068	3.059	3.7	21.1	9 18	23 4.38	-11 38.6	1.891	2.877	4.7	18.5
9 28	22 58.79	- 9 20.8	2.098	3.046	7.3	21.3	9 28	22 55.58	-11 50.7	1.923	2.864	8.4	18.7
10 8	22 53.01	- 9 47.3	2.154	3.033	10.7	21.4	10 8	22 48.35	-11 50.3	1.981	2.849	11.9	18.9
10 18	22 49.06	-10 1.3	2.232	3.020	13.5	21.6	10 18	22 43.27	-11 36.6	2.060	2.835	14.9	19.1
124601	2001 <i>SM</i> ₂₉		9 9.6 278°61'	0°3'/9.8	18		97036	1999 <i>UR</i> ₈		9 9.6 238°67'	1°7'/11.2	18	
8 9	23 34.07	- 1 30.5	1.603	2.490	14.1	20.7	8 9	23 33.88	+ 1 52.2	1.927	2.794	13.0	19.3
8 19	23 29.16	- 2 9.0	1.525	2.475	10.3	20.4	8 19	23 28.69	+ 1 28.5	1.851	2.788	9.7	19.1
8 29	23 22.13	- 3 2.9	1.469	2.460	5.8	20.2	8 29	23 21.74	+ 0 50.1	1.797	2.781	5.9	18.9
9 8	23 13.73	- 4 6.8	1.438	2.445	1.0	19.8	9 8	23 13.71	+ 0 0.6	1.770	2.774	2.2	18.6
9 18	23 4.96	- 5 13.8	1.434	2.430	4.1	20.0	9 18	23 5.44	- 0 55.1	1.771	2.767	3.4	18.7
9 28	22 56.98	- 6 15.9	1.456	2.415	8.9	20.2	9 28	22 57.88	- 1 50.7	1.799	2.760	7.3	18.9
10 8	22 50.80	- 7 6.1	1.503	2.400	13.3	20.5	10 8	22 51.85	- 2 40.3	1.853	2.753	11.0	19.1
10 18	22 47.11	- 7 40.2	1.569	2.385	17.0	20.7	10 18	22 47.91	- 3 19.5	1.930	2.745	14.3	19.3
17147	1999 <i>JF</i> ₁₀₂		9 9.6 355°72'	1°2'/8.5	18		316676	1995 <i>SM</i> ₆₃		9 9.6 159°47'	1°6'/11.1	17	
8 9	23 31.86	- 5 37.0	1.751	2.647	12.6	17.8	8 9	23 35.44	+ 2 16.7	1.686	2.555	14.4	21.4
8 19	23 27.29	- 6 22.6	1.688	2.645	8.9	17.6	8 19	23 29.90	+ 1 38.6	1.621	2.559	10.7	21.2
8 29	23 20.94	- 7 17.7	1.649	2.644	4.8	17.3	8 29	23 22.43	+ 0 43.3	1.578	2.563	6.4	20.9
9 8	23 13.55	- 8 16.3	1.637	2.643	1.2	17.1	9 8	23 13.81	- 0 24.5	1.562	2.566	2.2	20.7
9 18	23 6.00	- 9 11.8	1.651	2.642	4.4	17.3	9 18	23 5.02	- 1 38.1	1.573	2.569	3.7	20.8
9 28	22 59.27	- 9 58.0	1.691	2.642	8.5	17.5	9 28	22 57.13	- 2 49.5	1.611	2.572	8.0	21.0
10 8	22 54.17	-10 30.2	1.756	2.642	12.3	17.8	10 8	22 51.03	- 3 51.9	1.674	2.574	12.0	21.3
10 18	22 51.24	-10 46.3	1.841	2.643	15.4	18.0	10 18	22 47.28	- 4 40.2	1.759	2.576	15.4	21.5
71421	2000 <i>AJ</i> ₁₉₂		9 9.6 297°93'	2°2'/7.2	18		385849	2006 <i>KC</i> ₆₀		9 9.6 103°93'	4°0'/5.4	17	
8 9	23 30.71	- 6 8.4	1.675	2.576	12.8	18.8	8 9	23 34.72	-13 41.6	1.856	2.759	11.7	21.0
8 19	23 26.70	- 7 37.2	1.598	2.558	9.1	18.6	8 19	23 29.17	-14 54.5	1.812	2.771	8.3	20.8
8 29	23 20.76	- 8 19.4	1.545	2.541	4.9	18.3	8 29	23 21.91	-16 8.5	1.793	2.783	5.1	20.6
9 8	23 13.56	-11 6.7	1.518	2.523	2.3	18.1	9 8	23 13.73	-17 16.1	1.800	2.794	4.2	20.6
9 18	23 6.01	-12 49.4	1.519	2.505	5.6	18.3	9 18	23 5.52	-18 10.5	1.835	2.806	6.6	20.8
9 28	22 59.17	-14 18.1	1.546	2.488	10.0	18.5	9 28	22 58.24	-18 47.0	1.896	2.817	9.8	21.0
10 8	22 53.98	-15 26.2	1.596	2.471	14.0	18.7	10 8	22 52.65	-19 3.7	1.981	2.828	12.9	21.2
10 18	22 51.09	-16 10.5	1.667	2.454	17.4	18.9	10 18	22 49.21	-19 0.9	2.086	2.839	15.4	21.4
12880	Juliegrady		9 9.6 356°34'	1°2'/8.5	18	R	407835	2012 <i>BT</i> ₂₄		9 9.6 203°10'	5°5'/15.3	17	
8 9	23 34.76	- 6 24.2	1.763	2.656	12.7	18.7	8 9	23 34.88	+12 50.0	2.336	3.139	13.1	21.1
8 19	23 29.35	- 7 0.0	1.700	2.656	9.0	18.5	8 19	23 29.19	+13 18.8	2.256	3.138	10.7	20.9
8 29	23 22.08	- 7 43.9	1.662	2.656	4.9	18.2	8 29	23 21.95	+13 30.3	2.199	3.137	8.2	20.8
9 8	23 13.73	- 8 30.4	1.649	2.656	1.3	18.0	9 8	23 13.76	+13 24.5	2.167	3.136	6.1	20.6
9 18	23 5.24	- 9 13.4	1.664	2.656	4.5	18.2	9 18	23 5.33	+13 2.8	2.162	3.135	5.6	20.6
9 28	22 57.61	- 9 47.3	1.706	2.656	8.6	18.5	9 28	22 57.50	+12 29.1	2.185	3.134	7.1	20.7
10 8	22 51.69	-10 8.1	1.772	2.656	12.3	18.7	10 8	22 51.00	+11 48.4	2.234	3.132	9.5	20.9
10 18	22 48.03	-10 14.0	1.859	2.656	15.5	18.9	10 18	22 46.34	+11 6.3	2.307	3.131	12.0	21.0
448084	2008 <i>HN</i> ₂₉		9 9.6 129°94'	2°9'/13.4	18		474453	2003 <i>SY</i> ₃₆		9 9.6 336°36'	4°8'/6.7	18	
8 9	23 30.61	+ 8 5.2	2.325	3.161	12.1	21.8	8 9	23 38.97	-15 54.4	1.344	2.255	14.7	20.0
8 19	23 26.06	+ 7 26.6	2.253	3.167	9.4	21.6	8 19	23 32.94	-16 7.2	1.280	2.242	10.7	19.8
8 29	23 20.15	+ 6 30.9	2.205	3.172	6.3	21.4	8 29	23 24.32	-16 17.7	1.238	2.229	6.7	19.5
9 8	23 13.46	+ 5 21.3	2.183	3.178	3.5	21.2	9 8	23 14.10	-16 18.7	1.220	2.218	4.9	19.4
9 18	23 6.66	+ 4 2.4	2.190	3.183	3.4	21.2	9 18	23 3.61	-16 4.3	1.227	2.207	7.7	19.5
9 28	23 0.47	+ 2 40.4	2.226	3.188	6.0	21.4	9 28	22 54.35	-15 31.1	1.258	2.198	12.0	19.7
10 8	22 55.51	+ 1 21.4	2.289	3.192	9.0	21.6	10 8	22 47.47	-14 39.2	1.311	2.189	16.2	20.0
10 18	22 52.23	+ 0 10.8	2.376	3.197	11.8	21.8	10 18	22 43.64	-13 30.8	1.383	2.182	19.7	20.2
474552	2003 <i>YC</i> ₄		9 9.6 326°18'	10°1'/30.3	18		228148	2009 <i>SH</i> ₁₉		9 9.6 289°64'	1°2'/7.3	17	
8 9	23 31.00	-24 21.2	1.316	2.237	14.2	20.1	8 9	23 25.79	- 9 53.9	4.354	5.240	5.9	19.6
8 19	23 27.51	-26 22.2	1.256	2.211	11.5	19.9	8 19	23 22.17	-10 25.8	4.285	5.238	4.1	19.4
8 29	23 21.44	-28 17.7	1.218	2.186	10.1	19.8	8 29	23 17.87	-10 59.7	4.243	5.236	2.3	19.3
9 8	23 13.67	-29 53.5	1.203	2.162	11.0	19.8	9 8	23 13.18	-11 33.1	4.231	5.234	1.2	19.2
9 18	23 5.45	-30 57.8	1.210	2.138	13.7	19.9	9 18	23 8.42	-12 3.9	4.248	5.231	2.5	19.3
9 28	22 58.25	-31 23.7	1.237	2.116	17.1	20.0	9 28	23 3.96	-12 29.9	4.295	5.229	4.4	19.4
10 8	22 53.33	-31 10.5	1.282	2.094	20.4	20.2	10 8	23 0.12	-12 49.4	4.369	5.227	6.1	19.6
10 18	22 51.44	-30 22.1	1.340	2.074	23.3	20.3	10 18	22 57.15	-13 1.3	4.468	5.225	7.7	19.7
512731	2016 <i>UY</i> ₂₄		9 9.6 27°76'	1°4'/10.9	18		195340	2002 <i>EM</i> ₁₄₆		9 9.6 99°43'	0°9'/8		

EPHEMERIDES

9 9.6

9 9.6

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
191108	2002 <i>EX</i> ₅₈	9 9.6 244°19	0°5/10.6 18				319552	2006 <i>RL</i> ₁₂₀	9 9.6 56°01	3°5/ 7.4 17			
8 9	23 25.92	- 1 2.2	4.554	5.414	6.2	20.2	8 9	23 40.59	-11 20.4	1.184	2.095	16.3	20.2
8 19	23 22.24	- 1 19.8	4.473	5.409	4.5	20.1	8 19	23 33.84	-11 52.4	1.151	2.114	11.4	20.0
8 29	23 17.91	- 1 42.4	4.419	5.404	2.6	20.0	8 29	23 24.60	-12 27.4	1.139	2.134	6.4	19.8
9 8	23 13.19	- 2 8.3	4.394	5.399	0.7	19.8	9 8	23 14.13	-12 57.3	1.151	2.154	3.5	19.7
9 18	23 8.40	- 2 35.7	4.399	5.394	1.6	19.9	9 18	23 3.86	-13 15.1	1.187	2.174	6.8	20.0
9 28	23 3.88	- 3 2.6	4.434	5.389	3.5	20.0	9 28	22 55.23	-13 16.0	1.248	2.195	11.4	20.3
10 8	22 59.93	- 3 26.8	4.497	5.384	5.3	20.2	10 8	22 49.22	-12 59.0	1.330	2.215	15.5	20.6
10 18	22 56.81	- 3 46.9	4.586	5.379	7.0	20.3	10 18	22 46.26	-12 25.3	1.431	2.236	18.9	20.9
219835	2002 <i>CH</i> ₈₂	9 9.6 258°94	0°3/10.1 18				195264	2002 <i>EN</i> ₅₆	9 9.6 102°49	0°5/10.2 18			
8 9	23 26.49	- 2 30.6	4.423	5.287	6.3	20.5	8 9	23 34.91	- 0 23.3	1.855	2.729	13.1	21.0
8 19	23 22.66	- 2 46.9	4.341	5.281	4.5	20.4	8 19	23 29.27	- 1 9.8	1.804	2.747	9.4	20.8
8 29	23 18.14	- 3 7.7	4.286	5.274	2.5	20.2	8 29	23 21.97	- 2 9.1	1.776	2.765	5.3	20.6
9 8	23 13.22	- 3 31.3	4.261	5.267	0.5	20.1	9 8	23 13.77	- 3 15.9	1.776	2.783	1.1	20.3
9 18	23 8.23	- 3 55.9	4.265	5.260	1.7	20.2	9 18	23 5.56	- 4 23.7	1.804	2.800	3.4	20.5
9 28	23 3.51	- 4 19.3	4.299	5.253	3.7	20.3	9 28	22 58.26	- 5 25.9	1.859	2.816	7.5	20.8
10 8	22 59.39	- 4 39.6	4.362	5.246	5.6	20.4	10 8	22 52.60	- 6 17.3	1.941	2.832	11.0	21.1
10 18	22 56.13	- 4 55.3	4.451	5.239	7.2	20.6	10 18	22 49.05	- 6 54.7	2.044	2.848	14.0	21.3
370550	2003 <i>UA</i> ₁₂	9 9.6 342°91	4°9/ 6.6 15				169756	2002 <i>PE</i> ₃₀	9 9.6 3°00	1°4/ 8.3 18			
8 9	23 35.74	-13 24.9	1.050	1.974	16.6	20.3	8 9	23 30.50	- 4 25.3	1.495	2.398	14.0	19.5
8 19	23 31.06	-14 2.8	0.995	1.965	11.9	20.0	8 19	23 26.58	- 5 35.4	1.437	2.397	9.9	19.2
8 29	23 23.44	-14 43.6	0.960	1.956	7.2	19.7	8 29	23 20.68	- 6 58.7	1.401	2.397	5.3	19.0
9 8	23 13.99	-15 17.2	0.947	1.948	5.0	19.6	9 8	23 13.61	- 8 27.2	1.391	2.397	1.4	18.7
9 18	23 4.26	-15 34.6	0.957	1.941	8.5	19.7	9 18	23 6.37	- 9 51.9	1.406	2.398	5.0	19.0
9 28	22 55.94	-15 29.5	0.988	1.936	13.5	20.0	9 28	23 0.05	-11 3.9	1.448	2.400	9.6	19.2
10 8	22 50.34	-15 0.1	1.039	1.931	18.2	20.3	10 8	22 55.55	-11 57.1	1.512	2.402	13.7	19.5
10 18	22 48.15	-14 8.5	1.106	1.928	22.2	20.5	10 18	22 53.43	-12 28.9	1.596	2.405	17.1	19.7
286924	2002 <i>PN</i> ₁₀₆	9 9.6 334°23	5°0/14.3 18				319357	2006 <i>CS</i> ₆₁	9 9.6 179°90	3°4/ 4.6 18			
8 9	23 32.03	+ 9 50.3	1.668	2.512	15.8	20.2	8 9	23 31.03	-15 15.4	2.809	3.704	8.4	21.1
8 19	23 27.62	+ 9 49.2	1.593	2.506	12.5	19.9	8 19	23 26.21	-16 26.6	2.751	3.705	6.0	20.9
8 29	23 21.27	+ 9 25.2	1.538	2.501	8.9	19.7	8 29	23 20.21	-17 38.1	2.720	3.706	3.9	20.8
9 8	23 13.69	+ 8 39.9	1.507	2.496	5.8	19.5	9 8	23 13.54	-18 44.7	2.718	3.706	3.5	20.8
9 18	23 5.82	+ 7 37.5	1.502	2.491	5.3	19.5	9 18	23 6.76	-19 41.9	2.745	3.706	5.3	20.9
9 28	22 58.75	+ 6 25.1	1.523	2.487	8.1	19.7	9 28	23 0.51	-20 25.8	2.800	3.705	7.6	21.0
10 8	22 53.38	+ 5 11.3	1.568	2.483	11.7	19.9	10 8	22 55.33	-20 54.6	2.880	3.704	9.9	21.2
10 18	22 50.34	+ 4 3.8	1.636	2.480	15.1	20.1	10 18	22 51.61	-21 7.7	2.982	3.703	11.9	21.3
248171	2004 <i>XH</i> ₆₁	9 9.6 350°75	5°5/12.6 18				5932	Pru tkov	9 9.6 133°57	1°0/ 8.6 18			
8 9	23 32.07	+ 3 54.5	0.885	1.791	20.9	19.2	8 9	23 34.72	- 5 16.9	1.906	2.793	12.2	17.9
8 19	23 28.77	+ 4 44.8	0.828	1.780	16.2	18.9	8 19	23 29.19	- 6 2.7	1.847	2.800	8.6	17.7
8 29	23 22.36	+ 5 10.9	0.787	1.772	10.9	18.6	8 29	23 21.98	- 6 57.2	1.813	2.807	4.6	17.4
9 8	23 13.87	+ 5 12.5	0.765	1.765	6.3	18.3	9 8	23 13.80	- 7 54.8	1.806	2.813	1.0	17.2
9 18	23 4.88	+ 4 53.5	0.764	1.760	6.6	18.3	9 18	23 5.54	- 8 49.3	1.827	2.819	4.1	17.4
9 28	22 57.26	+ 4 22.3	0.782	1.757	11.5	18.6	9 28	22 58.10	- 9 35.1	1.876	2.825	8.0	17.7
10 8	22 52.50	+ 3 49.5	0.820	1.756	16.8	18.9	10 8	22 52.26	-10 8.2	1.949	2.830	11.5	17.9
10 18	22 51.44	+ 3 24.2	0.874	1.756	21.5	19.2	10 18	22 48.52	-10 26.3	2.045	2.836	14.5	18.1
336868	2011 <i>FV</i> ₁₄₆	9 9.6 118°32	2°7/11.9 17				62535	2000 <i>SU</i> ₂₅₇	9 9.6 236°07	3°6/ 5.9 18			
8 9	23 36.78	+ 3 47.0	1.735	2.595	14.5	21.1	8 9	23 35.50	-15 3.5	2.234	3.130	10.3	19.0
8 19	23 30.78	+ 3 39.2	1.673	2.604	10.9	20.9	8 19	23 29.63	-15 41.8	2.169	3.124	7.4	18.8
8 29	23 22.89	+ 3 14.9	1.635	2.613	6.9	20.7	8 29	23 22.19	-16 20.0	2.130	3.118	4.6	18.6
9 8	23 13.91	+ 2 37.1	1.622	2.622	3.3	20.5	9 8	23 13.84	-16 52.7	2.118	3.112	3.6	18.5
9 18	23 4.81	+ 1 50.6	1.636	2.631	3.9	20.5	9 18	23 5.36	-17 15.4	2.135	3.106	5.7	18.7
9 28	22 56.64	+ 1 1.9	1.677	2.639	7.6	20.8	9 28	22 57.60	-17 24.5	2.178	3.100	8.7	18.8
10 8	22 50.26	+ 0 17.2	1.744	2.647	11.4	21.0	10 8	22 51.27	-17 18.7	2.247	3.093	11.6	19.0
10 18	22 46.22	- 0 18.7	1.833	2.655	14.7	21.3	10 18	22 46.88	-16 57.9	2.337	3.087	14.0	19.2
9975	Takimotokoso	9 9.6 28°41	0°9/10.3 18				21392	Helibrochier	9 9.6 317°45	2°8/11.9 18			
8 9	23 33.91	- 0 51.8	1.244	2.142	16.6	17.4	8 9	23 32.00	+ 4 29.1	1.263	2.146	17.4	18.1
8 19	23 29.21	- 1 17.0	1.195	2.150	12.0	17.2	8 19	23 28.09	+ 3 55.4	1.192	2.135	13.2	17.8
8 29	23 22.17	- 1 59.3	1.167	2.158	6.9	16.9	8 29	23 21.74	+ 2 56.0	1.141	2.125	8.3	17.5
9 8	23 13.81	- 2 52.5	1.161	2.168	1.6	16.6	9 8	23 13.81	+ 1 35.5	1.112	2.115	3.6	17.2
9 18	23 5.36	- 3 48.7	1.180	2.178	4.4	16.8	9 18	23 5.47	+ 0 2.1	1.108	2.106	4.5	17.2
9 28	22 58.13	- 4 39.4	1.224	2.188	9.5	17.2	9 28	22 58.11	- 1 32.6	1.128	2.097	9.6	17.5
10 8	22 53.14	- 5 17.6	1.290	2.200	14.1	17.5	10 8	22 52.91	- 2 57.4	1.171	2.089	14.6	17.8
10 18	22 50.94	- 5 39.5	1.375	2.211	17.9	17.7	10 18	22 50.60	- 4 4.2	1.234	2.081	18.8	18.0
3265	Fletcher	9 9.6 339°92	6°3/ 4.8 18				15355	Maupassant	9 9.6 57°17	1°6/10.9 18			
8 9	23 34.21	-16 2.0	1.200	2.122	15.1	15.9	8 9	23 36.94	+ 0 7.7	1.482	2.363	15.4	17.2
8 19	23 29.71	-17 11.4	1.146	2.113	11.0	15.6	8 19	23 31.16	+ 0 1.8	1.424	2.369	11.3	16.9
8 29	23 22.60	-18 21.4	1.114	2.105	7.4	15.4	8 29	23 23.21	- 0 19.1	1.387	2.375	6.7	16.7
9 8	23 13.88	-19 20.7	1.105	2.097	6.6	15.3	9 8	23 13.99	- 0 51.2	1.376	2.381	2.2	16.4
9 18	23 4.92	-19 59.6	1.119	2.090	9.6	15.5	9 18	23 4.63	- 1 28.7	1.390	2.387	4.0	16.6
9 28	22 57.21	-20 11.6	1.155	2.085	13.8	15.7	9 28	22 56.35	- 2 5.2	1.431	2.393	8.6	16.9
10 8	22 51.93	-19 55.4	1.211	2.080	17.9	15.9	10 8	22 50.12	- 2 34.7	1.495	2.400	12.8	17.1
10 18	22 49.71	-19 13.3	1.283	2.076	21.3	16.2	10 18	22 46.51	- 2 52.9	1.580	2.406	16.4	17.4
447409	2006 <i>BE</i> ₁₇₃	9 9.6 289°50	3°1/ 5.8 18				29156	1989 <i>CH</i>	9 9.6 192°94	3°1/ 5.4 18			
8 9	23 30.47	-11 2.											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
391945	2008 <i>VV</i> ₅₉		9 9.6 246°89	3°0/ 6.7 18			77490	2001 <i>HF</i> ₃₅		9 9.6 143°50	6°0/ 4.6 18		
8 9	23 35.43	-11 9.7	1.895	2.793	11.8	21.6	8 9	23 38.80	-18 5.7	1.594	2.499	13.2	18.9
8 19	23 29.86	-12 2.4	1.825	2.783	8.3	21.4	8 19	23 32.39	-19 14.1	1.548	2.504	9.7	18.7
8 29	23 22.44	-12 59.6	1.779	2.772	4.8	21.2	8 29	23 23.85	-20 19.3	1.525	2.509	6.7	18.5
9 8	23 13.89	-13 54.8	1.761	2.761	3.1	21.0	9 8	23 14.10	-21 12.5	1.528	2.513	6.2	18.5
9 18	23 5.10	-14 41.5	1.769	2.750	5.7	21.2	9 18	23 4.31	-21 46.6	1.557	2.517	8.6	18.7
9 28	22 57.07	-15 14.4	1.805	2.739	9.4	21.4	9 28	22 55.68	-21 57.4	1.611	2.521	11.9	18.9
10 8	22 50.68	-15 30.2	1.865	2.727	12.9	21.6	10 8	22 49.14	-21 44.7	1.686	2.524	15.2	19.1
10 18	22 46.49	-15 28.3	1.945	2.715	15.8	21.8	10 18	22 45.23	-21 10.7	1.781	2.527	17.9	19.3
399546	2003 <i>QW</i> ₁₄		9 9.6 347°41	5°5/13.9 16			478801	2012 <i>UM</i> ₁₆₁		9 9.6 265°29	7°6/17.5 18		
8 9	23 29.59	+ 8 1.5	1.461	2.325	16.5	20.2	8 9	23 33.22	+17 45.3	1.847	2.638	16.5	21.0
8 19	23 26.16	+ 8 31.9	1.384	2.309	13.2	20.0	8 19	23 28.42	+17 58.6	1.768	2.636	13.9	20.8
8 29	23 20.60	+ 8 41.0	1.327	2.295	9.5	19.7	8 29	23 21.72	+17 45.6	1.709	2.633	11.0	20.7
9 8	23 13.65	+ 8 28.8	1.292	2.282	6.3	19.5	9 8	23 13.83	+17 5.8	1.672	2.630	8.6	20.5
9 18	23 6.31	+ 7 58.2	1.281	2.270	5.9	19.5	9 18	23 5.65	+16 1.5	1.660	2.627	7.6	20.4
9 28	22 59.75	+ 7 15.1	1.294	2.260	8.9	19.6	9 28	22 58.21	+14 39.0	1.674	2.624	8.8	20.5
10 8	22 55.04	+ 6 27.7	1.329	2.252	12.7	19.8	10 8	22 52.41	+13 7.1	1.713	2.621	11.3	20.7
10 18	22 52.86	+ 5 43.5	1.386	2.245	16.4	20.0	10 18	22 48.86	+11 34.9	1.775	2.618	14.2	20.8
298704	2004 <i>EQ</i> ₆₆		9 9.6 257°62	0°5/ 9.1 18			71430	2000 <i>AN</i> ₂₀₁		9 9.6 271°71	1°8/11.9 18		
8 9	23 35.98	- 5 5.3	2.257	3.135	10.9	21.4	8 9	23 30.07	+ 4 39.7	2.448	3.298	11.1	19.2
8 19	23 30.09	- 5 27.9	2.167	3.114	7.9	21.2	8 19	23 25.79	+ 3 50.9	2.352	3.279	8.4	19.0
8 29	23 22.54	- 5 58.1	2.102	3.093	4.3	20.9	8 29	23 20.14	+ 2 46.5	2.282	3.260	5.3	18.8
9 8	23 13.92	- 6 32.1	2.064	3.071	0.6	20.6	9 8	23 13.61	+ 1 29.8	2.239	3.240	2.3	18.6
9 18	23 4.98	- 7 5.7	2.056	3.049	3.5	20.8	9 18	23 6.82	+ 0 5.5	2.225	3.221	2.8	18.6
9 28	22 56.59	- 7 34.3	2.077	3.027	7.3	21.0	9 28	23 0.50	- 1 20.2	2.240	3.201	6.1	18.8
10 8	22 49.44	- 7 54.2	2.124	3.004	10.8	21.2	10 8	22 55.28	- 2 41.3	2.283	3.181	9.3	18.9
10 18	22 44.50	- 8 3.0	2.194	2.980	13.7	21.4	10 18	22 51.69	- 3 52.5	2.350	3.161	12.2	19.1
153295	2001 <i>FB</i> ₁₀₇		9 9.6 103°78	1°5/ 7.8 18			95633	2002 <i>GX</i> ₄₂		9 9.6 265°66	1°8/ 7.8 18		
8 9	23 33.11	- 8 33.1	2.377	3.266	10.0	20.2	8 9	23 35.04	- 9 41.1	2.202	3.093	10.7	19.9
8 19	23 27.77	- 9 8.8	2.322	3.276	7.0	20.0	8 19	23 29.33	-10 4.7	2.132	3.086	7.5	19.7
8 29	23 21.10	- 9 48.7	2.292	3.285	3.8	19.8	8 29	23 22.07	-10 31.9	2.087	3.080	4.1	19.5
9 8	23 13.69	-10 28.4	2.289	3.294	1.5	19.7	9 8	23 13.87	-10 58.5	2.070	3.074	1.8	19.3
9 18	23 6.25	-11 3.6	2.316	3.303	3.9	19.9	9 18	23 5.52	-11 20.1	2.081	3.068	4.3	19.5
9 28	22 59.48	-11 30.4	2.371	3.312	7.0	20.1	9 28	22 57.86	-11 32.9	2.120	3.061	7.7	19.7
10 8	22 53.99	-11 46.4	2.452	3.321	9.9	20.3	10 8	22 51.61	-11 34.6	2.184	3.055	10.9	19.9
10 18	22 50.21	-11 50.4	2.555	3.330	12.3	20.5	10 18	22 47.26	-11 24.2	2.271	3.049	13.6	20.1
103108	1999 <i>XF</i> ₁₇₇		9 9.6 287°32	4°1/ 5.8 18			11977	Leonisoldi		9 9.6 292°77	4°7/13.2 18		
8 9	23 35.69	-13 58.9	1.787	2.689	12.1	18.7	8 9	23 35.66	+ 7 10.4	1.434	2.294	17.0	17.2
8 19	23 30.26	-14 52.3	1.708	2.667	8.7	18.5	8 19	23 30.56	+ 7 20.9	1.358	2.284	13.3	16.9
8 29	23 22.78	-15 48.5	1.654	2.644	5.4	18.2	8 29	23 23.08	+ 7 8.9	1.303	2.275	9.2	16.7
9 8	23 13.96	-16 40.2	1.626	2.622	4.2	18.1	9 8	23 14.04	+ 6 35.5	1.271	2.265	5.5	16.4
9 18	23 4.77	-17 20.4	1.624	2.599	6.9	18.2	9 18	23 4.58	+ 5 45.1	1.264	2.256	5.4	16.4
9 28	22 56.33	-17 43.5	1.649	2.576	10.6	18.4	9 28	22 56.02	+ 4 45.1	1.282	2.247	9.1	16.6
10 8	22 49.61	-17 46.7	1.697	2.553	14.2	18.6	10 8	22 49.51	+ 3 44.6	1.323	2.238	13.4	16.8
10 18	22 45.28	-17 29.8	1.764	2.530	17.4	18.8	10 18	22 45.80	+ 2 51.5	1.385	2.229	17.3	17.1
63284	2001 <i>DM</i> ₄₆		9 9.6 283°19	0°4/ 8.7 18			356920	2012 <i>BC</i> ₁₃₉		9 9.6 162°56	0°7/10.5 18		
8 9	23 25.77	- 5 52.2	4.361	5.238	6.1	19.9	8 9	23 31.46	- 0 9.2	2.448	3.316	10.6	21.4
8 19	23 22.20	- 6 20.5	4.278	5.226	4.3	19.7	8 19	23 26.65	- 0 43.5	2.378	3.318	7.7	21.2
8 29	23 17.93	- 6 52.5	4.222	5.214	2.3	19.6	8 29	23 20.53	- 1 28.1	2.333	3.320	4.4	21.0
9 8	23 13.25	- 7 26.0	4.196	5.202	0.5	19.4	9 8	23 13.65	- 2 19.6	2.316	3.322	1.2	20.8
9 18	23 8.49	- 7 58.9	4.199	5.190	2.0	19.5	9 18	23 6.66	- 3 13.6	2.327	3.323	2.7	20.9
9 28	23 3.99	- 8 28.7	4.232	5.178	4.0	19.7	9 28	23 0.24	- 4 5.3	2.368	3.325	6.1	21.2
10 8	23 0.08	- 8 53.7	4.293	5.166	5.9	19.8	10 8	22 55.01	- 4 50.5	2.435	3.326	9.1	21.4
10 18	22 57.04	- 9 12.3	4.379	5.154	7.6	19.9	10 18	22 51.38	- 5 25.8	2.526	3.327	11.7	21.5
53438	1999 <i>WY</i> ₉		9 9.6 321°75	23°6/10.4 18 R			253650	2003 <i>UA</i> ₁₄₀		9 9.6 329°64	4°4/ 5.9 18		
8 9	23 43.72	-52 7.2	0.984	1.836	23.6	17.4	8 9	23 32.20	-10 8.5	1.160	2.082	15.6	20.0
8 19	23 38.44	-55 6.9	0.980	1.827	23.9	17.4	8 19	23 28.37	-11 36.5	1.103	2.072	11.1	19.7
8 29	23 28.08	-57 14.0	0.991	1.819	24.8	17.4	8 29	23 21.94	-13 14.8	1.066	2.063	6.4	19.4
9 8	23 14.69	-58 14.6	1.013	1.812	26.2	17.5	9 8	23 13.88	-14 51.7	1.053	2.054	4.6	19.3
9 18	23 1.35	-58 4.2	1.047	1.805	27.8	17.6	9 18	23 5.48	-16 14.8	1.064	2.046	8.3	19.5
9 28	22 51.10	-56 47.9	1.089	1.799	29.3	17.7	9 28	22 58.24	-17 13.6	1.097	2.038	13.2	19.7
10 8	22 45.65	-54 37.7	1.139	1.793	30.7	17.9	10 8	22 53.36	-17 43.2	1.150	2.032	17.7	20.0
10 18	22 45.25	-51 46.3	1.196	1.788	31.8	18.0	10 18	22 51.53	-17 43.4	1.220	2.026	21.5	20.2
66115	1998 <i>ST</i> ₆₈		9 9.6 53°66	7°4/17.2 18			266135	2006 <i>TG</i> ₆₃		9 9.6 230°62	1°7/11.6 18		
8 9	23 35.78	+17 1.2	2.073	2.856	15.2	18.7	8 9	23 33.40	+ 6 6.2	1.824	2.678	14.2	20.6
8 19	23 29.96	+17 47.4	2.009	2.869	12.7	18.6	8 19	23 28.53	+ 4 36.6	1.738	2.667	10.7	20.3
8 29	23 22.44	+18 11.9	1.965	2.882	10.2	18.4	8 29	23 21.80	+ 2 42.4	1.675	2.656	6.6	20.0
9 8	23 13.90	+18 13.7	1.946	2.895	8.1	18.3	9 8	23 13.86	+ 0 29.3	1.640	2.644	2.5	19.8
9 18	23 5.20	+17 54.1	1.952	2.909	7.4	18.3	9 18	23 5.59	- 1 53.3	1.634	2.631	3.5	19.8
9 28	22 57.26	+17 17.3	1.984	2.922	8.4	18.4	9 28	22 58.01	- 4 14.4	1.658	2.618	7.9	20.0
10 8	22 50.89	+16 29.6	2.041	2.936	10.4	18.6	10 8	22 52.01	- 6 23.2	1.709	2.604	12.1	20.3
10 18	22 46.60	+15 37.9	2.122	2.950	12.7	18.7	10 18	22 48.22	- 8 12.3	1.783	2.590	15.6	20.5
476618	2008 <i>SG</i> ₁₅₁		9 9.6 291°39	2°1/11.2 18			219119	1998 <i>SO</i> ₁₂₀		9			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
35495	1998 <i>FO</i> ₃₂	9 9.6 34°15'	0°1'	9.6 18			449076	2012 <i>GN</i> ₉	9 9.6 251°18'	3°0'	6.5 18		
8 9	23 41.82	- 6 21.3	1.139	2.043	17.3	16.9	8 9	23 36.37	-14 33.7	2.541	3.430	9.5	21.2
8 19	23 34.73	- 5 53.9	1.106	2.065	12.3	16.7	8 19	23 30.16	-14 58.0	2.465	3.417	6.8	21.0
8 29	23 25.12	- 5 35.3	1.094	2.088	6.7	16.5	8 29	23 22.51	-15 22.2	2.416	3.404	4.1	20.8
9 8	23 14.29	- 5 21.3	1.106	2.113	0.9	16.2	9 8	23 13.99	-15 42.0	2.395	3.391	3.0	20.8
9 18	23 3.74	- 5 7.8	1.142	2.139	4.8	16.5	9 18	23 5.30	-15 53.7	2.403	3.377	4.9	20.9
9 28	22 54.90	- 4 50.8	1.203	2.165	10.0	16.9	9 28	22 57.22	-15 54.3	2.439	3.363	7.7	21.0
10 8	22 48.76	- 4 27.2	1.286	2.192	14.4	17.3	10 8	22 50.41	-15 42.5	2.502	3.349	10.5	21.2
10 18	22 45.73	- 3 55.6	1.389	2.220	18.0	17.6	10 18	22 45.37	-15 18.3	2.587	3.335	12.9	21.3
314659	2006 <i>PV</i> ₉	9 9.6 51°63'	2°7'	7.5 17			219267	2000 <i>AR</i> ₁₇₅	9 9.6 289°81'	5°4'	15.8 18		
8 9	23 34.95	- 7 6.3	1.171	2.084	16.2	20.1	8 9	23 31.52	+13 49.5	2.272	3.076	13.4	20.2
8 19	23 30.00	- 8 20.0	1.132	2.097	11.3	19.9	8 19	23 27.03	+13 51.5	2.170	3.053	11.0	20.0
8 29	23 22.64	- 9 44.1	1.115	2.112	6.1	19.6	8 29	23 20.94	+13 33.5	2.091	3.030	8.4	19.8
9 8	23 13.96	-11 8.1	1.121	2.126	2.7	19.5	9 8	23 13.79	+12 55.7	2.035	3.007	6.2	19.6
9 18	23 5.31	-12 21.2	1.152	2.141	6.5	19.8	9 18	23 6.27	+12 0.2	2.007	2.984	5.5	19.5
9 28	22 58.04	-13 14.9	1.207	2.156	11.4	20.1	9 28	22 59.23	+10 51.6	2.006	2.960	7.2	19.6
10 8	22 53.15	-13 45.0	1.282	2.172	15.7	20.4	10 8	22 53.42	+ 9 36.6	2.031	2.937	9.9	19.7
10 18	22 51.14	-13 51.0	1.377	2.187	19.2	20.7	10 18	22 49.44	+ 8 22.0	2.080	2.914	12.7	19.9
421814	2014 <i>QV</i> ₅₀	9 9.6 10°61'	1°9'	11.6 18			342557	2008 <i>UN</i> ₂₄₅	9 9.6 205°26'	0°7'	8.9 18		
8 9	23 31.98	+ 2 32.2	2.174	3.036	11.9	21.0	8 9	23 35.80	- 5 11.8	2.163	3.044	11.3	22.0
8 19	23 27.17	+ 2 15.5	2.103	3.036	8.9	20.8	8 19	23 29.93	- 5 43.7	2.090	3.039	8.0	21.8
8 29	23 20.88	+ 1 45.8	2.056	3.037	5.5	20.6	8 29	23 22.45	- 6 23.3	2.043	3.035	4.4	21.5
9 8	23 13.72	+ 1 6.1	2.035	3.037	2.3	20.4	9 8	23 14.00	- 7 6.3	2.022	3.029	0.8	21.3
9 18	23 6.41	+ 0 20.4	2.042	3.038	3.1	20.5	9 18	23 5.36	- 7 47.9	2.031	3.023	3.6	21.5
9 28	22 59.74	- 0 26.2	2.077	3.039	6.4	20.7	9 28	22 57.41	- 8 23.2	2.068	3.017	7.4	21.7
10 8	22 54.40	- 1 8.7	2.138	3.039	9.7	20.9	10 8	22 50.88	- 8 48.5	2.131	3.011	10.8	21.9
10 18	22 50.86	- 1 43.2	2.223	3.040	12.6	21.1	10 18	22 46.30	- 9 1.6	2.217	3.003	13.6	22.1
287261	2002 <i>TB</i> ₁₃₀	9 9.6 314°96'	1°2'	10.5 18			53139	1999 <i>BG</i> ₅	9 9.6 264°77'	11°0'	23.7 18		
8 9	23 37.44	- 2 10.3	1.658	2.540	14.0	19.6	8 9	23 34.18	+31 53.7	2.372	3.032	16.5	19.5
8 19	23 31.57	- 1 55.3	1.580	2.526	10.3	19.4	8 19	23 29.12	+32 31.9	2.267	3.012	15.1	19.3
8 29	23 23.54	- 1 50.6	1.524	2.513	6.0	19.1	8 29	23 22.19	+32 43.2	2.179	2.991	13.5	19.2
9 8	23 14.12	- 1 53.5	1.494	2.500	1.7	18.8	9 8	23 13.98	+32 23.8	2.111	2.969	12.1	19.0
9 18	23 4.34	- 2 0.6	1.491	2.488	3.8	18.9	9 18	23 5.30	+31 32.5	2.064	2.947	11.2	18.9
9 28	22 55.39	- 2 7.2	1.515	2.475	8.4	19.2	9 28	22 57.13	+30 11.4	2.041	2.925	11.1	18.9
10 8	22 48.28	- 2 9.2	1.562	2.464	12.6	19.4	10 8	22 50.37	+28 27.1	2.042	2.902	12.0	18.9
10 18	22 43.70	- 2 3.2	1.632	2.453	16.2	19.6	10 18	22 45.73	+26 28.2	2.066	2.879	13.6	19.0
350059	2010 <i>TA</i> ₁₄₃	9 9.6 263°84'	0°5'	8.7 16			342347	2008 <i>TS</i> ₁₆₀	9 9.6 145°94'	5°1'	15.3 18		
8 9	23 27.36	- 6 44.5	4.233	5.111	6.3	21.1	8 9	23 32.11	+12 53.0	1.772	2.597	15.8	20.7
8 19	23 23.32	- 7 2.4	4.160	5.108	4.4	20.9	8 19	23 27.60	+12 23.0	1.698	2.598	12.7	20.5
8 29	23 18.57	- 7 23.3	4.113	5.105	2.4	20.8	8 29	23 21.27	+11 27.1	1.645	2.599	9.2	20.3
9 8	23 13.41	- 7 45.2	4.096	5.103	0.5	20.6	9 8	23 13.83	+10 7.6	1.617	2.600	6.1	20.1
9 18	23 8.17	- 8 6.0	4.109	5.100	2.1	20.7	9 18	23 6.19	+ 8 29.9	1.614	2.601	5.3	20.1
9 28	23 3.25	- 8 23.8	4.151	5.097	4.1	20.9	9 28	22 59.33	+ 6 42.6	1.639	2.602	7.7	20.2
10 8	22 58.97	- 8 36.8	4.222	5.095	6.0	21.0	10 8	22 54.11	+ 4 55.8	1.689	2.603	11.1	20.4
10 18	22 55.61	- 8 43.7	4.318	5.092	7.7	21.2	10 18	22 51.09	+ 3 17.8	1.763	2.604	14.4	20.6
204361	2004 <i>TB</i> ₃₀	9 9.6 170°37'	3°0'	6.9 18			295104	2008 <i>EM</i> ₁₆₅	9 9.6 133°24'	0°1'	9.5 18		
8 9	23 38.19	-12 0.0	1.910	2.804	11.9	20.6	8 9	23 33.79	- 3 38.9	2.325	3.202	10.7	21.4
8 19	23 31.72	-12 37.8	1.851	2.807	8.4	20.4	8 19	23 28.33	- 4 6.1	2.262	3.209	7.6	21.3
8 29	23 23.43	-13 18.0	1.817	2.809	4.8	20.2	8 29	23 21.48	- 4 41.2	2.225	3.216	4.2	21.1
9 8	23 14.10	-13 54.6	1.810	2.811	3.0	20.0	9 8	23 13.86	- 5 20.4	2.215	3.222	0.6	20.8
9 18	23 4.68	-14 22.1	1.831	2.812	5.5	20.2	9 18	23 6.15	- 5 59.3	2.234	3.229	3.1	21.0
9 28	22 56.16	-14 36.6	1.880	2.813	9.1	20.4	9 28	22 59.10	- 6 33.8	2.282	3.235	6.5	21.2
10 8	22 49.36	-14 35.9	1.952	2.814	12.4	20.6	10 8	22 53.36	- 7 0.2	2.356	3.241	9.6	21.4
10 18	22 44.81	-14 19.9	2.046	2.814	15.2	20.8	10 18	22 49.37	- 7 16.3	2.454	3.246	12.3	21.6
447070	2004 <i>RH</i> ₃₂₇	9 9.6 336°81'	1°5'	10.8 17			53860	2000 <i>FV</i> ₂₅	9 9.6 280°76'	1°8'	8.1 18		
8 9	23 34.23	- 0 40.2	1.820	2.698	13.2	20.6	8 9	23 34.89	- 6 27.9	1.514	2.414	14.0	19.5
8 19	23 29.07	- 0 34.6	1.746	2.689	9.7	20.4	8 19	23 29.88	- 7 20.4	1.444	2.403	10.0	19.2
8 29	23 22.07	- 0 40.4	1.694	2.681	5.8	20.1	8 29	23 22.66	- 8 24.0	1.398	2.393	5.4	19.0
9 8	23 13.92	- 0 54.8	1.668	2.673	1.9	19.9	9 8	23 14.05	- 9 31.3	1.376	2.382	1.8	18.7
9 18	23 5.53	- 1 14.2	1.669	2.666	3.5	20.0	9 18	23 5.12	-10 34.4	1.381	2.371	5.4	18.9
9 28	22 57.88	- 1 33.9	1.697	2.659	7.6	20.2	9 28	22 57.09	-11 25.1	1.411	2.361	10.1	19.2
10 8	22 51.85	- 1 49.1	1.750	2.653	11.4	20.4	10 8	22 51.00	-11 58.3	1.464	2.350	14.3	19.4
10 18	22 48.01	- 1 56.5	1.825	2.647	14.7	20.6	10 18	22 47.52	-12 11.7	1.537	2.340	17.9	19.6
9610	<i>Vischer</i>	9 9.6 353°80'	1°4'	8.4 18			264135	2009 <i>UX</i> ₅₀	9 9.6 324°00'	2°1'	13.6 17		
8 9	23 29.34	- 6 9.8	1.498	2.406	13.6	17.2	8 9	23 25.85	+ 7 0.7	3.845	4.673	7.9	19.9
8 19	23 25.82	- 6 49.8	1.436	2.398	9.7	16.9	8 19	23 22.39	+ 6 43.7	3.756	4.664	6.1	19.8
8 29	23 20.34	- 7 40.1	1.396	2.392	5.2	16.6	8 29	23 18.13	+ 6 17.3	3.691	4.655	4.2	19.7
9 8	23 13.68	- 8 34.1	1.380	2.387	1.4	16.4	9 8	23 13.40	+ 5 42.9	3.655	4.646	2.5	19.5
9 18	23 6.81	- 9 24.7	1.390	2.383	4.9	16.6	9 18	23 8.56	+ 5 2.5	3.647	4.637	2.4	19.5
9 28	23 0.82	-10 4.8	1.424	2.380	9.4	16.9	9 28	23 4.02	+ 4 18.8	3.669	4.629	4.0	19.6
10 8	22 56.61	-10 29.5	1.482	2.379	13.5	17.1	10 8	23 0.16	+ 3 35.0	3.719	4.621	6.0	19.7
10 18	22 54.75	-10 36.5	1.559	2.379	16.9	17.3	10 18	22 57.27	+ 2 53.8	3.795	4.612	7.8	19.9
80890	2000 <i>DY</i> ₄₅	9 9.6 81°13'	0°4'	10.0 18			154604	2003 <i>QM</i> ₂₉	9 9.6 83°43'	6°1'			

EPHEMERIDES

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9 9.7

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
203680	2002 <i>NU</i> ₅		9 9.6 353°70	1°1/ 8.7	18		483387	2016 <i>TX</i> ₅₂		9 9.7 8°71 10°2/19.7	18		
8 9	23 32.24	- 4 53.1	1.513	2.413	14.0	19.9	8 9	23 29.97	+20 31.0	1.332	2.138	21.0	20.3
8 19	23 27.88	- 5 41.2	1.452	2.410	9.9	19.7	8 19	23 26.62	+20 56.0	1.268	2.139	18.0	20.1
8 29	23 21.50	- 6 41.2	1.413	2.408	5.4	19.4	8 29	23 20.97	+20 44.4	1.220	2.141	14.7	19.9
9 8	23 13.90	- 7 46.2	1.399	2.406	1.1	19.1	9 8	23 13.87	+19 54.3	1.192	2.145	11.7	19.8
9 18	23 6.10	- 8 48.4	1.412	2.405	4.7	19.4	9 18	23 6.47	+18 29.0	1.185	2.149	10.2	19.7
9 28	22 59.23	- 9 40.3	1.450	2.404	9.3	19.6	9 28	23 0.10	+16 37.4	1.201	2.154	11.0	19.7
10 8	22 54.21	-10 16.4	1.511	2.404	13.5	19.9	10 8	22 55.84	+14 33.0	1.239	2.160	13.6	19.9
10 18	22 51.62	-10 34.2	1.592	2.405	16.9	20.1	10 18	22 54.32	+12 29.5	1.298	2.167	16.7	20.1
209339	2004 <i>CZ</i> ₁₉		9 9.6 155°86	3°5/ 5.6	18		437028	2012 <i>TV</i> ₂₉₅		9 9.7 345°21 0°2/ 9.5	18		
8 9	23 33.31	-12 45.1	2.107	3.006	10.7	20.7	8 9	23 32.49	- 5 16.1	1.077	1.994	17.0	19.5
8 19	23 28.16	-13 59.8	2.052	3.010	7.5	20.5	8 19	23 28.80	- 5 9.5	1.012	1.978	12.3	19.1
8 29	23 21.47	-15 17.0	2.023	3.013	4.6	20.3	8 29	23 22.35	- 5 14.4	0.967	1.963	6.9	18.8
9 8	23 13.89	-16 29.8	2.021	3.017	3.6	20.3	9 8	23 14.09	- 5 26.0	0.943	1.950	1.0	18.4
9 18	23 6.20	-17 32.0	2.048	3.020	5.9	20.4	9 18	23 5.38	- 5 38.0	0.941	1.939	5.2	18.6
9 28	22 59.25	-18 18.6	2.102	3.022	9.0	20.6	9 28	22 57.83	- 5 43.6	0.962	1.930	11.0	18.9
10 8	22 53.74	-18 46.9	2.180	3.025	11.9	20.8	10 8	22 52.75	- 5 37.3	1.003	1.922	16.2	19.2
10 18	22 50.15	-18 56.6	2.279	3.027	14.4	21.0	10 18	22 50.92	- 5 16.4	1.062	1.917	20.7	19.5
49673	1999 <i>RA</i> ₂₁₅		9 9.6 314°85	0°3/ 4.5	13 3 8		255458	2005 <i>YW</i> ₇₂		9 9.7 77°81 2°0/ 7.5	18		
8 9	23 14.98	-17 45.2	39.567	40.461	0.7	23.8	8 9	23 33.05	- 9 20.7	2.184	3.077	10.6	20.2
8 19	23 14.29	-17 51.5	39.507	40.459	0.5	23.8	8 19	23 27.91	-10 2.3	2.126	3.083	7.4	20.0
8 29	23 13.54	-17 57.6	39.474	40.457	0.3	23.8	8 29	23 21.31	-10 48.2	2.094	3.088	4.1	19.8
9 8	23 12.76	-18 3.4	39.470	40.454	0.3	23.8	9 8	23 13.90	-11 33.3	2.090	3.093	2.0	19.7
9 18	23 11.97	-18 8.6	39.495	40.452	0.4	23.8	9 18	23 6.41	-12 12.6	2.113	3.099	4.4	19.9
9 28	23 11.20	-18 13.1	39.548	40.450	0.6	23.8	9 28	22 59.63	-12 42.0	2.164	3.104	7.7	20.1
10 8	23 10.49	-18 16.7	39.628	40.448	0.8	23.9	10 8	22 54.23	-12 58.7	2.241	3.110	10.7	20.3
10 18	23 9.87	-18 19.3	39.732	40.445	1.0	23.9	10 18	22 50.66	-13 1.5	2.339	3.115	13.3	20.5
172094	2002 <i>EK</i> ₆₉		9 9.6 121°12	0°1/ 9.6	18		97402	2000 <i>AQ</i> ₁₂₈		9 9.7 224°79 1°5/11.6	18		
8 9	23 39.50	- 3 35.9	1.456	2.344	15.2	20.2	8 9	23 32.05	+ 2 13.1	2.687	3.541	10.2	20.2
8 19	23 33.04	- 3 57.4	1.401	2.352	10.9	20.0	8 19	23 27.07	+ 1 55.4	2.604	3.534	7.6	20.1
8 29	23 24.32	- 4 30.7	1.368	2.360	6.0	19.7	8 29	23 20.84	+ 1 27.0	2.547	3.526	4.7	19.9
9 8	23 14.31	- 5 10.3	1.360	2.367	0.8	19.4	9 8	23 13.84	+ 0 50.4	2.516	3.519	1.9	19.7
9 18	23 4.20	- 5 49.7	1.379	2.374	4.4	19.7	9 18	23 6.68	+ 0 8.8	2.515	3.511	2.6	19.7
9 28	22 55.25	- 6 22.3	1.424	2.381	9.2	20.0	9 28	22 59.99	- 0 33.7	2.544	3.503	5.6	19.9
10 8	22 48.47	- 6 43.2	1.492	2.387	13.5	20.2	10 8	22 54.38	- 1 13.1	2.599	3.494	8.4	20.1
10 18	22 44.44	- 6 50.0	1.582	2.394	17.1	20.5	10 18	22 50.27	- 1 46.1	2.679	3.486	11.0	20.2
95411	2002 <i>CY</i> ₂₁₈		9 9.6 52°00	1°5/ 7.9	18		90644	5483 <i>T</i> ₋₂		9 9.7 338°73 1°6/10.9	18		
8 9	23 30.60	- 5 36.2	1.981	2.874	11.5	19.1	8 9	23 35.74	- 0 59.3	1.742	2.620	13.6	19.1
8 19	23 26.27	- 6 49.4	1.926	2.883	8.1	18.9	8 19	23 30.26	- 0 43.0	1.667	2.611	10.1	18.8
8 29	23 20.44	- 8 11.4	1.897	2.891	4.3	18.7	8 29	23 22.82	- 0 37.7	1.616	2.603	6.0	18.6
9 8	23 13.75	- 9 35.6	1.894	2.900	1.5	18.5	9 8	23 14.16	- 0 40.9	1.590	2.595	2.1	18.3
9 18	23 6.97	-10 54.9	1.920	2.909	4.3	18.7	9 18	23 5.22	- 0 49.4	1.591	2.588	3.6	18.4
9 28	23 0.94	-12 3.0	1.973	2.918	8.0	19.0	9 28	22 57.07	- 0 58.7	1.619	2.581	7.8	18.7
10 8	22 56.32	-12 55.4	2.051	2.927	11.3	19.2	10 8	22 50.65	- 1 4.5	1.671	2.575	11.8	18.9
10 18	22 53.59	-13 30.1	2.151	2.936	14.0	19.4	10 18	22 46.55	- 1 3.5	1.745	2.570	15.2	19.1
323614	2004 <i>VT</i> ₇		9 9.7 273°54	5°8/ 2.8	18		171558	1999 <i>TE</i> ₁₄₇		9 9.7 11°18 1°3/ 8.7	18		
8 9	23 34.52	-22 35.1	2.296	3.192	10.0	20.3	8 9	23 28.67	- 3 44.2	0.903	1.830	18.4	18.4
8 19	23 29.04	-23 34.2	2.236	3.182	7.7	20.1	8 19	23 26.09	- 4 43.9	0.862	1.833	13.1	18.2
8 29	23 21.97	-24 28.1	2.202	3.172	6.1	20.0	8 29	23 20.77	- 6 2.6	0.839	1.837	7.0	17.9
9 8	23 13.98	-25 10.5	2.194	3.161	6.1	20.0	9 8	23 13.86	- 7 29.2	0.837	1.844	1.4	17.5
9 18	23 5.85	-25 36.7	2.213	3.151	7.8	20.1	9 18	23 6.82	- 8 50.8	0.856	1.852	6.1	17.9
9 28	22 58.42	-25 43.4	2.258	3.140	10.2	20.2	9 28	23 1.20	- 9 55.3	0.896	1.861	12.0	18.2
10 8	22 52.43	-25 30.2	2.326	3.130	12.6	20.4	10 8	22 58.16	-10 35.2	0.956	1.873	17.1	18.6
10 18	22 48.36	-24 58.5	2.414	3.119	14.7	20.5	10 18	22 58.24	-10 48.1	1.033	1.886	21.2	18.9
63031	2000 <i>WC</i> ₆₂		9 9.7 340°09	5°1/ 4.1	18		435165	2007 <i>PE</i> ₁₂		9 9.7 31°31 1°0/10.1	18		
8 9	23 31.07	-15 38.5	1.774	2.685	11.7	18.5	8 9	23 44.96	- 5 16.3	1.272	2.163	16.8	19.7
8 19	23 26.88	-17 5.8	1.718	2.679	8.4	18.3	8 19	23 37.02	- 4 21.6	1.226	2.178	12.1	19.5
8 29	23 20.89	-18 34.2	1.687	2.674	5.7	18.1	8 29	23 26.53	- 3 34.7	1.202	2.193	6.9	19.2
9 8	23 13.83	-19 55.1	1.681	2.669	5.4	18.1	9 8	23 14.68	- 2 53.9	1.203	2.210	1.6	18.9
9 18	23 6.59	-21 0.7	1.702	2.664	7.8	18.2	9 18	23 2.93	- 2 17.3	1.230	2.227	4.5	19.2
9 28	23 0.16	-21 45.1	1.748	2.660	11.0	18.4	9 28	22 52.75	- 1 42.2	1.283	2.245	9.5	19.5
10 8	22 55.36	-22 5.9	1.816	2.656	14.1	18.6	10 8	22 45.20	- 1 6.0	1.360	2.264	13.9	19.8
10 18	22 52.74	-22 3.6	1.903	2.653	16.8	18.8	10 18	22 40.81	- 0 26.6	1.457	2.283	17.6	20.1
25098	Gridnev		9 9.7 64°44	2°5/11.5	18		13151	Polino		9 9.7 34°63 4°5/13.0	18		
8 9	23 37.81	+ 2 2.4	1.372	2.250	16.6	17.7	8 9	23 34.12	+ 6 18.1	1.017	1.904	20.3	17.1
8 19	23 31.88	+ 1 59.6	1.321	2.263	12.3	17.5	8 19	23 29.68	+ 6 15.8	0.978	1.920	15.5	16.9
8 29	23 23.69	+ 1 38.8	1.291	2.276	7.6	17.3	8 29	23 22.63	+ 5 45.0	0.958	1.938	10.2	16.7
9 8	23 14.23	+ 1 4.0	1.286	2.289	3.1	17.1	9 8	23 14.13	+ 4 50.3	0.958	1.956	5.5	16.5
9 18	23 4.71	+ 0 21.1	1.306	2.302	4.2	17.2	9 18	23 5.64	+ 3 40.2	0.980	1.976	5.5	16.6
9 28	22 56.40	- 0 22.4	1.351	2.316	8.8	17.5	9 28	22 58.65	+ 2 26.3	1.025	1.997	9.9	16.9
10 8	22 50.30	- 0 59.6	1.420	2.329	13.1	17.8	10 8	22 54.24	+ 1 19.6	1.092	2.018	14.5	17.2
10 18	22 46.95	- 1 25.7	1.509	2.343	16.7	18.0	10 18	22 52.92	+ 0 27.7	1.177	2.040	18.5	17.6
200039	2007 <i>RY</i> ₁₅₆		9 9.7 227°16	0°5/ 9.0	18		29617	1998 <i>SK</i> ₁₀₈		9 9.7			

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
51313	2000 <i>KF</i> ₇₁		9 9.7 234°10	2.4/ 6.8	18		155461	1998 <i>RV</i> ₃₇		9 9.7 57°99	2°0/10.9	18	
8 9	23 31.92	- 8 19.5	2.067	2.962	11.0	19.1	8 9	23 41.42	- 0 2.3	1.029	1.925	19.4	18.8
8 19	23 27.30	- 9 41.8	1.999	2.956	7.7	18.9	8 19	23 34.77	- 0 0.5	0.995	1.947	14.2	18.5
8 29	23 21.09	-11 11.7	1.957	2.950	4.3	18.7	8 29	23 25.36	- 0 17.9	0.980	1.969	8.3	18.3
9 8	23 13.92	-12 42.3	1.942	2.944	2.5	18.6	9 8	23 14.54	- 0 49.0	0.987	1.992	2.7	18.1
9 18	23 6.54	-14 6.2	1.956	2.938	5.1	18.7	9 18	23 3.91	- 1 26.2	1.017	2.015	4.8	18.3
9 28	22 59.82	-15 17.0	1.997	2.931	8.6	18.9	9 28	22 55.04	- 2 1.0	1.072	2.038	10.3	18.7
10 8	22 54.49	-16 10.2	2.064	2.924	11.9	19.1	10 8	22 49.04	- 2 26.3	1.148	2.062	15.1	19.0
10 18	22 51.07	-16 44.0	2.152	2.917	14.6	19.3	10 18	22 46.35	- 2 38.2	1.243	2.085	19.0	19.3
425562	2010 <i>RR</i> ₁₅₃		9 9.7 312°32	4°3/12.8	17		68230	2001 <i>DT</i> ₃₂		9 9.7 43°57	0°3/ 9.4	18	
8 9	23 33.75	+ 5 57.2	1.237	2.114	18.1	21.1	8 9	23 35.93	- 5 31.7	2.156	3.037	11.3	19.1
8 19	23 29.56	+ 5 56.5	1.162	2.099	14.1	20.8	8 19	23 30.00	- 5 37.0	2.091	3.040	8.0	18.9
8 29	23 22.76	+ 5 30.6	1.106	2.085	9.4	20.5	8 29	23 22.51	- 5 48.6	2.051	3.043	4.4	18.7
9 8	23 14.20	+ 4 41.4	1.072	2.071	5.1	20.3	9 8	23 14.14	- 6 3.0	2.038	3.046	0.6	18.4
9 18	23 5.10	+ 3 34.6	1.062	2.058	5.3	20.2	9 18	23 5.67	- 6 16.7	2.054	3.049	3.3	18.6
9 28	22 56.96	+ 2 19.9	1.076	2.045	9.8	20.5	9 28	22 57.93	- 6 26.0	2.099	3.052	7.0	18.9
10 8	22 51.07	+ 1 8.2	1.111	2.033	14.8	20.7	10 8	22 51.64	- 6 28.1	2.169	3.055	10.3	19.1
10 18	22 48.23	+ 0 8.4	1.166	2.021	19.2	20.9	10 18	22 47.28	- 6 21.4	2.262	3.058	13.1	19.3
257617	1999 <i>TG</i> ₇₃		9 9.7 315°13	0°4/ 9.9	18		148606	2001 <i>RK</i> ₇₁		9 9.7 339°11	0°5/ 9.4	18	
8 9	23 34.74	- 2 46.2	1.189	2.092	16.8	21.1	8 9	23 36.80	- 5 25.6	1.284	2.186	15.8	18.6
8 19	23 30.44	- 2 57.9	1.110	2.068	12.3	20.7	8 19	23 31.54	- 5 29.6	1.219	2.178	11.4	18.3
8 29	23 23.35	- 3 25.7	1.050	2.044	7.1	20.4	8 29	23 23.74	- 5 44.1	1.176	2.171	6.3	18.0
9 8	23 14.30	- 4 4.7	1.014	2.021	1.2	19.9	9 8	23 14.35	- 6 3.8	1.157	2.164	0.9	17.6
9 18	23 4.56	- 4 47.8	1.001	1.998	5.0	20.1	9 18	23 4.64	- 6 22.7	1.162	2.158	4.9	17.9
9 28	22 55.75	- 5 26.3	1.011	1.976	10.9	20.4	9 28	22 56.06	- 6 34.7	1.192	2.153	10.2	18.2
10 8	22 49.28	- 5 52.4	1.042	1.955	16.4	20.6	10 8	22 49.77	- 6 35.0	1.243	2.148	14.9	18.5
10 18	22 46.07	- 6 1.3	1.091	1.935	21.0	20.9	10 18	22 46.46	- 6 21.4	1.314	2.144	18.9	18.7
306976	2001 <i>VR</i> ₇₈		9 9.7 95°14	2°8/18.0	17		206590	2003 <i>WU</i> ₂₈		9 9.7 353°95	1°1/10.6	18	
8 9	23 57.88	+68 56.8	2.009	2.258	26.7	20.5	8 9	23 35.78	- 1 10.1	1.656	2.537	14.0	20.4
8 19	23 48.53	+69 57.7	1.962	2.283	26.2	20.4	8 19	23 30.31	- 1 16.3	1.590	2.536	10.3	20.2
8 29	23 33.68	+70 16.6	1.913	2.307	25.6	20.4	8 29	23 22.86	- 1 35.1	1.546	2.535	6.0	19.9
9 8	23 15.71	+69 44.4	1.864	2.331	24.7	20.3	9 8	23 14.21	- 2 2.7	1.528	2.534	1.6	19.6
9 18	22 58.15	+68 14.8	1.821	2.354	23.7	20.3	9 18	23 5.35	- 2 34.3	1.536	2.533	3.7	19.8
9 28	22 44.31	+65 47.2	1.785	2.377	22.6	20.2	9 28	22 57.38	- 3 4.1	1.572	2.533	8.1	20.1
10 8	22 35.92	+62 28.3	1.762	2.399	21.6	20.2	10 8	22 51.23	- 3 27.0	1.631	2.533	12.1	20.3
10 18	22 33.09	+58 28.5	1.756	2.420	20.8	20.2	10 18	22 47.46	- 3 39.4	1.712	2.533	15.6	20.5
21226	1995 <i>ON</i> ₆		9 9.7 127°52	1°2/10.7	18		149543	2003 <i>HM</i> ₄₇		9 9.7 57°67	1°9/ 7.8	18	
8 9	23 35.72	+ 1 36.4	1.588	2.463	14.9	19.8	8 9	23 33.95	- 8 13.6	1.862	2.758	12.0	19.8
8 19	23 30.24	+ 0 46.1	1.530	2.472	10.9	19.6	8 19	23 28.65	- 8 59.8	1.820	2.777	8.4	19.6
8 29	23 22.78	+ 0 22.0	1.494	2.481	6.4	19.3	8 29	23 21.76	- 9 51.4	1.802	2.796	4.5	19.4
9 8	23 14.17	- 1 41.8	1.484	2.490	1.8	19.1	9 8	23 14.03	-10 42.3	1.811	2.815	1.9	19.3
9 18	23 5.44	- 3 5.5	1.501	2.498	3.7	19.2	9 18	23 6.32	-11 26.9	1.847	2.835	4.6	19.5
9 28	22 57.70	- 4 24.3	1.546	2.506	8.3	19.5	9 28	22 59.53	-12 0.2	1.910	2.854	8.2	19.8
10 8	22 51.84	- 5 31.1	1.615	2.514	12.4	19.8	10 8	22 54.36	-12 19.4	1.998	2.874	11.5	20.0
10 18	22 48.41	- 6 21.3	1.705	2.521	15.9	20.0	10 18	22 51.22	-12 23.5	2.107	2.893	14.2	20.2
188977	2008 <i>EY</i> ₈₉		9 9.7 298°80	0°3/ 9.9	18		439033	2011 <i>FF</i> ₈		9 9.7 217°63	3°5/ 6.6	16	
8 9	23 33.04	- 0 21.7	1.376	2.268	15.7	20.0	8 9	23 39.53	-13 22.9	1.967	2.859	11.7	22.5
8 19	23 28.75	- 1 18.0	1.306	2.259	11.4	19.8	8 19	23 32.81	-14 4.9	1.897	2.851	8.3	22.2
8 29	23 22.16	- 2 34.1	1.258	2.250	6.5	19.5	8 29	23 24.18	-14 48.5	1.853	2.843	5.0	22.0
9 8	23 14.10	- 4 3.1	1.234	2.241	1.1	19.1	9 8	23 14.40	-15 27.5	1.836	2.833	3.5	21.9
9 18	23 5.69	- 5 35.6	1.235	2.232	4.4	19.3	9 18	23 4.40	-15 56.4	1.847	2.823	5.9	22.1
9 28	22 58.22	- 7 1.0	1.262	2.223	9.7	19.6	9 28	22 55.23	-16 10.7	1.885	2.813	9.5	22.2
10 8	22 52.76	- 8 10.6	1.312	2.215	14.4	19.8	10 8	22 47.75	-16 8.5	1.948	2.801	12.8	22.4
10 18	22 50.02	- 8 59.2	1.382	2.207	18.4	20.1	10 18	22 42.54	-15 50.0	2.033	2.789	15.6	22.6
509082	2005 <i>UY</i> ₉₉		9 9.7 353°62	1°4/ 8.6	18		476752	2008 <i>UZ</i> ₆₂		9 9.7 313°46	4°5/13.2	16	
8 9	23 30.35	- 4 31.4	1.129	2.044	16.5	20.6	8 9	23 32.04	+ 7 9.4	1.434	2.299	16.7	22.2
8 19	23 27.06	- 5 26.4	1.072	2.038	11.7	20.3	8 19	23 28.22	+ 7 9.1	1.340	2.269	13.2	21.9
8 29	23 21.28	- 6 37.5	1.037	2.034	6.3	20.0	8 29	23 22.03	+ 6 44.8	1.266	2.240	9.1	21.6
9 8	23 13.97	- 7 56.0	1.023	2.030	1.4	19.7	9 8	23 14.13	+ 5 57.3	1.215	2.211	5.4	21.3
9 18	23 6.39	- 9 11.0	1.033	2.027	5.7	20.0	9 18	23 5.56	+ 4 50.8	1.188	2.182	5.2	21.2
9 28	22 59.96	-10 12.1	1.066	2.026	11.2	20.3	9 28	22 57.64	+ 3 33.3	1.186	2.154	9.3	21.4
10 8	22 55.81	-10 52.2	1.120	2.026	16.0	20.5	10 8	22 51.61	+ 2 15.2	1.207	2.127	14.0	21.5
10 18	22 54.59	-11 8.3	1.191	2.028	20.1	20.8	10 18	22 48.35	+ 1 5.8	1.248	2.100	18.3	21.7
296817	2009 <i>WF</i> ₃		9 9.7 347°43	0°8/ 8.1	17		401287	2012 <i>DA</i> ₄₁		9 9.7 325°78	5°1/ 3.9	18	
8 9	23 26.38	- 7 57.6	4.133	5.016	6.3	20.4	8 9	23 31.59	-17 10.0	1.944	2.852	11.0	20.1
8 19	23 22.71	- 8 26.3	4.063	5.015	4.4	20.2	8 19	23 27.18	-18 28.1	1.885	2.843	8.1	19.9
8 29	23 18.32	- 8 57.8	4.021	5.014	2.4	20.1	8 29	23 21.07	-19 45.9	1.850	2.835	5.6	19.8
9 8	23 13.52	- 9 29.7	4.007	5.013	0.8	20.0	9 8	23 13.95	-20 55.5	1.843	2.827	5.4	19.7
9 18	23 8.66	- 9 59.8	4.024	5.012	2.3	20.1	9 18	23 6.64	-21 50.3	1.861	2.819	7.6	19.8
9 28	23 4.10	-10 25.7	4.069	5.011	4.4	20.2	9 28	23 0.07	-22 25.1	1.905	2.812	10.6	20.0
10 8	23 0.19	-10 45.7	4.143	5.010	6.2	20.4	10 8	22 55.03	-22 38.1	1.972	2.805	13.5	20.2
10 18	22 57.20	-10 58.5	4.241	5.009	7.9	20.5	10 18	22 52.04	-22 29.7	2.058	2.798	16.0	20.4
467852	2010 <i>VT</i> <												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
471228	2011 AG ₁₆		9 9.7 274°65	5°9/31.7	18		3391	Sinon		9 9.7 273°49	0°4/10.5	18	R
8 9	23 31.62	-20 56.3	2.419	3.319	9.4	21.0	8 9	23 27.57	-1 59.2	4.469	5.330	6.3	17.7
8 19	23 27.09	-22 55.0	2.350	3.298	7.3	20.9	8 19	23 23.52	-2 7.4	4.387	5.324	4.5	17.5
8 29	23 21.03	-24 52.6	2.309	3.277	5.9	20.8	8 29	23 18.78	-2 20.1	4.332	5.317	2.6	17.4
9 8	23 13.96	-26 41.0	2.296	3.256	6.4	20.8	9 8	23 13.64	-2 35.8	4.305	5.311	0.7	17.2
9 18	23 6.58	-28 13.0	2.311	3.234	8.3	20.8	9 18	23 8.41	-2 52.7	4.309	5.305	1.6	17.3
9 28	22 59.69	-29 23.1	2.352	3.213	10.7	21.0	9 28	23 3.46	-3 9.1	4.344	5.299	3.6	17.5
10 8	22 54.04	-30 9.2	2.417	3.191	13.1	21.1	10 8	22 59.11	-3 22.9	4.406	5.293	5.5	17.6
10 18	22 50.18	-30 31.5	2.500	3.168	15.1	21.2	10 18	22 55.62	-3 32.9	4.495	5.286	7.1	17.7
192854	1999 VA ₁₇₈		9 9.7 263°81	12°9/24.6	18		289695	2005 GF ₁₇₆		9 9.7 205°91	6°3/18.3	18	
8 9	23 51.06	-46 26.9	2.202	3.011	13.6	20.4	8 9	23 32.14	+19 46.4	2.295	3.059	14.4	20.8
8 19	23 41.45	-47 40.8	2.152	2.987	13.0	20.3	8 19	23 27.42	+19 16.3	2.206	3.056	12.2	20.7
8 29	23 29.09	-48 31.1	2.125	2.962	12.9	20.3	8 29	23 21.17	+18 20.7	2.138	3.052	9.6	20.5
9 8	23 15.12	-48 49.2	2.119	2.936	13.6	20.3	9 8	23 14.00	+17 0.4	2.093	3.047	7.4	20.4
9 18	23 1.05	-48 30.1	2.134	2.909	14.7	20.3	9 18	23 6.62	+15 18.8	2.076	3.042	6.3	20.3
9 28	22 48.43	-47 33.9	2.170	2.883	16.2	20.4	9 28	22 59.84	+13 22.4	2.087	3.037	7.3	20.3
10 8	22 38.47	-46 5.2	2.223	2.855	17.7	20.4	10 8	22 54.38	+11 19.9	2.126	3.032	9.6	20.5
10 18	22 31.79	-44 10.7	2.291	2.827	19.0	20.5	10 18	22 50.76	+9 19.8	2.191	3.026	12.1	20.6
193446	2000 WR ₁₃₉		9 9.7 41°05	3°0/7.2	18		371511	2006 UU ₇₅		9 9.7 303°59	4°5/6.6	17	
8 9	23 35.65	-10 8.7	1.539	2.443	13.6	19.6	8 9	23 38.60	-13 33.0	1.346	2.256	14.7	20.8
8 19	23 30.26	-10 58.4	1.486	2.447	9.6	19.3	8 19	23 32.81	-14 15.0	1.284	2.246	10.6	20.6
8 29	23 22.83	-11 53.4	1.457	2.452	5.4	19.1	8 29	23 24.45	-14 59.5	1.243	2.236	6.4	20.3
9 8	23 14.22	-12 46.2	1.454	2.456	3.0	19.0	9 8	23 14.49	-15 37.8	1.227	2.226	4.6	20.2
9 18	23 5.50	-13 29.6	1.476	2.461	6.0	19.2	9 18	23 4.23	-16 2.0	1.236	2.216	7.6	20.3
9 28	22 57.84	-13 57.8	1.524	2.466	10.1	19.4	9 28	22 55.12	-16 6.5	1.269	2.207	12.1	20.6
10 8	22 52.14	-14 7.9	1.595	2.471	13.9	19.7	10 8	22 48.34	-15 49.4	1.323	2.198	16.3	20.8
10 18	22 48.93	-13 59.3	1.685	2.476	17.1	19.9	10 18	22 44.57	-15 11.7	1.396	2.189	19.9	21.0
358314	2006 UW ₂₆₈		9 9.7 308°67	0°7/10.4	18		400948	2010 VJ ₁₁₂		9 9.7 318°53	6°1/3.4	18	
8 9	23 32.81	-0 41.9	1.916	2.794	12.6	21.7	8 9	23 34.27	-20 56.2	1.958	2.862	11.2	20.1
8 19	23 28.02	-1 11.2	1.844	2.789	9.2	21.5	8 19	23 29.10	-21 58.4	1.901	2.853	8.5	20.0
8 29	23 21.55	-1 53.2	1.796	2.784	5.3	21.2	8 29	23 22.14	-22 56.3	1.868	2.844	6.4	19.8
9 8	23 14.04	-2 43.7	1.774	2.780	1.3	20.9	9 8	23 14.14	-23 42.6	1.861	2.836	6.3	19.8
9 18	23 6.32	-3 37.3	1.779	2.775	3.3	21.1	9 18	23 5.98	-24 11.3	1.880	2.828	8.3	19.9
9 28	22 59.32	-4 27.9	1.812	2.771	7.4	21.3	9 28	22 58.64	-24 19.0	1.924	2.820	11.1	20.1
10 8	22 53.81	-5 10.3	1.870	2.767	11.1	21.6	10 8	22 52.93	-24 4.9	1.991	2.812	13.8	20.2
10 18	22 50.34	-5 40.8	1.950	2.763	14.2	21.8	10 18	22 49.37	-23 30.6	2.076	2.805	16.2	20.4
379880	2012 HL ₅₁		9 9.7 62°14	0°7/10.2	17		48210	2001 KG ₂₂		9 9.7 143°13	5°5/15.6	18	
8 9	23 35.79	-0 18.1	1.298	2.190	16.5	20.9	8 9	23 34.32	+13 9.8	2.052	2.862	14.5	19.1
8 19	23 30.48	-1 2.9	1.256	2.207	11.9	20.6	8 19	23 29.03	+13 13.2	1.979	2.867	11.7	18.9
8 29	23 22.96	-2 4.9	1.234	2.225	6.7	20.4	8 29	23 22.08	+12 55.7	1.928	2.871	8.8	18.7
9 8	23 14.23	-3 17.0	1.236	2.243	1.4	20.1	9 8	23 14.14	+12 17.9	1.901	2.876	6.2	18.6
9 18	23 5.52	-4 30.1	1.264	2.261	4.3	20.4	9 18	23 6.00	+11 23.2	1.901	2.880	5.5	18.5
9 28	22 58.08	-5 35.3	1.318	2.280	9.3	20.7	9 28	22 58.57	+10 17.0	1.928	2.883	7.3	18.7
10 8	22 52.84	-6 25.8	1.394	2.298	13.6	21.0	10 8	22 52.63	+9 6.6	1.981	2.887	10.1	18.8
10 18	22 50.31	-6 58.0	1.490	2.316	17.2	21.3	10 18	22 48.70	+7 58.7	2.058	2.890	12.9	19.0
282772	2006 JU ₂₇		9 9.7 24°11	6°3/16.0	18		198439	2004 WT ₆		9 9.7 238°25	6°1/3.5	18	
8 9	23 29.88	+13 41.8	1.393	2.234	18.5	20.0	8 9	23 38.65	-21 29.5	2.037	2.931	11.2	20.3
8 19	23 26.34	+13 22.5	1.336	2.242	14.9	19.8	8 19	23 32.21	-22 30.7	1.972	2.919	8.5	20.1
8 29	23 20.74	+12 31.9	1.297	2.252	11.0	19.6	8 29	23 23.88	-23 27.2	1.933	2.907	6.5	19.9
9 8	23 13.92	+11 12.7	1.279	2.262	7.5	19.4	9 8	23 14.41	-24 11.7	1.921	2.893	6.4	19.9
9 18	23 6.96	+9 31.6	1.286	2.273	6.3	19.4	9 18	23 4.72	-24 38.3	1.935	2.880	8.3	20.0
9 28	23 1.00	+7 39.3	1.318	2.285	8.7	19.6	9 28	22 55.85	-24 43.4	1.976	2.866	11.1	20.2
10 8	22 56.97	+5 48.0	1.374	2.298	12.3	19.8	10 8	22 48.69	-24 26.7	2.039	2.851	13.9	20.3
10 18	22 55.42	+4 7.7	1.452	2.311	15.8	20.1	10 18	22 43.79	-23 49.9	2.122	2.836	16.3	20.5
38480	1999 TL ₉₉		9 9.7 342°97	3°3/5.9	18		144179	2004 BO ₁₁₄		9 9.7 123°89	0°6/10.3	17	
8 9	23 29.66	-10 4.0	1.775	2.683	11.9	17.9	8 9	23 36.39	-0 0.9	1.768	2.641	13.7	20.6
8 19	23 25.90	-11 31.6	1.714	2.677	8.3	17.7	8 19	23 30.54	-0 50.2	1.713	2.656	9.9	20.4
8 29	23 20.41	-13 6.2	1.677	2.671	4.8	17.5	8 29	23 22.90	-1 53.7	1.681	2.670	5.6	20.2
9 8	23 13.88	-14 39.6	1.666	2.666	3.4	17.4	9 8	23 14.26	-3 5.6	1.677	2.683	1.2	19.9
9 18	23 7.14	-16 3.3	1.682	2.661	6.2	17.5	9 18	23 5.56	-4 19.0	1.700	2.696	3.5	20.1
9 28	23 1.15	-17 10.0	1.725	2.656	9.9	17.7	9 28	22 57.79	-5 26.8	1.751	2.709	7.8	20.4
10 8	22 56.71	-17 55.6	1.790	2.653	13.3	18.0	10 8	22 51.77	-6 22.9	1.828	2.721	11.6	20.7
10 18	22 54.35	-18 18.7	1.876	2.649	16.2	18.2	10 18	22 47.98	-7 4.0	1.927	2.732	14.7	20.9
174077	2002 FP ₂₁		9 9.7 46°85	1°5/7.7	18		397558	2007 TP ₃₈₉		9 9.7 285°92	7°4/3.3	18	
8 9	23 30.83	-9 19.3	2.703	3.593	8.9	19.1	8 9	23 40.04	-24 21.2	1.796	2.692	12.4	20.4
8 19	23 26.12	-9 50.4	2.649	3.603	6.3	19.0	8 19	23 33.39	-25 11.3	1.736	2.680	9.7	20.2
8 29	23 20.29	-10 24.5	2.621	3.614	3.4	18.8	8 29	23 24.59	-25 53.0	1.701	2.668	7.8	20.0
9 8	23 13.85	-10 58.1	2.620	3.625	1.5	18.7	9 8	23 14.52	-26 18.2	1.690	2.657	7.7	20.0
9 18	23 7.37	-11 27.4	2.649	3.635	3.6	18.9	9 18	23 4.29	-26 21.3	1.705	2.645	9.6	20.1
9 28	23 1.46	-11 49.4	2.706	3.646	6.3	19.1	9 28	22 55.09	-25 59.6	1.746	2.633	12.4	20.3
10 8	22 56.63	-12 1.7	2.789	3.658	8.9	19.2	10 8	22 47.88	-25 14.2	1.808	2.622	15.3	20.4
10 18	22 53.26	-12 3.5	2.896	3.669	11.1	19.4	10 18	22 43.25	-24 8.3	1.888	2.610	17.8	20.6
206750	2004 BD ₁₄₉		9 9.7 146°61	0°1/9.8	18		237010	2008 RK ₁₁₄		9 9.7 249°11	2°2/7.8	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
68002	2000 <i>XK</i> ₃₄		9 9.7 129°34	2°2/12.5	18		348108	2003 <i>YP</i> ₆₈		9 9.7 264°56	4°9/ 4.2	18	
8 9	23 35.20	+ 4 21.3	2.858	3.693	10.1	19.3	8 9	23 33.97	-16 17.7	1.968	2.871	11.1	20.8
8 19	23 29.17	+ 4 21.6	2.792	3.708	7.7	19.1	8 19	23 28.95	-17 38.9	1.900	2.857	8.1	20.5
8 29	23 21.97	+ 4 11.4	2.752	3.723	5.0	19.0	8 29	23 22.14	-19 1.2	1.858	2.843	5.5	20.4
9 8	23 14.13	+ 3 52.6	2.740	3.737	2.6	18.8	9 8	23 14.21	-20 16.7	1.842	2.828	5.2	20.3
9 18	23 6.22	+ 3 27.6	2.758	3.751	2.8	18.9	9 18	23 6.01	-21 18.1	1.854	2.814	7.5	20.4
9 28	22 58.89	+ 2 59.8	2.806	3.764	5.2	19.0	9 28	22 58.52	-21 59.8	1.891	2.799	10.6	20.6
10 8	22 52.66	+ 2 32.5	2.882	3.776	7.7	19.2	10 8	22 52.58	-22 19.4	1.952	2.784	13.6	20.8
10 18	22 47.92	+ 2 8.8	2.983	3.789	10.0	19.4	10 18	22 48.76	-22 17.2	2.032	2.768	16.3	20.9
436593	2011 <i>JN</i> ₂₇		9 9.7 33°83	4°2/12.9	16		380922	2006 <i>GG</i> ₇		9 9.7 134°46	1°3/ 8.2	17	
8 9	23 34.58	+ 5 47.8	1.230	2.106	18.2	20.0	8 9	23 35.18	- 6 7.0	2.154	3.037	11.2	21.8
8 19	23 29.73	+ 5 52.8	1.188	2.124	13.9	19.8	8 19	23 29.46	- 7 4.0	2.099	3.050	7.8	21.6
8 29	23 22.60	+ 5 34.1	1.166	2.144	9.2	19.6	8 29	23 22.25	- 8 8.0	2.070	3.063	4.2	21.4
9 8	23 14.23	+ 4 55.3	1.166	2.164	5.0	19.4	9 8	23 14.22	- 9 13.5	2.070	3.075	1.3	21.2
9 18	23 5.86	+ 4 3.0	1.190	2.185	5.0	19.5	9 18	23 6.13	-10 14.8	2.098	3.087	4.0	21.4
9 28	22 58.79	+ 3 5.9	1.239	2.207	8.9	19.8	9 28	22 58.81	-11 6.5	2.155	3.098	7.5	21.7
10 8	22 53.98	+ 2 12.9	1.310	2.230	13.1	20.1	10 8	22 52.93	-11 45.0	2.237	3.109	10.6	21.9
10 18	22 51.92	+ 1 30.4	1.401	2.253	16.7	20.4	10 18	22 48.93	-12 8.6	2.342	3.119	13.3	22.1
388566	2007 <i>QQ</i> ₁₀		9 9.7 111°09	1°5/10.9	18		481685	2008 <i>AU</i> ₈		9 9.7 274°70	1°5/ 8.2	16	
8 9	23 39.22	- 0 52.2	1.806	2.676	13.6	20.4	8 9	23 33.76	- 6 34.6	2.063	2.951	11.3	22.4
8 19	23 32.64	- 0 40.1	1.739	2.679	10.0	20.2	8 19	23 28.78	- 7 24.7	1.975	2.929	8.1	22.2
8 29	23 24.13	- 0 38.9	1.696	2.682	5.9	20.0	8 29	23 22.06	- 8 23.6	1.913	2.906	4.4	21.9
9 8	23 14.47	- 0 45.9	1.680	2.684	2.0	19.7	9 8	23 14.22	- 9 26.0	1.878	2.884	1.5	21.7
9 18	23 4.64	- 0 57.9	1.691	2.687	3.5	19.8	9 18	23 6.03	-10 25.9	1.871	2.860	4.4	21.8
9 28	22 55.71	- 1 10.2	1.730	2.690	7.7	20.1	9 28	22 58.40	-11 17.1	1.892	2.837	8.2	22.0
10 8	22 48.56	- 1 18.8	1.794	2.692	11.4	20.3	10 8	22 52.17	-11 55.1	1.938	2.813	11.8	22.2
10 18	22 43.75	- 1 20.5	1.881	2.695	14.7	20.5	10 18	22 47.93	-12 17.3	2.005	2.789	14.9	22.4
38102	1999 <i>JM</i> ₁₈		9 9.7 90°87	0°9/ 9.0	17		374923	2006 <i>YP</i> ₄		9 9.7 245°79	1°0/ 8.8	16	
8 9	23 40.00	- 5 21.5	1.354	2.249	15.7	19.1	8 9	23 36.10	- 4 46.7	1.717	2.606	13.2	21.8
8 19	23 33.48	- 5 51.1	1.307	2.263	11.1	18.8	8 19	23 30.65	- 5 33.3	1.641	2.594	9.5	21.6
8 29	23 24.65	- 6 31.3	1.283	2.277	6.0	18.6	8 29	23 23.17	- 6 31.2	1.589	2.582	5.2	21.3
9 8	23 14.54	- 7 15.1	1.283	2.290	1.1	18.3	9 8	23 14.38	- 7 34.6	1.563	2.570	1.0	21.0
9 18	23 4.43	- 7 55.4	1.310	2.304	4.9	18.6	9 18	23 5.27	- 8 36.4	1.564	2.557	4.5	21.2
9 28	22 55.65	- 8 25.6	1.362	2.317	9.8	18.9	9 28	22 56.93	- 9 29.5	1.593	2.544	9.0	21.4
10 8	22 49.17	- 8 41.4	1.437	2.330	14.1	19.2	10 8	22 50.34	-10 8.4	1.645	2.530	13.1	21.7
10 18	22 45.53	- 8 41.3	1.532	2.342	17.6	19.5	10 18	22 46.14	-10 30.4	1.719	2.516	16.5	21.9
23482	1991 <i>LV</i>		9 9.7 305°75	18°8/27.1	18		378239	2007 <i>CJ</i> ₅		9 9.7 260°44	0°4/10.1	18	
8 9	23 33.16	+32 42.8	1.087	1.833	28.2	17.0	8 9	23 36.79	- 1 51.8	1.693	2.573	13.8	21.7
8 19	23 29.92	+34 14.8	1.019	1.823	26.1	16.8	8 19	23 31.22	- 2 17.1	1.611	2.558	10.1	21.4
8 29	23 23.38	+34 59.2	0.961	1.813	23.7	16.6	8 29	23 23.53	- 2 55.8	1.552	2.542	5.8	21.1
9 8	23 14.43	+34 45.4	0.915	1.804	21.3	16.4	9 8	23 14.45	- 3 43.5	1.519	2.525	1.1	20.8
9 18	23 4.62	+33 27.1	0.885	1.795	19.4	16.3	9 18	23 4.96	- 4 34.3	1.513	2.509	3.9	21.0
9 28	22 55.95	+31 7.6	0.871	1.786	18.8	16.2	9 28	22 56.22	- 5 21.3	1.534	2.492	8.6	21.2
10 8	22 50.22	+28 2.2	0.875	1.778	19.7	16.3	10 8	22 49.25	- 5 58.5	1.579	2.475	12.9	21.4
10 18	22 48.47	+24 32.7	0.897	1.771	21.9	16.4	10 18	22 44.73	- 6 22.2	1.646	2.457	16.5	21.6
138228	2000 <i>FG</i> ₁₇		9 9.7 282°14	4°0/ 6.4	18		264166	2010 <i>AA</i> ₁₂₃		9 9.7 302°46	1°1/11.8	18	
8 9	23 37.14	-11 58.5	1.546	2.450	13.5	19.4	8 9	23 26.73	+ 1 52.3	4.237	5.086	6.9	20.1
8 19	23 31.72	-12 58.0	1.466	2.427	9.7	19.1	8 19	23 23.00	+ 1 40.3	4.153	5.080	5.1	19.9
8 29	23 23.91	-14 3.6	1.410	2.402	5.8	18.8	8 29	23 18.55	+ 1 21.9	4.095	5.073	3.2	19.8
9 8	23 14.48	-15 7.0	1.379	2.378	4.1	18.6	9 8	23 13.68	+ 0 58.6	4.066	5.067	1.4	19.7
9 18	23 4.55	-15 59.7	1.374	2.353	7.1	18.8	9 18	23 8.72	+ 0 32.2	4.066	5.061	1.7	19.7
9 28	22 55.42	-16 34.2	1.394	2.328	11.5	19.0	9 28	23 4.04	+ 0 5.0	4.096	5.055	3.6	19.8
10 8	22 48.27	-16 46.6	1.437	2.303	15.7	19.2	10 8	22 59.98	- 0 20.8	4.155	5.049	5.6	20.0
10 18	22 43.86	-16 36.3	1.498	2.278	19.3	19.3	10 18	22 56.81	- 0 43.2	4.239	5.044	7.3	20.1
188760	2005 <i>UU</i> ₃₀₁		9 9.7 218°70	1°1/ 8.3	18		98239	2000 <i>SH</i> ₁₅₆		9 9.7 144°67	3°7/ 7.1	18	
8 9	23 32.09	- 6 7.1	2.398	3.283	10.1	20.6	8 9	23 41.57	-12 26.0	1.453	2.354	14.4	19.4
8 19	23 27.26	- 6 55.9	2.327	3.278	7.1	20.4	8 19	23 34.64	-13 2.2	1.400	2.358	10.3	19.2
8 29	23 21.05	- 7 51.7	2.281	3.274	3.9	20.2	8 29	23 25.35	-13 40.7	1.369	2.362	6.0	18.9
9 8	23 14.03	- 8 49.9	2.263	3.269	1.1	20.0	9 8	23 14.70	-14 13.9	1.365	2.365	3.7	18.8
9 18	23 6.85	- 9 45.4	2.274	3.264	3.6	20.2	9 18	23 3.96	-14 35.3	1.386	2.369	6.7	19.0
9 28	23 0.23	-10 33.6	2.313	3.258	7.0	20.4	9 28	22 54.48	-14 39.9	1.433	2.372	10.9	19.2
10 8	22 54.83	-11 10.6	2.379	3.253	10.0	20.6	10 8	22 47.28	-14 26.3	1.503	2.375	14.9	19.5
10 18	22 51.09	-11 34.4	2.467	3.247	12.6	20.8	10 18	22 42.94	-13 55.3	1.593	2.377	18.2	19.7
245274	2005 <i>BQ</i> ₅		9 9.7 299°91	9°4/30.2	18		92276	2000 <i>CC</i> ₁₀₀		9 9.7 60°51	2°9/ 7.5	17	
8 9	23 34.17	-25 45.0	1.595	2.503	13.0	20.0	8 9	23 36.76	- 6 47.4	1.059	1.974	17.4	19.8
8 19	23 29.58	-27 45.8	1.539	2.484	10.6	19.8	8 19	23 31.49	- 8 11.1	1.027	1.993	12.1	19.6
8 29	23 22.67	-29 39.1	1.507	2.466	9.5	19.7	8 29	23 23.64	- 9 45.8	1.016	2.013	6.5	19.3
9 8	23 14.29	-31 13.0	1.500	2.447	10.2	19.7	9 8	23 14.43	-11 19.3	1.028	2.033	2.9	19.2
9 18	23 5.54	-32 18.0	1.516	2.429	12.5	19.8	9 18	23 5.35	-12 39.5	1.064	2.053	6.9	19.5
9 28	22 57.73	-32 48.6	1.554	2.411	15.4	19.9	9 28	22 57.85	-13 37.5	1.123	2.074	12.0	19.9
10 8	22 51.93	-32 44.7	1.611	2.394	18.2	20.1	10 8	22 52.95	-14 9.1	1.203	2.094	16.4	20.2
10 18	22 48.85	-32 9.9	1.683	2.376	20.6	20.2	10 18	22 51.11	-14 14.8	1.301	2.115	20.0	20.5
145478	2005 <i>TC</i> ₈₆												

EPHEMERIDES

9 9.7

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
263156	2007 <i>VV</i> ₂₇₅		9 9.7 348°71	1°8/10.9	17		154414	2003 <i>BH</i> ₁₂		9 9.7 269°73	2°3/ 7.7	18	
8 9	23 32.23	+ 0 46.3	1.030	1.935	18.6	21.5	8 9	23 35.65	- 7 54.0	1.631	2.529	13.3	20.2
8 19	23 28.69	+ 0 28.8	0.971	1.928	13.8	21.2	8 19	23 30.46	- 8 49.1	1.556	2.514	9.4	20.0
8 29	23 22.38	- 0 11.6	0.931	1.922	8.2	20.8	8 29	23 23.13	- 9 53.6	1.505	2.499	5.2	19.7
9 8	23 14.30	- 1 9.3	0.911	1.917	2.6	20.5	9 8	23 14.43	-11 0.3	1.479	2.484	2.3	19.5
9 18	23 5.84	- 2 15.4	0.914	1.913	4.8	20.6	9 18	23 5.36	-12 1.5	1.481	2.468	5.5	19.7
9 28	22 58.61	- 3 18.9	0.940	1.910	10.7	20.9	9 28	22 57.10	-12 49.6	1.508	2.453	10.0	19.9
10 8	22 53.91	- 4 9.7	0.986	1.909	16.0	21.2	10 8	22 50.65	-13 19.9	1.559	2.437	14.1	20.1
10 18	22 52.45	- 4 41.6	1.049	1.908	20.5	21.5	10 18	22 46.70	-13 30.5	1.629	2.421	17.5	20.3
37865	1998 <i>FS</i> ₁₅		9 9.7 54°06	4°2/14.3	18		65149	2002 <i>CH</i> ₁₂₂		9 9.7 134°08	0°7/ 8.9	18	
8 9	23 31.71	+10 40.0	1.516	2.363	16.9	18.5	8 9	23 32.55	- 4 36.5	2.121	3.006	11.2	20.2
8 19	23 27.49	+ 9 49.5	1.461	2.378	13.2	18.3	8 19	23 27.72	- 5 20.2	2.056	3.007	8.0	20.0
8 29	23 21.34	+ 8 31.6	1.426	2.393	9.1	18.1	8 29	23 21.38	- 6 12.5	2.015	3.008	4.3	19.8
9 8	23 14.12	+ 6 51.1	1.416	2.409	5.3	17.9	9 8	23 14.16	- 7 8.6	2.001	3.008	0.8	19.5
9 18	23 6.81	+ 4 56.5	1.431	2.425	4.6	17.9	9 18	23 6.80	- 8 3.0	2.016	3.009	3.6	19.8
9 28	23 0.50	+ 2 58.6	1.473	2.441	7.9	18.1	9 28	23 0.11	- 8 50.6	2.058	3.009	7.3	20.0
10 8	22 56.02	+ 1 8.1	1.540	2.457	11.7	18.4	10 8	22 54.79	- 9 27.0	2.127	3.010	10.6	20.2
10 18	22 53.88	- 0 26.8	1.630	2.473	15.2	18.7	10 18	22 51.31	- 9 50.0	2.217	3.011	13.4	20.4
234144	2000 <i>ET</i> ₅₀		9 9.7 81°86	6°5/ 2.8	18		38867	2000 <i>SF</i> ₁₁₂		9 9.7 247°40	0°3/10.1	18	R
8 9	23 34.83	-20 44.2	1.849	2.753	11.6	20.2	8 9	23 33.17	- 1 59.6	2.232	3.106	11.2	19.8
8 19	23 29.47	-22 12.9	1.812	2.765	8.8	20.1	8 19	23 28.16	- 2 28.9	2.155	3.099	8.1	19.6
8 29	23 22.34	-23 36.2	1.801	2.776	6.8	20.0	8 29	23 21.64	- 3 8.2	2.102	3.091	4.6	19.4
9 8	23 14.26	-24 45.6	1.816	2.787	6.8	20.0	9 8	23 14.21	- 3 53.8	2.077	3.084	0.9	19.1
9 18	23 6.15	-25 34.6	1.856	2.798	8.8	20.2	9 18	23 6.57	- 4 41.2	2.080	3.076	3.1	19.2
9 28	22 59.01	-25 59.6	1.922	2.809	11.5	20.4	9 28	22 59.53	- 5 25.2	2.112	3.068	6.7	19.5
10 8	22 53.60	-26 0.5	2.009	2.820	14.1	20.6	10 8	22 53.79	- 6 1.7	2.169	3.060	10.1	19.7
10 18	22 50.39	-25 39.3	2.115	2.831	16.3	20.8	10 18	22 49.85	- 6 27.4	2.250	3.052	13.0	19.8
401777	2014 <i>DH</i> ₁₂₃		9 9.7 138°55	0°5/10.3	17		511121	2013 <i>WZ</i> ₅₇		9 9.7 321°11	0°2/ 9.9	18	
8 9	23 32.71	+ 0 42.6	2.081	2.950	12.1	21.4	8 9	23 33.01	- 2 14.5	1.226	2.129	16.4	21.0
8 19	23 27.81	- 0 21.2	2.017	2.958	8.8	21.2	8 19	23 29.10	- 2 43.6	1.152	2.110	12.0	20.7
8 29	23 21.41	- 1 38.7	1.977	2.965	5.0	21.0	8 29	23 22.62	- 3 30.3	1.098	2.092	6.8	20.3
9 8	23 14.13	- 3 4.6	1.966	2.972	1.1	20.7	9 8	23 14.39	- 4 29.0	1.068	2.075	1.1	19.9
9 18	23 6.74	- 4 32.4	1.983	2.979	3.1	20.9	9 18	23 5.65	- 5 31.2	1.061	2.058	4.8	20.1
9 28	23 0.06	- 5 55.0	2.029	2.985	7.0	21.1	9 28	22 57.86	- 6 27.3	1.078	2.042	10.5	20.4
10 8	22 54.76	- 7 6.7	2.101	2.991	10.4	21.4	10 8	22 52.29	- 7 9.0	1.116	2.027	15.7	20.6
10 18	22 51.34	- 8 3.4	2.196	2.997	13.3	21.6	10 18	22 49.74	- 7 31.4	1.173	2.013	20.1	20.9
404001	2012 <i>BC</i> ₁₃₈		9 9.7 69°24	3°5/13.5	18		311896	2006 <i>YC</i> ₉		9 9.7 294°28	3°5/13.0	18	
8 9	23 33.86	+ 7 17.3	2.173	3.011	12.8	20.6	8 9	23 34.91	+ 5 58.0	2.078	2.923	13.1	21.0
8 19	23 28.53	+ 7 17.1	2.114	3.028	9.9	20.5	8 19	23 29.53	+ 6 10.3	1.999	2.917	10.1	20.8
8 29	23 21.76	+ 7 1.2	2.079	3.044	6.8	20.3	8 29	23 22.46	+ 6 7.7	1.942	2.911	6.9	20.6
9 8	23 14.18	+ 6 31.6	2.069	3.060	4.0	20.2	9 8	23 14.34	+ 5 51.5	1.912	2.905	4.0	20.4
9 18	23 6.54	+ 5 51.9	2.087	3.077	3.9	20.2	9 18	23 5.97	+ 5 24.4	1.908	2.900	4.0	20.4
9 28	22 59.62	+ 5 7.0	2.133	3.093	6.3	20.4	9 28	22 58.24	+ 4 51.0	1.933	2.894	6.9	20.6
10 8	22 54.10	+ 4 22.2	2.205	3.110	9.3	20.6	10 8	22 51.95	+ 4 16.4	1.984	2.888	10.2	20.7
10 18	22 50.40	+ 3 42.0	2.301	3.126	11.9	20.8	10 18	22 47.63	+ 3 45.5	2.057	2.883	13.1	20.9
299113	2005 <i>EV</i> ₁₄₉		9 9.7 15°23	3°7/ 6.6	18		235160	2003 <i>SQ</i> ₄		9 9.7 5°24	2°6/ 7.0	18	
8 9	23 36.11	-13 7.7	1.675	2.579	12.7	20.4	8 9	23 27.69	- 4 39.7	1.247	2.162	15.3	19.4
8 19	23 30.54	-13 50.2	1.621	2.580	9.0	20.2	8 19	23 25.00	- 6 38.2	1.195	2.162	10.7	19.1
8 29	23 23.02	-14 34.6	1.590	2.582	5.4	20.0	8 29	23 20.15	- 8 53.8	1.165	2.163	5.7	18.9
9 8	23 14.38	-15 13.8	1.585	2.584	3.8	19.9	9 8	23 14.00	-11 14.0	1.160	2.165	2.7	18.7
9 18	23 5.63	-15 41.7	1.606	2.585	6.4	20.1	9 18	23 7.65	-13 24.7	1.180	2.168	6.6	18.9
9 28	22 57.86	-15 53.9	1.654	2.588	10.1	20.3	9 28	23 2.32	-15 13.4	1.225	2.172	11.5	19.2
10 8	22 51.94	-15 48.4	1.724	2.590	13.5	20.5	10 8	22 58.98	-16 32.6	1.291	2.177	15.8	19.5
10 18	22 48.41	-15 25.5	1.814	2.593	16.5	20.7	10 18	22 58.21	-17 20.0	1.375	2.184	19.3	19.8
440361	2004 <i>XA</i> ₃₆		9 9.7 153°91	10°9/24.5	18		470552	2008 <i>EA</i> ₁₆₅		9 9.7 55°00	1°0/ 9.1	16	
8 9	23 38.16	-38 33.6	2.180	3.040	12.0	21.0	8 9	23 39.80	- 5 51.8	1.247	2.148	16.3	21.1
8 19	23 32.04	-40 47.4	2.164	3.046	11.1	21.0	8 19	23 33.38	- 6 11.3	1.211	2.169	11.6	20.9
8 29	23 23.87	-42 41.8	2.172	3.052	11.0	21.0	8 29	23 24.62	- 6 40.5	1.196	2.190	6.3	20.7
9 8	23 14.50	-44 8.4	2.204	3.058	11.8	21.1	9 8	23 14.65	- 7 12.8	1.204	2.211	1.1	20.4
9 18	23 4.99	-45 2.4	2.259	3.063	13.2	21.2	9 18	23 4.82	- 7 41.4	1.239	2.233	4.9	20.7
9 28	22 56.46	-45 22.7	2.334	3.068	14.7	21.3	9 28	22 56.46	- 8 0.3	1.298	2.255	9.9	21.1
10 8	22 49.84	-45 12.0	2.426	3.072	16.0	21.4	10 8	22 50.53	- 8 5.7	1.379	2.277	14.2	21.4
10 18	22 45.68	-44 35.1	2.531	3.076	17.2	21.6	10 18	22 47.50	- 7 56.4	1.480	2.299	17.7	21.7
333145	2012 <i>AR</i> ₁₅		9 9.7 53°03	1°6/ 8.8	18		23735	<i>Cohen</i>		9 9.7 309°97	4°4/ 6.1	18	
8 9	23 40.68	- 7 12.9	1.114	2.022	17.3	20.1	8 9	23 33.75	-10 40.6	1.229	2.147	15.2	18.2
8 19	23 34.27	- 7 30.8	1.075	2.036	12.3	19.8	8 19	23 29.63	-12 0.6	1.163	2.130	10.9	18.0
8 29	23 25.20	- 7 57.7	1.056	2.051	6.6	19.6	8 29	23 22.90	-13 30.6	1.119	2.114	6.4	17.7
9 8	23 14.70	- 8 26.4	1.060	2.067	1.6	19.3	9 8	23 14.44	-14 59.6	1.097	2.098	4.5	17.5
9 18	23 4.28	- 8 49.4	1.089	2.082	5.7	19.6	9 18	23 5.54	-16 16.0	1.100	2.082	8.1	17.7
9 28	22 55.48	- 9 0.5	1.141	2.098	10.9	20.0	9 28	22 57.66	-17 9.6	1.127	2.067	13.0	17.9
10 8	22 49.36	- 8 56.5	1.215	2.115	15.6	20.3	10 8	22 52.08	-17 35.5	1.173	2.053	17.6	18.1
10 18	22 46.45	- 8 36.7	1.307	2.131	19.3	20.6	10 18	22 49.54	-17 32.9	1.236	2.039	21.4	18.4
360441	2002 <i>JU</i> ₁₄₅		9 9.7 149°62	1°1/ 8.2	18		145992	2000 <i>CY</i> ₉					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
446813	1999 <i>XB</i> ₂₃₉	9 9.7 280°14	8°5/29.9	18			515330	2013 <i>AL</i> ₂₇	9 9.7 241°32	13°1/17.9	18		
8 9	23 36.99	-31 30.5	2.296	3.175	10.7	21.1	8 9	23 43.93	-49 43.1	2.319	3.118	13.3	21.7
8 19	23 31.07	-32 44.7	2.237	3.155	9.2	21.0	8 19	23 36.60	-51 38.7	2.295	3.103	13.1	21.6
8 29	23 23.33	-33 47.8	2.202	3.134	8.5	20.9	8 29	23 26.64	-53 10.2	2.292	3.087	13.4	21.6
9 8	23 14.49	-34 32.4	2.193	3.114	9.0	20.9	9 8	23 15.02	-54 9.6	2.309	3.071	14.2	21.7
9 18	23 5.42	-34 53.5	2.209	3.093	10.5	20.9	9 18	23 3.10	-54 32.7	2.345	3.054	15.3	21.7
9 28	22 57.12	-34 48.5	2.248	3.072	12.5	21.0	9 28	22 52.38	-54 19.3	2.398	3.037	16.4	21.8
10 8	22 50.42	-34 18.3	2.308	3.050	14.5	21.2	10 8	22 44.06	-53 33.1	2.464	3.019	17.5	21.9
10 18	22 45.89	-33 25.6	2.385	3.029	16.3	21.3	10 18	22 38.80	-52 19.8	2.541	3.000	18.4	22.0
259705	2003 <i>YO</i> ₄₀	9 9.7 164°37	3°3/5.8	18			70473	1999 <i>TQ</i> ₃₃	9 9.7 244°36	1°3/11.0	18		
8 9	23 34.40	-13 8.4	2.319	3.213	10.0	21.5	8 9	23 34.29	+ 1 10.4	1.951	2.819	12.8	19.1
8 19	23 28.94	-14 13.6	2.263	3.218	7.1	21.3	8 19	23 29.19	+ 0 39.9	1.872	2.810	9.5	18.8
8 29	23 22.02	-15 20.5	2.232	3.222	4.3	21.2	8 29	23 22.33	- 0 5.0	1.815	2.800	5.7	18.6
9 8	23 14.29	-16 23.2	2.230	3.225	3.4	21.1	9 8	23 14.38	- 1 0.6	1.785	2.790	1.8	18.3
9 18	23 6.45	-17 16.3	2.257	3.229	5.4	21.3	9 18	23 6.14	- 2 1.6	1.783	2.780	3.3	18.4
9 28	22 59.30	-17 55.3	2.311	3.231	8.3	21.4	9 28	22 58.57	- 3 1.4	1.809	2.770	7.3	18.6
10 8	22 53.49	-18 18.2	2.391	3.233	11.1	21.6	10 8	22 52.49	- 3 54.2	1.861	2.759	11.1	18.8
10 18	22 49.47	-18 24.5	2.492	3.235	13.4	21.8	10 18	22 48.48	- 4 35.5	1.935	2.748	14.3	19.0
476666	2008 <i>TC</i> ₁₈	9 9.7 330°91	0°2/9.6	18			111716	2002 <i>CG</i> ₃₅	9 9.7 48°69	6°4/4.1	18		
8 9	23 32.86	- 3 33.7	1.287	2.191	15.7	20.8	8 9	23 38.36	-22 37.7	1.858	2.757	11.9	18.8
8 19	23 28.88	- 3 55.1	1.215	2.174	11.4	20.5	8 19	23 31.91	-23 20.9	1.823	2.771	9.1	18.6
8 29	23 22.44	- 4 31.0	1.163	2.157	6.4	20.2	8 29	23 23.68	-23 56.1	1.812	2.785	6.9	18.5
9 8	23 14.39	- 5 15.8	1.135	2.142	0.9	19.8	9 8	23 14.55	-24 16.9	1.826	2.799	6.6	18.5
9 18	23 5.89	- 6 2.1	1.130	2.127	4.7	20.0	9 18	23 5.53	-24 18.9	1.867	2.814	8.4	18.7
9 28	22 58.33	- 6 41.9	1.150	2.113	10.2	20.3	9 28	22 57.62	-24 0.3	1.933	2.829	11.0	18.9
10 8	22 52.89	- 7 8.2	1.192	2.101	15.0	20.5	10 8	22 51.57	-23 22.3	2.021	2.844	13.6	19.1
10 18	22 50.33	- 7 17.4	1.252	2.089	19.2	20.8	10 18	22 47.81	-22 27.5	2.130	2.859	15.8	19.3
38754	2000 <i>QG</i> ₂₁₇	9 9.7 40°55	2°0/8.5	18			423472	2005 <i>SN</i> ₂₂₄	9 9.7 90°62	2°2/8.0	17		
8 9	23 39.96	- 8 23.9	1.178	2.086	16.5	18.1	8 9	23 39.75	- 9 6.0	1.544	2.441	14.0	21.1
8 19	23 33.01	- 8 41.5	1.132	2.094	11.7	17.9	8 19	23 33.16	- 9 37.4	1.497	2.454	9.9	20.9
8 29	23 25.01	- 9 6.5	1.107	2.102	6.4	17.6	8 29	23 24.49	-10 14.2	1.474	2.467	5.4	20.6
9 8	23 14.74	- 9 31.7	1.105	2.111	2.1	17.4	9 8	23 14.69	-10 49.8	1.476	2.481	2.2	20.5
9 18	23 4.44	- 9 50.2	1.127	2.120	5.8	17.7	9 18	23 4.90	-11 18.0	1.505	2.494	5.3	20.7
9 28	22 55.60	- 9 56.2	1.174	2.129	11.0	18.0	9 28	22 56.29	-11 33.9	1.560	2.506	9.6	21.0
10 8	22 49.33	- 9 46.7	1.243	2.139	15.5	18.3	10 8	22 49.77	-11 35.0	1.639	2.519	13.4	21.3
10 18	22 46.20	- 9 21.4	1.330	2.150	19.3	18.6	10 18	22 45.83	-11 20.9	1.738	2.531	16.5	21.5
439882	1999 <i>YZ</i> ₁₂	9 9.7 264°14	5°5/14.7	16			32863	1993 <i>FP</i> ₁₁	9 9.7 256°26	1°7/7.9	18		
8 9	23 36.07	+11 2.2	1.974	2.794	14.6	21.6	8 9	23 33.60	- 7 49.7	2.067	2.959	11.2	19.1
8 19	23 30.55	+11 25.2	1.886	2.782	11.8	21.4	8 19	23 28.54	- 8 33.0	2.002	2.957	7.9	18.9
8 29	23 23.15	+11 29.1	1.819	2.769	8.7	21.2	8 29	23 21.89	- 9 22.4	1.961	2.955	4.3	18.7
9 8	23 14.49	+11 13.8	1.778	2.757	6.2	21.0	9 8	23 14.31	-10 12.8	1.947	2.952	1.7	18.5
9 18	23 5.44	+10 41.4	1.763	2.744	5.7	21.0	9 18	23 6.57	-10 58.8	1.962	2.950	4.3	18.7
9 28	22 57.02	+ 9 56.3	1.775	2.731	7.8	21.1	9 28	22 59.54	-11 35.3	2.004	2.948	7.9	18.9
10 8	22 50.11	+ 9 5.1	1.812	2.717	10.9	21.2	10 8	22 53.93	-11 58.8	2.071	2.946	11.2	19.1
10 18	22 45.37	+ 8 14.5	1.873	2.704	14.0	21.4	10 18	22 50.25	-12 7.8	2.160	2.944	14.0	19.3
73424	2002 <i>LV</i> ₃₉	9 9.7 234°30	0°7/8.9	18			292925	2006 <i>VP</i> ₆₆	9 9.7 279°92	0°5/10.1	18		
8 9	23 30.89	- 3 51.8	2.333	3.215	10.5	19.8	8 9	23 35.12	- 0 57.3	1.464	2.352	15.2	20.7
8 19	23 26.48	- 4 50.1	2.262	3.212	7.4	19.6	8 19	23 30.22	- 1 35.7	1.394	2.344	11.1	20.5
8 29	23 20.70	- 5 57.6	2.217	3.209	4.0	19.4	8 29	23 23.07	- 2 30.7	1.346	2.337	6.3	20.2
9 8	23 14.11	- 7 9.4	2.199	3.206	0.7	19.2	9 8	23 14.51	- 3 36.7	1.322	2.329	1.2	19.8
9 18	23 7.36	- 8 20.0	2.210	3.203	3.4	19.4	9 18	23 5.61	- 4 46.2	1.325	2.321	4.2	20.0
9 28	23 1.18	- 9 23.8	2.250	3.199	6.8	19.6	9 28	22 57.63	- 5 50.2	1.353	2.314	9.2	20.3
10 8	22 56.20	-10 16.4	2.316	3.196	10.0	19.8	10 8	22 51.62	- 6 41.7	1.405	2.306	13.7	20.5
10 18	22 52.88	-10 55.0	2.405	3.193	12.6	20.0	10 18	22 48.25	- 7 16.0	1.476	2.299	17.6	20.8
404548	2013 <i>JJ</i> ₃₁	9 9.7 97°93	1°0/8.6	18			39745	1997 <i>AK</i> ₁₇	9 9.7 340°35	8°8/2.0	18 R		
8 9	23 31.50	- 4 51.1	2.267	3.152	10.6	21.2	8 9	23 31.08	-20 27.7	1.186	2.113	14.9	17.1
8 19	23 26.87	- 5 50.9	2.209	3.161	7.5	21.1	8 19	23 27.78	-22 9.2	1.133	2.098	11.4	16.9
8 29	23 20.88	- 6 58.8	2.177	3.170	4.0	20.9	8 29	23 21.88	-23 47.3	1.102	2.083	9.0	16.7
9 8	23 14.13	- 8 9.4	2.172	3.179	1.0	20.6	9 8	23 14.33	-25 8.5	1.093	2.070	9.4	16.7
9 18	23 7.30	- 9 17.2	2.196	3.187	3.6	20.9	9 18	23 6.46	-26 1.4	1.106	2.059	12.2	16.8
9 28	23 1.11	-10 16.7	2.249	3.196	7.0	21.1	9 28	22 59.76	-26 19.3	1.140	2.048	15.9	17.0
10 8	22 56.19	-11 3.9	2.327	3.205	10.0	21.3	10 8	22 55.41	-26 1.5	1.192	2.039	19.6	17.2
10 18	22 52.97	-11 36.7	2.429	3.213	12.6	21.5	10 18	22 54.10	-25 11.8	1.259	2.032	22.7	17.4
395240	2010 <i>ND</i> ₅₉	9 9.7 43°22	1°0/10.8	18			267169	2000 <i>HW</i> ₉₇	9 9.7 95°43	0°2/9.5	17		
8 9	23 30.57	+ 2 9.7	1.746	2.622	13.7	20.6	8 9	23 36.84	- 2 45.0	1.605	2.491	14.2	20.8
8 19	23 26.50	+ 1 4.4	1.692	2.635	10.0	20.4	8 19	23 31.04	- 3 30.2	1.556	2.507	10.1	20.6
8 29	23 20.77	- 0 17.7	1.662	2.649	5.8	20.2	8 29	23 23.31	- 4 27.5	1.531	2.522	5.6	20.4
9 8	23 14.12	- 1 50.4	1.657	2.663	1.6	19.9	9 8	23 14.54	- 5 30.7	1.531	2.538	0.8	20.1
9 18	23 7.40	- 3 25.8	1.680	2.677	3.3	20.1	9 18	23 5.73	- 6 32.6	1.558	2.553	4.0	20.4
9 28	23 1.51	- 4 55.6	1.730	2.692	7.5	20.4	9 28	22 57.98	- 7 26.2	1.612	2.568	8.5	20.7
10 8	22 57.19	- 6 12.8	1.806	2.707	11.2	20.6	10 8	22 52.12	- 8 6.3	1.691	2.583	12.4	20.9
10 18	22 54.90	- 7 13.0	1.904	2.723	14.3	20.9	10 18	22 48.65	- 8 30.5	1.791	2.597	15.6	21.2
392864	2012 <i>UX</i> ₈₆	9 9.7 300°87	7°2/16.7	18			313599	2003 <i>OF</i> ₂₀	9 9.				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
492348	2014 <i>HS</i> ₁₂		9 9.7 275°63	3°9/13.8	18		192496	1998 <i>HS</i> ₆₆		9 9.8 212°67	2°0/ 7.8	18	
8 9	23 32.54	+ 8 55.2	1.894	2.734	14.3	21.2	8 9	23 35.39	- 7 58.8	1.867	2.760	12.1	20.5
8 19	23 28.08	+ 8 30.1	1.804	2.718	11.3	21.0	8 19	23 29.99	- 8 52.2	1.801	2.757	8.6	20.3
8 29	23 21.80	+ 7 43.4	1.737	2.702	7.8	20.7	8 29	23 22.80	- 9 52.8	1.760	2.753	4.7	20.0
9 8	23 14.34	+ 6 37.2	1.694	2.686	4.6	20.5	9 8	23 14.51	-10 54.3	1.745	2.749	2.0	19.8
9 18	23 6.52	+ 5 16.1	1.678	2.670	4.3	20.4	9 18	23 6.03	-11 50.2	1.758	2.745	4.9	20.0
9 28	22 59.31	+ 3 47.5	1.689	2.654	7.4	20.6	9 28	22 58.33	-12 34.5	1.798	2.741	8.8	20.3
10 8	22 53.59	+ 2 19.8	1.727	2.637	11.1	20.8	10 8	22 52.25	-13 3.4	1.863	2.736	12.3	20.5
10 18	22 49.97	+ 1 0.3	1.787	2.621	14.5	21.0	10 18	22 48.33	-13 15.2	1.949	2.731	15.4	20.7
516066	2015 <i>TK</i> ₂₀₈		9 9.7 20°61	5°7/15.2	18		433414	2013 <i>TW</i> ₄₈		9 9.8 268°11	2°7/ 7.8	16	
8 9	23 33.06	+11 24.2	1.787	2.617	15.5	20.4	8 9	23 39.14	- 9 57.1	1.490	2.390	14.2	21.4
8 19	23 28.38	+11 43.4	1.722	2.623	12.4	20.2	8 19	23 33.05	-10 29.0	1.426	2.385	10.1	21.1
8 29	23 21.90	+11 41.2	1.677	2.629	9.2	20.0	8 29	23 24.64	-11 6.4	1.385	2.379	5.7	20.8
9 8	23 14.35	+11 18.2	1.656	2.636	6.5	19.9	9 8	23 14.80	-11 42.5	1.370	2.374	2.7	20.6
9 18	23 6.61	+10 37.6	1.661	2.643	5.8	19.9	9 18	23 4.72	-12 10.5	1.381	2.368	5.9	20.8
9 28	22 59.66	+ 9 45.2	1.692	2.651	7.8	20.0	9 28	22 55.69	-12 24.9	1.417	2.363	10.4	21.1
10 8	22 54.35	+ 8 48.2	1.747	2.660	10.8	20.2	10 8	22 48.78	-12 22.5	1.477	2.358	14.5	21.3
10 18	22 51.21	+ 7 53.5	1.825	2.669	13.8	20.4	10 18	22 44.61	-12 3.1	1.556	2.352	18.0	21.6
33922	2000 <i>LB</i> ₂₃		9 9.8 143°20	3°5/13.7	18		452523	2004 <i>TT</i> ₅₃		9 9.8 328°84	6°8/ 3.5	18	
8 9	23 33.10	+ 8 17.6	2.190	3.024	12.9	19.1	8 9	23 37.03	-23 17.0	1.879	2.779	11.7	20.4
8 19	23 28.13	+ 8 0.0	2.118	3.028	10.0	18.9	8 19	23 31.23	-24 2.4	1.821	2.768	9.1	20.2
8 29	23 21.66	+ 7 25.2	2.068	3.033	6.9	18.7	8 29	23 23.49	-24 40.5	1.786	2.757	7.1	20.1
9 8	23 14.31	+ 6 35.5	2.045	3.037	4.1	18.5	9 8	23 14.62	-25 4.3	1.777	2.747	7.0	20.1
9 18	23 6.81	+ 5 34.8	2.050	3.041	3.8	18.5	9 18	23 5.61	-25 8.6	1.794	2.738	8.9	20.2
9 28	22 59.95	+ 4 28.9	2.082	3.044	6.4	18.7	9 28	22 57.52	-24 50.5	1.835	2.729	11.6	20.3
10 8	22 54.44	+ 3 23.9	2.142	3.048	9.5	18.9	10 8	22 51.22	-24 10.7	1.899	2.720	14.4	20.5
10 18	22 50.75	+ 2 25.2	2.225	3.051	12.3	19.1	10 18	22 47.26	-23 11.6	1.981	2.712	16.8	20.6
103249	2000 <i>AA</i> ₅		9 9.8 293°28	1°7/11.2	18		163282	2002 <i>GR</i> ₁₁₉		9 9.8 38°55	0°5/ 9.3	17	
8 9	23 35.62	+ 0 41.9	1.744	2.617	13.9	19.4	8 9	23 30.85	- 0 33.7	1.300	2.199	15.9	19.3
8 19	23 30.43	+ 0 37.3	1.658	2.598	10.4	19.1	8 19	23 27.07	- 2 7.2	1.260	2.217	11.3	19.1
8 29	23 23.18	+ 0 18.6	1.594	2.579	6.3	18.9	8 29	23 21.23	- 3 58.7	1.241	2.235	6.1	18.9
9 8	23 14.58	- 0 11.3	1.555	2.560	2.3	18.6	9 8	23 14.27	- 5 57.9	1.248	2.255	0.9	18.6
9 18	23 5.54	- 0 48.1	1.544	2.541	3.7	18.6	9 18	23 7.30	- 7 53.0	1.280	2.275	4.7	18.9
9 28	22 57.17	- 1 25.8	1.559	2.522	8.0	18.8	9 28	23 1.46	- 9 32.9	1.337	2.296	9.6	19.3
10 8	22 50.47	- 1 58.7	1.599	2.503	12.2	19.0	10 8	22 57.62	-10 50.3	1.418	2.317	13.8	19.6
10 18	22 46.13	- 2 22.0	1.661	2.485	15.9	19.2	10 18	22 56.24	-11 42.2	1.518	2.339	17.3	19.9
231493	2008 <i>QT</i> ₁₉		9 9.8 320°55	2°0/13.7	17		403698	2010 <i>VS</i> ₁₁₆		9 9.8 268°43	1°8/11.7	18	
8 9	23 25.78	+ 7 28.1	4.067	4.890	7.6	20.2	8 9	23 33.27	+ 2 22.5	2.298	3.156	11.5	21.5
8 19	23 22.42	+ 7 0.2	3.981	4.886	5.9	20.1	8 19	23 28.29	+ 2 9.8	2.212	3.143	8.6	21.3
8 29	23 18.33	+ 6 22.9	3.920	4.883	4.0	20.0	8 29	23 21.81	+ 1 44.7	2.151	3.131	5.4	21.1
9 8	23 13.81	+ 5 37.8	3.888	4.879	2.4	19.9	9 8	23 14.37	+ 1 9.6	2.116	3.118	2.3	20.9
9 18	23 9.21	+ 4 47.1	3.884	4.875	2.2	19.8	9 18	23 6.69	+ 0 28.4	2.109	3.105	3.0	20.9
9 28	23 4.89	+ 3 53.7	3.911	4.872	3.7	20.0	9 28	22 59.54	- 0 14.5	2.131	3.093	6.3	21.1
10 8	23 1.20	+ 3 0.6	3.967	4.868	5.6	20.1	10 8	22 53.63	- 0 54.2	2.180	3.080	9.6	21.3
10 18	22 58.43	+ 2 10.6	4.048	4.865	7.4	20.2	10 18	22 49.49	- 1 26.8	2.252	3.067	12.5	21.4
159815	2003 <i>SF</i> ₂₂₀		9 9.8 288°25	1°7/11.8	18		41919	2000 <i>WW</i> ₁₅₆		9 9.8 189°06	4°2/14.6	18	
8 9	23 30.86	+ 3 13.7	2.285	3.143	11.6	20.0	8 9	23 33.99	+10 14.7	2.397	3.214	12.4	19.3
8 19	23 26.58	+ 2 41.0	2.197	3.129	8.7	19.8	8 19	23 28.72	+10 21.4	2.318	3.214	9.9	19.1
8 29	23 20.85	+ 1 54.1	2.134	3.114	5.4	19.6	8 29	23 22.01	+10 11.9	2.261	3.213	7.2	18.9
9 8	23 14.21	+ 0 56.0	2.097	3.100	2.2	19.3	9 8	23 14.41	+ 9 47.3	2.231	3.213	4.8	18.8
9 18	23 7.32	- 0 8.7	2.089	3.085	2.9	19.3	9 18	23 6.61	+ 9 10.0	2.228	3.212	4.4	18.8
9 28	23 0.93	- 1 14.6	2.109	3.071	6.3	19.5	9 28	22 59.39	+ 8 24.2	2.253	3.210	6.3	18.9
10 8	22 55.75	- 2 15.7	2.155	3.056	9.6	19.7	10 8	22 53.41	+ 7 35.3	2.306	3.209	9.0	19.1
10 18	22 52.28	- 3 7.7	2.225	3.042	12.6	19.9	10 18	22 49.16	+ 6 48.3	2.382	3.207	11.6	19.2
294413	2007 <i>VC</i> ₂₀₉		9 9.8 49°66	3°3/ 6.9	18		241024	2006 <i>QW</i> ₄₆		9 9.8 58°25	4°2/ 5.5	18	
8 9	23 36.09	-11 20.3	1.582	2.486	13.3	20.9	8 9	23 33.37	-12 31.5	1.674	2.582	12.5	19.5
8 19	23 30.57	-12 7.3	1.536	2.497	9.4	20.7	8 19	23 28.58	-13 57.9	1.633	2.594	8.8	19.3
8 29	23 23.09	-12 57.6	1.514	2.507	5.3	20.5	8 29	23 21.99	-15 26.8	1.616	2.607	5.4	19.2
9 8	23 14.54	-13 44.1	1.517	2.518	3.3	20.4	9 8	23 14.40	-16 49.6	1.625	2.620	4.3	19.1
9 18	23 5.97	-14 20.1	1.547	2.530	6.1	20.6	9 18	23 6.77	-17 58.2	1.660	2.633	6.9	19.3
9 28	22 58.46	-14 40.7	1.602	2.541	9.9	20.9	9 28	23 0.10	-18 46.9	1.722	2.647	10.4	19.6
10 8	22 52.88	-14 43.7	1.680	2.553	13.5	21.1	10 8	22 55.18	-19 13.3	1.806	2.660	13.6	19.8
10 18	22 49.71	-14 29.1	1.778	2.565	16.5	21.4	10 18	22 52.49	-19 17.6	1.909	2.674	16.3	20.0
437288	2013 <i>AN</i> ₁₃₃		9 9.8 249°73	0°2/ 9.4	16		367297	2007 <i>VB</i> ₁₇₅		9 9.8 87°58	4°0/ 6.8	17	
8 9	23 25.60	- 4 13.5	4.901	5.771	5.6	22.1	8 9	23 40.17	-11 41.9	1.327	2.233	15.2	20.8
8 19	23 22.20	- 4 45.2	4.815	5.759	4.0	22.0	8 19	23 33.69	-12 42.5	1.289	2.250	10.7	20.6
8 29	23 18.18	- 5 20.8	4.757	5.747	2.2	21.8	8 29	23 24.88	-13 46.4	1.274	2.267	6.2	20.4
9 8	23 13.80	- 5 58.4	4.728	5.735	0.3	21.6	9 8	23 14.83	-14 44.1	1.283	2.283	4.1	20.3
9 18	23 9.33	- 6 36.0	4.729	5.723	1.7	21.8	9 18	23 4.87	-15 27.5	1.318	2.299	7.1	20.5
9 28	23 5.10	- 7 11.6	4.761	5.711	3.5	21.9	9 28	22 56.30	-15 51.1	1.378	2.315	11.3	20.8
10 8	23 1.37	- 7 43.1	4.821	5.698	5.2	22.0	10 8	22 50.10	-15 53.0	1.459	2.331	15.2	21.1
10 18	22 58.40	- 8 9.1	4.907	5.686	6.8	22.1	10 18	22 46.77	-15 34.5	1.560	2.346	18.4	21.4
394515	2007 <i>TZ</i> ₂₉₃		9 9.8 314°39	6°6/16.8	18		223229	2003 <i>DE</i> ₁₈					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
353859	2012 <i>VN</i> ₉₃		9 9.8 269°02	8°0/31.9	18		424488	2008 <i>DP</i> ₂₄		9 9.8 199°09	1°1/ 8.8	17	
8 9	23 37.83	-25 59.4	1.948	2.843	11.6	21.0	8 9	23 39.07	- 5 58.8	1.839	2.722	12.8	22.5
8 19	23 31.95	-27 23.9	1.884	2.822	9.4	20.9	8 19	23 32.67	- 6 35.1	1.769	2.719	9.1	22.2
8 29	23 24.00	-28 40.9	1.844	2.802	8.1	20.7	8 29	23 24.33	- 7 20.0	1.723	2.716	5.0	22.0
9 8	23 14.74	-29 41.6	1.830	2.781	8.5	20.7	9 8	23 14.80	- 8 7.9	1.705	2.711	1.2	21.7
9 18	23 5.16	-30 18.9	1.841	2.759	10.4	20.8	9 18	23 5.04	- 8 52.9	1.714	2.706	4.3	21.9
9 28	22 56.39	-30 29.0	1.877	2.737	13.0	20.9	9 28	22 56.12	- 9 29.4	1.752	2.700	8.5	22.2
10 8	22 49.40	-30 11.7	1.933	2.715	15.6	21.1	10 8	22 48.92	- 9 53.1	1.814	2.694	12.3	22.4
10 18	22 44.82	-29 29.8	2.007	2.693	17.9	21.2	10 18	22 44.05	-10 2.2	1.898	2.687	15.5	22.6
108214	2001 <i>HW</i> ₃₀		9 9.8 352°59	3°7/ 6.2	18		180314	2003 <i>XR</i> ₄		9 9.8 271°09	0°7/10.4	18	
8 9	23 32.87	-11 19.8	1.601	2.509	12.9	19.2	8 9	23 35.98	- 0 16.3	1.560	2.441	14.8	20.4
8 19	23 28.42	-12 32.7	1.544	2.507	9.1	18.9	8 19	23 30.93	- 0 53.4	1.475	2.421	10.9	20.1
8 29	23 22.00	-13 50.9	1.512	2.505	5.4	18.7	8 29	23 23.60	- 1 47.8	1.412	2.401	6.3	19.8
9 8	23 14.42	-15 5.8	1.505	2.504	3.8	18.6	9 8	23 14.72	- 2 54.9	1.374	2.381	1.5	19.5
9 18	23 6.67	-16 9.3	1.524	2.502	6.7	18.8	9 18	23 5.33	- 4 7.5	1.363	2.360	4.1	19.6
9 28	22 59.81	-16 54.6	1.568	2.502	10.5	19.0	9 28	22 56.68	- 5 16.9	1.378	2.339	9.1	19.9
10 8	22 54.75	-17 18.5	1.635	2.501	14.1	19.3	10 8	22 49.88	- 6 15.3	1.418	2.318	13.7	20.1
10 18	22 52.04	-17 20.4	1.721	2.501	17.2	19.5	10 18	22 45.70	- 6 57.4	1.477	2.296	17.7	20.3
247078	2000 <i>SQ</i> ₄₀		9 9.8 21°94	4°3/11.9	18		256450	2007 <i>CV</i> ₄₄		9 9.8 327°74	3°4/13.0	18	
8 9	23 41.02	+ 1 57.8	1.057	1.946	19.6	19.2	8 9	23 34.61	+ 5 48.2	2.049	2.895	13.2	20.0
8 19	23 34.93	+ 2 52.3	1.006	1.952	14.8	18.9	8 19	23 29.37	+ 5 57.3	1.973	2.892	10.2	19.8
8 29	23 25.87	+ 3 27.9	0.975	1.958	9.6	18.6	8 29	23 22.46	+ 5 51.1	1.920	2.889	6.9	19.6
9 8	23 15.02	+ 3 45.2	0.964	1.965	5.0	18.4	9 8	23 14.52	+ 5 31.3	1.892	2.887	4.0	19.5
9 18	23 3.97	+ 3 47.4	0.977	1.973	5.7	18.5	9 18	23 6.36	+ 5 1.0	1.892	2.884	3.9	19.4
9 28	22 54.44	+ 3 40.5	1.014	1.982	10.5	18.8	9 28	22 58.85	+ 4 24.7	1.920	2.882	6.8	19.6
10 8	22 47.72	+ 3 32.1	1.071	1.992	15.3	19.1	10 8	22 52.80	+ 3 48.0	1.974	2.880	10.1	19.8
10 18	22 44.47	+ 3 28.3	1.147	2.002	19.4	19.4	10 18	22 48.72	+ 3 15.5	2.050	2.878	13.1	20.0
34432	2000 <i>SF</i> ₃₆		9 9.8 236°74	1°4/ 8.2	18		256528	2007 <i>EZ</i> ₂₁₉		9 9.8 281°14	4°5/ 5.7	18	
8 9	23 33.19	- 6 55.3	2.139	3.028	11.0	19.4	8 9	23 39.37	-18 31.6	2.165	3.057	10.8	20.4
8 19	23 28.25	- 7 41.4	2.071	3.025	7.8	19.2	8 19	23 32.68	-18 55.1	2.096	3.046	7.9	20.2
8 29	23 21.78	- 8 34.4	2.028	3.022	4.2	19.0	8 29	23 24.25	-19 15.0	2.052	3.035	5.4	20.0
9 8	23 14.39	- 9 29.3	2.013	3.019	1.4	18.8	9 8	23 14.79	-19 26.2	2.036	3.024	4.6	19.9
9 18	23 6.83	-10 20.6	2.026	3.015	4.1	19.0	9 18	23 5.17	-19 24.5	2.048	3.013	6.5	20.0
9 28	22 59.93	-11 3.2	2.066	3.012	7.6	19.2	9 28	22 56.34	-19 7.2	2.087	3.001	9.4	20.2
10 8	22 54.40	-11 33.3	2.132	3.008	10.9	19.4	10 8	22 49.10	-18 34.2	2.151	2.990	12.3	20.4
10 18	22 50.73	-11 49.1	2.220	3.005	13.7	19.6	10 18	22 43.97	-17 46.5	2.236	2.979	14.8	20.5
348399	2005 <i>JS</i> ₂		9 9.8 138°91	4°4/ 5.2	18		156900	2003 <i>EN</i> ₃₀		9 9.8 240°72	0°3/10.0	18	
8 9	23 37.27	-17 13.6	2.177	3.072	10.6	21.1	8 9	23 36.27	- 1 46.9	1.799	2.678	13.3	21.4
8 19	23 31.04	-18 5.6	2.129	3.081	7.7	20.9	8 19	23 30.79	- 2 20.6	1.721	2.667	9.6	21.1
8 29	23 23.25	-18 55.4	2.106	3.090	5.2	20.8	8 29	23 23.36	- 3 7.2	1.666	2.656	5.5	20.9
9 8	23 14.60	-19 37.1	2.111	3.098	4.5	20.8	9 8	23 14.68	- 4 2.2	1.638	2.645	1.0	20.5
9 18	23 5.92	-20 5.7	2.143	3.105	6.4	20.9	9 18	23 5.68	- 4 59.6	1.637	2.633	3.7	20.7
9 28	22 58.08	-20 18.1	2.203	3.113	9.2	21.1	9 28	22 57.41	- 5 52.6	1.664	2.621	8.1	21.0
10 8	22 51.77	-20 13.4	2.287	3.120	11.9	21.3	10 8	22 50.80	- 6 35.5	1.715	2.608	12.2	21.2
10 18	22 47.44	-19 52.4	2.392	3.126	14.1	21.5	10 18	22 46.47	- 7 4.6	1.789	2.595	15.6	21.4
288119	2003 <i>WR</i> ₆₇		9 9.8 347°65	2°9/12.3	18		94235	2001 <i>BO</i> ₇₄		9 9.8 210°46	2°9/12.7	18	
8 9	23 33.51	+ 4 16.5	1.608	2.476	15.1	20.5	8 9	23 35.72	+ 4 54.7	2.431	3.271	11.6	19.8
8 19	23 28.91	+ 4 5.8	1.538	2.472	11.5	20.3	8 19	23 29.94	+ 5 6.9	2.352	3.269	8.9	19.6
8 29	23 22.32	+ 3 36.3	1.490	2.470	7.4	20.1	8 29	23 22.70	+ 5 7.1	2.297	3.266	5.9	19.4
9 8	23 14.49	+ 2 51.3	1.467	2.467	3.6	19.8	9 8	23 14.57	+ 4 56.4	2.269	3.264	3.3	19.3
9 18	23 6.41	+ 1 55.8	1.469	2.465	4.0	19.9	9 18	23 6.24	+ 4 37.2	2.269	3.261	3.4	19.3
9 28	22 59.16	+ 0 57.3	1.498	2.464	7.9	20.1	9 28	22 58.49	+ 4 13.2	2.299	3.258	6.1	19.4
10 8	22 53.68	+ 0 3.0	1.550	2.462	12.0	20.3	10 8	22 51.98	+ 3 48.5	2.355	3.255	9.0	19.6
10 18	22 50.57	- 0 41.2	1.625	2.462	15.5	20.6	10 18	22 47.21	+ 3 26.8	2.436	3.252	11.7	19.8
293737	2007 <i>RV</i> ₃₆		9 9.8 12°03	2°3/12.1	18		389563	2010 <i>VO</i> ₄₆		9 9.8 277°57	0°8/ 8.2	15	
8 9	23 28.60	+ 5 30.8	1.323	2.205	16.9	19.4	8 9	23 26.90	- 8 11.2	4.433	5.314	5.9	21.2
8 19	23 25.60	+ 4 27.3	1.265	2.208	12.7	19.2	8 19	23 23.18	- 8 35.4	4.358	5.308	4.2	21.1
8 29	23 20.53	+ 2 57.6	1.228	2.212	7.9	18.9	8 29	23 18.77	- 9 1.9	4.309	5.301	2.3	20.9
9 8	23 14.22	+ 1 8.3	1.214	2.217	3.2	18.7	9 8	23 13.96	- 9 28.9	4.290	5.295	0.8	20.8
9 18	23 7.72	- 0 50.1	1.225	2.223	4.0	18.7	9 18	23 9.08	- 9 54.2	4.300	5.289	2.2	20.9
9 28	23 2.20	- 2 45.5	1.261	2.231	8.7	19.0	9 28	23 4.47	-10 15.8	4.341	5.282	4.1	21.1
10 8	22 58.59	- 4 26.6	1.321	2.239	13.2	19.3	10 8	23 0.46	-10 32.0	4.409	5.276	5.9	21.2
10 18	22 57.46	- 5 46.6	1.402	2.248	17.1	19.6	10 18	22 57.30	-10 41.6	4.502	5.270	7.5	21.3
155571	1999 <i>XC</i> ₂₉		9 9.8 314°57	4°8/15.2	18		67054	1999 <i>XR</i> ₂₀₉		9 9.8 270°31	6°0/16.0	17	
8 9	23 31.18	+11 40.3	2.088	2.910	13.8	19.3	8 9	23 35.39	+14 43.5	2.432	3.219	13.1	19.5
8 19	23 26.96	+11 33.2	2.004	2.902	11.1	19.1	8 19	23 29.88	+15 16.8	2.336	3.205	10.9	19.4
8 29	23 21.14	+11 5.7	1.941	2.893	8.2	18.9	8 29	23 22.77	+15 32.8	2.263	3.190	8.6	19.2
9 8	23 14.31	+10 19.1	1.903	2.885	5.6	18.7	9 8	23 14.60	+15 30.7	2.215	3.175	6.6	19.0
9 18	23 7.23	+ 9 16.7	1.892	2.877	4.9	18.7	9 18	23 6.07	+15 11.4	2.194	3.159	6.0	19.0
9 28	23 0.73	+ 8 4.3	1.908	2.869	7.0	18.8	9 28	22 58.01	+14 37.9	2.200	3.144	7.3	19.0
10 8	22 55.58	+ 6 48.9	1.950	2.861	9.9	19.0	10 8	22 51.18	+13 55.3	2.232	3.128	9.6	19.2
10 18	22 52.32	+ 5 37.4	2.016	2.854	12.9	19.2	10 18	22 46.14	+13 9.2	2.289	3.113	12.1	19.3
289504	2005 <i>ED</i> ₁₃₇		9 9.8 213°97	0°1/ 9.7	18		280969	2006 <i>DZ</i> ₄		9			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
282925	2007 <i>PF</i> ₁₆		9 9.8	8°20'	2°9'	6.9 18	301313	2009 <i>BP</i> ₁₄₈		9 9.8	72°38'	1°4'	11.1 18
8 9	23 31.40	- 7 46.9	1.432	2.342	14.0	19.4	8 9	23 34.35	+ 0 57.6	1.850	2.721	13.3	20.8
8 19	23 27.52	- 9 10.9	1.379	2.343	9.8	19.2	8 19	23 29.25	+ 0 33.8	1.786	2.726	9.8	20.6
8 29	23 21.59	-10 45.1	1.348	2.344	5.4	18.9	8 29	23 22.42	- 0 3.8	1.746	2.731	5.8	20.4
9 8	23 14.44	-12 19.8	1.343	2.346	3.0	18.8	9 8	23 14.58	- 0 51.4	1.732	2.736	1.9	20.1
9 18	23 7.11	-13 45.1	1.363	2.349	6.3	19.0	9 18	23 6.59	- 1 43.7	1.745	2.742	3.3	20.2
9 28	23 0.75	-14 52.4	1.408	2.352	10.6	19.3	9 28	22 59.40	- 2 34.4	1.785	2.747	7.3	20.5
10 8	22 56.29	-15 36.6	1.476	2.356	14.6	19.5	10 8	22 53.80	- 3 18.0	1.851	2.752	11.0	20.7
10 18	22 54.28	-15 56.4	1.562	2.360	17.9	19.8	10 18	22 50.29	- 3 50.6	1.939	2.757	14.1	20.9
470714	2008 <i>TX</i> ₁₈₉		9 9.8	328°78'	2°4'	11.5 18	11970	Palitzsch		9 9.8	269°69'	0°4'	10.2 18
8 9	23 33.32	+ 1 17.7	1.306	2.196	16.5	20.4	8 9	23 32.14	- 1 8.6	2.179	3.053	11.4	18.9
8 19	23 29.31	+ 1 21.9	1.228	2.176	12.4	20.1	8 19	23 27.52	- 1 46.7	2.106	3.049	8.3	18.7
8 29	23 22.83	+ 1 8.0	1.170	2.157	7.7	19.8	8 29	23 21.42	- 2 36.1	2.057	3.046	4.7	18.5
9 8	23 14.66	+ 0 38.7	1.135	2.139	3.1	19.4	9 8	23 14.43	- 3 32.6	2.035	3.042	1.0	18.2
9 18	23 5.96	- 0 0.8	1.124	2.122	4.4	19.5	9 18	23 7.25	- 4 31.1	2.042	3.038	3.0	18.4
9 28	22 58.12	- 0 42.7	1.137	2.105	9.5	19.7	9 28	23 0.68	- 5 26.1	2.076	3.034	6.7	18.6
10 8	22 52.37	- 1 19.3	1.172	2.090	14.4	20.0	10 8	22 55.41	- 6 12.8	2.137	3.030	10.1	18.8
10 18	22 49.51	- 1 44.2	1.226	2.077	18.7	20.2	10 18	22 51.93	- 6 47.7	2.221	3.026	13.0	19.0
163271	2002 <i>GZ</i> ₈₇		9 9.8	38°67'	2°0'	11.8 16	451394	2011 <i>DD</i> ₁₁		9 9.8	296°95'	0°5'	9.2 17
8 9	23 30.97	+ 5 0.8	1.358	2.236	16.7	19.2	8 9	23 32.82	- 3 21.3	2.272	3.150	10.9	21.7
8 19	23 27.16	+ 3 52.7	1.311	2.252	12.4	19.0	8 19	23 28.21	- 4 15.5	2.163	3.111	7.9	21.4
8 29	23 21.33	+ 2 20.8	1.285	2.269	7.6	18.8	8 29	23 21.94	- 5 21.7	2.079	3.070	4.4	21.1
9 8	23 14.39	+ 0 32.6	1.283	2.287	2.9	18.5	9 8	23 14.53	- 6 35.5	2.023	3.030	0.7	20.8
9 18	23 7.39	- 1 21.5	1.307	2.305	3.8	18.7	9 18	23 6.65	- 7 51.3	1.995	2.988	3.6	20.9
9 28	23 1.47	- 3 10.0	1.357	2.324	8.5	19.0	9 28	22 59.14	- 9 2.6	1.997	2.947	7.5	21.1
10 8	22 57.48	- 4 43.2	1.430	2.343	12.7	19.3	10 8	22 52.79	-10 3.6	2.024	2.905	11.2	21.2
10 18	22 55.91	- 5 55.6	1.525	2.363	16.3	19.6	10 18	22 48.25	-10 50.2	2.074	2.862	14.4	21.4
313686	2003 <i>SD</i> ₃₃₃		9 9.8	73°12'	0°3'	9.4 18	218200	2002 <i>TO</i> ₁₄₆		9 9.8	317°82'	2°6'	11.8 18
8 9	23 32.99	- 3 48.7	2.194	3.074	11.1	20.7	8 9	23 33.13	+ 3 2.4	1.277	2.163	17.1	19.9
8 19	23 27.98	- 4 26.1	2.140	3.089	7.9	20.6	8 19	23 29.20	+ 2 45.3	1.202	2.147	12.9	19.6
8 29	23 21.58	- 5 11.7	2.112	3.104	4.3	20.4	8 29	23 22.77	+ 2 5.7	1.146	2.131	8.1	19.3
9 8	23 14.42	- 6 1.0	2.111	3.119	0.6	20.1	9 8	23 14.67	+ 1 7.2	1.113	2.116	3.4	19.0
9 18	23 7.22	- 6 49.1	2.139	3.133	3.2	20.4	9 18	23 6.07	- 0 3.4	1.104	2.102	4.4	19.0
9 28	23 0.73	- 7 31.3	2.195	3.148	6.7	20.6	9 28	22 58.36	- 1 16.1	1.119	2.088	9.6	19.3
10 8	22 55.59	- 8 3.9	2.276	3.163	9.9	20.8	10 8	22 52.78	- 2 21.0	1.157	2.075	14.6	19.5
10 18	22 52.20	- 8 24.6	2.381	3.177	12.5	21.0	10 18	22 50.12	- 3 10.8	1.213	2.062	19.0	19.8
9255	Inoutadataka		9 9.8	26°12'	2°0'	8.5 18	476750	2008 <i>UJ</i> ₆₁		9 9.8	335°47'	0°4'	9.5 16
8 9	23 41.09	- 9 17.0	1.322	2.224	15.5	17.0	8 9	23 32.21	- 4 59.3	1.107	2.023	16.8	20.6
8 19	23 34.56	- 9 23.5	1.268	2.227	11.1	16.7	8 19	23 28.87	- 5 3.6	1.032	1.997	12.2	20.3
8 29	23 25.52	- 9 35.3	1.237	2.231	6.1	16.5	8 29	23 22.74	- 5 20.9	0.977	1.973	6.9	19.9
9 8	23 15.04	- 9 46.4	1.229	2.235	2.1	16.2	9 8	23 14.68	- 5 46.0	0.943	1.950	1.0	19.5
9 18	23 4.44	- 9 51.1	1.247	2.239	5.5	16.5	9 18	23 5.99	- 6 11.9	0.932	1.929	5.2	19.7
9 28	22 55.15	- 9 44.8	1.290	2.244	10.4	16.8	9 28	22 58.27	- 6 30.6	0.943	1.910	11.2	20.0
10 8	22 48.25	- 9 25.2	1.356	2.248	14.8	17.0	10 8	22 52.92	- 6 35.5	0.974	1.892	16.6	20.2
10 18	22 44.35	- 8 52.0	1.441	2.254	18.4	17.3	10 18	22 50.84	- 6 23.1	1.022	1.877	21.3	20.5
59554	1999 <i>JW</i> ₄₀		9 9.8	66°52'	9°6'	1.9 18	37104	2000 <i>UP</i> ₉₉		9 9.8	113°08'	1°7'	8.6 18
8 9	23 40.58	-27 38.0	1.521	2.420	14.0	18.9	8 9	23 40.82	- 7 18.2	1.467	2.361	14.8	18.0
8 19	23 33.93	-28 55.6	1.493	2.432	11.4	18.8	8 19	23 34.12	- 7 49.7	1.417	2.372	10.5	17.8
8 29	23 25.02	-29 58.7	1.488	2.444	9.8	18.7	8 29	23 25.19	- 8 29.0	1.389	2.383	5.7	17.6
9 8	23 14.94	-30 37.8	1.507	2.457	10.0	18.8	9 8	23 15.01	- 9 9.5	1.387	2.393	1.7	17.3
9 18	23 5.00	-30 47.5	1.549	2.470	11.8	18.9	9 18	23 4.78	- 9 44.3	1.412	2.404	5.1	17.6
9 28	22 56.47	-30 26.3	1.614	2.482	14.4	19.1	9 28	22 55.77	-10 7.8	1.463	2.414	9.7	17.9
10 8	22 50.29	-29 37.4	1.699	2.495	16.9	19.3	10 8	22 48.95	-10 16.5	1.538	2.423	13.8	18.1
10 18	22 46.91	-28 26.2	1.800	2.508	19.0	19.5	10 18	22 44.86	-10 9.5	1.632	2.432	17.1	18.4
378069	2006 <i>UT</i> ₁₄		9 9.8	305°43'	1°8'	8.4 18	399808	2005 <i>ST</i> ₇₈		9 9.8	357°98'	2°0'	8.1 17
8 9	23 34.89	- 6 5.3	1.309	2.215	15.4	21.5	8 9	23 34.70	- 8 56.4	1.675	2.576	12.9	20.8
8 19	23 30.45	- 6 51.5	1.234	2.195	11.0	21.2	8 19	23 29.66	- 9 23.9	1.615	2.574	9.1	20.6
8 29	23 23.47	- 7 51.2	1.180	2.176	6.1	20.8	8 29	23 22.71	- 9 56.9	1.578	2.572	5.0	20.4
9 8	23 14.76	- 8 56.8	1.150	2.156	1.8	20.5	9 8	23 14.64	-10 29.9	1.567	2.571	2.0	20.2
9 18	23 5.54	- 9 59.3	1.145	2.137	5.7	20.7	9 18	23 6.40	-10 57.2	1.582	2.571	5.0	20.4
9 28	22 57.22	-10 49.4	1.164	2.119	11.1	20.9	9 28	22 59.05	-11 13.7	1.623	2.571	9.0	20.6
10 8	22 51.07	-11 20.6	1.204	2.101	15.9	21.2	10 8	22 53.47	-11 16.4	1.687	2.572	12.8	20.8
10 18	22 47.86	-11 29.9	1.263	2.083	20.1	21.4	10 18	22 50.19	-11 4.3	1.773	2.574	15.9	21.1
116969	2004 <i>HZ</i> ₁₁		9 9.8	326°47'	4°5'	19.5 18	306554	2000 <i>AP</i> ₁₉₄		9 9.8	216°75'	4°8'	2.1 18
8 9	23 26.21	+20 37.6	3.984	4.718	9.3	19.0	8 9	23 31.89	-19 35.2	2.734	3.630	8.6	20.4
8 19	23 22.83	+20 21.0	3.888	4.711	7.9	18.9	8 19	23 27.20	-21 17.7	2.675	3.624	6.5	20.2
8 29	23 18.64	+19 49.8	3.813	4.704	6.4	18.8	8 29	23 21.20	-22 58.6	2.644	3.617	5.0	20.1
9 8	23 13.98	+19 4.6	3.764	4.698	5.2	18.7	9 8	23 14.40	-24 31.5	2.642	3.610	5.2	20.1
9 18	23 9.21	+18 7.0	3.742	4.691	4.5	18.6	9 18	23 7.42	-25 50.5	2.669	3.602	6.9	20.2
9 28	23 4.76	+16 59.8	3.749	4.685	4.9	18.6	9 28	23 0.92	-26 51.6	2.723	3.595	9.1	20.4
10 8	23 0.98	+15 46.6	3.784	4.679	6.1	18.7	10 8	22 55.53	-27 32.7	2.801	3.587	11.2	20.5
10 18	22 58.20	+14 31.3	3.846	4.673	7.5	18.8	10 18	22 51.68	-27 53.9	2.899	3.578	13.0	20.6
143003	2002 <i>VC</i> ₁₀₂		9 9.8	182°86'	6°2'	2.7 18	390673	2002 <i>TJ</i> ₆₀		9 9.8	249°66'	12°1'	21.7

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
219317	2000 FZ ₇		9 9.8 225°31	0°2/ 9.9 18			169549	2002 EG ₁₀₅		9 9.8 269°91	4°4/ 6.5 18		
8 9	23 36.50	- 1 38.4	1.862	2.738	13.0	21.5	8 9	23 39.03	-12 40.2	1.376	2.284	14.6	19.8
8 19	23 30.92	- 2 18.6	1.784	2.729	9.4	21.3	8 19	23 33.28	-13 36.3	1.312	2.273	10.5	19.5
8 29	23 23.44	- 3 11.9	1.730	2.719	5.3	21.0	8 29	23 24.98	-14 36.9	1.269	2.262	6.3	19.3
9 8	23 14.77	- 4 13.4	1.702	2.709	0.9	20.7	9 8	23 15.05	-15 32.8	1.252	2.251	4.5	19.1
9 18	23 5.79	- 5 17.0	1.703	2.698	3.6	20.9	9 18	23 4.77	-16 15.2	1.259	2.239	7.6	19.3
9 28	22 57.53	- 6 15.9	1.731	2.687	8.0	21.1	9 28	22 55.57	-16 37.2	1.291	2.228	12.1	19.5
10 8	22 50.88	- 7 4.3	1.785	2.675	11.9	21.3	10 8	22 48.63	-16 36.2	1.345	2.217	16.3	19.7
10 18	22 46.44	- 7 38.5	1.860	2.663	15.2	21.5	10 18	22 44.65	-16 12.6	1.417	2.205	19.9	20.0
314083	2005 CR ₃₈		9 9.8 191°58	4°0/ 6.3 17			156605	2002 GE ₈₄		9 9.8 72°15	0°1/ 9.7 18		
8 9	23 39.29	-12 50.0	1.679	2.578	13.0	21.0	8 9	23 31.37	- 1 35.2	2.145	3.023	11.4	19.7
8 19	23 33.00	-13 53.9	1.620	2.577	9.3	20.8	8 19	23 26.92	- 2 34.3	2.088	3.034	8.2	19.5
8 29	23 24.60	-15 0.8	1.585	2.575	5.6	20.6	8 29	23 21.07	- 3 44.4	2.055	3.046	4.5	19.3
9 8	23 14.94	-16 2.8	1.576	2.573	4.1	20.5	9 8	23 14.42	- 5 0.1	2.050	3.057	0.7	19.0
9 18	23 5.09	-16 52.2	1.594	2.570	6.8	20.7	9 18	23 7.70	- 6 15.6	2.073	3.068	3.2	19.2
9 28	22 56.22	-17 23.5	1.639	2.567	10.6	20.9	9 28	23 1.65	- 7 24.7	2.125	3.080	6.8	19.5
10 8	22 49.28	-17 34.0	1.707	2.563	14.2	21.1	10 8	22 56.92	- 8 22.5	2.203	3.091	10.0	19.7
10 18	22 44.86	-17 24.3	1.795	2.559	17.2	21.3	10 18	22 53.93	- 9 6.1	2.303	3.103	12.8	19.9
508058	2015 BK ₅₃₇		9 9.8 60°68	1°1/10.8 17			11793	Chujkovia		9 9.8 314°52	1°8/ 7.7 18		
8 9	23 34.03	+ 1 50.5	1.382	2.266	16.1	21.4	8 9	23 30.88	- 6 40.1	1.923	2.819	11.7	17.5
8 19	23 29.49	+ 0 51.5	1.322	2.269	11.8	21.1	8 19	23 26.86	- 7 48.0	1.849	2.807	8.2	17.3
8 29	23 22.75	- 0 28.8	1.283	2.271	6.9	20.8	8 29	23 21.18	- 9 5.4	1.800	2.795	4.5	17.0
9 8	23 14.66	- 2 3.3	1.268	2.274	1.8	20.5	9 8	23 14.46	-10 26.0	1.778	2.783	1.8	16.8
9 18	23 6.36	- 3 42.5	1.279	2.277	4.1	20.7	9 18	23 7.48	-11 42.4	1.784	2.772	4.7	17.0
9 28	22 59.07	- 5 15.7	1.316	2.280	9.1	21.0	9 28	23 1.15	-12 47.8	1.816	2.760	8.6	17.2
10 8	22 53.81	- 6 33.8	1.377	2.283	13.7	21.3	10 8	22 56.24	-13 37.1	1.873	2.750	12.1	17.4
10 18	22 51.18	- 7 31.6	1.458	2.286	17.5	21.5	10 18	22 53.32	-14 7.8	1.951	2.739	15.1	17.6
492139	2013 NK ₁₈		9 9.8 40°99	1°8/10.9 16			124612	2001 SD ₄₄		9 9.8 316°46	3°2/ 7.4 18		
8 9	23 37.53	+ 0 14.6	1.094	1.990	18.5	21.0	8 9	23 34.65	- 9 26.7	1.306	2.218	14.9	19.4
8 19	23 32.22	+ 0 7.4	1.051	2.003	13.5	20.8	8 19	23 30.30	-10 15.6	1.234	2.198	10.7	19.1
8 29	23 24.29	- 0 19.1	1.027	2.017	8.0	20.5	8 29	23 23.41	-11 13.7	1.183	2.179	6.0	18.8
9 8	23 14.89	- 0 59.4	1.026	2.032	2.5	20.3	9 8	23 14.83	-12 12.8	1.156	2.160	3.2	18.6
9 18	23 5.46	- 1 45.8	1.049	2.047	4.5	20.5	9 18	23 5.77	-13 3.5	1.154	2.141	6.7	18.8
9 28	22 57.49	- 2 29.3	1.095	2.062	9.9	20.8	9 28	22 57.65	-13 37.8	1.175	2.124	11.7	19.0
10 8	22 52.08	- 3 2.5	1.162	2.079	14.7	21.1	10 8	22 51.69	-13 50.5	1.217	2.107	16.3	19.2
10 18	22 49.77	- 3 21.1	1.249	2.095	18.7	21.4	10 18	22 48.68	-13 40.4	1.277	2.090	20.3	19.4
436430	2011 BA ₂₈		9 9.8 222°39	1°8/ 7.9 18			169774	2002 PP ₉₀		9 9.8 153°74	10°1/20.3 18		
8 9	23 35.30	- 6 7.5	1.748	2.640	12.9	21.4	8 9	23 40.99	+25 38.4	2.227	2.935	16.3	20.2
8 19	23 30.13	- 7 18.3	1.679	2.634	9.1	21.1	8 19	23 34.13	+26 52.2	2.150	2.940	14.5	20.0
8 29	23 23.03	- 8 40.0	1.633	2.627	5.0	20.9	8 29	23 25.27	+27 41.9	2.093	2.944	12.6	19.9
9 8	23 14.72	-10 5.1	1.615	2.620	1.8	20.7	9 8	23 15.11	+28 4.0	2.058	2.948	11.0	19.8
9 18	23 6.13	-11 25.5	1.624	2.613	5.0	20.9	9 18	23 4.55	+27 57.6	2.046	2.952	10.2	19.8
9 28	22 58.34	-12 33.5	1.660	2.605	9.2	21.1	9 28	22 54.66	+27 25.3	2.060	2.956	10.5	19.8
10 8	22 52.23	-13 23.8	1.721	2.596	13.1	21.3	10 8	22 46.37	+26 33.2	2.099	2.959	11.7	19.9
10 18	22 48.42	-13 54.0	1.802	2.588	16.3	21.5	10 18	22 40.35	+25 29.3	2.159	2.962	13.4	20.0
517997	2015 UQ ₅₇		9 9.8 244°85	1°8/ 7.4 18			186466	2002 TE ₃₁		9 9.8 336°30	0°4/10.1 17		
8 9	23 31.16	- 8 9.9	2.429	3.320	9.8	21.6	8 9	23 33.47	- 1 14.4	1.257	2.156	16.4	19.5
8 19	23 26.72	- 9 12.3	2.360	3.315	6.9	21.4	8 19	23 29.36	- 1 51.2	1.192	2.148	12.0	19.3
8 29	23 20.95	-10 20.6	2.316	3.310	3.8	21.2	8 29	23 22.82	- 2 46.4	1.148	2.141	6.8	19.0
9 8	23 14.38	-11 29.6	2.301	3.305	1.9	21.0	9 8	23 14.73	- 3 53.6	1.128	2.135	1.3	18.6
9 18	23 7.66	-12 33.9	2.315	3.300	4.1	21.2	9 18	23 6.30	- 5 4.1	1.131	2.129	4.5	18.8
9 28	23 1.47	-13 28.5	2.357	3.294	7.3	21.4	9 28	22 58.89	- 6 8.1	1.159	2.124	9.9	19.1
10 8	22 56.45	-14 9.9	2.425	3.289	10.2	21.6	10 8	22 53.66	- 6 57.6	1.209	2.119	14.8	19.4
10 18	22 53.05	-14 36.3	2.515	3.284	12.7	21.7	10 18	22 51.28	- 7 27.7	1.278	2.115	18.9	19.6
113538	2002 TE ₂₄		9 9.8 349°91	1°5/11.1 18			149784	2004 TM ₂₂₁		9 9.8 71°65	2°9/12.7 18		
8 9	23 31.75	+ 1 10.3	1.494	2.380	15.1	18.9	8 9	23 36.96	+ 4 26.4	2.131	2.977	12.7	19.6
8 19	23 27.79	+ 0 41.4	1.427	2.374	11.1	18.6	8 19	23 30.88	+ 4 40.5	2.072	2.993	9.7	19.4
8 29	23 21.79	- 0 5.4	1.382	2.370	6.7	18.4	8 29	23 23.26	+ 4 41.2	2.037	3.009	6.4	19.2
9 8	23 14.53	- 1 5.2	1.361	2.366	2.1	18.1	9 8	23 14.78	+ 4 30.2	2.029	3.025	3.4	19.1
9 18	23 7.00	- 2 11.2	1.365	2.363	3.8	18.2	9 18	23 6.23	+ 4 10.6	2.049	3.041	3.6	19.1
9 28	23 0.34	- 3 15.1	1.395	2.360	8.4	18.5	9 28	22 58.46	+ 3 46.5	2.097	3.057	6.5	19.3
10 8	22 55.50	- 4 9.5	1.448	2.359	12.8	18.7	10 8	22 52.16	+ 3 22.3	2.171	3.073	9.5	19.6
10 18	22 53.08	- 4 49.2	1.522	2.358	16.5	19.0	10 18	22 47.81	+ 3 2.1	2.269	3.089	12.3	19.8
340305	2006 CF ₆₀		9 9.8 231°90	8°5/31.1 18			515992	2015 RX ₂₁₀		9 9.8 325°62	0°9/10.9 18		
8 9	23 37.12	-26 43.9	1.888	2.784	11.9	20.0	8 9	23 30.77	+ 1 21.8	2.048	2.919	12.2	20.8
8 19	23 31.45	-28 25.5	1.840	2.777	9.7	19.9	8 19	23 26.66	+ 0 30.7	1.974	2.915	8.9	20.6
8 29	23 23.75	-29 58.1	1.816	2.769	8.6	19.8	8 29	23 21.02	- 0 35.1	1.925	2.911	5.3	20.4
9 8	23 14.82	-31 12.1	1.818	2.761	9.1	19.8	9 8	23 14.44	- 1 50.9	1.902	2.907	1.5	20.1
9 18	23 5.70	-32 0.5	1.844	2.753	10.9	19.9	9 18	23 7.67	- 3 10.8	1.907	2.904	3.0	20.2
9 28	22 57.47	-32 19.7	1.895	2.744	13.4	20.1	9 28	23 1.53	- 4 27.9	1.940	2.900	6.9	20.5
10 8	22 51.08	-32 10.2	1.965	2.735	15.8	20.2	10 8	22 56.72	- 5 36.0	1.999	2.897	10.4	20.7
10 18	22 47.10	-31 35.3	2.052	2.726	17.8	20.4	10 18	22 53.76	- 6 30.7	2.081	2.894	13.5	20.9
68248	2001 DY ₇₁		9 9.8 46°83	1°0/10.7 18			1749	Telamon		9 9.8 265°89	0°2/10.2 18		
8 9	23 34.84	- 1 9.4	2.130	3.									

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
428653	2008 <i>GO</i> ₅₀		9 9.8 168°43	1.4/ 8.6	17		97565	2000 <i>DN</i> ₉₁		9 9.8 345°67	0.1/ 9.9	18	
8 9	23 37.96	- 6 4.5	1.717	2.606	13.2	22.1	8 9	23 31.80	- 2 27.4	2.013	2.896	11.9	19.1
8 19	23 31.98	- 6 50.6	1.656	2.609	9.4	21.9	8 19	23 27.42	- 2 58.3	1.943	2.891	8.6	18.9
8 29	23 24.04	- 7 45.7	1.619	2.612	5.1	21.7	8 29	23 21.47	- 3 39.7	1.897	2.888	4.8	18.7
9 8	23 14.93	- 8 43.5	1.608	2.614	1.4	21.4	9 8	23 14.58	- 4 27.5	1.877	2.884	0.8	18.4
9 18	23 5.66	- 9 37.3	1.624	2.616	4.6	21.6	9 18	23 7.49	- 5 16.5	1.885	2.881	3.3	18.6
9 28	22 57.31	-10 20.9	1.668	2.617	8.8	21.9	9 28	23 1.07	- 6 1.3	1.920	2.878	7.1	18.8
10 8	22 50.77	-10 49.7	1.737	2.618	12.7	22.1	10 8	22 56.03	- 6 37.0	1.980	2.876	10.7	19.1
10 18	22 46.59	-11 2.2	1.826	2.618	15.9	22.4	10 18	22 52.89	- 7 0.8	2.063	2.874	13.7	19.3
491116	2011 <i>SF</i> ₉₈		9 9.8 299°36	1.2/10.9	18		367060	2006 <i>KK</i> ₅₅		9 9.8 36°71	0.7/10.3	17	
8 9	23 32.76	+ 1 3.2	1.804	2.679	13.4	20.9	8 9	23 34.44	- 0 10.1	1.051	1.955	18.4	20.7
8 19	23 28.32	+ 0 28.7	1.726	2.668	9.9	20.7	8 19	23 30.13	- 0 54.2	1.009	1.967	13.4	20.5
8 29	23 22.05	- 0 21.4	1.671	2.657	5.9	20.4	8 29	23 23.22	- 1 59.2	0.987	1.980	7.6	20.2
9 8	23 14.63	- 1 23.0	1.641	2.647	1.8	20.1	9 8	23 14.85	- 3 16.8	0.987	1.993	1.6	19.9
9 18	23 6.92	- 2 30.1	1.639	2.636	3.4	20.2	9 18	23 6.43	- 4 36.0	1.010	2.008	4.7	20.1
9 28	22 59.89	- 3 35.5	1.663	2.626	7.7	20.4	9 28	22 59.42	- 5 45.9	1.056	2.023	10.3	20.5
10 8	22 54.41	- 4 32.7	1.713	2.615	11.6	20.7	10 8	22 54.90	- 6 38.3	1.124	2.039	15.2	20.8
10 18	22 51.07	- 5 16.8	1.784	2.606	15.0	20.9	10 18	22 53.40	- 7 9.0	1.210	2.055	19.3	21.2
217746	2000 <i>CU</i> ₆₀		9 9.8 299°31	5.7/14.7	17		485812	2012 <i>DA</i> ₄₈		9 9.8 344°90	3.4/12.6	18	
8 9	23 36.70	+11 23.9	2.182	2.994	13.7	20.0	8 9	23 37.27	+ 4 3.3	1.966	2.817	13.4	20.3
8 19	23 31.13	+12 3.7	2.076	2.965	11.2	19.7	8 19	23 31.41	+ 4 33.6	1.890	2.814	10.3	20.1
8 29	23 23.68	+12 27.4	1.992	2.936	8.5	19.5	8 29	23 23.74	+ 4 50.8	1.838	2.810	6.9	19.9
9 8	23 14.92	+12 34.0	1.933	2.907	6.3	19.3	9 8	23 14.95	+ 4 55.7	1.811	2.807	3.9	19.7
9 18	23 5.61	+12 23.9	1.901	2.877	5.9	19.3	9 18	23 5.90	+ 4 50.4	1.812	2.804	4.0	19.7
9 28	22 56.70	+12 0.0	1.897	2.848	7.8	19.3	9 28	22 57.56	+ 4 38.8	1.841	2.802	7.2	19.9
10 8	22 49.11	+11 27.5	1.919	2.819	10.7	19.4	10 8	22 50.77	+ 4 25.3	1.895	2.800	10.6	20.1
10 18	22 43.53	+10 52.0	1.964	2.790	13.7	19.6	10 18	22 46.11	+ 4 14.3	1.972	2.798	13.6	20.3
379547	2011 <i>AR</i> ₁₉		9 9.8 170°51	3.6/12.9	18		158718	2003 <i>HW</i> ₄₅		9 9.8 90°74	0.5/ 9.4	18	
8 9	23 37.42	+ 6 10.1	1.697	2.547	15.2	21.1	8 9	23 35.34	- 2 56.8	1.638	2.525	13.8	20.3
8 19	23 31.69	+ 6 7.6	1.627	2.549	11.7	20.9	8 19	23 30.12	- 3 50.4	1.584	2.536	9.9	20.1
8 29	23 23.94	+ 5 46.1	1.579	2.551	7.8	20.7	8 29	23 23.01	- 4 56.4	1.555	2.547	5.4	19.8
9 8	23 14.94	+ 5 7.7	1.556	2.552	4.3	20.5	9 8	23 14.83	- 6 8.2	1.551	2.558	0.8	19.5
9 18	23 5.70	+ 4 17.0	1.559	2.553	4.3	20.5	9 18	23 6.56	- 7 18.3	1.574	2.569	4.1	19.8
9 28	22 57.32	+ 3 20.6	1.590	2.553	7.8	20.7	9 28	22 59.24	- 8 19.3	1.624	2.579	8.5	20.1
10 8	22 50.73	+ 2 26.0	1.645	2.554	11.7	20.9	10 8	22 53.72	- 9 5.9	1.698	2.590	12.4	20.4
10 18	22 46.55	+ 1 39.0	1.723	2.554	15.1	21.2	10 18	22 50.50	- 9 35.2	1.794	2.600	15.6	20.6
402009	2003 <i>QV</i> ₉₄		9 9.8 348°71	11.4/15.4	17		44857	1999 <i>UW</i> ₈		9 9.8 319°07	4.6/13.6	18	
8 9	23 43.21	+16 52.5	1.587	2.380	18.7	19.4	8 9	23 31.52	+ 8 1.1	1.247	2.118	18.4	18.3
8 19	23 36.47	+19 13.2	1.507	2.368	16.2	19.2	8 19	23 28.16	+ 7 43.8	1.169	2.102	14.4	18.0
8 29	23 26.98	+21 14.5	1.448	2.356	13.7	19.1	8 29	23 22.31	+ 6 57.1	1.110	2.086	9.9	17.7
9 8	23 15.48	+22 49.2	1.412	2.346	11.9	18.9	9 8	23 14.77	+ 5 43.2	1.073	2.070	5.6	17.4
9 18	23 3.15	+23 52.4	1.400	2.338	11.4	18.9	9 18	23 6.68	+ 4 8.7	1.059	2.055	5.3	17.3
9 28	22 51.51	+24 23.8	1.412	2.330	12.7	18.9	9 28	22 59.47	+ 2 25.0	1.069	2.041	9.6	17.5
10 8	22 41.94	+24 29.1	1.447	2.324	15.0	19.1	10 8	22 54.38	+ 0 44.8	1.102	2.027	14.5	17.8
10 18	22 35.42	+24 16.7	1.501	2.320	17.5	19.2	10 18	22 52.24	- 0 41.0	1.154	2.015	18.9	18.0
518257	2016 <i>VN</i> ₁₉		9 9.8 186°36	3.2/ 6.3	18		96555	1998 <i>SN</i> ₁₂₁		9 9.8 313°70	1.7/11.6	18	
8 9	23 35.01	-14 26.2	2.427	3.320	9.7	21.3	8 9	23 32.79	+ 1 40.9	2.054	2.920	12.4	19.1
8 19	23 29.44	-15 3.4	2.366	3.320	6.9	21.1	8 19	23 28.19	+ 1 28.8	1.972	2.908	9.2	18.9
8 29	23 22.47	-15 40.7	2.331	3.319	4.3	20.9	8 29	23 21.95	+ 1 3.7	1.914	2.896	5.7	18.7
9 8	23 14.71	-16 13.3	2.324	3.319	3.2	20.9	9 8	23 14.68	+ 0 28.2	1.881	2.885	2.3	18.4
9 18	23 6.85	-16 37.3	2.345	3.319	5.1	21.0	9 18	23 7.15	- 0 13.5	1.877	2.873	3.1	18.5
9 28	22 59.63	-16 49.2	2.394	3.318	7.9	21.2	9 28	23 0.20	- 0 56.3	1.899	2.862	6.8	18.7
10 8	22 53.72	-16 47.6	2.469	3.317	10.6	21.3	10 8	22 54.62	- 1 34.9	1.948	2.851	10.4	18.9
10 18	22 49.54	-16 32.3	2.565	3.317	12.9	21.5	10 18	22 50.97	- 2 5.2	2.019	2.841	13.5	19.1
351134	2003 <i>WK</i> ₁₁₃		9 9.8 258°71	6.5/ 4.1	18		487152	2014 <i>OV</i> ₂₂₁		9 9.8 328°19	1.6/ 8.4	18	
8 9	23 40.04	-21 58.9	1.865	2.761	12.0	20.5	8 9	23 35.54	- 8 45.8	2.042	2.933	11.4	21.0
8 19	23 33.46	-22 47.2	1.806	2.754	9.2	20.3	8 19	23 30.07	- 9 4.2	1.973	2.927	8.1	20.8
8 29	23 24.87	-23 29.3	1.773	2.746	6.9	20.2	8 29	23 22.95	- 9 27.2	1.929	2.922	4.4	20.5
9 8	23 15.11	-23 57.8	1.765	2.739	6.7	20.1	9 8	23 14.84	- 9 50.3	1.911	2.917	1.6	20.3
9 18	23 5.20	-24 7.2	1.783	2.732	8.6	20.2	9 18	23 6.55	-10 9.2	1.922	2.912	4.2	20.5
9 28	22 56.26	-23 54.6	1.827	2.725	11.5	20.4	9 28	22 58.97	-10 20.0	1.960	2.907	7.8	20.7
10 8	22 49.19	-23 20.3	1.894	2.717	14.3	20.6	10 8	22 52.89	-10 19.9	2.023	2.903	11.2	20.9
10 18	22 44.55	-22 27.0	1.980	2.710	16.8	20.7	10 18	22 48.80	-10 7.9	2.108	2.899	14.1	21.1
218286	2003 <i>JP</i> ₈		9 9.8 87°96	2.3/12.7	18		365918	2011 <i>WL</i> ₁₃₆		9 9.8 242°29	0.8/11.5	18	
8 9	23 31.97	+ 5 53.3	2.192	3.039	12.4	20.4	8 9	23 26.86	+ 0 47.3	4.800	5.649	6.1	21.6
8 19	23 27.35	+ 5 12.0	2.129	3.052	9.4	20.2	8 19	23 23.18	+ 0 33.7	4.713	5.641	4.5	21.5
8 29	23 21.34	+ 4 14.6	2.091	3.065	6.0	20.0	8 29	23 18.87	+ 0 14.8	4.653	5.633	2.7	21.4
9 8	23 14.55	+ 3 5.0	2.078	3.078	2.9	19.8	9 8	23 14.19	- 0 8.1	4.622	5.625	1.1	21.2
9 18	23 7.66	+ 1 48.2	2.095	3.090	3.1	19.9	9 18	23 9.42	- 0 33.2	4.621	5.617	1.5	21.3
9 28	23 1.45	+ 0 30.6	2.140	3.103	6.1	20.1	9 28	23 4.88	- 0 58.7	4.651	5.609	3.3	21.4
10 8	22 56.54	- 0 41.6	2.211	3.115	9.3	20.3	10 8	23 0.89	- 1 22.5	4.709	5.601	5.0	21.5
10 18	22 53.37	- 1 43.9	2.307	3.128	12.1	20.5	10 18	22 57.67	- 1 43.1	4.793	5.593	6.6	21.6
325585	2009 <i>SH</i> ₁₄₃		9 9.8 340°13	4.1/ 6.4	18		433289	2013 <i>BF</i> ₅₄					

EPHEMERIDES

9 9.8

9 9.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
371477	2006 <i>TR</i> ₃₀		9 9.8 342°81	2°2/ 8.5	18		452258	2015 <i>TC</i> ₁₂₂		9 9.9 230°98	4°1/ 4.6	18	
8 9	23 33.15	- 7 42.3	0.992	1.916	17.4	20.0	8 9	23 32.73	-16 28.7	2.401	3.300	9.6	20.9
8 19	23 29.68	- 8 4.9	0.932	1.902	12.5	19.7	8 19	23 27.93	-17 35.1	2.343	3.297	6.9	20.8
8 29	23 23.26	- 8 38.8	0.891	1.889	6.9	19.3	8 29	23 21.72	-18 41.2	2.310	3.294	4.7	20.6
9 8	23 14.93	- 9 15.9	0.871	1.877	2.2	19.0	9 8	23 14.70	-19 40.9	2.305	3.291	4.3	20.6
9 18	23 6.14	- 9 47.2	0.873	1.867	6.4	19.3	9 18	23 7.54	-20 29.2	2.328	3.288	6.1	20.7
9 28	22 58.60	-10 4.0	0.896	1.859	12.3	19.5	9 28	23 0.99	-21 2.0	2.377	3.285	8.7	20.9
10 8	22 53.70	-10 1.1	0.939	1.853	17.6	19.8	10 8	22 55.69	-21 17.5	2.451	3.281	11.3	21.0
10 18	22 52.19	- 9 37.1	0.998	1.848	22.0	20.1	10 18	22 52.10	-21 15.8	2.546	3.278	13.4	21.2
147	Protogeneia		9 9.8 358°77	0°9/10.9	18		339421	2005 <i>EQ</i> ₃₁		9 9.9 265°30	1°1/ 8.9	18	
8 9	23 32.70	- 0 1.1	2.193	3.062	11.6	13.5	8 9	23 37.58	- 6 23.5	1.986	2.870	12.0	21.6
8 19	23 27.96	- 0 26.3	2.122	3.062	8.5	13.3	8 19	23 31.77	- 6 50.9	1.898	2.849	8.6	21.4
8 29	23 21.75	- 1 2.8	2.076	3.062	5.0	13.1	8 29	23 24.06	- 7 26.1	1.835	2.828	4.7	21.1
9 8	23 14.67	- 1 47.1	2.056	3.062	1.4	12.9	9 8	23 15.11	- 8 4.5	1.800	2.806	1.1	20.8
9 18	23 7.43	- 2 34.8	2.065	3.062	2.9	13.0	9 18	23 5.78	- 8 41.0	1.792	2.784	4.1	21.0
9 28	23 0.81	- 3 20.8	2.101	3.062	6.5	13.2	9 28	22 57.05	- 9 10.2	1.812	2.762	8.2	21.2
10 8	22 55.50	- 4 0.5	2.164	3.062	9.8	13.4	10 8	22 49.84	- 9 28.2	1.858	2.739	12.0	21.4
10 18	22 51.96	- 4 30.4	2.250	3.062	12.6	13.6	10 18	22 44.79	- 9 32.7	1.925	2.716	15.2	21.5
317929	2003 <i>US</i> ₃₇₄		9 9.8 331°97	2°8/13.1	18		224955	2007 <i>EU</i> ₁₁		9 9.9 132°73	0°8/10.9	18	
8 9	23 30.91	+ 6 28.8	2.140	2.987	12.6	20.6	8 9	23 32.21	+ 0 30.9	2.473	3.336	10.6	20.5
8 19	23 26.76	+ 6 2.1	2.062	2.983	9.7	20.4	8 19	23 27.46	- 0 9.7	2.406	3.343	7.7	20.3
8 29	23 21.13	+ 5 18.6	2.007	2.979	6.5	20.2	8 29	23 21.43	- 1 1.1	2.365	3.350	4.5	20.1
9 8	23 14.58	+ 4 20.9	1.978	2.975	3.5	20.0	9 8	23 14.68	- 1 59.6	2.351	3.357	1.3	19.9
9 18	23 7.83	+ 3 13.5	1.977	2.971	3.4	20.0	9 18	23 7.82	- 3 0.7	2.367	3.364	2.6	20.0
9 28	23 1.67	+ 2 2.6	2.003	2.968	6.4	20.2	9 28	23 1.53	- 3 59.3	2.412	3.370	5.9	20.2
10 8	22 56.80	+ 0 54.4	2.056	2.964	9.7	20.4	10 8	22 56.40	- 4 51.0	2.483	3.376	8.9	20.4
10 18	22 53.71	- 0 5.6	2.132	2.961	12.6	20.5	10 18	22 52.85	- 5 32.5	2.579	3.382	11.5	20.6
450348	2004 <i>TA</i> ₃₂₆		9 9.8 352°69	7°7/14.9	17		131520	2001 <i>TW</i> ₁₉₂		9 9.9 263°40	0°2/ 9.8	18	
8 9	23 36.21	+11 0.5	1.515	2.353	17.4	20.0	8 9	23 41.15	- 4 24.0	1.372	2.263	15.8	19.3
8 19	23 31.21	+12 17.2	1.442	2.345	14.3	19.8	8 19	23 34.90	- 4 31.2	1.301	2.253	11.5	19.0
8 29	23 23.90	+13 13.7	1.389	2.338	11.0	19.5	8 29	23 26.02	- 4 49.7	1.252	2.244	6.5	18.7
9 8	23 15.06	+13 47.4	1.358	2.332	8.3	19.4	9 8	23 15.45	- 5 14.6	1.227	2.234	1.0	18.3
9 18	23 5.75	+13 57.9	1.351	2.327	7.8	19.3	9 18	23 4.47	- 5 40.0	1.229	2.225	4.6	18.6
9 28	22 57.27	+13 48.9	1.369	2.324	9.8	19.5	9 28	22 54.53	- 5 59.5	1.255	2.215	9.9	18.9
10 8	22 50.74	+13 27.1	1.410	2.322	13.0	19.6	10 8	22 46.86	- 6 7.9	1.305	2.205	14.7	19.1
10 18	22 46.90	+12 59.9	1.472	2.321	16.2	19.8	10 18	22 42.21	- 6 2.6	1.375	2.195	18.7	19.4
330594	2008 <i>CB</i> ₁₉₆		9 9.8 173°19	0°1/ 9.9	17		259607	2003 <i>UB</i> ₂₈₃		9 9.9 331°74	5°9/ 5.1	18	
8 9	23 36.83	- 1 32.9	1.745	2.623	13.6	22.2	8 9	23 33.25	-13 20.7	1.125	2.050	15.7	19.7
8 19	23 31.21	- 2 25.1	1.680	2.626	9.8	22.0	8 19	23 29.55	-14 52.0	1.069	2.038	11.3	19.4
8 29	23 23.68	- 3 31.1	1.638	2.628	5.5	21.7	8 29	23 23.14	-16 29.7	1.034	2.027	7.2	19.1
9 8	23 14.99	- 4 45.1	1.623	2.630	0.9	21.4	9 8	23 15.01	-18 0.8	1.022	2.017	6.2	19.1
9 18	23 6.12	- 5 59.8	1.636	2.631	3.8	21.6	9 18	23 6.50	-19 12.9	1.032	2.008	9.6	19.2
9 28	22 58.09	- 7 7.6	1.676	2.632	8.2	21.9	9 28	22 59.16	-19 56.4	1.065	1.999	14.2	19.4
10 8	22 51.79	- 8 2.6	1.741	2.632	12.2	22.1	10 8	22 54.25	-20 7.9	1.116	1.992	18.6	19.7
10 18	22 47.79	- 8 41.3	1.828	2.631	15.5	22.4	10 18	22 52.48	-19 48.7	1.184	1.985	22.3	19.9
450711	2007 <i>AL</i> ₂₉		9 9.8 83°36	8°0/18.9	18		388237	2006 <i>KP</i> ₂₂		9 9.9 62°62	5°9/ 4.3	17	
8 9	23 40.36	+21 9.8	2.374	3.112	14.7	20.7	8 9	23 35.97	-17 17.3	1.595	2.504	12.9	20.1
8 19	23 33.37	+22 7.2	2.314	3.135	12.6	20.6	8 19	23 30.59	-18 44.6	1.564	2.523	9.4	19.9
8 29	23 24.75	+22 43.0	2.275	3.158	10.5	20.4	8 29	23 23.30	-20 8.6	1.557	2.541	6.6	19.8
9 8	23 15.16	+22 55.5	2.261	3.181	8.7	20.4	9 8	23 14.99	-21 20.1	1.576	2.560	6.1	19.8
9 18	23 5.43	+22 45.5	2.272	3.204	8.0	20.4	9 18	23 6.73	-22 11.9	1.620	2.579	8.4	20.0
9 28	22 56.46	+22 16.2	2.310	3.227	8.5	20.4	9 28	22 59.59	-22 39.6	1.689	2.598	11.6	20.2
10 8	22 48.98	+21 33.4	2.374	3.249	10.0	20.6	10 8	22 54.38	-22 42.9	1.779	2.617	14.5	20.5
10 18	22 43.51	+20 43.6	2.461	3.271	11.8	20.7	10 18	22 51.54	-22 23.8	1.889	2.635	17.0	20.7
439613	2014 <i>EF</i> ₃₅		9 9.9 278°87	2°3/ 7.3	18		509497	2007 <i>TJ</i> ₄₃₃		9 9.9 234°46	0°2/ 9.7	18	
8 9	23 32.19	- 5 55.6	1.741	2.638	12.7	20.2	8 9	23 34.35	- 2 43.7	1.937	2.818	12.3	22.0
8 19	23 28.01	- 7 32.4	1.669	2.628	8.9	19.9	8 19	23 29.36	- 3 24.8	1.866	2.814	8.9	21.8
8 29	23 21.97	- 9 22.0	1.623	2.617	4.9	19.7	8 29	23 22.66	- 4 17.3	1.819	2.810	5.0	21.6
9 8	23 14.75	-11 15.9	1.603	2.607	2.3	19.5	9 8	23 14.92	- 5 16.1	1.799	2.806	0.8	21.2
9 18	23 7.23	-13 4.3	1.610	2.596	5.4	19.7	9 18	23 6.95	- 6 15.4	1.806	2.801	3.5	21.5
9 28	23 0.42	-14 38.2	1.645	2.586	9.6	19.9	9 28	22 59.69	- 7 9.1	1.841	2.797	7.6	21.7
10 8	22 55.20	-15 51.1	1.704	2.575	13.4	20.1	10 8	22 53.93	- 7 51.9	1.901	2.792	11.3	21.9
10 18	22 52.18	-16 40.2	1.784	2.565	16.6	20.3	10 18	22 50.20	- 8 20.9	1.984	2.787	14.4	22.1
510738	2012 <i>WP</i> ₂		9 9.9 256°70	0°2/ 9.7	18		396431	2014 <i>EV</i> ₄₂		9 9.9 219°50	1°2/ 8.5	18	
8 9	23 34.94	- 3 2.4	1.807	2.691	12.9	21.8	8 9	23 35.49	- 5 55.8	2.278	3.158	10.8	22.6
8 19	23 29.86	- 3 39.4	1.737	2.686	9.3	21.6	8 19	23 30.01	- 6 46.5	2.200	3.149	7.6	22.4
8 29	23 22.94	- 4 27.8	1.690	2.682	5.2	21.3	8 29	23 22.97	- 7 45.1	2.147	3.139	4.2	22.1
9 8	23 14.90	- 5 22.8	1.670	2.677	0.8	21.0	9 8	23 14.97	- 8 46.8	2.122	3.128	1.2	21.9
9 18	23 6.62	- 6 18.2	1.677	2.672	3.7	21.2	9 18	23 6.72	- 9 46.0	2.127	3.117	3.8	22.1
9 28	22 59.10	- 7 7.6	1.711	2.668	8.0	21.5	9 28	22 59.06	-10 37.4	2.160	3.105	7.4	22.3
10 8	22 53.20	- 7 45.8	1.770	2.663	11.9	21.7	10 8	22 52.70	-11 16.9	2.219	3.092	10.7	22.5
10 18	22 49.48	- 8 9.7	1.851	2.658	15.1	21.9	10 18	22 48.17	-11 42.3	2.301	3.079	13.4	22.6
393042	2013 <i>AZ</i> ₁₆		9 9.9 234°40	5°1/ 3.8	18		285526	2000 <i>FX</i> ₅₀		9 9.9 103°46			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
130607	2000 SY ₁₄	9 9.9 84°04'	2.7°/11.9 17				439490	2013 YW ₁₂₅	9 9.9 277°66'	2.9°/ 7.2 18			
8 9	23 38.46	+ 3 46.7	1.323	2.197	17.4	19.3	8 9	23 35.63	- 9 46.5	1.678	2.579	12.9	21.3
8 19	23 32.71	+ 3 24.6	1.274	2.212	13.0	19.1	8 19	23 30.47	-10 44.2	1.618	2.577	9.1	21.1
8 29	23 24.63	+ 2 41.1	1.245	2.227	8.1	18.9	8 29	23 23.35	-11 48.0	1.581	2.575	5.1	20.9
9 8	23 15.23	+ 1 41.2	1.239	2.242	3.5	18.7	9 8	23 15.05	-12 50.6	1.571	2.573	2.9	20.7
9 18	23 5.75	+ 0 32.5	1.259	2.256	4.2	18.7	9 18	23 6.56	-13 44.8	1.587	2.571	5.7	20.9
9 28	22 57.52	- 0 35.8	1.305	2.271	8.9	19.1	9 28	22 58.95	-14 24.2	1.629	2.570	9.7	21.1
10 8	22 51.52	- 1 35.3	1.374	2.285	13.3	19.4	10 8	22 53.12	-14 45.4	1.695	2.568	13.4	21.4
10 18	22 48.33	- 2 20.3	1.464	2.299	17.0	19.6	10 18	22 49.63	-14 47.4	1.781	2.566	16.5	21.6
445529	2011 AY ₃₀	9 9.9 267°08'	4.4°/ 3.9 18				204925	2008 TG ₅	9 9.9 324°28'	0.9°/10.6 18			
8 9	23 32.00	-17 1.5	2.394	3.294	9.5	21.0	8 9	23 33.71	- 0 33.9	1.426	2.316	15.3	20.7
8 19	23 27.48	-18 21.0	2.331	3.285	7.0	20.8	8 19	23 29.46	- 1 0.6	1.354	2.304	11.3	20.5
8 29	23 21.54	-19 40.4	2.294	3.276	4.9	20.7	8 29	23 22.96	- 1 44.1	1.303	2.293	6.6	20.2
9 8	23 14.74	-20 53.3	2.284	3.267	4.7	20.7	9 8	23 15.01	- 2 39.6	1.276	2.282	1.6	19.8
9 18	23 7.75	-21 53.9	2.303	3.258	6.6	20.8	9 18	23 6.68	- 3 40.0	1.274	2.272	4.0	20.0
9 28	23 1.32	-22 37.8	2.348	3.248	9.1	20.9	9 28	22 59.21	- 4 37.1	1.297	2.262	9.1	20.2
10 8	22 56.13	-23 2.8	2.417	3.239	11.7	21.1	10 8	22 53.69	- 5 23.2	1.344	2.253	13.7	20.5
10 18	22 52.64	-23 8.8	2.507	3.230	13.8	21.2	10 18	22 50.79	- 5 53.7	1.410	2.244	17.6	20.7
445468	2010 VZ ₇₇	9 9.9 217°52'	4.9°/16.2 18				47506	2000 AA ₅₈	9 9.9 121°94'	3.5°/ 6.8 18			
8 9	23 31.76	+14 3.3	2.339	3.140	13.2	21.0	8 9	23 36.41	-10 13.8	1.494	2.399	13.9	17.7
8 19	23 27.33	+13 49.1	2.257	3.138	10.7	20.8	8 19	23 31.19	-11 24.6	1.439	2.400	9.8	17.4
8 29	23 21.47	+13 14.8	2.197	3.137	8.1	20.7	8 29	23 23.80	-12 41.9	1.408	2.402	5.6	17.2
9 8	23 14.73	+12 21.6	2.162	3.135	5.8	20.5	9 8	23 15.13	-13 56.9	1.402	2.403	3.6	17.1
9 18	23 7.80	+11 12.7	2.154	3.133	5.0	20.5	9 18	23 6.28	-15 0.6	1.422	2.405	6.6	17.3
9 28	23 1.43	+ 9 53.7	2.174	3.132	6.5	20.6	9 28	22 58.45	-15 46.2	1.468	2.406	10.7	17.5
10 8	22 56.29	+ 8 31.1	2.221	3.130	9.0	20.7	10 8	22 52.62	-16 9.9	1.536	2.407	14.6	17.8
10 18	22 52.85	+ 7 11.4	2.293	3.128	11.7	20.9	10 18	22 49.36	-16 11.5	1.623	2.408	17.8	18.0
98064	2000 RY ₄₈	9 9.9 108°81'	4.5°/13.1 18				514673	2005 UR ₃₄₃	9 9.9 19°77'	3.4°/ 6.9 18			
8 9	23 38.93	+ 6 19.7	1.405	2.265	17.3	18.8	8 9	23 37.34	-13 44.9	1.847	2.746	12.0	20.9
8 19	23 33.18	+ 6 34.0	1.340	2.266	13.4	18.6	8 19	23 31.47	-14 11.8	1.792	2.749	8.5	20.7
8 29	23 25.00	+ 6 26.7	1.295	2.268	9.1	18.4	8 29	23 23.80	-14 39.1	1.761	2.752	5.1	20.6
9 8	23 15.32	+ 5 59.4	1.274	2.269	5.3	18.1	9 8	23 15.12	-15 1.2	1.756	2.755	3.5	20.5
9 18	23 5.32	+ 5 16.5	1.277	2.270	5.2	18.1	9 18	23 6.35	-15 13.3	1.779	2.759	5.8	20.6
9 28	22 56.37	+ 4 25.5	1.306	2.272	8.9	18.4	9 28	22 58.49	-15 11.8	1.828	2.763	9.2	20.8
10 8	22 49.58	+ 3 34.7	1.359	2.273	13.2	18.6	10 8	22 52.35	-14 55.5	1.901	2.767	12.5	21.0
10 18	22 45.62	+ 2 51.5	1.432	2.274	17.0	18.9	10 18	22 48.43	-14 24.7	1.995	2.771	15.3	21.3
12889	1998 QW ₄₂	9 9.9 123°99'	0.4°/10.4 18 R				58812	1998 GM	9 9.9 237°64'	0.3°/ 9.6 18			
8 9	23 33.25	- 1 19.2	2.465	3.333	10.5	18.2	8 9	23 37.71	- 3 57.4	2.005	2.882	12.2	20.0
8 19	23 28.20	- 1 51.9	2.402	3.342	7.6	18.1	8 19	23 31.81	- 4 23.8	1.923	2.869	8.8	19.8
8 29	23 21.86	- 2 33.8	2.364	3.351	4.3	17.9	8 29	23 24.08	- 4 59.8	1.866	2.856	4.9	19.5
9 8	23 14.79	- 3 21.2	2.354	3.360	0.9	17.6	9 8	23 15.19	- 5 41.1	1.836	2.843	0.7	19.2
9 18	23 7.64	- 4 10.0	2.373	3.369	2.7	17.8	9 18	23 5.97	- 6 22.6	1.834	2.828	3.6	19.4
9 28	23 1.08	- 4 55.7	2.421	3.378	6.0	18.0	9 28	22 57.42	- 6 59.1	1.860	2.814	7.7	19.6
10 8	22 55.71	- 5 34.3	2.496	3.386	9.0	18.2	10 8	22 50.37	- 7 26.0	1.912	2.798	11.4	19.8
10 18	22 51.95	- 6 3.2	2.595	3.394	11.5	18.4	10 18	22 45.45	- 7 40.7	1.987	2.783	14.6	20.0
112373	2002 NM ₂₂	9 9.9 23°12'	1.7°/11.1 18				23217	Nayana	9 9.9 163°37'	3.1°/12.6 18			
8 9	23 34.00	+ 1 7.6	1.092	1.991	18.3	18.9	8 9	23 38.43	+ 5 10.5	1.637	2.492	15.5	18.8
8 19	23 29.89	+ 0 44.2	1.044	1.998	13.5	18.7	8 19	23 32.52	+ 4 57.2	1.569	2.496	11.8	18.6
8 29	23 23.21	+ 0 0.9	1.016	2.006	8.0	18.4	8 29	23 24.52	+ 4 24.6	1.524	2.500	7.7	18.4
9 8	23 15.03	- 1 1.4	1.009	2.014	2.6	18.1	9 8	23 15.25	+ 3 35.7	1.503	2.503	3.8	18.1
9 18	23 6.69	- 2 8.4	1.025	2.024	4.4	18.3	9 18	23 5.75	+ 2 36.0	1.510	2.505	4.1	18.2
9 28	22 59.66	- 3 11.3	1.065	2.035	9.9	18.6	9 28	22 57.16	+ 1 32.8	1.543	2.507	8.0	18.4
10 8	22 55.03	- 4 1.4	1.126	2.046	14.8	18.9	10 8	22 50.45	+ 0 33.8	1.602	2.509	12.0	18.6
10 18	22 53.40	- 4 33.6	1.206	2.058	18.9	19.2	10 18	22 46.22	- 0 15.2	1.682	2.510	15.5	18.9
267642	2002 SR ₄₅	9 9.9 304°09'	1.7°/ 8.7 18				69603	1998 FD ₂₉	9 9.9 129°22'	0.1°/ 9.8 18			
8 9	23 36.49	- 6 36.3	1.345	2.249	15.2	20.2	8 9	23 38.42	- 2 11.6	1.632	2.513	14.2	19.6
8 19	23 31.70	- 7 10.1	1.268	2.228	11.0	19.9	8 19	23 32.38	- 2 57.8	1.577	2.525	10.2	19.4
8 29	23 24.34	- 7 55.4	1.213	2.208	6.1	19.6	8 29	23 24.37	- 3 57.0	1.546	2.536	5.7	19.1
9 8	23 15.24	- 8 45.6	1.181	2.187	1.7	19.3	9 8	23 15.22	- 5 3.0	1.540	2.547	0.9	18.8
9 18	23 5.60	- 9 32.5	1.174	2.167	5.5	19.5	9 18	23 5.97	- 6 8.6	1.562	2.558	3.9	19.1
9 28	22 56.84	-10 8.1	1.192	2.148	10.8	19.7	9 28	22 57.74	- 7 6.4	1.612	2.568	8.4	19.4
10 8	22 50.21	-10 26.6	1.232	2.128	15.6	19.9	10 8	22 51.39	- 7 51.1	1.685	2.577	12.4	19.6
10 18	22 46.54	-10 25.5	1.290	2.110	19.8	20.2	10 18	22 47.47	- 8 19.7	1.781	2.586	15.7	19.9
447338	2005 YO ₈₈	9 9.9 226°60'	3.9°/ 5.0 18				331333	2012 BS ₂₂	9 9.9 205°57'	4.1°/ 4.5 18			
8 9	23 32.53	-14 48.1	2.302	3.201	9.9	21.7	8 9	23 32.52	-15 26.7	2.315	3.215	9.8	20.3
8 19	23 27.85	-16 0.3	2.243	3.199	7.1	21.5	8 19	23 27.85	-16 47.0	2.258	3.213	7.1	20.1
8 29	23 21.74	-17 13.5	2.210	3.197	4.6	21.3	8 29	23 21.75	-18 7.9	2.226	3.212	4.7	20.0
9 8	23 14.78	-18 21.4	2.205	3.195	4.0	21.3	9 8	23 14.80	-19 23.0	2.223	3.210	4.3	19.9
9 18	23 7.68	-19 18.4	2.228	3.193	6.0	21.4	9 18	23 7.70	-20 26.3	2.247	3.208	6.3	20.1
9 28	23 1.20	-20 0.0	2.278	3.191	8.8	21.6	9 28	23 1.22	-21 13.1	2.299	3.206	9.0	20.2
10 8	22 56.01	-20 23.9	2.352	3.189	11.4	21.8	10 8	22 56.02	-21 41.2	2.374	3.204	11.6	20.4
10 18	22 52.56	-20 29.7	2.447	3.187	13.7	21.9	10 18	22 52.56	-21 50.5	2.471	3.202	13.8	20.6
416006	2002 CT ₂₄	9 9.9 118°90'	1.9°/ 7.8 17				424024	2006 XK ₄₁	9 9.9 258°28'	3.2°/ 7.0 17			
8 9	23 36.70	- 3 19.5											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
344699	2003 <i>SH</i> ₄₀₆		9 9.9 131°49	7.1/ 2.7	18		142048	2002 <i>QU</i> ₁₈		9 9.9 292°53	3°0/ 7.5	18	
8 9	23 37.18	-22 34.2	1.823	2.724	12.0	20.2	8 9	23 36.36	-9 1.3	1.403	2.309	14.5	20.0
8 19	23 31.48	-23 54.3	1.779	2.727	9.2	20.0	8 19	23 31.49	-9 57.8	1.331	2.292	10.4	19.7
8 29	23 23.86	-25 7.7	1.760	2.730	7.3	19.9	8 29	23 24.18	-11 3.8	1.281	2.276	5.9	19.4
9 8	23 15.14	-26 6.1	1.766	2.732	7.4	20.0	9 8	23 15.27	-12 11.1	1.256	2.260	3.0	19.2
9 18	23 6.35	-26 42.9	1.797	2.735	9.4	20.1	9 18	23 5.90	-13 10.4	1.256	2.243	6.4	19.3
9 28	22 58.52	-26 54.7	1.853	2.737	12.0	20.3	9 28	22 57.45	-13 53.6	1.281	2.227	11.2	19.6
10 8	22 52.51	-26 41.9	1.931	2.739	14.7	20.4	10 8	22 51.07	-14 15.7	1.328	2.211	15.7	19.8
10 18	22 48.83	-26 6.8	2.027	2.741	16.9	20.6	10 18	22 47.51	-14 15.3	1.394	2.196	19.5	20.0
400222	2007 <i>DH</i> ₂₀		9 9.9 135°72	0°2/ 9.6	18		236491	2006 <i>GE</i> ₂		9 9.9 141°81	6°4/ 17.1	18	
8 9	23 33.73	-3 42.9	2.493	3.367	10.2	21.9	8 9	23 36.25	+16 27.1	2.126	2.911	14.8	20.6
8 19	23 28.54	-4 15.1	2.430	3.375	7.3	21.7	8 19	23 30.65	+16 36.3	2.054	2.920	12.3	20.4
8 29	23 22.07	-4 54.7	2.392	3.382	4.0	21.5	8 29	23 23.38	+16 23.1	2.003	2.928	9.6	20.3
9 8	23 14.86	-5 38.1	2.382	3.389	0.6	21.2	9 8	23 15.11	+15 47.7	1.976	2.936	7.3	20.1
9 18	23 7.55	-6 21.0	2.401	3.396	2.9	21.5	9 18	23 6.65	+14 52.8	1.975	2.943	6.4	20.1
9 28	23 0.85	-6 59.3	2.450	3.402	6.2	21.7	9 28	22 58.91	+13 43.7	2.001	2.950	7.6	20.2
10 8	22 55.33	-7 29.6	2.525	3.409	9.1	21.9	10 8	22 52.64	+12 27.7	2.054	2.957	10.0	20.4
10 18	22 51.41	-7 49.7	2.623	3.415	11.6	22.1	10 18	22 48.38	+11 12.0	2.131	2.963	12.5	20.5
341061	2007 <i>HO</i> ₂₁		9 9.9 65°89	0°5/ 10.2	16		163905	2003 <i>SW</i> ₂₂₅		9 9.9 339°01	0°6/ 9.5	18	
8 9	23 39.36	-2 9.9	1.490	2.374	15.2	20.3	8 9	23 32.51	-4 59.2	1.202	2.113	16.0	19.4
8 19	23 33.02	-2 29.4	1.450	2.398	10.9	20.1	8 19	23 28.96	-5 13.8	1.132	2.094	11.6	19.1
8 29	23 24.66	-3 1.2	1.433	2.423	6.1	19.9	8 29	23 22.87	-5 41.2	1.081	2.077	6.5	18.8
9 8	23 15.27	-3 40.1	1.441	2.448	1.2	19.6	9 8	23 15.07	-6 15.9	1.053	2.060	1.1	18.3
9 18	23 5.96	-4 19.8	1.475	2.472	3.8	19.9	9 18	23 6.78	-6 50.4	1.049	2.045	5.0	18.6
9 28	22 57.88	-4 54.1	1.536	2.497	8.4	20.2	9 28	22 59.47	-7 16.9	1.067	2.032	10.6	18.9
10 8	22 51.86	-5 18.3	1.621	2.521	12.3	20.5	10 8	22 54.36	-7 29.3	1.107	2.020	15.6	19.1
10 18	22 48.37	-5 29.8	1.728	2.545	15.6	20.8	10 18	22 52.24	-7 24.3	1.165	2.010	19.8	19.3
94007	2000 <i>XR</i> ₂₅		9 9.9 344°85	8°1/ 14.2	18		340217	2006 <i>AJ</i> ₉₆		9 9.9 153°64	6°4/ 4.3	16	
8 9	23 33.66	+8 23.1	1.088	1.964	20.1	17.3	8 9	23 41.21	-21 44.9	1.859	2.754	12.1	20.6
8 19	23 30.11	+9 45.6	1.017	1.946	16.4	17.0	8 19	23 34.27	-22 38.3	1.812	2.758	9.2	20.4
8 29	23 23.67	+10 45.6	0.963	1.930	12.3	16.7	8 29	23 25.39	-23 25.2	1.789	2.762	6.9	20.3
9 8	23 15.19	+11 19.6	0.930	1.915	8.9	16.5	9 8	23 15.43	-23 58.1	1.792	2.766	6.6	20.3
9 18	23 6.02	+11 27.0	0.917	1.903	8.4	16.4	9 18	23 5.43	-24 11.8	1.822	2.770	8.5	20.4
9 28	22 57.82	+11 12.3	0.926	1.893	11.5	16.5	9 28	22 56.48	-24 3.5	1.877	2.773	11.3	20.6
10 8	22 52.09	+10 44.4	0.955	1.884	15.7	16.7	10 8	22 49.45	-23 34.0	1.955	2.776	14.1	20.8
10 18	22 49.76	+10 13.2	1.002	1.878	19.9	17.0	10 18	22 44.84	-22 45.8	2.053	2.778	16.4	21.0
437971	2003 <i>OE</i> ₄		9 9.9 0°39	9°4/ 16.3	18		447681	2006 <i>YX</i> ₃₈		9 9.9 279°56	4°9/ 4.2	18	
8 9	23 36.45	+14 0.0	1.306	2.140	19.8	19.3	8 9	23 33.63	-17 11.2	2.076	2.978	10.7	20.9
8 19	23 31.68	+15 18.4	1.241	2.137	16.6	19.1	8 19	23 28.84	-18 26.7	2.016	2.971	7.8	20.7
8 29	23 24.32	+16 10.1	1.195	2.136	13.2	18.9	8 29	23 22.39	-19 41.7	1.980	2.964	5.5	20.6
9 8	23 15.27	+16 31.7	1.169	2.135	10.3	18.7	9 8	23 14.96	-20 49.1	1.972	2.956	5.1	20.6
9 18	23 5.77	+16 23.3	1.165	2.136	9.4	18.7	9 18	23 7.33	-21 42.3	1.991	2.949	7.2	20.7
9 28	22 57.28	+15 49.8	1.185	2.138	11.1	18.8	9 28	23 0.39	-22 16.8	2.036	2.941	10.1	20.8
10 8	22 51.04	+15 0.9	1.226	2.141	14.2	19.0	10 8	22 54.91	-22 30.5	2.104	2.934	12.9	21.0
10 18	22 47.82	+14 6.6	1.287	2.145	17.5	19.2	10 18	22 51.40	-22 24.0	2.192	2.927	15.3	21.2
421496	2014 <i>OO</i> ₆₇		9 9.9 328°17	1°1/ 10.9	17		438936	2010 <i>GB</i> ₁₀₂		9 9.9 114°04	7°3/ 2.5	18	
8 9	23 35.59	-0 47.8	2.170	3.038	11.7	21.6	8 9	23 38.77	-24 50.8	1.940	2.835	11.7	21.1
8 19	23 30.10	-0 47.8	2.097	3.035	8.6	21.4	8 19	23 32.47	-26 1.6	1.903	2.844	9.2	21.0
8 29	23 23.04	-0 57.6	2.048	3.033	5.1	21.2	8 29	23 24.36	-27 3.4	1.890	2.852	7.6	20.9
9 8	23 15.04	-1 14.5	2.025	3.030	1.6	20.9	9 8	23 15.26	-27 48.5	1.903	2.861	7.6	20.9
9 18	23 6.84	-1 35.2	2.031	3.028	3.0	21.0	9 18	23 6.16	-28 11.9	1.941	2.869	9.4	21.1
9 28	22 59.29	-1 55.6	2.066	3.026	6.6	21.3	9 28	22 58.08	-28 11.0	2.005	2.878	11.8	21.2
10 8	22 53.11	-2 12.0	2.126	3.024	9.9	21.5	10 8	22 51.80	-27 46.9	2.090	2.885	14.1	21.4
10 18	22 48.82	-2 21.2	2.210	3.022	12.8	21.7	10 18	22 47.81	-27 2.5	2.194	2.893	16.2	21.6
279845	2000 <i>VY</i> ₅₉		9 9.9 351°80	7°1/ 4.7	18		361900	2008 <i>GC</i> ₁₇		9 9.9 127°10	3°1/ 6.0	18	
8 9	23 38.75	-20 3.9	1.386	2.297	14.3	19.9	8 9	23 34.48	-13 39.2	2.534	3.426	9.4	21.7
8 19	23 33.05	-20 57.4	1.337	2.294	10.8	19.7	8 19	23 29.05	-14 34.5	2.485	3.438	6.7	21.6
8 29	23 24.90	-21 45.4	1.309	2.291	7.8	19.5	8 29	23 22.35	-15 30.3	2.462	3.450	4.1	21.4
9 8	23 15.34	-22 18.3	1.305	2.289	7.3	19.5	9 8	23 14.94	-16 21.7	2.468	3.462	3.1	21.4
9 18	23 5.64	-22 29.2	1.326	2.287	9.7	19.6	9 18	23 7.49	-17 4.2	2.502	3.474	5.0	21.5
9 28	22 57.19	-22 14.3	1.370	2.286	13.2	19.8	9 28	23 0.68	-17 34.2	2.565	3.485	7.6	21.7
10 8	22 51.04	-21 34.4	1.434	2.285	16.6	20.1	10 8	22 55.11	-17 50.0	2.653	3.496	10.1	21.9
10 18	22 47.78	-20 32.8	1.517	2.285	19.6	20.3	10 18	22 51.17	-17 51.3	2.763	3.506	12.2	22.1
477222	2009 <i>PL</i> ₁₁		9 9.9 5°76	1°5/ 10.9	17		268897	2007 <i>BO</i> ₄₂		9 9.9 232°00	0°1/ 9.8	18	
8 9	23 29.83	-0 25.0	0.891	1.810	19.4	19.6	8 9	23 36.74	-2 18.5	1.863	2.740	12.9	21.3
8 19	23 27.31	-0 34.3	0.845	1.809	14.3	19.3	8 19	23 31.24	-3 1.4	1.784	2.730	9.4	21.1
8 29	23 21.96	-1 5.8	0.816	1.810	8.4	19.0	8 29	23 23.84	-3 57.0	1.728	2.718	5.3	20.8
9 8	23 14.90	-1 53.3	0.808	1.814	2.4	18.7	9 8	23 15.21	-5 0.3	1.699	2.706	0.8	20.5
9 18	23 7.59	-2 47.3	0.820	1.819	4.8	18.9	9 18	23 6.26	-6 5.0	1.699	2.694	3.7	20.7
9 28	23 1.67	-3 36.7	0.853	1.827	10.8	19.2	9 28	22 58.00	-7 4.2	1.726	2.681	8.1	20.9
10 8	22 58.37	-4 12.5	0.905	1.837	16.2	19.6	10 8	22 51.33	-7 52.2	1.778	2.667	12.0	21.1
10 18	22 58.28	-4 29.5	0.975	1.848	20.6	19.9	10 18	22 46.87	-8 25.4	1.852	2.653	15.4	21.3
207330	2005 <i>GS</i> ₁₄₇		9 9.9 87°11	0°8/ 10.7	18		490916	2011 <i>CZ</i> ₁₃		9 9.9 266°72	0°4/ 10.2		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
380718	2005 <i>QD</i> ₂₀		9 9.9 348°93	2°9/11.2	18		282111	2000 <i>WW</i> ₁₂₃		9 9.9 318°88	4°2/13.5	18	
8 9	23 36.07	- 1 52.1	0.964	1.875	19.1	19.2	8 9	23 33.76	+ 7 15.3	1.525	2.384	16.3	19.9
8 19	23 31.96	- 0 54.4	0.902	1.861	14.3	18.8	8 19	23 29.45	+ 7 10.3	1.448	2.374	12.7	19.6
8 29	23 24.73	- 0 9.8	0.858	1.849	8.8	18.5	8 29	23 22.98	+ 6 42.8	1.392	2.364	8.7	19.4
9 8	23 15.39	+ 0 22.6	0.835	1.839	3.5	18.2	9 8	23 15.10	+ 5 54.7	1.359	2.355	5.0	19.1
9 18	23 5.50	+ 0 45.3	0.833	1.831	5.3	18.3	9 18	23 6.84	+ 4 50.9	1.352	2.346	4.8	19.1
9 28	22 56.88	+ 1 2.8	0.853	1.826	11.0	18.5	9 28	22 59.37	+ 3 39.4	1.369	2.337	8.4	19.3
10 8	22 51.04	+ 1 21.0	0.892	1.822	16.5	18.8	10 8	22 53.73	+ 2 29.2	1.411	2.329	12.5	19.5
10 18	22 48.82	+ 1 44.5	0.949	1.820	21.2	19.1	10 18	22 50.62	+ 1 27.9	1.474	2.321	16.3	19.8
314648	2006 <i>KH</i> ₁₁₂		9 9.9 164°60	0°6/ 9.4	17		392202	2009 <i>SV</i> ₂₆₂		9 9.9 330°29	0°4/ 9.1	17	
8 9	23 39.30	- 4 7.8	1.428	2.319	15.3	21.0	8 9	23 26.94	- 5 11.9	4.096	4.971	6.5	21.2
8 19	23 33.36	- 4 41.1	1.367	2.320	11.0	20.8	8 19	23 23.41	- 5 44.2	4.023	4.969	4.6	21.1
8 29	23 25.10	- 5 26.8	1.329	2.322	6.1	20.5	8 29	23 19.14	- 6 20.5	3.977	4.968	2.5	21.0
9 8	23 15.41	- 6 18.5	1.316	2.323	1.0	20.2	9 8	23 14.45	- 6 58.7	3.960	4.966	0.5	20.8
9 18	23 5.51	- 7 8.9	1.330	2.325	4.6	20.4	9 18	23 9.68	- 7 36.2	3.972	4.965	2.0	20.9
9 28	22 56.69	- 7 50.6	1.369	2.326	9.6	20.7	9 28	23 5.21	- 8 10.6	4.015	4.964	4.1	21.1
10 8	22 50.02	- 8 18.2	1.431	2.326	14.0	21.0	10 8	23 1.37	- 8 39.7	4.085	4.962	6.1	21.2
10 18	22 46.10	- 8 29.2	1.513	2.327	17.6	21.3	10 18	22 58.44	- 9 1.9	4.180	4.961	7.8	21.3
490817	2010 <i>VF</i> ₁₄₂		9 9.9 322°09	2°3/ 5.6	16		148747	2001 <i>TR</i> ₁₄₃		9 9.9 24°49	2°0/ 8.2	17	
8 9	23 27.81	-15 1.0	4.012	4.904	6.2	21.2	8 9	23 35.23	- 6 38.7	1.401	2.304	14.7	19.9
8 19	23 24.04	-15 38.7	3.948	4.900	4.4	21.0	8 19	23 30.45	- 7 35.9	1.347	2.307	10.4	19.6
8 29	23 19.48	-16 16.3	3.910	4.897	2.8	20.9	8 29	23 23.46	- 8 43.6	1.315	2.310	5.7	19.4
9 8	23 14.49	-16 51.1	3.902	4.894	2.3	20.9	9 8	23 15.17	- 9 53.8	1.307	2.313	2.0	19.1
9 18	23 9.41	-17 20.4	3.923	4.890	3.5	21.0	9 18	23 6.70	-10 57.6	1.325	2.316	5.5	19.4
9 28	23 4.66	-17 42.1	3.972	4.887	5.3	21.1	9 28	22 59.28	-11 47.3	1.369	2.320	10.1	19.7
10 8	23 0.59	-17 54.9	4.048	4.884	7.1	21.2	10 8	22 53.90	-12 18.0	1.434	2.324	14.3	19.9
10 18	22 57.49	-17 57.9	4.147	4.881	8.6	21.3	10 18	22 51.14	-12 28.0	1.520	2.328	17.8	20.2
70950	1999 <i>WU</i> ₁₈		9 9.9 55°35	1°5/ 8.7	18		23854	Rickschaffer		9 9.9 61°30	3°4/ 7.3	18	
8 9	23 36.30	- 6 21.2	1.544	2.441	14.0	19.9	8 9	23 37.85	- 9 33.1	1.284	2.192	15.4	18.0
8 19	23 30.92	- 7 2.3	1.498	2.454	9.9	19.7	8 19	23 32.26	-10 38.4	1.248	2.210	10.8	17.8
8 29	23 23.58	- 7 51.9	1.474	2.468	5.4	19.4	8 29	23 24.39	-11 49.7	1.234	2.228	6.1	17.6
9 8	23 15.15	- 8 43.6	1.475	2.481	1.5	19.2	9 8	23 15.31	-12 57.4	1.244	2.246	3.4	17.5
9 18	23 6.68	- 9 30.3	1.503	2.495	4.7	19.5	9 18	23 6.28	-13 52.7	1.279	2.265	6.6	17.7
9 28	22 59.27	-10 6.1	1.557	2.509	9.0	19.8	9 28	22 58.59	-14 28.9	1.339	2.284	11.0	18.0
10 8	22 53.77	-10 26.9	1.634	2.523	12.9	20.0	10 8	22 53.18	-14 43.3	1.421	2.302	15.0	18.3
10 18	22 50.68	-10 31.3	1.732	2.538	16.1	20.3	10 18	22 50.54	-14 36.4	1.522	2.321	18.2	18.6
265650	2005 <i>TD</i> ₁₁₈		9 9.9 127°84	0°1/ 9.9	17		8008	1988 <i>TQ</i> ₄		9 9.9 326°37	0°5/ 9.4	18	
8 9	23 38.46	- 2 47.7	1.797	2.674	13.3	21.0	8 9	23 33.95	- 3 58.1	1.730	2.620	13.1	17.2
8 19	23 32.29	- 3 20.3	1.740	2.686	9.5	20.8	8 19	23 29.29	- 4 35.6	1.661	2.614	9.4	17.0
8 29	23 24.30	- 4 3.7	1.708	2.698	5.3	20.6	8 29	23 22.76	- 5 24.2	1.616	2.608	5.2	16.8
9 8	23 15.27	- 4 52.9	1.702	2.709	0.9	20.3	9 8	23 15.07	- 6 18.7	1.596	2.603	0.8	16.4
9 18	23 6.16	- 5 42.1	1.724	2.719	3.6	20.5	9 18	23 7.14	- 7 12.6	1.603	2.598	4.0	16.7
9 28	22 57.97	- 6 25.3	1.774	2.730	7.8	20.8	9 28	22 59.99	- 7 59.3	1.637	2.593	8.3	16.9
10 8	22 51.52	- 6 57.8	1.849	2.739	11.6	21.0	10 8	22 54.48	- 8 33.9	1.695	2.589	12.2	17.1
10 18	22 47.32	- 7 17.2	1.946	2.748	14.7	21.3	10 18	22 51.19	- 8 53.3	1.774	2.585	15.5	17.4
119501	2001 <i>UL</i> ₁₁₉		9 9.9 130°90	1°7/ 8.4	18		474793	2005 <i>QD</i> ₁₈₇		9 9.9 324°69	1°6/ 8.8	18	
8 9	23 37.24	- 6 54.5	1.667	2.560	13.3	19.6	8 9	23 34.76	- 6 38.0	1.190	2.102	16.1	20.8
8 19	23 31.60	- 7 38.9	1.609	2.564	9.5	19.4	8 19	23 30.71	- 7 3.4	1.117	2.080	11.7	20.4
8 29	23 23.99	- 8 31.5	1.575	2.569	5.2	19.2	8 29	23 23.94	- 7 40.8	1.063	2.059	6.5	20.1
9 8	23 15.23	- 9 25.9	1.567	2.572	1.7	18.9	9 8	23 15.30	- 8 23.3	1.032	2.039	1.7	19.7
9 18	23 6.32	-10 15.3	1.586	2.576	4.8	19.2	9 18	23 6.08	- 9 2.8	1.025	2.020	5.7	19.9
9 28	22 58.36	-10 53.6	1.631	2.580	9.0	19.4	9 28	22 57.82	- 9 30.7	1.041	2.001	11.4	20.2
10 8	22 52.21	-11 16.9	1.700	2.583	12.8	19.7	10 8	22 51.87	- 9 41.2	1.078	1.984	16.5	20.4
10 18	22 48.43	-11 23.6	1.791	2.587	16.0	19.9	10 18	22 49.07	- 9 31.5	1.132	1.968	20.9	20.7
134058	2004 <i>XX</i> ₃₈		9 9.9 248°30	2°4/ 7.1	18		393761	2005 <i>GO</i> ₆₆		9 9.9 235°63	1°1/11.1	18	
8 9	23 33.51	- 7 19.2	1.878	2.773	12.0	19.9	8 9	23 34.22	+ 1 7.8	2.033	2.899	12.5	22.0
8 19	23 28.91	- 8 47.7	1.806	2.763	8.5	19.7	8 19	23 29.29	+ 0 32.6	1.955	2.892	9.2	21.8
8 29	23 22.53	-10 26.4	1.759	2.753	4.7	19.4	8 29	23 22.69	- 0 16.6	1.900	2.885	5.5	21.5
9 8	23 15.01	-12 7.5	1.740	2.743	2.5	19.3	9 8	23 15.06	- 1 15.9	1.872	2.878	1.7	21.3
9 18	23 7.21	-13 42.4	1.748	2.732	5.4	19.4	9 18	23 7.18	- 2 20.0	1.873	2.870	3.1	21.4
9 28	23 0.08	-15 3.2	1.784	2.721	9.2	19.6	9 28	22 59.92	- 3 22.7	1.901	2.862	7.0	21.6
10 8	22 54.47	-16 4.7	1.844	2.710	12.8	19.8	10 8	22 54.08	- 4 17.9	1.955	2.853	10.6	21.8
10 18	22 50.95	-16 44.5	1.925	2.698	15.9	20.0	10 18	22 50.20	- 5 1.6	2.032	2.845	13.8	22.0
313385	2002 <i>NZ</i> ₂₀		9 9.9 64°41	2°9/ 6.4	18		151508	2002 <i>NW</i> ₃₃		9 9.9 15°10	4°3/12.6	18	
8 9	23 32.95	-10 19.3	2.113	3.009	10.8	19.9	8 9	23 32.95	+ 3 17.6	0.872	1.779	21.0	18.9
8 19	23 28.08	-11 42.9	2.079	3.036	7.5	19.7	8 19	23 29.55	+ 3 47.2	0.832	1.786	15.9	18.6
8 29	23 21.84	-13 9.5	2.071	3.063	4.3	19.6	8 29	23 23.21	+ 3 50.8	0.808	1.795	10.4	18.4
9 8	23 14.87	-14 32.0	2.092	3.091	2.9	19.6	9 8	23 15.15	+ 3 31.5	0.804	1.806	5.3	18.1
9 18	23 7.93	-15 44.3	2.140	3.118	5.2	19.8	9 18	23 6.96	+ 2 56.0	0.821	1.818	5.6	18.2
9 28	23 1.78	-16 41.4	2.216	3.144	8.2	20.0	9 28	23 0.30	+ 2 14.4	0.858	1.833	10.5	18.6
10 8	22 57.02	-17 20.7	2.317	3.171	11.0	20.2	10 8	22 56.41	+ 1 37.0	0.915	1.850	15.6	18.9
10 18	22 54.05	-17 41.9	2.440	3.198	13.3	20.4	10 18	22 55.86	+ 1 11.1	0.989	1.868	19.9	19.2
270256	2001 <i>UW</i> ₉₇		9 9.9 356°51	0°9/10.6	18		282783	2006 <i>KM</i> ₂₆		9 9.			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
339120	2004 <i>RE</i> ₂₄₉		9 9.9 247°89	16°2/24.3	17		232176	2002 <i>EK</i> ₅₈		9 9.9 236°64	0°1/10.1	18	
8 9	23 38.24	+30 43.6	1.306	2.036	24.9	20.4	8 9	23 34.86	-1 6.4	1.944	2.819	12.6	21.2
8 19	23 33.52	+32 1.5	1.229	2.027	22.8	20.2	8 19	23 29.86	-1 58.7	1.864	2.809	9.1	21.0
8 29	23 25.69	+32 38.4	1.166	2.018	20.3	20.0	8 29	23 23.08	-3 4.8	1.809	2.798	5.2	20.8
9 8	23 15.62	+32 25.7	1.118	2.009	18.1	19.8	9 8	23 15.18	-4 19.7	1.780	2.786	0.9	20.4
9 18	23 4.72	+31 19.1	1.088	1.999	16.5	19.7	9 18	23 6.98	-5 36.8	1.779	2.775	3.5	20.6
9 28	22 54.78	+29 22.6	1.077	1.989	16.3	19.6	9 28	22 59.41	-6 49.1	1.806	2.763	7.7	20.8
10 8	22 47.44	+26 49.3	1.086	1.979	17.6	19.7	10 8	22 53.33	-7 50.2	1.859	2.750	11.5	21.0
10 18	22 43.70	+23 57.2	1.115	1.968	20.0	19.8	10 18	22 49.31	-8 36.2	1.935	2.737	14.7	21.2
353012	2009 <i>BP</i> ₁₆₁		9 9.9 132°41	2°9/13.2	18		309506	2007 <i>VK</i> ₃₃₀		9 9.9 330°72	4°3/5.9	18	
8 9	23 35.80	+6 20.1	2.242	3.079	12.5	21.2	8 9	23 35.46	-14 24.6	1.734	2.638	12.3	20.0
8 19	23 30.18	+6 9.3	2.175	3.090	9.6	21.1	8 19	23 30.38	-15 19.5	1.674	2.633	8.8	19.8
8 29	23 23.08	+5 43.5	2.132	3.100	6.4	20.9	8 29	23 23.38	-16 15.7	1.639	2.628	5.6	19.6
9 8	23 15.12	+5 4.9	2.115	3.110	3.5	20.7	9 8	23 15.22	-17 5.9	1.629	2.624	4.4	19.5
9 18	23 7.04	+4 17.4	2.127	3.120	3.5	20.7	9 18	23 6.87	-17 43.4	1.646	2.620	6.8	19.7
9 28	22 59.64	+3 25.9	2.167	3.129	6.2	20.9	9 28	22 59.39	-18 3.3	1.688	2.616	10.3	19.9
10 8	22 53.60	+2 35.8	2.235	3.138	9.3	21.1	10 8	22 53.65	-18 3.4	1.753	2.612	13.7	20.1
10 18	22 49.39	+1 51.7	2.326	3.146	12.0	21.3	10 18	22 50.21	-17 44.2	1.838	2.608	16.6	20.3
225090	2007 <i>TH</i> ₁₀		9 9.9 330°69	2°1/8.2	18		520208	2014 <i>DE</i> ₁₅₁		9 9.9 104°80	0°9/10.8	18	
8 9	23 37.22	-8 57.6	1.690	2.586	13.0	19.9	8 9	23 38.00	-1 0.1	1.999	2.867	12.6	21.8
8 19	23 31.64	-9 25.0	1.626	2.583	9.3	19.6	8 19	23 31.84	-1 12.1	1.943	2.882	9.1	21.7
8 29	23 24.07	-9 58.0	1.586	2.580	5.1	19.4	8 29	23 24.03	-1 34.6	1.910	2.896	5.3	21.5
9 8	23 15.30	-10 30.9	1.572	2.577	2.1	19.2	9 8	23 15.32	-2 4.2	1.904	2.910	1.5	21.2
9 18	23 6.33	-10 58.1	1.584	2.574	5.0	19.4	9 18	23 6.54	-2 36.6	1.927	2.924	3.1	21.4
9 28	22 58.25	-11 14.5	1.623	2.571	9.1	19.6	9 28	22 58.60	-3 7.0	1.978	2.937	6.9	21.6
10 8	22 51.97	-11 16.9	1.686	2.569	12.9	19.8	10 8	22 52.23	-3 31.2	2.055	2.950	10.3	21.9
10 18	22 48.07	-11 4.4	1.769	2.566	16.1	20.1	10 18	22 47.90	-3 46.3	2.155	2.963	13.2	22.1
255374	2005 <i>WY</i> ₁₁₅		9 9.9 251°74	0°6/9.2	18		491847	2013 <i>AS</i> ₈₂		9 9.9 303°89	0°2/10.1	16	
8 9	23 32.96	-4 17.7	2.512	3.389	10.0	21.3	8 9	23 35.35	-2 28.4	1.610	2.497	14.1	22.0
8 19	23 28.17	-5 3.1	2.426	3.373	7.2	21.1	8 19	23 30.70	-2 52.7	1.517	2.467	10.3	21.7
8 29	23 22.01	-5 56.9	2.366	3.357	3.9	20.9	8 29	23 23.80	-3 31.1	1.446	2.437	5.9	21.4
9 8	23 14.97	-6 55.0	2.334	3.341	0.7	20.6	9 8	23 15.34	-4 19.1	1.400	2.407	1.1	21.0
9 18	23 7.69	-7 52.8	2.331	3.324	3.2	20.8	9 18	23 6.27	-5 10.6	1.381	2.377	4.1	21.2
9 28	23 0.88	-8 45.3	2.357	3.307	6.6	21.0	9 28	22 57.80	-5 58.5	1.387	2.348	9.1	21.4
10 8	22 55.19	-9 28.4	2.410	3.290	9.7	21.1	10 8	22 51.06	-6 35.9	1.417	2.318	13.7	21.6
10 18	22 51.09	-9 59.4	2.486	3.272	12.3	21.3	10 18	22 46.85	-6 58.5	1.468	2.289	17.7	21.8
274074	2007 <i>XO</i> ₃₃		9 9.9 314°20	4°6/13.2	18		483231	2015 <i>RW</i> ₇₃		9 9.9 264°42	3°8/6.4	18	
8 9	23 37.37	+6 13.0	1.304	2.171	18.0	20.3	8 9	23 38.63	-16 3.8	2.183	3.075	10.7	21.4
8 19	23 32.33	+6 27.1	1.234	2.164	14.0	20.0	8 19	23 32.29	-16 28.6	2.120	3.072	7.7	21.2
8 29	23 24.73	+6 18.3	1.184	2.158	9.5	19.8	8 29	23 24.30	-16 51.8	2.082	3.069	4.9	21.0
9 8	23 15.44	+5 47.9	1.156	2.152	5.5	19.5	9 8	23 15.38	-17 8.4	2.072	3.066	3.8	21.0
9 18	23 5.71	+5 0.4	1.152	2.147	5.4	19.5	9 18	23 6.33	-17 14.5	2.090	3.062	5.7	21.1
9 28	22 56.99	+4 4.0	1.173	2.141	9.4	19.7	9 28	22 58.06	-17 7.1	2.136	3.059	8.7	21.3
10 8	22 50.48	+3 8.1	1.217	2.136	14.0	20.0	10 8	22 51.31	-16 45.4	2.206	3.056	11.6	21.5
10 18	22 46.96	+2 20.6	1.281	2.131	18.1	20.2	10 18	22 46.57	-16 10.0	2.298	3.053	14.1	21.6
220262	2002 <i>YW</i> ₁₈		9 9.9 242°22	1°0/9.0	18		488280	2016 <i>TD</i> ₈₇		9 9.9 309°69	4°0/6.2	18	
8 9	23 36.76	-4 36.8	1.782	2.668	13.0	20.6	8 9	23 36.24	-13 53.7	1.801	2.703	12.1	21.0
8 19	23 31.36	-5 25.8	1.705	2.656	9.3	20.4	8 19	23 30.87	-14 46.5	1.742	2.700	8.6	20.8
8 29	23 23.97	-6 26.2	1.651	2.643	5.1	20.1	8 29	23 23.63	-15 40.8	1.708	2.697	5.3	20.6
9 8	23 15.31	-7 32.2	1.624	2.630	1.1	19.8	9 8	23 15.28	-16 29.6	1.699	2.695	4.1	20.5
9 18	23 6.30	-8 36.9	1.624	2.617	4.3	20.0	9 18	23 6.76	-17 6.7	1.717	2.692	6.5	20.6
9 28	22 58.02	-9 33.1	1.651	2.603	8.7	20.3	9 28	22 59.09	-17 27.2	1.761	2.690	9.9	20.8
10 8	22 51.39	-10 15.4	1.704	2.588	12.7	20.5	10 8	22 53.12	-17 29.1	1.829	2.687	13.2	21.0
10 18	22 47.07	-10 40.8	1.777	2.574	16.1	20.7	10 18	22 49.41	-17 12.6	1.917	2.685	16.1	21.2
516950	2012 <i>BL</i> ₁₅₆		9 9.9 148°83	3°1/13.6	18		119440	2001 <i>TN</i> ₁₄₀		9 9.9 344°64	4°1/6.6	18	
8 9	23 33.77	+7 8.4	2.466	3.298	11.7	21.7	8 9	23 27.44	-8 42.2	0.983	1.915	16.7	18.9
8 19	23 28.69	+7 5.8	2.391	3.301	9.0	21.5	8 19	23 25.64	-10 3.0	0.924	1.899	11.9	18.5
8 29	23 22.26	+6 49.3	2.340	3.304	6.2	21.3	8 29	23 21.16	-11 38.4	0.885	1.883	6.7	18.2
9 8	23 15.01	+6 20.3	2.315	3.306	3.7	21.2	9 8	23 14.91	-13 16.3	0.867	1.870	4.2	18.0
9 18	23 7.60	+5 41.9	2.318	3.309	3.5	21.2	9 18	23 8.22	-14 42.5	0.871	1.859	8.2	18.2
9 28	23 0.75	+4 58.3	2.350	3.311	5.8	21.3	9 28	23 2.65	-15 44.6	0.895	1.849	13.6	18.5
10 8	22 55.08	+4 14.3	2.409	3.313	8.6	21.5	10 8	22 59.49	-16 15.7	0.938	1.842	18.6	18.7
10 18	22 51.05	+3 34.2	2.492	3.315	11.2	21.7	10 18	22 59.49	-16 14.3	0.997	1.837	22.8	19.0
452054	2014 <i>OG</i> ₂₇₄		9 9.9 46°51	2°8/7.2	18		22165	Kathydouglas		9 9.9 231°37	0°8/10.6	18	R
8 9	23 36.05	-12 23.3	2.088	2.983	11.0	21.0	8 9	23 38.97	-1 1.5	1.600	2.477	14.7	19.6
8 19	23 30.43	-12 52.7	2.034	2.989	7.8	20.8	8 19	23 33.11	-1 21.4	1.526	2.470	10.8	19.4
8 29	23 23.24	-13 23.6	2.004	2.995	4.5	20.6	8 29	23 25.03	-1 55.4	1.474	2.463	6.3	19.1
9 8	23 15.18	-13 50.9	2.002	3.002	2.8	20.5	9 8	23 15.53	-2 39.4	1.448	2.455	1.5	18.8
9 18	23 7.05	-14 10.4	2.027	3.009	5.0	20.6	9 18	23 5.67	-3 27.3	1.449	2.446	3.8	18.9
9 28	22 59.71	-14 18.4	2.080	3.016	8.2	20.9	9 28	22 56.67	-4 12.3	1.477	2.437	8.6	19.2
10 8	22 53.87	-14 13.1	2.157	3.023	11.2	21.1	10 8	22 49.58	-4 48.2	1.529	2.428	13.0	19.4
10 18	22 49.98	-13 54.6	2.257	3.030	13.8	21.3	10 18	22 45.05	-5 10.9	1.602	2.419	16.7	19.6
166167	2002 <i>EY</i> ₄₄		9 9.9 273°63	0°6/10.3	18		120336	2004 <i>PX</i> ₅₃		9 9.9 10°30	2°2/7.3	18	
8 9	23 39.91	-2 24.2											

EPHEMERIDES

9 9.9

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
511060	2013 <i>SK</i> ₆₄		9 9.9 247°49	2°3/ 8.3 18			444606	2006 <i>UJ</i> ₂₅₄		9 9.9 309°77	0°4/10.3 18		
8 9	23 42.05	- 9 38.4	1.656	2.546	13.6	21.5	8 9	23 33.71	- 1 25.9	1.889	2.768	12.7	21.8
8 19	23 35.31	-10 0.1	1.580	2.534	9.7	21.2	8 19	23 29.03	- 1 58.0	1.817	2.762	9.2	21.6
8 29	23 26.26	-10 26.8	1.528	2.521	5.5	21.0	8 29	23 22.63	- 2 42.3	1.767	2.757	5.3	21.4
9 8	23 15.74	-10 52.9	1.503	2.507	2.3	20.7	9 8	23 15.15	- 3 34.7	1.744	2.751	1.1	21.1
9 18	23 4.84	-11 12.4	1.505	2.494	5.3	20.9	9 18	23 7.44	- 4 29.4	1.749	2.746	3.3	21.2
9 28	22 54.83	-11 20.4	1.533	2.479	9.7	21.1	9 28	23 0.41	- 5 20.4	1.780	2.740	7.5	21.5
10 8	22 46.78	-11 14.0	1.586	2.465	13.8	21.4	10 8	22 54.89	- 6 2.2	1.837	2.735	11.2	21.7
10 18	22 41.40	-10 52.4	1.660	2.450	17.3	21.6	10 18	22 51.42	- 6 31.3	1.916	2.730	14.4	21.9
474200	2000 <i>DT</i> ₁₇		9 9.9 190°69	0°1/ 9.9 18			223164	2002 <i>XD</i> ₈₆		9 9.9 271°11	1°1/10.8 18		
8 9	23 39.53	- 4 15.8	2.396	3.263	10.8	21.6	8 9	23 38.11	- 0 35.9	1.617	2.494	14.6	20.5
8 19	23 32.82	- 4 21.5	2.321	3.261	7.8	21.4	8 19	23 32.58	- 0 48.0	1.535	2.478	10.8	20.3
8 29	23 24.59	- 4 33.8	2.271	3.260	4.4	21.2	8 29	23 24.80	- 1 14.4	1.475	2.462	6.4	20.0
9 8	23 15.44	- 4 49.7	2.250	3.257	0.7	21.0	9 8	23 15.54	- 1 51.4	1.441	2.446	1.8	19.7
9 18	23 6.12	- 5 6.0	2.259	3.254	3.0	21.1	9 18	23 5.81	- 2 33.8	1.433	2.430	3.8	19.8
9 28	22 57.44	- 5 19.0	2.298	3.251	6.5	21.4	9 28	22 56.84	- 3 14.8	1.451	2.414	8.6	20.0
10 8	22 50.10	- 5 26.1	2.364	3.247	9.7	21.6	10 8	22 49.70	- 3 48.4	1.495	2.397	13.0	20.2
10 18	22 44.61	- 5 25.1	2.454	3.243	12.4	21.7	10 18	22 45.12	- 4 9.9	1.559	2.380	16.8	20.4
80578	2000 <i>AJ</i> ₁₂₁		9 9.9 164°92	3°9/13.3 18			76493	2000 <i>GZ</i> ₉		9 9.9 328°83	2°0/ 8.7 18		
8 9	23 37.74	+ 6 49.0	1.672	2.520	15.5	19.2	8 9	23 38.03	- 9 23.4	1.412	2.316	14.6	18.4
8 19	23 32.09	+ 6 46.2	1.602	2.523	12.0	19.0	8 19	23 32.74	- 9 26.2	1.337	2.297	10.5	18.1
8 29	23 24.38	+ 6 23.4	1.555	2.525	8.1	18.7	8 29	23 24.97	- 9 34.0	1.284	2.279	5.9	17.8
9 8	23 15.42	+ 5 42.8	1.531	2.526	4.6	18.5	9 8	23 15.57	- 9 41.6	1.255	2.261	2.0	17.5
9 18	23 6.19	+ 4 49.0	1.535	2.528	4.5	18.5	9 18	23 5.72	- 9 43.3	1.252	2.244	5.4	17.7
9 28	22 57.83	+ 3 48.9	1.565	2.529	7.9	18.7	9 28	22 56.79	- 9 34.4	1.273	2.229	10.3	17.9
10 8	22 51.29	+ 2 50.3	1.620	2.530	11.7	19.0	10 8	22 49.97	- 9 11.9	1.317	2.214	14.8	18.2
10 18	22 47.16	+ 1 59.4	1.698	2.531	15.2	19.2	10 18	22 46.00	- 8 35.1	1.381	2.200	18.7	18.4
17181	1999 <i>UM</i> ₃		9 9.9 230°59	3°0/ 5.8 18			477766	2011 <i>AQ</i> ₂₄		9 9.9 204°00	2°5/13.4 17		
8 9	23 39.25	-13 30.6	2.931	3.809	8.7	22.2	8 9	23 32.90	+ 6 26.3	3.007	3.835	9.9	22.3
8 19	23 32.58	-14 39.4	2.842	3.788	6.3	22.0	8 19	23 27.93	+ 6 16.3	2.921	3.830	7.6	22.1
8 29	23 24.47	-15 50.8	2.780	3.766	3.9	21.9	8 29	23 21.82	+ 5 54.7	2.860	3.825	5.2	21.9
9 8	23 15.44	-16 59.4	2.750	3.742	3.1	21.8	9 8	23 15.02	+ 5 23.1	2.827	3.820	3.0	21.8
9 18	23 6.10	-18 0.3	2.750	3.717	4.9	21.9	9 18	23 8.05	+ 4 44.1	2.823	3.815	2.8	21.8
9 28	22 57.17	-18 49.2	2.781	3.691	7.5	22.0	9 28	23 1.50	+ 4 1.2	2.849	3.809	5.0	21.9
10 8	22 49.31	-19 23.5	2.840	3.663	10.1	22.1	10 8	22 55.90	+ 3 18.2	2.903	3.803	7.5	22.1
10 18	22 43.03	-19 42.2	2.921	3.633	12.3	22.3	10 18	22 51.64	+ 2 38.8	2.982	3.796	9.8	22.2
299102	2005 <i>EX</i> ₁₀₈		9 9.9 107°66	2°8/12.5 18			129810	1999 <i>LD</i> ₂₆		9 9.9 45°14	11°6/ 1.5 17		
8 9	23 38.60	+ 4 9.2	2.012	2.860	13.3	20.4	8 9	23 38.52	-24 52.6	0.983	1.908	17.5	18.5
8 19	23 32.31	+ 4 16.3	1.951	2.873	10.1	20.2	8 19	23 33.20	-27 0.7	0.976	1.932	13.9	18.4
8 29	23 24.33	+ 4 9.2	1.913	2.886	6.6	20.0	8 29	23 25.03	-28 49.3	0.988	1.957	11.8	18.3
9 8	23 15.40	+ 3 50.0	1.901	2.899	3.4	19.8	9 8	23 15.51	-30 3.9	1.022	1.983	12.1	18.5
9 18	23 6.36	+ 3 22.3	1.917	2.911	3.6	19.9	9 18	23 6.36	-30 36.9	1.076	2.010	14.5	18.7
9 28	22 58.13	+ 2 50.6	1.962	2.923	6.8	20.1	9 28	22 59.12	-30 28.0	1.149	2.037	17.5	19.0
10 8	22 51.48	+ 2 20.0	2.033	2.935	10.1	20.3	10 8	22 54.78	-29 43.0	1.240	2.065	20.3	19.2
10 18	22 46.90	+ 1 54.8	2.127	2.947	13.0	20.5	10 18	22 53.66	-28 29.9	1.345	2.093	22.6	19.5
348789	2006 <i>PF</i> ₁₀		9 9.9 11°43	1°3/10.9 17			299829	2006 <i>SF</i> ₁₇₆		9 9.9 316°42	0°6/ 9.5 18		
8 9	23 31.93	+ 0 51.5	1.014	1.920	18.7	20.1	8 9	23 36.77	- 5 23.8	1.792	2.679	12.9	20.4
8 19	23 28.65	+ 0 16.2	0.964	1.922	13.8	19.8	8 19	23 31.30	- 5 39.1	1.721	2.673	9.2	20.1
8 29	23 22.71	- 0 42.7	0.934	1.926	8.1	19.5	8 29	23 23.93	- 6 2.6	1.675	2.667	5.1	19.9
9 8	23 15.16	- 1 57.8	0.924	1.930	2.2	19.2	9 8	23 15.39	- 6 30.0	1.654	2.661	0.9	19.6
9 18	23 7.38	- 3 18.6	0.937	1.936	4.6	19.4	9 18	23 6.60	- 6 56.4	1.661	2.656	3.9	19.8
9 28	23 0.89	- 4 33.0	0.973	1.943	10.4	19.7	9 28	22 58.61	- 7 16.7	1.694	2.650	8.1	20.0
10 8	22 56.85	- 5 31.3	1.029	1.951	15.5	20.1	10 8	22 52.29	- 7 27.1	1.753	2.645	12.0	20.3
10 18	22 55.89	- 6 8.0	1.103	1.961	19.8	20.4	10 18	22 48.22	- 7 25.4	1.833	2.640	15.2	20.5
305273	2007 <i>YZ</i> ₅₀		9 9.9 310°16	2°8/ 7.1 18			344255	2001 <i>SQ</i> ₂₆₂		9 9.9 317°10	8°8/19.1 14 C		
8 9	23 34.00	- 9 53.3	1.847	2.746	11.9	20.4	8 9	23 28.87	+22 12.7	1.033	1.855	24.8	20.9
8 19	23 29.26	-10 53.1	1.784	2.742	8.4	20.2	8 19	23 26.77	+21 4.2	0.956	1.845	21.0	20.6
8 29	23 22.74	-11 58.6	1.744	2.738	4.8	20.0	8 29	23 21.88	+18 55.6	0.894	1.835	16.5	20.3
9 8	23 15.15	-13 3.1	1.732	2.733	2.8	19.9	9 8	23 15.09	+15 45.2	0.851	1.826	11.7	20.0
9 18	23 7.36	-13 59.9	1.746	2.729	5.4	20.0	9 18	23 7.76	+11 42.6	0.831	1.818	8.8	19.8
9 28	23 0.33	-14 42.9	1.787	2.726	9.1	20.2	9 28	23 1.54	+ 7 11.2	0.835	1.810	10.8	19.9
10 8	22 54.87	-15 8.7	1.852	2.722	12.6	20.5	10 8	22 57.82	+ 2 42.1	0.864	1.802	15.8	20.1
10 18	22 51.52	-15 16.1	1.938	2.718	15.5	20.7	10 18	22 57.42	- 1 18.2	0.914	1.796	20.9	20.4
385090	2012 <i>VF</i>		9 9.9 92°48	5°1/ 4.7 18			343936	2011 <i>KB</i> ₁₈		9 9.9 141°64	1°7/11.7 17		
8 9	23 35.40	-15 8.2	1.724	2.630	12.3	20.5	8 9	23 37.70	+ 2 22.4	2.072	2.927	12.7	21.6
8 19	23 30.26	-16 39.9	1.681	2.640	8.8	20.3	8 19	23 31.65	+ 2 1.5	2.008	2.938	9.4	21.4
8 29	23 23.27	-18 11.8	1.663	2.650	5.9	20.2	8 29	23 23.99	+ 1 27.1	1.968	2.948	5.8	21.2
9 8	23 15.23	-19 35.0	1.671	2.660	5.3	20.2	9 8	23 15.39	+ 0 42.5	1.955	2.958	2.3	21.0
9 18	23 7.11	-20 41.5	1.706	2.669	7.6	20.3	9 18	23 6.67	- 0 7.5	1.971	2.968	3.1	21.0
9 28	22 59.94	-21 26.1	1.766	2.679	10.9	20.6	9 28	22 58.72	- 0 57.4	2.016	2.976	6.7	21.3
10 8	22 54.53	-21 46.8	1.849	2.689	13.9	20.8	10 8	22 52.27	- 1 42.2	2.087	2.985	10.1	21.5
10 18	22 51.37	-21 44.7	1.950	2.698	16.5	21.0	10 18	22 47.81	- 2 17.8	2.181	2.992	13.0	21.7
509656	2008 <i>GL</i> ₁₁₁		9 9.9 85°56	3°0/13.8 18			521528	2015 <i>OL</i> ₉₉					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
351791	2006 <i>HB</i> ₅₂		9 9.9 16°50	5°1/ 5.8	18		391205	2006 <i>HL</i> ₃₉		9 9.9 211°29	1°5/ 8.4	18	
8 9	23 34.26	-13 59.2	1.306	2.224	14.5	19.5	8 9	23 35.85	-6 36.7	2.061	2.946	11.5	22.0
8 19	23 29.87	-15 4.6	1.264	2.229	10.4	19.3	8 19	23 30.47	-7 27.8	1.989	2.941	8.2	21.8
8 29	23 23.21	-16 11.5	1.243	2.235	6.5	19.1	8 29	23 23.41	-8 26.8	1.943	2.936	4.5	21.6
9 8	23 15.26	-17 10.2	1.246	2.242	5.2	19.1	9 8	23 15.33	-9 28.1	1.924	2.930	1.5	21.4
9 18	23 7.24	-17 52.3	1.274	2.250	8.0	19.3	9 18	23 7.03	-10 25.8	1.934	2.924	4.2	21.5
9 28	23 0.39	-18 12.0	1.324	2.259	12.0	19.5	9 28	22 59.40	-11 14.3	1.972	2.917	7.9	21.8
10 8	22 55.70	-18 7.7	1.396	2.269	15.7	19.8	10 8	22 53.22	-11 49.3	2.035	2.910	11.4	22.0
10 18	22 53.67	-17 40.9	1.486	2.280	18.8	20.0	10 18	22 49.02	-12 8.9	2.120	2.902	14.3	22.2
366174	2012 <i>FG</i> ₈₃		9 9.9 258°44	5°1/ 3.5	18		264071	2009 <i>SW</i> ₁₅₉		9 9.9 303°39	0°5/ 9.0	16	
8 9	23 33.92	-19 16.5	2.325	3.223	9.9	20.7	8 9	23 28.08	-6 26.8	4.223	5.098	6.3	21.0
8 19	23 29.00	-20 30.3	2.262	3.213	7.4	20.5	8 19	23 24.25	-6 46.3	4.146	5.092	4.5	20.8
8 29	23 22.54	-21 42.3	2.224	3.202	5.5	20.4	8 29	23 19.69	-7 9.0	4.096	5.087	2.4	20.7
9 8	23 15.16	-22 45.7	2.214	3.191	5.4	20.4	9 8	23 14.70	-7 32.9	4.074	5.081	0.5	20.5
9 18	23 7.57	-23 35.0	2.231	3.179	7.2	20.5	9 18	23 9.63	-7 55.9	4.083	5.075	2.0	20.6
9 28	23 0.59	-24 6.0	2.275	3.168	9.7	20.6	9 28	23 4.84	-8 15.9	4.122	5.070	4.1	20.8
10 8	22 54.93	-24 17.2	2.342	3.156	12.2	20.8	10 8	23 0.68	-8 31.1	4.188	5.064	6.0	20.9
10 18	22 51.09	-24 9.0	2.429	3.145	14.4	20.9	10 18	22 57.42	-8 40.3	4.280	5.059	7.7	21.0
439529	2014 <i>BO</i> ₆₄		9 9.9 42°20	7°9/ 1.7	18		515642	2014 <i>MF</i> ₅₇		9 9.9 57°02	4°8/ 14.5	18	
8 9	23 34.83	-21 52.8	1.588	2.498	12.9	19.8	8 9	23 38.30	+9 14.5	2.030	2.855	14.1	21.0
8 19	23 30.07	-23 43.2	1.552	2.504	9.9	19.7	8 19	23 32.10	+9 47.1	1.974	2.875	11.1	20.9
8 29	23 23.26	-25 26.9	1.539	2.511	8.1	19.6	8 29	23 24.24	+10 2.4	1.941	2.895	8.0	20.7
9 8	23 15.27	-26 53.2	1.552	2.517	8.4	19.6	9 8	23 15.46	+10 1.3	1.932	2.915	5.4	20.6
9 18	23 7.19	-27 53.9	1.589	2.524	10.5	19.8	9 18	23 6.60	+9 45.9	1.952	2.935	5.0	20.6
9 28	23 0.15	-28 24.7	1.649	2.531	13.4	20.0	9 28	22 58.56	+9 20.6	1.998	2.955	7.0	20.8
10 8	22 55.05	-28 25.8	1.730	2.538	16.1	20.2	10 8	22 52.10	+8 50.8	2.071	2.975	9.8	21.0
10 18	22 52.41	-28 0.3	1.827	2.546	18.4	20.4	10 18	22 47.69	+8 21.6	2.168	2.996	12.5	21.2
61547	2000 <i>QO</i> ₆₆		9 9.9 50°61	3°9/ 6.8	18 R		283106	2008 <i>UJ</i> ₂₄₃		9 9.9 110°37	8°8/ 20.2	18	
8 9	23 37.23	-11 54.7	1.425	2.332	14.2	18.8	8 9	23 37.17	+22 52.9	2.022	2.766	16.8	20.5
8 19	23 31.82	-12 52.6	1.380	2.342	10.1	18.6	8 19	23 31.50	+23 21.7	1.955	2.780	14.5	20.4
8 29	23 24.24	-13 54.0	1.359	2.352	5.9	18.4	8 29	23 24.02	+23 23.6	1.907	2.793	12.1	20.3
9 8	23 15.44	-14 50.1	1.362	2.362	4.0	18.3	9 8	23 15.44	+22 57.4	1.881	2.807	9.9	20.2
9 18	23 6.58	-15 33.4	1.391	2.372	6.8	18.5	9 18	23 6.66	+22 4.6	1.879	2.820	8.8	20.1
9 28	22 58.89	-15 57.9	1.444	2.383	10.9	18.8	9 28	22 58.68	+20 50.6	1.903	2.832	9.3	20.2
10 8	22 53.30	-16 1.7	1.520	2.393	14.6	19.0	10 8	22 52.34	+19 23.4	1.952	2.845	10.9	20.3
10 18	22 50.33	-15 45.3	1.615	2.404	17.7	19.3	10 18	22 48.17	+17 51.8	2.025	2.857	13.1	20.5
383136	2005 <i>US</i> ₅₂		9 9.9 320°46	11°6/ 1.3	18		322093	2010 <i>VH</i> ₁₃₃		9 9.9 298°40	2°0/ 7.9	18	
8 9	23 42.17	-29 41.7	1.314	2.215	15.7	20.2	8 9	23 34.15	-8 53.6	2.076	2.969	11.1	20.4
8 19	23 36.00	-30 52.7	1.262	2.199	13.2	20.0	8 19	23 29.25	-9 33.4	2.005	2.960	7.9	20.2
8 29	23 26.86	-31 47.7	1.230	2.183	11.7	19.9	8 29	23 22.74	-10 18.6	1.958	2.951	4.4	20.0
9 8	23 15.90	-32 14.7	1.220	2.168	12.0	19.8	9 8	23 15.23	-11 4.2	1.938	2.942	2.0	19.8
9 18	23 4.67	-32 5.5	1.232	2.154	14.1	19.9	9 18	23 7.50	-11 44.8	1.946	2.933	4.5	20.0
9 28	22 54.87	-31 18.0	1.265	2.140	17.1	20.1	9 28	23 0.42	-12 15.5	1.981	2.924	8.0	20.2
10 8	22 47.81	-29 56.0	1.316	2.127	20.1	20.2	10 8	22 54.74	-12 33.2	2.041	2.916	11.4	20.4
10 18	22 44.14	-28 6.5	1.383	2.115	22.8	20.4	10 18	22 50.98	-12 36.2	2.123	2.907	14.2	20.6
230584	2003 <i>DS</i> ₁₆		9 9.9 261°07	0°9/ 9.2	18		4035	1986 <i>WD</i>		9 9.9 286°38	2°5/ 15.3	18	
8 9	23 36.49	-4 22.2	1.685	2.573	13.5	21.2	8 9	23 26.79	+10 33.7	4.426	5.226	7.4	17.0
8 19	23 31.31	-5 7.5	1.607	2.559	9.7	20.9	8 19	23 23.34	+10 22.3	4.337	5.222	5.9	16.8
8 29	23 24.05	-6 5.0	1.553	2.545	5.4	20.6	8 29	23 19.19	+10 1.5	4.272	5.218	4.3	16.7
9 8	23 15.44	-7 8.8	1.524	2.531	1.0	20.3	9 8	23 14.63	+9 32.4	4.235	5.214	2.9	16.6
9 18	23 6.45	-8 11.7	1.522	2.516	4.4	20.5	9 18	23 9.98	+8 56.6	4.227	5.209	2.6	16.6
9 28	22 58.20	-9 6.4	1.548	2.501	9.0	20.7	9 28	23 5.58	+8 16.2	4.248	5.205	3.6	16.7
10 8	22 51.68	-9 47.1	1.597	2.486	13.1	21.0	10 8	23 1.77	+7 34.1	4.298	5.201	5.2	16.8
10 18	22 47.56	-10 10.6	1.667	2.471	16.7	21.2	10 18	22 58.80	+6 52.7	4.375	5.197	6.8	16.9
329156	2012 <i>BK</i> ₂₅		9 9.9 187°34	2°8/ 6.6	18		347500	1998 <i>SQ</i> ₄₀		9 9.9 80°43	0°7/ 9.3	18	
8 9	23 37.09	-14 50.3	2.828	3.713	8.8	21.4	8 9	23 36.07	-4 45.4	1.791	2.678	12.9	21.6
8 19	23 30.91	-15 17.8	2.763	3.712	6.3	21.2	8 19	23 30.75	-5 18.5	1.729	2.680	9.2	21.3
8 29	23 23.48	-15 44.8	2.724	3.711	3.9	21.1	8 29	23 23.60	-6 1.0	1.691	2.683	5.1	21.1
9 8	23 15.32	-16 7.5	2.715	3.710	2.9	21.0	9 8	23 15.37	-6 47.7	1.679	2.686	0.9	20.8
9 18	23 7.07	-16 22.5	2.735	3.708	4.5	21.1	9 18	23 6.99	-7 32.7	1.695	2.689	3.9	21.1
9 28	22 59.39	-16 27.2	2.784	3.706	7.0	21.3	9 28	22 59.44	-8 10.4	1.737	2.692	8.1	21.3
10 8	22 52.87	-16 20.5	2.860	3.703	9.4	21.4	10 8	22 53.54	-8 36.4	1.804	2.694	11.8	21.6
10 18	22 47.92	-16 2.2	2.958	3.700	11.5	21.6	10 18	22 49.84	-8 48.5	1.893	2.697	15.0	21.8
20388	1998 <i>KZ</i> ₅₄		9 9.9 47°06	1°0/ 11.1	18		117200	2004 <i>RF</i> ₁₇₆		9 9.9 267°02	2°5/ 13.8	16	
8 9	23 31.65	+1 47.1	1.902	2.774	13.0	17.7	8 9	23 30.81	+7 21.8	3.429	4.250	8.9	20.0
8 19	23 27.45	+0 51.9	1.843	2.784	9.5	17.5	8 19	23 26.40	+7 17.1	3.330	4.233	7.0	19.9
8 29	23 21.69	-0 18.6	1.808	2.794	5.6	17.3	8 29	23 20.99	+7 1.9	3.256	4.216	4.8	19.7
9 8	23 15.03	-1 39.0	1.799	2.804	1.6	17.0	9 8	23 14.95	+6 37.4	3.209	4.198	3.0	19.6
9 18	23 8.25	-3 2.7	1.818	2.815	3.1	17.2	9 18	23 8.71	+6 5.4	3.192	4.181	2.8	19.5
9 28	23 2.22	-4 22.3	1.864	2.826	7.0	17.4	9 28	23 2.78	+5 28.9	3.204	4.163	4.5	19.6
10 8	22 57.63	-5 31.5	1.936	2.837	10.6	17.7	10 8	22 57.64	+4 51.2	3.244	4.145	6.7	19.7
10 18	22 54.96	-6 26.1	2.031	2.848	13.6	17.9	10 18	22 53.64	+4 15.3	3.310	4.127	8.9	19.9
442672	2012 <i>TL</i> ₂₉₆		9 9.9 160°03	8°6/ 20.8	17		515377	2013 <i>EW</i> ₈₁		9 9.9 213°69	0°9/ 8.9	18	
8 9	23 33.												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
362830	2012 AZ ₁₃		9 9.9 211°03	1°9/ 7.6 18			353145	2009 HJ ₁₆		9 9.9 241°10	1°0/ 8.9 18		
8 9	23 33.24	- 8 53.2	2.500	3.387	9.7	21.5	8 9	23 33.90	- 4 27.4	2.145	3.027	11.3	21.8
8 19	23 28.37	- 9 45.8	2.430	3.383	6.8	21.3	8 19	23 29.09	- 5 26.7	2.067	3.016	8.0	21.5
8 29	23 22.15	-10 43.3	2.386	3.379	3.8	21.1	8 29	23 22.68	- 6 36.1	2.013	3.005	4.4	21.3
9 8	23 15.14	-11 40.8	2.371	3.374	1.9	20.9	9 8	23 15.27	- 7 50.4	1.987	2.993	1.0	21.0
9 18	23 7.96	-12 33.6	2.384	3.369	4.0	21.1	9 18	23 7.60	- 9 3.3	1.989	2.981	3.8	21.2
9 28	23 1.32	-13 17.1	2.426	3.363	7.1	21.3	9 28	23 0.51	-10 8.5	2.020	2.969	7.5	21.4
10 8	22 55.85	-13 48.3	2.493	3.358	9.9	21.5	10 8	22 54.74	-11 1.1	2.077	2.956	11.0	21.6
10 18	22 51.98	-14 5.6	2.584	3.352	12.4	21.6	10 18	22 50.83	-11 38.1	2.156	2.944	13.9	21.8
302153	2001 SL ₂₂₁		9 9.9 356°94	0°7/ 9.3 18			384567	2010 GE ₁₀₅		9 9.9 222°74	0°6/ 10.6 18		
8 9	23 34.82	- 4 57.4	1.722	2.613	13.1	20.5	8 9	23 36.68	- 1 3.2	2.100	2.968	12.0	21.9
8 19	23 29.94	- 5 26.9	1.658	2.612	9.4	20.3	8 19	23 31.09	- 1 30.4	2.020	2.960	8.8	21.7
8 29	23 23.19	- 6 5.9	1.618	2.611	5.2	20.1	8 29	23 23.81	- 2 9.0	1.964	2.951	5.1	21.4
9 8	23 15.32	- 6 49.4	1.603	2.610	0.9	19.8	9 8	23 15.46	- 2 55.3	1.936	2.942	1.2	21.2
9 18	23 7.25	- 7 31.3	1.615	2.609	4.0	20.0	9 18	23 6.85	- 3 44.5	1.936	2.932	3.1	21.3
9 28	23 0.01	- 8 5.9	1.653	2.609	8.3	20.3	9 28	22 58.85	- 4 31.1	1.964	2.922	7.0	21.5
10 8	22 54.44	- 8 28.7	1.716	2.610	12.1	20.5	10 8	22 52.27	- 5 10.3	2.019	2.911	10.6	21.7
10 18	22 51.10	- 8 37.5	1.800	2.611	15.4	20.7	10 18	22 47.67	- 5 38.6	2.096	2.900	13.7	21.9
396542	1994 UR ₅		9 9.9 309°69	3°0/ 7.2 18 R			100378	1995 VD ₆		9 9.9 250°89	0°6/ 9.4 18		
8 9	23 36.56	-12 36.6	2.010	2.906	11.3	20.5	8 9	23 35.89	- 4 9.7	1.848	2.732	12.7	20.5
8 19	23 31.01	-13 6.1	1.942	2.898	8.1	20.3	8 19	23 30.69	- 4 46.4	1.775	2.725	9.1	20.2
8 29	23 23.73	-13 37.3	1.899	2.890	4.8	20.1	8 29	23 23.64	- 5 33.5	1.726	2.718	5.1	20.0
9 8	23 15.41	-14 5.1	1.883	2.883	3.0	20.0	9 8	23 15.44	- 6 26.0	1.704	2.711	0.9	19.7
9 18	23 6.90	-14 24.6	1.894	2.875	5.3	20.1	9 18	23 6.98	- 7 17.8	1.709	2.703	3.8	19.9
9 28	22 59.13	-14 31.8	1.932	2.868	8.7	20.3	9 28	22 59.24	- 8 2.9	1.741	2.695	8.1	20.1
10 8	22 52.88	-14 24.9	1.994	2.861	12.0	20.5	10 8	22 53.09	- 8 36.4	1.798	2.688	11.9	20.3
10 18	22 48.71	-14 3.4	2.078	2.854	14.8	20.7	10 18	22 49.11	- 8 55.5	1.877	2.680	15.1	20.5
75803	2000 AX ₂₃₄		9 9.9 115°44	7°0/ 17.4 18			355024	2006 QD ₁₅₀		9 9.9 329°63	1°6/ 11.3 18		
8 9	23 37.22	+16 51.8	2.056	2.839	15.3	19.8	8 9	23 35.65	+ 0 30.6	1.746	2.620	13.8	20.9
8 19	23 31.49	+17 19.2	1.986	2.848	12.8	19.6	8 19	23 30.59	+ 0 23.3	1.674	2.615	10.3	20.7
8 29	23 24.01	+17 24.1	1.937	2.858	10.1	19.5	8 29	23 23.61	+ 0 2.2	1.625	2.610	6.2	20.4
9 8	23 15.47	+17 6.0	1.912	2.867	7.9	19.4	9 8	23 15.44	- 0 29.3	1.601	2.606	2.2	20.2
9 18	23 6.72	+16 26.9	1.912	2.876	7.0	19.3	9 18	23 7.00	- 1 6.5	1.604	2.601	3.4	20.2
9 28	22 58.71	+15 31.6	1.940	2.885	8.1	19.4	9 28	22 59.33	- 1 43.7	1.634	2.597	7.6	20.5
10 8	22 52.23	+14 27.3	1.993	2.893	10.3	19.6	10 8	22 53.31	- 2 15.4	1.688	2.594	11.6	20.7
10 18	22 47.85	+13 21.0	2.069	2.901	12.8	19.7	10 18	22 49.56	- 2 37.3	1.765	2.590	15.0	20.9
63637	2001 QT ₉₀		9 9.9 314°68	18°3/ 27.6 18			96135	3054 T ₋₃		9 9.9 323°01	2°2/ 7.9 18		
8 9	23 33.95	+32 55.3	1.124	1.863	27.8	17.8	8 9	23 34.71	- 9 35.0	1.877	2.774	11.9	19.4
8 19	23 30.75	+34 22.2	1.056	1.855	25.6	17.6	8 19	23 29.84	-10 5.9	1.804	2.761	8.5	19.2
8 29	23 24.34	+35 2.1	0.998	1.847	23.2	17.4	8 29	23 23.16	-10 41.9	1.756	2.749	4.8	18.9
9 8	23 15.60	+34 44.9	0.953	1.840	20.8	17.2	9 8	23 15.36	-11 17.7	1.733	2.737	2.2	18.7
9 18	23 6.03	+33 25.0	0.924	1.833	19.0	17.1	9 18	23 7.30	-11 47.7	1.737	2.725	4.8	18.9
9 28	22 57.58	+31 6.1	0.911	1.826	18.3	17.0	9 28	22 59.94	-12 7.3	1.768	2.714	8.7	19.1
10 8	22 51.95	+28 3.2	0.917	1.820	19.1	17.1	10 8	22 54.13	-12 13.0	1.824	2.703	12.2	19.3
10 18	22 50.15	+24 37.6	0.942	1.814	21.2	17.2	10 18	22 50.45	-12 3.9	1.900	2.693	15.3	19.5
284512	2007 RQ ₃₅		9 9.9 39°26	4°6/ 13.4 18			345891	2007 RO ₇₈		9 9.9 339°84	0°5/ 10.4 18		
8 9	23 39.40	+ 6 28.2	1.646	2.494	15.8	20.1	8 9	23 36.64	- 2 35.0	1.544	2.431	14.5	20.6
8 19	23 33.33	+ 7 2.9	1.581	2.499	12.3	19.9	8 19	23 31.48	- 2 42.9	1.476	2.426	10.6	20.3
8 29	23 25.14	+ 7 19.8	1.537	2.504	8.5	19.7	8 29	23 24.18	- 3 2.8	1.430	2.421	6.1	20.1
9 8	23 15.67	+ 7 19.5	1.518	2.509	5.3	19.5	9 8	23 15.54	- 3 30.7	1.410	2.416	1.3	19.7
9 18	23 5.96	+ 7 4.5	1.525	2.515	5.1	19.5	9 18	23 6.61	- 4 1.2	1.415	2.412	3.8	19.9
9 28	22 57.16	+ 6 39.9	1.559	2.521	8.1	19.7	9 28	22 58.58	- 4 28.2	1.446	2.409	8.6	20.2
10 8	22 50.25	+ 6 12.0	1.617	2.527	11.7	20.0	10 8	22 52.44	- 4 46.6	1.501	2.406	12.8	20.4
10 18	22 45.85	+ 5 46.6	1.697	2.533	15.0	20.2	10 18	22 48.82	- 4 53.0	1.577	2.403	16.5	20.7
65216	2002 EZ ₁₃		9 9.9 321°72	1°8/ 13.3 16			50466	2000 DA ₆₆		9 9.9 314°36	1°6/ 11.1 18		
8 9	23 27.95	+ 5 26.5	3.990	4.821	7.6	19.4	8 9	23 35.27	+ 0 22.1	1.308	2.198	16.5	19.0
8 19	23 24.22	+ 5 16.2	3.906	4.818	5.8	19.2	8 19	23 30.94	+ 0 8.4	1.232	2.181	12.3	18.7
8 29	23 19.71	+ 4 57.7	3.848	4.814	3.9	19.1	8 29	23 24.10	- 0 23.8	1.177	2.165	7.4	18.4
9 8	23 14.75	+ 4 32.4	3.817	4.811	2.2	19.0	9 8	23 15.55	- 1 10.5	1.144	2.149	2.4	18.0
9 18	23 9.69	+ 4 2.1	3.815	4.808	2.1	19.0	9 18	23 6.48	- 2 5.1	1.136	2.134	4.2	18.1
9 28	23 4.91	+ 3 29.2	3.843	4.804	3.8	19.1	9 28	22 58.28	- 2 58.9	1.152	2.120	9.6	18.4
10 8	23 0.79	+ 2 56.4	3.900	4.801	5.7	19.2	10 8	22 52.20	- 3 43.6	1.191	2.106	14.6	18.6
10 18	22 57.62	+ 2 26.1	3.982	4.798	7.5	19.3	10 18	22 49.03	- 4 13.4	1.249	2.092	18.9	18.8
505874	2015 DU ₁₀₁		9 9.9 217°18	2°3/ 8.3 17			146912	2002 CL ₁₈₇		9 9.9 219°28	0°5/ 9.4 18		
8 9	23 40.99	- 9 3.5	1.556	2.451	14.1	21.9	8 9	23 34.42	- 4 32.1	2.355	3.233	10.6	21.0
8 19	23 34.59	- 9 34.3	1.492	2.447	10.0	21.7	8 19	23 29.29	- 5 4.9	2.281	3.228	7.6	20.8
8 29	23 25.90	-10 11.2	1.450	2.443	5.6	21.4	8 29	23 22.72	- 5 45.4	2.232	3.223	4.2	20.6
9 8	23 15.81	-10 48.0	1.434	2.439	2.3	21.2	9 8	23 15.28	- 6 29.7	2.211	3.218	0.7	20.3
9 18	23 5.46	-11 18.0	1.445	2.434	5.4	21.4	9 18	23 7.66	- 7 13.3	2.219	3.213	3.2	20.5
9 28	22 56.12	-11 35.6	1.482	2.429	9.9	21.6	9 28	23 0.61	- 7 51.6	2.255	3.207	6.7	20.7
10 8	22 48.83	-11 37.7	1.543	2.424	14.0	21.9	10 8	22 54.79	- 8 21.0	2.318	3.201	9.8	20.9
10 18	22 44.22	-11 23.4	1.624	2.419	17.4	22.1	10 18	22 50.69	- 8 39.1	2.403	3.195	12.5	21.1
399336	1999 YY ₂₈		9 9.9 256°12	6°1/ 17.1 17			118922	2000 VE ₄₈		9 9.9 229°89	0°2/ 10.3 18		
8 9	23 35.10	+16 36.8											

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
280065	2002 <i>CK</i> ₁₂₅		9 9.9 120°50	1.2°/ 8.8	18		175113	2004 <i>PF</i> ₁₁₅		9 9.9 169°55	0.3°/ 4.2	18	
8 9	23 35.56	- 4 59.2	1.732	2.622	13.1	20.6	8 9	23 16.19	-19 12.1	40.687	41.579	0.7	20.6
8 19	23 30.43	- 5 56.2	1.674	2.627	9.3	20.3	8 19	23 15.50	-19 17.7	40.630	41.579	0.5	20.5
8 29	23 23.46	- 7 3.5	1.639	2.632	5.1	20.1	8 29	23 14.74	-19 23.2	40.601	41.579	0.4	20.5
9 8	23 15.40	- 8 14.6	1.631	2.637	1.3	19.8	9 8	23 13.95	-19 28.2	40.601	41.579	0.3	20.5
9 18	23 7.20	- 9 22.1	1.650	2.642	4.4	20.1	9 18	23 13.16	-19 32.6	40.629	41.580	0.5	20.5
9 28	22 59.84	-10 19.2	1.696	2.647	8.6	20.3	9 28	23 12.39	-19 36.3	40.685	41.580	0.6	20.6
10 8	22 54.18	-11 1.0	1.766	2.651	12.3	20.6	10 8	23 11.67	-19 39.0	40.768	41.580	0.8	20.6
10 18	22 50.75	-11 25.3	1.858	2.655	15.4	20.8	10 18	23 11.03	-19 40.8	40.875	41.580	1.0	20.6
362493	2010 <i>TM</i> ₂₅		9 9.9 298°00	1°0/ 9.1	18 R		320280	2007 <i>RJ</i> ₁₄₅		9 9.9 353°34	5°2/13.4	18	
8 9	23 37.23	- 7 13.7	2.022	2.907	11.7	20.2	8 9	23 29.12	+ 5 38.1	0.855	1.761	21.4	19.3
8 19	23 31.52	- 7 25.0	1.947	2.897	8.4	19.9	8 19	23 27.15	+ 5 58.1	0.799	1.751	16.7	19.0
8 29	23 24.05	- 7 42.1	1.896	2.888	4.6	19.7	8 29	23 22.19	+ 5 47.5	0.760	1.744	11.4	18.7
9 8	23 15.51	- 8 0.8	1.872	2.878	1.1	19.4	9 8	23 15.26	+ 5 7.8	0.738	1.738	6.4	18.4
9 18	23 6.72	- 8 17.1	1.876	2.869	3.8	19.6	9 18	23 7.83	+ 4 5.9	0.737	1.734	6.1	18.4
9 28	22 58.63	- 8 26.9	1.908	2.859	7.7	19.8	9 28	23 1.68	+ 2 54.0	0.755	1.733	11.0	18.7
10 8	22 52.03	- 8 27.1	1.965	2.850	11.2	20.0	10 8	22 58.24	+ 1 46.0	0.792	1.734	16.4	19.0
10 18	22 47.50	- 8 16.4	2.045	2.841	14.3	20.2	10 18	22 58.28	+ 0 52.4	0.846	1.736	21.3	19.3
107492	2001 <i>DK</i> ₄₁		9 9.9 262°89	0°4/ 9.6	18		69315	1992 <i>UR</i> ₂		9 9.9 265°88	13°5/27.4	18	
8 9	23 35.82	- 2 6.9	1.503	2.392	14.8	19.8	8 9	23 49.87	-39 58.4	1.714	2.566	15.1	18.0
8 19	23 31.04	- 3 3.5	1.429	2.380	10.7	19.5	8 19	23 41.47	-41 28.6	1.661	2.543	13.9	17.8
8 29	23 24.01	- 4 16.8	1.376	2.368	6.0	19.2	8 29	23 29.98	-42 36.7	1.629	2.519	13.5	17.7
9 8	23 15.52	- 5 40.1	1.350	2.357	0.9	18.9	9 8	23 16.55	-43 11.1	1.619	2.495	14.2	17.7
9 18	23 6.63	- 7 4.8	1.349	2.344	4.4	19.1	9 18	23 2.79	-43 4.7	1.631	2.470	15.8	17.8
9 28	22 58.57	- 8 21.3	1.375	2.332	9.4	19.4	9 28	22 50.48	-42 16.4	1.663	2.444	17.9	17.9
10 8	22 52.40	- 9 22.1	1.424	2.320	14.0	19.6	10 8	22 40.98	-40 50.8	1.712	2.418	20.0	18.0
10 18	22 48.82	-10 2.9	1.493	2.307	17.8	19.8	10 18	22 35.01	-38 55.8	1.776	2.392	21.9	18.1
489251	2006 <i>RD</i> ₆₂		9 9.9 11°94	3°3/12.4	16		184304	2005 <i>EV</i> ₁₉₈		9 9.9 150°04	0°5/10.4	17	
8 9	23 22.11	+ 3 54.5	0.662	1.594	22.4	20.2	8 9	23 38.57	- 1 23.3	1.531	2.412	15.0	21.2
8 19	23 22.18	+ 3 35.3	0.632	1.600	16.9	19.9	8 19	23 32.82	- 1 53.7	1.469	2.416	10.9	20.9
8 29	23 19.31	+ 2 41.2	0.617	1.610	10.6	19.7	8 29	23 24.91	- 2 38.5	1.430	2.419	6.2	20.7
9 8	23 14.73	+ 1 21.0	0.619	1.623	4.5	19.4	9 8	23 15.69	- 3 32.3	1.416	2.422	1.3	20.4
9 18	23 10.01	- 0 11.3	0.639	1.639	5.1	19.5	9 18	23 6.26	- 4 28.4	1.428	2.425	3.9	20.6
9 28	23 6.79	- 1 39.0	0.677	1.659	10.9	19.9	9 28	22 57.81	- 5 19.3	1.467	2.428	8.7	20.9
10 8	23 6.20	- 2 48.5	0.734	1.681	16.5	20.3	10 8	22 51.34	- 5 59.0	1.530	2.430	12.9	21.1
10 18	23 8.70	- 3 32.5	0.806	1.705	21.1	20.7	10 18	22 47.44	- 6 23.7	1.614	2.432	16.5	21.4
53183	1999 <i>CZ</i> ₄₁		9 9.9 277°25	4°5/ 4.6	18		49162	1998 <i>SO</i> ₅₆		9 9.9 15°23	1°2/ 9.2	18	
8 9	23 33.09	-13 36.3	1.935	2.838	11.3	19.0	8 9	23 35.14	- 6 6.3	0.969	1.889	18.1	17.9
8 19	23 28.71	-15 15.6	1.865	2.824	8.1	18.8	8 19	23 31.03	- 6 21.0	0.927	1.894	13.0	17.6
8 29	23 22.56	-16 59.5	1.821	2.809	5.3	18.6	8 29	23 24.10	- 6 47.8	0.905	1.901	7.1	17.3
9 8	23 15.27	-18 39.4	1.804	2.795	4.7	18.5	9 8	23 15.56	- 7 19.2	0.903	1.910	1.4	17.0
9 18	23 7.68	-20 6.9	1.815	2.780	7.1	18.6	9 18	23 6.93	- 7 46.9	0.924	1.920	5.6	17.3
9 28	23 0.72	-21 14.9	1.852	2.765	10.5	18.8	9 28	22 59.78	- 8 3.2	0.967	1.932	11.2	17.7
10 8	22 55.25	-21 59.9	1.912	2.751	13.6	19.0	10 8	22 55.29	- 8 3.3	1.029	1.946	16.2	18.0
10 18	22 51.85	-22 21.0	1.992	2.736	16.3	19.2	10 18	22 54.00	- 7 45.9	1.110	1.960	20.3	18.3
424543	2008 <i>EQ</i> ₁₄₁		9 9.9 208°24	2°3/ 7.9	17		301485	2009 <i>DU</i> ₁₃₇		9 9.9 86°67	0°1/10.1	18	
8 9	23 39.11	- 8 22.2	1.729	2.620	13.0	22.0	8 9	23 34.63	- 2 5.2	1.908	2.787	12.6	21.0
8 19	23 33.09	- 9 11.8	1.661	2.615	9.3	21.8	8 19	23 29.66	- 2 43.0	1.846	2.792	9.1	20.8
8 29	23 25.02	-10 8.7	1.618	2.610	5.2	21.6	8 29	23 23.01	- 3 32.2	1.807	2.797	5.1	20.5
9 8	23 15.69	-11 6.3	1.601	2.605	2.3	21.4	9 8	23 15.38	- 4 28.0	1.795	2.802	0.9	20.3
9 18	23 6.09	-11 57.6	1.611	2.599	5.2	21.5	9 18	23 7.60	- 5 24.6	1.810	2.806	3.4	20.5
9 28	22 57.35	-12 36.3	1.649	2.593	9.4	21.8	9 28	23 0.58	- 6 15.9	1.853	2.811	7.4	20.7
10 8	22 50.41	-12 58.7	1.711	2.586	13.2	22.0	10 8	22 55.07	- 6 57.1	1.922	2.816	11.0	21.0
10 18	22 45.88	-13 3.3	1.793	2.578	16.4	22.2	10 18	22 51.59	- 7 24.9	2.012	2.821	14.0	21.2
144876	2004 <i>OB</i> ₁		9 9.9 50°25	4°9/ 4.5	18		48985	1998 <i>QF</i> ₄₇		9 9.9 176°00	1°4/ 8.9	18	
8 9	23 33.32	-15 24.4	1.843	2.750	11.6	19.0	8 9	23 43.38	- 8 9.0	1.769	2.652	13.2	19.1
8 19	23 28.75	-16 53.3	1.800	2.759	8.3	18.9	8 19	23 36.05	- 8 20.6	1.704	2.654	9.5	18.9
8 29	23 22.47	-18 22.1	1.782	2.768	5.6	18.7	8 29	23 26.64	- 8 37.4	1.664	2.655	5.2	18.7
9 8	23 15.24	-19 42.7	1.790	2.778	5.1	18.7	9 8	23 16.00	- 8 54.6	1.650	2.656	1.5	18.4
9 18	23 7.93	-20 47.7	1.825	2.787	7.3	18.9	9 18	23 5.19	- 9 7.6	1.665	2.657	4.4	18.6
9 28	23 1.45	-21 32.1	1.885	2.797	10.4	19.1	9 28	22 55.35	- 9 12.2	1.708	2.657	8.7	18.9
10 8	22 56.57	-21 54.0	1.968	2.807	13.3	19.3	10 8	22 47.42	- 9 5.7	1.776	2.656	12.5	19.1
10 18	22 53.75	-21 54.1	2.071	2.817	15.7	19.5	10 18	22 41.99	- 8 47.4	1.866	2.655	15.7	19.3
510198	2011 <i>CY</i> ₆₆		9 9.9 265°54	2°2/ 7.9	17		494492	2016 <i>WV</i> ₄₃		9 9.9 11°55	4°0/ 6.3	18	
8 9	23 35.51	- 6 19.9	1.537	2.435	14.0	21.6	8 9	23 36.25	-13 59.6	1.831	2.732	11.9	20.9
8 19	23 30.77	- 7 31.5	1.467	2.425	9.9	21.3	8 19	23 30.90	-14 50.3	1.775	2.733	8.5	20.7
8 29	23 23.84	- 8 55.5	1.419	2.414	5.5	21.0	8 29	23 23.73	-15 42.2	1.744	2.733	5.3	20.5
9 8	23 15.50	-10 23.8	1.397	2.402	2.2	20.8	9 8	23 15.51	-16 28.4	1.738	2.734	4.0	20.5
9 18	23 6.80	-11 46.9	1.402	2.391	5.5	21.0	9 18	23 7.14	-17 3.1	1.760	2.735	6.3	20.6
9 28	22 58.94	-12 56.1	1.433	2.380	10.2	21.2	9 28	22 59.64	-17 21.6	1.807	2.736	9.7	20.8
10 8	22 52.93	-13 45.3	1.486	2.368	14.4	21.4	10 8	22 53.80	-17 22.0	1.878	2.737	12.9	21.0
10 18	22 49.47	-14 11.9	1.560	2.357	17.9	21.7	10 18	22 50.16	-17 4.6	1.970	2.738	15.7	21.2
398248	2010 <i>RA</i> ₁₁₇		9 9.9 357°32	2°2/ 7.9	18		224652						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
261628	2005 YE ₃₃		9 9.9 285°40	3°0/13.2	18		251382	2007 VB ₉₀		9 9.9 324°37	2°3/11.7	18	
8 9	23 34.03	+ 5 51.0	2.217	3.060	12.4	20.6	8 9	23 32.45	+ 2 35.2	1.097	1.994	18.4	19.9
8 19	23 29.17	+ 5 48.4	2.134	3.052	9.6	20.4	8 19	23 29.26	+ 2 10.2	1.026	1.977	13.9	19.6
8 29	23 22.75	+ 5 31.2	2.075	3.044	6.4	20.2	8 29	23 23.33	+ 1 19.4	0.973	1.961	8.6	19.3
9 8	23 15.37	+ 5 0.9	2.041	3.037	3.6	20.0	9 8	23 15.52	+ 0 7.1	0.941	1.946	3.2	18.9
9 18	23 7.73	+ 4 20.9	2.036	3.029	3.5	20.0	9 18	23 7.12	- 1 17.8	0.932	1.931	4.6	19.0
9 28	23 0.64	+ 3 35.9	2.058	3.021	6.4	20.2	9 28	22 59.69	- 2 43.1	0.946	1.917	10.4	19.3
10 8	22 54.84	+ 2 51.2	2.107	3.014	9.6	20.3	10 8	22 54.62	- 3 56.9	0.980	1.905	15.9	19.5
10 18	22 50.86	+ 2 11.6	2.180	3.006	12.5	20.5	10 18	22 52.75	- 4 51.0	1.033	1.893	20.7	19.8
447345	2005 YO ₁₅₀		9 9.9 308°21	2°6/7.4	17		517015	2012 TA ₃₂₇		9 9.9 39°94	8°2/18.7	16	
8 9	23 34.03	-10 4.7	1.903	2.801	11.7	21.4	8 9	23 32.85	+18 44.8	1.462	2.267	19.5	20.8
8 19	23 29.45	-10 51.1	1.821	2.779	8.3	21.2	8 19	23 28.85	+18 42.6	1.403	2.279	16.3	20.6
8 29	23 23.04	-11 43.5	1.764	2.757	4.8	20.9	8 29	23 22.74	+18 6.6	1.362	2.291	12.9	20.4
9 8	23 15.43	-12 35.8	1.733	2.735	2.7	20.8	9 8	23 15.38	+16 57.4	1.342	2.304	9.7	20.3
9 18	23 7.47	-13 21.9	1.728	2.713	5.3	20.9	9 18	23 7.84	+15 20.2	1.346	2.318	8.2	20.2
9 28	23 0.11	-13 55.9	1.751	2.692	9.1	21.1	9 28	23 1.29	+13 24.5	1.374	2.332	9.4	20.3
10 8	22 54.25	-14 14.0	1.797	2.671	12.7	21.3	10 8	22 56.70	+11 23.0	1.426	2.347	12.2	20.6
10 18	22 50.51	-14 14.6	1.864	2.650	15.8	21.4	10 18	22 54.60	+ 9 27.2	1.501	2.362	15.3	20.8
399701	2004 TH ₂₃₆		9 9.9 276°99	1°8/12.1	18		396399	2014 DJ ₁₄₀		9 9.9 183°68	0°8/9.2	18	
8 9	23 32.01	+ 3 40.8	2.296	3.150	11.7	21.0	8 9	23 36.92	- 5 24.5	2.081	2.962	11.6	21.8
8 19	23 27.70	+ 3 7.2	2.209	3.138	8.8	20.8	8 19	23 31.23	- 5 58.6	2.014	2.962	8.3	21.6
8 29	23 21.92	+ 2 19.0	2.147	3.126	5.5	20.6	8 29	23 23.89	- 6 40.5	1.971	2.962	4.6	21.3
9 8	23 15.23	+ 1 19.4	2.111	3.113	2.4	20.4	9 8	23 15.58	- 7 25.6	1.955	2.962	1.0	21.1
9 18	23 8.29	+ 0 12.8	2.104	3.101	2.9	20.4	9 18	23 7.09	- 8 8.8	1.968	2.961	3.7	21.3
9 28	23 1.85	- 0 55.0	2.125	3.088	6.2	20.6	9 28	22 59.30	- 8 45.0	2.009	2.960	7.4	21.5
10 8	22 56.60	- 1 58.4	2.173	3.076	9.5	20.8	10 8	22 52.97	- 9 10.5	2.076	2.958	10.9	21.7
10 18	22 53.05	- 2 52.6	2.245	3.063	12.4	20.9	10 18	22 48.62	- 9 23.2	2.165	2.956	13.7	21.9
224629	2005 YN ₁₄₁		9 9.9 40°50	0°9/8.9	18		386627	2009 SY ₅₉		9 9.9 301°48	2°4/14.9	17	
8 9	23 33.97	- 5 52.7	2.170	3.055	11.0	20.5	8 9	23 27.09	+ 9 41.0	4.349	5.155	7.5	20.8
8 19	23 29.04	- 6 27.0	2.106	3.057	7.8	20.3	8 19	23 23.61	+ 9 29.0	4.263	5.153	5.9	20.7
8 29	23 22.63	- 7 8.2	2.066	3.059	4.3	20.1	8 29	23 19.42	+ 9 7.8	4.201	5.151	4.2	20.6
9 8	23 15.34	- 7 52.1	2.054	3.061	1.0	19.8	9 8	23 14.81	+ 8 38.5	4.167	5.149	2.8	20.5
9 18	23 7.92	- 8 33.7	2.070	3.063	3.6	20.1	9 18	23 10.12	+ 8 2.8	4.162	5.147	2.5	20.4
9 28	23 1.15	- 9 8.3	2.114	3.065	7.1	20.3	9 28	23 5.68	+ 7 23.0	4.187	5.145	3.6	20.5
10 8	22 55.72	- 9 32.5	2.183	3.067	10.3	20.5	10 8	23 1.85	+ 6 41.7	4.240	5.143	5.2	20.6
10 18	22 52.10	- 9 44.3	2.275	3.069	13.1	20.7	10 18	22 58.87	+ 6 1.6	4.320	5.141	6.9	20.7
58875	1998 HS ₁₁₉		9 9.9 298°79	10°2/31.2	18		447679	2006 YC ₁₇		9 9.9 223°67	4°0/5.1	18	
8 9	23 39.59	-28 43.9	1.583	2.480	13.7	17.6	8 9	23 33.78	-14 54.3	2.229	3.127	10.2	21.4
8 19	23 33.91	-30 12.3	1.526	2.460	11.5	17.4	8 19	23 28.95	-16 6.3	2.169	3.124	7.4	21.2
8 29	23 25.70	-31 29.1	1.490	2.441	10.3	17.3	8 29	23 22.61	-17 19.4	2.134	3.121	4.8	21.0
9 8	23 15.89	-32 23.2	1.479	2.421	10.8	17.2	9 8	23 15.36	-18 27.0	2.127	3.117	4.1	21.0
9 18	23 5.72	-32 46.6	1.490	2.401	12.8	17.3	9 18	23 7.95	-19 23.4	2.148	3.114	6.2	21.1
9 28	22 56.61	-32 35.4	1.523	2.382	15.6	17.5	9 28	23 1.17	-20 3.7	2.196	3.110	9.0	21.3
10 8	22 49.72	-31 51.4	1.575	2.363	18.3	17.6	10 8	22 55.73	-20 25.8	2.268	3.106	11.8	21.5
10 18	22 45.73	-30 39.1	1.643	2.344	20.8	17.8	10 18	22 52.11	-20 29.4	2.361	3.102	14.1	21.6
166613	2002 RA ₂₄₄		9 9.9 295°02	0°8/10.8	18		455094	2015 UU ₇₂		9 9.9 302°24	2°8/7.3	18	
8 9	23 33.94	+ 0 1.1	1.781	2.658	13.4	19.9	8 9	23 36.03	-11 59.0	2.032	2.927	11.2	20.6
8 19	23 29.40	- 0 35.1	1.705	2.649	9.9	19.6	8 19	23 30.75	-12 30.7	1.955	2.910	8.0	20.3
8 29	23 23.00	- 1 26.2	1.652	2.640	5.8	19.4	8 29	23 23.71	-13 5.1	1.903	2.894	4.7	20.1
9 8	23 15.43	- 2 27.7	1.625	2.631	1.5	19.1	9 8	23 15.56	-13 37.1	1.877	2.878	2.9	20.0
9 18	23 7.56	- 3 33.3	1.625	2.623	3.4	19.2	9 18	23 7.14	-14 1.5	1.879	2.862	5.2	20.1
9 28	23 0.39	- 4 36.0	1.652	2.614	7.8	19.4	9 28	22 59.37	-14 14.0	1.908	2.846	8.7	20.3
10 8	22 54.80	- 5 29.3	1.704	2.606	11.7	19.7	10 8	22 53.08	-14 12.2	1.962	2.830	12.0	20.4
10 18	22 51.38	- 6 8.9	1.778	2.598	15.2	19.9	10 18	22 48.84	-13 55.3	2.037	2.815	14.9	20.6
487770	2015 RB ₂₀₇		9 9.9 2°22	0°9/9.0	17		233913	2009 QD ₅₈		9 9.9 288°13	1°3/8.8	17	
8 9	23 31.29	- 4 4.2	1.676	2.572	13.1	20.5	8 9	23 34.30	- 3 45.8	1.472	2.368	14.6	20.2
8 19	23 27.49	- 5 0.0	1.615	2.571	9.4	20.3	8 19	23 29.98	- 4 56.8	1.402	2.359	10.5	20.0
8 29	23 21.90	- 6 7.7	1.577	2.570	5.1	20.1	8 29	23 23.47	- 6 23.5	1.355	2.349	5.7	19.7
9 8	23 15.23	- 7 20.8	1.564	2.571	1.1	19.8	9 8	23 15.54	- 7 58.0	1.332	2.339	1.4	19.4
9 18	23 8.38	- 8 31.7	1.578	2.572	4.2	20.0	9 18	23 7.24	- 9 30.6	1.336	2.329	5.0	19.6
9 28	23 2.30	- 9 33.3	1.618	2.574	8.5	20.3	9 28	22 59.80	-10 51.4	1.366	2.320	9.9	19.8
10 8	22 57.84	-10 19.8	1.682	2.576	12.3	20.5	10 8	22 54.24	-11 53.1	1.418	2.310	14.3	20.1
10 18	22 55.50	-10 48.5	1.768	2.580	15.5	20.7	10 18	22 51.24	-12 32.1	1.491	2.301	18.0	20.3
182804	2002 AO ₁₀₁		9 9.9 104°90	1°8/12.1	18		157947	2000 AB ₁₅₈		9 9.9 314°74	2°1/8.1	18	
8 9	23 35.53	+ 2 51.1	2.401	3.251	11.4	20.5	8 9	23 34.35	- 8 45.3	1.835	2.732	12.1	19.7
8 19	23 29.95	+ 2 34.7	2.343	3.269	8.5	20.3	8 19	23 29.79	- 9 20.8	1.748	2.705	8.7	19.5
8 29	23 23.05	+ 2 6.5	2.309	3.287	5.3	20.1	8 29	23 23.29	-10 3.3	1.685	2.678	4.9	19.2
9 8	23 15.41	+ 1 29.5	2.303	3.305	2.3	20.0	9 8	23 15.51	-10 47.3	1.647	2.652	2.1	18.9
9 18	23 7.72	+ 0 47.3	2.326	3.322	2.7	20.0	9 18	23 7.30	-11 26.7	1.637	2.626	4.9	19.1
9 28	23 0.69	+ 0 4.6	2.377	3.339	5.8	20.3	9 28	22 59.69	-11 55.8	1.653	2.600	9.0	19.3
10 8	22 54.92	- 0 34.5	2.456	3.355	8.7	20.5	10 8	22 53.62	-12 10.4	1.693	2.575	12.9	19.5
10 18	22 50.84	- 1 6.6	2.560	3.371	11.3	20.7	10 18	22 49.74	-12 8.6	1.753	2.550	16.3	19.6
144031	2004 BA ₂₁		9 9.9 310°59	5°5/13.8	17		290451	2005 TW ₁₅₁					