

EPHEMERIDES

7 28.9

7 29.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
390160	2012 <i>VE</i> ₁₀₁		7 28.9 326°70	3°6/31.1	16		135926	2002 <i>TW</i> ₁₇₉		7 29.0 263°04	1°0/29.6	18	
6 20	20 57.63	- 8 34.4	1.814	2.623	16.2	20.9	6 20	20 59.14	-14 51.8	2.069	2.887	14.2	20.2
6 30	20 54.25	- 8 24.4	1.730	2.620	13.2	20.7	6 30	20 55.23	-14 54.5	1.976	2.878	11.3	20.0
7 10	20 48.62	- 8 28.8	1.665	2.618	9.7	20.4	7 10	20 49.22	-15 6.2	1.904	2.868	7.9	19.7
7 20	20 41.24	- 8 47.2	1.622	2.615	6.1	20.2	7 20	20 41.54	-15 25.1	1.856	2.859	4.1	19.5
7 30	20 32.88	- 9 17.6	1.605	2.612	3.6	20.1	7 30	20 32.91	-15 48.5	1.835	2.849	1.0	19.3
8 9	20 24.55	- 9 56.7	1.615	2.610	5.4	20.2	8 9	20 24.26	-16 13.2	1.842	2.840	4.4	19.5
8 19	20 17.21	-10 40.1	1.649	2.608	9.0	20.4	8 19	20 16.50	-16 36.3	1.875	2.830	8.3	19.7
8 29	20 11.72	-11 23.5	1.708	2.606	12.6	20.6	8 29	20 10.46	-16 55.3	1.932	2.820	11.8	19.9
303202	2004 <i>GH</i> ₅₁		7 28.9 336°55	3°4/27.1	18		39032	2000 <i>UU</i> ₇₆		7 29.0 171°89	0°3/29.2	18	
6 20	20 58.06	-24 52.0	1.760	2.609	15.0	20.6	6 20	20 58.01	-16 8.2	2.506	3.318	12.2	20.7
6 30	20 54.91	-25 32.3	1.680	2.602	11.8	20.4	6 30	20 53.88	-16 26.4	2.420	3.320	9.6	20.6
7 10	20 49.26	-26 17.1	1.621	2.594	8.2	20.2	7 10	20 48.03	-16 51.9	2.356	3.321	6.6	20.4
7 20	20 41.61	-27 1.2	1.585	2.588	4.6	20.0	7 20	20 40.86	-17 22.3	2.318	3.322	3.2	20.2
7 30	20 32.85	-27 38.7	1.574	2.582	3.6	19.9	7 30	20 32.99	-17 54.9	2.308	3.323	0.4	19.9
8 9	20 24.14	-28 4.8	1.590	2.576	6.7	20.1	8 9	20 25.17	-18 26.7	2.327	3.324	3.8	20.2
8 19	20 16.60	-28 16.9	1.630	2.571	10.4	20.3	8 19	20 18.11	-18 55.0	2.373	3.325	7.1	20.4
8 29	20 11.17	-28 14.7	1.692	2.566	13.9	20.5	8 29	20 12.47	-19 18.0	2.445	3.325	10.0	20.6
256492	2007 <i>EJ</i> ₄₄		7 28.9 124°35	0°5/29.4	18		249634	1999 <i>TP</i> ₁₁₆		7 29.0 320°57	6°9/25.1	18	
6 20	20 57.64	-15 36.0	2.578	3.388	11.9	21.3	6 20	21 1.51	-34 56.9	1.876	2.719	14.5	19.7
6 30	20 53.48	-15 47.5	2.497	3.395	9.4	21.2	6 30	20 57.82	-35 45.9	1.791	2.701	11.8	19.4
7 10	20 47.67	-16 5.9	2.439	3.403	6.5	21.0	7 10	20 51.38	-36 31.9	1.727	2.684	9.1	19.2
7 20	20 40.63	-16 29.2	2.406	3.410	3.2	20.8	7 20	20 42.70	-37 7.8	1.686	2.667	7.2	19.1
7 30	20 32.98	-16 55.1	2.402	3.417	0.6	20.6	7 30	20 32.77	-37 27.0	1.670	2.650	7.2	19.1
8 9	20 25.41	-17 20.8	2.426	3.423	3.6	20.8	8 9	20 22.87	-37 25.1	1.678	2.634	9.2	19.1
8 19	20 18.61	-17 44.1	2.478	3.430	6.7	21.1	8 19	20 14.25	-37 1.5	1.711	2.619	12.1	19.3
8 29	20 13.17	-18 3.1	2.555	3.436	9.6	21.2	8 29	20 7.98	-36 18.5	1.765	2.604	15.1	19.4
243654	1999 <i>TO</i> ₂₈₉		7 28.9 301°36	8°2/ 2.6	18		13324	1998 <i>SK</i> ₂		7 29.0 332°36	0°9/28.5	18	
6 20	20 56.10	+ 1 23.5	1.770	2.540	18.0	20.1	6 20	20 55.53	-19 29.5	1.800	2.644	14.9	17.9
6 30	20 53.24	+ 2 8.9	1.674	2.524	15.6	19.9	6 30	20 52.85	-19 46.6	1.708	2.627	11.8	17.7
7 10	20 48.10	+ 2 35.0	1.595	2.508	12.8	19.7	7 10	20 47.84	-20 11.4	1.637	2.611	8.1	17.4
7 20	20 41.08	+ 2 38.5	1.537	2.493	10.1	19.5	7 20	20 40.95	-20 40.9	1.590	2.596	3.9	17.1
7 30	20 32.91	+ 2 17.8	1.502	2.477	8.4	19.3	7 30	20 32.97	-21 10.7	1.568	2.582	1.1	16.9
8 9	20 24.59	+ 1 34.6	1.491	2.462	8.7	19.3	8 9	20 24.94	-21 36.7	1.571	2.568	5.3	17.2
8 19	20 17.14	+ 0 33.0	1.504	2.447	11.0	19.4	8 19	20 17.91	-21 55.6	1.600	2.555	9.5	17.4
8 29	20 11.54	- 0 40.5	1.540	2.433	14.0	19.6	8 29	20 12.81	-22 5.6	1.652	2.543	13.3	17.6
443220	2014 <i>DZ</i> ₉₇		7 29.0 237°17	1°1/28.3	18		117399	2005 <i>AO</i> ₇		7 29.0 164°71	2°4/27.9	17	
6 20	21 0.73	-20 13.0	2.065	2.893	13.9	21.5	6 20	21 6.30	-23 8.3	1.658	2.494	16.4	20.6
6 30	20 56.53	-20 34.8	1.976	2.885	10.9	21.3	6 30	21 1.38	-23 32.2	1.583	2.497	12.9	20.3
7 10	20 50.12	-21 2.8	1.908	2.878	7.4	21.0	7 10	20 53.66	-24 0.9	1.529	2.500	8.8	20.1
7 20	20 41.96	-21 33.6	1.865	2.870	3.6	20.8	7 20	20 43.74	-24 29.4	1.498	2.503	4.5	19.9
7 30	20 32.83	-22 3.3	1.848	2.862	1.3	20.6	7 30	20 32.68	-24 52.1	1.494	2.505	2.6	19.7
8 9	20 23.71	-22 28.0	1.860	2.854	4.9	20.8	8 9	20 21.80	-25 4.9	1.516	2.507	6.3	20.0
8 19	20 15.55	-22 45.1	1.898	2.846	8.8	21.1	8 19	20 12.35	-25 5.8	1.563	2.508	10.5	20.2
8 29	20 9.20	-22 53.4	1.960	2.837	12.2	21.3	8 29	20 5.35	-24 55.1	1.634	2.509	14.3	20.5
73176	2002 <i>HW</i> ₆		7 29.0 42°71	1°1/29.4	18		191152	2002 <i>HP</i> ₂		7 29.0 358°96	2°5/27.7	18	
6 20	21 2.02	-16 10.1	1.232	2.083	20.0	18.8	6 20	20 59.73	-22 29.9	1.589	2.439	16.3	19.6
6 30	20 58.54	-15 59.8	1.173	2.093	15.8	18.6	6 30	20 56.39	-23 2.8	1.516	2.438	12.8	19.4
7 10	20 51.94	-16 1.2	1.131	2.104	10.9	18.4	7 10	20 50.34	-23 42.2	1.462	2.437	8.7	19.2
7 20	20 42.92	-16 11.8	1.110	2.115	5.5	18.1	7 20	20 42.17	-24 22.9	1.431	2.436	4.5	18.9
7 30	20 32.74	-16 27.5	1.113	2.127	1.1	17.8	7 30	20 32.85	-24 59.0	1.425	2.437	2.7	18.8
8 9	20 22.92	-16 43.8	1.139	2.140	6.0	18.2	8 9	20 23.65	-25 25.5	1.445	2.437	6.4	19.0
8 19	20 14.84	-16 57.0	1.189	2.152	11.1	18.5	8 19	20 15.78	-25 39.6	1.489	2.438	10.6	19.3
8 29	20 9.53	-17 4.9	1.260	2.165	15.6	18.8	8 29	20 10.24	-25 40.5	1.555	2.439	14.4	19.5
380892	2006 <i>DA</i> ₆₈		7 29.0 116°68	3°3/30.9	17		519631	2012 <i>UO</i> ₁₈₂		7 29.0 345°21	4°5/26.4	18	
6 20	21 3.18	- 9 16.6	2.135	2.924	14.7	21.3	6 20	20 55.86	-24 44.5	1.385	2.252	17.3	20.7
6 30	20 57.98	- 8 51.3	2.062	2.940	11.9	21.1	6 30	20 53.92	-25 48.4	1.312	2.244	13.6	20.4
7 10	20 50.81	- 8 36.7	2.010	2.957	8.7	21.0	7 10	20 49.01	-27 0.1	1.258	2.236	9.5	20.2
7 20	20 42.17	- 8 32.6	1.983	2.973	5.4	20.8	7 20	20 41.65	-28 12.2	1.226	2.229	5.6	19.9
7 30	20 32.84	- 8 37.9	1.983	2.988	3.4	20.7	7 30	20 32.90	-29 15.8	1.217	2.223	4.9	19.9
8 9	20 23.70	- 8 50.3	2.011	3.003	4.9	20.8	8 9	20 24.18	-30 3.5	1.233	2.218	8.4	20.1
8 19	20 15.59	- 9 7.3	2.066	3.017	8.0	21.0	8 19	20 16.87	-30 31.0	1.271	2.214	12.6	20.3
8 29	20 9.20	- 9 26.2	2.147	3.031	11.0	21.3	8 29	20 12.16	-30 37.8	1.330	2.211	16.5	20.5
482364	2011 <i>YZ</i> ₁₀		7 29.0 253°49	2°6/30.5	18		169751	2002 <i>PO</i> ₅		7 29.0 17°85	4°9/31.3	18	
6 20	20 58.97	-10 58.9	2.411	3.207	13.1	21.6	6 20	20 57.56	- 8 14.9	1.502	2.324	18.4	19.5
6 30	20 54.74	-10 39.0	2.312	3.197	10.6	21.4	6 30	20 54.52	- 7 35.4	1.432	2.329	15.1	19.3
7 10	20 48.68	-10 27.6	2.235	3.186	7.7	21.2	7 10	20 48.96	- 7 11.1	1.381	2.335	11.3	19.0
7 20	20 41.21	-10 24.5	2.182	3.176	4.6	21.0	7 20	20 41.45	- 7 3.0	1.351	2.341	7.4	18.8
7 30	20 32.94	-10 28.6	2.157	3.165	2.6	20.9	7 30	20 32.94	- 7 10.1	1.345	2.348	4.9	18.7
8 9	20 24.65	-10 38.0	2.160	3.155	4.3	21.0	8 9	20 24.60	- 7 29.5	1.363	2.356	6.5	18.8
8 19	20 17.10	-10 50.7	2.191	3.144	7.4	21.1	8 19	20 17.52	- 7 57.3	1.405	2.365	10.1	19.1
8 29	20 11.00	-11 4.5	2.247	3.133	10.5	21.3	8 29	20 12.62	- 8 28.7	1.469	2.374	13.8	19.3
288064	2003 <i>UD</i> ₃₄₃		7 29.0 354°21	0°6/29.3	17		354357						

EPHEMERIDES

7 29.0

7 29.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
134087	Symeonplatts 7 29.0 240°07' 1.4/28.2 18						417923	2007 RQ ₂₃₃ 7 29.0 336°92' 3.0/27.7 17					
6 20	21 0.86	-20 31.9	2.015	2.844	14.1	20.6	6 20	20 53.03	-20 47.1	1.001	1.889	20.7	20.0
6 30	20 56.73	-20 58.6	1.925	2.836	11.1	20.4	6 30	20 52.65	-21 28.9	0.929	1.873	16.5	19.7
7 10	20 50.33	-21 31.8	1.857	2.828	7.6	20.1	7 10	20 48.74	-22 24.9	0.874	1.859	11.3	19.4
7 20	20 42.11	-22 7.9	1.813	2.819	3.7	19.9	7 20	20 41.76	-23 28.7	0.837	1.845	5.8	19.0
7 30	20 32.87	-22 42.5	1.797	2.810	1.6	19.7	7 30	20 32.92	-24 30.8	0.821	1.834	3.4	18.8
8 9	20 23.62	-23 11.3	1.808	2.801	5.2	20.0	8 9	20 23.99	-25 21.4	0.826	1.823	8.5	19.1
8 19	20 15.35	-23 31.7	1.845	2.792	9.0	20.2	8 19	20 16.80	-25 53.8	0.851	1.814	14.3	19.4
8 29	20 8.95	-23 42.2	1.906	2.782	12.5	20.4	8 29	20 12.85	-26 5.6	0.893	1.807	19.5	19.6
190632	2000 WT ₁₃₁ 7 29.0 259°86' 7.5/2.9 17						434638	2005 WB ₇₉ 7 29.0 237°23' 0.3/29.2 18					
6 20	20 57.22	+ 2 4.6	1.944	2.701	17.0	20.1	6 20	21 1.13	-16 30.6	1.891	2.715	15.1	22.1
6 30	20 53.87	+ 2 32.1	1.849	2.690	14.7	19.9	6 30	20 57.05	-16 43.8	1.801	2.707	12.0	21.9
7 10	20 48.40	+ 2 39.8	1.771	2.680	12.0	19.7	7 10	20 50.62	-17 6.4	1.731	2.699	8.3	21.6
7 20	20 41.20	+ 2 25.4	1.715	2.669	9.4	19.5	7 20	20 42.29	-17 35.6	1.685	2.690	4.1	21.4
7 30	20 32.98	+ 1 48.4	1.683	2.658	7.6	19.4	7 30	20 32.89	-18 7.7	1.666	2.681	0.5	21.0
8 9	20 24.65	+ 0 51.2	1.675	2.647	7.9	19.4	8 9	20 23.45	-18 38.6	1.674	2.672	4.9	21.4
8 19	20 17.16	- 0 21.5	1.693	2.636	10.0	19.5	8 19	20 15.03	-19 5.1	1.709	2.663	9.1	21.6
8 29	20 11.36	- 1 43.3	1.735	2.624	12.9	19.7	8 29	20 8.55	-19 24.8	1.767	2.653	12.8	21.8
101424	1998 VA ₂₀ 7 29.0 234°76' 1.8/27.7 18						241374	2008 RA ₆₅ 7 29.0 218°66' 0.5/28.7 18					
6 20	21 0.44	-21 46.1	2.381	3.203	12.4	20.6	6 20	21 1.06	-18 3.7	2.162	2.981	13.6	22.1
6 30	20 56.11	-22 24.3	2.284	3.191	9.7	20.3	6 30	20 56.71	-18 29.7	2.069	2.974	10.7	21.9
7 10	20 49.76	-23 8.1	2.209	3.178	6.7	20.1	7 10	20 50.22	-19 3.5	1.998	2.966	7.3	21.7
7 20	20 41.81	-23 53.7	2.160	3.165	3.4	19.9	7 20	20 42.05	-19 42.0	1.952	2.958	3.5	21.4
7 30	20 32.92	-24 36.9	2.140	3.151	2.0	19.8	7 30	20 32.92	-20 21.3	1.934	2.949	0.7	21.2
8 9	20 23.96	-25 13.6	2.147	3.136	4.9	20.0	8 9	20 23.75	-20 57.5	1.944	2.939	4.6	21.5
8 19	20 15.79	-25 41.1	2.182	3.121	8.3	20.1	8 19	20 15.47	-21 27.3	1.981	2.930	8.4	21.7
8 29	20 9.20	-25 58.1	2.242	3.106	11.4	20.3	8 29	20 8.90	-21 49.0	2.043	2.919	11.8	21.9
302285	2001 XS ₂₅₂ 7 29.0 181°22' 0.6/28.5 18						292136	2006 RB ₈₁ 7 29.0 21°11' 2.5/30.7 18					
6 20	20 58.15	-18 25.0	2.952	3.761	10.6	22.3	6 20	20 57.09	- 9 51.8	2.050	2.856	14.7	21.3
6 30	20 53.76	-19 0.2	2.862	3.762	8.3	22.1	6 30	20 53.56	-10 0.1	1.965	2.857	11.9	21.1
7 10	20 47.84	-19 41.0	2.796	3.762	5.6	22.0	7 10	20 48.04	-10 21.3	1.901	2.857	8.5	20.9
7 20	20 40.76	-20 24.9	2.757	3.762	2.7	21.8	7 20	20 40.96	-10 54.2	1.861	2.857	5.0	20.6
7 30	20 33.04	-21 8.7	2.747	3.762	0.8	21.6	7 30	20 33.04	-11 36.2	1.847	2.857	2.5	20.5
8 9	20 25.34	-21 49.5	2.767	3.761	3.6	21.8	8 9	20 25.15	-12 23.5	1.860	2.858	4.5	20.6
8 19	20 18.27	-22 24.8	2.815	3.759	6.5	22.0	8 19	20 18.15	-13 12.0	1.900	2.858	8.0	20.8
8 29	20 12.41	-22 53.0	2.890	3.757	9.0	22.2	8 29	20 12.79	-13 57.9	1.965	2.858	11.4	21.0
58559	1997 LT ₅ 7 29.0 216°98' 6.0/1.9 18						424558	2008 FV ₃₈ 7 29.0 71°80' 1.8/28.1 17					
6 20	21 0.24	- 0 55.0	2.059	2.820	16.1	20.1	6 20	21 2.21	-19 56.6	1.486	2.331	17.4	21.1
6 30	20 56.09	- 0 36.2	1.962	2.812	13.6	19.9	6 30	20 58.28	-20 38.0	1.426	2.346	13.6	20.9
7 10	20 49.83	- 0 34.7	1.884	2.803	10.8	19.7	7 10	20 51.57	-21 28.4	1.387	2.361	9.2	20.7
7 20	20 41.88	- 0 52.0	1.828	2.794	8.0	19.5	7 20	20 42.73	-22 22.3	1.370	2.376	4.5	20.5
7 30	20 32.91	- 1 27.7	1.798	2.784	6.2	19.4	7 30	20 32.85	-23 13.0	1.379	2.392	2.0	20.3
8 9	20 23.86	- 2 19.2	1.794	2.774	6.7	19.4	8 9	20 23.28	-23 54.6	1.413	2.407	6.2	20.6
8 19	20 15.62	- 3 22.1	1.817	2.763	9.2	19.5	8 19	20 15.22	-24 23.7	1.472	2.422	10.6	20.9
8 29	20 9.06	- 4 31.0	1.865	2.751	12.3	19.7	8 29	20 9.61	-24 39.3	1.553	2.438	14.4	21.2
356199	2009 OO ₂₄ 7 29.0 6°55' 2.6/30.9 18						159354	2007 EL ₁₃₇ 7 29.0 250°49' 2.8/31.2 18					
6 20	20 52.00	- 8 33.5	1.606	2.434	17.1	19.7	6 20	20 55.72	- 7 43.9	2.401	3.192	13.2	20.8
6 30	20 50.12	- 9 2.3	1.531	2.436	13.8	19.5	6 30	20 52.23	- 7 55.2	2.306	3.186	10.8	20.6
7 10	20 45.96	- 9 50.1	1.476	2.438	10.0	19.2	7 10	20 47.00	- 8 19.3	2.233	3.181	7.9	20.4
7 20	20 40.02	-10 54.8	1.443	2.441	5.8	19.0	7 20	20 40.43	- 8 55.3	2.184	3.175	4.9	20.2
7 30	20 33.12	-12 11.9	1.435	2.446	2.7	18.8	7 30	20 33.10	- 9 41.1	2.162	3.169	2.8	20.1
8 9	20 26.29	-13 34.8	1.452	2.452	5.0	19.0	8 9	20 25.75	-10 33.3	2.169	3.164	4.2	20.2
8 19	20 20.51	-14 56.6	1.494	2.458	9.1	19.2	8 19	20 19.10	-11 28.3	2.202	3.158	7.2	20.3
8 29	20 16.66	-16 11.4	1.559	2.466	13.0	19.5	8 29	20 13.82	-12 22.2	2.261	3.152	10.2	20.5
84248	2002 SN ₃₆ 7 29.0 268°48' 4.5/26.6 18						472099	2014 AB ₂₂ 7 29.0 270°74' 0.8/29.3 18					
6 20	21 2.66	-26 16.5	1.596	2.444	16.3	19.3	6 20	21 3.39	-17 34.5	1.793	2.618	15.7	21.4
6 30	20 58.95	-27 9.1	1.515	2.435	12.9	19.1	6 30	20 58.89	-17 15.2	1.704	2.611	12.5	21.2
7 10	20 52.30	-28 6.4	1.454	2.426	9.1	18.8	7 10	20 51.89	-17 2.0	1.637	2.604	8.7	20.9
7 20	20 43.23	-29 1.9	1.416	2.417	5.5	18.6	7 20	20 42.91	-16 53.3	1.592	2.597	4.4	20.7
7 30	20 32.76	-29 47.7	1.404	2.408	4.8	18.6	7 30	20 32.83	-16 46.7	1.575	2.590	0.8	20.4
8 9	20 22.29	-30 17.8	1.417	2.398	7.9	18.7	8 9	20 22.81	-16 40.0	1.584	2.582	5.0	20.7
8 19	20 13.17	-30 29.4	1.454	2.389	11.9	18.9	8 19	20 13.95	-16 31.6	1.619	2.575	9.3	20.9
8 29	20 6.57	-30 22.9	1.512	2.380	15.7	19.1	8 29	20 7.20	-16 20.3	1.678	2.568	13.2	21.1
22164	2000 WE ₁₃₅ 7 29.0 201°74' 5.1/25.9 18						199373	2006 BT ₂₁₆ 7 29.0 104°22' 2.2/29.9 18					
6 20	21 5.94	-32 17.3	2.224	3.049	13.1	19.2	6 20	21 3.01	-14 6.9	1.814	2.630	15.9	19.9
6 30	21 0.64	-33 1.8	2.143	3.046	10.5	19.0	6 30	20 58.40	-13 38.8	1.734	2.633	12.8	19.7
7 10	20 52.92	-33 44.5	2.084	3.042	7.8	18.9	7 10	20 51.42	-13 19.3	1.674	2.636	9.0	19.4
7 20	20 43.34	-34 19.7	2.051	3.037	5.6	18.7	7 20	20 42.62	-13 7.4	1.639	2.639	5.0	19.2
7 30	20 32.77	-34 42.0	2.044	3.033	5.4	18.7	7 30	20 32.88	-13 1.6	1.629	2.642	2.2	19.0
8 9	20 22.30	-34 47.9	2.065	3.027	7.4	18.8	8 9	20 23.28	-12 59.9	1.647	2.644	5.0	19.2
8 19	20 12.98	-34 36.7	2.112	3.021	10.1	19.0	8 19	20 14.85	-13 0.2	1.691	2.647	9.0	19.5
8 29	20 5.69	-34 10.1	2.182	3.015	12.8	19.1	8 29	20 8.45	-13 0.6	1.758	2.650	12.6	19.7
346757	2009 BD ₄₁ 7 29.0 263°05' 1.3/28.2 18						335103	2004 TJ ₁₄₇ 7 29.0 50°71' 2.1/30.1 17					
6 20	20 59.93	-19 57.5	2.087	2.914	13.7	21.9	6 20	21 0.19	-13 3.6	1.568	2.397	17.4	20.6
6 30	20 56.03	-20 30.0	1.987	2.898	10.8	21.7	6 30	20 56.48	-12 56.2	1.501	2.407	13.9	20.4
7 10	20 49.89	-21 9.9	1.910	2.880									

EPHEMERIDES

7 29.0

7 29.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
504474	2008 <i>EM</i> ₄₀		7 29.0 67°32'	2.4/30.2	17		440081	2002 <i>TA</i> ₆₈		7 29.0 15°55'	18°6'/27.5	17	
6 20	21 1.94	-12 35.7	1.471	2.301	18.4	21.3	6 20	21 33.03	-52 50.4	0.955	1.785	26.0	19.9
6 30	20 57.97	-12 26.2	1.408	2.314	14.7	21.1	6 30	21 26.55	-53 51.1	0.910	1.786	23.4	19.8
7 10	20 51.31	-12 30.1	1.363	2.327	10.4	20.9	7 10	21 12.77	-54 24.7	0.877	1.787	20.9	19.6
7 20	20 42.60	-12 45.9	1.340	2.340	5.7	20.6	7 20	20 53.31	-54 10.4	0.860	1.789	19.1	19.5
7 30	20 32.89	-13 10.2	1.341	2.354	2.4	20.5	7 30	20 31.84	-52 52.9	0.860	1.792	18.7	19.5
8 9	20 23.46	-13 38.8	1.369	2.368	5.5	20.7	8 9	20 12.76	-50 32.3	0.878	1.795	19.8	19.6
8 19	20 15.47	-14 7.6	1.421	2.381	9.9	21.0	8 19	19 59.04	-47 23.9	0.915	1.799	22.2	19.7
8 29	20 9.84	-14 33.2	1.495	2.395	13.9	21.3	8 29	19 51.73	-43 49.0	0.968	1.803	24.9	20.0
480196	2015 <i>FC</i> ₃₄₀		7 29.0 8°03'	2.7/28.2	17		320487	2007 <i>VM</i> ₃₃₃		7 29.0 222°71'	1°6'/29.9	17	
6 20	21 4.21	-25 50.7	1.465	2.316	17.4	20.0	6 20	21 1.14	-12 7.8	1.672	2.492	16.9	21.6
6 30	21 0.04	-25 40.2	1.395	2.317	13.7	19.7	6 30	20 57.37	-12 27.5	1.584	2.486	13.6	21.4
7 10	20 52.87	-25 30.0	1.344	2.318	9.4	19.5	7 10	20 51.04	-13 2.2	1.516	2.480	9.6	21.1
7 20	20 43.39	-25 15.7	1.316	2.321	5.0	19.2	7 20	20 42.60	-13 49.8	1.471	2.473	5.2	20.8
7 30	20 32.81	-24 53.6	1.312	2.324	2.8	19.1	7 30	20 32.93	-14 45.9	1.452	2.466	1.6	20.6
8 9	20 22.56	-24 21.5	1.334	2.327	6.5	19.4	8 9	20 23.20	-15 45.1	1.459	2.458	5.2	20.8
8 19	20 13.95	-23 40.0	1.380	2.332	11.0	19.6	8 19	20 14.57	-16 41.8	1.492	2.450	9.8	21.1
8 29	20 8.00	-22 50.8	1.448	2.337	14.9	19.9	8 29	20 8.07	-17 31.7	1.548	2.442	13.9	21.3
184768	2005 <i>TS</i> ₇		7 29.0 48°42'	1.3/28.2	18		20799	Ashishbakshi		7 29.0 197°24'	1°1'/28.2	18	
6 20	20 58.56	-20 18.3	1.958	2.793	14.2	20.5	6 20	20 58.62	-20 51.7	2.756	3.572	11.1	19.5
6 30	20 54.80	-20 46.2	1.889	2.803	11.1	20.3	6 30	20 54.29	-21 17.5	2.666	3.570	8.6	19.3
7 10	20 48.88	-21 20.4	1.842	2.814	7.5	20.1	7 10	20 48.31	-21 47.5	2.599	3.567	5.9	19.1
7 20	20 41.36	-21 57.0	1.819	2.825	3.6	19.9	7 20	20 41.05	-22 19.1	2.559	3.564	2.9	18.9
7 30	20 33.03	-22 31.8	1.823	2.837	1.5	19.8	7 30	20 33.12	-22 49.1	2.547	3.560	1.3	18.8
8 9	20 24.89	-23 0.7	1.854	2.848	5.0	20.0	8 9	20 25.21	-23 14.7	2.565	3.557	4.0	19.0
8 19	20 17.82	-23 21.4	1.911	2.860	8.6	20.3	8 19	20 18.01	-23 34.1	2.610	3.553	6.9	19.2
8 29	20 12.60	-23 32.5	1.992	2.872	11.9	20.5	8 29	20 12.14	-23 46.0	2.681	3.548	9.6	19.3
508421	2016 <i>JY</i> ₂₉		7 29.0 50°17'	5.4/26.5	17		299209	2005 <i>JN</i> ₃₆		7 29.0 24°27'	4°2'/1.3	16 R	
6 20	21 3.06	-26 57.0	1.269	2.133	18.8	20.5	6 20	20 53.04	- 3 21.6	1.435	2.251	19.4	20.3
6 30	20 59.63	-28 0.5	1.216	2.144	14.8	20.3	6 30	20 51.09	- 4 3.5	1.372	2.264	15.9	20.1
7 10	20 52.85	-29 7.7	1.182	2.156	10.4	20.1	7 10	20 46.70	- 5 11.4	1.327	2.278	11.9	19.9
7 20	20 43.46	-30 9.6	1.169	2.169	6.5	19.9	7 20	20 40.43	- 6 43.3	1.303	2.293	7.6	19.7
7 30	20 32.81	-30 57.1	1.179	2.182	5.8	19.9	7 30	20 33.19	- 8 33.4	1.303	2.309	4.4	19.6
8 9	20 22.56	-31 24.0	1.214	2.195	9.0	20.1	8 9	20 26.12	-10 32.5	1.328	2.326	5.7	19.7
8 19	20 14.19	-31 28.7	1.271	2.208	13.1	20.4	8 19	20 20.27	-12 31.1	1.378	2.344	9.6	20.0
8 29	20 8.80	-31 13.5	1.348	2.222	16.8	20.7	8 29	20 16.52	-14 20.5	1.452	2.363	13.5	20.3
310672	2002 <i>FL</i> ₆		7 29.0 150°29'	10°7'/21.1	16		488437	2016 <i>XZ</i> ₂₂		7 29.0 297°30'	0°3'/29.3	18	
6 20	21 13.91	-43 46.4	1.905	2.717	15.4	21.5	6 20	20 56.61	-14 0.3	1.898	2.724	15.0	21.5
6 30	21 8.07	-45 50.9	1.854	2.728	13.3	21.4	6 30	20 53.73	-14 42.3	1.791	2.698	12.0	21.2
7 10	20 58.69	-47 46.2	1.826	2.738	11.5	21.3	7 10	20 48.56	-15 39.0	1.704	2.672	8.4	21.0
7 20	20 46.39	-49 21.0	1.821	2.747	10.7	21.3	7 20	20 41.44	-16 47.7	1.641	2.646	4.2	20.7
7 30	20 32.48	-50 25.9	1.841	2.756	11.2	21.3	7 30	20 33.07	-18 3.8	1.605	2.620	0.5	20.3
8 9	20 18.72	-50 56.3	1.885	2.763	12.7	21.4	8 9	20 24.42	-19 21.1	1.595	2.594	5.0	20.6
8 19	20 6.79	-50 53.3	1.950	2.770	14.7	21.6	8 19	20 16.55	-20 33.6	1.612	2.568	9.4	20.8
8 29	19 58.01	-50 22.3	2.034	2.776	16.6	21.7	8 29	20 10.47	-21 36.6	1.653	2.542	13.4	21.0
47476	2000 <i>AJ</i> ₈		7 29.0 294°42'	4°9'/26.2	18		398068	2009 <i>HW</i> ₉₆		7 29.0 78°80'	3°3'/26.5	18	
6 20	21 0.55	-25 35.5	1.468	2.324	17.0	18.9	6 20	20 58.87	-23 55.2	2.087	2.923	13.4	21.3
6 30	20 57.63	-26 43.7	1.386	2.312	13.5	18.6	6 30	20 55.08	-25 7.5	2.018	2.932	10.5	21.1
7 10	20 51.62	-27 59.5	1.325	2.300	9.5	18.3	7 10	20 49.15	-26 24.9	1.971	2.942	7.2	20.9
7 20	20 43.01	-29 15.2	1.286	2.287	5.9	18.1	7 20	20 41.55	-27 42.0	1.950	2.951	4.2	20.8
7 30	20 32.84	-30 21.6	1.272	2.275	5.3	18.0	7 30	20 33.08	-28 52.3	1.957	2.961	3.6	20.8
8 9	20 22.57	-31 10.8	1.283	2.263	8.6	18.2	8 9	20 24.69	-29 50.6	1.991	2.970	6.2	20.9
8 19	20 13.68	-31 38.7	1.316	2.252	12.9	18.4	8 19	20 17.30	-30 34.0	2.051	2.980	9.3	21.2
8 29	20 7.44	-31 45.0	1.370	2.240	16.8	18.6	8 29	20 11.72	-31 1.5	2.135	2.989	12.2	21.4
467193	2016 <i>EQ</i> ₁₂₅		7 29.0 96°12'	5°3'/1.0	17		71883	2000 <i>VO</i> ₅₆		7 29.0 185°30'	4°0'/26.9	18	
6 20	21 1.06	- 4 48.3	1.430	2.237	19.9	21.5	6 20	21 6.12	-26 16.1	1.723	2.560	15.8	20.2
6 30	20 57.40	- 4 38.7	1.363	2.248	16.4	21.3	6 30	21 1.34	-27 2.0	1.647	2.561	12.5	20.0
7 10	20 51.02	- 4 50.6	1.313	2.259	12.4	21.1	7 10	20 53.74	-27 51.3	1.591	2.561	8.7	19.7
7 20	20 42.53	- 5 24.0	1.284	2.270	8.2	20.9	7 20	20 43.90	-28 37.7	1.560	2.560	5.2	19.5
7 30	20 32.93	- 6 16.5	1.279	2.281	5.4	20.8	7 30	20 32.84	-29 14.5	1.554	2.559	4.3	19.5
8 9	20 23.51	- 7 22.4	1.298	2.292	6.8	20.9	8 9	20 21.89	-29 36.6	1.575	2.557	7.3	19.7
8 19	20 15.47	- 8 34.6	1.342	2.302	10.5	21.1	8 19	20 12.32	-29 42.1	1.622	2.555	11.1	19.9
8 29	20 9.79	- 9 46.4	1.409	2.312	14.4	21.4	8 29	20 5.18	-29 31.9	1.690	2.552	14.6	20.1
8984	Derevyanko		7 29.0 345°72'	9°1'/25.5	18		246644	2008 <i>YZ</i> ₁₈		7 29.0 37°15'	0°5'/28.7	17	
6 20	20 58.82	-35 29.8	1.204	2.078	18.9	16.2	6 20	20 59.14	-18 1.0	1.887	2.719	14.8	21.2
6 30	20 57.09	-36 19.3	1.135	2.063	15.6	15.9	6 30	20 55.43	-18 25.0	1.808	2.720	11.7	21.0
7 10	20 51.63	-37 3.4	1.084	2.050	12.1	15.7	7 10	20 49.46	-18 57.5	1.750	2.721	7.9	20.8
7 20	20 43.09	-37 32.2	1.052	2.039	9.6	15.5	7 20	20 41.74	-19 35.2	1.717	2.723	3.8	20.5
7 30	20 32.87	-37 36.2	1.042	2.029	9.4	15.4	7 30	20 33.07	-20 13.7	1.709	2.724	0.8	20.3
8 9	20 22.87	-37 10.2	1.053	2.020	11.9	15.6	8 9	20 24.49	-20 48.7	1.729	2.726	4.9	20.6
8 19	20 14.86	-36 15.0	1.084	2.014	15.6	15.7	8 19	20 16.96	-21 17.0	1.774	2.727	8.9	20.8
8 29	20 10.17	-34 56.2	1.134	2.009	19.2	16.0	8 29	20 11.33	-21 36.6	1.844	2.729	12.4	21.0
181526	2006 <i>UQ</i> ₁₁₈		7 29.0 178°64'	0°9'/28.4	18		254480	2005 <i>EE</i> ₁₃					

EPHEMERIDES

7 29.0

7 29.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
311520	2005 <i>XH</i> ₃		7 29.0 325°62	5°4/25.3	18		83949	2001 <i>WP</i> ₄₅		7 29.1 88°87	1°3/28.4	18	
6 20	20 59.03	-30 19.0	1.981	2.825	13.7	20.3	6 20	21 1.54	-19 58.1	1.668	2.506	16.1	19.7
6 30	20 55.59	-31 24.6	1.903	2.818	11.0	20.1	6 30	20 57.64	-20 23.9	1.593	2.509	12.7	19.5
7 10	20 49.74	-32 31.4	1.847	2.812	8.1	19.9	7 10	20 51.15	-20 57.5	1.539	2.511	8.6	19.2
7 20	20 41.94	-33 32.9	1.815	2.805	5.8	19.8	7 20	20 42.63	-21 34.8	1.508	2.514	4.2	19.0
7 30	20 33.07	-34 22.5	1.808	2.799	5.7	19.8	7 30	20 33.03	-22 10.6	1.503	2.517	1.5	18.8
8 9	20 24.20	-34 55.3	1.828	2.793	7.9	19.9	8 9	20 23.56	-22 40.0	1.524	2.519	5.6	19.1
8 19	20 16.43	-35 9.2	1.872	2.787	10.9	20.1	8 19	20 15.36	-23 0.0	1.571	2.522	9.9	19.3
8 29	20 10.69	-35 4.9	1.939	2.782	13.8	20.2	8 29	20 9.38	-23 9.4	1.640	2.525	13.7	19.6
97971	2000 <i>QR</i> ₁₅₀		7 29.0 342°42	1°6/28.6	18		335809	2007 <i>JG</i> ₄		7 29.1 172°52	6°7/ 2.1	18	
6 20	20 53.84	-22 34.5	0.912	1.807	21.6	17.4	6 20	21 0.29	- 0 15.3	2.040	2.798	16.3	21.3
6 30	20 53.60	-22 15.3	0.842	1.789	17.3	17.1	6 30	20 56.07	+ 0 24.8	1.955	2.800	13.9	21.1
7 10	20 49.56	-22 0.5	0.786	1.773	12.0	16.7	7 10	20 49.78	+ 0 48.4	1.888	2.802	11.1	20.9
7 20	20 42.26	-21 46.4	0.749	1.758	6.0	16.4	7 20	20 41.89	+ 0 53.6	1.845	2.803	8.5	20.8
7 30	20 33.03	-21 28.3	0.731	1.745	1.8	16.1	7 30	20 33.11	+ 0 40.0	1.826	2.804	6.8	20.7
8 9	20 23.82	-21 2.3	0.733	1.735	7.8	16.4	8 9	20 24.36	+ 0 9.5	1.833	2.805	7.3	20.7
8 19	20 16.56	-20 27.1	0.754	1.727	14.1	16.7	8 19	20 16.50	- 0 34.2	1.865	2.805	9.4	20.8
8 29	20 12.75	-19 43.6	0.792	1.721	19.6	17.0	8 29	20 10.33	- 1 26.4	1.922	2.805	12.1	21.0
139106	2001 <i>FC</i> ₄₇		7 29.0 69°60	2°3/27.9	18		518629	2008 <i>FW</i> ₁₃₈		7 29.1 92°46	4°2/31.4	17	
6 20	21 4.02	-21 39.6	1.414	2.262	18.0	19.8	6 20	20 59.94	- 7 6.0	1.626	2.434	17.9	21.5
6 30	20 59.84	-22 13.0	1.358	2.279	14.1	19.6	6 30	20 56.27	- 6 58.7	1.553	2.441	14.6	21.3
7 10	20 52.71	-22 53.4	1.321	2.296	9.5	19.3	7 10	20 50.14	- 7 8.8	1.499	2.449	10.8	21.1
7 20	20 43.35	-23 35.0	1.306	2.312	4.8	19.1	7 20	20 42.12	- 7 35.8	1.466	2.456	6.9	20.9
7 30	20 32.94	-24 11.5	1.317	2.329	2.5	19.0	7 30	20 33.09	- 8 17.3	1.458	2.464	4.2	20.8
8 9	20 22.93	-24 37.6	1.353	2.346	6.5	19.3	8 9	20 24.19	- 9 8.8	1.476	2.471	5.8	20.9
8 19	20 14.57	-24 50.9	1.413	2.363	10.9	19.6	8 19	20 16.47	-10 4.7	1.520	2.479	9.6	21.1
8 29	20 8.84	-24 51.2	1.494	2.379	14.8	19.9	8 29	20 10.84	-11 0.0	1.586	2.486	13.3	21.4
115863	2003 <i>UL</i> ₂₇₄		7 29.0 101°49	3°6/30.8	17		33745	1999 <i>NW</i> ₆₁		7 29.1 56°54	5°3/ 1.9	18	
6 20	21 3.37	-10 2.5	1.548	2.362	18.3	19.9	6 20	20 57.33	- 1 54.3	1.576	2.369	18.9	17.7
6 30	20 59.01	- 9 41.2	1.479	2.374	14.8	19.7	6 30	20 54.20	- 2 11.0	1.511	2.386	15.7	17.5
7 10	20 52.02	- 9 34.4	1.429	2.385	10.7	19.4	7 10	20 48.69	- 2 51.5	1.464	2.402	12.0	17.4
7 20	20 43.01	- 9 41.4	1.401	2.396	6.5	19.2	7 20	20 41.39	- 3 55.0	1.439	2.419	8.2	17.2
7 30	20 32.98	-10 0.2	1.398	2.407	3.6	19.1	7 30	20 33.18	- 5 17.8	1.437	2.437	5.5	17.1
8 9	20 23.17	-10 27.1	1.421	2.417	5.8	19.2	8 9	20 25.15	- 6 53.1	1.462	2.454	6.3	17.2
8 19	20 14.73	-10 57.9	1.469	2.428	9.9	19.5	8 19	20 18.32	- 8 33.0	1.512	2.472	9.5	17.4
8 29	20 8.57	-11 28.7	1.540	2.438	13.7	19.8	8 29	20 13.53	-10 9.8	1.586	2.489	13.0	17.6
100061	1992 <i>EL</i> ₅		7 29.0 214°71	1°6/27.9	18		483306	2015 <i>UB</i> ₈₃		7 29.1 307°45	3°7/ 1.1	18	
6 20	20 58.84	-21 32.9	2.447	3.270	12.1	20.4	6 20	20 54.16	- 4 27.0	2.276	3.059	14.1	21.0
6 30	20 54.75	-22 8.0	2.358	3.266	9.4	20.3	6 30	20 51.19	- 4 46.6	2.176	3.048	11.7	20.8
7 10	20 48.78	-22 48.2	2.292	3.262	6.4	20.1	7 10	20 46.45	- 5 22.5	2.097	3.037	8.8	20.6
7 20	20 41.37	-23 30.0	2.253	3.257	3.2	19.8	7 20	20 40.28	- 6 14.4	2.042	3.026	5.9	20.4
7 30	20 33.15	-24 9.4	2.241	3.253	1.8	19.7	7 30	20 33.29	- 7 19.9	2.013	3.015	3.8	20.3
8 9	20 24.95	-24 43.0	2.257	3.248	4.6	19.9	8 9	20 26.22	- 8 35.1	2.012	3.005	4.7	20.3
8 19	20 17.53	-25 8.2	2.301	3.242	7.8	20.1	8 19	20 19.83	- 9 55.1	2.038	2.994	7.6	20.5
8 29	20 11.63	-25 23.8	2.370	3.237	10.7	20.3	8 29	20 14.84	-11 14.7	2.089	2.984	10.7	20.7
24221	1999 <i>XT</i> ₇₃		7 29.0 136°88	0°1/29.1	18		168744	2000 <i>QB</i> ₁₀₂		7 29.1 309°98	1°3/28.4	18	
6 20	20 57.78	-16 46.4	2.662	3.473	11.6	20.4	6 20	20 56.25	-16 49.6	1.241	2.103	19.2	19.9
6 30	20 53.61	-17 3.3	2.580	3.479	9.1	20.3	6 30	20 54.66	-17 38.5	1.154	2.083	15.3	19.5
7 10	20 47.82	-17 26.4	2.521	3.486	6.2	20.1	7 10	20 49.91	-18 45.7	1.085	2.064	10.6	19.2
7 20	20 40.83	-17 53.6	2.488	3.492	3.0	19.9	7 20	20 42.38	-20 6.8	1.037	2.045	5.1	18.9
7 30	20 33.22	-18 22.3	2.483	3.498	0.3	19.7	7 30	20 33.05	-21 33.6	1.012	2.026	1.6	18.6
8 9	20 25.68	-18 49.8	2.507	3.504	3.6	20.0	8 9	20 23.42	-22 56.1	1.010	2.008	7.2	18.9
8 19	20 18.88	-19 13.7	2.559	3.510	6.6	20.2	8 19	20 15.11	-24 5.8	1.030	1.991	12.8	19.1
8 29	20 13.42	-19 32.6	2.637	3.515	9.4	20.4	8 29	20 9.57	-24 57.5	1.071	1.974	17.9	19.4
305414	2008 <i>CG</i> ₁₁₀		7 29.0 180°44	4°1/26.3	18		238177	2003 <i>SR</i> ₂₁₅		7 29.1 227°31	3°5/27.8	18	
6 20	21 3.83	-31 23.9	2.589	3.410	11.6	21.0	6 20	21 11.69	-29 54.2	2.107	2.924	14.0	19.7
6 30	20 58.56	-31 54.9	2.509	3.410	9.2	20.9	6 30	21 5.12	-29 49.0	2.017	2.918	11.2	19.5
7 10	20 51.30	-32 24.0	2.452	3.411	6.7	20.7	7 10	20 55.98	-29 40.4	1.949	2.911	7.9	19.3
7 20	20 42.54	-32 46.8	2.421	3.411	4.6	20.6	7 20	20 44.89	-29 24.0	1.907	2.904	4.8	19.1
7 30	20 33.03	-32 59.6	2.418	3.411	4.3	20.6	7 30	20 32.83	-28 56.3	1.893	2.897	3.7	19.0
8 9	20 23.66	-32 59.7	2.443	3.410	6.1	20.7	8 9	20 20.99	-28 15.6	1.907	2.889	6.2	19.2
8 19	20 15.26	-32 46.7	2.495	3.409	8.6	20.8	8 19	20 10.49	-27 23.0	1.949	2.881	9.6	19.4
8 29	20 8.54	-32 21.6	2.572	3.408	11.0	21.0	8 29	20 2.21	-26 21.2	2.017	2.873	12.8	19.6
190213	2006 <i>BL</i> ₆₆		7 29.1 17°55	1°2/28.3	18		55814	1994 <i>YD</i>		7 29.1 205°97	1°7/29.8	18	
6 20	20 55.59	-19 31.9	1.801	2.645	14.9	19.5	6 20	21 4.70	-14 41.8	1.961	2.770	15.2	19.2
6 30	20 52.72	-20 2.9	1.733	2.652	11.6	19.3	6 30	20 59.69	-14 21.5	1.871	2.767	12.1	19.0
7 10	20 47.63	-20 41.5	1.686	2.660	7.9	19.1	7 10	20 52.35	-14 9.0	1.802	2.763	8.6	18.8
7 20	20 40.85	-21 23.8	1.663	2.669	3.8	18.9	7 20	20 43.18	-14 3.0	1.757	2.758	4.6	18.5
7 30	20 33.22	-22 5.2	1.665	2.679	1.4	18.7	7 30	20 33.00	-14 1.8	1.740	2.753	1.7	18.3
8 9	20 25.74	-22 41.1	1.693	2.689	5.1	19.0	8 9	20 22.87	-14 3.2	1.750	2.747	4.8	18.5
8 19	20 19.37	-23 8.3	1.747	2.700	9.0	19.3	8 19	20 13.79	-14 5.1	1.787	2.741	8.7	18.7
8 29	20 14.89	-23 25.3	1.824	2.712	12.4	19.5	8 29	20 6.64	-14 5.9	1.849	2.735	12.4	19.0
392850	2012 <i>UA</i> ₅₈		7 29.1 220°07	2°9/27.3	18		439770	2015 <i>GW</i> ₈					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
428564	2008 <i>CJ</i> ₁₅₂		7 29.1 159°73	1°0/29.6	17		94766	2001 <i>XU</i> ₁₀₀		7 29.1 195°53	0°8/29.5	18	
6 20	21 3.46	-14 35.4	1.829	2.646	15.8	22.0	6 20	21 2.33	-15 23.5	2.163	2.973	13.9	20.4
6 30	20 58.83	-14 43.3	1.750	2.651	12.6	21.8	6 30	20 57.64	-15 29.3	2.073	2.971	11.1	20.2
7 10	20 51.80	-15 1.5	1.692	2.656	8.7	21.6	7 10	20 50.86	-15 43.3	2.005	2.968	7.7	20.0
7 20	20 42.91	-15 27.9	1.657	2.660	4.5	21.3	7 20	20 42.44	-16 3.5	1.962	2.965	3.9	19.8
7 30	20 33.04	-15 58.8	1.649	2.663	1.1	21.1	7 30	20 33.12	-16 27.1	1.946	2.961	0.8	19.5
8 9	20 23.27	-16 30.3	1.668	2.667	4.8	21.4	8 9	20 23.83	-16 50.9	1.959	2.957	4.3	19.8
8 19	20 14.65	-16 58.9	1.714	2.669	9.0	21.6	8 19	20 15.46	-17 12.2	1.999	2.952	8.1	20.0
8 29	20 8.05	-17 22.2	1.784	2.671	12.7	21.8	8 29	20 8.79	-17 29.1	2.064	2.946	11.4	20.2
441310	2008 <i>AQ</i> ₆₇		7 29.1 210°40	0°1/29.0	18		400647	2009 <i>FC</i> ₆₈		7 29.1 129°11	0°7/29.5	15	
6 20	21 0.06	-18 9.3	2.190	3.010	13.4	21.9	6 20	20 59.27	-14 55.1	2.254	3.066	13.3	22.2
6 30	20 55.82	-18 14.9	2.104	3.009	10.6	21.7	6 30	20 55.08	-15 10.0	2.175	3.073	10.5	22.0
7 10	20 49.57	-18 26.6	2.040	3.008	7.2	21.5	7 10	20 48.99	-15 33.4	2.117	3.081	7.3	21.8
7 20	20 41.77	-18 42.2	2.001	3.006	3.5	21.2	7 20	20 41.48	-16 3.2	2.085	3.088	3.7	21.6
7 30	20 33.16	-18 58.7	1.990	3.005	0.4	21.0	7 30	20 33.23	-16 36.4	2.080	3.094	0.7	21.4
8 9	20 24.61	-19 13.3	2.006	3.003	4.3	21.3	8 9	20 25.07	-17 9.5	2.103	3.101	4.0	21.6
8 19	20 16.99	-19 23.8	2.050	3.002	7.9	21.5	8 19	20 17.80	-17 39.8	2.153	3.107	7.5	21.9
8 29	20 11.03	-19 29.0	2.118	3.000	11.2	21.7	8 29	20 12.10	-18 5.0	2.229	3.113	10.6	22.1
249636	1999 <i>TT</i> ₁₃₇		7 29.1 255°37	6°6/3.6	18		7301	Matsuitakafumi		7 29.1 212°87	3°2/26.7	18	
6 20	20 56.10	+ 5 18.4	2.856	3.565	13.1	21.6	6 20	21 2.64	-25 21.6	2.308	3.133	12.7	19.2
6 30	20 52.34	+ 5 43.9	2.743	3.545	11.5	21.4	6 30	20 58.00	-26 16.8	2.218	3.125	10.0	19.0
7 10	20 47.05	+ 5 54.4	2.649	3.525	9.7	21.3	7 10	20 51.20	-27 16.0	2.150	3.117	7.0	18.8
7 20	20 40.54	+ 5 48.0	2.578	3.505	7.9	21.1	7 20	20 42.65	-28 14.3	2.109	3.109	4.1	18.7
7 30	20 33.29	+ 5 24.2	2.532	3.484	6.8	21.0	7 30	20 33.11	-29 6.2	2.096	3.099	3.5	18.6
8 9	20 25.92	+ 4 43.9	2.512	3.463	6.9	21.0	8 9	20 23.51	-29 47.3	2.111	3.090	6.0	18.7
8 19	20 19.06	+ 3 49.8	2.520	3.441	8.1	21.1	8 19	20 14.79	-30 14.9	2.153	3.079	9.1	18.9
8 29	20 13.31	+ 2 45.7	2.552	3.419	10.1	21.2	8 29	20 7.80	-30 28.3	2.219	3.068	12.0	19.1
356413	2010 <i>TD</i> ₁₀₀		7 29.1 29°47	0°7/29.5	18		64375	2001 <i>UF</i> ₁₁₆		7 29.1 102°87	0°6/29.5	18	
6 20	20 56.70	-14 46.6	1.902	2.729	14.9	20.8	6 20	20 58.63	-15 25.6	2.148	2.966	13.7	20.0
6 30	20 53.43	-15 5.2	1.828	2.736	11.8	20.6	6 30	20 54.72	-15 37.7	2.067	2.969	10.9	19.8
7 10	20 48.05	-15 34.2	1.775	2.743	8.1	20.4	7 10	20 48.83	-15 58.4	2.007	2.973	7.5	19.6
7 20	20 41.06	-16 11.2	1.746	2.750	4.1	20.2	7 20	20 41.43	-16 25.5	1.972	2.976	3.8	19.4
7 30	20 33.24	-16 52.3	1.743	2.758	0.7	19.9	7 30	20 33.25	-16 55.9	1.964	2.979	0.6	19.2
8 9	20 25.54	-17 33.3	1.767	2.766	4.5	20.2	8 9	20 25.14	-17 26.2	1.984	2.982	4.2	19.4
8 19	20 18.85	-18 10.6	1.816	2.774	8.4	20.5	8 19	20 17.94	-17 53.5	2.031	2.986	7.8	19.7
8 29	20 13.94	-18 41.3	1.890	2.783	11.8	20.7	8 29	20 12.38	-18 15.6	2.102	2.989	11.1	19.9
183007	2002 <i>PJ</i> ₆₇		7 29.1 309°62	2°1/29.9	18		165956	2001 <i>XM</i> ₆₈		7 29.1 238°17	5°2/26.1	18	
6 20	20 58.02	-13 27.4	1.357	2.202	18.8	20.7	6 20	21 5.11	-27 10.0	1.625	2.468	16.3	19.8
6 30	20 55.65	-13 20.9	1.268	2.184	15.2	20.5	6 30	21 1.04	-28 19.4	1.541	2.458	13.0	19.6
7 10	20 50.32	-13 28.6	1.196	2.166	10.9	20.1	7 10	20 53.91	-29 34.3	1.477	2.446	9.3	19.3
7 20	20 42.48	-13 49.4	1.146	2.149	5.9	19.8	7 20	20 44.20	-30 47.0	1.437	2.434	6.0	19.1
7 30	20 33.08	-14 20.2	1.118	2.132	2.1	19.5	7 30	20 32.94	-31 48.6	1.423	2.422	5.5	19.0
8 9	20 23.49	-14 56.2	1.115	2.116	6.1	19.7	8 9	20 21.56	-32 32.0	1.434	2.409	8.6	19.2
8 19	20 15.14	-15 32.1	1.135	2.100	11.3	20.0	8 19	20 11.52	-32 53.6	1.469	2.395	12.5	19.4
8 29	20 9.31	-16 3.5	1.175	2.084	16.1	20.2	8 29	20 4.06	-32 54.2	1.526	2.382	16.2	19.6
263408	2008 <i>DY</i> ₂₆		7 29.1 140°59	4°8/2.5	18		359910	2011 <i>WD</i> ₁₀₂		7 29.1 0°27	11°3/2.6	18	
6 20	20 56.10	- 0 1.4	2.513	3.263	13.8	20.6	6 20	21 2.51	+ 6 35.8	1.941	2.660	18.2	19.4
6 30	20 52.39	- 0 11.5	2.425	3.268	11.6	20.4	6 30	20 58.01	+ 8 37.9	1.860	2.659	16.2	19.2
7 10	20 47.07	- 0 38.0	2.358	3.274	9.1	20.2	7 10	20 51.25	+10 23.5	1.798	2.659	14.2	19.1
7 20	20 40.52	- 1 20.9	2.314	3.279	6.6	20.1	7 20	20 42.70	+11 47.0	1.757	2.659	12.4	19.0
7 30	20 33.31	- 2 18.7	2.297	3.284	5.0	20.0	7 30	20 33.12	+12 43.6	1.738	2.659	11.4	18.9
8 9	20 26.13	- 3 28.1	2.308	3.289	5.3	20.0	8 9	20 23.49	+13 11.8	1.744	2.660	11.6	18.9
8 19	20 19.64	- 4 44.6	2.347	3.294	7.3	20.2	8 19	20 14.81	+13 12.9	1.773	2.661	12.8	19.0
8 29	20 14.45	- 6 3.5	2.411	3.298	9.8	20.3	8 29	20 7.96	+12 51.6	1.822	2.662	14.6	19.2
16925	1998 <i>FB</i> ₆₃		7 29.1 278°61	7°3/3.5	18		460127	2014 <i>PM</i> ₄₀		7 29.1 288°68	2°1/30.9	17	
6 20	20 55.85	+ 4 15.2	2.310	3.043	15.3	18.3	6 20	20 54.29	- 8 55.2	2.628	3.421	12.2	21.6
6 30	20 52.57	+ 4 37.9	2.201	3.022	13.3	18.1	6 30	20 51.06	- 9 16.1	2.526	3.409	9.9	21.4
7 10	20 47.45	+ 4 42.3	2.109	3.001	11.1	17.9	7 10	20 46.24	- 9 48.8	2.445	3.396	7.2	21.2
7 20	20 40.82	+ 4 26.2	2.039	2.980	9.0	17.7	7 20	20 40.17	-10 32.0	2.389	3.384	4.3	21.0
7 30	20 33.27	+ 3 48.9	1.994	2.958	7.5	17.6	7 30	20 33.38	-11 23.6	2.361	3.371	2.2	20.9
8 9	20 25.55	+ 2 51.9	1.974	2.937	7.6	17.6	8 9	20 26.53	-12 20.1	2.362	3.358	3.8	20.9
8 19	20 18.45	+ 1 39.1	1.980	2.915	9.3	17.6	8 19	20 20.26	-13 18.1	2.390	3.346	6.7	21.1
8 29	20 12.74	+ 0 15.8	2.011	2.893	11.7	17.7	8 29	20 15.22	-14 14.0	2.444	3.334	9.6	21.3
259885	2004 <i>DV</i> ₂₉		7 29.1 209°52	0°3/29.3	17		512004	2015 <i>KX</i> ₁₆₄		7 29.1 140°02	8°6/21.5	18	
6 20	21 2.16	-15 16.9	1.926	2.743	15.1	22.1	6 20	21 6.70	-39 17.9	2.145	2.967	13.6	21.8
6 30	20 57.87	-15 43.9	1.835	2.738	12.0	21.8	6 30	21 1.85	-41 20.5	2.088	2.976	11.4	21.7
7 10	20 51.23	-16 22.0	1.766	2.732	8.3	21.6	7 10	20 54.19	-43 18.2	2.055	2.984	9.5	21.6
7 20	20 42.70	-17 8.2	1.721	2.725	4.1	21.3	7 20	20 44.23	-45 1.8	2.047	2.993	8.6	21.5
7 30	20 33.08	-17 58.3	1.703	2.718	0.5	21.0	7 30	20 32.96	-46 22.8	2.065	3.000	9.1	21.6
8 9	20 23.41	-18 47.4	1.713	2.710	4.8	21.3	8 9	20 21.65	-47 16.3	2.109	3.007	10.7	21.7
8 19	20 14.73	-19 31.2	1.749	2.702	9.0	21.6	8 19	20 11.63	-47 41.6	2.176	3.014	12.7	21.8
8 29	20 7.95	-20 6.9	1.810	2.693	12.7	21.8	8 29	20 3.97	-47 41.5	2.263	3.021	14.7	22.0
454322	2014 <i>KF</</i>												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
173589	2001 <i>DE</i> ₁₁		7 29.1 193°20	0°9/28.6	17		353006	2009 <i>BQ</i> ₁₄₅		7 29.1 77°14	1°3/28.3	18	
6 20	21 4.17	-18 53.1	1.895	2.718	15.1	21.6	6 20	21 0.87	-21 3.5	1.963	2.795	14.3	21.2
6 30	20 59.48	-19 21.1	1.809	2.716	11.9	21.4	6 30	20 56.76	-21 21.6	1.884	2.796	11.2	21.0
7 10	20 52.34	-19 57.2	1.745	2.714	8.1	21.1	7 10	20 50.38	-21 45.1	1.825	2.796	7.6	20.8
7 20	20 43.25	-20 37.8	1.706	2.711	3.9	20.9	7 20	20 42.26	-22 10.5	1.791	2.797	3.8	20.6
7 30	20 33.07	-21 18.0	1.693	2.708	1.1	20.7	7 30	20 33.22	-22 33.7	1.784	2.797	1.5	20.4
8 9	20 22.91	-21 53.1	1.708	2.703	5.2	21.0	8 9	20 24.28	-22 51.3	1.804	2.798	5.1	20.6
8 19	20 13.86	-22 20.0	1.750	2.699	9.3	21.2	8 19	20 16.41	-23 0.8	1.850	2.798	8.9	20.9
8 29	20 6.83	-22 37.0	1.816	2.693	13.0	21.4	8 29	20 10.45	-23 1.7	1.919	2.799	12.3	21.1
35542	1998 <i>FS</i> ₉₉		7 29.1 178°09	5°1/26.6	18		33509	Mogilny		7 29.1 131°47	4°7/31.7	18	
6 20	21 8.24	-31 55.6	2.017	2.844	14.2	18.3	6 20	21 0.77	-6 3.6	1.508	2.316	19.0	19.5
6 30	21 2.62	-32 26.0	1.941	2.845	11.4	18.1	6 30	20 57.19	-5 56.0	1.433	2.320	15.6	19.3
7 10	20 54.39	-32 53.8	1.886	2.846	8.3	17.9	7 10	20 50.98	-6 7.9	1.376	2.325	11.7	19.0
7 20	20 44.18	-33 13.3	1.856	2.846	5.7	17.8	7 20	20 42.65	-6 39.5	1.340	2.329	7.6	18.8
7 30	20 32.99	-33 19.0	1.853	2.846	5.2	17.7	7 30	20 33.18	-7 28.2	1.328	2.332	4.8	18.7
8 9	20 22.01	-33 8.2	1.877	2.846	7.4	17.9	8 9	20 23.77	-8 28.9	1.341	2.336	6.4	18.8
8 19	20 12.40	-32 41.0	1.927	2.845	10.4	18.1	8 19	20 15.62	-9 35.3	1.379	2.339	10.2	19.0
8 29	20 5.05	-31 59.5	2.000	2.844	13.3	18.2	8 29	20 9.73	-10 41.1	1.440	2.343	14.2	19.2
392052	2009 <i>BG</i> ₁₃₈		7 29.1 342°24	0°2/28.9	18		95146	2002 <i>AV</i> ₁₆₅		7 29.1 221°52	0°8/29.6	18	
6 20	20 56.52	-16 11.8	1.666	2.505	16.1	20.7	6 20	21 2.22	-15 0.4	2.269	3.075	13.5	20.3
6 30	20 53.78	-16 42.5	1.584	2.500	12.7	20.4	6 30	20 57.56	-15 8.0	2.170	3.065	10.7	20.1
7 10	20 48.61	-17 25.3	1.523	2.495	8.7	20.2	7 10	20 50.84	-15 24.0	2.092	3.054	7.5	19.9
7 20	20 41.48	-18 16.8	1.484	2.490	4.3	19.9	7 20	20 42.49	-15 46.4	2.040	3.042	3.9	19.6
7 30	20 33.26	-19 11.8	1.471	2.486	0.5	19.6	7 30	20 33.20	-16 12.6	2.016	3.030	0.9	19.4
8 9	20 25.03	-20 4.7	1.484	2.483	5.2	20.0	8 9	20 23.84	-16 39.4	2.020	3.017	4.2	19.6
8 19	20 17.90	-20 50.7	1.522	2.480	9.7	20.2	8 19	20 15.30	-17 4.0	2.052	3.004	7.9	19.8
8 29	20 12.82	-21 26.5	1.583	2.477	13.6	20.5	8 29	20 8.38	-17 24.3	2.109	2.990	11.3	20.0
518407	2018 <i>CD</i> ₆		7 29.1 237°59	2°3/27.5	18		228219	1996 <i>VG</i> ₃₃		7 29.1 210°48	2°3/27.4	18	
6 20	21 2.44	-22 48.4	2.278	3.100	12.9	21.9	6 20	21 3.12	-23 38.9	2.475	3.292	12.1	21.5
6 30	20 57.91	-23 32.0	2.178	3.085	10.2	21.7	6 30	20 58.18	-24 18.3	2.380	3.285	9.5	21.3
7 10	20 51.19	-24 21.2	2.100	3.068	7.0	21.5	7 10	20 51.21	-25 1.6	2.309	3.276	6.6	21.1
7 20	20 42.70	-25 11.9	2.048	3.051	3.7	21.2	7 20	20 42.65	-25 44.9	2.264	3.267	3.5	20.9
7 30	20 33.13	-25 58.9	2.024	3.034	2.5	21.1	7 30	20 33.19	-26 23.8	2.248	3.256	2.5	20.8
8 9	20 23.44	-26 38.0	2.029	3.015	5.4	21.3	8 9	20 23.67	-26 54.7	2.260	3.245	5.1	21.0
8 19	20 14.57	-27 6.0	2.061	2.996	8.9	21.5	8 19	20 14.98	-27 15.2	2.301	3.234	8.2	21.1
8 29	20 7.40	-27 21.9	2.117	2.977	12.1	21.6	8 29	20 7.89	-27 24.6	2.366	3.222	11.2	21.3
86044	1999 <i>OD</i> ₂		7 29.1 346°85	10°7/3.1	18		429411	2010 <i>TW</i> ₁₄₀		7 29.1 267°20	5°0/26.8	18	
6 20	20 53.61	+ 3 15.5	1.600	2.375	19.4	18.1	6 20	21 6.05	-28 22.4	1.579	2.424	16.6	21.6
6 30	20 51.54	+ 4 45.0	1.516	2.363	17.1	17.9	6 30	21 1.88	-29 3.0	1.491	2.408	13.3	21.3
7 10	20 47.11	+ 5 55.5	1.449	2.351	14.6	17.7	7 10	20 54.54	-29 46.1	1.423	2.392	9.5	21.1
7 20	20 40.78	+ 6 41.6	1.402	2.341	12.3	17.5	7 20	20 44.55	-30 24.5	1.378	2.376	6.1	20.8
7 30	20 33.33	+ 6 59.7	1.375	2.333	10.8	17.4	7 30	20 32.98	-30 50.8	1.358	2.360	5.3	20.8
8 9	20 25.79	+ 6 49.5	1.370	2.325	11.0	17.4	8 9	20 21.33	-30 59.2	1.363	2.343	8.4	20.9
8 19	20 19.24	+ 6 14.0	1.388	2.319	12.7	17.5	8 19	20 11.11	-30 47.9	1.392	2.326	12.5	21.1
8 29	20 14.64	+ 5 19.3	1.425	2.314	15.2	17.6	8 29	20 3.59	-30 18.6	1.443	2.309	16.4	21.3
349778	2009 <i>BQ</i> ₃₀		7 29.1 286°65	1°0/28.6	18		444347	2005 <i>WT</i> ₁₄₁		7 29.1 255°74	1°7/30.1	17	
6 20	21 0.73	-20 15.7	1.868	2.701	14.9	21.1	6 20	20 59.12	-13 22.6	2.514	3.315	12.4	21.8
6 30	20 56.91	-20 27.6	1.775	2.688	11.8	20.9	6 30	20 54.87	-13 9.1	2.415	3.305	10.0	21.7
7 10	20 50.67	-20 45.7	1.703	2.675	8.1	20.7	7 10	20 48.85	-13 2.8	2.337	3.294	7.1	21.5
7 20	20 42.48	-21 7.0	1.656	2.661	3.9	20.4	7 20	20 41.47	-13 2.7	2.285	3.284	3.9	21.2
7 30	20 33.16	-21 27.3	1.634	2.648	1.2	20.2	7 30	20 33.33	-13 7.6	2.261	3.273	1.7	21.1
8 9	20 23.79	-21 42.9	1.639	2.635	5.2	20.4	8 9	20 25.17	-13 15.4	2.265	3.262	3.9	21.2
8 19	20 15.47	-21 51.3	1.670	2.622	9.4	20.6	8 19	20 17.72	-13 24.4	2.297	3.251	7.1	21.4
8 29	20 9.13	-21 51.4	1.724	2.609	13.2	20.8	8 29	20 11.66	-13 32.8	2.355	3.240	10.1	21.6
169585	2002 <i>GE</i> ₃₅		7 29.1 75°72	3°1/27.4	17		134588	1999 <i>TK</i> ₆₄		7 29.1 5°61	4°5/27.7	17	
6 20	21 2.22	-21 20.4	1.375	2.228	18.2	20.0	6 20	20 55.80	-26 21.4	0.899	1.795	21.8	19.4
6 30	20 58.74	-22 23.6	1.313	2.237	14.2	19.7	6 30	20 55.05	-26 33.9	0.846	1.794	17.2	19.1
7 10	20 52.21	-23 36.7	1.271	2.247	9.7	19.5	7 10	20 50.38	-26 48.8	0.810	1.795	12.0	18.8
7 20	20 43.28	-24 52.5	1.251	2.256	5.0	19.3	7 20	20 42.58	-26 59.0	0.791	1.798	6.7	18.6
7 30	20 33.08	-26 2.3	1.256	2.266	3.4	19.2	7 30	20 33.23	-26 57.0	0.793	1.803	4.8	18.5
8 9	20 23.10	-26 58.4	1.285	2.276	7.3	19.5	8 9	20 24.33	-26 38.3	0.814	1.810	9.0	18.7
8 19	20 14.71	-27 36.7	1.339	2.285	11.8	19.7	8 19	20 17.64	-26 2.7	0.855	1.819	14.2	19.1
8 29	20 8.99	-27 56.5	1.414	2.295	15.8	20.0	8 29	20 14.40	-25 13.1	0.914	1.830	18.9	19.4
273575	2007 <i>CY</i> ₁₄		7 29.1 160°21	1°5/30.1	17		323399	2004 <i>BZ</i>		7 29.1 62°18	1°3/29.8	13	C
6 20	21 1.06	-11 48.6	2.005	2.811	15.0	21.8	6 20	21 1.50	-13 43.6	1.400	2.237	18.8	21.1
6 30	20 56.77	-12 11.8	1.923	2.816	12.0	21.6	6 30	20 57.82	-13 56.9	1.341	2.253	14.9	20.9
7 10	20 50.33	-12 47.7	1.862	2.821	8.4	21.4	7 10	20 51.36	-14 24.5	1.301	2.270	10.3	20.7
7 20	20 42.22	-13 33.9	1.825	2.826	4.5	21.2	7 20	20 42.79	-15 3.2	1.283	2.287	5.3	20.5
7 30	20 33.20	-14 26.9	1.816	2.830	1.5	21.0	7 30	20 33.21	-15 48.0	1.289	2.304	1.3	20.2
8 9	20 24.24	-15 21.9	1.835	2.833	4.4	21.2	8 9	20 23.94	-16 33.3	1.321	2.321	5.4	20.6
8 19	20 16.24	-16 14.6	1.880	2.836	8.3	21.4	8 19	20 16.18	-17 14.1	1.377	2.338	10.1	20.9
8 29	20 10.03	-17 1.6	1.951	2.838	11.8	21.6	8 29	20 10.86	-17 47.1	1.456	2.356	14.2	21.2
44745	1999 <i>TZ</i> ₅₄		7 29.1 46°67	5°1/31.6	17		308012	2004 <i>RD</i> ₁₉₅		7 29.1			

EPHEMERIDES

7 29.1

7 29.1

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
399882	2005 <i>WR</i> ₄		7 29.1 322°41'	1°1/29.5	17		156112	2001 <i>SO</i> ₂₅₄		7 29.1 249°40'	1°7/30.2	18	
6 20	21 0.24	-17 57.1	1.688	2.525	16.1	20.0	6 20	20 59.70	-11 36.0	1.890	2.703	15.5	19.9
6 30	20 56.94	-17 23.5	1.581	2.494	12.9	19.7	6 30	20 56.07	-11 56.2	1.793	2.690	12.5	19.7
7 10	20 50.98	-16 54.3	1.494	2.464	9.1	19.4	7 10	20 50.13	-12 30.5	1.717	2.678	8.9	19.4
7 20	20 42.79	-16 28.4	1.430	2.434	4.7	19.1	7 20	20 42.29	-13 17.0	1.664	2.665	4.9	19.1
7 30	20 33.20	-16 4.2	1.391	2.405	1.1	18.8	7 30	20 33.32	-14 12.3	1.638	2.651	1.7	18.9
8 9	20 23.38	-15 40.2	1.377	2.377	5.4	19.0	8 9	20 24.21	-15 11.4	1.639	2.637	4.8	19.1
8 19	20 14.57	-15 15.4	1.389	2.349	10.2	19.2	8 19	20 15.99	-16 9.3	1.666	2.623	9.0	19.3
8 29	20 7.90	-14 49.2	1.423	2.322	14.5	19.4	8 29	20 9.62	-17 1.8	1.717	2.609	12.9	19.5
21696	Ermalmquist		7 29.1 338°13'	3°8/27.6	18		201695	2003 <i>UQ</i> ₁₃₁		7 29.1 202°77'	1°8/30.2	18	
6 20	20 56.56	-23 57.7	1.089	1.970	19.9	17.6	6 20	21 1.49	-12 42.5	2.463	3.258	12.8	21.1
6 30	20 55.32	-24 27.6	1.017	1.956	15.8	17.3	6 30	20 56.73	-12 34.0	2.367	3.254	10.3	20.9
7 10	20 50.54	-25 5.0	0.961	1.943	11.0	16.9	7 10	20 50.15	-12 33.4	2.294	3.249	7.3	20.7
7 20	20 42.76	-25 43.5	0.925	1.931	6.0	16.6	7 20	20 42.14	-12 39.9	2.246	3.243	4.1	20.5
7 30	20 33.21	-26 14.7	0.910	1.921	4.1	16.5	7 30	20 33.36	-12 51.7	2.226	3.238	1.8	20.3
8 9	20 23.67	-26 31.5	0.917	1.912	8.5	16.7	8 9	20 24.57	-13 6.7	2.235	3.231	4.0	20.5
8 19	20 15.89	-26 30.3	0.945	1.904	13.8	17.0	8 19	20 16.56	-13 22.6	2.272	3.224	7.2	20.7
8 29	20 11.26	-26 11.3	0.991	1.897	18.7	17.2	8 29	20 10.01	-13 37.5	2.334	3.217	10.3	20.8
361049	2005 <i>YN</i> ₁₈		7 29.1 349°26'	4°7/25.8	18		356189	2009 <i>KE</i> ₇		7 29.1 28°07'	10°2/21.1	18	
6 20	20 57.66	-27 47.5	1.877	2.725	14.2	20.5	6 20	21 1.87	-40 42.2	1.753	2.594	15.4	19.8
6 30	20 54.62	-28 52.4	1.802	2.721	11.2	20.2	6 30	20 58.62	-42 45.3	1.705	2.603	13.0	19.7
7 10	20 49.15	-30 0.3	1.748	2.718	8.0	20.0	7 10	20 52.28	-44 40.9	1.679	2.612	11.1	19.6
7 20	20 41.77	-31 5.0	1.718	2.714	5.3	19.9	7 20	20 43.43	-46 18.6	1.676	2.621	10.2	19.6
7 30	20 33.33	-31 59.8	1.714	2.712	5.0	19.9	7 30	20 33.22	-47 29.4	1.697	2.631	10.8	19.6
8 9	20 24.92	-32 39.3	1.736	2.710	7.5	20.0	8 9	20 23.15	-48 8.5	1.740	2.641	12.4	19.8
8 19	20 17.62	-33 1.1	1.783	2.708	10.7	20.2	8 19	20 14.66	-48 15.9	1.804	2.652	14.5	19.9
8 29	20 12.34	-33 5.1	1.851	2.707	13.8	20.4	8 29	20 8.90	-47 55.6	1.887	2.664	16.6	20.1
263746	2008 <i>JE</i> ₂₃		7 29.1 164°48'	6°0/3.9	18		390407	2013 <i>YX</i> ₁₃		7 29.1 285°55'	14°0/28.2	17	
6 20	20 56.79	+ 5 39.2	3.150	3.848	12.2	21.6	6 20	21 35.07	-45 49.4	1.039	1.867	24.4	20.3
6 30	20 52.59	+ 5 59.5	3.059	3.854	10.6	21.5	6 30	21 28.02	-46 10.4	0.959	1.848	21.3	20.0
7 10	20 47.06	+ 6 5.5	2.988	3.859	8.9	21.4	7 10	21 14.29	-46 11.1	0.893	1.829	17.9	19.7
7 20	20 40.53	+ 5 56.3	2.941	3.864	7.2	21.3	7 20	20 54.74	-45 31.4	0.845	1.809	15.0	19.5
7 30	20 33.47	+ 5 31.7	2.919	3.868	6.1	21.2	7 30	20 32.12	-43 53.0	0.818	1.789	14.1	19.3
8 9	20 26.43	+ 4 53.2	2.924	3.872	6.1	21.2	8 9	20 10.47	-41 11.8	0.813	1.769	16.1	19.4
8 19	20 19.93	+ 4 3.4	2.957	3.875	7.2	21.3	8 19	19 53.21	-37 42.0	0.830	1.750	20.2	19.5
8 29	20 14.49	+ 3 5.8	3.016	3.878	8.8	21.4	8 29	19 42.20	-33 47.3	0.867	1.730	24.7	19.7
335455	2005 <i>UO</i> ₅₁₈		7 29.1 355°00'	2°0/27.5	16		51448	2001 <i>FD</i> ₂₉		7 29.1 54°92'	7°5/3.6	18	
6 20	20 52.37	-20 59.2	2.081	2.925	13.2	20.5	6 20	20 56.98	+ 2 27.0	1.786	2.548	18.1	18.5
6 30	20 50.11	-21 50.2	1.999	2.919	10.3	20.3	6 30	20 53.72	+ 2 51.4	1.716	2.561	15.5	18.4
7 10	20 45.88	-22 48.4	1.939	2.914	7.0	20.1	7 10	20 48.33	+ 2 53.7	1.665	2.574	12.6	18.2
7 20	20 40.12	-23 49.8	1.904	2.909	3.6	19.9	7 20	20 41.31	+ 2 32.2	1.634	2.588	9.7	18.1
7 30	20 33.51	-24 49.2	1.895	2.906	2.2	19.8	7 30	20 33.46	+ 1 47.7	1.626	2.602	7.8	18.0
8 9	20 26.90	-25 41.9	1.913	2.903	5.2	20.0	8 9	20 25.74	+ 0 43.8	1.643	2.616	7.9	18.0
8 19	20 21.14	-26 24.1	1.956	2.902	8.7	20.2	8 19	20 19.06	+ 0 33.7	1.685	2.630	9.9	18.2
8 29	20 16.99	-26 54.0	2.023	2.901	11.8	20.4	8 29	20 14.19	+ 1 57.7	1.751	2.645	12.5	18.4
185581	2008 <i>BM</i> ₂₀		7 29.1 172°97'	0°9/28.7	17		301973	2000 <i>GV</i> ₁₇₀		7 29.1 26°05'	3°0/28.1	17	
6 20	21 4.71	-19 52.2	1.651	2.484	16.5	21.0	6 20	21 1.78	-23 8.6	1.026	1.902	21.2	20.0
6 30	21 0.21	-20 4.5	1.573	2.485	13.0	20.8	6 30	20 59.23	-23 27.0	0.973	1.909	16.7	19.7
7 10	20 53.00	-20 23.9	1.515	2.486	8.9	20.6	7 10	20 52.97	-23 52.3	0.936	1.917	11.4	19.5
7 20	20 43.66	-20 46.6	1.481	2.487	4.3	20.3	7 20	20 43.80	-24 17.9	0.919	1.926	5.9	19.2
7 30	20 33.17	-21 8.2	1.473	2.488	1.2	20.1	7 30	20 33.22	-24 36.4	0.924	1.936	3.2	19.1
8 9	20 22.81	-21 24.3	1.492	2.488	5.6	20.4	8 9	20 23.09	-24 42.2	0.951	1.947	7.9	19.4
8 19	20 13.78	-21 32.6	1.536	2.488	10.0	20.7	8 19	20 15.08	-24 33.4	0.999	1.959	13.1	19.7
8 29	20 7.08	-21 32.1	1.603	2.488	14.0	20.9	8 29	20 10.36	-24 11.3	1.066	1.971	17.8	20.0
78521	2002 <i>RH</i> ₉₆		7 29.1 317°66'	3°1/30.9	18		438311	2006 <i>HN</i> ₈₀		7 29.1 226°25'	11°4/5.7	16	
6 20	20 57.09	- 9 37.1	1.808	2.622	16.1	19.2	6 20	20 58.64	+11 54.8	2.080	2.767	18.0	21.4
6 30	20 54.01	- 9 31.6	1.719	2.614	13.1	19.0	6 30	20 54.93	+13 12.1	1.995	2.764	16.3	21.3
7 10	20 48.68	- 9 40.1	1.650	2.606	9.5	18.8	7 10	20 49.17	+14 8.4	1.927	2.761	14.5	21.1
7 20	20 41.55	-10 2.0	1.603	2.598	5.8	18.6	7 20	20 41.77	+14 38.9	1.877	2.758	12.8	21.0
7 30	20 33.39	-10 35.2	1.582	2.591	3.1	18.4	7 30	20 33.41	+14 40.7	1.849	2.755	11.6	20.9
8 9	20 25.19	-11 15.9	1.586	2.584	5.1	18.5	8 9	20 24.99	+14 13.6	1.843	2.752	11.5	20.9
8 19	20 17.94	-11 59.9	1.616	2.577	9.0	18.7	8 19	20 17.40	+13 20.7	1.860	2.748	12.3	21.0
8 29	20 12.54	-12 42.9	1.670	2.570	12.7	18.9	8 29	20 11.44	+12 7.7	1.899	2.745	13.9	21.1
329610	2003 <i>GU</i> ₅₄		7 29.1 121°45'	2°2/28.0	17		260320	2004 <i>TL</i> ₁₅₅		7 29.1 253°24'	1°8/27.8	18	
6 20	21 6.60	-21 19.4	1.510	2.348	17.5	21.5	6 20	20 58.72	-22 36.3	2.372	3.199	12.3	20.8
6 30	21 1.85	-21 55.7	1.445	2.361	13.7	21.3	6 30	20 54.75	-23 4.9	2.288	3.198	9.6	20.7
7 10	20 54.17	-22 39.5	1.400	2.373	9.3	21.0	7 10	20 48.88	-23 37.6	2.226	3.196	6.6	20.5
7 20	20 44.22	-23 25.1	1.379	2.384	4.7	20.8	7 20	20 41.55	-24 10.8	2.190	3.195	3.4	20.3
7 30	20 33.13	-24 6.0	1.383	2.395	2.4	20.7	7 30	20 33.44	-24 40.8	2.182	3.193	2.0	20.2
8 9	20 22.32	-24 36.7	1.413	2.406	6.4	20.9	8 9	20 25.38	-25 4.5	2.201	3.191	4.7	20.3
8 19	20 13.08	-24 54.5	1.469	2.416	10.8	21.2	8 19	20 18.17	-25 19.6	2.248	3.190	7.9	20.5
8 29	20 6.43	-24 59.0	1.546	2.426	14.7	21.5	8 29	20 12.52	-25 25.4	2.319	3.188	10.8	20.7
338018	2002 <i>FM</i> ₄₁		7 29.1 89°62'	2°4/30.6	17		430996						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
146922	2002 <i>CE</i> ₂₅₅		7 29.1 261°05	0°0/29.1 18			476042	2007 <i>RH</i> ₂₈₆		7 29.1 312°17	1°7/28.6 18		
6 20	21 0.17	-18 18.4	2.264	3.083	13.1	20.2	6 20	21 3.79	-23 34.5	1.592	2.435	16.6	20.8
6 30	20 55.91	-18 17.9	2.175	3.078	10.3	20.0	6 30	21 0.10	-23 21.1	1.486	2.404	13.3	20.5
7 10	20 49.69	-18 22.9	2.107	3.073	7.1	19.8	7 10	20 53.41	-23 9.4	1.401	2.374	9.3	20.2
7 20	20 41.96	-18 31.3	2.064	3.069	3.5	19.5	7 20	20 44.15	-22 55.9	1.337	2.343	4.7	19.9
7 30	20 33.41	-18 40.7	2.049	3.064	0.3	19.3	7 30	20 33.26	-22 36.6	1.300	2.313	1.9	19.6
8 9	20 24.90	-18 48.4	2.061	3.059	4.1	19.6	8 9	20 22.12	-22 8.6	1.287	2.284	6.3	19.8
8 19	20 17.26	-18 52.7	2.101	3.054	7.7	19.8	8 19	20 12.16	-21 31.3	1.299	2.254	11.2	20.0
8 29	20 11.24	-18 52.5	2.166	3.049	11.0	20.0	8 29	20 4.67	-20 45.6	1.334	2.226	15.8	20.2
72028	2000 <i>XH</i> ₃₀		7 29.1 198°55	1°0/28.6 18			284294	2006 <i>KK</i> ₁₀₀		7 29.1 349°98	11°1/22.8 17		
6 20	21 5.53	-20 13.3	1.662	2.493	16.5	19.7	6 20	20 59.35	-39 10.0	1.342	2.205	17.9	19.3
6 30	21 0.92	-20 24.2	1.580	2.492	13.0	19.4	6 30	20 57.49	-40 45.0	1.281	2.196	15.1	19.1
7 10	20 53.55	-20 41.9	1.519	2.490	8.9	19.2	7 10	20 52.01	-42 13.5	1.239	2.189	12.6	18.9
7 20	20 43.99	-21 2.5	1.482	2.487	4.4	18.9	7 20	20 43.50	-43 24.1	1.217	2.182	11.2	18.8
7 30	20 33.23	-21 21.5	1.470	2.485	1.2	18.7	7 30	20 33.33	-44 5.7	1.217	2.177	11.6	18.8
8 9	20 22.55	-21 34.9	1.485	2.481	5.6	19.0	8 9	20 23.33	-44 12.6	1.238	2.173	13.7	18.9
8 19	20 13.19	-21 40.1	1.526	2.478	10.1	19.2	8 19	20 15.26	-43 44.8	1.278	2.170	16.5	19.1
8 29	20 6.18	-21 36.6	1.590	2.474	14.1	19.5	8 29	20 10.42	-42 47.4	1.336	2.169	19.3	19.3
358503	2007 <i>RH</i> ₁₇₃		7 29.1 21°08	2°0/28.2 17			289692	2005 <i>GT</i> ₁₆₇		7 29.1 114°37	1°8/28.2 17		
6 20	20 55.32	-19 7.6	0.897	1.786	22.4	20.1	6 20	21 5.44	-20 50.1	1.673	2.506	16.4	21.5
6 30	20 54.42	-19 46.1	0.851	1.795	17.6	19.8	6 30	21 0.65	-21 24.7	1.608	2.521	12.8	21.3
7 10	20 49.83	-20 39.0	0.820	1.805	11.9	19.6	7 10	20 53.22	-22 6.4	1.564	2.535	8.7	21.1
7 20	20 42.34	-21 39.2	0.808	1.817	5.8	19.3	7 20	20 43.77	-22 50.0	1.544	2.549	4.3	20.9
7 30	20 33.41	-22 37.0	0.817	1.831	2.3	19.1	7 30	20 33.33	-23 29.9	1.549	2.562	2.0	20.7
8 9	20 24.93	-23 23.6	0.847	1.846	7.7	19.5	8 9	20 23.15	-24 1.2	1.582	2.575	5.8	21.0
8 19	20 18.53	-23 53.6	0.896	1.863	13.3	19.9	8 19	20 14.36	-24 21.3	1.641	2.588	9.9	21.3
8 29	20 15.37	-24 5.7	0.964	1.880	18.1	20.2	8 29	20 7.90	-24 29.5	1.722	2.600	13.6	21.5
325784	2010 <i>PP</i> ₃₈		7 29.1 303°08	5°7/25.5 18			237313	2008 <i>YE</i> ₁₆₁		7 29.1 309°68	1°0/28.6 18		
6 20	21 1.63	-32 20.8	2.054	2.892	13.6	20.9	6 20	20 59.78	-19 48.1	1.771	2.608	15.4	20.9
6 30	20 57.82	-33 9.3	1.958	2.867	11.0	20.6	6 30	20 56.32	-20 5.4	1.685	2.600	12.1	20.6
7 10	20 51.47	-33 57.2	1.883	2.843	8.3	20.4	7 10	20 50.38	-20 30.2	1.619	2.591	8.3	20.4
7 20	20 43.03	-34 38.6	1.832	2.819	6.1	20.2	7 20	20 42.48	-20 58.9	1.577	2.583	4.1	20.1
7 30	20 33.34	-35 7.1	1.807	2.795	6.0	20.2	7 30	20 33.46	-21 27.1	1.561	2.575	1.2	19.9
8 9	20 23.53	-35 18.3	1.809	2.771	8.1	20.3	8 9	20 24.43	-21 50.6	1.571	2.567	5.3	20.2
8 19	20 14.76	-35 10.3	1.834	2.748	11.1	20.4	8 19	20 16.50	-22 6.4	1.606	2.559	9.6	20.4
8 29	20 8.06	-34 44.3	1.883	2.724	14.1	20.6	8 29	20 10.63	-22 12.9	1.664	2.552	13.4	20.6
178407	1998 <i>QY</i> ₂₇		7 29.1 338°17	1°5/29.8 18			398901	2013 <i>CL</i> ₁₂₇		7 29.1 284°99	4°1/26.1 18		
6 20	20 53.68	-14 20.8	1.145	2.012	20.2	19.0	6 20	20 59.36	-27 27.5	2.164	3.001	13.0	20.6
6 30	20 52.69	-14 21.6	1.067	1.996	16.2	18.7	6 30	20 55.67	-28 27.1	2.081	2.995	10.3	20.4
7 10	20 48.57	-14 38.6	1.006	1.982	11.5	18.4	7 10	20 49.78	-29 29.6	2.021	2.988	7.3	20.2
7 20	20 41.81	-15 10.1	0.964	1.970	6.0	18.1	7 20	20 42.13	-30 29.5	1.985	2.981	4.7	20.1
7 30	20 33.45	-15 51.8	0.944	1.958	1.5	17.7	7 30	20 33.50	-31 21.1	1.977	2.975	4.4	20.0
8 9	20 25.00	-16 37.2	0.946	1.948	6.4	18.0	8 9	20 24.85	-31 59.7	1.995	2.968	6.7	20.2
8 19	20 17.99	-17 19.8	0.969	1.939	12.0	18.3	8 19	20 17.14	-32 22.9	2.039	2.962	9.7	20.3
8 29	20 13.73	-17 54.4	1.012	1.932	17.1	18.6	8 29	20 11.23	-32 30.4	2.106	2.955	12.6	20.5
133988	2004 <i>TB</i> ₃₃₉		7 29.1 288°78	5°1/2.2 18			141779	2002 <i>NP</i> ₁₀		7 29.1 315°80	0°6/29.4 17		
6 20	20 55.06	- 0 46.9	2.400	3.160	14.1	20.7	6 20	20 55.69	-15 4.3	1.252	2.110	19.3	19.9
6 30	20 51.94	- 0 49.3	2.288	3.138	11.9	20.5	6 30	20 54.27	-15 19.2	1.159	2.085	15.6	19.6
7 10	20 47.05	- 1 8.4	2.196	3.117	9.5	20.3	7 10	20 49.76	-15 50.5	1.084	2.059	11.0	19.2
7 20	20 40.75	- 1 45.0	2.127	3.095	6.9	20.1	7 20	20 42.51	-16 36.1	1.028	2.035	5.6	18.9
7 30	20 33.57	- 2 38.3	2.084	3.073	5.2	20.0	7 30	20 33.46	-17 31.2	0.996	2.011	0.7	18.4
8 9	20 26.24	- 3 45.4	2.068	3.051	5.7	20.0	8 9	20 24.05	-18 28.4	0.986	1.988	6.4	18.8
8 19	20 19.50	- 5 2.2	2.080	3.030	8.0	20.1	8 19	20 15.85	-19 20.7	0.999	1.965	12.3	19.0
8 29	20 14.06	- 6 23.5	2.116	3.008	10.8	20.2	8 29	20 10.33	-20 2.8	1.031	1.944	17.5	19.2
126255	2002 <i>AR</i> ₇₁		7 29.1 329°92	5°2/25.5 18			156329	2001 <i>XO</i> ₁₁₀		7 29.1 157°30	1°5/30.1 18		
6 20	20 56.66	-23 38.1	1.410	2.274	17.2	18.1	6 20	21 1.69	-12 35.3	2.092	2.897	14.5	21.1
6 30	20 54.75	-25 21.8	1.333	2.263	13.6	17.9	6 30	20 57.21	-12 47.6	2.010	2.903	11.6	20.9
7 10	20 49.86	-27 18.1	1.276	2.253	9.5	17.6	7 10	20 50.65	-13 10.8	1.950	2.909	8.1	20.7
7 20	20 42.42	-29 18.1	1.242	2.243	5.9	17.4	7 20	20 42.50	-13 43.0	1.914	2.914	4.4	20.5
7 30	20 33.40	-31 10.0	1.233	2.234	5.7	17.4	7 30	20 33.50	-14 21.0	1.905	2.919	1.5	20.3
8 9	20 24.22	-32 43.3	1.248	2.226	9.2	17.5	8 9	20 24.56	-15 1.0	1.925	2.923	4.3	20.5
8 19	20 16.34	-33 51.4	1.286	2.218	13.4	17.8	8 19	20 16.58	-15 39.6	1.971	2.926	8.0	20.8
8 29	20 11.05	-34 32.5	1.345	2.211	17.3	18.0	8 29	20 10.31	-16 13.8	2.043	2.930	11.3	21.0
281735	2008 <i>YE</i> ₉		7 29.1 331°64	0°4/29.3 18			476670	2008 <i>TW</i> ₃₅		7 29.1 301°82	2°8/27.8 18		
6 20	20 57.32	-16 20.2	1.501	2.347	17.3	20.4	6 20	21 1.57	-23 50.5	1.612	2.459	16.2	21.6
6 30	20 54.79	-16 30.3	1.417	2.336	13.8	20.2	6 30	20 58.20	-24 12.9	1.520	2.440	12.9	21.3
7 10	20 49.56	-16 51.9	1.353	2.326	9.5	19.9	7 10	20 51.99	-24 40.4	1.448	2.422	8.9	21.0
7 20	20 42.14	-17 22.4	1.310	2.316	4.8	19.6	7 20	20 43.41	-25 8.2	1.399	2.403	4.8	20.7
7 30	20 33.45	-17 57.6	1.292	2.307	0.5	19.3	7 30	20 33.40	-25 30.7	1.374	2.385	3.0	20.6
8 9	20 24.72	-18 32.2	1.298	2.299	5.5	19.6	8 9	20 23.28	-25 42.8	1.376	2.367	6.7	20.8
8 19	20 17.19	-19 1.9	1.329	2.291	10.4	19.9	8 19	20 14.37	-25 42.0	1.401	2.350	11.2	21.0
8 29	20 11.94	-19 23.7	1.382	2.284	14.7	20.1	8 29	20 7.85	-25 28.2	1.449	2.332	15.3	21.2
136216	2003 <i>WK</i> ₇₁		7 29.1 305°79	0°1/29.1 17 R									

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
426056	2012 <i>BM</i> ₅₃		7 29.1 174°95	1°5/28.4	17		501991	2015 <i>AW</i> ₉		7 29.1 233°80	4°0/27.0	17	
6 20	21 6.49	-20 57.8	1.802	2.628	15.6	23.0	6 20	21 6.21	-26 11.2	1.750	2.585	15.6	22.3
6 30	21 1.46	-21 19.7	1.722	2.630	12.3	22.8	6 30	21 1.67	-26 55.4	1.662	2.575	12.4	22.1
7 10	20 53.83	-21 47.8	1.663	2.633	8.4	22.6	7 10	20 54.27	-27 43.7	1.595	2.564	8.7	21.9
7 20	20 44.14	-22 18.0	1.629	2.634	4.2	22.3	7 20	20 44.51	-28 29.9	1.552	2.552	5.2	21.6
7 30	20 33.37	-22 45.2	1.621	2.635	1.7	22.2	7 30	20 33.37	-29 7.3	1.535	2.539	4.2	21.5
8 9	20 22.70	-23 5.4	1.641	2.635	5.5	22.4	8 9	20 22.16	-29 30.3	1.544	2.526	7.3	21.7
8 19	20 13.28	-23 16.1	1.687	2.635	9.7	22.7	8 19	20 12.21	-29 36.6	1.579	2.513	11.2	21.9
8 29	20 6.09	-23 16.8	1.757	2.633	13.4	22.9	8 29	20 4.64	-29 26.6	1.636	2.499	14.9	22.1
316048	2009 <i>HO</i> ₄₁		7 29.1 164°74	1°6/30.1	17		383208	2005 <i>YG</i> ₁₀₀		7 29.2 211°05	1°5/28.3	17	
6 20	21 3.58	-12 6.0	1.796	2.606	16.3	22.1	6 20	21 2.24	-20 27.7	1.963	2.791	14.5	21.8
6 30	20 59.08	-12 23.3	1.716	2.611	13.1	21.9	6 30	20 58.00	-20 58.7	1.877	2.787	11.4	21.6
7 10	20 52.16	-12 54.1	1.656	2.616	9.2	21.7	7 10	20 51.43	-21 36.6	1.813	2.783	7.8	21.4
7 20	20 43.32	-13 36.1	1.619	2.620	5.0	21.5	7 20	20 43.00	-22 17.6	1.773	2.778	3.8	21.1
7 30	20 33.45	-14 25.3	1.609	2.623	1.6	21.2	7 30	20 33.52	-22 56.7	1.760	2.774	1.7	21.0
8 9	20 23.62	-15 16.7	1.627	2.625	4.9	21.5	8 9	20 24.05	-23 29.6	1.775	2.768	5.2	21.2
8 19	20 14.92	-16 5.8	1.671	2.627	9.1	21.7	8 19	20 15.61	-23 53.3	1.816	2.763	9.2	21.4
8 29	20 8.25	-16 49.0	1.739	2.629	12.9	22.0	8 29	20 9.10	-24 6.4	1.881	2.757	12.7	21.6
99245	2001 <i>KG</i> ₆₁		7 29.1 37°68	1°4/28.3	18		304500	2006 <i>UK</i> ₁₅₈		7 29.2 84°71	0°6/29.6	18	
6 20	20 57.72	-17 38.5	1.540	2.387	16.9	19.1	6 20	20 58.56	-15 3.8	2.089	2.908	14.0	21.2
6 30	20 54.84	-18 35.6	1.479	2.400	13.2	18.9	6 30	20 54.83	-15 21.1	2.007	2.910	11.1	21.0
7 10	20 49.40	-19 44.6	1.438	2.413	8.9	18.7	7 10	20 49.09	-15 48.0	1.947	2.912	7.7	20.8
7 20	20 41.99	-21 0.0	1.420	2.427	4.3	18.5	7 20	20 41.78	-16 21.9	1.911	2.915	3.9	20.6
7 30	20 33.57	-22 14.6	1.428	2.442	1.6	18.3	7 30	20 33.65	-16 59.5	1.902	2.917	0.6	20.3
8 9	20 25.35	-23 21.5	1.461	2.457	5.8	18.6	8 9	20 25.57	-17 36.9	1.921	2.920	4.2	20.6
8 19	20 18.42	-24 15.7	1.519	2.472	10.1	18.9	8 19	20 18.40	-18 11.0	1.966	2.922	8.0	20.9
8 29	20 13.70	-24 54.9	1.600	2.488	13.8	19.2	8 29	20 12.90	-18 39.2	2.036	2.924	11.3	21.1
388616	2007 <i>SL</i> ₁₉		7 29.1 171°34	5°4/25.3	16		329284	2000 <i>CM</i> ₁₀₆		7 29.2 55°25	0°3/29.0	17	
6 20	21 5.86	-34 42.8	2.511	3.329	12.0	22.2	6 20	21 1.46	-16 47.6	1.376	2.222	18.6	21.1
6 30	21 0.43	-35 34.2	2.437	3.333	9.7	22.1	6 30	20 57.98	-17 13.4	1.318	2.237	14.6	20.9
7 10	20 52.82	-36 22.4	2.386	3.335	7.4	21.9	7 10	20 51.64	-17 51.4	1.279	2.252	9.9	20.6
7 20	20 43.55	-37 1.9	2.361	3.338	5.7	21.8	7 20	20 43.12	-18 37.1	1.261	2.267	4.8	20.4
7 30	20 33.43	-37 27.9	2.363	3.340	5.7	21.8	7 30	20 33.53	-19 24.5	1.268	2.283	0.6	20.1
8 9	20 23.43	-37 37.4	2.393	3.341	7.3	21.9	8 9	20 24.24	-20 7.5	1.300	2.299	5.7	20.5
8 19	20 14.49	-37 29.8	2.449	3.342	9.5	22.1	8 19	20 16.50	-20 41.9	1.356	2.315	10.5	20.9
8 29	20 7.39	-37 6.7	2.528	3.342	11.8	22.3	8 29	20 11.26	-21 5.4	1.434	2.332	14.6	21.1
165010	2000 <i>CG</i> ₇₉		7 29.1 12°89	0°5/28.9	18		93949	2000 <i>WZ</i> ₁₇₈		7 29.2 255°88	3°0/30.6	18	
6 20	21 0.94	-19 7.2	1.851	2.682	15.1	20.1	6 20	21 1.72	-11 12.2	1.953	2.758	15.4	19.6
6 30	20 56.99	-19 14.7	1.772	2.683	11.9	19.9	6 30	20 57.55	-10 47.5	1.857	2.747	12.5	19.4
7 10	20 50.69	-19 28.8	1.713	2.683	8.1	19.7	7 10	20 51.11	-10 33.0	1.782	2.736	9.1	19.2
7 20	20 42.58	-19 46.7	1.679	2.684	3.9	19.4	7 20	20 42.85	-10 28.4	1.730	2.725	5.5	18.9
7 30	20 33.52	-20 4.6	1.670	2.685	0.7	19.2	7 30	20 33.55	-10 32.6	1.704	2.713	3.0	18.7
8 9	20 24.56	-20 19.3	1.689	2.686	4.9	19.5	8 9	20 24.18	-10 43.4	1.706	2.702	5.1	18.8
8 19	20 16.71	-20 28.2	1.733	2.687	9.0	19.7	8 19	20 15.74	-10 58.1	1.734	2.690	8.8	19.0
8 29	20 10.84	-20 30.1	1.801	2.688	12.6	20.0	8 29	20 9.12	-11 14.0	1.786	2.678	12.4	19.2
259570	2003 <i>UC</i> ₁₈₁		7 29.1 276°97	2°6/27.8	18		482218	2010 <i>WM</i> ₇₄		7 29.2 196°02	4°1/24.8	18	
6 20	21 1.72	-21 21.6	1.499	2.347	17.2	21.0	6 20	20 59.83	-28 57.7	2.860	3.683	10.5	21.2
6 30	20 58.51	-22 4.9	1.412	2.334	13.6	20.8	6 30	20 55.57	-30 24.6	2.777	3.681	8.4	21.0
7 10	20 52.33	-22 58.0	1.345	2.320	9.4	20.5	7 10	20 49.50	-31 53.7	2.719	3.678	6.1	20.9
7 20	20 43.63	-23 55.7	1.301	2.306	4.8	20.2	7 20	20 41.99	-33 19.7	2.688	3.676	4.4	20.8
7 30	20 33.41	-24 50.6	1.281	2.292	2.8	20.0	7 30	20 33.64	-34 37.4	2.687	3.673	4.4	20.8
8 9	20 23.05	-25 35.6	1.286	2.279	6.9	20.3	8 9	20 25.18	-35 42.2	2.714	3.669	6.2	20.9
8 19	20 13.95	-26 6.3	1.316	2.265	11.7	20.5	8 19	20 17.38	-36 31.8	2.769	3.666	8.4	21.0
8 29	20 7.37	-26 21.1	1.367	2.251	16.0	20.7	8 29	20 10.95	-37 5.4	2.848	3.662	10.6	21.2
378776	2008 <i>SY</i> ₁₄		7 29.1 171°71	1°1/29.7	17		121714	1999 <i>XZ</i> ₁₁₅		7 29.2 285°31	1°6/30.1	18	
6 20	21 1.58	-14 39.2	1.872	2.690	15.4	21.2	6 20	20 59.48	-14 4.5	2.293	3.102	13.3	19.6
6 30	20 57.44	-14 44.2	1.790	2.692	12.3	20.9	6 30	20 55.46	-13 49.0	2.193	3.087	10.6	19.4
7 10	20 50.99	-14 59.3	1.729	2.693	8.6	20.7	7 10	20 49.50	-13 40.8	2.113	3.073	7.6	19.2
7 20	20 42.74	-15 22.3	1.691	2.694	4.4	20.5	7 20	20 42.01	-13 39.0	2.059	3.059	4.2	19.0
7 30	20 33.52	-15 50.1	1.680	2.694	1.1	20.2	7 30	20 33.64	-13 42.0	2.032	3.045	1.6	18.8
8 9	20 24.37	-16 19.0	1.696	2.695	4.7	20.5	8 9	20 25.23	-13 47.9	2.032	3.030	4.1	18.9
8 19	20 16.27	-16 45.5	1.738	2.695	8.7	20.7	8 19	20 17.58	-13 54.7	2.060	3.016	7.7	19.1
8 29	20 10.10	-17 7.2	1.805	2.695	12.4	21.0	8 29	20 11.46	-14 0.6	2.113	3.002	10.9	19.3
401691	2013 <i>HJ</i> ₁₈		7 29.1 118°45	0°3/29.4	18		61212	2000 <i>OJ</i> ₁₀		7 29.2 310°14	0°1/29.1	18	
6 20	20 57.96	-16 4.6	2.547	3.358	12.0	21.7	6 20	20 56.15	-15 0.4	1.213	2.073	19.7	18.4
6 30	20 53.93	-16 21.9	2.466	3.365	9.5	21.5	6 30	20 54.76	-15 34.6	1.124	2.050	15.8	18.1
7 10	20 48.23	-16 46.3	2.408	3.373	6.5	21.3	7 10	20 50.19	-16 28.2	1.051	2.028	11.1	17.7
7 20	20 41.28	-17 15.5	2.376	3.380	3.2	21.1	7 20	20 42.80	-17 38.2	1.000	2.007	5.5	17.4
7 30	20 33.69	-17 46.7	2.372	3.387	0.4	20.9	7 30	20 33.54	-18 57.9	0.970	1.985	0.5	16.9
8 9	20 26.17	-18 17.1	2.396	3.394	3.6	21.2	8 9	20 23.92	-20 18.0	0.964	1.965	6.8	17.3
8 19	20 19.41	-18 44.2	2.448	3.400	6.8	21.4	8 19	20 15.56	-21 29.6	0.980	1.945	12.7	17.6
8 29	20 14.02	-19 6.3	2.525	3.407	9.6	21.6	8 29	20 9.98	-22 26.5	1.015	1.925	18.0	17.8
31619	Jodietinker		7 29.1 124°68	3°2/27.4	18		158082	2000 <i>VT</i> ₄					

EPHEMERIDES

7 29.2

7 29.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
255419	2005 <i>XH</i> ₅₀		7 29.2 290°05	2°8/27.2	18		281012	2006 <i>EA</i> ₁₁		7 29.2 291°61	1°6/30.1	18	R
6 20	20 59.04	-24 54.5	2.266	3.099	12.6	20.7	6 20	20 58.04	-12 13.2	1.732	2.556	16.3	20.7
6 30	20 55.24	-25 33.0	2.180	3.092	9.9	20.5	6 30	20 55.10	-12 30.0	1.635	2.539	13.1	20.5
7 10	20 49.41	-26 14.8	2.116	3.085	6.9	20.3	7 10	20 49.72	-13 1.4	1.558	2.522	9.3	20.2
7 20	20 41.97	-26 55.9	2.077	3.079	3.9	20.1	7 20	20 42.32	-13 45.6	1.503	2.505	5.1	19.9
7 30	20 33.66	-27 31.6	2.066	3.073	3.0	20.0	7 30	20 33.66	-14 39.2	1.474	2.487	1.6	19.6
8 9	20 25.35	-27 58.3	2.082	3.066	5.5	20.2	8 9	20 24.82	-15 36.9	1.470	2.470	5.0	19.8
8 19	20 17.92	-28 13.7	2.124	3.060	8.7	20.4	8 19	20 16.91	-16 33.4	1.493	2.453	9.5	20.0
8 29	20 12.15	-28 17.2	2.191	3.054	11.6	20.5	8 29	20 10.97	-17 24.0	1.538	2.437	13.7	20.3
384544	2010 <i>ER</i> ₃₉		7 29.2 196°28	4°7/26.0	18		34084	2000 <i>PM</i> ₄		7 29.2 32°10	0°8/29.7	18	
6 20	21 6.62	-31 50.7	2.439	3.258	12.3	22.1	6 20	20 58.12	-12 9.8	1.595	2.424	17.2	18.5
6 30	21 1.10	-32 35.1	2.355	3.255	9.8	22.0	6 30	20 55.18	-12 57.6	1.519	2.427	13.7	18.3
7 10	20 53.36	-33 18.1	2.295	3.251	7.2	21.8	7 10	20 49.73	-14 2.7	1.462	2.429	9.5	18.1
7 20	20 43.89	-33 54.4	2.260	3.246	5.2	21.7	7 20	20 42.27	-15 21.4	1.428	2.432	4.9	17.8
7 30	20 33.49	-34 19.1	2.253	3.241	4.9	21.6	7 30	20 33.68	-16 47.7	1.420	2.435	0.8	17.5
8 9	20 23.15	-34 28.9	2.274	3.236	6.8	21.7	8 9	20 25.10	-18 14.0	1.438	2.438	5.1	17.9
8 19	20 13.83	-34 23.0	2.321	3.229	9.4	21.9	8 19	20 17.67	-19 33.4	1.481	2.441	9.7	18.1
8 29	20 6.37	-34 2.5	2.393	3.222	11.9	22.1	8 29	20 12.35	-20 40.9	1.548	2.444	13.8	18.4
414459	2009 <i>HP</i> ₃₄		7 29.2 144°88	3°5/27.3	17		163100	2002 <i>AA</i> ₁₀₈		7 29.2 299°67	0°3/29.0	18	
6 20	21 6.95	-24 49.4	1.681	2.517	16.2	21.9	6 20	20 59.23	-16 48.3	1.290	2.144	19.1	19.9
6 30	21 2.06	-25 36.0	1.612	2.525	12.7	21.7	6 30	20 57.02	-17 10.7	1.200	2.124	15.3	19.6
7 10	20 54.36	-26 27.0	1.563	2.533	8.8	21.5	7 10	20 51.64	-17 47.8	1.129	2.104	10.6	19.3
7 20	20 44.47	-27 16.1	1.539	2.541	5.0	21.3	7 20	20 43.49	-18 36.4	1.078	2.084	5.3	18.9
7 30	20 33.45	-27 56.7	1.541	2.547	3.8	21.2	7 30	20 33.55	-19 30.5	1.050	2.065	0.7	18.5
8 9	20 22.62	-28 23.7	1.569	2.554	6.9	21.4	8 9	20 23.32	-20 22.5	1.046	2.046	6.6	18.8
8 19	20 13.22	-28 34.9	1.623	2.560	10.8	21.7	8 19	20 14.38	-21 6.2	1.065	2.027	12.2	19.1
8 29	20 6.26	-28 30.9	1.699	2.565	14.3	21.9	8 29	20 8.16	-21 37.6	1.104	2.009	17.3	19.3
392652	2011 <i>UN</i> ₁₈₃		7 29.2 353°27	5°5/25.7	18		153297	2001 <i>FN</i> ₁₀₉		7 29.2 151°23	4°2/1.6	18	
6 20	21 0.10	-30 27.0	1.857	2.703	14.4	20.1	6 20	20 56.04	-3 22.8	2.594	3.359	13.0	20.5
6 30	20 56.66	-31 27.1	1.784	2.700	11.5	19.9	6 30	20 52.42	-3 17.7	2.505	3.362	10.8	20.3
7 10	20 50.68	-32 27.6	1.733	2.698	8.5	19.7	7 10	20 47.23	-3 25.8	2.437	3.364	8.4	20.1
7 20	20 42.69	-33 22.0	1.706	2.697	6.0	19.6	7 20	20 40.85	-3 47.2	2.392	3.366	5.9	20.0
7 30	20 33.61	-34 3.6	1.704	2.696	5.8	19.6	7 30	20 33.82	-4 20.7	2.375	3.368	4.2	19.9
8 9	20 24.62	-34 27.7	1.728	2.695	8.1	19.7	8 9	20 26.81	-5 3.9	2.385	3.370	4.8	19.9
8 19	20 16.84	-34 32.7	1.775	2.694	11.1	19.9	8 19	20 20.46	-5 53.5	2.422	3.372	7.0	20.1
8 29	20 11.22	-34 19.6	1.845	2.694	14.1	20.1	8 29	20 15.36	-6 45.9	2.485	3.373	9.5	20.2
3840	Mimistrobell		7 29.2 82°63	3°2/27.7	18		129481	1994 <i>CL</i> ₁₅		7 29.2 185°16	1°1/28.5	18	
6 20	21 4.83	-23 0.5	1.362	2.213	18.4	16.6	6 20	21 2.28	-19 31.0	2.033	2.857	14.2	20.3
6 30	21 0.91	-23 42.9	1.300	2.223	14.4	16.4	6 30	20 57.92	-20 1.4	1.950	2.857	11.2	20.1
7 10	20 53.83	-24 32.2	1.257	2.232	9.9	16.2	7 10	20 51.31	-20 39.0	1.888	2.857	7.6	19.9
7 20	20 44.28	-25 21.9	1.237	2.242	5.2	15.9	7 20	20 42.95	-21 20.1	1.851	2.856	3.7	19.7
7 30	20 33.47	-26 4.2	1.241	2.251	3.4	15.9	7 30	20 33.63	-22 0.3	1.841	2.855	1.3	19.5
8 9	20 22.95	-26 33.3	1.270	2.261	7.3	16.1	8 9	20 24.34	-22 35.3	1.859	2.853	4.9	19.7
8 19	20 14.12	-26 46.4	1.322	2.270	11.8	16.4	8 19	20 16.05	-23 2.0	1.904	2.851	8.7	20.0
8 29	20 8.07	-26 43.9	1.396	2.279	15.8	16.7	8 29	20 9.61	-23 19.0	1.973	2.849	12.2	20.2
253058	2002 <i>TT</i> ₅₉		7 29.2 259°12	18°2/9.7	17		481160	2005 <i>UX</i> ₁₉₄		7 29.2 263°62	1°2/28.3	18	
6 20	20 58.59	+17 51.9	1.282	1.985	26.6	20.6	6 20	20 59.05	-20 32.3	2.483	3.303	12.0	22.2
6 30	20 56.46	+19 23.6	1.202	1.974	24.8	20.4	6 30	20 55.11	-21 1.7	2.380	3.286	9.5	22.0
7 10	20 51.22	+20 20.5	1.133	1.962	22.8	20.2	7 10	20 49.28	-21 36.8	2.300	3.268	6.5	21.8
7 20	20 43.27	+20 32.2	1.076	1.949	20.7	20.0	7 20	20 41.95	-22 14.7	2.246	3.250	3.2	21.5
7 30	20 33.54	+19 49.8	1.035	1.937	19.0	19.9	7 30	20 33.72	-22 51.5	2.219	3.232	1.4	21.4
8 9	20 23.45	+18 11.0	1.011	1.924	18.2	19.8	8 9	20 25.39	-23 24.0	2.221	3.214	4.4	21.6
8 19	20 14.55	+15 41.3	1.006	1.910	18.9	19.8	8 19	20 17.77	-23 49.2	2.251	3.195	7.8	21.7
8 29	20 8.28	+12 34.2	1.019	1.897	20.7	19.9	8 29	20 11.59	-24 5.9	2.305	3.176	10.8	21.9
241211	2007 <i>TW</i> ₄₅		7 29.2 297°53	3°8/26.7	18		319260	2006 <i>AB</i> ₁₀₂		7 29.2 269°09	0°1/29.2	18	
6 20	21 0.30	-25 40.3	1.882	2.724	14.5	20.3	6 20	20 59.97	-16 9.9	1.804	2.632	15.5	21.5
6 30	20 56.74	-26 33.2	1.801	2.718	11.4	20.0	6 30	20 56.50	-16 34.1	1.711	2.620	12.4	21.3
7 10	20 50.71	-27 30.5	1.741	2.711	8.0	19.8	7 10	20 50.59	-17 9.3	1.640	2.609	8.5	21.0
7 20	20 42.72	-28 26.6	1.705	2.705	4.8	19.6	7 20	20 42.71	-17 52.8	1.592	2.597	4.2	20.8
7 30	20 33.61	-29 15.1	1.695	2.699	4.0	19.6	7 30	20 33.65	-18 40.0	1.570	2.585	0.4	20.4
8 9	20 24.50	-29 51.0	1.712	2.693	6.8	19.7	8 9	20 24.49	-19 25.8	1.574	2.573	5.0	20.8
8 19	20 16.49	-30 11.5	1.754	2.688	10.3	19.9	8 19	20 16.32	-20 6.0	1.605	2.561	9.4	21.0
8 29	20 10.52	-30 16.1	1.819	2.682	13.6	20.1	8 29	20 10.11	-20 37.7	1.659	2.549	13.3	21.2
507688	2013 <i>SQ</i> ₈₄		7 29.2 286°32	0°2/29.1	17		183842	2004 <i>BS</i> ₁₁₀		7 29.2 187°61	4°1/26.8	18	
6 20	21 3.27	-18 53.7	1.530	2.369	17.3	21.2	6 20	21 3.31	-24 59.8	1.648	2.492	16.1	20.2
6 30	20 59.55	-18 49.4	1.441	2.356	13.8	20.9	6 30	20 59.42	-26 1.3	1.574	2.492	12.7	20.0
7 10	20 52.92	-18 52.7	1.372	2.344	9.6	20.7	7 10	20 52.73	-27 8.7	1.520	2.492	8.8	19.8
7 20	20 43.91	-19 0.8	1.326	2.331	4.7	20.4	7 20	20 43.77	-28 15.2	1.490	2.491	5.2	19.6
7 30	20 33.50	-19 9.7	1.304	2.319	0.5	20.0	7 30	20 33.55	-29 13.0	1.486	2.491	4.4	19.5
8 9	20 23.03	-19 15.8	1.308	2.307	5.7	20.4	8 9	20 23.38	-29 56.0	1.508	2.490	7.4	19.7
8 19	20 13.85	-19 16.3	1.336	2.295	10.7	20.6	8 19	20 14.54	-30 21.0	1.554	2.489	11.3	19.9
8 29	20 7.11	-19 10.1	1.387	2.283	15.1	20.8	8 29	20 8.08	-30 27.9	1.622	2.487	14.9	20.2
399526	2003 <i>AA</i> ₁₇		7 29.2 181°56	4°8/30.8	15		75796	2000 <i>AK</i> ₂₃₀					

EPHEMERIDES

7 29.2

7 29.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
177380	2004 <i>BE</i> ₆₀		7 29.2 88°44'	0°6'/29.5 17			511376	2014 <i>FL</i> ₇₃		7 29.2 156°83'	3°0'/31.4 18		
6 20	21 3.05	-15 9.9	1.559	2.389	17.5	20.4	6 20	20 59.69	-7 42.5	2.453	3.233	13.3	22.5
6 30	20 58.92	-15 27.9	1.495	2.403	13.8	20.2	6 30	20 55.34	-7 39.6	2.367	3.240	10.8	22.3
7 10	20 52.16	-15 57.9	1.450	2.418	9.5	20.0	7 10	20 49.27	-7 48.1	2.303	3.245	8.0	22.1
7 20	20 43.38	-16 36.5	1.428	2.432	4.8	19.7	7 20	20 41.88	-8 7.5	2.263	3.251	5.1	22.0
7 30	20 33.60	-17 19.0	1.431	2.446	0.6	19.4	7 30	20 33.79	-8 36.1	2.251	3.256	3.1	21.8
8 9	20 24.07	-18 0.0	1.461	2.460	5.2	19.8	8 9	20 25.76	-9 11.3	2.267	3.260	4.3	21.9
8 19	20 15.91	-18 35.6	1.516	2.474	9.7	20.1	8 19	20 18.48	-9 49.9	2.311	3.264	7.1	22.1
8 29	20 10.05	-19 2.9	1.594	2.488	13.6	20.4	8 29	20 12.61	-10 28.9	2.381	3.268	9.9	22.3
519211	2010 <i>SJ</i> ₄₄		7 29.2 239°10'	3°8'/26.4 18			318474	2005 <i>EB</i> ₆₄		7 29.2 314°69'	2°1'/30.4 18		
6 20	21 1.00	-28 55.8	2.486	3.313	11.8	22.1	6 20	20 57.30	-11 19.4	1.758	2.579	16.2	21.4
6 30	20 56.67	-29 38.8	2.398	3.305	9.4	21.9	6 30	20 54.37	-11 30.6	1.669	2.571	13.0	21.1
7 10	20 50.35	-30 22.6	2.334	3.297	6.7	21.7	7 10	20 49.11	-11 56.1	1.601	2.562	9.3	20.9
7 20	20 42.45	-31 2.5	2.295	3.289	4.4	21.6	7 20	20 41.99	-12 34.4	1.555	2.554	5.2	20.6
7 30	20 33.70	-31 34.1	2.284	3.281	4.0	21.5	7 30	20 33.78	-13 22.3	1.534	2.546	2.1	20.4
8 9	20 24.94	-31 54.0	2.300	3.272	6.0	21.7	8 9	20 25.50	-14 15.0	1.539	2.539	4.9	20.6
8 19	20 17.05	-32 0.6	2.343	3.264	8.7	21.8	8 19	20 18.20	-15 7.6	1.570	2.532	9.1	20.8
8 29	20 10.77	-31 54.2	2.410	3.255	11.4	22.0	8 29	20 12.80	-15 55.6	1.625	2.525	13.0	21.0
121380	1999 <i>TJ</i> ₈₉		7 29.2 347°18'	1°3'/28.6 18			251825	1999 <i>TH</i> ₁₇₉		7 29.2 332°85'	6°3'/25.7 18		
6 20	20 55.76	-19 58.7	1.275	2.141	18.5	18.9	6 20	21 0.79	-33 6.1	1.791	2.638	14.8	19.7
6 30	20 54.10	-20 12.1	1.199	2.131	14.7	18.7	6 30	20 57.48	-33 52.7	1.710	2.624	12.0	19.5
7 10	20 49.42	-20 34.9	1.142	2.121	10.1	18.4	7 10	20 51.42	-34 37.4	1.649	2.611	9.1	19.3
7 20	20 42.27	-21 3.2	1.106	2.113	4.9	18.1	7 20	20 43.16	-35 13.3	1.612	2.599	6.8	19.1
7 30	20 33.72	-21 31.3	1.092	2.107	1.5	17.8	7 30	20 33.68	-35 34.0	1.600	2.587	6.6	19.1
8 9	20 25.19	-21 53.8	1.102	2.101	6.5	18.1	8 9	20 24.24	-35 35.0	1.612	2.576	8.8	19.2
8 19	20 18.11	-22 6.6	1.134	2.097	11.6	18.4	8 19	20 16.09	-35 15.5	1.648	2.566	11.9	19.4
8 29	20 13.64	-22 8.1	1.186	2.094	16.1	18.6	8 29	20 10.26	-34 37.4	1.705	2.556	15.0	19.5
234073	1999 <i>RT</i> ₁₉₃		7 29.2 334°41'	1°3'/28.7 18			230390	2002 <i>GA</i> ₁₄₄		7 29.2 93°39'	0°2'/29.1 17		
6 20	21 0.61	-22 2.9	1.404	2.259	17.7	19.2	6 20	21 0.39	-15 30.7	1.824	2.649	15.5	20.4
6 30	20 57.71	-21 53.9	1.321	2.246	14.1	19.0	6 30	20 56.56	-16 14.7	1.754	2.661	12.2	20.2
7 10	20 51.79	-21 49.2	1.257	2.233	9.7	18.7	7 10	20 50.43	-17 10.4	1.705	2.673	8.3	20.0
7 20	20 43.41	-21 45.6	1.214	2.221	4.8	18.4	7 20	20 42.55	-18 13.8	1.680	2.685	4.0	19.7
7 30	20 33.62	-21 39.0	1.195	2.210	1.5	18.1	7 30	20 33.74	-19 19.3	1.682	2.697	0.5	19.5
8 9	20 23.85	-21 26.1	1.201	2.200	6.2	18.4	8 9	20 25.07	-20 21.3	1.711	2.709	4.8	19.8
8 19	20 15.51	-21 5.4	1.230	2.190	11.2	18.6	8 19	20 17.49	-21 15.2	1.766	2.720	8.9	20.1
8 29	20 9.75	-20 37.0	1.281	2.182	15.7	18.9	8 29	20 11.86	-21 58.3	1.846	2.731	12.4	20.4
44386	1998 <i>SV</i> ₆₁		7 29.2 174°39'	3°3'/31.1 18			512206	2015 <i>TP</i> ₅₅		7 29.2 289°12'	1°8'/28.2 18		
6 20	20 59.68	-9 3.0	2.008	2.808	15.2	19.2	6 20	21 0.90	-23 30.5	2.316	3.142	12.6	21.2
6 30	20 55.79	-8 49.8	1.923	2.808	12.4	19.0	6 30	20 56.59	-23 40.7	2.227	3.136	9.9	21.0
7 10	20 49.81	-8 49.1	1.859	2.809	9.1	18.8	7 10	20 50.28	-23 53.5	2.161	3.130	6.8	20.8
7 20	20 42.22	-9 0.3	1.817	2.809	5.6	18.6	7 20	20 42.43	-24 5.7	2.120	3.124	3.5	20.5
7 30	20 33.74	-9 21.9	1.802	2.809	3.3	18.4	7 30	20 33.76	-24 14.1	2.106	3.118	1.9	20.4
8 9	20 25.30	-9 50.9	1.814	2.809	4.9	18.6	8 9	20 25.15	-24 16.3	2.120	3.112	4.7	20.6
8 19	20 17.77	-10 24.1	1.853	2.809	8.3	18.8	8 19	20 17.43	-24 10.7	2.161	3.106	8.1	20.8
8 29	20 11.96	-10 57.7	1.915	2.809	11.6	19.0	8 29	20 11.36	-23 57.3	2.227	3.100	11.1	21.0
485762	2012 <i>CV</i> ₁₃		7 29.2 256°89'	0°4'/29.5 18			143782	2003 <i>WU</i> ₆₈		7 29.2 76°88'	4°2'/31.2 17		
6 20	20 58.51	-15 25.6	2.672	3.477	11.7	22.5	6 20	21 1.87	-8 38.6	1.484	2.300	18.9	20.6
6 30	20 54.52	-15 46.6	2.562	3.457	9.3	22.3	6 30	20 58.17	-8 15.3	1.413	2.307	15.4	20.4
7 10	20 48.81	-16 15.5	2.474	3.437	6.4	22.0	7 10	20 51.78	-8 8.2	1.360	2.314	11.4	20.2
7 20	20 41.71	-16 50.4	2.413	3.416	3.3	21.8	7 20	20 43.29	-8 17.2	1.328	2.321	7.1	20.0
7 30	20 33.78	-17 28.6	2.379	3.394	0.4	21.5	7 30	20 33.69	-8 40.7	1.321	2.328	4.3	19.8
8 9	20 25.73	-18 6.8	2.375	3.373	3.7	21.8	8 9	20 24.23	-9 14.5	1.339	2.335	6.2	20.0
8 19	20 18.26	-18 42.3	2.399	3.351	7.0	21.9	8 19	20 16.10	-9 53.9	1.381	2.342	10.2	20.2
8 29	20 12.08	-19 12.8	2.449	3.328	10.0	22.1	8 29	20 10.27	-10 34.0	1.446	2.348	14.1	20.5
515967	2015 <i>RH</i> ₁₀₆		7 29.2 331°04'	4°5'/26.7 18			284997	2010 <i>NV</i> ₇		7 29.2 245°73'	1°8'/27.9 18		
6 20	21 1.56	-29 55.4	2.031	2.869	13.7	20.6	6 20	20 59.97	-20 30.6	1.927	2.760	14.5	20.5
6 30	20 57.54	-30 26.9	1.950	2.862	10.9	20.4	6 30	20 56.32	-21 15.1	1.844	2.758	11.4	20.3
7 10	20 51.15	-30 57.9	1.890	2.856	7.9	20.2	7 10	20 50.36	-22 7.5	1.783	2.755	7.8	20.1
7 20	20 42.91	-31 23.1	1.855	2.850	5.2	20.0	7 20	20 42.58	-23 3.3	1.746	2.752	3.9	19.9
7 30	20 33.68	-31 37.7	1.846	2.844	4.7	20.0	7 30	20 33.76	-23 57.2	1.736	2.749	2.0	19.7
8 9	20 24.55	-31 38.3	1.864	2.839	6.9	20.1	8 9	20 24.94	-24 43.8	1.754	2.746	5.5	20.0
8 19	20 16.55	-31 24.1	1.906	2.834	10.0	20.3	8 19	20 17.13	-25 19.7	1.797	2.743	9.3	20.2
8 29	20 10.54	-30 56.0	1.972	2.829	13.0	20.5	8 29	20 11.22	-25 43.2	1.863	2.739	12.8	20.4
516946	2012 <i>BH</i> ₁₁₁		7 29.2 254°54'	0°6'/29.7 18			139029	2001 <i>DO</i> ₉₁		7 29.2 244°31'	1°4'/29.9 17		
6 20	20 57.87	-14 54.8	2.525	3.333	12.2	22.4	6 20	21 2.24	-13 20.6	1.725	2.544	16.5	20.7
6 30	20 54.06	-15 10.1	2.424	3.321	9.7	22.2	6 30	20 58.41	-13 29.8	1.631	2.533	13.3	20.5
7 10	20 48.49	-15 33.7	2.346	3.308	6.7	22.0	7 10	20 52.01	-13 51.9	1.557	2.520	9.4	20.2
7 20	20 41.55	-16 3.5	2.293	3.296	3.5	21.7	7 20	20 43.48	-14 24.9	1.506	2.508	5.0	19.9
7 30	20 33.81	-16 37.0	2.268	3.283	0.7	21.5	7 30	20 33.68	-15 5.2	1.481	2.495	1.4	19.6
8 9	20 26.00	-17 11.0	2.271	3.270	3.7	21.7	8 9	20 23.73	-15 48.3	1.482	2.481	5.1	19.9
8 19	20 18.86	-17 42.9	2.302	3.256	7.1	21.9	8 19	20 14.82	-16 29.6	1.509	2.467	9.7	20.1
8 29	20 13.08	-18 10.4	2.359	3.243	10.1	22.1	8 29	20 7.98	-17 5.4	1.560	2.453	13.8	20.3
170581	2003 <i>XC</i> ₁₈		7 29.2 234°54'	4°2'/27.2 18			238146	2003 <i>SQ</i> ₃₆					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
312057	2007 <i>RC</i> ₃₂₅	7 29.2 358°22		0°6/28.9 17			358929	2008 <i>HX</i> ₃₄	7 29.2 350°93		7°1/ 3.8 18		
6 20	21 3.16	-18 37.5	1.356	2.204	18.7	21.1	6 20	20 53.67	+ 3 0.1	2.020	2.775	16.5	20.6
6 30	20 59.67	-18 49.4	1.284	2.203	14.8	20.9	6 30	20 51.14	+ 3 13.0	1.931	2.771	14.2	20.4
7 10	20 53.11	-19 11.3	1.229	2.203	10.2	20.6	7 10	20 46.70	+ 3 5.1	1.861	2.767	11.7	20.3
7 20	20 44.05	-19 39.4	1.197	2.203	5.0	20.3	7 20	20 40.76	+ 2 34.8	1.812	2.764	9.1	20.1
7 30	20 33.64	-20 8.3	1.188	2.203	0.9	20.0	7 30	20 33.97	+ 1 42.4	1.787	2.762	7.3	20.0
8 9	20 23.33	-20 32.6	1.204	2.203	6.1	20.4	8 9	20 27.15	+ 0 31.2	1.787	2.760	7.3	20.0
8 19	20 14.56	-20 48.8	1.244	2.203	11.2	20.7	8 19	20 21.13	- 0 53.7	1.812	2.758	9.2	20.1
8 29	20 8.46	-20 55.1	1.306	2.204	15.7	21.0	8 29	20 16.64	- 2 25.7	1.862	2.758	11.8	20.3
353382	2011 <i>MJ</i> ₇	7 29.2 326°31		13°3/31.9 17			191051	2002 <i>CK</i> ₆₄	7 29.2 251°89		7°1/25.2 18		
6 20	21 2.21	+ 4 54.2	1.621	2.369	20.2	19.8	6 20	21 10.24	-36 44.9	2.032	2.854	14.3	20.0
6 30	20 58.58	+ 7 22.2	1.530	2.351	18.2	19.6	6 30	21 4.80	-37 35.1	1.942	2.837	11.8	19.8
7 10	20 52.28	+ 9 36.7	1.457	2.333	16.1	19.4	7 10	20 56.42	-38 21.1	1.873	2.819	9.3	19.6
7 20	20 43.70	+11 29.6	1.404	2.317	14.2	19.3	7 20	20 45.66	-38 55.4	1.829	2.801	7.4	19.5
7 30	20 33.66	+12 53.5	1.373	2.301	13.3	19.2	7 30	20 33.53	-39 11.1	1.810	2.783	7.4	19.4
8 9	20 23.32	+13 44.1	1.364	2.285	13.7	19.2	8 9	20 21.40	-39 4.0	1.818	2.764	9.3	19.5
8 19	20 13.93	+14 1.1	1.376	2.271	15.4	19.2	8 19	20 10.59	-38 33.7	1.850	2.745	12.0	19.7
8 29	20 6.66	+13 48.9	1.408	2.258	17.6	19.3	8 29	20 2.25	-37 43.4	1.905	2.725	14.8	19.8
381836	2009 <i>WZ</i> ₄₃	7 29.2 212°15		1°6/30.0 18			33238	1998 <i>GE</i> ₉	7 29.2 26°52		4°3/ 1.4 18		
6 20	21 2.51	-14 3.8	1.985	2.796	14.9	21.4	6 20	20 55.78	- 3 39.7	1.538	2.344	18.8	17.3
6 30	20 58.12	-13 55.2	1.896	2.792	12.0	21.1	6 30	20 53.36	- 4 11.3	1.464	2.350	15.5	17.1
7 10	20 51.49	-13 55.6	1.828	2.788	8.4	20.9	7 10	20 48.50	- 5 7.3	1.408	2.356	11.6	16.9
7 20	20 43.10	-14 3.7	1.784	2.784	4.6	20.7	7 20	20 41.72	- 6 26.6	1.374	2.362	7.5	16.7
7 30	20 33.74	-14 17.2	1.766	2.780	1.6	20.5	7 30	20 33.89	- 8 4.5	1.364	2.369	4.5	16.5
8 9	20 24.40	-14 33.2	1.776	2.775	4.6	20.7	8 9	20 26.10	- 9 53.3	1.380	2.377	5.7	16.6
8 19	20 16.03	-14 49.0	1.813	2.770	8.5	20.9	8 19	20 19.44	-11 44.2	1.421	2.385	9.6	16.9
8 29	20 9.49	-15 2.6	1.875	2.764	12.1	21.1	8 29	20 14.83	-13 28.8	1.486	2.394	13.5	17.1
245087	2004 <i>PU</i>	7 29.2 13°17		0°6/29.5 18			151424	2002 <i>FT</i> ₁	7 29.2 73°37		4°9/25.4 18		
6 20	21 0.33	-17 20.1	1.946	2.771	14.7	19.9	6 20	21 0.41	-30 7.5	2.214	3.049	12.8	19.4
6 30	20 56.38	-17 7.0	1.866	2.773	11.6	19.7	6 30	20 56.45	-31 17.5	2.148	3.058	10.1	19.2
7 10	20 50.24	-17 0.3	1.808	2.775	8.0	19.5	7 10	20 50.32	-32 27.8	2.104	3.066	7.4	19.1
7 20	20 42.45	-16 58.2	1.774	2.778	4.0	19.2	7 20	20 42.52	-33 32.6	2.086	3.075	5.3	19.0
7 30	20 33.81	-16 58.6	1.766	2.781	0.7	19.0	7 30	20 33.84	-34 25.9	2.095	3.083	5.2	19.0
8 9	20 25.29	-16 59.0	1.785	2.784	4.4	19.3	8 9	20 25.26	-35 3.7	2.130	3.092	7.2	19.1
8 19	20 17.82	-16 57.6	1.830	2.788	8.3	19.5	8 19	20 17.70	-35 24.1	2.191	3.101	9.8	19.3
8 29	20 12.19	-16 53.2	1.900	2.792	11.8	19.7	8 29	20 11.96	-35 27.7	2.275	3.110	12.3	19.5
48169	2001 <i>HV</i> ₁₂	7 29.2 10°80		4°2/26.6 18			285433	1999 <i>VD</i> ₁₂₇	7 29.2 20°42		2°2/28.0 17		
6 20	21 1.24	-26 50.4	1.833	2.676	14.7	18.8	6 20	21 0.47	-21 36.5	1.637	2.481	16.1	20.5
6 30	20 57.53	-27 45.4	1.759	2.676	11.6	18.6	6 30	20 57.06	-22 10.3	1.564	2.483	12.7	20.3
7 10	20 51.29	-28 43.6	1.707	2.677	8.2	18.4	7 10	20 51.04	-22 51.2	1.512	2.486	8.6	20.1
7 20	20 43.06	-29 39.0	1.679	2.677	5.1	18.2	7 20	20 42.97	-23 34.3	1.483	2.488	4.4	19.8
7 30	20 33.75	-30 24.9	1.676	2.678	4.5	18.2	7 30	20 33.80	-24 13.8	1.479	2.491	2.4	19.7
8 9	20 24.52	-30 56.6	1.700	2.678	7.1	18.3	8 9	20 24.75	-24 44.7	1.501	2.495	6.0	19.9
8 19	20 16.49	-31 11.6	1.749	2.679	10.5	18.5	8 19	20 16.97	-25 3.9	1.548	2.498	10.2	20.2
8 29	20 10.58	-31 10.3	1.820	2.680	13.7	18.7	8 29	20 11.41	-25 10.5	1.618	2.502	13.9	20.4
90405	2003 <i>YW</i> ₅₃	7 29.2 339°18		1°6/28.2 18			231906	2000 <i>YN</i> ₉	7 29.2 341°22		0°1/29.2 17		
6 20	20 59.08	-20 6.7	1.750	2.590	15.4	19.5	6 20	20 59.61	-17 51.4	1.490	2.335	17.4	20.0
6 30	20 55.84	-20 43.4	1.670	2.587	12.1	19.3	6 30	20 56.65	-17 51.6	1.410	2.329	13.8	19.8
7 10	20 50.16	-21 28.6	1.611	2.584	8.3	19.1	7 10	20 50.92	-18 1.1	1.350	2.323	9.5	19.5
7 20	20 42.52	-22 17.8	1.576	2.582	4.1	18.8	7 20	20 42.98	-18 16.9	1.312	2.318	4.7	19.2
7 30	20 33.80	-23 5.7	1.566	2.579	1.8	18.7	7 30	20 33.80	-18 35.2	1.298	2.313	0.4	18.9
8 9	20 25.10	-23 46.8	1.582	2.577	5.6	18.9	8 9	20 24.66	-18 51.8	1.309	2.309	5.5	19.2
8 19	20 17.51	-24 17.6	1.624	2.575	9.7	19.1	8 19	20 16.81	-19 3.4	1.344	2.305	10.3	19.5
8 29	20 11.97	-24 36.3	1.689	2.573	13.4	19.4	8 29	20 11.31	-19 8.1	1.401	2.302	14.6	19.8
342352	2008 <i>TZ</i> ₁₆₉	7 29.2 359°12		10°4/ 2.8 16			5451	Plato	7 29.2 27°96		1°3/28.6 18 R		
6 20	20 51.75	- 0 59.3	1.133	1.962	22.8	20.3	6 20	21 0.40	-19 56.3	1.351	2.206	18.3	17.5
6 30	20 50.96	+ 0 26.8	1.067	1.956	19.6	20.1	6 30	20 57.38	-20 15.2	1.289	2.213	14.4	17.3
7 10	20 47.29	+ 1 29.7	1.016	1.953	16.1	19.9	7 10	20 51.42	-20 42.9	1.245	2.221	9.8	17.0
7 20	20 41.26	+ 2 3.6	0.983	1.951	12.7	19.7	7 20	20 43.18	-21 14.9	1.223	2.230	4.8	16.8
7 30	20 33.91	+ 2 5.3	0.968	1.952	10.6	19.6	7 30	20 33.79	-21 45.4	1.226	2.240	1.5	16.6
8 9	20 26.61	+ 1 36.5	0.974	1.954	10.9	19.6	8 9	20 24.66	-22 9.2	1.252	2.250	6.1	16.9
8 19	20 20.69	+ 0 43.1	1.000	1.958	13.5	19.7	8 19	20 17.07	-22 23.1	1.303	2.261	10.9	17.2
8 29	20 17.28	- 0 25.8	1.045	1.964	16.9	20.0	8 29	20 12.05	-22 26.1	1.374	2.273	15.0	17.5
276060	2002 <i>CJ</i> ₈₀	7 29.2 102°44		0°2/29.3 17			131516	2001 <i>TH</i> ₁₁₇	7 29.2 248°08		1°1/29.7 17		
6 20	21 0.95	-14 53.5	1.868	2.689	15.4	20.9	6 20	21 4.79	-15 52.9	1.519	2.349	17.9	19.5
6 30	20 56.93	-15 32.5	1.798	2.702	12.1	20.7	6 30	21 0.76	-15 43.6	1.431	2.340	14.3	19.2
7 10	20 50.66	-16 23.0	1.749	2.715	8.3	20.5	7 10	20 53.81	-15 44.5	1.363	2.330	10.1	19.0
7 20	20 42.67	-17 21.5	1.724	2.728	4.1	20.2	7 20	20 44.45	-15 53.4	1.317	2.320	5.2	18.7
7 30	20 33.80	-18 22.8	1.726	2.741	0.3	20.0	7 30	20 33.68	-16 7.2	1.296	2.310	1.1	18.3
8 9	20 25.06	-19 21.6	1.755	2.753	4.6	20.3	8 9	20 22.84	-16 21.9	1.300	2.300	5.6	18.6
8 19	20 17.41	-20 13.6	1.811	2.765	8.6	20.6	8 19	20 13.29	-16 34.4	1.330	2.289	10.6	18.9
8 29	20 11.66	-20 55.9	1.891	2.777	12.1	20.8	8 29	20 6.19	-16 42.3	1.382	2.279	15.0	19.1
311958	2007 <i>DD</i> ₄₇	7 29.2 197°28		2°3/27.8 18			43225	2000 <i>AW</i> ₁₆₅	7 29.2 265°74		2°2/31.1 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
187259	2005 <i>SK</i> ₂₇₈		7 29.2 161°15	0°6/28.8	18		120218	Richardberry		7 29.2 197°69	17°4/	9.9	18 R
6 20	20 58.87	-18 27.2	2.471	3.288	12.2	21.5	6 20	21 1.57	+17 57.6	1.333	2.025	26.2	20.2
6 30	20 54.83	-18 53.5	2.387	3.290	9.5	21.3	6 30	20 58.63	+19 25.4	1.260	2.024	24.3	20.1
7 10	20 49.01	-19 26.2	2.326	3.293	6.5	21.1	7 10	20 52.62	+20 18.3	1.199	2.022	22.1	19.9
7 20	20 41.83	-20 2.5	2.290	3.295	3.1	20.9	7 20	20 44.00	+20 26.8	1.151	2.019	19.9	19.7
7 30	20 33.93	-20 38.9	2.282	3.297	0.7	20.7	7 30	20 33.78	+19 43.7	1.119	2.016	18.2	19.6
8 9	20 26.07	-21 12.2	2.303	3.299	4.0	21.0	8 9	20 23.40	+18 8.7	1.105	2.013	17.4	19.6
8 19	20 18.98	-21 39.9	2.351	3.300	7.2	21.2	8 19	20 14.32	+15 48.3	1.110	2.009	17.9	19.6
8 29	20 13.34	-22 0.4	2.425	3.301	10.2	21.4	8 29	20 7.85	+12 55.9	1.135	2.004	19.6	19.7
386393	2008 <i>US</i> ₁₅₈		7 29.2 167°08	2°8/30.7	18		396654	2002 <i>JT</i> ₆₀		7 29.2 117°92	3°2/26.9	18	
6 20	21 2.24	-11 0.2	2.110	2.907	14.6	21.4	6 20	21 0.34	-26 47.9	2.451	3.279	11.9	20.9
6 30	20 57.68	-10 39.6	2.024	2.910	11.8	21.2	6 30	20 56.08	-27 28.5	2.376	3.285	9.4	20.8
7 10	20 51.07	-10 28.9	1.960	2.912	8.6	21.0	7 10	20 49.92	-28 10.6	2.324	3.290	6.5	20.6
7 20	20 42.88	-10 27.6	1.920	2.914	5.1	20.8	7 20	20 42.31	-28 50.0	2.297	3.296	4.0	20.5
7 30	20 33.84	-10 34.3	1.906	2.915	2.8	20.6	7 30	20 33.95	-29 22.5	2.299	3.301	3.3	20.4
8 9	20 24.86	-10 46.8	1.921	2.917	4.6	20.7	8 9	20 25.69	-29 44.9	2.328	3.306	5.5	20.6
8 19	20 16.82	-11 2.6	1.963	2.918	8.0	21.0	8 19	20 18.32	-29 55.6	2.383	3.311	8.2	20.8
8 29	20 10.47	-11 19.1	2.029	2.918	11.3	21.2	8 29	20 12.53	-29 54.6	2.463	3.316	10.9	20.9
138253	2000 <i>FB</i> ₆₀		7 29.2 154°43	0°3/29.0	17		91659	1999 <i>TP</i> ₁₀₅		7 29.2 246°83	7°4/23.2	18 R	
6 20	21 3.20	-16 54.3	1.923	2.742	15.0	21.2	6 20	21 5.90	-41 46.2	2.632	3.441	11.7	20.3
6 30	20 58.73	-17 24.6	1.845	2.749	11.9	21.0	6 30	21 0.84	-42 48.6	2.551	3.429	10.0	20.2
7 10	20 51.94	-18 4.5	1.788	2.755	8.1	20.8	7 10	20 53.41	-43 44.9	2.493	3.417	8.3	20.0
7 20	20 43.36	-18 50.3	1.756	2.760	4.0	20.6	7 20	20 44.12	-44 28.8	2.460	3.404	7.4	20.0
7 30	20 33.81	-19 37.5	1.750	2.765	0.5	20.3	7 30	20 33.80	-44 55.0	2.452	3.392	7.7	19.9
8 9	20 24.35	-20 21.4	1.773	2.770	4.8	20.7	8 9	20 23.49	-45 0.4	2.470	3.379	8.9	20.0
8 19	20 15.95	-20 58.2	1.822	2.774	8.8	20.9	8 19	20 14.24	-44 44.6	2.513	3.366	10.8	20.1
8 29	20 9.49	-21 26.0	1.896	2.777	12.3	21.1	8 29	20 6.94	-44 9.8	2.577	3.352	12.6	20.2
177471	2004 <i>DU</i> ₇₂		7 29.2 40°27	0°5/29.0	18		441966	2010 <i>MN</i> ₃₇		7 29.2 237°97	7°2/	5.3	18
6 20	21 3.87	-19 39.8	1.353	2.202	18.7	19.4	6 20	20 56.50	+ 9 1.2	2.845	3.528	13.6	21.8
6 30	21 0.08	-19 35.8	1.289	2.209	14.7	19.2	6 30	20 52.81	+ 9 10.8	2.737	3.516	12.1	21.6
7 10	20 53.26	-19 39.4	1.243	2.217	10.1	19.0	7 10	20 47.60	+ 9 2.4	2.647	3.502	10.4	21.5
7 20	20 44.09	-19 47.1	1.219	2.225	4.9	18.7	7 20	20 41.18	+ 8 34.3	2.579	3.489	8.7	21.4
7 30	20 33.76	-19 54.5	1.219	2.234	0.8	18.4	7 30	20 34.05	+ 7 46.1	2.535	3.474	7.4	21.3
8 9	20 23.72	-19 57.8	1.244	2.243	5.9	18.8	8 9	20 26.83	+ 6 39.5	2.518	3.460	7.3	21.2
8 19	20 15.31	-19 54.8	1.293	2.253	10.8	19.1	8 19	20 20.14	+ 5 17.8	2.528	3.445	8.3	21.3
8 29	20 9.57	-19 44.9	1.364	2.263	15.0	19.4	8 29	20 14.58	+ 3 45.8	2.564	3.430	10.0	21.4
228648	2002 <i>EQ</i> ₇₅		7 29.2 197°99	1°9/30.2	18		115430	2003 <i>SF</i> ₃₁₅		7 29.2 237°60	1°6/30.6	18	
6 20	21 3.07	-13 13.9	2.076	2.880	14.6	21.1	6 20	20 58.70	- 8 34.1	2.039	2.837	15.0	19.8
6 30	20 58.45	-13 1.8	1.986	2.878	11.7	20.9	6 30	20 55.21	- 9 32.3	1.943	2.831	12.1	19.6
7 10	20 51.68	-12 58.6	1.917	2.875	8.3	20.7	7 10	20 49.62	-10 48.7	1.869	2.824	8.7	19.4
7 20	20 43.22	-13 3.3	1.874	2.872	4.6	20.5	7 20	20 42.30	-12 20.7	1.819	2.817	4.8	19.2
7 30	20 33.85	-13 13.9	1.857	2.869	1.9	20.3	7 30	20 33.96	-14 3.3	1.797	2.810	1.6	18.9
8 9	20 24.49	-13 27.9	1.868	2.865	4.5	20.4	8 9	20 25.48	-15 49.6	1.804	2.803	4.4	19.1
8 19	20 16.08	-13 42.7	1.906	2.861	8.2	20.7	8 19	20 17.79	-17 32.8	1.839	2.796	8.3	19.3
8 29	20 9.42	-13 56.2	1.969	2.857	11.6	20.9	8 29	20 11.75	-19 7.0	1.899	2.788	12.0	19.5
469621	2004 <i>RV</i> ₉₃		7 29.2 324°82	1°4/29.7	18		262904	2007 <i>CE</i> ₄₆		7 29.2 75°52	2°5/31.3	18	
6 20	20 57.93	-17 15.5	1.278	2.136	19.0	20.8	6 20	20 56.43	- 8 13.7	2.305	3.099	13.6	20.6
6 30	20 56.09	-16 45.3	1.182	2.107	15.4	20.5	6 30	20 53.03	- 8 33.0	2.218	3.100	11.1	20.4
7 10	20 51.10	-16 22.5	1.103	2.078	10.9	20.2	7 10	20 47.87	- 9 5.5	2.152	3.102	8.1	20.2
7 20	20 43.36	-16 6.2	1.045	2.051	5.7	19.8	7 20	20 41.33	- 9 50.1	2.110	3.103	4.9	20.0
7 30	20 33.81	-15 54.4	1.009	2.024	1.4	19.4	7 30	20 34.05	-10 44.0	2.096	3.105	2.6	19.8
8 9	20 23.94	-15 44.1	0.996	1.998	6.3	19.7	8 9	20 26.77	-11 43.3	2.109	3.106	4.1	20.0
8 19	20 15.31	-15 33.2	1.006	1.974	12.0	19.9	8 19	20 20.24	-12 44.0	2.150	3.108	7.2	20.2
8 29	20 9.36	-15 19.7	1.035	1.951	17.2	20.1	8 29	20 15.12	-13 42.1	2.216	3.109	10.3	20.4
381182	2007 <i>LX</i> ₂₀		7 29.2 265°20	15°4/16.2	18		516818	2010 <i>OS</i> ₉₉		7 29.2 233°14	8°5/20.9	18	
6 20	21 6.53	-36 10.2	1.042	1.915	21.2	20.3	6 20	21 11.50	-50 10.0	3.050	3.823	11.1	22.5
6 30	21 5.30	-40 22.5	0.984	1.905	18.1	20.1	6 30	21 5.24	-51 14.9	2.975	3.810	9.9	22.4
7 10	20 59.20	-44 44.1	0.947	1.894	15.9	19.9	7 10	20 56.42	-52 10.0	2.922	3.796	8.9	22.3
7 20	20 48.17	-48 49.1	0.933	1.883	15.6	19.9	7 20	20 45.60	-52 49.3	2.892	3.782	8.5	22.3
7 30	20 33.34	-52 10.0	0.941	1.872	17.5	19.9	7 30	20 33.69	-53 7.6	2.887	3.767	8.8	22.3
8 9	20 17.37	-54 28.8	0.968	1.861	20.6	20.1	8 9	20 21.86	-53 2.5	2.907	3.752	9.7	22.3
8 19	20 3.53	-55 42.2	1.012	1.850	24.0	20.3	8 19	20 11.22	-52 34.5	2.949	3.737	11.0	22.4
8 29	19 54.70	-55 58.9	1.069	1.838	27.0	20.5	8 29	20 2.72	-51 46.3	3.013	3.721	12.3	22.5
145818	1998 <i>SF</i> ₁₇₀		7 29.2 301°91	3°8/30.7	18		437671	2014 <i>CS</i> ₁₅		7 29.2 272°75	3°0/30.9	18	
6 20	21 0.58	-11 6.4	1.478	2.305	18.4	20.2	6 20	21 0.66	- 9 36.1	1.941	2.742	15.6	21.0
6 30	20 57.55	-10 32.4	1.386	2.288	15.1	19.9	6 30	20 57.01	- 9 32.7	1.830	2.718	12.8	20.7
7 10	20 51.70	-10 10.9	1.312	2.272	11.1	19.7	7 10	20 51.04	- 9 42.7	1.740	2.692	9.4	20.5
7 20	20 43.49	-10 2.4	1.259	2.255	6.8	19.4	7 20	20 43.10	-10 5.8	1.673	2.667	5.7	20.2
7 30	20 33.83	-10 6.0	1.230	2.239	3.8	19.2	7 30	20 33.91	-10 40.3	1.631	2.641	3.0	20.0
8 9	20 23.99	-10 19.3	1.226	2.224	6.3	19.3	8 9	20 24.42	-11 22.7	1.617	2.614	5.1	20.1
8 19	20 15.30	-10 38.7	1.246	2.208	10.8	19.5	8 19	20 15.71	-12 8.8	1.629	2.587	9.1	20.2
8 29	20 8.93	-11 0.3	1.287	2.193	15.3	19.7	8 29	20 8.75	-12 54.5	1.665	2.559	13.1	20.4
121439	1999 <i>TK</i> ₁₈₄		7 29.2 263°37	4°8/	1.1	18	239804	1995 <i>WL</i>					

EPHEMERIDES

7 29.2

7 29.2

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
61190	Johnschutt		7 29.2 227°30	2°4/27.9	18		106850	2000 YN ₁₈		7 29.2 120°01	1°3/29.9	18	
6 20	21 3.56	-20 38.6	1.482	2.326	17.5	19.0	6 20	21 4.59	-14 41.4	2.195	2.997	14.0	19.9
6 30	20 59.98	-21 27.8	1.403	2.322	13.8	18.8	6 30	20 59.34	-14 30.4	2.121	3.012	11.1	19.7
7 10	20 53.40	-22 27.6	1.343	2.317	9.5	18.5	7 10	20 52.09	-14 27.0	2.069	3.028	7.8	19.5
7 20	20 44.33	-23 32.2	1.307	2.312	4.8	18.2	7 20	20 43.38	-14 29.6	2.042	3.042	4.1	19.3
7 30	20 33.81	-24 34.0	1.295	2.307	2.7	18.1	7 30	20 33.96	-14 36.1	2.043	3.057	1.3	19.2
8 9	20 23.25	-25 25.6	1.308	2.301	6.8	18.3	8 9	20 24.73	-14 44.2	2.073	3.070	4.1	19.4
8 19	20 14.05	-26 2.5	1.346	2.295	11.5	18.6	8 19	20 16.52	-14 51.9	2.130	3.084	7.6	19.6
8 29	20 7.39	-26 22.9	1.406	2.289	15.7	18.8	8 29	20 10.02	-14 57.8	2.213	3.097	10.7	19.9
49208	1998 SB ₁₁₉		7 29.2 73°98	1°9/28.3	18		25204	1998 SP ₁₄₄		7 29.2 291°65	2°8/30.9	18	
6 20	21 4.31	-21 5.1	1.492	2.335	17.5	18.7	6 20	20 58.56	-10 6.4	1.887	2.696	15.6	19.0
6 30	21 0.17	-21 35.1	1.431	2.349	13.7	18.5	6 30	20 55.24	-10 1.5	1.794	2.687	12.7	18.8
7 10	20 53.18	-22 12.3	1.391	2.364	9.3	18.3	7 10	20 49.71	-10 9.7	1.722	2.677	9.3	18.5
7 20	20 44.04	-23 51.7	1.373	2.379	4.6	18.1	7 20	20 42.39	-10 30.3	1.672	2.668	5.6	18.3
7 30	20 33.86	-23 27.1	1.380	2.393	2.1	17.9	7 30	20 34.04	-11 1.2	1.648	2.658	2.9	18.1
8 9	20 23.97	-23 53.5	1.414	2.408	6.1	18.2	8 9	20 25.61	-11 39.0	1.651	2.649	4.9	18.2
8 19	20 15.62	-24 8.4	1.471	2.423	10.5	18.5	8 19	20 18.09	-12 19.6	1.680	2.640	8.7	18.4
8 29	20 9.76	-24 11.2	1.551	2.437	14.3	18.8	8 29	20 12.35	-12 59.1	1.732	2.630	12.4	18.6
181200	2005 SO ₁₅₅		7 29.2 264°59	1°0/28.4	18		425541	2010 RO ₃₉		7 29.2 274°80	3°7/30.8	18	
6 20	20 57.77	-17 11.6	2.204	3.027	13.3	19.8	6 20	21 2.13	-10 18.7	1.537	2.355	18.2	21.0
6 30	20 54.35	-18 13.2	2.115	3.022	10.4	19.6	6 30	20 58.74	-9 54.5	1.440	2.338	15.0	20.8
7 10	20 48.95	-19 25.3	2.048	3.017	7.1	19.4	7 10	20 52.54	-9 44.1	1.363	2.320	11.1	20.5
7 20	20 41.95	-20 43.9	2.007	3.013	3.4	19.1	7 20	20 43.97	-9 47.7	1.306	2.302	6.8	20.2
7 30	20 34.03	-22 3.7	1.994	3.008	1.2	19.0	7 30	20 33.90	-10 4.2	1.275	2.284	3.8	20.0
8 9	20 26.04	-23 19.0	2.010	3.003	4.7	19.2	8 9	20 23.59	-10 30.3	1.268	2.265	6.2	20.1
8 19	20 18.82	-24 25.3	2.052	2.999	8.3	19.4	8 19	20 14.36	-11 2.0	1.285	2.247	10.7	20.3
8 29	20 13.18	-25 19.6	2.120	2.994	11.5	19.6	8 29	20 7.40	-11 34.8	1.325	2.228	15.2	20.5
512422	2016 PF ₈₉		7 29.2 272°09	2°1/30.5	18		40418	1999 RK ₁₉		7 29.2 279°15	1°8/28.2	18	
6 20	20 58.79	-11 29.4	1.980	2.790	15.0	21.8	6 20	21 1.69	-23 33.8	2.277	3.103	12.8	19.2
6 30	20 55.30	-11 34.4	1.888	2.783	12.1	21.6	6 30	20 57.38	-23 44.6	2.182	3.090	10.1	19.0
7 10	20 49.66	-11 51.5	1.817	2.776	8.7	21.4	7 10	20 50.99	-23 58.2	2.108	3.077	7.0	18.8
7 20	20 42.32	-12 19.6	1.770	2.768	4.9	21.2	7 20	20 42.96	-24 11.2	2.060	3.064	3.6	18.5
7 30	20 34.00	-12 55.8	1.748	2.760	2.1	21.0	7 30	20 34.00	-24 20.4	2.039	3.051	2.0	18.4
8 9	20 25.64	-13 36.6	1.754	2.753	4.5	21.1	8 9	20 25.04	-24 22.9	2.046	3.038	4.9	18.6
8 19	20 18.15	-14 17.9	1.786	2.745	8.4	21.3	8 19	20 16.96	-24 17.4	2.080	3.025	8.3	18.8
8 29	20 12.37	-14 56.3	1.843	2.738	12.0	21.5	8 29	20 10.55	-24 3.4	2.139	3.012	11.5	19.0
126872	2002 EG ₈₈		7 29.2 179°55	1°7/30.4	18		346061	2007 UM ₆₁		7 29.2 191°26	3°2/31.5	18	
6 20	21 0.96	-11 40.7	2.182	2.982	14.1	20.7	6 20	20 59.83	-7 37.3	2.406	3.187	13.5	22.1
6 30	20 56.71	-11 54.5	2.094	2.984	11.3	20.5	6 30	20 55.62	-7 29.6	2.314	3.186	11.0	21.9
7 10	20 50.46	-12 19.5	2.028	2.984	8.0	20.3	7 10	20 49.62	-7 33.4	2.243	3.185	8.2	21.7
7 20	20 42.66	-12 54.2	1.986	2.985	4.5	20.1	7 20	20 42.23	-7 48.4	2.196	3.183	5.3	21.6
7 30	20 33.99	-13 35.6	1.972	2.985	1.7	19.9	7 30	20 34.08	-8 13.2	2.176	3.180	3.3	21.4
8 9	20 25.33	-14 19.9	1.986	2.984	4.2	20.0	8 9	20 25.92	-8 45.2	2.185	3.177	4.5	21.5
8 19	20 17.53	-15 3.4	2.027	2.983	7.8	20.3	8 19	20 18.50	-9 21.5	2.221	3.174	7.3	21.7
8 29	20 11.34	-15 43.2	2.094	2.981	11.1	20.5	8 29	20 12.49	-9 58.9	2.283	3.171	10.3	21.9
105543	2000 RW ₄₀		7 29.2 318°34	0°7/28.9	18		479838	2014 GR ₃		7 29.2 349°77	12°4/7.7	18	
6 20	21 1.89	-20 53.5	1.999	2.827	14.2	19.2	6 20	20 51.44	+11 24.4	1.577	2.310	21.2	19.9
6 30	20 57.71	-20 48.4	1.911	2.820	11.2	19.0	6 30	20 50.07	+12 17.3	1.495	2.301	19.2	19.8
7 10	20 51.28	-20 47.2	1.844	2.813	7.7	18.7	7 10	20 46.40	+12 41.0	1.428	2.294	17.0	19.6
7 20	20 43.10	-20 47.5	1.802	2.807	3.8	18.5	7 20	20 40.84	+12 30.4	1.378	2.287	14.7	19.4
7 30	20 33.96	-20 46.3	1.786	2.801	0.9	18.2	7 30	20 34.18	+11 42.2	1.347	2.282	12.9	19.3
8 9	20 24.87	-20 41.3	1.798	2.795	4.7	18.5	8 9	20 27.45	+10 18.2	1.336	2.277	12.4	19.3
8 19	20 16.82	-20 31.0	1.836	2.789	8.6	18.7	8 19	20 21.69	+8 24.5	1.347	2.274	13.3	19.3
8 29	20 10.63	-20 14.9	1.898	2.783	12.1	18.9	8 29	20 17.85	+6 11.2	1.380	2.272	15.3	19.4
80339	1999 XB ₁₀₄		7 29.2 297°37	5°9/26.1	18		3045	Alois		7 29.2 308°09	1°8/28.1	18	
6 20	21 2.44	-27 41.6	1.432	2.288	17.4	19.2	6 20	20 58.71	-21 54.1	2.149	2.981	13.2	16.4
6 30	20 59.75	-28 43.8	1.337	2.261	14.0	18.9	6 30	20 55.17	-22 21.2	2.059	2.971	10.4	16.2
7 10	20 53.73	-29 52.7	1.262	2.234	10.2	18.6	7 10	20 49.55	-22 53.5	1.991	2.961	7.1	16.0
7 20	20 44.74	-31 0.5	1.209	2.207	6.7	18.3	7 20	20 42.28	-23 27.5	1.947	2.952	3.6	15.7
7 30	20 33.79	-31 57.2	1.179	2.180	6.2	18.2	7 30	20 34.08	-23 59.1	1.930	2.942	1.9	15.6
8 9	20 22.44	-32 34.4	1.174	2.152	9.6	18.3	8 9	20 25.86	-24 24.5	1.941	2.933	5.0	15.8
8 19	20 12.39	-32 47.6	1.191	2.126	14.0	18.5	8 19	20 18.51	-24 41.2	1.978	2.924	8.5	16.0
8 29	20 5.17	-32 36.9	1.228	2.099	18.3	18.7	8 29	20 12.85	-24 48.0	2.039	2.916	11.8	16.2
77120	2001 DL ₈₁		7 29.2 185°84	4°2/26.8	18		442003	2010 ON ₁₉		7 29.2 351°17	5°7/1.3	18	
6 20	21 4.76	-25 33.2	1.692	2.532	15.9	19.4	6 20	20 57.63	-4 34.9	1.903	2.693	16.2	20.4
6 30	21 0.59	-26 32.9	1.616	2.532	12.5	19.2	6 30	20 54.38	-3 48.6	1.818	2.689	13.6	20.2
7 10	20 53.61	-27 37.8	1.562	2.532	8.8	19.0	7 10	20 49.03	-3 16.4	1.752	2.686	10.6	20.0
7 20	20 44.37	-28 41.1	1.531	2.531	5.3	18.8	7 20	20 42.02	-2 59.8	1.708	2.683	7.7	19.9
7 30	20 33.86	-29 35.3	1.526	2.530	4.4	18.7	7 30	20 34.10	-2 59.3	1.689	2.681	5.8	19.7
8 9	20 23.40	-30 14.3	1.548	2.529	7.4	18.9	8 9	20 26.19	-3 13.1	1.696	2.680	6.6	19.8
8 19	20 14.26	-30 35.4	1.594	2.527	11.2	19.1	8 19	20 19.18	-3 38.4	1.727	2.678	9.2	19.9
8 29	20 7.49	-30 38.8	1.663	2.525	14.7	19.3	8 29	20 13.89	-4 11.0	1.782	2.678	12.3	20.1
476966	2008 YS ₄		7 29.2 262°12	0°4/29.1	18		355687	2008 FB ₁₆		7 29.2 58°80	3°9/26.9	18	
6 20	21 2.30	-18 49.3	2.07										

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7 29.2

7 29.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
385356	2002 <i>PC</i> ₉₆		7 29.2 336°14	4°2/27.9	18		70467	1999 <i>TG</i> ₃₁		7 29.3 313°04	9°6/24.4	18	
6 20	21 6.72	-29 32.0	1.593	2.436	16.5	19.8	6 20	21 6.78	-39 14.8	1.598	2.439	16.6	18.6
6 30	21 2.29	-29 30.7	1.512	2.428	13.2	19.6	6 30	21 3.02	-40 18.9	1.520	2.423	14.0	18.4
7 10	20 54.82	-29 26.9	1.451	2.419	9.4	19.4	7 10	20 55.77	-41 16.8	1.461	2.406	11.5	18.2
7 20	20 44.97	-29 15.1	1.412	2.412	5.7	19.1	7 20	20 45.63	-41 58.8	1.424	2.391	9.8	18.1
7 30	20 33.86	-28 50.7	1.399	2.405	4.4	19.0	7 30	20 33.84	-42 15.7	1.410	2.375	9.9	18.1
8 9	20 22.96	-28 11.3	1.412	2.399	7.3	19.2	8 9	20 22.11	-42 2.4	1.420	2.360	11.9	18.1
8 19	20 13.62	-27 17.9	1.449	2.393	11.3	19.4	8 19	20 12.10	-41 19.1	1.451	2.345	14.7	18.3
8 29	20 6.90	-26 13.5	1.509	2.388	15.1	19.6	8 29	20 5.14	-40 10.7	1.502	2.331	17.7	18.4
243626	1999 <i>RP</i> ₁₁₄		7 29.2 284°54	4°7/26.5	18		100798	1998 <i>FG</i> ₇₉		7 29.3 113°52	1°6/28.4	18	
6 20	21 5.37	-32 2.1	2.315	3.139	12.7	20.5	6 20	21 2.95	-19 0.9	1.530	2.370	17.3	19.9
6 30	21 0.51	-32 28.8	2.213	3.115	10.2	20.2	6 30	20 59.22	-19 44.9	1.459	2.376	13.6	19.7
7 10	20 53.29	-32 53.7	2.133	3.091	7.6	20.0	7 10	20 52.69	-20 39.5	1.409	2.381	9.3	19.4
7 20	20 44.16	-33 11.7	2.078	3.067	5.3	19.9	7 20	20 43.94	-21 39.6	1.381	2.387	4.5	19.2
7 30	20 33.93	-33 17.9	2.050	3.043	4.9	19.8	7 30	20 33.99	-22 38.4	1.379	2.392	1.8	19.0
8 9	20 23.63	-33 9.3	2.049	3.018	6.9	19.9	8 9	20 24.15	-23 29.2	1.403	2.398	6.0	19.3
8 19	20 14.31	-32 44.9	2.075	2.993	9.8	20.0	8 19	20 15.68	-24 7.9	1.451	2.403	10.6	19.6
8 29	20 6.87	-32 6.2	2.125	2.968	12.7	20.1	8 29	20 9.60	-24 32.6	1.522	2.408	14.5	19.8
332158	2005 <i>YC</i> ₁₅₂		7 29.2 303°83	4°0/26.6	18		465880	2010 <i>TF</i> ₈₆		7 29.3 7°04	5°5/1.1	17	
6 20	20 58.32	-22 14.5	1.535	2.388	16.6	20.0	6 20	20 49.07	-6 48.5	0.883	1.756	24.1	20.8
6 30	20 56.06	-23 34.6	1.442	2.366	13.1	19.7	6 30	20 49.55	-6 33.5	0.828	1.756	19.9	20.5
7 10	20 50.92	-25 7.8	1.369	2.345	9.1	19.4	7 10	20 46.73	-6 47.0	0.788	1.758	14.9	20.2
7 20	20 43.27	-26 47.3	1.320	2.323	5.2	19.2	7 20	20 41.21	-7 29.9	0.764	1.762	9.6	20.0
7 30	20 33.99	-28 23.6	1.295	2.302	4.4	19.1	7 30	20 34.21	-8 38.3	0.759	1.768	5.7	19.8
8 9	20 24.37	-29 47.3	1.296	2.281	8.0	19.2	8 9	20 27.39	-10 2.9	0.774	1.776	7.5	19.9
8 19	20 15.82	-30 51.5	1.321	2.261	12.5	19.4	8 19	20 22.27	-11 32.4	0.809	1.787	12.5	20.2
8 29	20 9.66	-31 33.2	1.367	2.240	16.6	19.6	8 29	20 20.08	-12 56.1	0.862	1.799	17.4	20.6
366682	2003 <i>UA</i> ₁₈₀		7 29.2 288°02	2°4/30.5	18		40996	1999 <i>UO</i> ₅		7 29.3 333°09	6°1/27.2	18	
6 20	20 59.47	-11 9.0	1.476	2.305	18.3	21.3	6 20	21 8.69	-33 21.3	1.575	2.417	16.8	18.1
6 30	20 56.82	-11 16.1	1.379	2.285	14.9	21.0	6 30	21 4.01	-33 36.7	1.498	2.410	13.6	17.9
7 10	20 51.36	-11 40.2	1.301	2.264	10.8	20.7	7 10	20 56.09	-33 47.1	1.440	2.403	10.1	17.6
7 20	20 43.46	-12 20.6	1.244	2.244	6.1	20.4	7 20	20 45.63	-33 45.7	1.405	2.396	7.0	17.5
7 30	20 33.98	-13 14.0	1.210	2.223	2.4	20.1	7 30	20 33.87	-33 26.4	1.395	2.390	6.3	17.4
8 9	20 24.20	-14 14.6	1.202	2.202	5.8	20.3	8 9	20 22.38	-32 46.5	1.410	2.385	8.7	17.5
8 19	20 15.47	-15 16.0	1.218	2.182	10.9	20.5	8 19	20 12.60	-31 47.4	1.449	2.380	12.3	17.7
8 29	20 9.04	-16 12.5	1.256	2.161	15.6	20.7	8 29	20 5.65	-30 33.4	1.510	2.375	15.8	17.9
202298	2005 <i>CG</i> ₅₁		7 29.2 203°97	0°9/28.7	18		287337	2002 <i>TM</i> ₃₃₂		7 29.3 173°61	4°0/26.6	18	
6 20	21 3.47	-20 26.7	2.553	3.363	12.0	22.5	6 20	21 3.10	-28 11.3	2.168	2.999	13.2	21.4
6 30	20 58.46	-20 42.6	2.458	3.357	9.5	22.3	6 30	20 58.63	-28 57.4	2.091	3.000	10.4	21.3
7 10	20 51.56	-21 2.9	2.386	3.351	6.5	22.1	7 10	20 51.91	-29 44.7	2.036	3.001	7.4	21.1
7 20	20 43.20	-21 24.9	2.340	3.345	3.2	21.9	7 20	20 43.45	-30 28.1	2.006	3.002	4.7	20.9
7 30	20 34.03	-21 45.5	2.323	3.337	1.0	21.7	7 30	20 34.06	-31 2.2	2.003	3.003	4.2	20.9
8 9	20 24.85	-22 1.9	2.335	3.329	4.1	21.9	8 9	20 24.74	-31 23.3	2.028	3.003	6.5	21.0
8 19	20 16.46	-22 12.3	2.375	3.320	7.4	22.1	8 19	20 16.47	-31 29.8	2.078	3.003	9.4	21.2
8 29	20 9.56	-22 15.7	2.442	3.311	10.4	22.3	8 29	20 10.07	-31 22.1	2.152	3.003	12.3	21.4
423145	2004 <i>DU</i> ₆₅		7 29.2 183°53	0°2/29.3	17		368106	2013 <i>EE</i> ₁₂₁		7 29.3 170°86	0°7/29.8	18	
6 20	21 3.32	-15 47.2	1.904	2.721	15.3	22.4	6 20	20 58.94	-14 49.0	2.773	3.573	11.4	22.3
6 30	20 58.95	-16 13.1	1.819	2.721	12.1	22.2	6 30	20 54.69	-15 2.5	2.684	3.576	9.0	22.1
7 10	20 52.23	-16 49.5	1.756	2.722	8.4	22.0	7 10	20 48.86	-15 23.0	2.619	3.579	6.3	21.9
7 20	20 43.63	-17 33.3	1.717	2.721	4.2	21.7	7 20	20 41.84	-15 48.8	2.579	3.581	3.2	21.7
7 30	20 34.00	-18 20.1	1.705	2.720	0.3	21.4	7 30	20 34.19	-16 17.5	2.568	3.582	0.7	21.5
8 9	20 24.36	-19 5.2	1.720	2.718	4.7	21.8	8 9	20 26.57	-16 46.6	2.586	3.584	3.4	21.8
8 19	20 15.77	-19 44.6	1.763	2.716	8.9	22.0	8 19	20 19.61	-17 13.6	2.632	3.585	6.4	22.0
8 29	20 9.10	-20 15.8	1.829	2.714	12.6	22.2	8 29	20 13.91	-17 36.9	2.704	3.585	9.1	22.1
115783	2003 <i>UQ</i> ₂₁₇		7 29.3 245°81	0°2/29.4	18		284273	2006 <i>HF</i> ₉₉		7 29.3 336°61	2°8/30.8	16	
6 20	20 59.82	-15 45.4	1.981	2.803	14.6	20.1	6 20	20 58.97	-10 37.4	1.770	2.586	16.3	21.0
6 30	20 56.16	-16 8.8	1.893	2.797	11.6	19.9	6 30	20 55.67	-10 30.4	1.687	2.583	13.2	20.8
7 10	20 50.29	-16 42.3	1.825	2.792	8.0	19.7	7 10	20 50.05	-10 36.7	1.622	2.580	9.6	20.5
7 20	20 42.68	-17 23.3	1.782	2.786	4.0	19.4	7 20	20 42.60	-10 55.4	1.581	2.578	5.6	20.3
7 30	20 34.08	-18 7.8	1.765	2.780	0.3	19.1	7 30	20 34.14	-11 24.2	1.565	2.575	2.8	20.1
8 9	20 25.44	-18 51.3	1.776	2.774	4.5	19.5	8 9	20 25.68	-11 59.4	1.575	2.573	5.0	20.3
8 19	20 17.72	-19 30.0	1.813	2.768	8.5	19.7	8 19	20 18.23	-12 37.0	1.611	2.572	9.0	20.5
8 29	20 11.78	-20 1.3	1.874	2.762	12.1	19.9	8 29	20 12.69	-13 13.1	1.670	2.570	12.7	20.7
481296	2005 <i>YP</i> ₁₆₇		7 29.3 309°90	4°5/31.0	18		51014	2000 <i>GS</i> ₁₀₅		7 29.3 180°52	2°6/27.7	18	
6 20	21 3.53	-8 52.0	2.208	2.992	14.5	20.7	6 20	21 2.86	-24 50.6	2.166	2.993	13.3	19.7
6 30	20 58.71	-7 46.8	2.110	2.983	11.9	20.5	6 30	20 58.36	-25 19.2	2.085	2.994	10.5	19.5
7 10	20 51.85	-6 49.0	2.034	2.973	9.1	20.3	7 10	20 51.69	-25 50.5	2.026	2.994	7.2	19.3
7 20	20 43.39	-6 0.0	1.982	2.964	6.2	20.1	7 20	20 43.33	-26 20.4	1.992	2.994	4.0	19.1
7 30	20 34.03	-5 21.0	1.958	2.955	4.5	20.0	7 30	20 34.09	-26 44.5	1.986	2.994	2.8	19.1
8 9	20 24.64	-4 51.9	1.961	2.947	5.7	20.1	8 9	20 24.93	-26 59.5	2.007	2.993	5.5	19.2
8 19	20 16.10	-4 32.1	1.992	2.938	8.5	20.2	8 19	20 16.77	-27 3.7	2.055	2.993	8.8	19.4
8 29	20 9.19	-4 19.8	2.048	2.930	11.5	20.4	8 29	20 10.43	-26 56.9	2.127	2.992	11.8	19.6
423791	2006 <i>GZ</i> ₅₀		7 29.3 50°75	2°1/30.8	17		375227	2008 <i>FP</i>					

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7 29.3

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
118990	2000 <i>XW</i> ₄₈		7 29.3 259°40	4.7/26.0	18		291983	2006 <i>QN</i> ₉₅		7 29.3 320°24	2°1/28.2	17	
6 20	21 2.24	-31 14.8	2.336	3.165	12.4	20.0	6 20	20 57.53	-19 11.5	1.257	2.120	18.9	20.4
6 30	20 57.92	-31 59.2	2.252	3.158	9.9	19.8	6 30	20 55.83	-19 55.1	1.175	2.105	15.0	20.1
7 10	20 51.43	-32 42.9	2.191	3.151	7.3	19.6	7 10	20 50.97	-20 52.8	1.111	2.090	10.4	19.8
7 20	20 43.24	-33 20.7	2.156	3.144	5.2	19.5	7 20	20 43.40	-21 59.6	1.068	2.076	5.2	19.5
7 30	20 34.12	-33 47.7	2.147	3.137	4.9	19.5	7 30	20 34.14	-23 7.4	1.048	2.062	2.3	19.2
8 9	20 25.03	-34 0.5	2.165	3.130	6.8	19.6	8 9	20 24.69	-24 7.5	1.052	2.049	7.2	19.5
8 19	20 16.92	-33 57.9	2.209	3.123	9.5	19.7	8 19	20 16.62	-24 53.3	1.078	2.037	12.5	19.8
8 29	20 10.58	-33 40.6	2.277	3.116	12.1	19.9	8 29	20 11.28	-25 21.7	1.123	2.025	17.3	20.0
102360	1999 <i>TU</i> ₁₃₄		7 29.3 287°95	0°6/28.9	18		454264	2014 <i>EP</i> ₂₄		7 29.3 193°58	6°7/3.2	17	
6 20	21 0.95	-18 45.2	1.792	2.625	15.4	20.2	6 20	21 1.83	+ 3 35.5	1.270	2.050	23.3	20.9
6 30	20 57.38	-18 59.9	1.703	2.614	12.2	20.0	6 30	20 58.97	+ 2 42.9	1.187	2.049	19.9	20.6
7 10	20 51.34	-19 22.6	1.633	2.604	8.4	19.7	7 10	20 53.00	+ 1 10.2	1.119	2.048	15.7	20.4
7 20	20 43.31	-19 50.3	1.587	2.593	4.1	19.4	7 20	20 44.37	- 1 4.4	1.071	2.047	11.0	20.1
7 30	20 34.11	-20 18.8	1.567	2.582	0.8	19.2	7 30	20 34.08	- 3 56.1	1.046	2.045	7.2	19.9
8 9	20 24.86	-20 43.8	1.574	2.572	5.1	19.5	8 9	20 23.58	- 7 11.7	1.048	2.043	7.6	19.9
8 19	20 16.66	-21 2.2	1.606	2.561	9.5	19.7	8 19	20 14.39	-10 33.9	1.075	2.040	11.8	20.1
8 29	20 10.48	-21 12.3	1.662	2.551	13.3	19.9	8 29	20 7.84	-13 45.4	1.127	2.037	16.6	20.4
90336	2003 <i>FP</i> ₉₇		7 29.3 26°50	0°1/29.3	18		70099	1999 <i>JG</i> ₁₂₁		7 29.3 26°45	4°4/31.5	17	
6 20	20 58.28	-16 48.3	1.817	2.650	15.3	19.4	6 20	20 57.90	- 8 14.6	1.150	1.993	21.6	18.9
6 30	20 55.01	-17 3.0	1.745	2.656	12.0	19.2	6 30	20 55.82	- 8 3.1	1.090	2.000	17.7	18.6
7 10	20 49.50	-17 26.9	1.694	2.664	8.3	18.9	7 10	20 50.67	- 8 13.4	1.045	2.007	13.0	18.4
7 20	20 42.29	-17 57.0	1.666	2.671	4.1	18.7	7 20	20 43.08	- 8 45.1	1.020	2.016	8.0	18.1
7 30	20 34.20	-18 29.4	1.665	2.680	0.3	18.4	7 30	20 34.20	- 9 34.8	1.016	2.025	4.5	18.0
8 9	20 26.24	-19 0.2	1.689	2.688	4.6	18.8	8 9	20 25.51	-10 35.8	1.035	2.035	6.6	18.1
8 19	20 19.36	-19 26.0	1.740	2.698	8.6	19.0	8 19	20 18.38	-11 40.3	1.077	2.046	11.3	18.4
8 29	20 14.36	-19 44.7	1.813	2.707	12.2	19.3	8 29	20 13.93	-12 41.3	1.139	2.058	15.8	18.7
134804	2000 <i>EP</i> ₉₈		7 29.3 24°52	1°8/28.6	18		218289	2003 <i>OV</i> ₄		7 29.3 314°27	1°4/28.7	18	
6 20	21 2.19	-22 51.7	1.459	2.310	17.4	18.9	6 20	21 2.98	-23 23.8	2.074	2.902	13.8	19.6
6 30	20 58.61	-22 51.6	1.398	2.320	13.7	18.6	6 30	20 58.66	-23 12.9	1.976	2.885	10.9	19.4
7 10	20 52.20	-22 55.5	1.355	2.330	9.3	18.4	7 10	20 52.05	-23 3.5	1.898	2.868	7.6	19.1
7 20	20 43.66	-22 59.4	1.335	2.341	4.7	18.2	7 20	20 43.62	-22 52.8	1.846	2.851	3.8	18.9
7 30	20 34.11	-22 59.3	1.340	2.353	2.0	18.0	7 30	20 34.16	-22 38.2	1.821	2.834	1.5	18.7
8 9	20 24.89	-22 51.9	1.369	2.366	5.9	18.3	8 9	20 24.69	-22 17.6	1.823	2.818	4.9	18.9
8 19	20 17.22	-22 36.1	1.423	2.380	10.3	18.6	8 19	20 16.20	-21 50.3	1.851	2.802	8.8	19.1
8 29	20 11.99	-22 12.4	1.499	2.394	14.2	18.9	8 29	20 9.57	-21 16.6	1.905	2.786	12.3	19.3
251527	2008 <i>GV</i> ₁₃₇		7 29.3 270°06	0°7/29.8	18		336889	2011 <i>GE</i> ₅₉		7 29.3 26°11	0°9/29.8	17	
6 20	20 57.67	-14 7.5	2.270	3.083	13.2	20.9	6 20	20 58.61	-13 36.4	1.511	2.347	17.6	20.6
6 30	20 54.15	-14 29.4	2.181	3.080	10.5	20.7	6 30	20 55.78	-14 3.7	1.439	2.351	14.0	20.3
7 10	20 48.76	-15 1.1	2.114	3.077	7.3	20.5	7 10	20 50.35	-14 46.0	1.386	2.355	9.8	20.1
7 20	20 41.91	-15 40.4	2.072	3.074	3.8	20.3	7 20	20 42.85	-15 40.2	1.356	2.360	5.0	19.8
7 30	20 34.25	-16 24.2	2.056	3.071	0.7	20.0	7 30	20 34.23	-16 40.9	1.350	2.365	0.9	19.6
8 9	20 26.57	-17 8.6	2.069	3.068	3.9	20.3	8 9	20 25.69	-17 41.7	1.370	2.370	5.2	19.9
8 19	20 19.68	-17 50.3	2.109	3.065	7.5	20.5	8 19	20 18.38	-18 37.0	1.414	2.376	9.8	20.2
8 29	20 14.27	-18 26.4	2.174	3.062	10.7	20.7	8 29	20 13.28	-19 22.8	1.481	2.382	13.9	20.4
300731	2007 <i>VR</i> ₁₄₂		7 29.3 312°48	2°4/30.7	18		127122	2002 <i>GB</i> ₁₀₂		7 29.3 9°61	3°1/26.9	18	
6 20	20 58.23	-11 7.5	1.842	2.657	15.8	20.9	6 20	20 58.12	-23 59.8	2.101	2.939	13.3	19.2
6 30	20 55.07	-11 6.3	1.753	2.650	12.7	20.7	6 30	20 54.81	-24 58.7	2.025	2.940	10.4	19.0
7 10	20 49.66	-11 17.9	1.683	2.642	9.2	20.5	7 10	20 49.38	-26 2.8	1.970	2.941	7.2	18.8
7 20	20 42.45	-11 41.4	1.637	2.634	5.3	20.2	7 20	20 42.29	-27 7.0	1.940	2.942	4.1	18.7
7 30	20 34.21	-12 14.2	1.616	2.627	2.4	20.0	7 30	20 34.28	-28 5.6	1.938	2.943	3.3	18.6
8 9	20 25.92	-12 52.7	1.621	2.620	4.8	20.2	8 9	20 26.30	-28 53.8	1.962	2.945	5.9	18.8
8 19	20 18.57	-13 32.6	1.652	2.613	8.8	20.4	8 19	20 19.25	-29 28.7	2.012	2.947	9.1	19.0
8 29	20 13.04	-14 10.3	1.707	2.607	12.5	20.6	8 29	20 13.93	-29 49.1	2.086	2.949	12.1	19.2
185946	2001 <i>AT</i> ₃₅		7 29.3 278°96	3°3/26.9	18		31158	1997 <i>WE</i> ₃		7 29.3 287°92	0°1/29.4	18	
6 20	21 0.16	-25 55.4	2.332	3.162	12.4	20.2	6 20	20 59.83	-16 59.4	2.029	2.852	14.2	18.9
6 30	20 56.36	-26 42.2	2.232	3.142	9.8	20.0	6 30	20 56.11	-17 11.6	1.942	2.847	11.3	18.7
7 10	20 50.45	-27 32.7	2.154	3.122	6.9	19.8	7 10	20 50.26	-17 32.0	1.876	2.843	7.8	18.5
7 20	20 42.84	-28 22.5	2.102	3.101	4.1	19.5	7 20	20 42.72	-17 58.0	1.834	2.838	3.9	18.2
7 30	20 34.18	-29 6.5	2.077	3.081	3.5	19.5	7 30	20 34.25	-18 26.3	1.819	2.834	0.3	17.9
8 9	20 25.39	-29 40.5	2.080	3.060	5.9	19.6	8 9	20 25.79	-18 53.3	1.831	2.830	4.4	18.3
8 19	20 17.38	-30 1.7	2.109	3.039	9.0	19.7	8 19	20 18.24	-19 16.0	1.870	2.825	8.3	18.5
8 29	20 10.99	-30 9.4	2.163	3.018	12.0	19.9	8 29	20 12.44	-19 32.5	1.933	2.821	11.8	18.7
396516	2014 <i>GN</i> ₁₃		7 29.3 205°48	2°6/31.1	18		251325	Leopoldjosefine		7 29.3 285°37	5°1/2.5	18	
6 20	20 59.74	- 9 26.9	2.317	3.108	13.7	22.0	6 20	20 55.80	- 0 34.6	2.290	3.050	14.7	20.7
6 30	20 55.70	- 9 28.9	2.224	3.105	11.1	21.8	6 30	20 52.72	- 0 41.6	2.187	3.038	12.4	20.6
7 10	20 49.79	- 9 42.4	2.151	3.101	8.1	21.6	7 10	20 47.85	- 1 6.6	2.104	3.025	9.8	20.4
7 20	20 42.42	-10 6.5	2.103	3.096	4.9	21.4	7 20	20 41.53	- 1 49.9	2.044	3.012	7.1	20.2
7 30	20 34.22	-10 39.3	2.083	3.092	2.6	21.2	7 30	20 34.35	- 2 50.4	2.010	3.000	5.3	20.0
8 9	20 26.00	-11 17.6	2.090	3.086	4.2	21.3	8 9	20 27.06	- 4 4.8	2.002	2.987	5.7	20.0
8 19	20 18.53	-11 58.1	2.125	3.081	7.5	21.5	8 19	20 20.42	- 5 28.1	2.022	2.975	8.0	20.2
8 29	20 12.53	-12 37.7	2.185	3.075	10.6	21.7	8 29	20 15.16	- 6 54.8	2.067	2.962	10.9	20.3
308630	2005 <i>XY</i> ₆₇		7 29.3 329°94	6°0/27.7	18		369518	2010 <i>VL</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
428526	2008 <i>AD</i> ₈₀		7 29.3 221°89		0°7/29.6 17		35814	1999 <i>JK</i> ₄₈		7 29.3 41°85		0°2/29.2 17	
6 20	21 4.10	-15 33.0	1.774	2.594	16.1	22.3	6 20	21 2.66	-18 29.0	1.530	2.369	17.3	18.8
6 30	20 59.86	-15 41.9	1.684	2.587	12.9	22.1	6 30	20 58.90	-18 30.6	1.461	2.376	13.7	18.6
7 10	20 53.07	-16 1.1	1.614	2.579	9.0	21.8	7 10	20 52.43	-18 40.4	1.413	2.384	9.4	18.4
7 20	20 44.21	-16 28.4	1.568	2.571	4.6	21.5	7 20	20 43.86	-18 55.3	1.386	2.392	4.6	18.1
7 30	20 34.14	-16 59.9	1.548	2.563	0.7	21.2	7 30	20 34.24	-19 11.1	1.385	2.400	0.4	17.8
8 9	20 24.01	-17 31.3	1.555	2.554	5.0	21.5	8 9	20 24.82	-19 24.1	1.409	2.409	5.3	18.2
8 19	20 14.95	-17 58.9	1.588	2.544	9.4	21.8	8 19	20 16.79	-19 31.6	1.458	2.417	9.9	18.5
8 29	20 7.97	-18 20.3	1.645	2.534	13.4	22.0	8 29	20 11.10	-19 32.3	1.530	2.426	13.9	18.7
143599	2003 <i>FM</i> ₇₈		7 29.3 28°38		5°1/31.9 17		364124	2006 <i>BY</i> ₇₈		7 29.3 103°87		1°9/30.3 17	
6 20	20 57.38	-6 21.7	1.100	1.941	22.5	19.3	6 20	21 4.13	-11 53.8	1.465	2.288	18.7	21.1
6 30	20 55.54	-6 13.4	1.040	1.948	18.5	19.1	6 30	21 0.08	-12 7.8	1.399	2.302	15.0	20.9
7 10	20 50.57	-6 30.1	0.997	1.956	13.8	18.8	7 10	20 53.26	-12 37.6	1.352	2.315	10.6	20.6
7 20	20 43.08	-7 12.0	0.971	1.965	8.9	18.6	7 20	20 44.29	-13 20.7	1.327	2.328	5.7	20.4
7 30	20 34.26	-8 15.3	0.968	1.975	5.3	18.4	7 30	20 34.21	-14 12.2	1.327	2.340	1.9	20.2
8 9	20 25.62	-9 32.2	0.986	1.985	7.0	18.6	8 9	20 24.32	-15 6.1	1.353	2.353	5.4	20.5
8 19	20 18.59	-10 53.6	1.027	1.997	11.6	18.9	8 19	20 15.85	-15 57.0	1.403	2.365	10.0	20.8
8 29	20 14.30	-12 10.9	1.088	2.009	16.1	19.2	8 29	20 9.78	-16 40.9	1.477	2.376	14.1	21.0
173946	2001 <i>WT</i> ₇₄		7 29.3 111°65		5°1/25.6 18		188413	2004 <i>EA</i> ₈₁		7 29.3 217°65		1°6/28.3 18	
6 20	21 2.58	-31 9.4	2.223	3.054	12.9	20.5	6 20	21 2.57	-19 8.5	1.778	2.609	15.6	20.7
6 30	20 58.25	-32 12.4	2.155	3.062	10.3	20.4	6 30	20 58.74	-19 56.6	1.693	2.604	12.3	20.5
7 10	20 51.69	-33 14.9	2.109	3.069	7.6	20.2	7 10	20 52.36	-20 55.0	1.628	2.599	8.4	20.2
7 20	20 43.42	-34 11.0	2.089	3.076	5.5	20.1	7 20	20 43.91	-21 58.9	1.588	2.593	4.2	20.0
7 30	20 34.24	-34 55.0	2.096	3.083	5.3	20.1	7 30	20 34.24	-23 2.2	1.574	2.587	1.8	19.8
8 9	20 25.17	-35 23.0	2.130	3.090	7.2	20.2	8 9	20 24.50	-23 58.7	1.587	2.581	5.7	20.0
8 19	20 17.17	-35 33.7	2.189	3.097	9.8	20.4	8 19	20 15.83	-24 43.8	1.626	2.575	9.9	20.3
8 29	20 11.03	-35 27.9	2.271	3.104	12.3	20.6	8 29	20 9.25	-25 15.5	1.689	2.568	13.7	20.5
165825	2001 <i>RS</i> ₁₁₇		7 29.3 335°54		1°0/28.8 18 R		160318	2003 <i>JR</i> ₈		7 29.3 56°44		7°6/23.2 18	
6 20	20 59.85	-19 38.3	1.870	2.704	14.8	19.7	6 20	21 2.72	-35 42.8	1.990	2.826	14.0	19.4
6 30	20 56.36	-19 56.6	1.787	2.700	11.7	19.5	6 30	20 58.82	-37 29.2	1.940	2.843	11.4	19.3
7 10	20 50.55	-20 21.9	1.725	2.696	8.0	19.3	7 10	20 52.33	-39 11.9	1.913	2.860	9.1	19.2
7 20	20 42.91	-20 51.0	1.687	2.693	3.9	19.0	7 20	20 43.83	-40 42.5	1.911	2.877	7.7	19.2
7 30	20 34.28	-21 19.7	1.676	2.690	1.1	18.8	7 30	20 34.26	-41 53.4	1.934	2.894	8.0	19.2
8 9	20 25.68	-21 44.0	1.690	2.687	5.0	19.1	8 9	20 24.82	-42 39.9	1.983	2.912	9.7	19.3
8 19	20 18.11	-22 1.0	1.731	2.684	9.0	19.3	8 19	20 16.67	-43 1.3	2.055	2.929	11.9	19.5
8 29	20 12.46	-22 9.2	1.795	2.682	12.6	19.6	8 29	20 10.73	-42 59.7	2.149	2.947	14.1	19.7
276472	2003 <i>KL</i> ₈		7 29.3 11°67		8°1/ 3.3 17		259846	2004 <i>CL</i> ₅₉		7 29.3 228°92		0°7/28.9 18	
6 20	20 56.79	+ 1 4.9	1.549	2.332	19.7	21.2	6 20	21 2.43	-15 59.2	1.889	2.708	15.3	21.1
6 30	20 54.24	+ 1 41.1	1.474	2.333	16.9	21.0	6 30	20 58.53	-16 52.6	1.794	2.698	12.1	20.9
7 10	20 49.25	+ 1 54.4	1.415	2.335	13.7	20.8	7 10	20 52.20	-17 59.2	1.720	2.687	8.3	20.6
7 20	20 42.33	+ 1 41.9	1.376	2.337	10.5	20.6	7 20	20 43.85	-19 15.1	1.671	2.676	4.1	20.3
7 30	20 34.32	+ 1 3.5	1.358	2.340	8.4	20.5	7 30	20 34.25	-20 34.3	1.649	2.664	0.8	20.1
8 9	20 26.33	+ 0 2.6	1.365	2.343	8.6	20.5	8 9	20 24.46	-21 50.2	1.655	2.651	5.2	20.3
8 19	20 19.44	-1 14.5	1.395	2.347	10.9	20.7	8 19	20 15.58	-22 57.2	1.687	2.638	9.5	20.6
8 29	20 14.58	-2 40.0	1.448	2.351	14.1	20.9	8 29	20 8.62	-23 51.7	1.744	2.624	13.3	20.8
324070	2005 <i>WK</i> ₁		7 29.3 229°41		7°2/22.7 17		340218	2006 <i>AP</i> ₉₈		7 29.3 158°33		6°2/ 4.4 18	
6 20	21 10.74	-46 12.9	3.217	3.998	10.4	22.4	6 20	21 0.83	+ 5 53.7	2.283	2.996	15.9	20.9
6 30	21 4.34	-47 5.4	3.133	3.984	9.0	22.3	6 30	20 56.57	+ 5 19.2	2.190	3.001	13.7	20.8
7 10	20 55.72	-47 50.0	3.072	3.969	7.9	22.2	7 10	20 50.41	+ 4 21.3	2.116	3.007	11.2	20.6
7 20	20 45.37	-48 21.2	3.036	3.953	7.2	22.1	7 20	20 42.79	+ 2 59.4	2.065	3.012	8.5	20.5
7 30	20 34.09	-48 34.7	3.026	3.937	7.4	22.1	7 30	20 34.34	+ 1 15.7	2.041	3.016	6.5	20.3
8 9	20 22.87	-48 28.2	3.042	3.921	8.4	22.2	8 9	20 25.87	- 0 44.8	2.045	3.020	6.5	20.3
8 19	20 12.66	-48 1.7	3.083	3.903	9.8	22.2	8 19	20 18.18	- 2 55.0	2.079	3.023	8.3	20.5
8 29	20 4.28	-47 17.5	3.147	3.886	11.3	22.3	8 29	20 11.98	- 5 7.1	2.140	3.026	10.9	20.6
339346	2005 <i>AK</i> ₆		7 29.3 279°63		0°4/29.5 18		269056	2007 <i>GS</i> ₂₄		7 29.3 34°74		5°5/26.2 17	
6 20	21 1.53	-16 36.0	1.874	2.698	15.2	20.9	6 20	21 0.82	-26 50.2	1.390	2.251	17.6	19.2
6 30	20 57.84	-16 41.0	1.772	2.678	12.2	20.6	6 30	20 57.96	-28 5.7	1.336	2.262	13.8	19.0
7 10	20 51.72	-16 54.8	1.691	2.658	8.5	20.3	7 10	20 52.05	-29 25.5	1.301	2.274	9.8	18.8
7 20	20 43.59	-17 15.5	1.633	2.638	4.3	20.1	7 20	20 43.76	-30 40.7	1.288	2.287	6.3	18.6
7 30	20 34.22	-17 39.6	1.602	2.617	0.5	19.7	7 30	20 34.26	-31 42.3	1.300	2.300	5.8	18.6
8 9	20 24.67	-18 3.3	1.597	2.596	4.9	20.0	8 9	20 25.02	-32 23.8	1.335	2.314	8.7	18.8
8 19	20 16.03	-18 23.5	1.619	2.576	9.3	20.2	8 19	20 17.39	-32 42.9	1.394	2.328	12.4	19.1
8 29	20 9.30	-18 37.8	1.664	2.555	13.2	20.4	8 29	20 12.40	-32 40.8	1.473	2.343	15.9	19.4
273977	2007 <i>LE</i> ₁₅		7 29.3 61°76		8°3/ 2.6 17		430602	2002 <i>TM</i> ₃₁₀		7 29.3 226°21		0°5/29.6 17	
6 20	21 1.83	+ 0 5.0	1.672	2.442	18.9	20.0	6 20	21 1.24	-14 3.8	1.740	2.563	16.2	22.2
6 30	20 57.85	+ 1 13.0	1.604	2.455	16.1	19.8	6 30	20 57.68	-14 37.7	1.653	2.558	13.0	22.0
7 10	20 51.51	+ 2 2.1	1.555	2.468	13.1	19.7	7 10	20 51.63	-15 25.6	1.586	2.552	9.0	21.7
7 20	20 43.35	+ 2 29.3	1.526	2.481	10.2	19.5	7 20	20 43.55	-16 24.3	1.543	2.547	4.6	21.5
7 30	20 34.26	+ 2 33.1	1.520	2.494	8.4	19.5	7 30	20 34.28	-17 28.8	1.526	2.541	0.5	21.1
8 9	20 25.32	+ 2 15.2	1.539	2.507	8.7	19.5	8 9	20 24.93	-18 33.1	1.535	2.534	5.0	21.5
8 19	20 17.54	+ 1 39.8	1.581	2.521	10.8	19.7	8 19	20 16.61	-19 31.7	1.571	2.528	9.5	21.7
8 29	20 11.77	+ 0 52.7	1.647	2.534	13.6	19.9	8 29	20 10.31	-20 20.8	1.630	2.521	13.5	21.9
359532	2010 <i>RC</i> ₁₀₈		7 29.3 37°09		4°5/26.4 18		46779	1998 <i>HY</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
412084	2013 <i>FQ</i> ₁₅	7 29.3 339°79		4.6°/27.4 16			396058	2013 <i>CY</i> ₄₉	7 29.3 185°60		2.3°/31.2 18		
6 20	21 5.85	-25 40.5	1.271	2.128	19.1	21.9	6 20	20 58.68	-9 3.2	2.639	3.422	12.4	22.4
6 30	21 2.37	-26 23.9	1.203	2.128	15.1	21.7	6 30	20 54.65	-9 14.9	2.546	3.422	10.0	22.2
7 10	20 55.39	-27 12.7	1.153	2.127	10.6	21.4	7 10	20 49.00	-9 37.3	2.474	3.422	7.3	22.1
7 20	20 45.56	-27 59.1	1.124	2.127	6.2	21.2	7 20	20 42.10	-10 9.5	2.429	3.421	4.4	21.9
7 30	20 34.15	-28 34.6	1.119	2.126	4.8	21.1	7 30	20 34.50	-10 49.3	2.410	3.419	2.3	21.7
8 9	20 22.90	-28 52.6	1.138	2.126	8.4	21.3	8 9	20 26.88	-11 33.8	2.421	3.417	3.7	21.8
8 19	20 13.43	-28 51.0	1.180	2.125	13.0	21.6	8 19	20 19.92	-12 19.8	2.460	3.415	6.6	22.0
8 29	20 7.02	-28 31.2	1.241	2.125	17.3	21.8	8 29	20 14.23	-13 4.4	2.525	3.413	9.4	22.2
42600	1997 <i>YF</i> ₁₀	7 29.3 139°71		1.9°/28.2 18 R			164132	2003 <i>YU</i> ₄₅	7 29.3 308°39		4.1°/27.3 18		
6 20	21 7.60	-21 18.9	1.911	2.732	15.1	18.5	6 20	21 2.99	-27 22.5	1.723	2.566	15.5	19.8
6 30	21 2.27	-21 57.9	1.841	2.746	11.8	18.3	6 30	20 59.34	-27 51.5	1.636	2.553	12.3	19.5
7 10	20 54.48	-22 43.0	1.792	2.760	8.0	18.1	7 10	20 52.93	-28 22.5	1.570	2.540	8.8	19.3
7 20	20 44.83	-23 29.4	1.768	2.772	4.1	17.9	7 20	20 44.28	-28 50.0	1.527	2.527	5.3	19.1
7 30	20 34.22	-24 11.6	1.772	2.784	2.1	17.8	7 30	20 34.34	-29 8.0	1.509	2.514	4.3	19.0
8 9	20 23.78	-24 45.1	1.804	2.795	5.4	18.1	8 9	20 24.38	-29 12.2	1.517	2.502	7.2	19.1
8 19	20 14.58	-25 7.4	1.863	2.805	9.2	18.3	8 19	20 15.65	-29 0.9	1.550	2.489	11.0	19.3
8 29	20 7.48	-25 17.9	1.946	2.815	12.6	18.5	8 29	20 9.23	-28 34.9	1.605	2.478	14.6	19.5
104422	2000 <i>FJ</i> ₅₉	7 29.3 199°57		5.6°/25.1 18			44990	1999 <i>VD</i> ₁₇₄	7 29.3 5°42		1.0°/28.9 18		
6 20	21 4.62	-33 17.8	2.321	3.146	12.6	20.3	6 20	21 4.10	-21 18.2	1.645	2.482	16.4	18.2
6 30	20 59.94	-34 22.1	2.243	3.144	10.2	20.1	6 30	20 59.98	-21 10.8	1.568	2.482	13.0	18.0
7 10	20 52.94	-35 24.9	2.187	3.141	7.7	19.9	7 10	20 53.18	-21 8.0	1.511	2.483	8.9	17.8
7 20	20 44.12	-36 20.3	2.157	3.137	5.9	19.8	7 20	20 44.31	-21 6.6	1.478	2.483	4.4	17.5
7 30	20 34.29	-37 2.3	2.154	3.133	5.9	19.8	7 30	20 34.35	-21 3.1	1.470	2.484	1.1	17.3
8 9	20 24.46	-37 27.0	2.178	3.129	7.7	19.9	8 9	20 24.55	-20 54.8	1.488	2.486	5.4	17.6
8 19	20 15.66	-37 33.1	2.227	3.125	10.2	20.1	8 19	20 16.07	-20 40.2	1.531	2.487	9.8	17.8
8 29	20 8.75	-37 21.7	2.299	3.120	12.6	20.2	8 29	20 9.86	-20 19.4	1.598	2.489	13.7	18.1
523071	2016 <i>QU</i> ₉₂	7 29.3 328°58		2.0°/30.3 18			398949	2013 <i>DZ</i> ₅	7 29.3 70°89		1.5°/30.6 18		
6 20	21 0.03	-13 17.6	1.734	2.557	16.3	21.5	6 20	20 57.10	-10 35.8	2.253	3.056	13.6	20.8
6 30	20 56.64	-13 8.2	1.650	2.553	13.1	21.3	6 30	20 53.73	-11 9.6	2.168	3.059	10.9	20.6
7 10	20 50.84	-13 9.7	1.585	2.548	9.3	21.1	7 10	20 48.54	-11 56.1	2.105	3.062	7.8	20.4
7 20	20 43.14	-13 21.2	1.543	2.544	5.2	20.8	7 20	20 41.92	-12 53.4	2.067	3.066	4.3	20.2
7 30	20 34.36	-13 40.0	1.527	2.540	2.0	20.6	7 30	20 34.53	-13 57.8	2.056	3.069	1.5	20.0
8 9	20 25.59	-14 2.7	1.536	2.536	4.9	20.8	8 9	20 27.15	-15 4.7	2.073	3.072	3.9	20.2
8 19	20 17.87	-14 26.0	1.571	2.532	9.1	21.0	8 19	20 20.53	-16 9.8	2.118	3.076	7.3	20.4
8 29	20 12.14	-14 46.8	1.629	2.529	13.0	21.2	8 29	20 15.37	-17 9.3	2.188	3.079	10.5	20.6
313929	2004 <i>RN</i> ₈₁	7 29.3 277°99		4.8°/26.4 18			32554	2001 <i>QZ</i> ₂₈	7 29.3 265°68		3.8°/31.9 18		
6 20	21 5.02	-32 41.7	2.377	3.200	12.4	20.6	6 20	20 58.75	-6 10.0	2.367	3.146	13.8	19.2
6 30	21 0.17	-33 9.6	2.282	3.184	10.0	20.5	6 30	20 55.06	-6 0.1	2.258	3.127	11.4	19.0
7 10	20 53.06	-33 35.0	2.211	3.167	7.5	20.3	7 10	20 49.52	-6 2.7	2.169	3.107	8.7	18.8
7 20	20 44.17	-33 53.1	2.164	3.151	5.3	20.1	7 20	20 42.46	-6 18.1	2.104	3.087	5.8	18.6
7 30	20 34.29	-33 59.4	2.145	3.135	5.0	20.1	7 30	20 34.49	-6 45.4	2.066	3.067	3.9	18.5
8 9	20 24.43	-33 51.0	2.153	3.118	6.8	20.1	8 9	20 26.36	-7 22.2	2.055	3.046	4.9	18.5
8 19	20 15.55	-33 27.2	2.187	3.102	9.5	20.3	8 19	20 18.86	-8 5.4	2.072	3.026	7.8	18.6
8 29	20 8.52	-32 49.6	2.245	3.085	12.2	20.4	8 29	20 12.74	-8 51.1	2.114	3.004	10.8	18.8
349294	2007 <i>TG</i> ₄₂₅	7 29.3 258°05		2.3°/30.8 18			173158	1996 <i>TJ</i> ₁	7 29.3 319°60		3.0°/31.2 18		
6 20	20 59.05	-10 37.4	2.000	2.806	15.0	21.4	6 20	20 56.50	-8 58.1	1.826	2.639	16.0	20.8
6 30	20 55.54	-10 44.0	1.910	2.802	12.1	21.2	6 30	20 53.82	-9 2.8	1.733	2.627	13.1	20.6
7 10	20 49.93	-11 3.3	1.841	2.797	8.7	21.0	7 10	20 48.93	-9 22.8	1.660	2.615	9.6	20.3
7 20	20 42.65	-11 34.2	1.795	2.792	5.1	20.7	7 20	20 42.25	-9 57.5	1.609	2.604	5.8	20.1
7 30	20 34.42	-12 13.9	1.775	2.787	2.3	20.5	7 30	20 34.51	-10 44.3	1.583	2.593	3.1	19.9
8 9	20 26.15	-12 58.8	1.783	2.782	4.5	20.7	8 9	20 26.66	-11 38.9	1.584	2.582	5.0	20.0
8 19	20 18.74	-13 44.6	1.817	2.777	8.2	20.9	8 19	20 19.68	-12 36.5	1.610	2.572	8.8	20.2
8 29	20 13.03	-14 27.6	1.876	2.771	11.8	21.1	8 29	20 14.48	-13 32.1	1.660	2.563	12.6	20.4
398975	2013 <i>EE</i> ₅₄	7 29.3 3°36		0.2°/29.4 18			424229	2007 <i>RH</i> ₁₅₀	7 29.3 331°85		7.9°/26.4 17		
6 20	20 57.24	-16 20.9	1.880	2.712	14.9	20.7	6 20	20 59.13	-30 46.5	1.005	1.892	20.8	20.3
6 30	20 54.25	-16 37.1	1.801	2.711	11.8	20.5	6 30	20 58.30	-31 34.7	0.933	1.872	16.9	20.0
7 10	20 49.08	-17 2.7	1.742	2.711	8.1	20.2	7 10	20 53.41	-32 24.1	0.877	1.855	12.6	19.7
7 20	20 42.23	-17 35.1	1.707	2.712	4.0	20.0	7 20	20 44.95	-33 4.6	0.840	1.838	8.9	19.4
7 30	20 34.45	-18 10.7	1.698	2.713	0.3	19.7	7 30	20 34.30	-33 24.6	0.822	1.822	8.2	19.4
8 9	20 26.73	-18 45.2	1.716	2.715	4.5	20.0	8 9	20 23.58	-33 16.1	0.825	1.808	11.6	19.5
8 19	20 19.99	-19 15.1	1.759	2.718	8.5	20.3	8 19	20 14.90	-32 37.7	0.847	1.796	16.4	19.7
8 29	20 15.04	-19 38.2	1.826	2.720	12.1	20.5	8 29	20 9.90	-31 33.7	0.886	1.785	21.1	19.9
440644	2005 <i>WT</i> ₁₁₆	7 29.3 302°61		3.8°/26.4 18			302272	2001 <i>XY</i> ₁₇₅	7 29.3 214°74		0.7°/28.7 18		
6 20	20 58.95	-26 2.9	2.172	3.009	13.0	20.9	6 20	20 59.55	-18 33.6	2.737	3.547	11.3	21.9
6 30	20 55.54	-27 6.7	2.088	3.001	10.2	20.7	6 30	20 55.40	-19 7.7	2.640	3.540	8.9	21.8
7 10	20 49.98	-28 14.8	2.026	2.994	7.2	20.5	7 10	20 49.57	-19 48.1	2.567	3.532	6.1	21.6
7 20	20 42.70	-29 21.8	1.989	2.987	4.5	20.4	7 20	20 42.42	-20 32.2	2.520	3.524	3.0	21.3
7 30	20 34.42	-30 21.9	1.979	2.980	4.0	20.3	7 30	20 34.51	-21 16.5	2.501	3.515	0.8	21.2
8 9	20 26.08	-31 10.0	1.997	2.973	6.4	20.5	8 9	20 26.55	-21 57.7	2.512	3.506	3.8	21.4
8 19	20 18.61	-31 43.2	2.040	2.966	9.5	20.6	8 19	20 19.23	-22 33.1	2.551	3.497	6.9	21.6
8 29	20 12.88	-32 0.7	2.106	2.960	12.4	20.8	8 29	20 13.19	-23 0.9	2.616	3.487	9.7	21.7
393866	2005 <i>SX</i> ₂₇₄	7 29.3 354°97		4.6°/26.9 18			512082	2015 <i>NQ</i> ₁₂	7 29.3 6°62		1.4°/28.7 18		
6													

EPHEMERIDES

7 29.3

7 29.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
75095	1999 VT ₃₆		7 29.3 171°16'	3°9'/27.0	18		92012	1999 VT ₁₅₉		7 29.3 201°64'	3°8'/1.6	18	
6 20	21 4.40	-24 42.9	1.664	2.505	16.1	19.2	6 20	20 57.91	-3 37.9	3.091	3.842	11.4	20.5
6 30	21 0.42	-25 42.7	1.590	2.507	12.7	19.0	6 30	20 53.81	-3 25.6	2.990	3.838	9.5	20.3
7 10	20 53.65	-26 48.4	1.537	2.508	8.8	18.7	7 10	20 48.32	-3 24.0	2.911	3.833	7.4	20.2
7 20	20 44.63	-27 53.5	1.508	2.509	5.2	18.5	7 20	20 41.77	-3 33.3	2.857	3.827	5.2	20.0
7 30	20 34.36	-28 50.3	1.504	2.510	4.2	18.5	7 30	20 34.62	-3 52.6	2.831	3.822	3.9	19.9
8 9	20 24.14	-29 32.7	1.527	2.510	7.2	18.6	8 9	20 27.44	-4 20.5	2.833	3.816	4.4	20.0
8 19	20 15.22	-29 57.6	1.574	2.510	11.1	18.9	8 19	20 20.78	-4 54.7	2.863	3.809	6.3	20.1
8 29	20 8.67	-30 4.9	1.644	2.510	14.7	19.1	8 29	20 15.17	-5 32.5	2.920	3.802	8.5	20.2
371506	2006 UT ₆₈		7 29.3 307°35'	2°1'/28.3	18		304403	2006 TA ₂₈		7 29.3 217°34'	0°3'/29.6	18	
6 20	20 59.02	-19 50.2	1.346	2.203	18.2	20.7	6 20	20 59.97	-15 51.6	2.570	3.376	12.1	22.3
6 30	20 57.00	-20 29.2	1.254	2.180	14.6	20.4	6 30	20 55.81	-16 8.1	2.474	3.369	9.6	22.1
7 10	20 51.87	-21 21.0	1.181	2.158	10.1	20.1	7 10	20 49.90	-16 32.0	2.399	3.362	6.6	21.9
7 20	20 44.02	-22 21.0	1.130	2.137	5.1	19.7	7 20	20 42.62	-17 1.3	2.351	3.354	3.4	21.7
7 30	20 34.39	-23 21.7	1.102	2.115	2.4	19.5	7 30	20 34.56	-17 33.1	2.331	3.346	0.4	21.4
8 9	20 24.45	-24 15.1	1.098	2.094	7.1	19.7	8 9	20 26.46	-18 4.6	2.339	3.338	3.6	21.7
8 19	20 15.73	-24 55.0	1.117	2.074	12.4	20.0	8 19	20 19.05	-18 33.0	2.376	3.329	7.0	21.9
8 29	20 9.65	-25 18.5	1.156	2.054	17.2	20.2	8 29	20 12.99	-18 56.5	2.439	3.320	9.9	22.1
291511	2006 DS ₁₉₅		7 29.3 258°24'	6°4'/24.9	18		153245	2001 BK		7 29.3 193°35'	1°6'/28.1	18	
6 20	21 6.58	-39 2.0	2.590	3.402	11.8	20.4	6 20	20 59.39	-21 45.2	2.668	3.486	11.3	20.4
6 30	21 1.34	-39 43.7	2.506	3.391	9.8	20.3	6 30	20 55.32	-22 21.1	2.580	3.485	8.9	20.3
7 10	20 53.83	-40 19.8	2.444	3.380	7.9	20.1	7 10	20 49.53	-23 1.5	2.516	3.483	6.1	20.1
7 20	20 44.57	-40 44.8	2.407	3.369	6.6	20.0	7 20	20 42.42	-23 43.1	2.478	3.481	3.1	19.9
7 30	20 34.38	-40 54.0	2.396	3.357	6.6	20.0	7 30	20 34.58	-24 22.4	2.468	3.479	1.7	19.8
8 9	20 24.27	-40 44.7	2.413	3.346	8.0	20.1	8 9	20 26.74	-24 56.0	2.487	3.477	4.2	20.0
8 19	20 15.22	-40 16.8	2.454	3.334	10.0	20.2	8 19	20 19.61	-25 21.8	2.533	3.474	7.2	20.2
8 29	20 8.06	-39 32.6	2.519	3.322	12.1	20.3	8 29	20 13.84	-25 38.6	2.605	3.471	9.9	20.3
64589	2001 XN ₇		7 29.3 167°71'	2°2'/31.2	18		99686	2002 JO ₂₂		7 29.3 12°31'	0°6'/29.7	18	
6 20	20 58.20	-8 45.9	2.558	3.343	12.7	20.2	6 20	20 54.87	-15 28.8	1.518	2.366	17.0	17.8
6 30	20 54.34	-9 5.0	2.469	3.346	10.2	20.0	6 30	20 52.82	-15 42.0	1.454	2.372	13.5	17.6
7 10	20 48.82	-9 35.7	2.401	3.349	7.4	19.9	7 10	20 48.33	-16 7.1	1.408	2.380	9.3	17.3
7 20	20 42.04	-10 16.9	2.359	3.351	4.4	19.7	7 20	20 41.95	-16 41.2	1.385	2.390	4.7	17.1
7 30	20 34.56	-11 5.9	2.344	3.353	2.3	19.5	7 30	20 34.62	-17 19.9	1.386	2.401	0.6	16.8
8 9	20 27.08	-11 59.5	2.358	3.355	3.8	19.6	8 9	20 27.44	-17 58.1	1.411	2.413	4.9	17.2
8 19	20 20.28	-12 54.0	2.400	3.356	6.7	19.8	8 19	20 21.47	-18 31.7	1.461	2.426	9.4	17.5
8 29	20 14.78	-13 46.2	2.468	3.357	9.6	20.0	8 29	20 17.57	-18 57.7	1.534	2.440	13.2	17.7
296028	2008 YZ ₁₅₈		7 29.3 164°97'	0°6'/29.8	18		33739	1999 NK ₄₃		7 29.3 111°96'	0°2'/29.2	18	
6 20	20 59.70	-14 58.2	2.074	2.890	14.2	21.0	6 20	20 58.62	-15 34.8	2.193	3.010	13.5	19.0
6 30	20 55.97	-15 14.9	1.990	2.891	11.3	20.8	6 30	20 55.03	-16 18.8	2.112	3.014	10.6	18.8
7 10	20 50.18	-15 41.3	1.927	2.891	7.8	20.6	7 10	20 49.51	-17 13.0	2.052	3.018	7.3	18.6
7 20	20 42.79	-16 15.0	1.889	2.892	4.0	20.4	7 20	20 42.47	-18 14.1	2.018	3.022	3.6	18.4
7 30	20 34.52	-16 52.6	1.877	2.892	0.6	20.1	7 30	20 34.60	-19 17.6	2.011	3.026	0.4	18.1
8 9	20 26.27	-17 30.3	1.893	2.892	4.2	20.4	8 9	20 26.74	-20 18.7	2.032	3.030	4.2	18.4
8 19	20 18.92	-18 4.7	1.936	2.893	8.0	20.6	8 19	20 19.71	-21 13.4	2.081	3.033	7.8	18.7
8 29	20 13.24	-18 33.3	2.003	2.893	11.4	20.8	8 29	20 14.24	-21 59.0	2.154	3.037	11.0	18.9
115617	2003 UD ₁₁₃		7 29.3 169°58'	4°6'/2.1	18		476275	2007 VF ₁₈₃		7 29.3 296°71'	4°0'/27.3	18	
6 20	20 59.22	-1 58.7	2.361	3.119	14.3	20.0	6 20	21 3.66	-27 22.5	1.831	2.670	14.9	21.4
6 30	20 55.26	-2 0.6	2.271	3.122	12.0	19.9	6 30	20 59.89	-27 52.6	1.731	2.645	11.9	21.1
7 10	20 49.53	-2 18.3	2.202	3.125	9.3	19.7	7 10	20 53.40	-28 25.2	1.651	2.619	8.5	20.9
7 20	20 42.42	-2 52.0	2.156	3.127	6.6	19.5	7 20	20 44.63	-28 54.8	1.595	2.594	5.2	20.6
7 30	20 34.55	-3 40.1	2.137	3.129	4.8	19.4	7 30	20 34.44	-29 15.5	1.565	2.569	4.2	20.5
8 9	20 26.67	-4 39.6	2.145	3.130	5.3	19.5	8 9	20 24.05	-29 22.7	1.561	2.544	7.1	20.6
8 19	20 19.52	-5 46.2	2.181	3.131	7.6	19.6	8 19	20 14.73	-29 14.1	1.581	2.519	11.0	20.8
8 29	20 13.77	-6 55.1	2.243	3.132	10.4	19.8	8 29	20 7.60	-28 50.4	1.625	2.494	14.7	21.0
100720	1998 BA ₂₈		7 29.3 3°19'	0°3'/29.5	18		115792	2003 UT ₂₂₃		7 29.3 19°74'	6°1'/26.8	17	
6 20	20 58.94	-17 34.3	2.294	3.112	12.9	19.3	6 20	21 4.69	-29 7.5	1.264	2.127	18.9	18.8
6 30	20 55.14	-17 30.2	2.209	3.112	10.2	19.1	6 30	21 1.50	-29 55.9	1.203	2.129	15.1	18.6
7 10	20 49.47	-17 31.8	2.147	3.113	7.0	18.9	7 10	20 54.81	-30 45.6	1.161	2.133	10.9	18.3
7 20	20 42.38	-17 37.5	2.109	3.113	3.5	18.7	7 20	20 45.33	-31 28.1	1.139	2.136	7.1	18.2
7 30	20 34.55	-17 44.8	2.099	3.114	0.3	18.5	7 30	20 34.40	-31 54.5	1.140	2.141	6.3	18.1
8 9	20 26.79	-17 51.5	2.116	3.115	3.9	18.8	8 9	20 23.75	-31 59.5	1.165	2.146	9.3	18.3
8 19	20 19.87	-17 55.8	2.160	3.116	7.3	19.0	8 19	20 14.98	-31 42.2	1.212	2.151	13.4	18.6
8 29	20 14.47	-17 56.4	2.230	3.118	10.5	19.2	8 29	20 9.28	-31 5.7	1.279	2.157	17.3	18.8
316727	1998 QF ₅₈		7 29.3 330°95'	3°5'/27.3	18		126008	2001 YN ₅₁		7 29.3 106°74'	0°4'/29.6	18	
6 20	21 1.53	-27 31.2	2.114	2.948	13.4	20.7	6 20	21 3.66	-16 34.0	1.790	2.612	15.9	20.0
6 30	20 57.54	-27 56.2	2.031	2.942	10.6	20.6	6 30	20 59.32	-16 39.3	1.717	2.621	12.6	19.8
7 10	20 51.32	-28 22.1	1.970	2.937	7.4	20.4	7 10	20 52.59	-16 53.5	1.664	2.630	8.7	19.6
7 20	20 43.37	-28 44.4	1.933	2.932	4.5	20.2	7 20	20 44.02	-17 13.8	1.635	2.638	4.4	19.4
7 30	20 34.48	-28 58.8	1.923	2.927	3.6	20.1	7 30	20 34.50	-17 36.8	1.632	2.647	0.5	19.1
8 9	20 25.66	-29 2.1	1.940	2.923	6.0	20.2	8 9	20 25.13	-17 58.6	1.656	2.655	4.7	19.4
8 19	20 17.87	-28 53.1	1.983	2.918	9.2	20.4	8 19	20 16.94	-18 16.4	1.706	2.663	8.9	19.7
8 29	20 11.93	-28 32.4	2.049	2.914	12.2	20.6	8 29	20 10.78	-18 28.4	1.780	2.671	12.5	19.9
386461	2008 XQ ₃₉		7 29.3 260°70'	4°9'/31.7	18		381759	2009 SL ₂₀₀		7 29.4 308°32'	6°5'/26.6	15	
6 20	21 2.01	-6 47.9											

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7 29.4

7 29.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
25279	1998 VF ₅₂	7 29.4 341°57		1°5/30.3 18			95105	2002 AY ₁₁₆	7 29.4 193°13		0°4/29.1 18		
6 20	20 49.38	-10 50.5	1.071	1.940	21.1	17.8	6 20	21 1.68	-16 19.7	2.082	2.898	14.2	19.9
6 30	20 49.70	-11 28.1	0.993	1.923	17.1	17.5	6 30	20 57.63	-17 0.9	1.994	2.896	11.2	19.7
7 10	20 47.00	-12 32.2	0.930	1.907	12.2	17.2	7 10	20 51.42	-17 52.5	1.929	2.894	7.7	19.5
7 20	20 41.66	-14 0.9	0.887	1.893	6.6	16.8	7 20	20 43.50	-18 51.0	1.888	2.892	3.8	19.2
7 30	20 34.66	-15 47.2	0.865	1.880	1.5	16.5	7 30	20 34.59	-19 51.6	1.875	2.890	0.5	19.0
8 9	20 27.45	-17 39.7	0.865	1.869	6.4	16.7	8 9	20 25.63	-20 49.3	1.889	2.886	4.5	19.3
8 19	20 21.60	-19 26.6	0.887	1.860	12.3	17.0	8 19	20 17.57	-21 39.9	1.932	2.883	8.4	19.5
8 29	20 18.47	-20 57.8	0.927	1.853	17.7	17.3	8 29	20 11.22	-22 20.8	1.998	2.879	11.8	19.7
327111	2005 CH ₄₄	7 29.4 177°66		1°4/28.6 17			443911	2002 GG ₁₈₃	7 29.4 70°69		3°9/ 1.2 18		
6 20	21 6.15	-20 9.9	1.726	2.554	16.1	22.1	6 20	20 57.48	- 5 38.4	2.339	3.119	13.9	20.8
6 30	21 1.58	-20 35.1	1.647	2.556	12.7	21.9	6 30	20 53.93	- 5 28.6	2.254	3.123	11.4	20.6
7 10	20 54.33	-21 7.9	1.588	2.557	8.7	21.6	7 10	20 48.64	- 5 31.7	2.190	3.126	8.7	20.5
7 20	20 44.97	-21 43.9	1.553	2.558	4.3	21.4	7 20	20 42.03	- 5 47.7	2.149	3.130	5.8	20.3
7 30	20 34.45	-22 18.1	1.544	2.558	1.5	21.2	7 30	20 34.70	- 6 15.4	2.134	3.134	4.0	20.2
8 9	20 23.98	-22 45.6	1.563	2.558	5.5	21.5	8 9	20 27.39	- 6 52.1	2.147	3.138	4.8	20.3
8 19	20 14.76	-23 3.5	1.607	2.557	9.9	21.7	8 19	20 20.83	- 7 34.4	2.187	3.141	7.4	20.4
8 29	20 7.78	-23 10.7	1.674	2.556	13.7	21.9	8 29	20 15.66	- 8 18.9	2.252	3.145	10.2	20.6
103400	2000 AO ₁₃₀	7 29.4 234°84		1°8/30.4 18			152386	2005 UB ₂₁₇	7 29.4 215°45		0°9/28.7 18		
6 20	21 2.20	-12 49.6	2.351	3.148	13.3	20.4	6 20	20 59.92	-19 58.6	2.673	3.486	11.4	21.5
6 30	20 57.76	-12 43.2	2.249	3.136	10.7	20.2	6 30	20 55.75	-20 23.4	2.579	3.480	9.0	21.3
7 10	20 51.37	-12 45.4	2.168	3.123	7.7	20.0	7 10	20 49.85	-20 53.3	2.508	3.474	6.1	21.1
7 20	20 43.42	-12 55.1	2.112	3.109	4.3	19.8	7 20	20 42.63	-21 25.5	2.464	3.468	3.0	20.9
7 30	20 34.56	-13 10.5	2.083	3.095	1.8	19.6	7 30	20 34.66	-21 57.0	2.447	3.461	1.0	20.7
8 9	20 25.61	-13 29.2	2.083	3.081	4.1	19.7	8 9	20 26.66	-22 24.8	2.460	3.454	3.9	20.9
8 19	20 17.39	-13 48.7	2.111	3.066	7.6	19.9	8 19	20 19.36	-22 46.6	2.500	3.447	7.0	21.1
8 29	20 10.68	-14 6.7	2.164	3.051	10.8	20.1	8 29	20 13.39	-23 1.1	2.567	3.439	9.8	21.3
358925	2008 HJ ₁₆	7 29.4 169°17		1°5/30.6 18			344488	2002 QO ₆₈	7 29.4 52°76		1°9/28.3 17		
6 20	20 57.87	-11 11.2	2.530	3.326	12.5	21.7	6 20	21 2.58	-22 22.1	1.903	2.736	14.7	21.3
6 30	20 54.14	-11 32.5	2.441	3.327	10.0	21.5	6 30	20 58.53	-22 43.9	1.825	2.737	11.5	21.1
7 10	20 48.74	-12 4.4	2.374	3.329	7.1	21.3	7 10	20 52.10	-23 10.5	1.767	2.738	7.9	20.9
7 20	20 42.06	-12 45.0	2.333	3.330	4.0	21.1	7 20	20 43.84	-23 37.9	1.734	2.738	4.1	20.7
7 30	20 34.67	-13 31.7	2.319	3.331	1.5	20.9	7 30	20 34.59	-24 1.8	1.727	2.739	2.1	20.5
8 9	20 27.27	-14 21.2	2.334	3.332	3.6	21.1	8 9	20 25.43	-24 18.2	1.747	2.740	5.3	20.7
8 19	20 20.56	-15 10.0	2.376	3.333	6.7	21.3	8 19	20 17.38	-24 25.1	1.793	2.741	9.2	21.0
8 29	20 15.17	-15 55.1	2.445	3.333	9.7	21.5	8 29	20 11.30	-24 21.9	1.863	2.742	12.6	21.2
107817	2001 FO ₆₁	7 29.4 338°53		11°7/25.2 18			255472	2005 YG ₁₄₂	7 29.4 322°40		2°2/27.8 18		
6 20	21 6.56	-39 54.8	1.156	2.019	20.2	18.3	6 20	20 58.22	-22 9.9	2.156	2.989	13.2	20.2
6 30	21 4.10	-40 55.9	1.091	2.007	17.1	18.1	6 30	20 54.93	-22 54.5	2.070	2.983	10.3	20.0
7 10	20 57.28	-41 47.6	1.042	1.995	14.1	17.9	7 10	20 49.58	-23 45.1	2.006	2.977	7.1	19.8
7 20	20 46.80	-42 17.5	1.013	1.985	12.0	17.7	7 20	20 42.59	-24 37.6	1.967	2.971	3.7	19.6
7 30	20 34.32	-42 13.9	1.003	1.975	11.9	17.7	7 30	20 34.68	-25 27.1	1.955	2.965	2.4	19.5
8 9	20 22.15	-42 31.7	1.014	1.967	14.1	17.8	8 9	20 26.74	-26 9.1	1.970	2.960	5.2	19.7
8 19	20 12.39	-40 13.5	1.045	1.960	17.4	18.0	8 19	20 19.65	-26 40.6	2.012	2.955	8.7	19.9
8 29	20 6.52	-38 27.6	1.093	1.954	20.8	18.2	8 29	20 14.22	-27 0.0	2.077	2.950	11.8	20.1
28833	Arunachalam	7 29.4 220°99		1°4/28.5 18			280110	2002 GE ₈₉	7 29.4 50°00		14°7/12.3 17		
6 20	21 0.97	-20 40.6	2.048	2.876	13.9	19.6	6 20	20 57.51	+18 55.4	1.391	2.078	25.4	20.3
6 30	20 57.09	-21 8.3	1.966	2.875	11.0	19.4	6 30	20 55.15	+19 29.4	1.331	2.092	23.3	20.1
7 10	20 51.04	-21 42.1	1.905	2.875	7.5	19.2	7 10	20 50.10	+19 23.8	1.281	2.107	20.8	20.0
7 20	20 43.28	-22 18.5	1.869	2.874	3.7	19.0	7 20	20 42.94	+18 32.3	1.246	2.122	18.2	19.9
7 30	20 34.59	-22 53.1	1.859	2.873	1.6	18.8	7 30	20 34.66	+16 52.6	1.228	2.138	16.0	19.8
8 9	20 25.93	-23 21.9	1.878	2.872	4.9	19.1	8 9	20 26.54	+14 29.0	1.230	2.154	14.7	19.7
8 19	20 18.24	-23 42.3	1.922	2.871	8.6	19.3	8 19	20 19.74	+11 32.4	1.254	2.170	15.0	19.8
8 29	20 12.34	-23 53.0	1.991	2.870	11.9	19.5	8 29	20 15.26	+ 8 17.7	1.301	2.187	16.5	20.0
322518	2011 YU ₂	7 29.4 198°26		2°7/30.9 18			322012	2010 UQ ₉₃	7 29.4 53°56		1°7/28.7 17		
6 20	21 1.73	-11 6.0	2.441	3.230	13.1	20.2	6 20	21 5.88	-21 54.4	1.393	2.239	18.3	20.2
6 30	20 57.17	-10 35.3	2.350	3.230	10.6	20.1	6 30	21 1.85	-22 1.3	1.326	2.246	14.5	20.0
7 10	20 50.81	-10 12.4	2.280	3.229	7.7	19.9	7 10	20 54.74	-22 14.0	1.279	2.253	9.9	19.7
7 20	20 43.08	- 9 57.2	2.236	3.227	4.7	19.7	7 20	20 45.23	-22 28.0	1.254	2.260	5.0	19.5
7 30	20 34.61	- 9 48.9	2.219	3.226	2.7	19.6	7 30	20 34.51	-22 38.2	1.253	2.267	1.9	19.3
8 9	20 26.18	- 9 46.3	2.231	3.225	4.2	19.7	8 9	20 24.06	-22 40.5	1.278	2.274	6.2	19.6
8 19	20 18.52	- 9 47.7	2.270	3.224	7.2	19.8	8 19	20 15.23	-22 33.3	1.326	2.282	11.0	19.9
8 29	20 12.30	- 9 51.3	2.335	3.222	10.1	20.0	8 29	20 9.08	-22 16.6	1.396	2.290	15.1	20.2
240993	2006 KO ₅₇	7 29.4 64°00		0°7/29.8 18			398242	2010 RC ₁₀₂	7 29.4 2°13		5°9/ 2.5 18		
6 20	20 59.52	-13 56.9	1.877	2.698	15.3	20.4	6 20	20 56.47	- 1 6.6	2.044	2.815	15.9	20.9
6 30	20 56.09	-14 23.4	1.796	2.699	12.2	20.2	6 30	20 53.45	- 0 44.5	1.959	2.814	13.4	20.7
7 10	20 50.43	-15 2.0	1.735	2.700	8.5	19.9	7 10	20 48.50	- 0 39.6	1.893	2.814	10.7	20.5
7 20	20 43.01	-15 50.1	1.697	2.700	4.4	19.7	7 20	20 42.03	- 0 53.0	1.849	2.814	7.9	20.3
7 30	20 34.61	-16 43.4	1.686	2.701	0.7	19.4	7 30	20 34.73	- 1 24.3	1.829	2.815	6.1	20.2
8 9	20 26.22	-17 36.9	1.703	2.702	4.5	19.7	8 9	20 27.42	- 2 10.6	1.835	2.816	6.5	20.3
8 19	20 18.80	-18 26.2	1.745	2.703	8.6	20.0	8 19	20 20.92	- 3 7.9	1.866	2.817	8.7	20.4
8 29	20 13.21	-19 8.0	1.811	2.704	12.2	20.2	8 29	20 15.98	- 4 11.0	1.922	2.818	11.5	20.6
397000	2005 SC ₂₈₃	7 29.4 61°88		1°1/30.2 16			116604	2004 BQ ₁₀₈	7 29.4 44°59		3°7/27.5 18		
6 20	20 57.88	-12 4.4	2.088	2.899	14.3	21.4							

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
320353	2007 <i>TT</i> ₂₀₂		7 29.4 232°45	1°4/30.1	17		4963	Kanroku		7 29.4 18°74	4°7/28.0	18	
6 20	21 3.42	-13 13.7	1.678	2.496	16.9	21.9	6 20	21 7.42	-29 42.8	1.330	2.184	18.6	15.2
6 30	20 59.60	-13 25.7	1.587	2.487	13.6	21.7	6 30	21 3.30	-29 42.7	1.268	2.190	14.8	14.9
7 10	20 53.14	-13 51.2	1.515	2.478	9.7	21.4	7 10	20 55.81	-29 39.9	1.225	2.196	10.5	14.7
7 20	20 44.51	-14 28.2	1.467	2.468	5.2	21.1	7 20	20 45.77	-29 28.2	1.204	2.204	6.4	14.5
7 30	20 34.57	-15 12.8	1.444	2.458	1.4	20.8	7 30	20 34.55	-29 2.7	1.206	2.212	4.8	14.4
8 9	20 24.49	-15 59.9	1.447	2.447	5.1	21.1	8 9	20 23.80	-28 21.2	1.233	2.221	7.8	14.6
8 19	20 15.48	-16 44.7	1.477	2.436	9.8	21.3	8 19	20 14.97	-27 25.4	1.283	2.231	12.0	14.9
8 29	20 8.60	-17 23.3	1.529	2.424	14.0	21.5	8 29	20 9.10	-26 19.2	1.355	2.242	15.9	15.2
73784	1994 <i>VP</i> ₂		7 29.4 267°27	8°3/23.3	18		492142	2013 <i>NR</i> ₂₃		7 29.4 64°61	4°9/31.8	16	
6 20	21 6.86	-38 38.8	2.054	2.880	14.0	19.7	6 20	21 3.09	-7 24.3	1.359	2.176	20.2	21.8
6 30	21 2.52	-39 59.3	1.970	2.863	11.8	19.5	6 30	20 59.44	-6 57.0	1.298	2.191	16.6	21.6
7 10	20 55.28	-41 16.3	1.907	2.845	9.6	19.3	7 10	20 52.98	-6 48.3	1.255	2.206	12.4	21.3
7 20	20 45.62	-42 21.6	1.868	2.827	8.4	19.2	7 20	20 44.35	-6 58.4	1.232	2.222	8.0	21.1
7 30	20 34.49	-43 7.0	1.854	2.809	8.7	19.2	7 30	20 34.64	-7 25.3	1.233	2.238	5.0	21.0
8 9	20 23.22	-43 27.5	1.864	2.790	10.4	19.2	8 9	20 25.19	-8 4.5	1.258	2.253	6.6	21.2
8 19	20 13.16	-43 21.8	1.899	2.771	12.8	19.4	8 19	20 17.21	-8 50.3	1.307	2.269	10.5	21.4
8 29	20 5.49	-42 52.2	1.954	2.752	15.3	19.5	8 29	20 11.68	-9 37.1	1.379	2.285	14.4	21.7
71374	2000 <i>AJ</i> ₁₄₁		7 29.4 231°19	2°6/31.2	18		511292	2014 <i>DN</i> ₆₂		7 29.4 183°07	3°9/26.9	18	
6 20	21 0.37	-9 7.9	2.382	3.169	13.4	20.3	6 20	21 4.63	-28 24.3	2.171	2.999	13.3	21.8
6 30	20 56.32	-9 11.7	2.279	3.157	11.0	20.1	6 30	20 59.96	-29 1.6	2.092	2.999	10.5	21.7
7 10	20 50.40	-9 27.0	2.198	3.145	8.0	19.9	7 10	20 53.01	-29 39.5	2.035	2.999	7.5	21.5
7 20	20 42.99	-9 53.2	2.141	3.133	4.9	19.6	7 20	20 44.30	-30 13.1	2.003	2.999	4.7	21.3
7 30	20 34.69	-10 28.4	2.111	3.120	2.6	19.5	7 30	20 34.65	-30 37.5	1.998	2.998	4.1	21.3
8 9	20 26.28	-11 9.5	2.110	3.106	4.2	19.6	8 9	20 25.08	-30 49.2	2.021	2.998	6.3	21.4
8 19	20 18.55	-11 53.2	2.136	3.092	7.4	19.7	8 19	20 16.57	-30 46.9	2.069	2.997	9.3	21.6
8 29	20 12.24	-12 36.1	2.189	3.078	10.6	19.9	8 29	20 9.96	-30 31.4	2.142	2.995	12.2	21.8
357139	2002 <i>AP</i> ₁₄₉		7 29.4 210°82	1°0/28.6	18		144620	2004 <i>FU</i> ₆₅		7 29.4 140°38	0°7/28.9	18	
6 20	20 59.13	-18 24.5	2.503	3.318	12.1	21.3	6 20	21 0.41	-18 28.3	2.213	3.033	13.3	20.5
6 30	20 55.29	-19 10.2	2.411	3.314	9.5	21.1	6 30	20 56.45	-18 56.1	2.132	3.036	10.5	20.3
7 10	20 49.65	-20 3.5	2.343	3.310	6.5	20.9	7 10	20 50.50	-19 31.0	2.073	3.040	7.1	20.1
7 20	20 42.59	-21 1.2	2.301	3.305	3.2	20.7	7 20	20 43.03	-20 10.0	2.038	3.043	3.5	19.9
7 30	20 34.72	-21 59.1	2.287	3.301	1.1	20.6	7 30	20 34.73	-20 49.1	2.032	3.046	0.8	19.7
8 9	20 26.79	-22 53.0	2.301	3.295	4.1	20.8	8 9	20 26.48	-21 24.5	2.053	3.049	4.3	20.0
8 19	20 19.57	-23 39.6	2.344	3.290	7.4	21.0	8 19	20 19.10	-21 53.5	2.101	3.052	7.8	20.2
8 29	20 13.74	-24 16.9	2.412	3.285	10.4	21.2	8 29	20 13.34	-22 14.2	2.175	3.055	11.0	20.4
11439	1974 <i>XW</i>		7 29.4 204°29	1°7/28.2	18		454822	2015 <i>RT</i> ₁₁₆		7 29.4 318°39	4°2/26.2	18	
6 20	21 2.84	-21 10.7	2.301	3.119	12.9	18.6	6 20	20 57.29	-25 1.4	1.900	2.746	14.2	20.5
6 30	20 58.39	-21 48.4	2.210	3.115	10.2	18.4	6 30	20 54.78	-26 16.1	1.805	2.725	11.2	20.3
7 10	20 51.88	-22 32.0	2.142	3.109	7.0	18.2	7 10	20 49.88	-27 38.4	1.732	2.704	7.9	20.0
7 20	20 43.73	-23 17.7	2.100	3.104	3.5	18.0	7 20	20 42.95	-29 2.5	1.684	2.683	4.9	19.8
7 30	20 34.65	-24 1.1	2.086	3.098	1.8	17.9	7 30	20 34.74	-30 20.8	1.662	2.663	4.5	19.7
8 9	20 25.53	-24 38.2	2.100	3.091	4.8	18.1	8 9	20 26.30	-31 26.5	1.666	2.644	7.3	19.8
8 19	20 17.24	-25 6.0	2.142	3.084	8.2	18.3	8 19	20 18.75	-32 15.0	1.694	2.625	10.8	20.0
8 29	20 10.59	-25 23.5	2.208	3.076	11.4	18.5	8 29	20 13.11	-32 44.5	1.745	2.606	14.2	20.2
186366	2002 <i>GA</i> ₁₀₇		7 29.4 36°16	1°2/28.6	18		48377	4047 <i>T</i> ₋₃		7 29.4 345°82	6°5/26.1	18	
6 20	20 58.22	-19 1.3	1.982	2.814	14.2	19.5	6 20	20 49.48	-25 38.8	0.925	1.827	20.7	18.1
6 30	20 54.94	-19 39.9	1.911	2.823	11.1	19.4	6 30	20 50.58	-26 50.1	0.859	1.810	16.6	17.7
7 10	20 49.55	-20 26.5	1.861	2.832	7.5	19.2	7 10	20 48.08	-28 11.9	0.809	1.795	11.9	17.4
7 20	20 42.56	-21 17.0	1.836	2.841	3.7	18.9	7 20	20 42.40	-29 34.7	0.777	1.781	7.6	17.2
7 30	20 34.73	-22 6.7	1.837	2.851	1.3	18.8	7 30	20 34.77	-30 45.6	0.765	1.770	7.0	17.1
8 9	20 27.00	-22 51.1	1.866	2.861	4.8	19.0	8 9	20 27.06	-31 33.2	0.772	1.761	11.0	17.3
8 19	20 20.25	-23 26.8	1.920	2.872	8.4	19.3	8 19	20 21.16	-31 51.7	0.797	1.754	16.0	17.5
8 29	20 15.24	-23 52.1	1.999	2.882	11.7	19.5	8 29	20 18.60	-31 40.9	0.839	1.750	20.7	17.8
93423	2000 <i>SG</i> ₃₀₈		7 29.4 173°04	4°3/31.9	18		20906	2727 <i>P-L</i>		7 29.4 74°46	3°8/27.7	18	R
6 20	21 2.59	-6 12.8	2.143	2.920	15.0	20.1	6 20	21 7.21	-24 49.5	1.392	2.241	18.2	18.6
6 30	20 58.12	-5 47.2	2.056	2.923	12.4	19.9	6 30	21 2.87	-25 29.8	1.337	2.257	14.3	18.4
7 10	20 51.64	-5 34.4	1.989	2.925	9.4	19.7	7 10	20 55.41	-26 14.5	1.301	2.274	9.9	18.2
7 20	20 43.58	-5 34.6	1.945	2.926	6.4	19.6	7 20	20 45.56	-26 56.6	1.288	2.290	5.5	18.0
7 30	20 34.67	-5 47.3	1.929	2.927	4.4	19.4	7 30	20 34.58	-27 29.0	1.299	2.307	3.9	17.9
8 9	20 25.77	-6 10.1	1.939	2.928	5.4	19.5	8 9	20 24.00	-27 46.7	1.335	2.324	7.3	18.2
8 19	20 17.73	-6 40.1	1.977	2.928	8.2	19.7	8 19	20 15.16	-27 48.0	1.395	2.340	11.5	18.5
8 29	20 11.33	-7 13.7	2.039	2.928	11.3	19.9	8 29	20 9.08	-27 34.3	1.477	2.357	15.3	18.8
482119	2010 <i>OW</i> ₂₁		7 29.4 209°69	10°8/19.8	18		118894	2000 <i>UW</i> ₄₆		7 29.4 211°17	0°8/30.0	18	
6 20	21 14.81	-54 12.0	2.574	3.340	13.1	21.6	6 20	20 59.51	-14 22.5	2.826	3.623	11.3	20.9
6 30	21 8.77	-55 32.8	2.519	3.337	11.9	21.5	6 30	20 55.30	-14 32.6	2.728	3.617	9.0	20.7
7 10	20 59.49	-56 40.2	2.484	3.335	11.1	21.5	7 10	20 49.51	-14 49.9	2.652	3.610	6.3	20.5
7 20	20 47.62	-57 26.7	2.471	3.332	10.8	21.5	7 20	20 42.50	-15 12.8	2.603	3.603	3.3	20.3
7 30	20 34.41	-57 46.1	2.480	3.329	11.1	21.5	7 30	20 34.80	-15 39.1	2.582	3.596	0.8	20.1
8 9	20 21.43	-57 36.0	2.511	3.326	12.0	21.5	8 9	20 27.06	-16 6.4	2.590	3.588	3.3	20.3
8 19	20 10.17	-56 58.0	2.563	3.322	13.2	21.6	8 19	20 19.94	-16 32.4	2.626	3.580	6.3	20.5
8 29	20 1.77	-55 56.3	2.634	3.319	14.4	21.7	8 29	20 14.02	-16 55.1	2.689	3.571	9.1	20.6
513467	2009 <i>BP</i> ₁₇₅		7 29.4 198°35	0°9/28.7	18		257627	1999 <i>TW</i> ₁₆₅		7 29.4 346°47			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
189340	2007 <i>VD</i> ₂₆₅		7 29.4 88°03	1.7°/30.2	17		426458	2013 <i>QE</i> ₇₂		7 29.4 337°06	0°8/28.9	18	
6 20	21 4.74	-14 11.2	1.461	2.290	18.5	20.6	6 20	20 56.07	-15 32.1	1.218	2.078	19.6	20.1
6 30	21 0.72	-14 3.3	1.392	2.299	14.8	20.4	6 30	20 54.76	-16 21.1	1.141	2.069	15.6	19.8
7 10	20 53.88	-14 7.7	1.342	2.308	10.4	20.1	7 10	20 50.39	-17 29.2	1.082	2.059	10.8	19.5
7 20	20 44.84	-14 22.3	1.314	2.316	5.6	19.9	7 20	20 43.39	-18 51.8	1.044	2.051	5.3	19.2
7 30	20 34.66	-14 43.6	1.311	2.325	1.7	19.6	7 30	20 34.81	-20 20.5	1.029	2.043	1.0	18.9
8 9	20 24.66	-15 7.5	1.333	2.333	5.4	19.9	8 9	20 26.09	-21 45.6	1.037	2.037	6.5	19.2
8 19	20 16.08	-15 30.0	1.380	2.342	10.1	20.2	8 19	20 18.74	-22 58.5	1.067	2.031	12.0	19.5
8 29	20 9.94	-15 48.4	1.449	2.350	14.2	20.5	8 29	20 14.06	-23 54.0	1.118	2.026	16.9	19.8
73332	2002 <i>JV</i> ₁₀₇		7 29.4 126°24	5°9/	1.8	18	33467	<i>Johnlieb</i>		7 29.4 18°20	1°8/30.4	18	
6 20	21 2.88	-2 45.9	2.072	2.835	15.9	19.7	6 20	20 57.59	-12 36.0	1.309	2.154	19.3	18.1
6 30	20 58.35	-2 2.4	1.993	2.845	13.4	19.5	6 30	20 55.43	-12 44.1	1.244	2.160	15.5	17.9
7 10	20 51.79	-1 33.4	1.934	2.855	10.5	19.4	7 10	20 50.45	-13 8.8	1.196	2.166	10.9	17.7
7 20	20 43.67	-1 20.4	1.898	2.864	7.7	19.2	7 20	20 43.23	-13 47.6	1.170	2.173	5.9	17.4
7 30	20 34.74	-1 23.5	1.887	2.873	6.0	19.1	7 30	20 34.83	-14 35.8	1.167	2.181	1.9	17.2
8 9	20 25.88	-1 41.0	1.903	2.881	6.5	19.2	8 9	20 26.57	-15 27.3	1.187	2.189	5.5	17.4
8 19	20 17.96	-2 9.7	1.946	2.890	8.8	19.3	8 19	20 19.70	-16 16.1	1.232	2.199	10.4	17.7
8 29	20 11.71	-2 45.7	2.012	2.897	11.6	19.5	8 29	20 15.24	-16 57.6	1.297	2.209	14.7	18.0
162905	2001 <i>KV</i> ₅		7 29.4 126°96	7°5/	3.1	18	398842	2013 <i>CT</i> ₃₃		7 29.4 212°40	3°0/31.8	18	
6 20	20 59.95	+ 1 42.2	2.042	2.790	16.6	20.1	6 20	20 57.66	- 7 3.6	2.354	3.138	13.6	21.5
6 30	20 56.18	+ 2 30.5	1.958	2.793	14.3	19.9	6 30	20 54.18	- 7 15.5	2.262	3.137	11.2	21.3
7 10	20 50.39	+ 3 1.4	1.893	2.795	11.7	19.7	7 10	20 48.93	- 7 40.8	2.191	3.135	8.3	21.2
7 20	20 43.03	+ 3 12.7	1.850	2.797	9.3	19.6	7 20	20 42.30	- 8 18.7	2.144	3.133	5.2	21.0
7 30	20 34.78	+ 3 3.5	1.831	2.800	7.7	19.5	7 30	20 34.90	- 9 7.1	2.125	3.131	3.0	20.8
8 9	20 26.53	+ 2 35.2	1.837	2.802	7.8	19.5	8 9	20 27.46	-10 2.4	2.133	3.128	4.2	20.9
8 19	20 19.14	+ 1 51.5	1.868	2.804	9.6	19.6	8 19	20 20.73	-11 0.7	2.168	3.126	7.2	21.1
8 29	20 13.37	+ 0 57.2	1.923	2.806	12.1	19.8	8 29	20 15.38	-11 58.0	2.230	3.123	10.2	21.3
425550	2010 <i>RA</i> ₁₀₄		7 29.4 237°56	0°3/29.5	17		92063	1999 <i>WY</i> ₁₀		7 29.4 50°99	5°0/25.4	18	
6 20	21 4.45	-16 15.5	1.753	2.575	16.2	22.5	6 20	21 0.62	-30 23.5	2.262	3.096	12.6	18.8
6 30	21 0.37	-16 29.7	1.659	2.564	12.9	22.3	6 30	20 56.85	-31 33.2	2.190	3.099	10.0	18.6
7 10	20 53.68	-16 54.5	1.586	2.552	9.0	22.0	7 10	20 50.94	-32 43.5	2.141	3.102	7.4	18.4
7 20	20 44.83	-17 27.2	1.535	2.539	4.6	21.8	7 20	20 43.35	-33 48.5	2.118	3.106	5.3	18.3
7 30	20 34.66	-18 3.4	1.511	2.526	0.3	21.4	7 30	20 34.83	-34 42.4	2.121	3.109	5.2	18.3
8 9	20 24.36	-18 38.6	1.514	2.513	5.1	21.7	8 9	20 26.34	-35 20.9	2.151	3.112	7.1	18.5
8 19	20 15.09	-19 8.8	1.543	2.499	9.7	22.0	8 19	20 18.81	-35 42.2	2.207	3.116	9.7	18.6
8 29	20 7.92	-19 31.4	1.595	2.485	13.8	22.2	8 29	20 13.04	-35 46.6	2.285	3.120	12.2	18.8
90205	2003 <i>AV</i> ₇₁		7 29.4 337°02	0°5/29.6	18		509870	2009 <i>AF</i> ₄₆		7 29.4 173°54	1°1/28.6	17	
6 20	20 56.40	-15 52.4	1.228	2.088	19.5	18.9	6 20	21 1.52	-18 51.4	2.399	3.213	12.6	22.2
6 30	20 54.97	-16 0.8	1.149	2.075	15.6	18.6	6 30	20 57.23	-19 34.9	2.314	3.216	9.9	22.0
7 10	20 50.47	-16 23.6	1.087	2.063	10.9	18.3	7 10	20 51.04	-20 25.6	2.252	3.218	6.7	21.8
7 20	20 43.39	-16 58.2	1.045	2.052	5.6	18.0	7 20	20 43.36	-21 20.1	2.215	3.219	3.3	21.6
7 30	20 34.76	-17 39.5	1.026	2.041	0.5	17.6	7 30	20 34.85	-22 14.0	2.207	3.221	1.2	21.4
8 9	20 26.02	-18 21.2	1.030	2.032	6.1	18.0	8 9	20 26.33	-23 3.1	2.228	3.221	4.3	21.7
8 19	20 18.65	-18 57.5	1.056	2.024	11.6	18.3	8 19	20 18.60	-23 44.3	2.276	3.222	7.6	21.9
8 29	20 13.91	-19 24.4	1.102	2.018	16.5	18.5	8 29	20 12.39	-24 15.8	2.350	3.221	10.6	22.1
300699	2007 <i>VY</i> ₆₇		7 29.4 236°10	2°0/30.7	18		319278	2006 <i>BY</i> ₆₁		7 29.4 205°79	2°1/27.8	18	
6 20	21 0.07	-11 44.1	2.077	2.883	14.5	21.5	6 20	21 1.84	-25 12.9	2.974	3.787	10.4	21.6
6 30	20 56.33	-11 45.5	1.987	2.879	11.7	21.3	6 30	20 57.11	-25 33.1	2.882	3.782	8.2	21.5
7 10	20 50.54	-11 58.1	1.919	2.875	8.4	21.1	7 10	20 50.75	-25 54.7	2.813	3.777	5.7	21.3
7 20	20 43.12	-12 20.5	1.874	2.871	4.8	20.9	7 20	20 43.14	-26 14.8	2.771	3.771	3.1	21.1
7 30	20 34.80	-12 50.4	1.855	2.867	2.0	20.7	7 30	20 34.87	-26 30.6	2.757	3.765	2.2	21.0
8 9	20 26.45	-13 24.3	1.864	2.863	4.3	20.8	8 9	20 26.60	-26 39.6	2.773	3.759	4.2	21.2
8 19	20 18.95	-13 59.0	1.900	2.859	8.0	21.0	8 19	20 19.02	-26 40.8	2.817	3.752	6.8	21.3
8 29	20 13.09	-14 31.3	1.961	2.855	11.4	21.2	8 29	20 12.74	-26 33.9	2.887	3.745	9.3	21.5
435186	2007 <i>RJ</i> ₃₅		7 29.4 320°06	3°2/31.2	18		104597	2000 <i>GJ</i> ₉₂		7 29.4 99°11	2°1/30.5	17	
6 20	20 55.60	- 9 21.8	1.532	2.360	17.8	20.8	6 20	21 2.92	-11 59.8	1.658	2.475	17.2	20.3
6 30	20 53.77	- 9 23.4	1.434	2.337	14.7	20.5	6 30	20 58.97	-12 3.3	1.586	2.485	13.8	20.1
7 10	20 49.39	- 9 42.7	1.354	2.314	10.8	20.3	7 10	20 52.53	-12 20.4	1.534	2.495	9.8	19.9
7 20	20 42.81	-10 19.6	1.295	2.292	6.5	20.0	7 20	20 44.17	-12 49.0	1.505	2.504	5.4	19.6
7 30	20 34.83	-11 11.6	1.260	2.271	3.3	19.7	7 30	20 34.80	-13 25.8	1.501	2.514	2.1	19.4
8 9	20 26.58	-12 13.8	1.250	2.250	5.6	19.8	8 9	20 25.56	-14 6.2	1.524	2.524	4.9	19.6
8 19	20 19.27	-13 19.8	1.263	2.230	10.2	20.0	8 19	20 17.53	-14 45.8	1.572	2.533	9.1	19.9
8 29	20 14.04	-14 23.5	1.299	2.211	14.7	20.2	8 29	20 11.60	-15 21.0	1.644	2.542	13.0	20.2
279767	1999 <i>RT</i> ₅₆		7 29.4 321°58	0°2/29.3	18		86876	2000 <i>HZ</i> ₂₁		7 29.4 93°95	3°9/27.4	18	
6 20	20 59.13	-18 56.9	1.399	2.252	17.9	19.9	6 20	21 5.49	-25 43.4	1.617	2.459	16.4	19.9
6 30	20 57.00	-18 49.3	1.302	2.225	14.4	19.6	6 30	21 1.31	-26 28.3	1.551	2.467	12.9	19.7
7 10	20 51.87	-18 49.6	1.223	2.198	10.1	19.3	7 10	20 54.31	-27 16.9	1.505	2.475	9.0	19.5
7 20	20 44.15	-18 55.6	1.165	2.171	5.1	18.9	7 20	20 45.09	-28 2.9	1.482	2.483	5.3	19.3
7 30	20 34.75	-19 3.3	1.131	2.146	0.4	18.5	7 30	20 34.74	-28 39.5	1.485	2.491	4.1	19.2
8 9	20 25.05	-19 8.7	1.120	2.121	6.0	18.9	8 9	20 24.58	-29 1.8	1.514	2.498	7.1	19.4
8 19	20 16.51	-19 8.6	1.133	2.097	11.4	19.1	8 19	20 15.86	-29 7.8	1.567	2.506	10.9	19.7
8 29	20 10.46	-19 1.2	1.166	2.075	16.3	19.3	8 29	20 9.57	-28 58.3	1.642	2.513	14.4	19.9
292767	2006 <i>UL</i> ₁₉₉		7 29.4 201°78	1°0/30.2	18		310621	2002 <i>AN</i> ₉₆					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
117098	2004 <i>NF</i> ₂₅		7 29.4 302°83	2.7/27.8	18		356661	2011 <i>UY</i> ₇₄		7 29.4 284°18	1.1/28.7	18	
6 20	21 1.40	-25 8.0	2.109	2.941	13.4	19.0	6 20	20 59.83	-19 26.6	2.057	2.885	13.9	21.3
6 30	20 57.69	-25 29.7	2.007	2.919	10.7	18.8	6 30	20 56.37	-19 56.8	1.964	2.873	11.0	21.0
7 10	20 51.69	-25 54.4	1.928	2.896	7.5	18.6	7 10	20 50.73	-20 34.7	1.892	2.861	7.5	20.8
7 20	20 43.82	-26 18.1	1.872	2.874	4.2	18.3	7 20	20 43.33	-21 17.0	1.844	2.849	3.7	20.6
7 30	20 34.84	-26 36.4	1.843	2.852	2.9	18.2	7 30	20 34.89	-21 59.2	1.823	2.837	1.3	20.3
8 9	20 25.73	-26 45.6	1.841	2.830	5.7	18.3	8 9	20 26.37	-22 37.0	1.830	2.825	4.8	20.6
8 19	20 17.50	-26 43.7	1.866	2.808	9.3	18.5	8 19	20 18.70	-23 6.9	1.863	2.814	8.7	20.8
8 29	20 11.06	-26 30.5	1.914	2.786	12.6	18.7	8 29	20 12.76	-23 27.2	1.920	2.802	12.2	21.0
160334	2003 <i>QH</i> ₁₀₉		7 29.4 351°74	1.1/29.6	18		358923	2008 <i>HA</i> ₁₂		7 29.4 32°22	3.0/27.7	18	
6 20	21 4.87	-20 29.1	1.288	2.140	19.2	18.8	6 20	21 0.58	-24 53.1	1.912	2.751	14.4	20.0
6 30	21 1.42	-19 26.4	1.211	2.132	15.4	18.5	6 30	20 56.96	-25 26.6	1.845	2.760	11.2	19.8
7 10	20 54.72	-18 25.0	1.152	2.125	10.8	18.2	7 10	20 51.05	-26 3.3	1.799	2.769	7.8	19.6
7 20	20 45.43	-17 24.2	1.114	2.120	5.6	17.9	7 20	20 43.41	-26 38.5	1.777	2.779	4.3	19.5
7 30	20 34.75	-16 23.7	1.101	2.115	1.1	17.6	7 30	20 34.89	-27 7.2	1.781	2.789	3.1	19.4
8 9	20 24.23	-15 23.9	1.111	2.113	6.0	17.9	8 9	20 26.54	-27 25.8	1.811	2.799	5.8	19.6
8 19	20 15.35	-14 26.1	1.146	2.111	11.2	18.2	8 19	20 19.31	-27 32.4	1.868	2.810	9.3	19.8
8 29	20 9.26	-13 31.3	1.202	2.111	15.9	18.5	8 29	20 14.02	-27 26.9	1.947	2.821	12.4	20.0
85775	1998 <i>UY</i> ₂₀		7 29.4 236°01	1.1/28.8	18		42098	2001 <i>AS</i> ₂₉		7 29.4 42°42	4.7/27.1	18	
6 20	21 4.06	-19 21.9	1.866	2.692	15.2	20.2	6 20	21 4.12	-25 35.9	1.346	2.203	18.3	18.5
6 30	20 59.94	-19 47.2	1.774	2.682	12.1	20.0	6 30	21 0.86	-26 32.4	1.283	2.207	14.5	18.3
7 10	20 53.32	-20 20.8	1.703	2.671	8.3	19.8	7 10	20 54.37	-27 34.5	1.238	2.212	10.1	18.0
7 20	20 44.66	-20 58.8	1.655	2.660	4.1	19.5	7 20	20 45.27	-28 34.3	1.215	2.217	6.1	17.8
7 30	20 34.80	-21 36.6	1.635	2.649	1.2	19.3	7 30	20 34.78	-29 23.1	1.216	2.222	5.0	17.8
8 9	20 24.82	-22 9.5	1.641	2.637	5.2	19.5	8 9	20 24.46	-29 54.4	1.242	2.227	8.3	18.0
8 19	20 15.86	-22 33.9	1.674	2.625	9.5	19.7	8 19	20 15.79	-30 5.4	1.290	2.232	12.5	18.2
8 29	20 8.91	-22 48.3	1.730	2.612	13.3	19.9	8 29	20 9.94	-29 57.2	1.359	2.238	16.4	18.5
260164	2004 <i>RB</i> ₆₄		7 29.4 290°16	6.0/25.8	18		338616	2003 <i>SX</i> ₂₂₁		7 29.4 293°62	0.7/29.8	18	
6 20	21 6.33	-35 26.8	2.284	3.107	12.9	21.1	6 20	20 59.14	-14 17.8	1.788	2.613	15.8	20.6
6 30	21 1.58	-36 3.6	2.188	3.085	10.6	20.9	6 30	20 56.14	-14 41.1	1.695	2.601	12.6	20.4
7 10	20 54.35	-36 36.8	2.113	3.062	8.2	20.7	7 10	20 50.76	-15 17.1	1.622	2.588	8.9	20.1
7 20	20 45.14	-37 0.8	2.062	3.040	6.3	20.6	7 20	20 43.42	-16 3.6	1.572	2.575	4.6	19.8
7 30	20 34.77	-37 9.9	2.038	3.018	6.2	20.5	7 30	20 34.89	-16 56.2	1.548	2.563	0.7	19.5
8 9	20 24.35	-37 0.9	2.041	2.995	7.9	20.6	8 9	20 26.23	-17 49.9	1.550	2.550	4.8	19.8
8 19	20 14.97	-36 33.1	2.069	2.973	10.5	20.7	8 19	20 18.50	-18 39.6	1.578	2.538	9.2	20.0
8 29	20 7.60	-35 48.4	2.120	2.950	13.2	20.9	8 29	20 12.66	-19 21.7	1.630	2.526	13.2	20.2
320483	2007 <i>VF</i> ₃₂₉		7 29.4 248°24	0.5/29.7	17		137334	1999 <i>TC</i> ₆₇		7 29.4 12°60	1.1/28.9	17	
6 20	21 4.78	-16 14.5	1.642	2.467	16.9	22.0	6 20	21 1.51	-19 30.1	1.227	2.085	19.6	20.0
6 30	21 0.85	-16 20.3	1.549	2.455	13.6	21.8	6 30	20 58.89	-19 41.1	1.161	2.087	15.5	19.8
7 10	20 54.16	-16 36.6	1.476	2.442	9.5	21.5	7 10	20 53.05	-20 2.1	1.113	2.089	10.7	19.5
7 20	20 45.16	-17 0.9	1.425	2.429	4.9	21.2	7 20	20 44.63	-20 28.7	1.086	2.092	5.3	19.2
7 30	20 34.77	-17 29.2	1.400	2.415	0.5	20.8	7 30	20 34.83	-20 55.0	1.081	2.096	1.2	19.0
8 9	20 24.21	-17 57.1	1.402	2.401	5.3	21.2	8 9	20 25.19	-21 15.6	1.101	2.100	6.3	19.3
8 19	20 14.77	-18 20.8	1.429	2.387	10.1	21.4	8 19	20 17.19	-21 26.9	1.143	2.106	11.5	19.6
8 29	20 7.57	-18 37.6	1.479	2.372	14.4	21.6	8 29	20 11.97	-21 27.4	1.206	2.111	16.1	19.9
213331	2001 <i>SG</i> ₁₄₆		7 29.4 261°48	4.2/1.2	18		182907	2002 <i>EG</i> ₈₁		7 29.4 69°81	1.4/30.4	18	
6 20	20 58.61	- 5 37.0	2.168	2.950	14.7	20.5	6 20	20 59.87	-13 9.6	2.179	2.987	13.9	20.9
6 30	20 55.12	- 5 25.0	2.074	2.944	12.2	20.3	6 30	20 55.91	-13 16.9	2.109	3.003	11.0	20.7
7 10	20 49.70	- 5 26.9	2.000	2.937	9.3	20.1	7 10	20 50.08	-13 33.8	2.061	3.020	7.7	20.5
7 20	20 42.75	- 5 43.0	1.949	2.930	6.3	19.9	7 20	20 42.85	-13 58.5	2.037	3.037	4.2	20.3
7 30	20 34.93	- 6 12.1	1.924	2.924	4.3	19.7	7 30	20 34.95	-14 28.1	2.040	3.054	1.4	20.2
8 9	20 27.03	- 6 51.5	1.926	2.917	5.2	19.8	8 9	20 27.18	-14 59.5	2.071	3.071	3.9	20.4
8 19	20 19.90	- 7 37.6	1.954	2.910	8.0	19.9	8 19	20 20.32	-15 29.6	2.129	3.087	7.3	20.6
8 29	20 14.27	- 8 26.2	2.008	2.903	11.1	20.1	8 29	20 15.04	-15 56.2	2.213	3.104	10.4	20.8
112772	2002 <i>PZ</i> ₁₅₇		7 29.4 309°04	0.7/29.1	18		39613	1993 <i>XF</i> ₁		7 29.4 297°73	3.2/27.7	18	
6 20	21 1.27	-18 6.6	1.418	2.265	18.1	20.3	6 20	21 0.84	-21 35.3	1.363	2.219	18.1	19.1
6 30	20 58.46	-18 27.3	1.337	2.256	14.4	20.0	6 30	20 58.58	-22 27.2	1.272	2.198	14.5	18.8
7 10	20 52.70	-18 59.5	1.274	2.247	9.9	19.7	7 10	20 53.13	-23 31.5	1.201	2.177	10.1	18.5
7 20	20 44.48	-19 39.3	1.232	2.238	4.9	19.4	7 20	20 44.88	-24 42.0	1.150	2.156	5.4	18.2
7 30	20 34.81	-20 21.1	1.215	2.230	0.9	19.1	7 30	20 34.80	-25 50.4	1.124	2.135	3.5	18.0
8 9	20 25.06	-20 58.9	1.223	2.222	6.0	19.4	8 9	20 24.36	-26 47.7	1.121	2.114	7.7	18.2
8 19	20 16.62	-21 27.9	1.254	2.214	11.0	19.7	8 19	20 15.17	-27 28.0	1.142	2.093	12.8	18.4
8 29	20 10.66	-21 45.8	1.307	2.207	15.5	20.0	8 29	20 8.67	-27 48.6	1.183	2.073	17.5	18.7
379659	2011 <i>EB</i> ₄₄		7 29.4 111°86	2.7/30.9	17		164151	2003 <i>YM</i> ₁₂₅		7 29.4 227°43	0.1/29.5	18	
6 20	21 3.69	-10 38.4	1.893	2.694	15.9	21.3	6 20	21 3.81	-17 59.9	2.379	3.186	12.9	20.5
6 30	20 59.19	-10 30.0	1.821	2.708	12.8	21.1	6 30	20 59.09	-18 1.6	2.279	3.176	10.2	20.3
7 10	20 52.48	-10 33.8	1.768	2.721	9.3	20.9	7 10	20 52.36	-18 8.8	2.202	3.165	7.1	20.0
7 20	20 44.09	-10 48.8	1.739	2.734	5.4	20.7	7 20	20 44.07	-18 19.6	2.151	3.154	3.5	19.8
7 30	20 34.85	-11 12.4	1.737	2.747	2.7	20.6	7 30	20 34.87	-18 31.3	2.127	3.142	0.2	19.5
8 9	20 25.75	-11 41.4	1.762	2.759	4.7	20.7	8 9	20 25.63	-18 41.4	2.132	3.130	4.0	19.8
8 19	20 17.73	-12 12.3	1.813	2.771	8.4	21.0	8 19	20 17.17	-18 48.0	2.166	3.118	7.6	20.0
8 29	20 11.59	-12 41.8	1.889	2.783	11.8	21.2	8 29	20 10.27	-18 49.8	2.224	3.104	10.8	20.2
449431	2013 <i>HV</i> ₁₀₃		7 29.4 157°51	1.7/30.7	18		432714						

EPHEMERIDES

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7 29.4

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
266220	2006 <i>WU</i> ₁₉₈		7 29.4 222°50		2°0/30.4 18		18362	1990 <i>VX</i> ₆		7 29.4 323°59		2°7/27.5 18	
6 20	21 4.09	-13 9.0	1.770	2.583	16.4	21.2	6 20	20 58.02	-21 34.3	1.905	2.745	14.4	18.2
6 30	20 59.93	-12 57.8	1.682	2.578	13.2	21.0	6 30	20 55.20	-22 36.9	1.819	2.736	11.3	18.0
7 10	20 53.29	-12 57.4	1.613	2.573	9.5	20.7	7 10	20 50.08	-23 48.3	1.755	2.727	7.8	17.8
7 20	20 44.64	-13 6.7	1.568	2.567	5.3	20.5	7 20	20 43.09	-25 3.3	1.715	2.719	4.2	17.5
7 30	20 34.84	-13 23.2	1.549	2.562	2.0	20.2	7 30	20 34.98	-26 15.4	1.701	2.710	2.9	17.4
8 9	20 25.00	-13 43.6	1.556	2.555	4.9	20.4	8 9	20 26.76	-27 18.5	1.714	2.702	6.0	17.6
8 19	20 16.23	-14 4.8	1.590	2.549	9.2	20.7	8 19	20 19.47	-28 8.1	1.753	2.695	9.7	17.8
8 29	20 9.48	-14 23.8	1.647	2.542	13.1	20.9	8 29	20 14.04	-28 42.1	1.814	2.688	13.2	18.0
415053	2012 <i>AR</i> ₁₂		7 29.4 112°20		5°1/27.2 17		523193	2016 <i>UD</i> ₁₄₉		7 29.4 279°76		5°0/26.1 18	
6 20	21 10.72	-28 58.7	1.569	2.406	17.0	20.8	6 20	21 3.05	-30 59.1	2.144	2.976	13.3	21.2
6 30	21 5.50	-29 40.3	1.507	2.419	13.5	20.6	6 30	20 58.96	-31 47.8	2.062	2.970	10.6	21.0
7 10	20 57.20	-30 22.2	1.466	2.432	9.7	20.4	7 10	20 52.52	-32 36.2	2.003	2.964	7.8	20.8
7 20	20 46.54	-30 57.0	1.449	2.445	6.2	20.2	7 20	20 44.23	-33 18.7	1.968	2.957	5.5	20.7
7 30	20 34.73	-31 17.8	1.456	2.457	5.3	20.2	7 30	20 34.91	-33 49.7	1.960	2.951	5.2	20.6
8 9	20 23.28	-31 20.6	1.490	2.468	7.9	20.4	8 9	20 25.61	-34 5.3	1.978	2.945	7.2	20.8
8 19	20 13.53	-31 5.0	1.548	2.480	11.6	20.6	8 19	20 17.35	-34 4.1	2.021	2.938	10.1	20.9
8 29	20 6.50	-30 33.6	1.628	2.491	15.0	20.9	8 29	20 11.02	-33 47.0	2.088	2.932	12.9	21.1
96062	4558 <i>P-L</i>		7 29.4 243°25		1°7/28.2 18		381792	2009 <i>UC</i> ₆		7 29.4 338°83		1°9/30.2 18	
6 20	21 0.61	-22 42.7	2.599	3.418	11.6	20.9	6 20	20 51.12	-14 29.0	1.014	1.893	21.2	20.2
6 30	20 56.46	-23 8.6	2.504	3.408	9.1	20.7	6 30	20 51.41	-14 15.4	0.934	1.871	17.2	19.8
7 10	20 50.51	-23 38.3	2.431	3.398	6.3	20.5	7 10	20 48.45	-14 17.7	0.871	1.850	12.4	19.5
7 20	20 43.13	-24 8.6	2.384	3.387	3.3	20.3	7 20	20 42.63	-14 35.4	0.825	1.831	6.7	19.1
7 30	20 34.94	-24 36.0	2.365	3.377	1.8	20.1	7 30	20 35.00	-15 5.3	0.800	1.814	2.0	18.7
8 9	20 26.72	-24 57.6	2.375	3.366	4.4	20.3	8 9	20 27.13	-15 41.3	0.795	1.799	6.6	19.0
8 19	20 19.21	-25 11.4	2.412	3.354	7.5	20.5	8 19	20 20.71	-16 16.9	0.809	1.786	12.7	19.3
8 29	20 13.11	-25 16.4	2.475	3.343	10.3	20.6	8 29	20 17.21	-16 46.4	0.842	1.775	18.2	19.5
132748	2002 <i>PB</i> ₄₅		7 29.4 298°05		2°2/27.9 18		316920	2000 <i>WW</i> ₇₅		7 29.4 292°27		1°6/28.8 18	
6 20	20 59.43	-23 41.1	2.434	3.261	12.1	20.2	6 20	21 3.62	-20 43.5	1.392	2.240	18.2	20.8
6 30	20 55.81	-24 9.1	2.328	3.237	9.5	20.0	6 30	21 0.58	-20 57.3	1.303	2.223	14.6	20.5
7 10	20 50.23	-24 41.1	2.245	3.213	6.6	19.8	7 10	20 54.37	-21 19.6	1.233	2.207	10.1	20.2
7 20	20 43.07	-25 13.6	2.187	3.190	3.6	19.6	7 20	20 45.44	-21 46.2	1.184	2.190	5.1	19.9
7 30	20 34.95	-25 42.8	2.156	3.166	2.3	19.4	7 30	20 34.83	-22 11.4	1.159	2.173	1.7	19.6
8 9	20 26.70	-26 5.1	2.153	3.142	4.9	19.6	8 9	20 24.03	-22 29.5	1.159	2.156	6.5	19.9
8 19	20 19.14	-26 18.3	2.177	3.119	8.2	19.7	8 19	20 14.55	-22 37.1	1.182	2.140	11.8	20.1
8 29	20 13.07	-26 21.3	2.226	3.095	11.2	19.9	8 29	20 7.73	-22 32.8	1.226	2.124	16.5	20.4
393564	2003 <i>HP</i> ₄₃		7 29.4 16°16		5°3/26.3 18		21860	<i>Joannaguy</i>		7 29.4 216°93		0°1/29.4 18	
6 20	21 2.47	-30 57.5	1.916	2.756	14.3	20.7	6 20	21 0.93	-16 30.1	1.939	2.762	14.8	18.4
6 30	20 58.66	-31 45.2	1.846	2.758	11.4	20.5	6 30	20 57.26	-16 55.6	1.855	2.760	11.7	18.2
7 10	20 52.37	-32 32.0	1.798	2.761	8.4	20.4	7 10	20 51.34	-17 30.9	1.792	2.758	8.1	17.9
7 20	20 44.13	-33 12.0	1.773	2.764	5.9	20.2	7 20	20 43.65	-18 13.0	1.752	2.757	4.0	17.7
7 30	20 34.90	-33 39.3	1.774	2.767	5.5	20.2	7 30	20 34.96	-18 57.6	1.739	2.755	0.3	17.4
8 9	20 25.80	-33 50.1	1.801	2.771	7.6	20.3	8 9	20 26.25	-19 40.3	1.754	2.753	4.6	17.7
8 19	20 17.92	-33 43.3	1.853	2.775	10.6	20.5	8 19	20 18.51	-20 17.2	1.795	2.750	8.6	18.0
8 29	20 12.15	-33 20.4	1.927	2.779	13.5	20.7	8 29	20 12.58	-20 45.8	1.860	2.748	12.2	18.2
477697	2010 <i>RG</i> ₁₁₃		7 29.4 169°01		7°3/ 5.1 18		513092	2017 <i>WG</i> ₂₂		7 29.4 232°35		1°3/30.2 17	
6 20	20 57.61	+ 7 44.9	2.774	3.466	13.8	21.7	6 20	21 3.14	-13 50.6	1.926	2.737	15.3	22.4
6 30	20 53.84	+ 8 17.0	2.684	3.468	12.2	21.6	6 30	20 59.07	-13 57.6	1.831	2.727	12.3	22.1
7 10	20 48.56	+ 8 32.6	2.612	3.470	10.4	21.4	7 10	20 52.67	-14 15.5	1.756	2.717	8.7	21.9
7 20	20 42.11	+ 8 30.0	2.562	3.472	8.7	21.3	7 20	20 44.35	-14 42.4	1.706	2.707	4.7	21.6
7 30	20 35.03	+ 8 8.5	2.536	3.474	7.5	21.3	7 30	20 34.91	-15 15.3	1.682	2.696	1.3	21.4
8 9	20 27.93	+ 7 29.3	2.537	3.475	7.4	21.3	8 9	20 25.36	-15 50.1	1.685	2.685	4.6	21.6
8 19	20 21.42	+ 6 35.4	2.563	3.476	8.4	21.3	8 19	20 16.73	-16 23.3	1.715	2.673	8.8	21.8
8 29	20 16.09	+ 5 30.8	2.614	3.477	10.0	21.4	8 29	20 9.95	-16 51.8	1.769	2.661	12.6	22.0
103657	2000 <i>CW</i> ₄₁		7 29.4 45°48		0°6/29.6 18		399901	2005 <i>WT</i> ₁₆₂		7 29.4 164°14		0°9/30.1 18	
6 20	21 7.78	-19 2.2	1.315	2.158	19.4	19.1	6 20	20 59.48	-14 31.2	2.689	3.489	11.7	21.7
6 30	21 3.31	-18 28.2	1.256	2.172	15.4	18.9	6 30	20 55.35	-14 35.7	2.601	3.491	9.3	21.5
7 10	20 55.72	-18 0.7	1.216	2.187	10.6	18.7	7 10	20 49.61	-14 47.2	2.535	3.494	6.5	21.3
7 20	20 45.80	-17 37.7	1.197	2.202	5.4	18.4	7 20	20 42.65	-15 4.3	2.495	3.496	3.5	21.1
7 30	20 34.81	-17 16.8	1.203	2.218	0.6	18.1	7 30	20 35.04	-15 24.8	2.484	3.498	0.9	20.9
8 9	20 24.26	-16 55.8	1.233	2.234	5.6	18.6	8 9	20 27.45	-15 46.3	2.501	3.499	3.4	21.1
8 19	20 15.48	-16 33.8	1.288	2.250	10.6	18.9	8 19	20 20.55	-16 6.7	2.546	3.501	6.4	21.3
8 29	20 9.44	-16 10.3	1.365	2.267	14.8	19.2	8 29	20 14.94	-16 24.2	2.617	3.502	9.2	21.5
252042	2000 <i>QA</i> ₂₁₇		7 29.4 356°74		8°1/26.1 17		363293	2002 <i>JU</i> ₉₅		7 29.4 1°12		4°7/30.9 17	
6 20	21 2.30	-31 25.1	1.082	1.959	20.3	19.5	6 20	20 52.53	-13 9.0	0.870	1.755	23.3	19.2
6 30	21 0.45	-32 28.3	1.023	1.956	16.4	19.3	6 30	20 52.65	-12 3.6	0.813	1.750	19.0	18.9
7 10	20 54.67	-33 31.6	0.980	1.953	12.3	19.0	7 10	20 49.23	-11 12.6	0.771	1.747	14.0	18.6
7 20	20 45.63	-34 24.3	0.957	1.951	8.9	18.9	7 20	20 42.91	-10 38.5	0.745	1.747	8.5	18.4
7 30	20 34.81	-34 55.3	0.956	1.951	8.5	18.8	7 30	20 35.01	-10 21.2	0.738	1.749	4.7	18.2
8 9	20 24.23	-34 57.7	0.975	1.951	11.4	19.0	8 9	20 27.30	-10 18.3	0.751	1.754	7.5	18.3
8 19	20 15.75	-34 31.1	1.014	1.952	15.5	19.2	8 19	20 21.40	-10 25.3	0.783	1.761	12.8	18.7
8 29	20 10.74	-33 40.0	1.072	1.955	19.5	19.5	8 29	20 18.59	-10 36.7	0.833	1.770	17.8	19.0
170524	2003 <i>WL</i> ₇₈		7 29.4 267°62		0°5/29.2 18		3344	<i>Modena</i>					

EPHEMERIDES

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7 29.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
393164	2013 CX ₂₉	7 29.4 331°06 1°8/28.4 18					426405	2013 PA ₆₄	7 29.5 246°57 1°1/29.9 17				
6 20	20 59.98	-21 21.7	1.929	2.764	14.4	20.8	6 20	21 5.69	-16 9.3	1.614	2.439	17.2	22.2
6 30	20 56.60	-21 50.1	1.846	2.759	11.4	20.6	6 30	21 1.54	-15 55.6	1.526	2.431	13.8	21.9
7 10	20 50.94	-22 24.8	1.783	2.754	7.8	20.4	7 10	20 54.61	-15 50.7	1.458	2.424	9.7	21.7
7 20	20 43.47	-23 1.8	1.745	2.750	4.0	20.2	7 20	20 45.42	-15 52.9	1.413	2.416	5.1	21.4
7 30	20 35.00	-23 36.5	1.733	2.745	1.9	20.0	7 30	20 34.93	-15 59.3	1.393	2.408	1.1	21.1
8 9	20 26.52	-24 4.7	1.747	2.741	5.2	20.2	8 9	20 24.39	-16 6.7	1.400	2.400	5.2	21.4
8 19	20 19.04	-24 23.5	1.788	2.738	9.1	20.5	8 19	20 15.05	-16 12.3	1.431	2.391	10.0	21.6
8 29	20 13.41	-24 31.7	1.852	2.734	12.5	20.7	8 29	20 8.01	-16 14.4	1.486	2.383	14.2	21.9
173651	2001 FZ ₁₈₆	7 29.4 223°54 0°8/29.1 18					323669	2005 ER ₉₂	7 29.5 221°66 5°0/ 1.6 17				
6 20	21 6.49	-20 1.4	1.653	2.483	16.6	20.2	6 20	21 1.38	-3 53.5	1.699	2.487	18.0	21.5
6 30	21 2.10	-20 5.3	1.569	2.479	13.2	19.9	6 30	20 57.95	-3 52.9	1.609	2.481	15.0	21.2
7 10	20 54.94	-20 15.8	1.506	2.475	9.1	19.7	7 10	20 52.05	-4 12.4	1.537	2.475	11.5	21.0
7 20	20 45.54	-20 29.4	1.465	2.470	4.5	19.4	7 20	20 44.13	-4 52.6	1.487	2.469	7.8	20.8
7 30	20 34.89	-20 42.0	1.450	2.465	0.9	19.1	7 30	20 35.00	-5 51.7	1.462	2.463	5.2	20.6
8 9	20 24.26	-20 49.8	1.462	2.460	5.4	19.4	8 9	20 25.74	-7 4.8	1.463	2.456	6.2	20.7
8 19	20 14.90	-20 50.5	1.499	2.454	10.0	19.7	8 19	20 17.45	-8 25.6	1.489	2.448	9.7	20.8
8 29	20 7.85	-20 43.2	1.559	2.448	14.1	19.9	8 29	20 11.14	-9 47.2	1.539	2.441	13.5	21.1
312983	1999 RA ₂₃₆	7 29.4 312°69 2°3/31.3 18					191780	2004 TA ₉₉	7 29.5 161°58 1°4/30.4 17				
6 20	20 55.71	-7 54.9	1.941	2.746	15.4	20.5	6 20	21 2.07	-12 39.8	2.098	2.902	14.5	21.4
6 30	20 53.36	-8 33.5	1.830	2.720	12.7	20.2	6 30	20 57.89	-12 53.4	2.015	2.907	11.6	21.2
7 10	20 48.87	-9 31.3	1.738	2.693	9.3	20.0	7 10	20 51.63	-13 18.0	1.952	2.910	8.2	21.0
7 20	20 42.56	-10 47.1	1.671	2.667	5.5	19.7	7 20	20 43.77	-13 51.6	1.914	2.914	4.4	20.8
7 30	20 35.06	-12 17.4	1.629	2.641	2.4	19.4	7 30	20 35.03	-14 31.2	1.903	2.917	1.4	20.6
8 9	20 27.26	-13 56.2	1.615	2.615	4.6	19.5	8 9	20 26.31	-15 12.8	1.920	2.920	4.1	20.8
8 19	20 20.13	-15 36.6	1.627	2.590	8.7	19.7	8 19	20 18.50	-15 52.8	1.965	2.922	7.9	21.1
8 29	20 14.62	-17 11.8	1.664	2.565	12.7	19.9	8 29	20 12.35	-16 28.3	2.034	2.924	11.2	21.3
24775	1993 FT ₄₂	7 29.4 197°68 1°4/28.7 18					80318	1999 XH ₈₀	7 29.5 161°12 0°6/29.8 18				
6 20	21 5.54	-20 11.3	1.967	2.788	14.7	19.4	6 20	21 4.69	-15 19.1	1.827	2.643	15.9	20.6
6 30	21 0.93	-20 40.1	1.880	2.785	11.6	19.2	6 30	21 0.29	-15 32.4	1.747	2.647	12.6	20.4
7 10	20 53.91	-21 16.1	1.815	2.782	8.0	19.0	7 10	20 53.46	-15 56.1	1.688	2.652	8.8	20.2
7 20	20 44.97	-21 55.2	1.774	2.778	4.0	18.7	7 20	20 44.74	-16 27.5	1.652	2.655	4.5	19.9
7 30	20 34.93	-22 32.7	1.760	2.774	1.5	18.5	7 30	20 34.98	-17 2.7	1.643	2.658	0.6	19.6
8 9	20 24.87	-23 4.0	1.774	2.768	5.1	18.8	8 9	20 25.27	-17 37.3	1.662	2.661	4.7	19.9
8 19	20 15.84	-23 26.4	1.815	2.763	9.1	19.0	8 19	20 16.66	-18 7.8	1.707	2.663	8.9	20.2
8 29	20 8.77	-23 38.4	1.880	2.756	12.6	19.2	8 29	20 10.06	-18 31.8	1.776	2.665	12.6	20.4
340561	2006 KR ₇₈	7 29.4 250°18 5°9/ 2.2 16					456153	2006 FZ ₁₅	7 29.5 197°80 5°1/27.1 17				
6 20	20 59.41	-2 4.6	1.964	2.736	16.4	21.4	6 20	21 9.62	-28 24.2	1.541	2.381	17.2	21.5
6 30	20 55.95	-1 37.6	1.876	2.733	13.9	21.2	6 30	21 5.00	-29 7.4	1.466	2.380	13.7	21.3
7 10	20 50.40	-1 27.3	1.807	2.731	10.9	21.1	7 10	20 57.17	-29 52.6	1.411	2.378	9.8	21.1
7 20	20 43.19	-1 35.1	1.760	2.729	8.0	20.9	7 20	20 46.74	-30 32.2	1.379	2.376	6.2	20.9
7 30	20 35.04	-2 0.7	1.738	2.727	6.1	20.8	7 30	20 34.86	-30 58.8	1.372	2.373	5.3	20.8
8 9	20 26.84	-2 41.7	1.742	2.724	6.6	20.8	8 9	20 23.09	-31 7.0	1.391	2.371	8.2	21.0
8 19	20 19.50	-3 33.8	1.771	2.722	9.1	20.9	8 19	20 12.90	-30 55.6	1.433	2.367	12.1	21.2
8 29	20 13.83	-4 31.9	1.824	2.719	12.1	21.1	8 29	20 5.48	-30 26.7	1.497	2.363	15.9	21.4
470755	2008 UF ₁₅₂	7 29.4 130°80 8°5/24.0 17					375804	2009 TW ₁₅	7 29.5 299°45 7°5/24.8 18				
6 20	21 7.72	-38 16.4	1.864	2.694	15.0	21.0	6 20	21 3.90	-31 49.0	1.562	2.413	16.5	20.0
6 30	21 3.26	-39 37.3	1.800	2.697	12.5	20.9	6 30	21 0.74	-33 17.5	1.489	2.406	13.4	19.7
7 10	20 55.81	-40 53.0	1.758	2.699	10.1	20.7	7 10	20 54.42	-34 47.9	1.437	2.399	10.2	19.5
7 20	20 45.99	-41 54.7	1.739	2.702	8.6	20.7	7 20	20 45.47	-36 10.8	1.407	2.392	7.8	19.4
7 30	20 34.88	-42 34.6	1.745	2.704	8.8	20.7	7 30	20 34.96	-37 16.1	1.402	2.386	7.9	19.4
8 9	20 23.91	-42 48.4	1.776	2.706	10.5	20.8	8 9	20 24.38	-37 56.8	1.421	2.379	10.3	19.5
8 19	20 14.43	-42 35.9	1.829	2.708	12.9	20.9	8 19	20 15.23	-38 10.3	1.463	2.373	13.6	19.7
8 29	20 7.52	-42 0.5	1.903	2.710	15.3	21.1	8 29	20 8.78	-37 58.4	1.524	2.367	16.8	19.9
479760	2014 EF ₂₅	7 29.4 193°72 0°3/29.3 18					351026	2003 SF ₅₃	7 29.5 298°72 0°5/29.7 17				
6 20	21 0.56	-17 2.8	2.010	2.832	14.4	21.8	6 20	21 3.56	-17 14.6	1.800	2.624	15.7	21.6
6 30	20 56.88	-17 30.3	1.926	2.832	11.4	21.6	6 30	20 59.96	-17 6.5	1.682	2.588	12.7	21.3
7 10	20 51.05	-18 7.0	1.864	2.831	7.8	21.4	7 10	20 53.70	-17 5.9	1.585	2.551	9.0	21.0
7 20	20 43.51	-18 49.6	1.826	2.831	3.9	21.1	7 20	20 45.12	-17 11.1	1.511	2.515	4.7	20.7
7 30	20 35.03	-19 34.1	1.815	2.830	0.4	20.8	7 30	20 34.97	-17 19.2	1.463	2.478	0.6	20.3
8 9	20 26.55	-20 16.0	1.832	2.830	4.5	21.2	8 9	20 24.38	-17 27.0	1.441	2.441	5.2	20.6
8 19	20 19.00	-20 51.8	1.875	2.829	8.4	21.4	8 19	20 14.59	-17 31.6	1.445	2.404	10.0	20.8
8 29	20 13.20	-21 19.2	1.942	2.829	11.8	21.6	8 29	20 6.79	-17 31.2	1.472	2.366	14.5	20.9
243706	2000 CM ₉₈	7 29.4 13°89 1°1/30.2 18					121733	1999 XR ₁₇₂	7 29.5 182°93 0°9/30.0 18				
6 20	20 59.35	-13 20.3	1.849	2.669	15.5	21.0	6 20	21 2.35	-16 1.6	2.811	3.607	11.4	20.0
6 30	20 56.08	-13 39.9	1.767	2.669	12.4	20.8	6 30	20 57.51	-15 47.5	2.718	3.607	9.1	19.9
7 10	20 50.57	-14 11.8	1.706	2.670	8.7	20.6	7 10	20 51.06	-15 38.3	2.649	3.607	6.3	19.7
7 20	20 43.30	-14 53.8	1.669	2.671	4.6	20.3	7 20	20 43.40	-15 32.8	2.606	3.606	3.3	19.5
7 30	20 35.05	-15 41.9	1.658	2.672	1.1	20.1	7 30	20 35.10	-15 29.6	2.592	3.606	0.9	19.3
8 9	20 26.81	-16 31.4	1.673	2.673	4.5	20.3	8 9	20 26.84	-15 27.2	2.607	3.605	3.3	19.5
8 19	20 19.54	-17 18.0	1.714	2.674	8.6	20.6	8 19	20 19.28	-15 24.3	2.651	3.604	6.3	19.7
8 29	20 14.09	-17 58.2	1.780	2.676	12.2	20.8	8 29	20 13.00	-15 19.8	2.721	3.602	9.0	19.9
261233	2005 UZ ₃₉	7 29.5 107°26 5°0/ 2.2 18					332663	2008 WA ₅₅	7 29.5 136°03 3°8/31.0 18				
6 20	20 58.83	-2 11.2	2.463	3.220	13.8	21.0	6 20	21 12.48	-10 2.5	1.314	2.125	21.1	21.7
6 30	20 54.93	-1 45.8	2.381	3.228	11.6	20.8	6 30	21 7.13	-9 41.7	1.248	2.141	17.2	21.4
7 10													

EPHEMERIDES

7 29.5

7 29.5

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
397774	2008 <i>HP</i> ₅		7 29.5 17 ^o 18	4.8/	1.6 18		416707	2005 <i>AL</i> ₆₉		7 29.5 233 ^o 26	0.7/29.1 17		
6 20	20 56.63	- 5 5.7	1.839	2.636	16.5	20.4	6 20	21 7.35	-18 20.0	2.048	2.858	14.6	23.2
6 30	20 53.85	- 4 47.4	1.763	2.641	13.7	20.2	6 30	21 2.47	-18 45.7	1.943	2.841	11.6	22.9
7 10	20 48.98	- 4 45.4	1.706	2.646	10.4	20.0	7 10	20 55.12	-19 20.0	1.859	2.823	8.1	22.7
7 20	20 42.50	- 5 0.1	1.671	2.652	7.2	19.9	7 20	20 45.72	-19 59.6	1.800	2.804	4.0	22.4
7 30	20 35.16	- 5 30.1	1.660	2.659	4.9	19.7	7 30	20 35.02	-20 40.1	1.769	2.783	0.8	22.1
8 9	20 27.87	- 6 12.2	1.675	2.666	5.8	19.8	8 9	20 24.07	-21 16.7	1.766	2.762	4.9	22.4
8 19	20 21.52	- 7 1.9	1.715	2.674	8.6	20.0	8 19	20 13.99	-21 46.0	1.791	2.740	9.1	22.6
8 29	20 16.88	- 7 54.2	1.779	2.683	11.8	20.2	8 29	20 5.78	-22 5.9	1.840	2.716	12.9	22.8
38382	1999 <i>RZ</i> ₁₇₅		7 29.5 302 ^o 36	5 ^o 3/	2.2 18		343960	2011 <i>KN</i> ₃₇		7 29.5 347 ^o 27	10 ^o 0/	3.2 16	
6 20	20 56.42	- 2 8.3	2.141	2.913	15.2	19.0	6 20	20 55.49	+ 0 53.0	1.383	2.179	21.0	20.5
6 30	20 53.56	- 1 58.5	2.039	2.897	12.9	18.8	6 30	20 53.80	+ 2 10.2	1.304	2.170	18.2	20.3
7 10	20 48.78	- 2 5.4	1.955	2.881	10.1	18.6	7 10	20 49.48	+ 3 6.2	1.241	2.161	15.2	20.1
7 20	20 42.45	- 2 29.9	1.894	2.866	7.3	18.4	7 20	20 42.98	+ 3 36.1	1.197	2.154	12.2	19.9
7 30	20 35.17	- 3 11.4	1.859	2.850	5.4	18.3	7 30	20 35.18	+ 3 36.6	1.173	2.148	10.3	19.8
8 9	20 27.74	- 4 7.1	1.849	2.835	5.9	18.3	8 9	20 27.28	+ 3 8.7	1.171	2.143	10.4	19.8
8 19	20 20.99	- 5 12.7	1.866	2.820	8.4	18.4	8 19	20 20.50	+ 2 16.9	1.190	2.139	12.7	19.9
8 29	20 15.71	- 6 23.0	1.907	2.805	11.5	18.5	8 29	20 15.91	+ 1 8.9	1.230	2.137	15.8	20.1
5224	Abbe		7 29.5 219 ^o 67	5 ^o 3/	27.3 18		483234	2015 <i>RJ</i> ₈₇		7 29.5 243 ^o 73	4 ^o 6/	1.6 17	
6 20	21 8.66	-28 37.2	1.414	2.262	18.0	17.9	6 20	21 0.02	- 3 8.3	2.907	3.655	12.1	21.9
6 30	21 4.48	-29 14.7	1.344	2.262	14.4	17.6	6 30	20 55.75	- 2 33.3	2.798	3.641	10.2	21.7
7 10	20 56.93	-29 53.5	1.292	2.261	10.3	17.4	7 10	20 49.94	- 2 8.3	2.711	3.626	8.1	21.5
7 20	20 46.66	-30 26.2	1.263	2.261	6.5	17.2	7 20	20 42.92	- 1 54.5	2.648	3.611	6.0	21.4
7 30	20 34.93	-30 44.8	1.258	2.260	5.5	17.1	7 30	20 35.19	- 1 51.8	2.612	3.596	4.6	21.3
8 9	20 23.37	-30 44.5	1.277	2.259	8.5	17.3	8 9	20 27.37	- 1 59.6	2.604	3.581	5.1	21.3
8 19	20 13.53	-30 24.5	1.320	2.259	12.6	17.5	8 19	20 20.06	- 2 16.0	2.624	3.565	7.0	21.4
8 29	20 6.62	-29 47.3	1.384	2.258	16.5	17.8	8 29	20 13.88	- 2 38.7	2.671	3.548	9.3	21.5
311514	2005 <i>WB</i> ₁₅₆		7 29.5 147 ^o 19	2 ^o 9/	26.7 18		77059	2001 <i>DS</i> ₁₄		7 29.5 105 ^o 09	3 ^o 2/	31.4 18	
6 20	21 0.43	-25 7.9	2.756	3.576	11.0	20.9	6 20	21 2.40	- 8 30.6	1.586	2.396	18.1	19.5
6 30	20 56.26	-26 12.5	2.678	3.583	8.6	20.7	6 30	20 58.76	- 8 39.7	1.514	2.405	14.7	19.3
7 10	20 50.35	-27 20.3	2.625	3.589	6.0	20.5	7 10	20 52.57	- 9 6.5	1.461	2.415	10.7	19.1
7 20	20 43.12	-28 27.1	2.598	3.596	3.6	20.4	7 20	20 44.39	- 9 49.6	1.429	2.424	6.4	18.9
7 30	20 35.14	-29 28.2	2.600	3.602	3.1	20.4	7 30	20 35.12	-10 45.2	1.423	2.433	3.2	18.7
8 9	20 27.16	-30 19.7	2.631	3.608	5.1	20.5	8 9	20 25.94	-11 47.8	1.443	2.442	5.3	18.9
8 19	20 19.89	-30 59.4	2.690	3.613	7.6	20.7	8 19	20 17.96	-12 51.4	1.488	2.450	9.4	19.1
8 29	20 13.97	-31 26.3	2.774	3.618	10.0	20.9	8 29	20 12.12	-13 50.8	1.557	2.459	13.3	19.4
10733	Georgesand		7 29.5 249 ^o 46	0 ^o 2/	29.6 18		521747	2015 <i>RO</i> ₂₇₃		7 29.5 237 ^o 06	6 ^o 3/	24.9 18	
6 20	20 59.88	-15 53.6	2.211	3.025	13.5	18.4	6 20	21 6.94	-39 12.6	2.678	3.488	11.5	21.7
6 30	20 56.20	-16 14.4	2.118	3.019	10.7	18.2	6 30	21 1.70	-39 56.5	2.597	3.480	9.6	21.5
7 10	20 50.53	-16 44.0	2.047	3.012	7.4	18.0	7 10	20 54.26	-40 34.8	2.538	3.472	7.7	21.4
7 20	20 43.29	-17 20.2	2.001	3.005	3.8	17.7	7 20	20 45.13	-41 2.3	2.504	3.464	6.5	21.3
7 30	20 35.14	-17 59.5	1.983	2.998	0.3	17.4	7 30	20 35.10	-41 14.4	2.497	3.455	6.5	21.3
8 9	20 26.94	-18 38.1	1.992	2.991	4.1	17.7	8 9	20 25.16	-41 8.4	2.516	3.447	7.8	21.3
8 19	20 19.53	-19 12.7	2.028	2.983	7.8	18.0	8 19	20 16.23	-40 44.3	2.561	3.438	9.8	21.5
8 29	20 13.69	-19 40.9	2.089	2.976	11.1	18.2	8 29	20 9.12	-40 3.9	2.629	3.429	11.8	21.6
321731	2010 <i>LQ</i> ₅₀		7 29.5 15 ^o 11	0 ^o 8/	30.0 18		154232	2002 <i>JC</i> ₁₀₄		7 29.5 121 ^o 52	5 ^o 3/	2.5 18 R	
6 20	20 58.22	-14 5.6	1.932	2.754	14.9	20.8	6 20	20 58.38	- 0 59.5	2.527	3.276	13.7	20.0
6 30	20 55.10	-14 26.5	1.852	2.756	11.9	20.6	6 30	20 54.61	- 0 31.5	2.440	3.281	11.6	19.8
7 10	20 49.86	-14 58.6	1.793	2.758	8.3	20.3	7 10	20 49.21	- 0 17.1	2.373	3.285	9.2	19.7
7 20	20 42.97	-15 39.6	1.757	2.760	4.3	20.1	7 20	20 42.57	- 0 17.4	2.330	3.289	7.0	19.5
7 30	20 35.17	-16 25.7	1.748	2.763	0.8	19.9	7 30	20 35.26	- 0 32.1	2.313	3.294	5.5	19.5
8 9	20 27.39	-17 12.4	1.766	2.766	4.3	20.1	8 9	20 27.96	- 0 59.4	2.323	3.298	5.8	19.5
8 19	20 20.54	-17 55.6	1.809	2.769	8.2	20.4	8 19	20 21.33	- 1 36.6	2.359	3.302	7.6	19.6
8 29	20 15.42	-18 32.4	1.877	2.773	11.7	20.6	8 29	20 15.99	- 2 20.1	2.421	3.306	9.9	19.8
80077	1999 <i>JL</i> ₁₁₅		7 29.5 23 ^o 85	0 ^o 6/	29.1 18		366221	2012 <i>TH</i> ₂₃₂		7 29.5 353 ^o 86	0 ^o 1/	29.5 18 R	
6 20	20 59.15	-18 26.6	1.643	2.484	16.2	19.1	6 20	21 0.02	-15 54.8	1.708	2.539	16.1	20.3
6 30	20 56.16	-18 45.7	1.576	2.492	12.8	18.9	6 30	20 56.90	-16 24.8	1.628	2.538	12.8	20.0
7 10	20 50.73	-19 13.5	1.529	2.501	8.7	18.7	7 10	20 51.33	-17 6.8	1.568	2.537	8.9	19.8
7 20	20 43.42	-19 46.5	1.505	2.511	4.3	18.5	7 20	20 43.81	-17 57.3	1.532	2.537	4.4	19.5
7 30	20 35.15	-20 20.1	1.506	2.521	0.8	18.2	7 30	20 35.19	-18 51.3	1.521	2.536	0.3	19.2
8 9	20 27.03	-20 49.6	1.533	2.532	5.0	18.6	8 9	20 26.55	-19 43.3	1.537	2.536	4.9	19.6
8 19	20 20.11	-21 12.0	1.585	2.544	9.3	18.8	8 19	20 18.99	-20 28.5	1.578	2.536	9.3	19.8
8 29	20 15.25	-21 25.3	1.660	2.556	13.0	19.1	8 29	20 13.44	-21 4.1	1.642	2.536	13.2	20.1
45150	1999 <i>XP</i> ₁₁₀		7 29.5 118 ^o 22	5 ^o 1/	1.5 18		419574	2010 <i>RE</i> ₅₃		7 29.5 320 ^o 82	5 ^o 9/	1.2 18	
6 20	21 2.59	- 4 29.0	2.079	2.851	15.6	18.7	6 20	20 57.24	- 6 20.9	1.240	2.072	21.0	20.5
6 30	20 58.20	- 3 54.8	2.001	2.861	13.0	18.6	6 30	20 55.65	- 5 50.1	1.156	2.057	17.6	20.2
7 10	20 51.80	- 3 34.5	1.942	2.872	10.0	18.4	7 10	20 51.07	- 5 39.8	1.088	2.042	13.5	19.9
7 20	20 43.86	- 3 28.9	1.907	2.881	7.1	18.2	7 20	20 43.93	- 5 52.4	1.039	2.028	9.1	19.6
7 30	20 35.13	- 3 37.7	1.898	2.891	5.2	18.1	7 30	20 35.17	- 6 27.4	1.011	2.015	6.0	19.4
8 9	20 26.47	- 3 58.7	1.916	2.901	5.9	18.2	8 9	20 26.18	- 7 20.7	1.006	2.003	7.5	19.5
8 19	20 18.73	- 4 28.8	1.960	2.910	8.4	18.4	8 19	20 18.40	- 8 25.6	1.023	1.991	11.8	19.7
8 29	20 12.65	- 5 4.0	2.029	2.918	11.3	18.6	8 29	20 13.16	- 9 3				

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
316242	2010 <i>OA</i> ₃₁		7 29.5 323°39	0°8/29.1	18		86022	1999 <i>KJ</i> ₁₄		7 29.5 341°02	6°0/1.6	18	
6 20	21 2.08	-21 15.2	1.852	2.686	15.0	20.1	6 20	20 55.26	-5 10.8	1.587	2.397	18.1	18.1
6 30	20 58.45	-21 5.2	1.758	2.670	11.9	19.9	6 30	20 53.34	-4 29.4	1.498	2.383	15.2	17.9
7 10	20 52.38	-20 59.0	1.684	2.654	8.3	19.6	7 10	20 49.03	-4 4.3	1.426	2.369	11.9	17.7
7 20	20 44.34	-20 54.0	1.634	2.639	4.1	19.3	7 20	20 42.75	-3 57.6	1.376	2.357	8.4	17.4
7 30	20 35.17	-20 47.4	1.610	2.625	0.9	19.1	7 30	20 35.30	-4 9.8	1.349	2.346	6.2	17.3
8 9	20 25.95	-20 36.4	1.612	2.611	4.9	19.3	8 9	20 27.72	-4 38.6	1.345	2.335	7.0	17.3
8 19	20 17.75	-20 19.9	1.640	2.597	9.2	19.6	8 19	20 21.11	-5 19.8	1.365	2.326	10.2	17.5
8 29	20 11.54	-19 57.4	1.692	2.584	13.0	19.8	8 29	20 16.44	-6 8.0	1.407	2.318	13.9	17.7
235865	2005 <i>AM</i> ₅₈		7 29.5 164°00	2°4/27.6	18		366664	2003 <i>SP</i> ₄₃₀		7 29.5 301°05	1°8/30.2	18	
6 20	21 1.59	-20 36.1	2.043	2.870	14.0	20.4	6 20	21 3.54	-15 21.9	1.379	2.217	18.9	21.2
6 30	20 57.81	-21 46.2	1.963	2.872	11.0	20.2	6 30	21 0.43	-14 57.2	1.291	2.203	15.3	20.9
7 10	20 51.80	-23 5.0	1.905	2.874	7.5	20.0	7 10	20 54.26	-14 42.4	1.222	2.190	10.9	20.6
7 20	20 44.01	-24 27.2	1.873	2.876	3.9	19.8	7 20	20 45.49	-14 36.7	1.173	2.176	5.9	20.3
7 30	20 35.19	-25 46.4	1.868	2.878	2.6	19.7	7 30	20 35.15	-14 37.6	1.149	2.163	1.8	20.0
8 9	20 26.33	-26 56.6	1.891	2.879	5.6	19.9	8 9	20 24.66	-14 41.9	1.148	2.149	5.8	20.2
8 19	20 18.39	-27 53.4	1.941	2.880	9.1	20.1	8 19	20 15.46	-14 46.6	1.172	2.137	11.1	20.5
8 29	20 12.24	-28 35.0	2.015	2.881	12.4	20.4	8 29	20 8.82	-14 49.2	1.217	2.124	15.8	20.7
280917	2005 <i>YM</i> ₁₇₄		7 29.5 178°91	4°2/26.8	17		161152	2002 <i>SR</i> ₂₈		7 29.5 221°86	5°0/30.2	18	
6 20	21 5.35	-27 19.2	2.002	2.833	14.1	21.2	6 20	21 18.91	-14 31.5	1.264	2.079	21.6	19.1
6 30	21 0.88	-28 13.2	1.925	2.834	11.2	21.0	6 30	21 12.84	-12 53.7	1.178	2.073	17.7	18.9
7 10	20 53.96	-29 9.7	1.869	2.834	8.0	20.8	7 10	21 2.96	-11 19.0	1.111	2.067	13.1	18.6
7 20	20 45.09	-30 3.0	1.838	2.835	5.0	20.6	7 20	20 49.88	-9 49.3	1.065	2.060	8.1	18.3
7 30	20 35.14	-30 46.9	1.835	2.835	4.4	20.6	7 30	20 34.92	-8 27.8	1.045	2.052	5.0	18.1
8 9	20 25.22	-31 16.8	1.858	2.834	6.8	20.7	8 9	20 19.94	-7 17.3	1.051	2.044	8.0	18.2
8 19	20 16.42	-31 30.6	1.907	2.834	10.0	20.9	8 19	20 6.78	-6 19.9	1.082	2.035	13.1	18.5
8 29	20 9.64	-31 28.5	1.979	2.832	13.1	21.1	8 29	19 56.89	-5 35.3	1.134	2.026	18.0	18.7
471620	2012 <i>TK</i> ₁₆		7 29.5 20°00	10°6/5.7	17		151619	2002 <i>VB</i> ₁₀₅		7 29.5 274°88	2°4/28.3	18	
6 20	20 53.17	+4 22.9	1.162	1.963	23.9	19.8	6 20	21 5.24	-22 30.7	1.706	2.540	16.0	21.0
6 30	20 52.15	+5 10.2	1.109	1.975	20.8	19.6	6 30	21 1.45	-22 57.0	1.605	2.518	12.8	20.7
7 10	20 48.35	+5 25.0	1.071	1.988	17.2	19.5	7 10	20 54.82	-23 30.0	1.525	2.495	8.9	20.4
7 20	20 42.38	+5 3.5	1.049	2.004	13.7	19.3	7 20	20 45.76	-24 5.3	1.467	2.472	4.7	20.1
7 30	20 35.29	+4 5.8	1.046	2.021	11.1	19.2	7 30	20 35.15	-24 37.1	1.436	2.448	2.5	19.9
8 9	20 28.40	+2 37.8	1.064	2.040	10.7	19.3	8 9	20 24.25	-25 0.0	1.431	2.424	6.3	20.1
8 19	20 22.91	+0 49.3	1.103	2.060	12.6	19.4	8 19	20 14.40	-25 10.6	1.451	2.399	10.8	20.3
8 29	20 19.78	-1 7.6	1.163	2.081	15.6	19.7	8 29	20 6.81	-25 8.0	1.493	2.375	15.0	20.5
443021	2013 <i>EE</i> ₁₃		7 29.5 45°45	3°7/27.4	18		380209	2001 <i>FZ</i> ₄₃		7 29.5 109°21	4°7/27.0	17	
6 20	21 3.71	-28 20.8	2.149	2.978	13.3	21.6	6 20	21 10.23	-31 36.3	2.149	2.968	13.7	21.3
6 30	20 59.31	-28 47.4	2.073	2.981	10.5	21.4	6 30	21 4.29	-32 8.0	2.087	2.987	10.9	21.2
7 10	20 52.68	-29 14.1	2.020	2.985	7.5	21.2	7 10	20 55.99	-32 37.1	2.048	3.005	7.9	21.0
7 20	20 44.37	-29 36.4	1.991	2.988	4.6	21.1	7 20	20 45.97	-32 58.1	2.033	3.022	5.4	20.9
7 30	20 35.19	-29 49.9	1.989	2.991	3.8	21.0	7 30	20 35.16	-33 6.6	2.046	3.040	4.8	20.9
8 9	20 26.15	-29 51.6	2.014	2.995	6.0	21.2	8 9	20 24.68	-33 0.0	2.087	3.056	6.7	21.0
8 19	20 18.17	-29 40.8	2.066	2.998	9.1	21.4	8 19	20 15.51	-32 38.6	2.154	3.073	9.5	21.2
8 29	20 12.06	-29 18.1	2.141	3.002	12.0	21.6	8 29	20 8.44	-32 4.2	2.245	3.089	12.1	21.4
491746	2012 <i>VX</i> ₅₈		7 29.5 301°30	2°5/28.1	18		199976	2007 <i>JR</i>		7 29.5 327°31	7°9/3.9	18	
6 20	21 0.98	-21 44.5	1.673	2.515	15.9	22.1	6 20	20 56.27	+2 24.3	1.617	2.390	19.3	19.7
6 30	20 58.15	-22 21.0	1.570	2.488	12.7	21.8	6 30	20 54.08	+2 42.3	1.530	2.382	16.7	19.5
7 10	20 52.58	-23 6.4	1.488	2.461	8.9	21.5	7 10	20 49.52	+2 35.5	1.458	2.374	13.7	19.3
7 20	20 44.65	-23 56.1	1.429	2.433	4.7	21.2	7 20	20 43.00	+2 1.4	1.406	2.366	10.5	19.1
7 30	20 35.17	-24 44.0	1.395	2.406	2.6	21.0	7 30	20 35.30	+0 59.7	1.377	2.358	8.3	18.9
8 9	20 25.34	-25 23.9	1.386	2.379	6.4	21.2	8 9	20 27.47	+0 25.7	1.372	2.352	8.3	18.9
8 19	20 16.48	-25 51.3	1.402	2.353	11.0	21.4	8 19	20 20.58	-2 7.5	1.390	2.345	10.7	19.0
8 29	20 9.81	-26 4.2	1.440	2.326	15.2	21.6	8 29	20 15.62	-3 57.0	1.432	2.339	13.9	19.2
27597	<i>Varuniyer</i>		7 29.5 31°97	3°0/30.6	18 R		5764	1985 <i>CS</i> ₁		7 29.5 35°62	3°8/31.4	18	
6 20	21 2.80	-13 10.4	1.209	2.053	20.7	17.9	6 20	20 58.98	-8 47.5	1.019	1.871	23.1	15.9
6 30	20 59.77	-12 38.4	1.148	2.062	16.7	17.7	6 30	20 57.08	-8 48.9	0.972	1.888	18.7	15.7
7 10	20 53.61	-12 20.2	1.105	2.071	11.9	17.4	7 10	20 51.90	-9 14.4	0.940	1.907	13.6	15.5
7 20	20 45.01	-12 15.2	1.081	2.082	6.8	17.2	7 20	20 44.19	-10 1.9	0.928	1.926	8.0	15.2
7 30	20 35.16	-12 21.1	1.080	2.092	3.0	17.0	7 30	20 35.25	-11 5.7	0.936	1.947	3.9	15.1
8 9	20 25.58	-12 34.0	1.103	2.104	6.1	17.2	8 9	20 26.69	-12 17.3	0.967	1.969	6.4	15.3
8 19	20 17.63	-12 49.9	1.149	2.116	11.0	17.5	8 19	20 19.92	-13 27.9	1.019	1.991	11.4	15.6
8 29	20 12.39	-13 5.1	1.215	2.129	15.4	17.8	8 29	20 15.99	-14 30.5	1.092	2.014	16.0	16.0
209995	2006 <i>JG</i> ₂		7 29.5 16°30	2°6/28.5	17		73921	1997 <i>LT</i> ₄		7 29.5 276°40	0°9/28.9	18	
6 20	20 56.92	-21 37.6	0.884	1.775	22.5	19.6	6 20	21 0.29	-17 45.5	1.898	2.726	14.9	19.6
6 30	20 56.22	-21 57.4	0.837	1.782	17.7	19.3	6 30	20 56.97	-18 24.0	1.810	2.719	11.8	19.4
7 10	20 51.73	-22 27.1	0.806	1.791	12.1	19.0	7 10	20 51.35	-19 12.9	1.742	2.711	8.1	19.1
7 20	20 44.22	-23 0.2	0.793	1.801	6.1	18.8	7 20	20 43.86	-20 8.2	1.699	2.704	4.0	18.9
7 30	20 35.22	-23 28.5	0.800	1.814	2.8	18.6	7 30	20 35.26	-21 5.0	1.682	2.697	1.0	18.6
8 9	20 26.65	-23 45.3	0.828	1.828	7.7	19.0	8 9	20 26.59	-21 57.9	1.692	2.689	4.9	18.9
8 19	20 20.17	-23 47.4	0.875	1.843	13.3	19.3	8 19	20 18.84	-22 42.6	1.729	2.682	9.0	19.1
8 29	20 16.96	-23 34.7	0.940	1.861	18.1	19.7	8 29	20 12.94	-23 16.4	1.789	2.675	12.7	19.4
514265	2015 <i>RK</i> ₂₆		7 29.5 286°57	1°5/30.4	18		515075	2010 <i>PZ</i> ₆₇		7 29.5 332°60	2°9/2		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
488411	2016 <i>WS</i> ₅₅	7 29.5 310°09		0°1/29.6 18			18312	1981 <i>EC</i> ₁₉	7 29.5 292°60		3°4/28.1 18		
6 20	21 1.81	-18 15.1	2.061	2.882	14.1	21.2	6 20	21 5.40	-24 33.9	1.398	2.249	18.0	18.6
6 30	20 57.88	-18 8.9	1.970	2.874	11.2	21.0	6 30	21 2.10	-24 57.7	1.314	2.235	14.4	18.4
7 10	20 51.79	-18 8.5	1.901	2.867	7.8	20.7	7 10	20 55.52	-25 26.8	1.248	2.222	10.1	18.1
7 20	20 44.00	-18 11.9	1.856	2.859	3.9	20.5	7 20	20 46.18	-25 55.5	1.205	2.208	5.6	17.8
7 30	20 35.27	-18 16.6	1.837	2.852	0.2	20.2	7 30	20 35.18	-26 16.7	1.185	2.195	3.6	17.6
8 9	20 26.53	-18 20.1	1.846	2.845	4.3	20.5	8 9	20 24.07	-26 24.8	1.190	2.182	7.4	17.8
8 19	20 18.72	-18 20.3	1.882	2.839	8.2	20.7	8 19	20 14.42	-26 17.5	1.218	2.169	12.2	18.0
8 29	20 12.64	-18 16.2	1.942	2.832	11.7	20.9	8 29	20 7.54	-25 55.2	1.267	2.156	16.6	18.3
419661	2010 <i>TM</i> ₁₀₂	7 29.5 325°21		7°0/26.2 18			437471	2013 <i>YL</i> ₄₂	7 29.5 210°47		0°0/29.5 18		
6 20	21 1.31	-28 50.9	1.190	2.061	19.2	20.0	6 20	21 1.88	-14 43.4	2.340	3.144	13.2	21.7
6 30	20 59.55	-29 56.6	1.116	2.048	15.5	19.7	6 30	20 57.75	-15 29.4	2.243	3.137	10.5	21.5
7 10	20 54.15	-31 7.4	1.060	2.034	11.4	19.5	7 10	20 51.64	-16 26.5	2.168	3.130	7.3	21.3
7 20	20 45.62	-32 13.5	1.025	2.022	7.8	19.2	7 20	20 43.95	-17 31.5	2.119	3.122	3.6	21.0
7 30	20 35.17	-33 4.0	1.011	2.010	7.3	19.2	7 30	20 35.31	-18 40.1	2.099	3.114	0.2	20.7
8 9	20 24.61	-33 30.3	1.020	1.999	10.5	19.3	8 9	20 26.54	-19 47.4	2.107	3.105	4.0	21.0
8 19	20 15.77	-33 29.2	1.049	1.989	14.9	19.5	8 19	20 18.49	-20 49.2	2.144	3.095	7.7	21.3
8 29	20 10.13	-33 2.5	1.097	1.980	19.2	19.8	8 29	20 11.93	-21 42.3	2.206	3.085	11.0	21.4
328945	2010 <i>VR</i> ₆₂	7 29.5 291°31		4°4/27.3 18			16501	1990 <i>SX</i> ₁₃	7 29.5 24°87		0°2/29.4 18		
6 20	21 3.75	-25 21.5	1.450	2.302	17.5	21.0	6 20	21 0.12	-16 31.6	1.092	1.956	21.1	17.8
6 30	21 0.77	-26 8.8	1.364	2.286	13.9	20.8	6 30	20 58.12	-16 52.4	1.034	1.962	16.7	17.5
7 10	20 54.60	-27 2.8	1.297	2.270	9.9	20.5	7 10	20 52.78	-17 28.4	0.993	1.970	11.6	17.3
7 20	20 45.73	-27 56.7	1.253	2.254	5.8	20.2	7 20	20 44.74	-18 15.1	0.971	1.977	5.8	17.0
7 30	20 35.17	-28 42.3	1.232	2.238	4.6	20.1	7 30	20 35.27	-19 5.7	0.971	1.986	0.4	16.6
8 9	20 24.41	-29 12.6	1.236	2.223	8.1	20.3	8 9	20 26.01	-19 52.3	0.994	1.996	6.4	17.1
8 19	20 15.00	-29 23.9	1.263	2.207	12.5	20.5	8 19	20 18.50	-20 29.4	1.039	2.006	11.9	17.4
8 29	20 8.26	-29 16.2	1.311	2.192	16.8	20.7	8 29	20 13.89	-20 53.8	1.104	2.017	16.6	17.7
511209	2014 <i>AH</i> ₁₄	7 29.5 262°96		9°0/23.8 18			521363	2015 <i>MJ</i> ₁₃₉	7 29.5 315°45		1°6/30.6 18		
6 20	21 8.88	-39 21.4	1.841	2.670	15.3	21.5	6 20	20 58.20	-11 41.6	1.973	2.786	14.9	21.8
6 30	21 4.51	-40 40.1	1.766	2.660	12.8	21.3	6 30	20 55.15	-11 59.8	1.884	2.780	12.0	21.6
7 10	20 56.97	-41 53.7	1.712	2.649	10.6	21.2	7 10	20 49.99	-12 31.0	1.814	2.774	8.6	21.4
7 20	20 46.80	-42 53.0	1.680	2.639	9.2	21.0	7 20	20 43.16	-13 13.4	1.769	2.768	4.8	21.2
7 30	20 35.12	-43 29.6	1.673	2.629	9.4	21.0	7 30	20 35.35	-14 3.8	1.749	2.763	1.6	20.9
8 9	20 23.43	-43 38.3	1.690	2.618	11.1	21.1	8 9	20 27.48	-14 57.7	1.757	2.757	4.3	21.1
8 19	20 13.23	-43 18.8	1.730	2.608	13.6	21.3	8 19	20 20.45	-15 50.6	1.791	2.752	8.2	21.3
8 29	20 5.73	-42 34.6	1.790	2.597	16.2	21.4	8 29	20 15.09	-16 38.6	1.849	2.747	11.8	21.5
396171	2013 <i>ED</i> ₁₁₉	7 29.5 255°62		3°9/ 1.5 18			260491	2005 <i>CV</i> ₇₃	7 29.5 242°49		0°4/29.9 18		
6 20	20 57.72	- 4 45.7	2.278	3.055	14.3	21.1	6 20	20 57.76	-14 43.4	2.884	3.685	11.0	21.2
6 30	20 54.40	- 4 49.5	2.185	3.052	11.8	20.9	6 30	20 54.10	-15 10.4	2.782	3.674	8.8	21.0
7 10	20 49.27	- 5 8.2	2.113	3.048	9.0	20.8	7 10	20 48.90	-15 45.3	2.702	3.662	6.1	20.9
7 20	20 42.71	- 5 41.5	2.063	3.044	6.1	20.6	7 20	20 42.50	-16 26.1	2.649	3.651	3.1	20.6
7 30	20 35.35	- 6 27.8	2.040	3.041	4.0	20.4	7 30	20 35.39	-17 10.3	2.624	3.639	0.4	20.4
8 9	20 27.93	- 7 23.7	2.045	3.037	4.8	20.5	8 9	20 28.21	-17 54.7	2.628	3.627	3.2	20.6
8 19	20 21.21	- 8 25.2	2.076	3.033	7.5	20.6	8 19	20 21.56	-18 36.5	2.661	3.615	6.3	20.8
8 29	20 15.91	- 9 27.7	2.133	3.029	10.5	20.8	8 29	20 16.06	-19 13.4	2.720	3.602	9.0	21.0
477051	2009 <i>BD</i> ₂	7 29.5 295°63		5°5/ 1.7 16 C			420320	2012 <i>AP</i> ₁	7 29.5 254°21		3°2/27.7 17		
6 20	21 2.85	- 2 7.4	2.061	2.822	16.1	22.4	6 20	21 4.47	-21 59.2	1.488	2.332	17.5	21.3
6 30	20 59.22	- 2 4.1	1.920	2.773	13.8	22.1	6 30	21 1.17	-22 54.9	1.403	2.322	13.9	21.1
7 10	20 53.21	- 2 19.3	1.797	2.722	10.9	21.8	7 10	20 54.79	-24 1.2	1.338	2.311	9.6	20.8
7 20	20 45.02	- 2 55.2	1.697	2.670	7.9	21.5	7 20	20 45.81	-25 11.6	1.295	2.299	5.2	20.5
7 30	20 35.21	- 3 52.2	1.622	2.617	5.6	21.3	7 30	20 35.21	-26 18.0	1.278	2.288	3.5	20.4
8 9	20 24.66	- 5 8.0	1.575	2.563	6.5	21.2	8 9	20 24.41	-27 12.3	1.286	2.276	7.3	20.6
8 19	20 14.45	- 6 37.7	1.555	2.508	9.9	21.3	8 19	20 14.89	-27 49.7	1.318	2.264	11.9	20.8
8 29	20 5.72	- 8 14.6	1.560	2.451	13.9	21.4	8 29	20 7.92	-28 8.6	1.371	2.252	16.2	21.0
138924	2001 <i>AV</i> ₄₀	7 29.5 101°19		1°1/28.9 17			448627	2010 <i>UP</i> ₁₀₁	7 29.5 337°84		5°8/25.7 18		
6 20	21 6.41	-19 17.2	1.553	2.386	17.4	20.5	6 20	21 2.61	-32 39.5	2.056	2.892	13.6	20.8
6 30	21 2.04	-19 39.6	1.487	2.399	13.7	20.2	6 30	20 58.83	-33 33.5	1.980	2.888	11.0	20.6
7 10	20 54.89	-20 10.5	1.441	2.411	9.4	20.0	7 10	20 52.61	-34 26.2	1.926	2.884	8.3	20.4
7 20	20 45.59	-20 45.5	1.419	2.424	4.6	19.8	7 20	20 44.48	-35 11.3	1.896	2.881	6.2	20.3
7 30	20 35.20	-21 19.3	1.421	2.436	1.2	19.6	7 30	20 35.29	-35 43.0	1.892	2.877	6.0	20.2
8 9	20 25.03	-21 46.9	1.450	2.448	5.5	19.9	8 9	20 26.16	-35 57.2	1.914	2.874	7.9	20.4
8 19	20 16.29	-22 5.3	1.504	2.459	10.0	20.2	8 19	20 18.14	-35 52.8	1.960	2.872	10.6	20.5
8 29	20 9.94	-22 13.4	1.581	2.470	13.9	20.5	8 29	20 12.14	-35 31.1	2.029	2.869	13.3	20.7
495032	2010 <i>VX</i> ₆₇	7 29.5 247°73		7°2/22.9 18			144594	2004 <i>FD</i> ₄₄	7 29.5 231°89		4°6/ 1.3 18		
6 20	21 5.13	-40 8.7	2.638	3.450	11.6	21.5	6 20	21 2.33	- 5 14.1	1.908	2.690	16.5	20.8
6 30	21 0.59	-41 25.1	2.556	3.438	9.8	21.4	6 30	20 58.52	- 5 4.5	1.810	2.680	13.7	20.6
7 10	20 53.75	-42 37.2	2.497	3.425	8.2	21.2	7 10	20 52.41	- 5 11.2	1.732	2.669	10.5	20.4
7 20	20 45.04	-43 38.5	2.463	3.412	7.2	21.2	7 20	20 44.43	- 5 34.6	1.675	2.658	7.1	20.2
7 30	20 35.23	-44 23.3	2.456	3.398	7.5	21.1	7 30	20 35.29	- 6 13.8	1.645	2.646	4.7	20.0
8 9	20 25.31	-44 47.8	2.474	3.384	8.8	21.2	8 9	20 25.99	- 7 5.1	1.641	2.633	5.8	20.0
8 19	20 16.30	-44 51.0	2.516	3.370	10.7	21.3	8 19	20 17.53	- 8 3.9	1.663	2.620	9.1	20.2
8 29	20 9.12	-44 34.4	2.581	3.356	12.6	21.4	8 29	20 10.84	- 9 5.0	1.710	2.607	12.7	20.4
49262	1998 <i>TY</i> ₃₄	7 29.5 251°69		1°2/30.2 18			479021	2013 <i>AC</i> ₂	7 29.5 228°50		2°2/31.2 18		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
147226	2002 <i>XB</i> ₃₂		7 29.5 316°62	2°5/28.5	17		108514	2001 <i>KQ</i> ₇₄		7 29.5 125°56	2°2/27.9	18	
6 20	21 2.10	-22 49.9	1.344	2.201	18.3	19.7	6 20	21 2.02	-21 17.0	2.074	2.900	13.9	20.1
6 30	20 59.58	-23 5.0	1.259	2.184	14.6	19.4	6 30	20 58.07	-22 13.4	1.999	2.907	10.9	19.9
7 10	20 53.85	-23 26.6	1.191	2.167	10.2	19.1	7 10	20 51.95	-23 16.7	1.946	2.915	7.4	19.7
7 20	20 45.38	-23 50.0	1.145	2.151	5.3	18.8	7 20	20 44.13	-24 22.1	1.918	2.922	3.9	19.5
7 30	20 35.25	-24 9.0	1.122	2.135	2.7	18.6	7 30	20 35.38	-25 23.9	1.918	2.928	2.4	19.4
8 9	20 24.96	-24 18.0	1.123	2.120	7.0	18.8	8 9	20 26.67	-26 17.1	1.946	2.935	5.3	19.6
8 19	20 16.06	-24 14.2	1.147	2.105	12.1	19.0	8 19	20 18.92	-26 58.4	2.000	2.941	8.8	19.8
8 29	20 9.88	-23 57.1	1.192	2.092	16.7	19.3	8 29	20 12.94	-27 26.2	2.078	2.947	11.9	20.1
119808	2002 <i>AX</i> ₁₅₂		7 29.5 185°94	2°2/28.2	18		10798	1992 <i>LK</i>		7 29.5 0°41	6°5/26.3	18	
6 20	21 3.30	-24 37.1	2.383	3.204	12.4	20.0	6 20	20 51.15	-24 50.6	0.878	1.780	21.5	16.2
6 30	20 58.75	-24 54.0	2.299	3.204	9.8	19.8	6 30	20 52.07	-26 12.1	0.824	1.775	17.1	15.9
7 10	20 52.22	-25 13.0	2.237	3.203	6.8	19.6	7 10	20 49.23	-27 44.3	0.787	1.773	12.1	15.7
7 20	20 44.17	-25 30.7	2.201	3.203	3.7	19.4	7 20	20 43.23	-29 16.5	0.767	1.772	7.6	15.4
7 30	20 35.33	-25 43.6	2.193	3.202	2.3	19.3	7 30	20 35.42	-30 35.0	0.768	1.773	6.9	15.4
8 9	20 26.54	-25 49.0	2.213	3.202	4.8	19.5	8 9	20 27.75	-31 28.5	0.788	1.777	10.8	15.6
8 19	20 18.65	-25 45.6	2.260	3.201	7.9	19.7	8 19	20 22.02	-31 51.9	0.826	1.782	15.7	15.9
8 29	20 12.39	-25 33.3	2.332	3.200	10.8	19.8	8 29	20 19.65	-31 45.9	0.881	1.790	20.2	16.2
325013	2008 <i>BU</i> ₅₂		7 29.5 89°56	3°4/27.5	17		486358	2013 <i>CQ</i> ₁₉₆		7 29.5 307°98	0°3/29.7	18	
6 20	21 4.33	-22 40.4	1.520	2.364	17.2	20.8	6 20	20 58.42	-13 52.6	2.135	2.949	13.9	21.5
6 30	21 0.68	-23 43.0	1.455	2.373	13.5	20.6	6 30	20 55.18	-14 38.3	2.048	2.947	11.1	21.3
7 10	20 54.14	-24 53.7	1.410	2.382	9.3	20.3	7 10	20 49.95	-15 36.1	1.982	2.946	7.7	21.1
7 20	20 45.32	-26 5.5	1.389	2.392	5.1	20.1	7 20	20 43.15	-16 43.1	1.941	2.944	3.9	20.8
7 30	20 35.27	-27 10.2	1.392	2.401	3.7	20.1	7 30	20 35.44	-17 54.7	1.927	2.942	0.3	20.5
8 9	20 25.35	-28 1.2	1.422	2.410	7.0	20.3	8 9	20 27.67	-19 5.6	1.941	2.940	4.1	20.9
8 19	20 16.84	-28 34.8	1.475	2.419	11.1	20.6	8 19	20 20.69	-20 11.1	1.983	2.939	7.9	21.1
8 29	20 10.80	-28 50.3	1.551	2.427	14.9	20.8	8 29	20 15.27	-21 7.6	2.049	2.937	11.3	21.3
440658	2005 <i>XN</i> ₁₄		7 29.5 306°37	3°6/26.4	18		481305	2005 <i>YB</i> ₂₂₃		7 29.5 178°22	3°6/26.5	18	
6 20	20 59.64	-25 21.2	2.269	3.101	12.6	21.2	6 20	21 1.43	-28 5.2	2.650	3.473	11.3	21.9
6 30	20 56.18	-26 34.0	2.187	3.098	9.9	21.0	6 30	20 57.23	-28 59.0	2.570	3.474	8.9	21.8
7 10	20 50.66	-27 51.7	2.129	3.096	7.0	20.8	7 10	20 51.18	-29 54.1	2.512	3.475	6.4	21.6
7 20	20 43.49	-29 8.9	2.096	3.094	4.3	20.6	7 20	20 43.69	-30 46.2	2.481	3.475	4.2	21.5
7 30	20 35.36	-30 19.5	2.091	3.092	3.9	20.6	7 30	20 35.41	-31 30.8	2.478	3.475	3.8	21.4
8 9	20 27.17	-31 18.4	2.114	3.090	6.2	20.8	8 9	20 27.13	-32 4.4	2.503	3.475	5.6	21.6
8 19	20 19.80	-32 2.4	2.162	3.088	9.1	20.9	8 19	20 19.62	-32 25.1	2.555	3.475	8.2	21.7
8 29	20 14.07	-32 30.5	2.235	3.086	11.9	21.1	8 29	20 13.57	-32 32.6	2.632	3.474	10.6	21.9
99221	2001 <i>HP</i> ₅₅		7 29.5 47°08	1°6/30.6	18		123817	2001 <i>BG</i> ₇₄		7 29.5 201°61	0°5/29.1	18	
6 20	20 59.26	-11 16.9	1.638	2.460	17.1	19.0	6 20	21 0.12	-18 37.8	2.662	3.473	11.6	21.0
6 30	20 56.20	-11 46.9	1.573	2.475	13.7	18.8	6 30	20 56.05	-18 59.5	2.571	3.470	9.1	20.9
7 10	20 50.77	-12 32.5	1.528	2.491	9.6	18.6	7 10	20 50.29	-19 26.9	2.503	3.467	6.2	20.7
7 20	20 43.54	-13 30.8	1.506	2.507	5.2	18.4	7 20	20 43.23	-19 57.5	2.460	3.464	3.1	20.5
7 30	20 35.37	-14 36.8	1.509	2.523	1.6	18.2	7 30	20 35.44	-20 28.4	2.446	3.461	0.6	20.2
8 9	20 27.34	-15 44.3	1.539	2.540	4.7	18.5	8 9	20 27.64	-20 56.6	2.460	3.457	3.7	20.5
8 19	20 20.47	-16 47.9	1.594	2.557	8.9	18.8	8 19	20 20.51	-21 19.9	2.503	3.453	6.8	20.7
8 29	20 15.59	-17 43.2	1.673	2.574	12.6	19.0	8 29	20 14.71	-21 36.7	2.571	3.449	9.6	20.9
380188	2000 <i>WC</i> ₆₇		7 29.5 142°35	2°7/31.9	13	13	472106	2014 <i>AP</i> ₄₂		7 29.5 171°66	0°3/29.7	18	
6 20	21 3.35	-6 25.7	3.304	4.052	10.8	24.9	6 20	21 6.57	-18 9.1	2.151	2.959	14.0	21.6
6 30	20 57.97	-6 23.9	3.220	4.071	8.8	24.8	6 30	21 1.43	-17 58.5	2.065	2.961	11.1	21.4
7 10	20 51.26	-6 31.1	3.160	4.088	6.6	24.7	7 10	20 54.14	-17 53.1	2.001	2.963	7.7	21.2
7 20	20 43.56	-6 46.9	3.125	4.105	4.3	24.5	7 20	20 45.18	-17 51.0	1.962	2.965	3.9	21.0
7 30	20 35.38	-7 9.8	3.121	4.121	2.8	24.4	7 30	20 35.35	-17 49.8	1.951	2.966	0.3	20.7
8 9	20 27.26	-7 38.2	3.146	4.136	3.5	24.5	8 9	20 25.60	-17 47.3	1.968	2.967	4.2	21.0
8 19	20 19.73	-8 9.7	3.202	4.149	5.6	24.7	8 19	20 16.85	-17 42.1	2.014	2.967	7.9	21.2
8 29	20 13.29	-8 42.2	3.285	4.162	7.8	24.8	8 29	20 9.87	-17 33.3	2.084	2.968	11.3	21.5
307568	2003 <i>FE</i> ₄₉		7 29.5 55°54	6°6/26.6	17		387599	2001 <i>XF</i> ₁₈₀		7 29.5 228°84	1°9/30.7	18	
6 20	21 7.10	-28 16.0	1.144	2.009	20.3	19.9	6 20	21 3.32	-11 46.9	2.213	3.007	14.1	21.7
6 30	21 3.69	-29 30.2	1.100	2.027	16.0	19.7	6 30	20 58.99	-11 49.6	2.110	2.995	11.4	21.5
7 10	20 56.57	-30 46.8	1.073	2.045	11.5	19.5	7 10	20 52.58	-12 3.0	2.029	2.983	8.2	21.3
7 20	20 46.59	-31 55.1	1.067	2.064	7.6	19.4	7 20	20 44.49	-12 25.7	1.973	2.969	4.7	21.0
7 30	20 35.24	-32 44.6	1.084	2.083	6.9	19.4	7 30	20 35.38	-12 55.6	1.943	2.955	1.9	20.8
8 9	20 24.40	-33 9.0	1.124	2.102	9.9	19.6	8 9	20 26.14	-13 29.5	1.942	2.941	4.2	21.0
8 19	20 15.69	-33 7.7	1.185	2.122	13.9	19.9	8 19	20 17.64	-14 4.0	1.969	2.926	7.9	21.2
8 29	20 10.25	-32 44.0	1.266	2.141	17.6	20.2	8 29	20 10.74	-14 36.2	2.021	2.910	11.4	21.3
86257	1999 <i>TK</i> ₂₀₇		7 29.5 115°71	9°0/31.2	18	18	202728	2007 <i>JU</i> ₉		7 29.5 357°77	10°8/2.6	18	
6 20	21 16.66	-7 20.1	1.172	1.977	23.5	17.9	6 20	20 56.10	-1 1.3	1.215	2.030	22.3	18.5
6 30	21 10.86	-5 12.4	1.106	1.986	19.7	17.7	6 30	20 54.61	+0 45.3	1.146	2.025	19.3	18.3
7 10	21 1.41	-3 16.6	1.057	1.996	15.4	17.5	7 10	20 50.24	+2 12.3	1.092	2.021	16.0	18.1
7 20	20 49.04	-1 38.9	1.028	2.004	11.3	17.3	7 20	20 43.51	+3 13.3	1.056	2.018	12.9	17.9
7 30	20 35.12	+0 25.1	1.023	2.013	9.0	17.2	7 30	20 35.43	+3 43.7	1.041	2.017	11.0	17.8
8 9	20 21.48	+0 22.3	1.042	2.021	10.4	17.3	8 9	20 27.33	+3 43.1	1.046	2.018	11.3	17.8
8 19	20 9.78	+0 44.8	1.084	2.029	14.0	17.5	8 19	20 20.53	+3 15.5	1.071	2.021	13.7	18.0
8 29	20 1.32	+0 47.4	1.146	2.036	18.0	17.8	8 29	20 16.18	+2 28.3	1.116	2.025	16.8	18.2
228640	2002 <i>EU</i> ₁₅		7 29.5 224°74	3°0/31.5	18		9308	Randyrose		7 29.5 349°			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
472363	2015 <i>BX</i> ₃₀		7 29.5 39°67'	2.7/28.7	18		495875	2004 <i>RT</i> ₁₀₅		7 29.5 255°94'	10°8/22.3	18	
6 20	21 9.51	-25 47.3	1.415	2.259	18.2	20.1	6 20	21 25.39	-50 48.3	2.345	3.111	14.2	22.1
6 30	21 4.76	-25 34.8	1.353	2.270	14.4	19.8	6 30	21 17.64	-51 54.3	2.256	3.087	12.7	22.0
7 10	20 56.87	-25 22.7	1.310	2.281	10.0	19.6	7 10	21 6.13	-52 48.5	2.187	3.061	11.5	21.8
7 20	20 46.63	-25 6.7	1.289	2.293	5.3	19.4	7 20	20 51.50	-53 21.3	2.141	3.035	10.9	21.7
7 30	20 35.30	-24 42.8	1.293	2.305	2.7	19.3	7 30	20 35.11	-53 24.1	2.119	3.008	11.1	21.7
8 9	20 24.42	-24 9.0	1.323	2.318	6.4	19.5	8 9	20 18.81	-52 53.0	2.121	2.981	12.3	21.7
8 19	20 15.32	-23 26.2	1.377	2.331	10.8	19.8	8 19	20 4.42	-51 49.4	2.147	2.952	14.0	21.8
8 29	20 8.97	-22 36.5	1.454	2.345	14.8	20.1	8 29	19 53.30	-50 19.0	2.193	2.923	15.8	21.9
173300	1999 <i>TJ</i> ₃₁₂		7 29.5 161°37'	1°1/30.2	17		173759	2001 <i>RG</i> ₁₀₆		7 29.5 79°99'	1°0/28.9	18	
6 20	21 5.23	-13 49.1	1.849	2.658	15.9	21.3	6 20	21 2.08	-19 50.3	2.007	2.833	14.3	20.3
6 30	21 0.76	-14 2.2	1.768	2.664	12.7	21.1	6 30	20 58.14	-20 10.3	1.930	2.838	11.2	20.1
7 10	20 53.89	-14 26.8	1.708	2.669	8.9	20.9	7 10	20 52.00	-20 36.7	1.874	2.842	7.7	19.9
7 20	20 45.15	-15 0.4	1.672	2.673	4.7	20.7	7 20	20 44.19	-21 6.2	1.842	2.847	3.8	19.7
7 30	20 35.38	-15 39.3	1.662	2.677	1.1	20.4	7 30	20 35.48	-21 34.6	1.837	2.852	1.1	19.5
8 9	20 25.64	-16 19.2	1.680	2.680	4.6	20.7	8 9	20 26.84	-21 58.4	1.860	2.856	4.6	19.7
8 19	20 16.97	-16 56.1	1.725	2.682	8.7	20.9	8 19	20 19.21	-22 15.0	1.909	2.861	8.4	20.0
8 29	20 10.27	-17 27.1	1.794	2.684	12.5	21.2	8 29	20 13.38	-22 23.2	1.982	2.866	11.8	20.2
476688	2008 <i>TN</i> ₉₅		7 29.5 352°98'	0°7/29.8	16		38994	2000 <i>UZ</i> ₂₁		7 29.5 347°30'	6°4/2.3	16	R
6 20	21 3.02	-17 20.3	1.519	2.356	17.5	21.4	6 20	20 57.63	-2 42.3	1.544	2.343	19.0	19.0
6 30	20 59.58	-17 3.3	1.441	2.353	14.0	21.2	6 30	20 55.26	-2 19.2	1.463	2.339	16.1	18.7
7 10	20 53.89	-16 54.4	1.382	2.351	9.8	20.9	7 10	20 50.41	-2 17.0	1.399	2.335	12.6	18.5
7 20	20 44.99	-16 51.6	1.345	2.350	5.0	20.6	7 20	20 43.55	-2 37.3	1.355	2.332	9.1	18.3
7 30	20 35.38	-16 52.1	1.333	2.348	0.7	20.3	7 30	20 35.51	-3 19.5	1.335	2.329	6.6	18.2
8 9	20 25.85	-16 52.9	1.347	2.348	5.2	20.6	8 9	20 27.41	-4 19.6	1.338	2.327	7.2	18.2
8 19	20 17.61	-16 51.5	1.385	2.347	9.9	20.9	8 19	20 20.36	-5 31.4	1.365	2.326	10.3	18.4
8 29	20 11.69	-16 46.4	1.445	2.348	14.1	21.2	8 29	20 15.34	-6 47.8	1.415	2.325	13.9	18.6
380197	2000 <i>YD</i> ₂₇		7 29.5 152°08'	6°6/1.1	18		386711	2009 <i>WW</i> ₁₇₇		7 29.5 132°37'	0°2/29.7	17	
6 20	21 8.73	-3 45.8	2.074	2.829	16.1	20.4	6 20	21 5.08	-17 28.0	1.803	2.625	15.8	21.1
6 30	21 3.13	-2 23.0	1.987	2.833	13.6	20.2	6 30	21 0.71	-17 28.1	1.725	2.629	12.5	20.9
7 10	20 55.33	-1 11.2	1.921	2.837	10.9	20.1	7 10	20 53.89	-17 36.0	1.668	2.634	8.7	20.7
7 20	20 45.81	-0 13.1	1.880	2.840	8.2	19.9	7 20	20 45.18	-17 49.1	1.634	2.638	4.4	20.5
7 30	20 35.35	+ 0 29.2	1.864	2.844	6.7	19.8	7 30	20 35.45	-18 4.1	1.626	2.642	0.3	20.1
8 9	20 24.92	+ 0 55.2	1.877	2.847	7.3	19.9	8 9	20 25.81	-18 17.6	1.646	2.645	4.7	20.5
8 19	20 15.46	+ 1 6.1	1.916	2.849	9.6	20.0	8 19	20 17.33	-18 27.1	1.692	2.649	8.9	20.8
8 29	20 7.79	+ 1 5.0	1.980	2.852	12.3	20.2	8 29	20 10.89	-18 31.1	1.761	2.652	12.6	21.0
325067	2008 <i>CS</i> ₂₁₃		7 29.5 212°19'	2°8/31.2	17		268738	2006 <i>KQ</i> ₁₀₁		7 29.5 138°15'	3°0/31.9	16	
6 20	21 2.24	-9 28.0	1.685	2.494	17.3	21.2	6 20	21 3.61	-1 49.4	1.254	2.056	22.4	20.3
6 30	20 58.73	-9 38.0	1.599	2.491	14.1	21.0	6 30	21 0.71	-3 26.3	1.176	2.061	18.5	20.1
7 10	20 52.71	-10 4.4	1.532	2.487	10.2	20.8	7 10	20 54.63	-5 42.1	1.115	2.065	13.7	19.8
7 20	20 44.66	-10 45.9	1.488	2.484	6.1	20.5	7 20	20 45.86	-8 33.7	1.075	2.069	8.1	19.5
7 30	20 35.41	-11 39.3	1.469	2.480	2.8	20.3	7 30	20 35.41	-11 50.5	1.062	2.073	3.3	19.2
8 9	20 26.08	-12 39.4	1.476	2.476	5.1	20.4	8 9	20 24.76	-15 15.2	1.075	2.077	6.0	19.4
8 19	20 17.78	-13 40.5	1.510	2.471	9.3	20.7	8 19	20 15.47	-18 29.7	1.116	2.080	11.6	19.7
8 29	20 11.51	-14 37.6	1.566	2.467	13.4	20.9	8 29	20 8.87	-21 20.4	1.180	2.083	16.6	20.0
188968	2008 <i>CN</i> ₁₈₃		7 29.5 4°20'	1°4/28.8	18		420355	2012 <i>BK</i> ₈₅		7 29.5 98°01'	0°3/29.4	17	
6 20	20 56.50	-19 44.7	1.591	2.441	16.2	19.3	6 20	21 5.99	-16 21.2	1.555	2.382	17.6	21.8
6 30	20 54.35	-20 11.5	1.519	2.441	12.8	19.1	6 30	21 1.68	-16 52.9	1.493	2.400	13.9	21.6
7 10	20 49.72	-20 46.9	1.467	2.442	8.8	18.9	7 10	20 54.67	-17 36.3	1.450	2.418	9.5	21.4
7 20	20 43.13	-21 26.9	1.438	2.444	4.4	18.6	7 20	20 45.58	-18 27.1	1.430	2.435	4.7	21.1
7 30	20 35.49	-22 6.3	1.433	2.447	1.5	18.4	7 30	20 35.44	-19 19.4	1.436	2.451	0.4	20.8
8 9	20 27.92	-22 39.9	1.454	2.452	5.4	18.7	8 9	20 25.52	-20 7.4	1.469	2.468	5.2	21.2
8 19	20 21.51	-23 4.3	1.499	2.457	9.7	19.0	8 19	20 17.00	-20 46.8	1.527	2.484	9.7	21.5
8 29	20 17.17	-23 17.5	1.566	2.464	13.5	19.2	8 29	20 10.81	-21 15.4	1.608	2.499	13.6	21.8
236532	2006 <i>HV</i> ₂₅		7 29.5 64°12'	3°1/31.4	17		144881	2004 <i>RM</i> ₉₉		7 29.5 299°52'	0°8/29.1	18	R
6 20	21 1.71	-9 10.2	1.726	2.533	17.0	20.3	6 20	21 1.46	-20 21.7	2.241	3.062	13.1	19.9
6 30	20 57.93	-9 7.6	1.662	2.552	13.7	20.1	6 30	20 57.48	-20 29.4	2.152	3.057	10.4	19.8
7 10	20 51.86	-9 19.9	1.618	2.571	10.0	19.9	7 10	20 51.49	-20 41.9	2.085	3.052	7.1	19.5
7 20	20 44.08	-9 45.8	1.596	2.590	6.0	19.8	7 20	20 43.93	-20 56.5	2.043	3.048	3.6	19.3
7 30	20 35.45	-10 22.4	1.600	2.609	3.2	19.6	7 30	20 35.52	-21 10.2	2.029	3.043	0.9	19.1
8 9	20 27.02	-11 5.3	1.630	2.628	4.9	19.8	8 9	20 27.11	-21 20.2	2.042	3.039	4.3	19.3
8 19	20 19.73	-11 50.2	1.686	2.648	8.6	20.0	8 19	20 19.57	-21 24.6	2.082	3.034	7.8	19.6
8 29	20 14.39	-12 32.9	1.766	2.667	12.1	20.3	8 29	20 13.64	-21 22.4	2.147	3.030	11.0	19.8
348747	2006 <i>HN</i> ₁₆		7 29.5 194°96'	5°5/25.2	17		443662	2015 <i>FC</i> ₃₀₂		7 29.5 334°35'	6°2/2.9	16	
6 20	21 4.02	-29 50.7	2.073	2.905	13.7	21.1	6 20	20 56.38	-0 18.5	1.663	2.446	18.5	20.2
6 30	21 0.01	-31 17.4	1.996	2.904	10.9	20.9	6 30	20 54.14	-0 22.1	1.575	2.439	15.7	20.0
7 10	20 53.53	-32 46.5	1.942	2.903	8.1	20.7	7 10	20 49.59	-0 49.5	1.504	2.433	12.4	19.8
7 20	20 45.06	-34 11.0	1.914	2.901	5.9	20.6	7 20	20 43.14	-1 42.1	1.454	2.427	9.0	19.5
7 30	20 35.42	-35 23.3	1.912	2.899	5.8	20.6	7 30	20 35.55	-2 58.2	1.428	2.421	6.5	19.4
8 9	20 25.69	-36 17.7	1.937	2.896	8.0	20.7	8 9	20 27.85	-4 32.7	1.427	2.416	6.8	19.4
8 19	20 16.97	-36 51.5	1.988	2.894	10.8	20.9	8 19	20 21.07	-6 17.9	1.451	2.412	9.7	19.6
8 29	20 10.24	-37 4.9	2.061	2.891	13.5	21.1	8 29	20 16.15	-8 5.3	1.498	2.408	13.3	19.8
344112	1999 <i>VD</i> ₄		7 29.5 297°45'	3°8/27.3	18		292418	2006 <i>SG</i> ₃₀₀					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
31200	1998 <i>AL</i> ₄		7 29.6 162°83	0°4/29.3	18		507994	2015 <i>BS</i> ₁₉₅		7 29.6 37°11	3°1/27.9	17	
6 20	21 1.58	-18 12.8	2.249	3.065	13.2	19.3	6 20	21 2.49	-22 34.4	1.382	2.236	18.0	20.9
6 30	20 57.52	-18 30.1	2.165	3.067	10.5	19.1	6 30	20 59.49	-23 20.4	1.321	2.244	14.2	20.7
7 10	20 51.48	-18 54.1	2.103	3.068	7.2	18.9	7 10	20 53.49	-24 14.1	1.278	2.253	9.8	20.4
7 20	20 43.92	-19 22.1	2.066	3.070	3.6	18.7	7 20	20 45.13	-25 9.2	1.257	2.262	5.2	20.2
7 30	20 35.53	-19 50.7	2.056	3.071	0.5	18.4	7 30	20 35.52	-25 57.9	1.261	2.272	3.3	20.1
8 9	20 27.17	-20 16.7	2.074	3.072	4.1	18.7	8 9	20 26.10	-26 34.1	1.289	2.282	7.0	20.4
8 19	20 19.67	-20 37.5	2.120	3.073	7.6	18.9	8 19	20 18.21	-26 54.4	1.341	2.292	11.3	20.6
8 29	20 13.75	-20 51.5	2.191	3.074	10.8	19.1	8 29	20 12.88	-26 58.6	1.414	2.303	15.3	20.9
170682	2004 <i>AM</i> ₃		7 29.6 249°98	1°8/28.5	18		44359	1998 <i>SM</i> ₉		7 29.6 276°26	4°9/1.6	18	
6 20	21 4.52	-22 46.2	2.274	3.093	13.0	21.0	6 20	20 59.47	-4 21.2	2.023	2.803	15.7	19.1
6 30	21 0.02	-23 5.3	2.174	3.077	10.3	20.8	6 30	20 56.21	-4 5.3	1.920	2.787	13.2	18.9
7 10	20 53.35	-23 28.4	2.095	3.061	7.2	20.6	7 10	20 50.85	-4 5.0	1.837	2.770	10.2	18.7
7 20	20 44.94	-23 52.0	2.042	3.045	3.7	20.3	7 20	20 43.75	-4 21.1	1.776	2.754	7.2	18.5
7 30	20 35.49	-24 12.4	2.016	3.028	1.9	20.2	7 30	20 35.59	-4 53.0	1.740	2.737	5.0	18.3
8 9	20 25.93	-24 26.0	2.018	3.010	4.9	20.3	8 9	20 27.24	-5 38.0	1.731	2.720	5.8	18.3
8 19	20 17.20	-24 31.0	2.048	2.993	8.4	20.5	8 19	20 19.62	-6 32.1	1.748	2.704	8.8	18.5
8 29	20 10.15	-24 26.6	2.103	2.974	11.7	20.7	8 29	20 13.61	-7 30.3	1.789	2.687	12.1	18.6
476950	2008 <i>XA</i> ₂₄		7 29.6 244°62	0°6/29.2	18		440494	2005 <i>TW</i> ₁₁₁		7 29.6 313°14	5°0/26.6	18	
6 20	21 4.22	-19 9.9	2.168	2.983	13.7	22.5	6 20	21 4.05	-31 9.4	2.027	2.861	13.9	21.3
6 30	20 59.85	-19 22.3	2.068	2.969	10.9	22.3	6 30	21 0.02	-31 47.0	1.945	2.853	11.1	21.1
7 10	20 53.28	-19 41.0	1.989	2.954	7.5	22.1	7 10	20 53.52	-32 23.6	1.884	2.845	8.2	20.9
7 20	20 44.92	-20 3.2	1.935	2.939	3.8	21.8	7 20	20 45.07	-32 53.8	1.847	2.837	5.7	20.8
7 30	20 35.50	-20 25.5	1.909	2.924	0.7	21.6	7 30	20 35.53	-33 12.0	1.836	2.830	5.2	20.7
8 9	20 25.96	-20 44.6	1.911	2.908	4.5	21.8	8 9	20 26.04	-33 14.5	1.851	2.822	7.3	20.8
8 19	20 17.26	-20 57.7	1.940	2.892	8.3	22.0	8 19	20 17.65	-33 0.4	1.892	2.815	10.3	21.0
8 29	20 10.26	-21 3.7	1.994	2.875	11.8	22.2	8 29	20 11.30	-32 30.9	1.955	2.808	13.2	21.2
87683	2000 <i>SR</i> ₂		7 29.6 267°00	1°3/28.7	18		24722	1991 <i>TK</i>		7 29.6 143°99	1°1/28.9	18	
6 20	21 2.59	-18 38.1	1.961	2.785	14.6	19.7	6 20	21 3.88	-18 1.5	1.678	2.508	16.4	18.0
6 30	20 58.97	-19 19.3	1.857	2.763	11.7	19.5	6 30	21 0.07	-18 42.0	1.602	2.512	13.0	17.8
7 10	20 52.95	-20 10.9	1.773	2.741	8.1	19.2	7 10	20 53.66	-19 33.3	1.547	2.516	8.9	17.6
7 20	20 44.88	-21 9.1	1.714	2.718	4.1	18.9	7 20	20 45.18	-20 30.8	1.515	2.520	4.4	17.3
7 30	20 35.50	-22 8.7	1.681	2.695	1.4	18.7	7 30	20 35.53	-21 28.6	1.510	2.524	1.2	17.1
8 9	20 25.83	-23 3.9	1.677	2.672	5.2	18.9	8 9	20 25.92	-22 20.5	1.530	2.527	5.4	17.4
8 19	20 16.96	-23 50.3	1.698	2.648	9.4	19.1	8 19	20 17.48	-23 2.4	1.577	2.530	9.7	17.6
8 29	20 9.92	-24 24.9	1.744	2.624	13.3	19.3	8 29	20 11.21	-23 31.8	1.647	2.533	13.6	17.9
8311	Zhangdaning		7 29.6 67°64	1°8/30.5	18		493616	2015 <i>OC</i> ₁₉		7 29.6 41°14	6°5/1.9	16	
6 20	21 2.57	-12 11.1	1.389	2.220	19.2	18.3	6 20	21 2.02	-3 2.1	1.939	2.711	16.6	20.3
6 30	20 59.37	-12 25.5	1.322	2.229	15.4	18.1	6 30	20 58.00	-1 58.6	1.864	2.720	14.0	20.1
7 10	20 53.33	-12 56.6	1.273	2.238	10.9	17.9	7 10	20 51.88	-1 9.3	1.808	2.729	11.1	20.0
7 20	20 45.02	-13 41.6	1.245	2.246	5.9	17.6	7 20	20 44.16	-0 36.4	1.774	2.738	8.3	19.8
7 30	20 35.51	-14 35.6	1.242	2.255	1.8	17.4	7 30	20 35.59	-0 20.9	1.765	2.748	6.6	19.7
8 9	20 26.11	-15 32.2	1.263	2.265	5.4	17.6	8 9	20 27.10	-0 21.7	1.782	2.758	7.1	19.8
8 19	20 18.09	-16 25.5	1.309	2.274	10.2	17.9	8 19	20 19.58	-0 36.2	1.825	2.769	9.3	19.9
8 29	20 12.50	-17 10.9	1.377	2.283	14.5	18.2	8 29	20 13.79	-1 0.4	1.891	2.779	12.0	20.1
287947	2003 <i>UH</i> ₉₁		7 29.6 277°62	3°9/27.0	18		198591	2004 <i>YB</i> ₃₅		7 29.6 247°75	8°2/4.1	18	
6 20	21 2.59	-25 47.2	1.897	2.734	14.5	20.8	6 20	21 0.21	+5 15.5	2.175	2.897	16.4	21.0
6 30	20 59.08	-26 41.4	1.807	2.721	11.6	20.6	6 30	20 56.64	+5 53.8	2.072	2.883	14.4	20.8
7 10	20 53.04	-27 40.6	1.738	2.707	8.2	20.3	7 10	20 51.06	+6 13.5	1.987	2.869	12.2	20.6
7 20	20 44.90	-28 39.2	1.694	2.693	5.0	20.1	7 20	20 43.84	+6 11.6	1.923	2.854	10.0	20.4
7 30	20 35.51	-29 30.6	1.676	2.679	4.1	20.0	7 30	20 35.60	+5 46.6	1.883	2.839	8.5	20.3
8 9	20 25.97	-30 9.2	1.684	2.665	6.9	20.2	8 9	20 27.18	+4 59.8	1.868	2.824	8.4	20.3
8 19	20 17.43	-30 31.9	1.717	2.651	10.5	20.4	8 19	20 19.43	+3 54.7	1.878	2.808	10.0	20.4
8 29	20 10.91	-30 37.9	1.774	2.638	13.9	20.5	8 29	20 13.17	+2 37.0	1.913	2.792	12.4	20.5
462585	2009 <i>FP</i> ₅₅		7 29.6 24°23	5°8/27.2	17		132560	2002 <i>JH</i> ₉₃		7 29.6 183°44	9°3/5.3	18	
6 20	20 59.62	-26 5.8	0.924	1.813	21.9	20.3	6 20	21 2.14	+9 33.8	2.388	3.070	16.0	20.7
6 30	20 58.39	-27 3.1	0.883	1.826	17.3	20.0	6 30	20 57.85	+10 35.1	2.299	3.070	14.3	20.6
7 10	20 53.26	-28 5.2	0.859	1.840	12.1	19.8	7 10	20 51.70	+11 18.1	2.227	3.070	12.5	20.4
7 20	20 45.10	-29 2.1	0.853	1.856	7.4	19.6	7 20	20 44.07	+11 39.6	2.176	3.070	10.7	20.3
7 30	20 35.51	-29 43.3	0.868	1.874	6.0	19.6	7 30	20 35.60	+11 37.5	2.148	3.069	9.6	20.2
8 9	20 26.45	-30 2.0	0.903	1.893	9.6	19.9	8 9	20 27.05	+11 12.3	2.145	3.067	9.4	20.2
8 19	20 19.59	-29 56.9	0.959	1.914	14.2	20.2	8 19	20 19.20	+10 26.7	2.166	3.065	10.4	20.3
8 29	20 16.08	-29 30.8	1.033	1.935	18.4	20.6	8 29	20 12.79	+9 25.4	2.212	3.062	12.0	20.4
2805	Kalle		7 29.6 316°56	4°7/26.8	18		63254	2001 <i>BW</i> ₅₄		7 29.6 349°51	0°5/29.3	18	
6 20	21 1.36	-26 53.2	1.633	2.483	15.9	16.4	6 20	20 46.94	-12 28.7	0.900	1.789	22.4	17.1
6 30	20 58.53	-27 46.3	1.549	2.469	12.7	16.2	6 30	20 48.44	-13 35.9	0.832	1.775	18.0	16.8
7 10	20 52.89	-28 44.0	1.485	2.456	9.1	15.9	7 10	20 46.69	-15 13.8	0.780	1.764	12.6	16.4
7 20	20 44.90	-29 39.8	1.444	2.443	5.7	15.7	7 20	20 42.08	-17 17.8	0.747	1.755	6.3	16.1
7 30	20 35.51	-30 26.4	1.428	2.430	5.0	15.6	7 30	20 35.68	-19 36.1	0.733	1.748	0.7	15.7
8 9	20 26.00	-30 57.4	1.437	2.418	7.8	15.8	8 9	20 29.13	-21 52.8	0.740	1.743	7.3	16.1
8 19	20 17.69	-31 9.9	1.469	2.406	11.7	16.0	8 19	20 24.12	-23 52.8	0.766	1.740	13.6	16.4
8 29	20 11.71	-31 3.8	1.523	2.395	15.3	16.2	8 29	20 22.14	-25 25.8	0.811	1.740	19.2	16.7
521531	2015 <i>OX</i> ₉₉		7 29.6 57°97	0°1/29.6	18		223224	2003 <i>DN</i> ₇		7 29.6 246°95	0°6/29.2	18	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
31767	Jennimartin		7 29.6 173°27'	3°0'/31.5	18		61655	2000 QF ₁₁₃		7 29.6 359°94'	3°6'/1.3	18	
6 20	21 3.29	- 8 31.9	2.193	2.976	14.6	20.0	6 20	20 58.28	- 5 50.9	2.143	2.928	14.8	19.7
6 30	20 58.86	- 8 27.8	2.105	2.979	11.9	19.8	6 30	20 55.03	- 5 56.5	2.055	2.928	12.2	19.5
7 10	20 52.44	- 8 36.0	2.037	2.982	8.8	19.6	7 10	20 49.87	- 6 17.3	1.987	2.928	9.2	19.3
7 20	20 44.46	- 8 55.8	1.994	2.984	5.5	19.4	7 20	20 43.22	- 6 52.7	1.943	2.928	6.0	19.1
7 30	20 35.61	- 9 25.4	1.978	2.985	3.1	19.3	7 30	20 35.72	- 7 40.7	1.925	2.928	3.7	19.0
8 9	20 26.76	-10 1.7	1.990	2.986	4.5	19.4	8 9	20 28.20	- 8 37.5	1.933	2.928	4.7	19.1
8 19	20 18.74	-10 41.2	2.030	2.986	7.7	19.6	8 19	20 21.44	- 9 38.9	1.969	2.928	7.7	19.3
8 29	20 12.30	-11 20.6	2.095	2.986	10.9	19.8	8 29	20 16.19	-10 40.1	2.030	2.928	10.9	19.5
450095	2015 RW ₉₂		7 29.6 303°90'	0°3'/29.4	18		304661	2006 WW ₄₉		7 29.6 232°43'	4°0'/1.1	18	
6 20	21 2.62	-19 32.4	2.141	2.961	13.7	20.7	6 20	21 0.66	- 6 46.6	2.307	3.086	14.1	20.9
6 30	20 58.52	-19 26.4	2.049	2.953	10.9	20.5	6 30	20 56.74	- 6 20.6	2.214	3.082	11.6	20.7
7 10	20 52.30	-19 25.0	1.978	2.945	7.5	20.3	7 10	20 50.96	- 6 6.0	2.142	3.079	8.8	20.5
7 20	20 44.42	-19 26.2	1.933	2.937	3.8	20.0	7 20	20 43.74	- 6 3.1	2.094	3.075	6.0	20.3
7 30	20 35.62	-19 27.3	1.914	2.929	0.4	19.7	7 30	20 35.70	- 6 11.4	2.072	3.071	4.0	20.2
8 9	20 26.80	-19 26.0	1.922	2.921	4.2	20.0	8 9	20 27.63	- 6 29.0	2.077	3.067	5.0	20.2
8 19	20 18.89	-19 20.7	1.958	2.913	8.0	20.2	8 19	20 20.29	- 6 53.4	2.109	3.063	7.6	20.4
8 29	20 12.67	-19 10.5	2.018	2.906	11.4	20.4	8 29	20 14.39	- 7 21.3	2.167	3.059	10.6	20.6
63209	2001 AP ₁₁		7 29.6 296°79'	2°2'/30.8	18		333592	2007 CP ₆₄		7 29.6 69°40'	0°9'/29.1	17	
6 20	20 59.51	-10 36.5	1.416	2.247	18.9	19.2	6 20	21 3.42	-18 34.7	1.607	2.441	16.8	21.3
6 30	20 57.25	-10 55.9	1.327	2.233	15.4	18.9	6 30	20 59.73	-19 1.6	1.539	2.451	13.3	21.1
7 10	20 52.16	-11 34.8	1.256	2.220	11.1	18.6	7 10	20 53.41	-19 37.9	1.491	2.461	9.1	20.8
7 20	20 44.64	-12 31.8	1.206	2.206	6.3	18.3	7 20	20 45.06	-20 19.3	1.466	2.471	4.5	20.6
7 30	20 35.60	-13 42.9	1.180	2.193	2.2	18.0	7 30	20 35.65	-21 0.5	1.467	2.482	1.0	20.4
8 9	20 26.31	-14 59.6	1.178	2.180	5.6	18.2	8 9	20 26.38	-21 36.4	1.494	2.492	5.3	20.7
8 19	20 18.11	-16 16.2	1.201	2.167	10.7	18.5	8 19	20 18.39	-22 3.4	1.546	2.502	9.7	21.0
8 29	20 12.25	-17 24.9	1.245	2.155	15.4	18.7	8 29	20 12.62	-22 19.8	1.621	2.512	13.5	21.2
440549	2005 UN ₂₃₇		7 29.6 325°49'	6°3'/2.7	15		187385	2005 UJ ₄₁₂		7 29.6 353°76'	4°1'/26.5	18	
6 20	20 57.11	- 1 4.4	2.008	2.779	16.1	21.5	6 20	21 0.30	-26 55.2	2.058	2.895	13.5	20.0
6 30	20 54.29	- 0 33.4	1.915	2.769	13.8	21.3	6 30	20 56.98	-27 57.4	1.981	2.894	10.7	19.8
7 10	20 49.48	- 0 19.2	1.840	2.760	11.0	21.1	7 10	20 51.41	-29 2.9	1.926	2.893	7.6	19.6
7 20	20 43.05	- 0 23.4	1.787	2.751	8.3	20.9	7 20	20 44.05	-30 6.2	1.895	2.892	4.9	19.4
7 30	20 35.68	- 0 46.3	1.758	2.742	6.5	20.8	7 30	20 35.69	-31 1.2	1.892	2.891	4.4	19.4
8 9	20 28.21	- 1 25.7	1.754	2.734	6.8	20.8	8 9	20 27.31	-31 42.9	1.915	2.891	6.7	19.5
8 19	20 21.50	- 2 17.8	1.776	2.726	9.1	20.9	8 19	20 19.90	-32 8.7	1.963	2.890	9.8	19.7
8 29	20 16.35	- 3 17.5	1.821	2.719	11.9	21.1	8 29	20 14.31	-32 18.3	2.034	2.890	12.7	19.9
121282	1999 RC ₁₅₃		7 29.6 5°75'	1°4'/29.1	18		62014	2000 RJ ₄₂		7 29.6 337°79'	4°0'/31.6	18	
6 20	21 2.35	-22 52.7	1.557	2.404	16.7	18.7	6 20	20 59.51	- 9 15.7	1.805	2.613	16.3	18.4
6 30	20 59.01	-22 38.6	1.485	2.404	13.2	18.4	6 30	20 56.43	- 8 39.4	1.716	2.604	13.4	18.2
7 10	20 52.96	-22 27.4	1.433	2.406	9.1	18.2	7 10	20 51.08	- 8 14.8	1.646	2.596	10.0	18.0
7 20	20 44.82	-22 16.1	1.403	2.409	4.6	17.9	7 20	20 43.91	- 8 2.6	1.599	2.589	6.5	17.8
7 30	20 35.62	-22 1.4	1.399	2.413	1.5	17.7	7 30	20 35.70	- 8 2.3	1.577	2.582	4.1	17.6
8 9	20 26.61	-21 41.0	1.419	2.418	5.4	18.0	8 9	20 27.44	- 8 11.9	1.580	2.575	5.5	17.7
8 19	20 18.96	-21 14.2	1.464	2.423	9.8	18.3	8 19	20 20.10	- 8 28.7	1.609	2.569	9.0	17.9
8 29	20 13.60	-20 41.5	1.532	2.430	13.7	18.5	8 29	20 14.58	- 8 49.2	1.661	2.564	12.6	18.1
122553	2000 QH ₂₄₄		7 29.6 296°14'	0°3'/29.8	18		106275	2000 UY ₆₉		7 29.6 199°72'	0°3'/29.8	18	
6 20	21 1.43	-15 30.1	1.694	2.522	16.4	20.0	6 20	21 4.31	-16 24.0	2.394	3.196	13.0	20.3
6 30	20 58.16	-15 49.9	1.611	2.518	13.1	19.8	6 30	20 59.60	-16 35.8	2.299	3.192	10.3	20.1
7 10	20 52.39	-16 21.5	1.547	2.514	9.1	19.6	7 10	20 52.94	-16 54.9	2.227	3.187	7.2	19.9
7 20	20 44.60	-17 2.0	1.507	2.510	4.7	19.3	7 20	20 44.75	-17 19.0	2.180	3.182	3.7	19.7
7 30	20 35.63	-17 47.0	1.492	2.507	0.4	18.9	7 30	20 35.68	-17 45.3	2.161	3.176	0.3	19.4
8 9	20 26.62	-18 31.3	1.503	2.503	4.9	19.3	8 9	20 26.56	-18 10.7	2.171	3.170	3.8	19.6
8 19	20 18.68	-19 10.5	1.540	2.500	9.4	19.5	8 19	20 18.22	-18 32.7	2.209	3.162	7.4	19.9
8 29	20 12.78	-19 41.4	1.600	2.496	13.4	19.8	8 29	20 11.41	-18 49.4	2.273	3.155	10.6	20.0
93022	2000 RM ₉₅		7 29.6 329°36'	1°0'/29.1	18		100917	1998 KX ₅₁		7 29.6 80°70'	3°5'/31.8	17	
6 20	20 57.55	-17 53.3	1.364	2.219	18.2	19.4	6 20	21 3.85	- 6 30.5	1.497	2.301	19.3	19.6
6 30	20 55.87	-18 21.4	1.279	2.204	14.5	19.2	6 30	21 0.00	- 6 55.4	1.438	2.324	15.7	19.4
7 10	20 51.29	-19 2.7	1.213	2.189	10.1	18.9	7 10	20 53.53	- 7 41.1	1.397	2.347	11.4	19.2
7 20	20 44.24	-19 53.4	1.168	2.174	5.0	18.5	7 20	20 45.09	- 8 45.5	1.378	2.370	7.0	19.0
7 30	20 35.66	-20 47.2	1.146	2.161	1.1	18.2	7 30	20 35.67	-10 3.5	1.384	2.393	3.6	18.8
8 9	20 26.90	-21 37.2	1.148	2.148	6.1	18.5	8 9	20 26.47	-11 27.8	1.416	2.415	5.4	19.0
8 19	20 19.35	-22 17.6	1.174	2.137	11.3	18.8	8 19	20 18.61	-12 51.1	1.474	2.437	9.4	19.3
8 29	20 14.24	-22 45.0	1.220	2.126	15.9	19.0	8 29	20 12.99	-14 7.3	1.555	2.459	13.3	19.6
137715	1999 XA ₉₈		7 29.6 243°19'	1°4'/28.8	18		171003	2005 EQ ₂₀		7 29.6 35°95'	5°5'/27.4	17	
6 20	21 4.95	-19 35.1	1.818	2.643	15.5	20.1	6 20	21 7.89	-31 25.3	1.585	2.428	16.6	18.9
6 30	21 0.98	-20 7.9	1.723	2.630	12.4	19.8	6 30	21 3.42	-31 48.5	1.526	2.439	13.3	18.7
7 10	20 54.41	-20 49.8	1.648	2.617	8.6	19.6	7 10	20 55.98	-32 8.7	1.486	2.451	9.7	18.5
7 20	20 45.67	-21 36.8	1.598	2.602	4.3	19.3	7 20	20 46.31	-32 19.7	1.469	2.463	6.5	18.4
7 30	20 35.60	-22 23.4	1.574	2.587	1.5	19.1	7 30	20 35.62	-32 15.8	1.477	2.475	5.6	18.4
8 9	20 25.34	-23 4.2	1.577	2.572	5.5	19.3	8 9	20 25.32	-31 54.3	1.510	2.488	7.9	18.5
8 19	20 16.06	-23 35.3	1.606	2.556	9.8	19.5	8 19	20 16.67	-31 16.0	1.568	2.502	11.3	18.8
8 29	20 8.85	-23 54.7	1.658	2.540	13.8	19.7	8 29	20 10.61	-30 24.1	1.647	2.516	14.6	19.0
235790	2004 XS ₁₁		7 29.6 215°18'	4°9'/2.3	18		234758	2002 OD ₂₉		7 29.6 88°34'	0°4'/29.9	17	
6 20	21 1.01</												

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7 29.6

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
150546	2000 <i>SD</i> ₁₆₈		7 29.6 302°25	7.1/2.6	18		12638	Fransbrüggen		7 29.6 222°58	1.0/30.2	18	
6 20	20 58.36	+ 0 2.6	2.064	2.824	16.1	20.1	6 20	21 4.70	-14 5.0	1.928	2.737	15.4	19.7
6 30	20 55.35	+ 0 47.4	1.958	2.803	13.9	19.9	6 30	21 0.50	-14 16.8	1.833	2.728	12.4	19.4
7 10	20 50.30	+ 1 16.7	1.871	2.782	11.4	19.7	7 10	20 53.92	-14 39.6	1.758	2.719	8.8	19.2
7 20	20 43.55	+ 1 27.9	1.806	2.761	8.9	19.5	7 20	20 45.41	-15 11.4	1.708	2.709	4.7	18.9
7 30	20 35.75	+ 1 19.7	1.764	2.741	7.2	19.4	7 30	20 35.73	-15 48.9	1.684	2.698	1.0	18.6
8 9	20 27.72	+ 0 53.1	1.748	2.721	7.5	19.3	8 9	20 25.91	-16 27.7	1.687	2.687	4.5	18.9
8 19	20 20.37	+ 0 10.9	1.757	2.701	9.6	19.4	8 19	20 17.01	-17 4.0	1.718	2.675	8.8	19.1
8 29	20 14.55	- 0 42.1	1.789	2.681	12.5	19.5	8 29	20 9.97	-17 34.8	1.773	2.663	12.6	19.3
220258	2002 <i>YT</i> ₈		7 29.6 216°49	0°6/29.9	18		93155	2000 <i>SX</i> ₈₄		7 29.6 273°05	3°8/27.4	18	
6 20	21 4.04	-14 49.3	2.015	2.824	14.8	21.3	6 20	21 5.17	-25 50.7	1.898	2.730	14.7	20.2
6 30	20 59.85	-15 8.5	1.921	2.817	11.9	21.1	6 30	21 1.27	-26 33.4	1.797	2.708	11.8	20.0
7 10	20 53.39	-15 38.3	1.847	2.809	8.3	20.9	7 10	20 54.72	-27 20.9	1.718	2.685	8.4	19.7
7 20	20 45.08	-16 16.3	1.798	2.801	4.3	20.6	7 20	20 45.92	-28 7.8	1.663	2.662	5.0	19.5
7 30	20 35.68	-16 58.7	1.777	2.792	0.6	20.3	7 30	20 35.70	-28 47.6	1.634	2.639	3.9	19.3
8 9	20 26.17	-17 41.2	1.783	2.782	4.4	20.6	8 9	20 25.23	-29 15.1	1.632	2.615	6.8	19.5
8 19	20 17.54	-18 20.0	1.816	2.772	8.5	20.8	8 19	20 15.71	-29 27.1	1.655	2.591	10.6	19.6
8 29	20 10.69	-18 52.2	1.874	2.761	12.1	21.0	8 29	20 8.28	-29 23.3	1.701	2.567	14.3	19.8
200475	2000 <i>XJ</i> ₄₇		7 29.6 243°28	11°3/19.9	18		123582	2000 <i>XQ</i> ₄₀		7 29.6 309°27	3°7/28.4	18	R
6 20	21 25.58	-54 31.6	2.526	3.276	13.7	22.1	6 20	21 9.48	-28 7.9	1.601	2.439	16.7	18.9
6 30	21 18.02	-55 53.5	2.447	3.256	12.5	22.0	6 30	21 4.96	-28 3.7	1.513	2.425	13.4	18.6
7 10	21 6.60	-57 2.7	2.389	3.234	11.7	21.9	7 10	20 57.35	-27 58.0	1.444	2.412	9.6	18.3
7 20	20 51.93	-57 50.0	2.354	3.212	11.3	21.8	7 20	20 47.21	-27 45.8	1.398	2.399	5.6	18.1
7 30	20 35.39	-58 7.1	2.341	3.189	11.7	21.8	7 30	20 35.65	-27 22.2	1.378	2.386	3.8	17.9
8 9	20 18.88	-57 50.4	2.350	3.165	12.7	21.8	8 9	20 24.14	-26 44.7	1.383	2.373	6.9	18.1
8 19	20 4.29	-57 1.1	2.382	3.141	14.1	21.9	8 19	20 14.07	-25 53.7	1.414	2.361	11.2	18.3
8 29	19 53.07	-55 44.6	2.432	3.115	15.5	21.9	8 29	20 6.62	-24 52.0	1.467	2.350	15.2	18.5
7838	Feliceierman		7 29.6 309°97	9°6/6.6	18		167819	2005 <i>CQ</i> ₈		7 29.6 211°43	0°8/29.2	17	
6 20	20 57.00	+11 21.1	2.367	3.049	16.1	18.0	6 20	21 6.19	-18 16.7	1.751	2.574	16.1	21.3
6 30	20 53.92	+12 9.6	2.276	3.044	14.5	17.8	6 30	21 1.96	-18 42.8	1.663	2.569	12.8	21.1
7 10	20 49.08	+12 38.1	2.201	3.039	12.8	17.7	7 10	20 55.08	-19 18.6	1.596	2.563	8.9	20.9
7 20	20 42.85	+12 43.5	2.146	3.034	11.1	17.6	7 20	20 46.04	-20 0.3	1.552	2.557	4.4	20.6
7 30	20 35.80	+12 23.9	2.113	3.029	9.9	17.5	7 30	20 35.72	-20 42.7	1.535	2.550	0.9	20.3
8 9	20 28.67	+11 40.2	2.103	3.024	9.6	17.4	8 9	20 25.31	-21 20.7	1.545	2.542	5.2	20.6
8 19	20 22.20	+10 35.4	2.118	3.020	10.4	17.5	8 19	20 15.99	-21 50.4	1.580	2.534	9.7	20.8
8 29	20 17.07	+ 9 14.8	2.155	3.015	11.9	17.6	8 29	20 8.82	-22 9.8	1.640	2.526	13.7	21.1
354694	2005 <i>QE</i> ₁₀₁		7 29.6 231°84	1°7/28.7	18		117556	2005 <i>EQ</i> ₁₄		7 29.6 72°87	3°3/28.2	17	
6 20	21 4.42	-23 17.2	2.288	3.108	13.0	20.7	6 20	21 9.62	-24 23.8	1.387	2.230	18.5	20.3
6 30	20 59.81	-23 24.0	2.200	3.104	10.2	20.5	6 30	21 4.93	-24 54.2	1.335	2.252	14.6	20.1
7 10	20 53.14	-23 33.2	2.134	3.100	7.1	20.3	7 10	20 57.10	-25 28.9	1.302	2.273	10.0	19.9
7 20	20 44.87	-23 42.0	2.093	3.096	3.7	20.1	7 20	20 46.93	-26 1.2	1.291	2.294	5.5	19.7
7 30	20 35.74	-23 47.2	2.080	3.092	1.7	20.0	7 30	20 35.70	-26 24.7	1.306	2.316	3.5	19.6
8 9	20 26.64	-23 46.1	2.095	3.088	4.6	20.2	8 9	20 24.92	-26 35.0	1.346	2.337	6.9	19.9
8 19	20 18.46	-23 37.5	2.137	3.084	8.0	20.4	8 19	20 15.93	-26 30.7	1.409	2.358	11.1	20.2
8 29	20 11.96	-23 21.4	2.205	3.080	11.1	20.5	8 29	20 9.70	-26 13.3	1.495	2.379	14.9	20.5
365706	2010 <i>VR</i> ₁₃₈		7 29.6 239°03	2°6/27.6	18		500159	2012 <i>EY</i> ₁₃		7 29.6 182°66	4°5/26.9	17	
6 20	21 0.79	-24 46.2	2.541	3.364	11.7	21.5	6 20	21 9.76	-28 2.9	1.920	2.745	14.9	22.8
6 30	20 56.87	-25 26.0	2.452	3.358	9.2	21.3	6 30	21 4.65	-28 55.9	1.841	2.746	11.8	22.6
7 10	20 51.09	-26 9.1	2.386	3.352	6.4	21.1	7 10	20 56.84	-29 51.0	1.784	2.747	8.5	22.4
7 20	20 43.85	-26 51.6	2.345	3.345	3.7	20.9	7 20	20 46.87	-30 41.9	1.752	2.746	5.4	22.3
7 30	20 35.78	-27 29.5	2.332	3.339	2.7	20.8	7 30	20 35.70	-31 22.0	1.746	2.745	4.7	22.2
8 9	20 27.67	-27 59.1	2.348	3.332	5.0	21.0	8 9	20 24.55	-31 46.2	1.768	2.743	7.2	22.4
8 19	20 20.30	-28 18.5	2.390	3.326	7.9	21.2	8 19	20 14.62	-31 52.9	1.815	2.741	10.5	22.6
8 29	20 14.38	-28 26.7	2.458	3.319	10.6	21.3	8 29	20 6.93	-31 43.0	1.886	2.737	13.7	22.8
3396	Muazzez		7 29.6 323°97	4°3/26.6	18		348756	2006 <i>HS</i> ₇₃		7 29.6 295°05	3°1/27.6	18	
6 20	21 0.00	-28 53.1	2.154	2.991	13.0	15.8	6 20	21 1.60	-23 0.9	1.814	2.652	15.1	20.6
6 30	20 56.76	-29 38.1	2.065	2.976	10.4	15.6	6 30	20 58.33	-23 55.0	1.731	2.646	11.9	20.4
7 10	20 51.30	-30 24.5	1.997	2.963	7.5	15.4	7 10	20 52.57	-24 56.3	1.669	2.640	8.2	20.2
7 20	20 44.05	-31 7.5	1.955	2.949	5.0	15.2	7 20	20 44.77	-25 59.4	1.632	2.634	4.6	20.0
7 30	20 35.77	-31 41.5	1.938	2.936	4.5	15.2	7 30	20 35.78	-26 57.7	1.620	2.628	3.3	19.9
8 9	20 27.42	-32 2.6	1.948	2.923	6.7	15.3	8 9	20 26.72	-27 45.4	1.635	2.623	6.3	20.0
8 19	20 19.98	-32 8.7	1.984	2.911	9.7	15.4	8 19	20 18.69	-28 18.7	1.675	2.617	10.1	20.3
8 29	20 14.30	-31 59.8	2.042	2.899	12.6	15.6	8 29	20 12.70	-28 36.5	1.738	2.612	13.6	20.5
183953	2004 <i>DA</i> ₄₇		7 29.6 86°17	3°3/31.7	17		206630	2003 <i>WK</i> ₁₅₉		7 29.6 198°05	3°9/1.8	18	
6 20	21 2.90	- 7 48.5	1.608	2.413	18.1	20.5	6 20	20 59.97	- 3 50.4	2.364	3.129	14.1	20.9
6 30	20 59.17	- 8 0.4	1.542	2.429	14.7	20.3	6 30	20 56.21	- 4 2.2	2.269	3.127	11.7	20.8
7 10	20 52.96	- 8 30.3	1.494	2.446	10.8	20.1	7 10	20 50.65	- 4 29.5	2.194	3.124	9.0	20.6
7 20	20 44.84	- 9 16.6	1.469	2.462	6.5	19.9	7 20	20 43.66	- 5 11.9	2.142	3.121	6.1	20.4
7 30	20 35.75	-10 15.5	1.469	2.478	3.4	19.7	7 30	20 35.84	- 6 7.5	2.118	3.117	4.0	20.3
8 9	20 26.80	-11 21.2	1.495	2.494	5.2	19.9	8 9	20 27.95	- 7 12.8	2.122	3.113	4.7	20.3
8 19	20 19.05	-12 27.6	1.547	2.510	9.1	20.2	8 19	20 20.74	- 8 23.5	2.153	3.109	7.4	20.5
8 29	20 13.40	-13 29.6	1.623	2.525	12.9	20.4	8 29	20 14.91	- 9 34.7	2.211	3.104	10.3	20.6
49114	1998 <i>ST</i> ₇		7 29.6 193°88	1°0/28.9	18		344430	2002 <i>ES</i> ₁₀₀		7 29.6 126°85	7°2		

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
302149	2001 <i>SR</i> ₁₅₇	7 29.6 315°16'		3°0'/31.3 18			32892	1994 <i>DW</i>	7 29.6 31°02'		1°1'/28.8 18		
6 20	20 59.81	-10 2.5	1.943	2.748	15.4	20.4	6 20	20 59.07	-17 25.0	1.914	2.743	14.7	18.6
6 30	20 56.53	-9 50.0	1.852	2.741	12.6	20.2	6 30	20 56.03	-18 19.8	1.837	2.747	11.6	18.4
7 10	20 51.11	-9 49.5	1.782	2.734	9.2	20.0	7 10	20 50.80	-19 25.4	1.782	2.752	7.9	18.2
7 20	20 43.97	-10 0.8	1.734	2.728	5.7	19.7	7 20	20 43.84	-20 37.4	1.751	2.756	3.9	18.0
7 30	20 35.84	-10 22.2	1.713	2.721	3.0	19.6	7 30	20 35.91	-21 49.9	1.748	2.762	1.2	17.8
8 9	20 27.64	-10 50.7	1.718	2.715	4.8	19.7	8 9	20 27.98	-22 57.2	1.771	2.767	4.9	18.1
8 19	20 20.31	-11 22.8	1.748	2.710	8.3	19.9	8 19	20 20.99	-23 54.6	1.820	2.773	8.7	18.3
8 29	20 14.69	-11 54.9	1.803	2.704	11.9	20.1	8 29	20 15.77	-24 39.4	1.894	2.779	12.2	18.5
440885	2006 <i>TT</i> ₁₂₄	7 29.6 332°18'		2°5'/30.9 18			417899	2007 <i>RR</i> ₉₈	7 29.6 282°09'		2°9'/28.2 17		
6 20	21 0.10	-11 50.9	1.851	2.665	15.8	21.1	6 20	21 4.01	-21 43.6	1.425	2.273	17.9	21.3
6 30	20 56.87	-11 35.0	1.763	2.658	12.8	20.9	6 30	21 1.15	-22 25.6	1.335	2.255	14.3	21.0
7 10	20 51.39	-11 30.2	1.695	2.652	9.3	20.7	7 10	20 55.14	-23 18.2	1.263	2.236	10.0	20.7
7 20	20 44.12	-11 35.8	1.650	2.646	5.4	20.4	7 20	20 46.36	-24 15.8	1.213	2.217	5.3	20.4
7 30	20 35.83	-11 50.1	1.630	2.641	2.6	20.2	7 30	20 35.81	-25 10.6	1.187	2.198	3.1	20.2
8 9	20 27.50	-12 10.1	1.637	2.636	4.7	20.4	8 9	20 24.93	-25 54.9	1.186	2.180	7.2	20.4
8 19	20 20.09	-12 32.7	1.669	2.631	8.6	20.6	8 19	20 15.28	-26 23.8	1.209	2.161	12.2	20.6
8 29	20 14.49	-12 54.7	1.725	2.627	12.3	20.8	8 29	20 8.24	-26 35.4	1.252	2.142	16.8	20.8
10569	Kinoshitamasao	7 29.6 143°19'		6°2'/25.1 18			509524	2007 <i>XU</i> ₆	7 29.6 296°14'		5°5'/25.5 18		
6 20	21 6.13	-35 19.8	2.304	3.126	12.8	18.0	6 20	21 1.40	-27 42.3	1.850	2.693	14.6	20.5
6 30	21 1.45	-36 24.1	2.235	3.131	10.4	17.9	6 30	20 58.51	-29 8.3	1.756	2.671	11.7	20.3
7 10	20 54.42	-37 25.2	2.190	3.136	8.1	17.8	7 10	20 52.98	-30 41.2	1.683	2.649	8.6	20.0
7 20	20 45.58	-38 16.9	2.169	3.141	6.5	17.7	7 20	20 45.16	-32 13.5	1.634	2.627	6.0	19.8
7 30	20 35.78	-38 53.5	2.174	3.146	6.5	17.7	7 30	20 35.86	-33 36.8	1.612	2.606	5.8	19.8
8 9	20 26.06	-39 11.4	2.207	3.150	8.0	17.8	8 9	20 26.22	-34 43.3	1.616	2.584	8.4	19.9
8 19	20 17.43	-39 9.9	2.264	3.155	10.3	17.9	8 19	20 17.50	-35 28.5	1.644	2.563	11.9	20.0
8 29	20 10.75	-38 50.6	2.344	3.159	12.6	18.1	8 29	20 10.86	-35 51.3	1.694	2.541	15.2	20.2
232145	2002 <i>CX</i> ₄₅	7 29.6 173°02'		4°8'/1.8 18			250004	2001 <i>YD</i> ₁₀₇	7 29.6 240°14'		1°8'/30.8 18		
6 20	21 3.63	-3 36.0	2.370	3.126	14.3	20.8	6 20	21 1.49	-12 45.1	2.344	3.142	13.3	20.5
6 30	20 58.99	-3 11.3	2.280	3.129	12.0	20.6	6 30	20 57.44	-12 34.1	2.250	3.137	10.7	20.3
7 10	20 52.50	-2 59.6	2.210	3.132	9.3	20.4	7 10	20 51.52	-12 31.4	2.177	3.131	7.7	20.1
7 20	20 44.56	-3 1.7	2.164	3.134	6.7	20.3	7 20	20 44.13	-12 36.3	2.129	3.126	4.4	19.9
7 30	20 35.83	-3 17.2	2.145	3.136	4.9	20.2	7 30	20 35.91	-12 46.9	2.108	3.120	1.9	19.7
8 9	20 27.07	-3 44.1	2.154	3.137	5.5	20.2	8 9	20 27.66	-13 1.1	2.115	3.114	3.9	19.9
8 19	20 19.07	-4 19.3	2.190	3.137	7.8	20.3	8 19	20 20.16	-13 16.6	2.150	3.108	7.2	20.1
8 29	20 12.53	-4 59.2	2.252	3.137	10.5	20.5	8 29	20 14.12	-13 31.2	2.210	3.102	10.4	20.2
482764	2013 <i>GF</i> ₅₆	7 29.6 221°56'		4°7'/26.1 18			252206	2001 <i>FE</i> ₁₃₃	7 29.6 85°67'		4°1'/27.6 17		
6 20	21 3.59	-31 37.8	2.472	3.296	12.0	21.7	6 20	21 7.67	-25 20.4	1.517	2.359	17.3	20.1
6 30	20 59.25	-32 26.7	2.391	3.292	9.6	21.5	6 30	21 3.36	-26 11.6	1.459	2.375	13.6	19.9
7 10	20 52.83	-33 14.8	2.331	3.288	7.1	21.3	7 10	20 56.08	-27 7.0	1.421	2.390	9.5	19.7
7 20	20 44.77	-33 57.1	2.298	3.284	5.1	21.2	7 20	20 46.52	-27 59.6	1.406	2.406	5.5	19.5
7 30	20 35.82	-34 28.8	2.291	3.279	4.9	21.2	7 30	20 35.82	-28 42.0	1.416	2.422	4.3	19.5
8 9	20 26.87	-34 46.5	2.312	3.275	6.6	21.3	8 9	20 25.41	-29 8.9	1.452	2.437	7.3	19.7
8 19	20 18.81	-34 48.8	2.359	3.270	9.1	21.4	8 19	20 16.56	-29 18.4	1.512	2.452	11.2	19.9
8 29	20 12.42	-34 36.5	2.430	3.265	11.6	21.6	8 29	20 10.28	-29 11.4	1.594	2.467	14.7	20.2
488788	2004 <i>XF</i> ₄₂	7 29.6 311°90'		6°9'/25.7 18			105862	2000 <i>SU</i> ₁₇₀	7 29.6 317°19'		4°9'/1.8 18		
6 20	20 58.69	-25 58.4	1.134	2.011	19.6	20.8	6 20	20 58.43	-4 21.2	2.083	2.863	15.3	19.4
6 30	20 58.09	-27 22.3	1.041	1.977	15.9	20.4	6 30	20 55.29	-4 0.1	1.990	2.856	12.8	19.2
7 10	20 53.83	-29 1.0	0.965	1.943	11.6	20.1	7 10	20 50.19	-3 53.8	1.917	2.850	9.9	19.0
7 20	20 46.07	-30 45.6	0.909	1.910	7.8	19.8	7 20	20 43.52	-4 2.8	1.867	2.844	7.0	18.8
7 30	20 35.74	-32 22.6	0.875	1.877	7.5	19.6	7 30	20 35.94	-4 26.7	1.842	2.838	5.0	18.7
8 9	20 24.59	-33 38.4	0.863	1.844	11.5	19.7	8 9	20 28.30	-5 3.0	1.843	2.832	5.7	18.7
8 19	20 14.71	-34 23.7	0.870	1.813	16.8	19.9	8 19	20 21.41	-5 47.9	1.871	2.826	8.3	18.9
8 29	20 8.11	-34 36.1	0.894	1.783	21.9	20.1	8 29	20 16.06	-6 37.2	1.923	2.821	11.4	19.1
378202	2006 <i>YV</i> ₃₆	7 29.6 218°91'		2°0'/28.4 18			362819	2011 <i>YT</i> ₇₃	7 29.6 111°88'		2°0'/27.9 18		
6 20	21 5.61	-21 35.3	1.922	2.747	14.9	21.9	6 20	20 59.48	-20 38.2	2.410	3.231	12.3	20.5
6 30	21 1.33	-22 10.3	1.833	2.740	11.8	21.7	6 30	20 55.93	-21 41.5	2.328	3.234	9.6	20.3
7 10	20 54.57	-22 52.0	1.765	2.732	8.1	21.5	7 10	20 50.52	-22 51.8	2.269	3.237	6.6	20.1
7 20	20 45.79	-23 36.2	1.721	2.725	4.2	21.2	7 20	20 43.65	-24 4.9	2.237	3.240	3.4	19.9
7 30	20 35.81	-24 17.3	1.704	2.716	2.2	21.1	7 30	20 35.95	-25 15.7	2.232	3.243	2.1	19.8
8 9	20 25.75	-24 50.7	1.715	2.708	5.5	21.3	8 9	20 28.20	-26 19.3	2.256	3.245	4.7	20.0
8 19	20 16.71	-25 13.1	1.752	2.698	9.5	21.5	8 19	20 21.20	-27 12.4	2.308	3.248	7.9	20.2
8 29	20 9.65	-25 23.4	1.813	2.688	13.1	21.7	8 29	20 15.65	-27 52.9	2.385	3.251	10.7	20.4
482774	2013 <i>GP</i> ₁₀₇	7 29.6 123°26'		0°3'/29.9 18			335532	2006 <i>AT</i> ₈₁	7 29.6 144°91'		9°4'/26.2 17		
6 20	20 59.85	-15 30.1	2.626	3.430	11.9	21.5	6 20	21 28.80	-47 12.8	2.175	2.948	15.0	20.5
6 30	20 55.87	-15 53.7	2.546	3.439	9.4	21.3	6 30	21 19.50	-47 46.0	2.110	2.957	12.9	20.3
7 10	20 50.26	-16 24.8	2.488	3.449	6.5	21.2	7 10	21 6.82	-48 5.4	2.065	2.965	11.0	20.2
7 20	20 43.41	-17 1.2	2.456	3.458	3.3	21.0	7 20	20 51.70	-48 2.5	2.045	2.972	9.7	20.2
7 30	20 35.92	-17 39.8	2.452	3.467	0.3	20.7	7 30	20 35.65	-47 31.2	2.050	2.979	9.5	20.2
8 9	20 28.46	-18 17.6	2.477	3.476	3.4	21.0	8 9	20 20.39	-46 30.5	2.082	2.986	10.6	20.2
8 19	20 21.70	-18 51.9	2.530	3.485	6.5	21.2	8 19	20 7.37	-45 4.3	2.140	2.992	12.4	20.4
8 29	20 16.25	-19 20.7	2.609	3.493	9.3	21.4	8 29	19 57.55	-43 19.5	2.221	2.997	14.4	20.5
219006	2008 <i>TD</i> ₁₁₁	7 29.6 266°60'		7°8'/3.4 18			450345	2004 <i>TO</i> ₂₇₆	7 29.6 319°28'		1°0'/29.0 17		
6 20	21 0.26												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
349303	2007 <i>UB</i> ₁₀	7 29.6 299°86		8°4/23.6 18			413159	2002 <i>GK</i> ₁₀₃	7 29.6 116°54		5°1/27.0 17		
6 20	21 4.60	-36 23.3	1.808	2.647	15.1	20.2	6 20	21 9.06	-27 42.7	1.549	2.389	17.1	20.9
6 30	21 1.28	-37 55.6	1.732	2.636	12.5	20.0	6 30	21 4.59	-28 40.5	1.485	2.399	13.6	20.7
7 10	20 54.98	-39 26.3	1.677	2.624	10.1	19.9	7 10	20 57.05	-29 41.0	1.442	2.409	9.7	20.5
7 20	20 46.17	-40 46.3	1.645	2.613	8.6	19.8	7 20	20 47.09	-30 36.4	1.423	2.419	6.2	20.4
7 30	20 35.85	-41 46.4	1.638	2.602	8.9	19.7	7 30	20 35.86	-31 18.7	1.428	2.428	5.3	20.3
8 9	20 25.39	-42 20.5	1.655	2.591	10.8	19.8	8 9	20 24.84	-31 42.6	1.459	2.438	8.1	20.5
8 19	20 16.20	-42 26.9	1.695	2.580	13.5	20.0	8 19	20 15.40	-31 46.4	1.514	2.446	11.8	20.8
8 29	20 9.50	-42 7.7	1.755	2.570	16.1	20.1	8 29	20 8.60	-31 31.8	1.591	2.455	15.2	21.0
62594	2000 <i>SX</i> ₃₀₅	7 29.6 17°34		1°3/30.3 18			248687	2006 <i>KJ</i> ₅₇	7 29.6 111°13		3°3/31.5 17		
6 20	21 2.94	-15 36.9	1.998	2.812	14.7	19.0	6 20	21 4.12	-8 52.0	1.502	2.313	18.9	20.7
6 30	20 58.86	-15 17.0	1.916	2.814	11.8	18.8	6 30	21 0.46	-8 53.3	1.430	2.322	15.4	20.5
7 10	20 52.62	-15 4.2	1.854	2.815	8.3	18.6	7 10	20 54.10	-9 12.2	1.377	2.331	11.2	20.2
7 20	20 44.71	-14 57.3	1.817	2.817	4.5	18.3	7 20	20 45.59	-9 47.7	1.345	2.340	6.8	20.0
7 30	20 35.93	-14 54.5	1.806	2.820	1.3	18.1	7 30	20 35.92	-10 36.2	1.338	2.348	3.4	19.8
8 9	20 27.21	-14 53.7	1.822	2.822	4.2	18.3	8 9	20 26.32	-11 32.4	1.357	2.356	5.5	20.0
8 19	20 19.47	-14 53.0	1.865	2.825	8.0	18.6	8 19	20 17.99	-12 30.3	1.400	2.364	9.8	20.2
8 29	20 13.49	-14 50.8	1.933	2.828	11.5	18.8	8 29	20 11.93	-13 24.7	1.467	2.371	13.8	20.5
76853	2000 <i>WE</i> ₂₅	7 29.6 53°09		9°0/31.4 18			333159	2012 <i>BP</i> ₁₁₇	7 29.6 110°23		0°3/29.8 17		
6 20	21 18.84	-7 11.8	1.279	2.071	22.6	17.3	6 20	21 6.05	-14 19.1	1.664	2.481	17.1	22.1
6 30	21 11.98	-4 40.7	1.224	2.095	18.9	17.1	6 30	21 1.67	-14 56.4	1.598	2.499	13.6	21.9
7 10	21 1.86	-2 22.3	1.189	2.120	14.8	16.9	7 10	20 54.74	-15 47.0	1.552	2.516	9.4	21.7
7 20	20 49.33	-0 23.2	1.176	2.145	11.0	16.8	7 20	20 45.84	-16 46.8	1.530	2.533	4.8	21.5
7 30	20 35.76	+1 10.3	1.188	2.171	9.1	16.8	7 30	20 35.92	-17 50.1	1.535	2.550	0.3	21.1
8 9	20 22.79	+2 15.5	1.225	2.197	10.1	16.9	8 9	20 26.15	-18 50.8	1.566	2.566	4.8	21.5
8 19	20 11.81	+2 54.0	1.287	2.223	13.1	17.1	8 19	20 17.65	-19 44.0	1.624	2.581	9.2	21.8
8 29	20 3.83	+3 10.6	1.370	2.249	16.3	17.4	8 29	20 11.32	-20 26.7	1.705	2.596	13.0	22.1
394227	2006 <i>SN</i> ₃₂₇	7 29.6 283°62		6°7/25.1 18			312206	2007 <i>VG</i> ₂₆₂	7 29.6 120°90		0°9/29.1 17		
6 20	21 5.32	-35 5.7	2.063	2.893	13.8	21.6	6 20	21 5.95	-17 49.8	1.551	2.382	17.5	21.3
6 30	21 1.24	-36 8.4	1.984	2.886	11.3	21.4	6 30	21 1.93	-18 24.7	1.482	2.392	13.8	21.0
7 10	20 54.57	-37 8.6	1.928	2.878	8.8	21.2	7 10	20 55.12	-19 10.6	1.432	2.401	9.5	20.8
7 20	20 45.82	-37 59.5	1.896	2.871	7.0	21.1	7 20	20 46.11	-20 3.0	1.405	2.410	4.7	20.6
7 30	20 35.89	-38 34.3	1.889	2.864	7.0	21.1	7 30	20 35.91	-20 55.6	1.404	2.418	1.0	20.3
8 9	20 25.95	-38 48.9	1.908	2.857	8.8	21.2	8 9	20 25.81	-21 42.3	1.428	2.426	5.5	20.6
8 19	20 17.17	-38 42.1	1.951	2.850	11.3	21.3	8 19	20 17.06	-22 19.0	1.479	2.434	10.1	20.9
8 29	20 10.51	-38 15.8	2.017	2.843	13.9	21.5	8 29	20 10.66	-22 43.6	1.552	2.442	14.1	21.2
441968	2010 <i>MD</i> ₆₆	7 29.6 339°19		1°6/28.8 18			345057	2005 <i>GX</i> ₁₂₉	7 29.6 142°94		0°1/29.7 18		
6 20	21 2.88	-22 38.9	1.946	2.777	14.5	21.0	6 20	21 2.09	-15 51.3	2.247	3.056	13.5	21.6
6 30	20 59.04	-22 43.6	1.861	2.772	11.4	20.8	6 30	20 57.98	-16 17.5	2.166	3.062	10.7	21.4
7 10	20 52.88	-22 51.9	1.798	2.767	7.9	20.5	7 10	20 51.92	-16 52.6	2.107	3.069	7.4	21.2
7 20	20 44.90	-23 0.5	1.759	2.763	4.1	20.3	7 20	20 44.36	-17 33.6	2.073	3.075	3.7	21.0
7 30	20 35.93	-23 5.9	1.746	2.759	1.7	20.1	7 30	20 35.99	-18 17.0	2.066	3.081	0.2	20.7
8 9	20 27.00	-23 5.1	1.760	2.755	5.0	20.3	8 9	20 27.64	-18 58.8	2.088	3.087	3.9	21.0
8 19	20 19.11	-22 56.7	1.800	2.752	8.8	20.6	8 19	20 20.13	-19 35.9	2.138	3.092	7.5	21.2
8 29	20 13.12	-22 40.2	1.864	2.749	12.3	20.8	8 29	20 14.19	-20 6.1	2.212	3.097	10.7	21.5
179487	2002 <i>CD</i> ₂₈	7 29.6 85°82		3°4/27.9 18			260160	2004 <i>RK</i> ₅₄	7 29.6 297°35		0°4/29.4 17		
6 20	21 8.29	-29 3.0	2.271	3.090	13.1	19.5	6 20	20 59.68	-17 26.3	2.210	3.029	13.3	21.3
6 30	21 2.75	-29 14.6	2.204	3.105	10.3	19.3	6 30	20 56.46	-17 51.7	2.098	3.002	10.7	21.1
7 10	20 55.07	-29 24.6	2.160	3.121	7.3	19.2	7 10	20 51.17	-18 26.1	2.007	2.973	7.4	20.8
7 20	20 45.84	-29 29.2	2.141	3.137	4.5	19.0	7 20	20 44.13	-19 6.9	1.941	2.945	3.7	20.5
7 30	20 35.91	-29 24.9	2.149	3.152	3.5	19.0	7 30	20 35.99	-19 50.4	1.902	2.917	0.5	20.2
8 9	20 26.25	-29 9.8	2.186	3.167	5.5	19.2	8 9	20 27.59	-20 32.4	1.890	2.889	4.3	20.5
8 19	20 17.74	-28 43.8	2.250	3.182	8.4	19.4	8 19	20 19.84	-21 9.3	1.906	2.860	8.3	20.7
8 29	20 11.10	-28 8.4	2.339	3.197	11.1	19.6	8 29	20 13.62	-21 38.4	1.945	2.832	11.8	20.8
375276	2008 <i>HJ</i> ₅₄	7 29.6 237°37		3°8/27.3 18			130994	2000 <i>WA</i> ₁₆₂	7 29.6 258°68		0°3/29.8 18		
6 20	21 4.78	-24 30.8	1.736	2.573	15.7	20.8	6 20	21 1.14	-13 59.8	1.941	2.756	15.1	20.2
6 30	21 1.07	-25 28.7	1.653	2.567	12.4	20.6	6 30	20 57.81	-14 41.1	1.842	2.742	12.1	19.9
7 10	20 54.63	-26 33.1	1.591	2.560	8.7	20.3	7 10	20 52.20	-15 36.3	1.765	2.729	8.5	19.7
7 20	20 45.93	-27 37.9	1.552	2.553	5.1	20.1	7 20	20 44.68	-16 42.3	1.712	2.715	4.4	19.4
7 30	20 35.90	-28 35.8	1.539	2.545	4.0	20.0	7 30	20 35.98	-17 54.4	1.685	2.700	0.3	19.1
8 9	20 25.75	-29 20.4	1.553	2.538	7.0	20.2	8 9	20 27.06	-19 6.7	1.686	2.686	4.6	19.4
8 19	20 16.75	-29 48.1	1.592	2.530	10.9	20.4	8 19	20 18.95	-20 13.6	1.714	2.671	8.8	19.6
8 29	20 9.97	-29 58.4	1.653	2.521	14.5	20.6	8 29	20 12.60	-21 11.0	1.767	2.656	12.7	19.8
425674	2010 <i>YR</i> ₃	7 29.6 309°26		0°9/29.6 18			210804	2001 <i>FZ</i> ₁₈₉	7 29.6 170°32		5°2/26.4 18		
6 20	21 17.19	-25 40.2	1.344	2.178	19.5	19.6	6 20	21 9.04	-32 56.3	2.265	3.084	13.1	21.0
6 30	21 11.90	-24 35.5	1.243	2.154	15.9	19.3	6 30	21 3.69	-33 39.5	2.190	3.087	10.6	20.8
7 10	21 2.74	-23 23.6	1.162	2.130	11.3	19.0	7 10	20 55.98	-34 20.3	2.137	3.090	7.9	20.7
7 20	20 50.26	-22 1.0	1.103	2.107	5.9	18.6	7 20	20 46.43	-34 53.1	2.108	3.092	5.8	20.5
7 30	20 35.73	-20 25.7	1.069	2.084	1.0	18.2	7 30	20 35.92	-35 12.7	2.107	3.094	5.4	20.5
8 9	20 21.04	-18 39.3	1.062	2.061	6.6	18.5	8 9	20 25.53	-35 15.9	2.134	3.095	7.2	20.6
8 19	20 8.07	-16 47.0	1.080	2.039	12.5	18.8	8 19	20 16.28	-35 2.2	2.186	3.096	9.8	20.8
8 29	19 58.36	-14 55.3	1.121	2.018	17.8	19.0	8 29	20 9.00	-34 33.2	2.262	3.096	12.4	21.0
380242	2001 <i>UR</i> ₃₁	7 29.6 269°07		4°0/27.2 18			484027	2006 <i>DX</i> ₁₇₅	7 29.6 212°97		1°7/31.3 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
508184	2015 <i>FO</i> ₃₁₀		7 29.7 69°71	9°5/24.7	17		175437	Zsivótzky		7 29.7 311°30	2°5/31.3	18	
6 20	21 11.44	-40 4.7	1.677	2.507	16.4	20.8	6 20	20 57.38	-9 32.9	1.735	2.551	16.5	20.0
6 30	21 6.59	-41 24.0	1.631	2.524	13.8	20.7	6 30	20 55.18	-9 47.9	1.631	2.527	13.6	19.8
7 10	20 58.44	-42 34.6	1.604	2.540	11.3	20.5	7 10	20 50.61	-10 20.0	1.545	2.502	10.0	19.5
7 20	20 47.76	-43 27.2	1.600	2.557	9.7	20.5	7 20	20 44.02	-11 8.5	1.482	2.478	5.9	19.2
7 30	20 35.89	-43 54.0	1.619	2.573	9.7	20.5	7 30	20 36.10	-12 10.5	1.443	2.455	2.6	18.9
8 9	20 24.44	-43 51.5	1.662	2.590	11.3	20.7	8 9	20 27.88	-13 20.8	1.430	2.431	5.0	19.0
8 19	20 14.86	-43 21.4	1.728	2.607	13.6	20.9	8 19	20 20.44	-14 33.4	1.443	2.408	9.3	19.2
8 29	20 8.18	-42 28.6	1.814	2.623	15.9	21.1	8 29	20 14.84	-15 42.2	1.479	2.386	13.6	19.4
228587	2002 <i>AP</i> ₇		7 29.7 288°13	20°5/9.3	18		322686	1999 <i>VV</i> ₉₇		7 29.7 329°24	5°1/27.2	17	
6 20	20 51.13	-20 49.3	0.437	1.377	28.8	19.7	6 20	20 59.59	-25 20.9	1.187	2.059	19.2	19.9
6 30	20 56.00	-29 53.6	0.390	1.363	23.1	19.2	6 30	20 58.25	-26 14.5	1.110	2.043	15.4	19.6
7 10	20 55.99	-40 41.4	0.364	1.350	20.5	19.0	7 10	20 53.46	-27 16.5	1.051	2.028	11.0	19.3
7 20	20 49.50	-51 37.1	0.362	1.336	24.2	19.1	7 20	20 45.68	-28 19.1	1.012	2.015	6.6	19.0
7 30	20 35.71	-60 47.1	0.381	1.322	31.1	19.3	7 30	20 36.04	-29 12.3	0.995	2.002	5.4	18.9
8 9	20 16.69	-67 12.4	0.414	1.309	37.8	19.7	8 9	20 26.23	-29 47.5	1.001	1.990	9.1	19.1
8 19	19 58.54	-70 59.7	0.455	1.297	43.0	20.0	8 19	20 17.95	-30 0.3	1.028	1.979	13.9	19.3
8 29	19 49.91	-72 47.3	0.499	1.285	46.7	20.3	8 29	20 12.68	-29 50.6	1.073	1.969	18.5	19.6
387144	2012 <i>TZ</i> ₂₀₉		7 29.7 222°14	4°5/2.2	18		250827	2005 <i>US</i> ₇₄		7 29.7 256°93	0°1/29.7	18	
6 20	21 0.93	-2 11.0	2.480	3.232	13.9	22.0	6 20	21 1.52	-16 54.5	2.761	3.562	11.4	22.1
6 30	20 56.98	-2 13.7	2.375	3.221	11.7	21.8	6 30	20 57.37	-17 9.2	2.648	3.541	9.1	21.9
7 10	20 51.25	-2 31.7	2.290	3.210	9.1	21.6	7 10	20 51.49	-17 30.4	2.558	3.518	6.4	21.7
7 20	20 44.08	-3 5.2	2.228	3.199	6.5	21.5	7 20	20 44.22	-17 56.1	2.493	3.496	3.2	21.4
7 30	20 36.05	-3 53.2	2.194	3.186	4.6	21.3	7 30	20 36.11	-18 23.8	2.457	3.473	0.1	21.1
8 9	20 27.87	-4 52.8	2.187	3.174	5.1	21.3	8 9	20 27.83	-18 50.7	2.451	3.449	3.5	21.4
8 19	20 20.30	-5 59.9	2.209	3.160	7.5	21.5	8 19	20 20.11	-19 14.4	2.472	3.425	6.7	21.5
8 29	20 14.04	-7 10.1	2.257	3.146	10.3	21.6	8 29	20 13.63	-19 33.2	2.520	3.400	9.7	21.7
35895	1999 <i>JX</i> ₈₃		7 29.7 28°10	2°6/31.1	18		388893	2008 <i>RO</i> ₁₃₇		7 29.7 266°46	4°6/31.9	18	
6 20	20 56.20	-9 12.9	0.946	1.810	23.6	17.4	6 20	21 2.93	-6 56.6	1.974	2.760	15.9	21.1
6 30	20 55.34	-9 43.1	0.901	1.825	19.0	17.1	6 30	20 59.14	-6 25.1	1.870	2.742	13.2	20.9
7 10	20 51.12	-10 40.1	0.870	1.842	13.6	16.9	7 10	20 53.09	-6 6.0	1.785	2.724	10.1	20.7
7 20	20 44.25	-11 59.9	0.858	1.860	7.6	16.7	7 20	20 45.17	-6 0.4	1.723	2.706	6.9	20.5
7 30	20 36.05	-13 34.1	0.866	1.879	2.7	16.4	7 30	20 36.07	-6 8.2	1.687	2.688	4.6	20.3
8 9	20 28.17	-15 11.2	0.896	1.900	6.1	16.7	8 9	20 26.76	-6 27.4	1.677	2.669	5.8	20.3
8 19	20 22.07	-16 40.7	0.948	1.922	11.6	17.1	8 19	20 18.22	-6 55.1	1.694	2.649	9.0	20.5
8 29	20 18.85	-17 55.2	1.019	1.945	16.4	17.5	8 29	20 11.38	-7 27.5	1.734	2.630	12.5	20.6
509930	2009 <i>OV</i> ₂₀		7 29.7 309°36	1°5/28.7	18		91620	1999 <i>TA</i> ₃₉		7 29.7 112°72	4°4/1.6	18	
6 20	20 57.63	-15 49.6	1.358	2.209	18.5	20.5	6 20	21 0.31	-4 58.7	2.364	3.134	14.0	19.4
6 30	20 56.28	-16 53.9	1.259	2.181	14.8	20.2	6 30	20 56.46	-4 30.7	2.277	3.137	11.7	19.3
7 10	20 51.96	-18 19.5	1.179	2.154	10.4	19.9	7 10	20 50.84	-4 14.9	2.210	3.140	9.0	19.1
7 20	20 44.94	-20 2.3	1.120	2.127	5.2	19.5	7 20	20 43.86	-4 11.9	2.168	3.142	6.3	19.0
7 30	20 36.03	-21 54.0	1.086	2.100	1.6	19.2	7 30	20 36.14	-4 21.2	2.151	3.145	4.5	18.8
8 9	20 26.58	-23 43.5	1.075	2.074	6.8	19.5	8 9	20 28.42	-4 40.9	2.162	3.148	5.2	18.9
8 19	20 18.09	-25 20.6	1.089	2.048	12.4	19.7	8 19	20 21.43	-5 8.4	2.199	3.151	7.5	19.0
8 29	20 12.07	-26 38.2	1.123	2.023	17.5	19.9	8 29	20 15.82	-5 40.4	2.262	3.153	10.2	19.2
367977	2012 <i>EW</i> ₁₁		7 29.7 35°80	2°6/31.2	17		183943	2004 <i>DN</i> ₃₂		7 29.7 48°93	3°1/28.4	17	
6 20	21 0.16	-9 43.6	1.347	2.178	19.7	20.2	6 20	21 6.80	-24 18.1	1.398	2.245	18.2	20.0
6 30	20 57.69	-10 2.2	1.279	2.184	15.9	20.0	6 30	21 2.95	-24 38.3	1.335	2.255	14.4	19.8
7 10	20 52.40	-10 40.7	1.228	2.190	11.5	19.8	7 10	20 56.00	-25 2.8	1.292	2.264	10.0	19.6
7 20	20 44.86	-11 37.2	1.199	2.197	6.6	19.5	7 20	20 46.63	-25 25.9	1.271	2.274	5.4	19.3
7 30	20 36.05	-12 46.5	1.192	2.205	2.6	19.3	7 30	20 36.05	-25 41.5	1.274	2.284	3.2	19.2
8 9	20 27.31	-14 1.3	1.211	2.213	5.4	19.5	8 9	20 25.75	-25 45.4	1.302	2.295	6.7	19.5
8 19	20 19.88	-15 14.2	1.253	2.221	10.2	19.8	8 19	20 17.08	-25 36.0	1.354	2.306	11.1	19.8
8 29	20 14.83	-16 19.1	1.318	2.229	14.6	20.1	8 29	20 11.09	-25 14.4	1.427	2.317	15.1	20.0
66256	1999 <i>GU</i> ₃₃		7 29.7 353°07	7°1/25.9	18		399061	2013 <i>YF</i> ₃₁		7 29.7 212°55	4°7/1.5	17	
6 20	20 54.54	-26 1.8	0.967	1.860	20.8	17.9	6 20	21 2.51	-5 12.8	2.066	2.842	15.6	21.1
6 30	20 54.78	-27 31.6	0.907	1.852	16.6	17.6	6 30	20 58.56	-4 47.4	1.974	2.838	13.0	20.9
7 10	20 51.31	-29 11.9	0.864	1.846	12.0	17.3	7 10	20 52.51	-4 35.9	1.901	2.834	10.0	20.7
7 20	20 44.64	-30 51.4	0.839	1.841	8.0	17.1	7 20	20 44.80	-4 39.0	1.851	2.829	6.9	20.5
7 30	20 36.05	-32 16.1	0.836	1.838	7.5	17.1	7 30	20 36.12	-4 56.1	1.827	2.824	4.8	20.4
8 9	20 27.45	-33 14.5	0.852	1.836	11.2	17.3	8 9	20 27.36	-5 25.0	1.830	2.819	5.7	20.4
8 19	20 20.70	-33 41.3	0.887	1.836	15.9	17.5	8 19	20 19.42	-6 2.2	1.860	2.813	8.5	20.6
8 29	20 17.27	-33 37.3	0.940	1.838	20.2	17.8	8 29	20 13.11	-6 43.8	1.914	2.808	11.6	20.8
347498	1998 <i>RE</i> ₆₈		7 29.7 309°97	3°8/27.8	18		257103	2008 <i>GE</i> ₅₀		7 29.7 336°66	4°1/27.3	18	
6 20	21 3.32	-26 1.2	1.638	2.483	16.1	20.3	6 20	21 0.28	-26 50.8	1.761	2.608	15.1	19.7
6 30	21 0.33	-26 27.9	1.538	2.456	12.9	20.0	6 30	20 57.51	-27 30.0	1.677	2.596	12.0	19.5
7 10	20 54.43	-26 58.6	1.458	2.429	9.2	19.8	7 10	20 52.17	-28 12.3	1.614	2.585	8.5	19.3
7 20	20 46.03	-27 28.0	1.400	2.402	5.4	19.5	7 20	20 44.75	-28 52.3	1.575	2.574	5.2	19.1
7 30	20 36.03	-27 49.6	1.368	2.375	4.0	19.3	7 30	20 36.12	-29 23.9	1.560	2.564	4.3	19.0
8 9	20 25.74	-27 58.3	1.360	2.349	7.2	19.4	8 9	20 27.44	-29 42.5	1.571	2.555	7.0	19.1
8 19	20 16.54	-27 51.3	1.377	2.323	11.5	19.6	8 19	20 19.87	-29 45.5	1.606	2.547	10.6	19.3
8 29	20 9.68	-27 28.6	1.415	2.298	15.6	19.8	8 29	20 14.39	-29 33.0	1.663	2.539	14.1	19.5
397789	2008 <i>JP</i> ₂₂		7 29.7 22°43	16°6/13.4	16		137399	1999 <i>TY</i> ₁₇₁		7			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
107376	2001 CG ₃₆		7 29.7 169°73	3°9/27.5	17		28240	1999 AP ₂₁		7 29.7 357°38	1°1/30.1	18	
6 20	21 9.12	-26 23.1	1.823	2.651	15.4	20.5	6 20	21 2.31	-17 9.9	1.287	2.137	19.4	17.7
6 30	21 4.26	-27 7.2	1.748	2.655	12.2	20.3	6 30	20 59.67	-16 44.2	1.215	2.134	15.5	17.4
7 10	20 56.69	-27 54.4	1.693	2.658	8.6	20.1	7 10	20 53.95	-16 27.5	1.160	2.131	10.9	17.1
7 20	20 46.96	-28 38.7	1.662	2.660	5.2	19.9	7 20	20 45.73	-16 18.2	1.126	2.130	5.7	16.9
7 30	20 36.05	-29 13.8	1.658	2.662	4.1	19.8	7 30	20 36.14	-16 13.5	1.115	2.129	1.1	16.5
8 9	20 25.21	-29 34.8	1.681	2.664	6.8	20.0	8 9	20 26.62	-16 10.3	1.128	2.130	5.6	16.9
8 19	20 15.64	-29 40.0	1.730	2.664	10.4	20.2	8 19	20 18.58	-16 6.0	1.164	2.131	10.8	17.2
8 29	20 8.34	-29 30.0	1.801	2.664	13.8	20.4	8 29	20 13.14	-15 58.7	1.221	2.133	15.4	17.4
120829	1998 HV ₁₂₄		7 29.7 54°61	8°3/24.0	18		311517	2005 WY ₁₇₈		7 29.7 181°54	5°9/23.5	18	
6 20	21 5.08	-33 44.1	1.601	2.448	16.3	19.1	6 20	21 4.08	-34 15.0	2.670	3.488	11.3	21.0
6 30	21 1.72	-35 35.1	1.548	2.459	13.3	19.0	6 30	20 59.79	-35 55.7	2.595	3.489	9.2	20.9
7 10	20 55.28	-37 24.8	1.516	2.471	10.4	18.8	7 10	20 53.40	-37 35.8	2.545	3.489	7.3	20.8
7 20	20 46.36	-39 2.7	1.508	2.483	8.5	18.8	7 20	20 45.30	-39 9.0	2.521	3.489	6.0	20.7
7 30	20 36.07	-40 19.0	1.524	2.495	8.7	18.8	7 30	20 36.16	-40 28.9	2.526	3.488	6.3	20.7
8 9	20 25.91	-41 7.3	1.564	2.508	10.8	18.9	8 9	20 26.86	-41 30.9	2.558	3.488	7.8	20.8
8 19	20 17.26	-41 26.5	1.627	2.520	13.5	19.1	8 19	20 18.31	-42 12.8	2.617	3.487	9.8	20.9
8 29	20 11.25	-41 19.4	1.710	2.533	16.2	19.4	8 29	20 11.36	-42 34.9	2.698	3.485	11.8	21.1
374932	2007 AM ₁₇		7 29.7 207°38	0°6/29.3	18		215069	2009 DV ₁₂₉		7 29.7 216°39	0°1/29.6	18	
6 20	21 4.92	-17 40.2	2.028	2.843	14.5	21.4	6 20	21 3.04	-17 25.5	2.519	3.323	12.3	22.3
6 30	21 0.64	-18 10.4	1.937	2.838	11.6	21.2	6 30	20 58.66	-17 42.7	2.421	3.315	9.8	22.1
7 10	20 54.07	-18 49.6	1.867	2.832	8.0	21.0	7 10	20 52.43	-18 6.6	2.345	3.307	6.8	21.9
7 20	20 45.64	-19 34.6	1.822	2.826	4.0	20.7	7 20	20 44.74	-18 34.8	2.295	3.298	3.4	21.6
7 30	20 36.12	-20 20.8	1.804	2.819	0.7	20.5	7 30	20 36.19	-19 4.4	2.273	3.288	0.2	21.3
8 9	20 26.50	-21 3.6	1.814	2.812	4.6	20.7	8 9	20 27.56	-19 32.3	2.280	3.278	3.7	21.6
8 19	20 17.79	-21 39.3	1.852	2.804	8.6	21.0	8 19	20 19.63	-19 56.0	2.315	3.268	7.1	21.8
8 29	20 10.88	-22 5.7	1.913	2.795	12.2	21.2	8 29	20 13.12	-20 13.6	2.377	3.257	10.2	22.0
430426	1999 TL ₇₈		7 29.7 294°28	4°1/31.7	17		395660	2011 WT ₇₉		7 29.7 168°53	4°4/26.4	18	
6 20	21 0.67	- 8 37.8	1.462	2.282	18.9	21.9	6 20	21 2.72	-28 44.0	2.231	3.061	12.9	21.5
6 30	20 58.24	- 8 24.1	1.366	2.262	15.7	21.6	6 30	20 58.83	-29 44.0	2.154	3.061	10.2	21.4
7 10	20 53.01	- 8 27.7	1.288	2.243	11.8	21.3	7 10	20 52.75	-30 45.6	2.099	3.062	7.4	21.2
7 20	20 45.36	- 8 49.2	1.230	2.223	7.4	21.0	7 20	20 44.94	-31 43.3	2.070	3.062	5.0	21.0
7 30	20 36.13	- 9 27.3	1.196	2.204	4.2	20.8	7 30	20 36.18	-32 31.6	2.068	3.062	4.6	21.0
8 9	20 26.56	-10 17.6	1.186	2.185	6.1	20.8	8 9	20 27.41	-33 6.1	2.092	3.063	6.6	21.1
8 19	20 17.99	-11 14.3	1.200	2.166	10.7	21.0	8 19	20 19.57	-33 24.8	2.143	3.063	9.4	21.3
8 29	20 11.67	-12 11.1	1.235	2.147	15.3	21.3	8 29	20 13.48	-33 27.7	2.217	3.063	12.1	21.5
372887	2010 YM		7 29.7 248°60	0°6/29.4	17		123295	2000 UH ₁₀₃		7 29.7 277°04	6°7/1.7	18	
6 20	21 6.10	-19 6.2	1.669	2.497	16.6	22.2	6 20	21 3.27	- 3 32.9	1.840	2.616	17.2	19.1
6 30	21 2.11	-19 13.2	1.580	2.489	13.2	21.9	6 30	20 59.51	- 2 33.1	1.745	2.605	14.6	18.9
7 10	20 55.38	-19 28.0	1.512	2.480	9.2	21.7	7 10	20 53.40	- 1 46.9	1.669	2.594	11.6	18.7
7 20	20 46.41	-19 47.3	1.467	2.471	4.6	21.4	7 20	20 45.37	- 1 17.0	1.615	2.583	8.7	18.5
7 30	20 36.10	-20 7.0	1.447	2.462	0.7	21.1	7 30	20 36.17	- 1 4.8	1.586	2.572	6.8	18.4
8 9	20 25.72	-20 22.8	1.454	2.453	5.3	21.4	8 9	20 26.80	- 1 9.7	1.581	2.561	7.4	18.4
8 19	20 16.48	-20 31.8	1.486	2.443	9.9	21.6	8 19	20 18.32	- 1 29.1	1.602	2.550	10.1	18.5
8 29	20 9.48	-20 32.7	1.542	2.434	14.0	21.9	8 29	20 11.66	- 1 58.9	1.647	2.539	13.3	18.7
376905	2001 YA ₁₆		7 29.7 83°80	5°7/25.7	17		504449	2008 CK ₁₁₀		7 29.7 175°83	0°2/29.8	17	
6 20	21 4.67	-27 44.7	1.683	2.526	15.8	20.3	6 20	21 6.51	-16 7.9	1.937	2.747	15.3	22.5
6 30	21 1.06	-29 19.8	1.621	2.536	12.6	20.1	6 30	21 1.89	-16 26.5	1.853	2.750	12.2	22.3
7 10	20 54.65	-30 59.0	1.581	2.547	9.1	19.9	7 10	20 54.91	-16 54.7	1.790	2.752	8.5	22.0
7 20	20 46.01	-32 33.7	1.565	2.557	6.3	19.8	7 20	20 46.06	-17 29.5	1.751	2.753	4.3	21.8
7 30	20 36.12	-33 54.7	1.575	2.568	6.0	19.8	7 30	20 36.15	-18 7.1	1.739	2.754	0.2	21.5
8 9	20 26.29	-34 55.4	1.610	2.578	8.5	20.0	8 9	20 26.23	-18 42.9	1.755	2.754	4.5	21.8
8 19	20 17.77	-35 32.6	1.670	2.588	11.8	20.2	8 19	20 17.33	-19 13.7	1.798	2.753	8.6	22.1
8 29	20 11.59	-35 47.2	1.751	2.598	14.8	20.4	8 29	20 10.34	-19 37.1	1.866	2.752	12.3	22.3
262987	2007 EA ₅₄		7 29.7 114°01	0°8/30.3	18		54922	2001 OO ₉₅		7 29.7 277°17	1°3/29.0	18	
6 20	20 59.56	-13 56.6	2.555	3.356	12.3	21.3	6 20	21 3.94	-19 32.7	1.682	2.514	16.3	19.8
6 30	20 55.76	-14 13.8	2.473	3.364	9.7	21.1	6 30	21 0.57	-19 57.2	1.584	2.496	13.0	19.5
7 10	20 50.31	-14 39.5	2.413	3.371	6.8	21.0	7 10	20 54.47	-20 31.1	1.507	2.477	9.1	19.3
7 20	20 43.59	-15 11.5	2.378	3.379	3.6	20.8	7 20	20 46.04	-21 10.5	1.453	2.458	4.6	19.0
7 30	20 36.21	-15 47.4	2.372	3.386	0.8	20.6	7 30	20 36.15	-21 50.2	1.424	2.438	1.4	18.7
8 9	20 28.85	-16 24.0	2.393	3.393	3.4	20.8	8 9	20 25.99	-22 24.8	1.422	2.419	5.6	18.9
8 19	20 22.19	-16 58.6	2.443	3.400	6.5	21.0	8 19	20 16.84	-22 50.1	1.444	2.399	10.3	19.2
8 29	20 16.85	-17 28.8	2.519	3.407	9.4	21.2	8 29	20 9.86	-23 4.0	1.489	2.380	14.6	19.4
519609	2012 UH ₅₃		7 29.7 315°92	2°3/30.3	18		128100	2003 PY ₉		7 29.7 239°68	1°9/31.2	18	
6 20	21 5.52	-16 23.7	1.525	2.355	17.8	20.3	6 20	20 58.98	-10 43.4	2.667	3.455	12.1	20.8
6 30	21 1.98	-15 31.5	1.427	2.334	14.5	20.0	6 30	20 55.33	-10 50.4	2.567	3.447	9.8	20.6
7 10	20 55.51	-14 44.1	1.348	2.313	10.4	19.7	7 10	20 50.06	-11 6.9	2.489	3.439	7.1	20.4
7 20	20 46.58	-14 1.3	1.292	2.292	5.9	19.4	7 20	20 43.52	-11 32.1	2.436	3.430	4.2	20.2
7 30	20 36.10	-13 22.6	1.260	2.273	2.3	19.1	7 30	20 36.24	-12 3.9	2.411	3.422	1.9	20.0
8 9	20 25.41	-12 47.4	1.253	2.253	5.7	19.3	8 9	20 28.90	-12 39.8	2.415	3.413	3.5	20.1
8 19	20 15.87	-12 15.3	1.271	2.235	10.6	19.5	8 19	20 22.14	-13 16.8	2.446	3.404	6.5	20.3
8 29	20 8.68	-11 45.6	1.312	2.217	15.1	19.8	8 29	20 16.60	-13 52.3	2.503	3.395	9.3	20.5
443690	2015 KB ₄₁		7 29.7 205°45	2°5/28.0	17		512902	2016 WG ₄₈		7 29.7 228°20	2°3/27.9	18	
6 20	21 3.77												

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
174100	2002 <i>JH</i> ₂₄		7 29.7 26°81'	4.2/27.4	17		412260	2013 <i>HK</i> ₁₀₃		7 29.7 297°04'	1.9/28.9	17	
6 20	21 4.17	-23 51.8	1.384	2.237	18.1	20.1	6 20	21 4.72	-20 35.5	1.265	2.119	19.4	21.4
6 30	21 1.19	-24 55.1	1.316	2.238	14.3	19.9	6 30	21 1.99	-20 56.4	1.186	2.109	15.5	21.1
7 10	20 55.06	-26 6.7	1.266	2.239	10.0	19.6	7 10	20 55.89	-21 27.3	1.125	2.099	10.8	20.8
7 20	20 46.35	-27 19.0	1.239	2.241	5.8	19.4	7 20	20 46.92	-22 3.4	1.084	2.090	5.5	20.5
7 30	20 36.16	-28 23.0	1.236	2.243	4.5	19.3	7 30	20 36.22	-22 37.8	1.067	2.080	2.0	20.3
8 9	20 26.00	-29 11.1	1.257	2.245	7.9	19.5	8 9	20 25.39	-23 4.0	1.073	2.071	6.8	20.5
8 19	20 17.33	-29 39.2	1.302	2.247	12.2	19.8	8 19	20 16.04	-23 17.8	1.102	2.062	12.2	20.8
8 29	20 11.33	-29 47.2	1.368	2.249	16.2	20.0	8 29	20 9.56	-23 18.0	1.152	2.054	17.0	21.1
232080	2001 <i>VW</i> ₁₁₃		7 29.7 223°54'	4.3/27.1	18		435782	2008 <i>UU</i> ₃₁₃		7 29.7 310°53'	1.1/30.2	18	
6 20	21 6.28	-27 11.6	1.935	2.765	14.6	20.9	6 20	21 2.12	-15 57.5	1.568	2.401	17.2	20.9
6 30	21 2.04	-28 3.2	1.850	2.759	11.6	20.6	6 30	20 59.22	-15 44.1	1.474	2.383	13.9	20.6
7 10	20 55.22	-28 58.0	1.787	2.752	8.3	20.4	7 10	20 53.58	-15 40.0	1.398	2.365	9.9	20.3
7 20	20 46.31	-29 50.2	1.748	2.745	5.2	20.2	7 20	20 45.64	-15 43.9	1.345	2.348	5.3	20.0
7 30	20 36.17	-30 33.2	1.736	2.737	4.4	20.2	7 30	20 36.27	-15 53.1	1.316	2.330	1.2	19.7
8 9	20 25.96	-31 2.1	1.751	2.729	7.0	20.3	8 9	20 26.69	-16 4.0	1.312	2.313	5.2	19.9
8 19	20 16.83	-31 14.4	1.791	2.721	10.4	20.5	8 19	20 18.18	-16 13.5	1.333	2.297	10.1	20.2
8 29	20 9.78	-31 10.3	1.854	2.713	13.6	20.7	8 29	20 11.86	-16 19.3	1.376	2.281	14.5	20.4
200685	2001 <i>TG</i> ₂₁₉		7 29.7 285°72'	1.0/28.9	18		77623	2001 <i>KP</i> ₄₃		7 29.7 119°95'	1.0/30.4	18	
6 20	20 58.14	-19 29.5	2.706	3.522	11.3	20.5	6 20	21 4.86	-12 40.7	1.760	2.571	16.6	19.8
6 30	20 54.75	-20 2.6	2.609	3.511	8.9	20.3	6 30	21 0.71	-13 10.3	1.688	2.584	13.2	19.6
7 10	20 49.70	-20 41.7	2.535	3.501	6.1	20.1	7 10	20 54.15	-13 53.7	1.637	2.597	9.3	19.4
7 20	20 43.36	-21 24.0	2.487	3.490	3.1	19.9	7 20	20 45.72	-14 47.8	1.609	2.610	4.9	19.1
7 30	20 36.26	-22 6.2	2.466	3.480	1.1	19.7	7 30	20 36.28	-15 47.8	1.607	2.622	1.1	18.9
8 9	20 29.09	-22 45.1	2.474	3.470	3.8	19.9	8 9	20 26.92	-16 48.0	1.633	2.634	4.5	19.2
8 19	20 22.51	-23 17.8	2.510	3.459	6.8	20.1	8 19	20 18.68	-17 43.6	1.685	2.645	8.8	19.4
8 29	20 17.18	-23 42.8	2.572	3.449	9.6	20.3	8 29	20 12.45	-18 30.9	1.762	2.655	12.5	19.7
495996	2007 <i>VP</i> ₅₈		7 29.7 113°07'	17.4/6.1	18		322531	2011 <i>YP</i> ₂₀		7 29.7 137°60'	0.8/30.1	17	
6 20	21 7.77	+11 22.6	1.242	1.973	26.1	20.7	6 20	21 6.68	-15 0.3	1.618	2.437	17.4	21.8
6 30	21 4.10	+13 56.7	1.181	1.979	23.8	20.6	6 30	21 2.43	-15 11.3	1.543	2.445	13.9	21.6
7 10	20 57.15	+16 3.2	1.134	1.985	21.4	20.4	7 10	20 55.50	-15 34.1	1.489	2.453	9.7	21.3
7 20	20 47.46	+17 31.6	1.102	1.991	19.2	20.3	7 20	20 46.45	-16 5.7	1.457	2.460	5.1	21.1
7 30	20 36.13	+18 13.5	1.088	1.996	17.7	20.2	7 30	20 36.25	-16 41.9	1.451	2.466	0.8	20.8
8 9	20 24.72	+18 6.6	1.092	2.002	17.4	20.2	8 9	20 26.13	-17 17.9	1.472	2.473	4.9	21.1
8 19	20 14.77	+17 15.2	1.115	2.007	18.4	20.3	8 19	20 17.27	-17 49.5	1.518	2.478	9.5	21.4
8 29	20 7.61	+15 49.6	1.155	2.012	20.2	20.4	8 29	20 10.65	-18 14.1	1.588	2.484	13.5	21.7
512133	2015 <i>PO</i> ₃₆		7 29.7 275°00'	6.1/26.4	18		188524	2004 <i>RG</i> ₁₀₀		7 29.7 209°35'	5.3/3.5	18	
6 20	21 9.92	-36 18.1	2.251	3.068	13.2	21.5	6 20	20 58.11	+1 23.2	2.700	3.433	13.3	20.7
6 30	21 4.63	-36 47.3	2.165	3.057	10.9	21.3	6 30	20 54.61	+1 27.8	2.602	3.429	11.4	20.6
7 10	20 56.81	-37 11.6	2.100	3.046	8.4	21.1	7 10	20 49.57	+1 17.0	2.524	3.426	9.2	20.4
7 20	20 47.02	-37 25.1	2.059	3.035	6.5	21.0	7 20	20 43.31	+0 50.3	2.469	3.422	7.0	20.3
7 30	20 36.17	-37 22.8	2.046	3.024	6.2	20.9	7 30	20 36.36	+0 8.2	2.440	3.417	5.5	20.1
8 9	20 25.41	-37 1.9	2.058	3.013	7.9	21.0	8 9	20 29.34	-0 47.0	2.438	3.413	5.5	20.1
8 19	20 15.84	-36 22.6	2.097	3.002	10.4	21.2	8 19	20 22.88	-1 51.8	2.464	3.408	7.2	20.2
8 29	20 8.35	-35 27.5	2.159	2.991	12.9	21.3	8 29	20 17.59	-3 1.9	2.516	3.403	9.5	20.4
288547	2004 <i>GF</i> ₄₂		7 29.7 31°54'	5.0/27.4	17		35829	1999 <i>JH</i> ₅₄		7 29.7 4°81'	9.3/24.5	18	
6 20	20 59.85	-22 18.9	0.843	1.735	23.3	19.7	6 20	21 0.92	-33 44.4	1.261	2.129	18.5	18.6
6 30	20 58.93	-23 37.6	0.806	1.750	18.2	19.5	6 30	20 59.28	-35 20.7	1.204	2.129	15.2	18.4
7 10	20 53.99	-25 8.0	0.784	1.767	12.6	19.3	7 10	20 54.10	-36 56.0	1.166	2.129	11.9	18.2
7 20	20 45.88	-26 38.7	0.780	1.786	7.0	19.0	7 20	20 46.00	-38 18.8	1.149	2.131	9.6	18.1
7 30	20 36.22	-27 56.1	0.797	1.806	5.3	19.0	7 30	20 36.27	-39 17.8	1.154	2.134	9.7	18.1
8 9	20 27.08	-28 50.3	0.834	1.828	9.4	19.3	8 9	20 26.66	-39 45.8	1.181	2.138	12.1	18.2
8 19	20 20.21	-29 17.5	0.891	1.850	14.5	19.7	8 19	20 18.84	-39 41.8	1.228	2.143	15.3	18.4
8 29	20 16.80	-29 19.2	0.966	1.873	19.0	20.1	8 29	20 14.09	-39 9.3	1.294	2.149	18.5	18.7
359832	2011 <i>UH</i> ₃₂₀		7 29.7 205°58'	3.8/26.6	18		164002	2003 <i>UU</i> ₁₇₂		7 29.7 290°49'	4.1/1.3	18	
6 20	21 2.41	-27 24.4	2.448	3.272	12.1	20.8	6 20	20 59.27	-6 0.8	1.869	2.663	16.4	20.8
6 30	20 58.40	-28 23.7	2.364	3.270	9.5	20.7	6 30	20 56.48	-6 0.6	1.765	2.643	13.6	20.5
7 10	20 52.39	-29 25.7	2.304	3.267	6.8	20.5	7 10	20 51.43	-6 17.6	1.679	2.623	10.4	20.3
7 20	20 44.78	-30 25.2	2.269	3.264	4.4	20.3	7 20	20 44.48	-6 52.0	1.616	2.602	6.9	20.0
7 30	20 36.26	-31 17.3	2.262	3.260	3.9	20.3	7 30	20 36.32	-7 42.3	1.578	2.582	4.2	19.8
8 9	20 27.69	-31 57.6	2.283	3.256	6.0	20.4	8 9	20 27.90	-8 44.6	1.566	2.562	5.4	19.9
8 19	20 19.90	-32 24.0	2.331	3.253	8.7	20.6	8 19	20 20.22	-9 53.7	1.580	2.542	9.0	20.0
8 29	20 13.69	-32 35.8	2.402	3.249	11.3	20.8	8 29	20 14.25	-11 3.8	1.618	2.522	12.8	20.2
40612	1999 <i>RM</i> ₁₆₂		7 29.7 264°41'	4.8/26.2	18		396987	2005 <i>SZ</i> ₁₄₉		7 29.7 341°85'	6.4/25.8	16	
6 20	21 3.15	-30 54.4	2.336	3.163	12.5	19.7	6 20	21 3.35	-33 1.9	1.874	2.714	14.6	20.6
6 30	20 59.16	-31 47.3	2.252	3.156	10.0	19.5	6 30	20 59.93	-33 59.0	1.800	2.709	11.8	20.4
7 10	20 53.00	-32 40.4	2.191	3.150	7.4	19.3	7 10	20 53.86	-34 54.7	1.746	2.704	9.0	20.2
7 20	20 45.12	-33 28.2	2.155	3.143	5.3	19.2	7 20	20 45.66	-35 42.2	1.715	2.699	6.8	20.0
7 30	20 36.26	-34 5.5	2.146	3.136	5.0	19.2	7 30	20 36.29	-36 14.7	1.710	2.695	6.6	20.0
8 9	20 27.37	-34 28.5	2.164	3.129	6.9	19.3	8 9	20 26.94	-36 27.7	1.730	2.691	8.6	20.1
8 19	20 19.37	-34 35.4	2.208	3.122	9.5	19.4	8 19	20 18.80	-36 20.2	1.774	2.688	11.4	20.3
8 29	20 13.09	-34 26.8	2.275	3.115	12.1	19.6	8 29	20 12.86	-35 53.6	1.840	2.685	14.3	20.5
484978	2009 <i>UY</i> ₁₆		7 29.7 316°60'	10.5/4.1	17		337266	2000 <i>SY</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
274844	2009 QW ₃₂	7 29.7 279°10 16°7/10.7 17											
6 20	20 58.81	+17 13.2	1.294	2.000	26.3	20.9							
6 30	20 57.18	+18 21.3	1.212	1.989	24.4	20.6							
7 10	20 52.56	+18 52.8	1.141	1.978	22.2	20.4							
7 20	20 45.30	+18 38.0	1.082	1.966	19.8	20.2							
7 30	20 36.30	+17 29.0	1.040	1.955	17.8	20.1							
8 9	20 26.94	+15 25.0	1.016	1.943	16.8	20.0							
8 19	20 18.67	+12 33.1	1.011	1.932	17.3	20.0							
8 29	20 12.90	+9 8.4	1.027	1.920	19.3	20.1							
262472	2006 UG ₁₅₈	7 29.7 82°21 4°2/27.6 17											
6 20	21 8.45	-25 29.9	1.517	2.357	17.4	20.9							
6 30	21 4.04	-26 24.6	1.462	2.377	13.7	20.7							
7 10	20 56.66	-27 23.3	1.427	2.396	9.5	20.5							
7 20	20 47.02	-28 18.7	1.416	2.416	5.6	20.3							
7 30	20 36.28	-29 3.3	1.430	2.435	4.4	20.3							
8 9	20 25.85	-29 31.9	1.469	2.454	7.3	20.5							
8 19	20 17.01	-29 42.6	1.533	2.472	11.1	20.8							
8 29	20 10.73	-29 36.5	1.619	2.491	14.6	21.0							
385804	2006 DS ₂₃	7 29.7 152°50 0°3/29.6 17											
6 20	21 3.70	-17 1.2	2.014	2.829	14.6	21.8							
6 30	20 59.60	-17 26.0	1.933	2.834	11.6	21.6							
7 10	20 53.31	-17 59.7	1.874	2.838	8.0	21.4							
7 20	20 45.30	-18 39.1	1.839	2.842	4.0	21.2							
7 30	20 36.34	-19 20.1	1.831	2.846	0.3	20.9							
8 9	20 27.39	-19 58.4	1.851	2.849	4.3	21.2							
8 19	20 19.40	-20 30.8	1.897	2.852	8.2	21.4							
8 29	20 13.19	-20 55.1	1.968	2.855	11.7	21.7							
443127	2014 BK ₈	7 29.7 225°83 15°9/18.3 18											
6 20	21 15.24	-43 2.0	1.185	2.032	20.9	20.8							
6 30	21 12.63	-46 10.0	1.131	2.026	18.4	20.6							
7 10	21 4.88	-49 13.1	1.096	2.019	16.5	20.5							
7 20	20 52.20	-51 51.3	1.081	2.011	15.9	20.5							
7 30	20 36.11	-53 44.9	1.087	2.003	17.0	20.5							
8 9	20 19.46	-54 42.6	1.111	1.995	19.2	20.6							
8 19	20 5.38	-54 45.0	1.152	1.986	21.9	20.8							
8 29	19 56.25	-54 1.6	1.208	1.976	24.5	20.9							
337893	2001 XK ₁	7 29.7 118°81 20°7/ 8.4 18											
6 20	21 19.71	+21 44.1	1.533	2.142	25.9	19.9							
6 30	21 13.32	+25 20.8	1.482	2.159	24.5	19.8							
7 10	21 3.50	+28 28.7	1.446	2.176	23.0	19.7							
7 20	20 50.75	+30 55.5	1.425	2.192	21.8	19.6							
7 30	20 36.19	+32 31.2	1.422	2.206	21.0	19.6							
8 9	20 21.41	+33 11.7	1.436	2.221	20.7	19.6							
8 19	20 8.10	+33 0.0	1.466	2.234	21.0	19.7							
8 29	19 57.64	+32 5.4	1.512	2.247	21.7	19.8							
479093	2013 AV ₁₁₉	7 29.7 252°60 1°5/28.7 18											
6 20	21 1.98	-20 6.7	2.147	2.969	13.6	22.1							
6 30	20 58.32	-20 45.1	2.053	2.959	10.7	21.9							
7 10	20 52.50	-21 31.0	1.981	2.949	7.4	21.7							
7 20	20 44.95	-22 20.7	1.934	2.938	3.8	21.4							
7 30	20 36.36	-23 9.5	1.914	2.927	1.6	21.3							
8 9	20 27.64	-23 52.9	1.922	2.916	4.8	21.5							
8 19	20 19.73	-24 27.4	1.957	2.905	8.5	21.7							
8 29	20 13.49	-24 51.1	2.016	2.894	11.9	21.8							
470787	2008 US ₃₀₂	7 29.7 294°77 2°0/28.7 18											
6 20	21 3.07	-21 29.0	1.722	2.558	15.8	21.5							
6 30	20 59.92	-21 54.7	1.621	2.535	12.6	21.2							
7 10	20 54.08	-22 27.9	1.541	2.512	8.8	20.9							
7 20	20 45.94	-23 4.7	1.484	2.488	4.6	20.6							
7 30	20 36.32	-23 39.7	1.452	2.465	2.1	20.4							
8 9	20 26.43	-24 7.5	1.447	2.442	5.9	20.6							
8 19	20 17.50	-24 24.6	1.466	2.419	10.4	20.8							
8 29	20 10.69	-24 29.3	1.508	2.396	14.5	21.0							
122490	2000 QF ₁₇₅	7 29.7 279°86 3°0/31.3 18											
6 20	21 1.87	-10 21.6	1.755	2.565	16.7	20.2							
6 30	20 58.64	-10 12.2	1.660	2.551	13.6	19.9							
7 10	20 52.97	-10 16.4	1.584	2.538	10.0	19.7							
7 20	20 45.28	-10 33.6	1.530	2.525	6.1	19.4							
7 30	20 36.35	-11 2.0	1.501	2.511	3.0	19.2							
8 9	20 27.24	-11 37.8	1.498	2.498	5.1	19.3							
8 19	20 19.03	-12 17.0	1.521	2.484	9.2	19.5							
8 29	20 12.74	-12 55.4	1.568	2.471	13.2	19.7							
43387	2000 WF ₅₈	7 29.7 206°90 2°3/30.9 18											
6 20	21 6.10	-11 34.9	1.843	2.644	16.3	19.6							
6 30	21 1.78	-11 30.3	1.752	2.640	13.2	19.4							
7 10	20 55.02	-11 37.8	1.681	2.635	9.6	19.2							
7 20	20 46.27	-11 56.5	1.633	2.629	5.5	18.9							
7 30	20 36.35	-12 23.9	1.611	2.622	2.4	18.7							
8 9	20 26.32	-12 56.2	1.616	2.615	4.8	18.8							
8 19	20 17.26	-13 29.6	1.648	2.608	8.9	19.1							
8 29	20 10.14	-14 0.8	1.704	2.600	12.8	19.3							
435879	2008 YC ₁₃₅	7 29.7 249°09 2°0/28.4 18											
6 20	21 2.52	-20 34.6	1.975	2.802	14.4	21.4							
6 30	20 58.97	-21 22.2	1.885	2.794	11.4	21.2							
7 10	20 53.09	-22 18.2	1.817	2.786	7.9	21.0							
7 20	20 45.31	-23 18.2	1.773	2.777	4.1	20.7							
7 30	20 36.39	-24 16.5	1.756	2.768	2.1	20.6							
8 9	20 27.35	-25 7.8	1.767	2.759	5.4	20.8							
8 19	20 19.20	-25 47.9	1.803	2.750	9.2	21.0							
8 29	20 12.88	-26 15.1	1.864	2.741	12.7	21.2							
38380	1999 RR ₁₇₅	7 29.7 78°59 6°4/26.9 18											
6 20	21 11.55	-34 20.9	1.783	2.612	15.7	18.1							
6 30	21 6.37	-34 53.6	1.715	2.617	12.7	17.9							
7 10	20 58.24	-35 21.8	1.667	2.621	9.6	17.7							
7 20	20 47.85	-35 38.6	1.643	2.626	7.1	17.6							
7 30	20 36.33	-35 38.0	1.644	2.631	6.5	17.6							
8 9	20 25.10	-35 17.1	1.670	2.636	8.5	17.7							
8 19	20 15.43	-34 36.6	1.722	2.640	11.4	17.9							
8 29	20 8.31	-33 40.1	1.796	2.645	14.4	18.1							
189608	2000 XX ₃₆	7 29.7 298°62 2°6/28.8 18											
6 20	21 8.15	-25 12.2	1.657	2.492	16.4	19.4							
6 30	21 4.01	-25 8.7	1.561	2.473	13.1	19.1							
7 10	20 56.92	-25 6.6	1.485	2.454	9.3	18.8							

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
208156	2000 GQ ₁₆₄	7 29.7 142°05 5°2/26.5 16					152690	1998 QS ₇₅	7 29.8 309°02 8°8/ 5.1 18				
6 20	21 7.84	-32 27.7	2.217	3.039	13.2	20.9	6 20	20 56.83	+ 6 45.2	2.184	2.904	16.4	19.9
6 30	21 2.88	-33 13.9	2.146	3.046	10.6	20.7	6 30	20 54.21	+ 7 26.1	2.078	2.883	14.6	19.7
7 10	20 55.57	-33 58.1	2.097	3.052	7.9	20.6	7 10	20 49.70	+ 7 47.8	1.989	2.863	12.5	19.5
7 20	20 46.46	-34 34.7	2.073	3.058	5.7	20.5	7 20	20 43.61	+ 7 47.2	1.921	2.843	10.5	19.4
7 30	20 36.42	-34 58.4	2.076	3.063	5.4	20.5	7 30	20 36.54	+ 7 22.3	1.875	2.823	9.0	19.2
8 9	20 26.50	-35 5.9	2.106	3.069	7.2	20.6	8 9	20 29.26	+ 6 34.0	1.853	2.804	8.9	19.2
8 19	20 17.71	-34 56.5	2.162	3.074	9.8	20.8	8 19	20 22.58	+ 5 25.6	1.856	2.784	10.2	19.2
8 29	20 10.87	-34 31.8	2.241	3.078	12.3	20.9	8 29	20 17.30	+ 4 2.7	1.883	2.766	12.3	19.3
470839	2008 XV ₅	7 29.7 250°94 2°0/30.7 18					137040	1998 UY ₃₅	7 29.8 284°04 2°3/28.6 18				
6 20	21 5.75	-13 34.0	2.144	2.941	14.4	21.2	6 20	21 4.47	-21 28.9	1.620	2.458	16.6	20.0
6 30	21 1.23	-13 12.6	2.040	2.926	11.7	21.0	6 30	21 1.28	-22 0.5	1.522	2.436	13.3	19.7
7 10	20 54.52	-12 58.9	1.956	2.911	8.4	20.8	7 10	20 55.21	-22 40.8	1.442	2.413	9.3	19.4
7 20	20 46.02	-12 52.2	1.898	2.895	4.8	20.5	7 20	20 46.65	-23 25.4	1.386	2.390	4.9	19.1
7 30	20 36.45	-12 51.1	1.866	2.878	2.0	20.3	7 30	20 36.46	-24 8.0	1.355	2.367	2.4	18.9
8 9	20 26.72	-12 53.6	1.863	2.861	4.3	20.4	8 9	20 25.94	-24 42.4	1.350	2.344	6.3	19.1
8 19	20 17.78	-12 57.7	1.887	2.844	8.1	20.6	8 19	20 16.44	-25 4.6	1.369	2.321	11.0	19.3
8 29	20 10.51	-13 1.5	1.936	2.826	11.7	20.8	8 29	20 9.24	-25 12.6	1.410	2.298	15.4	19.5
521600	2015 PT ₃₁₇	7 29.7 300°54 0°6/30.1 18					137949	2000 CV ₆	7 29.8 236°93 3°5/27.6 18				
6 20	21 2.27	-16 34.4	2.156	2.969	13.8	21.4	6 20	21 4.98	-23 10.2	1.712	2.547	15.9	20.4
6 30	20 58.40	-16 27.3	2.064	2.962	11.0	21.2	6 30	21 1.40	-24 10.2	1.627	2.540	12.6	20.1
7 10	20 52.48	-16 26.8	1.993	2.955	7.7	21.0	7 10	20 55.08	-25 18.3	1.563	2.533	8.8	19.9
7 20	20 44.93	-16 31.5	1.947	2.949	4.1	20.8	7 20	20 46.47	-26 28.6	1.524	2.525	5.0	19.6
7 30	20 36.47	-16 39.0	1.927	2.942	0.7	20.5	7 30	20 36.48	-27 33.4	1.510	2.517	3.6	19.5
8 9	20 27.98	-16 46.8	1.935	2.935	4.0	20.7	8 9	20 26.33	-28 26.1	1.522	2.509	6.8	19.7
8 19	20 20.33	-16 52.8	1.970	2.929	7.7	21.0	8 19	20 17.30	-29 2.4	1.560	2.500	10.8	19.9
8 29	20 14.29	-16 55.4	2.030	2.923	11.1	21.2	8 29	20 10.48	-29 21.1	1.620	2.492	14.6	20.1
359483	2010 OX ₃₃	7 29.8 70°88 4°0/ 1.8 18					94024	2000 XS ₃₆	7 29.8 306°90 1°3/29.4 18				
6 20	20 59.16	- 4 47.8	2.250	3.025	14.5	21.0	6 20	21 7.78	-22 48.9	1.587	2.423	17.0	18.1
6 30	20 55.70	- 4 43.0	2.171	3.035	12.0	20.8	6 30	21 3.80	-22 29.7	1.492	2.404	13.6	17.9
7 10	20 50.46	- 4 52.4	2.111	3.044	9.1	20.7	7 10	20 56.84	-22 12.6	1.417	2.386	9.6	17.6
7 20	20 43.85	- 5 15.9	2.075	3.054	6.2	20.5	7 20	20 47.40	-21 54.5	1.364	2.368	4.9	17.3
7 30	20 36.51	- 5 52.0	2.066	3.064	4.2	20.4	7 30	20 36.46	-21 32.0	1.337	2.351	1.3	17.0
8 9	20 29.20	- 6 37.5	2.083	3.074	4.8	20.4	8 9	20 25.39	-21 2.6	1.335	2.334	5.7	17.2
8 19	20 22.67	- 7 28.6	2.127	3.084	7.4	20.6	8 19	20 15.57	-20 25.9	1.359	2.317	10.5	17.5
8 29	20 17.55	- 8 21.3	2.197	3.094	10.2	20.8	8 29	20 8.18	-19 42.9	1.405	2.301	14.9	17.7
440663	2005 XO ₅₈	7 29.8 319°92 2°2/30.9 17					311321	2005 NP ₁	7 29.8 58°16 27°0/11.0 17				
6 20	20 59.22	-12 51.7	1.820	2.640	15.7	21.0	6 20	21 41.87	+13 52.4	0.855	1.565	36.7	20.6
6 30	20 56.56	-12 36.8	1.718	2.617	12.8	20.7	6 30	21 31.70	+20 16.3	0.841	1.604	33.6	20.6
7 10	20 51.57	-12 32.4	1.634	2.595	9.3	20.5	7 10	21 16.49	+25 50.5	0.842	1.643	30.9	20.5
7 20	20 44.64	-12 37.8	1.574	2.573	5.4	20.2	7 20	20 57.26	+30 9.2	0.860	1.683	28.7	20.6
7 30	20 36.49	-12 51.5	1.539	2.551	2.3	19.9	7 30	20 36.24	+32 55.9	0.895	1.722	27.5	20.7
8 9	20 28.12	-13 10.5	1.529	2.530	4.8	20.0	8 9	20 16.31	+34 11.1	0.946	1.761	27.0	20.8
8 19	20 20.56	-13 31.7	1.545	2.509	9.0	20.2	8 19	19 59.95	+34 9.0	1.009	1.800	27.1	21.0
8 29	20 14.81	-13 51.7	1.584	2.489	12.9	20.4	8 29	19 48.65	+33 11.7	1.085	1.838	27.6	21.2
175226	2005 GS ₁₁₁	7 29.8 260°09 4°3/31.9 17					107575	2001 DG ₉₄	7 29.8 206°09 2°1/31.1 18				
6 20	21 2.82	- 7 38.9	1.591	2.396	18.3	21.1	6 20	21 5.28	-10 39.3	1.990	2.784	15.5	21.2
6 30	20 59.62	- 7 23.0	1.502	2.388	15.1	20.9	6 30	21 1.00	-10 49.8	1.896	2.779	12.6	21.0
7 10	20 53.80	- 7 23.6	1.431	2.380	11.4	20.7	7 10	20 54.45	-11 13.6	1.821	2.773	9.1	20.7
7 20	20 45.79	- 7 41.4	1.382	2.371	7.3	20.4	7 20	20 46.04	-11 49.2	1.771	2.766	5.3	20.5
7 30	20 36.46	- 8 14.6	1.357	2.363	4.4	20.2	7 30	20 36.51	-12 33.7	1.747	2.759	2.2	20.3
8 9	20 26.96	- 8 59.5	1.357	2.354	5.9	20.3	8 9	20 26.85	-13 22.9	1.751	2.750	4.5	20.4
8 19	20 18.49	- 9 50.9	1.382	2.345	9.9	20.5	8 19	20 18.04	-14 12.5	1.782	2.741	8.4	20.6
8 29	20 12.12	-10 43.3	1.430	2.336	14.0	20.7	8 29	20 11.00	-14 58.5	1.839	2.732	12.1	20.8
281799	2009 VW ₄₇	7 29.8 148°08 1°8/30.9 17					264064	2009 SS ₁₁₅	7 29.8 32°67 1°1/29.3 17				
6 20	21 4.21	-11 22.6	2.154	2.947	14.5	22.0	6 20	21 4.42	-20 14.6	1.254	2.108	19.5	20.1
6 30	20 59.80	-11 33.3	2.072	2.956	11.7	21.8	6 30	21 1.36	-20 19.2	1.196	2.118	15.4	19.9
7 10	20 53.35	-11 55.4	2.012	2.964	8.3	21.7	7 10	20 55.13	-20 32.0	1.155	2.129	10.6	19.6
7 20	20 45.34	-12 27.2	1.976	2.972	4.7	21.5	7 20	20 46.43	-20 48.9	1.136	2.141	5.3	19.4
7 30	20 36.48	-13 5.7	1.968	2.980	1.8	21.3	7 30	20 36.50	-21 4.4	1.139	2.154	1.2	19.1
8 9	20 27.65	-13 47.4	1.987	2.987	4.0	21.4	8 9	20 26.86	-21 14.0	1.167	2.167	6.0	19.5
8 19	20 19.70	-14 28.7	2.035	2.993	7.6	21.7	8 19	20 18.88	-21 15.2	1.218	2.181	11.0	19.8
8 29	20 13.38	-15 6.3	2.107	2.999	10.8	21.9	8 29	20 13.61	-21 7.1	1.290	2.196	15.3	20.1
437413	2013 WX ₉₇	7 29.8 202°16 3°5/27.6 17					67679	2000 SR ₂₈₉	7 29.8 86°30 2°4/28.8 18				
6 20	21 5.24	-24 50.1	1.874	2.706	14.9	22.1	6 20	21 10.21	-23 0.0	1.402	2.242	18.6	18.8
6 30	21 1.27	-25 40.8	1.794	2.704	11.8	21.8	6 30	21 5.67	-23 12.8	1.340	2.254	14.7	18.6
7 10	20 54.75	-26 36.5	1.734	2.702	8.3	21.6	7 10	20 57.98	-23 30.6	1.296	2.266	10.1	18.4
7 20	20 46.19	-27 31.7	1.700	2.700	4.8	21.4	7 20	20 47.83	-23 48.3	1.274	2.278	5.3	18.1
7 30	20 36.46	-28 19.9	1.691	2.697	3.7	21.3	7 30	20 36.47	-24 0.3	1.278	2.290	2.4	18.0
8 9	20 26.69	-28 56.0	1.710	2.694	6.4	21.5	8 9	20 25.41	-24 2.3	1.306	2.302	6.3	18.3
8 19	20 18.00	-29 16.9	1.754	2.691	10.1	21.7	8 19	20 16.03	-23 52.9	1.360	2.314	10.9	18.6
8 29	20 11.39	-29 22.5	1.821	2.688	13.4	21.9	8 29	20 9.39	-23 32.9	1.435	2.325	15.0	18.8
477900	2011 KX ₁₁	7 29.8 125°38 11°1/ 5.4 17					206696	2004 AO ₂	7 29.8 285°21 0°0/29.8 18				
6 20	21 3.98	+ 9 25.5	1.990	2.686	18.4	20.9	6 20	21 0.69	-15 42.7	1.940	2.761	14.9	20.3
6 30	20 59.86	+10 55.9	1.912	2.692	16.5	20.7	6 30	20 57.51	-16 12.1	1.849	2.753	11.9	

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
488361	2016 <i>WK</i> ₂₉	7 29.8 144°08		6°9/ 5.2 18			287731	2003 <i>RN</i> ₁₉	7 29.8 320°31		2°1/29.0 18		
6 20	20 58.61	+ 6 49.3	2.816	3.510	13.6	21.4	6 20	21 2.30	-22 7.3	1.182	2.046	19.8	20.3
6 30	20 54.94	+ 7 20.3	2.728	3.515	11.9	21.2	6 30	21 0.48	-22 11.7	1.097	2.027	15.9	20.0
7 10	20 49.78	+ 7 35.4	2.658	3.521	10.1	21.1	7 10	20 55.18	-22 23.2	1.030	2.007	11.2	19.7
7 20	20 43.49	+ 7 33.0	2.611	3.526	8.4	21.0	7 20	20 46.82	-22 37.5	0.983	1.989	5.8	19.3
7 30	20 36.58	+ 7 12.6	2.589	3.531	7.2	20.9	7 30	20 36.52	-22 48.4	0.957	1.971	2.2	19.0
8 9	20 29.65	+ 6 35.7	2.592	3.535	7.0	20.9	8 9	20 25.96	-22 50.4	0.955	1.954	7.1	19.3
8 19	20 23.30	+ 5 44.9	2.621	3.540	8.0	21.0	8 19	20 16.88	-22 40.3	0.974	1.939	12.8	19.5
8 29	20 18.07	+ 4 44.3	2.676	3.544	9.6	21.1	8 29	20 10.78	-22 17.8	1.012	1.924	17.9	19.8
479270	2013 <i>FD</i> ₃	7 29.8 115°48		4°2/26.6 18			183796	2004 <i>BP</i> ₃₈	7 29.8 127°42		1°1/29.2 17		
6 20	21 2.76	-28 43.1	2.324	3.151	12.5	21.0	6 20	21 7.13	-19 21.3	1.727	2.551	16.3	21.6
6 30	20 58.81	-29 39.3	2.249	3.155	9.9	20.8	6 30	21 2.70	-19 46.9	1.655	2.561	12.9	21.4
7 10	20 52.77	-30 36.8	2.197	3.159	7.2	20.6	7 10	20 55.69	-20 20.7	1.604	2.571	8.8	21.2
7 20	20 45.10	-31 30.4	2.170	3.162	4.8	20.5	7 20	20 46.65	-20 58.3	1.576	2.580	4.4	20.9
7 30	20 36.54	-32 15.0	2.170	3.166	4.4	20.5	7 30	20 36.54	-21 34.8	1.575	2.589	1.2	20.7
8 9	20 28.00	-32 46.5	2.198	3.169	6.3	20.6	8 9	20 26.54	-22 5.4	1.600	2.597	5.1	21.0
8 19	20 20.35	-33 3.2	2.251	3.172	9.0	20.8	8 19	20 17.77	-22 26.9	1.652	2.605	9.4	21.3
8 29	20 14.39	-33 5.0	2.329	3.175	11.6	21.0	8 29	20 11.17	-22 38.2	1.727	2.613	13.1	21.5
71358	2000 <i>AZ</i> ₁₂₃	7 29.8 200°30		2°2/31.0 18			61003	2000 <i>KU</i> ₃₂	7 29.8 153°92		1°2/29.2 18		
6 20	21 3.90	-11 58.5	2.236	3.030	14.0	19.8	6 20	21 7.03	-18 48.4	1.480	2.315	18.0	19.8
6 30	20 59.56	-11 45.4	2.144	3.028	11.3	19.6	6 30	21 3.18	-19 16.9	1.406	2.318	14.3	19.6
7 10	20 53.22	-11 41.5	2.073	3.025	8.2	19.4	7 10	20 56.35	-19 55.9	1.352	2.321	9.9	19.3
7 20	20 45.32	-11 45.9	2.027	3.022	4.8	19.1	7 20	20 47.13	-20 40.9	1.320	2.324	5.0	19.1
7 30	20 36.54	-11 57.1	2.008	3.018	2.2	19.0	7 30	20 36.55	-21 25.5	1.312	2.327	1.3	18.8
8 9	20 27.72	-12 12.6	2.017	3.015	4.1	19.1	8 9	20 26.00	-22 3.8	1.331	2.329	5.8	19.1
8 19	20 19.70	-12 30.0	2.053	3.011	7.5	19.3	8 19	20 16.83	-22 31.7	1.374	2.331	10.6	19.4
8 29	20 13.25	-12 47.0	2.114	3.006	10.8	19.5	8 29	20 10.15	-22 47.4	1.440	2.333	14.8	19.7
64619	2001 <i>XR</i> ₂₈	7 29.8 254°12		1°9/30.9 18			440204	2004 <i>JA</i> ₃₁	7 29.8 37°85		4°4/27.2 15		
6 20	21 2.84	-11 52.9	1.883	2.690	15.8	19.8	6 20	21 2.63	-25 57.0	1.572	2.421	16.5	20.7
6 30	20 59.28	-11 58.2	1.785	2.678	12.8	19.6	6 30	20 59.40	-26 58.4	1.523	2.443	12.9	20.5
7 10	20 53.38	-12 16.1	1.708	2.665	9.2	19.3	7 10	20 53.47	-28 3.1	1.494	2.465	9.0	20.3
7 20	20 45.55	-12 45.4	1.654	2.652	5.3	19.0	7 20	20 45.52	-29 4.1	1.488	2.487	5.5	20.2
7 30	20 36.53	-13 23.3	1.626	2.639	2.0	18.8	7 30	20 36.59	-29 54.3	1.507	2.511	4.6	20.2
8 9	20 27.33	-14 5.7	1.626	2.626	4.6	18.9	8 9	20 27.94	-30 28.6	1.552	2.534	7.2	20.4
8 19	20 18.99	-14 48.3	1.651	2.612	8.7	19.2	8 19	20 20.70	-30 45.0	1.620	2.559	10.7	20.7
8 29	20 12.46	-15 27.4	1.700	2.598	12.6	19.4	8 29	20 15.75	-30 44.2	1.711	2.583	13.9	20.9
164018	2003 <i>UP</i> ₂₀₇	7 29.8 252°36		7°0/24.4 18			391836	2008 <i>SH</i> ₁₆₂	7 29.8 266°98		5°5/ 2.3 18		
6 20	21 6.75	-35 17.1	2.169	2.994	13.4	20.0	6 20	21 0.64	- 2 31.5	1.950	2.722	16.5	21.9
6 30	21 2.57	-36 36.9	2.083	2.980	11.0	19.9	6 30	20 57.47	- 2 19.4	1.847	2.706	14.0	21.7
7 10	20 55.78	-37 55.6	2.019	2.965	8.7	19.7	7 10	20 52.11	- 2 25.1	1.763	2.691	11.0	21.5
7 20	20 46.81	-39 6.0	1.980	2.950	7.2	19.6	7 20	20 44.93	- 2 49.9	1.701	2.674	7.9	21.2
7 30	20 36.50	-40 0.8	1.967	2.935	7.3	19.5	7 30	20 36.60	- 3 33.2	1.664	2.658	5.7	21.1
8 9	20 25.99	-40 34.5	1.980	2.920	9.1	19.6	8 9	20 28.05	- 4 31.9	1.653	2.641	6.2	21.1
8 19	20 16.49	-40 45.3	2.017	2.904	11.6	19.7	8 19	20 20.22	- 5 41.2	1.668	2.624	9.1	21.2
8 29	20 9.04	-40 34.4	2.076	2.888	14.1	19.9	8 29	20 14.04	- 6 55.2	1.707	2.607	12.5	21.4
87533	2000 <i>QG</i> ₂₀₃	7 29.8 325°58		2°9/28.5 18			78284	2002 <i>PC</i> ₄₃	7 29.8 225°36		1°6/30.8 18		
6 20	20 58.22	-22 10.3	1.271	2.137	18.6	19.5	6 20	21 2.22	-12 49.0	2.032	2.838	14.8	19.7
6 30	20 57.08	-22 36.5	1.179	2.109	14.9	19.2	6 30	20 58.50	-12 51.7	1.943	2.835	11.9	19.5
7 10	20 52.74	-23 12.2	1.104	2.082	10.5	18.9	7 10	20 52.65	-13 5.2	1.875	2.832	8.5	19.3
7 20	20 45.58	-23 52.6	1.051	2.056	5.6	18.5	7 20	20 45.11	-13 27.8	1.831	2.829	4.7	19.1
7 30	20 36.53	-24 30.7	1.019	2.032	3.0	18.3	7 30	20 36.61	-13 57.0	1.813	2.826	1.6	18.9
8 9	20 27.09	-24 59.1	1.011	2.008	7.3	18.5	8 9	20 28.05	-14 29.2	1.823	2.823	4.2	19.0
8 19	20 18.89	-25 13.0	1.024	1.985	12.7	18.7	8 19	20 20.36	-15 1.1	1.859	2.819	8.0	19.3
8 29	20 13.39	-25 10.4	1.056	1.964	17.7	18.9	8 29	20 14.34	-15 29.8	1.920	2.816	11.5	19.5
43988	1997 <i>KQ</i> ₃	7 29.8 267°25		0°8/29.2 18			190673	2001 <i>AZ</i> ₄₅	7 29.8 216°54		8°5/25.1 18		
6 20	21 1.68	-17 36.2	1.893	2.718	15.0	19.3	6 20	21 23.35	-45 27.1	2.446	3.223	13.4	20.7
6 30	20 58.30	-18 14.5	1.810	2.717	11.9	19.1	6 30	21 15.39	-46 9.7	2.362	3.214	11.6	20.5
7 10	20 52.62	-19 2.8	1.749	2.717	8.2	18.9	7 10	21 4.39	-46 42.1	2.300	3.204	9.8	20.4
7 20	20 45.11	-19 57.4	1.712	2.716	4.1	18.6	7 20	20 51.03	-46 56.5	2.263	3.194	8.7	20.3
7 30	20 36.55	-20 53.3	1.701	2.715	0.9	18.4	7 30	20 36.48	-46 46.8	2.252	3.183	8.7	20.3
8 9	20 27.94	-21 45.1	1.717	2.715	4.8	18.7	8 9	20 22.19	-46 10.5	2.268	3.171	9.8	20.3
8 19	20 20.29	-22 28.7	1.759	2.714	8.8	18.9	8 19	20 9.52	-45 9.1	2.309	3.158	11.7	20.4
8 29	20 14.47	-23 1.5	1.826	2.714	12.4	19.1	8 29	19 59.52	-43 47.4	2.373	3.145	13.7	20.6
375720	2009 <i>QF</i> ₂₃	7 29.8 332°76		3°6/28.5 17			513576	2010 <i>VS</i> ₁₉₁	7 29.8 7°64		3°2/ 1.0 18		
6 20	21 4.42	-25 24.5	1.281	2.140	18.9	20.5	6 20	20 59.62	- 7 52.6	2.369	3.152	13.6	21.5
6 30	21 1.81	-25 36.6	1.204	2.129	15.1	20.2	6 30	20 56.06	- 7 40.4	2.280	3.152	11.2	21.4
7 10	20 55.82	-25 52.1	1.144	2.119	10.7	19.9	7 10	20 50.75	- 7 39.6	2.211	3.153	8.3	21.2
7 20	20 46.99	-26 5.5	1.105	2.109	6.0	19.6	7 20	20 44.07	- 7 49.8	2.167	3.153	5.4	21.0
7 30	20 36.51	-26 10.3	1.089	2.100	3.7	19.4	7 30	20 36.63	- 8 9.8	2.149	3.153	3.3	20.9
8 9	20 26.01	-26 1.5	1.097	2.092	7.4	19.6	8 9	20 29.18	- 8 37.3	2.159	3.153	4.3	20.9
8 19	20 17.09	-25 37.8	1.127	2.084	12.3	19.9	8 19	20 22.42	- 9 9.4	2.196	3.153	7.1	21.1
8 29	20 11.05	-25 0.5	1.178	2.078	16.9	20.1	8 29	20 17.04	- 9 42.9	2.258	3.154	10.0	21.3
47657	2000 <i>CE</i> ₄₈	7 29.8 50°54		1°8/30.6 18			302461	2002 <i>EA</i> ₁₂₃	7 29.8 169°88		0°9/30.5 18		

EPHEMERIDES

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
387250	2012 <i>UJ</i> ₈₄		7 29.8 320°79	0°3/29.9	18		361959	2008 <i>JT</i> ₁₇		7 29.8 14°60	0°1/29.7	18	
6 20	20 59.97	-14 39.1	1.725	2.553	16.2	20.4	6 20	20 58.75	-15 0.3	2.137	2.954	13.8	20.6
6 30	20 57.23	-15 9.3	1.639	2.546	12.9	20.2	6 30	20 55.70	-15 45.2	2.054	2.955	11.0	20.4
7 10	20 52.07	-15 52.7	1.573	2.539	9.1	19.9	7 10	20 50.69	-16 41.2	1.992	2.956	7.6	20.2
7 20	20 44.94	-16 46.5	1.529	2.533	4.7	19.6	7 20	20 44.13	-17 45.1	1.955	2.958	3.8	20.0
7 30	20 36.63	-17 45.8	1.511	2.527	0.3	19.3	7 30	20 36.68	-18 52.4	1.945	2.960	0.1	19.6
8 9	20 28.21	-18 45.0	1.520	2.521	4.7	19.6	8 9	20 29.20	-19 58.0	1.962	2.962	4.0	20.0
8 19	20 20.76	-19 38.7	1.554	2.515	9.2	19.9	8 19	20 22.50	-20 57.4	2.007	2.964	7.8	20.2
8 29	20 15.23	-20 23.2	1.611	2.510	13.1	20.1	8 29	20 17.34	-21 47.5	2.077	2.967	11.1	20.4
514326	2016 <i>NS</i> ₆₇		7 29.8 210°91	2°0/30.9	18		424380	2007 <i>WO</i> ₁₅		7 29.8 243°47	0°9/30.3	17	
6 20	21 2.89	-12 43.3	2.400	3.193	13.2	21.2	6 20	21 5.55	-14 30.8	1.702	2.519	16.8	22.2
6 30	20 58.62	-12 25.9	2.307	3.191	10.6	21.0	6 30	21 1.79	-14 43.0	1.607	2.507	13.5	21.9
7 10	20 52.51	-12 16.4	2.236	3.189	7.7	20.8	7 10	20 55.37	-15 7.6	1.531	2.493	9.6	21.6
7 20	20 44.97	-12 13.9	2.191	3.186	4.4	20.6	7 20	20 46.70	-15 42.3	1.478	2.480	5.1	21.3
7 30	20 36.64	-12 17.2	2.172	3.183	2.0	20.4	7 30	20 36.63	-16 23.3	1.450	2.465	0.9	21.0
8 9	20 28.29	-12 24.1	2.182	3.180	3.8	20.6	8 9	20 26.32	-17 5.5	1.450	2.450	4.9	21.3
8 19	20 20.69	-12 32.9	2.220	3.177	7.1	20.8	8 19	20 17.00	-17 44.4	1.475	2.435	9.7	21.5
8 29	20 14.53	-12 41.6	2.283	3.174	10.1	21.0	8 29	20 9.77	-18 16.5	1.523	2.419	13.9	21.7
210793	2001 <i>EC</i> ₁₇		7 29.8 163°40	5°4/25.9	17		467262	2016 <i>EG</i> ₁₈₁		7 29.8 39°39	1°2/29.4	17	
6 20	21 8.40	-18 11.9	1.198	2.045	20.7	20.1	6 20	21 6.53	-20 43.9	1.117	1.976	21.0	20.2
6 30	21 5.40	-20 56.1	1.128	2.049	16.3	19.8	6 30	21 3.28	-20 42.7	1.067	1.993	16.6	19.9
7 10	20 58.71	-24 6.3	1.079	2.052	11.3	19.5	7 10	20 56.56	-20 49.5	1.035	2.010	11.4	19.7
7 20	20 48.72	-27 28.6	1.053	2.055	6.6	19.3	7 20	20 47.21	-20 59.8	1.023	2.029	5.7	19.4
7 30	20 36.55	-30 43.5	1.054	2.057	6.0	19.3	7 30	20 36.64	-21 8.1	1.033	2.048	1.3	19.2
8 9	20 23.98	-33 31.9	1.081	2.059	10.3	19.5	8 9	20 26.53	-21 10.0	1.067	2.067	6.3	19.6
8 19	20 12.95	-35 42.4	1.132	2.060	15.2	19.8	8 19	20 18.37	-21 3.5	1.123	2.088	11.5	20.0
8 29	20 5.11	-37 12.5	1.204	2.061	19.5	20.1	8 29	20 13.21	-20 48.4	1.200	2.109	15.9	20.3
195364	2002 <i>FH</i> ₂₅		7 29.8 44°92	12°4/22.7	17		267747	2003 <i>GT</i> ₃₈		7 29.8 317°14	3°4/27.9	18	
6 20	21 11.74	-45 18.6	1.554	2.382	17.6	19.5	6 20	20 59.45	-21 57.3	1.401	2.258	17.7	19.9
6 30	21 7.79	-47 3.8	1.511	2.392	15.3	19.3	6 30	20 57.76	-22 48.9	1.310	2.236	14.1	19.6
7 10	20 59.97	-48 36.2	1.488	2.404	13.4	19.2	7 10	20 53.06	-23 52.0	1.238	2.214	9.9	19.3
7 20	20 49.04	-49 44.4	1.486	2.415	12.4	19.2	7 20	20 45.73	-25 1.0	1.188	2.193	5.4	19.0
7 30	20 36.55	-50 19.0	1.505	2.427	12.7	19.3	7 30	20 36.66	-26 7.8	1.161	2.172	3.6	18.8
8 9	20 24.45	-50 16.3	1.545	2.439	14.1	19.4	8 9	20 27.25	-27 3.8	1.159	2.152	7.4	19.0
8 19	20 14.51	-49 38.9	1.605	2.452	16.1	19.5	8 19	20 18.97	-27 43.1	1.179	2.132	12.3	19.2
8 29	20 7.97	-48 33.2	1.684	2.465	18.1	19.7	8 29	20 13.20	-28 3.1	1.220	2.114	16.8	19.5
122974	2000 <i>SO</i> ₂₂₉		7 29.8 296°28	2°7/28.4	18		287250	2002 <i>TX</i> ₉₅		7 29.8 305°53	3°1/28.4	18	
6 20	21 3.80	-23 5.7	1.657	2.497	16.2	19.7	6 20	21 5.24	-25 40.7	1.771	2.608	15.4	20.6
6 30	21 0.60	-23 35.1	1.566	2.481	12.9	19.4	6 30	21 1.60	-25 54.8	1.676	2.589	12.3	20.3
7 10	20 54.62	-24 10.8	1.495	2.466	9.0	19.1	7 10	20 55.24	-26 11.3	1.601	2.570	8.7	20.1
7 20	20 46.33	-24 48.2	1.448	2.451	4.9	18.9	7 20	20 46.62	-26 25.7	1.550	2.551	4.9	19.8
7 30	20 36.61	-25 21.3	1.425	2.436	2.8	18.7	7 30	20 36.65	-26 33.1	1.523	2.533	3.2	19.7
8 9	20 26.73	-25 44.7	1.428	2.422	6.3	18.9	8 9	20 26.54	-26 29.4	1.523	2.514	6.3	19.8
8 19	20 17.95	-25 55.2	1.456	2.407	10.6	19.1	8 19	20 17.52	-26 13.1	1.549	2.497	10.3	20.0
8 29	20 11.41	-25 52.1	1.507	2.393	14.7	19.3	8 29	20 10.68	-25 44.6	1.597	2.479	14.2	20.2
519573	2012 <i>SR</i> ₇₀		7 29.8 271°56	0°6/30.1	18		16254	Harper		7 29.8 341°22	0°7/30.3	18	
6 20	21 3.26	-15 35.8	1.934	2.750	15.1	22.3	6 20	21 0.41	-14 42.0	1.855	2.676	15.4	18.8
6 30	20 59.65	-15 42.8	1.833	2.733	12.2	22.0	6 30	20 57.33	-14 55.9	1.770	2.673	12.3	18.6
7 10	20 53.68	-15 59.4	1.752	2.715	8.6	21.8	7 10	20 52.00	-15 20.8	1.706	2.670	8.7	18.4
7 20	20 45.76	-16 23.7	1.695	2.697	4.5	21.5	7 20	20 44.86	-15 54.4	1.665	2.667	4.6	18.1
7 30	20 36.63	-16 52.5	1.664	2.679	0.6	21.2	7 30	20 36.70	-16 33.1	1.650	2.665	0.8	17.8
8 9	20 27.29	-17 21.9	1.660	2.660	4.5	21.4	8 9	20 28.48	-17 12.6	1.661	2.663	4.4	18.1
8 19	20 18.78	-17 48.4	1.682	2.642	8.8	21.6	8 19	20 21.21	-17 48.9	1.699	2.661	8.5	18.4
8 29	20 12.07	-18 9.3	1.729	2.623	12.7	21.8	8 29	20 15.73	-18 19.1	1.760	2.659	12.2	18.6
43458	2000 <i>YF</i> ₁₁₉		7 29.8 255°96	1°2/29.3	18		132046	2002 <i>CT</i> ₁₃₄		7 29.8 148°40	2°0/31.3	18	
6 20	21 6.68	-20 0.6	1.524	2.360	17.6	19.1	6 20	21 3.88	-10 16.1	2.278	3.065	14.0	21.5
6 30	21 2.95	-20 12.2	1.441	2.353	14.0	18.9	6 30	20 59.45	-10 29.1	2.196	3.075	11.3	21.3
7 10	20 56.27	-20 31.8	1.377	2.347	9.7	18.6	7 10	20 53.12	-10 53.7	2.135	3.084	8.2	21.2
7 20	20 47.15	-20 55.6	1.335	2.340	4.9	18.3	7 20	20 45.31	-11 28.3	2.098	3.092	4.7	21.0
7 30	20 36.61	-21 18.5	1.319	2.333	1.2	18.0	7 30	20 36.71	-12 10.4	2.089	3.100	2.1	20.8
8 9	20 25.99	-21 35.6	1.328	2.326	5.7	18.3	8 9	20 28.12	-12 56.1	2.109	3.108	3.9	20.9
8 19	20 16.65	-21 44.0	1.361	2.319	10.5	18.6	8 19	20 20.34	-13 42.0	2.157	3.115	7.2	21.2
8 29	20 9.75	-21 42.5	1.417	2.312	14.9	18.8	8 29	20 14.09	-14 24.8	2.230	3.121	10.3	21.4
479576	2014 <i>CN</i> ₁₅		7 29.8 242°33	0°7/29.4	18		417988	2007 <i>TW</i> ₂₇₄		7 29.8 84°27	3°1/28.3	17	
6 20	21 5.06	-19 8.4	2.131	2.946	13.9	22.0	6 20	21 8.34	-22 40.9	1.392	2.236	18.5	21.1
6 30	21 0.82	-19 25.2	2.032	2.932	11.1	21.8	6 30	21 4.28	-23 23.1	1.334	2.251	14.6	20.9
7 10	20 54.34	-19 48.9	1.954	2.918	7.7	21.5	7 10	20 57.11	-24 12.5	1.294	2.266	10.1	20.7
7 20	20 46.04	-20 16.4	1.901	2.904	3.9	21.3	7 20	20 47.51	-25 2.3	1.277	2.280	5.4	20.5
7 30	20 36.64	-20 44.1	1.875	2.889	0.8	21.0	7 30	20 36.67	-25 45.3	1.284	2.295	3.2	20.4
8 9	20 27.08	-21 8.2	1.877	2.874	4.5	21.3	8 9	20 26.09	-26 15.4	1.317	2.310	6.8	20.6
8 19	20 18.36	-21 26.0	1.906	2.859	8.4	21.5	8 19	20 17.14	-26 29.9	1.374	2.324	11.2	20.9
8 29	20 11.35	-21 35.8	1.960	2.843	11.9	21.7	8 29	20 10.89	-26 29.2	1.453	2.338	15.1	21.2
445357	2010 <i>NA</i> ₁₀₄		7 29.8 278°43	5°3/3.2	18		93810	2000 <i>WB</</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
391935	2008 <i>UV</i> ₃₅₁		7 29.8 228°34	2.7/27.6	18		168652	2000 <i>DH</i> ₆₈		7 29.8 120°71	3.3/27.9	17	
6 20	21 4.25	-23 44.6	2.402	3.220	12.5	21.9	6 20	21 7.03	-26 50.4	2.077	2.901	13.9	20.1
6 30	21 0.03	-24 38.4	2.306	3.208	9.9	21.7	6 30	21 2.31	-27 15.9	2.002	2.908	11.0	19.9
7 10	20 53.73	-25 37.5	2.232	3.196	6.9	21.5	7 10	20 55.27	-27 42.5	1.950	2.914	7.7	19.7
7 20	20 45.74	-26 37.5	2.183	3.183	3.9	21.3	7 20	20 46.46	-28 5.8	1.922	2.920	4.6	19.5
7 30	20 36.71	-27 33.3	2.164	3.170	2.9	21.2	7 30	20 36.73	-28 21.2	1.921	2.927	3.4	19.5
8 9	20 27.52	-28 20.2	2.172	3.156	5.3	21.3	8 9	20 27.13	-28 25.6	1.948	2.933	5.8	19.6
8 19	20 19.06	-28 55.2	2.208	3.142	8.5	21.5	8 19	20 18.63	-28 17.8	2.001	2.938	9.0	19.9
8 29	20 12.15	-29 17.0	2.269	3.127	11.5	21.7	8 29	20 12.07	-27 58.6	2.078	2.944	12.0	20.1
355639	2008 <i>EM</i> ₃₅		7 29.8 152°85	1.4/28.7	18		362515	2010 <i>TQ</i> ₈₆		7 29.8 219°39	4.9/26.2	18	
6 20	21 2.41	-20 54.3	2.747	3.556	11.3	21.9	6 20	21 4.61	-32 0.3	2.424	3.247	12.2	21.1
6 30	20 58.07	-21 31.2	2.665	3.564	8.9	21.8	6 30	21 0.31	-32 49.3	2.344	3.244	9.8	20.9
7 10	20 52.04	-22 12.7	2.607	3.571	6.1	21.6	7 10	20 53.87	-33 37.3	2.286	3.241	7.3	20.8
7 20	20 44.74	-22 55.8	2.575	3.578	3.1	21.4	7 20	20 45.77	-34 19.2	2.253	3.238	5.3	20.7
7 30	20 36.74	-23 36.9	2.572	3.584	1.4	21.3	7 30	20 36.74	-34 50.0	2.248	3.235	5.1	20.6
8 9	20 28.75	-24 12.8	2.597	3.590	3.9	21.5	8 9	20 27.72	-35 6.3	2.269	3.231	6.8	20.7
8 19	20 21.46	-24 41.3	2.651	3.595	6.8	21.7	8 19	20 19.60	-35 6.7	2.317	3.228	9.2	20.9
8 29	20 15.48	-25 1.1	2.731	3.600	9.4	21.9	8 29	20 13.19	-34 52.1	2.388	3.224	11.7	21.0
285829	2001 <i>DL</i> ₅₅		7 29.8 311°43	0.7/30.2	18		39759	1997 <i>EX</i> ₄₂		7 29.8 344°47	4.9/28.4	18	
6 20	20 58.52	-14 27.8	1.254	2.106	19.6	20.2	6 20	21 7.94	-30 13.5	1.382	2.234	18.2	17.2
6 30	20 57.35	-14 43.6	1.156	2.076	16.0	19.9	6 30	21 4.42	-30 11.9	1.305	2.224	14.7	16.9
7 10	20 53.04	-15 17.0	1.075	2.047	11.5	19.5	7 10	20 57.51	-30 7.0	1.246	2.215	10.6	16.7
7 20	20 45.87	-16 6.6	1.013	2.018	6.1	19.1	7 20	20 47.85	-29 52.9	1.209	2.208	6.6	16.4
7 30	20 36.70	-17 7.6	0.974	1.990	0.7	18.7	7 30	20 36.71	-29 23.9	1.196	2.201	5.0	16.3
8 9	20 26.94	-18 12.5	0.959	1.962	6.2	19.0	8 9	20 25.72	-28 37.5	1.206	2.195	7.9	16.5
8 19	20 18.22	-19 13.4	0.965	1.934	12.2	19.2	8 19	20 16.43	-27 35.0	1.241	2.190	12.2	16.7
8 29	20 12.10	-20 3.9	0.991	1.908	17.7	19.4	8 29	20 10.02	-26 20.3	1.296	2.187	16.3	16.9
148391	2000 <i>TV</i> ₆₁		7 29.8 245°95	3.7/26.8	18		41737	2000 <i>UX</i> ₁₀₃		7 29.8 75°67	1.6/29.2	18	
6 20	21 2.50	-26 57.6	2.399	3.224	12.3	20.3	6 20	21 9.20	-21 44.8	1.408	2.247	18.5	18.3
6 30	20 58.69	-27 57.0	2.309	3.214	9.7	20.1	6 30	21 4.94	-21 49.0	1.341	2.256	14.7	18.0
7 10	20 52.81	-28 59.8	2.241	3.205	7.0	19.9	7 10	20 57.57	-21 59.0	1.294	2.264	10.1	17.8
7 20	20 45.26	-30 1.0	2.200	3.195	4.5	19.7	7 20	20 47.77	-22 10.5	1.269	2.273	5.2	17.5
7 30	20 36.73	-30 55.2	2.186	3.185	3.9	19.7	7 30	20 36.72	-22 18.5	1.268	2.282	1.7	17.3
8 9	20 28.07	-31 37.9	2.200	3.175	6.0	19.8	8 9	20 25.90	-22 18.9	1.293	2.291	5.9	17.6
8 19	20 20.17	-32 6.5	2.240	3.164	8.9	20.0	8 19	20 16.68	-22 10.1	1.342	2.300	10.7	17.9
8 29	20 13.85	-32 20.4	2.305	3.154	11.6	20.1	8 29	20 10.13	-21 52.4	1.413	2.309	14.9	18.2
12132	Wimfröger		7 29.8 76°30	1.9/30.9	18		288854	2004 <i>RS</i> ₂₀₈		7 29.8 5°44	8.2/1.2	16	
6 20	21 3.63	-12 14.9	1.768	2.579	16.5	18.1	6 20	20 55.51	-8 47.5	0.941	1.805	23.7	19.3
6 30	20 59.76	-12 17.3	1.699	2.594	13.2	17.9	6 30	20 55.06	-6 59.3	0.866	1.805	19.8	19.0
7 10	20 53.57	-12 32.0	1.650	2.608	9.4	17.7	7 10	20 51.25	-5 27.1	0.845	1.806	15.4	18.8
7 20	20 45.61	-12 57.4	1.625	2.623	5.3	17.5	7 20	20 44.74	-4 16.7	0.822	1.811	11.0	18.6
7 30	20 36.73	-13 30.0	1.625	2.637	1.9	17.3	7 30	20 36.78	-3 31.8	0.818	1.818	8.3	18.4
8 9	20 27.98	-14 5.8	1.651	2.652	4.5	17.5	8 9	20 29.00	-3 12.5	0.834	1.827	9.4	18.5
8 19	20 20.34	-14 41.0	1.704	2.666	8.4	17.8	8 19	20 22.88	-3 14.8	0.869	1.839	13.1	18.8
8 29	20 14.63	-15 12.2	1.781	2.681	12.1	18.0	8 29	20 19.62	-3 32.1	0.923	1.853	17.3	19.1
329160	2012 <i>BJ</i> ₇₄		7 29.8 107°21	1.3/30.9	18		360231	1999 <i>VM</i> ₁₃₈		7 29.8 50°96	4.6/26.4	18	
6 20	20 59.10	-11 30.6	2.469	3.265	12.8	20.5	6 20	21 2.45	-29 17.2	2.184	3.016	13.1	20.5
6 30	20 55.63	-11 57.5	2.384	3.270	10.2	20.3	6 30	20 58.76	-30 18.6	2.113	3.021	10.4	20.3
7 10	20 50.45	-12 35.1	2.320	3.275	7.3	20.1	7 10	20 52.89	-31 21.2	2.065	3.027	7.6	20.1
7 20	20 43.97	-13 21.6	2.282	3.280	4.0	19.9	7 20	20 45.30	-32 19.2	2.042	3.033	5.2	20.0
7 30	20 36.76	-14 13.9	2.272	3.285	1.3	19.7	7 30	20 36.78	-33 6.9	2.045	3.038	4.8	20.0
8 9	20 29.54	-15 8.4	2.290	3.290	3.4	19.9	8 9	20 28.30	-33 40.2	2.075	3.044	6.8	20.1
8 19	20 23.01	-16 1.3	2.336	3.295	6.7	20.1	8 19	20 20.78	-33 57.2	2.131	3.051	9.5	20.3
8 29	20 17.79	-16 49.6	2.407	3.300	9.6	20.3	8 29	20 15.04	-33 58.0	2.210	3.057	12.2	20.5
400219	2007 <i>CA</i> ₅₅		7 29.8 101°78	2.5/31.6	17		72764	2001 <i>FA</i> ₁₄₄		7 29.8 296°22	7.3/24.8	18	
6 20	21 3.36	-10 4.9	2.679	3.455	12.4	20.9	6 20	21 5.35	-34 0.5	1.857	2.694	14.8	18.8
6 30	20 58.61	-9 46.6	2.604	3.475	10.0	20.7	6 30	21 1.79	-35 22.0	1.783	2.689	12.1	18.6
7 10	20 52.28	-9 36.7	2.551	3.494	7.3	20.6	7 10	20 55.43	-36 42.7	1.731	2.684	9.4	18.5
7 20	20 44.80	-9 34.8	2.524	3.513	4.5	20.4	7 20	20 46.76	-37 54.5	1.702	2.679	7.5	18.3
7 30	20 36.75	-9 39.7	2.525	3.532	2.5	20.3	7 30	20 36.75	-38 49.4	1.699	2.674	7.6	18.3
8 9	20 28.81	-9 49.6	2.555	3.550	3.7	20.4	8 9	20 26.67	-39 21.7	1.720	2.669	9.5	18.4
8 19	20 21.62	-10 2.6	2.614	3.569	6.3	20.6	8 19	20 17.80	-39 29.6	1.765	2.664	12.3	18.6
8 29	20 15.73	-10 16.6	2.698	3.586	8.9	20.8	8 29	20 11.24	-39 14.9	1.831	2.660	15.0	18.8
114833	2003 <i>OZ</i> ₂₂		7 29.8 322°19	2.0/29.1	18		124814	2001 <i>SF</i> ₂₈₅		7 29.8 251°95	3.3/31.4	18	
6 20	21 3.99	-22 0.8	1.240	2.098	19.4	19.3	6 20	21 4.34	-9 54.4	1.472	2.289	19.0	20.3
6 30	21 1.60	-22 6.3	1.159	2.085	15.6	19.0	6 30	21 1.16	-9 45.1	1.385	2.281	15.6	20.1
7 10	20 55.80	-22 18.6	1.097	2.072	10.9	18.7	7 10	20 55.12	-9 52.1	1.316	2.272	11.5	19.8
7 20	20 47.12	-22 33.5	1.055	2.060	5.7	18.3	7 20	20 46.68	-10 15.3	1.268	2.263	7.0	19.5
7 30	20 36.69	-22 45.0	1.035	2.049	2.1	18.1	7 30	20 36.75	-10 52.1	1.244	2.254	3.4	19.3
8 9	20 26.14	-22 47.9	1.039	2.039	6.8	18.3	8 9	20 26.63	-11 37.9	1.245	2.245	5.7	19.4
8 19	20 17.09	-22 39.4	1.066	2.029	12.2	18.6	8 19	20 17.64	-12 27.1	1.270	2.235	10.4	19.6
8 29	20 10.93	-22 19.3	1.113	2.020	17.0	18.9	8 29	20 10.96	-13 14.4	1.318	2.226	14.9	19.9
518116	2016 <i>CA</i> ₂₈₇		7 29.8 9°11	2.3/29.0	17		195366	2002 <i>FS</i> ₂₆		7 29.8 8			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
280415	2003 <i>WT</i> ₁₅₆		7 29.8 254°68	4.6/25.7	18		29525	1998 <i>AF</i>		7 29.8 200°84	1.9/30.9	18	
6 20	21 2.00	-31 19.9	2.645	3.468	11.3	20.7	6 20	21 4.83	-11 22.8	1.691	2.500	17.2	19.4
6 30	20 58.15	-32 20.2	2.559	3.460	9.1	20.5	6 30	21 1.12	-11 37.7	1.605	2.498	13.9	19.2
7 10	20 52.35	-33 20.8	2.497	3.453	6.8	20.4	7 10	20 54.84	-12 7.8	1.538	2.495	10.0	19.0
7 20	20 45.02	-34 16.7	2.461	3.446	5.0	20.3	7 20	20 46.45	-12 51.2	1.494	2.492	5.6	18.7
7 30	20 36.79	-35 2.9	2.453	3.438	4.8	20.2	7 30	20 36.82	-13 44.0	1.476	2.489	2.0	18.5
8 9	20 28.49	-35 35.7	2.472	3.431	6.5	20.3	8 9	20 27.07	-14 40.9	1.484	2.485	4.8	18.6
8 19	20 20.93	-35 53.4	2.516	3.423	8.8	20.5	8 19	20 18.36	-15 36.4	1.518	2.480	9.3	18.9
8 29	20 14.85	-35 55.9	2.585	3.415	11.1	20.6	8 29	20 11.70	-16 26.1	1.576	2.475	13.4	19.1
370328	2002 <i>RR</i> ₁₆₂		7 29.8 341°41	2.4/28.9	15		395729	2012 <i>UU</i> ₄₃		7 29.8 228°90	6.3/24.6	18	
6 20	20 57.54	-22 9.1	1.052	1.932	20.6	20.8	6 20	21 7.49	-35 5.8	2.392	3.210	12.5	22.3
6 30	20 56.97	-22 17.1	0.978	1.916	16.5	20.4	6 30	21 2.91	-36 21.2	2.306	3.199	10.3	22.1
7 10	20 52.88	-22 33.2	0.920	1.901	11.5	20.1	7 10	20 55.93	-37 35.4	2.243	3.187	8.1	21.9
7 20	20 45.76	-22 52.6	0.881	1.888	6.0	19.8	7 20	20 46.97	-38 41.7	2.205	3.175	6.5	21.8
7 30	20 36.78	-23 8.7	0.863	1.877	2.5	19.5	7 30	20 36.81	-39 33.6	2.194	3.162	6.6	21.8
8 9	20 27.67	-23 15.4	0.866	1.867	7.3	19.8	8 9	20 26.49	-40 6.6	2.210	3.149	8.3	21.9
8 19	20 20.17	-23 9.1	0.890	1.859	13.0	20.1	8 19	20 17.07	-40 18.8	2.251	3.136	10.6	22.0
8 29	20 15.74	-22 49.2	0.932	1.852	18.2	20.3	8 29	20 9.52	-40 11.4	2.314	3.122	13.0	22.2
445475	2010 <i>VX</i> ₁₀₇		7 29.8 327°48	11.6/ 7.8	18		423057	2003 <i>UL</i> ₃₃₉		7 29.8 313°99	0.1/29.9	17	
6 20	20 59.98	+16 3.7	2.410	3.047	16.8	20.5	6 20	21 2.95	-18 31.0	1.248	2.102	19.6	21.4
6 30	20 56.52	+17 29.5	2.324	3.045	15.5	20.4	6 30	21 0.82	-18 17.9	1.159	2.081	15.9	21.1
7 10	20 51.22	+18 35.6	2.255	3.042	14.1	20.3	7 10	20 55.38	-18 13.6	1.087	2.061	11.2	20.7
7 20	20 44.45	+19 17.6	2.204	3.040	12.8	20.2	7 20	20 47.03	-18 15.9	1.036	2.041	5.8	20.4
7 30	20 36.81	+19 32.3	2.173	3.038	11.9	20.1	7 30	20 36.80	-18 20.7	1.006	2.022	0.1	19.9
8 9	20 29.05	+19 19.2	2.164	3.036	11.6	20.1	8 9	20 26.26	-18 23.8	1.001	2.003	6.1	20.3
8 19	20 21.94	+18 40.0	2.177	3.034	12.1	20.1	8 19	20 17.03	-18 21.9	1.017	1.985	11.9	20.5
8 29	20 16.20	+17 39.4	2.212	3.032	13.1	20.2	8 29	20 10.58	-18 13.1	1.054	1.968	17.1	20.8
473907	2016 <i>ES</i> ₁₄₉		7 29.8 272°81	2.7/31.3	17		115025	2003 <i>QC</i> ₁₀₀		7 29.8 199°98	3.9/ 2.5	18	
6 20	21 2.46	- 9 54.3	1.397	2.221	19.4	21.2	6 20	20 58.15	- 2 36.2	2.644	3.399	13.0	19.8
6 30	20 59.82	-10 4.5	1.313	2.214	15.9	21.0	6 30	20 54.79	- 2 46.9	2.549	3.398	10.9	19.7
7 10	20 54.28	-10 34.0	1.247	2.207	11.6	20.7	7 10	20 49.87	- 3 12.0	2.474	3.397	8.4	19.5
7 20	20 46.29	-11 21.7	1.201	2.199	6.8	20.4	7 20	20 43.72	- 3 51.3	2.423	3.395	5.9	19.3
7 30	20 36.78	-12 23.6	1.180	2.192	2.8	20.2	7 30	20 36.88	- 4 43.3	2.399	3.394	4.1	19.2
8 9	20 27.07	-13 33.2	1.183	2.184	5.6	20.3	8 9	20 29.98	- 5 44.9	2.403	3.392	4.5	19.2
8 19	20 18.53	-14 43.1	1.210	2.177	10.6	20.6	8 19	20 23.66	- 6 52.3	2.435	3.390	6.7	19.4
8 29	20 12.37	-15 47.1	1.259	2.169	15.2	20.8	8 29	20 18.51	- 8 1.4	2.494	3.388	9.3	19.6
387424	2013 <i>VS</i> ₁₇		7 29.8 289°18	1.2/30.4	18		18249	3175 <i>T</i> ₋₂		7 29.8 2°24	6.3/27.3	18	
6 20	21 4.42	-15 9.6	1.618	2.442	17.2	21.4	6 20	21 1.38	-27 32.2	1.024	1.904	20.9	18.7
6 30	21 1.25	-15 2.7	1.512	2.416	14.0	21.1	6 30	21 0.16	-28 22.7	0.965	1.902	16.8	18.4
7 10	20 55.27	-15 6.4	1.424	2.388	10.0	20.8	7 10	20 55.10	-29 17.6	0.923	1.901	12.1	18.1
7 20	20 46.84	-15 19.4	1.359	2.361	5.4	20.5	7 20	20 46.86	-30 7.6	0.900	1.901	7.7	17.9
7 30	20 36.77	-15 38.6	1.319	2.334	1.3	20.1	7 30	20 36.83	-30 42.3	0.899	1.903	6.5	17.9
8 9	20 26.28	-16 0.3	1.304	2.306	5.2	20.3	8 9	20 26.97	-30 54.2	0.918	1.906	9.9	18.1
8 19	20 16.70	-16 20.6	1.315	2.278	10.3	20.5	8 19	20 19.08	-30 41.5	0.957	1.910	14.5	18.3
8 29	20 9.27	-16 36.4	1.348	2.250	15.0	20.7	8 29	20 14.53	-30 6.8	1.015	1.915	18.9	18.6
307871	2004 <i>BO</i> ₄₀		7 29.8 246°52	0.0/29.8	18		148377	2000 <i>SN</i> ₂₈₁		7 29.8 239°32	4.0/ 1.4	18	
6 20	21 3.36	-15 40.8	1.563	2.394	17.4	20.7	6 20	21 1.22	- 6 31.2	2.266	3.043	14.3	19.9
6 30	21 0.17	-16 9.8	1.484	2.393	13.9	20.4	6 30	20 57.48	- 6 7.8	2.174	3.040	11.9	19.7
7 10	20 54.28	-16 52.0	1.424	2.392	9.7	20.2	7 10	20 51.87	- 5 56.5	2.102	3.038	9.0	19.5
7 20	20 46.18	-17 43.8	1.387	2.391	5.0	19.9	7 20	20 44.80	- 5 57.4	2.054	3.035	6.1	19.4
7 30	20 36.79	-18 39.9	1.375	2.390	0.1	19.5	7 30	20 36.88	- 6 10.0	2.032	3.032	4.1	19.2
8 9	20 27.34	-19 34.0	1.388	2.389	5.1	19.9	8 9	20 28.91	- 6 32.1	2.038	3.029	4.9	19.3
8 19	20 19.05	-20 27.8	1.427	2.388	9.9	20.2	8 19	20 21.67	- 7 0.9	2.070	3.026	7.6	19.4
8 29	20 12.98	-20 50.1	1.488	2.387	14.1	20.5	8 29	20 15.87	- 7 33.2	2.128	3.023	10.6	19.6
88573	2001 <i>QF</i> ₂₄₈		7 29.8 282°81	3.1/ 1.0	18		318400	2004 <i>XY</i> ₁₀₉		7 29.8 256°30	0.2/29.8	17	
6 20	20 59.32	- 7 32.7	2.153	2.942	14.6	19.2	6 20	21 9.49	-18 42.2	1.670	2.491	16.9	21.3
6 30	20 56.25	- 7 41.5	2.049	2.926	12.0	19.0	6 30	21 5.14	-18 37.8	1.569	2.472	13.6	21.0
7 10	20 51.19	- 8 4.8	1.965	2.910	9.0	18.8	7 10	20 57.89	-18 40.6	1.488	2.453	9.6	20.7
7 20	20 44.51	- 8 42.2	1.905	2.894	5.7	18.6	7 20	20 48.15	-18 48.0	1.430	2.434	4.9	20.4
7 30	20 36.82	- 9 31.5	1.870	2.878	3.2	18.4	7 30	20 36.82	-18 56.2	1.398	2.413	0.2	20.0
8 9	20 28.95	-10 29.1	1.864	2.861	4.5	18.4	8 9	20 25.21	-19 1.4	1.393	2.392	5.3	20.3
8 19	20 21.73	-11 30.5	1.883	2.845	7.8	18.6	8 19	20 14.67	-19 1.0	1.413	2.371	10.2	20.6
8 29	20 16.00	-12 31.2	1.929	2.829	11.3	18.8	8 29	20 6.41	-18 53.9	1.457	2.349	14.7	20.8
261944	2006 <i>OR</i> ₁₃		7 29.8 1°18	2.2/30.9	18		116935	2004 <i>GA</i> ₃₆		7 29.8 253°04	2.7/28.5	18	
6 20	20 56.60	-12 23.7	1.058	1.921	21.7	20.0	6 20	21 7.75	-23 52.3	1.732	2.563	16.0	19.8
6 30	20 55.83	-12 24.7	0.993	1.918	17.6	19.7	6 30	21 3.61	-24 14.0	1.642	2.552	12.7	19.6
7 10	20 51.81	-12 45.3	0.944	1.916	12.6	19.4	7 10	20 56.68	-24 40.2	1.573	2.541	8.9	19.3
7 20	20 45.09	-13 23.9	0.913	1.916	7.0	19.1	7 20	20 47.44	-25 6.3	1.528	2.530	4.9	19.0
7 30	20 36.81	-14 15.5	0.904	1.918	2.3	18.9	7 30	20 36.84	-25 26.8	1.508	2.519	2.8	18.9
8 9	20 28.54	-15 12.6	0.916	1.920	6.0	19.1	8 9	20 26.14	-25 37.3	1.515	2.507	6.1	19.1
8 19	20 21.80	-16 7.5	0.950	1.924	11.6	19.4	8 19	20 16.59	-25 35.4	1.547	2.496	10.3	19.3
8 29	20 17.84	-16 54.1	1.003	1.929	16.6	19.7	8 29	20 9.31	-25 21.2	1.602	2.484	14.2	19.5
327645	2006 <i>QO</i> ₁₆		7 29.8 301°61	2.3/28.9	17		443130						

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
315122	2007 <i>EG</i> ₈₁		7 29.8 106°18'	0°4/30.3	18		140805	2001 <i>UQ</i> ₁₅₂		7 29.8 359°73'	1°3/29.0	18	
6 20	21 1.51	-11 45.5	2.596	3.384	12.4	20.2	6 20	21 0.93	-19 42.1	1.867	2.699	14.9	19.9
6 30	20 57.42	-12 50.7	2.518	3.401	9.9	20.0	6 30	20 57.82	-20 12.7	1.787	2.698	11.8	19.7
7 10	20 51.67	-14 7.4	2.462	3.418	6.9	19.8	7 10	20 52.42	-20 51.1	1.728	2.698	8.1	19.5
7 20	20 44.63	-15 32.5	2.434	3.434	3.6	19.7	7 20	20 45.18	-21 33.6	1.693	2.697	4.1	19.3
7 30	20 36.90	-17 1.3	2.435	3.450	0.4	19.4	7 30	20 36.93	-22 15.4	1.684	2.698	1.4	19.1
8 9	20 29.17	-18 28.8	2.467	3.466	3.4	19.7	8 9	20 28.66	-22 51.9	1.701	2.698	4.9	19.3
8 19	20 22.11	-19 50.6	2.528	3.481	6.5	19.9	8 19	20 21.37	-23 19.6	1.744	2.699	8.9	19.6
8 29	20 16.36	-21 3.3	2.616	3.497	9.4	20.1	8 29	20 15.93	-23 36.8	1.811	2.700	12.4	19.8
164108	2003 <i>XW</i> ₁₁		7 29.8 344°05'	0°7/30.3	18		88224	2001 <i>BM</i> ₂₄		7 29.8 290°99'	0°3/30.1	18	
6 20	20 55.25	-10 45.6	1.397	2.237	18.6	19.2	6 20	20 59.18	-14 28.2	2.244	3.055	13.4	19.3
6 30	20 54.13	-11 48.3	1.313	2.226	15.0	19.0	6 30	20 56.07	-15 3.9	2.148	3.045	10.7	19.1
7 10	20 50.36	-13 14.6	1.249	2.217	10.7	18.7	7 10	20 51.04	-15 50.6	2.073	3.036	7.5	18.8
7 20	20 44.34	-15 1.1	1.205	2.209	5.6	18.4	7 20	20 44.46	-16 45.7	2.024	3.026	3.9	18.6
7 30	20 36.90	-17 0.2	1.186	2.201	0.7	18.0	7 30	20 36.94	-17 45.4	2.002	3.017	0.3	18.3
8 9	20 29.25	-19 1.4	1.193	2.195	5.3	18.3	8 9	20 29.30	-18 45.1	2.007	3.007	3.9	18.6
8 19	20 22.66	-20 54.4	1.223	2.190	10.5	18.6	8 19	20 22.35	-19 40.6	2.040	2.998	7.6	18.8
8 29	20 18.27	-22 31.4	1.276	2.186	15.1	18.9	8 29	20 16.86	-20 28.5	2.098	2.989	10.9	19.0
193489	2000 <i>YT</i> ₁		7 29.8 243°77'	4°1/27.7	18		161684	2006 <i>GD</i> ₅₀		7 29.8 65°74'	2°6/28.8	17	
6 20	21 9.18	-28 41.3	2.009	2.833	14.3	20.8	6 20	21 11.01	-25 37.4	1.697	2.526	16.3	19.1
6 30	21 4.39	-29 8.7	1.918	2.822	11.5	20.6	6 30	21 5.73	-25 36.8	1.636	2.543	12.9	19.0
7 10	20 57.01	-29 36.6	1.849	2.811	8.3	20.4	7 10	20 57.74	-25 37.2	1.595	2.561	9.0	18.8
7 20	20 47.54	-29 59.8	1.804	2.799	5.2	20.1	7 20	20 47.77	-25 34.3	1.577	2.579	4.9	18.6
7 30	20 36.85	-30 13.0	1.786	2.787	4.2	20.1	7 30	20 36.90	-25 24.1	1.586	2.597	2.7	18.5
8 9	20 26.11	-30 12.3	1.794	2.775	6.6	20.2	8 9	20 26.39	-25 4.5	1.622	2.615	5.7	18.7
8 19	20 16.47	-29 56.6	1.829	2.763	10.0	20.4	8 19	20 17.39	-24 35.4	1.684	2.633	9.6	19.0
8 29	20 8.92	-29 27.0	1.888	2.750	13.3	20.5	8 29	20 10.75	-23 58.3	1.769	2.651	13.1	19.2
260755	2005 <i>MS</i> ₂₈		7 29.8 72°64'	4°3/1.1	17		220779	2004 <i>TL</i> ₁₃₉		7 29.8 206°51'	1°5/30.9	18	
6 20	21 5.55	-8 3.4	1.498	2.305	19.2	20.9	6 20	21 1.17	-12 45.0	2.724	3.514	11.9	20.7
6 30	21 1.64	-7 38.4	1.435	2.322	15.7	20.7	6 30	20 57.13	-12 42.8	2.628	3.510	9.5	20.6
7 10	20 55.08	-7 30.1	1.390	2.339	11.7	20.5	7 10	20 51.47	-12 48.2	2.555	3.507	6.8	20.4
7 20	20 46.50	-7 38.2	1.367	2.356	7.5	20.3	7 20	20 44.56	-13 0.3	2.507	3.503	3.9	20.2
7 30	20 36.88	-8 1.0	1.368	2.373	4.5	20.1	7 30	20 36.95	-13 17.3	2.487	3.499	1.5	20.0
8 9	20 27.46	-8 34.3	1.394	2.391	5.9	20.3	8 9	20 29.30	-13 36.9	2.495	3.495	3.3	20.1
8 19	20 19.37	-9 13.3	1.445	2.408	9.6	20.5	8 19	20 22.27	-13 57.1	2.532	3.490	6.3	20.3
8 29	20 13.51	-9 53.2	1.519	2.425	13.4	20.8	8 29	20 16.47	-14 15.9	2.596	3.485	9.1	20.5
344775	2003 <i>WP</i> ₁₅₄		7 29.8 228°53'	2°6/27.9	18		337181	1999 <i>VA</i> ₁₁₇		7 29.8 148°10'	17°7/8.4	17	
6 20	21 3.27	-22 24.5	2.165	2.988	13.5	21.1	6 20	21 6.73	+15 7.7	1.329	2.030	25.9	20.4
6 30	20 59.48	-23 19.4	2.075	2.981	10.6	20.9	6 30	21 3.34	+17 21.8	1.265	2.035	23.9	20.3
7 10	20 53.49	-24 21.0	2.007	2.974	7.4	20.7	7 10	20 56.82	+19 6.0	1.213	2.039	21.7	20.1
7 20	20 45.73	-25 24.6	1.965	2.966	4.1	20.5	7 20	20 47.66	+20 10.6	1.176	2.043	19.7	20.0
7 30	20 36.89	-26 24.8	1.950	2.958	2.7	20.4	7 30	20 36.90	+20 27.8	1.156	2.047	18.2	19.9
8 9	20 27.93	-27 16.4	1.962	2.950	5.4	20.6	8 9	20 25.97	+19 55.8	1.153	2.050	17.7	19.9
8 19	20 19.79	-27 55.8	2.002	2.942	8.9	20.8	8 19	20 16.36	+18 39.1	1.169	2.053	18.3	19.9
8 29	20 13.34	-28 21.6	2.065	2.933	12.1	20.9	8 29	20 9.35	+16 48.3	1.203	2.055	19.8	20.1
119652	2001 <i>XV</i> ₄₉		7 29.8 151°81'	2°9/28.0	18		260193	2004 <i>RE</i> ₁₅₇		7 29.8 342°91'	4°5/27.4	18	
6 20	21 5.91	-23 11.3	1.929	2.755	14.7	20.6	6 20	21 5.77	-30 37.4	2.047	2.877	13.9	19.9
6 30	21 1.70	-24 0.5	1.853	2.760	11.6	20.4	6 30	21 1.56	-31 1.4	1.967	2.874	11.1	19.8
7 10	20 55.07	-24 55.4	1.798	2.765	8.1	20.1	7 10	20 54.93	-31 24.1	1.909	2.870	8.1	19.6
7 20	20 46.51	-25 50.9	1.768	2.770	4.5	19.9	7 20	20 46.43	-31 40.3	1.874	2.867	5.4	19.4
7 30	20 36.89	-26 40.9	1.765	2.774	3.0	19.9	7 30	20 36.92	-31 45.5	1.866	2.864	4.7	19.3
8 9	20 27.28	-27 20.5	1.790	2.778	5.8	20.0	8 9	20 27.49	-31 36.5	1.884	2.861	6.7	19.5
8 19	20 18.74	-27 46.7	1.840	2.781	9.4	20.3	8 19	20 19.18	-31 12.8	1.928	2.859	9.7	19.6
8 29	20 12.18	-27 58.8	1.914	2.785	12.7	20.5	8 29	20 12.87	-30 36.0	1.996	2.857	12.7	19.8
86216	1999 <i>TV</i> ₃₂		7 29.8 331°90'	4°2/27.4	18		186372	2002 <i>GF</i> ₁₄₅		7 29.8 169°66'	3°2/1.4	18	
6 20	21 4.05	-28 53.3	2.020	2.853	13.9	19.2	6 20	21 0.22	-6 30.2	2.680	3.448	12.6	20.8
6 30	21 0.26	-29 25.0	1.938	2.847	11.1	19.0	6 30	20 56.37	-6 25.7	2.588	3.450	10.3	20.6
7 10	20 54.08	-29 57.1	1.877	2.841	8.0	18.8	7 10	20 50.93	-6 32.3	2.518	3.452	7.8	20.5
7 20	20 46.01	-30 24.7	1.841	2.836	5.2	18.6	7 20	20 44.29	-6 49.7	2.472	3.454	5.2	20.3
7 30	20 36.89	-30 42.7	1.830	2.831	4.3	18.6	7 30	20 36.96	-7 16.7	2.454	3.456	3.3	20.2
8 9	20 27.80	-30 47.5	1.847	2.826	6.6	18.7	8 9	20 29.61	-7 50.9	2.464	3.457	4.0	20.2
8 19	20 19.76	-30 37.8	1.888	2.822	9.7	18.9	8 19	20 22.87	-8 29.4	2.502	3.458	6.5	20.4
8 29	20 13.66	-30 14.4	1.953	2.818	12.8	19.1	8 29	20 17.34	-9 9.4	2.566	3.458	9.1	20.6
34291	2000 <i>QS</i> ₁₅₀		7 29.8 289°77'	3°9/27.6	18		115000	2003 <i>QD</i> ₇₅		7 29.8 275°70'	0°9/30.5	18	
6 20	21 5.08	-28 30.0	2.138	2.966	13.5	17.5	6 20	21 0.59	-14 39.6	2.468	3.271	12.6	19.6
6 30	21 0.96	-28 58.6	2.050	2.956	10.7	17.3	6 30	20 56.93	-14 41.7	2.370	3.262	10.1	19.4
7 10	20 54.52	-29 27.9	1.983	2.947	7.7	17.1	7 10	20 51.48	-14 51.4	2.294	3.252	7.1	19.2
7 20	20 46.23	-29 53.1	1.942	2.937	4.9	16.9	7 20	20 44.63	-15 7.4	2.243	3.243	3.8	19.0
7 30	20 36.90	-30 9.4	1.926	2.928	4.0	16.8	7 30	20 36.96	-15 27.4	2.219	3.233	1.0	18.7
8 9	20 27.54	-30 13.5	1.938	2.919	6.2	16.9	8 9	20 29.21	-15 48.8	2.223	3.224	3.5	18.9
8 19	20 19.16	-30 3.9	1.976	2.909	9.4	17.1	8 19	20 22.14	-16 9.2	2.255	3.214	6.9	19.1
8 29	20 12.64	-29 41.3	2.038	2.900	12.4	17.3	8 29	20 16.41	-16 26.6	2.313	3.205	10.0	19.3
221652	2007 <i>BM</i> ₇₈		7 29.8 295°49'	0°7/29.5	18		181079	2005 <i>QO</i> ₂₇					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
99031	2001 <i>DW</i> ₉₈	7 29.9 134°87		0°3/29.7 18			450110	2015 <i>RO</i> ₁₀₅	7 29.9 237°08		3°6/ 1.9 18		
6 20	21 8.12	-19 30.2	2.087	2.897	14.3	19.3	6 20	20 58.84	-4 51.5	2.515	3.283	13.3	21.6
6 30	21 3.04	-19 23.2	2.007	2.905	11.4	19.1	6 30	20 55.48	-4 54.0	2.418	3.278	11.0	21.4
7 10	20 55.75	-19 21.0	1.949	2.912	7.9	18.9	7 10	20 50.45	-5 9.9	2.342	3.274	8.4	21.2
7 20	20 46.78	-19 21.1	1.916	2.919	4.0	18.7	7 20	20 44.11	-5 39.0	2.290	3.269	5.7	21.0
7 30	20 36.94	-19 20.9	1.911	2.926	0.3	18.4	7 30	20 37.01	-6 19.8	2.265	3.264	3.8	20.9
8 9	20 27.21	-19 18.0	1.934	2.932	4.2	18.7	8 9	20 29.83	-7 9.4	2.267	3.260	4.4	20.9
8 19	20 18.53	-19 11.0	1.984	2.939	8.0	19.0	8 19	20 23.26	-8 4.5	2.298	3.255	6.9	21.1
8 29	20 11.68	-18 59.3	2.059	2.944	11.3	19.2	8 29	20 17.95	-9 0.9	2.354	3.250	9.7	21.3
189556	2000 <i>SQ</i> ₄₇	7 29.9 318°91		4°8/31.9 17			250818	2005 <i>UU</i> ₆₇	7 29.9 333°68		4°2/27.2 18		
6 20	21 2.34	-8 42.1	1.552	2.364	18.4	19.4	6 20	20 59.09	-25 12.4	1.693	2.543	15.4	20.1
6 30	20 59.40	-7 58.4	1.464	2.354	15.2	19.1	6 30	20 56.93	-26 9.7	1.607	2.528	12.3	19.9
7 10	20 53.82	-7 28.1	1.394	2.343	11.5	18.9	7 10	20 52.16	-27 13.4	1.542	2.514	8.7	19.6
7 20	20 46.05	-7 12.4	1.345	2.333	7.6	18.6	7 20	20 45.24	-28 17.7	1.500	2.501	5.3	19.4
7 30	20 36.95	-7 11.4	1.320	2.324	4.9	18.5	7 30	20 36.99	-29 15.2	1.483	2.488	4.4	19.3
8 9	20 27.70	-7 23.1	1.319	2.315	6.3	18.5	8 9	20 28.59	-29 59.6	1.492	2.476	7.2	19.5
8 19	20 19.51	-7 44.0	1.343	2.306	10.2	18.7	8 19	20 21.22	-30 27.1	1.524	2.465	11.0	19.7
8 29	20 13.43	-8 10.0	1.389	2.298	14.2	18.9	8 29	20 15.95	-30 36.4	1.578	2.455	14.6	19.9
25816	2000 <i>DK</i> ₂₉	7 29.9 345°79		1°4/29.1 18			250109	2002 <i>JG</i> ₁₂₇	7 29.9 129°36		3°7/ 2.2 18		
6 20	21 3.65	-21 6.0	1.774	2.607	15.6	18.5	6 20	20 59.91	-3 41.6	2.752	3.507	12.6	21.0
6 30	21 0.12	-21 19.4	1.693	2.604	12.3	18.3	6 30	20 56.04	-3 41.3	2.668	3.518	10.5	20.8
7 10	20 54.08	-21 38.7	1.633	2.602	8.5	18.0	7 10	20 50.66	-3 53.6	2.605	3.528	8.0	20.7
7 20	20 46.07	-22 0.4	1.596	2.600	4.4	17.8	7 20	20 44.15	-4 18.1	2.566	3.539	5.6	20.5
7 30	20 36.96	-22 20.2	1.585	2.598	1.5	17.6	7 30	20 37.02	-4 53.6	2.554	3.549	3.9	20.4
8 9	20 27.85	-22 34.1	1.600	2.597	5.1	17.8	8 9	20 29.91	-5 37.5	2.571	3.559	4.3	20.5
8 19	20 19.84	-22 39.8	1.640	2.596	9.3	18.1	8 19	20 23.42	-6 26.7	2.615	3.568	6.4	20.6
8 29	20 13.86	-22 36.3	1.704	2.595	13.0	18.3	8 29	20 18.10	-7 17.9	2.686	3.577	8.8	20.8
214953	Giugavazzi	7 29.9 38°06		5°9/26.8 18			244932	Méliés	7 29.9 207°70		0°5/29.5 18		
6 20	21 5.29	-26 47.0	1.265	2.125	19.0	19.6	6 20	21 3.60	-18 7.6	2.328	3.137	13.1	21.5
6 30	21 2.56	-28 0.7	1.205	2.130	15.1	19.4	6 30	20 59.45	-18 31.3	2.235	3.133	10.4	21.3
7 10	20 56.40	-29 20.1	1.164	2.136	10.8	19.2	7 10	20 53.32	-19 2.0	2.165	3.128	7.2	21.1
7 20	20 47.44	-30 35.9	1.144	2.142	7.0	19.0	7 20	20 45.62	-19 37.2	2.120	3.123	3.6	20.8
7 30	20 36.93	-31 37.6	1.148	2.149	6.2	18.9	7 30	20 37.00	-20 13.1	2.102	3.117	0.6	20.6
8 9	20 26.55	-32 17.5	1.174	2.155	9.2	19.1	8 9	20 28.32	-20 46.1	2.113	3.111	4.0	20.9
8 19	20 17.87	-32 32.8	1.224	2.163	13.3	19.4	8 19	20 20.40	-21 13.5	2.152	3.105	7.6	21.1
8 29	20 12.14	-32 25.0	1.293	2.170	17.2	19.6	8 29	20 14.01	-21 33.4	2.216	3.098	10.8	21.3
357549	2004 <i>SG</i> ₃₄	7 29.9 48°85		4°3/ 1.8 18			510720	2012 <i>VJ</i> ₄₀	7 29.9 256°54		1°9/30.9 18		
6 20	21 0.17	-5 28.6	2.116	2.896	15.1	21.0	6 20	21 2.88	-12 34.1	2.049	2.852	14.8	21.9
6 30	20 56.73	-5 8.4	2.037	2.904	12.5	20.8	6 30	20 59.16	-12 30.2	1.953	2.843	12.0	21.6
7 10	20 51.39	-5 2.2	1.978	2.912	9.6	20.6	7 10	20 53.29	-12 36.7	1.877	2.833	8.6	21.4
7 20	20 44.58	-5 10.0	1.942	2.921	6.6	20.5	7 20	20 45.67	-12 52.4	1.825	2.822	4.9	21.2
7 30	20 36.99	-5 30.9	1.931	2.929	4.5	20.4	7 30	20 37.01	-13 15.2	1.800	2.812	1.9	21.0
8 9	20 29.42	-6 2.2	1.947	2.938	5.2	20.4	8 9	20 28.23	-13 41.8	1.802	2.802	4.2	21.1
8 19	20 22.68	-6 40.5	1.990	2.947	7.8	20.6	8 19	20 20.26	-14 9.2	1.830	2.791	8.1	21.3
8 29	20 17.45	-7 21.8	2.057	2.956	10.7	20.8	8 29	20 13.94	-14 34.5	1.883	2.780	11.6	21.5
190677	2001 <i>BQ</i> ₆₁	7 29.9 231°00		8°5/ 6.7 18			193596	2001 <i>BV</i> ₆₀	7 29.9 178°72		1°9/30.9 18		
6 20	21 2.39	+12 39.7	2.801	3.445	14.5	20.7	6 20	21 6.13	-12 52.9	2.319	3.108	13.7	20.8
6 30	20 58.20	+13 0.8	2.687	3.429	13.1	20.6	6 30	21 1.30	-12 37.8	2.228	3.110	11.1	20.6
7 10	20 52.33	+13 2.8	2.589	3.411	11.6	20.4	7 10	20 54.50	-12 30.7	2.160	3.111	7.9	20.4
7 20	20 45.09	+12 43.0	2.513	3.393	10.0	20.3	7 20	20 46.17	-12 30.8	2.116	3.111	4.6	20.2
7 30	20 36.98	+12 0.0	2.460	3.374	8.8	20.2	7 30	20 37.01	-12 36.4	2.100	3.111	1.9	20.0
8 9	20 28.69	+10 54.8	2.432	3.354	8.5	20.1	8 9	20 27.83	-12 45.5	2.112	3.111	3.9	20.1
8 19	20 20.88	+9 30.3	2.432	3.333	9.3	20.2	8 19	20 19.47	-12 55.9	2.153	3.110	7.3	20.4
8 29	20 14.24	+7 51.8	2.457	3.311	10.8	20.2	8 29	20 12.66	-13 5.7	2.219	3.108	10.5	20.6
191292	2003 <i>FF</i> ₁₀₇	7 29.9 62°07		6°8/ 3.5 17			59870	1999 <i>RH</i> ₁₀₉	7 29.9 334°78		5°0/ 2.0 18		
6 20	21 0.94	+0 12.5	1.629	2.403	19.2	20.0	6 20	20 59.01	-4 29.2	2.032	2.813	15.6	18.9
6 30	20 57.90	+0 26.4	1.560	2.416	16.2	19.9	6 30	20 56.05	-4 4.1	1.941	2.807	13.1	18.7
7 10	20 52.49	+0 17.5	1.508	2.429	12.9	19.7	7 10	20 51.08	-3 53.7	1.870	2.802	10.2	18.5
7 20	20 45.23	+0 15.6	1.476	2.442	9.5	19.5	7 20	20 44.52	-3 58.8	1.821	2.797	7.2	18.4
7 30	20 36.98	-1 11.3	1.467	2.455	7.1	19.4	7 30	20 37.03	-4 19.0	1.796	2.792	5.1	18.2
8 9	20 28.79	-2 24.9	1.484	2.469	7.2	19.4	8 9	20 29.46	-4 51.9	1.798	2.787	5.7	18.3
8 19	20 21.68	-3 49.6	1.525	2.482	9.7	19.6	8 19	20 22.65	-5 34.0	1.826	2.783	8.4	18.4
8 29	20 16.52	-5 17.8	1.591	2.496	12.9	19.9	8 29	20 17.40	-6 20.7	1.877	2.779	11.4	18.6
513798	2013 <i>CA</i> ₉₂	7 29.9 273°20		2°5/31.7 18			449016	2012 <i>BF</i> ₁₁₂	7 29.9 225°63		0°4/30.2 18		
6 20	21 0.39	-8 27.1	2.168	2.958	14.5	22.1	6 20	21 1.04	-15 45.1	2.754	3.553	11.5	23.0
6 30	20 57.18	-8 46.4	2.059	2.938	11.9	21.8	6 30	20 57.10	-15 59.5	2.654	3.545	9.2	22.8
7 10	20 51.93	-9 20.6	1.970	2.918	8.8	21.6	7 10	20 51.51	-16 20.8	2.578	3.537	6.4	22.6
7 20	20 45.00	-10 8.8	1.905	2.898	5.4	21.3	7 20	20 44.65	-16 47.2	2.527	3.528	3.3	22.4
7 30	20 36.99	-11 8.3	1.867	2.877	2.6	21.1	7 30	20 37.03	-17 16.2	2.504	3.519	0.4	22.1
8 9	20 28.73	-12 15.1	1.857	2.856	4.3	21.2	8 9	20 29.34	-17 45.2	2.510	3.510	3.3	22.3
8 19	20 21.09	-13 24.2	1.874	2.835	7.9	21.4	8 19	20 22.25	-18 11.6	2.545	3.500	6.4	22.5
8 29	20 14.94	-14 30.9	1.916	2.814	11.4	21.6	8 29	20 16.38	-18 33.7	2.605	3.490	9.3	22.7
388239	2006 <i>KB</i> ₂₉	7 29.9 195°04		3°5/ 1.2 17			31082	1996 <i>XM</i> ₁₉	7 29.9 283°95		1°9/30.9 18		
6 20	21 3.28	-7 5.1	2.325	3.098	14.1	22.2							

EPHEMERIDES

7 29.9

7 29.9

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V	
331332	2012 <i>BD</i> ₂₀	7 29.9 193°24 3°1/ 1.2 18						334399	2002 <i>CG</i> ₂₁₄	7 29.9 168°51 0°7/30.4 17				
6 20	21 1.54	- 7 26.6	2.858	3.623	11.9	21.6	6 20	21 4.38	-13 56.6	2.295	3.092	13.6	22.3	
6 30	20 57.33	- 7 10.6	2.761	3.622	9.8	21.4	6 30	21 0.01	-14 21.7	2.208	3.097	10.8	22.2	
7 10	20 51.58	- 7 4.0	2.685	3.619	7.4	21.3	7 10	20 53.68	-14 56.7	2.143	3.101	7.6	22.0	
7 20	20 44.66	- 7 6.6	2.635	3.617	4.9	21.1	7 20	20 45.81	-15 39.3	2.104	3.104	4.0	21.7	
7 30	20 37.06	- 7 17.6	2.613	3.614	3.1	21.0	7 30	20 37.08	-16 25.9	2.092	3.107	0.7	21.5	
8 9	20 29.43	- 7 35.4	2.619	3.610	3.9	21.0	8 9	20 28.31	-17 12.8	2.109	3.109	3.7	21.7	
8 19	20 22.37	- 7 57.7	2.653	3.607	6.3	21.2	8 19	20 20.34	-17 56.2	2.154	3.110	7.3	22.0	
8 29	20 16.46	- 8 22.3	2.714	3.603	8.8	21.3	8 29	20 13.90	-18 33.6	2.224	3.111	10.5	22.2	
33488	1999 <i>GD</i> ₉	7 29.9 126°56 7°3/25.4 18						263309	2008 <i>CU</i> ₂₇	7 29.9 160°69 2°8/28.6 17				
6 20	21 8.69	-34 1.6	1.777	2.611	15.5	18.5	6 20	21 10.47	-24 23.6	1.762	2.587	16.0	21.5	
6 30	21 4.49	-35 17.7	1.711	2.615	12.6	18.3	6 30	21 5.54	-24 45.8	1.685	2.591	12.7	21.3	
7 10	20 57.34	-36 31.9	1.667	2.619	9.7	18.1	7 10	20 57.87	-25 11.5	1.629	2.595	8.8	21.0	
7 20	20 47.83	-37 35.9	1.646	2.623	7.6	18.0	7 20	20 48.04	-25 35.9	1.597	2.599	4.8	20.8	
7 30	20 37.02	-38 21.7	1.650	2.627	7.5	18.0	7 30	20 37.05	-25 53.6	1.592	2.602	2.9	20.7	
8 9	20 26.28	-38 44.1	1.679	2.631	9.5	18.2	8 9	20 26.15	-26 0.6	1.613	2.605	6.0	20.9	
8 19	20 16.95	-38 42.2	1.732	2.635	12.3	18.3	8 19	20 16.55	-25 55.4	1.661	2.607	9.9	21.1	
8 29	20 10.09	-38 18.5	1.806	2.639	15.1	18.5	8 29	20 9.24	-25 38.6	1.732	2.608	13.5	21.4	
180302	2003 <i>WR</i> ₁₃₉	7 29.9 237°40 2°6/31.2 18						79121	1990 <i>EG</i> ₁	7 29.9 223°54 0°5/30.1 18				
6 20	21 5.94	-11 19.7	1.819	2.621	16.4	20.7	6 20	21 8.14	-16 20.7	1.986	2.791	15.1	20.3	
6 30	21 1.94	-11 10.7	1.722	2.609	13.4	20.4	6 30	21 3.49	-16 24.2	1.887	2.781	12.1	20.0	
7 10	20 55.45	-11 13.9	1.644	2.597	9.8	20.2	7 10	20 56.40	-16 36.1	1.809	2.770	8.6	19.8	
7 20	20 46.88	-11 28.6	1.589	2.584	5.8	19.9	7 20	20 47.33	-16 54.2	1.756	2.758	4.5	19.5	
7 30	20 37.03	-11 52.7	1.560	2.571	2.6	19.7	7 30	20 37.06	-17 15.3	1.730	2.745	0.5	19.2	
8 9	20 26.98	-12 22.9	1.558	2.557	4.9	19.8	8 9	20 26.62	-17 35.8	1.732	2.731	4.4	19.5	
8 19	20 17.83	-12 55.2	1.582	2.543	9.1	20.0	8 19	20 17.09	-17 52.9	1.760	2.717	8.7	19.7	
8 29	20 10.61	-13 26.1	1.630	2.528	13.1	20.2	8 29	20 9.42	-18 4.5	1.814	2.702	12.5	19.9	
319277	2006 <i>BJ</i> ₆₀	7 29.9 243°93 0°6/29.4 18						439502	2014 <i>AB</i> ₄₆	7 29.9 154°77 9°6/ 5.8 18				
6 20	21 0.92	-18 26.6	2.671	3.479	11.6	21.8	6 20	21 7.31	+12 1.6	2.637	3.280	15.4	21.7	
6 30	20 57.13	-18 51.1	2.571	3.468	9.2	21.6	6 30	21 2.01	+13 21.8	2.554	3.290	13.9	21.6	
7 10	20 51.61	-19 21.8	2.494	3.457	6.4	21.4	7 10	20 54.91	+14 25.0	2.489	3.299	12.3	21.5	
7 20	20 44.74	-19 56.3	2.443	3.446	3.2	21.1	7 20	20 46.40	+15 7.6	2.445	3.308	10.8	21.4	
7 30	20 37.07	-20 31.5	2.420	3.435	0.6	20.9	7 30	20 37.08	+15 27.0	2.425	3.315	9.9	21.4	
8 9	20 29.30	-21 4.2	2.426	3.424	3.6	21.1	8 9	20 27.72	+15 23.2	2.429	3.322	9.7	21.4	
8 19	20 22.14	-21 32.0	2.460	3.412	6.8	21.3	8 19	20 19.03	+14 58.1	2.459	3.329	10.4	21.4	
8 29	20 16.27	-21 53.0	2.520	3.400	9.7	21.5	8 29	20 11.72	+14 15.7	2.512	3.334	11.6	21.5	
25559	1999 <i>XW</i> ₁₇₂	7 29.9 211°73 1°7/30.9 18						135570	2002 <i>GF</i> ₂₆	7 29.9 342°27 7°2/26.8 18				
6 20	21 3.79	-13 28.8	2.646	3.434	12.2	18.8	6 20	21 3.67	-29 58.3	1.163	2.033	19.7	18.8	
6 30	20 59.22	-13 6.1	2.550	3.431	9.8	18.7	6 30	21 1.85	-30 54.6	1.095	2.024	15.9	18.5	
7 10	20 52.95	-12 49.6	2.477	3.428	7.1	18.5	7 10	20 56.31	-31 53.1	1.045	2.017	11.8	18.2	
7 20	20 45.37	-12 38.7	2.429	3.425	4.1	18.3	7 20	20 47.61	-32 44.4	1.015	2.010	8.2	18.0	
7 30	20 37.06	-12 32.4	2.410	3.421	1.8	18.1	7 30	20 37.06	-33 18.0	1.006	2.004	7.4	18.0	
8 9	20 28.74	-12 29.2	2.419	3.418	3.5	18.2	8 9	20 26.52	-33 26.6	1.019	2.000	10.4	18.1	
8 19	20 21.10	-12 27.7	2.457	3.414	6.5	18.4	8 19	20 17.79	-33 8.6	1.054	1.996	14.6	18.3	
8 29	20 14.78	-12 26.4	2.521	3.410	9.4	18.6	8 29	20 12.29	-32 26.9	1.107	1.993	18.7	18.6	
330653	2008 <i>FV</i> ₁₀₉	7 29.9 128°00 3°1/28.2 17						178464	1999 <i>RS</i> ₇₈	7 29.9 318°71 3°4/28.6 18				
6 20	21 7.10	-23 25.3	1.661	2.495	16.4	21.9	6 20	21 3.94	-24 24.2	1.239	2.100	19.3	19.9	
6 30	21 3.06	-24 9.5	1.590	2.501	13.0	21.7	6 30	21 1.82	-24 38.3	1.154	2.081	15.5	19.6	
7 10	20 56.25	-24 59.6	1.538	2.507	9.0	21.4	7 10	20 56.21	-24 57.8	1.087	2.062	11.0	19.2	
7 20	20 47.25	-25 50.1	1.511	2.513	5.0	21.2	7 20	20 47.59	-25 17.1	1.040	2.045	6.1	18.9	
7 30	20 37.04	-26 34.2	1.509	2.518	3.2	21.1	7 30	20 37.06	-25 29.3	1.016	2.028	3.5	18.7	
8 9	20 26.90	-27 6.6	1.534	2.523	6.4	21.3	8 9	20 26.29	-25 28.5	1.015	2.011	7.5	18.9	
8 19	20 18.04	-27 24.3	1.583	2.528	10.4	21.6	8 19	20 17.01	-25 12.2	1.036	1.996	12.8	19.1	
8 29	20 11.49	-27 27.2	1.656	2.533	14.0	21.8	8 29	20 10.67	-24 41.0	1.077	1.981	17.7	19.4	
478402	2012 <i>BE</i> ₁₂₈	7 29.9 206°02 1°8/28.5 18						443094	2013 <i>HN</i> ₁₅	7 29.9 135°96 4°5/ 3.2 18				
6 20	21 3.80	-24 3.7	2.921	3.729	10.7	21.8	6 20	20 58.51	- 0 14.1	2.601	3.345	13.5	20.9	
6 30	20 59.19	-24 22.0	2.827	3.725	8.4	21.6	6 30	20 55.13	- 0 27.3	2.510	3.348	11.4	20.7	
7 10	20 52.91	-24 42.4	2.757	3.719	5.9	21.4	7 10	20 50.17	- 0 56.5	2.439	3.352	9.0	20.6	
7 20	20 45.35	-25 2.0	2.713	3.714	3.2	21.2	7 20	20 43.99	- 1 41.6	2.392	3.356	6.5	20.4	
7 30	20 37.08	-25 18.1	2.698	3.708	1.9	21.1	7 30	20 37.13	- 2 41.2	2.371	3.359	4.7	20.3	
8 9	20 28.79	-25 28.2	2.712	3.702	4.0	21.3	8 9	20 30.22	- 3 51.9	2.378	3.363	4.9	20.3	
8 19	20 21.15	-25 31.0	2.754	3.695	6.7	21.4	8 19	20 23.92	- 5 9.5	2.413	3.366	6.9	20.5	
8 29	20 14.80	-25 26.1	2.822	3.688	9.3	21.6	8 29	20 18.81	- 6 29.3	2.475	3.369	9.3	20.6	
315234	2007 <i>RP</i> ₂₆₀	7 29.9 234°57 4°2/ 1.0 17						336228	2008 <i>SU</i> ₈₁	7 29.9 295°24 1°3/29.4 18				
6 20	21 4.14	- 8 2.0	1.525	2.332	18.8	21.3	6 20	21 8.28	-22 14.0	1.709	2.537	16.3	20.8	
6 30	21 0.86	- 7 44.5	1.442	2.329	15.5	21.1	6 30	21 4.30	-22 4.5	1.601	2.509	13.1	20.5	
7 10	20 54.86	- 7 43.8	1.377	2.326	11.6	20.8	7 10	20 57.42	-21 58.3	1.514	2.481	9.2	20.2	
7 20	20 46.62	- 8 0.2	1.333	2.323	7.5	20.6	7 20	20 48.05	-21 52.3	1.449	2.453	4.8	19.9	
7 30	20 37.05	- 8 32.0	1.313	2.319	4.4	20.4	7 30	20 37.07	-21 42.6	1.411	2.425	1.3	19.6	
8 9	20 27.38	- 9 15.0	1.318	2.316	5.9	20.5	8 9	20 25.75	-21 26.0	1.398	2.397	5.5	19.8	
8 19	20 18.82	-10 4.1	1.348	2.312	10.0	20.7	8 19	20 15.45	-21 1.1	1.412	2.368	10.4	20.0	
8 29	20 12.46	-10 53.7	1.401	2.308	14.2	21.0	8 29	20 7.39	-20 28.2	1.448	2.340	14.8	20.2	
190539	2000 <i>RX</i> ₆₀	7 29.9 300°24 1°2/29.4 18						450089	2015 <i>RD</i> ₉₁	7 29.9 52°98 2°6/28.3 18				
6 20	21 5.66	-20 41.9	1.647	2.480	16.6	19.8	6 20	21 4.21	-25 29.1	2.271	3.094	12.9	20.4	
6 30	21 2.41	-20 45.0	1.536	2.447	13.4	19.5								

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
484877	2009 <i>PB</i> ₅	7 29.9 327°87		5°6/ 2.9 17			330644	2008 <i>FB</i> ₃₉	7 29.9 296°12		4°2/27.6 17		
6 20	20 55.29	- 1 40.5	1.835	2.619	17.0	20.6	6 20	21 5.31	-24 57.2	1.545	2.390	16.9	20.8
6 30	20 53.52	- 1 37.9	1.731	2.597	14.4	20.4	6 30	21 2.07	-25 52.5	1.469	2.387	13.5	20.6
7 10	20 49.63	- 1 55.8	1.646	2.576	11.4	20.1	7 10	20 55.87	-26 54.3	1.414	2.384	9.5	20.4
7 20	20 43.95	- 2 35.7	1.581	2.555	8.3	19.9	7 20	20 47.23	-27 55.8	1.380	2.381	5.6	20.1
7 30	20 37.13	- 3 37.0	1.540	2.534	5.9	19.7	7 30	20 37.17	-28 48.9	1.372	2.378	4.4	20.1
8 9	20 30.06	- 4 55.7	1.524	2.515	6.3	19.7	8 9	20 27.05	-29 27.3	1.389	2.375	7.4	20.2
8 19	20 23.69	- 6 26.1	1.534	2.496	9.1	19.8	8 19	20 18.24	-29 47.3	1.430	2.373	11.5	20.5
8 29	20 18.94	- 8 0.8	1.567	2.479	12.7	20.0	8 29	20 11.88	-29 49.0	1.493	2.370	15.3	20.7
376925	2002 <i>CX</i> ₃₂	7 29.9 179°35		2°2/28.3 17			378264	2007 <i>DX</i> ₁₁₁	7 29.9 255°82		0°3/30.1 17		
6 20	21 6.82	-23 5.9	2.406	3.217	12.6	22.2	6 20	21 4.49	-15 41.7	1.837	2.654	15.7	22.1
6 30	21 1.97	-23 45.5	2.320	3.219	10.0	22.0	6 30	21 0.89	-15 58.8	1.739	2.640	12.7	21.9
7 10	20 55.06	-24 29.4	2.257	3.220	6.9	21.8	7 10	20 54.80	-16 26.8	1.662	2.625	8.9	21.6
7 20	20 46.55	-25 13.6	2.220	3.220	3.8	21.6	7 20	20 46.64	-17 3.4	1.607	2.610	4.7	21.3
7 30	20 37.13	-25 53.6	2.211	3.220	2.3	21.5	7 30	20 37.18	-17 44.5	1.579	2.594	0.3	20.9
8 9	20 27.68	-26 25.5	2.231	3.219	4.8	21.7	8 9	20 27.50	-18 25.4	1.578	2.579	4.7	21.2
8 19	20 19.06	-26 47.2	2.279	3.218	8.0	21.9	8 19	20 18.70	-19 1.8	1.603	2.562	9.1	21.5
8 29	20 12.05	-26 57.8	2.352	3.215	10.9	22.1	8 29	20 11.81	-19 30.7	1.652	2.546	13.1	21.7
503444	2016 <i>EO</i> ₉₅	7 29.9 18°55		6°6/26.6 17			428279	2007 <i>EX</i> ₅₉	7 29.9 6°72		4°2/ 1.4 18		
6 20	20 59.84	-25 32.3	0.985	1.869	21.3	20.4	6 20	21 0.02	- 6 40.8	1.524	2.335	18.7	20.9
6 30	20 59.01	-27 0.8	0.935	1.875	16.9	20.1	6 30	20 57.55	- 6 38.6	1.446	2.335	15.4	20.7
7 10	20 54.38	-28 38.1	0.902	1.881	12.0	19.9	7 10	20 52.54	- 6 55.8	1.386	2.336	11.6	20.5
7 20	20 46.61	-30 12.8	0.888	1.889	7.7	19.7	7 20	20 45.47	- 7 32.3	1.347	2.337	7.5	20.2
7 30	20 37.12	-31 31.6	0.895	1.898	6.9	19.7	7 30	20 37.20	- 8 25.3	1.332	2.338	4.4	20.1
8 9	20 27.82	-32 24.5	0.924	1.908	10.4	19.9	8 9	20 28.87	- 9 29.7	1.341	2.340	5.7	20.1
8 19	20 20.50	-32 47.7	0.972	1.920	14.9	20.2	8 19	20 21.62	-10 39.0	1.375	2.342	9.6	20.4
8 29	20 16.46	-32 42.9	1.038	1.932	19.1	20.5	8 29	20 16.44	-11 46.7	1.432	2.345	13.6	20.6
422681	1999 <i>WP</i> ₁₇	7 29.9 253°05		7°0/ 2.6 18			152323	2005 <i>UZ</i> ₁₁	7 29.9 223°28		4°1/26.6 18		
6 20	21 4.72	- 0 34.0	1.935	2.690	17.2	21.8	6 20	21 3.15	-28 38.4	2.434	3.258	12.1	20.4
6 30	21 0.92	+ 0 5.6	1.827	2.670	14.8	21.6	6 30	20 59.24	-29 35.1	2.351	3.255	9.7	20.3
7 10	20 54.76	+ 0 28.6	1.736	2.649	12.0	21.3	7 10	20 53.28	-30 33.4	2.290	3.251	7.0	20.1
7 20	20 46.60	+ 0 32.5	1.668	2.627	9.2	21.1	7 20	20 45.71	-31 28.5	2.255	3.247	4.7	19.9
7 30	20 37.13	+ 0 15.8	1.624	2.605	7.2	21.0	7 30	20 37.20	-32 15.2	2.247	3.243	4.3	19.9
8 9	20 27.30	+ 0 20.0	1.605	2.582	7.6	20.9	8 9	20 28.63	-32 49.5	2.267	3.238	6.2	20.0
8 19	20 18.18	- 1 11.4	1.612	2.559	10.1	21.0	8 19	20 20.86	-33 9.3	2.314	3.234	8.8	20.2
8 29	20 10.75	- 2 13.1	1.644	2.535	13.4	21.2	8 29	20 14.68	-33 14.4	2.384	3.229	11.4	20.3
438013	2003 <i>WW</i> ₅₁	7 29.9 27°31		8°7/24.8 16			212415	2006 <i>KP</i> ₉₇	7 29.9 183°02		5°1/ 2.6 18		
6 20	21 8.35	-37 58.6	1.733	2.568	15.8	20.4	6 20	21 1.40	- 2 5.8	2.107	2.869	15.7	20.6
6 30	21 4.45	-39 14.0	1.672	2.570	13.2	20.2	6 30	20 57.86	- 2 1.0	2.017	2.870	13.2	20.4
7 10	20 57.44	-40 24.2	1.630	2.574	10.6	20.1	7 10	20 52.34	- 2 13.4	1.947	2.870	10.4	20.2
7 20	20 47.95	-41 20.1	1.612	2.577	8.9	20.0	7 20	20 45.23	- 2 43.4	1.899	2.869	7.4	20.0
7 30	20 37.12	-41 53.7	1.617	2.580	9.0	20.0	7 30	20 37.20	- 3 30.0	1.876	2.869	5.3	19.9
8 9	20 26.44	-42 0.6	1.646	2.584	10.7	20.1	8 9	20 29.10	- 4 29.7	1.881	2.868	5.7	19.9
8 19	20 17.29	-41 40.8	1.698	2.588	13.2	20.3	8 19	20 21.77	- 5 37.7	1.912	2.867	8.2	20.1
8 29	20 10.79	-40 57.9	1.771	2.593	15.7	20.5	8 29	20 15.97	- 6 48.9	1.968	2.866	11.2	20.3
170898	2004 <i>VC</i> ₂₅	7 29.9 264°06		2°6/31.1 17			26800	Gualtierotrucco	7 29.9 179°14		3°7/28.0 18 R		
6 20	21 5.38	-11 43.6	1.555	2.371	18.2	21.5	6 20	21 10.08	-26 36.8	1.865	2.690	15.2	19.2
6 30	21 2.07	-11 34.9	1.458	2.354	14.9	21.2	6 30	21 5.21	-27 7.7	1.786	2.691	12.1	19.0
7 10	20 55.92	-11 40.3	1.379	2.337	10.9	20.9	7 10	20 57.67	-27 40.7	1.728	2.692	8.6	18.8
7 20	20 47.33	-11 59.1	1.322	2.319	6.4	20.6	7 20	20 48.00	-28 10.6	1.694	2.693	5.1	18.6
7 30	20 37.15	-12 28.9	1.289	2.301	2.7	20.3	7 30	20 37.18	-28 31.6	1.687	2.693	3.8	18.5
8 9	20 26.64	-13 5.5	1.282	2.283	5.4	20.5	8 9	20 26.41	-28 39.8	1.707	2.692	6.4	18.7
8 19	20 17.13	-13 44.0	1.300	2.264	10.3	20.7	8 19	20 16.86	-28 33.7	1.753	2.691	10.0	18.9
8 29	20 9.84	-14 20.1	1.340	2.245	14.9	20.9	8 29	20 9.52	-28 14.1	1.822	2.690	13.4	19.1
75468	1999 <i>XC</i> ₁₆₁	7 29.9 300°44		6°3/26.8 18			312438	2008 <i>HH</i> ₂₈	7 29.9 211°40		3°3/ 1.4 18		
6 20	21 6.29	-29 25.3	1.430	2.281	17.7	19.4	6 20	21 1.23	- 6 35.7	2.683	3.449	12.6	21.8
6 30	21 3.37	-30 22.8	1.350	2.268	14.3	19.1	6 30	20 57.27	- 6 25.9	2.583	3.444	10.4	21.6
7 10	20 57.11	-31 23.4	1.288	2.256	10.5	18.9	7 10	20 51.68	- 6 27.0	2.504	3.438	7.9	21.4
7 20	20 48.00	-32 19.1	1.249	2.243	7.2	18.7	7 20	20 44.82	- 6 38.8	2.451	3.431	5.3	21.3
7 30	20 37.15	-33 0.4	1.233	2.231	6.5	18.6	7 30	20 37.21	- 7 0.2	2.424	3.425	3.4	21.1
8 9	20 26.13	-33 20.4	1.242	2.219	9.3	18.7	8 9	20 29.53	- 7 29.3	2.426	3.418	4.2	21.2
8 19	20 16.57	-33 16.4	1.273	2.207	13.3	18.9	8 19	20 22.43	- 8 3.4	2.456	3.410	6.6	21.3
8 29	20 9.82	-32 50.3	1.324	2.195	17.2	19.1	8 29	20 16.54	- 8 39.5	2.512	3.403	9.3	21.5
295197	2008 <i>FF</i> ₁₀₉	7 29.9 12°18		0°4/29.6 18			155310	2005 <i>YF</i> ₁₅₆	7 29.9 297°71		0°4/29.7 18		
6 20	21 0.12	-17 17.7	1.953	2.778	14.6	21.0	6 20	21 1.16	-17 56.3	2.135	2.954	13.7	20.7
6 30	20 57.08	-17 44.5	1.873	2.780	11.6	20.8	6 30	20 57.91	-18 12.8	2.030	2.933	11.0	20.5
7 10	20 51.89	-18 20.4	1.815	2.782	8.0	20.6	7 10	20 52.54	-18 37.2	1.946	2.912	7.7	20.2
7 20	20 45.01	-19 2.3	1.780	2.784	4.0	20.3	7 20	20 45.42	-19 7.0	1.887	2.891	3.9	19.9
7 30	20 37.18	-19 46.0	1.772	2.787	0.5	20.1	7 30	20 37.21	-19 38.9	1.855	2.870	0.4	19.6
8 9	20 29.36	-20 27.0	1.790	2.790	4.3	20.4	8 9	20 28.79	-20 8.8	1.849	2.849	4.3	19.9
8 19	20 22.44	-21 1.7	1.835	2.793	8.2	20.6	8 19	20 21.09	-20 33.8	1.871	2.828	8.2	20.1
8 29	20 17.24	-21 27.8	1.904	2.797	11.7	20.8	8 29	20 14.98	-20 51.6	1.916	2.807	11.8	20.3
145857	1999 <i>EY</i> ₂	7 29.9 261°85		5°2/ 2.7 18			479082	2013 <i>AQ</i> ₉₉	7 29.9 267°47		1°9/28.9 18		
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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
113675	2002 <i>TN</i> ₁₀₂		7 29.9 331°54	3°4/31.9	18		291970	2006 <i>QC</i> ₆₆		7 29.9 227°31	2°9/31.6	17	
6 20	21 1.08	- 8 45.2	1.871	2.672	16.1	19.4	6 20	21 3.32	- 9 1.3	1.642	2.449	17.7	21.2
6 30	20 57.90	- 8 33.7	1.785	2.669	13.2	19.2	6 30	21 0.10	- 9 12.3	1.555	2.444	14.5	21.0
7 10	20 52.52	- 8 35.9	1.717	2.666	9.8	18.9	7 10	20 54.31	- 9 40.5	1.487	2.440	10.7	20.8
7 20	20 45.38	- 8 51.6	1.673	2.663	6.2	18.7	7 20	20 46.42	-10 25.1	1.441	2.435	6.4	20.5
7 30	20 37.21	- 9 19.1	1.653	2.660	3.5	18.6	7 30	20 37.24	-11 22.7	1.420	2.430	3.0	20.3
8 9	20 28.97	- 9 54.9	1.660	2.658	4.9	18.6	8 9	20 27.91	-12 27.7	1.425	2.425	5.1	20.4
8 19	20 21.62	-10 35.2	1.693	2.656	8.4	18.8	8 19	20 19.59	-13 34.1	1.455	2.420	9.4	20.7
8 29	20 16.01	-11 15.7	1.750	2.654	12.0	19.1	8 29	20 13.31	-14 36.3	1.510	2.414	13.5	20.9
236023	2005 <i>GK</i> ₁₂₂		7 29.9 14°78	3°0/31.6	17		281474	2008 <i>SD</i> ₂₀₃		7 29.9 351°18	2°6/31.4	16	
6 20	20 59.63	- 9 56.4	1.587	2.406	17.7	20.4	6 20	20 59.01	-10 41.8	1.459	2.289	18.5	20.8
6 30	20 57.10	- 9 51.9	1.512	2.410	14.4	20.2	6 30	20 56.95	-10 45.2	1.380	2.284	15.0	20.5
7 10	20 52.12	-10 2.9	1.457	2.413	10.5	20.0	7 10	20 52.25	-11 5.4	1.319	2.280	10.9	20.3
7 20	20 45.21	-10 28.4	1.423	2.418	6.3	19.8	7 20	20 45.39	-11 41.4	1.279	2.277	6.4	20.0
7 30	20 37.21	-11 5.8	1.413	2.423	3.1	19.6	7 30	20 37.25	-12 29.6	1.263	2.275	2.7	19.8
8 9	20 29.24	-11 50.5	1.428	2.429	5.0	19.7	8 9	20 29.03	-13 24.5	1.271	2.273	5.2	19.9
8 19	20 22.34	-12 37.4	1.468	2.435	9.1	20.0	8 19	20 21.92	-14 20.2	1.304	2.272	9.8	20.2
8 29	20 17.43	-13 21.8	1.531	2.442	13.0	20.2	8 29	20 16.97	-15 11.2	1.358	2.272	14.0	20.4
78177	2002 <i>NH</i> ₃₃		7 29.9 316°87	4°6/31.7	18		56319	1999 <i>UM</i> ₁₀		7 29.9 260°40	18°5/21.5	18	
6 20	21 3.38	- 9 36.1	1.707	2.512	17.2	18.4	6 20	21 29.56	-52 51.8	1.208	2.019	22.6	18.7
6 30	21 0.07	- 8 42.0	1.611	2.497	14.3	18.1	6 30	21 25.17	-54 48.5	1.151	2.008	20.8	18.5
7 10	20 54.26	- 7 58.1	1.534	2.482	10.8	17.9	7 10	21 14.25	-56 27.8	1.110	1.997	19.2	18.4
7 20	20 46.37	- 7 25.7	1.480	2.468	7.2	17.6	7 20	20 57.41	-57 30.7	1.086	1.985	18.5	18.3
7 30	20 37.21	- 7 5.5	1.450	2.453	4.7	17.5	7 30	20 37.14	-57 39.5	1.079	1.973	18.9	18.3
8 9	20 27.86	- 6 56.6	1.446	2.440	6.1	17.5	8 9	20 17.39	-56 47.0	1.090	1.961	20.4	18.4
8 19	20 19.45	- 6 57.1	1.467	2.427	9.7	17.7	8 19	20 1.75	-54 59.2	1.117	1.949	22.5	18.5
8 29	20 13.00	- 7 3.9	1.510	2.414	13.6	17.9	8 29	19 52.23	-52 30.4	1.160	1.937	24.8	18.6
479036	2013 <i>AC</i> ₃₀		7 29.9 245°58	3°4/1.3	18		206253	2002 <i>XM</i> ₆₃		7 29.9 317°69	0°0/29.9	18	
6 20	21 2.76	- 6 34.7	2.456	3.225	13.6	23.0	6 20	20 53.95	-14 28.4	0.989	1.866	21.8	19.6
6 30	20 58.78	- 6 32.3	2.343	3.206	11.3	22.8	6 30	20 54.65	-14 55.8	0.893	1.829	17.9	19.2
7 10	20 52.94	- 6 42.4	2.252	3.187	8.5	22.6	7 10	20 51.93	-15 47.4	0.812	1.792	12.9	18.8
7 20	20 45.56	- 7 5.0	2.184	3.167	5.6	22.4	7 20	20 45.87	-17 3.0	0.749	1.756	6.8	18.3
7 30	20 37.22	- 7 38.8	2.144	3.146	3.5	22.2	7 30	20 37.24	-18 36.6	0.706	1.721	0.1	17.7
8 9	20 28.66	- 8 21.1	2.131	3.125	4.4	22.2	8 9	20 27.64	-20 17.4	0.682	1.687	7.4	18.0
8 19	20 20.67	- 9 8.7	2.147	3.103	7.4	22.4	8 19	20 19.06	-21 52.5	0.679	1.654	14.6	18.3
8 29	20 14.00	- 9 57.9	2.189	3.081	10.5	22.5	8 29	20 13.57	-23 11.1	0.692	1.623	21.2	18.5
505764	2015 <i>BZ</i> ₁₈₆		7 29.9 309°34	4°4/27.7	17		263877	2009 <i>DO</i> ₁₂₅		7 29.9 23°18	3°3/28.5	17	
6 20	21 2.27	-23 55.2	1.299	2.159	18.6	21.3	6 20	21 5.11	-23 21.7	1.193	2.054	19.9	20.7
6 30	21 0.44	-24 47.1	1.213	2.139	14.9	21.0	6 30	21 2.48	-23 50.7	1.131	2.058	15.8	20.5
7 10	20 55.29	-25 49.0	1.144	2.120	10.6	20.7	7 10	20 56.41	-24 26.9	1.087	2.063	11.0	20.2
7 20	20 47.20	-26 54.1	1.097	2.100	6.2	20.4	7 20	20 47.58	-25 3.6	1.064	2.068	6.0	20.0
7 30	20 37.20	-27 53.3	1.073	2.082	4.6	20.2	7 30	20 37.24	-25 33.3	1.063	2.074	3.4	19.8
8 9	20 26.84	-28 37.7	1.073	2.063	8.3	20.4	8 9	20 27.08	-25 50.0	1.086	2.081	7.3	20.1
8 19	20 17.78	-29 2.1	1.094	2.046	13.2	20.6	8 19	20 18.66	-25 50.8	1.131	2.088	12.2	20.4
8 29	20 11.53	-29 5.1	1.136	2.029	17.9	20.8	8 29	20 13.17	-25 36.5	1.196	2.096	16.6	20.7
9784	Yotsubashi		7 29.9 272°12	3°2/27.9	18		236471	2006 <i>FF</i> ₁₁		7 29.9 275°78	0°4/29.7	18	
6 20	21 4.42	-24 46.9	1.936	2.767	14.5	17.9	6 20	21 2.57	-16 57.7	1.821	2.646	15.6	20.7
6 30	21 0.71	-25 25.6	1.852	2.762	11.5	17.6	6 30	20 59.33	-17 26.3	1.732	2.638	12.4	20.4
7 10	20 54.56	-26 8.6	1.788	2.756	8.1	17.4	7 10	20 53.68	-18 5.6	1.663	2.630	8.6	20.2
7 20	20 46.46	-26 51.2	1.749	2.750	4.6	17.2	7 20	20 46.07	-18 52.3	1.618	2.622	4.4	19.9
7 30	20 37.22	-27 27.6	1.737	2.744	3.3	17.1	7 30	20 37.27	-19 41.7	1.599	2.614	0.5	19.6
8 9	20 27.92	-27 53.4	1.751	2.738	6.0	17.3	8 9	20 28.33	-20 28.6	1.607	2.606	4.7	19.9
8 19	20 19.62	-28 6.0	1.791	2.733	9.6	17.5	8 19	20 20.34	-21 8.7	1.640	2.599	9.0	20.2
8 29	20 13.28	-28 5.0	1.854	2.727	13.0	17.7	8 29	20 14.24	-21 39.2	1.697	2.591	12.9	20.4
459053	2012 <i>BR</i> ₈		7 29.9 39°15	2°8/27.7	17		193467	2000 <i>XK</i> ₁₇		7 29.9 209°54	0°1/29.9	18	R
6 20	21 1.67	-12 44.9	1.224	2.069	20.5	19.9	6 20	21 7.12	-18 11.1	2.051	2.861	14.5	20.3
6 30	20 59.68	-15 18.7	1.160	2.079	16.1	19.7	6 30	21 2.52	-18 6.8	1.961	2.858	11.6	20.1
7 10	20 54.52	-18 21.4	1.116	2.090	11.0	19.4	7 10	20 55.64	-18 8.5	1.892	2.854	8.1	19.8
7 20	20 46.69	-21 41.5	1.096	2.102	5.5	19.2	7 20	20 46.96	-18 14.0	1.847	2.849	4.2	19.6
7 30	20 37.22	-25 1.6	1.102	2.114	3.1	19.1	7 30	20 37.27	-18 20.6	1.830	2.845	0.1	19.2
8 9	20 27.63	-28 3.7	1.135	2.127	7.8	19.4	8 9	20 27.54	-18 25.5	1.840	2.840	4.2	19.6
8 19	20 19.44	-30 34.9	1.193	2.140	12.9	19.7	8 19	20 18.76	-18 26.7	1.878	2.835	8.2	19.8
8 29	20 13.97	-32 30.0	1.273	2.154	17.2	20.0	8 29	20 11.79	-18 23.1	1.941	2.829	11.7	20.0
236947	2007 <i>TO</i> ₃₇₄		7 29.9 10°41	2°8/28.6	16		80946	2000 <i>DX</i> ₉₄		7 29.9 199°77	3°9/28.1	18	
6 20	21 3.30	-23 38.9	1.500	2.348	17.2	20.1	6 20	21 9.19	-26 27.5	1.678	2.511	16.3	19.4
6 30	21 0.34	-23 59.3	1.430	2.350	13.6	19.9	6 30	21 4.85	-26 57.4	1.600	2.510	13.0	19.2
7 10	20 54.54	-24 24.7	1.380	2.352	9.4	19.7	7 10	20 57.63	-27 30.1	1.543	2.509	9.2	19.0
7 20	20 46.49	-24 50.0	1.352	2.355	5.1	19.4	7 20	20 48.09	-27 59.7	1.508	2.508	5.4	18.7
7 30	20 37.22	-25 9.8	1.348	2.359	2.9	19.3	7 30	20 37.27	-28 20.0	1.500	2.506	4.0	18.6
8 9	20 28.07	-25 19.5	1.369	2.364	6.2	19.5	8 9	20 26.48	-28 26.7	1.518	2.505	6.8	18.8
8 19	20 20.26	-25 17.0	1.414	2.369	10.5	19.8	8 19	20 17.03	-28 18.2	1.560	2.503	10.7	19.0
8 29	20 14.84	-25 2.3	1.482	2.375	14.4	20.0	8 29	20 9.97	-27 55.5	1.626	2.501	14.4	19.3
424559	2008 <i>FT</i> ₄₆		7 29.9 218°83	0°5/30.2	17		374356	2005 <i>UT</i>					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
376460	2012 <i>HJ</i> ₇₄		7 29.9 346°51	6°8/26.7	15		476951	2008 <i>XE</i> ₂₈		7 29.9 321°43	1°6/29.1	17	
6 20	21 1.20	-28 38.5	1.192	2.064	19.2	20.4	6 20	21 5.47	-21 29.7	1.821	2.649	15.4	21.5
6 30	20 59.79	-29 42.3	1.124	2.055	15.5	20.2	6 30	21 1.56	-21 43.8	1.740	2.648	12.2	21.3
7 10	20 54.86	-30 50.5	1.074	2.048	11.3	19.9	7 10	20 55.16	-22 3.4	1.679	2.647	8.5	21.0
7 20	20 46.95	-31 53.8	1.044	2.041	7.7	19.7	7 20	20 46.79	-22 24.8	1.643	2.646	4.4	20.8
7 30	20 37.28	-32 41.8	1.037	2.036	7.0	19.6	7 30	20 37.32	-22 43.7	1.632	2.645	1.6	20.6
8 9	20 27.57	-33 6.5	1.051	2.032	10.0	19.8	8 9	20 27.86	-22 56.3	1.648	2.644	5.1	20.8
8 19	20 19.52	-33 5.2	1.086	2.029	14.2	20.0	8 19	20 19.49	-23 0.3	1.690	2.644	9.2	21.1
8 29	20 14.50	-32 39.7	1.141	2.027	18.3	20.3	8 29	20 13.15	-22 55.0	1.755	2.643	12.8	21.3
211342	2002 <i>TW</i> ₅₉		7 29.9 272°48	19°1/24.8	17		439449	2013 <i>XS</i> ₂₀		7 29.9 186°73	8°7/20.8	18	
6 20	21 35.17	-53 45.2	1.101	1.912	24.3	20.6	6 20	21 12.82	-41 32.5	2.450	3.251	12.7	21.5
6 30	21 29.82	-55 20.7	1.051	1.908	22.2	20.5	6 30	21 7.69	-43 43.9	2.382	3.251	10.9	21.3
7 10	21 17.35	-56 34.5	1.014	1.904	20.4	20.3	7 10	20 59.73	-45 51.2	2.339	3.250	9.4	21.2
7 20	20 58.77	-57 6.5	0.994	1.900	19.3	20.3	7 20	20 49.32	-47 45.2	2.322	3.248	8.7	21.2
7 30	20 37.18	-56 39.0	0.990	1.896	19.3	20.2	7 30	20 37.31	-49 17.5	2.332	3.246	9.2	21.2
8 9	20 16.96	-55 7.4	1.005	1.891	20.5	20.3	8 9	20 24.90	-50 22.5	2.368	3.243	10.6	21.3
8 19	20 1.59	-52 41.5	1.036	1.887	22.6	20.4	8 19	20 13.44	-50 58.9	2.428	3.240	12.4	21.4
8 29	19 52.68	-49 38.9	1.084	1.883	25.0	20.6	8 29	20 4.13	-51 8.9	2.508	3.235	14.1	21.5
299660	2006 <i>OK</i> ₂₀		7 29.9 352°03	7°1/26.1	18		80950	2000 <i>DJ</i> ₉₆		7 29.9 101°85	0°3/30.1	18	
6 20	20 58.80	-30 13.5	1.315	2.184	17.9	19.5	6 20	21 6.39	-15 15.4	1.698	2.515	16.8	19.8
6 30	20 57.57	-31 20.0	1.247	2.175	14.4	19.3	6 30	21 2.23	-15 39.2	1.631	2.531	13.3	19.7
7 10	20 53.12	-32 28.8	1.197	2.168	10.8	19.0	7 10	20 55.56	-16 14.6	1.583	2.547	9.3	19.4
7 20	20 45.98	-33 30.9	1.168	2.162	7.7	18.9	7 20	20 46.95	-16 58.0	1.559	2.562	4.8	19.2
7 30	20 37.29	-34 17.0	1.162	2.157	7.3	18.8	7 30	20 37.33	-17 44.8	1.561	2.576	0.3	18.9
8 9	20 28.58	-34 40.0	1.178	2.154	10.0	19.0	8 9	20 27.84	-18 29.6	1.590	2.591	4.6	19.3
8 19	20 21.37	-34 37.6	1.216	2.152	13.7	19.2	8 19	20 19.55	-19 8.5	1.645	2.605	8.9	19.6
8 29	20 16.89	-34 11.3	1.273	2.151	17.3	19.4	8 29	20 13.35	-19 38.7	1.724	2.619	12.7	19.8
266243	2006 <i>XB</i> ₅₇		7 29.9 249°72	2°8/31.1	18		82920	2001 <i>QF</i> ₁₀₆		7 29.9 243°59	6°5/3.4	18	
6 20	21 8.38	-12 19.9	1.889	2.686	16.1	21.0	6 20	21 0.98	+ 0 51.4	2.274	3.016	15.2	19.7
6 30	21 3.87	-11 50.4	1.785	2.670	13.2	20.8	6 30	20 57.45	+ 1 26.4	2.177	3.009	13.1	19.5
7 10	20 56.85	-11 29.9	1.701	2.653	9.7	20.5	7 10	20 52.05	+ 1 45.7	2.099	3.002	10.7	19.4
7 20	20 47.73	-11 18.1	1.641	2.635	5.8	20.2	7 20	20 45.15	+ 1 47.5	2.044	2.995	8.3	19.2
7 30	20 37.28	-11 14.1	1.606	2.617	2.8	20.0	7 30	20 37.35	+ 1 31.4	2.013	2.987	6.7	19.1
8 9	20 26.59	-11 15.9	1.600	2.598	5.0	20.1	8 9	20 29.42	+ 0 58.7	2.008	2.980	6.8	19.1
8 19	20 16.77	-11 21.2	1.620	2.578	9.1	20.3	8 19	20 22.17	+ 0 12.8	2.030	2.972	8.6	19.2
8 29	20 8.86	-11 27.7	1.664	2.559	13.0	20.5	8 29	20 16.31	- 0 42.0	2.076	2.964	11.1	19.3
494249	2016 <i>QL</i> ₁₄		7 29.9 339°02	1°5/29.3	16		166009	2002 <i>AS</i> ₁₁₄		7 29.9 92°91	1°1/29.4	17	
6 20	21 1.72	-21 34.2	1.331	2.187	18.5	21.2	6 20	21 8.04	-18 35.2	1.440	2.274	18.5	20.7
6 30	20 59.62	-21 33.3	1.250	2.174	14.8	20.9	6 30	21 4.04	-19 4.6	1.377	2.288	14.6	20.5
7 10	20 54.41	-21 38.7	1.187	2.162	10.3	20.6	7 10	20 57.08	-19 44.5	1.333	2.302	10.1	20.3
7 20	20 46.62	-21 46.8	1.145	2.151	5.3	20.3	7 20	20 47.81	-20 29.9	1.312	2.316	5.1	20.0
7 30	20 37.28	-21 52.6	1.126	2.141	1.6	20.0	7 30	20 37.33	-21 14.6	1.316	2.330	1.2	19.8
8 9	20 27.86	-21 52.0	1.131	2.132	6.1	20.3	8 9	20 27.03	-21 52.5	1.345	2.344	5.6	20.1
8 19	20 19.80	-21 42.3	1.159	2.124	11.2	20.6	8 19	20 18.22	-22 20.0	1.399	2.357	10.3	20.5
8 29	20 14.31	-21 23.0	1.208	2.117	15.8	20.8	8 29	20 11.92	-22 35.4	1.476	2.370	14.4	20.7
181774	1997 <i>LK</i> ₁₀		7 29.9 91°38	7°2/23.9	18		131745	2001 <i>YT</i> ₁₃₀		7 29.9 230°26	3°9/27.9	17	
6 20	21 6.15	-37 40.6	2.328	3.148	12.7	19.6	6 20	21 8.24	-24 24.6	1.551	2.389	17.2	20.7
6 30	21 1.91	-39 8.1	2.269	3.159	10.5	19.4	6 30	21 4.48	-25 13.0	1.469	2.382	13.7	20.4
7 10	20 55.30	-40 31.3	2.233	3.170	8.5	19.3	7 10	20 57.66	-26 8.1	1.407	2.376	9.7	20.2
7 20	20 46.81	-41 43.3	2.223	3.181	7.3	19.3	7 20	20 48.27	-27 3.7	1.368	2.369	5.6	19.9
7 30	20 37.29	-42 37.8	2.238	3.192	7.5	19.3	7 30	20 37.32	-27 51.8	1.354	2.362	4.0	19.8
8 9	20 27.81	-43 11.0	2.279	3.202	8.9	19.4	8 9	20 26.25	-28 25.9	1.366	2.354	7.3	20.0
8 19	20 19.39	-43 22.0	2.344	3.213	10.9	19.6	8 19	20 16.48	-28 42.6	1.402	2.346	11.6	20.2
8 29	20 12.91	-43 12.6	2.431	3.224	12.8	19.7	8 29	20 9.23	-28 41.7	1.460	2.338	15.5	20.4
129361	4324 <i>P-L</i>		7 29.9 80°50	4°5/27.9	17		442539	2011 <i>YM</i> ₉		7 29.9 4°15	3°1/27.7	18	
6 20	21 10.95	-29 31.8	1.778	2.607	15.7	19.4	6 20	21 1.84	-24 8.4	2.064	2.896	13.7	20.8
6 30	21 5.85	-29 56.4	1.715	2.621	12.5	19.2	6 30	20 58.50	-25 2.6	1.985	2.896	10.8	20.6
7 10	20 58.03	-30 19.9	1.673	2.635	9.0	19.0	7 10	20 52.95	-26 2.0	1.928	2.896	7.6	20.4
7 20	20 48.15	-30 36.6	1.654	2.649	5.7	18.9	7 20	20 45.65	-27 1.6	1.896	2.896	4.4	20.2
7 30	20 37.29	-30 41.3	1.662	2.663	4.6	18.8	7 30	20 37.35	-27 55.7	1.890	2.896	3.3	20.1
8 9	20 26.72	-30 31.0	1.696	2.677	6.9	19.0	8 9	20 29.00	-28 39.3	1.912	2.897	5.8	20.3
8 19	20 17.61	-30 5.7	1.755	2.690	10.2	19.2	8 19	20 21.57	-29 9.6	1.959	2.898	9.1	20.5
8 29	20 10.85	-29 27.6	1.838	2.704	13.4	19.5	8 29	20 15.89	-29 25.5	2.030	2.898	12.2	20.7
37426	2001 <i>YU</i> ₆₉		7 29.9 79°78	3°6/27.2	18		66221	1999 <i>CH</i> ₇₃		7 29.9 161°13	3°2/31.4	18	
6 20	21 2.52	-25 27.6	2.163	2.992	13.3	19.4	6 20	21 6.35	-10 41.1	1.494	2.308	18.9	18.7
6 30	20 58.91	-26 29.4	2.088	2.997	10.5	19.2	6 30	21 2.68	-10 24.9	1.416	2.310	15.4	18.4
7 10	20 53.16	-27 35.3	2.036	3.001	7.4	19.1	7 10	20 56.19	-10 23.5	1.357	2.312	11.3	18.2
7 20	20 45.71	-28 39.9	2.009	3.006	4.5	18.9	7 20	20 47.42	-10 36.3	1.318	2.313	6.8	17.9
7 30	20 37.31	-29 37.6	2.009	3.011	3.7	18.9	7 30	20 37.35	-11 0.9	1.304	2.315	3.3	17.7
8 9	20 28.89	-30 23.5	2.036	3.016	6.0	19.0	8 9	20 27.24	-11 33.1	1.316	2.316	5.5	17.9
8 19	20 21.38	-30 55.0	2.089	3.021	9.0	19.2	8 19	20 18.36	-12 8.5	1.352	2.317	9.9	18.1
8 29	20 15.59	-31 11.3	2.167	3.026	11.9	19.4	8 29	20 11.80	-12 42.5	1.411	2.317	14.2	18.4
476621	2008 <i>SP</i> ₁₆₂		7 29.9 277°80	1°8/30.9	18		346766	200					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
346988	2010 <i>CJ</i> ₁₂₅		7 29.9 144°68	2°3/28.6	17		116679	2004 <i>CH</i> ₆₉		7 29.9 305°66	1°3/29.2	18	
6 20	21 6.37	-23 10.0	2.072	2.893	14.1	21.9	6 20	21 1.50	-17 16.0	1.426	2.270	18.1	19.8
6 30	21 1.93	-23 39.4	1.994	2.899	11.1	21.7	6 30	20 59.30	-18 1.6	1.340	2.258	14.5	19.5
7 10	20 55.23	-24 13.1	1.938	2.904	7.7	21.5	7 10	20 54.19	-19 2.3	1.274	2.246	10.1	19.2
7 20	20 46.77	-24 46.8	1.907	2.909	4.1	21.3	7 20	20 46.58	-20 13.6	1.229	2.235	5.1	18.9
7 30	20 37.36	-25 16.0	1.904	2.914	2.3	21.2	7 30	20 37.40	-21 28.3	1.209	2.223	1.3	18.6
8 9	20 28.00	-25 36.9	1.927	2.919	5.1	21.4	8 9	20 27.96	-22 38.2	1.214	2.213	6.0	18.9
8 19	20 19.65	-25 47.5	1.978	2.923	8.6	21.6	8 19	20 19.66	-23 36.6	1.242	2.202	11.1	19.2
8 29	20 13.14	-25 47.2	2.053	2.927	11.8	21.8	8 29	20 13.75	-24 19.4	1.292	2.192	15.6	19.4
209774	2005 <i>EW</i> ₃₁₇		7 29.9 331°37	0°3/29.7	18		204431	2004 <i>XW</i> ₂₈		7 29.9 277°54	3°2/31.5	18	
6 20	21 3.13	-17 56.5	1.866	2.690	15.3	20.9	6 20	21 4.13	-10 47.3	1.879	2.680	16.0	20.5
6 30	20 59.63	-18 10.2	1.783	2.688	12.1	20.7	6 30	21 0.46	-10 20.4	1.782	2.668	13.1	20.3
7 10	20 53.80	-18 32.1	1.720	2.686	8.4	20.5	7 10	20 54.44	-10 4.3	1.706	2.656	9.7	20.0
7 20	20 46.11	-18 59.4	1.680	2.684	4.3	20.3	7 20	20 46.50	-9 58.8	1.652	2.644	6.0	19.8
7 30	20 37.36	-19 28.2	1.667	2.682	0.4	19.9	7 30	20 37.40	-10 3.2	1.623	2.632	3.3	19.6
8 9	20 28.58	-19 54.5	1.681	2.681	4.5	20.3	8 9	20 28.14	-10 15.0	1.622	2.620	5.0	19.7
8 19	20 20.78	-20 15.1	1.720	2.679	8.7	20.5	8 19	20 19.75	-10 31.5	1.646	2.607	8.8	19.9
8 29	20 14.85	-20 28.1	1.784	2.678	12.3	20.7	8 29	20 13.17	-10 49.7	1.694	2.595	12.5	20.1
454820	2015 <i>RH</i> ₁₀₈		7 29.9 335°98	3°5/ 1.0	16		111834	2002 <i>EK</i> ₁₃		7 29.9 192°20	7°1/24.6	18	
6 20	20 56.31	- 8 37.1	1.688	2.505	16.9	20.8	6 20	21 8.14	-39 0.3	2.398	3.212	12.6	20.1
6 30	20 54.55	- 8 29.6	1.593	2.488	14.0	20.6	6 30	21 3.47	-40 3.5	2.327	3.211	10.5	19.9
7 10	20 50.50	- 8 37.8	1.517	2.471	10.4	20.3	7 10	20 56.39	-41 1.6	2.277	3.211	8.5	19.8
7 20	20 44.53	- 9 1.9	1.462	2.455	6.6	20.1	7 20	20 47.42	-41 48.2	2.252	3.210	7.3	19.7
7 30	20 37.37	- 9 40.2	1.431	2.440	3.7	19.9	7 30	20 37.40	-42 17.7	2.253	3.209	7.3	19.7
8 9	20 30.02	-10 28.6	1.426	2.425	5.2	19.9	8 9	20 27.42	-42 26.8	2.280	3.207	8.7	19.8
8 19	20 23.50	-11 22.2	1.444	2.412	9.1	20.1	8 19	20 18.52	-42 15.0	2.331	3.206	10.7	19.9
8 29	20 18.79	-12 15.7	1.486	2.400	13.0	20.3	8 29	20 11.58	-41 44.3	2.405	3.205	12.8	20.1
316547	2010 <i>XP</i> ₆₈		7 29.9 250°20	6°5/24.1	18		320391	2007 <i>UU</i> ₅₂		7 29.9 199°50	0°8/30.4	17	
6 20	21 4.68	-37 3.7	2.532	3.350	11.9	20.4	6 20	21 6.50	-14 29.6	1.725	2.539	16.7	22.0
6 30	21 0.66	-38 19.3	2.454	3.345	9.8	20.2	6 30	21 2.54	-14 45.4	1.639	2.537	13.4	21.8
7 10	20 54.43	-39 32.0	2.400	3.339	7.9	20.1	7 10	20 55.99	-15 13.3	1.573	2.534	9.5	21.5
7 20	20 46.42	-40 35.7	2.371	3.333	6.7	20.0	7 20	20 47.32	-15 51.0	1.530	2.531	5.0	21.3
7 30	20 37.37	-41 24.7	2.369	3.327	6.8	20.0	7 30	20 37.40	-16 34.1	1.512	2.527	0.8	20.9
8 9	20 28.23	-41 55.0	2.392	3.321	8.2	20.1	8 9	20 27.38	-17 17.6	1.522	2.523	4.7	21.2
8 19	20 19.96	-42 5.3	2.440	3.315	10.3	20.2	8 19	20 18.40	-17 57.1	1.558	2.518	9.2	21.5
8 29	20 13.42	-41 56.6	2.511	3.309	12.3	20.3	8 29	20 11.49	-18 29.5	1.617	2.513	13.3	21.7
52491	1995 <i>YC</i> ₁₀		7 29.9 328°68	2°8/31.1	18		166933	2003 <i>HN</i> ₁₁		7 29.9 3°26	2°1/31.1	18	
6 20	21 2.85	-13 5.3	1.372	2.206	19.2	18.6	6 20	20 53.05	-10 17.6	0.932	1.804	23.2	18.7
6 30	21 0.28	-12 37.4	1.289	2.197	15.7	18.3	6 30	20 53.48	-10 43.4	0.872	1.802	18.8	18.4
7 10	20 54.78	-12 21.9	1.224	2.188	11.4	18.0	7 10	20 50.56	-11 36.3	0.826	1.801	13.6	18.1
7 20	20 46.82	-12 18.4	1.180	2.179	6.6	17.8	7 20	20 44.82	-12 53.9	0.799	1.802	7.6	17.8
7 30	20 37.38	-12 25.2	1.159	2.171	2.8	17.5	7 30	20 37.42	-14 28.7	0.791	1.805	2.3	17.5
8 9	20 27.81	-12 38.8	1.162	2.164	5.7	17.7	8 9	20 29.99	-16 8.9	0.804	1.810	6.2	17.8
8 19	20 19.47	-12 55.5	1.189	2.157	10.5	17.9	8 19	20 24.14	-17 42.8	0.838	1.816	12.1	18.1
8 29	20 13.54	-13 11.6	1.237	2.151	15.1	18.2	8 29	20 21.20	-19 1.5	0.890	1.824	17.4	18.5
321780	2010 <i>OM</i> ₈₄		7 29.9 295°77	2°0/31.3	18		1250	<i>Galanthus</i>		7 29.9 143°17	2°0/31.1	18	
6 20	20 59.87	-11 3.4	2.195	2.995	14.0	21.1	6 20	21 9.36	-12 32.4	2.343	3.123	13.8	17.4
6 30	20 56.73	-11 8.0	2.095	2.982	11.4	20.9	6 30	21 3.77	-12 13.3	2.262	3.137	11.1	17.2
7 10	20 51.65	-11 24.0	2.017	2.970	8.3	20.7	7 10	20 56.22	-12 2.1	2.202	3.150	8.0	17.0
7 20	20 45.00	-11 50.4	1.962	2.957	4.9	20.4	7 20	20 47.20	-11 58.1	2.168	3.161	4.7	16.8
7 30	20 37.39	-12 25.0	1.933	2.945	2.1	20.2	7 30	20 37.42	-11 59.7	2.162	3.173	2.1	16.7
8 9	20 29.65	-13 4.4	1.932	2.932	4.0	20.3	8 9	20 27.72	-12 4.9	2.185	3.183	3.9	16.8
8 19	20 22.59	-13 45.1	1.958	2.920	7.5	20.5	8 19	20 18.92	-12 11.9	2.237	3.193	7.2	17.1
8 29	20 17.01	-14 23.8	2.009	2.908	10.9	20.7	8 29	20 11.72	-12 18.7	2.316	3.202	10.2	17.3
241206	2007 <i>TE</i> ₃₅		7 29.9 298°02	6°3/ 2.5	18		97152	1999 <i>VU</i> ₁₆₀		7 29.9 225°73	0°5/29.7	18	
6 20	21 1.33	- 2 25.8	1.924	2.695	16.7	20.5	6 20	21 4.67	-18 16.8	2.089	2.904	14.2	20.5
6 30	20 58.13	- 1 43.3	1.830	2.686	14.2	20.3	6 30	21 0.65	-18 33.2	1.998	2.898	11.3	20.3
7 10	20 52.75	- 1 16.2	1.755	2.677	11.3	20.1	7 10	20 54.43	-18 57.1	1.928	2.892	7.8	20.1
7 20	20 45.61	- 1 6.7	1.701	2.668	8.5	19.9	7 20	20 46.44	-19 25.6	1.882	2.885	4.0	19.8
7 30	20 37.39	- 1 15.2	1.672	2.659	6.5	19.7	7 30	20 37.43	-19 55.1	1.863	2.878	0.5	19.5
8 9	20 29.03	- 1 40.4	1.668	2.650	6.9	19.7	8 9	20 28.33	-20 21.6	1.872	2.871	4.3	19.8
8 19	20 21.46	- 2 18.7	1.690	2.641	9.4	19.9	8 19	20 20.09	-20 42.5	1.908	2.864	8.2	20.1
8 29	20 15.55	- 3 5.4	1.735	2.633	12.4	20.0	8 29	20 13.56	-20 56.0	1.969	2.856	11.7	20.3
390924	2005 <i>ET</i> ₂₅₆		7 29.9 154°00	1°1/29.2	14	C	511341	2014 <i>ED</i> ₂₅		7 29.9 140°55	2°6/28.1	18	
6 20	21 5.64	-20 18.2	2.329	3.139	13.0	22.5	6 20	21 4.13	-22 52.3	2.129	2.953	13.6	21.6
6 30	21 1.04	-20 38.5	2.247	3.145	10.3	22.3	6 30	21 0.19	-23 44.2	2.052	2.958	10.7	21.4
7 10	20 54.46	-21 4.0	2.188	3.151	7.1	22.1	7 10	20 54.06	-24 41.8	1.997	2.963	7.5	21.2
7 20	20 46.34	-21 31.6	2.154	3.157	3.6	21.9	7 20	20 46.23	-25 40.2	1.967	2.968	4.1	21.0
7 30	20 37.39	-21 57.7	2.148	3.162	1.1	21.7	7 30	20 37.43	-26 34.0	1.964	2.973	2.7	20.9
8 9	20 28.48	-22 19.1	2.171	3.167	4.1	22.0	8 9	20 28.63	-27 18.5	1.989	2.977	5.4	21.1
8 19	20 20.43	-22 33.7	2.221	3.171	7.5	22.2	8 19	20 20.74	-27 50.7	2.041	2.981	8.7	21.3
8 29	20 13.97	-22 40.6	2.297	3.175	10.6	22.4	8 29	20 14.58	-28 9.7	2.117	2.985	11.8	21.5
230117	2001 <i>DA</i> ₃		7 29.9 253°49	4°0/27.9	17		511239	2014 <i>BF</i> ₁₉					

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
475929	2007 <i>EN</i> ₆₈		7 29.9 182°78	4.2/26.9	18		436548	2011 <i>GW</i> ₆₉		7 29.9 136°06	2.1/31.4	17	
6 20	21 6.80	-32 5.5	2.780	3.591	11.1	22.0	6 20	21 5.21	-10 42.5	2.081	2.872	15.0	22.1
6 30	21 1.80	-32 38.8	2.698	3.591	8.9	21.8	6 30	21 0.86	-10 49.5	2.002	2.883	12.1	21.9
7 10	20 54.91	-33 10.2	2.639	3.591	6.6	21.7	7 10	20 54.43	-11 8.6	1.944	2.894	8.7	21.7
7 20	20 46.57	-33 35.6	2.606	3.591	4.7	21.6	7 20	20 46.40	-11 38.2	1.910	2.904	5.1	21.5
7 30	20 37.45	-33 51.2	2.601	3.590	4.3	21.5	7 30	20 37.50	-12 15.4	1.903	2.914	2.2	21.4
8 9	20 28.37	-33 54.5	2.624	3.589	5.8	21.6	8 9	20 28.63	-12 56.6	1.924	2.923	4.1	21.5
8 19	20 20.13	-33 44.7	2.674	3.588	8.1	21.8	8 19	20 20.66	-13 38.1	1.972	2.932	7.6	21.8
8 29	20 13.40	-33 22.7	2.750	3.586	10.3	21.9	8 29	20 14.37	-14 16.6	2.046	2.940	11.0	22.0
511274	2014 <i>DP</i> ₁₅		7 29.9 163°10	1.4/28.9	18		160228	2002 <i>GQ</i> ₁₁₂		7 29.9 123°88	2.9/27.4	18	
6 20	21 4.49	-20 12.2	2.330	3.143	13.0	22.3	6 20	21 4.48	-27 15.2	2.974	3.784	10.5	21.7
6 30	21 0.21	-20 49.8	2.248	3.147	10.2	22.1	6 30	20 59.73	-28 0.9	2.905	3.802	8.3	21.6
7 10	20 53.95	-21 33.6	2.187	3.151	7.0	21.9	7 10	20 53.34	-28 47.5	2.860	3.819	5.8	21.5
7 20	20 46.13	-22 20.1	2.152	3.155	3.6	21.7	7 20	20 45.73	-29 31.1	2.842	3.836	3.7	21.3
7 30	20 37.45	-23 4.9	2.145	3.158	1.5	21.6	7 30	20 37.50	-30 8.2	2.853	3.853	3.0	21.3
8 9	20 28.75	-23 44.2	2.167	3.161	4.3	21.8	8 9	20 29.34	-30 36.1	2.892	3.868	4.7	21.4
8 19	20 20.86	-24 15.0	2.216	3.164	7.7	22.0	8 19	20 21.89	-30 53.2	2.960	3.884	7.0	21.6
8 29	20 14.54	-24 36.0	2.290	3.166	10.7	22.2	8 29	20 15.76	-30 59.5	3.053	3.899	9.2	21.8
139095	2001 <i>FR</i> ₃₄		7 29.9 83°97	0.3/29.8	17		41860	2000 <i>WW</i> ₉₅		7 29.9 292°75	2.1/30.8	18	
6 20	21 7.40	-17 20.6	1.504	2.334	18.0	20.0	6 20	21 4.38	-13 52.9	1.413	2.245	18.9	18.8
6 30	21 3.38	-17 37.2	1.441	2.349	14.3	19.8	6 30	21 1.65	-13 37.3	1.320	2.227	15.4	18.5
7 10	20 56.56	-18 4.1	1.396	2.363	9.9	19.5	7 10	20 55.90	-13 34.1	1.245	2.209	11.2	18.2
7 20	20 47.56	-18 37.7	1.374	2.378	5.0	19.3	7 20	20 47.55	-13 42.4	1.190	2.191	6.3	17.9
7 30	20 37.44	-19 12.7	1.378	2.393	0.3	19.0	7 30	20 37.51	-13 59.6	1.160	2.173	2.1	17.6
8 9	20 27.52	-19 44.0	1.407	2.407	5.1	19.4	8 9	20 27.14	-14 21.8	1.154	2.156	5.6	17.7
8 19	20 18.99	-20 8.1	1.461	2.422	9.7	19.7	8 19	20 17.89	-14 44.7	1.171	2.138	10.8	18.0
8 29	20 12.83	-20 23.0	1.538	2.436	13.7	20.0	8 29	20 11.05	-15 4.5	1.210	2.121	15.6	18.2
16803	1997 <i>SU</i> ₁₀		7 29.9 292°08	3.0/31.2	18		143248	2002 <i>YS</i> ₂₈		7 29.9 255°23	1.0/29.3	18	
6 20	21 3.38	-11 42.2	1.388	2.217	19.3	18.8	6 20	21 3.11	-19 7.8	2.322	3.135	13.0	20.7
6 30	21 0.88	-11 26.4	1.295	2.198	15.9	18.5	6 30	20 59.31	-19 37.2	2.220	3.119	10.3	20.5
7 10	20 55.38	-11 25.3	1.219	2.180	11.7	18.2	7 10	20 53.49	-20 13.7	2.140	3.104	7.2	20.2
7 20	20 47.27	-11 39.0	1.164	2.162	6.9	17.9	7 20	20 46.02	-20 54.6	2.085	3.088	3.7	20.0
7 30	20 37.45	-12 5.3	1.131	2.143	3.0	17.6	7 30	20 37.52	-21 35.8	2.057	3.071	1.0	19.8
8 9	20 27.26	-12 39.9	1.124	2.125	5.8	17.8	8 9	20 28.86	-22 13.4	2.058	3.055	4.2	20.0
8 19	20 18.16	-13 17.6	1.139	2.107	10.9	18.0	8 19	20 20.88	-22 44.2	2.086	3.038	7.9	20.2
8 29	20 11.46	-13 53.5	1.176	2.090	15.8	18.2	8 29	20 14.41	-23 6.2	2.139	3.020	11.1	20.3
29656	Leejoseph		7 29.9 199°76	1.3/30.8	18		333986	2000 <i>SF</i> ₆₆		7 29.9 338°23	1.4/30.7	18	
6 20	21 5.39	-13 3.9	2.006	2.808	15.1	19.9	6 20	20 55.02	-14 5.0	1.183	2.044	20.0	20.1
6 30	21 1.27	-13 16.7	1.915	2.805	12.2	19.7	6 30	20 54.64	-14 5.2	1.099	2.024	16.2	19.8
7 10	20 54.89	-13 41.0	1.845	2.801	8.7	19.5	7 10	20 51.24	-14 21.7	1.032	2.006	11.7	19.5
7 20	20 46.71	-14 14.7	1.798	2.797	4.8	19.2	7 20	20 45.23	-14 53.2	0.985	1.989	6.4	19.2
7 30	20 37.46	-14 54.7	1.779	2.793	1.3	19.0	7 30	20 37.53	-15 35.8	0.959	1.973	1.5	18.8
8 9	20 28.10	-15 36.7	1.787	2.788	4.2	19.2	8 9	20 29.56	-16 23.1	0.955	1.960	5.8	19.0
8 19	20 19.61	-16 17.0	1.822	2.782	8.2	19.4	8 19	20 22.81	-17 8.6	0.973	1.947	11.4	19.3
8 29	20 12.87	-16 52.3	1.882	2.776	11.8	19.6	8 29	20 18.61	-17 46.4	1.011	1.937	16.5	19.5
320830	2008 <i>FC</i> ₄₄		7 29.9 75°52	0.6/29.7	17		10066	1988 <i>XV</i> ₂		7 29.9 273°88	1.0/30.4	18	
6 20	21 7.39	-18 25.8	1.505	2.336	17.9	21.1	6 20	21 7.02	-15 31.5	1.496	2.322	18.3	18.8
6 30	21 3.37	-18 40.0	1.442	2.351	14.2	20.9	6 30	21 3.71	-15 25.5	1.396	2.301	14.9	18.6
7 10	20 56.55	-19 3.5	1.398	2.366	9.8	20.6	7 10	20 57.35	-15 30.7	1.314	2.279	10.7	18.3
7 20	20 47.56	-19 32.2	1.377	2.381	4.9	20.4	7 20	20 48.33	-15 45.5	1.254	2.256	5.8	17.9
7 30	20 37.46	-20 1.2	1.381	2.396	0.6	20.1	7 30	20 37.53	-16 6.4	1.219	2.233	1.1	17.5
8 9	20 27.58	-20 25.7	1.411	2.411	5.2	20.5	8 9	20 26.30	-16 29.0	1.209	2.210	5.5	17.8
8 19	20 19.10	-20 42.5	1.465	2.425	9.8	20.8	8 19	20 16.11	-16 49.2	1.223	2.187	10.8	18.0
8 29	20 13.00	-20 50.3	1.543	2.440	13.7	21.1	8 29	20 8.30	-17 4.0	1.259	2.163	15.7	18.2
447317	2005 <i>XX</i> ₂₄		7 29.9 320°75	2.0/30.9	18		63942	2001 <i>SQ</i> ₅₆		7 29.9 1°00	0.7/30.4	18	
6 20	21 4.48	-14 26.1	2.124	2.928	14.3	20.9	6 20	20 59.33	-14 19.1	1.671	2.501	16.5	18.3
6 30	21 0.38	-13 51.0	2.029	2.919	11.6	20.7	6 30	20 56.92	-14 39.8	1.592	2.500	13.2	18.1
7 10	20 54.18	-13 22.2	1.955	2.910	8.4	20.5	7 10	20 52.11	-15 13.5	1.533	2.499	9.3	17.8
7 20	20 46.31	-12 59.4	1.905	2.902	4.8	20.2	7 20	20 45.37	-15 57.5	1.496	2.499	4.9	17.6
7 30	20 37.49	-12 41.5	1.882	2.893	2.0	20.0	7 30	20 37.54	-16 47.5	1.485	2.500	0.7	17.3
8 9	20 28.61	-12 27.4	1.886	2.886	4.2	20.2	8 9	20 29.67	-17 38.0	1.499	2.501	4.5	17.6
8 19	20 20.57	-12 15.8	1.918	2.878	7.8	20.4	8 19	20 22.80	-18 24.3	1.538	2.503	8.9	17.8
8 29	20 14.17	-12 5.3	1.974	2.871	11.2	20.6	8 29	20 17.86	-19 2.7	1.601	2.505	12.9	18.1
500865	2013 <i>JT</i> ₂₆		7 29.9 29°43	5.5/27.2	17		193410	2000 <i>WS</i> ₅₀		7 29.9 264°55	4.8/26.3	18	
6 20	21 3.61	-24 56.1	1.128	1.997	20.2	19.8	6 20	21 4.58	-26 23.8	1.962	2.794	14.3	19.8
6 30	21 1.63	-26 11.4	1.073	2.003	16.0	19.5	6 30	21 1.19	-27 47.6	1.868	2.777	11.5	19.6
7 10	20 56.08	-27 35.2	1.035	2.011	11.3	19.3	7 10	20 55.24	-29 18.5	1.796	2.761	8.3	19.4
7 20	20 47.59	-28 57.7	1.017	2.019	7.0	19.1	7 20	20 47.10	-30 49.8	1.750	2.744	5.5	19.2
7 30	20 37.48	-30 7.4	1.022	2.027	5.8	19.0	7 30	20 37.54	-32 13.3	1.730	2.727	5.1	19.1
8 9	20 27.53	-30 55.7	1.050	2.037	9.2	19.3	8 9	20 27.66	-33 21.8	1.737	2.709	7.6	19.2
8 19	20 19.37	-31 18.7	1.099	2.046	13.7	19.5	8 19	20 18.63	-34 10.9	1.770	2.692	11.0	19.4
8 29	20 14.30	-31 17.6	1.168	2.057	17.8	19.8	8 29	20 11.55	-34 39.2	1.825	2.674	14.2	19.5
315876	2008 <i>JA</i> ₂₄		7 29.9 262°37	1.2/28.9	18		100502	1996 <i>XZ</i> ₂₂		7 29			

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2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
121467	1999 <i>TT</i> ₂₁₇		7 29.9 231°47'	4.6/26.2	18		385385	2002 <i>ST</i> ₇₂		7 29.9 209°75'	14.0/25.4	15	
6 20	21 3.70	-30 39.1	2.489	3.312	11.9	19.8	6 20	21 31.46	-46 8.1	1.320	2.132	21.0	21.2
6 30	20 59.75	-31 38.5	2.406	3.307	9.6	19.6	6 30	21 24.97	-47 26.7	1.255	2.127	18.4	21.0
7 10	20 53.76	-32 38.5	2.346	3.302	7.1	19.5	7 10	21 13.07	-48 32.4	1.207	2.122	15.9	20.8
7 20	20 46.13	-33 33.8	2.311	3.297	5.1	19.3	7 20	20 56.56	-49 9.1	1.178	2.116	14.2	20.7
7 30	20 37.55	-34 19.3	2.304	3.292	4.8	19.3	7 30	20 37.56	-49 2.6	1.170	2.109	14.2	20.7
8 9	20 28.90	-34 51.1	2.324	3.287	6.6	19.4	8 9	20 19.09	-48 7.1	1.185	2.101	15.8	20.7
8 19	20 21.05	-35 7.3	2.370	3.282	9.0	19.6	8 19	20 3.85	-46 28.1	1.220	2.093	18.4	20.9
8 29	20 14.79	-35 8.0	2.440	3.276	11.5	19.7	8 29	19 53.54	-44 17.9	1.274	2.084	21.3	21.1
182811	2002 <i>AH</i> ₁₃₂		7 29.9 177°35'	0.7/29.3	18		429131	2009 <i>SJ</i> ₃₅₄		7 29.9 92°13'	7.5/25.2	18	
6 20	21 2.70	-19 5.7	2.904	3.705	10.9	21.8	6 20	21 10.43	-34 41.3	1.821	2.650	15.4	20.8
6 30	20 58.40	-19 34.1	2.814	3.707	8.6	21.7	6 30	21 5.79	-36 9.8	1.770	2.669	12.5	20.6
7 10	20 52.50	-20 7.7	2.747	3.708	5.9	21.5	7 10	20 58.27	-37 35.1	1.740	2.688	9.7	20.5
7 20	20 45.38	-20 44.0	2.707	3.709	3.0	21.3	7 20	20 48.51	-38 48.4	1.734	2.707	7.8	20.4
7 30	20 37.57	-21 20.1	2.695	3.710	0.8	21.1	7 30	20 37.59	-39 42.0	1.754	2.725	7.7	20.4
8 9	20 29.72	-21 52.9	2.713	3.710	3.4	21.3	8 9	20 26.87	-40 11.2	1.799	2.743	9.5	20.6
8 19	20 22.49	-22 20.2	2.760	3.709	6.3	21.5	8 19	20 17.60	-40 15.5	1.868	2.761	12.0	20.8
8 29	20 16.46	-22 40.7	2.833	3.708	8.9	21.7	8 29	20 10.79	-39 57.8	1.958	2.778	14.5	21.0
204119	2003 <i>WY</i> ₁₆₃		7 29.9 319°00'	1.9/28.9	18		343562	2010 <i>FW</i> ₅₅		7 29.9 146°90'	3.6/27.8	16	
6 20	21 1.62	-20 27.6	1.649	2.489	16.2	20.3	6 20	21 6.36	-26 11.6	2.001	2.828	14.3	20.9
6 30	20 59.01	-20 58.9	1.561	2.476	12.9	20.1	6 30	21 2.17	-26 53.5	1.925	2.832	11.3	20.7
7 10	20 53.77	-21 39.2	1.493	2.464	9.0	19.8	7 10	20 55.58	-27 38.2	1.870	2.835	8.0	20.5
7 20	20 46.33	-22 24.3	1.447	2.452	4.7	19.6	7 20	20 47.11	-28 20.7	1.840	2.838	4.8	20.3
7 30	20 37.56	-23 8.4	1.427	2.440	1.9	19.3	7 30	20 37.60	-28 55.4	1.836	2.841	3.7	20.2
8 9	20 28.63	-23 45.9	1.432	2.429	5.7	19.6	8 9	20 28.12	-29 18.0	1.859	2.843	6.1	20.4
8 19	20 20.72	-24 12.8	1.462	2.419	10.1	19.8	8 19	20 19.70	-29 26.7	1.909	2.846	9.4	20.6
8 29	20 14.93	-24 27.0	1.515	2.408	14.1	20.0	8 29	20 13.23	-29 21.5	1.982	2.848	12.6	20.8
390159	2012 <i>VS</i> ₉₈		7 29.9 320°61'	3.6/31.8	18		498789	2008 <i>UC</i> ₁₇₁		7 29.9 240°72'	2.7/31.2	17	
6 20	20 57.64	-9 32.1	1.437	2.267	18.7	20.4	6 20	21 6.56	-12 8.0	1.379	2.203	19.6	22.2
6 30	20 56.25	-9 22.5	1.337	2.240	15.5	20.1	6 30	21 3.25	-11 52.3	1.298	2.200	16.0	21.9
7 10	20 52.15	-9 30.3	1.254	2.213	11.6	19.8	7 10	20 56.90	-11 51.1	1.236	2.196	11.6	21.7
7 20	20 45.66	-9 56.0	1.191	2.187	7.2	19.5	7 20	20 48.01	-12 3.5	1.194	2.192	6.8	21.4
7 30	20 37.56	-10 38.1	1.151	2.161	3.7	19.2	7 30	20 37.61	-12 27.1	1.176	2.188	2.8	21.1
8 9	20 29.04	-11 31.9	1.135	2.137	5.8	19.3	8 9	20 27.09	-12 57.1	1.182	2.184	5.6	21.3
8 19	20 21.41	-12 31.5	1.142	2.113	10.6	19.5	8 19	20 17.86	-13 29.0	1.213	2.180	10.6	21.6
8 29	20 15.94	-13 30.3	1.171	2.091	15.3	19.7	8 29	20 11.13	-13 58.4	1.266	2.175	15.2	21.8
508098	2015 <i>DL</i> ₁₄₂		7 29.9 206°85'	4.0/1.3	17		504246	2006 <i>UL</i> ₂₈₂		7 29.9 234°29'	7.3/25.1	18	
6 20	21 5.05	-7 6.0	1.792	2.582	17.1	22.1	6 20	21 10.57	-33 56.5	1.902	2.728	14.9	22.3
6 30	21 1.28	-6 54.9	1.703	2.578	14.2	21.9	6 30	21 6.22	-35 17.9	1.818	2.717	12.3	22.1
7 10	20 55.08	-6 59.6	1.632	2.574	10.7	21.7	7 10	20 58.89	-36 39.6	1.755	2.704	9.6	21.9
7 20	20 46.92	-7 20.0	1.584	2.570	6.9	21.5	7 20	20 49.04	-37 53.2	1.716	2.691	7.6	21.8
7 30	20 37.57	-7 54.6	1.560	2.565	4.2	21.3	7 30	20 37.61	-38 50.0	1.703	2.678	7.6	21.7
8 9	20 28.08	-8 39.6	1.564	2.560	5.4	21.4	8 9	20 25.96	-39 23.6	1.715	2.664	9.6	21.8
8 19	20 19.53	-9 30.3	1.593	2.554	9.0	21.6	8 19	20 15.47	-39 32.0	1.752	2.649	12.5	22.0
8 29	20 12.87	-10 22.0	1.647	2.548	12.8	21.8	8 29	20 7.35	-39 16.8	1.810	2.634	15.4	22.1
467594	2007 <i>VA</i> ₁₃₆		7 29.9 98°95'	4.1/27.8	17		119002	2000 <i>YW</i> ₆₁		7 29.9 94°23'	1.6/28.5	18	
6 20	21 7.77	-24 16.6	1.450	2.294	17.9	21.9	6 20	21 2.07	-19 6.7	2.470	3.282	12.3	19.4
6 30	21 4.14	-25 15.5	1.385	2.302	14.2	21.7	6 30	20 58.19	-20 15.2	2.399	3.298	9.7	19.2
7 10	20 57.40	-26 21.3	1.340	2.310	9.9	21.5	7 10	20 52.51	-21 31.1	2.350	3.315	6.6	19.1
7 20	20 48.17	-27 26.5	1.317	2.317	5.8	21.3	7 20	20 45.45	-22 50.1	2.328	3.331	3.4	18.9
7 30	20 37.56	-28 22.8	1.318	2.325	4.3	21.2	7 30	20 37.62	-24 7.0	2.335	3.347	1.7	18.8
8 9	20 27.04	-29 3.4	1.345	2.333	7.5	21.4	8 9	20 29.80	-25 17.2	2.371	3.362	4.3	19.0
8 19	20 18.01	-29 25.0	1.396	2.340	11.6	21.7	8 19	20 22.72	-26 16.9	2.435	3.378	7.3	19.2
8 29	20 11.59	-29 27.9	1.469	2.347	15.4	21.9	8 29	20 17.05	-27 4.4	2.524	3.393	10.1	19.4
217322	2004 <i>PN</i> ₁₀₂		7 29.9 322°38'	1.1/30.6	18		399711	2004 <i>UH</i> ₇		7 29.9 332°78'	15.5/10.9	16	
6 20	21 1.99	-15 4.5	2.117	2.928	14.1	20.0	6 20	20 57.05	+21 17.2	2.001	2.625	20.2	20.1
6 30	20 58.47	-14 57.2	2.026	2.922	11.3	19.8	6 30	20 54.99	+23 0.6	1.914	2.609	19.1	20.0
7 10	20 52.89	-14 57.8	1.956	2.916	8.0	19.5	7 10	20 50.78	+24 19.8	1.839	2.594	17.9	19.8
7 20	20 45.70	-15 5.0	1.909	2.910	4.4	19.3	7 20	20 44.78	+25 8.3	1.779	2.580	16.8	19.7
7 30	20 37.57	-15 16.6	1.890	2.904	1.1	19.1	7 30	20 37.62	+25 20.7	1.736	2.567	15.9	19.6
8 9	20 29.39	-15 29.9	1.897	2.898	3.9	19.3	8 9	20 30.21	+24 55.0	1.711	2.554	15.5	19.6
8 19	20 22.02	-15 42.6	1.931	2.893	7.7	19.5	8 19	20 23.49	+23 52.5	1.704	2.542	15.7	19.5
8 29	20 16.24	-15 52.5	1.990	2.888	11.1	19.7	8 29	20 18.39	+22 18.5	1.716	2.531	16.5	19.6
316901	2000 <i>SV</i> ₂₂₇		7 29.9 232°96'	3.3/31.8	18		32948	1995 <i>YA</i> ₆		7 29.9 267°82'	0.4/29.7	18	
6 20	21 5.16	-8 54.2	1.677	2.478	17.6	21.3	6 20	21 1.63	-17 39.4	2.255	3.069	13.3	19.3
6 30	21 1.63	-8 51.1	1.584	2.469	14.5	21.1	6 30	20 58.14	-18 4.2	2.161	3.061	10.5	19.1
7 10	20 55.51	-9 4.0	1.510	2.460	10.8	20.8	7 10	20 52.67	-18 37.0	2.090	3.054	7.3	18.9
7 20	20 47.22	-9 32.5	1.459	2.451	6.7	20.6	7 20	20 45.61	-19 15.0	2.043	3.046	3.7	18.6
7 30	20 37.57	-10 14.2	1.432	2.441	3.4	20.4	7 30	20 37.63	-19 54.5	2.024	3.039	0.5	18.3
8 9	20 27.72	-11 4.8	1.431	2.431	5.3	20.4	8 9	20 29.55	-20 31.7	2.032	3.031	4.0	18.6
8 19	20 18.81	-11 59.0	1.456	2.420	9.5	20.7	8 19	20 22.21	-21 3.5	2.068	3.023	7.6	18.8
8 29	20 11.94	-12 51.7	1.505	2.408	13.6	20.9	8 29	20 16.38	-21 27.6	2.128	3.016	10.9	19.0
480984	2003 <i>YR</i> ₇₀		7 29.9 99°60'	0.2/30.1	17 C		450505	2005 <					

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7 29.9

7 30.0

2020	α_{2000}	δ_{2000}	Δ	r	β	V	2020	α_{2000}	δ_{2000}	Δ	r	β	V
109352	2001 QR ₁₅₃	7 29.9 295°58		0°7/29.7 18			64938	2001 YH ₁₁₆	7 30.0 98°84		0°3/30.2 18 R		
6 20	21 6.01	-19 46.2	1.568	2.402	17.2	19.3	6 30	20 58.83	-16 7.5	2.257	3.150	10.4	19.4
6 30	21 2.65	-19 45.2	1.477	2.388	13.8	19.0	7 10	20 52.96	-16 30.6	2.203	3.163	7.3	19.2
7 10	20 56.41	-19 51.4	1.405	2.374	9.7	18.7	7 20	20 45.69	-16 59.1	2.175	3.176	3.8	19.0
7 20	20 47.76	-20 1.6	1.356	2.360	5.0	18.4	7 30	20 37.70	-17 30.0	2.173	3.189	0.3	18.8
7 30	20 37.64	-20 11.7	1.331	2.346	0.7	18.1	8 9	20 29.76	-18 0.1	2.201	3.201	3.6	19.1
8 9	20 27.34	-20 17.8	1.332	2.333	5.4	18.4	8 19	20 22.64	-18 26.8	2.255	3.213	7.0	19.3
8 19	20 18.18	-20 17.1	1.358	2.319	10.3	18.6	8 29	20 17.00	-18 48.0	2.336	3.225	10.0	19.5
8 29	20 11.34	-20 8.5	1.407	2.306	14.6	18.9	9 8	20 13.28	-19 2.8	2.438	3.237	12.5	19.7
438265	2005 XE ₂₅	7 29.9 221°54		4°6/ 2.1 18			473254	2015 MQ ₁₉	7 30.0 163°58		2°8/28.4 17		
6 20	21 2.69	- 3 27.9	2.814	3.559	12.5	21.1	6 30	21 3.03	-24 57.0	1.934	2.839	11.4	21.4
6 30	20 58.43	- 2 51.6	2.711	3.551	10.6	21.0	7 10	20 56.18	-25 32.3	1.877	2.842	7.9	21.2
7 10	20 52.57	- 2 25.7	2.629	3.543	8.3	20.8	7 20	20 47.46	-26 6.6	1.844	2.845	4.5	21.0
7 20	20 45.47	- 2 11.0	2.572	3.535	6.1	20.7	7 30	20 37.72	-26 35.0	1.839	2.847	2.9	20.9
7 30	20 37.65	- 2 7.7	2.541	3.527	4.7	20.6	8 9	20 28.00	-26 53.6	1.860	2.850	5.5	21.1
8 9	20 29.73	- 2 14.9	2.539	3.518	5.0	20.6	8 19	20 19.33	-27 0.4	1.909	2.851	9.0	21.3
8 19	20 22.36	- 2 30.7	2.565	3.509	7.0	20.7	8 29	20 12.59	-26 55.3	1.981	2.853	12.3	21.5
8 29	20 16.14	- 2 52.7	2.617	3.500	9.3	20.8	9 8	20 8.32	-26 39.5	2.073	2.854	15.0	21.7
50090	2000 AN ₉₆	7 29.9 129°26		1°3/30.9 17			508536	2016 SM	7 30.0 278°73		0°2/29.8 18		
6 20	21 4.87	-10 26.8	1.859	2.658	16.2	19.3	6 30	21 0.74	-12 38.5	1.842	2.732	12.6	20.5
6 30	21 0.95	-11 11.6	1.782	2.669	13.1	19.2	7 10	20 55.01	-14 33.1	1.748	2.707	8.9	20.2
7 10	20 54.74	-12 12.5	1.726	2.681	9.3	18.9	7 20	20 47.13	-16 46.5	1.680	2.682	4.6	19.9
7 20	20 46.70	-13 26.4	1.693	2.691	5.1	18.7	7 30	20 37.72	-19 11.4	1.641	2.656	0.3	19.5
7 30	20 37.64	-14 48.0	1.688	2.702	1.4	18.5	8 9	20 27.76	-21 37.9	1.632	2.630	4.9	19.8
8 9	20 28.57	-16 11.0	1.710	2.712	4.3	18.7	8 19	20 18.35	-23 56.1	1.652	2.604	9.5	20.0
8 19	20 20.48	-17 29.4	1.760	2.721	8.3	19.0	8 29	20 10.62	-25 58.4	1.699	2.577	13.7	20.2
8 29	20 14.24	-18 38.5	1.835	2.730	12.0	19.2	9 8	20 5.41	-27 40.7	1.767	2.551	17.1	20.4
361073	2006 AQ ₄₇	7 29.9 299°37		0°4/29.6 18			219520	2001 QG ₅₄	7 30.0 308°73		4°6/27.8 18		
6 20	20 59.56	-15 17.5	2.270	3.082	13.3	20.8	6 30	21 2.13	-26 42.6	1.361	2.281	14.1	19.4
6 30	20 56.53	-16 12.5	2.176	3.075	10.5	20.6	7 10	20 56.44	-27 29.4	1.288	2.259	10.1	19.1
7 10	20 51.59	-17 19.2	2.104	3.067	7.3	20.4	7 20	20 47.98	-28 15.7	1.238	2.238	6.1	18.8
7 20	20 45.09	-18 34.1	2.057	3.060	3.7	20.1	7 30	20 37.72	-28 53.5	1.211	2.217	4.7	18.7
7 30	20 37.65	-19 52.4	2.038	3.053	0.5	19.9	8 9	20 27.14	-29 15.8	1.208	2.196	8.0	18.8
8 9	20 30.06	-21 8.8	2.047	3.046	4.0	20.1	8 19	20 17.77	-29 19.1	1.229	2.176	12.5	19.0
8 19	20 23.14	-22 18.5	2.084	3.039	7.7	20.4	8 29	20 11.01	-29 3.3	1.270	2.157	16.8	19.2
8 29	20 17.65	-23 18.0	2.146	3.032	10.9	20.6	9 8	20 7.69	-28 31.1	1.329	2.138	20.5	19.4
122319	2000 QQ ₁₃	7 29.9 200°85		4°8/28.4 18			476074	2007 TL ₁₉	7 30.0 302°49		0°8/29.7 17		
6 20	21 17.90	-32 2.2	1.881	2.694	15.6	18.7	6 30	21 2.73	-20 26.4	1.668	2.575	12.7	21.1
6 30	21 11.48	-32 3.8	1.798	2.693	12.6	18.5	7 10	20 56.47	-20 27.0	1.578	2.544	9.0	20.8
7 10	21 2.11	-32 0.9	1.736	2.691	9.2	18.3	7 20	20 47.87	-20 30.0	1.510	2.514	4.7	20.5
7 20	20 50.46	-31 48.1	1.698	2.689	6.0	18.1	7 30	20 37.73	-20 32.0	1.469	2.484	0.8	20.1
7 30	20 37.65	-31 20.4	1.687	2.687	4.8	18.0	8 9	20 27.21	-20 29.4	1.454	2.454	5.1	20.4
8 9	20 25.07	-30 36.0	1.705	2.684	7.0	18.1	8 19	20 17.56	-20 20.1	1.465	2.423	9.9	20.6
8 19	20 14.00	-29 36.3	1.749	2.681	10.4	18.3	8 29	20 9.97	-20 3.3	1.499	2.393	14.2	20.8
8 29	20 5.45	-28 25.1	1.817	2.678	13.7	18.5	9 8	20 5.22	-19 39.2	1.552	2.364	17.9	21.0
264953	2002 XY ₁₇	7 29.9 211°33		0°3/30.2 17			176347	2001 TQ ₃₁	7 30.0 337°83		2°1/28.9 18		
6 20	21 6.35	-15 57.7	1.959	2.769	15.2	21.8	6 30	21 0.69	-23 16.2	1.724	2.635	12.1	19.2
6 30	21 2.18	-16 12.7	1.868	2.764	12.1	21.6	7 10	20 54.75	-23 31.0	1.660	2.629	8.5	19.0
7 10	20 55.66	-16 37.4	1.797	2.758	8.5	21.4	7 20	20 46.80	-23 46.1	1.619	2.623	4.5	18.7
7 20	20 47.23	-17 9.2	1.750	2.751	4.4	21.1	7 30	20 37.73	-23 57.3	1.605	2.617	2.1	18.6
7 30	20 37.67	-17 44.4	1.729	2.745	0.3	20.8	8 9	20 28.63	-24 1.1	1.616	2.612	5.3	18.8
8 9	20 27.98	-18 18.7	1.737	2.737	4.3	21.1	8 19	20 20.60	-23 55.5	1.653	2.607	9.3	19.0
8 19	20 19.20	-18 48.7	1.771	2.729	8.5	21.3	8 29	20 14.58	-23 40.3	1.713	2.603	13.0	19.2
8 29	20 12.25	-19 12.0	1.830	2.721	12.2	21.5	9 8	20 11.15	-23 16.3	1.794	2.599	16.1	19.4
444650	2007 BL ₁₃	7 30.0 141°17		1°4/29.0 18			181232	2005 TO ₉₆	7 30.0 75°04		0°8/30.5 18		
6 30	20 59.47	-21 56.4	2.360	3.260	9.8	21.9	6 30	20 58.59	-15 7.6	2.121	3.015	11.0	20.3
7 10	20 53.42	-22 20.8	2.300	3.264	6.7	21.7	7 10	20 52.91	-15 22.2	2.061	3.020	7.7	20.1
7 20	20 45.94	-22 46.3	2.266	3.268	3.5	21.5	7 20	20 45.73	-15 43.3	2.026	3.026	4.1	19.9
7 30	20 37.68	-23 9.6	2.259	3.272	1.4	21.3	7 30	20 37.74	-16 8.1	2.017	3.032	0.8	19.7
8 9	20 29.44	-23 27.7	2.281	3.276	4.1	21.5	8 9	20 29.77	-16 33.6	2.037	3.038	3.7	19.9
8 19	20 22.00	-23 38.8	2.330	3.279	7.3	21.7	8 19	20 22.62	-16 57.0	2.084	3.044	7.3	20.1
8 29	20 16.04	-23 41.8	2.404	3.282	10.2	21.9	8 29	20 17.02	-17 16.2	2.155	3.050	10.5	20.4
9 8	20 12.03	-23 37.1	2.501	3.285	12.7	22.1	9 8	20 13.43	-17 29.8	2.249	3.056	13.2	20.6
244497	2002 TZ ₈₀	7 30.0 313°76		3°5/ 1.1 18			180785	2004 RE ₁₅₂	7 30.0 97°54		7°1/ 5.0 18 R		
6 30	20 56.60	- 7 52.6	1.587	2.476	14.3	19.7	6 30	20 57.29	+ 5 37.0	2.369	3.172	13.1	19.7
7 10	20 52.20	- 8 16.1	1.494	2.445	10.8	19.4	7 10	20 51.85	+ 5 55.2	2.310	3.186	10.9	19.6
7 20	20 45.67	- 8 58.1	1.423	2.415	6.8	19.1	7 20	20 45.14	+ 5 54.6	2.273	3.200	8.8	19.5
7 30	20 37.68	- 9 56.9	1.376	2.384	3.6	18.8	7 30	20 37.74	+ 5 34.8	2.260	3.214	7.4	19.4
8 9	20 29.24	-11 7.9	1.354	2.354	5.3	18.9	8 9	20 30.37	+ 4 57.6	2.273	3.227	7.3	19.5
8 19	20 21.49	-12 24.8	1.357	2.325	9.6	19.0	8 19	20 23.69	+ 4 6.3	2.312	3.240	8.4	19.6
8 29	20 15.56	-13 40.9	1.384	2.296	14.0	19.2	8 29	20 18.34	+ 3 5.5	2.376	3.253	10.3	19.7
9 8	20 12.29	-14 50.5	1.430	2.267	17.9	19.4	9 8	20 14.72	+ 2 0.2	2.462	3.266	12.3	19.9
123609	2000 YJ ₁₃	7 30.0 351°26		7°4/25.4 18			46440	2002 LS ₂₇	7 30.0 286°19		3°3/31.8 18		
6 30	20 52.83	-30 3.2	1.154	2.091	14.5	17.3	6 30	21 0.25					