

EPHEMERIDES

12 20.9

12 21.0

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
326833	2003 <i>UD</i> ₄₈		12 20.9 63°89	4.5/21.4	18		79900	Coreglia		12 21.0 301°70	0.9/21.0	17	
11 17	6 28.89	+12 40.4	1.209	2.043	19.4	20.1	11 17	6 22.92	+20 28.2	1.753	2.585	14.4	19.7
11 27	6 22.52	+12 41.6	1.167	2.070	14.8	19.9	11 27	6 18.01	+20 34.9	1.661	2.567	10.9	19.4
12 7	6 13.01	+12 56.5	1.146	2.096	9.6	19.7	12 7	6 10.47	+20 44.9	1.592	2.549	6.7	19.1
12 17	6 1.59	+13 24.6	1.149	2.123	5.2	19.6	12 17	6 0.99	+20 57.1	1.550	2.531	2.2	18.8
12 27	5 49.93	+14 3.9	1.178	2.149	5.5	19.7	12 27	5 50.75	+21 10.4	1.536	2.513	3.1	18.8
1 6	5 39.73	+14 51.3	1.233	2.176	9.8	20.0	1 6	5 41.07	+21 24.2	1.550	2.496	7.8	19.1
1 16	5 32.22	+15 43.6	1.313	2.202	14.2	20.3	1 16	5 33.19	+21 38.4	1.590	2.479	12.2	19.3
1 26	5 28.13	+16 37.9	1.413	2.228	17.9	20.6	1 26	5 28.05	+21 53.8	1.652	2.462	15.9	19.5
232748	2004 <i>JX</i> ₁₉		12 20.9 211°04	0.6/21.0	18		193173	2000 <i>LE</i> ₉		12 21.0 234°74	1.7/20.9	18	
11 17	6 28.62	+25 48.7	1.996	2.812	13.5	21.5	11 17	6 26.79	+19 3.2	2.097	2.911	13.1	21.5
11 27	6 21.85	+25 43.7	1.908	2.805	10.2	21.3	11 27	6 20.43	+18 51.5	2.000	2.895	9.9	21.3
12 7	6 12.56	+25 35.5	1.844	2.798	6.2	21.0	12 7	6 11.72	+18 42.0	1.926	2.878	6.2	21.0
12 17	6 1.51	+25 22.6	1.808	2.789	1.9	20.7	12 17	6 1.33	+18 34.5	1.881	2.860	2.4	20.7
12 27	5 49.91	+25 4.2	1.803	2.780	2.8	20.8	12 27	5 50.29	+18 29.0	1.867	2.842	3.2	20.7
1 6	5 39.03	+24 41.4	1.827	2.770	7.1	21.0	1 6	5 39.77	+18 25.9	1.882	2.823	7.2	21.0
1 16	5 30.02	+24 16.6	1.880	2.760	11.1	21.3	1 16	5 30.83	+18 25.9	1.926	2.802	11.0	21.1
1 26	5 23.67	+23 52.7	1.956	2.748	14.5	21.5	1 26	5 24.29	+18 29.7	1.994	2.781	14.4	21.3
218099	2002 <i>MH</i> ₃		12 20.9 83°92	1.8/21.1	18		183185	2002 <i>SH</i> ₅₅		12 21.0 134°17	2.1/21.1	18	
11 17	6 30.12	+17 25.4	1.473	2.300	17.0	19.7	11 17	6 30.51	+28 34.4	1.684	2.506	15.4	20.8
11 27	6 23.11	+17 45.4	1.425	2.326	12.6	19.5	11 27	6 23.52	+28 47.1	1.617	2.516	11.5	20.6
12 7	6 13.27	+18 12.1	1.399	2.353	7.8	19.2	12 7	6 13.64	+28 54.7	1.574	2.527	7.2	20.3
12 17	6 1.68	+18 43.5	1.399	2.379	2.9	19.0	12 17	6 1.85	+28 54.1	1.557	2.536	2.9	20.1
12 27	5 49.82	+19 17.2	1.428	2.405	3.6	19.1	12 27	5 49.63	+28 43.5	1.570	2.545	3.6	20.2
1 6	5 39.21	+19 51.3	1.485	2.430	8.2	19.5	1 6	5 38.51	+28 24.1	1.611	2.554	7.9	20.4
1 16	5 31.01	+20 24.8	1.568	2.455	12.5	19.8	1 16	5 29.74	+27 59.1	1.679	2.562	12.0	20.7
1 26	5 25.93	+20 57.8	1.674	2.479	16.0	20.1	1 26	5 24.09	+27 32.8	1.769	2.569	15.5	20.9
146703	2001 <i>VY</i> ₁₁₂		12 20.9 60°88	1°1/21.0	18		78231	2002 <i>OK</i> ₁₅		12 21.0 56°64	3.9/20.8	18	
11 17	6 24.85	+26 24.8	1.822	2.650	14.1	20.0	11 17	6 21.71	+13 25.8	2.036	2.853	13.3	19.2
11 27	6 19.06	+26 27.6	1.757	2.660	10.5	19.8	11 27	6 16.26	+12 45.8	1.980	2.873	10.1	19.0
12 7	6 10.81	+26 27.5	1.716	2.671	6.4	19.6	12 7	6 8.92	+12 12.3	1.949	2.892	6.8	18.9
12 17	6 0.98	+26 22.6	1.701	2.682	2.1	19.3	12 17	6 0.43	+11 47.2	1.944	2.912	4.2	18.7
12 27	5 50.80	+26 12.1	1.716	2.693	2.9	19.4	12 27	5 51.76	+11 31.7	1.968	2.932	4.7	18.8
1 6	5 41.56	+25 56.9	1.759	2.705	7.1	19.7	1 6	5 43.86	+11 26.2	2.022	2.952	7.4	19.0
1 16	5 34.28	+25 39.2	1.829	2.716	11.0	20.0	1 16	5 37.54	+11 30.3	2.101	2.973	10.5	19.2
1 26	5 29.67	+25 21.6	1.922	2.727	14.2	20.2	1 26	5 33.35	+11 42.7	2.204	2.993	13.2	19.5
220415	2003 <i>SW</i> ₁₉₅		12 20.9 26°45	2°0/20.8	17		345739	2007 <i>DS</i> ₆₇		12 21.0 186°15	0°5/21.0	14 C	
11 17	6 21.54	+18 54.2	2.139	2.961	12.5	20.1	11 17	6 27.18	+21 38.4	1.948	2.766	13.7	22.2
11 27	6 16.26	+18 25.4	2.063	2.963	9.4	19.9	11 27	6 20.76	+21 43.8	1.867	2.767	10.3	22.0
12 7	6 9.00	+17 58.4	2.011	2.964	5.9	19.6	12 7	6 11.89	+21 50.6	1.812	2.766	6.2	21.8
12 17	6 0.45	+17 33.9	1.988	2.966	2.5	19.4	12 17	6 1.37	+21 57.2	1.784	2.765	1.9	21.5
12 27	5 51.57	+17 13.1	1.994	2.968	3.2	19.5	12 27	5 50.32	+22 2.8	1.786	2.763	2.8	21.6
1 6	5 43.34	+16 56.7	2.029	2.970	6.7	19.7	1 6	5 39.99	+22 7.1	1.817	2.761	7.1	21.8
1 16	5 36.63	+16 45.6	2.092	2.972	10.1	19.9	1 16	5 31.47	+22 10.9	1.877	2.758	11.0	22.1
1 26	5 32.07	+16 40.3	2.178	2.974	13.1	20.1	1 26	5 25.54	+22 15.5	1.959	2.754	14.4	22.3
355035	2006 <i>RV</i> ₄₅		12 20.9 71°22	3°4/21.1	18		439843	1998 <i>QR</i> ₂₉		12 21.0 94°51	0°0/20.9	18	
11 17	6 23.75	+14 41.7	1.778	2.601	14.7	21.0	11 17	6 27.06	+23 53.6	1.870	2.693	14.0	21.7
11 27	6 18.08	+14 24.6	1.719	2.616	11.1	20.9	11 27	6 20.49	+23 46.8	1.811	2.712	10.4	21.5
12 7	6 10.15	+14 14.6	1.682	2.631	7.2	20.7	12 7	6 11.58	+23 38.7	1.776	2.731	6.3	21.3
12 17	6 0.78	+14 12.5	1.673	2.646	3.9	20.5	12 17	6 1.22	+23 28.3	1.768	2.750	1.8	21.1
12 27	5 51.11	+14 18.3	1.691	2.662	4.3	20.6	12 27	5 50.62	+23 15.3	1.790	2.768	2.7	21.2
1 6	5 42.32	+14 31.7	1.739	2.677	7.8	20.8	1 6	5 41.01	+23 0.7	1.842	2.786	6.9	21.5
1 16	5 35.35	+14 51.8	1.812	2.692	11.4	21.0	1 16	5 33.36	+22 46.3	1.921	2.804	10.7	21.7
1 26	5 30.88	+15 17.4	1.908	2.707	14.5	21.3	1 26	5 28.32	+22 33.9	2.023	2.822	13.8	22.0
385680	2005 <i>SX</i> ₂₀₆		12 20.9 6°40	0°8/20.9	16		218561	2005 <i>EZ</i> ₂₃₉		12 21.0 167°83	2°6/21.0	18	
11 17	6 22.50	+21 59.4	1.127	1.986	18.8	21.2	11 17	6 27.96	+16 42.1	1.777	2.594	14.9	21.7
11 27	6 18.52	+21 53.2	1.066	1.986	14.1	20.9	11 27	6 21.40	+16 32.8	1.703	2.599	11.3	21.5
12 7	6 11.04	+21 49.1	1.025	1.987	8.6	20.6	12 7	6 12.30	+16 28.8	1.652	2.603	7.1	21.3
12 17	6 1.14	+21 45.8	1.007	1.989	2.6	20.3	12 17	6 1.48	+16 30.1	1.629	2.607	3.2	21.1
12 27	5 50.58	+21 42.8	1.014	1.993	3.8	20.4	12 27	5 50.18	+16 36.6	1.636	2.609	3.9	21.1
1 6	5 41.24	+21 40.5	1.045	1.997	9.7	20.7	1 6	5 39.69	+16 47.9	1.671	2.611	7.9	21.4
1 16	5 34.66	+21 40.2	1.098	2.003	15.0	21.0	1 16	5 31.15	+17 3.8	1.733	2.612	11.9	21.6
1 26	5 31.77	+21 43.2	1.171	2.010	19.3	21.3	1 26	5 25.32	+17 24.0	1.818	2.613	15.3	21.8
403647	2010 <i>TW</i> ₅₃		12 21.0 168°39	1°3/21.0	18		326589	2002 <i>QR</i> ₁₁₅		12 21.0 116°82	2°2/21.2	18	
11 17	6 25.32	+27 0.6	2.370	3.183	11.8	22.2	11 17	6 21.40	+15 18.6	2.418	3.230	11.6	20.5
11 27	6 19.03	+27 16.8	2.291	3.187	8.8	22.0	11 27	6 15.97	+15 28.5	2.344	3.236	8.8	20.3
12 7	6 10.68	+27 30.6	2.238	3.190	5.4	21.8	12 7	6 8.78	+15 44.1	2.294	3.243	5.6	20.1
12 17	6 0.96	+27 39.7	2.213	3.193	2.0	21.6	12 17	6 0.43	+16 5.1	2.273	3.249	2.7	19.9
12 27	5 50.84	+27 42.9	2.219	3.195	2.6	21.6	12 27	5 51.74	+16 30.7	2.282	3.255	3.0	20.0
1 6	5 41.36	+27 40.2	2.256	3.197	6.1	21.9	1 6	5 43.59	+16 59.8	2.321	3.261	6.1	20.2
1 16	5 33.43	+27 33.0	2.321	3.198	9.4	22.1	1 16	5 36.74	+17 31.4	2.389	3.266	9.1	20.4
1 26	5 27.70	+27 23.4	2.411	3.199	12.2	22.3	1 26	5 31.79	+18 4.8	2.482	3.272	11.8	20.6
323252	2003 <i>SR</i> ₂₃₈		12 21.0 89°29	4°9/20.8	18		126917	2002 <i>EE</i> ₁₂₈		12 21.0 154°13			

EPHEMERIDES

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
273205	2006 <i>JK</i> ₁₅		12 21.0 274°57		4°0/20.7 17		107556	2001 <i>DF</i> ₈₁		12 21.0 294°31		3°1/20.8 18	
11 17	6 24.72	+33 46.9	2.305	3.115	12.1	20.9	11 17	6 26.14	+28 50.8	1.686	2.515	15.0	19.9
11 27	6 18.98	+34 34.5	2.220	3.108	9.4	20.7	11 27	6 20.76	+29 39.0	1.600	2.502	11.4	19.6
12 7	6 10.88	+35 16.6	2.159	3.100	6.5	20.5	12 7	6 12.33	+30 25.5	1.537	2.490	7.4	19.4
12 17	6 1.10	+35 49.0	2.126	3.092	4.2	20.4	12 17	6 1.65	+31 5.1	1.501	2.477	3.6	19.1
12 27	5 50.71	+36 8.5	2.123	3.085	4.6	20.4	12 27	5 50.05	+31 33.6	1.493	2.465	4.4	19.1
1 6	5 40.89	+36 14.5	2.149	3.077	7.2	20.5	1 6	5 39.14	+31 49.2	1.512	2.453	8.5	19.3
1 16	5 32.71	+36 8.5	2.202	3.069	10.2	20.7	1 16	5 30.35	+31 53.4	1.557	2.440	12.7	19.6
1 26	5 26.98	+35 54.2	2.278	3.061	13.0	20.9	1 26	5 24.72	+31 49.8	1.624	2.429	16.4	19.8
452670	2005 <i>WU</i> ₁₂₂		12 21.0 55°76		3°1/20.9 18		362849	2012 <i>BV</i> ₃₀		12 21.0 351°62		6°0/21.8 18	
11 17	6 26.84	+29 31.4	1.752	2.578	14.7	20.8	11 17	6 22.07	+ 6 34.7	1.775	2.583	15.3	20.4
11 27	6 20.71	+30 20.7	1.699	2.599	11.1	20.6	11 27	6 17.07	+ 6 34.1	1.700	2.581	12.2	20.1
12 7	6 11.90	+31 5.6	1.670	2.621	7.1	20.4	12 7	6 9.74	+ 6 49.1	1.647	2.579	8.9	19.9
12 17	6 1.36	+31 41.5	1.667	2.643	3.6	20.3	12 17	6 0.82	+ 7 21.2	1.620	2.578	6.3	19.8
12 27	5 50.46	+32 5.1	1.694	2.665	4.2	20.3	12 27	5 51.36	+ 8 10.0	1.620	2.577	6.4	19.8
1 6	5 40.59	+32 16.1	1.748	2.687	7.7	20.6	1 6	5 42.55	+ 9 13.0	1.648	2.576	9.1	19.9
1 16	5 32.89	+32 16.8	1.829	2.709	11.3	20.9	1 16	5 35.42	+10 26.3	1.702	2.575	12.4	20.1
1 26	5 28.10	+32 10.7	1.932	2.731	14.4	21.1	1 26	5 30.74	+11 45.6	1.779	2.575	15.5	20.4
359918	2011 <i>WX</i> ₁₂₅		12 21.0 60°26		0°5/21.0 18		266205	2006 <i>WR</i> ₅₈		12 21.0 61°31		0°5/21.1 18	
11 17	6 24.73	+24 5.3	1.824	2.652	14.1	21.3	11 17	6 29.08	+25 10.0	1.268	2.110	18.2	20.5
11 27	6 19.12	+24 17.7	1.749	2.653	10.5	21.1	11 27	6 22.91	+25 2.2	1.217	2.127	13.5	20.2
12 7	6 10.98	+24 30.0	1.698	2.654	6.4	20.9	12 7	6 13.43	+24 51.8	1.186	2.145	8.2	20.0
12 17	6 1.13	+24 40.0	1.674	2.655	1.9	20.6	12 17	6 1.86	+24 36.9	1.181	2.163	2.4	19.7
12 27	5 50.77	+24 46.3	1.678	2.656	2.8	20.6	12 27	5 49.98	+24 17.2	1.202	2.180	3.5	19.8
1 6	5 41.19	+24 48.9	1.712	2.657	7.2	20.9	1 6	5 39.57	+23 54.6	1.249	2.198	8.9	20.2
1 16	5 33.50	+24 48.7	1.771	2.658	11.3	21.2	1 16	5 31.95	+23 32.4	1.321	2.217	13.7	20.5
1 26	5 28.49	+24 47.6	1.854	2.659	14.7	21.4	1 26	5 27.89	+23 13.5	1.414	2.235	17.6	20.8
60539	2000 <i>EB</i> ₆₁		12 21.0 356°42		0°5/21.0 18		441205	2007 <i>UR</i> ₉₁		12 21.0 73°46		2°3/20.9 16	
11 17	6 21.40	+24 48.4	1.809	2.643	13.9	19.0	11 17	6 26.10	+18 41.1	1.684	2.511	15.2	21.5
11 27	6 16.68	+24 50.4	1.733	2.641	10.4	18.8	11 27	6 19.90	+18 13.0	1.630	2.532	11.3	21.3
12 7	6 9.52	+24 51.2	1.681	2.638	6.3	18.5	12 7	6 11.29	+17 48.1	1.599	2.553	7.0	21.1
12 17	6 0.71	+24 49.2	1.655	2.637	1.9	18.2	12 17	6 1.21	+17 27.0	1.595	2.573	3.0	20.9
12 27	5 51.42	+24 43.7	1.658	2.636	2.8	18.3	12 27	5 50.92	+17 10.7	1.619	2.594	3.7	21.0
1 6	5 42.88	+24 35.2	1.688	2.635	7.2	18.6	1 6	5 41.68	+16 59.9	1.672	2.614	7.7	21.3
1 16	5 36.17	+24 25.0	1.745	2.636	11.2	18.8	1 16	5 34.47	+16 55.2	1.751	2.635	11.6	21.5
1 26	5 32.06	+24 15.2	1.824	2.637	14.6	19.0	1 26	5 29.94	+16 56.8	1.853	2.655	14.8	21.8
301886	1998 <i>QY</i> ₄		12 21.0 108°11		5°2/21.8 18		320322	2007 <i>TM</i> ₃₁		12 21.0 80°74		1°7/21.1 18	
11 17	6 34.13	+40 3.3	2.196	2.982	13.5	21.6	11 17	6 27.53	+27 9.1	1.686	2.514	15.1	21.2
11 27	6 25.65	+40 20.7	2.140	3.007	10.6	21.4	11 27	6 21.26	+27 25.4	1.626	2.529	11.3	21.0
12 7	6 14.63	+40 24.7	2.107	3.031	7.7	21.3	12 7	6 12.27	+27 38.5	1.589	2.544	6.9	20.7
12 17	6 2.11	+40 11.3	2.103	3.055	5.6	21.2	12 17	6 1.53	+27 45.3	1.579	2.559	2.6	20.5
12 27	5 49.48	+39 39.2	2.128	3.079	5.6	21.2	12 27	5 50.42	+27 44.2	1.597	2.573	3.3	20.6
1 6	5 38.09	+38 51.0	2.182	3.101	7.7	21.4	1 6	5 40.38	+27 35.9	1.643	2.588	7.6	20.9
1 16	5 28.97	+37 51.8	2.265	3.123	10.4	21.6	1 16	5 32.54	+27 22.7	1.716	2.603	11.6	21.2
1 26	5 22.77	+36 47.6	2.372	3.144	12.9	21.8	1 26	5 27.65	+27 7.7	1.812	2.617	15.0	21.4
177381	2004 <i>BP</i> ₆₀		12 21.0 56°14		0°7/21.0 18		336593	2009 <i>SH</i> ₃₆₄		12 21.0 316°14		3°8/21.2 18	
11 17	6 25.59	+25 26.6	1.647	2.480	15.2	20.5	11 17	6 25.01	+14 30.8	1.436	2.269	17.0	20.8
11 27	6 19.83	+25 25.1	1.584	2.490	11.3	20.3	11 27	6 19.81	+14 22.9	1.364	2.266	13.0	20.5
12 7	6 11.40	+25 21.3	1.544	2.501	6.9	20.0	12 7	6 11.65	+14 24.6	1.312	2.263	8.5	20.2
12 17	6 1.24	+25 13.5	1.530	2.512	2.1	19.8	12 17	6 1.42	+14 36.5	1.286	2.261	4.4	20.0
12 27	5 50.70	+25 0.9	1.545	2.523	3.0	19.9	12 27	5 50.50	+14 58.3	1.286	2.258	4.9	20.0
1 6	5 41.19	+24 44.8	1.587	2.534	7.6	20.2	1 6	5 40.44	+15 28.7	1.313	2.256	9.3	20.3
1 16	5 33.83	+24 27.3	1.656	2.545	11.7	20.4	1 16	5 32.57	+16 5.9	1.365	2.254	13.8	20.5
1 26	5 29.36	+24 10.9	1.747	2.557	15.2	20.7	1 26	5 27.82	+16 48.0	1.437	2.251	17.7	20.8
457255	2008 <i>QQ</i> ₄₇		12 21.0 347°49		9°5/20.7 17		47771	2000 <i>DC</i> ₁₀₅		12 21.0 121°16		3°4/21.3 18	
11 17	6 18.74	- 1 49.2	2.002	2.778	14.9	21.2	11 17	6 20.83	+11 42.1	2.432	3.237	11.7	19.6
11 27	6 14.31	- 2 57.0	1.932	2.774	12.8	21.0	11 27	6 15.55	+11 39.7	2.357	3.242	9.0	19.4
12 7	6 7.93	- 3 47.8	1.884	2.770	10.8	20.9	12 7	6 8.55	+11 45.1	2.307	3.248	6.1	19.3
12 17	6 0.24	- 4 16.6	1.859	2.766	9.6	20.8	12 17	6 0.43	+11 58.6	2.285	3.253	3.7	19.1
12 27	5 52.14	- 4 20.6	1.860	2.763	9.8	20.8	12 27	5 52.00	+12 20.1	2.293	3.258	4.0	19.1
1 6	5 44.62	- 3 59.6	1.886	2.761	11.3	20.9	1 6	5 44.08	+12 48.7	2.331	3.263	6.5	19.3
1 16	5 38.53	- 3 16.3	1.936	2.759	13.4	21.0	1 16	5 37.43	+13 23.1	2.397	3.268	9.4	19.5
1 26	5 34.51	- 2 15.4	2.007	2.757	15.6	21.2	1 26	5 32.63	+14 1.7	2.488	3.273	11.9	19.7
212180	2005 <i>GJ</i> ₇₆		12 21.0 226°04		0°3/21.0 18		179294	2001 <i>VK</i> ₅₅		12 21.0 93°82		1°7/21.1 18	
11 17	6 25.20	+23 22.2	2.090	2.910	12.9	20.9	11 17	6 27.12	+28 24.1	2.063	2.879	13.1	20.2
11 27	6 19.29	+23 39.6	2.003	2.903	9.6	20.7	11 27	6 20.46	+28 32.1	2.003	2.900	9.8	20.1
12 7	6 11.05	+23 57.8	1.940	2.895	5.9	20.4	12 7	6 11.57	+28 35.6	1.969	2.921	6.1	19.9
12 17	6 1.18	+24 14.7	1.905	2.887	1.7	20.1	12 17	6 1.29	+28 32.6	1.962	2.941	2.4	19.7
12 27	5 50.72	+24 28.6	1.901	2.879	2.6	20.2	12 27	5 50.79	+28 22.1	1.985	2.961	3.0	19.7
1 6	5 40.85	+24 39.0	1.926	2.870	6.7	20.4	1 6	5 41.22	+28 5.2	2.038	2.980	6.6	20.0
1 16	5 32.62	+24 46.5	1.979	2.861	10.5	20.6	1 16	5 33.52	+27 44.2	2.119	2.999	10.0	20.3
1 26	5 26.80	+24 52.4	2.055	2.851	13.8	20.8	1 26	5 28.32	+27 22.0	2.224	3.018	12.9	20.5
102205	1999 <i>SB</i> ₂₀		12 21.0 126°14		0°6/20.9 18		271277	2003 <i>UY</i> ₂₁₀		12			

EPHEMERIDES

12 21.0

12 21.0

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
214851	2006 <i>WU</i> ₁₀₁		12 21.0	85°98	2°6/21.1	18	383846	2008 <i>JN</i> ₂₆		12 21.0	119°69	3°9/21.9	18
11 17	6 24.43	+15 56.4	1.920	2.738	13.9	20.9	11 17	6 30.67	+9 19.6	1.868	2.663	15.2	20.7
11 27	6 18.50	+15 52.2	1.860	2.756	10.4	20.7	11 27	6 23.21	+10 1.9	1.803	2.682	11.7	20.5
12 7	6 10.42	+15 53.8	1.823	2.774	6.6	20.5	12 7	6 13.34	+10 58.0	1.762	2.701	7.9	20.3
12 17	6 0 9.8	+16 1.3	1.815	2.791	3.1	20.3	12 17	6 1.88	+12 6.5	1.750	2.719	4.5	20.2
12 27	5 51.26	+16 14.3	1.835	2.808	3.6	20.4	12 27	5 50.02	+13 24.1	1.768	2.736	4.5	20.2
1 6	5 42.36	+16 31.9	1.885	2.825	7.1	20.7	1 6	5 38.98	+14 46.4	1.818	2.753	7.8	20.5
1 16	5 35.19	+16 53.6	1.961	2.842	10.7	20.9	1 16	5 29.82	+16 9.6	1.896	2.768	11.4	20.7
1 26	5 30.39	+17 18.5	2.062	2.858	13.7	21.1	1 26	5 23.28	+17 30.9	1.999	2.783	14.5	20.9
57112	2001 <i>OC</i> ₈₁		12 21.0	57°10	3°1/21.3	18	420575	2012 <i>HY</i> ₁₈		12 21.0	259°71	0°0/21.0	17
11 17	6 27.52	+32 1.9	1.711	2.535	15.1	17.5	11 17	6 23.65	+20 52.8	2.221	3.039	12.3	20.7
11 27	6 21.22	+32 6.3	1.654	2.552	11.4	17.3	11 27	6 18.01	+21 35.9	2.139	3.038	9.2	20.5
12 7	6 12.20	+32 2.2	1.619	2.569	7.4	17.1	12 7	6 10.25	+22 22.9	2.083	3.037	5.6	20.3
12 17	6 1.50	+31 46.7	1.611	2.586	3.7	16.9	12 17	6 1.01	+23 11.2	2.055	3.036	1.6	20.0
12 27	5 50.54	+31 19.2	1.632	2.604	4.1	17.0	12 27	5 51.23	+23 58.2	2.058	3.035	2.4	20.0
1 6	5 40.76	+30 41.8	1.680	2.622	7.7	17.3	1 6	5 41.97	+24 41.8	2.091	3.034	6.3	20.3
1 16	5 33.27	+29 58.8	1.755	2.640	11.5	17.5	1 16	5 34.18	+25 21.2	2.152	3.033	9.8	20.5
1 26	5 28.76	+29 14.8	1.852	2.657	14.7	17.8	1 26	5 28.60	+25 56.6	2.238	3.032	12.8	20.7
182288	2001 <i>KN</i> ₅₈		12 21.0	152°79	3°7/21.1	18	290649	2005 <i>UV</i> ₂₇₉		12 21.0	47°48	0°6/21.0	17
11 17	6 26.97	+13 28.8	1.913	2.723	14.3	21.1	11 17	6 23.75	+22 0.4	1.736	2.568	14.5	21.0
11 27	6 20.45	+13 9.9	1.843	2.732	10.9	20.9	11 27	6 18.30	+21 58.9	1.676	2.582	10.8	20.8
12 7	6 11.65	+12 58.4	1.796	2.740	7.3	20.7	12 7	6 10.44	+21 58.5	1.640	2.596	6.5	20.5
12 17	6 1.36	+12 55.1	1.777	2.748	4.2	20.5	12 17	6 1.03	+21 58.2	1.630	2.611	2.0	20.3
12 27	5 50.68	+13 0.4	1.787	2.755	4.6	20.6	12 27	5 51.31	+21 57.3	1.648	2.626	2.8	20.4
1 6	5 40.78	+13 14.0	1.827	2.761	7.9	20.8	1 6	5 42.51	+21 56.1	1.695	2.641	7.2	20.7
1 16	5 32.65	+13 35.0	1.894	2.766	11.4	21.0	1 16	5 35.65	+21 55.6	1.768	2.657	11.1	21.0
1 26	5 26.98	+14 2.2	1.984	2.771	14.5	21.2	1 26	5 31.42	+21 56.7	1.864	2.673	14.4	21.2
523344	2017 <i>BT</i> ₁₄₀		12 21.0	354°73	2°6/21.0	17	108762	2001 <i>ON</i> ₄₆		12 21.0	184°79	1°0/21.1	18
11 17	6 25.15	+29 32.3	1.968	2.790	13.5	21.3	11 17	6 29.26	+26 48.8	1.895	2.713	14.1	20.3
11 27	6 19.43	+29 59.7	1.891	2.790	10.2	21.1	11 27	6 22.44	+26 43.9	1.815	2.713	10.6	20.0
12 7	6 11.21	+30 23.1	1.838	2.789	6.5	20.8	12 7	6 13.00	+26 35.0	1.760	2.713	6.5	19.8
12 17	6 1.27	+30 39.0	1.813	2.789	3.1	20.6	12 17	6 1.81	+26 20.2	1.732	2.712	2.2	19.5
12 27	5 50.80	+30 45.2	1.816	2.789	3.6	20.7	12 27	5 50.13	+25 58.9	1.734	2.711	2.9	19.6
1 6	5 41.09	+30 41.7	1.849	2.789	7.2	20.9	1 6	5 39.32	+25 32.4	1.765	2.709	7.3	19.8
1 16	5 33.24	+30 30.4	1.908	2.789	10.9	21.1	1 16	5 30.51	+25 3.5	1.825	2.706	11.3	20.1
1 26	5 28.05	+30 14.5	1.990	2.789	14.0	21.3	1 26	5 24.49	+24 35.4	1.907	2.703	14.7	20.3
394565	2007 <i>VR</i>		12 21.0	54°44	4°0/20.6	17	310346	2011 <i>UL</i> ₂₄₄		12 21.0	45°19	1°9/21.1	18
11 17	6 25.26	+16 37.4	1.553	2.384	16.0	20.5	11 17	6 24.19	+18 0.0	1.543	2.377	15.9	20.4
11 27	6 19.43	+15 35.6	1.498	2.399	12.1	20.3	11 27	6 18.87	+18 6.1	1.484	2.390	11.9	20.2
12 7	6 11.08	+14 38.0	1.465	2.416	7.9	20.1	12 7	6 10.90	+18 18.2	1.447	2.403	7.4	19.9
12 17	6 1.18	+13 47.6	1.459	2.432	4.4	19.9	12 17	6 1.20	+18 35.3	1.436	2.416	2.9	19.7
12 27	5 51.05	+13 7.3	1.480	2.449	5.1	20.0	12 27	5 51.09	+18 56.0	1.453	2.430	3.5	19.8
1 6	5 42.01	+12 39.0	1.529	2.466	8.8	20.3	1 6	5 41.96	+19 19.3	1.497	2.444	8.0	20.1
1 16	5 35.09	+12 23.4	1.603	2.483	12.7	20.5	1 16	5 34.94	+19 44.3	1.567	2.458	12.2	20.4
1 26	5 30.94	+12 19.6	1.699	2.500	16.0	20.8	1 26	5 30.77	+20 10.8	1.659	2.473	15.7	20.6
272771	2005 <i>YX</i> ₁₈₅		12 21.0	237°00	3°3/21.3	18	115519	2003 <i>UN</i> ₃₇		12 21.0	21°49	0°6/21.1	17
11 17	6 25.32	+33 30.0	2.230	3.042	12.5	20.6	11 17	6 23.42	+26 49.8	1.947	2.774	13.4	19.0
11 27	6 19.33	+33 43.0	2.149	3.039	9.6	20.4	11 27	6 17.94	+26 25.6	1.875	2.778	10.0	18.8
12 7	6 11.04	+33 48.5	2.093	3.037	6.4	20.2	12 7	6 10.18	+25 56.8	1.827	2.782	6.1	18.6
12 17	6 1.21	+33 43.6	2.064	3.035	3.7	20.0	12 17	6 0.97	+25 23.0	1.806	2.787	1.9	18.3
12 27	5 50.94	+33 26.7	2.065	3.032	4.0	20.0	12 27	5 51.44	+24 44.9	1.815	2.793	2.6	18.4
1 6	5 41.42	+32 59.0	2.094	3.030	6.9	20.2	1 6	5 42.76	+24 4.5	1.852	2.798	6.7	18.7
1 16	5 33.64	+32 23.3	2.152	3.027	10.1	20.4	1 16	5 35.89	+23 24.8	1.917	2.804	10.5	18.9
1 26	5 28.34	+31 43.6	2.233	3.025	12.9	20.6	1 26	5 31.49	+22 48.4	2.005	2.810	13.7	19.1
26935	<i>Vireday</i>		12 21.0	204°96	4°5/20.8	18	122630	2000 <i>RO</i> ₇₈		12 21.0	312°35	1°7/21.1	18
11 17	6 26.16	+13 23.0	1.747	2.564	15.1	20.0	11 17	6 25.81	+27 23.5	1.501	2.338	16.1	19.9
11 27	6 20.16	+12 44.3	1.668	2.561	11.7	19.8	11 27	6 20.62	+27 31.2	1.421	2.329	12.2	19.6
12 7	6 11.65	+12 12.4	1.613	2.557	7.9	19.5	12 7	6 12.28	+27 35.2	1.363	2.320	7.6	19.3
12 17	6 1.42	+11 49.4	1.584	2.553	4.9	19.3	12 17	6 1.69	+27 32.4	1.331	2.311	2.8	19.0
12 27	5 50.64	+11 37.1	1.583	2.548	5.4	19.4	12 27	5 50.33	+27 21.0	1.325	2.302	3.6	19.1
1 6	5 40.61	+11 36.1	1.611	2.543	8.9	19.6	1 6	5 39.87	+27 1.9	1.347	2.294	8.6	19.3
1 16	5 32.44	+11 46.2	1.664	2.537	12.7	19.8	1 16	5 31.77	+26 38.2	1.393	2.286	13.3	19.6
1 26	5 26.92	+12 6.0	1.740	2.531	16.0	20.0	1 26	5 26.98	+26 13.7	1.461	2.279	17.3	19.8
174909	2004 <i>BE</i> ₁₄₇		12 21.0	57°02	7°0/21.9	18	490998	2011 <i>FC</i> ₁₅₆		12 21.0	160°49	2°6/21.2	17
11 17	6 31.46	+41 38.9	1.702	2.505	16.1	19.7	11 17	6 21.03	+14 30.8	2.393	3.205	11.7	21.9
11 27	6 24.59	+42 4.8	1.642	2.516	12.9	19.5	11 27	6 15.80	+14 32.4	2.314	3.206	8.9	21.8
12 7	6 14.45	+42 14.3	1.602	2.527	9.7	19.4	12 7	6 8.79	+14 40.1	2.260	3.207	5.8	21.6
12 17	6 2.20	+42 1.4	1.588	2.538	7.4	19.3	12 17	6 0.58	+14 54.0	2.233	3.207	3.0	21.4
12 27	5 49.61	+41 23.8	1.601	2.550	7.4	19.3	12 27	5 52.01	+15 13.5	2.237	3.208	3.4	21.4
1 6	5 38.45	+40 24.7	1.641	2.561	9.7	19.5	1 6	5 43.95	+15 38.0	2.271	3.209	6.3	21.6
1 16	5 30.04	+39 11.0	1.706	2.573	12.7	19.7	1 16	5 37.17	+16 6.6	2.333	3.210	9.4	21.8
1 26	5 25.15	+37 50.8	1.794	2.585	15.6	19.9	1 26	5 32.30	+16 38.2	2.420	3.210	12.1	22.0
78287	2002 <i>PN</i> ₄₉		12 21.0	8°68	4°2/21.7	18 R	213009	1995 <i>FB</i> ₁₅		12 21.0	97°93	2°	

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12 21.0

12 21.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
480654	2015 <i>OG</i> ₁₃		12 21.0	20°03	1°0/20.9	18	362488	2010 <i>TH</i> ₁₀		12 21.1	139°47	1°9/21.0	17
11 17	6 23.61	+23 22.6	1.262	2.113	17.7	20.0	11 17	6 23.75	+18 6.0	2.109	2.927	12.8	21.5
11 27	6 19.15	+23 59.4	1.205	2.121	13.2	19.7	11 27	6 17.99	+17 53.9	2.035	2.932	9.6	21.3
12 7	6 11.40	+24 38.8	1.169	2.129	8.0	19.4	12 7	6 10.18	+17 45.0	1.986	2.938	6.0	21.1
12 17	6 1.43	+25 16.5	1.157	2.139	2.5	19.1	12 17	6 1.02	+17 39.5	1.964	2.943	2.6	20.9
12 27	5 50.84	+25 49.0	1.171	2.149	3.6	19.2	12 27	5 51.51	+17 37.5	1.973	2.948	3.1	20.9
1 6	5 41.41	+26 14.5	1.210	2.161	8.9	19.6	1 6	5 42.67	+17 39.0	2.011	2.952	6.7	21.2
1 16	5 34.56	+26 33.4	1.274	2.174	13.7	19.9	1 16	5 35.39	+17 44.4	2.077	2.957	10.2	21.4
1 26	5 31.18	+26 47.9	1.358	2.187	17.7	20.2	1 26	5 30.34	+17 53.5	2.166	2.961	13.2	21.6
460874	2014 <i>WY</i> ₁₃₇		12 21.0	165°59	1°5/20.9	18	335213	2005 <i>EE</i> ₂₂₃		12 21.1	220°74	5°0/21.4	18
11 17	6 21.47	+19 23.5	2.570	3.384	10.9	21.8	11 17	6 19.67	+5 25.5	2.746	3.529	11.1	21.0
11 27	6 15.99	+18 59.1	2.490	3.385	8.2	21.6	11 27	6 14.60	+5 13.4	2.660	3.524	8.9	20.9
12 7	6 8.83	+18 35.9	2.435	3.387	5.1	21.4	12 7	6 8.00	+5 11.6	2.599	3.518	6.7	20.7
12 17	6 0.59	+18 14.3	2.410	3.389	2.1	21.2	12 17	6 0.38	+5 21.4	2.566	3.513	5.2	20.6
12 27	5 52.06	+17 55.0	2.416	3.390	2.6	21.2	12 27	5 52.42	+5 43.5	2.563	3.507	5.3	20.6
1 6	5 44.08	+17 38.8	2.452	3.391	5.7	21.5	1 6	5 44.85	+6 16.9	2.589	3.501	7.0	20.7
1 16	5 37.36	+17 26.4	2.516	3.392	8.8	21.7	1 16	5 38.34	+7 0.1	2.643	3.494	9.3	20.8
1 26	5 32.47	+17 18.4	2.605	3.393	11.4	21.8	1 26	5 33.42	+7 50.8	2.721	3.488	11.5	21.0
142755	Castander		12 21.1	291°59	3°2/21.2	18	44752	1999 <i>TY</i> ₉₉		12 21.1	356°70	5°7/21.4	18
11 17	6 28.17	+30 31.4	1.415	2.250	17.0	19.8	11 17	6 24.01	+11 7.8	1.276	2.112	18.5	18.5
11 27	6 22.78	+30 42.2	1.329	2.235	13.1	19.5	11 27	6 19.32	+10 51.4	1.209	2.111	14.4	18.2
12 7	6 13.82	+30 45.8	1.265	2.219	8.5	19.2	12 7	6 11.51	+10 49.3	1.162	2.109	10.0	18.0
12 17	6 2.21	+30 37.6	1.226	2.203	4.0	18.9	12 17	6 1.51	+11 3.6	1.139	2.108	6.2	17.8
12 27	5 49.61	+30 15.0	1.213	2.188	4.6	18.9	12 27	5 50.79	+11 34.6	1.141	2.108	6.5	17.8
1 6	5 37.96	+29 39.3	1.227	2.172	9.5	19.2	1 6	5 41.02	+12 20.0	1.168	2.108	10.5	18.0
1 16	5 28.93	+28 55.2	1.265	2.157	14.4	19.4	1 16	5 33.60	+13 16.3	1.218	2.109	15.0	18.3
1 26	5 23.65	+28 9.1	1.324	2.142	18.7	19.6	1 26	5 29.49	+14 19.3	1.289	2.110	19.0	18.5
174470	2003 <i>AY</i> ₇		12 21.1	94°90	12°1/24.4	18	533	Sara		12 21.1	239°95	3°1/21.0	18
11 17	6 49.97	+50 23.6	1.100	1.891	23.8	19.1	11 17	6 21.40	+14 28.1	2.248	3.062	12.3	14.5
11 27	6 40.34	+50 29.8	1.041	1.898	20.1	18.9	11 27	6 16.20	+14 9.0	2.166	3.058	9.4	14.3
12 7	6 24.62	+50 0.2	1.000	1.905	16.1	18.7	12 7	6 9.10	+13 55.3	2.109	3.055	6.2	14.1
12 17	6 5.20	+48 40.8	0.978	1.913	13.0	18.5	12 17	6 0.72	+13 48.0	2.079	3.051	3.5	13.9
12 27	5 45.80	+46 28.2	0.981	1.920	12.2	18.5	12 27	5 51.94	+13 47.6	2.079	3.047	3.9	14.0
1 6	5 29.90	+43 34.9	1.008	1.927	14.4	18.7	1 6	5 43.71	+13 54.2	2.108	3.044	6.9	14.1
1 16	5 19.44	+40 22.8	1.058	1.934	18.0	18.9	1 16	5 36.84	+14 7.3	2.165	3.040	10.1	14.3
1 26	5 14.85	+37 13.1	1.130	1.941	21.7	19.2	1 26	5 31.99	+14 26.3	2.246	3.036	12.9	14.5
92632	2000 <i>QH</i> ₁₇		12 21.1	131°39	0°2/21.1	18	494060	2016 <i>BT</i> ₅₅		12 21.1	66°60	1°0/21.2	17
11 17	6 28.16	+22 46.3	1.978	2.795	13.6	21.1	11 17	6 23.64	+27 28.9	2.199	3.019	12.3	21.2
11 27	6 21.34	+22 46.2	1.911	2.809	10.1	20.9	11 27	6 17.91	+27 20.2	2.127	3.026	9.2	21.1
12 7	6 12.20	+22 45.9	1.869	2.823	6.1	20.7	12 7	6 10.11	+27 7.7	2.079	3.033	5.6	20.9
12 17	6 1.59	+22 44.3	1.855	2.837	1.8	20.4	12 17	6 1.00	+26 50.0	2.060	3.040	2.0	20.6
12 27	5 50.65	+22 40.6	1.872	2.850	2.6	20.5	12 27	5 51.59	+26 27.0	2.071	3.048	2.5	20.7
1 6	5 40.59	+22 35.2	1.918	2.862	6.8	20.8	1 6	5 42.93	+26 0.2	2.111	3.055	6.2	20.9
1 16	5 32.39	+22 29.6	1.992	2.873	10.5	21.1	1 16	5 35.91	+25 31.5	2.179	3.062	9.6	21.2
1 26	5 26.72	+22 25.1	2.090	2.884	13.6	21.3	1 26	5 31.15	+25 3.5	2.271	3.070	12.5	21.4
254957	2005 <i>SM</i> ₂₀₆		12 21.1	65°31	3°1/20.9	18	515201	2011 <i>UO</i> ₄₁₄		12 21.1	117°97	0°8/20.9	18
11 17	6 26.99	+29 54.7	1.844	2.666	14.2	20.2	11 17	6 28.02	+23 27.4	2.092	2.907	13.1	21.4
11 27	6 20.83	+30 42.7	1.786	2.684	10.7	20.0	11 27	6 21.25	+24 10.6	2.027	2.923	9.7	21.2
12 7	6 12.06	+31 26.2	1.752	2.702	6.9	19.8	12 7	6 12.19	+24 54.8	1.986	2.940	5.9	21.0
12 17	6 1.57	+32 0.8	1.745	2.720	3.6	19.6	12 17	6 1.63	+25 36.8	1.975	2.956	1.9	20.8
12 27	5 50.67	+32 23.4	1.767	2.738	4.1	19.7	12 27	5 50.66	+26 13.8	1.994	2.971	2.6	20.8
1 6	5 40.73	+32 33.5	1.818	2.756	7.6	19.9	1 6	5 40.44	+26 44.3	2.044	2.986	6.5	21.1
1 16	5 32.85	+32 33.3	1.895	2.774	11.1	20.2	1 16	5 31.98	+27 8.7	2.122	3.000	10.1	21.4
1 26	5 27.80	+32 26.3	1.995	2.792	14.1	20.4	1 26	5 25.99	+27 28.3	2.224	3.014	13.0	21.6
298189	2002 <i>TL</i> ₂₀₃		12 21.1	33°73	9°3/21.7	18	475058	2005 <i>UD</i> ₁₁₄		12 21.1	350°37	2°3/21.0	18
11 17	6 21.65	+1 3.4	1.601	2.398	17.2	19.5	11 17	6 22.52	+26 48.6	1.139	1.998	18.7	20.7
11 27	6 16.82	+0 16.7	1.543	2.406	14.3	19.4	11 27	6 18.94	+27 15.4	1.071	1.990	14.2	20.4
12 7	6 9.62	+0 10.1	1.505	2.413	11.5	19.2	12 7	6 11.64	+27 40.6	1.023	1.983	8.8	20.1
12 17	6 0.86	+0 12.5	1.490	2.422	9.6	19.1	12 17	6 1.62	+27 59.5	0.997	1.978	3.4	19.8
12 27	5 51.71	+0 11.1	1.501	2.431	9.6	19.1	12 27	5 50.66	+28 8.6	0.996	1.974	4.4	19.9
1 6	5 43.38	+0 59.1	1.537	2.440	11.5	19.3	1 6	5 40.84	+28 7.5	1.019	1.971	10.0	20.2
1 16	5 36.90	+2 6.7	1.596	2.449	14.2	19.5	1 16	5 33.85	+27 58.8	1.064	1.969	15.3	20.4
1 26	5 32.97	+3 27.9	1.677	2.459	16.9	19.7	1 26	5 30.81	+27 46.5	1.128	1.969	19.8	20.7
276837	2004 <i>RC</i> ₅		12 21.1	142°14	1°0/21.0	18	258294	2001 <i>UQ</i> ₉₁		12 21.1	42°54	2°9/20.9	18
11 17	6 28.69	+25 14.1	1.987	2.804	13.6	21.7	11 17	6 23.01	+16 46.8	1.756	2.584	14.6	20.9
11 27	6 21.86	+25 35.4	1.917	2.815	10.1	21.5	11 27	6 17.76	+16 21.1	1.689	2.590	11.0	20.7
12 7	6 12.60	+25 55.6	1.872	2.826	6.2	21.3	12 7	6 10.17	+16 0.2	1.645	2.597	7.1	20.5
12 17	6 1.73	+26 11.8	1.855	2.836	2.0	21.0	12 17	6 1.05	+15 45.1	1.628	2.604	3.5	20.3
12 27	5 50.45	+26 22.3	1.868	2.845	2.8	21.1	12 27	5 51.56	+15 36.4	1.639	2.611	4.0	20.3
1 6	5 40.00	+26 26.9	1.911	2.854	6.9	21.4	1 6	5 42.88	+15 34.8	1.677	2.619	7.8	20.6
1 16	5 31.44	+26 27.0	1.982	2.862	10.6	21.6	1 16	5 36.02	+15 40.1	1.742	2.626	11.6	20.8
1 26	5 25.49	+26 24.7	2.077	2.870	13.7	21.9	1 26	5 31.69	+15 51.7	1.830	2.634	14.9	21.0
70942	Vandanashiva		12 21.1	19°87	3°7/21.2	18	129633	1998 <i>HD</i> ₃₈		12 21.1	207°17	1°3/21.0	18
11 17	6												

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
421538	2014 <i>OX</i> ₁₆₅		12 21.1 342°83	7°0/21.6	17		487575	2014 <i>WW</i> ₃₉₈		12 21.1 111°06	1°2/21.2	18	
11 17	6 28.00	+40 20.9	1.642	2.455	16.1	20.4	11 17	6 23.04	+17 42.8	2.334	3.148	11.9	20.6
11 27	6 22.40	+40 51.8	1.567	2.449	13.0	20.2	11 27	6 17.39	+18 10.2	2.259	3.155	8.9	20.4
12 7	6 13.42	+41 8.0	1.513	2.443	9.7	20.0	12 7	6 9.83	+18 42.5	2.210	3.162	5.5	20.2
12 17	6 2.08	+41 3.1	1.484	2.438	7.3	19.8	12 17	6 0.99	+19 18.3	2.189	3.169	2.0	19.9
12 27	5 50.07	+40 33.6	1.481	2.433	7.4	19.8	12 27	5 51.77	+19 56.0	2.199	3.175	2.5	20.0
1 6	5 39.22	+39 41.5	1.505	2.430	10.0	20.0	1 6	5 43.09	+20 34.0	2.239	3.182	6.0	20.2
1 16	5 31.02	+38 33.0	1.553	2.426	13.4	20.2	1 16	5 35.80	+21 11.3	2.308	3.189	9.3	20.5
1 26	5 26.39	+37 16.3	1.622	2.423	16.6	20.4	1 26	5 30.53	+21 47.5	2.402	3.195	12.1	20.7
173081	2006 <i>UD</i> ₂₁₉		12 21.1 204°85	1°1/21.0	18		173472	2000 <i>RS</i> ₈₇		12 21.1 211°47	3°6/21.2	18	
11 17	6 25.55	+25 25.0	2.069	2.889	13.0	20.4	11 17	6 27.22	+34 40.1	2.487	3.288	11.6	20.1
11 27	6 19.63	+25 50.1	1.988	2.887	9.7	20.2	11 27	6 20.68	+35 3.6	2.399	3.282	9.0	19.9
12 7	6 11.35	+26 14.6	1.930	2.884	6.0	20.0	12 7	6 11.92	+35 19.8	2.336	3.275	6.2	19.7
12 17	6 1.43	+26 35.8	1.901	2.881	2.0	19.7	12 17	6 1.63	+35 25.4	2.301	3.268	3.9	19.5
12 27	5 50.97	+26 51.7	1.901	2.878	2.8	19.8	12 27	5 50.84	+35 18.5	2.297	3.260	4.2	19.5
1 6	5 41.14	+27 1.7	1.932	2.875	6.8	20.0	1 6	5 40.69	+34 59.4	2.322	3.252	6.7	19.7
1 16	5 33.00	+27 6.7	1.989	2.871	10.5	20.2	1 16	5 32.14	+34 30.6	2.376	3.243	9.6	19.9
1 26	5 27.34	+27 8.5	2.071	2.867	13.6	20.5	1 26	5 25.94	+33 55.9	2.454	3.234	12.3	20.0
361214	2006 <i>SO</i> ₁₈		12 21.1 39°80	4°0/21.2	18		413274	2003 <i>UY</i> ₄₇		12 21.1 108°68	1°3/21.0	18	
11 17	6 22.86	+13 44.1	1.591	2.420	15.8	20.5	11 17	6 23.31	+19 48.8	2.641	3.450	10.8	21.9
11 27	6 17.79	+13 24.5	1.531	2.431	12.1	20.3	11 27	6 17.21	+19 31.8	2.578	3.471	8.0	21.7
12 7	6 10.24	+13 13.9	1.493	2.442	8.0	20.1	12 7	6 9.51	+19 16.1	2.540	3.492	4.9	21.6
12 17	6 1.08	+13 13.3	1.481	2.454	4.5	19.9	12 17	6 0.86	+19 1.7	2.533	3.512	1.9	21.4
12 27	5 51.56	+13 23.1	1.497	2.466	4.9	20.0	12 27	5 52.04	+18 48.9	2.556	3.531	2.4	21.4
1 6	5 42.94	+13 42.4	1.539	2.479	8.5	20.2	1 6	5 43.85	+18 38.3	2.610	3.551	5.4	21.7
1 16	5 36.28	+14 9.8	1.607	2.492	12.3	20.5	1 16	5 36.98	+18 30.4	2.694	3.569	8.3	21.9
1 26	5 32.29	+14 43.4	1.697	2.505	15.7	20.7	1 26	5 31.92	+18 25.8	2.803	3.587	10.8	22.1
364981	2008 <i>HE</i> ₅₉		12 21.1 90°32	2°6/21.0	18		246084	2006 <i>XX</i> ₃₄		12 21.1 45°84	1°8/21.1	18	
11 17	6 22.83	+16 31.2	2.057	2.876	13.1	21.2	11 17	6 25.20	+28 2.5	1.805	2.633	14.3	20.6
11 27	6 17.32	+16 10.9	1.988	2.885	9.9	21.0	11 27	6 19.56	+28 11.8	1.736	2.639	10.7	20.4
12 7	6 9.78	+15 54.9	1.943	2.893	6.3	20.8	12 7	6 11.36	+28 17.0	1.691	2.645	6.6	20.2
12 17	6 0.94	+15 44.0	1.925	2.901	3.1	20.6	12 17	6 1.46	+28 15.7	1.672	2.651	2.6	19.9
12 27	5 51.77	+15 38.6	1.937	2.909	3.6	20.7	12 27	5 51.14	+28 6.7	1.682	2.658	3.2	20.0
1 6	5 43.30	+15 39.0	1.978	2.917	7.0	20.9	1 6	5 41.71	+27 50.7	1.720	2.665	7.3	20.2
1 16	5 36.40	+15 45.1	2.046	2.925	10.4	21.1	1 16	5 34.29	+27 30.2	1.784	2.672	11.2	20.5
1 26	5 31.71	+15 56.5	2.138	2.933	13.3	21.4	1 26	5 29.61	+27 8.4	1.872	2.679	14.5	20.7
246451	2007 <i>VY</i> ₂₂₅		12 21.1 163°73	1°3/21.1	18		458667	2011 <i>GV</i> ₈₅		12 21.1 326°25	0°2/21.1	16	
11 17	6 26.84	+26 26.2	2.058	2.875	13.1	21.1	11 17	6 21.59	+23 44.7	1.985	2.814	13.1	21.3
11 27	6 20.54	+26 46.2	1.981	2.879	9.8	20.9	11 27	6 16.79	+23 48.1	1.899	2.803	9.8	21.1
12 7	6 11.86	+27 4.2	1.930	2.883	6.1	20.7	12 7	6 9.69	+23 51.4	1.837	2.793	6.0	20.8
12 17	6 1.58	+27 17.7	1.906	2.886	2.2	20.5	12 17	6 1.00	+23 53.1	1.802	2.783	1.8	20.5
12 27	5 50.83	+27 24.7	1.912	2.889	2.9	20.5	12 27	5 51.76	+23 52.4	1.796	2.774	2.6	20.6
1 6	5 40.82	+27 25.3	1.948	2.891	6.8	20.8	1 6	5 43.13	+23 49.6	1.818	2.765	6.8	20.8
1 16	5 32.57	+27 20.9	2.012	2.893	10.4	21.0	1 16	5 36.12	+23 45.4	1.868	2.756	10.7	21.0
1 26	5 26.86	+27 13.9	2.099	2.894	13.5	21.2	1 26	5 31.53	+23 41.6	1.940	2.748	14.0	21.2
301349	2009 <i>CO</i> ₁₀		12 21.1 88°26	4°7/21.7	18		254688	2005 <i>MS</i> ₁₈		12 21.1 93°10	0°2/21.1	18	
11 17	6 31.45	+36 56.6	1.802	2.610	15.1	20.2	11 17	6 25.97	+23 13.8	2.059	2.878	13.1	21.2
11 27	6 24.20	+37 0.6	1.740	2.625	11.7	20.0	11 27	6 19.60	+23 7.5	1.999	2.898	9.7	21.0
12 7	6 14.08	+36 51.7	1.701	2.640	8.1	19.8	12 7	6 11.13	+23 0.6	1.963	2.918	5.8	20.9
12 17	6 2.20	+36 26.2	1.688	2.654	5.1	19.7	12 17	6 1.36	+22 52.3	1.956	2.937	1.7	20.6
12 27	5 50.07	+35 43.1	1.704	2.668	5.2	19.7	12 27	5 51.36	+22 42.2	1.979	2.957	2.5	20.7
1 6	5 39.23	+34 45.6	1.749	2.682	8.2	19.9	1 6	5 42.23	+22 31.2	2.031	2.976	6.4	21.0
1 16	5 30.85	+33 39.5	1.820	2.696	11.6	20.2	1 16	5 34.85	+22 20.4	2.112	2.994	9.9	21.2
1 26	5 25.61	+32 31.2	1.915	2.710	14.6	20.4	1 26	5 29.82	+22 11.4	2.216	3.013	12.9	21.5
209330	2004 <i>BN</i> ₁₂₇		12 21.1 125°33	0°3/21.1	18		393411	2001 <i>OX</i> ₂₅		12 21.1 117°44	0°5/21.1	18	
11 17	6 25.28	+21 56.9	1.950	2.773	13.5	20.9	11 17	6 26.58	+22 33.8	2.386	3.195	11.8	21.6
11 27	6 19.37	+22 6.2	1.878	2.779	10.1	20.7	11 27	6 19.76	+22 21.5	2.323	3.217	8.7	21.5
12 7	6 11.14	+22 16.9	1.831	2.786	6.1	20.5	12 7	6 11.11	+22 8.8	2.285	3.238	5.3	21.3
12 17	6 1.37	+22 27.4	1.811	2.792	1.8	20.2	12 17	6 1.34	+21 54.9	2.278	3.259	1.6	21.1
12 27	5 51.18	+22 36.6	1.820	2.798	2.6	20.3	12 27	5 51.39	+21 40.2	2.301	3.278	2.3	21.1
1 6	5 41.74	+22 44.2	1.859	2.804	6.8	20.6	1 6	5 42.21	+21 25.3	2.356	3.298	5.8	21.4
1 16	5 34.06	+22 50.9	1.925	2.809	10.6	20.8	1 16	5 34.57	+21 11.5	2.439	3.316	9.0	21.6
1 26	5 28.86	+22 57.6	2.015	2.815	13.8	21.1	1 26	5 29.04	+21 0.0	2.547	3.334	11.7	21.9
314985	2006 <i>XE</i> ₄₆		12 21.1 4°84	0°5/21.1	18		495493	2014 <i>UB</i> ₁₁₀		12 21.1 14°87	6°3/20.2	17	
11 17	6 23.85	+23 26.9	1.746	2.578	14.5	20.7	11 17	6 20.74	+10 41.3	1.738	2.559	15.0	20.6
11 27	6 18.67	+23 48.5	1.672	2.578	10.8	20.5	11 27	6 16.02	+9 18.8	1.674	2.564	11.8	20.4
12 7	6 10.90	+24 11.2	1.621	2.578	6.6	20.2	12 7	6 9.11	+8 4.3	1.634	2.570	8.6	20.2
12 17	6 1.34	+24 32.7	1.597	2.578	2.0	19.9	12 17	6 0.80	+7 2.4	1.619	2.576	6.5	20.1
12 27	5 51.22	+24 50.8	1.601	2.579	2.9	20.0	12 27	5 52.16	+6 16.9	1.632	2.583	7.0	20.1
1 6	5 41.87	+25 4.8	1.634	2.581	7.4	20.3	1 6	5 44.32	+5 49.8	1.672	2.591	9.6	20.3
1 16	5 34.44	+25 15.3	1.692	2.582	11.5	20.5	1 16	5 38.20	+5 40.8	1.737	2.600	12.7	20.5
1 26	5 29.74	+25 23.8	1.774	2.584	15.0	20.7	1 26	5 34.47	+5 47.6	1.822	2.609	15.6	20.7
372798	2010 <i>RH</i> ₁₅₄		12 21.1 242°30	1°7/21.2	18		158131	2001 <i>FT</i> ₁₀		12 21.1 138°18	6°3/20		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
23952	1998 <i>UU</i> ₂₈		12 21.1	86°23	1°3/20.9	18	331302	2011 <i>EX</i> ₃₅		12 21.1	173°00	1°0/21.1	18
11 17	6 24.11	+25 30.4	2.231	3.050	12.2	18.1	11 17	6 28.03	+21 5.6	1.959	2.775	13.7	22.0
11 27	6 18.35	+26 7.0	2.160	3.059	9.1	17.9	11 27	6 21.42	+20 58.5	1.881	2.779	10.3	21.7
12 7	6 10.49	+26 43.2	2.115	3.068	5.6	17.7	12 7	6 12.42	+20 52.4	1.828	2.782	6.3	21.5
12 17	6 1.21	+27 16.1	2.097	3.077	2.0	17.5	12 17	6 1.81	+20 46.6	1.803	2.784	2.1	21.2
12 27	5 51.52	+27 43.5	2.110	3.086	2.7	17.6	12 27	5 50.76	+20 40.8	1.808	2.785	2.8	21.3
1 6	5 42.48	+28 4.4	2.153	3.095	6.2	17.8	1 6	5 40.47	+20 35.3	1.843	2.786	7.0	21.6
1 16	5 34.99	+28 19.4	2.224	3.104	9.6	18.0	1 16	5 31.98	+20 31.3	1.906	2.786	10.9	21.8
1 26	5 29.76	+28 29.9	2.319	3.113	12.4	18.2	1 26	5 26.06	+20 29.8	1.992	2.785	14.2	22.0
386759	2010 <i>CW</i> ₈₉		12 21.1	181°26	6°6/21.3	18	77981	2002 <i>JK</i> ₂₄		12 21.1	121°50	0°1/21.1	18
11 17	6 24.42	+5 57.6	1.866	2.663	15.1	21.2	11 17	6 27.63	+22 8.3	2.196	3.008	12.6	20.4
11 27	6 18.73	+5 25.9	1.792	2.664	12.1	21.0	11 27	6 20.79	+22 25.7	2.132	3.028	9.4	20.3
12 7	6 10.79	+5 7.6	1.740	2.665	9.1	20.8	12 7	6 11.87	+22 44.1	2.093	3.047	5.6	20.1
12 17	6 1.32	+5 5.7	1.715	2.665	6.9	20.7	12 17	6 1.62	+23 1.5	2.084	3.065	1.7	19.8
12 27	5 51.38	+5 21.4	1.717	2.664	7.1	20.7	12 27	5 51.07	+23 16.7	2.105	3.083	2.4	19.9
1 6	5 42.10	+5 53.9	1.747	2.663	9.5	20.9	1 6	5 41.30	+23 29.1	2.157	3.100	6.2	20.2
1 16	5 34.49	+6 40.6	1.803	2.662	12.5	21.1	1 16	5 33.20	+23 39.4	2.237	3.116	9.6	20.4
1 26	5 29.27	+7 37.7	1.881	2.661	15.4	21.2	1 26	5 27.39	+23 48.5	2.343	3.132	12.5	20.7
496593	2015 <i>BC</i> ₄₃₆		12 21.1	153°61	1°5/21.1	18	56670	2000 <i>KW</i> ₇₄		12 21.1	81°45	0°5/21.1	18
11 17	6 30.97	+26 46.3	1.605	2.429	15.9	22.0	11 17	6 27.85	+21 19.7	1.525	2.357	16.2	19.0
11 27	6 24.15	+26 59.1	1.535	2.436	11.9	21.8	11 27	6 21.73	+21 35.2	1.466	2.372	12.1	18.7
12 7	6 14.29	+27 8.7	1.488	2.442	7.4	21.5	12 7	6 12.76	+21 53.3	1.430	2.386	7.3	18.5
12 17	6 2.38	+27 11.9	1.467	2.447	2.6	21.3	12 17	6 1.93	+22 12.0	1.419	2.401	2.2	18.2
12 27	5 49.91	+27 6.8	1.475	2.452	3.4	21.3	12 27	5 50.66	+22 29.3	1.437	2.416	3.1	18.3
1 6	5 38.51	+26 54.2	1.512	2.456	8.1	21.6	1 6	5 40.47	+22 44.4	1.483	2.430	8.0	18.6
1 16	5 29.49	+26 36.8	1.575	2.460	12.5	21.9	1 16	5 32.57	+22 57.9	1.555	2.444	12.3	18.9
1 26	5 23.71	+26 18.4	1.660	2.463	16.2	22.1	1 26	5 27.73	+23 10.9	1.648	2.459	16.0	19.2
263903	2009 <i>FQ</i> ₃₅		12 21.1	76°30	2°4/21.0	18	279175	2009 <i>SM</i> ₂₇₄		12 21.1	27°30	3°6/21.0	18
11 17	6 35.44	+26 45.4	1.288	2.119	18.6	19.9	11 17	6 27.15	+29 10.9	1.186	2.035	18.8	20.4
11 27	6 27.60	+27 28.5	1.249	2.153	13.8	19.7	11 27	6 22.20	+29 52.2	1.130	2.042	14.2	20.1
12 7	6 16.30	+28 8.3	1.231	2.186	8.5	19.5	12 7	6 13.50	+30 28.9	1.094	2.050	9.1	19.9
12 17	6 2.90	+28 38.8	1.239	2.218	3.3	19.3	12 17	6 2.21	+30 54.8	1.081	2.058	4.4	19.6
12 27	5 49.32	+28 56.6	1.274	2.250	4.1	19.5	12 27	5 50.24	+31 5.9	1.093	2.068	5.1	19.7
1 6	5 37.45	+29 2.2	1.337	2.281	9.0	19.8	1 6	5 39.65	+31 2.0	1.131	2.078	9.9	20.0
1 16	5 28.64	+28 58.9	1.424	2.312	13.4	20.2	1 16	5 32.06	+30 47.2	1.191	2.088	14.7	20.3
1 26	5 23.60	+28 51.3	1.533	2.342	17.1	20.5	1 26	5 28.41	+30 26.9	1.271	2.099	18.8	20.6
226417	2003 <i>RG</i> ₃		12 21.1	5°10	2°2/21.1	17	159692	2002 <i>OV</i> ₂₀		12 21.1	100°84	5°2/21.9	18
11 17	6 22.52	+28 39.7	1.678	2.514	14.8	19.6	11 17	6 21.81	+4 24.6	2.559	3.338	12.0	20.2
11 27	6 17.83	+28 54.2	1.608	2.514	11.1	19.3	11 27	6 16.15	+4 21.7	2.496	3.356	9.6	20.0
12 7	6 10.45	+29 4.3	1.560	2.515	7.0	19.1	12 7	6 8.94	+4 30.7	2.457	3.374	7.2	19.9
12 17	6 1.25	+29 7.2	1.538	2.517	3.0	18.8	12 17	6 0.75	+4 52.7	2.446	3.391	5.5	19.8
12 27	5 51.53	+29 1.4	1.544	2.519	3.6	18.9	12 27	5 52.34	+5 27.4	2.465	3.408	5.5	19.9
1 6	5 42.70	+28 47.5	1.577	2.523	7.7	19.1	1 6	5 44.48	+6 13.3	2.513	3.425	7.2	20.0
1 16	5 35.93	+28 27.9	1.635	2.527	11.7	19.4	1 16	5 37.84	+7 8.0	2.590	3.442	9.4	20.2
1 26	5 32.01	+28 5.9	1.716	2.532	15.2	19.6	1 26	5 32.93	+8 8.7	2.691	3.458	11.6	20.4
7355	<i>Bottke</i>		12 21.1	76°71	3°0/20.9	18	197323	2003 <i>WW</i> ₁₄₉		12 21.1	2°81	5°7/20.3	17
11 17	6 31.68	+27 31.8	1.342	2.176	17.8	16.5	11 17	6 20.78	+10 23.8	1.990	2.803	13.7	20.0
11 27	6 25.07	+28 27.7	1.290	2.195	13.4	16.2	11 27	6 15.89	+9 14.2	1.918	2.803	10.8	19.8
12 7	6 14.98	+29 21.0	1.260	2.215	8.4	16.0	12 7	6 9.00	+8 11.7	1.869	2.803	7.8	19.7
12 17	6 2.59	+30 5.3	1.256	2.234	3.7	15.8	12 17	6 0.81	+7 20.1	1.847	2.803	5.8	19.5
12 27	5 49.68	+30 35.8	1.278	2.253	4.5	15.9	12 27	5 52.27	+6 42.6	1.853	2.804	6.3	19.6
1 6	5 38.15	+30 51.7	1.328	2.271	9.2	16.2	1 6	5 44.37	+6 20.5	1.887	2.806	8.8	19.7
1 16	5 29.46	+30 55.9	1.403	2.290	13.6	16.5	1 16	5 37.99	+6 13.9	1.947	2.807	11.7	19.9
1 26	5 24.48	+30 52.8	1.498	2.308	17.3	16.8	1 26	5 33.77	+6 20.9	2.029	2.809	14.4	20.1
515005	2009 <i>QA</i> ₄₉		12 21.1	51°22	0°9/21.1	18	280269	2003 <i>AK</i> ₃₈		12 21.1	350°63	2°6/20.9	18
11 17	6 28.88	+20 28.7	1.154	2.002	19.3	20.8	11 17	6 23.34	+19 52.3	1.218	2.070	18.2	20.1
11 27	6 22.90	+20 42.2	1.114	2.027	14.3	20.6	11 27	6 19.09	+19 17.7	1.150	2.065	13.8	19.9
12 7	6 13.54	+21 0.1	1.094	2.053	8.7	20.3	12 7	6 11.53	+18 45.3	1.102	2.060	8.6	19.6
12 17	6 2.11	+21 19.8	1.098	2.080	2.7	20.1	12 17	6 1.65	+18 16.3	1.077	2.057	3.5	19.3
12 27	5 50.44	+21 39.1	1.128	2.107	3.6	20.2	12 27	5 51.06	+17 52.4	1.077	2.054	4.5	19.3
1 6	5 40.33	+21 57.0	1.184	2.134	9.2	20.6	1 6	5 41.54	+17 35.4	1.103	2.052	9.8	19.6
1 16	5 33.11	+22 14.0	1.263	2.161	14.0	21.0	1 16	5 34.55	+17 26.7	1.152	2.051	14.9	19.9
1 26	5 29.48	+22 30.9	1.363	2.189	17.9	21.3	1 26	5 31.06	+17 26.9	1.220	2.051	19.2	20.2
302706	2002 <i>TA</i> ₁₇₇		12 21.1	40°70	1°0/20.9	18	196082	2002 <i>TB</i> ₈₆		12 21.1	11°33	2°2/20.9	17
11 17	6 28.10	+21 27.9	1.324	2.164	17.7	18.9	11 17	6 20.71	+18 30.2	1.892	2.722	13.6	19.6
11 27	6 22.18	+22 42.8	1.282	2.191	13.1	18.7	11 27	6 16.01	+18 6.0	1.821	2.724	10.2	19.4
12 7	6 13.12	+24 2.3	1.261	2.219	7.9	18.5	12 7	6 9.15	+17 44.8	1.773	2.727	6.4	19.2
12 17	6 2.02	+25 20.0	1.266	2.248	2.4	18.2	12 17	6 0.86	+17 27.2	1.753	2.731	2.8	19.0
12 27	5 50.53	+26 29.8	1.299	2.277	3.5	18.4	12 27	5 52.20	+17 14.0	1.761	2.735	3.4	19.0
1 6	5 40.34	+27 28.3	1.359	2.306	8.5	18.8	1 6	5 44.26	+17 6.0	1.797	2.740	7.2	19.3
1 16	5 32.75	+28 15.1	1.444	2.336	12.9	19.1	1 16	5 37.98	+17 3.5	1.859	2.745	10.8	19.5
1 26	5 28.55	+28 52.1	1.551	2.367	16.5	19.4	1 26	5 34.01	+17 6.5	1.945	2.751	14.0	19.7
160629	1999 <i>UQ</i> ₄₅		12 21.1	75°79	0°8/21.1	18	335716	2007 <i>CV</i> ₇		12 21.1	257°26	3°5/21.3	18
11 17													

EPHEMERIDES

12 21.1

12 21.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
319444	2006 <i>KL</i> ₆₁		12 21.1 184°21	3°8/21.0	17		450173	2001 <i>TZ</i> ₉		12 21.1 99°45	11°5/21.7	16	
11 17	6 28.18	+15 9.5	1.573	2.396	16.2	22.0	11 17	6 24.85	-13 57.9	2.443	3.125	14.9	22.0
11 27	6 21.99	+14 43.3	1.499	2.396	12.4	21.7	11 27	6 18.37	-15 28.3	2.408	3.155	13.4	22.0
12 7	6 12.98	+14 23.8	1.448	2.397	8.2	21.5	12 7	6 10.25	-16 36.1	2.395	3.184	12.3	21.9
12 17	6 2.04	+14 12.1	1.422	2.396	4.3	21.2	12 17	6 1.16	-17 16.6	2.404	3.213	11.6	21.9
12 27	5 50.52	+14 9.4	1.425	2.395	4.9	21.3	12 27	5 51.93	-17 27.6	2.438	3.240	11.6	22.0
1 6	5 39.86	+14 15.6	1.455	2.394	9.0	21.5	1 6	5 43.40	-17 10.3	2.494	3.267	12.2	22.1
1 16	5 31.33	+14 30.4	1.511	2.391	13.2	21.8	1 16	5 36.27	-16 28.1	2.573	3.293	13.2	22.2
1 26	5 25.76	+14 52.8	1.588	2.389	16.9	22.0	1 26	5 31.05	-15 26.5	2.671	3.319	14.3	22.3
337672	2001 <i>TL</i> ₁₈₃		12 21.1 175°86	4°5/21.1	18		132983	2002 <i>TV</i> ₁₉₆		12 21.1 101°51	1°2/21.1	18	
11 17	6 31.04	+33 55.5	1.824	2.636	14.8	21.0	11 17	6 21.97	+19 50.7	2.450	3.266	11.3	19.7
11 27	6 24.22	+34 35.7	1.749	2.638	11.4	20.8	11 27	6 16.47	+19 39.5	2.379	3.276	8.4	19.5
12 7	6 14.40	+35 8.1	1.698	2.640	7.8	20.6	12 7	6 9.23	+19 29.9	2.334	3.287	5.2	19.4
12 17	6 2.47	+35 27.3	1.673	2.641	4.9	20.4	12 17	6 0.89	+19 21.9	2.318	3.297	1.9	19.1
12 27	5 49.90	+35 29.7	1.677	2.641	5.2	20.5	12 27	5 52.28	+19 15.5	2.332	3.308	2.5	19.2
1 6	5 38.27	+35 15.7	1.709	2.641	8.5	20.7	1 6	5 44.29	+19 11.0	2.376	3.318	5.7	19.4
1 16	5 28.93	+34 48.9	1.768	2.641	12.0	20.9	1 16	5 37.63	+19 8.9	2.448	3.328	8.8	19.7
1 26	5 22.76	+34 14.8	1.849	2.640	15.3	21.1	1 26	5 32.89	+19 9.7	2.546	3.338	11.5	19.9
193351	2000 <i>UF</i> ₂₉		12 21.1 116°11	2°5/21.2	18		57918	2002 <i>EE</i> ₁₂₀		12 21.1 123°59	1°9/21.2	18	
11 17	6 27.38	+16 7.5	1.980	2.791	13.8	20.7	11 17	6 31.83	+27 50.5	1.587	2.411	16.1	20.0
11 27	6 20.69	+16 2.0	1.919	2.811	10.4	20.5	11 27	6 24.75	+28 5.2	1.524	2.424	12.1	19.8
12 7	6 11.84	+16 1.9	1.882	2.831	6.6	20.3	12 7	6 14.63	+28 15.4	1.484	2.438	7.5	19.5
12 17	6 1.64	+16 7.1	1.874	2.850	3.1	20.1	12 17	6 2.52	+28 17.8	1.471	2.450	2.9	19.3
12 27	5 51.17	+16 17.1	1.895	2.868	3.5	20.2	12 27	5 49.98	+28 10.6	1.486	2.462	3.6	19.4
1 6	5 41.54	+16 31.5	1.946	2.885	7.1	20.5	1 6	5 38.63	+27 54.6	1.530	2.474	8.1	19.7
1 16	5 33.67	+16 49.8	2.025	2.902	10.5	20.7	1 16	5 29.74	+27 33.3	1.600	2.485	12.4	19.9
1 26	5 28.20	+17 11.3	2.128	2.918	13.5	20.9	1 26	5 24.13	+27 10.7	1.692	2.495	15.9	20.2
274921	2009 <i>SM</i> ₁₅₆		12 21.1 3°63	5°0/21.1	18		41257	1999 <i>XG</i> ₄₆		12 21.1 197°13	0°9/21.1	18	
11 17	6 24.12	+13 40.7	1.291	2.131	18.1	20.5	11 17	6 23.60	+25 33.6	2.325	3.143	11.8	20.0
11 27	6 19.40	+13 9.1	1.225	2.130	14.0	20.3	11 27	6 17.96	+25 46.8	2.243	3.142	8.8	19.8
12 7	6 11.60	+12 47.6	1.180	2.130	9.4	20.0	12 7	6 10.28	+25 58.7	2.187	3.140	5.4	19.6
12 17	6 1.67	+12 38.3	1.158	2.130	5.5	19.8	12 17	6 1.24	+26 7.4	2.158	3.139	1.8	19.4
12 27	5 51.09	+12 42.7	1.162	2.131	6.0	19.8	12 27	5 51.75	+26 11.8	2.160	3.138	2.4	19.4
1 6	5 41.50	+13 0.3	1.191	2.133	10.2	20.1	1 6	5 42.86	+26 11.8	2.192	3.136	6.0	19.7
1 16	5 34.27	+13 29.4	1.244	2.135	14.7	20.3	1 16	5 35.44	+26 8.5	2.252	3.134	9.4	19.9
1 26	5 30.30	+14 7.4	1.317	2.137	18.7	20.6	1 26	5 30.17	+26 3.5	2.337	3.132	12.3	20.1
491682	2012 <i>UM</i> ₄₀		12 21.1 128°77	0°8/21.1	18		369825	2012 <i>HN</i> ₇₁		12 21.1 159°11	0°1/21.1	18	
11 17	6 29.07	+24 49.4	1.852	2.672	14.3	22.0	11 17	6 22.38	+23 37.0	2.796	3.607	10.2	22.3
11 27	6 22.31	+25 8.1	1.786	2.685	10.6	21.8	11 27	6 16.66	+23 38.6	2.717	3.612	7.6	22.1
12 7	6 13.00	+25 25.8	1.744	2.698	6.5	21.6	12 7	6 9.32	+23 39.7	2.664	3.617	4.6	21.9
12 17	6 2.02	+25 39.9	1.729	2.710	2.1	21.3	12 17	6 0.92	+23 39.4	2.640	3.622	1.4	21.7
12 27	5 50.63	+25 48.6	1.744	2.722	2.8	21.4	12 27	5 52.23	+23 37.1	2.648	3.626	1.9	21.7
1 6	5 40.14	+25 51.9	1.789	2.733	7.1	21.7	1 6	5 44.05	+23 33.1	2.687	3.630	5.1	22.0
1 16	5 31.67	+25 51.1	1.861	2.743	11.0	21.9	1 16	5 37.08	+23 28.2	2.755	3.633	8.0	22.2
1 26	5 25.96	+25 48.5	1.956	2.753	14.3	22.2	1 26	5 31.88	+23 23.3	2.848	3.636	10.5	22.3
290003	2005 <i>PY</i> ₁₈		12 21.1 174°65	2°6/21.2	18		364947	2008 <i>GM</i> ₁₈		12 21.1 212°49	1°8/21.1	17	
11 17	6 23.57	+14 32.8	2.581	3.384	11.2	22.2	11 17	6 25.37	+27 52.7	2.072	2.891	13.0	21.9
11 27	6 17.60	+14 26.5	2.500	3.387	8.5	22.0	11 27	6 19.56	+28 14.2	1.991	2.889	9.8	21.7
12 7	6 9.91	+14 25.3	2.445	3.389	5.6	21.8	12 7	6 11.39	+28 32.8	1.935	2.887	6.1	21.5
12 17	6 1.09	+14 29.4	2.418	3.391	3.0	21.7	12 17	6 1.58	+28 45.8	1.907	2.885	2.5	21.3
12 27	5 51.93	+14 38.9	2.423	3.392	3.3	21.7	12 27	5 51.26	+28 51.2	1.908	2.883	3.1	21.3
1 6	5 43.27	+14 53.3	2.458	3.393	6.1	21.9	1 6	5 41.61	+28 49.1	1.938	2.881	6.8	21.5
1 16	5 35.85	+15 12.1	2.523	3.393	9.0	22.1	1 16	5 33.69	+28 41.0	1.996	2.878	10.4	21.8
1 26	5 30.27	+15 34.8	2.612	3.392	11.6	22.2	1 26	5 28.27	+28 29.6	2.078	2.875	13.6	22.0
471074	2009 <i>WN</i> ₄₄		12 21.1 95°09	3°6/21.2	18		256373	2006 <i>YD</i> ₁₀		12 21.1 138°70	2°4/20.8	18	
11 17	6 33.38	+31 19.4	1.611	2.430	16.1	21.4	11 17	6 27.91	+28 43.3	2.433	3.239	11.7	20.7
11 27	6 25.81	+31 52.5	1.560	2.455	12.2	21.2	11 27	6 21.12	+29 35.3	2.361	3.251	8.8	20.5
12 7	6 15.18	+32 18.1	1.531	2.479	7.9	21.1	12 7	6 12.19	+30 24.7	2.315	3.263	5.6	20.3
12 17	6 2.65	+32 31.3	1.529	2.503	4.1	20.9	12 17	6 1.80	+31 8.0	2.299	3.274	2.8	20.2
12 27	5 49.82	+32 29.7	1.555	2.526	4.6	21.0	12 27	5 50.96	+31 42.2	2.314	3.284	3.3	20.2
1 6	5 38.33	+32 14.4	1.610	2.548	8.3	21.2	1 6	5 40.74	+32 6.2	2.360	3.294	6.3	20.4
1 16	5 29.44	+31 49.7	1.691	2.570	12.1	21.5	1 16	5 32.08	+32 20.9	2.434	3.304	9.3	20.6
1 26	5 23.89	+31 20.7	1.794	2.591	15.4	21.8	1 26	5 25.69	+32 28.6	2.534	3.313	11.9	20.8
112339	2002 <i>NF</i> ₆		12 21.1 88°55	0°4/21.1	17		54965	2001 <i>PN</i> ₂₇		12 21.1 90°24	4°5/21.1	18	
11 17	6 22.70	+22 31.4	2.292	3.111	11.9	20.7	11 17	6 25.66	+13 28.4	1.538	2.364	16.4	19.3
11 27	6 17.15	+22 28.0	2.221	3.121	8.8	20.5	11 27	6 20.05	+12 58.3	1.473	2.370	12.6	19.1
12 7	6 9.70	+22 24.7	2.176	3.130	5.3	20.3	12 7	6 11.77	+12 36.9	1.429	2.376	8.5	18.8
12 17	6 1.03	+22 20.7	2.158	3.140	1.6	20.1	12 17	6 1.70	+12 26.1	1.411	2.382	5.0	18.7
12 27	5 52.05	+22 15.9	2.171	3.149	2.3	20.1	12 27	5 51.16	+12 26.8	1.420	2.388	5.4	18.7
1 6	5 43.74	+22 10.4	2.214	3.158	5.9	20.4	1 6	5 41.54	+12 38.8	1.457	2.394	9.1	18.9
1 16	5 36.89	+22 5.3	2.285	3.168	9.2	20.6	1 16	5 34.00	+13 1.0	1.518	2.400	13.1	19.2
1 26	5 32.13	+22 1.4	2.380	3.177	12.1	20.8	1 26	5 29.33	+13 31.4	1.601	2.406	16.6	19.4
509506	2007 <i>VY</i> ₁₁		12 21.1 56°93	4°7/21.5	18		415018	2011 <i>HC</i> ₉₈		12 21.1 9°13	9		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
403138	2008 <i>EZ</i> ₇₄		12 21.1 273°73	1.7°/21.1	17		483209	2015 <i>PH</i> ₃₁₁		12 21.1 86°72	6°2/22.2	18	
11 17	6 24.99	+27 8.9	1.965	2.789	13.4	21.7	11 17	6 25.15	+4 44.3	1.851	2.644	15.3	20.9
11 27	6 19.42	+27 31.0	1.884	2.784	10.1	21.4	11 27	6 19.20	+4 49.4	1.790	2.659	12.3	20.7
12 7	6 11.37	+27 50.9	1.826	2.780	6.3	21.2	12 7	6 11.06	+5 10.9	1.750	2.674	9.1	20.6
12 17	6 1.60	+28 5.8	1.796	2.775	2.5	21.0	12 17	6 1.49	+5 50.0	1.737	2.689	6.6	20.4
12 27	5 51.25	+28 13.7	1.795	2.771	3.1	21.0	12 27	5 51.57	+6 45.6	1.752	2.704	6.5	20.5
1 6	5 41.59	+28 14.3	1.823	2.766	7.1	21.2	1 6	5 42.42	+7 54.6	1.796	2.718	8.8	20.6
1 16	5 33.71	+28 9.1	1.878	2.762	10.9	21.5	1 16	5 34.98	+9 12.7	1.866	2.733	11.9	20.9
1 26	5 28.43	+28 0.6	1.956	2.758	14.1	21.7	1 26	5 29.92	+10 35.6	1.961	2.747	14.7	21.1
303098	2004 <i>BJ</i> ₆₀		12 21.1 58°13	3°5/21.6	17		336114	2008 <i>KO</i> ₁		12 21.1 98°58	3°2/21.3	18	
11 17	6 28.88	+33 58.4	1.816	2.632	14.7	20.4	11 17	6 27.65	+14 58.2	1.580	2.403	16.2	21.2
11 27	6 22.44	+33 52.4	1.740	2.633	11.3	20.2	11 27	6 21.43	+14 56.9	1.520	2.418	12.3	21.0
12 7	6 13.19	+33 35.8	1.688	2.634	7.5	20.0	12 7	6 12.55	+15 4.0	1.483	2.433	7.9	20.7
12 17	6 2.12	+33 5.6	1.662	2.634	4.1	19.8	12 17	6 1.95	+15 19.4	1.472	2.448	3.9	20.5
12 27	5 50.62	+32 21.1	1.665	2.635	4.3	19.8	12 27	5 50.95	+15 42.0	1.490	2.462	4.3	20.6
1 6	5 40.17	+31 25.2	1.696	2.636	7.8	20.0	1 6	5 40.94	+16 10.5	1.535	2.477	8.3	20.9
1 16	5 31.96	+30 22.9	1.755	2.637	11.6	20.2	1 16	5 33.05	+16 43.5	1.606	2.490	12.4	21.1
1 26	5 26.76	+29 19.7	1.837	2.638	14.9	20.5	1 26	5 28.04	+17 19.5	1.700	2.504	15.8	21.4
287329	2002 <i>TX</i> ₃₀₈		12 21.1 145°10	1°7/21.2	18		518662	2008 <i>SK</i> ₂₆₈		12 21.1 119°85	2°6/21.0	18	
11 17	6 21.23	+17 14.4	2.435	3.250	11.4	21.0	11 17	6 21.77	+14 51.5	2.757	3.561	10.5	22.7
11 27	6 16.03	+17 17.7	2.356	3.251	8.6	20.8	11 27	6 16.08	+14 28.1	2.689	3.576	8.0	22.6
12 7	6 9.05	+17 25.1	2.302	3.253	5.4	20.6	12 7	6 8.91	+14 8.7	2.648	3.592	5.2	22.4
12 17	6 0.88	+17 36.3	2.276	3.254	2.3	20.4	12 17	6 0.82	+13 54.2	2.636	3.607	2.9	22.3
12 27	5 52.35	+17 50.8	2.281	3.255	2.7	20.4	12 27	5 52.54	+13 45.1	2.654	3.622	3.3	22.3
1 6	5 44.33	+18 8.2	2.315	3.256	5.9	20.7	1 6	5 44.81	+13 41.7	2.704	3.636	5.7	22.5
1 16	5 37.60	+18 27.8	2.378	3.258	9.1	20.9	1 16	5 38.24	+13 43.9	2.782	3.650	8.3	22.7
1 26	5 32.75	+18 49.5	2.465	3.259	11.8	21.0	1 26	5 33.35	+13 51.2	2.885	3.664	10.6	22.9
225424	2000 <i>AB</i> ₂₀₉		12 21.1 316°70	4°3/21.7	18		360495	2002 <i>VQ</i> ₁₄₂		12 21.1 337°09	4°9/20.3	17	
11 17	6 26.78	+37 1.4	2.107	2.914	13.3	19.6	11 17	6 26.06	+30 29.5	1.532	2.366	16.0	20.2
11 27	6 20.71	+37 4.1	2.024	2.907	10.4	19.4	11 27	6 21.23	+31 56.9	1.454	2.356	12.4	19.9
12 7	6 12.10	+36 55.7	1.964	2.901	7.3	19.2	12 7	6 13.02	+33 23.7	1.398	2.347	8.4	19.7
12 17	6 1.80	+36 32.6	1.930	2.895	4.7	19.0	12 17	6 2.24	+34 41.9	1.368	2.339	5.2	19.5
12 27	5 51.06	+35 53.8	1.926	2.889	4.9	19.0	12 27	5 50.36	+35 44.1	1.366	2.331	6.0	19.5
1 6	5 41.19	+35 1.2	1.951	2.883	7.5	19.2	1 6	5 39.18	+36 26.8	1.390	2.324	9.8	19.7
1 16	5 33.28	+33 59.2	2.003	2.878	10.7	19.4	1 16	5 30.34	+36 50.6	1.438	2.318	13.9	19.9
1 26	5 28.07	+32 53.2	2.078	2.873	13.7	19.6	1 26	5 25.04	+37 0.0	1.508	2.312	17.5	20.1
262462	2006 <i>UF</i> ₁₃₈		12 21.1 114°93	2°8/21.2	18		449892	2015 <i>MQ</i> ₁₀₃		12 21.1 192°82	0°3/21.1	18	
11 17	6 26.65	+30 48.1	1.959	2.777	13.7	21.2	11 17	6 27.89	+23 12.0	1.966	2.784	13.6	21.9
11 27	6 20.63	+31 9.3	1.885	2.781	10.4	21.0	11 27	6 21.51	+23 32.0	1.884	2.782	10.2	21.7
12 7	6 12.07	+31 24.8	1.836	2.785	6.7	20.7	12 7	6 12.63	+23 53.1	1.826	2.780	6.2	21.4
12 17	6 1.80	+31 31.4	1.813	2.788	3.4	20.5	12 17	6 2.01	+24 12.6	1.796	2.778	1.9	21.1
12 27	5 51.06	+31 27.1	1.820	2.792	3.8	20.6	12 27	5 50.80	+24 28.9	1.797	2.774	2.7	21.2
1 6	5 41.16	+31 12.4	1.855	2.795	7.3	20.8	1 6	5 40.26	+24 41.1	1.827	2.771	7.0	21.4
1 16	5 33.19	+30 50.1	1.918	2.799	10.8	21.0	1 16	5 31.52	+24 49.9	1.884	2.766	10.9	21.7
1 26	5 27.93	+30 23.8	2.004	2.802	14.0	21.2	1 26	5 25.39	+24 56.9	1.966	2.761	14.3	21.9
209579	2004 <i>XL</i> ₈₉		12 21.1 166°52	1°8/21.2	18		156598	2002 <i>GA</i> ₇₆		12 21.1 319°52	0°1/21.1	17	
11 17	6 31.89	+27 28.4	1.653	2.475	15.6	20.6	11 17	6 23.10	+23 48.4	2.001	2.827	13.1	20.3
11 27	6 24.85	+27 42.0	1.580	2.480	11.8	20.4	11 27	6 17.89	+23 48.5	1.920	2.822	9.8	20.1
12 7	6 14.77	+27 51.8	1.531	2.484	7.3	20.1	12 7	6 10.39	+23 47.9	1.862	2.818	6.0	19.9
12 17	6 2.63	+27 54.4	1.508	2.487	2.8	19.9	12 17	6 1.34	+23 45.5	1.832	2.813	1.8	19.6
12 27	5 49.90	+27 47.8	1.514	2.490	3.5	19.9	12 27	5 51.80	+23 40.8	1.831	2.809	2.5	19.6
1 6	5 38.21	+27 32.7	1.549	2.492	8.1	20.2	1 6	5 42.91	+23 33.9	1.859	2.805	6.7	19.9
1 16	5 28.87	+27 12.2	1.610	2.494	12.4	20.5	1 16	5 35.69	+23 26.1	1.914	2.801	10.5	20.1
1 26	5 22.75	+26 50.3	1.694	2.494	16.0	20.7	1 26	5 30.87	+23 19.0	1.993	2.797	13.8	20.3
447520	2006 <i>SD</i> ₁₁₈		12 21.1 31°25	5°0/21.0	17		515914	2015 <i>PU</i> ₂₉₉		12 21.1 108°04	8°1/21.9	18	
11 17	6 22.49	+12 51.8	1.514	2.345	16.3	20.5	11 17	6 36.15	+45 58.3	2.001	2.774	15.0	21.5
11 27	6 17.64	+12 8.8	1.456	2.355	12.6	20.3	11 27	6 28.04	+46 47.7	1.943	2.791	12.5	21.3
12 7	6 10.27	+11 35.1	1.420	2.366	8.6	20.1	12 7	6 16.66	+47 19.7	1.908	2.807	10.0	21.2
12 17	6 1.26	+11 13.1	1.409	2.377	5.4	20.0	12 17	6 3.18	+47 27.5	1.899	2.823	8.3	21.1
12 27	5 51.90	+11 4.6	1.424	2.390	5.9	20.0	12 27	5 49.31	+47 8.0	1.916	2.839	8.3	21.2
1 6	5 43.48	+11 9.7	1.467	2.402	9.2	20.3	1 6	5 36.83	+46 23.2	1.961	2.854	9.9	21.3
1 16	5 37.08	+11 27.0	1.533	2.416	13.0	20.5	1 16	5 27.11	+45 19.5	2.031	2.869	12.2	21.5
1 26	5 33.40	+11 54.3	1.621	2.429	16.3	20.8	1 26	5 20.91	+44 5.1	2.124	2.884	14.5	21.7
260062	2004 <i>HE</i> ₃₈		12 21.1 168°19	1°3/21.2	18		358616	2007 <i>VV</i> ₉₆		12 21.1 27°86	6°1/20.9	18	
11 17	6 24.39	+18 11.4	2.296	3.108	12.1	20.6	11 17	6 28.48	+35 48.7	1.588	2.410	16.1	21.1
11 27	6 18.48	+18 27.6	2.216	3.111	9.1	20.4	11 27	6 22.80	+36 51.8	1.523	2.414	12.7	20.9
12 7	6 10.59	+18 48.1	2.162	3.114	5.6	20.2	12 7	6 13.78	+37 45.8	1.480	2.419	9.0	20.7
12 17	6 1.36	+19 11.7	2.136	3.116	2.1	20.0	12 17	6 2.41	+38 23.4	1.462	2.423	6.4	20.5
12 27	5 51.70	+19 37.2	2.142	3.118	2.6	20.0	12 27	5 50.30	+38 39.7	1.471	2.429	6.8	20.6
1 6	5 42.60	+20 3.6	2.177	3.120	6.2	20.2	1 6	5 39.27	+38 34.6	1.506	2.434	9.7	20.8
1 16	5 34.92	+20 30.3	2.241	3.121	9.6	20.5	1 16	5 30.81	+38 12.1	1.567	2.440	13.3	21.0
1 26	5 29.34	+20 57.2	2.330	3.121	12.5	20.7	1 26	5 25.87	+37 38.8	1.648	2.447	16.5	21.2
185207	2006 <i>TP</i> ₄₇		12 21.1 34°86	0°3/21.1	18		227143	2005 <i>PT</i> ₁		12 21.1 64°			

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
175873	1999 VL ₁₃₆		12 21.1	55°49	5°7/20.6	18	73529	2003 OF ₁		12 21.1	140°60	2°0/21.3	18
11 17	6 30.74	+33 16.3	1.501	2.327	16.7	19.9	11 17	6 25.32	+30 24.0	2.390	3.201	11.7	19.7
11 27	6 24.42	+34 41.4	1.450	2.346	12.9	19.7	11 27	6 19.18	+30 24.6	2.314	3.206	8.9	19.6
12 7	6 14.70	+35 59.1	1.422	2.365	8.9	19.5	12 7	6 11.00	+30 19.8	2.263	3.212	5.6	19.4
12 17	6 2.66	+37 1.2	1.419	2.384	6.0	19.4	12 17	6 1.52	+30 7.5	2.240	3.217	2.6	19.2
12 27	5 49.99	+37 41.8	1.443	2.404	6.5	19.5	12 27	5 51.73	+29 47.3	2.248	3.221	2.9	19.2
1 6	5 38.57	+38 0.0	1.495	2.424	9.7	19.7	1 6	5 42.64	+29 20.2	2.285	3.226	6.1	19.4
1 16	5 29.85	+37 59.6	1.571	2.444	13.3	20.0	1 16	5 35.13	+28 48.6	2.352	3.230	9.2	19.6
1 26	5 24.76	+37 46.8	1.668	2.464	16.4	20.3	1 26	5 29.84	+28 15.4	2.443	3.234	11.9	19.8
316053	2009 HK ₅₃		12 21.1	255°60	13°0/16.4	18	130187	2000 AJ ₈₃		12 21.1	55°98	2°7/21.3	18
11 17	6 24.73	-11 56.9	2.237	2.940	15.6	20.4	11 17	6 26.13	+15 57.1	1.501	2.331	16.5	19.0
11 27	6 18.89	-14 14.1	2.161	2.923	14.3	20.3	11 27	6 20.34	+16 4.3	1.451	2.354	12.4	18.8
12 7	6 10.96	-16 13.3	2.107	2.905	13.4	20.2	12 7	6 11.90	+16 19.5	1.424	2.376	7.8	18.6
12 17	6 1.54	-17 46.3	2.076	2.888	13.0	20.2	12 17	6 1.80	+16 41.9	1.421	2.399	3.5	18.4
12 27	5 51.50	-18 47.2	2.069	2.869	13.5	20.1	12 27	5 51.40	+17 10.0	1.447	2.422	3.9	18.5
1 6	5 41.86	-19 13.7	2.085	2.850	14.5	20.2	1 6	5 42.08	+17 42.1	1.501	2.445	8.1	18.8
1 16	5 33.56	-19 7.4	2.121	2.831	16.0	20.3	1 16	5 34.95	+18 16.6	1.579	2.469	12.2	19.1
1 26	5 27.36	-18 32.9	2.175	2.812	17.5	20.3	1 26	5 30.71	+18 52.5	1.681	2.492	15.7	19.4
93609	2000 UX ₆₁		12 21.1	64°37	0°5/21.1	18	272013	2005 EB ₇		12 21.1	250°20	2°2/21.1	18
11 17	6 27.57	+25 1.9	1.513	2.347	16.2	18.7	11 17	6 20.87	+16 18.2	2.556	3.367	11.0	20.9
11 27	6 21.59	+24 57.8	1.454	2.360	12.1	18.5	11 27	6 15.76	+16 8.7	2.465	3.358	8.4	20.7
12 7	6 12.74	+24 51.6	1.417	2.374	7.3	18.3	12 7	6 8.93	+16 3.1	2.401	3.349	5.4	20.5
12 17	6 2.04	+24 41.5	1.407	2.388	2.2	18.0	12 17	6 0.93	+16 1.7	2.364	3.340	2.6	20.3
12 27	5 50.96	+24 27.1	1.424	2.402	3.1	18.1	12 27	5 52.52	+16 4.8	2.358	3.331	3.0	20.3
1 6	5 41.04	+24 9.5	1.468	2.416	8.0	18.4	1 6	5 44.55	+16 12.1	2.382	3.321	6.0	20.5
1 16	5 33.47	+23 51.4	1.539	2.430	12.3	18.7	1 16	5 37.76	+16 23.6	2.435	3.311	9.0	20.6
1 26	5 29.00	+23 35.1	1.631	2.444	16.0	19.0	1 26	5 32.76	+16 39.0	2.512	3.301	11.7	20.8
66674	1999 TO ₂₅		12 21.1	106°52	1°1/21.1	18	362912	2012 CJ ₃₆		12 21.1	179°61	0°6/21.2	18
11 17	6 27.86	+20 48.9	1.978	2.794	13.6	19.8	11 17	6 24.16	+20 9.1	2.301	3.116	12.0	20.9
11 27	6 21.09	+20 39.6	1.919	2.816	10.1	19.6	11 27	6 18.39	+20 30.7	2.220	3.117	9.0	20.7
12 7	6 12.12	+20 31.7	1.884	2.837	6.2	19.4	12 7	6 10.60	+20 55.3	2.164	3.117	5.5	20.5
12 17	6 1.81	+20 24.4	1.878	2.858	2.1	19.2	12 17	6 1.44	+21 21.5	2.136	3.117	1.7	20.2
12 27	5 51.28	+20 17.7	1.901	2.878	2.8	19.3	12 27	5 51.81	+21 47.8	2.140	3.117	2.4	20.3
1 6	5 41.65	+20 12.1	1.955	2.898	6.7	19.6	1 6	5 42.73	+22 13.1	2.173	3.117	6.1	20.5
1 16	5 33.85	+20 8.3	2.036	2.917	10.3	19.8	1 16	5 35.07	+22 37.0	2.235	3.116	9.5	20.7
1 26	5 28.50	+20 7.3	2.142	2.936	13.3	20.1	1 26	5 29.52	+22 59.8	2.322	3.115	12.4	20.9
414583	2009 TK ₁₈		12 21.1	66°88	3°4/21.2	16	104672	2000 GC ₁₄₆		12 21.1	116°31	0°6/21.1	18
11 17	6 27.42	+32 33.4	1.998	2.812	13.6	21.2	11 17	6 22.90	+25 18.7	2.638	3.451	10.7	20.2
11 27	6 20.99	+33 1.3	1.943	2.835	10.3	21.1	11 27	6 17.15	+25 28.0	2.567	3.463	7.9	20.0
12 7	6 12.16	+33 22.0	1.913	2.859	6.8	20.9	12 7	6 9.69	+25 35.8	2.521	3.474	4.8	19.8
12 17	6 1.84	+33 32.0	1.910	2.882	3.8	20.8	12 17	6 1.13	+25 40.9	2.505	3.486	1.6	19.6
12 27	5 51.25	+33 29.5	1.937	2.905	4.2	20.8	12 27	5 52.30	+25 42.4	2.519	3.497	2.1	19.7
1 6	5 41.65	+33 15.5	1.992	2.928	7.2	21.1	1 6	5 44.05	+25 40.6	2.565	3.508	5.3	19.9
1 16	5 34.05	+32 52.8	2.074	2.951	10.3	21.3	1 16	5 37.11	+25 36.3	2.638	3.518	8.3	20.1
1 26	5 29.10	+32 25.5	2.180	2.974	13.1	21.5	1 26	5 32.06	+25 30.8	2.738	3.529	10.8	20.3
282286	2002 PM ₈₃		12 21.1	15°75	6°3/21.9	17	354387	2003 SY ₂₆₁		12 21.1	65°13	4°7/21.2	15
11 17	6 22.31	+35 54.9	0.974	1.836	20.9	18.2	11 17	6 24.88	+12 27.6	1.594	2.417	16.1	21.6
11 27	6 19.10	+36 13.1	0.934	1.849	16.2	18.0	11 27	6 19.31	+12 0.4	1.537	2.432	12.3	21.4
12 7	6 11.75	+36 14.4	0.912	1.864	11.2	17.7	12 7	6 11.26	+11 43.0	1.502	2.447	8.4	21.2
12 17	6 1.77	+35 53.2	0.910	1.881	7.0	17.6	12 17	6 1.62	+11 37.0	1.493	2.462	5.1	21.1
12 27	5 51.44	+35 8.5	0.932	1.901	7.0	17.7	12 27	5 51.65	+11 43.2	1.511	2.477	5.5	21.1
1 6	5 42.98	+34 5.8	0.976	1.924	11.0	18.0	1 6	5 42.63	+12 0.7	1.557	2.492	8.8	21.3
1 16	5 37.90	+32 53.8	1.041	1.948	15.4	18.3	1 16	5 35.61	+12 28.0	1.628	2.508	12.5	21.6
1 26	5 36.89	+31 41.1	1.126	1.974	19.3	18.6	1 26	5 31.28	+13 2.7	1.721	2.523	15.7	21.8
159704	2002 RA ₁₈₇		12 21.1	13°42	4°4/20.6	17	163	Erigone		12 21.1	352°60	4°8/21.2	18
11 17	6 20.68	+15 7.6	1.711	2.542	14.8	18.3	11 17	6 20.13	+14 43.4	1.078	1.937	19.5	12.3
11 27	6 16.11	+14 4.3	1.647	2.547	11.3	18.1	11 27	6 17.04	+14 18.6	1.013	1.929	15.1	12.0
12 7	6 9.29	+13 5.8	1.605	2.553	7.6	17.9	12 7	6 10.53	+14 4.7	0.967	1.923	10.0	11.6
12 17	6 1.01	+12 15.2	1.590	2.560	4.7	17.8	12 17	6 1.53	+14 4.1	0.942	1.918	5.5	11.3
12 27	5 52.41	+11 35.5	1.603	2.568	5.3	17.8	12 27	5 51.70	+14 17.8	0.941	1.914	6.0	11.3
1 6	5 44.63	+11 8.6	1.642	2.577	8.5	18.0	1 6	5 42.89	+14 44.7	0.963	1.913	10.9	11.7
1 16	5 38.62	+10 54.9	1.707	2.586	12.1	18.3	1 16	5 36.67	+15 22.7	1.007	1.912	16.0	12.0
1 26	5 35.05	+10 53.3	1.794	2.597	15.2	18.5	1 26	5 34.09	+16 8.3	1.070	1.913	20.4	12.3
47397	1999 XS ₁₁₅		12 21.1	155°97	3°9/21.3	18	369840	2012 JU ₂₂		12 21.1	196°38	0°8/21.1	18
11 17	6 32.16	+32 43.0	1.700	2.516	15.5	19.0	11 17	6 23.98	+24 15.1	2.519	3.332	11.2	20.9
11 27	6 25.14	+33 10.4	1.629	2.522	11.9	18.8	11 27	6 18.19	+24 49.4	2.434	3.330	8.3	20.7
12 7	6 15.00	+33 29.7	1.581	2.527	7.9	18.6	12 7	6 10.47	+25 24.2	2.375	3.328	5.1	20.5
12 17	6 2.75	+33 36.1	1.560	2.532	4.4	18.4	12 17	6 1.41	+25 57.4	2.345	3.326	1.7	20.3
12 27	5 49.93	+33 26.7	1.567	2.536	4.8	18.4	12 27	5 51.87	+26 26.8	2.346	3.323	2.3	20.3
1 6	5 38.20	+33 2.6	1.603	2.540	8.5	18.6	1 6	5 42.81	+26 51.4	2.378	3.321	5.7	20.5
1 16	5 28.91	+32 28.1	1.665	2.543	12.3	18.9	1 16	5 35.07	+27 11.3	2.439	3.318	8.9	20.7
1 26	5 22.94	+31 48.8	1.749	2.546	15.7	19.1	1 26	5 29.33	+27 27.4	2.525	3.314	11.7	20.9
264107	2009 SZ ₃₃₇		12 21.1	96°19	0°6/21.2	18	22414	Hornschemeier		12 21.1	307°60	2°7/21.1	17
11 17	6 25.41	+25 44.6	2.364	3.177	11.8	21.0							

EPHEMERIDES

12 21.1

12 21.1

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
105096	2000 LY ₂		12 21.1 132°24	4°9/19.9	18		484191	2006 VN ₇₆		12 21.1 147°09	3°7/20.9	18	
11 17	6 27.85	+11 54.9	2.364	3.157	12.4	18.8	11 17	6 24.10	+13 12.1	2.322	3.126	12.3	22.1
11 27	6 20.70	+10 23.3	2.294	3.169	9.7	18.6	11 27	6 18.12	+12 33.6	2.250	3.135	9.4	22.0
12 7	6 11.76	+8 55.8	2.251	3.182	6.9	18.5	12 7	6 10.32	+12 0.5	2.203	3.143	6.4	21.8
12 17	6 1.73	+7 36.3	2.238	3.193	5.1	18.4	12 17	6 1.36	+11 34.5	2.184	3.151	4.0	21.7
12 27	5 51.52	+6 28.4	2.257	3.204	5.6	18.4	12 27	5 52.12	+11 16.8	2.195	3.158	4.4	21.7
1 6	5 42.04	+5 34.6	2.306	3.215	7.9	18.6	1 6	5 43.51	+11 8.0	2.236	3.164	7.0	21.9
1 16	5 34.04	+4 55.9	2.384	3.225	10.6	18.8	1 16	5 36.30	+11 8.2	2.305	3.171	9.9	22.1
1 26	5 28.08	+4 31.7	2.486	3.235	12.9	19.0	1 26	5 31.07	+11 16.5	2.399	3.176	12.6	22.3
92576	2000 OY ₅₉		12 21.1 80°64	1°3/21.1	18		304932	2007 RB ₃₂₃		12 21.1 141°96	2°0/21.2	15	
11 17	6 28.34	+20 22.5	1.584	2.412	15.9	19.8	11 17	6 26.38	+17 7.4	2.236	3.044	12.5	22.2
11 27	6 21.90	+20 15.3	1.530	2.433	11.8	19.6	11 27	6 19.90	+17 2.4	2.166	3.057	9.4	22.0
12 7	6 12.81	+20 10.6	1.499	2.454	7.2	19.4	12 7	6 11.44	+17 1.4	2.121	3.070	5.9	21.8
12 17	6 2.08	+20 7.6	1.495	2.476	2.5	19.1	12 17	6 1.70	+17 4.2	2.104	3.081	2.6	21.6
12 27	5 51.07	+20 5.9	1.519	2.497	3.2	19.2	12 27	5 51.65	+17 10.5	2.118	3.092	3.1	21.7
1 6	5 41.19	+20 5.8	1.572	2.517	7.8	19.5	1 6	5 42.29	+17 20.1	2.163	3.102	6.4	21.9
1 16	5 33.53	+20 7.9	1.650	2.538	11.9	19.8	1 16	5 34.46	+17 32.8	2.236	3.112	9.7	22.1
1 26	5 28.77	+20 13.1	1.751	2.558	15.3	20.1	1 26	5 28.78	+17 48.5	2.334	3.120	12.6	22.4
9992	1997 TG ₁₉		12 21.1 164°16	1°0/21.1	18 R		490606	2009 WN ₁₈₄		12 21.1 68°18	3°6/20.9	18	
11 17	6 32.18	+25 36.8	1.959	2.769	14.0	19.1	11 17	6 29.29	+17 42.6	1.363	2.196	17.7	20.7
11 27	6 24.64	+25 53.4	1.883	2.778	10.5	18.9	11 27	6 22.76	+16 50.1	1.316	2.220	13.3	20.5
12 7	6 14.50	+26 8.1	1.833	2.785	6.4	18.6	12 7	6 13.36	+16 2.1	1.291	2.244	8.5	20.3
12 17	6 2.62	+26 18.2	1.811	2.791	2.1	18.4	12 17	6 2.26	+15 20.8	1.291	2.267	4.2	20.1
12 27	5 50.24	+26 21.8	1.819	2.796	2.9	18.4	12 27	5 51.00	+14 48.7	1.319	2.291	4.9	20.2
1 6	5 38.72	+26 18.9	1.858	2.800	7.1	18.7	1 6	5 41.09	+14 27.3	1.374	2.315	9.2	20.5
1 16	5 29.19	+26 11.6	1.925	2.803	11.0	18.9	1 16	5 33.67	+14 17.1	1.453	2.338	13.4	20.8
1 26	5 22.44	+26 2.5	2.016	2.805	14.2	19.2	1 26	5 29.39	+14 17.5	1.554	2.362	16.9	21.1
115899	2003 VR ₉		12 21.1 257°51	3°6/20.8	18		43561	2001 FD ₈₀		12 21.1 185°09	1°6/21.0	18	
11 17	6 21.07	+13 2.6	2.491	3.297	11.5	19.8	11 17	6 22.53	+19 34.4	2.416	3.231	11.5	18.8
11 27	6 15.93	+12 26.7	2.399	3.285	8.9	19.6	11 27	6 17.02	+19 8.1	2.335	3.231	8.6	18.6
12 7	6 9.05	+11 55.6	2.332	3.273	6.1	19.4	12 7	6 9.69	+18 43.0	2.279	3.231	5.4	18.4
12 17	6 0.98	+11 31.0	2.294	3.261	3.9	19.2	12 17	6 1.19	+18 19.4	2.252	3.231	2.2	18.2
12 27	5 52.51	+11 14.2	2.286	3.248	4.2	19.2	12 27	5 52.36	+17 58.1	2.255	3.230	2.7	18.2
1 6	5 44.48	+11 6.0	2.307	3.236	6.8	19.4	1 6	5 44.10	+17 40.0	2.289	3.230	6.0	18.4
1 16	5 37.65	+11 6.4	2.356	3.223	9.7	19.5	1 16	5 37.18	+17 26.0	2.350	3.229	9.2	18.6
1 26	5 32.62	+11 14.8	2.430	3.210	12.3	19.7	1 26	5 32.21	+17 16.8	2.437	3.228	12.0	18.8
335303	2005 QL ₁₅		12 21.1 184°56	2°2/21.1	18		9038	Helensteel		12 21.1 69°27	6°7/22.1	18	
11 17	6 28.01	+17 26.9	2.031	2.842	13.5	22.1	11 17	6 24.93	+5 10.2	1.680	2.481	16.3	17.1
11 27	6 21.39	+17 13.8	1.950	2.843	10.2	21.9	11 27	6 19.21	+5 0.3	1.624	2.499	13.0	16.9
12 7	6 12.48	+17 4.5	1.893	2.843	6.5	21.6	12 7	6 11.17	+5 7.4	1.591	2.517	9.7	16.7
12 17	6 2.02	+16 58.9	1.864	2.842	2.9	21.4	12 17	6 1.64	+5 33.1	1.582	2.535	7.1	16.6
12 27	5 51.07	+16 57.2	1.866	2.840	3.4	21.5	12 27	5 51.79	+6 17.0	1.602	2.553	7.1	16.7
1 6	5 40.80	+16 59.5	1.898	2.837	7.2	21.7	1 6	5 42.81	+7 16.1	1.648	2.571	9.5	16.9
1 16	5 32.22	+17 6.0	1.957	2.834	10.9	21.9	1 16	5 35.70	+8 26.2	1.720	2.589	12.6	17.1
1 26	5 26.06	+17 16.9	2.041	2.829	14.1	22.1	1 26	5 31.13	+9 42.7	1.815	2.606	15.5	17.3
405377	2004 BK ₇₃		12 21.1 297°96	5°3/21.6	18		76225	2000 EC ₇₀		12 21.1 83°07	4°1/21.1	18	
11 17	6 28.96	+37 11.0	1.750	2.563	15.3	20.5	11 17	6 21.03	+11 13.4	2.330	3.136	12.2	18.8
11 27	6 23.10	+37 23.6	1.656	2.543	12.1	20.3	11 27	6 15.85	+10 42.3	2.262	3.146	9.4	18.6
12 7	6 14.01	+37 23.9	1.584	2.523	8.6	20.0	12 7	6 8.96	+10 18.5	2.218	3.155	6.6	18.4
12 17	6 2.57	+37 6.6	1.538	2.503	5.7	19.8	12 17	6 0.97	+10 3.6	2.201	3.164	4.4	18.3
12 27	5 50.28	+36 28.7	1.520	2.483	5.9	19.7	12 27	5 52.70	+9 58.6	2.214	3.174	4.7	18.3
1 6	5 38.88	+35 31.9	1.529	2.463	9.1	19.9	1 6	5 45.02	+10 3.4	2.256	3.183	7.0	18.5
1 16	5 29.84	+34 21.8	1.563	2.443	12.9	20.1	1 16	5 38.66	+10 17.4	2.325	3.192	9.8	18.7
1 26	5 24.17	+33 6.0	1.621	2.424	16.5	20.3	1 26	5 34.18	+10 39.0	2.419	3.201	12.3	18.9
130288	2000 ED ₃₅		12 21.1 305°09	4°8/20.8	18		298378	2003 SM ₅₁		12 21.1 298°15	4°8/20.8	18	
11 17	6 20.66	+11 15.4	2.055	2.869	13.3	19.5	11 17	6 27.73	+32 42.5	1.650	2.475	15.5	19.7
11 27	6 16.04	+10 35.5	1.960	2.848	10.5	19.3	11 27	6 22.31	+33 39.1	1.567	2.463	12.0	19.5
12 7	6 9.33	+10 2.7	1.889	2.828	7.4	19.1	12 7	6 13.63	+34 30.8	1.506	2.451	8.2	19.2
12 17	6 1.12	+9 39.4	1.844	2.807	5.1	18.9	12 17	6 2.51	+35 11.1	1.471	2.440	5.2	19.0
12 27	5 52.33	+9 27.7	1.828	2.787	5.5	18.9	12 27	5 50.41	+35 34.7	1.463	2.428	5.7	19.0
1 6	5 43.99	+9 28.2	1.839	2.767	8.3	19.0	1 6	5 39.06	+35 40.3	1.482	2.417	9.3	19.2
1 16	5 37.04	+9 40.6	1.877	2.747	11.6	19.2	1 16	5 30.01	+35 30.4	1.527	2.406	13.2	19.4
1 26	5 32.24	+10 3.6	1.938	2.728	14.7	19.3	1 26	5 24.35	+35 10.2	1.593	2.395	16.8	19.6
436465	2011 DQ ₁₃		12 21.1 217°31	0°4/21.1	18		450914	2008 CU ₂₁₄		12 21.1 259°53	1°0/21.2	17	
11 17	6 29.04	+24 26.3	1.857	2.677	14.3	22.2	11 17	6 25.16	+26 16.6	1.967	2.790	13.4	22.0
11 27	6 22.59	+24 31.9	1.770	2.669	10.7	21.9	11 27	6 19.53	+26 20.9	1.885	2.786	10.1	21.8
12 7	6 13.44	+24 36.6	1.706	2.661	6.6	21.7	12 7	6 11.48	+26 22.6	1.828	2.782	6.2	21.5
12 17	6 2.36	+24 38.1	1.670	2.652	2.0	21.4	12 17	6 1.77	+26 19.9	1.797	2.778	2.1	21.2
12 27	5 50.61	+24 35.1	1.664	2.642	2.8	21.4	12 27	5 51.54	+26 11.8	1.796	2.774	2.8	21.3
1 6	5 39.56	+24 27.9	1.687	2.632	7.4	21.7	1 6	5 42.03	+25 58.7	1.825	2.770	6.9	21.5
1 16	5 30.44	+24 18.2	1.737	2.621	11.6	21.9	1 16	5 34.28	+25 42.6	1.880	2.766	10.8	21.8
1 26	5 24.13	+24 8.4	1.811	2.609	15.2	22.1	1 26	5 29.10	+25 25.9	1.959	2.762	14.1	22.0
351390	2005 EN ₁₈₂		12 21.1 226°15	7°3/21.2	17		89848	2002 CK ₇₃		12 21.1 72°15	0°8/21.2	18	
11 17	6 34.17	+45 25.6	2.402	3.167	13.0	21.9	11 17	6 24.6					

EPHEMERIDES

12 21.1

12 21.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
129964	1999 <i>TY</i> ₃₁₄		12 21.1	93°17'	4.1°/21.0	18	47905	2000 <i>GN</i> ₆₃		12 21.2	24°92'	0.8°/21.2	18
11 17	6 26.03	+13 48.5	1.809	2.624	14.7	20.2	11 17	6 21.90	+20 50.3	1.886	2.716	13.6	18.3
11 27	6 19.89	+13 12.2	1.750	2.642	11.3	20.0	11 27	6 17.02	+20 54.3	1.819	2.723	10.2	18.1
12 7	6 11.50	+12 42.9	1.716	2.660	7.5	19.8	12 7	6 9.90	+21 0.6	1.775	2.731	6.2	17.9
12 17	6 1.73	+12 22.3	1.708	2.678	4.5	19.7	12 17	6 1.32	+21 8.4	1.758	2.739	2.0	17.7
12 27	5 51.70	+12 11.5	1.729	2.696	4.9	19.8	12 27	5 52.34	+21 16.7	1.770	2.748	2.7	17.7
1 6	5 42.58	+12 10.9	1.779	2.713	8.1	20.0	1 6	5 44.10	+21 25.3	1.810	2.757	6.8	18.0
1 16	5 35.28	+12 19.9	1.855	2.729	11.5	20.2	1 16	5 37.57	+21 34.4	1.877	2.767	10.6	18.2
1 26	5 30.46	+12 37.0	1.954	2.746	14.5	20.5	1 26	5 33.43	+21 44.6	1.967	2.777	13.8	18.5
459833	2013 <i>ST</i> ₇₅		12 21.1	167°42'	4.3°/21.1	18	32806	1990 <i>SF</i> ₁₃		12 21.2	74°67'	0.0°/21.1	18
11 17	6 20.26	+9 0.7	2.646	3.441	11.2	21.7	11 17	6 29.80	+23 21.8	1.455	2.287	16.8	19.1
11 27	6 15.16	+8 35.5	2.568	3.443	8.8	21.5	11 27	6 23.24	+23 24.0	1.404	2.310	12.5	18.9
12 7	6 8.51	+8 18.1	2.515	3.445	6.3	21.4	12 7	6 13.76	+23 26.2	1.376	2.332	7.5	18.7
12 17	6 0.85	+8 10.0	2.490	3.447	4.5	21.3	12 17	6 2.45	+23 26.2	1.373	2.354	2.2	18.4
12 27	5 52.89	+8 12.1	2.495	3.448	4.7	21.3	12 27	5 50.86	+23 23.2	1.398	2.377	3.1	18.5
1 6	5 45.39	+8 24.3	2.529	3.449	6.7	21.4	1 6	5 40.56	+23 17.8	1.451	2.399	8.1	18.9
1 16	5 39.01	+8 45.5	2.591	3.450	9.2	21.6	1 16	5 32.72	+23 11.7	1.530	2.420	12.5	19.2
1 26	5 34.30	+9 14.3	2.677	3.451	11.5	21.7	1 26	5 28.08	+23 6.9	1.630	2.442	16.0	19.5
523322	2017 <i>BL</i> ₁₃₈		12 21.1	202°36'	3.4°/21.2	17	515482	2014 <i>BK</i> ₂₈		12 21.2	313°56'	2.1°/21.1	18
11 17	6 26.99	+33 0.1	2.127	2.939	13.0	21.5	11 17	6 24.81	+19 36.6	1.362	2.205	17.2	21.4
11 27	6 20.87	+33 22.5	2.047	2.937	10.0	21.3	11 27	6 20.16	+19 20.2	1.283	2.193	13.0	21.1
12 7	6 12.28	+33 38.1	1.991	2.936	6.7	21.1	12 7	6 12.32	+19 7.2	1.224	2.181	8.2	20.8
12 17	6 2.02	+33 43.2	1.963	2.934	3.8	21.0	12 17	6 2.15	+18 57.6	1.190	2.170	3.1	20.5
12 27	5 51.25	+33 35.8	1.964	2.932	4.2	21.0	12 27	5 51.12	+18 51.6	1.182	2.159	4.0	20.5
1 6	5 41.23	+33 16.6	1.994	2.929	7.2	21.2	1 6	5 40.93	+18 49.9	1.201	2.149	9.3	20.8
1 16	5 33.04	+32 48.4	2.051	2.927	10.5	21.4	1 16	5 33.04	+18 53.1	1.243	2.139	14.3	21.0
1 26	5 27.45	+32 15.1	2.132	2.925	13.4	21.6	1 26	5 28.51	+19 1.9	1.306	2.130	18.6	21.3
417435	2006 <i>KQ</i> ₇₅		12 21.1	151°84'	5.6°/21.7	17	413789	2006 <i>HP</i> ₈₇		12 21.2	315°59'	3.8°/21.0	18
11 17	6 20.63	+3 58.3	2.529	3.309	12.0	21.0	11 17	6 25.10	+33 18.8	2.185	2.998	12.6	21.0
11 27	6 15.49	+3 44.0	2.453	3.312	9.8	20.9	11 27	6 19.50	+33 57.1	2.105	2.994	9.7	20.8
12 7	6 8.74	+3 41.8	2.401	3.315	7.5	20.7	12 7	6 11.50	+34 29.6	2.049	2.991	6.6	20.6
12 17	6 0.93	+3 53.3	2.376	3.317	5.9	20.6	12 17	6 1.83	+34 52.0	2.020	2.988	4.1	20.5
12 27	5 52.80	+4 18.9	2.380	3.319	5.9	20.7	12 27	5 51.60	+35 1.9	2.020	2.985	4.4	20.5
1 6	5 45.13	+4 57.6	2.413	3.321	7.6	20.8	1 6	5 42.02	+34 58.9	2.050	2.982	7.2	20.7
1 16	5 38.62	+5 47.3	2.473	3.323	9.9	20.9	1 16	5 34.17	+34 45.1	2.106	2.979	10.4	20.8
1 26	5 33.84	+6 45.0	2.557	3.325	12.1	21.1	1 26	5 28.83	+34 24.1	2.186	2.977	13.2	21.0
54915	2001 <i>OE</i> ₈₉		12 21.1	80°39'	0.1°/21.1	18	53568	2000 <i>CB</i> ₃₄		12 21.2	216°85'	5.7°/21.4	18
11 17	6 25.63	+23 4.3	1.846	2.672	14.1	19.3	11 17	6 23.32	+6 27.9	2.193	2.985	13.3	20.0
11 27	6 19.83	+23 17.8	1.780	2.683	10.5	19.1	11 27	6 17.80	+6 5.7	2.109	2.979	10.7	19.8
12 7	6 11.61	+23 32.0	1.738	2.694	6.4	18.8	12 7	6 10.31	+5 55.0	2.048	2.972	7.9	19.6
12 17	6 1.81	+23 45.0	1.723	2.704	1.9	18.6	12 17	6 1.46	+5 57.9	2.015	2.966	5.9	19.5
12 27	5 51.60	+23 55.2	1.737	2.715	2.7	18.7	12 27	5 52.14	+6 15.4	2.010	2.959	6.1	19.4
1 6	5 42.22	+24 2.4	1.780	2.726	7.0	18.9	1 6	5 43.32	+6 46.7	2.034	2.951	8.3	19.6
1 16	5 34.71	+24 7.4	1.850	2.737	10.8	19.2	1 16	5 35.86	+7 29.9	2.085	2.943	11.1	19.7
1 26	5 29.80	+24 11.7	1.943	2.747	14.1	19.4	1 26	5 30.46	+8 22.2	2.160	2.935	13.8	19.9
25595	1999 <i>YD</i> ₉		12 21.1	77°38'	0.7°/21.2	18	225358	1998 <i>VV</i> ₄₂		12 21.2	42°57'	3.3°/21.0	18
11 17	6 26.92	+25 32.9	1.719	2.546	14.9	19.5	11 17	6 28.54	+28 14.2	1.246	2.090	18.4	19.9
11 27	6 20.93	+25 32.5	1.654	2.558	11.1	19.3	11 27	6 23.12	+29 3.5	1.192	2.102	13.8	19.7
12 7	6 12.32	+25 29.6	1.613	2.569	6.8	19.1	12 7	6 14.11	+29 49.7	1.160	2.115	8.8	19.4
12 17	6 2.02	+25 22.6	1.599	2.580	2.1	18.8	12 17	6 2.64	+30 26.4	1.151	2.129	4.1	19.2
12 27	5 51.34	+25 10.8	1.613	2.591	2.9	18.9	12 27	5 50.58	+30 49.0	1.169	2.143	4.8	19.3
1 6	5 41.64	+24 55.1	1.656	2.602	7.4	19.2	1 6	5 39.86	+30 57.1	1.212	2.158	9.5	19.6
1 16	5 34.02	+24 37.7	1.725	2.613	11.4	19.5	1 16	5 32.04	+30 53.7	1.279	2.173	14.1	19.9
1 26	5 29.23	+24 21.2	1.817	2.624	14.8	19.7	1 26	5 28.01	+30 43.7	1.366	2.189	18.0	20.2
104982	2000 <i>JS</i> ₇₃		12 21.2	272°90'	2.8°/21.5	17	443213	2014 <i>DB</i> ₈₈		12 21.2	178°26'	1.1°/21.2	18
11 17	6 24.50	+13 51.5	1.949	2.763	13.9	19.4	11 17	6 28.47	+26 17.9	2.042	2.857	13.3	22.0
11 27	6 19.09	+14 12.6	1.857	2.750	10.7	19.1	11 27	6 21.89	+26 29.7	1.962	2.859	10.0	21.8
12 7	6 11.31	+14 43.4	1.788	2.736	7.0	18.9	12 7	6 12.89	+26 39.2	1.907	2.860	6.2	21.6
12 17	6 1.79	+15 23.4	1.747	2.722	3.4	18.6	12 17	6 2.24	+26 44.1	1.881	2.861	2.1	21.3
12 27	5 51.55	+16 11.1	1.735	2.709	3.7	18.6	12 27	5 51.09	+26 42.7	1.884	2.861	2.8	21.3
1 6	5 41.78	+17 4.0	1.753	2.695	7.5	18.8	1 6	5 40.68	+26 35.6	1.917	2.860	6.8	21.6
1 16	5 33.55	+18 0.0	1.798	2.680	11.4	19.0	1 16	5 32.07	+26 24.3	1.978	2.859	10.6	21.8
1 26	5 27.74	+18 57.1	1.867	2.666	14.8	19.2	1 26	5 26.04	+26 11.4	2.063	2.858	13.8	22.0
449989	2015 <i>PU</i> ₁₄₃		12 21.2	106°50'	3.6°/21.6	18	386007	2007 <i>DN</i> ₂₂		12 21.2	300°45'	3.1°/21.2	18
11 17	6 25.88	+12 16.3	1.752	2.567	15.2	20.7	11 17	6 24.62	+16 53.1	1.420	2.257	16.9	21.4
11 27	6 20.07	+12 30.3	1.682	2.574	11.7	20.5	11 27	6 20.01	+16 39.4	1.331	2.238	13.0	21.1
12 7	6 11.82	+12 55.4	1.636	2.581	7.7	20.3	12 7	6 12.28	+16 32.2	1.265	2.219	8.4	20.8
12 17	6 1.90	+13 31.2	1.616	2.588	4.2	20.1	12 17	6 2.18	+16 32.2	1.222	2.200	3.9	20.5
12 27	5 51.48	+14 16.3	1.625	2.595	4.4	20.1	12 27	5 51.09	+16 39.6	1.206	2.181	4.5	20.5
1 6	5 41.82	+15 8.0	1.662	2.602	8.0	20.3	1 6	5 40.64	+16 54.3	1.217	2.163	9.5	20.7
1 16	5 33.99	+16 3.8	1.727	2.609	11.8	20.6	1 16	5 32.33	+17 15.8	1.251	2.145	14.4	21.0
1 26	5 28.76	+17 1.4	1.814	2.615	15.1	20.8	1 26	5 27.27	+17 43.2	1.307	2.127	18.8	21.2
278087	2007 <i>BE</i> ₁₄		12 21.2	1°66'	2.9°/21.3	18	158797	2003 <i>SR</i> ₁₆₄		12 21.2	135°71'		

EPHEMERIDES

12 21.2

12 21.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
273248	2006 <i>KM</i> ₆₆		12 21.2 351°17	2°7/21.1 17			88531	2001 <i>QO</i> ₁₈₀		12 21.2 146°21	1°0/21.2 18	R	
11 17	6 20.91	+16 32.9	1.950	2.776	13.4	20.6	11 17	6 28.22	+19 34.5	1.760	2.581	14.8	20.3
11 27	6 16.26	+16 15.3	1.872	2.772	10.2	20.4	11 27	6 21.92	+19 53.0	1.689	2.588	11.1	20.1
12 7	6 9.46	+16 2.4	1.818	2.769	6.6	20.2	12 7	6 13.02	+20 15.9	1.641	2.595	6.8	19.9
12 17	6 1.22	+15 55.1	1.791	2.767	3.2	20.0	12 17	6 2.33	+20 41.2	1.620	2.601	2.3	19.6
12 27	5 52.53	+15 53.7	1.792	2.765	3.7	20.0	12 27	5 51.11	+21 7.1	1.629	2.606	2.9	19.6
1 6	5 44.46	+15 58.3	1.821	2.763	7.2	20.2	1 6	5 40.69	+21 32.2	1.667	2.612	7.5	19.9
1 16	5 37.96	+16 8.8	1.877	2.762	10.8	20.5	1 16	5 32.24	+21 56.2	1.731	2.616	11.6	20.2
1 26	5 33.72	+16 24.6	1.956	2.761	14.0	20.7	1 26	5 26.55	+22 19.6	1.819	2.621	15.0	20.4
335322	2005 <i>QS</i> ₁₀₄		12 21.2 150°53	0°5/21.1 18			511766	2015 <i>DZ</i> ₂₁₀		12 21.2 293°44	0°4/21.2 18		
11 17	6 29.00	+22 41.1	1.753	2.575	14.9	21.8	11 17	6 27.43	+19 54.2	1.377	2.215	17.3	21.1
11 27	6 22.46	+22 32.6	1.682	2.582	11.1	21.6	11 27	6 22.23	+20 31.3	1.299	2.207	13.1	20.9
12 7	6 13.28	+22 24.0	1.634	2.588	6.8	21.3	12 7	6 13.68	+21 16.1	1.242	2.199	8.1	20.5
12 17	6 2.36	+22 14.0	1.613	2.594	2.1	21.1	12 17	6 2.64	+22 5.3	1.210	2.192	2.5	20.2
12 27	5 50.98	+22 2.4	1.622	2.600	2.9	21.1	12 27	5 50.59	+22 54.8	1.206	2.184	3.4	20.2
1 6	5 40.52	+21 50.0	1.660	2.605	7.5	21.4	1 6	5 39.34	+23 41.3	1.228	2.177	9.0	20.5
1 16	5 32.11	+21 38.4	1.724	2.609	11.6	21.7	1 16	5 30.45	+24 23.3	1.275	2.170	14.1	20.8
1 26	5 26.53	+21 29.6	1.812	2.613	15.1	21.9	1 26	5 25.06	+25 1.3	1.343	2.163	18.4	21.1
191378	2003 <i>SJ</i> ₄		12 21.2 86°05	4°9/21.3 18			97177	1999 <i>VG</i> ₂₁₅		12 21.2 78°61	5°4/21.9 18		
11 17	6 27.78	+37 37.4	2.272	3.071	12.7	20.0	11 17	6 32.75	+37 51.7	1.692	2.500	15.9	19.6
11 27	6 21.33	+38 16.8	2.209	3.086	9.9	19.8	11 27	6 25.50	+38 5.4	1.635	2.518	12.4	19.4
12 7	6 12.49	+38 46.5	2.170	3.100	7.2	19.7	12 7	6 15.17	+38 5.2	1.600	2.535	8.8	19.2
12 17	6 2.11	+39 2.4	2.159	3.115	5.1	19.6	12 17	6 2.92	+37 46.5	1.590	2.553	5.8	19.1
12 27	5 51.35	+39 2.2	2.176	3.129	5.3	19.6	12 27	5 50.42	+37 8.0	1.609	2.570	5.9	19.1
1 6	5 41.45	+38 46.6	2.223	3.144	7.5	19.8	1 6	5 39.32	+36 12.8	1.656	2.587	8.7	19.4
1 16	5 33.43	+38 18.6	2.296	3.158	10.1	20.0	1 16	5 30.87	+35 7.2	1.729	2.605	12.1	19.6
1 26	5 27.99	+37 42.8	2.393	3.172	12.5	20.1	1 26	5 25.75	+33 58.3	1.825	2.621	15.2	19.8
231394	2006 <i>KO</i> ₆₆		12 21.2 22°93	0°5/21.2 17			76559	2000 <i>GF</i> ₉₇		12 21.2 15°48	5°0/21.4 18		
11 17	6 21.95	+21 49.4	1.879	2.709	13.7	20.4	11 17	6 28.25	+35 38.3	1.695	2.513	15.4	18.0
11 27	6 17.09	+21 51.7	1.811	2.716	10.2	20.2	11 27	6 22.41	+36 5.0	1.624	2.515	12.0	17.8
12 7	6 9.97	+21 55.5	1.767	2.723	6.2	20.0	12 7	6 13.50	+36 21.3	1.575	2.516	8.4	17.6
12 17	6 1.36	+21 59.7	1.750	2.731	1.9	19.7	12 17	6 2.50	+36 22.1	1.552	2.518	5.4	17.4
12 27	5 52.37	+22 3.5	1.761	2.739	2.6	19.8	12 27	5 50.92	+36 4.7	1.556	2.520	5.6	17.4
1 6	5 44.13	+22 7.0	1.801	2.748	6.8	20.1	1 6	5 40.39	+35 30.7	1.588	2.522	8.8	17.6
1 16	5 37.60	+22 10.7	1.867	2.758	10.6	20.3	1 16	5 32.26	+34 44.6	1.645	2.525	12.4	17.8
1 26	5 33.50	+22 15.3	1.957	2.767	13.8	20.6	1 26	5 27.37	+33 52.7	1.724	2.528	15.7	18.1
253326	2003 <i>EL</i> ₃₃		12 21.2 327°86	2°2/21.2 17			405725	2005 <i>WC</i> ₂₁₁		12 21.2 133°51	2°5/20.9 18		
11 17	6 23.03	+17 28.2	1.881	2.706	13.9	20.2	11 17	6 24.48	+17 24.8	2.331	3.141	12.0	20.7
11 27	6 17.94	+17 21.3	1.803	2.703	10.5	20.0	11 27	6 18.43	+16 43.6	2.258	3.151	9.1	20.6
12 7	6 10.54	+17 19.1	1.747	2.700	6.6	19.8	12 7	6 10.56	+16 4.7	2.212	3.160	5.8	20.4
12 17	6 1.57	+17 21.7	1.719	2.697	2.9	19.5	12 17	6 1.54	+15 29.2	2.194	3.168	2.9	20.2
12 27	5 52.08	+17 28.8	1.719	2.694	3.4	19.6	12 27	5 52.27	+14 58.5	2.206	3.177	3.4	20.3
1 6	5 43.24	+17 40.3	1.748	2.692	7.3	19.8	1 6	5 43.66	+14 34.0	2.249	3.185	6.5	20.5
1 16	5 36.07	+17 55.7	1.804	2.689	11.1	20.0	1 16	5 36.49	+14 16.5	2.320	3.193	9.6	20.7
1 26	5 31.33	+18 14.8	1.882	2.687	14.5	20.2	1 26	5 31.33	+14 6.2	2.416	3.200	12.3	20.9
436819	2012 <i>RS</i> ₂₆		12 21.2 104°36	2°8/21.2 16			375562	2008 <i>UV</i> ₃₂₁		12 21.2 135°22	0°6/21.2 17		
11 17	6 32.50	+29 43.9	1.768	2.583	15.0	22.1	11 17	6 23.36	+25 36.6	2.632	3.444	10.7	22.3
11 27	6 25.04	+30 14.0	1.712	2.607	11.3	21.9	11 27	6 17.56	+25 35.8	2.556	3.452	8.0	22.1
12 7	6 14.79	+30 38.6	1.680	2.630	7.2	21.8	12 7	6 10.04	+25 33.0	2.507	3.460	4.9	21.9
12 17	6 2.80	+30 53.5	1.676	2.652	3.4	21.6	12 17	6 1.40	+25 27.2	2.487	3.467	1.6	21.7
12 27	5 50.48	+30 56.4	1.701	2.674	3.9	21.6	12 27	5 52.48	+25 18.0	2.497	3.475	2.1	21.7
1 6	5 39.32	+30 48.1	1.755	2.695	7.6	21.9	1 6	5 44.14	+25 5.9	2.539	3.482	5.3	22.0
1 16	5 30.48	+30 31.6	1.836	2.715	11.4	22.2	1 16	5 37.13	+24 52.1	2.609	3.489	8.4	22.2
1 26	5 24.68	+30 11.2	1.940	2.735	14.5	22.4	1 26	5 32.01	+24 38.1	2.704	3.495	10.9	22.4
481660	2007 <i>VO</i> ₂₇₂		12 21.2 329°15	2°8/20.9 16			5183	Robyn		12 21.2 178°81	0°7/21.1 18		
11 17	6 23.04	+18 54.7	1.507	2.346	16.0	21.1	11 17	6 27.94	+23 44.0	2.028	2.844	13.3	16.9
11 27	6 18.50	+18 14.8	1.426	2.334	12.2	20.8	11 27	6 21.37	+23 5.4	1.948	2.846	10.0	16.7
12 7	6 11.14	+17 36.6	1.368	2.323	7.7	20.6	12 7	6 12.51	+22 23.7	1.893	2.846	6.1	16.4
12 17	6 1.79	+17 1.8	1.335	2.313	3.5	20.3	12 17	6 2.16	+21 39.2	1.866	2.847	1.9	16.2
12 27	5 51.77	+16 32.4	1.328	2.303	4.3	20.3	12 27	5 51.44	+20 53.4	1.869	2.847	2.7	16.2
1 6	5 42.54	+16 10.3	1.349	2.294	8.8	20.6	1 6	5 41.53	+20 8.6	1.903	2.846	6.8	16.5
1 16	5 35.36	+15 56.9	1.394	2.285	13.4	20.8	1 16	5 33.40	+19 27.5	1.965	2.846	10.6	16.7
1 26	5 31.14	+15 52.7	1.460	2.277	17.3	21.0	1 26	5 27.75	+18 52.5	2.051	2.844	13.9	16.9
52087	2002 <i>RH</i> ₁₁₁		12 21.2 143°49	5°7/21.5 18			270936	2002 <i>UE</i> ₇₀		12 21.2 16°80	0°9/21.1 18		
11 17	6 31.93	+40 15.6	2.239	3.026	13.2	18.9	11 17	6 25.42	+22 58.3	1.154	2.007	18.9	20.3
11 27	6 24.56	+40 53.5	2.169	3.036	10.6	18.8	11 27	6 21.01	+23 35.3	1.094	2.011	14.2	20.0
12 7	6 14.53	+41 19.7	2.124	3.045	7.9	18.6	12 7	6 12.99	+24 16.0	1.055	2.015	8.7	19.7
12 17	6 2.75	+41 29.0	2.106	3.054	6.0	18.5	12 17	6 2.41	+24 56.0	1.039	2.021	2.7	19.4
12 27	5 50.53	+41 18.8	2.116	3.062	6.1	18.5	12 27	5 51.07	+25 31.0	1.049	2.027	3.7	19.5
1 6	5 39.27	+40 50.3	2.156	3.069	8.1	18.7	1 6	5 40.93	+25 58.8	1.083	2.035	9.5	19.8
1 16	5 30.11	+40 7.5	2.222	3.077	10.7	18.8	1 16	5 33.59	+26 19.7	1.140	2.043	14.7	20.2
1 26	5 23.81	+39 16.1	2.313	3.083	13.2	19.0	1 26	5 30.05	+26 36.1	1.217	2.052	19.0	20.5
90424	2003 <i>YB</i> ₁₅₂		12 21.2 292°47	3°6/20.6 18			407172	2009 <i>UW</i> ₅₀		12 21.2 40°91	0°2/2		

EPHEMERIDES

12 21.2

12 21.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
61330	2000 <i>OT</i> ₅₈		12 21.2 106°93		1°1/21.2 18		135194	2001 <i>RY</i> ₂₃		12 21.2 192°59		1°1/21.2 18	
11 17	6 28.66	+20 6.6	1.804	2.623	14.6	19.9	11 17	6 29.58	+26 6.0	2.022	2.835	13.5	21.1
11 27	6 22.01	+20 11.8	1.744	2.643	10.9	19.7	11 27	6 22.83	+26 17.8	1.938	2.834	10.1	20.9
12 7	6 12.93	+20 19.7	1.708	2.662	6.7	19.5	12 7	6 13.56	+26 27.5	1.879	2.831	6.3	20.6
12 17	6 2.29	+20 29.0	1.699	2.680	2.2	19.2	12 17	6 2.56	+26 32.5	1.848	2.828	2.2	20.3
12 27	5 51.34	+20 38.8	1.720	2.698	2.9	19.3	12 27	5 50.98	+26 31.3	1.847	2.824	2.8	20.4
1 6	5 41.32	+20 48.7	1.771	2.715	7.2	19.6	1 6	5 40.13	+26 24.1	1.877	2.820	6.9	20.6
1 16	5 33.28	+20 59.1	1.848	2.732	11.0	19.9	1 16	5 31.10	+26 12.7	1.934	2.814	10.8	20.9
1 26	5 27.90	+21 10.6	1.949	2.748	14.3	20.2	1 26	5 24.71	+25 59.8	2.015	2.808	14.1	21.1
3660	Lazarev		12 21.2 246°35		3°2/21.2 18		338995	2004 <i>GU</i> ₁₅		12 21.2 162°43		3°8/20.4 18	
11 17	6 24.41	+33 35.4	2.558	3.364	11.2	17.1	11 17	6 33.36	+27 40.8	1.699	2.516	15.5	20.5
11 27	6 18.68	+33 58.8	2.472	3.358	8.6	16.9	11 27	6 26.42	+29 21.6	1.624	2.520	11.8	20.3
12 7	6 10.90	+34 16.1	2.410	3.351	5.9	16.7	12 7	6 16.17	+31 4.2	1.574	2.522	7.7	20.0
12 17	6 1.71	+34 24.4	2.376	3.345	3.5	16.5	12 17	6 3.44	+32 40.2	1.551	2.525	4.2	19.8
12 27	5 52.06	+34 21.9	2.372	3.338	3.8	16.5	12 27	5 49.67	+34 1.8	1.559	2.527	5.0	19.9
1 6	5 42.97	+34 8.9	2.399	3.331	6.3	16.7	1 6	5 36.60	+35 4.5	1.596	2.529	8.9	20.1
1 16	5 35.33	+33 47.2	2.453	3.324	9.2	16.9	1 16	5 25.78	+35 48.7	1.660	2.530	12.9	20.4
1 26	5 29.86	+33 20.0	2.531	3.317	11.7	17.0	1 26	5 18.35	+36 18.0	1.747	2.531	16.3	20.6
523261	2017 <i>AQ</i> ₂₃		12 21.2 260°00		2°6/21.5 17		189754	2002 <i>AB</i> ₄₂		12 21.2 42°47		4°6/21.8 18	
11 17	6 27.47	+31 58.9	1.981	2.797	13.6	21.6	11 17	6 25.84	+11 39.1	1.246	2.082	18.9	18.9
11 27	6 21.30	+31 51.2	1.901	2.795	10.4	21.4	11 27	6 20.64	+11 50.2	1.198	2.100	14.5	18.7
12 7	6 12.60	+31 35.2	1.844	2.792	6.7	21.2	12 7	6 12.41	+12 16.7	1.169	2.118	9.6	18.5
12 17	6 2.22	+31 8.7	1.815	2.790	3.3	20.9	12 17	6 2.20	+12 58.0	1.165	2.138	5.4	18.3
12 27	5 51.41	+30 31.1	1.815	2.788	3.6	21.0	12 27	5 51.58	+13 51.6	1.187	2.158	5.5	18.4
1 6	5 41.46	+29 44.5	1.844	2.786	7.1	21.2	1 6	5 42.16	+14 53.6	1.234	2.179	9.6	18.7
1 16	5 33.46	+28 52.8	1.900	2.783	10.8	21.4	1 16	5 35.20	+15 59.7	1.306	2.200	13.9	19.0
1 26	5 28.17	+28 0.5	1.981	2.781	14.0	21.6	1 26	5 31.49	+17 6.5	1.399	2.222	17.6	19.3
267519	2002 <i>NP</i> ₇₁		12 21.2 61°68		3°8/21.5 18		251426	2008 <i>AM</i> ₁₂₈		12 21.2 84°86		3°6/21.2 18	
11 17	6 22.64	+11 40.0	2.092	2.902	13.2	20.6	11 17	6 23.71	+13 53.1	1.877	2.695	14.2	20.9
11 27	6 17.18	+11 32.9	2.036	2.924	10.2	20.4	11 27	6 18.37	+13 35.6	1.804	2.698	10.9	20.7
12 7	6 9.85	+11 34.6	2.005	2.946	6.9	20.3	12 7	6 10.78	+13 25.4	1.756	2.702	7.2	20.5
12 17	6 1.36	+11 45.6	2.000	2.968	4.2	20.1	12 17	6 1.71	+13 23.6	1.734	2.705	4.1	20.3
12 27	5 52.63	+12 5.6	2.025	2.990	4.4	20.2	12 27	5 52.20	+13 30.5	1.740	2.709	4.4	20.4
1 6	5 44.63	+12 33.5	2.079	3.013	7.1	20.4	1 6	5 43.39	+13 45.7	1.775	2.713	7.7	20.6
1 16	5 38.14	+13 7.7	2.160	3.035	10.1	20.6	1 16	5 36.25	+14 8.2	1.837	2.716	11.3	20.8
1 26	5 33.73	+13 46.3	2.265	3.057	12.8	20.9	1 26	5 31.49	+14 36.7	1.921	2.720	14.5	21.0
76519	2000 <i>GN</i> ₄₆		12 21.2 320°77		2°0/21.1 18		329374	2001 <i>WK</i> ₅		12 21.2 69°57		2°1/21.1 18	
11 17	6 21.38	+18 13.1	2.087	2.910	12.8	19.0	11 17	6 33.00	+19 57.1	1.477	2.301	17.1	20.0
11 27	6 16.56	+17 55.8	2.002	2.902	9.6	18.8	11 27	6 25.17	+19 21.6	1.440	2.341	12.6	19.8
12 7	6 9.67	+17 41.4	1.941	2.894	6.1	18.5	12 7	6 14.70	+18 48.5	1.426	2.380	7.7	19.6
12 17	6 1.36	+17 30.5	1.908	2.886	2.7	18.3	12 17	6 2.78	+18 18.5	1.439	2.418	3.0	19.4
12 27	5 52.57	+17 23.5	1.903	2.878	3.2	18.3	12 27	5 50.92	+17 52.8	1.481	2.456	3.7	19.6
1 6	5 44.34	+17 20.7	1.928	2.871	6.8	18.5	1 6	5 40.55	+17 32.9	1.551	2.493	8.1	19.9
1 16	5 37.58	+17 22.4	1.980	2.864	10.4	18.7	1 16	5 32.67	+17 19.8	1.647	2.530	12.2	20.2
1 26	5 33.00	+17 28.9	2.055	2.857	13.5	18.9	1 26	5 27.84	+17 14.0	1.765	2.566	15.5	20.5
14265	2000 <i>AV</i> ₁₄₂		12 21.2 273°50		2°0/21.1 18		172194	2002 <i>PD</i> ₁₆₂		12 21.2 57°58		1°2/21.2 18	
11 17	6 21.82	+17 46.5	2.302	3.119	11.9	18.2	11 17	6 27.15	+26 24.5	1.598	2.430	15.6	20.5
11 27	6 16.71	+17 29.5	2.213	3.110	9.0	18.0	11 27	6 21.29	+26 31.6	1.540	2.445	11.6	20.3
12 7	6 9.69	+17 15.3	2.150	3.101	5.7	17.8	12 7	6 12.67	+26 35.8	1.504	2.460	7.1	20.1
12 17	6 1.36	+17 4.5	2.114	3.092	2.6	17.6	12 17	6 2.27	+26 34.7	1.495	2.476	2.4	19.8
12 27	5 52.59	+16 57.5	2.109	3.083	3.1	17.6	12 27	5 51.50	+26 27.1	1.514	2.491	3.1	19.9
1 6	5 44.31	+16 54.6	2.133	3.073	6.4	17.8	1 6	5 41.82	+26 14.1	1.560	2.507	7.7	20.2
1 16	5 37.37	+16 56.1	2.184	3.064	9.7	18.0	1 16	5 34.39	+25 57.9	1.633	2.523	11.8	20.5
1 26	5 32.44	+17 2.1	2.260	3.055	12.7	18.1	1 26	5 29.93	+25 41.4	1.727	2.540	15.3	20.8
414986	2011 <i>EW</i> ₁₂		12 21.2 268°20		3°6/20.9 18		236879	2007 <i>RU</i> ₂₈₅		12 21.2 150°33		3°4/21.6 18	
11 17	6 25.34	+32 49.4	2.302	3.113	12.1	20.8	11 17	6 26.45	+11 14.7	2.346	3.140	12.4	20.9
11 27	6 19.66	+33 31.8	2.216	3.105	9.4	20.6	11 27	6 19.94	+11 22.2	2.272	3.151	9.6	20.7
12 7	6 11.64	+34 9.2	2.155	3.098	6.4	20.4	12 7	6 11.55	+11 38.4	2.224	3.162	6.5	20.5
12 17	6 1.98	+34 37.6	2.121	3.090	3.9	20.2	12 17	6 1.92	+12 3.3	2.204	3.172	3.9	20.4
12 27	5 51.70	+34 54.2	2.118	3.082	4.3	20.3	12 27	5 51.93	+12 36.0	2.215	3.181	4.0	20.4
1 6	5 41.98	+34 58.3	2.143	3.075	7.0	20.4	1 6	5 42.52	+13 15.1	2.257	3.189	6.7	20.6
1 16	5 33.87	+34 51.6	2.195	3.067	10.1	20.6	1 16	5 34.52	+13 58.9	2.328	3.196	9.7	20.8
1 26	5 28.16	+34 37.2	2.272	3.059	12.9	20.8	1 26	5 28.55	+14 45.7	2.423	3.203	12.4	21.0
178997	2001 <i>RD</i> ₁₀		12 21.2 49°08		13°4/18.4 18		130013	1999 <i>VB</i> ₅₆		12 21.2 57°84		4°9/20.9 18	
11 17	6 30.04	+ 6 56.3	0.966	1.803	23.0	18.9	11 17	6 25.22	+13 41.8	1.558	2.384	16.2	19.5
11 27	6 24.28	+ 3 45.5	0.920	1.811	18.9	18.7	11 27	6 19.68	+12 49.8	1.501	2.398	12.5	19.3
12 7	6 14.81	+ 0 49.0	0.893	1.818	15.3	18.5	12 7	6 11.61	+12 5.3	1.466	2.411	8.4	19.1
12 17	6 2.92	- 1 37.0	0.889	1.826	13.5	18.4	12 17	6 1.95	+11 31.4	1.456	2.425	5.2	19.0
12 27	5 50.58	- 3 19.2	0.907	1.835	14.5	18.5	12 27	5 51.97	+11 10.1	1.474	2.439	5.7	19.0
1 6	5 39.80	- 4 12.9	0.946	1.844	17.5	18.7	1 6	5 42.98	+11 2.2	1.520	2.454	9.1	19.3
1 16	5 32.08	- 4 21.5	1.004	1.853	21.0	19.0	1 16	5 36.03	+11 7.2	1.590	2.468	12.8	19.5
1 26	5 28.26	- 3 54.5	1.078	1.863	24.2	19.2	1 26	5 31.82	+11 23.2	1.681	2.483	16.1	19.8
103435	2000 <i>AO</i> ₁₇₆		12 21.2 357°69		4°8/20.9 17		487908	2015 <i>TJ</i> ₁₈₃		12 21.2 79°75		2	

EPHEMERIDES

12 21.2

12 21.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
387895	2004 <i>TU</i> ₁₉₈		12 21.2 170°08		1°0/21.2 18		446519	2014 <i>LW</i> ₁		12 21.2 79°25		0°3/21.2 18	
11 17	6 28.57	+25 41.1	2.034	2.849	13.3	21.8	11 17	6 27.05	+22 55.1	1.820	2.643	14.3	21.1
11 27	6 22.01	+25 56.6	1.956	2.853	10.0	21.6	11 27	6 20.93	+23 18.7	1.761	2.662	10.6	20.9
12 7	6 13.03	+26 10.4	1.903	2.856	6.1	21.4	12 7	6 12.36	+23 43.3	1.725	2.680	6.4	20.7
12 17	6 2.41	+26 20.1	1.878	2.859	2.1	21.1	12 17	6 2.22	+24 6.4	1.717	2.698	1.9	20.5
12 27	5 51.29	+26 24.2	1.884	2.861	2.7	21.1	12 27	5 51.72	+24 26.1	1.738	2.717	2.7	20.6
1 6	5 40.91	+26 22.7	1.919	2.862	6.8	21.4	1 6	5 42.12	+24 41.7	1.789	2.735	7.0	20.9
1 16	5 32.33	+26 16.9	1.982	2.863	10.5	21.6	1 16	5 34.45	+24 53.9	1.866	2.752	10.8	21.1
1 26	5 26.32	+26 9.4	2.069	2.863	13.7	21.9	1 26	5 29.44	+25 3.9	1.967	2.770	14.0	21.4
256438	2007 <i>CM</i> ₁₄		12 21.2 11°50		1°1/21.2 17		330747	2008 <i>SX</i> ₁₂₁		12 21.2 165°08		4°1/20.9 17	
11 17	6 23.46	+20 25.4	1.916	2.742	13.6	21.5	11 17	6 21.13	+10 42.5	2.610	3.409	11.2	21.5
11 27	6 18.25	+20 21.0	1.840	2.743	10.2	21.3	11 27	6 15.89	+10 6.6	2.533	3.411	8.8	21.4
12 7	6 10.76	+20 18.9	1.789	2.743	6.3	21.0	12 7	6 9.06	+9 37.2	2.480	3.414	6.2	21.2
12 17	6 1.73	+20 18.4	1.764	2.744	2.2	20.8	12 17	6 1.22	+9 15.9	2.456	3.416	4.3	21.1
12 27	5 52.23	+20 19.1	1.768	2.745	2.8	20.8	12 27	5 53.08	+9 4.0	2.462	3.418	4.6	21.1
1 6	5 43.43	+20 21.2	1.801	2.746	6.9	21.1	1 6	5 45.42	+9 1.7	2.497	3.419	6.7	21.3
1 16	5 36.32	+20 24.9	1.860	2.748	10.8	21.3	1 16	5 38.92	+9 8.8	2.560	3.420	9.2	21.4
1 26	5 31.63	+20 31.1	1.943	2.749	14.0	21.5	1 26	5 34.12	+9 24.0	2.647	3.422	11.6	21.6
182988	2002 <i>OM</i> ₈		12 21.2 128°37		1°4/21.3 18		199643	2006 <i>GO</i> ₁₇		12 21.2 139°95		2°2/21.2 17	
11 17	6 31.35	+27 35.1	1.613	2.436	15.9	21.1	11 17	6 21.66	+15 54.1	2.674	3.481	10.7	21.8
11 27	6 24.47	+27 30.8	1.546	2.447	11.9	20.9	11 27	6 16.26	+15 42.1	2.599	3.489	8.1	21.7
12 7	6 14.64	+27 21.5	1.503	2.457	7.4	20.7	12 7	6 9.28	+15 33.9	2.549	3.496	5.2	21.5
12 17	6 2.89	+27 4.8	1.486	2.466	2.6	20.4	12 17	6 1.28	+15 30.0	2.528	3.503	2.6	21.3
12 27	5 50.71	+26 40.1	1.498	2.475	3.2	20.5	12 27	5 53.01	+15 30.6	2.538	3.510	3.0	21.4
1 6	5 39.67	+26 9.4	1.538	2.484	7.9	20.8	1 6	5 45.23	+15 35.6	2.579	3.516	5.7	21.5
1 16	5 31.02	+25 36.1	1.605	2.492	12.2	21.0	1 16	5 38.63	+15 44.7	2.648	3.522	8.5	21.7
1 26	5 25.54	+25 4.3	1.695	2.500	15.8	21.3	1 26	5 33.74	+15 57.8	2.742	3.528	10.9	21.9
414923	2011 <i>AT</i> ₃₉		12 21.2 269°57		0°2/21.2 17		390637	2002 <i>JO</i> ₁₀₈		12 21.2 197°63		4°3/21.5 18	
11 17	6 24.24	+25 22.1	2.189	3.009	12.4	20.9	11 17	6 25.23	+9 44.6	2.304	3.098	12.7	22.1
11 27	6 18.61	+25 3.3	2.107	3.006	9.3	20.7	11 27	6 19.20	+9 35.5	2.218	3.095	9.9	21.9
12 7	6 10.87	+24 41.7	2.050	3.004	5.6	20.5	12 7	6 11.22	+9 35.7	2.157	3.091	7.0	21.7
12 17	6 1.74	+24 16.4	2.021	3.002	1.7	20.2	12 17	6 1.90	+9 46.2	2.124	3.086	4.6	21.6
12 27	5 52.23	+23 48.0	2.022	3.000	2.3	20.3	12 27	5 52.12	+10 7.1	2.121	3.081	4.8	21.6
1 6	5 43.39	+23 17.8	2.053	2.998	6.3	20.5	1 6	5 42.83	+10 37.6	2.148	3.075	7.3	21.7
1 16	5 36.13	+22 47.8	2.111	2.996	9.8	20.7	1 16	5 34.89	+11 16.1	2.203	3.068	10.3	21.9
1 26	5 31.12	+22 20.3	2.194	2.994	12.9	20.9	1 26	5 28.97	+12 0.7	2.283	3.061	13.1	22.1
269098	2007 <i>HB</i> ₆₆		12 21.2 124°14		5°4/21.4 18		515291	2012 <i>TO</i> ₂₇₅		12 21.2 186°45		2°8/21.3 18	
11 17	6 21.13	+5 4.3	2.628	3.410	11.6	20.5	11 17	6 30.54	+30 46.1	1.908	2.722	14.2	22.1
11 27	6 15.80	+4 35.1	2.561	3.421	9.4	20.3	11 27	6 23.76	+31 1.0	1.829	2.722	10.8	21.9
12 7	6 8.95	+4 16.2	2.518	3.433	7.1	20.2	12 7	6 14.24	+31 9.7	1.773	2.721	7.0	21.6
12 17	6 1.14	+4 9.6	2.502	3.444	5.6	20.1	12 17	6 2.84	+31 8.6	1.745	2.720	3.4	21.4
12 27	5 53.09	+4 16.1	2.516	3.454	5.7	20.2	12 27	5 50.87	+30 55.9	1.746	2.719	3.8	21.4
1 6	5 45.54	+4 35.2	2.559	3.465	7.3	20.3	1 6	5 39.76	+30 32.5	1.776	2.716	7.5	21.7
1 16	5 39.14	+5 5.5	2.629	3.475	9.5	20.4	1 16	5 30.73	+30 1.6	1.834	2.714	11.3	21.9
1 26	5 34.41	+5 44.6	2.723	3.485	11.6	20.6	1 26	5 24.59	+29 27.5	1.915	2.710	14.6	22.1
125976	2001 <i>YR</i> ₂₀		12 21.2 135°77		2°7/21.2 18		331818	2003 <i>SR</i> ₂₉₂		12 21.2 35°28		0°3/21.2 17	
11 17	6 26.68	+30 20.3	2.068	2.884	13.1	20.4	11 17	6 23.86	+25 25.6	1.983	2.808	13.3	20.2
11 27	6 20.69	+30 48.1	1.993	2.887	10.0	20.2	11 27	6 18.45	+25 10.4	1.913	2.815	9.9	20.0
12 7	6 12.27	+31 11.3	1.942	2.891	6.4	20.0	12 7	6 10.83	+24 52.4	1.866	2.822	6.0	19.8
12 17	6 2.20	+31 26.4	1.919	2.894	3.2	19.8	12 17	6 1.77	+24 31.1	1.847	2.829	1.8	19.5
12 27	5 51.64	+31 31.3	1.926	2.898	3.7	19.9	12 27	5 52.37	+24 6.5	1.858	2.836	2.5	19.6
1 6	5 41.83	+31 26.1	1.961	2.901	7.0	20.1	1 6	5 43.77	+23 40.1	1.897	2.844	6.6	19.9
1 16	5 33.82	+31 12.7	2.024	2.904	10.4	20.3	1 16	5 36.91	+23 13.9	1.964	2.852	10.3	20.1
1 26	5 28.39	+30 54.6	2.111	2.907	13.4	20.5	1 26	5 32.44	+22 50.1	2.054	2.860	13.4	20.3
26123	1992 <i>OK</i>		12 21.2 55°75		1°8/21.1 18		295597	2008 <i>SP</i> ₁₆₁		12 21.2 118°51		0°5/21.2 18	
11 17	6 29.85	+20 32.9	1.567	2.393	16.1	18.2	11 17	6 23.16	+21 26.6	2.578	3.390	10.9	21.6
11 27	6 22.79	+19 59.3	1.531	2.433	11.9	18.1	11 27	6 17.44	+21 27.7	2.507	3.403	8.1	21.4
12 7	6 13.27	+19 27.7	1.518	2.472	7.3	17.9	12 7	6 10.02	+21 29.6	2.462	3.415	4.9	21.2
12 17	6 2.40	+18 58.5	1.531	2.511	2.7	17.7	12 17	6 1.52	+21 31.6	2.446	3.427	1.6	21.0
12 27	5 51.57	+18 32.9	1.573	2.549	3.4	17.8	12 27	5 52.75	+21 33.4	2.462	3.439	2.1	21.1
1 6	5 42.08	+18 12.3	1.644	2.588	7.6	18.2	1 6	5 44.55	+21 35.0	2.507	3.451	5.4	21.3
1 16	5 34.86	+17 57.8	1.741	2.626	11.5	18.5	1 16	5 37.66	+21 36.7	2.582	3.462	8.4	21.5
1 26	5 30.46	+17 49.8	1.861	2.664	14.7	18.8	1 26	5 32.62	+21 39.3	2.681	3.473	11.0	21.7
330167	2006 <i>BO</i> ₁₅₅		12 21.2 215°99		1°3/21.2 18		284113	2005 <i>TD</i> ₄₅		12 21.2 166°69		0°5/21.2 18	
11 17	6 22.45	+18 46.6	2.536	3.348	11.1	21.4	11 17	6 29.02	+22 8.1	1.960	2.775	13.8	22.0
11 27	6 17.05	+18 49.4	2.449	3.343	8.3	21.2	11 27	6 22.35	+22 6.2	1.884	2.781	10.3	21.8
12 7	6 9.87	+18 55.0	2.387	3.338	5.2	21.0	12 7	6 13.25	+22 4.8	1.832	2.785	6.3	21.5
12 17	6 1.47	+19 3.1	2.354	3.333	2.0	20.8	12 17	6 2.53	+22 2.6	1.808	2.789	2.0	21.2
12 27	5 52.65	+19 13.2	2.351	3.327	2.4	20.8	12 27	5 51.36	+21 59.0	1.814	2.792	2.6	21.3
1 6	5 44.30	+19 24.8	2.379	3.321	5.7	21.0	1 6	5 40.96	+21 54.4	1.851	2.795	6.9	21.6
1 16	5 37.18	+19 38.0	2.436	3.315	8.9	21.2	1 16	5 32.38	+21 49.8	1.915	2.796	10.8	21.8
1 26	5 31.91	+19 52.7	2.517	3.309	11.6	21.4	1 26	5 26.39	+21 46.8	2.002	2.797	14.1	22.0
495066	2011 <i>FF</i>		12 21.2 273°06		0°4/21.2 18		23408	Beijingaoyun		12 21.2 39°68		6°9/20.7 18	
11 17	6 2												

EPHEMERIDES

12 21.2

12 21.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
233876	2008 <i>WB</i> ₆₁		12 21.2 308°78	0°9/21.2	18		40149	1998 <i>QF</i> ₇₄		12 21.2 191°19	3°3/21.0	18	
11 17	6 22.64	+25 0.7	2.284	3.104	11.9	20.2	11 17	6 22.33	+14 8.5	2.379	3.188	11.9	19.1
11 27	6 17.50	+25 22.3	2.199	3.098	8.9	20.0	11 27	6 16.97	+13 35.5	2.299	3.187	9.1	18.9
12 7	6 10.30	+25 43.5	2.138	3.092	5.5	19.7	12 7	6 9.83	+13 7.2	2.243	3.186	6.1	18.7
12 17	6 1.66	+26 2.4	2.106	3.087	1.8	19.5	12 17	6 1.50	+12 44.9	2.216	3.185	3.6	18.6
12 27	5 52.52	+26 17.4	2.104	3.081	2.4	19.5	12 27	5 52.83	+12 29.9	2.218	3.184	4.0	18.6
1 6	5 43.90	+26 28.0	2.131	3.076	6.1	19.8	1 6	5 44.69	+12 22.7	2.250	3.182	6.7	18.8
1 16	5 36.71	+26 34.5	2.186	3.070	9.5	20.0	1 16	5 37.84	+12 23.4	2.310	3.181	9.7	19.0
1 26	5 31.68	+26 38.5	2.265	3.065	12.5	20.2	1 26	5 32.91	+12 31.3	2.394	3.179	12.4	19.1
413756	2006 <i>DW</i> ₉₉		12 21.2	9°88	4°9/21.3	16	425092	2009 <i>SE</i> ₄₄		12 21.2 115°00	2°7/21.3	18	
11 17	6 25.83	+35 20.5	1.826	2.644	14.5	21.5	11 17	6 33.28	+30 5.2	1.753	2.567	15.2	21.0
11 27	6 20.51	+35 57.2	1.755	2.646	11.3	21.3	11 27	6 25.73	+30 25.7	1.694	2.587	11.5	20.8
12 7	6 12.37	+36 25.1	1.707	2.648	7.9	21.1	12 7	6 15.34	+30 40.0	1.658	2.607	7.3	20.6
12 17	6 2.30	+36 39.3	1.685	2.650	5.2	21.0	12 17	6 3.16	+30 44.3	1.650	2.626	3.4	20.4
12 27	5 51.67	+36 36.8	1.691	2.653	5.5	21.0	12 27	5 50.65	+30 36.7	1.671	2.645	3.8	20.5
1 6	5 41.94	+36 18.2	1.724	2.657	8.4	21.2	1 6	5 39.31	+30 18.4	1.722	2.663	7.7	20.8
1 16	5 34.35	+35 47.1	1.783	2.661	11.7	21.4	1 16	5 30.31	+29 52.8	1.799	2.679	11.5	21.0
1 26	5 29.72	+35 8.6	1.864	2.665	14.8	21.6	1 26	5 24.41	+29 24.6	1.900	2.696	14.7	21.3
196930	2003 <i>UA</i> ₁₁		12 21.2	0°49	3°1/21.1	17	220468	2004 <i>BB</i> ₇₁		12 21.2 339°20	3°0/21.3	18	
11 17	6 18.10	+18 2.4	1.360	2.212	16.6	19.3	11 17	6 27.81	+29 26.5	1.287	2.130	18.0	20.0
11 27	6 14.99	+17 28.0	1.294	2.208	12.6	19.0	11 27	6 22.83	+29 42.8	1.216	2.125	13.7	19.7
12 7	6 9.10	+16 58.1	1.248	2.206	8.1	18.8	12 7	6 14.20	+29 53.2	1.165	2.120	8.8	19.5
12 17	6 1.33	+16 34.3	1.227	2.205	3.8	18.5	12 17	6 2.95	+29 53.2	1.138	2.116	3.9	19.2
12 27	5 53.01	+16 18.2	1.232	2.207	4.5	18.6	12 27	5 50.85	+29 40.1	1.137	2.113	4.5	19.2
1 6	5 45.59	+16 11.0	1.261	2.210	8.9	18.8	1 6	5 39.90	+29 14.9	1.161	2.110	9.5	19.5
1 16	5 40.25	+16 12.7	1.315	2.215	13.3	19.1	1 16	5 31.73	+28 42.2	1.210	2.107	14.5	19.7
1 26	5 37.82	+16 22.6	1.388	2.222	17.2	19.4	1 26	5 27.37	+28 7.3	1.278	2.105	18.7	20.0
263029	2007 <i>EZ</i> ₂₂₃		12 21.2 288°21	1°2/21.2	17		223043	2002 <i>TM</i> ₇₁		12 21.2 146°50	0°3/21.2	18	
11 17	6 23.05	+19 56.9	2.109	2.930	12.7	20.6	11 17	6 30.48	+25 17.7	1.710	2.532	15.2	20.3
11 27	6 17.83	+19 55.1	2.028	2.927	9.5	20.4	11 27	6 23.71	+25 4.9	1.640	2.540	11.4	20.1
12 7	6 10.49	+19 55.8	1.970	2.924	5.9	20.2	12 7	6 14.18	+24 49.1	1.592	2.547	6.9	19.9
12 17	6 1.72	+19 58.5	1.941	2.921	2.1	19.9	12 17	6 2.84	+24 28.9	1.572	2.553	2.1	19.6
12 27	5 52.47	+20 2.6	1.941	2.918	2.7	19.9	12 27	5 51.07	+24 4.1	1.581	2.560	2.9	19.6
1 6	5 43.81	+20 8.0	1.970	2.915	6.5	20.2	1 6	5 40.30	+23 36.4	1.620	2.565	7.6	19.9
1 16	5 36.67	+20 15.0	2.027	2.912	10.1	20.4	1 16	5 31.71	+23 8.6	1.685	2.570	11.8	20.2
1 26	5 31.75	+20 24.0	2.107	2.909	13.3	20.6	1 26	5 26.08	+22 43.6	1.773	2.575	15.3	20.4
206500	2003 <i>UQ</i> ₁₀₃		12 21.2	80°47	0°9/21.2	18	217520	2006 <i>UC</i> ₁₉₁		12 21.2 104°28	0°8/21.3	18	
11 17	6 29.23	+21 12.8	1.753	2.574	14.9	20.7	11 17	6 32.20	+26 26.3	1.533	2.359	16.5	20.5
11 27	6 22.37	+21 5.9	1.704	2.603	11.1	20.5	11 27	6 25.10	+26 12.5	1.474	2.376	12.3	20.3
12 7	6 13.13	+21 0.3	1.678	2.632	6.7	20.3	12 7	6 15.02	+25 54.4	1.438	2.393	7.5	20.0
12 17	6 2.45	+20 55.1	1.680	2.660	2.2	20.1	12 17	6 3.08	+25 30.3	1.428	2.409	2.4	19.7
12 27	5 51.60	+20 50.1	1.711	2.689	2.8	20.2	12 27	5 50.83	+25 0.2	1.447	2.425	3.1	19.8
1 6	5 41.85	+20 45.8	1.771	2.716	7.1	20.5	1 6	5 39.86	+24 26.5	1.495	2.441	8.0	20.2
1 16	5 34.16	+20 43.0	1.858	2.743	10.9	20.8	1 16	5 31.39	+23 52.7	1.568	2.456	12.4	20.5
1 26	5 29.16	+20 42.9	1.969	2.770	14.1	21.1	1 26	5 26.14	+23 22.4	1.664	2.471	16.0	20.7
213129	2000 <i>DY</i> ₄₃		12 21.2 152°77	6°1/21.5	18		490174	2008 <i>UR</i> ₂₅₆		12 21.2 78°88	3°3/21.0	17	
11 17	6 23.55	+ 6 30.4	1.960	2.758	14.4	20.5	11 17	6 21.42	+14 15.4	2.365	3.176	11.9	21.6
11 27	6 18.17	+ 6 3.8	1.887	2.760	11.6	20.3	11 27	6 16.27	+13 41.3	2.290	3.180	9.1	21.4
12 7	6 10.68	+ 5 49.9	1.837	2.762	8.6	20.1	12 7	6 9.39	+13 12.0	2.241	3.185	6.1	21.2
12 17	6 1.77	+ 5 51.1	1.813	2.764	6.4	20.0	12 17	6 1.38	+12 48.9	2.219	3.189	3.6	21.1
12 27	5 52.42	+ 6 8.4	1.817	2.766	6.6	20.0	12 27	5 53.07	+12 33.1	2.228	3.194	4.0	21.1
1 6	5 43.71	+ 6 40.9	1.848	2.768	8.9	20.1	1 6	5 45.32	+12 25.2	2.265	3.198	6.6	21.3
1 16	5 36.54	+ 7 26.0	1.907	2.769	11.8	20.3	1 16	5 38.88	+12 25.1	2.331	3.203	9.6	21.5
1 26	5 31.61	+ 8 20.6	1.988	2.771	14.6	20.5	1 26	5 34.31	+12 32.4	2.420	3.207	12.2	21.7
436920	2012 <i>TZ</i> ₉₇		12 21.2 118°28	1°0/21.2	18		325744	2009 <i>WE</i> ₁		12 21.2 82°50	0°6/21.2	18	
11 17	6 29.06	+21 1.0	1.830	2.648	14.5	22.2	11 17	6 24.91	+23 17.8	2.202	3.020	12.4	20.6
11 27	6 22.34	+20 53.6	1.767	2.665	10.8	22.0	11 27	6 19.12	+23 54.9	2.134	3.032	9.2	20.4
12 7	6 13.20	+20 47.6	1.728	2.681	6.6	21.8	12 7	6 11.24	+24 33.2	2.091	3.045	5.6	20.2
12 17	6 2.50	+20 42.2	1.716	2.697	2.2	21.6	12 17	6 1.97	+25 10.1	2.076	3.057	1.8	19.9
12 27	5 51.49	+20 37.0	1.734	2.712	2.9	21.7	12 27	5 52.29	+25 43.3	2.092	3.070	2.4	20.0
1 6	5 41.41	+20 32.4	1.782	2.726	7.1	22.0	1 6	5 43.26	+26 11.5	2.138	3.082	6.1	20.3
1 16	5 33.30	+20 29.5	1.857	2.740	11.0	22.2	1 16	5 35.78	+26 34.7	2.212	3.095	9.5	20.5
1 26	5 27.83	+20 29.3	1.955	2.754	14.3	22.5	1 26	5 30.53	+26 54.0	2.310	3.107	12.4	20.7
491086	2011 <i>SA</i> ₁₀		12 21.2	33°63	3°4/21.3	17	361343	2006 <i>UF</i> ₁₃₃		12 21.2 274°74	2°7/21.1	17	
11 17	6 25.40	+16 40.0	1.145	1.994	19.3	20.2	11 17	6 26.46	+29 18.8	1.922	2.743	13.8	21.2
11 27	6 20.32	+16 21.5	1.111	2.023	14.4	20.0	11 27	6 20.86	+29 54.0	1.838	2.736	10.5	21.0
12 7	6 12.16	+16 11.6	1.096	2.052	9.1	19.8	12 7	6 12.60	+30 26.2	1.779	2.729	6.7	20.7
12 17	6 2.18	+16 10.9	1.105	2.083	4.2	19.6	12 17	6 2.44	+30 51.2	1.746	2.722	3.3	20.5
12 27	5 52.05	+16 18.8	1.140	2.115	4.7	19.7	12 27	5 51.59	+31 6.3	1.742	2.715	3.8	20.5
1 6	5 43.39	+16 34.4	1.200	2.148	9.3	20.1	1 6	5 41.41	+31 10.5	1.767	2.708	7.5	20.7
1 16	5 37.37	+16 56.2	1.283	2.181	13.8	20.4	1 16	5 33.09	+31 5.8	1.819	2.701	11.3	21.0
1 26	5 34.62	+17 22.8	1.386	2.215	17.4	20.8	1 26	5 27.53	+30 55.1	1.894	2.694	14.6	21.2
116462	2004 <i>AG</i> ₈		12 21.2 356°77	3°8/21.9	18		511824	2015 <i>FL</i> ₁₇₄		12 21.2 300°51</			

EPHEMERIDES

12 21.2

12 21.2

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
209771	2005 <i>EB</i> ₂₉₂		12 21.2 294°76		1°3/21.1 18		381343	2008 <i>CG</i> ₂₅		12 21.2 248°41		3°2/21.3 18	
11 17	6 26.52	+23 47.7	1.720	2.548	14.8	19.9	11 17	6 27.49	+15 37.0	1.598	2.421	16.0	21.6
11 27	6 21.16	+24 38.1	1.635	2.539	11.2	19.7	11 27	6 21.88	+15 28.1	1.512	2.410	12.3	21.3
12 7	6 12.94	+25 31.9	1.574	2.529	6.9	19.4	12 7	6 13.38	+15 26.5	1.448	2.398	8.0	21.1
12 17	6 2.59	+26 24.9	1.539	2.519	2.4	19.1	12 17	6 2.78	+15 32.7	1.409	2.385	3.9	20.8
12 27	5 51.36	+27 13.0	1.533	2.510	3.2	19.1	12 27	5 51.33	+15 46.7	1.399	2.373	4.4	20.8
1 6	5 40.73	+27 53.4	1.555	2.501	7.9	19.4	1 6	5 40.54	+16 7.6	1.417	2.360	8.8	21.0
1 16	5 32.04	+28 25.6	1.604	2.492	12.2	19.6	1 16	5 31.73	+16 34.6	1.460	2.346	13.3	21.2
1 26	5 26.29	+28 51.1	1.676	2.483	15.9	19.9	1 26	5 25.89	+17 6.8	1.526	2.332	17.2	21.5
67182	2000 <i>BQ</i> ₂₈		12 21.2 204°07		5°6/21.1 18		372125	2008 <i>SF</i> ₁₈₂		12 21.2 135°38		3°3/21.1 17	
11 17	6 27.93	+39 57.1	2.427	3.218	12.2	18.2	11 17	6 21.39	+13 12.1	2.504	3.310	11.4	21.7
11 27	6 21.67	+40 47.0	2.349	3.216	9.8	18.0	11 27	6 16.20	+12 46.8	2.428	3.314	8.8	21.5
12 7	6 12.96	+41 27.3	2.294	3.215	7.4	17.9	12 7	6 9.36	+12 27.0	2.377	3.318	5.9	21.4
12 17	6 2.53	+41 53.2	2.267	3.213	5.8	17.8	12 17	6 1.44	+12 13.9	2.354	3.322	3.6	21.2
12 27	5 51.51	+42 1.4	2.269	3.211	6.0	17.8	12 27	5 53.22	+12 8.2	2.361	3.326	3.9	21.2
1 6	5 41.16	+41 51.9	2.299	3.209	7.8	17.9	1 6	5 45.51	+12 10.1	2.398	3.330	6.4	21.4
1 16	5 32.59	+41 27.3	2.356	3.207	10.3	18.0	1 16	5 39.02	+12 19.2	2.463	3.333	9.2	21.6
1 26	5 26.58	+40 52.5	2.436	3.205	12.6	18.2	1 26	5 34.32	+12 34.7	2.552	3.337	11.7	21.8
401504	2013 <i>ED</i> ₂₉		12 21.2 148°01		0°8/21.2 18		404391	2013 <i>GC</i> ₄₆		12 21.2 244°91		0°5/21.2 17	
11 17	6 26.17	+25 23.5	2.022	2.842	13.2	21.2	11 17	6 25.64	+23 59.5	2.075	2.895	13.0	21.8
11 27	6 20.26	+25 30.6	1.946	2.846	9.9	21.0	11 27	6 19.99	+24 18.0	1.987	2.886	9.7	21.5
12 7	6 12.02	+25 36.0	1.895	2.849	6.1	20.7	12 7	6 11.98	+24 36.8	1.922	2.876	6.0	21.3
12 17	6 2.22	+25 37.9	1.871	2.852	2.0	20.5	12 17	6 2.30	+24 54.0	1.886	2.867	1.9	21.0
12 27	5 51.97	+25 35.3	1.877	2.855	2.6	20.5	12 27	5 52.00	+25 7.6	1.879	2.857	2.5	21.0
1 6	5 42.46	+25 28.3	1.913	2.858	6.6	20.8	1 6	5 42.26	+25 17.2	1.902	2.847	6.7	21.3
1 16	5 34.68	+25 18.6	1.976	2.860	10.4	21.0	1 16	5 34.12	+25 23.3	1.953	2.837	10.5	21.5
1 26	5 29.38	+25 8.2	2.062	2.863	13.5	21.2	1 26	5 28.42	+25 27.5	2.027	2.827	13.8	21.7
66376	1999 <i>JH</i> ₁₂₂		12 21.2 108°81		1°3/21.2 18		322617	1995 <i>SC</i> ₂₅		12 21.2 96°90		0°6/21.2 18	
11 17	6 31.88	+25 25.7	1.515	2.342	16.6	18.5	11 17	6 25.22	+24 29.8	2.060	2.881	13.0	21.3
11 27	6 25.05	+25 49.3	1.456	2.358	12.4	18.3	11 27	6 19.50	+24 44.4	1.989	2.888	9.7	21.1
12 7	6 15.13	+26 11.5	1.419	2.374	7.6	18.1	12 7	6 11.56	+24 58.6	1.941	2.886	5.9	20.9
12 17	6 3.17	+26 28.7	1.408	2.389	2.6	17.8	12 17	6 2.14	+25 10.2	1.922	2.903	1.9	20.7
12 27	5 50.75	+26 38.3	1.426	2.404	3.3	17.9	12 27	5 52.30	+25 18.0	1.932	2.910	2.5	20.7
1 6	5 39.50	+26 40.4	1.472	2.418	8.2	18.2	1 6	5 43.17	+25 21.9	1.972	2.917	6.5	21.0
1 16	5 30.74	+26 37.1	1.544	2.432	12.5	18.5	1 16	5 35.71	+25 22.6	2.039	2.925	10.1	21.2
1 26	5 25.28	+26 31.5	1.638	2.445	16.2	18.8	1 26	5 30.64	+25 21.9	2.130	2.932	13.1	21.4
474235	2001 <i>QC</i> ₂₀₇		12 21.2 87°53		0°8/21.2 18		512252	2016 <i>CP</i> ₁₉₃		12 21.2 56°28		10°5/24.8 18	
11 17	6 31.71	+25 17.3	1.591	2.415	16.0	21.7	11 17	6 33.61	- 3 31.2	1.024	1.821	24.8	20.0
11 27	6 24.57	+25 23.1	1.540	2.441	11.9	21.5	11 27	6 27.31	- 2 34.1	0.965	1.829	20.6	19.8
12 7	6 14.63	+25 26.7	1.512	2.466	7.2	21.3	12 7	6 17.06	- 0 52.8	0.922	1.838	15.9	19.5
12 17	6 2.97	+25 25.7	1.511	2.492	2.3	21.0	12 17	6 3.94	+ 1 34.7	0.900	1.848	11.8	19.3
12 27	5 51.09	+25 19.0	1.538	2.516	3.0	21.1	12 27	5 49.86	+ 4 41.6	0.904	1.858	10.6	19.3
1 6	5 40.45	+25 7.7	1.594	2.540	7.6	21.5	1 6	5 37.04	+ 8 11.4	0.934	1.868	13.4	19.5
1 16	5 32.21	+24 54.1	1.677	2.564	11.8	21.8	1 16	5 27.29	+11 45.4	0.989	1.878	17.8	19.8
1 26	5 27.03	+24 40.9	1.782	2.587	15.2	22.1	1 26	5 21.73	+15 8.8	1.065	1.889	22.0	20.1
335332	2005 <i>RD</i>		12 21.2 241°27		3°8/21.0 18		517559	2014 <i>TB</i> ₉		12 21.2 150°42		3°7/21.2 17	
11 17	6 26.76	+15 54.2	1.592	2.418	15.9	20.8	11 17	6 26.58	+34 10.6	2.398	3.202	11.9	20.7
11 27	6 21.18	+15 17.4	1.513	2.412	12.2	20.5	11 27	6 20.48	+34 46.0	2.322	3.206	9.2	20.6
12 7	6 12.83	+14 45.7	1.456	2.406	8.0	20.3	12 7	6 12.16	+35 14.9	2.270	3.209	6.3	20.4
12 17	6 2.54	+14 20.7	1.425	2.399	4.3	20.1	12 17	6 2.33	+35 33.7	2.247	3.213	4.0	20.3
12 27	5 51.61	+14 4.3	1.422	2.393	4.9	20.1	12 27	5 52.04	+35 39.9	2.253	3.216	4.3	20.3
1 6	5 41.45	+13 57.3	1.447	2.386	8.9	20.3	1 6	5 42.41	+35 33.8	2.289	3.219	6.8	20.4
1 16	5 33.31	+14 0.2	1.497	2.380	13.2	20.5	1 16	5 34.40	+35 17.3	2.352	3.221	9.6	20.6
1 26	5 28.06	+14 12.2	1.568	2.373	16.9	20.8	1 26	5 28.74	+34 54.0	2.440	3.224	12.2	20.8
157429	2004 <i>TV</i> ₃₄₀		12 21.2 144°34		3°1/21.2 18		3273	<i>Drukar</i>		12 21.2 178°16		3°8/20.9 18	
11 17	6 26.46	+32 26.4	2.435	3.241	11.7	20.4	11 17	6 24.77	+34 55.4	2.687	3.488	10.9	17.0
11 27	6 20.28	+32 58.3	2.360	3.247	9.0	20.2	11 27	6 19.02	+35 42.6	2.607	3.488	8.5	16.9
12 7	6 11.97	+33 24.7	2.311	3.253	6.0	20.0	12 7	6 11.24	+36 24.1	2.553	3.488	5.9	16.7
12 17	6 2.24	+33 42.4	2.289	3.259	3.5	19.9	12 17	6 2.06	+36 56.1	2.527	3.488	4.0	16.6
12 27	5 52.08	+33 49.3	2.298	3.265	3.8	19.9	12 27	5 52.39	+37 16.2	2.531	3.488	4.3	16.6
1 6	5 42.56	+33 45.4	2.336	3.270	6.4	20.1	1 6	5 43.22	+37 23.8	2.564	3.488	6.4	16.8
1 16	5 34.62	+33 32.7	2.403	3.275	9.3	20.3	1 16	5 35.46	+37 20.4	2.626	3.488	9.0	16.9
1 26	5 28.95	+33 14.1	2.494	3.279	11.9	20.5	1 26	5 29.80	+37 8.7	2.712	3.488	11.3	17.1
73955	<i>Asaka</i>		12 21.2 337°26		6°9/21.0 18		153806	2001 <i>VC</i> ₁₁₆		12 21.2 92°12		1°1/21.3 18	
11 17	6 26.51	+40 19.5	1.915	2.721	14.4	18.8	11 17	6 30.38	+25 55.2	1.632	2.457	15.7	20.2
11 27	6 21.32	+41 17.6	1.836	2.711	11.7	18.6	11 27	6 23.68	+26 6.4	1.575	2.476	11.7	20.0
12 7	6 13.09	+42 4.6	1.779	2.702	9.0	18.4	12 7	6 14.20	+26 15.2	1.541	2.495	7.1	19.7
12 17	6 2.67	+42 34.1	1.747	2.694	7.1	18.3	12 17	6 2.93	+26 18.8	1.534	2.514	2.4	19.5
12 27	5 51.44	+42 41.7	1.743	2.686	7.4	18.3	12 27	5 51.33	+26 15.9	1.555	2.533	3.0	19.6
1 6	5 41.00	+42 27.1	1.765	2.679	9.6	18.4	1 6	5 40.85	+26 7.2	1.605	2.551	7.6	19.9
1 16	5 32.75	+41 53.8	1.811	2.672	12.4	18.6	1 16	5 32.67	+25 54.8	1.681	2.569	11.7	20.2
1 26	5 27.67	+41 8.0	1.880	2.666	15.2	18.7	1 26	5 27.51	+25 41.9	1.780	2.586	15.1	20.5
72717	2001 <i>FA</i> ₈₈		12 21.2 199°26		4°0/20.9 18 R		158560	2002 <i>JF</i> ₇₅		12 21.2 154°69		0°8/21.2	

EPHEMERIDES

12 21.2

12 21.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
285490	2000 <i>CU</i> ₁₀₀		12 21.2	96°12	3°4/21.5	17	75041	1999 <i>UB</i> ₃₈		12 21.3	297°32	1°8/21.3	18
11 17	6 22.16	+12 4.7	2.295	3.101	12.3	20.4	11 17	6 28.65	+27 20.4	1.385	2.222	17.2	19.6
11 27	6 16.93	+12 1.9	2.222	3.108	9.5	20.2	11 27	6 23.28	+27 29.0	1.308	2.216	13.1	19.4
12 7	6 9.89	+12 6.9	2.173	3.114	6.4	20.0	12 7	6 14.46	+27 33.8	1.253	2.209	8.2	19.1
12 17	6 1.64	+12 20.4	2.151	3.120	3.8	19.9	12 17	6 3.17	+27 31.4	1.222	2.203	3.1	18.8
12 27	5 53.04	+12 42.0	2.160	3.126	4.0	19.9	12 27	5 51.02	+27 19.6	1.219	2.196	3.7	18.8
1 6	5 44.99	+13 10.8	2.198	3.132	6.7	20.1	1 6	5 39.88	+26 59.5	1.242	2.190	9.0	19.1
1 16	5 38.27	+13 45.4	2.263	3.138	9.7	20.3	1 16	5 31.31	+26 34.3	1.289	2.184	13.9	19.3
1 26	5 33.48	+14 24.2	2.354	3.144	12.4	20.5	1 26	5 26.32	+26 8.6	1.357	2.179	18.2	19.6
14486	Tuscia		12 21.2	109°93	2°5/21.3	18	485521	2011 <i>UB</i> ₃₀		12 21.3	339°67	7°3/20.2	17
11 17	6 25.80	+18 2.0	1.361	2.201	17.4	18.6	11 17	6 20.91	+11 27.6	1.378	2.215	17.3	20.5
11 27	6 20.81	+17 50.0	1.295	2.203	13.1	18.3	11 27	6 17.16	+9 58.9	1.301	2.200	13.8	20.3
12 7	6 12.75	+17 43.7	1.250	2.205	8.3	18.1	12 7	6 10.57	+8 36.9	1.246	2.187	10.1	20.0
12 17	6 2.58	+17 43.2	1.229	2.208	3.5	17.8	12 17	6 1.97	+7 28.0	1.214	2.175	7.5	19.9
12 27	5 51.79	+17 48.4	1.235	2.211	4.1	17.9	12 27	5 52.66	+6 37.8	1.208	2.164	8.2	19.9
1 6	5 41.99	+17 58.9	1.267	2.215	9.0	18.1	1 6	5 44.13	+6 9.8	1.226	2.154	11.5	20.0
1 16	5 34.52	+18 14.4	1.324	2.219	13.7	18.4	1 16	5 37.63	+6 4.3	1.267	2.145	15.5	20.2
1 26	5 30.27	+18 34.5	1.401	2.224	17.7	18.7	1 26	5 34.11	+6 18.7	1.328	2.138	19.1	20.4
341976	2008 <i>QD</i> ₃₇		12 21.2	152°83	1°2/21.2	18	4161	Amasis		12 21.3	39°69	1°7/21.3	18
11 17	6 28.43	+20 20.8	1.934	2.750	13.9	21.9	11 17	6 22.68	+18 44.1	2.020	2.843	13.1	17.9
11 27	6 21.93	+20 15.5	1.862	2.758	10.4	21.7	11 27	6 17.59	+18 36.2	1.950	2.849	9.9	17.7
12 7	6 13.06	+20 12.1	1.813	2.766	6.4	21.5	12 7	6 10.40	+18 31.6	1.903	2.856	6.1	17.5
12 17	6 2.62	+20 9.9	1.792	2.773	2.2	21.2	12 17	6 1.83	+18 30.1	1.883	2.862	2.5	17.2
12 27	5 51.76	+20 8.5	1.802	2.779	2.8	21.3	12 27	5 52.89	+18 31.7	1.893	2.869	2.9	17.3
1 6	5 41.68	+20 8.0	1.840	2.784	7.0	21.6	1 6	5 44.62	+18 36.3	1.932	2.876	6.7	17.5
1 16	5 33.40	+20 9.1	1.907	2.789	10.8	21.8	1 16	5 37.93	+18 44.0	1.997	2.883	10.2	17.8
1 26	5 27.67	+20 12.7	1.997	2.793	14.1	22.0	1 26	5 33.47	+18 54.8	2.087	2.891	13.3	18.0
220691	2004 <i>RY</i> ₂₉₀		12 21.2	21°20	2°4/21.4	17	317935	2003 <i>WS</i> ₃₁		12 21.3	79°71	2°2/21.1	18
11 17	6 24.13	+29 17.9	1.501	2.340	16.0	19.7	11 17	6 23.04	+18 5.1	2.242	3.058	12.2	20.2
11 27	6 19.39	+29 27.3	1.444	2.351	12.1	19.5	11 27	6 17.59	+17 31.9	2.171	3.066	9.2	20.0
12 7	6 11.76	+29 31.1	1.408	2.363	7.6	19.3	12 7	6 10.28	+17 1.0	2.124	3.074	5.8	19.8
12 17	6 2.24	+29 26.2	1.397	2.376	3.3	19.0	12 17	6 1.78	+16 33.3	2.106	3.082	2.7	19.7
12 27	5 52.32	+29 11.5	1.414	2.390	3.7	19.1	12 27	5 52.99	+16 9.9	2.117	3.090	3.2	19.7
1 6	5 43.50	+28 48.5	1.457	2.404	8.0	19.4	1 6	5 44.85	+15 51.8	2.159	3.098	6.4	19.9
1 16	5 36.99	+28 20.4	1.525	2.420	12.2	19.7	1 16	5 38.15	+15 39.7	2.228	3.106	9.6	20.1
1 26	5 33.53	+27 51.1	1.615	2.437	15.7	19.9	1 26	5 33.49	+15 33.8	2.321	3.114	12.4	20.3
267596	2002 <i>RO</i> ₄₇		12 21.2	47°27	0°4/21.3	18	339093	2004 <i>RN</i> ₁₅₁		12 21.3	48°58	7°3/21.1	18
11 17	6 29.47	+21 16.7	1.105	1.955	19.8	20.1	11 17	6 32.09	+36 48.3	1.352	2.178	18.2	20.0
11 27	6 23.74	+21 36.3	1.066	1.979	14.7	19.8	11 27	6 26.04	+38 7.1	1.304	2.195	14.4	19.8
12 7	6 14.50	+21 59.7	1.046	2.005	8.9	19.6	12 7	6 16.15	+39 13.8	1.277	2.213	10.4	19.6
12 17	6 3.06	+22 23.7	1.050	2.032	2.7	19.3	12 17	6 3.65	+39 59.2	1.273	2.232	7.6	19.5
12 27	5 51.33	+22 45.5	1.079	2.059	3.5	19.5	12 27	5 50.52	+40 17.8	1.296	2.251	7.9	19.6
1 6	5 41.19	+23 4.1	1.134	2.086	9.2	19.9	1 6	5 38.88	+40 10.1	1.344	2.270	10.8	19.8
1 16	5 34.03	+23 20.2	1.213	2.114	14.2	20.2	1 16	5 30.35	+39 42.3	1.415	2.290	14.4	20.1
1 26	5 30.57	+23 35.2	1.311	2.141	18.2	20.6	1 26	5 25.84	+39 2.5	1.507	2.310	17.6	20.3
181650	2007 <i>UF</i> ₃₃		12 21.2	144°46	1°6/21.5	18	220049	2002 <i>RS</i> ₈₆		12 21.3	37°40	4°4/21.5	18
11 17	6 29.87	+29 29.7	2.021	2.833	13.5	20.0	11 17	6 30.02	+31 33.9	1.023	1.876	20.8	19.4
11 27	6 22.97	+29 13.2	1.947	2.841	10.2	19.8	11 27	6 24.68	+31 59.5	0.985	1.898	15.8	19.2
12 7	6 13.64	+28 50.1	1.897	2.848	6.4	19.6	12 7	6 15.28	+32 14.8	0.965	1.920	10.2	19.0
12 17	6 2.78	+28 18.8	1.876	2.855	2.5	19.3	12 17	6 3.33	+32 14.1	0.968	1.944	5.2	18.8
12 27	5 51.60	+27 39.5	1.885	2.861	2.9	19.4	12 27	5 51.09	+31 55.2	0.995	1.969	5.6	18.9
1 6	5 41.33	+26 54.3	1.923	2.867	6.8	19.6	1 6	5 40.78	+31 21.5	1.046	1.995	10.3	19.3
1 16	5 33.01	+26 7.0	1.990	2.873	10.4	19.9	1 16	5 33.89	+30 39.6	1.119	2.021	15.0	19.6
1 26	5 27.32	+25 21.1	2.081	2.878	13.6	20.1	1 26	5 31.16	+29 56.2	1.212	2.048	19.0	19.9
493803	2015 <i>VL</i> ₃₈		12 21.2	0°11	5°3/21.3	17	238234	2003 <i>UW</i> ₂₀₄		12 21.3	164°75	1°6/21.3	18
11 17	6 26.22	+35 1.2	1.548	2.376	16.2	20.8	11 17	6 28.66	+27 51.1	2.246	3.055	12.4	21.7
11 27	6 21.32	+35 40.0	1.478	2.375	12.6	20.6	11 27	6 21.98	+28 6.1	2.168	3.061	9.4	21.5
12 7	6 13.17	+36 9.3	1.430	2.374	8.8	20.4	12 7	6 13.07	+28 17.8	2.116	3.066	5.8	21.3
12 17	6 2.74	+36 23.2	1.406	2.373	5.8	20.2	12 17	6 2.66	+28 23.8	2.092	3.070	2.3	21.1
12 27	5 51.61	+36 18.3	1.409	2.374	6.0	20.2	12 27	5 51.82	+28 22.5	2.099	3.074	2.8	21.1
1 6	5 41.51	+35 55.3	1.438	2.375	9.3	20.4	1 6	5 41.69	+28 14.4	2.136	3.077	6.3	21.4
1 16	5 33.88	+35 18.4	1.492	2.377	13.1	20.6	1 16	5 33.22	+28 1.1	2.201	3.080	9.8	21.6
1 26	5 29.66	+34 33.8	1.567	2.379	16.6	20.8	1 26	5 27.14	+27 45.2	2.291	3.082	12.7	21.8
332431	2007 <i>TZ</i> ₁₉₆		12 21.2	190°56	4°5/21.3	18	329363	2001 <i>TQ</i> ₁₈₀		12 21.3	117°45	2°5/21.1	18
11 17	6 20.58	+ 8 38.1	2.609	3.403	11.3	21.4	11 17	6 21.69	+14 47.4	3.035	3.834	9.8	21.0
11 27	6 15.58	+ 8 13.9	2.528	3.402	9.0	21.3	11 27	6 16.10	+14 19.5	2.968	3.852	7.4	20.8
12 7	6 9.01	+ 7 57.9	2.473	3.402	6.5	21.1	12 7	6 9.18	+13 55.2	2.927	3.870	4.9	20.7
12 17	6 1.39	+ 7 51.8	2.445	3.401	4.7	21.0	12 17	6 1.44	+13 35.3	2.916	3.887	2.8	20.6
12 27	5 53.44	+ 7 56.3	2.447	3.400	4.9	21.0	12 27	5 53.53	+13 20.7	2.937	3.903	3.1	20.6
1 6	5 45.93	+ 8 11.1	2.478	3.399	6.8	21.1	1 6	5 46.11	+13 11.5	2.988	3.920	5.3	20.8
1 16	5 39.54	+ 8 35.4	2.537	3.397	9.3	21.3	1 16	5 39.75	+13 8.0	3.069	3.935	7.7	21.0
1 26	5 34.83	+ 9 7.2	2.621	3.396	11.7	21.5	1 26	5 34.90	+13 9.8	3.175	3.951	9.8	21.1
233545	2007 <i>JU</i> ₂₅		12 21.3	84°50	2°1/21.3	17	273655	2007 <i>DN</i> ₈₂		12 21.3	100°51	7°5/21.9	18
11													

EPHEMERIDES

12 21.3

12 21.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
230695	2003 <i>UZ</i> ₅₇		12 21.3	78°14'	1.4°/21.1	18	191895	2005 <i>AL</i> ₃₁		12 21.3	85°61'	3.3°/21.7	18
11 17	6 23.82	+20 28.0	2.202	3.020	12.4	20.7	11 17	6 23.05	+11 40.8	2.267	3.071	12.5	20.0
11 27	6 18.20	+20 1.1	2.134	3.032	9.2	20.5	11 27	6 17.61	+11 49.7	2.198	3.083	9.6	19.8
12 7	6 10.67	+19 35.0	2.091	3.043	5.7	20.3	12 7	6 10.34	+12 7.4	2.154	3.095	6.5	19.6
12 17	6 1.92	+19 10.2	2.075	3.055	2.2	20.1	12 17	6 1.86	+12 33.8	2.137	3.107	3.8	19.5
12 27	5 52.91	+18 47.4	2.090	3.067	2.7	20.1	12 27	5 53.05	+13 8.1	2.151	3.118	3.9	19.5
1 6	5 44.60	+18 27.6	2.135	3.078	6.2	20.4	1 6	5 44.81	+13 48.8	2.194	3.130	6.6	19.7
1 16	5 37.81	+18 11.9	2.208	3.090	9.6	20.6	1 16	5 37.94	+14 33.9	2.265	3.141	9.6	19.9
1 26	5 33.13	+18 1.0	2.305	3.101	12.4	20.8	1 26	5 33.05	+15 21.9	2.361	3.152	12.3	20.1
190518	2000 <i>KF</i> ₄₃		12 21.3	101°70'	0°8'/21.3	18	484496	2008 <i>DR</i> ₃₁		12 21.3	143°08'	9°0'/22.2	18
11 17	6 30.40	+24 43.8	1.705	2.527	15.2	21.0	11 17	6 22.90	- 4 40.2	2.290	3.034	14.2	21.3
11 27	6 23.64	+24 59.3	1.646	2.546	11.3	20.8	11 27	6 17.46	- 5 19.3	2.223	3.041	12.2	21.2
12 7	6 14.19	+25 13.6	1.611	2.565	6.9	20.6	12 7	6 10.23	- 5 40.3	2.178	3.047	10.3	21.1
12 17	6 3.01	+25 24.2	1.602	2.583	2.2	20.3	12 17	6 1.84	- 5 39.6	2.157	3.052	9.1	21.0
12 27	5 51.48	+25 29.5	1.623	2.601	2.9	20.4	12 27	5 53.11	- 5 15.7	2.164	3.058	9.1	21.0
1 6	5 40.99	+25 29.5	1.673	2.619	7.4	20.7	1 6	5 44.94	- 4 29.8	2.196	3.063	10.3	21.1
1 16	5 32.68	+25 25.9	1.749	2.636	11.4	21.0	1 16	5 38.09	- 3 25.2	2.254	3.068	12.1	21.2
1 26	5 27.28	+25 21.2	1.849	2.652	14.8	21.3	1 26	5 33.15	- 2 6.7	2.335	3.072	14.0	21.4
121103	Ericenielsen		12 21.3	89°22'	8°9'/21.7	18	448478	2010 <i>GM</i> ₁₁₂		12 21.3	133°95'	4°5'/21.1	17
11 17	6 36.23	+47 55.1	2.061	2.825	14.9	20.0	11 17	6 32.58	+36 41.8	2.553	3.340	11.8	22.3
11 27	6 28.51	+49 4.8	2.008	2.844	12.6	19.8	11 27	6 24.86	+37 36.5	2.488	3.358	9.2	22.1
12 7	6 17.40	+49 57.1	1.977	2.862	10.4	19.7	12 7	6 14.82	+38 23.1	2.448	3.376	6.6	22.0
12 17	6 4.02	+50 24.3	1.971	2.880	9.1	19.7	12 17	6 3.25	+38 57.0	2.438	3.393	4.7	21.9
12 27	5 50.11	+50 22.5	1.992	2.898	9.1	19.7	12 27	5 51.24	+39 15.2	2.458	3.409	4.9	21.9
1 6	5 37.49	+49 53.1	2.039	2.916	10.5	19.8	1 6	5 39.97	+39 17.7	2.508	3.424	7.0	22.1
1 16	5 27.62	+49 1.9	2.110	2.933	12.4	20.0	1 16	5 30.44	+39 6.9	2.587	3.439	9.5	22.3
1 26	5 21.34	+47 57.1	2.203	2.950	14.5	20.2	1 26	5 23.39	+38 46.9	2.690	3.452	11.7	22.5
293990	2007 <i>TZ</i> ₇₄		12 21.3	91°76'	3°0'/21.2	15	124490	2001 <i>RF</i> ₃₆		12 21.3	175°98'	2°3'/21.4	18
11 17	6 27.32	+16 12.3	1.838	2.654	14.5	21.9	11 17	6 30.76	+29 31.9	1.792	2.610	14.8	20.4
11 27	6 20.97	+15 44.1	1.781	2.675	11.0	21.7	11 27	6 24.11	+29 39.4	1.716	2.612	11.2	20.2
12 7	6 12.40	+15 21.0	1.748	2.696	7.1	21.5	12 7	6 14.63	+29 41.2	1.663	2.613	7.1	19.9
12 17	6 2.44	+15 3.9	1.743	2.717	3.6	21.3	12 17	6 3.23	+29 34.1	1.636	2.614	3.1	19.7
12 27	5 52.25	+14 53.5	1.766	2.738	4.0	21.4	12 27	5 51.27	+29 16.7	1.639	2.615	3.5	19.7
1 6	5 42.98	+14 50.3	1.819	2.758	7.5	21.6	1 6	5 40.24	+28 50.1	1.671	2.615	7.6	19.9
1 16	5 35.56	+14 54.0	1.899	2.777	11.0	21.9	1 16	5 31.37	+28 17.7	1.730	2.614	11.6	20.2
1 26	5 30.62	+15 4.2	2.001	2.797	14.1	22.1	1 26	5 25.49	+27 43.8	1.812	2.613	15.1	20.4
278045	2006 <i>WS</i> ₁₄₉		12 21.3	148°22'	1°7'/21.2	18	340169	2005 <i>YH</i> ₁₅₁		12 21.3	351°91'	2°0'/21.2	18
11 17	6 26.20	+27 4.8	2.021	2.841	13.2	20.7	11 17	6 23.13	+26 14.1	1.147	2.005	18.7	20.4
11 27	6 20.46	+27 33.4	1.944	2.842	10.0	20.5	11 27	6 19.68	+26 39.5	1.079	1.997	14.2	20.1
12 7	6 12.30	+28 0.1	1.891	2.844	6.2	20.2	12 7	6 12.54	+27 3.9	1.031	1.991	8.9	19.8
12 17	6 2.48	+28 22.0	1.866	2.845	2.5	20.0	12 17	6 2.70	+27 23.2	1.005	1.986	3.3	19.4
12 27	5 52.13	+28 36.8	1.871	2.846	3.0	20.0	12 27	5 51.92	+27 33.9	1.004	1.982	4.1	19.5
1 6	5 42.45	+28 43.8	1.904	2.848	6.8	20.3	1 6	5 42.21	+27 35.3	1.027	1.980	9.8	19.8
1 16	5 34.52	+28 44.5	1.965	2.849	10.5	20.5	1 16	5 35.28	+27 29.7	1.073	1.979	15.1	20.1
1 26	5 29.13	+28 41.0	2.050	2.850	13.6	20.7	1 26	5 32.21	+27 20.8	1.137	1.980	19.6	20.3
412327	2013 <i>KO</i> ₁₁		12 21.3	109°99'	0°5'/21.3	18	392328	2010 <i>EQ</i> ₈₇		12 21.3	147°65'	5°8'/21.3	18
11 17	6 24.40	+21 38.5	2.354	3.168	11.8	22.0	11 17	6 24.97	+ 5 19.1	2.415	3.194	12.6	22.5
11 27	6 18.58	+21 38.4	2.285	3.181	8.8	21.8	11 27	6 18.85	+ 4 41.4	2.346	3.205	10.1	22.3
12 7	6 10.89	+21 39.1	2.241	3.194	5.3	21.6	12 7	6 11.01	+ 4 14.5	2.302	3.217	7.7	22.2
12 17	6 2.01	+21 39.9	2.227	3.207	1.7	21.4	12 17	6 2.07	+ 4 0.7	2.285	3.227	6.0	22.1
12 27	5 52.83	+21 40.2	2.242	3.220	2.2	21.4	12 27	5 52.84	+ 4 1.2	2.298	3.237	6.2	22.1
1 6	5 44.30	+21 40.2	2.288	3.232	5.8	21.7	1 6	5 44.19	+ 4 15.7	2.340	3.246	8.0	22.3
1 16	5 37.21	+21 40.5	2.362	3.245	9.0	21.9	1 16	5 36.86	+ 4 42.8	2.409	3.254	10.3	22.4
1 26	5 32.16	+21 41.9	2.461	3.256	11.8	22.1	1 26	5 31.40	+ 5 19.8	2.503	3.261	12.6	22.6
482256	2011 <i>PC</i> ₁		12 21.3	69°45'	5°9'/23.1	18	488703	2004 <i>AC</i> ₁₉		12 21.3	267°66'	3°2'/21.5	18
11 17	6 31.73	+ 3 11.1	1.682	2.463	17.1	20.3	11 17	6 21.31	+12 28.1	2.435	3.240	11.7	20.8
11 27	6 24.38	+ 4 4.6	1.628	2.492	13.6	20.1	11 27	6 16.32	+12 26.6	2.352	3.238	9.0	20.6
12 7	6 14.54	+ 5 19.2	1.597	2.521	9.8	20.0	12 7	6 9.59	+12 32.4	2.294	3.236	6.1	20.4
12 17	6 3.12	+ 6 53.4	1.593	2.549	6.6	19.8	12 17	6 1.66	+12 45.9	2.264	3.233	3.6	20.3
12 27	5 51.39	+ 8 42.6	1.619	2.577	6.2	19.9	12 27	5 53.34	+13 7.1	2.264	3.231	3.8	20.3
1 6	5 40.65	+10 40.1	1.676	2.605	8.8	20.1	1 6	5 45.48	+13 34.9	2.293	3.229	6.4	20.4
1 16	5 31.95	+12 39.4	1.761	2.633	12.1	20.4	1 16	5 38.82	+14 8.3	2.351	3.226	9.3	20.6
1 26	5 26.00	+14 35.2	1.871	2.661	15.1	20.6	1 26	5 34.00	+14 45.9	2.433	3.224	12.0	20.8
74032	1998 <i>HR</i> ₂₇		12 21.3	84°70'	1°9'/21.3	18	117762	2005 <i>GD</i> ₆₉		12 21.3	332°08'	2°6'/21.3	18
11 17	6 32.55	+27 46.5	1.417	2.247	17.3	19.0	11 17	6 23.40	+17 11.2	1.504	2.341	16.2	19.7
11 27	6 25.68	+27 55.4	1.364	2.267	13.0	18.8	11 27	6 18.97	+17 5.5	1.425	2.331	12.3	19.4
12 7	6 15.58	+27 59.6	1.333	2.287	8.0	18.6	12 7	6 11.71	+17 6.3	1.368	2.322	7.9	19.2
12 17	6 3.46	+27 55.5	1.327	2.307	3.0	18.3	12 17	6 2.41	+17 13.9	1.336	2.314	3.5	18.9
12 27	5 51.00	+27 41.9	1.350	2.327	3.6	18.4	12 27	5 52.35	+17 27.8	1.330	2.306	4.0	18.9
1 6	5 39.93	+27 20.4	1.400	2.346	8.4	18.8	1 6	5 43.02	+17 47.3	1.352	2.299	8.6	19.1
1 16	5 31.56	+26 54.7	1.475	2.365	12.8	19.1	1 16	5 35.71	+18 11.5	1.398	2.292	13.1	19.4
1 26	5 26.63	+26 29.0	1.572	2.384	16.5	19.4	1 26	5 31.36	+18 39.7	1.465	2.286	17.1	19.6
113332	2002 <i>RP</i> ₂₀₉		12 21.3	257°49'	6°9'/20.9	18	300715	2007 <i>VO</i> ₁₁₇		12 21.3	57°08'		

EPHEMERIDES

12 21.3

12 21.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
50663	2000 <i>EY</i> ₁₀₂		12 21.3 134°07	0°4/21.2 18			414377	2008 <i>UW</i> ₂₉₀		12 21.3 278°84	1°9/21.1 18		
11 17	6 26.67	+23 54.9	1.879	2.702	14.0	19.2	11 17	6 22.36	+18 48.2	2.360	3.176	11.7	20.7
11 27	6 20.78	+23 31.1	1.803	2.704	10.5	19.0	11 27	6 17.17	+18 18.6	2.275	3.171	8.8	20.5
12 7	6 12.47	+23 5.0	1.751	2.706	6.4	18.8	12 7	6 10.13	+17 50.4	2.215	3.166	5.6	20.3
12 17	6 2.56	+22 36.5	1.727	2.708	2.0	18.5	12 17	6 1.86	+17 24.5	2.183	3.161	2.5	20.1
12 27	5 52.23	+22 6.1	1.732	2.710	2.6	18.5	12 27	5 53.21	+17 1.7	2.182	3.156	2.9	20.1
1 6	5 42.72	+21 35.6	1.765	2.712	7.0	18.8	1 6	5 45.09	+16 43.1	2.210	3.151	6.2	20.3
1 16	5 35.05	+21 7.2	1.826	2.713	11.0	19.1	1 16	5 38.31	+16 29.5	2.266	3.146	9.5	20.5
1 26	5 29.97	+20 42.9	1.911	2.715	14.3	19.3	1 26	5 33.47	+16 21.4	2.347	3.141	12.3	20.7
265516	2005 <i>LM</i> ₅₃		12 21.3 188°38	1°2/21.3 18			366071	2012 <i>CF</i> ₃₉		12 21.3 177°98	3°0/21.4 17		
11 17	6 30.72	+27 0.0	1.822	2.640	14.6	21.1	11 17	6 23.48	+14 29.0	2.084	2.898	13.1	21.8
11 27	6 24.03	+27 0.8	1.742	2.640	11.0	20.9	11 27	6 18.20	+14 20.6	2.006	2.898	10.0	21.6
12 7	6 14.58	+26 57.9	1.686	2.639	6.8	20.7	12 7	6 10.84	+14 18.8	1.952	2.898	6.6	21.4
12 17	6 3.24	+26 48.8	1.657	2.637	2.4	20.4	12 17	6 2.09	+14 24.0	1.925	2.898	3.5	21.2
12 27	5 51.32	+26 32.5	1.658	2.635	3.0	20.4	12 27	5 52.90	+14 36.2	1.928	2.898	3.8	21.2
1 6	5 40.26	+26 10.1	1.687	2.632	7.4	20.7	1 6	5 44.28	+14 54.8	1.959	2.898	7.0	21.4
1 16	5 31.26	+25 44.2	1.744	2.629	11.5	20.9	1 16	5 37.15	+15 19.0	2.018	2.898	10.4	21.6
1 26	5 25.16	+25 18.3	1.825	2.625	15.1	21.1	1 26	5 32.19	+15 47.7	2.101	2.898	13.5	21.8
64335	2001 <i>UL</i> ₆₂		12 21.3 317°91	3°5/21.0 18			156817	2003 <i>BV</i> ₅₄		12 21.3 3°91	4°8/21.5 18		
11 17	6 24.17	+17 55.4	1.356	2.198	17.3	19.1	11 17	6 23.25	+13 28.7	1.194	2.040	18.9	19.7
11 27	6 19.87	+17 13.0	1.273	2.182	13.2	18.8	11 27	6 19.26	+13 11.4	1.131	2.039	14.6	19.4
12 7	6 12.42	+16 33.4	1.212	2.167	8.6	18.5	12 7	6 12.03	+13 6.4	1.087	2.039	9.8	19.2
12 17	6 2.66	+15 58.8	1.174	2.151	4.2	18.2	12 17	6 2.54	+13 15.3	1.066	2.040	5.5	18.9
12 27	5 52.02	+15 31.4	1.163	2.137	4.9	18.2	12 27	5 52.32	+13 38.4	1.070	2.042	5.8	19.0
1 6	5 42.16	+15 13.4	1.177	2.123	9.8	18.4	1 6	5 43.10	+14 13.7	1.098	2.045	10.2	19.2
1 16	5 34.52	+15 6.1	1.215	2.109	14.7	18.7	1 16	5 36.31	+14 58.6	1.150	2.048	15.0	19.5
1 26	5 30.16	+15 9.5	1.272	2.097	19.0	18.9	1 26	5 32.92	+15 49.6	1.221	2.053	19.1	19.8
336644	2009 <i>WB</i> ₉₈		12 21.3 303°32	2°8/21.2 18			231239	2005 <i>YK</i> ₉		12 21.3 315°88	0°7/21.3 18		
11 17	6 26.11	+18 21.3	1.416	2.253	17.0	21.3	11 17	6 25.84	+25 5.8	1.384	2.226	17.0	21.0
11 27	6 21.14	+17 53.6	1.338	2.244	12.9	21.0	11 27	6 21.26	+25 8.6	1.302	2.212	12.9	20.8
12 7	6 13.09	+17 29.5	1.281	2.236	8.2	20.8	12 7	6 13.35	+25 10.0	1.241	2.198	8.0	20.4
12 17	6 2.85	+17 10.1	1.249	2.227	3.7	20.5	12 17	6 2.98	+25 7.5	1.204	2.185	2.6	20.1
12 27	5 51.82	+16 56.4	1.244	2.219	4.3	20.5	12 27	5 51.67	+24 59.6	1.193	2.172	3.4	20.1
1 6	5 41.64	+16 49.4	1.265	2.211	9.2	20.7	1 6	5 41.18	+24 46.8	1.209	2.160	8.9	20.4
1 16	5 33.68	+16 49.9	1.311	2.204	14.0	21.0	1 16	5 33.07	+24 31.5	1.249	2.148	14.0	20.6
1 26	5 28.93	+16 58.0	1.377	2.197	18.1	21.2	1 26	5 28.44	+24 16.8	1.310	2.137	18.4	20.9
228683	2002 <i>NJ</i> ₂₄		12 21.3 69°33	0°3/21.3 18			186922	2004 <i>PL</i> ₄₅		12 21.3 81°25	1°5/21.4 18		
11 17	6 25.48	+25 25.8	2.194	3.011	12.4	19.6	11 17	6 24.31	+18 26.0	2.063	2.882	13.1	20.4
11 27	6 19.42	+25 10.5	2.135	3.033	9.2	19.5	11 27	6 18.78	+18 32.9	1.996	2.893	9.8	20.2
12 7	6 11.40	+24 52.7	2.101	3.055	5.6	19.3	12 7	6 11.16	+18 43.9	1.952	2.905	6.1	20.0
12 17	6 2.19	+24 31.8	2.096	3.077	1.7	19.1	12 17	6 2.18	+18 58.1	1.937	2.916	2.3	19.8
12 27	5 52.80	+24 8.0	2.120	3.099	2.2	19.1	12 27	5 52.83	+19 14.6	1.951	2.928	2.8	19.9
1 6	5 44.24	+23 42.7	2.175	3.120	5.9	19.4	1 6	5 44.17	+19 32.8	1.995	2.939	6.5	20.1
1 16	5 37.31	+23 17.7	2.258	3.142	9.3	19.7	1 16	5 37.08	+19 52.3	2.066	2.951	10.0	20.4
1 26	5 32.59	+22 54.8	2.365	3.164	12.1	19.9	1 26	5 32.24	+20 12.9	2.161	2.962	13.0	20.6
103233	1999 <i>YM</i> ₁₇		12 21.3 353°73	1°6/21.3 18			418583	2008 <i>SS</i> ₂₀₆		12 21.3 67°79	1°7/21.2 18		
11 17	6 23.13	+19 49.5	1.110	1.968	19.2	19.5	11 17	6 25.70	+27 3.3	2.210	3.026	12.4	21.6
11 27	6 19.56	+19 50.1	1.044	1.962	14.5	19.2	11 27	6 19.74	+27 37.3	2.152	3.048	9.2	21.4
12 7	6 12.42	+19 56.4	0.997	1.957	9.0	18.9	12 7	6 11.70	+28 9.3	2.118	3.070	5.7	21.2
12 17	6 2.68	+20 7.7	0.973	1.954	3.2	18.5	12 17	6 2.33	+28 36.2	2.114	3.092	2.3	21.0
12 27	5 52.06	+20 22.4	0.973	1.952	4.0	18.6	12 27	5 52.65	+28 56.2	2.139	3.114	2.8	21.1
1 6	5 42.50	+20 39.6	0.997	1.951	9.9	18.9	1 6	5 43.72	+29 8.7	2.194	3.136	6.1	21.4
1 16	5 35.62	+20 59.0	1.044	1.951	15.3	19.2	1 16	5 36.42	+29 14.9	2.277	3.158	9.4	21.6
1 26	5 32.50	+21 20.6	1.110	1.953	19.9	19.5	1 26	5 31.39	+29 16.6	2.384	3.180	12.1	21.8
462758	2010 <i>DF</i> ₁₃		12 21.3 2°91	10°1/20.9 17			9509	Amfortas		12 21.3 191°57	3°9/21.2 18		
11 17	6 20.58	- 4 52.7	2.148	2.901	14.7	21.2	11 17	6 27.68	+13 57.9	1.852	2.664	14.6	19.0
11 27	6 15.90	- 6 5.8	2.082	2.901	12.8	21.1	11 27	6 21.55	+13 31.3	1.773	2.663	11.3	18.8
12 7	6 9.38	- 7 0.8	2.037	2.901	11.2	21.0	12 7	6 12.99	+13 11.3	1.717	2.661	7.5	18.5
12 17	6 1.63	- 7 33.0	2.015	2.901	10.2	20.9	12 17	6 2.77	+12 59.3	1.688	2.659	4.3	18.3
12 27	5 53.50	- 7 39.2	2.019	2.902	10.3	20.9	12 27	5 52.02	+12 56.2	1.688	2.656	4.7	18.4
1 6	5 45.91	- 7 19.6	2.048	2.902	11.5	21.0	1 6	5 41.94	+13 2.2	1.717	2.652	8.1	18.6
1 16	5 39.66	- 6 36.8	2.100	2.903	13.2	21.1	1 16	5 33.63	+13 16.7	1.773	2.648	11.9	18.8
1 26	5 35.36	- 5 35.6	2.173	2.904	15.1	21.2	1 26	5 27.85	+13 38.7	1.851	2.644	15.2	19.0
125377	2001 <i>VY</i> ₇₈		12 21.3 12°84	2°3/21.1 18			464838	2005 <i>CB</i> ₅₁		12 21.3 292°18	7°7/21.5 18		
11 17	6 25.35	+20 1.3	1.308	2.152	17.6	19.9	11 17	6 20.66	- 0 1.8	2.299	3.070	13.4	20.8
11 27	6 20.60	+19 27.9	1.243	2.154	13.3	19.6	11 27	6 15.99	- 0 36.6	2.210	3.054	11.3	20.6
12 7	6 12.71	+18 56.6	1.199	2.156	8.3	19.3	12 7	6 9.49	- 0 56.5	2.143	3.038	9.2	20.5
12 17	6 2.70	+18 28.3	1.179	2.159	3.3	19.1	12 17	6 1.70	- 0 58.4	2.101	3.022	7.9	20.4
12 27	5 52.12	+18 4.6	1.186	2.163	4.1	19.1	12 27	5 53.41	- 0 40.2	2.087	3.007	8.0	20.4
1 6	5 42.61	+17 47.1	1.219	2.167	9.1	19.4	1 6	5 45.51	- 0 2.3	2.100	2.991	9.5	20.4
1 16	5 35.51	+17 37.1	1.275	2.172	13.9	19.7	1 16	5 38.81	+ 0 52.8	2.138	2.976	11.7	20.5
1 26	5 31.70	+17 35.0	1.352	2.178	18.0	20.0	1 26	5 33.98	+ 2 1.3	2.199	2.960	14.1	20.7
153020	2000 <i>KF</i> ₄₉		12 21.3 135°70	0°2/21.3 18			443186	2014 <i>DU</i> ₃₇		12 21.3 203°60	0°9/21.3		

EPHEMERIDES

12 21.3

12 21.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
36873	2000 <i>SD</i> ₁₅₁		12 21.3	66°58'	0°6'/21.3	18	70848	1999 <i>VO</i> ₁₁₂		12 21.3	268°16'	0°4'/21.3	18
11 17	6 24.84	+21 52.4	1.931	2.755	13.6	19.3	11 17	6 23.92	+24 12.6	2.217	3.036	12.2	19.3
11 27	6 19.32	+21 48.9	1.863	2.765	10.2	19.1	11 27	6 18.59	+24 20.2	2.131	3.030	9.2	19.1
12 7	6 11.54	+21 46.4	1.820	2.774	6.2	18.9	12 7	6 11.14	+24 27.4	2.071	3.025	5.6	18.8
12 17	6 2.30	+21 44.0	1.803	2.784	2.0	18.6	12 17	6 2.24	+24 32.6	2.038	3.019	1.8	18.6
12 27	5 52.69	+21 41.2	1.816	2.794	2.6	18.7	12 27	5 52.83	+24 34.9	2.035	3.013	2.3	18.6
1 6	5 43.84	+21 38.4	1.858	2.804	6.7	19.0	1 6	5 43.98	+24 34.3	2.061	3.007	6.2	18.8
1 16	5 36.73	+21 36.2	1.927	2.815	10.4	19.2	1 16	5 36.62	+24 31.5	2.116	3.001	9.8	19.1
1 26	5 32.04	+21 35.8	2.019	2.825	13.6	19.5	1 26	5 31.46	+24 28.1	2.194	2.995	12.8	19.2
282207	2001 <i>VS</i> ₇₆		12 21.3	274°83'	8°6'/19.2	17	239179	2006 <i>KS</i> ₇₇		12 21.3	100°39'	2°6'/21.2	18
11 17	6 32.12	+14 40.8	1.110	1.948	20.5	20.2	11 17	6 27.21	+17 2.1	1.935	2.749	14.0	20.4
11 27	6 26.10	+12 8.9	1.039	1.941	16.2	19.9	11 27	6 20.88	+16 36.2	1.875	2.769	10.5	20.2
12 7	6 16.31	+9 34.9	0.990	1.934	11.7	19.6	12 7	6 12.40	+16 14.4	1.839	2.788	6.7	20.1
12 17	6 3.87	+7 9.6	0.965	1.927	8.7	19.4	12 17	6 2.57	+15 57.4	1.831	2.807	3.2	19.9
12 27	5 50.62	+5 5.6	0.965	1.919	10.0	19.5	12 27	5 52.49	+15 45.8	1.853	2.825	3.6	19.9
1 6	5 38.61	+3 32.7	0.990	1.912	14.3	19.7	1 6	5 43.26	+15 40.2	1.903	2.843	7.1	20.2
1 16	5 29.48	+2 34.5	1.037	1.905	19.0	19.9	1 16	5 35.80	+15 40.7	1.982	2.861	10.6	20.4
1 26	5 24.27	+2 8.7	1.101	1.897	23.1	20.2	1 26	5 30.73	+15 47.1	2.083	2.878	13.6	20.7
51766	2001 <i>LH</i> ₁₂		12 21.3	196°82'	0°3'/21.3	18	202496	2006 <i>BW</i> ₉₁		12 21.3	302°62'	3°4'/21.5	18
11 17	6 27.46	+24 35.6	2.123	2.938	12.9	19.1	11 17	6 26.11	+33 22.2	2.106	2.919	13.0	20.1
11 27	6 21.15	+24 4.4	2.040	2.936	9.6	18.9	11 27	6 20.48	+33 35.9	2.021	2.912	10.1	19.9
12 7	6 12.63	+23 29.9	1.981	2.934	5.9	18.7	12 7	6 12.40	+33 42.1	1.961	2.905	6.8	19.7
12 17	6 2.64	+22 51.9	1.951	2.932	1.8	18.4	12 17	6 2.63	+33 37.6	1.927	2.898	3.9	19.5
12 27	5 52.25	+22 11.5	1.951	2.929	2.4	18.5	12 27	5 52.32	+33 20.7	1.922	2.891	4.1	19.5
1 6	5 42.59	+21 30.6	1.982	2.926	6.5	18.7	1 6	5 42.72	+32 52.3	1.947	2.884	7.1	19.7
1 16	5 34.60	+20 51.8	2.041	2.923	10.2	18.9	1 16	5 34.91	+32 15.4	1.998	2.878	10.5	19.9
1 26	5 28.99	+20 17.5	2.124	2.919	13.4	19.1	1 26	5 29.68	+31 34.1	2.073	2.871	13.6	20.1
354993	2006 <i>OK</i> ₂₁		12 21.3	84°96'	2°0'/21.3	18	286494	2002 <i>AP</i> ₂₀₉		12 21.3	19°58'	2°7'/21.4	18
11 17	6 25.57	+18 12.8	1.843	2.665	14.2	21.1	11 17	6 23.29	+15 29.1	1.953	2.772	13.7	20.9
11 27	6 19.90	+18 4.0	1.777	2.676	10.7	20.9	11 27	6 18.20	+15 24.8	1.878	2.774	10.4	20.6
12 7	6 11.91	+17 59.3	1.735	2.687	6.7	20.6	12 7	6 10.92	+15 27.0	1.826	2.775	6.7	20.4
12 17	6 2.42	+17 58.4	1.720	2.698	2.8	20.4	12 17	6 2.17	+15 35.8	1.801	2.776	3.3	20.2
12 27	5 52.55	+18 1.3	1.733	2.709	3.2	20.5	12 27	5 52.95	+15 50.9	1.805	2.778	3.7	20.2
1 6	5 43.48	+18 7.6	1.776	2.720	7.2	20.7	1 6	5 44.35	+16 11.6	1.837	2.779	7.2	20.5
1 16	5 36.20	+18 17.6	1.845	2.731	10.9	21.0	1 16	5 37.34	+16 36.9	1.897	2.781	10.8	20.7
1 26	5 31.39	+18 30.9	1.938	2.741	14.2	21.2	1 26	5 32.62	+17 5.9	1.980	2.783	13.9	20.9
413037	2001 <i>KN</i> ₅₁		12 21.3	247°07'	0°7'/21.4	17	238490	2004 <i>RT</i> ₂₈₁		12 21.3	317°69'	6°9'/21.2	18
11 17	6 24.89	+18 34.3	2.817	3.619	10.4	21.4	11 17	6 23.96	+8 39.1	1.510	2.330	17.0	20.3
11 27	6 18.99	+19 9.5	2.711	3.601	7.8	21.2	11 27	6 19.26	+7 53.3	1.435	2.323	13.5	20.1
12 7	6 11.29	+19 49.2	2.632	3.582	4.9	21.0	12 7	6 11.84	+7 20.2	1.381	2.316	9.9	19.9
12 17	6 2.27	+20 31.9	2.583	3.563	1.7	20.7	12 17	6 2.51	+7 3.6	1.351	2.309	7.3	19.7
12 27	5 52.68	+21 15.9	2.567	3.544	2.1	20.7	12 27	5 52.50	+7 6.1	1.347	2.303	7.5	19.7
1 6	5 43.34	+21 59.5	2.582	3.524	5.3	20.9	1 6	5 43.22	+7 27.5	1.369	2.297	10.5	19.9
1 16	5 35.05	+22 41.6	2.628	3.504	8.4	21.1	1 16	5 35.87	+8 5.7	1.415	2.291	14.3	20.1
1 26	5 28.50	+23 21.8	2.700	3.483	11.2	21.3	1 26	5 31.36	+8 56.7	1.482	2.286	17.8	20.3
115026	2003 <i>QG</i> ₁₀₁		12 21.3	169°74'	0°3'/21.3	18	312369	2008 <i>ET</i> ₅		12 21.3	334°93'	0°8'/21.3	17
11 17	6 30.78	+22 37.4	1.628	2.451	15.7	21.2	11 17	6 22.94	+25 39.4	1.433	2.278	16.3	20.2
11 27	6 24.25	+22 39.0	1.554	2.455	11.8	20.9	11 27	6 18.99	+25 37.5	1.350	2.262	12.4	20.0
12 7	6 14.81	+22 41.2	1.503	2.458	7.3	20.7	12 7	6 11.93	+25 33.2	1.288	2.247	7.7	19.7
12 17	6 3.37	+22 42.2	1.479	2.460	2.2	20.4	12 17	6 2.58	+25 24.5	1.251	2.232	2.5	19.3
12 27	5 51.31	+22 40.9	1.483	2.462	3.0	20.4	12 27	5 52.38	+25 10.4	1.240	2.219	3.2	19.3
1 6	5 40.17	+22 37.5	1.517	2.463	7.9	20.7	1 6	5 42.96	+24 51.7	1.255	2.207	8.6	19.6
1 16	5 31.23	+22 33.5	1.576	2.464	12.4	21.0	1 16	5 35.78	+24 31.1	1.295	2.195	13.5	19.8
1 26	5 25.36	+22 30.7	1.658	2.463	16.1	21.2	1 26	5 31.85	+24 11.4	1.355	2.185	17.7	20.1
425575	2010 <i>TT</i> ₂₃		12 21.3	131°30'	2°7'/21.3	18	486598	2013 <i>JT</i> ₅₀		12 21.3	261°15'	4°3'/21.5	17
11 17	6 34.20	+28 54.9	1.581	2.401	16.3	22.5	11 17	6 23.81	+10 58.9	2.091	2.897	13.4	22.2
11 27	6 26.93	+29 25.8	1.518	2.415	12.3	22.3	11 27	6 18.57	+10 46.1	1.999	2.883	10.5	22.0
12 7	6 16.46	+29 52.2	1.477	2.428	7.8	22.0	12 7	6 11.20	+10 42.3	1.930	2.869	7.3	21.7
12 17	6 3.86	+30 9.1	1.463	2.440	3.5	21.8	12 17	6 2.30	+10 48.9	1.888	2.854	4.7	21.6
12 27	5 50.72	+30 13.7	1.478	2.452	4.0	21.9	12 27	5 52.79	+11 6.3	1.876	2.839	4.9	21.5
1 6	5 38.75	+30 6.3	1.521	2.463	8.3	22.1	1 6	5 43.72	+11 34.0	1.892	2.824	7.8	21.7
1 16	5 29.31	+29 50.2	1.590	2.474	12.5	22.4	1 16	5 36.06	+12 10.4	1.935	2.809	11.1	21.9
1 26	5 23.26	+29 30.0	1.682	2.483	16.1	22.7	1 26	5 30.58	+12 53.6	2.002	2.794	14.2	22.0
267538	2002 <i>PC</i> ₇₁		12 21.3	163°70'	2°1'/21.5	18	106985	2000 <i>YD</i> ₉₉		12 21.3	270°12'	2°0'/21.5	18
11 17	6 25.80	+31 42.8	2.810	3.611	10.4	20.6	11 17	6 27.94	+17 20.0	1.423	2.255	17.1	19.4
11 27	6 19.51	+31 39.7	2.729	3.616	7.9	20.4	11 27	6 22.54	+17 37.6	1.348	2.252	13.0	19.2
12 7	6 11.46	+31 30.8	2.674	3.620	5.1	20.3	12 7	6 14.01	+18 3.6	1.296	2.250	8.2	18.9
12 17	6 2.27	+31 14.3	2.649	3.623	2.5	20.1	12 17	6 3.21	+18 36.7	1.268	2.248	3.2	18.6
12 27	5 52.81	+30 50.0	2.654	3.626	2.7	20.1	12 27	5 51.60	+19 14.4	1.268	2.245	3.7	18.6
1 6	5 43.95	+30 18.9	2.691	3.629	5.4	20.3	1 6	5 40.81	+19 54.2	1.295	2.243	8.8	18.9
1 16	5 36.46	+29 43.1	2.756	3.632	8.1	20.5	1 16	5 32.29	+20 34.6	1.347	2.241	13.6	19.2
1 26	5 30.89	+29 5.5	2.848	3.634	10.6	20.6	1 26	5 27.04	+21 15.0	1.421	2.238	17.7	19.4
511936	2015 <i>HQ</i> ₁₆₉		12 21.3	287°52'	3°6'/21.3	18	32161	2000 <i>MR</i> ₃		12 21.3	166°		

EPHEMERIDES

12 21.3

12 21.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
474513	2003 <i>UF</i> ₁₃₄		12 21.3 40°64	1°1/21.2 17			146546	2001 <i>SC</i> ₂₇₉		12 21.3 116°07	2°4/21.2 18		
11 17	6 28.44	+23 36.6	1.262	2.106	18.2	20.0	11 17	6 25.44	+17 36.3	2.114	2.928	13.0	20.1
11 27	6 22.60	+22 51.8	1.219	2.130	13.5	19.8	11 27	6 19.53	+17 8.5	2.046	2.940	9.8	19.9
12 7	6 13.69	+22 5.4	1.197	2.155	8.2	19.5	12 7	6 11.60	+16 43.9	2.001	2.951	6.2	19.7
12 17	6 2.98	+21 18.3	1.200	2.182	2.6	19.3	12 17	6 2.38	+16 23.0	1.985	2.962	2.9	19.5
12 27	5 52.14	+20 32.8	1.230	2.209	3.5	19.4	12 27	5 52.87	+16 6.8	1.999	2.972	3.4	19.6
1 6	5 42.80	+19 52.0	1.286	2.236	8.6	19.8	1 6	5 44.07	+15 55.9	2.043	2.982	6.7	19.8
1 16	5 36.09	+19 18.8	1.367	2.264	13.2	20.1	1 16	5 36.84	+15 50.8	2.114	2.992	10.1	20.1
1 26	5 32.67	+18 54.5	1.469	2.292	16.9	20.4	1 26	5 31.80	+15 51.5	2.209	3.002	13.0	20.3
409813	2006 <i>HW</i> ₁₃₅		12 21.3 12°34	4°9/21.1 17			402025	2003 <i>SA</i> ₁₀₁		12 21.3 15°07	18°9/25.3 18		
11 17	6 26.11	+34 52.0	1.885	2.703	14.2	20.5	11 17	6 42.99	+56 44.4	0.934	1.729	26.7	19.6
11 27	6 20.82	+35 42.4	1.815	2.705	11.0	20.3	11 27	6 38.11	+58 18.1	0.891	1.731	24.0	19.5
12 7	6 12.77	+36 25.3	1.767	2.707	7.8	20.2	12 7	6 25.34	+59 12.9	0.860	1.735	21.4	19.3
12 17	6 2.80	+36 55.5	1.746	2.710	5.2	20.0	12 17	6 6.84	+59 9.2	0.845	1.739	19.5	19.2
12 27	5 52.20	+37 9.3	1.753	2.714	5.5	20.0	12 27	5 47.33	+57 55.9	0.847	1.745	19.0	19.2
1 6	5 42.42	+37 6.6	1.787	2.718	8.3	20.2	1 6	5 31.77	+55 40.2	0.867	1.752	20.0	19.3
1 16	5 34.67	+36 50.0	1.847	2.722	11.5	20.4	1 16	5 22.92	+52 42.5	0.905	1.760	22.2	19.5
1 26	5 29.82	+36 24.3	1.930	2.727	14.5	20.6	1 26	5 21.21	+49 27.0	0.959	1.769	24.8	19.7
40280	1999 <i>JV</i> ₄₄		12 21.3 261°61	0°1/21.3 18			318834	2005 <i>SK</i> ₂₄₉		12 21.3 40°58	0°7/21.3 18		
11 17	6 29.18	+23 39.4	1.372	2.209	17.4	19.4	11 17	6 24.45	+21 37.7	1.879	2.705	13.8	21.5
11 27	6 23.60	+23 40.9	1.300	2.208	13.1	19.2	11 27	6 19.17	+21 33.1	1.807	2.709	10.4	21.3
12 7	6 14.68	+23 42.3	1.250	2.207	8.1	18.9	12 7	6 11.57	+21 29.8	1.759	2.714	6.4	21.1
12 17	6 3.42	+23 41.5	1.225	2.206	2.5	18.5	12 17	6 2.41	+21 26.8	1.738	2.719	2.1	20.8
12 27	5 51.40	+23 37.1	1.226	2.205	3.3	18.6	12 27	5 52.82	+21 23.9	1.746	2.724	2.6	20.9
1 6	5 40.40	+23 29.5	1.255	2.204	8.8	18.9	1 6	5 43.98	+21 21.2	1.783	2.730	6.9	21.1
1 16	5 31.92	+23 20.8	1.307	2.203	13.8	19.2	1 16	5 36.88	+21 19.6	1.846	2.735	10.7	21.4
1 26	5 26.91	+23 13.6	1.381	2.202	17.9	19.4	1 26	5 32.26	+21 20.0	1.933	2.741	14.0	21.6
216133	2006 <i>SH</i> ₁₀₅		12 21.3 183°31	2°0/21.3 18			122027	2000 <i>GD</i> ₅₉		12 21.3 116°68	2°0/21.3 18		
11 17	6 25.05	+18 20.9	1.972	2.791	13.5	21.0	11 17	6 31.67	+27 50.8	1.837	2.653	14.6	20.2
11 27	6 19.52	+18 5.3	1.894	2.791	10.2	20.8	11 27	6 24.60	+28 17.0	1.776	2.671	10.9	20.0
12 7	6 11.74	+17 53.0	1.840	2.791	6.5	20.5	12 7	6 14.87	+28 39.6	1.738	2.689	6.8	19.8
12 17	6 2.46	+17 44.0	1.813	2.791	2.8	20.3	12 17	6 3.41	+28 55.2	1.727	2.706	2.8	19.5
12 27	5 52.71	+17 38.7	1.816	2.791	3.2	20.3	12 27	5 51.55	+29 1.6	1.747	2.722	3.3	19.6
1 6	5 43.61	+17 37.4	1.848	2.791	7.0	20.6	1 6	5 40.69	+28 58.9	1.796	2.738	7.3	19.9
1 16	5 36.16	+17 40.2	1.906	2.790	10.7	20.8	1 16	5 31.95	+28 49.5	1.872	2.753	11.0	20.1
1 26	5 31.07	+17 47.6	1.989	2.789	14.0	21.0	1 26	5 26.08	+28 36.7	1.971	2.768	14.2	20.4
149672	2004 <i>FH</i> ₁₄₅		12 21.3 141°55	0°7/21.3 18			521593	2015 <i>PY</i> ₃₁₆		12 21.3 240°40	7°0/22.0 18		
11 17	6 29.97	+21 11.0	1.935	2.749	14.0	21.2	11 17	6 25.53	+ 5 3.1	1.723	2.521	16.1	21.6
11 27	6 23.13	+21 12.3	1.866	2.762	10.5	21.0	11 27	6 20.15	+ 4 48.5	1.645	2.517	13.0	21.3
12 7	6 13.90	+21 15.0	1.821	2.774	6.4	20.8	12 7	6 12.29	+ 4 50.5	1.588	2.512	9.8	21.1
12 17	6 3.10	+21 17.9	1.804	2.785	2.1	20.5	12 17	6 2.67	+ 5 11.7	1.557	2.508	7.3	21.0
12 27	5 51.90	+21 20.3	1.818	2.796	2.7	20.6	12 27	5 52.43	+ 5 52.6	1.553	2.503	7.3	21.0
1 6	5 41.53	+21 22.0	1.861	2.805	6.9	20.9	1 6	5 42.81	+ 6 51.1	1.576	2.498	9.8	21.1
1 16	5 33.03	+21 24.0	1.932	2.814	10.7	21.2	1 16	5 34.92	+ 8 3.3	1.625	2.493	13.2	21.3
1 26	5 27.10	+21 27.3	2.027	2.823	13.9	21.4	1 26	5 29.61	+ 9 24.2	1.696	2.488	16.4	21.5
375653	2009 <i>BJ</i> ₆₀		12 21.3 43°18	1°3/21.5 17			303066	2003 <i>YB</i> ₁₅₁		12 21.3 295°19	8°0/21.0 17		
11 17	6 24.56	+28 54.2	2.243	3.060	12.2	20.1	11 17	6 31.07	+41 41.8	1.778	2.578	15.6	20.2
11 27	6 18.89	+28 35.0	2.173	3.069	9.2	19.9	11 27	6 25.31	+42 45.4	1.691	2.561	12.8	19.9
12 7	6 11.20	+28 10.5	2.127	3.079	5.7	19.7	12 7	6 15.97	+43 37.2	1.625	2.544	10.1	19.7
12 17	6 2.25	+27 39.8	2.110	3.089	2.2	19.5	12 17	6 3.92	+44 8.6	1.585	2.526	8.2	19.6
12 27	5 53.05	+27 3.4	2.122	3.099	2.5	19.6	12 27	5 50.74	+44 13.8	1.570	2.509	8.4	19.6
1 6	5 44.61	+26 22.9	2.165	3.110	6.0	19.8	1 6	5 38.36	+43 51.8	1.582	2.492	10.7	19.7
1 16	5 37.78	+25 41.2	2.235	3.120	9.3	20.0	1 16	5 28.51	+43 7.2	1.618	2.476	13.8	19.8
1 26	5 33.17	+25 0.9	2.330	3.131	12.2	20.2	1 26	5 22.35	+42 7.9	1.676	2.459	16.9	20.0
25144	1998 <i>SC</i> ₄₃		12 21.3 109°03	1°9/21.3 18			213026	1996 <i>HZ</i> ₅		12 21.3 359°99	6°5/20.4 18		
11 17	6 28.60	+27 52.3	1.929	2.747	13.9	19.3	11 17	6 27.42	+33 18.6	1.400	2.235	17.2	19.7
11 27	6 22.28	+28 16.0	1.863	2.760	10.4	19.1	11 27	6 22.83	+34 58.1	1.333	2.232	13.5	19.4
12 7	6 13.45	+28 36.5	1.821	2.772	6.5	18.9	12 7	6 14.56	+36 33.5	1.287	2.231	9.6	19.2
12 17	6 2.98	+28 50.6	1.806	2.784	2.7	18.7	12 17	6 3.49	+37 55.2	1.266	2.230	6.8	19.1
12 27	5 52.08	+28 56.4	1.820	2.796	3.2	18.7	12 27	5 51.31	+38 54.7	1.272	2.231	7.4	19.1
1 6	5 42.03	+28 54.0	1.864	2.807	7.0	19.0	1 6	5 40.04	+39 29.0	1.303	2.232	10.8	19.3
1 16	5 33.92	+28 45.4	1.935	2.819	10.6	19.3	1 16	5 31.45	+39 40.3	1.357	2.235	14.7	19.5
1 26	5 28.49	+28 33.4	2.030	2.830	13.8	19.5	1 26	5 26.74	+39 34.9	1.431	2.238	18.2	19.8
446418	2014 <i>JQ</i> ₁₄		12 21.3 125°12	1°0/21.2 18			268012	2004 <i>LL</i>		12 21.3 190°77	0°7/21.3 18		
11 17	6 28.09	+24 6.8	1.956	2.774	13.7	20.9	11 17	6 28.92	+21 49.3	1.941	2.757	13.9	22.0
11 27	6 21.91	+24 45.9	1.885	2.783	10.2	20.7	11 27	6 22.52	+21 45.3	1.859	2.756	10.4	21.8
12 7	6 13.27	+25 26.1	1.838	2.791	6.3	20.4	12 7	6 13.65	+21 42.1	1.801	2.754	6.4	21.6
12 17	6 2.94	+26 3.9	1.819	2.799	2.1	20.2	12 17	6 3.07	+21 38.4	1.771	2.752	2.1	21.3
12 27	5 52.09	+26 36.5	1.830	2.807	2.7	20.2	12 27	5 51.95	+21 33.9	1.771	2.749	2.7	21.3
1 6	5 41.95	+27 2.4	1.870	2.815	6.8	20.5	1 6	5 41.53	+21 28.7	1.800	2.745	7.0	21.6
1 16	5 33.62	+27 22.2	1.939	2.822	10.6	20.8	1 16	5 32.91	+21 24.0	1.858	2.741	11.0	21.8
1 26	5 27.88	+27 37.2	2.031	2.829	13.8	21.0	1 26	5 26.87	+21 21.3	1.939	2.736	14.4	22.0
78491	2002 <i>RQ</i> ₆₁		12 21.3 86°67	0°8/21.3 18			136183	2003 <i>UH</i> ₂₀₈					

EPHEMERIDES

12 21.3

12 21.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
143130	2002 <i>XF</i> ₃₄		12 21.3	44°52'	0°9'/21.3	18	9071	Coudenberghé		12 21.3	160°61'	1°0'/21.3	18
11 17	6 26.07	+24 52.1	1.722	2.551	14.8	20.0	11 17	6 24.05	+20 24.6	2.387	3.201	11.7	18.8
11 27	6 20.66	+25 10.0	1.654	2.557	11.1	19.8	11 27	6 18.45	+20 21.4	2.308	3.204	8.7	18.6
12 7	6 12.60	+25 27.4	1.608	2.564	6.8	19.6	12 7	6 10.97	+20 19.8	2.255	3.207	5.4	18.4
12 17	6 2.76	+25 41.6	1.589	2.570	2.2	19.3	12 17	6 2.24	+20 19.2	2.230	3.210	1.9	18.2
12 27	5 52.39	+25 51.0	1.599	2.577	2.9	19.4	12 27	5 53.15	+20 19.5	2.235	3.212	2.3	18.2
1 6	5 42.88	+25 55.1	1.636	2.584	7.3	19.7	1 6	5 44.60	+20 20.6	2.271	3.215	5.8	18.5
1 16	5 35.35	+25 55.3	1.700	2.591	11.4	19.9	1 16	5 37.43	+20 22.9	2.334	3.217	9.1	18.7
1 26	5 30.61	+25 53.6	1.787	2.598	14.9	20.2	1 26	5 32.25	+20 27.0	2.423	3.218	11.9	18.9
152969	2000 <i>GC</i> ₁₁₇		12 21.3	232°42'	1°1'/21.3	18	409607	2005 <i>UR</i> ₄₂₈		12 21.3	30°63'	0°3'/21.3	16
11 17	6 29.46	+25 55.8	1.833	2.652	14.4	21.3	11 17	6 24.76	+24 17.4	1.852	2.679	14.0	22.0
11 27	6 23.28	+26 5.9	1.744	2.642	10.9	21.1	11 27	6 19.50	+24 19.8	1.780	2.683	10.4	21.8
12 7	6 14.31	+26 14.1	1.678	2.631	6.8	20.8	12 7	6 11.83	+24 21.4	1.732	2.687	6.4	21.5
12 17	6 3.32	+26 17.7	1.639	2.620	2.3	20.5	12 17	6 2.53	+24 20.6	1.711	2.692	2.0	21.3
12 27	5 51.59	+26 15.1	1.630	2.608	2.9	20.5	12 27	5 52.78	+24 16.8	1.718	2.697	2.6	21.3
1 6	5 40.52	+26 6.3	1.650	2.595	7.5	20.8	1 6	5 43.80	+24 10.2	1.754	2.702	6.9	21.6
1 16	5 31.39	+25 53.2	1.697	2.582	11.7	21.0	1 16	5 36.64	+24 2.1	1.817	2.707	10.8	21.8
1 26	5 25.13	+25 38.9	1.767	2.569	15.4	21.2	1 26	5 32.04	+23 54.4	1.903	2.713	14.1	22.1
473816	2016 <i>EK</i> ₁₁₂		12 21.3	335°32'	0°2'/21.3	16	196020	2002 <i>SC</i> ₂		12 21.3	148°71'	2°6'/21.3	17
11 17	6 21.85	+22 31.8	1.865	2.696	13.7	21.1	11 17	6 22.02	+14 46.6	2.678	3.482	10.8	21.1
11 27	6 17.47	+22 39.2	1.779	2.684	10.3	20.9	11 27	6 16.70	+14 32.0	2.601	3.488	8.2	21.0
12 7	6 10.69	+22 47.9	1.716	2.672	6.3	20.6	12 7	6 9.80	+14 22.0	2.549	3.493	5.4	20.8
12 17	6 2.20	+22 56.6	1.680	2.661	2.0	20.3	12 17	6 1.88	+14 17.1	2.526	3.498	2.9	20.6
12 27	5 53.08	+23 4.2	1.672	2.651	2.6	20.3	12 27	5 53.66	+14 17.6	2.534	3.503	3.2	20.7
1 6	5 44.54	+23 10.5	1.692	2.641	7.0	20.6	1 6	5 45.92	+14 23.4	2.572	3.508	5.8	20.8
1 16	5 37.66	+23 15.7	1.739	2.632	11.1	20.8	1 16	5 39.32	+14 34.2	2.639	3.512	8.5	21.0
1 26	5 33.27	+23 21.1	1.809	2.624	14.6	21.0	1 26	5 34.43	+14 49.5	2.730	3.516	11.0	21.2
136233	2003 <i>WX</i> ₁₂₀		12 21.3	87°29'	3°3'/21.4	18	270187	2001 <i>SY</i> ₃₀₁		12 21.3	128°72'	0°6'/21.3	18
11 17	6 34.45	+30 24.1	1.431	2.256	17.4	19.9	11 17	6 30.68	+25 0.9	1.840	2.657	14.5	21.9
11 27	6 27.22	+30 50.2	1.380	2.279	13.2	19.7	11 27	6 23.82	+25 5.2	1.774	2.671	10.8	21.7
12 7	6 16.65	+31 9.1	1.351	2.301	8.4	19.4	12 7	6 14.40	+25 7.8	1.731	2.685	6.6	21.4
12 17	6 3.96	+31 16.0	1.348	2.324	4.1	19.2	12 17	6 3.31	+25 6.5	1.717	2.698	2.1	21.2
12 27	5 50.94	+31 8.5	1.372	2.346	4.4	19.3	12 27	5 51.84	+25 0.4	1.732	2.710	2.7	21.2
1 6	5 39.37	+30 48.3	1.424	2.367	8.7	19.6	1 6	5 41.31	+24 50.0	1.776	2.722	7.1	21.5
1 16	5 30.61	+30 19.7	1.501	2.388	12.9	19.9	1 16	5 32.81	+24 37.4	1.848	2.733	11.0	21.8
1 26	5 25.43	+29 48.4	1.601	2.409	16.5	20.2	1 26	5 27.07	+24 25.0	1.944	2.743	14.3	22.0
293046	2006 <i>WV</i> ₁₀₀		12 21.3	20°31'	0°5'/21.3	18	458017	2009 <i>WN</i> ₁₄₀		12 21.3	48°25'	1°0'/21.2	17
11 17	6 25.38	+23 11.7	1.786	2.614	14.4	20.6	11 17	6 25.01	+24 2.0	2.043	2.864	13.1	21.3
11 27	6 20.00	+22 53.1	1.712	2.616	10.8	20.3	11 27	6 19.57	+24 42.3	1.971	2.871	9.8	21.1
12 7	6 12.13	+22 33.6	1.662	2.617	6.6	20.1	12 7	6 11.85	+25 23.8	1.924	2.878	6.0	20.9
12 17	6 2.61	+22 12.5	1.638	2.619	2.1	19.8	12 17	6 2.56	+26 3.5	1.904	2.885	2.0	20.6
12 27	5 52.63	+21 50.4	1.643	2.622	2.7	19.9	12 27	5 52.77	+26 38.6	1.914	2.892	2.6	20.7
1 6	5 43.46	+21 28.4	1.677	2.624	7.2	20.1	1 6	5 43.62	+27 7.7	1.954	2.899	6.5	21.0
1 16	5 36.16	+21 8.5	1.737	2.627	11.3	20.4	1 16	5 36.11	+27 30.9	2.021	2.906	10.1	21.2
1 26	5 31.50	+20 52.3	1.820	2.630	14.7	20.6	1 26	5 31.00	+27 49.3	2.112	2.914	13.2	21.4
490982	2011 <i>FA</i> ₂		12 21.3	320°66'	3°8'/20.9	17	238264	2003 <i>WF</i> ₃₂		12 21.3	116°12'	4°2'/21.1	18
11 17	6 25.62	+31 11.2	2.023	2.842	13.3	21.0	11 17	6 31.03	+32 50.0	1.941	2.751	14.1	20.6
11 27	6 20.41	+32 11.8	1.938	2.832	10.2	20.8	11 27	6 24.33	+33 45.4	1.875	2.763	10.9	20.5
12 7	6 12.58	+33 9.5	1.877	2.822	6.9	20.5	12 7	6 14.86	+34 34.7	1.834	2.775	7.4	20.3
12 17	6 2.82	+33 59.5	1.842	2.813	4.1	20.3	12 17	6 3.51	+35 12.5	1.820	2.787	4.6	20.1
12 27	5 52.26	+34 37.5	1.837	2.804	4.6	20.4	12 27	5 51.59	+35 35.0	1.835	2.799	4.9	20.2
1 6	5 42.23	+35 1.5	1.861	2.795	7.7	20.5	1 6	5 40.54	+35 41.7	1.879	2.810	7.9	20.4
1 16	5 33.95	+35 12.7	1.911	2.787	11.1	20.7	1 16	5 31.58	+35 35.2	1.950	2.821	11.2	20.6
1 26	5 28.35	+35 13.9	1.984	2.779	14.2	20.9	1 26	5 25.53	+35 20.0	2.044	2.831	14.1	20.8
441108	2007 <i>TZ</i> ₅		12 21.3	17°24'	4°5'/21.4	17	309001	2006 <i>UG</i> ₄₉		12 21.3	53°32'	0°0'/21.3	18
11 17	6 23.75	+30 54.3	1.064	1.923	19.7	20.0	11 17	6 26.33	+24 23.2	1.779	2.606	14.5	20.8
11 27	6 20.22	+31 34.9	1.018	1.934	15.0	19.8	11 27	6 20.73	+24 11.4	1.707	2.610	10.8	20.6
12 7	6 12.84	+32 7.7	0.990	1.947	9.8	19.6	12 7	6 12.61	+23 57.9	1.659	2.614	6.6	20.4
12 17	6 2.89	+32 26.7	0.985	1.961	5.2	19.4	12 17	6 2.80	+23 41.5	1.637	2.618	2.0	20.1
12 27	5 52.36	+32 28.0	1.004	1.978	5.7	19.4	12 27	5 52.53	+23 22.4	1.644	2.623	2.7	20.2
1 6	5 43.34	+32 13.1	1.046	1.996	10.2	19.8	1 6	5 43.12	+23 1.6	1.679	2.627	7.2	20.4
1 16	5 37.40	+31 46.6	1.111	2.015	14.8	20.1	1 16	5 35.64	+22 41.3	1.742	2.632	11.2	20.7
1 26	5 35.38	+31 14.8	1.195	2.037	18.8	20.4	1 26	5 30.85	+22 23.4	1.827	2.636	14.7	20.9
215120	1999 <i>JG</i> ₄		12 21.3	149°85'	1°2'/21.2	18	179378	2001 <i>XF</i> ₂₄₅		12 21.3	103°63'	1°1'/21.3	18
11 17	6 31.91	+21 8.8	1.959	2.769	14.0	21.2	11 17	6 26.72	+25 29.1	2.040	2.859	13.2	21.0
11 27	6 24.49	+20 47.0	1.888	2.782	10.5	21.0	11 27	6 20.77	+25 50.7	1.971	2.869	9.9	20.8
12 7	6 14.70	+20 25.3	1.842	2.794	6.5	20.8	12 7	6 12.53	+26 11.3	1.927	2.880	6.1	20.6
12 17	6 3.37	+20 3.6	1.825	2.804	2.3	20.5	12 17	6 2.76	+26 28.2	1.910	2.890	2.1	20.4
12 27	5 51.70	+19 42.4	1.838	2.814	2.9	20.6	12 27	5 52.57	+26 39.9	1.923	2.900	2.6	20.4
1 6	5 40.91	+19 22.4	1.881	2.823	7.0	20.8	1 6	5 43.12	+26 46.0	1.965	2.910	6.5	20.7
1 16	5 32.03	+19 5.8	1.953	2.831	10.8	21.1	1 16	5 35.41	+26 47.5	2.035	2.920	10.1	20.9
1 26	5 25.74	+18 53.8	2.048	2.838	14.0	21.3	1 26	5 30.14	+26 46.5	2.129	2.929	13.2	21.1
256270	2006 <i>WV</i> ₈₂		12 21.3	138°72'	1°2'/21.3	18	455420	2003 <i>HR</i> ₁₅		12 21.3	208°30'		

EPHEMERIDES

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12 21.3

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
288651	2004 <i>PG</i> ₄₇		12 21.3 111°33	1°5/21.3 16			408077	2012 <i>HO</i> ₁₂		12 21.3 351°96	6°8/21.1 17		
11 17	6 33.43	+25 38.9	1.372	2.203	17.7	21.3	11 17	6 21.05	+ 6 57.6	1.840	2.648	14.8	19.9
11 27	6 26.68	+26 5.8	1.313	2.217	13.3	21.1	11 27	6 16.66	+ 6 6.3	1.766	2.644	12.0	19.7
12 7	6 16.52	+26 31.3	1.276	2.231	8.2	20.8	12 7	6 10.11	+ 5 26.6	1.715	2.641	9.1	19.5
12 17	6 4.05	+26 51.3	1.263	2.244	2.9	20.6	12 17	6 2.09	+ 5 2.4	1.689	2.639	7.0	19.4
12 27	5 51.00	+27 2.4	1.279	2.257	3.6	20.6	12 27	5 53.61	+ 4 56.0	1.690	2.637	7.2	19.4
1 6	5 39.22	+27 4.7	1.322	2.269	8.7	21.0	1 6	5 45.74	+ 5 7.6	1.718	2.635	9.5	19.5
1 16	5 30.17	+27 0.7	1.390	2.281	13.4	21.3	1 16	5 39.42	+ 5 35.4	1.770	2.634	12.5	19.7
1 26	5 24.73	+26 53.9	1.479	2.292	17.3	21.6	1 26	5 35.37	+ 6 16.3	1.844	2.634	15.3	19.9
151405	2002 <i>EQ</i> ₁₁₁		12 21.3 244°64	3°6/21.6 18			51533	2001 <i>FF</i> ₁₃₂		12 21.3 112°95	0°6/21.4 18		
11 17	6 23.02	+11 57.9	2.263	3.068	12.5	19.7	11 17	6 31.18	+20 33.6	1.739	2.556	15.2	19.4
11 27	6 17.83	+11 54.4	2.176	3.061	9.7	19.5	11 27	6 24.25	+20 51.6	1.679	2.576	11.3	19.2
12 7	6 10.70	+11 59.1	2.114	3.055	6.6	19.3	12 7	6 14.71	+21 12.6	1.642	2.596	6.9	19.0
12 17	6 2.23	+12 12.6	2.080	3.048	4.0	19.1	12 17	6 3.49	+21 34.4	1.634	2.614	2.2	18.7
12 27	5 53.28	+12 34.9	2.075	3.041	4.1	19.1	12 27	5 51.87	+21 55.1	1.654	2.632	2.8	18.8
1 6	5 44.78	+13 4.9	2.099	3.034	6.9	19.2	1 6	5 41.22	+22 13.8	1.704	2.650	7.3	19.1
1 16	5 37.60	+13 41.4	2.151	3.027	10.1	19.4	1 16	5 32.66	+22 30.8	1.782	2.667	11.3	19.4
1 26	5 32.41	+14 22.7	2.228	3.019	13.0	19.6	1 26	5 26.91	+22 47.0	1.882	2.683	14.7	19.6
371771	2007 <i>HF</i> ₁₈		12 21.3 202°01	3°2/21.2 18			430830	2005 <i>JF</i> ₅₉		12 21.3 223°94	3°0/21.2 18		
11 17	6 22.65	+13 35.4	2.567	3.370	11.3	21.8	11 17	6 28.62	+17 16.1	1.598	2.422	16.0	22.0
11 27	6 17.29	+13 10.8	2.482	3.367	8.7	21.6	11 27	6 22.77	+16 50.0	1.517	2.416	12.2	21.8
12 7	6 10.24	+12 51.3	2.423	3.364	5.8	21.4	12 7	6 14.08	+16 28.1	1.458	2.409	7.9	21.5
12 17	6 2.07	+12 37.7	2.391	3.360	3.5	21.3	12 17	6 3.37	+16 11.5	1.426	2.403	3.7	21.2
12 27	5 53.53	+12 31.1	2.390	3.356	3.8	21.3	12 27	5 51.95	+16 0.9	1.422	2.396	4.3	21.2
1 6	5 45.44	+12 31.5	2.419	3.352	6.3	21.4	1 6	5 41.30	+15 57.1	1.445	2.388	8.6	21.5
1 16	5 38.54	+12 38.9	2.477	3.347	9.1	21.6	1 16	5 32.69	+16 0.5	1.495	2.380	13.0	21.7
1 26	5 33.41	+12 52.5	2.559	3.342	11.7	21.8	1 26	5 27.04	+16 11.1	1.566	2.372	16.9	21.9
101112	1998 <i>RG</i> ₅₁		12 21.3 146°74	0°1/21.3 18			494587	2017 <i>BK</i> ₈₅		12 21.3 203°78	0°7/21.4 17		
11 17	6 27.90	+23 18.9	2.389	3.197	11.8	21.0	11 17	6 27.68	+27 18.9	2.058	2.874	13.2	21.2
11 27	6 21.25	+23 14.0	2.316	3.209	8.8	20.9	11 27	6 21.51	+26 55.1	1.976	2.873	9.9	21.0
12 7	6 12.66	+23 8.4	2.268	3.220	5.4	20.7	12 7	6 13.01	+26 26.2	1.918	2.871	6.1	20.8
12 17	6 2.81	+23 1.1	2.250	3.231	1.7	20.4	12 17	6 2.98	+25 51.4	1.889	2.869	2.0	20.5
12 27	5 52.65	+22 51.8	2.263	3.241	2.2	20.5	12 27	5 52.53	+25 11.1	1.889	2.867	2.5	20.5
1 6	5 43.16	+22 41.0	2.306	3.250	5.8	20.7	1 6	5 42.84	+24 27.4	1.920	2.865	6.6	20.8
1 16	5 35.18	+22 29.8	2.379	3.258	9.1	21.0	1 16	5 34.93	+23 43.4	1.978	2.863	10.3	21.0
1 26	5 29.33	+22 19.8	2.477	3.266	11.9	21.2	1 26	5 29.49	+23 2.2	2.060	2.860	13.6	21.2
506086	2015 <i>XD</i> ₃₈₅		12 21.3 290°83	7°6/23.2 17			185438	2006 <i>XW</i> ₄₇		12 21.3 80°40	1°4/21.4 18		
11 17	6 42.30	+42 18.4	1.034	1.857	22.8	20.7	11 17	6 26.79	+27 57.5	1.954	2.774	13.6	20.3
11 27	6 35.36	+41 43.6	0.953	1.843	18.6	20.4	11 27	6 20.96	+27 55.5	1.881	2.779	10.2	20.0
12 7	6 22.77	+40 36.5	0.890	1.828	13.6	20.0	12 7	6 12.72	+27 49.1	1.832	2.785	6.4	19.8
12 17	6 6.12	+38 46.1	0.848	1.813	8.8	19.7	12 17	6 2.89	+27 36.5	1.810	2.790	2.4	19.6
12 27	5 48.41	+36 10.1	0.831	1.799	8.1	19.6	12 27	5 52.65	+27 17.2	1.818	2.795	2.8	19.6
1 6	5 32.95	+33 1.2	0.839	1.784	12.6	19.8	1 6	5 43.23	+26 52.2	1.855	2.801	6.8	19.9
1 16	5 22.06	+29 41.7	0.870	1.771	18.4	20.1	1 16	5 35.65	+26 24.2	1.919	2.806	10.5	20.1
1 26	5 16.78	+26 33.0	0.922	1.757	23.7	20.4	1 26	5 30.65	+25 56.1	2.007	2.812	13.7	20.3
412960	2014 <i>QX</i> ₂₈₃		12 21.3 59°32	1°8/21.6 18			21077	1991 <i>RG</i> ₁₄		12 21.3 49°43	8°9/22.4 18		
11 17	6 25.63	+16 4.3	1.909	2.726	14.0	20.3	11 17	6 35.06	+43 35.2	1.443	2.247	18.4	18.2
11 27	6 19.92	+16 36.0	1.850	2.745	10.5	20.1	11 27	6 28.33	+44 23.3	1.395	2.265	15.0	18.0
12 7	6 11.99	+17 15.0	1.814	2.765	6.6	19.9	12 7	6 17.65	+44 51.7	1.366	2.284	11.7	17.9
12 17	6 2.63	+17 59.5	1.806	2.784	2.7	19.7	12 17	6 4.43	+44 52.3	1.361	2.302	9.3	17.8
12 27	5 52.89	+18 47.2	1.828	2.804	3.0	19.8	12 27	5 50.80	+44 21.5	1.381	2.322	9.2	17.8
1 6	5 43.91	+19 35.7	1.879	2.824	6.8	20.0	1 6	5 38.95	+43 23.0	1.426	2.341	11.3	18.0
1 16	5 36.64	+20 23.3	1.957	2.844	10.4	20.3	1 16	5 30.42	+42 5.6	1.495	2.361	14.3	18.2
1 26	5 31.75	+21 9.2	2.060	2.863	13.5	20.5	1 26	5 25.99	+40 39.5	1.585	2.381	17.1	18.5
108618	2001 <i>MB</i> ₂₆		12 21.3 173°71	5°0/21.6 18			394205	2006 <i>SZ</i> ₁₀₇		12 21.3 111°04	1°9/21.4 18		
11 17	6 24.66	+ 8 1.2	2.298	3.089	12.8	19.9	11 17	6 29.43	+28 52.6	2.176	2.985	12.8	21.6
11 27	6 18.91	+ 7 40.9	2.220	3.092	10.1	19.7	11 27	6 22.61	+29 9.3	2.114	3.005	9.6	21.4
12 7	6 11.29	+ 7 30.8	2.166	3.094	7.4	19.6	12 7	6 13.57	+29 21.8	2.076	3.025	6.0	21.3
12 17	6 2.42	+ 7 32.2	2.140	3.095	5.3	19.4	12 17	6 3.13	+29 27.4	2.067	3.044	2.6	21.1
12 27	5 53.15	+ 7 45.9	2.143	3.097	5.4	19.5	12 27	5 52.39	+29 24.8	2.088	3.063	3.0	21.1
1 6	5 44.41	+ 8 11.3	2.176	3.097	7.6	19.6	1 6	5 42.49	+29 14.5	2.139	3.081	6.3	21.4
1 16	5 37.01	+ 8 46.6	2.236	3.097	10.4	19.8	1 16	5 34.38	+28 58.6	2.219	3.098	9.6	21.6
1 26	5 31.58	+ 9 29.6	2.321	3.097	13.0	19.9	1 26	5 28.70	+28 40.1	2.323	3.115	12.5	21.8
226980	2004 <i>XB</i> ₂₃		12 21.3 63°16	0°1/21.3 18			69402	1995 <i>SM</i> ₁₀		12 21.3 172°28	7°5/21.4 18		
11 17	6 24.67	+21 53.4	2.105	2.925	12.8	19.9	11 17	6 25.11	+ 2 44.6	2.085	2.864	14.3	20.9
11 27	6 19.22	+22 24.5	2.033	2.932	9.6	19.7	11 27	6 19.39	+ 1 56.1	2.012	2.866	11.8	20.7
12 7	6 11.62	+22 58.1	1.985	2.939	5.8	19.5	12 7	6 11.65	+ 1 21.4	1.963	2.869	9.4	20.6
12 17	6 2.54	+23 31.9	1.966	2.947	1.8	19.2	12 17	6 2.57	+ 1 4.0	1.939	2.870	7.7	20.5
12 27	5 53.01	+24 3.7	1.976	2.954	2.3	19.3	12 27	5 53.07	+ 1 6.1	1.943	2.872	7.8	20.5
1 6	5 44.09	+24 32.1	2.016	2.962	6.3	19.6	1 6	5 44.17	+ 1 27.2	1.974	2.873	9.6	20.6
1 16	5 36.74	+24 57.0	2.084	2.970	9.8	19.8	1 16	5 36.73	+ 2 5.3	2.031	2.873	12.1	20.8
1 26	5 31.66	+25 19.0	2.176	2.978	12.9	20.0	1 26	5 31.42	+ 2 56.5	2.111	2.873	14.6	20.9
451595	2012 <i>BQ</i> ₁₃₂		12 21.3 317°38	3°1/20.9 17			266190	2006 <i>VS</i> ₁₀₆		12 21.3			

EPHEMERIDES

12 21.3

12 21.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
369629	2011 <i>DD</i> ₂₃		12 21.3	12 ^h 58 ^m	6 ^s .4/21.6	17	77242	2001 <i>FC</i> ₄₂		12 21.4	157 ^o 91	6 ^o 0/21.3	18
11 17	6 21.03	+ 6 7.2	1.955	2.757	14.3	20.7	11 17	6 24.73	+ 8 5.1	1.918	2.720	14.6	20.0
11 27	6 16.50	+ 5 33.9	1.885	2.759	11.5	20.5	11 27	6 19.29	+ 7 23.4	1.846	2.722	11.6	19.8
12 7	6 9.96	+ 5 13.6	1.837	2.761	8.7	20.3	12 7	6 11.68	+ 6 52.6	1.796	2.725	8.5	19.6
12 17	6 2.06	+ 5 8.7	1.815	2.764	6.7	20.2	12 17	6 2.62	+ 6 35.5	1.773	2.727	6.3	19.5
12 27	5 53.76	+ 5 20.6	1.821	2.768	6.8	20.2	12 27	5 53.12	+ 6 33.8	1.777	2.729	6.5	19.5
1 6	5 46.06	+ 5 48.7	1.853	2.772	8.9	20.4	1 6	5 44.27	+ 6 47.5	1.810	2.730	8.9	19.7
1 16	5 39.83	+ 6 30.4	1.912	2.776	11.7	20.5	1 16	5 37.00	+ 7 14.9	1.868	2.732	12.0	19.9
1 26	5 35.74	+ 7 22.5	1.993	2.781	14.4	20.7	1 26	5 32.03	+ 7 53.3	1.949	2.733	14.8	20.1
344164	2000 <i>YF</i> ₆₁		12 21.3	14 ^h 89 ^m	0 ^s .4/21.3	18	98921	2001 <i>BW</i> ₇₆		12 21.4	213 ^o 62	1 ^o 1/21.3	18
11 17	6 22.10	+24 25.8	0.997	1.864	20.0	18.6	11 17	6 23.53	+20 1.9	2.356	3.171	11.8	20.0
11 27	6 18.89	+23 57.0	0.949	1.872	15.0	18.4	11 27	6 18.19	+19 55.9	2.273	3.168	8.8	19.8
12 7	6 12.02	+23 25.8	0.920	1.883	9.2	18.1	12 7	6 10.93	+19 51.7	2.214	3.166	5.5	19.6
12 17	6 2.74	+22 52.3	0.913	1.895	2.8	17.8	12 17	6 2.39	+19 48.9	2.183	3.163	2.0	19.3
12 27	5 52.99	+22 18.0	0.929	1.909	3.7	17.9	12 27	5 53.43	+19 47.5	2.183	3.160	2.4	19.4
1 6	5 44.71	+21 45.9	0.969	1.925	9.7	18.3	1 6	5 44.98	+19 47.5	2.213	3.157	6.0	19.6
1 16	5 39.34	+21 19.1	1.031	1.943	15.0	18.6	1 16	5 37.89	+19 49.2	2.271	3.154	9.3	19.8
1 26	5 37.67	+20 59.4	1.112	1.963	19.3	19.0	1 26	5 32.79	+19 53.3	2.353	3.150	12.2	20.0
275886	2001 <i>TT</i> ₃₂		12 21.4	335 ^o 24	13 ^h 4/17.9	17	220350	2003 <i>HN</i> ₁₃		12 21.4	158 ^o 81	0 ^o 8/21.4	18
11 17	6 35.60	+50 24.8	1.636	2.410	17.8	19.8	11 17	6 24.66	+20 35.4	2.142	2.960	12.7	21.2
11 27	6 30.38	+52 57.7	1.567	2.398	15.8	19.6	11 27	6 19.19	+20 39.0	2.064	2.961	9.5	21.0
12 7	6 20.18	+55 15.1	1.520	2.386	14.1	19.5	12 7	6 11.61	+20 44.8	2.010	2.963	5.9	20.7
12 17	6 5.63	+57 2.5	1.495	2.376	13.4	19.4	12 17	6 2.61	+20 51.8	1.983	2.964	2.0	20.5
12 27	5 48.79	+58 8.4	1.494	2.365	13.9	19.4	12 27	5 53.16	+20 59.3	1.987	2.965	2.5	20.5
1 6	5 32.64	+58 29.5	1.515	2.356	15.5	19.5	1 6	5 44.30	+21 7.1	2.021	2.966	6.3	20.8
1 16	5 20.04	+58 11.0	1.556	2.348	17.6	19.6	1 16	5 36.96	+21 15.3	2.082	2.967	9.9	21.0
1 26	5 12.84	+57 24.4	1.614	2.340	19.7	19.8	1 26	5 31.84	+21 24.6	2.167	2.968	13.0	21.2
371321	2006 <i>HF</i> ₆₆		12 21.4	221 ^o 19	1 ^o 2/21.3	18	139248	2001 <i>HA</i> ₃₃		12 21.4	251 ^o 33	1 ^o 9/21.3	18
11 17	6 24.11	+26 35.8	2.619	3.430	10.8	21.6	11 17	6 25.94	+18 58.9	1.967	2.786	13.6	20.5
11 27	6 18.57	+26 57.0	2.531	3.425	8.1	21.5	11 27	6 20.39	+18 39.1	1.877	2.774	10.3	20.2
12 7	6 11.16	+27 16.7	2.468	3.419	5.1	21.3	12 7	6 12.49	+18 21.6	1.811	2.763	6.5	20.0
12 17	6 2.44	+27 33.0	2.434	3.413	1.9	21.0	12 17	6 2.92	+18 6.5	1.772	2.751	2.7	19.7
12 27	5 53.27	+27 44.4	2.431	3.407	2.3	21.1	12 27	5 52.74	+17 54.5	1.763	2.738	3.2	19.7
1 6	5 44.55	+27 50.5	2.458	3.401	5.5	21.3	1 6	5 43.12	+17 46.0	1.782	2.726	7.2	20.0
1 16	5 37.10	+27 51.9	2.514	3.395	8.6	21.4	1 16	5 35.13	+17 42.0	1.829	2.713	11.1	20.2
1 26	5 31.59	+27 50.4	2.596	3.388	11.3	21.6	1 26	5 29.57	+17 42.9	1.899	2.700	14.5	20.4
94798	2001 <i>XL</i> ₁₅₅		12 21.4	91 ^o 46	1 ^o 3/21.4	18	468318	2016 <i>CP</i> ₇₀		12 21.4	342 ^o 62	3 ^o 4/21.6	18
11 17	6 28.73	+19 39.8	1.619	2.444	15.7	20.0	11 17	6 23.96	+32 17.7	1.694	2.524	14.9	20.3
11 27	6 22.61	+19 44.5	1.558	2.459	11.8	19.8	11 27	6 19.50	+32 27.4	1.612	2.512	11.5	20.0
12 7	6 13.82	+19 53.1	1.520	2.474	7.3	19.6	12 7	6 12.19	+32 29.2	1.552	2.501	7.6	19.8
12 17	6 3.26	+20 4.2	1.509	2.489	2.6	19.4	12 17	6 2.86	+32 19.8	1.517	2.491	4.1	19.6
12 27	5 52.29	+20 16.6	1.526	2.504	3.1	19.4	12 27	5 52.84	+31 57.2	1.510	2.482	4.3	19.6
1 6	5 42.29	+20 29.7	1.572	2.518	7.7	19.7	1 6	5 43.63	+31 22.8	1.530	2.474	8.1	19.8
1 16	5 34.40	+20 43.7	1.643	2.533	11.8	20.0	1 16	5 36.51	+30 40.2	1.575	2.467	12.1	20.0
1 26	5 29.38	+20 59.0	1.738	2.546	15.3	20.3	1 26	5 32.37	+29 54.4	1.642	2.461	15.7	20.2
382663	2002 <i>TB</i> ₉₈		12 21.4	75 ^o 04	1 ^o 0/21.4	18	223231	2003 <i>DT</i> ₂₁		12 21.4	162 ^o 34	17 ^o 2/20.8	17
11 17	6 29.35	+20 44.4	1.395	2.229	17.3	21.1	11 17	6 50.18	+54 8.8	1.209	1.979	23.1	20.3
11 27	6 23.46	+20 48.9	1.337	2.243	13.0	20.8	11 27	6 43.26	+56 37.1	1.158	1.982	20.6	20.1
12 7	6 14.50	+20 56.8	1.300	2.256	8.0	20.6	12 7	6 28.95	+58 38.9	1.124	1.984	18.5	20.0
12 17	6 3.50	+21 6.4	1.289	2.270	2.6	20.3	12 17	6 8.46	+59 53.8	1.109	1.985	17.3	19.9
12 27	5 52.01	+21 16.1	1.305	2.284	3.3	20.4	12 27	5 45.59	+60 6.9	1.114	1.987	17.5	19.9
1 6	5 41.66	+21 25.7	1.348	2.297	8.4	20.7	1 6	5 25.31	+59 19.1	1.138	1.988	18.9	20.0
1 16	5 33.74	+21 35.5	1.417	2.311	13.0	21.0	1 16	5 11.34	+57 44.8	1.181	1.989	21.1	20.2
1 26	5 29.08	+21 46.7	1.507	2.324	16.8	21.3	1 26	5 5.02	+55 44.3	1.240	1.989	23.5	20.4
98053	2000 <i>RP</i> ₃₅		12 21.4	142 ^o 86	1 ^o 3/21.3	18	463909	2014 <i>US</i> ₁₂₄		12 21.4	34 ^o 65	4 ^o 6/21.6	17
11 17	6 31.29	+21 7.8	1.588	2.412	16.1	19.7	11 17	6 27.08	+36 4.0	1.982	2.793	13.8	21.4
11 27	6 24.63	+20 51.1	1.520	2.421	12.1	19.5	11 27	6 21.40	+36 31.4	1.914	2.800	10.8	21.2
12 7	6 15.11	+20 35.4	1.475	2.429	7.5	19.2	12 7	6 13.11	+36 49.3	1.870	2.808	7.6	21.0
12 17	6 3.68	+20 20.3	1.456	2.437	2.6	18.9	12 17	6 3.10	+36 53.5	1.852	2.816	5.0	20.9
12 27	5 51.77	+20 5.8	1.467	2.444	3.2	19.0	12 27	5 52.64	+36 42.0	1.863	2.824	5.1	20.9
1 6	5 40.86	+19 53.0	1.505	2.451	8.0	19.3	1 6	5 43.08	+36 15.7	1.901	2.833	7.8	21.1
1 16	5 32.20	+19 43.3	1.570	2.457	12.4	19.6	1 16	5 35.53	+35 38.3	1.966	2.842	10.9	21.3
1 26	5 26.58	+19 38.1	1.657	2.462	16.1	19.8	1 26	5 30.75	+34 54.7	2.055	2.852	13.7	21.5
184294	2005 <i>ES</i> ₂₅		12 21.4	252 ^o 53	1 ^o 4/21.4	18	317931	2003 <i>VW</i> ₁		12 21.4	97 ^o 73	1 ^o 2/21.3	18
11 17	6 28.69	+19 54.5	1.488	2.318	16.6	20.9	11 17	6 31.58	+22 9.7	1.443	2.273	17.1	20.3
11 27	6 23.17	+19 53.7	1.406	2.310	12.6	20.6	11 27	6 24.95	+21 41.1	1.385	2.288	12.8	20.1
12 7	6 14.53	+19 56.8	1.346	2.301	7.9	20.3	12 7	6 15.32	+21 12.1	1.348	2.303	7.9	19.8
12 17	6 3.59	+20 2.8	1.311	2.291	2.8	20.0	12 17	6 3.77	+20 42.9	1.338	2.318	2.7	19.5
12 27	5 51.79	+20 10.7	1.304	2.282	3.4	20.0	12 27	5 51.85	+20 14.2	1.355	2.333	3.4	19.6
1 6	5 40.74	+20 19.9	1.324	2.272	8.6	20.3	1 6	5 41.17	+19 48.1	1.400	2.347	8.4	20.0
1 16	5 31.90	+20 30.9	1.370	2.262	13.5	20.5	1 16	5 32.96	+19 26.8	1.471	2.361	12.9	20.3
1 26	5 26.29	+20 44.4	1.437	2.252	17.6	20.8	1 26	5 27.97					

EPHEMERIDES

12 21.4

12 21.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
421837	2014 <i>QB</i> ₁₂₀		12 21.4 59°16	1°0/21.4 18			79194	1993 <i>TZ</i> ₁₈		12 21.4 37°00	5°2/21.4 18		
11 17	6 24.46	+20 36.7	1.990	2.812	13.3	21.6	11 17	6 24.08	+11 45.3	1.559	2.383	16.3	18.9
11 27	6 19.14	+20 34.0	1.917	2.817	10.0	21.4	11 27	6 19.18	+11 10.2	1.499	2.393	12.6	18.7
12 7	6 11.62	+20 33.4	1.869	2.822	6.2	21.2	12 7	6 11.78	+10 45.5	1.461	2.403	8.8	18.5
12 17	6 2.64	+20 34.1	1.848	2.828	2.1	20.9	12 17	6 2.72	+10 33.5	1.448	2.414	5.6	18.4
12 27	5 53.23	+20 35.7	1.856	2.834	2.6	21.0	12 27	5 53.26	+10 35.5	1.461	2.426	5.9	18.4
1 6	5 44.52	+20 38.2	1.893	2.839	6.6	21.3	1 6	5 44.67	+10 50.8	1.502	2.437	9.1	18.6
1 16	5 37.43	+20 42.0	1.957	2.845	10.3	21.5	1 16	5 38.02	+11 17.8	1.567	2.450	12.7	18.9
1 26	5 32.69	+20 47.8	2.045	2.851	13.5	21.7	1 26	5 34.04	+11 53.7	1.654	2.462	16.0	19.1
128072	2003 <i>OV</i> ₉		12 21.4 151°93	1°4/21.5 18			366199	2012 <i>JL</i> ₂₆		12 21.4 113°04	7°7/23.1 18	R	
11 17	6 26.38	+28 46.9	2.367	3.177	11.9	20.1	11 17	6 23.20	- 5 8.4	2.656	3.388	12.7	20.2
11 27	6 20.31	+28 37.2	2.288	3.181	8.9	19.9	11 27	6 17.57	- 5 17.2	2.590	3.401	10.9	20.1
12 7	6 12.21	+28 22.7	2.234	3.185	5.6	19.7	12 7	6 10.40	- 5 8.9	2.547	3.413	9.1	20.0
12 17	6 2.80	+28 2.1	2.209	3.188	2.2	19.5	12 17	6 2.25	- 4 41.5	2.529	3.425	7.9	19.9
12 27	5 53.05	+27 35.0	2.214	3.191	2.5	19.5	12 27	5 53.85	- 3 54.6	2.539	3.437	7.8	20.0
1 6	5 43.98	+27 3.0	2.250	3.194	5.9	19.7	1 6	5 45.94	- 2 50.2	2.578	3.449	8.8	20.0
1 16	5 36.46	+26 28.3	2.314	3.196	9.2	20.0	1 16	5 39.19	- 1 31.7	2.643	3.461	10.4	20.2
1 26	5 31.13	+25 53.6	2.403	3.199	12.0	20.2	1 26	5 34.10	- 0 3.3	2.734	3.472	12.1	20.3
454536	2014 <i>OX</i> ₃₁₇		12 21.4 333°63	5°4/21.7 17			107869	2001 <i>FM</i> ₈₆		12 21.4 240°99	4°1/21.3 18		
11 17	6 22.29	+ 8 37.1	1.879	2.688	14.5	20.8	11 17	6 27.70	+14 18.8	1.677	2.495	15.6	20.3
11 27	6 17.66	+ 8 20.4	1.800	2.683	11.5	20.6	11 27	6 22.06	+13 50.0	1.591	2.485	12.1	20.0
12 7	6 10.81	+ 8 15.9	1.743	2.677	8.3	20.4	12 7	6 13.70	+13 27.9	1.528	2.474	8.1	19.8
12 17	6 2.43	+ 8 25.2	1.712	2.672	5.8	20.3	12 17	6 3.39	+13 14.3	1.491	2.463	4.6	19.5
12 27	5 53.50	+ 8 49.1	1.709	2.667	5.9	20.3	12 27	5 52.34	+13 10.3	1.482	2.451	5.0	19.5
1 6	5 45.13	+ 9 26.5	1.733	2.663	8.5	20.4	1 6	5 41.92	+13 16.2	1.500	2.439	8.8	19.7
1 16	5 38.29	+10 14.9	1.783	2.658	11.8	20.6	1 16	5 33.37	+13 31.7	1.545	2.426	13.0	19.9
1 26	5 33.75	+11 11.1	1.856	2.655	14.9	20.8	1 26	5 27.61	+13 55.7	1.612	2.413	16.7	20.1
454155	2013 <i>EK</i> ₉₂		12 21.4 323°41	10°2/20.9 17			395016	2009 <i>BM</i> ₁₉₀		12 21.4 75°42	2°5/21.5 18		
11 17	6 21.41	+ 2 14.9	1.499	2.305	17.7	20.9	11 17	6 25.97	+16 43.9	1.718	2.541	15.1	21.0
11 27	6 17.56	+ 1 4.7	1.418	2.287	14.9	20.7	11 27	6 20.54	+16 37.9	1.649	2.547	11.4	20.8
12 7	6 11.04	+ 0 11.5	1.357	2.269	12.2	20.5	12 7	6 12.62	+16 37.8	1.602	2.553	7.3	20.6
12 17	6 2.56	- 0 18.0	1.318	2.252	10.4	20.3	12 17	6 3.01	+16 43.7	1.583	2.560	3.3	20.4
12 27	5 53.28	- 0 19.1	1.304	2.235	10.6	20.3	12 27	5 52.92	+16 55.2	1.591	2.566	3.7	20.4
1 6	5 44.57	+ 0 9.0	1.314	2.220	12.9	20.4	1 6	5 43.61	+17 11.6	1.628	2.572	7.7	20.7
1 16	5 37.66	+ 1 3.4	1.346	2.205	16.0	20.5	1 16	5 36.16	+17 32.3	1.691	2.579	11.7	20.9
1 26	5 33.51	+ 2 18.1	1.397	2.191	19.2	20.7	1 26	5 31.35	+17 56.5	1.777	2.585	15.1	21.1
311839	2006 <i>VW</i> ₅₂		12 21.4 262°97	1°8/21.5 17			194940	2002 <i>AU</i> ₁₅₀		12 21.4 342°16	1°4/21.3 18		
11 17	6 26.98	+28 39.5	1.971	2.790	13.6	20.7	11 17	6 24.22	+24 52.8	1.243	2.094	17.9	19.5
11 27	6 21.27	+28 41.6	1.887	2.785	10.3	20.5	11 27	6 20.48	+25 18.5	1.169	2.084	13.6	19.2
12 7	6 13.05	+28 39.0	1.828	2.779	6.5	20.2	12 7	6 13.22	+25 45.4	1.115	2.074	8.5	18.9
12 17	6 3.12	+28 29.5	1.795	2.774	2.6	20.0	12 17	6 3.35	+26 9.6	1.085	2.066	2.9	18.6
12 27	5 52.64	+28 12.1	1.792	2.768	3.0	20.0	12 27	5 52.48	+26 27.7	1.079	2.058	3.7	18.6
1 6	5 42.87	+27 47.7	1.818	2.763	6.9	20.2	1 6	5 42.50	+26 38.5	1.099	2.052	9.3	18.9
1 16	5 34.91	+27 18.8	1.871	2.757	10.8	20.4	1 16	5 35.07	+26 43.1	1.142	2.046	14.6	19.2
1 26	5 29.57	+26 48.8	1.948	2.752	14.1	20.6	1 26	5 31.32	+26 44.3	1.205	2.042	19.0	19.4
114231	2002 <i>VB</i> ₁₂₂		12 21.4 172°86	1°4/21.2 18			262233	2006 <i>SD</i> ₂₈₄		12 21.4 74°50	3°1/21.7 18		
11 17	6 27.78	+21 19.8	2.314	3.122	12.2	19.8	11 17	6 31.55	+14 52.4	1.344	2.170	18.3	20.4
11 27	6 21.26	+20 40.0	2.232	3.125	9.1	19.6	11 27	6 24.95	+15 4.3	1.297	2.197	13.8	20.2
12 7	6 12.76	+19 59.2	2.177	3.128	5.7	19.4	12 7	6 15.35	+15 26.6	1.273	2.223	8.8	20.0
12 17	6 2.98	+19 18.0	2.150	3.129	2.2	19.2	12 17	6 3.85	+15 57.7	1.273	2.250	4.1	19.8
12 27	5 52.87	+18 37.7	2.155	3.131	2.7	19.2	12 27	5 52.04	+16 35.6	1.301	2.276	4.3	19.8
1 6	5 43.42	+18 0.3	2.191	3.132	6.2	19.5	1 6	5 41.51	+17 17.4	1.356	2.301	8.8	20.2
1 16	5 35.49	+17 27.4	2.255	3.132	9.6	19.7	1 16	5 33.49	+18 1.1	1.436	2.327	13.1	20.5
1 26	5 29.71	+17 0.7	2.344	3.132	12.5	19.9	1 26	5 28.71	+18 45.4	1.539	2.352	16.8	20.8
121191	1999 <i>NT</i> ₁₉		12 21.4 98°90	0°1/21.4 18			457286	2008 <i>RM</i> ₁₁₂		12 21.4 15°50	12°2/21.9 16		
11 17	6 29.49	+23 25.0	1.799	2.619	14.6	19.9	11 17	6 20.48	- 9 10.3	1.937	2.676	16.6	20.9
11 27	6 22.95	+23 21.4	1.738	2.638	10.9	19.7	11 27	6 16.15	-10 26.3	1.880	2.679	14.8	20.7
12 7	6 13.94	+23 17.3	1.702	2.656	6.6	19.5	12 7	6 9.81	-11 19.1	1.842	2.684	13.2	20.6
12 17	6 3.35	+23 11.2	1.693	2.674	2.0	19.2	12 17	6 2.15	-11 43.1	1.826	2.689	12.3	20.6
12 27	5 52.45	+23 2.7	1.713	2.691	2.6	19.3	12 27	5 54.12	-11 35.0	1.833	2.694	12.3	20.6
1 6	5 42.52	+22 52.6	1.762	2.709	7.0	19.6	1 6	5 46.70	-10 55.9	1.863	2.700	13.2	20.7
1 16	5 34.60	+22 42.3	1.839	2.726	10.9	19.9	1 16	5 40.75	- 9 49.8	1.915	2.707	14.7	20.8
1 26	5 29.38	+22 33.6	1.939	2.742	14.2	20.1	1 26	5 36.93	- 8 22.9	1.987	2.714	16.4	20.9
88121	2000 <i>WD</i> ₁₄₀		12 21.4 120°83	0°6/21.4 17			25424	Gunasekaran		12 21.4 319°16	0°5/21.4 18		
11 17	6 24.72	+21 44.8	2.092	2.911	12.9	19.8	11 17	6 26.18	+25 2.4	1.585	2.419	15.6	19.0
11 27	6 19.29	+21 41.9	2.014	2.913	9.6	19.6	11 27	6 21.20	+24 58.5	1.504	2.410	11.8	18.7
12 7	6 11.72	+21 40.1	1.961	2.914	5.9	19.4	12 7	6 13.29	+24 52.8	1.445	2.401	7.3	18.4
12 17	6 2.70	+21 38.4	1.935	2.916	1.9	19.1	12 17	6 3.31	+24 43.3	1.412	2.393	2.3	18.1
12 27	5 53.24	+21 36.4	1.939	2.917	2.4	19.1	12 27	5 52.61	+24 29.4	1.407	2.385	2.9	18.1
1 6	5 44.41	+21 34.2	1.973	2.919	6.4	19.4	1 6	5 42.69	+24 12.0	1.428	2.378	8.0	18.4
1 16	5 37.15	+21 32.7	2.033	2.920	10.0	19.6	1 16	5 34.88	+23 53.1	1.476	2.371	12.5	18.7
1 26	5 32.16	+21 32.7	2.118	2.921	13.2	19.8	1 26	5 30.11	+23 35.7	1.545	2.364	16.4	18.9
15075	1999 <i>BF</i> ₁₅		12 21.4 40°10	1°5/21.4 18			67187	2000 <i>CL</i> ₂₇		12 21.4			

EPHEMERIDES

12 21.4

12 21.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
35688	1999 <i>CD</i> ₁₀		12 21.4 289°85	2°4/21.6	18		451093	2009 <i>CA</i> ₅		12 21.4 221°14	1°6/21.4	18	
11 17	6 24.72	+15 24.6	1.915	2.732	14.0	17.7	11 17	6 26.78	+18 16.9	2.279	3.087	12.3	22.3
11 27	6 19.57	+15 38.5	1.830	2.726	10.7	17.5	11 27	6 20.81	+18 18.2	2.185	3.077	9.3	22.1
12 7	6 12.08	+16 0.4	1.770	2.719	6.9	17.2	12 7	6 12.72	+18 23.0	2.117	3.066	5.9	21.8
12 17	6 2.92	+16 29.5	1.736	2.713	3.2	17.0	12 17	6 3.13	+18 31.0	2.077	3.055	2.4	21.6
12 27	5 53.12	+17 4.7	1.731	2.706	3.4	17.0	12 27	5 52.97	+18 41.4	2.067	3.043	2.7	21.6
1 6	5 43.86	+17 44.1	1.756	2.700	7.2	17.2	1 6	5 43.27	+18 53.8	2.088	3.031	6.4	21.8
1 16	5 36.19	+18 26.2	1.807	2.693	11.1	17.4	1 16	5 34.96	+19 8.1	2.138	3.018	9.9	22.0
1 26	5 30.92	+19 9.7	1.882	2.687	14.5	17.6	1 26	5 28.80	+19 24.5	2.212	3.004	13.0	22.2
405479	2004 <i>XR</i>		12 21.4 49°71	5°7/21.5	18		233697	2008 <i>SE</i> ₃₄		12 21.4 65°28	1°1/21.4	18	
11 17	6 29.88	+37 12.1	1.817	2.626	14.9	19.8	11 17	6 29.60	+20 37.9	1.433	2.266	17.0	20.5
11 27	6 23.67	+38 4.0	1.766	2.649	11.7	19.7	11 27	6 23.48	+20 37.4	1.383	2.288	12.7	20.3
12 7	6 14.58	+38 45.0	1.739	2.672	8.4	19.5	12 7	6 14.47	+20 40.0	1.355	2.311	7.8	20.0
12 17	6 3.64	+39 9.5	1.737	2.694	6.0	19.4	12 17	6 3.63	+20 44.2	1.353	2.334	2.6	19.8
12 27	5 52.31	+39 14.5	1.763	2.718	6.2	19.5	12 27	5 52.48	+20 49.0	1.378	2.356	3.2	19.9
1 6	5 42.09	+39 0.9	1.816	2.741	8.6	19.7	1 6	5 42.53	+20 54.5	1.431	2.379	8.1	20.2
1 16	5 34.18	+38 32.8	1.895	2.765	11.5	19.9	1 16	5 34.97	+21 1.1	1.509	2.402	12.4	20.5
1 26	5 29.33	+37 55.8	1.997	2.789	14.3	20.1	1 26	5 30.51	+21 9.7	1.609	2.424	16.0	20.8
5719	Křížík		12 21.4 138°09	2°1/21.5	18		28198	1998 <i>XU</i> ₁₆		12 21.4 290°37	0°5/21.4	18	
11 17	6 33.70	+28 44.6	1.670	2.487	15.7	17.4	11 17	6 24.00	+23 3.6	2.297	3.114	12.0	18.2
11 27	6 26.52	+28 55.9	1.603	2.499	11.9	17.2	11 27	6 18.79	+23 34.3	2.210	3.108	9.0	18.0
12 7	6 16.35	+29 2.1	1.559	2.510	7.5	17.0	12 7	6 11.51	+24 6.7	2.148	3.101	5.5	17.8
12 17	6 4.21	+28 59.6	1.542	2.521	3.1	16.8	12 17	6 2.76	+24 38.8	2.114	3.095	1.8	17.5
12 27	5 51.58	+28 46.8	1.555	2.531	3.5	16.8	12 27	5 53.45	+25 8.3	2.110	3.089	2.3	17.5
1 6	5 40.04	+28 24.8	1.596	2.540	7.8	17.1	1 6	5 44.59	+25 34.2	2.137	3.082	6.0	17.8
1 16	5 30.88	+27 57.2	1.663	2.548	12.0	17.4	1 16	5 37.13	+25 56.1	2.191	3.076	9.5	18.0
1 26	5 24.90	+27 28.2	1.754	2.556	15.5	17.6	1 26	5 31.78	+26 14.9	2.270	3.070	12.5	18.2
447145	2005 <i>EX</i> ₂₇₆		12 21.4 232°89	5°2/21.2	18		5994	Yakubovich		12 21.4 90°50	5°5/21.3	18	
11 17	6 24.71	+10 4.9	1.992	2.796	14.0	22.0	11 17	6 32.14	+38 2.1	2.140	2.935	13.5	16.9
11 27	6 19.36	+9 27.2	1.909	2.790	11.0	21.8	11 27	6 25.09	+39 0.9	2.084	2.957	10.7	16.7
12 7	6 11.84	+8 58.1	1.849	2.783	7.9	21.6	12 7	6 15.39	+39 49.6	2.052	2.979	7.8	16.6
12 17	6 2.82	+8 40.3	1.817	2.777	5.5	21.5	12 17	6 3.93	+40 22.7	2.048	3.000	5.8	16.5
12 27	5 53.27	+8 35.3	1.812	2.770	5.8	21.5	12 27	5 52.04	+40 37.0	2.073	3.021	5.9	16.6
1 6	5 44.28	+8 43.5	1.836	2.762	8.4	21.6	1 6	5 41.09	+40 32.8	2.126	3.042	8.0	16.7
1 16	5 36.79	+9 3.9	1.887	2.755	11.7	21.8	1 16	5 32.21	+40 13.4	2.206	3.063	10.7	16.9
1 26	5 31.56	+9 34.4	1.960	2.747	14.6	22.0	1 26	5 26.17	+39 44.0	2.309	3.083	13.1	17.1
267989	2004 <i>GX</i> ₆₀		12 21.4 228°08	1°1/21.4	18		146469	2001 <i>RR</i> ₇₅		12 21.4 14°43	1°0/21.4	18	
11 17	6 28.82	+20 21.9	1.780	2.600	14.8	21.8	11 17	6 22.68	+20 23.2	1.316	2.165	17.3	18.7
11 27	6 22.87	+20 22.1	1.693	2.591	11.2	21.5	11 27	6 18.77	+20 31.5	1.258	2.171	13.0	18.4
12 7	6 14.22	+20 25.0	1.629	2.582	7.0	21.2	12 7	6 11.85	+20 44.4	1.220	2.179	8.0	18.2
12 17	6 3.61	+20 29.6	1.592	2.572	2.4	20.9	12 17	6 2.89	+21 0.3	1.207	2.188	2.7	17.9
12 27	5 52.27	+20 35.0	1.584	2.562	3.0	20.9	12 27	5 53.36	+21 17.7	1.219	2.198	3.2	18.0
1 6	5 41.56	+20 40.8	1.605	2.551	7.6	21.2	1 6	5 44.85	+21 35.5	1.257	2.210	8.4	18.3
1 16	5 32.72	+20 47.6	1.653	2.540	11.9	21.4	1 16	5 38.64	+21 53.6	1.320	2.223	13.1	18.6
1 26	5 26.66	+20 56.3	1.724	2.529	15.6	21.7	1 26	5 35.57	+22 12.1	1.403	2.237	17.0	18.9
186918	2004 <i>PT</i> ₁₃		12 21.4 118°63	2°8/21.6	18		311761	2006 <i>TO</i> ₉₉		12 21.4 219°58	2°2/21.3	17	
11 17	6 24.42	+14 15.3	2.243	3.051	12.5	20.5	11 17	6 27.77	+28 38.6	2.125	2.939	12.9	21.4
11 27	6 18.86	+14 16.2	2.171	3.060	9.5	20.3	11 27	6 21.83	+29 6.5	2.040	2.934	9.8	21.2
12 7	6 11.39	+14 23.7	2.124	3.069	6.3	20.2	12 7	6 13.46	+29 31.6	1.979	2.928	6.3	21.0
12 17	6 2.66	+14 37.8	2.105	3.078	3.3	20.0	12 17	6 3.38	+29 50.5	1.946	2.923	2.8	20.8
12 27	5 53.56	+14 58.1	2.115	3.087	3.5	20.0	12 27	5 52.68	+30 0.9	1.942	2.917	3.2	20.8
1 6	5 45.05	+15 23.5	2.156	3.095	6.5	20.2	1 6	5 42.58	+30 2.5	1.969	2.910	6.8	21.0
1 16	5 37.93	+15 53.1	2.224	3.103	9.6	20.4	1 16	5 34.16	+29 56.6	2.022	2.904	10.4	21.2
1 26	5 32.85	+16 25.7	2.318	3.111	12.5	20.6	1 26	5 28.23	+29 46.0	2.100	2.897	13.5	21.4
373095	2011 <i>FB</i> ₁₄₈		12 21.4 284°22	2°0/21.6	18		78544	2002 <i>RZ</i> ₁₂₀		12 21.4 121°01	1°2/21.5	18	
11 17	6 23.17	+15 41.1	2.302	3.113	12.1	20.4	11 17	6 32.42	+27 20.9	1.626	2.447	15.9	19.7
11 27	6 18.07	+15 59.3	2.213	3.105	9.2	20.2	11 27	6 25.54	+27 14.0	1.561	2.460	11.9	19.4
12 7	6 11.02	+16 24.1	2.150	3.098	5.9	20.0	12 7	6 15.75	+27 2.4	1.518	2.472	7.4	19.2
12 17	6 2.58	+16 54.7	2.114	3.091	2.7	19.8	12 17	6 4.06	+26 43.9	1.503	2.483	2.6	18.9
12 27	5 53.62	+17 30.1	2.108	3.083	2.9	19.8	12 27	5 51.96	+26 17.9	1.516	2.494	3.0	19.0
1 6	5 45.08	+18 8.6	2.133	3.076	6.2	20.0	1 6	5 40.98	+25 46.4	1.558	2.505	7.7	19.3
1 16	5 37.83	+18 49.0	2.186	3.069	9.6	20.2	1 16	5 32.34	+25 12.9	1.627	2.515	12.0	19.6
1 26	5 32.58	+19 30.3	2.263	3.061	12.6	20.3	1 26	5 26.83	+24 41.2	1.718	2.525	15.6	19.8
186851	2004 <i>GF</i> ₃₈		12 21.4 83°48	0°2/21.4	18		1118	Hanskya		12 21.4 150°38	4°4/21.8	18	
11 17	6 31.54	+22 10.9	1.514	2.341	16.6	19.5	11 17	6 27.84	+38 22.7	2.539	3.330	11.7	15.2
11 27	6 24.92	+22 40.3	1.461	2.363	12.4	19.3	11 27	6 21.55	+38 37.4	2.460	3.333	9.2	15.1
12 7	6 15.37	+23 12.0	1.431	2.386	7.5	19.1	12 7	6 13.09	+38 42.3	2.406	3.335	6.7	14.9
12 17	6 3.92	+23 42.5	1.427	2.408	2.3	18.8	12 17	6 3.22	+38 34.2	2.380	3.337	4.7	14.8
12 27	5 52.07	+24 9.2	1.451	2.430	2.9	18.9	12 27	5 52.98	+38 11.6	2.383	3.339	4.7	14.8
1 6	5 41.37	+24 30.7	1.504	2.451	7.8	19.3	1 6	5 43.47	+37 35.6	2.416	3.340	6.8	14.9
1 16	5 33.03	+24 47.8	1.582	2.473	12.1	19.6	1 16	5 35.61	+36 49.4	2.476	3.342	9.3	15.1
1 26	5 27.84	+25 2.1	1.683	2.493	15.7	19.9	1 26	5 30.07	+35 57.4	2.562	3.344	11.7	15.3
319474	2006 <i>PS</i> ₁₆		12 21.4 73°06	4°1/21.7	18		73341	2002 <i>JX</i> ₁₁₄		12 21.4 153°62	4°1/21.4	18	
11 17	6 30.05	+34 21.											

EPHEMERIDES

12 21.4

12 21.4

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
479700	2014 <i>DT</i> ₁₁₄		12 21.4 357°01	1°4/21.4 18			219064	1997 <i>CP</i> ₂₅		12 21.4 136°70	1°6/21.4 18	R	
11 17	6 24.04	+21 16.6	1.159	2.014	18.7	20.5	11 17	6 32.33	+26 51.9	1.805	2.621	14.8	21.1
11 27	6 20.27	+21 0.6	1.093	2.009	14.2	20.2	11 27	6 25.34	+27 12.0	1.738	2.633	11.1	20.9
12 7	6 13.04	+20 46.7	1.047	2.006	8.8	19.9	12 7	6 15.61	+27 29.3	1.694	2.646	6.9	20.7
12 17	6 3.33	+20 34.9	1.024	2.005	3.1	19.6	12 17	6 4.07	+27 40.7	1.678	2.657	2.6	20.4
12 27	5 52.83	+20 25.0	1.025	2.004	3.8	19.6	12 27	5 52.04	+27 44.0	1.691	2.668	3.1	20.5
1 6	5 43.40	+20 18.1	1.051	2.004	9.5	19.9	1 6	5 40.95	+27 39.6	1.734	2.678	7.3	20.8
1 16	5 36.59	+20 15.3	1.100	2.006	14.8	20.2	1 16	5 31.99	+27 29.4	1.804	2.688	11.3	21.0
1 26	5 33.39	+20 17.5	1.168	2.009	19.3	20.5	1 26	5 25.94	+27 16.8	1.897	2.696	14.6	21.3
235201	Lorántffy		12 21.4 65°02	8°8/20.5 18			230705	2003 <i>UK</i> ₁₂₀		12 21.4 91°66	1°3/21.4 18		
11 17	6 38.76	+45 58.5	2.134	2.898	14.5	20.5	11 17	6 29.26	+26 12.9	1.766	2.588	14.8	21.3
11 27	6 30.70	+47 55.0	2.093	2.929	12.1	20.4	11 27	6 23.03	+26 27.2	1.703	2.603	11.1	21.1
12 7	6 19.19	+49 35.7	2.076	2.960	10.1	20.3	12 7	6 14.18	+26 39.3	1.664	2.617	6.8	20.9
12 17	6 5.22	+50 51.7	2.086	2.991	8.9	20.3	12 17	6 3.61	+26 46.3	1.651	2.632	2.4	20.7
12 27	5 50.44	+51 37.7	2.124	3.022	9.1	20.3	12 27	5 52.63	+26 46.9	1.668	2.646	2.9	20.7
1 6	5 36.70	+51 53.7	2.189	3.052	10.4	20.5	1 6	5 42.60	+26 41.4	1.714	2.660	7.2	21.0
1 16	5 25.56	+51 44.4	2.278	3.083	12.3	20.7	1 16	5 34.62	+26 31.7	1.786	2.674	11.1	21.3
1 26	5 18.00	+51 17.5	2.388	3.113	14.1	20.9	1 26	5 29.46	+26 20.4	1.881	2.687	14.4	21.5
191514	2003 <i>UQ</i> ₉₂		12 21.4 73°58	4°6/21.4 17			232063	2001 <i>UZ</i> ₁₅₀		12 21.4 3°90	0°6/21.4 18		
11 17	6 28.01	+36 17.5	2.207	3.010	12.9	19.8	11 17	6 26.01	+23 5.1	1.280	2.126	17.8	19.8
11 27	6 21.96	+36 59.3	2.141	3.021	10.1	19.6	11 27	6 21.61	+23 33.4	1.213	2.126	13.4	19.5
12 7	6 13.48	+37 32.7	2.099	3.033	7.1	19.4	12 7	6 13.82	+24 4.7	1.167	2.126	8.3	19.2
12 17	6 3.38	+37 53.3	2.084	3.044	4.9	19.3	12 17	6 3.61	+24 35.4	1.145	2.126	2.6	18.9
12 27	5 52.82	+37 58.5	2.098	3.055	5.1	19.4	12 27	5 52.57	+25 2.3	1.149	2.128	3.3	19.0
1 6	5 43.05	+37 48.7	2.140	3.066	7.4	19.5	1 6	5 42.52	+25 23.5	1.178	2.130	8.9	19.3
1 16	5 35.12	+37 26.5	2.210	3.077	10.2	19.7	1 16	5 34.99	+25 39.6	1.232	2.133	13.9	19.6
1 26	5 29.76	+36 56.3	2.303	3.089	12.8	19.9	1 26	5 30.98	+25 52.4	1.306	2.137	18.1	19.9
269831	2000 <i>AQ</i> ₂₅₃		12 21.4 358°34	0°6/21.4 17			331088	2009 <i>WD</i> ₁₆₇		12 21.4 45°74	0°0/21.4 17		
11 17	6 23.86	+25 9.4	1.823	2.653	14.0	21.1	11 17	6 24.37	+21 41.5	2.238	3.055	12.2	20.6
11 27	6 19.07	+25 8.7	1.747	2.651	10.5	20.9	11 27	6 19.05	+22 11.4	2.159	3.056	9.2	20.4
12 7	6 11.81	+25 6.3	1.694	2.650	6.5	20.7	12 7	6 11.66	+22 43.9	2.105	3.058	5.6	20.2
12 17	6 2.89	+25 0.8	1.668	2.649	2.1	20.4	12 17	6 2.85	+23 17.0	2.079	3.060	1.7	19.9
12 27	5 53.44	+24 51.5	1.670	2.649	2.6	20.4	12 27	5 53.54	+23 48.5	2.083	3.061	2.2	20.0
1 6	5 44.72	+24 38.9	1.700	2.649	7.0	20.7	1 6	5 44.76	+24 17.3	2.117	3.063	6.0	20.2
1 16	5 37.81	+24 24.8	1.757	2.650	11.0	20.9	1 16	5 37.41	+24 43.0	2.179	3.065	9.5	20.5
1 26	5 33.47	+24 11.2	1.837	2.651	14.4	21.1	1 26	5 32.21	+25 5.9	2.266	3.067	12.5	20.7
257815	2000 <i>GQ</i> ₂₃		12 21.4 222°43	1°0/21.4 17			212216	2005 <i>GP</i> ₂₁₄		12 21.4 193°88	1°6/21.5 18		
11 17	6 27.16	+25 44.6	2.209	3.023	12.5	21.8	11 17	6 26.00	+18 31.4	1.951	2.770	13.7	21.3
11 27	6 21.24	+25 58.9	2.120	3.015	9.4	21.6	11 27	6 20.46	+18 32.7	1.872	2.769	10.4	21.0
12 7	6 13.06	+26 11.8	2.056	3.008	5.8	21.3	12 7	6 12.61	+18 38.0	1.817	2.768	6.5	20.8
12 17	6 3.28	+26 21.2	2.019	2.999	2.0	21.1	12 17	6 3.16	+18 46.9	1.788	2.767	2.6	20.5
12 27	5 52.92	+26 25.7	2.013	2.991	2.5	21.1	12 27	5 53.18	+18 58.6	1.789	2.766	2.9	20.6
1 6	5 43.10	+26 24.9	2.037	2.982	6.4	21.3	1 6	5 43.82	+19 12.5	1.820	2.765	6.9	20.8
1 16	5 34.84	+26 20.2	2.089	2.972	10.0	21.5	1 16	5 36.10	+19 28.4	1.877	2.763	10.8	21.1
1 26	5 28.90	+26 13.4	2.166	2.963	13.1	21.7	1 26	5 30.80	+19 46.4	1.958	2.762	14.1	21.3
95639	2002 <i>GE</i> ₆₇		12 21.4 220°11	0°2/21.4 17			116907	2004 <i>GF</i> ₂		12 21.4 185°34	8°9/19.9 18		
11 17	6 24.83	+23 42.7	2.231	3.049	12.3	20.6	11 17	6 28.74	+ 2 11.8	2.020	2.791	15.0	20.1
11 27	6 19.38	+23 47.3	2.149	3.046	9.2	20.4	11 27	6 22.24	+ 0 28.6	1.946	2.791	12.5	19.9
12 7	6 11.84	+23 51.6	2.091	3.044	5.6	20.2	12 7	6 13.57	- 1 2.9	1.897	2.791	10.3	19.8
12 17	6 2.88	+23 54.2	2.061	3.042	1.8	19.9	12 17	6 3.44	- 2 16.5	1.874	2.790	9.0	19.7
12 27	5 53.45	+23 54.5	2.061	3.039	2.2	19.9	12 27	5 52.86	- 3 7.4	1.879	2.788	9.4	19.7
1 6	5 44.58	+23 52.5	2.091	3.037	6.1	20.2	1 6	5 42.91	- 3 33.6	1.911	2.786	11.2	19.8
1 16	5 37.20	+23 48.9	2.148	3.034	9.6	20.4	1 16	5 34.53	- 3 36.1	1.969	2.783	13.6	20.0
1 26	5 32.00	+23 45.3	2.230	3.031	12.6	20.6	1 26	5 28.44	- 3 18.3	2.047	2.779	15.9	20.1
422578	2014 <i>TE</i> ₅₆		12 21.4 351°02	1°9/21.4 18			233540	2007 <i>JS</i> ₁₂		12 21.4 178°98	0°6/21.5 18		
11 17	6 22.60	+17 53.9	2.209	3.026	12.4	21.1	11 17	6 24.80	+19 23.7	2.543	3.351	11.2	20.5
11 27	6 17.66	+17 45.8	2.129	3.025	9.3	20.9	11 27	6 19.13	+19 52.6	2.459	3.352	8.4	20.4
12 7	6 10.76	+17 41.4	2.073	3.024	5.9	20.7	12 7	6 11.62	+20 25.2	2.401	3.352	5.2	20.2
12 17	6 2.54	+17 40.6	2.045	3.023	2.6	20.4	12 17	6 2.84	+21 0.0	2.372	3.352	1.7	19.9
12 27	5 53.89	+17 43.4	2.047	3.023	2.9	20.5	12 27	5 53.60	+21 35.1	2.374	3.352	2.1	19.9
1 6	5 45.78	+17 49.8	2.078	3.022	6.3	20.7	1 6	5 44.79	+22 9.4	2.408	3.352	5.5	20.2
1 16	5 39.07	+17 59.5	2.137	3.022	9.7	20.9	1 16	5 37.23	+22 42.0	2.470	3.352	8.7	20.4
1 26	5 34.40	+18 12.6	2.220	3.021	12.7	21.1	1 26	5 31.55	+23 13.0	2.558	3.351	11.4	20.6
91564	1999 <i>RN</i> ₂₃₅		12 21.4 23°56	0°9/21.4 17			84212	2002 <i>RG</i> ₁₄₉		12 21.4 306°85	15°6/23.6 18		
11 17	6 25.32	+25 22.5	2.088	2.908	12.9	19.4	11 17	6 47.08	+57 34.7	1.419	2.165	21.3	19.1
11 27	6 19.90	+25 35.6	2.009	2.908	9.7	19.2	11 27	6 39.88	+58 41.7	1.344	2.150	19.3	18.9
12 7	6 12.23	+25 47.6	1.955	2.908	6.0	18.9	12 7	6 26.18	+59 19.3	1.285	2.135	17.3	18.7
12 17	6 3.01	+25 56.5	1.928	2.908	2.0	18.7	12 17	6 7.62	+59 11.5	1.245	2.121	15.9	18.6
12 27	5 53.30	+26 1.0	1.931	2.909	2.5	18.7	12 27	5 47.73	+58 7.6	1.226	2.107	15.7	18.5
1 6	5 44.22	+26 0.9	1.963	2.909	6.4	19.0	1 6	5 30.53	+56 9.6	1.229	2.093	16.8	18.5
1 16	5 36.77	+25 57.3	2.022	2.909	10.1	19.2	1 16	5 18.74	+53 31.2	1.253	2.080	19.0	18.6
1 26	5 31.67	+25 52.1	2.106	2.910	13.2	19.4	1 26	5 13.35	+50 31.1	1.296	2.067	21.6	18.8
341076	2007 <i>HG</i> ₆₉		12 21.4 86°87	4°4/21.3 18			124718	2001 <i>SA</i> ₁₆₀		12 21.4 101°			

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
334240	2001 <i>TW</i> ₉₆		12 21.4	66°89	0°3/21.4	18	97714	2000 <i>GU</i> ₉₀		12 21.4	198°04	1°0/21.5	18 R
11 17	6 32.25	+24 19.9	1.399	2.230	17.4	21.1	11 17	6 22.86	+19 22.5	2.846	3.652	10.2	19.8
11 27	6 25.49	+24 21.4	1.354	2.258	13.0	20.9	11 27	6 17.52	+19 28.1	2.758	3.650	7.6	19.7
12 7	6 15.70	+24 21.7	1.331	2.287	7.9	20.7	12 7	6 10.57	+19 36.0	2.697	3.647	4.7	19.5
12 17	6 4.08	+24 18.7	1.334	2.315	2.5	20.4	12 17	6 2.55	+19 45.7	2.664	3.644	1.8	19.3
12 27	5 52.25	+24 11.3	1.365	2.344	3.0	20.5	12 27	5 54.15	+19 56.5	2.663	3.640	2.1	19.3
1 6	5 41.82	+24 0.7	1.423	2.372	8.1	20.9	1 6	5 46.15	+20 8.2	2.693	3.636	5.1	19.5
1 16	5 33.97	+23 49.1	1.507	2.400	12.4	21.2	1 16	5 39.23	+20 20.6	2.752	3.632	8.0	19.7
1 26	5 29.40	+23 39.0	1.613	2.428	16.0	21.5	1 26	5 33.96	+20 34.0	2.837	3.627	10.5	19.8
345433	2006 <i>DL</i> ₉₈		12 21.4	31°95	3°8/21.6	18	458011	2009 <i>WQ</i> ₉₉		12 21.4	51°63	0°7/21.4	18
11 17	6 29.41	+31 53.6	1.380	2.214	17.5	20.9	11 17	6 24.90	+22 19.7	1.959	2.783	13.5	21.2
11 27	6 24.00	+32 11.0	1.318	2.221	13.4	20.7	11 27	6 19.51	+22 6.3	1.894	2.795	10.1	21.0
12 7	6 15.16	+32 19.9	1.278	2.228	8.8	20.5	12 7	6 11.95	+21 53.0	1.853	2.807	6.2	20.8
12 17	6 4.01	+32 15.6	1.261	2.236	4.6	20.3	12 17	6 2.98	+21 39.5	1.839	2.820	2.0	20.5
12 27	5 52.27	+31 55.9	1.271	2.245	4.8	20.3	12 27	5 53.69	+21 25.9	1.855	2.833	2.5	20.6
1 6	5 41.78	+31 22.8	1.308	2.253	9.0	20.6	1 6	5 45.17	+21 12.8	1.899	2.846	6.5	20.9
1 16	5 33.99	+30 41.1	1.369	2.263	13.4	20.8	1 16	5 38.35	+21 1.5	1.971	2.860	10.2	21.1
1 26	5 29.77	+29 56.8	1.451	2.272	17.2	21.1	1 26	5 33.89	+20 53.1	2.066	2.873	13.3	21.3
272504	2005 <i>UF</i> ₁₇₀		12 21.4	65°01	2°2/21.4	17	356141	2009 <i>FR</i> ₆₉		12 21.4	281°90	4°6/21.5	17
11 17	6 31.71	+27 27.9	1.377	2.210	17.6	20.5	11 17	6 24.60	+11 46.2	1.832	2.646	14.7	20.8
11 27	6 25.39	+27 52.2	1.327	2.232	13.2	20.3	11 27	6 19.65	+11 25.7	1.743	2.632	11.5	20.6
12 7	6 15.82	+28 12.9	1.299	2.253	8.2	20.1	12 7	6 12.28	+11 14.2	1.677	2.618	8.0	20.4
12 17	6 4.17	+28 25.7	1.296	2.275	3.3	19.9	12 17	6 3.17	+11 13.6	1.636	2.603	5.0	20.2
12 27	5 52.12	+28 28.1	1.320	2.297	3.7	20.0	12 27	5 53.36	+11 24.7	1.624	2.589	5.2	20.2
1 6	5 41.43	+28 21.0	1.372	2.319	8.5	20.3	1 6	5 44.06	+11 47.2	1.639	2.575	8.4	20.3
1 16	5 33.42	+28 7.4	1.448	2.341	12.9	20.6	1 16	5 36.36	+12 19.8	1.681	2.561	12.2	20.5
1 26	5 28.85	+27 51.4	1.546	2.363	16.5	20.9	1 26	5 31.11	+13 0.2	1.746	2.547	15.6	20.7
264873	2002 <i>RM</i> ₂₃₅		12 21.4	219°51	1°4/21.5	18	309655	2008 <i>DT</i> ₅₈		12 21.4	115°75	1°3/21.5	18
11 17	6 24.92	+28 3.2	2.566	3.376	11.1	20.9	11 17	6 26.40	+19 11.3	2.031	2.847	13.3	21.0
11 27	6 19.30	+28 11.5	2.478	3.371	8.3	20.7	11 27	6 20.61	+19 16.4	1.960	2.856	10.0	20.8
12 7	6 11.75	+28 16.8	2.416	3.366	5.2	20.5	12 7	6 12.64	+19 25.0	1.914	2.866	6.2	20.6
12 17	6 2.90	+28 17.1	2.382	3.361	2.1	20.3	12 17	6 3.22	+19 36.1	1.895	2.875	2.3	20.3
12 27	5 53.62	+28 11.6	2.379	3.355	2.4	20.3	12 27	5 53.39	+19 48.9	1.906	2.884	2.7	20.4
1 6	5 44.84	+28 0.6	2.406	3.349	5.6	20.5	1 6	5 44.24	+20 2.8	1.947	2.892	6.5	20.7
1 16	5 37.40	+27 45.3	2.462	3.343	8.7	20.7	1 16	5 36.71	+20 17.7	2.016	2.901	10.2	20.9
1 26	5 31.96	+27 27.9	2.543	3.337	11.5	20.8	1 26	5 31.51	+20 33.8	2.108	2.909	13.3	21.1
274723	2008 <i>UN</i> ₁₆₈		12 21.4	226°32	1°1/21.4	18	460469	2014 <i>SW</i> ₂₆₄		12 21.4	19°01	5°1/21.3	18
11 17	6 24.26	+26 9.5	2.642	3.452	10.8	21.1	11 17	6 21.48	+13 26.6	1.453	2.289	16.6	20.0
11 27	6 18.78	+26 30.5	2.552	3.446	8.1	20.9	11 27	6 17.43	+12 37.0	1.400	2.302	12.8	19.8
12 7	6 11.45	+26 50.5	2.488	3.440	5.0	20.7	12 7	6 10.85	+11 56.3	1.370	2.317	8.8	19.6
12 17	6 2.83	+27 7.3	2.453	3.433	1.9	20.5	12 17	6 2.66	+11 27.6	1.363	2.332	5.5	19.5
12 27	5 53.73	+27 19.7	2.449	3.426	2.2	20.5	12 27	5 54.14	+11 12.9	1.383	2.349	5.8	19.5
1 6	5 45.07	+27 27.2	2.475	3.419	5.5	20.7	1 6	5 46.56	+11 12.3	1.429	2.368	9.1	19.8
1 16	5 37.66	+27 30.3	2.531	3.412	8.5	20.9	1 16	5 40.96	+11 24.8	1.499	2.387	12.8	20.0
1 26	5 32.14	+27 30.4	2.611	3.404	11.2	21.0	1 26	5 38.03	+11 47.7	1.590	2.407	16.1	20.3
100056	1992 <i>DZ</i> ₃		12 21.4	64°88	6°0/21.9	18	274752	2008 <i>UX</i> ₂₇₅		12 21.4	163°48	2°7/21.3	18
11 17	6 33.91	+38 18.9	1.623	2.431	16.5	18.9	11 17	6 22.67	+15 24.1	2.531	3.338	11.3	20.8
11 27	6 26.92	+38 51.0	1.573	2.454	13.0	18.7	11 27	6 17.45	+14 57.1	2.451	3.339	8.6	20.7
12 7	6 16.70	+39 9.2	1.544	2.477	9.3	18.5	12 7	6 10.56	+14 34.0	2.396	3.341	5.7	20.5
12 17	6 4.44	+39 7.9	1.541	2.500	6.5	18.4	12 17	6 2.55	+14 15.8	2.370	3.342	3.1	20.3
12 27	5 51.88	+38 44.8	1.565	2.523	6.5	18.5	12 27	5 54.22	+14 3.2	2.375	3.344	3.4	20.3
1 6	5 40.76	+38 2.5	1.617	2.546	9.1	18.7	1 6	5 46.39	+13 56.7	2.409	3.345	6.1	20.5
1 16	5 32.35	+37 7.2	1.694	2.569	12.4	18.9	1 16	5 39.76	+13 56.4	2.471	3.346	9.0	20.7
1 26	5 27.40	+36 6.2	1.793	2.591	15.4	19.2	1 26	5 34.91	+14 2.0	2.558	3.347	11.6	20.9
201843	2003 <i>YK</i> ₈₁		12 21.4	256°97	1°5/21.6	18	173514	2000 <i>UY</i> ₇₁		12 21.4	111°56	1°4/21.5	18
11 17	6 25.51	+29 32.0	2.520	3.329	11.3	20.2	11 17	6 34.34	+26 43.8	1.563	2.383	16.4	20.3
11 27	6 19.75	+29 19.7	2.429	3.320	8.5	20.0	11 27	6 27.07	+26 54.0	1.504	2.403	12.3	20.1
12 7	6 12.03	+29 2.1	2.362	3.311	5.4	19.8	12 7	6 16.76	+27 0.7	1.469	2.422	7.6	19.9
12 17	6 3.00	+28 37.9	2.324	3.303	2.2	19.6	12 17	6 4.51	+27 0.8	1.460	2.440	2.7	19.6
12 27	5 53.56	+28 6.9	2.317	3.293	2.5	19.6	12 27	5 51.87	+26 52.8	1.480	2.458	3.2	19.7
1 6	5 44.68	+27 30.4	2.341	3.284	5.7	19.8	1 6	5 40.45	+26 37.7	1.528	2.474	7.9	20.0
1 16	5 37.22	+26 50.7	2.393	3.275	8.9	20.0	1 16	5 31.51	+26 18.5	1.603	2.491	12.2	20.3
1 26	5 31.81	+26 10.7	2.470	3.266	11.7	20.1	1 26	5 25.82	+25 58.9	1.701	2.506	15.8	20.6
172563	2003 <i>UO</i> ₁₄₉		12 21.4	101°72	2°3/21.4	18	515044	2010 <i>CM</i> ₁₈₁		12 21.4	226°55	2°2/21.5	18
11 17	6 31.71	+28 32.7	1.962	2.774	13.9	21.1	11 17	6 27.37	+17 17.7	1.947	2.761	13.9	21.8
11 27	6 24.64	+29 4.4	1.905	2.797	10.5	20.9	11 27	6 21.60	+17 11.5	1.859	2.753	10.6	21.6
12 7	6 15.09	+29 32.3	1.872	2.821	6.6	20.7	12 7	6 13.42	+17 10.1	1.794	2.744	6.8	21.4
12 17	6 3.95	+29 52.7	1.867	2.844	3.0	20.5	12 17	6 3.52	+17 13.3	1.757	2.735	3.0	21.1
12 27	5 52.46	+30 3.3	1.892	2.866	3.3	20.6	12 27	5 52.98	+17 20.8	1.750	2.725	3.4	21.1
1 6	5 41.93	+30 4.4	1.946	2.888	6.9	20.9	1 6	5 42.99	+17 32.3	1.771	2.715	7.3	21.3
1 16	5 33.40	+29 57.9	2.029	2.909	10.4	21.1	1 16	5 34.64	+17 47.6	1.821	2.704	11.2	21.6
1 26	5 27.56	+29 47.1	2.135	2.929	13.4	21.4	1 26	5 28.75	+18 6.5	1.893	2.693	14.6	21.8
409632	2005 <i>WW</i> ₁₄₂		12 21.4	76°07	0°6/21.4	18	493394	2014 <i>WV</i> ₁₆₀		12 21.4			

EPHEMERIDES

12 21.4

12 21.5

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
139188	2001 <i>FO</i> ₁₄₉		12 21.4 310°51		0°9/21.5 18		225428	2000 <i>BX</i> ₁₉		12 21.4 292°71		0°9/21.5 18	
11 17	6 27.03	+20 29.6	1.327	2.168	17.6	19.6	11 17	6 23.55	+20 43.1	2.175	2.994	12.5	21.2
11 27	6 22.44	+20 42.6	1.248	2.157	13.4	19.3	11 27	6 18.60	+20 42.0	2.083	2.981	9.4	21.0
12 7	6 14.46	+21 0.9	1.189	2.146	8.4	19.0	12 7	6 11.53	+20 42.9	2.014	2.967	5.8	20.7
12 17	6 3.95	+21 22.6	1.155	2.136	2.8	18.7	12 17	6 2.95	+20 45.0	1.974	2.954	2.0	20.5
12 27	5 52.41	+21 45.3	1.147	2.126	3.4	18.7	12 27	5 53.80	+20 47.9	1.963	2.941	2.4	20.5
1 6	5 41.64	+22 7.5	1.164	2.116	9.1	19.0	1 6	5 45.11	+20 51.5	1.981	2.928	6.4	20.7
1 16	5 33.25	+22 29.0	1.206	2.106	14.3	19.2	1 16	5 37.84	+20 56.0	2.027	2.914	10.0	20.9
1 26	5 28.37	+22 50.4	1.269	2.097	18.8	19.5	1 26	5 32.73	+21 2.2	2.097	2.901	13.2	21.1
165765	2001 <i>QW</i> ₂₃₆		12 21.4 125°92		4°8/21.6 16		520770	2014 <i>SW</i> ₁₃₄		12 21.5 119°96		4°9/21.6 18	
11 17	6 32.62	+11 51.3	1.640	2.445	16.5	21.5	11 17	6 23.08	+ 8 10.3	2.391	3.183	12.3	21.1
11 27	6 25.43	+11 25.9	1.581	2.465	12.7	21.3	11 27	6 17.78	+ 7 43.7	2.321	3.193	9.7	21.0
12 7	6 15.62	+11 10.5	1.545	2.484	8.7	21.1	12 7	6 10.78	+ 7 26.4	2.275	3.202	7.1	20.8
12 17	6 4.15	+11 6.6	1.535	2.502	5.3	21.0	12 17	6 2.66	+ 7 20.2	2.256	3.210	5.1	20.7
12 27	5 52.32	+11 14.5	1.555	2.520	5.5	21.0	12 27	5 54.24	+ 7 25.8	2.267	3.219	5.2	20.7
1 6	5 41.50	+11 33.5	1.603	2.536	8.8	21.2	1 6	5 46.35	+ 7 42.9	2.307	3.228	7.3	20.9
1 16	5 32.79	+12 1.9	1.677	2.551	12.5	21.5	1 16	5 39.72	+ 8 10.1	2.374	3.236	9.8	21.1
1 26	5 26.92	+12 37.5	1.774	2.565	15.8	21.8	1 26	5 34.92	+ 8 45.3	2.466	3.244	12.2	21.2
412758	2014 <i>OU</i> ₃₇₈		12 21.4 52°64		1°4/21.5 18		274633	2008 <i>TF</i> ₈₈		12 21.5 115°12		4°1/21.5 17	
11 17	6 24.95	+19 14.2	1.861	2.685	14.1	20.8	11 17	6 22.22	+10 39.8	2.417	3.217	12.0	21.6
11 27	6 19.65	+19 15.8	1.798	2.698	10.5	20.6	11 27	6 17.18	+10 15.3	2.342	3.221	9.3	21.4
12 7	6 12.10	+19 21.1	1.759	2.712	6.5	20.4	12 7	6 10.44	+ 9 58.5	2.291	3.226	6.6	21.2
12 17	6 3.06	+19 29.2	1.746	2.726	2.4	20.2	12 17	6 2.57	+ 9 50.6	2.268	3.230	4.4	21.1
12 27	5 53.65	+19 39.5	1.763	2.740	2.8	20.2	12 27	5 54.36	+ 9 52.6	2.274	3.234	4.6	21.1
1 6	5 45.02	+19 51.5	1.808	2.755	6.8	20.5	1 6	5 46.65	+10 4.0	2.310	3.238	6.8	21.3
1 16	5 38.12	+20 5.1	1.880	2.769	10.6	20.8	1 16	5 40.17	+10 24.2	2.373	3.241	9.6	21.5
1 26	5 33.64	+20 20.3	1.975	2.784	13.7	21.0	1 26	5 35.50	+10 51.5	2.460	3.245	12.1	21.6
443561	2014 <i>KC</i> ₂₈		12 21.4 98°00		3°3/21.8 18		240900	2006 <i>DB</i> ₉₈		12 21.5 184°53		0°1/21.5 18	
11 17	6 26.43	+13 43.3	1.731	2.548	15.2	20.9	11 17	6 28.92	+20 48.3	2.186	2.994	12.8	20.8
11 27	6 21.02	+13 50.4	1.657	2.551	11.7	20.6	11 27	6 22.58	+21 27.2	2.102	2.995	9.6	20.6
12 7	6 13.10	+14 7.2	1.606	2.553	7.7	20.4	12 7	6 13.96	+22 9.9	2.043	2.995	5.9	20.4
12 17	6 3.43	+14 33.5	1.582	2.555	4.0	20.2	12 17	6 3.73	+22 53.7	2.013	2.994	1.9	20.1
12 27	5 53.18	+15 8.3	1.585	2.558	4.2	20.2	12 27	5 52.88	+23 36.1	2.014	2.992	2.3	20.2
1 6	5 43.61	+15 49.4	1.618	2.560	7.9	20.4	1 6	5 42.54	+24 15.0	2.046	2.991	6.3	20.4
1 16	5 35.85	+16 35.0	1.676	2.562	11.8	20.7	1 16	5 33.74	+24 49.8	2.107	2.988	10.0	20.6
1 26	5 30.70	+17 23.0	1.758	2.565	15.3	20.9	1 26	5 27.25	+25 21.0	2.192	2.985	13.1	20.8
209160	2003 <i>UK</i> ₅₁		12 21.4 82°72		4°8/22.2 17		6989	Hoshinosato		12 21.5 17°06		2°1/21.7 18	
11 17	6 33.81	+37 12.0	1.727	2.533	15.7	20.4	11 17	6 26.46	+30 12.6	1.901	2.722	13.9	16.8
11 27	6 26.68	+37 11.2	1.663	2.546	12.3	20.2	11 27	6 20.98	+30 3.4	1.827	2.725	10.5	16.6
12 7	6 16.51	+36 56.9	1.621	2.559	8.5	20.0	12 7	6 13.00	+29 47.7	1.777	2.727	6.7	16.3
12 17	6 4.44	+36 25.0	1.606	2.572	5.4	19.8	12 17	6 3.40	+29 23.3	1.753	2.731	2.9	16.1
12 27	5 52.06	+35 34.7	1.619	2.584	5.3	19.8	12 27	5 53.37	+28 50.2	1.758	2.734	3.1	16.1
1 6	5 40.99	+34 29.6	1.661	2.597	8.3	20.1	1 6	5 44.19	+28 10.2	1.792	2.738	6.9	16.4
1 16	5 32.45	+33 15.9	1.729	2.610	11.8	20.3	1 16	5 36.91	+27 26.6	1.853	2.743	10.7	16.6
1 26	5 27.17	+32 0.7	1.821	2.622	15.0	20.5	1 26	5 32.27	+26 43.2	1.938	2.747	13.9	16.8
337246	2000 <i>QJ</i> ₁₇₈		12 21.4 73°45		2°6/21.4 16		28368	1999 <i>GW</i> ₁₈		12 21.5 306°71		1°3/21.5 18	
11 17	6 31.21	+17 44.5	1.555	2.376	16.5	21.4	11 17	6 22.73	+18 34.2	2.384	3.198	11.7	18.1
11 27	6 24.34	+17 23.3	1.510	2.408	12.3	21.2	11 27	6 17.73	+18 42.2	2.301	3.196	8.8	17.9
12 7	6 14.88	+17 7.0	1.489	2.439	7.8	21.1	12 7	6 10.87	+18 53.7	2.242	3.194	5.5	17.7
12 17	6 3.90	+16 55.8	1.493	2.471	3.4	20.9	12 17	6 2.73	+19 8.3	2.212	3.191	2.1	17.5
12 27	5 52.76	+16 50.1	1.527	2.502	3.8	21.0	12 27	5 54.15	+19 25.2	2.212	3.189	2.4	17.5
1 6	5 42.84	+16 49.9	1.588	2.532	7.9	21.3	1 6	5 46.04	+19 43.6	2.242	3.187	5.8	17.7
1 16	5 35.15	+16 55.2	1.676	2.562	11.8	21.6	1 16	5 39.20	+20 3.1	2.300	3.185	9.1	17.9
1 26	5 30.34	+17 5.9	1.787	2.592	15.1	21.9	1 26	5 34.30	+20 23.7	2.383	3.183	12.0	18.1
228684	2002 <i>NK</i> ₅₅		12 21.4 71°10		4°4/22.6 17		73193	2002 <i>JQ</i> ₅		12 21.5 106°05		8°1/22.1 18	
11 17	6 34.60	+39 46.0	2.257	3.040	13.2	19.5	11 17	6 26.79	+ 0 6.5	2.048	2.814	15.0	20.1
11 27	6 26.41	+39 25.5	2.198	3.066	10.4	19.3	11 27	6 20.62	- 0 37.9	1.995	2.836	12.4	20.0
12 7	6 15.93	+38 51.2	2.164	3.091	7.4	19.2	12 7	6 12.52	- 1 5.4	1.964	2.858	10.0	19.9
12 17	6 4.18	+38 0.8	2.158	3.117	4.9	19.1	12 17	6 3.20	- 1 12.8	1.958	2.879	8.4	19.8
12 27	5 52.45	+36 54.9	2.182	3.142	4.7	19.1	12 27	5 53.64	- 0 58.8	1.981	2.900	8.4	19.9
1 6	5 41.96	+35 37.1	2.238	3.167	6.9	19.3	1 6	5 44.82	- 0 24.9	2.030	2.920	9.9	20.0
1 16	5 33.60	+34 13.0	2.322	3.192	9.7	19.5	1 16	5 37.56	+ 0 25.7	2.105	2.939	12.0	20.2
1 26	5 27.93	+32 48.4	2.432	3.217	12.2	19.7	1 26	5 32.44	+ 1 28.5	2.203	2.958	14.2	20.4
452656	2005 <i>UW</i> ₄₀₆		12 21.4 101°42		0°4/21.4 15		245781	2006 <i>GX</i> ₄₂		12 21.5 161°02		5°4/21.6 18	
11 17	6 26.37	+23 52.9	2.052	2.871	13.1	22.1	11 17	6 33.82	+39 32.4	2.355	3.138	12.8	21.0
11 27	6 20.67	+24 6.8	1.981	2.879	9.8	21.9	11 27	6 26.34	+40 12.5	2.281	3.145	10.2	20.8
12 7	6 12.73	+24 20.7	1.933	2.887	6.0	21.7	12 7	6 16.26	+40 42.1	2.231	3.152	7.6	20.7
12 17	6 3.29	+24 32.7	1.913	2.894	1.9	21.4	12 17	6 4.43	+40 56.1	2.208	3.158	5.6	20.6
12 27	5 53.41	+24 41.4	1.924	2.902	2.4	21.5	12 27	5 52.08	+40 51.7	2.216	3.163	5.7	20.6
1 6	5 44.23	+24 46.7	1.963	2.910	6.4	21.8	1 6	5 40.56	+40 29.5	2.253	3.167	7.7	20.7
1 16	5 36.70	+24 49.3	2.030	2.917	10.0	22.0	1 16	5 31.00	+39 53.0	2.317	3.171	10.3	20.9
1 26	5 31.55	+24 50.7	2.121	2.924	13.1	22.2	1 26	5 24.18	+39 7.7	2.405	3.174	12.8	21.1
212157	2005 <i>GF</i> ₅		12 21.4 291°72		6°1/20.7 17		42951	1999 <i>TU</i> ₁₀₁		12 21.5 137°31		0	

EPHEMERIDES

12 21.5

12 21.5

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
121017	1999 <i>BG</i> ₄	12 21.5 265°43			1.6°/21.5 18 R		376581	2013 <i>PZ</i> ₁₉	12 21.5 158°46			3.8°/21.6 17	
11 17	6 29.14	+26 55.9	1.646	2.472	15.5	20.1	11 17	6 27.94	+37 57.9	3.129	3.911	9.9	22.7
11 27	6 23.56	+27 10.2	1.561	2.462	11.8	19.8	11 27	6 21.34	+38 22.2	3.052	3.919	7.8	22.5
12 7	6 14.94	+27 22.1	1.498	2.451	7.4	19.6	12 7	6 12.94	+38 38.7	3.000	3.926	5.7	22.4
12 17	6 4.10	+27 28.3	1.461	2.440	2.8	19.3	12 17	6 3.36	+38 44.5	2.978	3.932	4.0	22.3
12 27	5 52.42	+27 26.6	1.452	2.429	3.3	19.3	12 27	5 53.46	+38 38.2	2.986	3.938	4.1	22.3
1 6	5 41.46	+27 17.0	1.471	2.418	8.0	19.5	1 6	5 44.12	+38 20.2	3.024	3.943	5.8	22.4
1 16	5 32.64	+27 1.8	1.516	2.407	12.5	19.8	1 16	5 36.11	+37 52.7	3.091	3.948	7.9	22.6
1 26	5 26.93	+26 44.4	1.583	2.396	16.4	20.0	1 26	5 30.02	+37 18.7	3.184	3.953	10.0	22.7
291453	2006 <i>DC</i> ₄₈	12 21.5 44°23			0°1/21.5 17		115793	2003 <i>UC</i> ₂₂₆	12 21.5 292°90			4°9/20.8 18	
11 17	6 24.75	+23 45.1	2.053	2.874	13.0	21.6	11 17	6 29.77	+32 19.5	1.759	2.577	15.0	18.8
11 27	6 19.47	+23 47.6	1.979	2.879	9.7	21.4	11 27	6 24.21	+33 35.5	1.675	2.567	11.7	18.6
12 7	6 12.01	+23 49.8	1.930	2.884	6.0	21.2	12 7	6 15.49	+34 48.6	1.615	2.557	8.1	18.3
12 17	6 3.09	+23 50.4	1.908	2.889	1.9	20.9	12 17	6 4.34	+35 51.7	1.581	2.548	5.2	18.2
12 27	5 53.74	+23 48.6	1.915	2.894	2.3	21.0	12 27	5 52.12	+36 38.7	1.575	2.538	5.7	18.2
1 6	5 45.06	+23 44.6	1.952	2.899	6.3	21.3	1 6	5 40.49	+37 6.9	1.597	2.528	9.0	18.3
1 16	5 38.00	+23 39.5	2.016	2.904	10.0	21.5	1 16	5 30.97	+37 17.6	1.645	2.519	12.7	18.5
1 26	5 33.25	+23 34.7	2.103	2.910	13.1	21.7	1 26	5 24.68	+37 15.4	1.715	2.510	16.1	18.7
46515	1978 <i>VW</i> ₅	12 21.5 90°14			1°2/21.4 18		511003	2013 <i>NG</i> ₁₈	12 21.5 79°37			2°6/21.7 18	
11 17	6 32.13	+20 46.8	1.507	2.331	16.7	19.6	11 17	6 36.51	+29 55.0	1.289	2.118	18.8	21.1
11 27	6 25.31	+20 38.0	1.454	2.355	12.5	19.4	11 27	6 29.08	+29 55.3	1.243	2.144	14.1	20.9
12 7	6 15.65	+20 31.4	1.424	2.378	7.7	19.2	12 7	6 18.11	+29 47.6	1.217	2.169	8.9	20.7
12 17	6 4.20	+20 26.0	1.420	2.400	2.7	18.9	12 17	6 4.98	+29 28.0	1.216	2.194	3.8	20.5
12 27	5 52.46	+20 21.4	1.445	2.423	3.2	19.0	12 27	5 51.63	+28 56.1	1.242	2.219	4.0	20.6
1 6	5 41.91	+20 18.0	1.497	2.444	7.9	19.4	1 6	5 39.97	+28 15.0	1.296	2.243	8.9	20.9
1 16	5 33.73	+20 16.9	1.576	2.465	12.2	19.7	1 16	5 31.38	+27 30.4	1.374	2.267	13.4	21.2
1 26	5 28.64	+20 19.1	1.677	2.486	15.8	20.0	1 26	5 26.54	+26 47.7	1.474	2.291	17.2	21.6
417848	2007 <i>HZ</i> ₅₁	12 21.5 156°09			0°6/21.4 17		30184	Okasinski	12 21.5 182°28			3°9/21.5 18	
11 17	6 25.27	+23 46.8	2.466	3.277	11.4	21.9	11 17	6 32.36	+32 40.1	1.857	2.668	14.6	19.3
11 27	6 19.61	+24 13.9	2.386	3.281	8.5	21.8	11 27	6 25.70	+33 14.0	1.780	2.669	11.3	19.1
12 7	6 12.01	+24 41.7	2.332	3.284	5.2	21.6	12 7	6 16.11	+33 41.2	1.726	2.669	7.6	18.9
12 17	6 3.09	+25 8.0	2.307	3.288	1.7	21.3	12 17	6 4.45	+33 56.8	1.698	2.669	4.4	18.7
12 27	5 53.73	+25 31.1	2.312	3.291	2.1	21.4	12 27	5 52.10	+33 57.7	1.700	2.668	4.6	18.7
1 6	5 44.86	+25 50.3	2.348	3.293	5.6	21.6	1 6	5 40.61	+33 43.9	1.730	2.667	8.0	18.9
1 16	5 37.35	+26 5.6	2.413	3.296	8.8	21.8	1 16	5 31.27	+33 18.8	1.787	2.665	11.7	19.1
1 26	5 31.83	+26 18.0	2.503	3.298	11.6	22.0	1 26	5 24.98	+32 47.3	1.868	2.663	15.0	19.3
443481	2014 <i>JC</i> ₁₄	12 21.5 72°07			1°0/21.3 18		133097	2003 <i>NE</i> ₈	12 21.5 42°58			0°4/21.4 18	
11 17	6 28.24	+23 32.3	1.721	2.546	15.0	20.5	11 17	6 28.60	+22 12.2	1.289	2.131	18.0	18.7
11 27	6 22.60	+24 16.4	1.649	2.550	11.2	20.3	11 27	6 23.19	+22 47.7	1.243	2.153	13.4	18.5
12 7	6 14.19	+25 2.9	1.600	2.554	6.9	20.1	12 7	6 14.59	+23 26.3	1.218	2.176	8.2	18.3
12 17	6 3.83	+25 48.0	1.578	2.558	2.4	19.8	12 17	6 3.93	+24 3.9	1.218	2.200	2.6	18.0
12 27	5 52.80	+26 28.1	1.585	2.563	2.9	19.8	12 27	5 52.85	+24 37.1	1.245	2.224	3.1	18.1
1 6	5 42.50	+27 1.1	1.620	2.567	7.5	20.1	1 6	5 43.04	+25 4.3	1.298	2.249	8.4	18.5
1 16	5 34.19	+27 26.9	1.682	2.571	11.6	20.4	1 16	5 35.80	+25 25.8	1.375	2.274	13.0	18.8
1 26	5 28.75	+27 47.3	1.767	2.575	15.1	20.6	1 26	5 31.93	+25 43.4	1.474	2.300	16.8	19.1
82215	2001 <i>HE</i> ₅₃	12 21.5 230°99			1°1/21.4 18		137425	1999 <i>TV</i> ₂₀₅	12 21.5 78°44			0°4/21.5 18	
11 17	6 30.41	+24 45.8	1.697	2.519	15.3	20.3	11 17	6 31.79	+24 47.8	1.385	2.218	17.5	20.3
11 27	6 24.43	+25 13.9	1.612	2.511	11.6	20.0	11 27	6 25.44	+24 45.4	1.330	2.235	13.1	20.0
12 7	6 15.45	+25 42.7	1.549	2.503	7.2	19.8	12 7	6 15.91	+24 41.2	1.297	2.253	8.0	19.8
12 17	6 4.27	+26 8.8	1.513	2.494	2.5	19.5	12 17	6 4.33	+24 33.1	1.289	2.270	2.5	19.5
12 27	5 52.21	+26 29.0	1.506	2.484	3.1	19.5	12 27	5 52.36	+24 20.3	1.309	2.288	3.1	19.6
1 6	5 40.82	+26 42.2	1.528	2.474	7.9	19.7	1 6	5 41.67	+24 4.1	1.356	2.305	8.3	20.0
1 16	5 31.48	+26 49.3	1.576	2.464	12.3	20.0	1 16	5 33.57	+23 47.0	1.428	2.322	12.9	20.3
1 26	5 25.19	+26 52.7	1.646	2.453	16.1	20.2	1 26	5 28.84	+23 32.0	1.521	2.339	16.7	20.5
385632	2005 <i>QQ</i> ₅₂	12 21.5 59°49			2°1/21.5 18		23722	Gulak	12 21.5 79°64			2°3/21.4 18	
11 17	6 34.50	+27 49.2	1.271	2.105	18.7	20.1	11 17	6 31.48	+19 8.3	1.388	2.217	17.6	18.2
11 27	6 27.45	+28 4.0	1.233	2.138	14.0	19.9	11 27	6 24.98	+18 44.5	1.337	2.239	13.2	18.0
12 7	6 17.03	+28 13.7	1.216	2.171	8.6	19.7	12 7	6 15.51	+18 24.5	1.308	2.261	8.3	17.7
12 17	6 4.61	+28 14.4	1.224	2.204	3.4	19.5	12 17	6 4.19	+18 8.5	1.304	2.283	3.4	17.5
12 27	5 52.06	+28 4.7	1.260	2.237	3.7	19.6	12 27	5 52.56	+17 56.9	1.328	2.304	3.8	17.6
1 6	5 41.17	+27 46.3	1.321	2.270	8.6	20.0	1 6	5 42.20	+17 50.4	1.379	2.325	8.5	17.9
1 16	5 33.24	+27 23.4	1.408	2.302	13.1	20.3	1 16	5 34.31	+17 49.7	1.456	2.346	13.0	18.2
1 26	5 28.90	+27 0.2	1.516	2.335	16.7	20.6	1 26	5 29.62	+17 54.9	1.554	2.367	16.6	18.5
517960	2015 <i>TX</i> ₃₅₉	12 21.5 175°89			2°9/21.5 18		455537	2004 <i>CF</i> ₂₃	12 21.5 11°89			7°2/23.1 17	
11 17	6 25.45	+15 8.7	2.174	2.983	12.8	22.1	11 17	6 23.06	- 0 26.9	2.197	2.964	14.1	21.0
11 27	6 19.82	+14 52.1	2.095	2.984	9.8	21.9	11 27	6 17.99	- 0 23.3	2.121	2.965	11.7	20.8
12 7	6 12.16	+14 40.9	2.040	2.985	6.4	21.7	12 7	6 11.04	- 0 1.7	2.068	2.967	9.3	20.7
12 17	6 3.14	+14 35.5	2.013	2.986	3.4	21.5	12 17	6 2.81	+ 0 39.8	2.040	2.968	7.6	20.6
12 27	5 53.69	+14 36.5	2.016	2.987	3.7	21.5	12 27	5 54.15	+ 1 40.8	2.039	2.971	7.4	20.5
1 6	5 44.81	+14 43.6	2.048	2.987	6.8	21.7	1 6	5 45.99	+ 2 59.0	2.068	2.973	8.9	20.6
1 16	5 37.37	+14 56.7	2.108	2.987	10.1	21.9	1 16	5 39.14	+ 4 29.9	2.123	2.976	11.2	20.8
1 26	5 32.06	+15 14.9	2.193	2.986	13.1	22.1	1 26	5 34.26	+ 6 8.6	2.203	2.979	13.6	21.0
70347	1999 <i>RA</i> ₁₇₈	12 21.5 126°38			5°4/21.7 18		493962	2016 <i>AU</i> ₅₅	12 21.5 194°67			3°2/21.8 18	
11 17	6 27.01	+ 7 53.4	2.067	2.859	14.0	19.9	11 17	6 23.29	+12 5.9	2.478	3.279	11.7	21.6

EPHEMERIDES

12 21.5

12 21.5

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
264834	2002 <i>QL</i> ₃₁		12 21.5 195°35	2.2	21.5	18	317347	2002 <i>LF</i> ₂₇		12 21.5 141°08	0.3	21.5	18
11 17	6 25.76	+30 38.6	2.811	3.613	10.4	21.4	11 17	6 24.58	+22 22.8	2.960	3.764	9.9	22.0
11 27	6 19.86	+30 57.4	2.724	3.611	7.9	21.2	11 27	6 18.67	+22 18.5	2.886	3.777	7.4	21.8
12 7	6 12.12	+31 12.1	2.663	3.608	5.1	21.0	12 7	6 11.26	+22 14.1	2.838	3.789	4.5	21.7
12 17	6 3.14	+31 20.5	2.631	3.605	2.6	20.9	12 17	6 2.87	+22 9.1	2.819	3.800	1.4	21.4
12 27	5 53.74	+31 21.2	2.630	3.602	2.8	20.9	12 27	5 54.24	+22 3.2	2.833	3.811	1.8	21.5
1 6	5 44.82	+31 14.2	2.660	3.598	5.5	21.0	1 6	5 46.10	+21 56.7	2.878	3.821	4.8	21.7
1 16	5 37.17	+31 1.0	2.718	3.593	8.2	21.2	1 16	5 39.11	+21 50.4	2.952	3.831	7.5	21.9
1 26	5 31.42	+30 43.6	2.802	3.589	10.7	21.4	1 26	5 33.76	+21 45.0	3.053	3.841	9.9	22.1
388863	2008 <i>PV</i> ₉		12 21.5 42°82	7.3	21.7	18	219633	2001 <i>UN</i> ₁₇		12 21.5 108°94	17.6	22.8	18
11 17	6 32.76	+37 28.1	1.259	2.088	19.1	20.0	11 17	6 53.97	+56 29.5	1.198	1.958	23.8	20.2
11 27	6 26.99	+38 24.9	1.212	2.105	15.1	19.8	11 27	6 46.30	+58 39.5	1.154	1.967	21.4	20.0
12 7	6 17.23	+39 7.4	1.185	2.123	10.9	19.6	12 7	6 30.90	+60 18.4	1.126	1.976	19.2	19.9
12 17	6 4.80	+39 27.3	1.181	2.141	7.7	19.5	12 17	6 9.46	+61 6.3	1.116	1.985	17.8	19.9
12 27	5 51.83	+39 20.2	1.202	2.160	7.8	19.5	12 27	5 46.29	+60 50.6	1.125	1.994	17.7	19.9
1 6	5 40.50	+38 48.3	1.247	2.180	10.9	19.8	1 6	5 26.50	+59 34.9	1.154	2.002	18.8	20.0
1 16	5 32.43	+37 58.9	1.316	2.200	14.6	20.0	1 16	5 13.41	+57 35.8	1.201	2.010	20.8	20.1
1 26	5 28.47	+37 1.0	1.406	2.220	18.0	20.3	1 26	5 7.92	+55 14.0	1.265	2.017	22.9	20.3
460947	2014 <i>WK</i> ₂₆₂		12 21.5 286°81	4.0	21.3	18	31552	1999 <i>EJ</i>		12 21.5 205°18	1.1	21.5	18
11 17	6 22.06	+11 58.7	2.345	3.151	12.1	21.5	11 17	6 27.06	+26 34.1	2.285	3.097	12.2	18.9
11 27	6 17.19	+11 26.4	2.262	3.146	9.4	21.3	11 27	6 21.15	+26 41.1	2.199	3.094	9.2	18.7
12 7	6 10.53	+11 0.4	2.203	3.141	6.6	21.1	12 7	6 13.07	+26 45.8	2.138	3.090	5.7	18.5
12 17	6 2.65	+10 42.6	2.172	3.136	4.3	20.9	12 17	6 3.51	+26 46.3	2.106	3.086	2.1	18.2
12 27	5 54.37	+10 33.9	2.170	3.131	4.5	21.0	12 27	5 53.45	+26 41.4	2.104	3.081	2.4	18.2
1 6	5 46.55	+10 34.9	2.197	3.127	7.0	21.1	1 6	5 43.97	+26 31.5	2.131	3.076	6.1	18.5
1 16	5 39.99	+10 45.0	2.251	3.122	9.9	21.3	1 16	5 36.01	+26 18.0	2.187	3.071	9.6	18.7
1 26	5 35.30	+11 3.2	2.329	3.117	12.6	21.5	1 26	5 30.29	+26 3.2	2.268	3.065	12.6	18.9
237901	2002 <i>OU</i> ₅		12 21.5 160°88	5.9	21.7	18	147371	2003 <i>DU</i> ₁₆		12 21.5 2°86	1.2	21.5	18
11 17	6 25.64	+ 5 35.8	2.238	3.021	13.3	20.9	11 17	6 25.29	+19 37.0	1.880	2.703	14.0	20.0
11 27	6 19.82	+ 5 7.5	2.165	3.027	10.7	20.8	11 27	6 20.11	+19 40.4	1.803	2.703	10.5	19.8
12 7	6 12.11	+ 4 50.9	2.115	3.032	8.1	20.6	12 7	6 12.56	+19 47.2	1.750	2.703	6.6	19.6
12 17	6 3.14	+ 4 48.3	2.092	3.037	6.2	20.5	12 17	6 3.38	+19 56.7	1.723	2.703	2.4	19.3
12 27	5 53.79	+ 5 0.6	2.097	3.042	6.2	20.5	12 27	5 53.65	+20 8.0	1.725	2.703	2.8	19.3
1 6	5 44.99	+ 5 27.1	2.132	3.045	8.2	20.6	1 6	5 44.58	+20 20.6	1.756	2.704	7.0	19.6
1 16	5 37.56	+ 6 5.9	2.194	3.048	10.8	20.8	1 16	5 37.19	+20 34.4	1.814	2.704	10.9	19.8
1 26	5 32.14	+ 6 54.1	2.280	3.051	13.3	21.0	1 26	5 32.27	+20 49.6	1.896	2.705	14.2	20.1
486640	2013 <i>PA</i>		12 21.5 114°38	5.0	21.8	18	359425	2010 <i>LO</i> ₅₄		12 21.5 137°54	3.3	21.5	18
11 17	6 22.43	+ 4 46.2	2.876	3.649	10.9	21.9	11 17	6 25.71	+13 49.4	2.219	3.024	12.7	21.8
11 27	6 16.99	+ 4 21.4	2.813	3.668	8.8	21.8	11 27	6 19.92	+13 30.1	2.147	3.033	9.8	21.6
12 7	6 10.17	+ 4 6.5	2.775	3.687	6.7	21.7	12 7	6 12.20	+13 16.8	2.100	3.042	6.5	21.4
12 17	6 2.50	+ 4 3.0	2.765	3.705	5.2	21.6	12 17	6 3.22	+13 10.5	2.081	3.051	3.7	21.3
12 27	5 54.62	+ 4 11.4	2.785	3.723	5.3	21.6	12 27	5 53.89	+13 11.6	2.091	3.059	3.9	21.3
1 6	5 47.21	+ 4 31.3	2.834	3.740	6.7	21.7	1 6	5 45.17	+13 20.0	2.131	3.067	6.8	21.5
1 16	5 40.86	+ 5 1.1	2.911	3.757	8.7	21.9	1 16	5 37.88	+13 35.0	2.199	3.074	9.9	21.7
1 26	5 36.04	+ 5 38.9	3.013	3.773	10.7	22.1	1 26	5 32.65	+13 55.7	2.292	3.081	12.7	21.9
280298	2003 <i>OV</i> ₂₆		12 21.5 127°76	0.5	21.5	18	495045	2011 <i>AP</i> ₇₅		12 21.5 312°81	3.7	21.5	18
11 17	6 30.15	+25 16.1	2.022	2.834	13.5	21.1	11 17	6 22.47	+13 34.7	1.952	2.770	13.7	21.1
11 27	6 23.43	+25 12.4	1.954	2.849	10.1	20.9	11 27	6 18.02	+13 20.5	1.859	2.752	10.7	20.8
12 7	6 14.39	+25 6.6	1.911	2.863	6.2	20.7	12 7	6 11.33	+13 13.7	1.789	2.734	7.2	20.6
12 17	6 3.86	+24 57.0	1.895	2.876	2.0	20.4	12 17	6 3.02	+13 15.5	1.746	2.717	4.2	20.4
12 27	5 52.98	+24 43.1	1.911	2.889	2.4	20.5	12 27	5 54.05	+13 26.5	1.731	2.700	4.4	20.3
1 6	5 42.95	+24 26.0	1.956	2.901	6.5	20.8	1 6	5 45.51	+13 46.3	1.743	2.683	7.7	20.5
1 16	5 34.75	+24 7.4	2.029	2.913	10.2	21.0	1 16	5 38.43	+14 13.9	1.783	2.667	11.4	20.7
1 26	5 29.06	+23 49.8	2.126	2.924	13.3	21.2	1 26	5 33.63	+14 47.8	1.845	2.651	14.7	20.9
79780	1998 <i>US</i> ₃₇		12 21.5 184°80	2.8	21.3	18	200321	2000 <i>GU</i> ₄		12 21.5 271°12	15.0	18.9	18
11 17	6 31.80	+28 52.5	1.793	2.609	14.8	19.5	11 17	6 25.91	-12 31.3	1.825	2.540	18.3	20.7
11 27	6 25.34	+29 32.6	1.715	2.609	11.3	19.3	11 27	6 20.81	-14 21.4	1.742	2.516	16.8	20.5
12 7	6 15.94	+30 9.8	1.660	2.609	7.3	19.0	12 7	6 13.17	-15 48.7	1.679	2.492	15.6	20.4
12 17	6 4.45	+30 39.5	1.633	2.609	3.5	18.8	12 17	6 3.64	-16 44.1	1.635	2.468	15.0	20.3
12 27	5 52.20	+30 58.0	1.634	2.608	3.9	18.8	12 27	5 53.25	-17 0.7	1.614	2.442	15.3	20.2
1 6	5 40.72	+31 4.5	1.665	2.606	7.8	19.0	1 6	5 43.25	-16 36.5	1.613	2.417	16.5	20.2
1 16	5 31.34	+31 1.0	1.722	2.604	11.8	19.3	1 16	5 34.80	-15 34.2	1.633	2.391	18.2	20.3
1 26	5 25.00	+30 51.1	1.802	2.601	15.3	19.5	1 26	5 28.85	-14 0.8	1.669	2.365	20.2	20.4
383495	2007 <i>BX</i> ₅₇		12 21.5 351°34	18.4	25.6	16	339073	2004 <i>QP</i> ₁₈		12 21.5 86°88	3.1	21.3	18
11 17	6 47.91	+61 54.0	1.266	2.005	23.8	19.7	11 17	6 35.47	+28 46.2	1.719	2.531	15.5	20.1
11 27	6 41.79	+63 13.5	1.208	1.999	21.9	19.6	11 27	6 27.80	+29 46.8	1.671	2.563	11.7	20.0
12 7	6 27.91	+63 57.7	1.165	1.994	20.1	19.4	12 7	6 17.23	+30 43.4	1.646	2.594	7.5	19.8
12 17	6 8.36	+63 49.1	1.137	1.989	18.8	19.3	12 17	6 4.81	+31 30.2	1.650	2.624	3.7	19.6
12 27	5 47.73	+62 36.7	1.128	1.986	18.5	19.3	12 27	5 52.01	+32 3.2	1.683	2.654	4.1	19.7
1 6	5 30.90	+60 24.6	1.138	1.984	19.2	19.3	1 6	5 40.37	+32 21.7	1.745	2.683	7.8	20.0
1 16	5 20.65	+57 28.6	1.167	1.984	20.7	19.4	1 16	5 31.11	+32 28.2	1.834	2.712	11.4	20.3
1 26	5 17.50	+54 9.3	1.214	1.984	22.8	19.6	1 26	5 24.98	+32 26.8	1.947	2.740	14.5	20.6
362345	2010 <i>MD</i> ₃₄		12 21.5 101°69	1.9	21.5	18	408138	2013 <i>CL</i> ₇₅		12 21.5 234°47	4.1</		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
65358	2002 OS		12 21.5	41°75	7°5/22.4	18	223964	2004 XH ₉₃		12 21.5	41°50	0°6/21.5	17
11 17	6 28.04	+ 6 38.5	1.259	2.079	19.7	19.1	11 17	6 25.02	+24 58.2	2.028	2.850	13.1	20.5
11 27	6 22.28	+ 6 10.4	1.230	2.116	15.5	18.9	11 27	6 19.76	+25 6.3	1.956	2.856	9.8	20.3
12 7	6 13.77	+ 6 2.0	1.220	2.153	11.2	18.8	12 7	6 12.27	+25 13.3	1.908	2.862	6.0	20.1
12 17	6 3.67	+ 6 15.3	1.234	2.191	8.0	18.7	12 17	6 3.28	+25 17.6	1.887	2.868	2.0	19.8
12 27	5 53.49	+ 6 49.4	1.273	2.229	7.8	18.8	12 27	5 53.86	+25 18.1	1.896	2.875	2.4	19.8
1 6	5 44.66	+ 7 40.6	1.337	2.267	10.5	19.1	1 6	5 45.13	+25 14.9	1.934	2.881	6.4	20.1
1 16	5 38.21	+ 8 43.7	1.426	2.306	13.9	19.4	1 16	5 38.05	+25 9.2	1.999	2.888	10.0	20.4
1 26	5 34.76	+ 9 53.3	1.535	2.345	17.0	19.7	1 26	5 33.33	+25 2.6	2.088	2.895	13.2	20.6
420976	2013 PT ₂₄		12 21.5	136°84	2°2/21.7	17	414922	2011 AT ₃₆		12 21.5	167°59	3°4/21.7	17
11 17	6 26.46	+31 12.3	2.434	3.241	11.7	21.5	11 17	6 23.27	+12 2.5	2.393	3.195	12.0	21.2
11 27	6 20.56	+31 14.9	2.356	3.245	8.9	21.3	11 27	6 18.08	+11 59.1	2.313	3.196	9.3	21.1
12 7	6 12.62	+31 11.8	2.302	3.249	5.7	21.1	12 7	6 11.09	+12 3.4	2.257	3.197	6.3	20.9
12 17	6 3.36	+31 0.9	2.277	3.252	2.8	20.9	12 17	6 2.90	+12 15.9	2.230	3.198	3.8	20.7
12 27	5 53.74	+30 41.4	2.282	3.256	3.0	21.0	12 27	5 54.30	+12 36.3	2.232	3.199	3.9	20.7
1 6	5 44.76	+30 14.4	2.318	3.259	5.9	21.2	1 6	5 46.18	+13 3.9	2.265	3.200	6.5	20.9
1 16	5 37.32	+29 42.1	2.381	3.262	9.0	21.4	1 16	5 39.30	+13 37.4	2.325	3.200	9.4	21.1
1 26	5 32.04	+29 7.6	2.470	3.265	11.7	21.5	1 26	5 34.29	+14 15.2	2.410	3.201	12.1	21.3
433366	2013 SE ₃₆		12 21.5	154°94	1°0/21.5	18	494041	2016 BA ₁₉		12 21.5	75°96	2°7/21.7	18
11 17	6 24.72	+27 1.1	2.900	3.705	10.1	22.4	11 17	6 23.82	+14 2.3	2.234	3.042	12.5	21.3
11 27	6 18.93	+27 10.2	2.821	3.711	7.5	22.2	11 27	6 18.53	+14 8.0	2.165	3.054	9.6	21.1
12 7	6 11.50	+27 16.9	2.768	3.718	4.7	22.1	12 7	6 11.37	+14 20.7	2.121	3.066	6.3	20.9
12 17	6 3.00	+27 20.0	2.744	3.724	1.8	21.9	12 17	6 2.98	+14 40.4	2.104	3.077	3.3	20.8
12 27	5 54.17	+27 18.5	2.752	3.729	2.0	21.9	12 27	5 54.23	+15 6.2	2.117	3.089	3.4	20.8
1 6	5 45.84	+27 12.7	2.791	3.734	4.9	22.1	1 6	5 46.06	+15 36.9	2.160	3.100	6.4	21.0
1 16	5 38.69	+27 3.5	2.859	3.739	7.7	22.3	1 16	5 39.27	+16 11.4	2.231	3.112	9.5	21.2
1 26	5 33.30	+26 52.6	2.953	3.743	10.1	22.5	1 26	5 34.47	+16 48.3	2.326	3.124	12.3	21.4
404258	2013 ER ₃₄		12 21.5	239°25	1°2/21.5	17	82116	2001 FK ₇₁		12 21.5	222°33	3°8/21.6	18
11 17	6 27.47	+26 8.5	2.096	2.912	13.0	21.9	11 17	6 28.28	+14 8.9	1.614	2.433	16.1	20.3
11 27	6 21.74	+26 27.4	2.006	2.903	9.8	21.7	11 27	6 22.70	+13 57.7	1.534	2.428	12.4	20.1
12 7	6 13.59	+26 45.0	1.941	2.893	6.1	21.4	12 7	6 14.34	+13 55.1	1.477	2.424	8.3	19.8
12 17	6 3.73	+26 58.9	1.904	2.884	2.3	21.2	12 17	6 4.00	+14 2.0	1.445	2.419	4.5	19.6
12 27	5 53.22	+27 7.0	1.896	2.874	2.7	21.2	12 27	5 52.93	+14 18.5	1.442	2.413	4.7	19.6
1 6	5 43.26	+27 9.0	1.919	2.864	6.6	21.4	1 6	5 42.56	+14 43.5	1.466	2.408	8.6	19.8
1 16	5 34.92	+27 6.1	1.968	2.853	10.4	21.6	1 16	5 34.12	+15 15.6	1.516	2.402	12.9	20.1
1 26	5 29.03	+27 0.3	2.042	2.842	13.7	21.8	1 26	5 28.55	+15 53.2	1.588	2.395	16.6	20.3
71710	2000 GG ₈₃		12 21.5	329°95	5°1/22.3	18	13083	1992 EE ₃₂		12 21.5	320°48	3°2/21.4	18
11 17	6 24.71	+ 8 56.7	1.580	2.397	16.5	17.8	11 17	6 23.85	+17 6.8	1.490	2.326	16.3	18.7
11 27	6 20.13	+ 9 13.1	1.498	2.387	13.0	17.5	11 27	6 19.72	+16 40.5	1.403	2.308	12.5	18.4
12 7	6 12.83	+ 9 46.2	1.437	2.377	9.2	17.3	12 7	6 12.70	+16 19.1	1.337	2.290	8.2	18.1
12 17	6 3.54	+10 36.6	1.401	2.368	5.8	17.1	12 17	6 3.53	+16 4.0	1.297	2.273	4.0	17.8
12 27	5 53.43	+11 43.2	1.393	2.360	5.6	17.0	12 27	5 53.48	+15 56.2	1.282	2.257	4.4	17.8
1 6	5 43.88	+13 1.9	1.411	2.352	9.0	17.2	1 6	5 44.04	+15 56.4	1.294	2.241	9.0	18.0
1 16	5 36.14	+14 28.1	1.456	2.345	13.1	17.4	1 16	5 36.58	+16 4.9	1.331	2.226	13.6	18.2
1 26	5 31.19	+15 57.1	1.523	2.338	16.8	17.7	1 26	5 32.10	+16 21.1	1.388	2.211	17.7	18.5
384626	2011 CR ₁₁₇		12 21.5	184°75	1°3/21.6	18	47703	2000 DR ₂		12 21.5	355°19	2°0/21.5	18
11 17	6 29.81	+18 49.1	1.961	2.772	13.9	21.1	11 17	6 25.12	+18 36.0	1.576	2.409	15.7	19.2
11 27	6 23.43	+19 2.2	1.879	2.773	10.5	20.9	11 27	6 20.37	+18 28.1	1.503	2.407	11.9	18.9
12 7	6 14.59	+19 19.7	1.822	2.772	6.6	20.6	12 7	6 12.90	+18 24.8	1.451	2.405	7.5	18.7
12 17	6 4.04	+19 40.2	1.792	2.772	2.4	20.3	12 17	6 3.54	+18 26.1	1.425	2.404	3.1	18.4
12 27	5 52.87	+20 2.3	1.793	2.770	2.8	20.4	12 27	5 53.54	+18 31.4	1.426	2.403	3.5	18.4
1 6	5 42.33	+20 24.9	1.823	2.768	7.0	20.6	1 6	5 44.31	+18 40.7	1.455	2.403	8.0	18.7
1 16	5 33.50	+20 47.5	1.881	2.765	10.9	20.9	1 16	5 37.05	+18 53.7	1.509	2.403	12.4	18.9
1 26	5 27.20	+21 10.5	1.964	2.761	14.2	21.1	1 26	5 32.62	+19 10.3	1.585	2.404	16.1	19.2
289466	2005 EK ₆₈		12 21.5	279°27	3°5/21.6	17	416538	2004 BM ₄₇		12 21.5	144°14	2°0/21.7	18
11 17	6 29.44	+32 29.1	1.793	2.611	14.8	20.5	11 17	6 26.14	+31 0.4	2.563	3.368	11.2	20.5
11 27	6 23.73	+32 44.2	1.705	2.598	11.4	20.2	11 27	6 20.20	+30 53.6	2.483	3.372	8.5	20.3
12 7	6 15.05	+32 51.8	1.639	2.585	7.6	20.0	12 7	6 12.36	+30 40.9	2.428	3.375	5.5	20.1
12 17	6 4.23	+32 47.8	1.600	2.573	4.2	19.7	12 17	6 3.29	+30 20.9	2.402	3.378	2.6	19.9
12 27	5 52.62	+32 29.9	1.589	2.560	4.4	19.7	12 27	5 53.89	+29 53.1	2.406	3.380	2.7	19.9
1 6	5 41.77	+31 58.8	1.606	2.547	8.0	19.9	1 6	5 45.13	+29 18.9	2.441	3.383	5.6	20.1
1 16	5 33.02	+31 18.1	1.649	2.534	12.0	20.1	1 16	5 37.82	+28 40.6	2.505	3.386	8.6	20.3
1 26	5 27.31	+30 33.2	1.715	2.521	15.6	20.3	1 26	5 32.55	+28 1.1	2.594	3.388	11.3	20.5
446977	2003 UE ₄₀₃		12 21.5	50°33	3°2/21.5	18	46406	2002 EQ ₆₇		12 21.5	170°98	0°3/21.5	18
11 17	6 26.32	+16 20.7	1.559	2.387	16.1	21.6	11 17	6 28.56	+22 41.8	1.969	2.786	13.7	20.3
11 27	6 21.09	+15 57.9	1.496	2.396	12.2	21.4	11 27	6 22.45	+22 38.1	1.891	2.788	10.3	20.1
12 7	6 13.21	+15 41.2	1.455	2.405	7.9	21.2	12 7	6 13.95	+22 34.5	1.837	2.790	6.3	19.8
12 17	6 3.59	+15 31.7	1.439	2.415	3.9	21.0	12 17	6 3.83	+22 29.9	1.811	2.792	2.0	19.6
12 27	5 53.49	+15 29.8	1.451	2.425	4.3	21.0	12 27	5 53.21	+22 23.6	1.815	2.794	2.5	19.6
1 6	5 44.30	+15 35.4	1.491	2.435	8.3	21.3	1 6	5 43.30	+22 16.0	1.848	2.794	6.7	19.9
1 16	5 37.13	+15 48.2	1.555	2.445	12.4	21.5	1 16	5 35.14	+22 8.5	1.909	2.795	10.6	20.1
1 26	5 32.75	+16 7.2	1.642	2.455	15.9	21.8	1 26	5 29.49	+22 2.5	1.993	2.795	13.9	20.3
302573	2002 PU ₈₃		12 21.5	101°84	5°9/22.2	18	67672	2000 SA ₂₇₇		12 21.5	98°54	4°6/21.4	18
11 17	6 26.73	+ 5 59.9	1.981	2.770	14.6	20.7							

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
458519	2011 CS ₇₁		12 21.5 347°32	6°4/21.5 18			359587	2010 UN ₆₂		12 21.5 160°28	9°7/20.7 17		
11 17	6 28.40	+39 24.0	1.898	2.703	14.6	20.7	11 17	6 39.91	+52 12.8	2.411	3.144	13.9	21.4
11 27	6 23.00	+40 10.1	1.822	2.699	11.7	20.5	11 27	6 31.98	+53 46.0	2.346	3.148	12.1	21.3
12 7	6 14.61	+40 45.1	1.768	2.695	8.8	20.3	12 7	6 20.38	+55 2.7	2.303	3.152	10.6	21.2
12 17	6 4.10	+41 3.1	1.740	2.692	6.6	20.2	12 17	6 6.03	+55 54.8	2.285	3.156	9.8	21.1
12 27	5 52.88	+41 0.2	1.739	2.689	6.8	20.2	12 27	5 50.59	+56 16.6	2.293	3.160	9.9	21.1
1 6	5 42.51	+40 36.8	1.766	2.687	9.1	20.3	1 6	5 36.04	+56 7.9	2.326	3.163	10.9	21.2
1 16	5 34.32	+39 56.8	1.817	2.685	12.0	20.5	1 16	5 24.10	+55 33.1	2.384	3.166	12.5	21.3
1 26	5 29.24	+39 6.4	1.891	2.683	14.9	20.7	1 26	5 15.90	+54 40.1	2.462	3.168	14.1	21.5
372822	2010 UF ₂₆		12 21.5 51°11	3°9/21.4 18			288311	2004 BV ₃₄		12 21.5 17°22	1°2/21.5 18		
11 17	6 32.61	+29 22.7	1.109	1.954	20.1	20.5	11 17	6 27.19	+26 5.3	1.684	2.512	15.1	20.7
11 27	6 26.94	+30 10.1	1.063	1.972	15.2	20.2	11 27	6 21.91	+26 18.1	1.611	2.513	11.4	20.4
12 7	6 17.27	+30 52.1	1.037	1.991	9.8	20.0	12 7	6 13.85	+26 29.1	1.561	2.515	7.1	20.2
12 17	6 4.92	+31 21.7	1.034	2.011	4.8	19.8	12 17	6 3.89	+26 35.6	1.537	2.517	2.5	19.9
12 27	5 52.02	+31 34.1	1.056	2.031	5.2	19.9	12 27	5 53.32	+26 36.0	1.541	2.519	3.0	19.9
1 6	5 40.75	+31 29.9	1.103	2.051	10.0	20.2	1 6	5 43.58	+26 30.3	1.573	2.521	7.5	20.2
1 16	5 32.74	+31 13.9	1.173	2.071	14.8	20.6	1 16	5 35.87	+26 20.5	1.631	2.524	11.7	20.5
1 26	5 28.86	+30 52.0	1.263	2.092	18.8	20.9	1 26	5 31.05	+26 9.1	1.712	2.526	15.3	20.7
450130	2015 SP ₃		12 21.5 144°03	1°0/21.6 18			484381	2007 VF ₂₈₁		12 21.5 21°32	5°8/20.6 17		
11 17	6 31.12	+28 0.0	2.300	3.104	12.4	21.5	11 17	6 24.99	+16 34.8	1.169	2.018	19.0	20.3
11 27	6 23.93	+27 40.3	2.226	3.116	9.3	21.3	11 27	6 20.56	+14 51.0	1.121	2.030	14.6	20.1
12 7	6 14.63	+27 15.5	2.178	3.127	5.8	21.1	12 7	6 13.04	+13 11.7	1.092	2.044	9.8	19.9
12 17	6 4.01	+26 44.6	2.158	3.138	2.1	20.9	12 17	6 3.59	+11 43.2	1.088	2.059	6.2	19.7
12 27	5 53.12	+26 7.8	2.170	3.148	2.3	20.9	12 27	5 53.82	+10 32.0	1.109	2.076	6.9	19.8
1 6	5 43.03	+25 27.2	2.213	3.157	6.0	21.2	1 6	5 45.33	+9 42.0	1.155	2.093	10.8	20.1
1 16	5 34.64	+24 45.3	2.286	3.166	9.4	21.4	1 16	5 39.34	+9 13.9	1.223	2.113	15.0	20.4
1 26	5 28.58	+24 5.2	2.384	3.174	12.2	21.6	1 26	5 36.55	+9 5.4	1.311	2.133	18.6	20.7
484203	2006 WB ₁₇₉		12 21.5 353°46	1°5/21.5 17			485640	2011 VD ₂₃		12 21.5 12°67	1°7/21.8 18		
11 17	6 26.83	+26 27.0	1.834	2.658	14.2	21.8	11 17	6 27.07	+15 50.1	1.636	2.459	15.7	20.0
11 27	6 21.48	+26 49.2	1.757	2.657	10.7	21.6	11 27	6 21.84	+16 35.6	1.561	2.460	11.9	19.7
12 7	6 13.53	+27 10.0	1.703	2.657	6.7	21.4	12 7	6 13.87	+17 31.8	1.509	2.461	7.6	19.5
12 17	6 3.76	+27 26.2	1.677	2.656	2.6	21.1	12 17	6 3.93	+18 36.3	1.484	2.463	3.0	19.2
12 27	5 53.37	+27 36.0	1.678	2.656	3.0	21.1	12 27	5 53.26	+19 45.2	1.487	2.465	3.1	19.2
1 6	5 43.70	+27 38.7	1.709	2.656	7.2	21.4	1 6	5 43.25	+20 54.5	1.519	2.468	7.7	19.5
1 16	5 35.89	+27 35.8	1.766	2.655	11.1	21.6	1 16	5 35.14	+22 1.2	1.578	2.470	12.0	19.8
1 26	5 30.79	+27 29.8	1.846	2.656	14.5	21.9	1 26	5 29.86	+23 3.7	1.660	2.473	15.7	20.0
386040	2007 EP ₉₆		12 21.5 255°36	1°4/21.5 18			422055	2014 QQ ₃₆₆		12 21.5 8°33	8°9/21.8 17		
11 17	6 28.35	+20 15.5	1.735	2.557	15.0	21.7	11 17	6 21.16	+0 49.7	1.824	2.612	15.7	20.2
11 27	6 22.78	+20 6.0	1.645	2.544	11.4	21.4	11 27	6 16.94	+0 4.6	1.758	2.613	13.2	20.1
12 7	6 14.44	+19 58.8	1.577	2.530	7.2	21.1	12 7	6 10.60	+0 41.7	1.713	2.615	10.7	19.9
12 17	6 4.10	+19 53.3	1.536	2.516	2.6	20.8	12 17	6 2.84	+0 57.1	1.693	2.618	9.1	19.8
12 27	5 52.95	+19 49.2	1.524	2.502	3.1	20.8	12 27	5 54.64	+0 48.5	1.698	2.621	9.2	19.9
1 6	5 42.40	+19 46.7	1.540	2.487	7.8	21.1	1 6	5 47.06	+0 16.5	1.728	2.625	10.8	20.0
1 16	5 33.71	+19 46.7	1.583	2.472	12.2	21.3	1 16	5 41.02	+0 35.5	1.782	2.630	13.2	20.1
1 26	5 27.82	+19 50.2	1.648	2.456	16.1	21.5	1 26	5 37.19	+1 42.7	1.858	2.635	15.7	20.3
120063	2003 CE ₅		12 21.5 241°90	0°3/21.5 18			209992	2006 HM ₁₁₃		12 21.5 62°36	2°1/21.6 18		
11 17	6 29.15	+21 27.2	1.781	2.602	14.7	20.5	11 17	6 27.56	+17 50.5	1.573	2.401	16.0	20.6
11 27	6 23.38	+21 46.3	1.692	2.591	11.2	20.2	11 27	6 22.00	+17 49.5	1.515	2.416	12.1	20.3
12 7	6 14.83	+22 8.7	1.626	2.579	6.9	19.9	12 7	6 13.79	+17 54.1	1.479	2.431	7.6	20.1
12 17	6 4.23	+22 32.2	1.586	2.567	2.2	19.6	12 17	6 3.85	+18 3.9	1.468	2.447	3.1	19.9
12 27	5 52.78	+22 54.7	1.576	2.555	2.7	19.6	12 27	5 53.48	+18 17.8	1.486	2.463	3.4	20.0
1 6	5 41.90	+23 14.7	1.595	2.542	7.5	19.9	1 6	5 44.06	+18 35.0	1.532	2.479	7.8	20.3
1 16	5 32.86	+23 32.4	1.641	2.529	11.9	20.1	1 16	5 36.71	+18 55.0	1.603	2.495	11.9	20.5
1 26	5 26.64	+23 48.7	1.709	2.516	15.7	20.3	1 26	5 32.17	+19 17.4	1.697	2.511	15.4	20.8
421950	2014 QY ₂₆₁		12 21.5 147°75	3°2/21.3 17			111340	2001 XL ₉₆		12 21.5 303°73	1°8/21.3 17		
11 17	6 28.42	+31 25.7	2.279	3.086	12.4	21.8	11 17	6 26.70	+25 48.2	1.894	2.717	13.9	19.3
11 27	6 22.33	+32 11.9	2.203	3.090	9.5	21.6	11 27	6 21.49	+26 32.6	1.809	2.708	10.5	19.0
12 7	6 13.90	+32 53.8	2.151	3.095	6.3	21.4	12 7	6 13.64	+27 18.0	1.747	2.700	6.6	18.8
12 17	6 3.87	+33 27.5	2.128	3.099	3.6	21.2	12 17	6 3.88	+28 0.4	1.713	2.692	2.6	18.5
12 27	5 53.28	+33 50.1	2.135	3.103	3.9	21.3	12 27	5 53.33	+28 36.4	1.707	2.684	3.1	18.5
1 6	5 43.29	+34 0.7	2.172	3.106	6.7	21.5	1 6	5 43.32	+29 4.0	1.731	2.676	7.2	18.8
1 16	5 34.94	+34 0.8	2.236	3.110	9.8	21.7	1 16	5 35.06	+29 23.5	1.781	2.668	11.2	19.0
1 26	5 28.99	+33 53.4	2.325	3.113	12.6	21.8	1 26	5 29.47	+29 36.7	1.854	2.660	14.6	19.2
407977	2012 DV ₄₇		12 21.5 153°19	1°0/21.5 17			261232	2005 UE ₃₉		12 21.5 318°92	0°4/21.5 17		
11 17	6 25.16	+20 41.0	2.097	2.915	12.9	21.9	11 17	6 25.00	+21 59.6	1.949	2.772	13.5	20.8
11 27	6 19.80	+20 36.4	2.019	2.916	9.7	21.7	11 27	6 19.93	+22 5.4	1.867	2.768	10.2	20.6
12 7	6 12.30	+20 33.5	1.964	2.917	6.0	21.5	12 7	6 12.53	+22 12.7	1.809	2.763	6.3	20.4
12 17	6 3.35	+20 31.8	1.937	2.918	2.1	21.2	12 17	6 3.48	+22 20.3	1.778	2.759	2.0	20.1
12 27	5 53.93	+20 31.0	1.940	2.918	2.5	21.2	12 27	5 53.86	+22 27.1	1.776	2.755	2.5	20.1
1 6	5 45.13	+20 31.0	1.973	2.919	6.4	21.5	1 6	5 44.84	+22 32.8	1.803	2.751	6.7	20.4
1 16	5 37.86	+20 32.4	2.032	2.919	10.0	21.7	1 16	5 37.46	+22 37.9	1.856	2.747	10.6	20.6
1 26	5 32.82	+20 35.9	2.116	2.920	13.1	21.9	1 26	5 32.50	+22 43.4	1.934	2.743	14.0	20.8
101379	1998 UE ₁₆		12 21.5 359°18	3°5/21.1 18			5018	Tenmu		12 21.5 58°78	2°6/21.5 18		
11 17	6 24.44	+26 17.3	1.050	1.911	19.7								

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
460493	2014 <i>SG</i> ₃₁₀		12 21.5 100°25	3°4/21.4	17		225162	2008 <i>GY</i> ₉₉		12 21.5 213°61	4°7/21.4	18	
11 17	6 27.20	+32 40.2	2.365	3.171	12.0	21.3	11 17	6 28.34	+13 12.3	1.653	2.469	15.9	20.7
11 27	6 21.32	+33 19.9	2.293	3.179	9.2	21.1	11 27	6 22.65	+12 33.7	1.575	2.465	12.4	20.5
12 7	6 13.24	+33 54.4	2.246	3.187	6.2	21.0	12 7	6 14.30	+12 2.5	1.518	2.461	8.5	20.2
12 17	6 3.68	+34 19.8	2.227	3.195	3.7	20.8	12 17	6 4.07	+11 41.1	1.488	2.457	5.2	20.0
12 27	5 53.65	+34 33.9	2.238	3.204	4.0	20.8	12 27	5 53.20	+11 31.2	1.486	2.452	5.5	20.1
1 6	5 44.25	+34 36.3	2.278	3.212	6.5	21.0	1 6	5 43.03	+11 33.4	1.511	2.447	9.0	20.2
1 16	5 36.44	+34 28.8	2.346	3.220	9.4	21.2	1 16	5 34.77	+11 47.2	1.562	2.441	13.0	20.5
1 26	5 30.93	+34 14.4	2.439	3.227	12.1	21.4	1 26	5 29.27	+12 10.9	1.635	2.435	16.5	20.7
78972	2003 <i>SH</i> ₃₀₄		12 21.5 10°57	5°3/21.5	17		146635	2001 <i>UM</i> ₄₄		12 21.5 5°04	2°7/21.4	17	
11 17	6 22.38	+ 8 24.0	2.150	2.950	13.2	19.2	11 17	6 27.31	+28 54.0	1.814	2.637	14.4	19.6
11 27	6 17.59	+ 7 50.3	2.074	2.950	10.5	19.0	11 27	6 21.97	+29 29.2	1.739	2.637	10.9	19.4
12 7	6 10.90	+ 7 26.5	2.022	2.951	7.7	18.8	12 7	6 13.92	+30 1.3	1.687	2.638	7.0	19.2
12 17	6 2.93	+ 7 14.9	1.997	2.952	5.6	18.7	12 17	6 3.96	+30 26.5	1.662	2.638	3.3	18.9
12 27	5 54.56	+ 7 16.6	2.000	2.953	5.7	18.7	12 27	5 53.34	+30 41.8	1.665	2.639	3.7	19.0
1 6	5 46.72	+ 7 31.5	2.031	2.954	8.0	18.9	1 6	5 43.46	+30 46.5	1.696	2.639	7.5	19.2
1 16	5 40.22	+ 7 58.2	2.089	2.955	10.8	19.0	1 16	5 35.52	+30 42.4	1.754	2.641	11.3	19.4
1 26	5 35.72	+ 8 34.4	2.170	2.956	13.4	19.2	1 26	5 30.40	+30 32.6	1.834	2.642	14.7	19.6
189084	2001 <i>OV</i> ₆₁		12 21.5 110°06	0°4/21.5	18		378044	2006 <i>TT</i> ₂₂		12 21.5 119°65	3°1/21.4	18	
11 17	6 31.92	+21 38.8	1.785	2.601	14.9	20.8	11 17	6 35.58	+29 45.3	1.747	2.557	15.4	22.0
11 27	6 24.98	+21 51.1	1.726	2.622	11.1	20.6	11 27	6 28.04	+30 29.1	1.687	2.578	11.7	21.8
12 7	6 15.49	+22 5.0	1.691	2.643	6.8	20.4	12 7	6 17.53	+31 8.2	1.651	2.597	7.5	21.6
12 17	6 4.37	+22 18.6	1.683	2.663	2.2	20.1	12 17	6 5.06	+31 37.4	1.642	2.616	3.8	21.4
12 27	5 52.88	+22 30.4	1.705	2.683	2.6	20.2	12 27	5 52.09	+31 53.2	1.662	2.634	4.1	21.5
1 6	5 42.35	+22 39.9	1.756	2.702	7.0	20.5	1 6	5 40.19	+31 55.6	1.712	2.651	7.8	21.7
1 16	5 33.86	+22 47.8	1.835	2.720	11.0	20.8	1 16	5 30.64	+31 47.4	1.789	2.668	11.6	22.0
1 26	5 28.13	+22 55.6	1.937	2.738	14.3	21.0	1 26	5 24.25	+31 33.0	1.889	2.683	14.8	22.3
367631	2009 <i>VY</i> ₆₁		12 21.5 39°65	3°1/21.2	18		245836	2006 <i>KL</i> ₂₂		12 21.5 112°19	1°8/21.3	18	
11 17	6 24.39	+17 4.8	1.942	2.762	13.7	20.4	11 17	6 31.29	+25 2.8	1.929	2.742	14.0	20.6
11 27	6 19.19	+16 18.4	1.875	2.770	10.4	20.2	11 27	6 24.68	+26 5.2	1.861	2.756	10.5	20.4
12 7	6 11.89	+15 35.1	1.831	2.780	6.8	20.0	12 7	6 15.46	+27 8.7	1.819	2.770	6.6	20.2
12 17	6 3.23	+14 56.8	1.815	2.789	3.6	19.9	12 17	6 4.43	+28 8.4	1.804	2.783	2.6	20.0
12 27	5 54.24	+14 25.2	1.828	2.799	3.9	19.9	12 27	5 52.80	+29 0.0	1.821	2.796	3.1	20.0
1 6	5 45.99	+14 1.8	1.869	2.809	7.3	20.1	1 6	5 41.90	+29 41.4	1.867	2.809	7.0	20.3
1 16	5 39.36	+13 47.3	1.937	2.819	10.7	20.4	1 16	5 32.89	+30 12.7	1.941	2.821	10.8	20.6
1 26	5 35.00	+13 41.4	2.029	2.830	13.7	20.6	1 26	5 26.59	+30 35.9	2.038	2.833	13.9	20.8
170954	2005 <i>BZ</i> ₁₉		12 21.5 231°85	3°1/21.9	18		105238	2000 <i>PC</i> ₂₁		12 21.5 116°65	2°0/21.6	18	
11 17	6 27.66	+12 24.8	2.082	2.884	13.6	20.6	11 17	6 25.59	+17 15.8	2.056	2.870	13.2	19.9
11 27	6 21.81	+12 45.6	1.990	2.874	10.5	20.4	11 27	6 20.11	+17 13.3	1.982	2.876	10.0	19.7
12 7	6 13.67	+13 16.5	1.921	2.864	7.0	20.1	12 7	6 12.50	+17 15.5	1.932	2.882	6.4	19.5
12 17	6 3.87	+13 57.4	1.881	2.853	3.8	19.9	12 17	6 3.46	+17 22.2	1.910	2.888	2.8	19.3
12 27	5 53.37	+14 46.6	1.870	2.842	3.8	19.9	12 27	5 53.99	+17 32.9	1.918	2.893	3.1	19.3
1 6	5 43.29	+15 41.9	1.890	2.830	7.2	20.1	1 6	5 45.14	+17 47.1	1.955	2.899	6.6	19.6
1 16	5 34.66	+16 40.7	1.938	2.818	10.8	20.3	1 16	5 37.85	+18 4.4	2.019	2.904	10.2	19.8
1 26	5 28.30	+17 41.2	2.011	2.805	14.1	20.5	1 26	5 32.79	+18 24.4	2.108	2.909	13.3	20.0
99612	2002 <i>GN</i> ₇₁		12 21.5 151°11	1°8/21.4	18		271546	2004 <i>JN</i> ₁₇		12 21.5 275°90	1°9/21.4	18	
11 17	6 29.41	+26 40.5	1.793	2.614	14.6	19.8	11 17	6 28.21	+20 16.7	1.533	2.363	16.2	20.4
11 27	6 23.48	+27 10.5	1.718	2.617	11.0	19.6	11 27	6 22.92	+19 51.2	1.450	2.353	12.4	20.1
12 7	6 14.81	+27 38.9	1.667	2.619	6.9	19.3	12 7	6 14.65	+19 27.0	1.389	2.343	7.8	19.8
12 17	6 4.23	+28 2.4	1.643	2.622	2.7	19.1	12 17	6 4.24	+19 4.5	1.353	2.333	3.0	19.5
12 27	5 52.99	+28 18.1	1.647	2.624	3.2	19.1	12 27	5 53.03	+18 44.4	1.346	2.323	3.6	19.5
1 6	5 42.53	+28 25.4	1.680	2.626	7.4	19.4	1 6	5 42.58	+18 28.0	1.366	2.313	8.5	19.8
1 16	5 34.05	+28 25.8	1.741	2.628	11.4	19.6	1 16	5 34.24	+18 16.9	1.411	2.303	13.2	20.0
1 26	5 28.43	+28 21.9	1.824	2.629	14.8	19.8	1 26	5 28.97	+18 12.1	1.477	2.293	17.2	20.3
197053	2003 <i>UH</i> ₁₄₇		12 21.5 44°85	1°4/21.4	18		164289	2004 <i>XJ</i> ₉₇		12 21.5 118°80	2°9/21.9	18	
11 17	6 25.95	+24 55.8	2.004	2.825	13.3	19.2	11 17	6 28.79	+34 26.2	2.773	3.565	10.8	20.0
11 27	6 20.57	+25 40.8	1.937	2.836	10.0	19.0	11 27	6 22.02	+34 29.1	2.704	3.583	8.3	19.8
12 7	6 12.87	+26 26.3	1.894	2.847	6.2	18.8	12 7	6 13.43	+34 24.5	2.662	3.600	5.6	19.7
12 17	6 3.58	+27 9.0	1.879	2.858	2.3	18.6	12 17	6 3.71	+34 10.5	2.648	3.616	3.3	19.5
12 27	5 53.79	+27 45.9	1.893	2.870	2.7	18.7	12 27	5 53.78	+33 46.4	2.666	3.632	3.3	19.6
1 6	5 44.67	+28 15.5	1.936	2.882	6.6	18.9	1 6	5 44.56	+33 13.5	2.714	3.648	5.6	19.7
1 16	5 37.24	+28 38.0	2.007	2.894	10.1	19.2	1 16	5 36.82	+32 34.3	2.792	3.663	8.2	19.9
1 26	5 32.23	+28 54.9	2.102	2.906	13.2	19.4	1 26	5 31.13	+31 52.1	2.895	3.678	10.5	20.1
57390	2001 <i>RT</i> ₇₆		12 21.5 231°11	0°6/21.5	18		392832	2012 <i>TE</i> ₃₁₄		12 21.5 344°63	4°8/21.4	18	
11 17	6 29.06	+23 24.6	1.649	2.475	15.5	18.5	11 17	6 23.61	+15 8.1	1.246	2.091	18.3	20.1
11 27	6 23.44	+23 51.7	1.571	2.472	11.7	18.3	11 27	6 19.87	+14 26.4	1.174	2.082	14.2	19.8
12 7	6 14.92	+24 20.8	1.515	2.470	7.2	18.0	12 7	6 12.94	+13 52.1	1.122	2.074	9.5	19.6
12 17	6 4.29	+24 48.6	1.486	2.467	2.4	17.7	12 17	6 3.72	+13 28.3	1.094	2.067	5.4	19.3
12 27	5 52.89	+25 12.5	1.485	2.464	2.9	17.7	12 27	5 53.68	+13 17.3	1.090	2.062	5.8	19.3
1 6	5 42.22	+25 30.9	1.512	2.460	7.7	18.0	1 6	5 44.50	+13 19.8	1.111	2.057	10.2	19.6
1 16	5 33.61	+25 44.6	1.566	2.457	12.2	18.3	1 16	5 37.63	+13 35.4	1.155	2.053	15.0	19.8
1 26	5 27.99	+25 55.1	1.642	2.454	16.0	18.5	1 26	5 34.06	+14 1.8	1.219	2.051	19.2	20.1
302577	2002 <i>PX</i> ₁₀₈		12 21.										

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
517397	2014 <i>KJ</i> ₁₀₆		12 21.5 210°96	2°1/21.5 18			213602	2002 <i>PZ</i> ₆₂		12 21.5 142°49	1°0/21.6 18		
11 17	6 26.79	+17 22.4	2.089	2.900	13.2	22.3	11 17	6 28.09	+20 1.5	2.203	3.013	12.7	21.0
11 27	6 21.08	+17 14.1	2.003	2.896	10.0	22.1	11 27	6 21.85	+20 6.4	2.131	3.023	9.5	20.8
12 7	6 13.17	+17 10.0	1.942	2.891	6.4	21.8	12 7	6 13.53	+20 13.6	2.083	3.034	5.9	20.6
12 17	6 3.72	+17 10.0	1.908	2.885	2.9	21.6	12 17	6 3.83	+20 22.3	2.063	3.043	2.1	20.3
12 27	5 53.72	+17 14.0	1.904	2.879	3.2	21.6	12 27	5 53.74	+20 31.5	2.075	3.052	2.4	20.4
1 6	5 44.27	+17 22.0	1.930	2.873	6.8	21.8	1 6	5 44.29	+20 41.0	2.116	3.061	6.1	20.6
1 16	5 36.34	+17 33.6	1.984	2.866	10.5	22.0	1 16	5 36.38	+20 50.8	2.186	3.069	9.6	20.9
1 26	5 30.67	+17 49.0	2.061	2.859	13.6	22.2	1 26	5 30.68	+21 1.6	2.281	3.076	12.6	21.1
146529	2001 <i>SD</i> ₁₆₁		12 21.5 71°01	2°8/21.6 18			174216	2002 <i>QO</i> ₁₂₂		12 21.5 18°84	2°3/21.6 18		
11 17	6 29.32	+30 18.6	1.827	2.645	14.5	20.0	11 17	6 28.36	+28 42.8	1.682	2.508	15.2	20.5
11 27	6 23.25	+30 43.1	1.766	2.661	11.0	19.8	11 27	6 22.89	+29 1.3	1.609	2.509	11.5	20.2
12 7	6 14.55	+31 2.2	1.728	2.677	7.1	19.6	12 7	6 14.55	+29 15.9	1.558	2.510	7.4	20.0
12 17	6 4.13	+31 12.3	1.718	2.693	3.5	19.5	12 17	6 4.22	+29 22.9	1.534	2.512	3.2	19.7
12 27	5 53.30	+31 11.3	1.736	2.709	3.7	19.5	12 27	5 53.25	+29 20.2	1.537	2.513	3.5	19.8
1 6	5 43.41	+31 0.0	1.782	2.725	7.3	19.8	1 6	5 43.14	+29 8.2	1.569	2.515	7.7	20.0
1 16	5 35.59	+30 40.9	1.855	2.741	10.9	20.0	1 16	5 35.16	+28 49.5	1.626	2.517	11.8	20.3
1 26	5 30.57	+30 17.8	1.952	2.756	14.1	20.3	1 26	5 30.17	+28 27.7	1.706	2.519	15.4	20.5
331566	2001 <i>PY</i> ₉		12 21.5 108°75	0°3/21.5 18			383095	2005 <i>SA</i> ₁₀₉		12 21.5 328°34	5°7/21.3 18		
11 17	6 32.28	+23 4.6	1.766	2.582	15.0	20.9	11 17	6 26.07	+12 38.8	1.419	2.247	17.4	20.6
11 27	6 25.24	+22 57.2	1.707	2.603	11.2	20.7	11 27	6 21.33	+11 48.0	1.346	2.242	13.6	20.4
12 7	6 15.65	+22 49.3	1.671	2.624	6.9	20.5	12 7	6 13.67	+11 5.8	1.294	2.238	9.5	20.1
12 17	6 4.45	+22 39.8	1.663	2.644	2.2	20.3	12 17	6 3.96	+10 35.8	1.266	2.233	6.1	19.9
12 27	5 52.95	+22 28.1	1.685	2.664	2.6	20.3	12 27	5 53.55	+10 20.8	1.264	2.229	6.5	19.9
1 6	5 42.47	+22 15.3	1.736	2.683	7.1	20.7	1 6	5 43.94	+10 21.7	1.288	2.225	10.1	20.1
1 16	5 34.09	+22 2.9	1.815	2.701	11.1	20.9	1 16	5 36.43	+10 37.5	1.337	2.222	14.3	20.4
1 26	5 28.49	+21 52.9	1.917	2.719	14.4	21.2	1 26	5 31.93	+11 5.9	1.405	2.219	18.1	20.6
211405	2002 <i>VH</i> ₆₁		12 21.5 122°06	2°4/21.6 18			354015	2001 <i>LQ</i> ₆		12 21.5 195°88	0°9/21.6 18		
11 17	6 30.15	+29 54.1	2.152	2.960	13.0	20.9	11 17	6 28.44	+26 41.7	2.733	3.533	10.7	22.7
11 27	6 23.53	+30 15.3	2.085	2.975	9.8	20.7	11 27	6 21.91	+26 43.6	2.642	3.530	8.1	22.5
12 7	6 14.59	+30 31.7	2.042	2.989	6.3	20.5	12 7	6 13.51	+26 42.8	2.576	3.526	5.0	22.3
12 17	6 4.14	+30 40.4	2.027	3.003	3.0	20.3	12 17	6 3.84	+26 37.8	2.541	3.520	1.8	22.1
12 27	5 53.30	+30 39.6	2.043	3.016	3.2	20.4	12 27	5 53.75	+26 28.0	2.537	3.515	2.1	22.1
1 6	5 43.25	+30 29.8	2.088	3.029	6.5	20.6	1 6	5 44.15	+26 13.7	2.565	3.508	5.3	22.3
1 16	5 34.99	+30 13.1	2.162	3.041	9.8	20.8	1 16	5 35.85	+25 56.4	2.622	3.500	8.4	22.5
1 26	5 29.22	+29 52.8	2.259	3.053	12.7	21.0	1 26	5 29.48	+25 37.9	2.706	3.492	11.1	22.7
350185	Linnell		12 21.5 191°42	1°6/21.5 18			147562	2004 <i>FD</i> ₃₁		12 21.5 334°18	12°8/25.2 18		
11 17	6 29.20	+27 40.5	2.451	3.255	11.7	22.0	11 17	6 26.66	- 6 32.4	1.244	2.023	22.1	18.7
11 27	6 22.72	+28 2.8	2.364	3.253	8.8	21.8	11 27	6 22.29	- 6 28.8	1.167	2.010	19.3	18.4
12 7	6 14.11	+28 22.8	2.303	3.251	5.6	21.6	12 7	6 14.59	- 5 47.4	1.106	1.998	16.2	18.2
12 17	6 4.01	+28 37.8	2.270	3.248	2.3	21.4	12 17	6 4.36	- 4 21.1	1.066	1.987	13.6	18.0
12 27	5 53.40	+28 46.0	2.269	3.244	2.6	21.4	12 27	5 53.03	- 2 8.4	1.048	1.977	12.8	17.9
1 6	5 43.30	+28 47.1	2.298	3.240	6.0	21.6	1 6	5 42.32	+ 0 43.4	1.055	1.968	14.5	18.0
1 16	5 34.68	+28 42.4	2.357	3.235	9.2	21.8	1 16	5 33.86	+ 4 0.6	1.086	1.960	17.7	18.2
1 26	5 28.24	+28 34.0	2.440	3.229	12.1	22.0	1 26	5 28.80	+ 7 27.7	1.138	1.954	21.3	18.4
52726	1998 <i>GY</i> ₆		12 21.5 229°96	4°4/20.9 18			320002	2007 <i>DJ</i> ₂₉		12 21.5 119°14	1°0/21.6 18		
11 17	6 29.83	+32 53.2	2.125	2.931	13.2	18.3	11 17	6 25.40	+20 15.9	2.213	3.027	12.4	20.9
11 27	6 23.80	+34 6.2	2.043	2.929	10.2	18.1	11 27	6 19.88	+20 17.2	2.138	3.034	9.3	20.7
12 7	6 15.09	+35 15.4	1.987	2.926	7.1	17.9	12 7	6 12.35	+20 20.7	2.089	3.040	5.8	20.5
12 17	6 4.40	+36 15.1	1.958	2.923	4.7	17.8	12 17	6 3.48	+20 25.7	2.067	3.047	2.0	20.2
12 27	5 52.89	+37 0.3	1.960	2.920	5.1	17.8	12 27	5 54.21	+20 31.6	2.075	3.053	2.4	20.3
1 6	5 41.90	+37 29.2	1.990	2.917	7.8	18.0	1 6	5 45.54	+20 38.0	2.113	3.059	6.1	20.5
1 16	5 32.68	+37 42.8	2.047	2.914	10.9	18.2	1 16	5 38.33	+20 45.3	2.179	3.065	9.5	20.7
1 26	5 26.16	+37 44.8	2.128	2.911	13.8	18.4	1 26	5 33.24	+20 54.0	2.269	3.070	12.5	21.0
300559	2007 <i>TT</i> ₃₀₂		12 21.5 103°25	1°2/21.5 18			352200	2007 <i>RZ</i> ₂₈₄		12 21.5 71°21	0°0/21.5 18		
11 17	6 28.90	+26 8.1	1.815	2.636	14.5	21.2	11 17	6 27.76	+22 56.3	1.709	2.535	15.0	21.5
11 27	6 22.96	+26 23.6	1.745	2.644	10.9	21.0	11 27	6 22.26	+23 3.6	1.637	2.538	11.3	21.3
12 7	6 14.42	+26 37.3	1.699	2.652	6.8	20.8	12 7	6 14.09	+23 11.9	1.587	2.542	7.0	21.0
12 17	6 4.13	+26 46.5	1.680	2.660	2.4	20.5	12 17	6 4.08	+23 19.2	1.564	2.545	2.2	20.8
12 27	5 53.32	+26 49.3	1.690	2.668	2.8	20.6	12 27	5 53.50	+23 24.2	1.570	2.549	2.7	20.8
1 6	5 43.35	+26 46.0	1.729	2.676	7.1	20.8	1 6	5 43.71	+23 26.8	1.603	2.552	7.3	21.1
1 16	5 35.34	+26 38.2	1.795	2.684	11.0	21.1	1 16	5 35.89	+23 27.8	1.663	2.556	11.5	21.3
1 26	5 30.08	+26 28.5	1.884	2.691	14.4	21.3	1 26	5 30.85	+23 29.0	1.746	2.559	15.1	21.6
163824	2003 <i>SE</i> ₅		12 21.5 36°11	3°2/21.6 18			153654	2001 <i>TB</i> ₁₁₃		12 21.5 146°57	0°6/21.6 18 R		
11 17	6 29.12	+29 29.0	1.254	2.097	18.4	19.6	11 17	6 31.22	+25 6.9	1.919	2.732	14.1	21.0
11 27	6 23.91	+29 55.2	1.208	2.116	13.9	19.4	11 27	6 24.53	+25 11.7	1.847	2.742	10.6	20.8
12 7	6 15.25	+30 15.3	1.183	2.137	8.8	19.2	12 7	6 15.33	+25 14.8	1.799	2.751	6.5	20.6
12 17	6 4.39	+30 24.7	1.182	2.159	4.1	19.0	12 17	6 4.45	+25 14.2	1.779	2.760	2.2	20.3
12 27	5 53.11	+30 21.0	1.206	2.182	4.4	19.1	12 27	5 53.10	+25 8.7	1.789	2.767	2.5	20.3
1 6	5 43.26	+30 5.5	1.256	2.205	8.9	19.4	1 6	5 42.58	+24 58.9	1.829	2.775	6.8	20.6
1 16	5 36.21	+29 42.2	1.330	2.229	13.4	19.7	1 16	5 33.98	+24 46.5	1.896	2.781	10.7	20.9
1 26	5 32.72	+29 15.9	1.426	2.253	17.1	20.0	1 26	5 28.04	+24 33.9	1.987	2.787	14.0	21.1
52067	2002 <i>QE</i> ₃₆		12 21.5 94°05	3°7/21.7 18			197513	2004 <i>CF</i> ₃₆		12 21.5 352°97	4		

EPHEMERIDES

12 21.5

12 21.6

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
368845	2006 <i>EM</i> ₁₆	12 21.5 340°70		4°0/21.5 18			281154	2007 <i>DJ</i> ₉₆	12 21.6 285°72		0°8/21.5 18		
11 17	6 26.14	+32 51.8	1.844	2.665	14.3	20.3	11 17	6 28.08	+21 45.8	1.523	2.355	16.2	21.4
11 27	6 21.26	+33 27.5	1.764	2.658	11.1	20.0	11 27	6 23.03	+21 42.8	1.437	2.341	12.3	21.2
12 7	6 13.60	+33 57.0	1.707	2.652	7.5	19.8	12 7	6 14.90	+21 41.5	1.372	2.328	7.7	20.9
12 17	6 3.97	+34 15.9	1.675	2.645	4.5	19.6	12 17	6 4.48	+21 40.7	1.333	2.314	2.6	20.5
12 27	5 53.62	+34 21.0	1.672	2.640	4.7	19.6	12 27	5 53.14	+21 39.5	1.322	2.300	3.1	20.5
1 6	5 43.97	+34 12.1	1.696	2.635	7.9	19.8	1 6	5 42.48	+21 37.9	1.337	2.287	8.3	20.8
1 16	5 36.28	+33 51.7	1.746	2.630	11.6	20.0	1 16	5 33.92	+21 37.0	1.378	2.273	13.2	21.0
1 26	5 31.45	+33 24.1	1.819	2.626	14.8	20.2	1 26	5 28.52	+21 38.4	1.440	2.260	17.4	21.3
473119	2015 <i>HF</i> ₁₇₇	12 21.5 268°97		3°1/21.7 18			447541	2006 <i>SG</i> ₂₆₀	12 21.6 136°45		2°3/21.6 18		
11 17	6 32.23	+30 42.9	1.446	2.273	17.2	21.3	11 17	6 29.63	+29 49.4	2.179	2.987	12.8	21.9
11 27	6 26.49	+30 49.1	1.361	2.261	13.2	21.0	11 27	6 23.22	+30 10.4	2.107	2.997	9.7	21.7
12 7	6 17.15	+30 47.6	1.298	2.249	8.6	20.7	12 7	6 14.50	+30 27.0	2.059	3.006	6.2	21.5
12 17	6 5.16	+30 34.1	1.259	2.236	4.1	20.4	12 17	6 4.23	+30 36.1	2.040	3.015	3.0	21.3
12 27	5 52.18	+30 6.0	1.248	2.224	4.3	20.4	12 27	5 53.53	+30 35.9	2.050	3.024	3.2	21.4
1 6	5 40.12	+29 25.0	1.264	2.211	9.1	20.6	1 6	5 43.57	+30 26.8	2.091	3.032	6.5	21.6
1 16	5 30.65	+28 36.1	1.305	2.198	14.0	20.9	1 16	5 35.33	+30 10.9	2.159	3.040	9.8	21.8
1 26	5 24.88	+27 45.8	1.366	2.185	18.2	21.1	1 26	5 29.55	+29 51.1	2.252	3.047	12.7	22.0
230846	2004 <i>RZ</i> ₃₆	12 21.5 210°70		0°8/21.5 18			469529	2003 <i>SU</i> ₁₉₀	12 21.6 89°00		3°7/21.6 18		
11 17	6 30.30	+25 24.5	1.999	2.812	13.6	21.5	11 17	6 35.88	+31 0.7	1.406	2.229	17.8	21.5
11 27	6 23.98	+25 32.4	1.911	2.806	10.3	21.3	11 27	6 28.81	+31 33.5	1.353	2.250	13.5	21.3
12 7	6 15.10	+25 38.6	1.847	2.799	6.4	21.1	12 7	6 18.26	+31 59.0	1.323	2.271	8.8	21.1
12 17	6 4.42	+25 41.1	1.811	2.792	2.2	20.8	12 17	6 5.44	+32 11.6	1.318	2.292	4.5	20.9
12 27	5 53.09	+25 38.5	1.806	2.784	2.6	20.8	12 27	5 52.18	+32 8.1	1.340	2.313	4.7	21.0
1 6	5 42.39	+25 30.7	1.830	2.775	6.9	21.0	1 6	5 40.35	+31 50.0	1.390	2.333	8.9	21.3
1 16	5 33.45	+25 19.5	1.881	2.766	10.8	21.3	1 16	5 31.38	+31 21.9	1.464	2.352	13.1	21.6
1 26	5 27.12	+25 7.3	1.957	2.756	14.2	21.5	1 26	5 26.07	+30 49.6	1.561	2.371	16.7	21.8
75319	1999 <i>XU</i> ₄₄	12 21.5 316°14		3°0/21.3 18			297021	2010 <i>GK</i> ₂₉	12 21.6 24°34		1°0/21.6 18		
11 17	6 29.00	+27 17.1	1.328	2.168	17.7	18.7	11 17	6 27.40	+20 6.6	1.610	2.438	15.7	20.5
11 27	6 24.31	+28 5.1	1.251	2.158	13.5	18.4	11 27	6 22.17	+20 18.9	1.537	2.439	11.8	20.3
12 7	6 15.96	+28 53.3	1.194	2.149	8.7	18.1	12 7	6 14.17	+20 35.4	1.486	2.441	7.4	20.0
12 17	6 4.83	+29 35.8	1.162	2.140	3.9	17.8	12 17	6 4.21	+20 54.6	1.462	2.442	2.5	19.7
12 27	5 52.55	+30 7.1	1.155	2.131	4.5	17.8	12 27	5 53.60	+21 14.8	1.465	2.444	2.9	19.8
1 6	5 41.08	+30 24.9	1.175	2.123	9.5	18.1	1 6	5 43.76	+21 34.7	1.497	2.446	7.7	20.1
1 16	5 32.20	+30 30.8	1.219	2.115	14.5	18.4	1 16	5 35.92	+21 54.3	1.554	2.448	12.1	20.3
1 26	5 27.09	+30 28.8	1.283	2.108	18.8	18.6	1 26	5 30.96	+22 13.9	1.634	2.450	15.8	20.6
177195	2003 <i>UL</i> ₂₉	12 21.5 103°11		1°1/21.5 18			474976	2005 <i>TZ</i> ₈₅	12 21.6 96°82		0°6/21.6 18		
11 17	6 29.56	+25 26.7	1.844	2.663	14.4	20.8	11 17	6 32.55	+21 10.8	1.656	2.474	15.8	22.0
11 27	6 23.38	+25 45.2	1.778	2.676	10.8	20.6	11 27	6 25.64	+21 23.5	1.601	2.499	11.8	21.8
12 7	6 14.66	+26 2.6	1.736	2.689	6.7	20.3	12 7	6 16.05	+21 38.5	1.570	2.522	7.2	21.6
12 17	6 4.25	+26 15.9	1.722	2.702	2.3	20.1	12 17	6 4.74	+21 53.8	1.565	2.546	2.3	21.4
12 27	5 53.38	+26 23.6	1.736	2.714	2.7	20.2	12 27	5 53.09	+22 7.5	1.590	2.569	2.7	21.4
1 6	5 43.37	+26 25.4	1.780	2.727	6.9	20.4	1 6	5 42.50	+22 19.4	1.644	2.591	7.3	21.8
1 16	5 35.30	+26 22.8	1.851	2.739	10.8	20.7	1 16	5 34.08	+22 29.8	1.724	2.612	11.4	22.1
1 26	5 29.93	+26 18.1	1.945	2.750	14.1	20.9	1 26	5 28.57	+22 40.1	1.828	2.633	14.8	22.3
32655	4692 <i>P-L</i>	12 21.5 204°62		1°6/21.5 18			112659	2002 <i>PS</i> ₈₆	12 21.6 144°37		4°6/21.9 18		
11 17	6 29.00	+19 14.8	1.913	2.728	14.1	19.9	11 17	6 33.14	+37 7.6	2.147	2.941	13.5	20.5
11 27	6 22.97	+19 8.4	1.829	2.724	10.7	19.7	11 27	6 26.02	+37 27.8	2.075	2.950	10.6	20.3
12 7	6 14.47	+19 5.0	1.769	2.720	6.7	19.4	12 7	6 16.28	+37 37.7	2.027	2.959	7.5	20.1
12 17	6 4.23	+19 4.1	1.736	2.715	2.6	19.1	12 17	6 4.83	+37 33.0	2.006	2.966	5.0	20.0
12 27	5 53.37	+19 5.3	1.732	2.709	3.0	19.2	12 27	5 52.95	+37 11.8	2.014	2.974	5.0	20.0
1 6	5 43.14	+19 8.6	1.758	2.703	7.2	19.4	1 6	5 41.99	+36 35.5	2.052	2.981	7.5	20.2
1 16	5 34.63	+19 14.4	1.811	2.696	11.2	19.6	1 16	5 33.06	+35 48.1	2.117	2.987	10.5	20.4
1 26	5 28.67	+19 23.2	1.888	2.689	14.6	19.8	1 26	5 26.92	+34 55.0	2.207	2.993	13.2	20.6
207650	2007 <i>MM</i> ₈	12 21.5 20°97		3°1/21.3 18			452622	2005 <i>SB</i> ₄₉	12 21.6 36°50		2°3/21.6 15		
11 17	6 24.82	+20 15.8	1.109	1.964	19.3	19.0	11 17	6 27.44	+18 25.6	1.352	2.190	17.6	21.7
11 27	6 20.77	+19 17.3	1.060	1.975	14.6	18.7	11 27	6 22.02	+18 10.7	1.315	2.221	13.1	21.5
12 7	6 13.39	+18 20.6	1.030	1.988	9.2	18.5	12 7	6 13.83	+18 1.4	1.300	2.254	8.2	21.3
12 17	6 3.88	+17 28.6	1.024	2.003	4.0	18.2	12 17	6 4.01	+17 57.5	1.309	2.288	3.4	21.1
12 27	5 53.95	+16 44.7	1.042	2.019	4.6	18.3	12 27	5 54.02	+17 58.8	1.345	2.322	3.7	21.2
1 6	5 45.37	+16 11.7	1.085	2.036	9.7	18.7	1 6	5 45.31	+18 4.9	1.408	2.356	8.1	21.6
1 16	5 39.42	+15 51.2	1.151	2.054	14.5	19.0	1 16	5 38.93	+18 15.5	1.495	2.392	12.3	21.9
1 26	5 36.89	+15 42.8	1.236	2.074	18.6	19.3	1 26	5 35.51	+18 30.2	1.605	2.427	15.7	22.2
366683	2003 <i>UN</i> ₂₄₀	12 21.5 96°79		2°1/21.6 18			196944	2003 <i>UO</i> ₂₈	12 21.6 111°86		3°3/21.4 18		
11 17	6 27.06	+29 50.4	2.403	3.211	11.8	21.0	11 17	6 24.13	+13 47.4	2.507	3.308	11.5	20.6
11 27	6 21.04	+30 4.4	2.336	3.226	8.9	20.8	11 27	6 18.62	+13 13.0	2.438	3.321	8.9	20.4
12 7	6 13.01	+30 14.0	2.294	3.242	5.7	20.6	12 7	6 11.47	+12 43.5	2.394	3.334	6.0	20.3
12 17	6 3.71	+30 17.0	2.281	3.257	2.7	20.4	12 17	6 3.27	+12 20.3	2.378	3.346	3.6	20.1
12 27	5 54.09	+30 12.1	2.298	3.272	2.8	20.5	12 27	5 54.82	+12 4.3	2.393	3.358	3.8	20.2
1 6	5 45.16	+29 59.9	2.345	3.287	5.8	20.7	1 6	5 46.91	+11 56.0	2.438	3.370	6.3	20.4
1 16	5 37.77	+29 42.3	2.421	3.301	8.9	20.9	1 16	5 40.26	+11 55.5	2.511	3.382	9.0	20.6
1 26	5 32.54	+29 21.7	2.521	3.316	11.5	21.1	1 26	5 35.40	+12 1.9	2.609	3.393	11.5	20.7
327639	2006 <i>QL</i> ₇	12 21.5 122°99		3°0/21.7 18			159412	1999 <i>RZ</i> ₁₃₃	12 21.6 131°16		0°3/21.6 18		
11 17	6 31.58	+15 43.6											

EPHEMERIDES

12 21.6

12 21.6

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
145261	2005 <i>JM</i> ₁₃₀		12 21.6 115°59	1.6°/21.5	18		449411	2013 <i>HL</i> ₂₁		12 21.6 308°45	4.7°/21.4	17	
11 17	6 27.70	+19 35.7	2.039	2.853	13.4	20.3	11 17	6 24.39	+13 13.2	1.733	2.553	15.1	21.6
11 27	6 21.67	+19 15.7	1.970	2.865	10.1	20.1	11 27	6 19.78	+12 33.0	1.647	2.540	11.8	21.3
12 7	6 13.50	+18 57.6	1.926	2.877	6.3	19.9	12 7	6 12.68	+11 59.5	1.584	2.527	8.1	21.1
12 17	6 3.95	+18 41.6	1.910	2.889	2.5	19.7	12 17	6 3.80	+11 35.3	1.546	2.514	5.1	20.9
12 27	5 54.05	+18 28.0	1.924	2.900	2.8	19.7	12 27	5 54.24	+11 22.4	1.536	2.502	5.4	20.9
1 6	5 44.89	+18 17.5	1.967	2.912	6.6	20.0	1 6	5 45.25	+11 21.7	1.553	2.490	8.7	21.0
1 16	5 37.38	+18 10.9	2.038	2.922	10.1	20.2	1 16	5 37.93	+11 32.9	1.595	2.478	12.6	21.2
1 26	5 32.17	+18 8.6	2.134	2.933	13.2	20.5	1 26	5 33.16	+11 54.4	1.660	2.466	16.1	21.4
291139	2005 <i>YF</i> ₂₂₅		12 21.6 12°38	0.4°/21.6	17		174095	2002 <i>HB</i> ₅		12 21.6 222°39	2.9°/21.7	18	
11 17	6 25.80	+23 39.5	1.931	2.753	13.7	21.1	11 17	6 30.08	+15 49.4	1.653	2.470	15.8	20.8
11 27	6 20.62	+23 54.0	1.854	2.754	10.3	20.9	11 27	6 24.22	+15 47.5	1.568	2.463	12.2	20.6
12 7	6 13.06	+24 9.1	1.801	2.755	6.3	20.7	12 7	6 15.51	+15 53.0	1.506	2.455	7.9	20.3
12 17	6 3.86	+24 22.8	1.775	2.756	2.0	20.4	12 17	6 4.74	+16 6.1	1.470	2.447	3.8	20.0
12 27	5 54.10	+24 33.5	1.778	2.757	2.4	20.4	12 27	5 53.14	+16 25.8	1.463	2.438	4.0	20.0
1 6	5 45.00	+24 40.8	1.810	2.759	6.7	20.7	1 6	5 42.17	+16 51.2	1.484	2.428	8.3	20.3
1 16	5 37.59	+24 45.4	1.870	2.760	10.5	20.9	1 16	5 33.13	+17 21.2	1.531	2.418	12.7	20.5
1 26	5 32.67	+24 48.7	1.952	2.762	13.8	21.2	1 26	5 26.98	+17 54.8	1.601	2.408	16.5	20.7
39	<i>Laetitia</i>		12 21.6 69°65	5.4°/21.9	18	A	266108	2006 <i>SV</i> ₂₁₈		12 21.6 177°99	0.9°/21.6	18	
11 17	6 25.17	+8 50.7	1.855	2.660	14.9	10.3	11 17	6 33.64	+26 28.9	1.867	2.678	14.5	21.1
11 27	6 19.92	+8 28.8	1.791	2.671	11.7	10.1	11 27	6 26.55	+26 22.3	1.788	2.681	11.0	20.9
12 7	6 12.50	+8 18.6	1.750	2.683	8.4	9.9	12 7	6 16.73	+26 12.0	1.732	2.683	6.8	20.6
12 17	6 3.64	+8 22.0	1.735	2.694	5.8	9.8	12 17	6 5.06	+25 55.8	1.704	2.684	2.4	20.4
12 27	5 54.40	+8 39.5	1.747	2.706	5.8	9.8	12 27	5 52.84	+25 33.3	1.706	2.684	2.7	20.4
1 6	5 45.85	+9 9.9	1.788	2.717	8.4	10.0	1 6	5 41.46	+25 5.6	1.737	2.683	7.2	20.7
1 16	5 38.94	+9 50.8	1.855	2.729	11.5	10.2	1 16	5 32.12	+24 35.8	1.797	2.682	11.3	20.9
1 26	5 34.34	+10 39.4	1.945	2.740	14.4	10.4	1 26	5 25.62	+24 7.0	1.881	2.679	14.7	21.1
521701	2015 <i>RU</i> ₂₆₃		12 21.6 112°97	1°1°/21.7	18		115744	2003 <i>US</i> ₁₉₃		12 21.6 106°73	1°6°/21.7	18	
11 17	6 28.74	+18 17.4	2.112	2.921	13.2	21.5	11 17	6 28.30	+18 27.1	1.841	2.659	14.5	20.4
11 27	6 22.45	+18 45.5	2.046	2.937	9.9	21.3	11 27	6 22.39	+18 30.9	1.775	2.671	10.9	20.2
12 7	6 14.00	+19 18.4	2.004	2.954	6.1	21.1	12 7	6 14.09	+18 39.2	1.731	2.682	6.8	19.9
12 17	6 4.12	+19 54.3	1.990	2.970	2.2	20.9	12 17	6 4.20	+18 51.0	1.715	2.694	2.7	19.7
12 27	5 53.84	+20 31.1	2.007	2.985	2.4	21.0	12 27	5 53.87	+19 5.5	1.728	2.705	2.9	19.8
1 6	5 44.22	+21 7.2	2.055	3.000	6.2	21.2	1 6	5 44.30	+19 21.8	1.770	2.717	7.0	20.0
1 16	5 36.20	+21 41.8	2.131	3.015	9.8	21.5	1 16	5 36.54	+19 39.7	1.840	2.727	10.9	20.3
1 26	5 30.46	+22 14.7	2.232	3.029	12.8	21.7	1 26	5 31.30	+19 59.2	1.933	2.738	14.1	20.5
357452	2004 <i>CZ</i> ₁₀₉		12 21.6 253°21	1°4°/21.7	18		419941	2011 <i>BB</i> ₈₀		12 21.6 240°13	2°5°/21.8	18	
11 17	6 29.47	+28 45.5	2.199	3.008	12.7	21.0	11 17	6 24.34	+14 14.5	2.358	3.163	12.1	21.0
11 27	6 23.26	+28 34.7	2.099	2.991	9.7	20.7	11 27	6 19.13	+14 24.9	2.271	3.158	9.3	20.8
12 7	6 14.69	+28 18.5	2.024	2.973	6.1	20.5	12 7	6 12.01	+14 42.3	2.207	3.152	6.1	20.6
12 17	6 4.40	+27 55.0	1.976	2.955	2.4	20.2	12 17	6 3.55	+15 6.4	2.172	3.146	3.1	20.4
12 27	5 53.48	+27 23.7	1.960	2.937	2.6	20.2	12 27	5 54.58	+15 36.6	2.167	3.140	3.2	20.4
1 6	5 43.12	+26 45.9	1.973	2.918	6.5	20.4	1 6	5 46.03	+16 11.5	2.192	3.133	6.2	20.6
1 16	5 34.38	+26 4.4	2.014	2.898	10.3	20.6	1 16	5 38.74	+16 49.8	2.246	3.127	9.5	20.8
1 26	5 28.08	+25 22.7	2.081	2.878	13.5	20.8	1 26	5 33.37	+17 30.4	2.324	3.120	12.3	20.9
446285	2014 <i>DU</i> ₄₁		12 21.6 171°12	0°9°/21.6	18		349698	2008 <i>XV</i> ₂₁		12 21.6 57°49	1°1°/21.5	18	
11 17	6 28.47	+20 18.2	2.414	3.218	11.9	22.7	11 17	6 29.19	+21 58.7	1.473	2.305	16.7	19.6
11 27	6 22.08	+20 22.0	2.333	3.223	8.9	22.5	11 27	6 23.43	+21 38.8	1.418	2.322	12.5	19.4
12 7	6 13.73	+20 27.7	2.277	3.227	5.5	22.3	12 7	6 14.84	+21 19.7	1.385	2.340	7.7	19.2
12 17	6 4.05	+20 34.3	2.250	3.230	1.9	22.0	12 17	6 4.43	+21 0.9	1.377	2.358	2.6	18.9
12 27	5 53.94	+20 41.1	2.255	3.233	2.2	22.1	12 27	5 53.66	+20 42.8	1.397	2.376	3.1	19.0
1 6	5 44.37	+20 47.9	2.290	3.234	5.8	22.3	1 6	5 44.02	+20 26.7	1.445	2.394	7.9	19.4
1 16	5 36.20	+20 55.0	2.355	3.235	9.1	22.5	1 16	5 36.67	+20 14.0	1.518	2.413	12.3	19.7
1 26	5 30.09	+21 2.9	2.445	3.235	12.0	22.7	1 26	5 32.33	+20 6.0	1.613	2.431	15.9	19.9
36616	2000 <i>QZ</i> ₁₄₉		12 21.6 223°54	0°5°/21.6	18		129161	<i>Mykallefevre</i>		12 21.6 164°19	2°9°/21.9	18	
11 17	6 30.10	+25 29.4	1.919	2.735	14.0	19.5	11 17	6 27.49	+13 10.0	1.996	2.802	13.9	20.3
11 27	6 23.93	+25 20.6	1.831	2.727	10.6	19.3	11 27	6 21.73	+13 30.1	1.917	2.804	10.7	20.1
12 7	6 15.16	+25 9.1	1.767	2.719	6.6	19.0	12 7	6 13.71	+13 59.9	1.862	2.806	7.1	19.9
12 17	6 4.56	+24 53.2	1.730	2.711	2.2	18.7	12 17	6 4.11	+14 38.6	1.835	2.808	3.7	19.7
12 27	5 53.31	+24 32.5	1.723	2.702	2.5	18.7	12 27	5 53.94	+15 24.6	1.837	2.810	3.7	19.7
1 6	5 42.74	+24 8.0	1.745	2.692	7.0	19.0	1 6	5 44.33	+16 15.6	1.869	2.811	7.1	19.9
1 16	5 34.01	+23 42.1	1.795	2.682	11.1	19.2	1 16	5 36.27	+17 9.4	1.929	2.812	10.7	20.1
1 26	5 27.95	+23 17.6	1.869	2.672	14.6	19.4	1 26	5 30.55	+18 4.2	2.014	2.813	13.9	20.4
197583	2004 <i>HX</i> ₅		12 21.6 224°65	2°6°/21.5	18		173671	2001 <i>MV</i> ₁₅		12 21.6 170°31	0°5°/21.6	18	
11 17	6 29.13	+16 53.5	1.908	2.720	14.2	21.7	11 17	6 30.22	+26 42.3	2.508	3.309	11.5	20.9
11 27	6 23.15	+16 36.3	1.818	2.710	10.9	21.4	11 27	6 23.29	+26 19.1	2.425	3.314	8.7	20.7
12 7	6 14.68	+16 23.5	1.752	2.700	7.1	21.2	12 7	6 14.41	+25 51.8	2.368	3.318	5.4	20.5
12 17	6 4.42	+16 15.5	1.713	2.689	3.4	20.9	12 17	6 4.27	+25 19.7	2.341	3.321	1.8	20.3
12 27	5 53.47	+16 12.6	1.703	2.677	3.7	20.9	12 27	5 53.81	+24 43.2	2.345	3.324	2.0	20.3
1 6	5 43.07	+16 15.0	1.723	2.665	7.6	21.2	1 6	5 44.01	+24 3.9	2.381	3.325	5.6	20.5
1 16	5 34.35	+16 22.8	1.770	2.652	11.5	21.4	1 16	5 35.70	+23 24.2	2.447	3.327	8.9	20.8
1 26	5 28.16	+16 36.0	1.840	2.638	15.0	21.6	1 26	5 29.50	+22 46.5	2.539	3.327	11.6	20.9
369653	2011 <i>FE</i> ₄₄		12 21.6 296°14	0°5°/21.6	18		7788	<i>Tsukuba</i>		12 21.6 106°46	2°1°/21.7		

EPHEMERIDES

12 21.6

12 21.6

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
1490	Limpopo		12 21.6	86°35	1°9/21.4	18	42538	1995 WZ ₇		12 21.6	58°03	1°0/21.7	18
11 17	6 31.96	+21 27.8	1.508	2.334	16.7	15.7	11 17	6 31.38	+28 5.0	1.528	2.355	16.4	17.6
11 27	6 25.38	+20 41.6	1.451	2.351	12.5	15.5	11 27	6 25.03	+27 34.0	1.472	2.373	12.3	17.4
12 7	6 15.97	+19 55.1	1.415	2.369	7.8	15.3	12 7	6 15.77	+26 56.4	1.437	2.391	7.6	17.1
12 17	6 4.78	+19 9.4	1.406	2.386	3.0	15.0	12 17	6 4.74	+26 11.6	1.429	2.410	2.6	16.9
12 27	5 53.30	+18 26.6	1.426	2.403	3.5	15.1	12 27	5 53.44	+25 20.7	1.449	2.428	2.9	16.9
1 6	5 42.99	+17 49.3	1.473	2.419	8.1	15.4	1 6	5 43.39	+24 27.2	1.497	2.447	7.7	17.3
1 16	5 35.00	+17 19.7	1.547	2.436	12.5	15.7	1 16	5 35.75	+23 35.5	1.572	2.466	12.0	17.6
1 26	5 30.06	+16 59.1	1.642	2.452	16.1	16.0	1 26	5 31.20	+22 49.4	1.669	2.485	15.6	17.8
7571	Weisse Rose		12 21.6	175°64	0°4/21.6	18	89539	2001 XK ₈₆		12 21.6	27°92	1°4/21.6	18
11 17	6 24.42	+21 49.4	2.748	3.555	10.5	18.3	11 17	6 26.70	+20 49.9	1.209	2.057	18.6	18.2
11 27	6 18.92	+21 52.9	2.664	3.556	7.9	18.1	11 27	6 22.19	+20 38.5	1.154	2.067	14.0	18.0
12 7	6 11.74	+21 57.3	2.606	3.558	4.8	17.9	12 7	6 14.39	+20 30.2	1.120	2.078	8.7	17.7
12 17	6 3.44	+22 1.5	2.578	3.559	1.6	17.7	12 17	6 4.38	+20 24.6	1.109	2.090	3.1	17.4
12 27	5 54.78	+22 5.2	2.581	3.559	1.9	17.7	12 27	5 53.82	+20 21.1	1.123	2.102	3.5	17.5
1 6	5 46.56	+22 8.2	2.614	3.559	5.1	18.0	1 6	5 44.46	+20 20.2	1.163	2.116	8.9	17.9
1 16	5 39.51	+22 10.8	2.677	3.559	8.1	18.2	1 16	5 37.66	+20 22.5	1.227	2.131	13.8	18.2
1 26	5 34.20	+22 13.8	2.765	3.559	10.7	18.3	1 26	5 34.27	+20 28.7	1.311	2.146	17.9	18.5
382722	2002 XR ₉₀		12 21.6	61°20	1°0/21.6	18	449576	2014 JJ ₂₁		12 21.6	187°35	3°4/21.4	18
11 17	6 31.03	+21 37.1	1.300	2.136	18.2	20.8	11 17	6 30.84	+30 58.8	1.997	2.807	13.7	21.7
11 27	6 25.08	+21 29.0	1.250	2.157	13.6	20.5	11 27	6 24.61	+31 45.3	1.917	2.807	10.6	21.5
12 7	6 15.96	+21 22.8	1.222	2.178	8.4	20.3	12 7	6 15.68	+32 27.9	1.862	2.806	7.0	21.3
12 17	6 4.81	+21 17.4	1.218	2.199	2.8	20.0	12 17	6 4.81	+33 1.7	1.833	2.805	3.9	21.1
12 27	5 53.29	+21 12.2	1.241	2.220	3.2	20.1	12 27	5 53.22	+33 23.1	1.835	2.804	4.2	21.1
1 6	5 43.08	+21 7.7	1.291	2.241	8.5	20.5	1 6	5 42.30	+33 31.3	1.865	2.802	7.5	21.3
1 16	5 35.47	+21 5.2	1.365	2.263	13.2	20.8	1 16	5 33.26	+33 28.0	1.923	2.801	11.0	21.5
1 26	5 31.21	+21 6.0	1.461	2.284	17.0	21.1	1 26	5 26.99	+33 16.9	2.004	2.798	14.1	21.7
94101	2000 YQ ₇₄		12 21.6	305°65	0°6/21.5	18	447626	2006 UO ₂₃₄		12 21.6	64°26	1°5/21.4	15
11 17	6 26.22	+22 41.4	1.980	2.801	13.5	18.3	11 17	6 31.17	+24 42.0	1.699	2.520	15.3	21.3
11 27	6 21.08	+23 23.5	1.893	2.792	10.2	18.1	11 27	6 24.71	+25 32.6	1.649	2.548	11.4	21.1
12 7	6 13.48	+24 9.0	1.830	2.784	6.3	17.8	12 7	6 15.57	+26 23.3	1.624	2.576	7.0	20.9
12 17	6 4.09	+24 54.9	1.795	2.775	2.1	17.5	12 17	6 4.71	+27 9.6	1.625	2.604	2.6	20.7
12 27	5 53.96	+25 38.0	1.789	2.767	2.5	17.5	12 27	5 53.46	+27 48.0	1.655	2.633	3.0	20.8
1 6	5 44.30	+26 16.2	1.812	2.759	6.8	17.8	1 6	5 43.23	+28 17.1	1.715	2.661	7.2	21.1
1 16	5 36.24	+26 48.8	1.863	2.751	10.7	18.0	1 16	5 35.13	+28 37.6	1.801	2.688	11.1	21.4
1 26	5 30.65	+27 16.4	1.937	2.744	14.1	18.2	1 26	5 29.92	+28 51.9	1.911	2.716	14.3	21.7
479326	2013 TG ₂₅		12 21.6	57°19	3°7/21.6	18	187225	2005 SG ₁₄₁		12 21.6	63°82	0°7/21.6	18
11 17	6 32.84	+29 58.3	1.224	2.062	19.0	21.0	11 17	6 26.32	+20 56.7	1.892	2.714	13.9	20.5
11 27	6 27.03	+30 34.7	1.172	2.077	14.5	20.7	11 27	6 20.94	+21 2.7	1.824	2.723	10.5	20.3
12 7	6 17.46	+31 5.2	1.141	2.093	9.4	20.5	12 7	6 13.24	+21 11.1	1.779	2.732	6.5	20.1
12 17	6 5.35	+31 23.5	1.133	2.109	4.6	20.3	12 17	6 3.98	+21 20.7	1.761	2.741	2.2	19.9
12 27	5 52.64	+31 26.0	1.151	2.125	4.9	20.4	12 27	5 54.27	+21 30.4	1.772	2.751	2.5	19.9
1 6	5 41.38	+31 13.5	1.194	2.141	9.5	20.7	1 6	5 45.29	+21 39.8	1.812	2.760	6.7	20.2
1 16	5 33.13	+30 50.6	1.262	2.158	14.1	21.0	1 16	5 38.03	+21 49.2	1.880	2.770	10.5	20.5
1 26	5 28.79	+30 23.0	1.350	2.174	18.1	21.3	1 26	5 33.23	+21 59.2	1.970	2.780	13.8	20.7
455698	2005 EY ₁₉₁		12 21.6	330°81	7°4/21.4	16	159209	2005 VW ₇₀		12 21.6	285°90	0°9/21.6	18
11 17	6 21.19	+ 5 5.3	1.879	2.680	14.8	21.4	11 17	6 27.95	+20 42.6	1.559	2.389	16.0	21.3
11 27	6 17.18	+ 4 15.6	1.795	2.666	12.2	21.2	11 27	6 22.96	+20 50.9	1.471	2.374	12.2	21.0
12 7	6 11.00	+ 3 38.6	1.733	2.652	9.5	21.0	12 7	6 14.94	+21 3.0	1.405	2.360	7.6	20.8
12 17	6 3.28	+ 3 18.4	1.696	2.639	7.6	20.9	12 17	6 4.66	+21 17.5	1.365	2.346	2.6	20.4
12 27	5 54.96	+ 3 17.7	1.685	2.626	7.8	20.9	12 27	5 53.41	+21 32.6	1.352	2.331	3.0	20.4
1 6	5 47.12	+ 3 36.7	1.700	2.614	9.9	21.0	1 6	5 42.77	+21 47.5	1.367	2.317	8.2	20.7
1 16	5 40.72	+ 4 13.6	1.740	2.602	12.8	21.1	1 16	5 34.16	+22 2.2	1.408	2.303	13.0	20.9
1 26	5 36.53	+ 5 4.9	1.802	2.592	15.6	21.3	1 26	5 28.61	+22 17.5	1.470	2.289	17.1	21.1
187464	2005 YC ₁₀		12 21.6	33°04	0°7/21.6	18	439090	2011 QP ₃₉		12 21.6	93°57	0°0/21.5	15
11 17	6 25.38	+21 10.2	1.791	2.617	14.4	20.4	11 17	6 30.41	+23 33.7	1.815	2.633	14.6	22.1
11 27	6 20.37	+21 16.2	1.722	2.624	10.8	20.2	11 27	6 23.95	+23 32.6	1.756	2.653	10.9	21.9
12 7	6 12.94	+21 24.5	1.677	2.631	6.7	19.9	12 7	6 15.03	+23 31.0	1.720	2.673	6.7	21.7
12 17	6 3.87	+21 34.0	1.658	2.639	2.2	19.7	12 17	6 4.53	+23 27.4	1.712	2.693	2.1	21.5
12 27	5 54.32	+21 43.6	1.668	2.647	2.6	19.7	12 27	5 53.72	+23 21.1	1.733	2.712	2.5	21.5
1 6	5 45.52	+21 52.8	1.707	2.656	6.9	20.0	1 6	5 43.84	+23 12.8	1.784	2.731	6.8	21.8
1 16	5 38.51	+22 2.0	1.771	2.664	10.9	20.3	1 16	5 35.94	+23 3.8	1.861	2.750	10.7	22.1
1 26	5 34.04	+22 11.7	1.859	2.673	14.3	20.5	1 26	5 30.71	+22 56.0	1.963	2.768	14.0	22.4
99329	2001 VH ₁₃		12 21.6	115°22	0°2/21.6	18	414612	2009 UD ₁₄₃		12 21.6	334°34	0°3/21.6	16
11 17	6 27.45	+24 8.6	2.064	2.881	13.1	19.8	11 17	6 23.32	+23 34.1	1.712	2.546	14.6	21.0
11 27	6 21.63	+24 8.1	1.992	2.889	9.8	19.6	11 27	6 19.25	+23 45.8	1.624	2.530	11.1	20.8
12 7	6 13.58	+24 6.7	1.944	2.897	6.1	19.4	12 7	6 12.52	+23 58.6	1.559	2.515	6.9	20.5
12 17	6 4.06	+24 3.0	1.924	2.904	1.9	19.2	12 17	6 3.85	+24 10.5	1.520	2.501	2.2	20.2
12 27	5 54.12	+23 56.5	1.933	2.912	2.3	19.2	12 27	5 54.39	+24 20.0	1.508	2.487	2.7	20.2
1 6	5 44.89	+23 47.6	1.972	2.919	6.3	19.5	1 6	5 45.50	+24 26.5	1.524	2.475	7.4	20.4
1 16	5 37.32	+23 37.5	2.039	2.927	10.0	19.7	1 16	5 38.40	+24 30.6	1.565	2.463	11.8	20.6
1 26	5 32.12	+23 28.0	2.130	2.934	13.1	19.9	1 26	5 34.01	+24 33.7	1.629	2.452	15.5	20.9
60587	2000 EL ₁₃₉		12 21.6	39°47	5°1/21.8	18	520681	2014 QA ₄₅₉		12 21.6	213°58	1°9/21.7	17
11 17	6 27.82	+13 9.8	1.256	2.091	18.8	1							

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
18270	2312 T_{-3}		12 21.6 115°76'	2°0/21.6 18			271920	2004 XM_{58}		12 21.6 25°93'	3°9/21.9 17		
11 17	6 32.55	+27 26.0	1.413	2.243	17.4	18.8	11 17	6 28.18	+34 54.2	2.046	2.855	13.5	20.7
11 27	6 26.53	+27 44.8	1.346	2.249	13.2	18.6	11 27	6 22.46	+35 4.8	1.972	2.858	10.5	20.5
12 7	6 17.10	+28 0.3	1.301	2.254	8.3	18.3	12 7	6 14.23	+35 6.5	1.921	2.862	7.2	20.3
12 17	6 5.30	+28 8.5	1.280	2.259	3.3	18.0	12 17	6 4.34	+34 55.7	1.897	2.865	4.4	20.2
12 27	5 52.78	+28 6.7	1.287	2.265	3.6	18.1	12 27	5 53.99	+34 31.3	1.902	2.869	4.4	20.2
1 6	5 41.36	+27 55.3	1.321	2.269	8.6	18.4	1 6	5 44.47	+33 54.5	1.936	2.873	7.2	20.4
1 16	5 32.52	+27 37.5	1.380	2.274	13.3	18.7	1 16	5 36.85	+33 9.0	1.997	2.878	10.5	20.6
1 26	5 27.22	+27 17.6	1.461	2.279	17.3	18.9	1 26	5 31.87	+32 19.4	2.081	2.882	13.4	20.8
71771	2000 SR_{75}		12 21.6 137°81'	1°0/21.5 18			521552	2015 OU_{102}		12 21.6 106°19'	3°2/21.3 15		
11 17	6 32.64	+24 6.4	1.499	2.324	16.7	20.0	11 17	6 28.55	+16 16.5	2.062	2.869	13.5	21.7
11 27	6 26.41	+24 37.6	1.430	2.331	12.6	19.8	11 27	6 22.20	+15 28.9	1.999	2.887	10.3	21.6
12 7	6 16.96	+25 10.0	1.384	2.338	7.8	19.5	12 7	6 13.81	+14 44.9	1.960	2.905	6.7	21.4
12 17	6 5.25	+25 39.7	1.363	2.344	2.7	19.2	12 17	6 4.15	+14 6.2	1.950	2.922	3.7	21.2
12 27	5 52.81	+26 3.3	1.371	2.349	3.1	19.3	12 27	5 54.25	+13 34.6	1.970	2.939	4.0	21.3
1 6	5 41.32	+26 19.5	1.407	2.355	8.2	19.6	1 6	5 45.13	+13 11.2	2.020	2.956	7.1	21.5
1 16	5 32.22	+26 29.4	1.468	2.360	12.8	19.9	1 16	5 37.64	+12 56.7	2.097	2.972	10.3	21.7
1 26	5 26.44	+26 35.6	1.551	2.364	16.7	20.1	1 26	5 32.40	+12 50.9	2.198	2.987	13.2	22.0
518941	2010 GV_{149}		12 21.6 197°78'	3°9/21.9 18			457894	2009 TY_{23}		12 21.6 117°74'	17°5/20.1 17		
11 17	6 32.00	+35 18.0	2.254	3.051	12.8	21.6	11 17	6 31.53	-7 25.6	1.206	1.975	23.2	20.7
11 27	6 25.19	+35 33.1	2.169	3.048	10.0	21.4	11 27	6 25.62	-10 11.2	1.163	1.985	20.7	20.5
12 7	6 15.88	+35 39.6	2.108	3.045	6.9	21.3	12 7	6 16.46	-12 26.7	1.137	1.993	18.6	20.4
12 17	6 4.85	+35 33.7	2.075	3.041	4.3	21.1	12 17	6 5.10	-13 58.8	1.132	2.002	17.6	20.4
12 27	5 53.29	+35 13.4	2.072	3.037	4.4	21.1	12 27	5 53.15	-14 39.3	1.146	2.010	17.8	20.4
1 6	5 42.47	+34 39.9	2.098	3.032	7.0	21.2	1 6	5 42.33	-14 28.1	1.180	2.018	19.2	20.6
1 16	5 33.47	+33 56.4	2.153	3.026	10.2	21.4	1 16	5 34.03	-13 32.1	1.232	2.025	21.2	20.7
1 26	5 27.07	+33 7.8	2.232	3.020	13.1	21.6	1 26	5 29.15	-12 2.7	1.299	2.032	23.3	20.9
397344	2006 UZ_{11}		12 21.6 181°89'	4°5/21.2 18			257435	2010 NG_{35}		12 21.6 147°29'	3°5/21.4 18		
11 17	6 31.42	+35 4.8	2.314	3.111	12.5	21.4	11 17	6 26.21	+13 49.2	2.302	3.103	12.4	21.5
11 27	6 24.85	+36 0.4	2.234	3.111	9.8	21.3	11 27	6 20.40	+13 14.6	2.228	3.111	9.6	21.3
12 7	6 15.75	+36 49.7	2.178	3.112	7.0	21.1	12 7	6 12.72	+12 45.3	2.178	3.118	6.5	21.2
12 17	6 4.85	+37 27.7	2.151	3.111	4.7	20.9	12 17	6 3.83	+12 22.5	2.157	3.125	3.9	21.0
12 27	5 53.26	+37 50.8	2.153	3.111	5.0	20.9	12 27	5 54.60	+12 7.5	2.166	3.132	4.1	21.0
1 6	5 42.26	+37 58.1	2.185	3.110	7.4	21.1	1 6	5 45.95	+12 0.8	2.205	3.138	6.8	21.2
1 16	5 32.98	+37 51.6	2.245	3.108	10.2	21.3	1 16	5 38.68	+12 2.3	2.272	3.144	9.8	21.4
1 26	5 26.27	+37 35.2	2.329	3.106	12.9	21.5	1 26	5 33.40	+12 11.2	2.363	3.149	12.5	21.6
221839	2008 FX_{26}		12 21.6 276°26'	2°5/21.5 18			321318	2009 HM_{53}		12 21.6 271°42'	0°5/21.6 17		
11 17	6 28.76	+18 33.9	1.507	2.335	16.5	20.9	11 17	6 26.96	+21 18.5	1.889	2.710	14.0	21.4
11 27	6 23.64	+18 13.8	1.416	2.317	12.7	20.6	11 27	6 21.71	+21 28.4	1.799	2.698	10.6	21.2
12 7	6 15.40	+17 57.3	1.347	2.299	8.2	20.3	12 7	6 13.93	+21 40.9	1.733	2.686	6.6	20.9
12 17	6 4.82	+17 44.9	1.303	2.281	3.5	20.0	12 17	6 4.32	+21 54.5	1.694	2.674	2.2	20.6
12 27	5 53.24	+17 36.9	1.286	2.263	3.9	20.0	12 27	5 53.96	+22 7.8	1.683	2.662	2.6	20.6
1 6	5 42.25	+17 34.1	1.297	2.244	8.9	20.2	1 6	5 44.13	+22 20.1	1.702	2.650	7.0	20.9
1 16	5 33.32	+17 37.1	1.333	2.225	13.8	20.5	1 16	5 35.98	+22 31.7	1.748	2.638	11.2	21.1
1 26	5 27.54	+17 46.3	1.390	2.207	18.1	20.7	1 26	5 30.38	+22 43.2	1.816	2.626	14.8	21.3
50272	2000 CZ		12 21.6 101°13'	1°4/21.6 18			436387	2010 VB_{20}		12 21.6 341°65'	1°5/21.5 18		
11 17	6 27.50	+19 7.5	1.863	2.682	14.2	19.4	11 17	6 28.89	+22 47.4	1.229	2.073	18.6	20.7
11 27	6 21.84	+19 9.5	1.793	2.690	10.7	19.2	11 27	6 24.07	+22 7.7	1.158	2.069	14.1	20.4
12 7	6 13.81	+19 15.3	1.747	2.699	6.7	19.0	12 7	6 15.75	+21 25.9	1.107	2.065	8.8	20.1
12 17	6 4.19	+19 24.1	1.728	2.708	2.6	18.7	12 17	6 4.93	+20 42.5	1.081	2.061	3.1	19.8
12 27	5 54.10	+19 35.0	1.738	2.716	2.8	18.8	12 27	5 53.32	+19 59.4	1.080	2.058	3.7	19.8
1 6	5 44.74	+19 47.4	1.778	2.724	6.9	19.0	1 6	5 42.80	+19 19.9	1.104	2.056	9.4	20.1
1 16	5 37.14	+20 1.4	1.844	2.733	10.8	19.3	1 16	5 34.90	+18 47.3	1.153	2.054	14.7	20.4
1 26	5 32.03	+20 17.0	1.934	2.741	14.1	19.5	1 26	5 30.61	+18 24.0	1.221	2.053	19.2	20.7
375157	2008 CA_{132}		12 21.6 352°30'	4°6/21.7 18			443176	2014 DU_{18}		12 21.6 248°76'	0°3/21.6 18		
11 17	6 29.61	+31 51.2	1.164	2.009	19.3	20.3	11 17	6 29.44	+22 55.3	1.790	2.611	14.7	21.7
11 27	6 25.19	+32 22.6	1.098	2.005	15.0	20.0	11 27	6 23.72	+22 52.0	1.700	2.598	11.1	21.4
12 7	6 16.72	+32 46.1	1.050	2.002	10.0	19.8	12 7	6 15.24	+22 48.8	1.632	2.585	6.9	21.1
12 17	6 5.27	+32 55.2	1.025	2.000	5.5	19.5	12 17	6 4.76	+22 44.4	1.591	2.572	2.3	20.8
12 27	5 52.81	+32 45.4	1.025	1.998	5.7	19.5	12 27	5 53.49	+22 37.8	1.580	2.559	2.7	20.8
1 6	5 41.58	+32 17.7	1.049	1.997	10.3	19.8	1 6	5 42.83	+22 29.3	1.597	2.545	7.4	21.1
1 16	5 33.43	+31 37.7	1.096	1.997	15.3	20.0	1 16	5 34.01	+22 20.5	1.641	2.530	11.8	21.3
1 26	5 29.45	+30 52.6	1.163	1.998	19.7	20.3	1 26	5 27.99	+22 13.2	1.707	2.516	15.6	21.5
84605	2002 VL_{34}		12 21.6 299°61'	1°3/21.5 17			22271	1981 EZ_{32}		12 21.6 355°97'	5°2/21.5 18		
11 17	6 27.05	+25 11.2	1.808	2.632	14.4	19.4	11 17	6 23.46	+9 58.8	2.013	2.819	13.8	19.3
11 27	6 21.96	+25 40.8	1.722	2.622	10.9	19.2	11 27	6 18.66	+9 19.6	1.937	2.818	10.9	19.1
12 7	6 14.16	+26 11.0	1.659	2.612	6.8	18.9	12 7	6 11.82	+8 49.3	1.884	2.818	7.8	18.9
12 17	6 4.39	+26 38.6	1.623	2.603	2.5	18.6	12 17	6 3.60	+8 30.4	1.858	2.817	5.5	18.7
12 27	5 53.81	+27 0.7	1.615	2.593	2.9	18.6	12 27	5 54.92	+8 24.5	1.860	2.817	5.7	18.8
1 6	5 43.82	+27 16.3	1.636	2.583	7.3	18.9	1 6	5 46.80	+8 31.6	1.890	2.817	8.1	18.9
1 16	5 35.63	+27 25.8	1.683	2.574	11.5	19.1	1 16	5 40.13	+8 50.9	1.946	2.817	11.2	19.1
1 26	5 30.21	+27 31.2	1.753	2.565	15.1	19.3	1 26	5 35.59	+9 20.2	2.025	2.817	14.1	19.3
97476	2000 CS_{51}		12 21.6 270°94'	2°5/21.6 18			278104	2007 BJ_{65}		12 21.6 169°13'	3°5/21.7 18		
11 17	6 23.82	+15 36.0</											

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
213354	2001 <i>TJ</i> ₁₂		12 21.6 132°43	5°1/21.5 18			298090	2002 <i>RM</i> ₃₆		12 21.6 71°61	7°5/22.5 18		
11 17	6 32.46	+37 56.5	2.310	3.099	12.8	20.6	11 17	6 37.54	+42 53.0	1.733	2.522	16.4	20.2
11 27	6 25.57	+38 47.4	2.241	3.111	10.1	20.5	11 27	6 29.92	+43 31.9	1.684	2.547	13.3	20.0
12 7	6 16.15	+39 29.2	2.197	3.122	7.4	20.3	12 7	6 18.94	+43 53.8	1.657	2.572	10.2	19.9
12 17	6 4.99	+39 56.9	2.181	3.133	5.4	20.2	12 17	6 5.86	+43 52.2	1.655	2.596	7.9	19.8
12 27	5 53.31	+40 7.4	2.194	3.144	5.5	20.2	12 27	5 52.49	+43 24.4	1.679	2.621	7.8	19.9
1 6	5 42.38	+40 0.7	2.236	3.154	7.6	20.4	1 6	5 40.63	+42 33.5	1.731	2.645	9.7	20.0
1 16	5 33.33	+39 39.6	2.305	3.163	10.2	20.6	1 16	5 31.62	+41 26.3	1.808	2.669	12.4	20.3
1 26	5 26.93	+39 9.0	2.398	3.172	12.7	20.8	1 26	5 26.19	+40 11.2	1.908	2.693	15.1	20.5
494150	2016 <i>CJ</i> ₂₅₁		12 21.6 199°22	0°8/21.5 17			13686	Kongozan		12 21.6 72°99	0°6/21.6 18		
11 17	6 26.05	+23 42.2	2.718	3.523	10.6	21.4	11 17	6 25.81	+21 45.7	2.182	2.997	12.6	18.7
11 27	6 20.33	+24 25.8	2.630	3.521	8.0	21.2	11 27	6 20.23	+21 43.9	2.118	3.015	9.4	18.5
12 7	6 12.77	+25 10.8	2.568	3.519	4.9	21.0	12 7	6 12.67	+21 43.1	2.080	3.032	5.8	18.4
12 17	6 3.91	+25 54.9	2.536	3.516	1.7	20.8	12 17	6 3.85	+21 42.3	2.069	3.050	1.9	18.1
12 27	5 54.53	+26 35.6	2.536	3.513	2.0	20.8	12 27	5 54.73	+21 41.3	2.089	3.067	2.2	18.2
1 6	5 45.51	+27 11.5	2.566	3.510	5.3	21.0	1 6	5 46.30	+21 40.1	2.138	3.085	5.9	18.5
1 16	5 37.66	+27 42.2	2.627	3.507	8.3	21.2	1 16	5 39.40	+21 39.3	2.215	3.102	9.3	18.7
1 26	5 31.64	+28 8.2	2.713	3.503	10.9	21.4	1 26	5 34.64	+21 39.8	2.316	3.119	12.2	18.9
436413	2011 <i>AG</i> ₂₃		12 21.6 348°58	1°8/21.7 18			235130	2003 <i>QY</i> ₅₃		12 21.6 90°26	1°7/21.7 18		
11 17	6 27.98	+27 2.0	1.159	2.009	19.1	20.9	11 17	6 30.58	+18 13.0	1.830	2.643	14.7	20.9
11 27	6 23.79	+27 9.9	1.091	2.004	14.5	20.6	11 27	6 23.98	+18 18.7	1.776	2.669	11.0	20.8
12 7	6 15.80	+27 14.4	1.042	1.999	9.2	20.3	12 7	6 15.03	+18 29.0	1.745	2.695	6.9	20.6
12 17	6 5.02	+27 11.7	1.015	1.996	3.4	20.0	12 17	6 4.60	+18 42.7	1.742	2.721	2.7	20.4
12 27	5 53.27	+26 59.7	1.014	1.993	3.8	20.0	12 27	5 53.89	+18 58.6	1.769	2.746	2.9	20.4
1 6	5 42.65	+26 39.3	1.037	1.991	9.6	20.3	1 6	5 44.09	+19 16.1	1.825	2.770	6.9	20.7
1 16	5 34.87	+26 14.3	1.084	1.990	15.0	20.6	1 16	5 36.19	+19 34.8	1.908	2.794	10.6	21.0
1 26	5 31.02	+25 49.2	1.149	1.989	19.5	20.9	1 26	5 30.85	+19 54.7	2.016	2.817	13.8	21.3
460507	2014 <i>SR</i> ₃₃₀		12 21.6 19°99	7°2/21.5 16			220427	2003 <i>TN</i> ₄₆		12 21.6 5°29	3°7/21.7 17		
11 17	6 28.31	+39 21.4	1.628	2.443	16.1	20.3	11 17	6 27.20	+33 26.7	2.048	2.861	13.4	20.5
11 27	6 23.39	+40 26.8	1.572	2.453	13.0	20.1	11 27	6 21.80	+33 50.3	1.972	2.861	10.3	20.3
12 7	6 15.20	+41 19.8	1.537	2.465	9.8	19.9	12 7	6 13.91	+34 7.0	1.919	2.862	7.0	20.1
12 17	6 4.74	+41 53.3	1.527	2.477	7.5	19.8	12 17	6 4.31	+34 13.0	1.893	2.862	4.2	19.9
12 27	5 53.63	+42 2.8	1.543	2.490	7.7	19.9	12 27	5 54.16	+34 6.2	1.895	2.863	4.3	20.0
1 6	5 43.61	+41 48.8	1.584	2.505	9.9	20.0	1 6	5 44.74	+33 47.1	1.926	2.864	7.2	20.1
1 16	5 36.08	+41 16.0	1.650	2.520	12.9	20.3	1 16	5 37.13	+33 18.5	1.984	2.866	10.5	20.3
1 26	5 31.96	+40 31.1	1.737	2.536	15.7	20.5	1 26	5 32.13	+32 44.4	2.065	2.867	13.5	20.5
288531	2004 <i>GT</i> ₈		12 21.6 246°57	1°3/21.6 18			474821	2005 <i>SW</i> ₄₀		12 21.6 185°45	3°2/21.6 18		
11 17	6 26.78	+19 58.1	2.338	3.146	12.0	21.6	11 17	6 32.50	+30 19.8	1.736	2.552	15.2	21.9
11 27	6 21.11	+19 48.0	2.238	3.130	9.1	21.3	11 27	6 26.17	+30 51.3	1.658	2.552	11.7	21.6
12 7	6 13.36	+19 39.4	2.162	3.113	5.8	21.1	12 7	6 16.81	+31 18.1	1.604	2.552	7.6	21.4
12 17	6 4.13	+19 32.2	2.116	3.095	2.2	20.8	12 17	6 5.28	+31 35.4	1.576	2.551	3.9	21.2
12 27	5 54.29	+19 26.1	2.100	3.077	2.5	20.8	12 27	5 53.01	+31 40.1	1.577	2.550	4.1	21.2
1 6	5 44.85	+19 21.4	2.114	3.058	6.2	21.0	1 6	5 41.58	+31 32.0	1.607	2.549	8.0	21.4
1 16	5 36.75	+19 18.9	2.156	3.039	9.7	21.2	1 16	5 32.33	+31 13.9	1.663	2.547	12.0	21.7
1 26	5 30.72	+19 19.1	2.224	3.019	12.9	21.4	1 26	5 26.22	+30 50.3	1.741	2.545	15.5	21.9
294031	2007 <i>TY</i> ₁₂₇		12 21.6 132°78	3°8/21.6 18			458471	2011 <i>BB</i> ₆₈		12 21.6 241°58	3°0/21.9 18		
11 17	6 30.35	+15 57.4	1.384	2.212	17.8	21.3	11 17	6 28.14	+33 32.7	2.320	3.124	12.3	21.6
11 27	6 24.67	+15 27.1	1.317	2.216	13.6	21.0	11 27	6 22.20	+33 35.7	2.236	3.121	9.5	21.4
12 7	6 15.89	+15 3.6	1.270	2.220	9.0	20.8	12 7	6 14.01	+33 31.0	2.176	3.118	6.4	21.2
12 17	6 4.97	+14 48.2	1.249	2.224	4.6	20.5	12 17	6 4.32	+33 16.2	2.144	3.115	3.6	21.1
12 27	5 53.38	+14 42.1	1.254	2.227	4.9	20.5	12 27	5 54.17	+32 50.1	2.141	3.111	3.6	21.1
1 6	5 42.76	+14 45.5	1.286	2.230	9.3	20.8	1 6	5 44.70	+32 13.9	2.169	3.108	6.4	21.2
1 16	5 34.46	+14 58.1	1.343	2.233	13.9	21.1	1 16	5 36.87	+31 30.6	2.224	3.104	9.6	21.4
1 26	5 29.39	+15 18.7	1.421	2.236	17.8	21.3	1 26	5 31.39	+30 44.1	2.304	3.101	12.4	21.6
72884	2001 <i>KK</i> ₁₂		12 21.6 257°65	1°3/21.7 18			80739	2000 <i>CK</i> ₃₄		12 21.6 37°38	4°0/21.8 18		
11 17	6 24.19	+18 38.1	2.409	3.220	11.7	19.8	11 17	6 31.40	+31 52.8	1.310	2.145	18.2	18.0
11 27	6 19.08	+18 43.2	2.317	3.210	8.8	19.6	11 27	6 25.97	+32 13.3	1.249	2.151	14.0	17.7
12 7	6 12.06	+18 51.7	2.250	3.201	5.6	19.3	12 7	6 16.89	+32 25.3	1.208	2.158	9.2	17.5
12 17	6 3.69	+19 3.2	2.212	3.191	2.2	19.1	12 17	6 5.32	+32 23.6	1.191	2.166	4.9	17.3
12 27	5 54.81	+19 16.9	2.204	3.181	2.4	19.1	12 27	5 53.07	+32 5.4	1.201	2.174	5.0	17.3
1 6	5 46.34	+19 32.4	2.226	3.171	5.9	19.3	1 6	5 42.11	+31 32.6	1.236	2.182	9.3	17.6
1 16	5 39.11	+19 49.3	2.276	3.161	9.2	19.5	1 16	5 34.00	+30 50.5	1.295	2.191	13.8	17.9
1 26	5 33.81	+20 7.6	2.351	3.151	12.1	19.7	1 26	5 29.65	+30 5.5	1.376	2.200	17.8	18.1
406211	2006 <i>YV</i> ₄₅		12 21.6 70°42	3°6/20.9 17			451921	2014 <i>KF</i> ₇₆		12 21.6 164°80	2°5/20.9 18		
11 17	6 31.12	+18 30.5	1.818	2.630	14.8	20.5	11 17	6 40.55	+20 15.8	1.178	2.005	20.3	20.3
11 27	6 24.25	+16 59.9	1.757	2.649	11.2	20.3	11 27	6 33.67	+22 28.3	1.107	2.008	15.5	20.0
12 7	6 15.11	+15 29.6	1.721	2.668	7.3	20.1	12 7	6 22.30	+24 57.7	1.057	2.011	9.7	19.7
12 17	6 4.60	+14 3.5	1.714	2.687	4.0	20.0	12 17	6 7.29	+27 31.8	1.033	2.013	3.7	19.3
12 27	5 53.91	+12 45.8	1.737	2.705	4.6	20.1	12 27	5 50.55	+29 55.6	1.039	2.015	4.8	19.4
1 6	5 44.23	+11 40.3	1.790	2.724	8.0	20.3	1 6	5 34.61	+31 57.2	1.073	2.016	10.8	19.8
1 16	5 36.49	+10 49.1	1.870	2.743	11.5	20.6	1 16	5 21.77	+33 32.6	1.132	2.017	16.3	20.1
1 26	5 31.29	+10 12.8	1.974	2.761	14.5	20.8	1 26	5 13.56	+34 45.4	1.212	2.017	20.9	20.4
15325	1993 <i>QN</i> ₇		12 21.6 98°44	0°8/21.6 18			36062	1999 <i>RB</i> ₄₇		12 21.6 95°23	2°6/21.6		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
372224	2008 <i>US</i> ₅₀		12 21.6 151°10		0°4/21.6 17		76475	2000 <i>FQ</i> ₅₈		12 21.6 27°47		1°3/21.4 18	
11 17	6 25.14	+24 37.9	2.840	3.645	10.2	22.1	11 17	6 28.39	+22 17.6	1.446	2.281	16.8	18.5
11 27	6 19.45	+24 45.2	2.761	3.652	7.7	22.0	11 27	6 23.38	+23 28.5	1.383	2.289	12.6	18.3
12 7	6 12.11	+24 51.7	2.708	3.659	4.7	21.8	12 7	6 15.24	+24 45.2	1.342	2.298	7.8	18.0
12 17	6 3.69	+24 56.1	2.685	3.666	1.6	21.6	12 17	6 4.86	+26 1.8	1.327	2.308	2.7	17.7
12 27	5 54.95	+24 57.7	2.693	3.672	1.8	21.6	12 27	5 53.70	+27 12.3	1.340	2.319	3.3	17.8
1 6	5 46.68	+24 56.5	2.733	3.678	4.9	21.8	1 6	5 43.40	+28 12.6	1.381	2.330	8.2	18.1
1 16	5 39.58	+24 53.2	2.801	3.683	7.8	22.0	1 16	5 35.37	+29 1.6	1.447	2.342	12.7	18.4
1 26	5 34.22	+24 49.0	2.896	3.688	10.3	22.2	1 26	5 30.59	+29 40.5	1.534	2.354	16.5	18.7
42378	2002 <i>EL</i> ₁₂		12 21.6 154°73		0°6/21.6 18		212275	2005 <i>JY</i> ₁₅₇		12 21.6 190°31		5°3/21.8 18	
11 17	6 32.54	+21 34.4	1.773	2.587	15.0	20.2	11 17	6 25.62	+ 6 59.6	2.388	3.172	12.6	21.4
11 27	6 25.79	+21 35.9	1.701	2.596	11.3	20.0	11 27	6 20.02	+ 6 31.9	2.306	3.171	10.1	21.3
12 7	6 16.36	+21 38.8	1.652	2.604	7.0	19.8	12 7	6 12.59	+ 6 14.1	2.248	3.169	7.5	21.1
12 17	6 5.11	+21 41.7	1.630	2.611	2.3	19.5	12 17	6 3.92	+ 6 8.3	2.217	3.167	5.6	21.0
12 27	5 53.32	+21 43.5	1.638	2.617	2.7	19.5	12 27	5 54.83	+ 6 15.5	2.216	3.164	5.6	21.0
1 6	5 42.36	+21 44.2	1.676	2.623	7.3	19.8	1 6	5 46.19	+ 6 35.3	2.244	3.161	7.6	21.1
1 16	5 33.41	+21 44.8	1.741	2.627	11.4	20.1	1 16	5 38.79	+ 7 6.4	2.299	3.157	10.3	21.3
1 26	5 27.28	+21 46.7	1.829	2.631	14.9	20.3	1 26	5 33.27	+ 7 46.5	2.379	3.153	12.8	21.4
396372	2014 <i>DV</i> ₁₀₆		12 21.6 236°78		4°0/21.7 18		458597	2011 <i>FU</i> ₄₁		12 21.6 230°55		1°3/21.5 18	
11 17	6 27.48	+13 44.6	1.769	2.584	15.1	21.3	11 17	6 25.75	+26 37.5	2.764	3.569	10.5	21.8
11 27	6 22.08	+13 23.2	1.687	2.577	11.7	21.1	11 27	6 20.17	+27 8.4	2.670	3.560	7.9	21.6
12 7	6 14.16	+13 9.3	1.626	2.570	7.9	20.9	12 7	6 12.74	+27 38.5	2.601	3.550	5.0	21.4
12 17	6 4.45	+13 4.4	1.592	2.563	4.5	20.7	12 17	6 3.99	+28 5.5	2.562	3.540	2.0	21.2
12 27	5 54.06	+13 9.1	1.587	2.556	4.7	20.6	12 27	5 54.71	+28 27.6	2.553	3.529	2.3	21.2
1 6	5 44.28	+13 23.2	1.609	2.549	8.2	20.8	1 6	5 45.79	+28 43.9	2.576	3.519	5.3	21.4
1 16	5 36.22	+13 45.9	1.658	2.541	12.1	21.1	1 16	5 38.03	+28 54.6	2.628	3.508	8.3	21.6
1 26	5 30.74	+14 15.6	1.730	2.533	15.6	21.3	1 26	5 32.11	+29 1.2	2.706	3.496	10.9	21.8
89198	2001 <i>UQ</i> ₈₃		12 21.6 86°80		2°2/21.5 18 R		358668	2007 <i>XE</i>		12 21.6 30°89		4°1/21.8 17	
11 17	6 31.72	+26 34.1	1.569	2.394	16.2	18.9	11 17	6 29.16	+31 35.8	1.228	2.071	18.7	20.1
11 27	6 25.63	+27 20.0	1.507	2.407	12.2	18.7	11 27	6 24.24	+32 4.9	1.183	2.090	14.2	19.9
12 7	6 16.46	+28 5.0	1.467	2.419	7.7	18.5	12 7	6 15.77	+32 25.5	1.158	2.110	9.4	19.7
12 17	6 5.18	+28 44.2	1.453	2.432	3.2	18.3	12 17	6 4.99	+32 32.4	1.156	2.131	5.0	19.5
12 27	5 53.26	+29 13.5	1.468	2.444	3.6	18.3	12 27	5 53.77	+32 23.0	1.180	2.153	5.1	19.6
1 6	5 42.32	+29 31.8	1.511	2.457	8.0	18.6	1 6	5 44.01	+31 59.2	1.229	2.177	9.2	19.9
1 16	5 33.69	+29 40.5	1.580	2.469	12.2	18.9	1 16	5 37.12	+31 26.0	1.302	2.201	13.6	20.2
1 26	5 28.26	+29 42.8	1.670	2.481	15.8	19.1	1 26	5 33.89	+30 49.1	1.396	2.226	17.3	20.5
76479	2000 <i>FF</i> ₆₂		12 21.6 196°77		3°7/21.8 18		226646	2004 <i>FE</i> ₈₅		12 21.6 157°11		2°1/21.5 18	
11 17	6 27.81	+35 24.0	2.541	3.338	11.5	19.8	11 17	6 32.56	+27 0.6	1.790	2.605	14.9	21.0
11 27	6 21.86	+35 45.1	2.459	3.337	9.0	19.7	11 27	6 26.07	+27 41.0	1.716	2.611	11.3	20.8
12 7	6 13.79	+35 58.9	2.401	3.336	6.3	19.5	12 7	6 16.71	+28 20.2	1.666	2.616	7.1	20.5
12 17	6 4.28	+36 2.1	2.371	3.334	4.0	19.4	12 17	6 5.33	+28 53.8	1.643	2.621	3.0	20.3
12 27	5 54.30	+35 53.1	2.370	3.333	4.1	19.4	12 27	5 53.25	+29 18.2	1.649	2.625	3.4	20.3
1 6	5 44.93	+35 32.2	2.400	3.331	6.4	19.5	1 6	5 41.96	+29 32.3	1.685	2.629	7.5	20.6
1 16	5 37.07	+35 1.8	2.457	3.329	9.1	19.7	1 16	5 32.72	+29 37.6	1.747	2.632	11.5	20.8
1 26	5 31.43	+34 25.6	2.540	3.327	11.7	19.8	1 26	5 26.44	+29 37.1	1.833	2.634	15.0	21.1
363999	2005 <i>UB</i> ₃₇₁		12 21.6 18°32		1°2/21.6 18		414312	2008 <i>RU</i> ₉₉		12 21.6 57°93		6°5/21.7 17	
11 17	6 25.47	+20 17.6	1.905	2.727	13.8	21.6	11 17	6 30.68	+41 57.3	2.225	3.011	13.3	20.6
11 27	6 20.41	+20 13.9	1.829	2.729	10.4	21.4	11 27	6 24.54	+42 47.4	2.156	3.016	10.9	20.4
12 7	6 13.02	+20 12.7	1.777	2.730	6.5	21.1	12 7	6 15.69	+43 25.7	2.109	3.022	8.4	20.3
12 17	6 4.05	+20 13.4	1.752	2.732	2.4	20.9	12 17	6 4.98	+43 46.8	2.089	3.028	6.7	20.2
12 27	5 54.58	+20 15.5	1.756	2.734	2.6	20.9	12 27	5 53.68	+43 47.2	2.096	3.033	6.8	20.2
1 6	5 45.75	+20 19.0	1.788	2.736	6.8	21.2	1 6	5 43.19	+43 27.6	2.131	3.039	8.5	20.3
1 16	5 38.59	+20 24.1	1.848	2.738	10.6	21.4	1 16	5 34.70	+42 51.3	2.193	3.045	10.9	20.5
1 26	5 33.84	+20 31.3	1.930	2.741	14.0	21.6	1 26	5 29.04	+42 4.0	2.277	3.051	13.3	20.7
10263	Vadimsimona		12 21.6 322°42		6°5/21.0 18		440029	2002 <i>PT</i> ₂₅		12 21.6 45°57		6°2/22.9 17	
11 17	6 23.89	+10 55.8	1.563	2.386	16.3	16.6	11 17	6 36.73	+40 20.4	1.428	2.238	18.3	20.6
11 27	6 19.70	+ 9 50.4	1.480	2.371	13.0	16.4	11 27	6 29.49	+40 12.6	1.380	2.261	14.4	20.4
12 7	6 12.85	+ 8 53.0	1.418	2.356	9.5	16.1	12 7	6 18.70	+39 45.8	1.353	2.286	10.4	20.2
12 17	6 4.08	+ 8 7.9	1.380	2.341	6.8	16.0	12 17	6 5.84	+38 55.7	1.350	2.310	7.0	20.1
12 27	5 54.55	+ 7 39.2	1.370	2.327	7.2	15.9	12 27	5 52.91	+37 42.3	1.374	2.336	6.6	20.1
1 6	5 45.63	+ 7 28.8	1.384	2.314	10.3	16.1	1 6	5 41.80	+36 11.8	1.425	2.361	9.4	20.4
1 16	5 38.50	+ 7 36.4	1.423	2.301	14.1	16.3	1 16	5 33.79	+34 33.3	1.501	2.387	13.0	20.6
1 26	5 34.10	+ 7 59.7	1.483	2.290	17.6	16.5	1 26	5 29.49	+32 55.9	1.600	2.413	16.3	20.9
402297	2005 <i>SH</i> ₂₄₂		12 21.6 179°57		2°8/21.7 18		450926	2008 <i>ER</i> ₄₆		12 21.6 344°31		7°6/20.8 17	
11 17	6 29.37	+32 19.1	2.525	3.324	11.5	22.2	11 17	6 31.14	+39 18.8	1.746	2.552	15.6	20.6
11 27	6 22.97	+32 38.1	2.442	3.325	8.9	22.0	11 27	6 25.75	+40 44.8	1.673	2.548	12.7	20.4
12 7	6 14.46	+32 51.5	2.384	3.326	5.9	21.9	12 7	6 16.92	+42 1.4	1.621	2.545	9.7	20.2
12 17	6 4.51	+32 56.3	2.355	3.326	3.3	21.7	12 17	6 5.49	+43 0.2	1.596	2.541	7.8	20.1
12 27	5 54.11	+32 51.0	2.357	3.326	3.4	21.7	12 27	5 53.01	+43 34.6	1.596	2.538	8.1	20.1
1 6	5 44.29	+32 35.9	2.389	3.326	6.1	21.9	1 6	5 41.28	+43 42.9	1.624	2.536	10.4	20.2
1 16	5 35.98	+32 12.9	2.449	3.324	9.0	22.1	1 16	5 31.95	+43 28.6	1.675	2.534	13.4	20.4
1 26	5 29.87	+31 45.3	2.535	3.323	11.7	22.2	1 26	5 26.15	+42 58.3	1.748	2.532	16.3	20.6
195667	2002 <i>OJ</i> ₆		12 21.6 175°44		0°2/21.7 18		191164	2002 <i>JD</i> ₁₄₈		12 21.6 210°57		1°0	

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
181671	2008 <i>BO</i> ₂₂		12 21.6 104°44'		2°3'/21.7 18		163907	2003 <i>SD</i> ₂₃₀		12 21.6 35°22'		2°5'/21.6 18	
11 17	6 28.86	+29 39.3	1.955	2.771	13.8	20.7	11 17	6 29.16	+28 14.2	1.509	2.340	16.4	19.9
11 27	6 23.04	+29 50.2	1.880	2.774	10.5	20.5	11 27	6 23.89	+28 41.8	1.443	2.346	12.4	19.7
12 7	6 14.70	+29 56.1	1.829	2.778	6.7	20.2	12 7	6 15.51	+29 6.0	1.399	2.352	7.9	19.4
12 17	6 4.65	+29 54.4	1.805	2.781	3.1	20.0	12 17	6 4.96	+29 22.8	1.381	2.359	3.5	19.2
12 27	5 54.09	+29 43.4	1.810	2.785	3.2	20.0	12 27	5 53.76	+29 29.1	1.389	2.366	3.8	19.2
1 6	5 44.31	+29 23.9	1.844	2.788	6.9	20.3	1 6	5 43.53	+29 25.1	1.425	2.373	8.2	19.5
1 16	5 36.38	+28 58.5	1.905	2.792	10.6	20.5	1 16	5 35.64	+29 13.2	1.486	2.381	12.5	19.8
1 26	5 31.09	+28 30.5	1.989	2.795	13.8	20.7	1 26	5 30.99	+28 57.2	1.569	2.389	16.2	20.0
516777	2009 <i>WY</i> ₁₆₄		12 21.6 323°45'		2°3'/21.4 18		327109	2005 <i>CP</i> ₁		12 21.6 39°89'		3°6'/21.9 18	
11 17	6 27.09	+25 38.7	1.279	2.124	17.9	21.0	11 17	6 28.90	+14 53.2	1.210	2.048	19.2	20.1
11 27	6 23.16	+26 24.7	1.197	2.108	13.7	20.7	11 27	6 24.00	+14 56.2	1.149	2.054	14.7	19.9
12 7	6 15.59	+27 13.3	1.136	2.093	8.7	20.4	12 7	6 15.72	+15 10.9	1.108	2.060	9.6	19.6
12 17	6 5.14	+27 59.4	1.098	2.078	3.5	20.0	12 17	6 5.06	+15 37.1	1.090	2.066	4.7	19.4
12 27	5 53.39	+28 37.4	1.086	2.064	4.1	20.0	12 27	5 53.64	+16 13.1	1.098	2.073	4.7	19.4
1 6	5 42.34	+29 4.3	1.099	2.050	9.6	20.3	1 6	5 43.27	+16 56.1	1.131	2.080	9.6	19.7
1 16	5 33.78	+29 20.5	1.136	2.038	14.8	20.6	1 16	5 35.42	+17 43.6	1.188	2.088	14.5	20.0
1 26	5 29.03	+29 29.1	1.192	2.026	19.4	20.8	1 26	5 31.08	+18 33.1	1.265	2.096	18.7	20.3
331759	2002 <i>XA</i> ₁₉		12 21.6 87°85'		8°0'/20.3 17		372302	2008 <i>WO</i> ₁₅		12 21.6 120°46'		0°5'/21.6 16	
11 17	6 33.71	+ 9 50.1	1.522	2.326	17.6	19.9	11 17	6 24.96	+21 37.0	2.623	3.431	10.9	22.2
11 27	6 26.49	+ 7 44.7	1.471	2.348	14.0	19.7	11 27	6 19.40	+21 38.3	2.550	3.442	8.2	22.0
12 7	6 16.64	+ 5 48.7	1.443	2.369	10.5	19.5	12 7	6 12.15	+21 40.5	2.503	3.454	5.0	21.8
12 17	6 5.21	+ 4 9.5	1.443	2.391	8.2	19.5	12 17	6 3.79	+21 42.8	2.485	3.465	1.7	21.6
12 27	5 53.57	+ 2 53.4	1.470	2.412	8.7	19.5	12 27	5 55.12	+21 44.8	2.497	3.476	1.9	21.6
1 6	5 43.10	+ 2 3.3	1.525	2.432	11.3	19.7	1 6	5 46.97	+21 46.3	2.540	3.486	5.2	21.9
1 16	5 34.86	+ 1 38.7	1.604	2.453	14.4	20.0	1 16	5 40.07	+21 47.9	2.613	3.496	8.2	22.1
1 26	5 29.51	+ 1 36.0	1.704	2.472	17.3	20.2	1 26	5 34.98	+21 50.1	2.710	3.506	10.8	22.3
93235	2000 <i>SE</i> ₁₄₈		12 21.6 83°95'		2°8'/21.7 18		238068	2003 <i>EK</i> ₃₉		12 21.6 215°49'		4°3'/22.2 18	
11 17	6 34.16	+29 58.3	1.672	2.487	15.7	19.6	11 17	6 28.94	+10 12.0	1.908	2.707	14.7	20.6
11 27	6 27.10	+30 24.2	1.620	2.514	11.9	19.4	11 27	6 23.08	+10 21.5	1.822	2.701	11.6	20.4
12 7	6 17.16	+30 44.2	1.592	2.540	7.6	19.2	12 7	6 14.79	+10 43.1	1.758	2.695	8.0	20.1
12 17	6 5.40	+30 54.3	1.590	2.565	3.6	19.0	12 17	6 4.73	+11 17.4	1.722	2.688	4.9	19.9
12 27	5 53.32	+30 52.2	1.617	2.590	3.8	19.1	12 27	5 53.97	+12 3.5	1.714	2.681	4.8	19.9
1 6	5 42.43	+30 39.1	1.672	2.615	7.6	19.4	1 6	5 43.71	+12 59.0	1.737	2.673	8.0	20.1
1 16	5 33.91	+30 18.2	1.754	2.639	11.4	19.6	1 16	5 35.04	+14 1.0	1.786	2.665	11.6	20.3
1 26	5 28.48	+29 53.7	1.859	2.663	14.7	19.9	1 26	5 28.81	+15 6.7	1.860	2.656	15.0	20.5
1855	Korolev		12 21.6 278°27'		2°4'/21.6 18 R		479390	2013 <i>YR</i> ₁₃		12 21.6 3°56' 10°3'/25.5 16			
11 17	6 28.88	+18 43.8	1.434	2.265	17.1	16.3	11 17	6 43.69	+50 0.1	1.104	1.903	23.2	19.4
11 27	6 23.81	+18 26.6	1.352	2.256	13.1	16.0	11 27	6 36.35	+49 15.6	1.037	1.901	19.5	19.2
12 7	6 15.58	+18 13.7	1.292	2.246	8.4	15.7	12 7	6 23.55	+47 51.7	0.986	1.900	15.4	18.9
12 17	6 5.04	+18 5.1	1.257	2.236	3.5	15.4	12 17	6 7.45	+45 38.2	0.957	1.902	11.7	18.7
12 27	5 53.59	+18 1.0	1.249	2.226	3.9	15.4	12 27	5 51.29	+42 35.5	0.952	1.905	10.4	18.7
1 6	5 42.89	+18 1.7	1.268	2.217	8.9	15.6	1 6	5 38.03	+38 58.7	0.973	1.909	12.7	18.8
1 16	5 34.39	+18 7.8	1.312	2.207	13.8	15.9	1 16	5 29.40	+35 11.1	1.019	1.915	16.7	19.0
1 26	5 29.11	+18 19.5	1.376	2.197	18.0	16.1	1 26	5 25.92	+31 34.3	1.087	1.922	20.8	19.3
229756	2007 <i>LC</i> ₈		12 21.6 106°82'		1°4'/21.8 18		416104	2002 <i>PV</i> ₁₁₁		12 21.6 29°00' 11°6'/24.9 17			
11 17	6 25.31	+17 43.7	2.404	3.211	11.8	20.1	11 17	6 41.42	+55 37.5	1.790	2.530	17.7	19.2
11 27	6 19.80	+18 0.0	2.331	3.222	8.9	19.9	11 27	6 33.58	+56 12.1	1.739	2.545	15.6	19.1
12 7	6 12.46	+18 20.7	2.284	3.233	5.6	19.7	12 7	6 21.48	+56 20.5	1.706	2.561	13.5	19.0
12 17	6 3.90	+18 44.8	2.265	3.244	2.2	19.5	12 17	6 6.78	+55 54.4	1.695	2.577	12.0	18.9
12 27	5 54.96	+19 11.1	2.277	3.254	2.4	19.5	12 27	5 51.92	+54 50.8	1.708	2.595	11.6	18.9
1 6	5 46.55	+19 38.6	2.319	3.264	5.7	19.8	1 6	5 39.22	+53 13.9	1.746	2.613	12.5	19.0
1 16	5 39.44	+20 6.4	2.390	3.274	8.8	20.0	1 16	5 30.20	+51 13.6	1.807	2.631	14.1	19.2
1 26	5 34.26	+20 34.4	2.486	3.284	11.6	20.2	1 26	5 25.49	+49 1.5	1.891	2.651	16.1	19.4
439103	2011 <i>SQ</i> ₆₃		12 21.6 75°54'		5°5'/22.1 17		84990	2003 <i>YC</i> ₉₀		12 21.6 21°57'		0°2'/21.7 18	
11 17	6 34.37	+37 26.2	1.704	2.511	15.9	21.3	11 17	6 26.95	+21 55.4	1.594	2.425	15.7	19.5
11 27	6 27.51	+37 55.9	1.649	2.529	12.5	21.1	11 27	6 21.99	+22 8.9	1.524	2.428	11.8	19.3
12 7	6 17.53	+38 13.2	1.615	2.548	8.9	21.0	12 7	6 14.24	+22 25.0	1.476	2.431	7.3	19.0
12 17	6 5.54	+38 12.9	1.607	2.567	6.0	20.8	12 17	6 4.55	+22 41.7	1.454	2.435	2.4	18.7
12 27	5 53.16	+37 52.4	1.626	2.586	6.0	20.9	12 27	5 54.24	+22 57.1	1.460	2.439	2.7	18.7
1 6	5 42.05	+37 13.9	1.674	2.605	8.7	21.1	1 6	5 44.72	+23 10.4	1.493	2.444	7.6	19.1
1 16	5 33.47	+36 22.8	1.747	2.623	12.0	21.3	1 16	5 37.23	+23 22.0	1.553	2.449	11.9	19.3
1 26	5 28.20	+35 25.9	1.843	2.642	15.0	21.6	1 26	5 32.63	+23 33.0	1.634	2.454	15.6	19.6
190494	2000 <i>GG</i> ₄₂		12 21.6 266°74'		4°1'/21.4 18		224808	2006 <i>UU</i> ₂₈₆		12 21.6 13°74'		0°5'/21.6 18	
11 17	6 27.98	+15 11.0	1.605	2.427	16.0	20.7	11 17	6 28.84	+24 25.7	1.245	2.089	18.4	20.0
11 27	6 22.76	+14 31.6	1.521	2.416	12.4	20.5	11 27	6 23.98	+23 54.5	1.180	2.091	13.9	19.8
12 7	6 14.76	+13 57.6	1.458	2.405	8.3	20.2	12 7	6 15.69	+23 20.1	1.136	2.093	8.6	19.5
12 17	6 4.74	+13 31.2	1.422	2.394	4.7	20.0	12 17	6 5.04	+22 42.3	1.115	2.096	2.8	19.1
12 27	5 53.95	+13 14.1	1.413	2.383	5.0	20.0	12 27	5 53.73	+22 2.3	1.121	2.100	3.3	19.2
1 6	5 43.81	+13 7.6	1.431	2.371	8.9	20.2	1 6	5 43.59	+21 23.0	1.152	2.104	9.0	19.5
1 16	5 35.58	+13 11.8	1.475	2.360	13.2	20.4	1 16	5 36.07	+20 48.2	1.207	2.109	14.1	19.8
1 26	5 30.19	+13 26.0	1.540	2.348	17.0	20.6	1 26	5 32.10	+20 20.5	1.282	2.115	18.4	20.1
39994	1998 <i>HA</i> ₄₈		12 21.6 112°00'		3°1'/21.7 18		330253	2006 <i>RF</i> ₄₃		12 21.6 93			

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12 21.6

12 21.7

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
215717	2004 <i>BE</i> ₈₇		12 21.6 268°34	3°3/21.4	18		344311	2001 <i>UZ</i> ₁₅₉		12 21.7 83°45	3°4/21.4	18	
11 17	6 26.48	+16 27.2	1.871	2.688	14.3	20.1	11 17	6 36.44	+28 54.9	1.613	2.428	16.3	20.7
11 27	6 21.18	+15 47.1	1.791	2.685	10.9	19.9	11 27	6 29.02	+30 2.8	1.565	2.458	12.3	20.6
12 7	6 13.55	+15 10.7	1.734	2.681	7.2	19.7	12 7	6 18.50	+31 6.8	1.540	2.487	7.9	20.4
12 17	6 4.31	+14 39.5	1.704	2.678	3.8	19.5	12 17	6 5.94	+32 0.5	1.542	2.516	4.1	20.2
12 27	5 54.55	+14 15.3	1.703	2.674	4.2	19.5	12 27	5 52.91	+32 39.0	1.573	2.544	4.4	20.3
1 6	5 45.42	+13 59.2	1.731	2.671	7.7	19.7	1 6	5 41.06	+33 1.4	1.633	2.572	8.2	20.6
1 16	5 37.96	+13 51.9	1.785	2.667	11.4	19.9	1 16	5 31.71	+33 10.1	1.719	2.599	11.9	20.9
1 26	5 32.92	+13 53.2	1.862	2.664	14.7	20.1	1 26	5 25.66	+33 9.8	1.828	2.626	15.1	21.1
440126	2003 <i>SV</i> ₂₇₄		12 21.6 123°61	1°2/21.7	18		28457	<i>Chloe</i> _{anassis}		12 21.7 201°39	1°0/21.7	18	
11 17	6 28.63	+20 0.0	1.874	2.691	14.2	22.2	11 17	6 31.70	+26 41.7	1.712	2.532	15.3	18.8
11 27	6 22.76	+19 57.1	1.803	2.699	10.7	22.0	11 27	6 25.50	+26 33.6	1.632	2.530	11.6	18.6
12 7	6 14.49	+19 56.9	1.756	2.708	6.7	21.8	12 7	6 16.41	+26 21.5	1.575	2.528	7.2	18.3
12 17	6 4.60	+19 58.6	1.736	2.716	2.5	21.5	12 17	6 5.31	+26 3.5	1.545	2.525	2.5	18.0
12 27	5 54.25	+20 1.7	1.745	2.723	2.7	21.6	12 27	5 53.57	+25 38.8	1.543	2.522	2.8	18.0
1 6	5 44.64	+20 5.9	1.784	2.731	6.9	21.9	1 6	5 42.66	+25 9.0	1.570	2.518	7.5	18.3
1 16	5 36.80	+20 11.8	1.850	2.738	10.8	22.1	1 16	5 33.86	+24 37.1	1.624	2.515	11.9	18.6
1 26	5 31.49	+20 19.8	1.939	2.745	14.1	22.3	1 26	5 28.05	+24 6.6	1.701	2.510	15.6	18.8
307739	2003 <i>UW</i> ₂₃₂		12 21.6 52°81	1°9/21.6	18		129163	2005 <i>GX</i> ₆₉		12 21.7 321°70	0°9/21.7	18	
11 17	6 24.87	+18 42.5	2.044	2.862	13.2	20.4	11 17	6 24.10	+21 0.8	2.132	2.952	12.7	20.6
11 27	6 19.71	+18 25.3	1.977	2.874	9.9	20.2	11 27	6 19.29	+20 55.4	2.047	2.945	9.6	20.4
12 7	6 12.49	+18 11.0	1.935	2.885	6.3	20.0	12 7	6 12.37	+20 51.4	1.985	2.938	6.0	20.2
12 17	6 3.94	+18 0.0	1.919	2.897	2.7	19.8	12 17	6 3.99	+20 48.5	1.951	2.931	2.1	19.9
12 27	5 55.03	+17 52.4	1.933	2.909	2.9	19.8	12 27	5 55.08	+20 46.3	1.947	2.925	2.4	19.9
1 6	5 46.81	+17 48.7	1.976	2.921	6.5	20.1	1 6	5 46.68	+20 44.9	1.971	2.919	6.3	20.2
1 16	5 40.14	+17 49.0	2.046	2.934	9.9	20.3	1 16	5 39.73	+20 44.8	2.023	2.913	9.9	20.4
1 26	5 35.65	+17 53.4	2.140	2.946	12.9	20.6	1 26	5 34.94	+20 46.7	2.099	2.907	13.1	20.6
8443	<i>Svecica</i>		12 21.7 283°42	5°6/21.5	18 R		272197	2005 <i>QF</i> ₉		12 21.7 74°53	1°1/21.7	18	
11 17	6 24.79	+ 8 47.4	2.066	2.865	13.8	17.3	11 17	6 32.03	+20 33.8	1.433	2.261	17.3	20.8
11 27	6 19.91	+ 8 10.5	1.966	2.841	11.0	17.0	11 27	6 25.71	+20 36.0	1.382	2.284	12.9	20.6
12 7	6 12.83	+ 7 42.6	1.888	2.817	8.1	16.8	12 7	6 16.43	+20 41.5	1.353	2.307	8.0	20.3
12 17	6 4.13	+ 7 26.6	1.837	2.793	5.9	16.6	12 17	6 5.27	+20 48.6	1.349	2.330	2.8	20.1
12 27	5 54.72	+ 7 24.5	1.814	2.768	6.1	16.6	12 27	5 53.74	+20 56.1	1.374	2.353	3.0	20.2
1 6	5 45.64	+ 7 36.8	1.819	2.743	8.6	16.7	1 6	5 43.40	+21 3.7	1.426	2.375	8.0	20.5
1 16	5 37.90	+ 8 2.5	1.851	2.718	11.9	16.8	1 16	5 35.45	+21 11.9	1.504	2.398	12.4	20.8
1 26	5 32.31	+ 8 39.6	1.905	2.693	15.0	17.0	1 26	5 30.66	+21 21.7	1.603	2.420	16.1	21.1
521293	2015 <i>JY</i> ₁₅		12 21.7 147°12	0°1/21.7	16		328446	2008 <i>TX</i> ₈₇		12 21.7 146°44	2°5/21.5	17	
11 17	6 31.54	+24 33.5	1.746	2.564	15.1	22.2	11 17	6 27.30	+31 14.2	2.870	3.667	10.3	21.4
11 27	6 25.15	+24 22.6	1.673	2.571	11.3	22.0	11 27	6 21.24	+31 46.7	2.793	3.676	7.9	21.2
12 7	6 16.05	+24 9.8	1.624	2.577	7.0	21.7	12 7	6 13.36	+32 15.2	2.743	3.685	5.2	21.1
12 17	6 5.13	+23 53.6	1.602	2.582	2.3	21.4	12 17	6 4.28	+32 37.0	2.722	3.693	2.9	20.9
12 27	5 53.69	+23 33.8	1.609	2.588	2.6	21.5	12 27	5 54.80	+32 50.3	2.732	3.701	3.0	20.9
1 6	5 43.14	+23 11.6	1.644	2.592	7.3	21.8	1 6	5 45.81	+32 55.0	2.773	3.708	5.4	21.1
1 16	5 34.65	+22 49.3	1.707	2.597	11.5	22.0	1 16	5 38.08	+32 51.9	2.842	3.715	8.0	21.3
1 26	5 29.00	+22 29.5	1.793	2.601	15.0	22.3	1 26	5 32.23	+32 43.5	2.938	3.722	10.3	21.5
458553	2011 <i>EA</i> ₂₈		12 21.7 333°01	0°3/21.6	16		145235	2005 <i>JB</i> ₈₃		12 21.7 356°34	1°1/21.7	18	
11 17	6 23.58	+23 27.8	1.686	2.520	14.8	21.3	11 17	6 26.84	+20 36.1	1.704	2.530	15.0	20.6
11 27	6 19.59	+23 38.4	1.597	2.503	11.2	21.0	11 27	6 21.77	+20 31.9	1.628	2.529	11.4	20.4
12 7	6 12.89	+23 50.1	1.530	2.486	7.0	20.7	12 7	6 14.08	+20 30.2	1.575	2.529	7.1	20.1
12 17	6 4.20	+24 1.2	1.490	2.471	2.3	20.4	12 17	6 4.58	+20 30.4	1.548	2.528	2.5	19.8
12 27	5 54.68	+24 9.9	1.476	2.456	2.7	20.4	12 27	5 54.46	+20 31.7	1.550	2.528	2.8	19.9
1 6	5 45.72	+24 15.9	1.490	2.442	7.5	20.6	1 6	5 45.06	+20 34.2	1.579	2.528	7.4	20.1
1 16	5 38.56	+24 19.6	1.530	2.429	11.9	20.9	1 16	5 37.53	+20 38.4	1.635	2.528	11.6	20.4
1 26	5 34.16	+24 22.5	1.592	2.416	15.8	21.1	1 26	5 32.70	+20 44.9	1.713	2.529	15.2	20.6
416818	2005 <i>GJ</i> ₂₁₅		12 21.7 189°80	1°7/21.8	18		84850	2003 <i>AR</i> ₃₅		12 21.7 71°70	2°0/21.8	18	
11 17	6 31.41	+17 22.2	1.769	2.581	15.2	21.2	11 17	6 30.43	+17 17.4	1.419	2.247	17.4	18.7
11 27	6 25.15	+17 44.0	1.688	2.581	11.5	21.0	11 27	6 24.68	+17 35.3	1.361	2.262	13.2	18.5
12 7	6 16.17	+18 12.9	1.630	2.580	7.3	20.8	12 7	6 15.93	+18 1.2	1.325	2.278	8.3	18.3
12 17	6 5.23	+18 47.2	1.599	2.578	2.9	20.5	12 17	6 5.16	+18 33.3	1.314	2.293	3.3	18.0
12 27	5 53.54	+19 24.8	1.598	2.575	3.0	20.5	12 27	5 53.85	+19 9.0	1.331	2.309	3.4	18.1
1 6	5 42.47	+20 3.3	1.626	2.572	7.5	20.7	1 6	5 43.56	+19 46.1	1.375	2.325	8.2	18.4
1 16	5 33.27	+20 41.6	1.681	2.568	11.8	21.0	1 16	5 35.57	+20 23.2	1.445	2.340	12.7	18.7
1 26	5 26.84	+21 19.3	1.760	2.564	15.4	21.2	1 26	5 30.72	+20 59.7	1.537	2.356	16.5	19.0
94720	2001 <i>XG</i> ₆₂		12 21.7 348°11	0°1/21.7	18		261141	2005 <i>TL</i> ₆₃		12 21.7 103°17	3°1/21.6	18	
11 17	6 25.99	+22 38.6	1.272	2.119	17.9	18.9	11 17	6 26.89	+14 40.5	2.236	3.040	12.7	21.5
11 27	6 22.02	+22 53.8	1.200	2.112	13.6	18.6	11 27	6 20.96	+14 15.7	2.174	3.059	9.7	21.3
12 7	6 14.66	+23 11.9	1.149	2.107	8.5	18.3	12 7	6 13.16	+13 56.3	2.136	3.078	6.4	21.2
12 17	6 4.81	+23 30.4	1.121	2.102	2.8	18.0	12 17	6 4.19	+13 43.1	2.126	3.097	3.6	21.0
12 27	5 54.03	+23 46.7	1.118	2.098	3.2	18.0	12 27	5 54.96	+13 36.7	2.146	3.115	3.7	21.1
1 6	5 44.12	+23 59.9	1.142	2.095	8.9	18.3	1 6	5 46.40	+13 37.3	2.196	3.133	6.5	21.3
1 16	5 36.66	+24 10.3	1.188	2.093	14.1	18.6	1 16	5 39.28	+13 44.4	2.274	3.150	9.6	21.5
1 26	5 32.70	+24 19.6	1.256	2.092	18.4	18.8	1 26	5 34.20	+13 57.4	2.377	3.168	12.3	21.7
403147	2008 <i>FS</i> ₉		12 21.7 176°85	1°4/21.7	18		287692	2003 <i>QX</i> ₂₇		12 21.7 81°91	0°9/21.		

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12 21.7

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
249484	2009 <i>UL</i> ₃₂		12 21.7	4°75	0°5/21.7	17	259873	2004 <i>DD</i> ₉		12 21.7	313°53	1°4/21.6	18
11 17	6 24.51	+22 15.0	1.805	2.634	14.2	20.1	11 17	6 29.15	+25 5.2	1.350	2.189	17.5	20.3
11 27	6 19.90	+22 10.6	1.731	2.634	10.7	19.9	11 27	6 24.45	+25 31.8	1.272	2.180	13.4	20.0
12 7	6 12.87	+22 7.2	1.680	2.634	6.6	19.6	12 7	6 16.26	+25 59.4	1.215	2.171	8.4	19.7
12 17	6 4.18	+22 3.8	1.655	2.635	2.2	19.4	12 17	6 5.45	+26 23.8	1.182	2.162	3.0	19.3
12 27	5 54.96	+22 0.0	1.658	2.637	2.5	19.4	12 27	5 53.58	+26 41.6	1.175	2.154	3.4	19.4
1 6	5 46.43	+21 56.0	1.690	2.640	6.9	19.7	1 6	5 42.52	+26 51.3	1.195	2.146	8.9	19.6
1 16	5 39.64	+21 52.7	1.747	2.642	10.9	19.9	1 16	5 33.90	+26 54.5	1.239	2.139	14.0	19.9
1 26	5 35.36	+21 51.2	1.828	2.646	14.3	20.1	1 26	5 28.87	+26 54.0	1.304	2.132	18.4	20.2
522068	2015 <i>XC</i> ₄₁₈		12 21.7	324°30	5°3/21.2	18	489205	2006 <i>JR</i> ₁₅		12 21.7	168°69	3°6/21.5	18
11 17	6 22.69	+10 23.6	2.075	2.882	13.4	21.5	11 17	6 27.90	+34 10.4	2.582	3.380	11.3	21.7
11 27	6 18.20	+9 31.6	1.990	2.872	10.6	21.3	11 27	6 22.03	+34 52.2	2.502	3.381	8.8	21.5
12 7	6 11.69	+8 46.9	1.929	2.862	7.7	21.1	12 7	6 14.05	+35 28.3	2.447	3.383	6.1	21.4
12 17	6 3.79	+8 12.5	1.895	2.853	5.5	20.9	12 17	6 4.59	+35 55.2	2.420	3.384	4.0	21.2
12 27	5 55.38	+7 50.7	1.888	2.844	5.8	20.9	12 27	5 54.61	+36 10.3	2.424	3.385	4.1	21.2
1 6	5 47.46	+7 42.5	1.910	2.835	8.2	21.0	1 6	5 45.14	+36 13.2	2.457	3.386	6.4	21.4
1 16	5 40.90	+7 47.8	1.957	2.827	11.2	21.2	1 16	5 37.13	+36 5.4	2.518	3.387	9.1	21.6
1 26	5 36.40	+8 4.7	2.028	2.819	14.1	21.4	1 26	5 31.27	+35 50.0	2.604	3.387	11.5	21.7
71301	2000 <i>AY</i> ₆₅		12 21.7	355°54	2°1/21.9	18	186457	2002 <i>SU</i> ₅₇		12 21.7	22°32	2°5/21.9	18
11 17	6 24.62	+15 41.3	1.939	2.757	13.8	18.8	11 17	6 28.12	+16 20.1	1.270	2.108	18.5	19.7
11 27	6 19.85	+16 4.7	1.860	2.755	10.5	18.6	11 27	6 23.43	+16 37.1	1.206	2.112	14.1	19.4
12 7	6 12.82	+16 36.1	1.804	2.753	6.8	18.4	12 7	6 15.46	+17 4.7	1.161	2.115	9.0	19.2
12 17	6 4.18	+17 14.7	1.775	2.752	3.0	18.2	12 17	6 5.14	+17 41.5	1.141	2.120	3.8	18.9
12 27	5 54.95	+17 58.5	1.775	2.751	3.0	18.2	12 27	5 54.01	+18 24.9	1.147	2.124	3.9	18.9
1 6	5 46.24	+18 45.4	1.804	2.751	6.8	18.4	1 6	5 43.83	+19 11.7	1.179	2.130	9.0	19.2
1 16	5 39.06	+19 33.3	1.860	2.751	10.6	18.6	1 16	5 36.05	+19 59.6	1.234	2.136	14.0	19.5
1 26	5 34.20	+20 21.1	1.940	2.751	13.9	18.8	1 26	5 31.67	+20 47.1	1.311	2.142	18.1	19.8
223581	2004 <i>FF</i> ₉₉		12 21.7	322°32	4°6/21.9	18	20248	1998 <i>EE</i> ₁₀		12 21.7	149°86	2°6/21.7	18
11 17	6 27.29	+13 17.3	1.402	2.230	17.6	20.1	11 17	6 34.22	+28 56.9	1.734	2.547	15.4	18.2
11 27	6 22.58	+12 59.2	1.327	2.225	13.7	19.8	11 27	6 27.42	+29 25.6	1.663	2.556	11.7	18.0
12 7	6 14.84	+12 51.7	1.273	2.220	9.3	19.6	12 7	6 17.63	+29 50.3	1.615	2.563	7.5	17.7
12 17	6 4.91	+12 56.4	1.244	2.216	5.3	19.3	12 17	6 5.79	+30 6.8	1.594	2.570	3.4	17.5
12 27	5 54.17	+13 13.8	1.241	2.212	5.4	19.3	12 27	5 53.31	+30 12.0	1.602	2.577	3.7	17.5
1 6	5 44.19	+13 42.7	1.264	2.208	9.5	19.6	1 6	5 41.74	+30 6.1	1.639	2.583	7.7	17.8
1 16	5 36.33	+14 21.1	1.311	2.204	14.0	19.8	1 16	5 32.40	+29 51.6	1.703	2.588	11.8	18.0
1 26	5 31.58	+15 6.4	1.380	2.201	17.9	20.0	1 26	5 26.15	+29 32.8	1.790	2.592	15.2	18.3
215121	1999 <i>JB</i> ₁₁		12 21.7	223°36	20°1/13.1	17	243624	1999 <i>RF</i> ₃₇		12 21.7	286°39	4°5/21.7	18
11 17	6 36.70	-18 22.4	1.594	2.266	22.0	22.3	11 17	6 26.30	+12 40.1	1.723	2.539	15.3	19.1
11 27	6 29.65	-21 54.5	1.535	2.255	20.9	22.1	11 27	6 21.49	+12 17.2	1.630	2.520	12.0	18.9
12 7	6 19.32	-24 59.3	1.494	2.241	20.2	22.0	12 7	6 14.06	+12 2.9	1.560	2.502	8.3	18.6
12 17	6 6.43	-27 22.1	1.473	2.227	20.1	22.0	12 17	6 4.68	+11 59.0	1.515	2.484	5.1	18.4
12 27	5 52.36	-28 51.8	1.472	2.211	20.7	22.0	12 27	5 54.47	+12 6.8	1.498	2.466	5.2	18.4
1 6	5 38.79	-29 25.0	1.488	2.193	21.9	22.0	1 6	5 44.71	+12 26.0	1.508	2.447	8.7	18.5
1 16	5 27.26	-29 5.4	1.519	2.175	23.3	22.1	1 16	5 36.63	+12 55.4	1.545	2.429	12.8	18.7
1 26	5 18.96	-28 2.4	1.562	2.155	24.7	22.2	1 26	5 31.17	+13 33.2	1.603	2.411	16.5	18.9
267288	2001 <i>SF</i> ₈₆		12 21.7	141°51	0°3/21.7	18	124627	2001 <i>SF</i> ₆₀		12 21.7	49°20	0°3/21.7	18
11 17	6 31.92	+22 35.0	1.933	2.744	14.1	21.7	11 17	6 30.16	+24 56.3	1.388	2.223	17.3	19.6
11 27	6 25.18	+22 33.6	1.863	2.756	10.6	21.5	11 27	6 24.68	+24 44.7	1.326	2.231	13.1	19.3
12 7	6 15.99	+22 32.4	1.817	2.768	6.5	21.3	12 7	6 16.04	+24 30.9	1.285	2.241	8.1	19.1
12 17	6 5.19	+22 30.0	1.798	2.779	2.1	21.0	12 17	6 5.27	+24 13.4	1.269	2.250	2.6	18.8
12 27	5 53.94	+22 25.8	1.810	2.789	2.4	21.1	12 27	5 53.95	+23 51.8	1.280	2.260	3.0	18.8
1 6	5 43.51	+22 20.0	1.852	2.799	6.7	21.4	1 6	5 43.76	+23 27.8	1.318	2.270	8.2	19.2
1 16	5 34.93	+22 14.0	1.922	2.807	10.6	21.6	1 16	5 36.02	+23 4.3	1.381	2.280	12.9	19.5
1 26	5 28.93	+22 9.2	2.016	2.815	13.8	21.9	1 26	5 31.59	+22 43.9	1.466	2.291	16.9	19.7
328851	2009 <i>WD</i> ₁₂₈		12 21.7	113°65	2°3/21.5	17	143647	2003 <i>OZ</i> ₁₃		12 21.7	123°40	17°5/25.1	18
11 17	6 25.55	+17 47.3	2.393	3.200	11.8	20.5	11 17	6 31.33	-14 2.1	1.290	2.021	23.8	19.7
11 27	6 19.96	+17 9.7	2.319	3.209	9.0	20.4	11 27	6 25.55	-15 21.1	1.240	2.029	21.5	19.6
12 7	6 12.58	+16 34.2	2.271	3.218	5.8	20.2	12 7	6 16.59	-16 2.4	1.206	2.037	19.4	19.4
12 17	6 4.05	+16 1.9	2.251	3.226	2.8	20.0	12 17	6 5.47	-15 56.3	1.189	2.044	18.0	19.4
12 27	5 55.23	+15 34.0	2.262	3.234	3.1	20.0	12 27	5 53.70	-14 58.3	1.191	2.051	17.6	19.4
1 6	5 46.99	+15 11.5	2.302	3.242	6.1	20.2	1 6	5 42.96	-13 12.2	1.214	2.058	18.4	19.4
1 16	5 40.09	+14 55.3	2.372	3.250	9.1	20.4	1 16	5 34.62	-10 48.0	1.257	2.064	20.1	19.6
1 26	5 35.10	+14 45.5	2.465	3.258	11.8	20.6	1 26	5 29.59	-7 59.2	1.318	2.070	22.2	19.7
289541	2005 <i>EW</i> ₂₁₄		12 21.7	223°57	0°5/21.7	18	16751	1996 <i>QG</i> ₁		12 21.7	108°96	0°5/21.7	18
11 17	6 28.10	+21 23.2	1.982	2.798	13.6	21.0	11 17	6 31.47	+21 53.2	1.856	2.670	14.5	19.1
11 27	6 22.50	+21 31.5	1.897	2.793	10.3	20.8	11 27	6 24.84	+21 55.8	1.794	2.689	10.9	18.9
12 7	6 14.48	+21 41.9	1.835	2.787	6.4	20.5	12 7	6 15.77	+21 59.5	1.757	2.709	6.7	18.7
12 17	6 4.75	+21 52.9	1.801	2.781	2.2	20.2	12 17	6 5.13	+22 2.8	1.747	2.727	2.2	18.4
12 27	5 54.39	+22 3.5	1.797	2.775	2.4	20.3	12 27	5 54.12	+22 4.9	1.767	2.746	2.5	18.5
1 6	5 44.59	+22 13.0	1.822	2.769	6.7	20.5	1 6	5 44.01	+22 5.7	1.816	2.763	6.8	18.8
1 16	5 36.42	+22 21.8	1.874	2.762	10.6	20.7	1 16	5 35.81	+22 6.2	1.893	2.780	10.6	19.1
1 26	5 30.70	+22 30.8	1.950	2.756	14.0	21.0	1 26	5 30.23	+22 7.7	1.994	2.797	13.9	19.3
69989	1998 <i>WK</i> ₃₁		12 21.7	74°37	2°8/21.5	18	220107	2002 <i>TN</i> ₂₅		12 21.7	111		

EPHEMERIDES

12 21.7

12 21.7

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
72822	2001 <i>HF</i> ₃		12 21.7 292°10	3°8/21.4	18		198212	2004 <i>TU</i> ₁₆₅		12 21.7 216°14	0°5/21.7	18	
11 17	6 27.76	+32 54.7	2.188	2.997	12.8	19.1	11 17	6 30.70	+24 44.5	2.016	2.828	13.6	21.7
11 27	6 22.35	+33 38.7	2.102	2.989	9.9	18.9	11 27	6 24.49	+24 48.3	1.926	2.820	10.3	21.4
12 7	6 14.46	+34 17.9	2.040	2.981	6.8	18.7	12 7	6 15.76	+24 51.0	1.861	2.812	6.4	21.2
12 17	6 4.79	+34 47.9	2.005	2.973	4.2	18.6	12 17	6 5.23	+24 50.5	1.823	2.804	2.2	20.9
12 27	5 54.41	+35 5.5	1.999	2.965	4.4	18.6	12 27	5 54.03	+24 45.7	1.815	2.794	2.4	20.9
1 6	5 44.55	+35 9.8	2.022	2.957	7.2	18.7	1 6	5 43.42	+24 36.9	1.838	2.784	6.7	21.2
1 16	5 36.34	+35 2.6	2.073	2.949	10.4	18.9	1 16	5 34.52	+24 25.5	1.888	2.774	10.7	21.4
1 26	5 30.63	+34 47.0	2.147	2.941	13.3	19.1	1 26	5 28.18	+24 13.7	1.962	2.763	14.1	21.6
137758	1999 <i>XH</i> ₁₇₃		12 21.7 21°00	4°4/21.5	18		183048	2002 <i>QM</i> ₆₈		12 21.7 117°71	1°3/21.7	18	
11 17	6 29.51	+29 50.5	1.141	1.989	19.4	18.1	11 17	6 28.26	+19 31.0	1.916	2.733	14.0	21.3
11 27	6 25.14	+30 45.1	1.084	1.994	14.9	17.8	11 27	6 22.51	+19 33.7	1.845	2.741	10.6	21.1
12 7	6 16.80	+31 35.5	1.047	2.001	9.8	17.5	12 7	6 14.42	+19 39.7	1.798	2.749	6.6	20.9
12 17	6 5.62	+32 14.3	1.032	2.008	5.2	17.3	12 17	6 4.76	+19 48.2	1.778	2.757	2.5	20.6
12 27	5 53.54	+32 35.8	1.043	2.016	5.5	17.4	12 27	5 54.61	+19 58.3	1.787	2.765	2.7	20.7
1 6	5 42.73	+32 39.2	1.077	2.025	10.2	17.6	1 6	5 45.17	+20 9.4	1.826	2.773	6.7	20.9
1 16	5 34.96	+32 28.1	1.135	2.035	15.0	18.0	1 16	5 37.44	+20 21.7	1.892	2.780	10.6	21.2
1 26	5 31.26	+32 8.6	1.212	2.046	19.1	18.2	1 26	5 32.16	+20 35.4	1.981	2.787	13.8	21.4
516912	2011 <i>UJ</i> ₁₈₁		12 21.7 66°78	10°7/19.3	18		339049	2004 <i>LV</i> ₂₉		12 21.7 67°87	1°6/21.6	18	
11 17	6 28.31	+0 40.4	1.806	2.580	16.4	20.5	11 17	6 30.09	+20 52.3	1.477	2.306	16.8	20.9
11 27	6 22.46	-1 37.8	1.744	2.585	14.0	20.4	11 27	6 24.33	+20 28.8	1.417	2.320	12.6	20.6
12 7	6 14.33	-3 41.9	1.706	2.591	11.8	20.2	12 7	6 15.69	+20 7.0	1.380	2.334	7.9	20.4
12 17	6 4.69	-5 23.9	1.693	2.596	10.7	20.2	12 17	6 5.17	+19 46.9	1.368	2.348	2.9	20.1
12 27	5 54.61	-6 37.2	1.707	2.601	11.2	20.2	12 27	5 54.22	+19 28.9	1.384	2.362	3.3	20.2
1 6	5 45.26	-7 19.4	1.747	2.607	12.8	20.3	1 6	5 44.32	+19 14.2	1.427	2.376	8.0	20.5
1 16	5 37.60	-7 31.6	1.809	2.612	15.0	20.5	1 16	5 36.69	+19 4.1	1.496	2.390	12.4	20.8
1 26	5 32.34	-7 18.6	1.891	2.618	17.2	20.7	1 26	5 32.08	+18 59.5	1.586	2.404	16.1	21.1
515976	2015 <i>RF</i> ₁₄₆		12 21.7 137°12	6°4/21.8	18		473314	2015 <i>RW</i> ₁₀₆		12 21.7 216°86	8°0/21.7	17	
11 17	6 35.52	+40 34.3	2.077	2.863	14.1	21.7	11 17	6 35.58	+43 29.5	1.889	2.673	15.4	21.0
11 27	6 28.33	+41 26.3	2.010	2.873	11.4	21.5	11 27	6 28.98	+44 29.4	1.814	2.671	12.7	20.8
12 7	6 18.18	+42 6.4	1.965	2.883	8.6	21.4	12 7	6 18.91	+45 15.3	1.761	2.669	10.1	20.6
12 17	6 5.98	+42 28.5	1.947	2.892	6.7	21.3	12 17	6 6.32	+45 39.5	1.732	2.666	8.3	20.5
12 27	5 53.18	+42 28.9	1.958	2.901	6.7	21.3	12 27	5 52.85	+45 36.8	1.731	2.664	8.3	20.5
1 6	5 41.31	+42 8.1	1.996	2.909	8.7	21.4	1 6	5 40.35	+45 7.6	1.756	2.661	10.2	20.6
1 16	5 31.68	+41 30.4	2.061	2.917	11.4	21.6	1 16	5 30.39	+44 16.9	1.807	2.658	12.9	20.8
1 26	5 25.15	+40 42.0	2.150	2.924	13.9	21.8	1 26	5 24.01	+43 12.6	1.879	2.655	15.6	20.9
116948	2004 <i>GH</i> ₇₁		12 21.7 114°22	4°2/21.6	18		475919	2007 <i>EE</i> ₁₅		12 21.7 355°70	0°4/21.7	18	
11 17	6 31.49	+34 50.0	2.211	3.010	13.0	20.0	11 17	6 26.00	+22 45.2	1.153	2.006	18.9	20.9
11 27	6 24.91	+35 30.9	2.144	3.024	10.1	19.8	11 27	6 22.29	+22 42.6	1.087	2.002	14.4	20.6
12 7	6 15.88	+36 4.2	2.102	3.038	7.0	19.6	12 7	6 14.99	+22 41.5	1.039	1.998	9.0	20.3
12 17	6 5.21	+36 25.7	2.088	3.051	4.5	19.5	12 17	6 5.08	+22 40.2	1.015	1.996	3.0	19.9
12 27	5 54.06	+36 32.7	2.103	3.064	4.7	19.5	12 27	5 54.27	+22 37.7	1.015	1.995	3.3	20.0
1 6	5 43.69	+36 25.4	2.147	3.077	7.1	19.7	1 6	5 44.48	+22 34.2	1.040	1.995	9.3	20.3
1 16	5 35.15	+36 6.4	2.219	3.089	10.0	19.9	1 16	5 37.35	+22 31.1	1.087	1.996	14.7	20.6
1 26	5 29.20	+35 39.9	2.315	3.101	12.7	20.1	1 26	5 33.91	+22 30.3	1.155	1.998	19.2	20.9
76344	2000 <i>EJ</i> ₁₅₇		12 21.7 179°85	1°4/21.5	18		371232	2006 <i>BX</i> ₇₉		12 21.7 180°72	4°4/21.7	18	
11 17	6 29.76	+24 31.9	2.069	2.881	13.3	19.4	11 17	6 29.47	+37 52.8	2.688	3.475	11.2	21.3
11 27	6 23.77	+25 24.6	1.987	2.881	10.0	19.2	11 27	6 23.19	+38 26.4	2.606	3.475	8.9	21.2
12 7	6 15.31	+26 19.2	1.931	2.882	6.3	19.0	12 7	6 14.77	+38 51.9	2.550	3.476	6.5	21.0
12 17	6 5.08	+27 11.7	1.903	2.882	2.4	18.8	12 17	6 4.88	+39 5.5	2.521	3.476	4.7	20.9
12 27	5 54.14	+27 58.6	1.905	2.882	2.8	18.8	12 27	5 54.50	+39 5.1	2.523	3.475	4.7	20.9
1 6	5 43.73	+28 37.5	1.937	2.881	6.7	19.0	1 6	5 44.69	+38 50.7	2.554	3.475	6.6	21.0
1 16	5 34.94	+29 8.3	1.997	2.881	10.4	19.3	1 16	5 36.38	+38 24.7	2.613	3.474	9.1	21.2
1 26	5 28.65	+29 32.2	2.082	2.880	13.5	19.5	1 26	5 30.30	+37 50.7	2.696	3.472	11.4	21.4
311650	2006 <i>RN</i> ₆₂		12 21.7 109°73	5°7/21.9	18		282688	2005 <i>YJ</i> ₃₂		12 21.7 222°07	1°8/21.9	17	
11 17	6 27.05	+6 31.0	2.160	2.945	13.7	21.1	11 17	6 25.44	+16 45.4	2.239	3.048	12.5	21.1
11 27	6 21.14	+5 59.5	2.099	2.964	10.9	21.0	11 27	6 20.22	+16 59.8	2.155	3.047	9.5	20.9
12 7	6 13.34	+5 39.6	2.062	2.983	8.1	20.8	12 7	6 12.98	+17 19.9	2.097	3.045	6.1	20.7
12 17	6 4.35	+5 33.3	2.053	3.001	6.1	20.7	12 17	6 4.32	+17 44.9	2.066	3.043	2.6	20.5
12 27	5 55.06	+5 41.5	2.071	3.019	6.1	20.8	12 27	5 55.15	+18 13.7	2.065	3.041	2.7	20.5
1 6	5 46.43	+6 3.4	2.119	3.036	8.0	20.9	1 6	5 46.44	+18 45.0	2.094	3.039	6.2	20.7
1 16	5 39.25	+6 37.0	2.194	3.053	10.6	21.1	1 16	5 39.08	+19 17.6	2.151	3.037	9.6	20.9
1 26	5 34.12	+7 19.6	2.292	3.069	13.1	21.3	1 26	5 33.78	+19 51.1	2.233	3.035	12.6	21.1
395641	2011 <i>WT</i> ₃₀		12 21.7 80°54	1°6/21.7	18		72482	2001 <i>DT</i> ₃₉		12 21.7 57°77	3°9/22.0	18	
11 17	6 28.31	+19 57.3	1.794	2.614	14.6	20.8	11 17	6 35.69	+32 11.7	1.190	2.025	19.7	18.5
11 27	6 22.57	+19 39.9	1.730	2.628	11.0	20.6	11 27	6 29.23	+32 22.4	1.145	2.047	15.0	18.3
12 7	6 14.44	+19 24.7	1.689	2.641	6.9	20.4	12 7	6 18.94	+32 22.6	1.120	2.070	9.8	18.1
12 17	6 4.74	+19 11.7	1.675	2.654	2.7	20.1	12 17	6 6.24	+32 7.5	1.118	2.093	5.0	17.9
12 27	5 54.65	+19 1.1	1.690	2.668	2.9	20.2	12 27	5 53.21	+31 35.5	1.143	2.117	4.9	17.9
1 6	5 45.39	+18 53.4	1.734	2.681	7.1	20.5	1 6	5 41.92	+30 50.3	1.193	2.141	9.4	18.3
1 16	5 37.98	+18 49.4	1.805	2.694	10.9	20.7	1 16	5 33.83	+29 58.6	1.267	2.164	14.0	18.6
1 26	5 33.13	+18 49.7	1.898	2.707	14.2	21.0	1 26	5 29.69	+29 7.0	1.362	2.188	17.8	18.9
32885	1993 <i>TC</i> ₂₅		12 21.7 7°20	1°0/21.7	18		442999	2013 <i>CO</i> ₁₈₃		12 21.7 339°92			

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
20875	2000 <i>VU</i> ₄₉		12 21.7 72°24	1.4/21.7	18	R	13831	1999 <i>XD</i> ₈		12 21.7 68°08	1.5/21.8	18	
11 17	6 29.53	+27 3.4	1.971	2.786	13.7	18.3	11 17	6 31.66	+18 29.5	1.332	2.163	18.1	17.7
11 27	6 23.35	+27 16.8	1.915	2.810	10.3	18.1	11 27	6 25.79	+18 49.2	1.279	2.182	13.7	17.5
12 7	6 14.85	+27 27.3	1.883	2.834	6.4	17.9	12 7	6 16.75	+19 15.9	1.248	2.201	8.5	17.3
12 17	6 4.89	+27 32.5	1.879	2.858	2.5	17.7	12 17	6 5.61	+19 47.2	1.241	2.221	3.1	17.0
12 27	5 54.64	+27 31.2	1.904	2.881	2.6	17.8	12 27	5 53.96	+20 20.4	1.261	2.240	3.3	17.1
1 6	5 45.26	+27 23.9	1.958	2.905	6.4	18.1	1 6	5 43.46	+20 53.3	1.309	2.259	8.4	17.4
1 16	5 37.73	+27 12.3	2.040	2.928	10.0	18.3	1 16	5 35.45	+21 25.0	1.382	2.279	13.1	17.8
1 26	5 32.70	+26 58.9	2.146	2.951	12.9	18.6	1 26	5 30.75	+21 55.6	1.476	2.298	16.9	18.1
157777	6239 <i>P-L</i>		12 21.7 170°99	0°3/21.7	18		2029	Binomi		12 21.7 89°05	0°5/21.8	18	R
11 17	6 25.53	+22 30.0	2.735	3.540	10.6	21.0	11 17	6 32.72	+25 47.9	1.515	2.341	16.6	16.6
11 27	6 19.93	+22 29.2	2.652	3.543	7.9	20.8	11 27	6 26.36	+25 35.0	1.454	2.355	12.5	16.4
12 7	6 12.63	+22 28.4	2.595	3.545	4.9	20.6	12 7	6 17.00	+25 18.8	1.415	2.369	7.7	16.2
12 17	6 4.20	+22 27.1	2.567	3.547	1.6	20.4	12 17	6 5.69	+24 57.6	1.403	2.383	2.6	15.9
12 27	5 55.40	+22 24.7	2.570	3.549	1.8	20.4	12 27	5 53.93	+24 31.5	1.418	2.397	2.8	16.0
1 6	5 47.07	+22 21.4	2.605	3.550	5.1	20.7	1 6	5 43.32	+24 2.1	1.461	2.411	7.8	16.3
1 16	5 39.92	+22 17.8	2.668	3.551	8.1	20.8	1 16	5 35.10	+23 32.8	1.531	2.424	12.2	16.6
1 26	5 34.54	+22 14.8	2.757	3.552	10.7	21.0	1 26	5 30.03	+23 6.4	1.622	2.438	15.9	16.9
401199	2011 <i>WJ</i> ₁₅₃		12 21.7 147°94	3°8/22.2	18		442393	2011 <i>UT</i> ₃₉		12 21.7 89°70	7°0/21.6	18	
11 17	6 27.50	+10 53.6	2.101	2.898	13.6	21.2	11 17	6 35.74	+40 3.0	1.840	2.634	15.4	21.3
11 27	6 21.77	+11 3.2	2.024	2.904	10.6	21.0	11 27	6 28.84	+41 11.8	1.783	2.651	12.4	21.1
12 7	6 13.94	+11 23.0	1.972	2.909	7.3	20.8	12 7	6 18.68	+42 8.4	1.748	2.668	9.4	21.0
12 17	6 4.66	+11 53.2	1.947	2.914	4.3	20.7	12 17	6 6.28	+42 45.4	1.739	2.685	7.3	20.9
12 27	5 54.90	+12 33.0	1.951	2.919	4.3	20.7	12 27	5 53.23	+42 58.3	1.758	2.701	7.4	20.9
1 6	5 45.67	+13 20.2	1.986	2.923	7.1	20.8	1 6	5 41.27	+42 47.5	1.804	2.717	9.5	21.1
1 16	5 37.91	+14 12.7	2.048	2.927	10.4	21.1	1 16	5 31.80	+42 17.5	1.876	2.733	12.2	21.3
1 26	5 32.32	+15 8.2	2.136	2.931	13.3	21.3	1 26	5 25.71	+41 35.4	1.970	2.749	14.9	21.5
441214	2007 <i>VS</i> ₄₀		12 21.7 73°54	2°9/21.8	18		40595	1999 <i>RY</i> ₁₄₆		12 21.7 123°23	1°0/21.7	18	
11 17	6 29.49	+16 4.6	1.685	2.502	15.6	21.1	11 17	6 30.00	+21 34.6	1.884	2.700	14.2	19.7
11 27	6 23.45	+15 52.8	1.632	2.526	11.8	20.9	11 27	6 23.83	+21 17.4	1.815	2.711	10.7	19.5
12 7	6 14.98	+15 47.5	1.602	2.550	7.6	20.7	12 7	6 15.27	+21 0.7	1.769	2.721	6.7	19.3
12 17	6 4.97	+15 48.8	1.598	2.574	3.7	20.5	12 17	6 5.12	+20 44.1	1.751	2.731	2.4	19.1
12 27	5 54.65	+15 56.4	1.624	2.598	3.8	20.6	12 27	5 54.57	+20 27.9	1.762	2.741	2.6	19.1
1 6	5 45.28	+16 9.8	1.677	2.621	7.5	20.9	1 6	5 44.81	+20 12.8	1.803	2.750	6.8	19.4
1 16	5 37.87	+16 28.1	1.757	2.644	11.3	21.1	1 16	5 36.88	+20 0.3	1.871	2.759	10.7	19.6
1 26	5 33.08	+16 50.5	1.860	2.668	14.5	21.4	1 26	5 31.48	+19 51.5	1.963	2.767	14.0	19.9
490512	2009 <i>UY</i> ₈₆		12 21.7 17°79	0°4/21.7	18		131405	2001 <i>LB</i> ₈		12 21.7 166°87	1°1/21.7	18	
11 17	6 27.21	+23 4.6	1.132	1.984	19.3	21.1	11 17	6 25.88	+27 14.5	2.654	3.461	10.8	20.5
11 27	6 23.09	+22 56.6	1.074	1.989	14.5	20.9	11 27	6 20.32	+27 22.5	2.572	3.463	8.2	20.3
12 7	6 15.40	+22 49.3	1.035	1.994	9.0	20.6	12 7	6 12.95	+27 28.0	2.516	3.465	5.1	20.1
12 17	6 5.22	+22 41.2	1.020	2.001	3.0	20.3	12 17	6 4.36	+27 29.4	2.488	3.467	2.0	19.9
12 27	5 54.34	+22 31.8	1.029	2.009	3.3	20.3	12 27	5 55.38	+27 26.0	2.491	3.468	2.1	19.9
1 6	5 44.68	+22 21.8	1.063	2.018	9.2	20.7	1 6	5 46.90	+27 17.7	2.525	3.470	5.3	20.1
1 16	5 37.74	+22 13.2	1.120	2.028	14.4	21.0	1 16	5 39.69	+27 5.9	2.587	3.471	8.3	20.3
1 26	5 34.48	+22 7.8	1.197	2.039	18.8	21.3	1 26	5 34.37	+26 52.3	2.675	3.472	10.9	20.5
224926	2007 <i>DA</i> ₄₁		12 21.7 238°32	19°5/14.2	18		84796	2002 <i>XZ</i> ₈₉		12 21.7 329°45	2°8/22.1	18	
11 17	6 46.86	- 6 49.8	1.285	2.022	23.6	20.7	11 17	6 26.18	+14 35.2	1.730	2.549	15.1	19.3
11 27	6 38.41	-10 39.1	1.199	1.998	21.5	20.4	11 27	6 21.37	+14 51.4	1.649	2.544	11.6	19.0
12 7	6 25.51	-14 17.9	1.133	1.971	19.9	20.2	12 7	6 14.01	+15 17.5	1.590	2.539	7.6	18.8
12 17	6 8.82	-17 25.8	1.091	1.942	19.6	20.1	12 17	6 4.79	+15 52.8	1.558	2.534	3.7	18.5
12 27	5 49.97	-19 42.4	1.074	1.909	20.9	20.1	12 27	5 54.85	+16 35.8	1.554	2.529	3.7	18.5
1 6	5 31.29	-20 56.6	1.078	1.873	23.5	20.1	1 6	5 45.47	+17 24.0	1.578	2.525	7.6	18.7
1 16	5 15.07	-21 8.5	1.100	1.834	26.7	20.2	1 16	5 37.81	+18 15.1	1.628	2.521	11.7	19.0
1 26	5 3.01	-20 28.8	1.135	1.792	29.8	20.3	1 26	5 32.74	+19 7.2	1.702	2.517	15.3	19.2
494146	2016 <i>CM</i> ₂₁₉		12 21.7 356°42	1°4/21.7	17		296431	2009 <i>HS</i> ₄₂		12 21.7 313°75	1°5/21.6	17	
11 17	6 23.73	+19 52.1	1.827	2.655	14.1	21.3	11 17	6 27.46	+25 25.4	1.620	2.450	15.5	20.8
11 27	6 19.36	+19 46.5	1.750	2.652	10.7	21.1	11 27	6 22.80	+25 57.4	1.534	2.437	11.8	20.6
12 7	6 12.63	+19 43.8	1.696	2.650	6.7	20.9	12 7	6 15.14	+26 30.4	1.470	2.424	7.4	20.3
12 17	6 4.28	+19 43.9	1.668	2.648	2.5	20.6	12 17	6 5.22	+27 0.6	1.431	2.411	2.8	20.0
12 27	5 55.36	+19 46.2	1.669	2.647	2.8	20.6	12 27	5 54.35	+27 24.8	1.420	2.398	3.2	20.0
1 6	5 47.07	+19 50.8	1.697	2.647	6.9	20.9	1 6	5 44.06	+27 41.3	1.437	2.386	7.9	20.2
1 16	5 40.43	+19 57.7	1.752	2.647	10.9	21.1	1 16	5 35.77	+27 50.8	1.479	2.375	12.5	20.5
1 26	5 36.22	+20 7.2	1.830	2.648	14.3	21.3	1 26	5 30.52	+27 55.5	1.544	2.363	16.4	20.7
327616	2006 <i>FN</i> ₄₂		12 21.7 78°62	10°9/21.3	18		487914	2015 <i>TJ</i> ₁₉₄		12 21.7 69°40	4°5/22.2	17	
11 17	6 23.08	- 9 47.1	2.366	3.080	14.5	20.1	11 17	6 33.22	+35 36.7	1.764	2.572	15.4	21.3
11 27	6 18.21	-11 12.4	2.307	3.087	13.0	20.0	11 27	6 26.58	+35 51.3	1.706	2.591	11.9	21.1
12 7	6 11.61	-12 18.2	2.270	3.093	11.7	19.9	12 7	6 17.05	+35 54.9	1.672	2.610	8.2	21.0
12 17	6 3.89	-12 59.8	2.255	3.100	11.0	19.9	12 17	6 5.70	+35 43.6	1.663	2.629	5.1	20.8
12 27	5 55.82	-13 14.0	2.265	3.106	11.0	19.9	12 27	5 54.00	+35 15.7	1.682	2.648	5.0	20.9
1 6	5 48.24	-13 0.8	2.299	3.113	11.8	20.0	1 6	5 43.47	+34 33.5	1.730	2.667	7.9	21.1
1 16	5 41.89	-12 22.9	2.355	3.119	13.1	20.1	1 16	5 35.29	+33 42.0	1.804	2.686	11.4	21.3
1 26	5 37.35	-11 24.9	2.431	3.126	14.5	20.2	1 26	5 30.19	+32 47.0	1.902	2.705	14.4	21.6
231036	2005 <i>EY</i> ₂₆₆		12 21.7 307°08	1°9/21.7	18		459748	2013 <i>QQ</i> ₃₃		12 21.7 312°61	4°2		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
284539	2007 <i>RV</i> ₂₀₄		12 21.7	72°25	0°7/21.8	18	190702	2001 <i>FN</i> ₈₅		12 21.7	97°89	2°1/21.7	17
11 17	6 33.24	+25 32.7	1.668	2.486	15.7	20.9	11 17	6 27.84	+29 15.0	2.375	3.183	11.9	20.8
11 27	6 26.30	+25 33.3	1.621	2.518	11.7	20.8	11 27	6 21.95	+29 37.4	2.307	3.197	9.0	20.6
12 7	6 16.72	+25 31.4	1.597	2.550	7.2	20.6	12 7	6 14.02	+29 56.2	2.263	3.210	5.8	20.5
12 17	6 5.55	+25 25.1	1.600	2.581	2.4	20.3	12 17	6 4.75	+30 8.7	2.248	3.224	2.7	20.3
12 27	5 54.19	+25 13.8	1.633	2.612	2.6	20.4	12 27	5 55.10	+30 13.5	2.264	3.238	2.8	20.3
1 6	5 44.01	+24 58.5	1.694	2.642	7.1	20.8	1 6	5 46.09	+30 10.6	2.309	3.251	5.9	20.5
1 16	5 36.05	+24 41.5	1.782	2.672	11.0	21.1	1 16	5 38.60	+30 1.5	2.382	3.264	9.0	20.8
1 26	5 30.98	+24 25.3	1.893	2.702	14.3	21.4	1 26	5 33.27	+29 48.6	2.480	3.277	11.6	21.0
103018	1999 <i>XW</i> ₁₀₅		12 21.7	11°53	1°3/21.8	18	512678	2016 <i>TZ</i> ₈₂		12 21.7	113°05	1°4/21.8	18
11 17	6 26.46	+19 54.7	1.113	1.966	19.5	18.6	11 17	6 34.77	+27 7.6	1.711	2.525	15.5	21.1
11 27	6 22.64	+20 4.3	1.053	1.968	14.8	18.3	11 27	6 27.64	+27 11.5	1.650	2.545	11.7	20.9
12 7	6 15.23	+20 20.4	1.012	1.971	9.3	18.0	12 7	6 17.70	+27 11.7	1.613	2.564	7.3	20.7
12 17	6 5.25	+20 41.1	0.994	1.975	3.3	17.7	12 17	6 5.96	+27 5.4	1.602	2.582	2.7	20.5
12 27	5 54.43	+21 4.2	1.001	1.980	3.5	17.7	12 27	5 53.84	+26 51.5	1.621	2.599	2.9	20.5
1 6	5 44.70	+21 27.9	1.031	1.986	9.4	18.1	1 6	5 42.79	+26 31.3	1.669	2.616	7.3	20.8
1 16	5 37.65	+21 51.7	1.085	1.994	14.7	18.4	1 16	5 33.99	+26 7.6	1.744	2.632	11.3	21.1
1 26	5 34.30	+22 15.6	1.158	2.002	19.2	18.7	1 26	5 28.18	+25 43.9	1.843	2.648	14.7	21.4
29372	1996 <i>GA</i>		12 21.7	225°47	7°3/21.2	18	66449	1999 <i>OZ</i> ₁		12 21.7	83°50	1°5/21.6	18
11 17	6 36.41	+39 44.7	1.852	2.646	15.3	18.3	11 17	6 32.84	+22 2.4	1.747	2.562	15.2	18.5
11 27	6 29.77	+40 59.5	1.770	2.638	12.5	18.1	11 27	6 25.84	+21 17.0	1.693	2.588	11.4	18.3
12 7	6 19.60	+42 4.7	1.710	2.630	9.5	17.9	12 7	6 16.40	+20 30.7	1.662	2.613	7.1	18.1
12 17	6 6.73	+42 51.8	1.676	2.621	7.5	17.8	12 17	6 5.49	+19 44.7	1.659	2.638	2.6	17.9
12 27	5 52.71	+43 14.5	1.670	2.612	7.7	17.7	12 27	5 54.41	+19 0.7	1.686	2.663	3.0	18.0
1 6	5 39.41	+43 11.3	1.691	2.603	10.1	17.9	1 6	5 44.42	+18 21.0	1.742	2.688	7.2	18.3
1 16	5 28.51	+42 45.9	1.737	2.593	13.2	18.0	1 16	5 36.50	+17 47.8	1.826	2.712	11.0	18.6
1 26	5 21.18	+42 5.6	1.806	2.582	16.1	18.2	1 26	5 31.28	+17 22.5	1.933	2.735	14.3	18.8
60394	2000 <i>AY</i> ₂₃₄		12 21.7	269°74	0°1/21.7	18	518961	2010 <i>HR</i> ₃₈		12 21.7	183°74	4°8/21.5	18
11 17	6 30.69	+24 31.2	1.510	2.339	16.5	19.2	11 17	6 32.99	+36 33.7	2.288	3.080	12.8	21.8
11 27	6 25.16	+24 11.7	1.431	2.334	12.5	19.0	11 27	6 26.29	+37 23.6	2.207	3.080	10.1	21.6
12 7	6 16.51	+23 49.6	1.374	2.328	7.8	18.7	12 7	6 16.97	+38 5.8	2.151	3.080	7.3	21.4
12 17	6 5.65	+23 23.8	1.342	2.323	2.6	18.3	12 17	6 5.80	+38 35.4	2.122	3.080	5.1	21.3
12 27	5 54.02	+22 54.3	1.338	2.317	2.9	18.4	12 27	5 53.94	+38 48.6	2.124	3.078	5.3	21.3
1 6	5 43.26	+22 23.1	1.362	2.312	8.2	18.7	1 6	5 42.70	+38 45.1	2.154	3.077	7.6	21.5
1 16	5 34.75	+21 53.2	1.411	2.306	12.9	18.9	1 16	5 33.27	+38 27.3	2.212	3.075	10.4	21.6
1 26	5 29.44	+21 27.5	1.482	2.301	17.0	19.2	1 26	5 26.49	+37 59.7	2.294	3.072	13.0	21.8
367419	2008 <i>RE</i> ₈₂		12 21.7	122°58	0°1/21.7	17	421160	2013 <i>RU</i> ₄₂		12 21.7	173°67	1°8/21.6	17
11 17	6 26.38	+24 10.1	2.448	3.257	11.5	21.9	11 17	6 24.66	+18 37.0	2.525	3.333	11.3	22.0
11 27	6 20.73	+24 6.8	2.373	3.266	8.6	21.7	11 27	6 19.39	+18 12.4	2.443	3.334	8.5	21.8
12 7	6 13.21	+24 2.5	2.323	3.275	5.3	21.5	12 7	6 12.39	+17 49.7	2.386	3.335	5.4	21.6
12 17	6 4.47	+23 56.2	2.302	3.283	1.7	21.3	12 17	6 4.23	+17 29.2	2.358	3.335	2.4	21.4
12 27	5 55.38	+23 47.7	2.312	3.291	1.9	21.3	12 27	5 55.72	+17 11.8	2.361	3.335	2.6	21.5
1 6	5 46.87	+23 37.2	2.352	3.299	5.5	21.6	1 6	5 47.68	+16 58.0	2.393	3.336	5.7	21.7
1 16	5 39.72	+23 25.9	2.421	3.307	8.7	21.8	1 16	5 40.88	+16 48.4	2.454	3.336	8.7	21.9
1 26	5 34.56	+23 15.2	2.515	3.314	11.4	22.0	1 26	5 35.89	+16 43.4	2.540	3.336	11.4	22.0
196737	2003 <i>SX</i> ₁₂₇		12 21.7	78°52	4°8/21.8	17	49172	1998 <i>SE</i> ₆₀		12 21.7	75°92	2°3/21.7	18
11 17	6 29.74	+37 9.2	2.225	3.023	12.9	20.7	11 17	6 30.41	+28 13.2	1.740	2.561	15.0	19.1
11 27	6 23.77	+37 46.6	2.154	3.030	10.2	20.5	11 27	6 24.56	+28 43.7	1.676	2.572	11.4	18.9
12 7	6 15.33	+38 15.2	2.107	3.037	7.4	20.4	12 7	6 15.95	+29 11.0	1.634	2.584	7.2	18.7
12 17	6 5.20	+38 30.5	2.087	3.044	5.2	20.2	12 17	6 5.45	+29 31.4	1.619	2.596	3.2	18.4
12 27	5 54.57	+38 30.0	2.095	3.051	5.2	20.3	12 27	5 54.41	+29 42.2	1.632	2.608	3.4	18.5
1 6	5 44.67	+38 13.9	2.133	3.059	7.4	20.4	1 6	5 44.24	+29 43.2	1.674	2.620	7.4	18.7
1 16	5 36.59	+37 45.3	2.197	3.066	10.2	20.6	1 16	5 36.16	+29 36.4	1.743	2.632	11.3	19.0
1 26	5 31.09	+37 8.5	2.285	3.073	12.8	20.8	1 26	5 30.96	+29 25.0	1.834	2.643	14.6	19.2
301817	2011 <i>PB</i> ₆		12 21.7	98°68	5°3/22.1	18	245228	2004 <i>XD</i> ₁₀₀		12 21.7	64°96	0°1/21.7	18
11 17	6 28.64	+ 8 51.2	1.906	2.702	14.8	22.2	11 17	6 30.49	+23 55.4	1.540	2.368	16.3	19.8
11 27	6 22.60	+ 8 26.8	1.848	2.723	11.7	22.0	11 27	6 24.65	+23 51.7	1.483	2.385	12.2	19.6
12 7	6 14.42	+ 8 13.8	1.813	2.743	8.4	21.9	12 7	6 15.96	+23 47.4	1.448	2.402	7.5	19.3
12 17	6 4.86	+ 8 13.9	1.804	2.763	5.7	21.7	12 17	6 5.43	+23 40.8	1.438	2.419	2.5	19.1
12 27	5 54.99	+ 8 27.6	1.825	2.782	5.7	21.8	12 27	5 54.48	+23 31.2	1.457	2.437	2.7	19.1
1 6	5 45.89	+ 8 53.6	1.874	2.801	8.2	22.0	1 6	5 44.60	+23 19.5	1.504	2.454	7.5	19.5
1 16	5 38.46	+ 9 29.9	1.949	2.820	11.2	22.2	1 16	5 36.95	+23 7.5	1.576	2.472	11.9	19.8
1 26	5 33.34	+10 13.7	2.049	2.838	14.0	22.4	1 26	5 32.30	+22 57.3	1.671	2.489	15.4	20.0
385567	2004 <i>TZ</i> ₂₇₄		12 21.7	33°60	2°0/21.6	18	167933	2005 <i>EF</i> ₁₇₂		12 21.7	333°80	11°0/21.2	17
11 17	6 22.13	+17 48.4	2.450	3.263	11.4	20.4	11 17	6 29.03	+43 20.9	1.281	2.102	19.3	18.8
11 27	6 17.47	+17 24.4	2.384	3.277	8.6	20.3	11 27	6 25.76	+44 44.2	1.202	2.081	16.3	18.6
12 7	6 11.16	+17 3.3	2.342	3.291	5.5	20.1	12 7	6 17.93	+45 52.9	1.141	2.060	13.3	18.3
12 17	6 3.79	+16 45.7	2.329	3.305	2.6	19.9	12 17	6 6.39	+46 34.8	1.101	2.041	11.3	18.2
12 27	5 56.16	+16 32.2	2.345	3.319	2.8	19.9	12 27	5 53.19	+46 40.2	1.085	2.022	11.5	18.1
1 6	5 49.07	+16 23.2	2.391	3.334	5.6	20.2	1 6	5 40.96	+46 7.2	1.090	2.006	13.9	18.2
1 16	5 43.22	+16 18.9	2.465	3.349	8.6	20.4	1 16	5 32.07	+45 2.1	1.116	1.990	17.4	18.3
1 26	5 39.15	+16 19.4	2.564	3.365	11.2	20.6	1 26	5 27.99	+43 36.5	1.161	1.977	21.0	18.5
221757	2007 <i>FF</i> ₇		12 21.7	330°72	0°1/21.7	17	452271	2015 <i>TA</i> ₁₄₈		12 21.7	36°		

EPHEMERIDES

12 21.7

12 21.8

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
13015	Noradokei		12 21.7	79°99	5°6/21.2	18	57216	2001 QD ₆₅		12 21.8	69°82	2°6/21.9	18
11 17	6 37.47	+34 24.3	1.729	2.533	15.8	17.8	11 17	6 30.27	+16 6.9	1.451	2.276	17.2	18.9
11 27	6 30.05	+35 51.9	1.681	2.562	12.3	17.6	11 27	6 24.58	+16 16.4	1.394	2.293	13.1	18.7
12 7	6 19.42	+37 11.5	1.656	2.590	8.7	17.5	12 7	6 16.00	+16 34.6	1.359	2.309	8.4	18.5
12 17	6 6.60	+38 14.9	1.658	2.618	6.0	17.4	12 17	6 5.49	+17 0.4	1.349	2.326	3.7	18.2
12 27	5 53.18	+38 56.7	1.689	2.645	6.2	17.4	12 27	5 54.47	+17 31.9	1.366	2.343	3.7	18.3
1 6	5 40.88	+39 16.2	1.748	2.672	8.9	17.7	1 6	5 44.44	+18 7.1	1.411	2.359	8.2	18.6
1 16	5 31.08	+39 17.0	1.834	2.699	12.1	17.9	1 16	5 36.64	+18 44.3	1.482	2.376	12.5	18.9
1 26	5 24.65	+39 5.0	1.942	2.725	14.9	18.1	1 26	5 31.86	+19 22.4	1.575	2.393	16.2	19.2
411059	2009 VY ₄₉		12 21.7	55°32	0°6/21.7	18	418687	2008 UG ₂		12 21.8	98°81	2°8/21.6	18
11 17	6 27.18	+24 4.9	1.946	2.766	13.7	20.6	11 17	6 25.39	+15 35.2	2.382	3.187	12.0	21.3
11 27	6 21.75	+24 24.1	1.884	2.782	10.2	20.5	11 27	6 19.92	+15 3.3	2.313	3.200	9.1	21.2
12 7	6 14.03	+24 43.5	1.846	2.799	6.3	20.3	12 7	6 12.69	+14 35.4	2.270	3.213	6.0	21.0
12 17	6 4.80	+25 0.7	1.835	2.816	2.1	20.0	12 17	6 4.35	+14 12.7	2.254	3.226	3.3	20.8
12 27	5 55.16	+25 14.2	1.854	2.833	2.3	20.1	12 27	5 55.71	+13 56.1	2.269	3.239	3.5	20.9
1 6	5 46.28	+25 23.6	1.901	2.850	6.4	20.4	1 6	5 47.66	+13 46.1	2.314	3.251	6.2	21.1
1 16	5 39.13	+25 29.4	1.976	2.867	10.0	20.6	1 16	5 40.93	+13 42.8	2.386	3.263	9.1	21.3
1 26	5 34.40	+25 33.2	2.075	2.885	13.1	20.9	1 26	5 36.08	+13 46.0	2.484	3.276	11.8	21.5
386938	2011 OX ₄₃		12 21.7	238°20	0°7/21.8	18	366702	2003 WX ₈₃		12 21.8	28°12	5°6/22.1	17
11 17	6 30.68	+25 6.3	1.893	2.709	14.2	21.9	11 17	6 23.56	+ 8 18.7	1.888	2.694	14.6	20.7
11 27	6 24.77	+25 13.4	1.802	2.697	10.8	21.6	11 27	6 19.00	+ 7 53.6	1.823	2.701	11.6	20.5
12 7	6 16.16	+25 19.4	1.734	2.685	6.8	21.3	12 7	6 12.33	+ 7 40.4	1.779	2.710	8.4	20.3
12 17	6 5.58	+25 22.0	1.693	2.673	2.3	21.0	12 17	6 4.27	+ 7 41.2	1.761	2.718	6.0	20.2
12 27	5 54.22	+25 19.7	1.681	2.660	2.6	21.0	12 27	5 55.78	+ 7 56.7	1.771	2.727	6.0	20.2
1 6	5 43.43	+25 12.4	1.699	2.647	7.1	21.3	1 6	5 47.92	+ 8 25.9	1.808	2.737	8.3	20.3
1 16	5 34.43	+25 1.8	1.744	2.633	11.3	21.5	1 16	5 41.59	+ 9 6.6	1.871	2.747	11.4	20.6
1 26	5 28.14	+24 50.2	1.813	2.618	14.9	21.7	1 26	5 37.45	+ 9 55.6	1.957	2.757	14.2	20.8
377996	2006 RU ₅₀		12 21.7	146°59	3°1/21.7	18	198768	2005 EO ₉₆		12 21.8	230°18	3°1/21.6	18
11 17	6 22.31	+12 42.3	2.887	3.683	10.3	21.4	11 17	6 23.91	+14 7.5	2.496	3.299	11.5	20.4
11 27	6 17.43	+12 19.8	2.808	3.687	8.0	21.2	11 27	6 18.88	+13 39.3	2.410	3.295	8.9	20.2
12 7	6 11.09	+12 2.6	2.754	3.691	5.5	21.1	12 7	6 12.13	+13 15.8	2.350	3.290	6.0	20.0
12 17	6 3.81	+11 51.4	2.729	3.695	3.4	20.9	12 17	6 4.19	+12 58.1	2.317	3.286	3.6	19.8
12 27	5 56.24	+11 47.1	2.734	3.698	3.5	21.0	12 27	5 55.85	+12 47.2	2.315	3.282	3.7	19.9
1 6	5 49.05	+11 49.5	2.769	3.701	5.6	21.1	1 6	5 47.95	+12 43.6	2.342	3.277	6.3	20.0
1 16	5 42.87	+11 58.4	2.833	3.704	8.1	21.3	1 16	5 41.22	+12 47.1	2.397	3.273	9.2	20.2
1 26	5 38.20	+12 13.1	2.922	3.707	10.4	21.4	1 26	5 36.28	+12 57.1	2.477	3.268	11.8	20.4
153763	2001 VY ₁₀		12 21.7	313°33	1°2/21.8	17	514156	2015 KA ₁₅₂		12 21.8	200°67	0°7/21.8	18
11 17	6 27.85	+26 38.3	1.899	2.720	13.9	20.4	11 17	6 32.33	+25 10.6	1.936	2.748	14.1	22.7
11 27	6 22.53	+26 44.6	1.819	2.716	10.6	20.1	11 27	6 25.86	+25 16.3	1.851	2.744	10.7	22.5
12 7	6 14.68	+26 48.4	1.761	2.713	6.6	19.9	12 7	6 16.75	+25 20.6	1.789	2.740	6.7	22.3
12 17	6 5.06	+26 47.6	1.731	2.711	2.5	19.6	12 17	6 5.77	+25 21.1	1.754	2.735	2.3	22.0
12 27	5 54.84	+26 40.8	1.729	2.708	2.6	19.6	12 27	5 54.11	+25 16.5	1.750	2.729	2.5	22.0
1 6	5 45.29	+26 28.4	1.757	2.705	6.8	19.9	1 6	5 43.10	+25 7.0	1.775	2.722	6.9	22.2
1 16	5 37.52	+26 12.3	1.811	2.702	10.8	20.1	1 16	5 33.93	+24 54.3	1.829	2.715	11.0	22.5
1 26	5 32.36	+25 55.1	1.889	2.700	14.2	20.3	1 26	5 27.45	+24 41.0	1.906	2.707	14.5	22.7
317238	2002 CZ ₂₀₅		12 21.7	309°35	4°3/21.9	17	320054	2007 EO ₁₅		12 21.8	1°84	1°0/21.8	17
11 17	6 24.55	+11 36.4	1.920	2.731	14.2	20.9	11 17	6 25.53	+20 14.8	1.857	2.680	14.1	20.3
11 27	6 19.92	+11 23.2	1.834	2.721	11.1	20.7	11 27	6 20.73	+20 18.5	1.780	2.680	10.6	20.1
12 7	6 13.03	+11 19.5	1.771	2.711	7.7	20.5	12 7	6 13.54	+20 25.4	1.727	2.680	6.7	19.8
12 17	6 4.53	+11 26.6	1.734	2.701	4.8	20.3	12 17	6 4.70	+20 34.4	1.700	2.680	2.4	19.6
12 27	5 55.40	+11 44.9	1.725	2.691	4.8	20.2	12 27	5 55.29	+20 44.7	1.702	2.680	2.6	19.6
1 6	5 46.74	+12 13.6	1.744	2.682	7.8	20.4	1 6	5 46.51	+20 55.8	1.732	2.681	6.8	19.8
1 16	5 39.56	+12 51.1	1.790	2.673	11.4	20.6	1 16	5 39.39	+21 7.7	1.789	2.682	10.8	20.1
1 26	5 34.67	+13 35.2	1.859	2.664	14.6	20.8	1 26	5 34.73	+21 20.7	1.869	2.684	14.2	20.3
296272	2009 DU ₄₅		12 21.7	248°69	4°8/21.9	17	447003	2004 CH ₂₉		12 21.8	66°98	4°6/22.4	17
11 17	6 33.10	+36 49.6	2.090	2.886	13.7	21.5	11 17	6 33.84	+36 30.0	1.719	2.527	15.7	21.0
11 27	6 26.66	+37 13.4	1.995	2.872	10.9	21.3	11 27	6 27.20	+36 33.2	1.656	2.540	12.3	20.9
12 7	6 17.35	+37 27.8	1.924	2.857	7.8	21.1	12 7	6 17.54	+36 24.0	1.616	2.554	8.5	20.7
12 17	6 5.98	+37 27.8	1.880	2.841	5.2	20.9	12 17	6 5.96	+35 58.4	1.601	2.567	5.3	20.5
12 27	5 53.81	+37 10.4	1.865	2.825	5.3	20.8	12 27	5 54.01	+35 15.2	1.615	2.581	5.1	20.5
1 6	5 42.30	+36 36.0	1.879	2.809	7.9	21.0	1 6	5 43.28	+34 17.5	1.656	2.595	8.1	20.7
1 16	5 32.75	+35 48.4	1.920	2.793	11.2	21.1	1 16	5 34.98	+33 11.1	1.725	2.609	11.7	21.0
1 26	5 26.09	+34 53.3	1.985	2.776	14.3	21.3	1 26	5 29.86	+32 2.4	1.816	2.622	14.9	21.2
290453	2005 TZ ₁₅₅		12 21.7	235°58	0°2/21.7	17	339792	2005 SK ₁₇₈		12 21.8	123°24	5°3/21.8	18
11 17	6 27.23	+23 17.3	2.082	2.898	13.0	21.3	11 17	6 36.48	+35 43.0	1.740	2.544	15.7	21.1
11 27	6 21.79	+23 11.4	1.999	2.895	9.8	21.1	11 27	6 29.38	+36 31.7	1.677	2.557	12.3	20.9
12 7	6 14.11	+23 5.1	1.939	2.892	6.1	20.8	12 7	6 19.06	+37 10.9	1.636	2.570	8.7	20.7
12 17	6 4.86	+22 57.5	1.907	2.888	2.0	20.5	12 17	6 6.52	+37 34.2	1.621	2.583	5.8	20.6
12 27	5 55.09	+22 48.1	1.905	2.884	2.2	20.6	12 27	5 53.35	+37 37.5	1.634	2.595	5.9	20.6
1 6	5 45.90	+22 37.3	1.932	2.881	6.3	20.8	1 6	5 41.25	+37 21.5	1.676	2.606	8.7	20.8
1 16	5 38.27	+22 26.3	1.987	2.877	10.1	21.0	1 16	5 31.63	+36 50.5	1.744	2.617	12.2	21.0
1 26	5 32.97	+22 16.8	2.066	2.873	13.3	21.2	1 26	5 25.37	+36 10.9	1.834	2.627	15.3	21.3
107054	Daniela		12 21.8	68°53	3°9/21.9	18	370416	2002 TY ₃₇₈		12 21.8	213°27	3°6/21.7	18
11 17	6 35.79	+31 26.6	1.280	2.110									

EPHEMERIDES

12 21.8

12 21.8

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
124765	2001 <i>SO</i> ₂₃₈		12 21.8	16°66	0°6/21.8	18	386666	2009 <i>UR</i> ₉₃		12 21.8	7°42	2°9/21.7	18
11 17	6 26.66	+20 54.1	1.162	2.013	19.0	18.8	11 17	6 28.30	+27 42.6	1.178	2.026	18.9	20.7
11 27	6 22.70	+21 12.9	1.104	2.017	14.4	18.5	11 27	6 24.21	+28 18.1	1.115	2.027	14.4	20.4
12 7	6 15.26	+21 37.1	1.065	2.023	8.9	18.3	12 7	6 16.36	+28 51.4	1.072	2.028	9.2	20.1
12 17	6 5.35	+22 4.2	1.049	2.030	3.0	17.9	12 17	6 5.77	+29 17.1	1.051	2.030	4.1	19.8
12 27	5 54.66	+22 31.1	1.058	2.038	3.2	18.0	12 27	5 54.25	+29 30.9	1.056	2.033	4.3	19.8
1 6	5 45.05	+22 56.1	1.092	2.047	9.0	18.4	1 6	5 43.85	+29 32.1	1.086	2.037	9.5	20.2
1 16	5 38.06	+23 18.8	1.150	2.057	14.2	18.7	1 16	5 36.24	+29 23.4	1.138	2.042	14.6	20.5
1 26	5 34.65	+23 39.9	1.227	2.068	18.5	19.0	1 26	5 32.52	+29 9.4	1.210	2.048	18.9	20.7
148356	2000 <i>SE</i> ₉		12 21.8	359°82	23°5/18.9	18	515460	2013 <i>YX</i> ₃₂		12 21.8	323°23	0°7/21.8	18
11 17	6 24.40	-13 56.5	0.989	1.761	27.1	18.9	11 17	6 27.82	+24 9.2	1.245	2.090	18.3	21.7
11 27	6 21.20	-17 17.8	0.952	1.758	25.4	18.8	11 27	6 23.81	+24 23.4	1.166	2.077	14.0	21.4
12 7	6 14.43	-19 58.3	0.928	1.756	24.1	18.7	12 7	6 16.17	+24 38.9	1.107	2.064	8.8	21.1
12 17	6 5.10	-21 41.5	0.920	1.756	23.6	18.7	12 17	6 5.76	+24 52.6	1.071	2.052	3.0	20.7
12 27	5 54.91	-22 16.8	0.925	1.756	23.8	18.7	12 27	5 54.19	+25 1.6	1.061	2.041	3.3	20.7
1 6	5 45.76	-21 44.2	0.945	1.758	24.8	18.7	1 6	5 43.42	+25 5.3	1.076	2.030	9.3	21.0
1 16	5 39.22	-20 12.0	0.978	1.761	26.2	18.9	1 16	5 35.17	+25 4.9	1.115	2.020	14.7	21.3
1 26	5 36.36	-17 54.7	1.022	1.764	27.9	19.0	1 26	5 30.66	+25 3.2	1.173	2.011	19.4	21.5
422479	2014 <i>SC</i> ₃₂₉		12 21.8	7°82	5°8/21.7	18	359794	2011 <i>UF</i> ₁₉₈		12 21.8	45°91	0°6/21.8	18
11 17	6 29.36	+38 26.8	2.017	2.819	13.9	20.3	11 17	6 27.93	+21 58.1	1.658	2.485	15.3	20.8
11 27	6 23.90	+39 15.0	1.944	2.819	11.1	20.1	11 27	6 22.71	+21 57.3	1.590	2.492	11.6	20.6
12 7	6 15.65	+39 53.4	1.893	2.820	8.3	19.9	12 7	6 14.84	+21 58.1	1.546	2.500	7.2	20.4
12 17	6 5.43	+40 16.5	1.869	2.822	6.1	19.8	12 17	6 5.17	+21 59.0	1.527	2.508	2.4	20.1
12 27	5 54.54	+40 20.8	1.872	2.823	6.2	19.8	12 27	5 54.96	+21 59.4	1.537	2.516	2.6	20.1
1 6	5 44.42	+40 6.4	1.903	2.825	8.4	19.9	1 6	5 45.59	+21 59.3	1.574	2.524	7.3	20.4
1 16	5 36.29	+39 36.5	1.960	2.828	11.3	20.1	1 16	5 38.18	+21 59.5	1.638	2.533	11.5	20.7
1 26	5 31.03	+38 56.3	2.039	2.830	14.0	20.3	1 26	5 33.53	+22 1.1	1.724	2.542	15.1	20.9
136276	2003 <i>YZ</i> ₁₂₃		12 21.8	99°38	5°6/22.2	18	308792	2006 <i>QA</i> ₄₀		12 21.8	135°72	5°0/22.5	18
11 17	6 38.62	+36 26.6	1.496	2.306	17.6	19.5	11 17	6 27.95	+ 6 58.1	2.176	2.960	13.6	20.6
11 27	6 31.23	+36 56.2	1.440	2.324	13.8	19.3	11 27	6 22.04	+ 6 59.2	2.104	2.971	10.8	20.5
12 7	6 20.24	+37 13.2	1.405	2.342	9.6	19.1	12 7	6 14.14	+ 7 12.7	2.056	2.981	7.9	20.3
12 17	6 6.89	+37 11.1	1.395	2.359	6.2	19.0	12 17	6 4.90	+ 7 39.5	2.035	2.990	5.5	20.2
12 27	5 53.07	+36 47.0	1.413	2.376	6.1	19.0	12 27	5 55.25	+ 8 19.1	2.044	3.000	5.3	20.2
1 6	5 40.71	+36 3.5	1.458	2.393	9.3	19.2	1 6	5 46.16	+ 9 9.7	2.082	3.008	7.5	20.3
1 16	5 31.29	+35 7.2	1.528	2.409	13.1	19.5	1 16	5 38.48	+10 8.4	2.148	3.017	10.4	20.5
1 26	5 25.63	+34 5.9	1.621	2.425	16.5	19.8	1 26	5 32.87	+11 12.3	2.239	3.025	13.1	20.7
489996	2008 <i>ST</i> ₁₈₆		12 21.8	26°19	3°1/21.6	17	92232	2000 <i>AS</i> ₁₀₂		12 21.8	75°16	0°9/21.9	18
11 17	6 24.21	+15 35.6	2.105	2.919	13.0	21.5	11 17	6 27.70	+18 33.1	2.087	2.898	13.2	18.9
11 27	6 19.35	+15 2.3	2.031	2.922	10.0	21.3	11 27	6 22.01	+19 6.7	2.022	2.915	9.9	18.7
12 7	6 12.50	+14 33.4	1.981	2.926	6.6	21.1	12 7	6 14.19	+19 45.3	1.980	2.931	6.2	18.5
12 17	6 4.34	+14 10.4	1.958	2.930	3.7	20.9	12 17	6 4.93	+20 26.9	1.967	2.947	2.2	18.3
12 27	5 55.78	+13 54.4	1.964	2.935	3.8	21.0	12 27	5 55.24	+21 9.2	1.985	2.963	2.3	18.3
1 6	5 47.79	+13 46.0	1.999	2.939	6.8	21.2	1 6	5 46.17	+21 50.2	2.032	2.979	6.1	18.6
1 16	5 41.25	+13 45.3	2.062	2.944	10.1	21.4	1 16	5 38.66	+22 29.0	2.107	2.995	9.7	18.8
1 26	5 36.77	+13 51.7	2.147	2.949	13.0	21.6	1 26	5 33.39	+23 5.2	2.207	3.011	12.7	19.1
416465	2003 <i>WT</i> ₆₅		12 21.8	74°69	3°3/21.4	18	454052	2012 <i>HE</i> ₁₃		12 21.8	280°89	0°2/21.8	18
11 17	6 30.51	+30 45.8	2.244	3.049	12.6	21.0	11 17	6 26.31	+20 43.1	2.190	3.004	12.6	20.6
11 27	6 24.16	+31 47.7	2.186	3.072	9.6	20.9	11 27	6 21.16	+21 13.8	2.100	2.995	9.5	20.4
12 7	6 15.52	+32 45.6	2.153	3.095	6.4	20.7	12 7	6 13.80	+21 48.3	2.033	2.985	5.9	20.2
12 17	6 5.34	+33 35.0	2.148	3.118	3.7	20.6	12 17	6 4.86	+22 24.9	1.995	2.976	2.0	19.9
12 27	5 54.70	+34 12.5	2.173	3.141	3.9	20.6	12 27	5 55.25	+23 1.2	1.987	2.966	2.2	19.9
1 6	5 44.75	+34 37.0	2.229	3.163	6.6	20.8	1 6	5 46.04	+23 35.6	2.009	2.957	6.1	20.1
1 16	5 36.49	+34 49.9	2.313	3.186	9.6	21.1	1 16	5 38.22	+24 7.3	2.059	2.947	9.8	20.4
1 26	5 30.63	+34 53.9	2.420	3.208	12.2	21.3	1 26	5 32.58	+24 36.5	2.133	2.938	13.0	20.5
24964	1997 <i>UY</i> ₂₀		12 21.8	149°54	3°7/21.7	18	325762	2010 <i>AL</i> ₉₄		12 21.8	99°79	1°8/21.6	18
11 17	6 24.10	+10 31.4	2.931	3.717	10.4	19.8	11 17	6 25.90	+28 6.6	2.715	3.521	10.7	20.8
11 27	6 18.69	+10 2.1	2.855	3.726	8.2	19.6	11 27	6 20.41	+28 43.8	2.641	3.530	8.0	20.6
12 7	6 11.86	+ 9 39.0	2.806	3.735	5.8	19.5	12 7	6 13.11	+29 19.0	2.592	3.539	5.1	20.4
12 17	6 4.10	+ 9 23.2	2.784	3.743	3.9	19.4	12 17	6 4.58	+29 49.9	2.572	3.548	2.4	20.3
12 27	5 56.07	+ 9 15.7	2.794	3.751	4.0	19.4	12 27	5 55.63	+30 14.2	2.583	3.557	2.6	20.3
1 6	5 48.46	+ 9 16.5	2.834	3.758	5.9	19.5	1 6	5 47.14	+30 31.4	2.625	3.566	5.3	20.5
1 16	5 41.87	+ 9 25.2	2.902	3.765	8.2	19.7	1 16	5 39.90	+30 41.9	2.695	3.575	8.1	20.7
1 26	5 36.80	+ 9 40.8	2.996	3.771	10.4	19.8	1 26	5 34.52	+30 47.3	2.791	3.583	10.6	20.9
60640	2000 <i>FE</i> ₃₄		12 21.8	136°52	0°4/21.7	18	511078	2013 <i>TG</i> ₆₄		12 21.8	80°34	1°2/21.8	18
11 17	6 28.54	+23 33.7	1.962	2.779	13.7	19.5	11 17	6 32.75	+25 57.1	1.346	2.179	17.9	21.6
11 27	6 22.91	+23 49.5	1.886	2.782	10.3	19.3	11 27	6 26.95	+26 5.4	1.283	2.187	13.5	21.3
12 7	6 14.86	+24 5.9	1.833	2.786	6.4	19.0	12 7	6 17.74	+26 11.5	1.241	2.196	8.5	21.1
12 17	6 5.16	+24 20.9	1.808	2.789	2.1	18.8	12 17	6 6.17	+26 12.1	1.224	2.204	3.0	20.8
12 27	5 54.89	+24 32.6	1.813	2.792	2.3	18.8	12 27	5 53.93	+26 5.5	1.234	2.213	3.2	20.8
1 6	5 45.28	+24 40.8	1.847	2.795	6.6	19.1	1 6	5 42.84	+25 52.2	1.270	2.221	8.5	21.1
1 16	5 37.37	+24 46.0	1.908	2.798	10.4	19.3	1 16	5 34.37	+25 35.3	1.332	2.230	13.4	21.4
1 26	5 31.95	+24 49.6	1.994	2.801	13.7	19.5	1 26	5 29.44	+25 18.3	1.414	2.238	17.4	21.7
390685	2002 <i>UR</i> ₄₄		12 21.8	66°62	6°4/21.7	17	386035	2007 <i>ER</i> ₄₁		12 21.8	354°99		

EPHEMERIDES

12 21.8

12 21.8

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
225110	2008 <i>DP</i> ₈₂		12 21.8 109°21	7°2/22.3	18		315814	2008 <i>GL</i> ₇₈		12 21.8 283°34	0°4/21.8	17	
11 17	6 30.74	+ 5 23.5	1.687	2.477	16.7	20.8	11 17	6 26.86	+20 55.6	1.987	2.805	13.5	21.4
11 27	6 24.44	+ 4 48.6	1.630	2.497	13.4	20.6	11 27	6 21.74	+21 14.3	1.901	2.798	10.2	21.2
12 7	6 15.72	+ 4 29.2	1.596	2.515	10.1	20.5	12 7	6 14.25	+21 36.4	1.838	2.791	6.4	20.9
12 17	6 5.43	+ 4 28.4	1.586	2.534	7.6	20.4	12 17	6 5.05	+22 0.1	1.803	2.783	2.2	20.7
12 27	5 54.77	+ 4 46.9	1.604	2.551	7.5	20.4	12 27	5 55.18	+22 23.7	1.797	2.776	2.3	20.7
1 6	5 44.96	+ 5 23.3	1.650	2.568	9.8	20.6	1 6	5 45.80	+22 46.0	1.820	2.769	6.6	20.9
1 16	5 37.05	+ 6 14.0	1.721	2.585	12.8	20.8	1 16	5 37.99	+23 6.7	1.871	2.762	10.5	21.1
1 26	5 31.73	+ 7 14.6	1.814	2.601	15.7	21.0	1 26	5 32.57	+23 26.2	1.946	2.755	13.9	21.3
298634	2004 <i>BS</i> ₃₇		12 21.8	0°02	3°1/21.8	18	134493	1998 <i>XR</i> ₆₃		12 21.8 32°56	8°3/21.6	18	
11 17	6 24.03	+29 11.2	1.169	2.024	18.6	19.1	11 17	6 32.76	+39 43.4	1.436	2.252	17.9	18.7
11 27	6 21.03	+29 30.4	1.105	2.019	14.3	18.8	11 27	6 27.44	+41 2.7	1.383	2.264	14.4	18.5
12 7	6 14.40	+29 44.3	1.060	2.017	9.2	18.6	12 7	6 18.28	+42 8.4	1.351	2.278	11.0	18.3
12 17	6 5.15	+29 48.6	1.038	2.016	4.2	18.3	12 17	6 6.42	+42 51.4	1.343	2.292	8.6	18.2
12 27	5 55.03	+29 40.6	1.040	2.017	4.4	18.3	12 27	5 53.76	+43 5.7	1.360	2.306	8.7	18.3
1 6	5 45.98	+29 20.9	1.066	2.019	9.4	18.6	1 6	5 42.39	+42 52.0	1.402	2.322	11.1	18.5
1 16	5 39.64	+28 53.4	1.115	2.024	14.4	18.9	1 16	5 33.96	+42 15.9	1.467	2.338	14.2	18.7
1 26	5 37.00	+28 22.9	1.183	2.030	18.7	19.2	1 26	5 29.47	+41 26.1	1.553	2.354	17.2	18.9
280177	2002 <i>RH</i> ₁₂₈		12 21.8	43°56	1°3/21.9	17	129464	1993 <i>FF</i> ₂₃		12 21.8 191°21	2°0/21.7	18	
11 17	6 29.31	+29 36.9	1.962	2.777	13.8	19.8	11 17	6 32.66	+19 6.8	1.707	2.521	15.5	20.8
11 27	6 23.27	+29 3.1	1.898	2.792	10.4	19.6	11 27	6 26.30	+18 51.4	1.626	2.520	11.8	20.6
12 7	6 14.92	+28 22.3	1.857	2.807	6.5	19.4	12 7	6 17.14	+18 38.9	1.569	2.519	7.5	20.3
12 17	6 5.15	+27 34.0	1.844	2.823	2.5	19.2	12 17	6 6.00	+18 29.2	1.538	2.516	3.1	20.1
12 27	5 55.13	+26 39.3	1.860	2.838	2.5	19.2	12 27	5 54.17	+18 22.3	1.536	2.513	3.3	20.1
1 6	5 46.05	+25 41.3	1.906	2.854	6.4	19.5	1 6	5 43.08	+18 18.5	1.564	2.509	7.8	20.3
1 16	5 38.85	+24 43.5	1.980	2.871	10.0	19.7	1 16	5 33.96	+18 18.6	1.618	2.505	12.1	20.6
1 26	5 34.15	+23 49.6	2.079	2.888	13.2	20.0	1 26	5 27.70	+18 23.3	1.695	2.500	15.8	20.8
39639	1995 <i>FN</i> ₆		12 21.8	67°30	3°8/21.9	18	471523	2012 <i>GV</i> ₁₉		12 21.8 132°11	3°2/21.6	18	
11 17	6 31.25	+14 55.2	1.263	2.095	18.9	18.7	11 17	6 35.48	+29 9.3	1.609	2.425	16.2	21.7
11 27	6 25.60	+14 44.4	1.211	2.112	14.5	18.5	11 27	6 28.75	+29 56.2	1.543	2.436	12.4	21.5
12 7	6 16.77	+14 43.9	1.180	2.129	9.5	18.2	12 7	6 18.79	+30 39.8	1.499	2.447	8.0	21.3
12 17	6 5.83	+14 53.9	1.172	2.147	4.8	18.0	12 17	6 6.57	+31 14.3	1.482	2.457	4.0	21.1
12 27	5 54.39	+15 13.6	1.191	2.165	4.8	18.1	12 27	5 53.61	+31 35.6	1.493	2.466	4.2	21.1
1 6	5 44.12	+15 41.4	1.235	2.182	9.2	18.4	1 6	5 41.64	+31 42.8	1.533	2.475	8.2	21.4
1 16	5 36.36	+15 15.3	1.305	2.200	13.8	18.7	1 16	5 32.07	+31 38.4	1.599	2.484	12.4	21.6
1 26	5 31.93	+16 53.4	1.395	2.218	17.7	19.0	1 26	5 25.83	+31 27.0	1.687	2.491	15.9	21.9
513918	2014 <i>AX</i> ₅₆		12 21.8	188°78	2°3/21.9	18	119083	2001 <i>NT</i> ₉		12 21.8 133°00	0°4/21.8	18	
11 17	6 30.04	+16 30.2	1.801	2.613	14.9	21.7	11 17	6 32.57	+22 28.6	1.860	2.672	14.5	21.1
11 27	6 24.20	+16 37.0	1.721	2.613	11.4	21.5	11 27	6 25.88	+22 26.0	1.793	2.686	10.9	20.9
12 7	6 15.79	+16 50.6	1.664	2.612	7.3	21.2	12 7	6 16.67	+22 23.7	1.748	2.700	6.8	20.7
12 17	6 5.54	+17 10.4	1.634	2.611	3.3	21.0	12 17	6 5.80	+22 20.5	1.732	2.712	2.3	20.4
12 27	5 54.61	+17 35.1	1.633	2.609	3.3	21.0	12 27	5 54.49	+22 15.6	1.745	2.724	2.4	20.5
1 6	5 44.30	+18 3.4	1.662	2.607	7.4	21.2	1 6	5 44.02	+22 9.3	1.788	2.735	6.8	20.8
1 16	5 35.77	+18 34.3	1.717	2.605	11.5	21.5	1 16	5 35.47	+22 3.0	1.859	2.746	10.8	21.0
1 26	5 29.86	+19 6.9	1.796	2.602	15.0	21.7	1 26	5 29.58	+21 58.2	1.953	2.756	14.1	21.3
46818	1998 <i>MZ</i> ₂₄		12 21.8	51°22	3°2/21.0	18	291353	2006 <i>BZ</i> ₂₅₂		12 21.8 237°19	0°4/21.8	18	
11 17	6 42.94	+24 35.3	1.110	1.940	21.1	16.8	11 17	6 30.25	+24 34.0	1.888	2.705	14.2	21.8
11 27	6 33.77	+22 18.4	1.077	1.979	15.7	16.6	11 27	6 24.45	+24 35.9	1.799	2.695	10.8	21.6
12 7	6 21.26	+19 56.6	1.065	2.018	9.7	16.4	12 7	6 16.01	+24 36.7	1.733	2.685	6.7	21.3
12 17	6 7.08	+17 37.3	1.079	2.058	4.1	16.2	12 17	6 5.66	+24 34.6	1.694	2.675	2.3	21.0
12 27	5 53.34	+15 30.1	1.123	2.097	4.9	16.4	12 27	5 54.57	+24 28.5	1.685	2.664	2.5	21.0
1 6	5 41.81	+13 43.4	1.194	2.137	10.0	16.8	1 6	5 44.07	+24 18.5	1.705	2.653	7.0	21.3
1 16	5 33.58	+12 21.4	1.289	2.176	14.6	17.2	1 16	5 35.36	+24 6.4	1.752	2.642	11.2	21.5
1 26	5 29.11	+11 23.9	1.406	2.215	18.3	17.5	1 26	5 29.32	+23 54.3	1.822	2.630	14.8	21.7
21935	1999 <i>VZ</i> ₇₇		12 21.8	319°99	2°1/21.9	18	422523	2014 <i>TW</i> ₁₀		12 21.8 77°99	0°3/21.8	18	
11 17	6 30.75	+28 57.5	1.311	2.148	18.0	16.9	11 17	6 27.18	+25 2.4	2.161	2.976	12.7	21.2
11 27	6 25.85	+28 49.5	1.234	2.140	13.8	16.6	11 27	6 21.61	+24 54.2	2.090	2.985	9.5	21.0
12 7	6 17.32	+28 34.5	1.177	2.131	8.9	16.3	12 7	6 13.94	+24 44.1	2.043	2.995	5.9	20.8
12 17	6 6.13	+28 9.3	1.144	2.123	3.6	16.0	12 17	6 4.89	+24 31.2	2.024	3.005	2.0	20.6
12 27	5 54.00	+27 32.7	1.137	2.116	3.7	16.0	12 27	5 55.48	+24 15.3	2.036	3.015	2.1	20.6
1 6	5 42.88	+26 47.2	1.156	2.108	9.0	16.2	1 6	5 46.75	+23 57.1	2.076	3.025	6.0	20.9
1 16	5 34.41	+25 57.9	1.200	2.102	14.2	16.5	1 16	5 39.59	+23 38.2	2.145	3.034	9.5	21.1
1 26	5 29.66	+25 10.5	1.264	2.096	18.6	16.8	1 26	5 34.65	+23 20.5	2.238	3.044	12.4	21.3
491433	2012 <i>FT</i> ₂₀		12 21.8	338°70	0°4/21.8	17	163123	2002 <i>BM</i> ₁₅		12 21.8 22°67	2°5/21.8	18	
11 17	6 26.63	+23 43.3	1.950	2.771	13.6	22.0	11 17	6 29.44	+19 11.3	1.168	2.012	19.3	19.0
11 27	6 21.58	+23 57.9	1.870	2.769	10.3	21.8	11 27	6 24.77	+18 50.8	1.105	2.015	14.7	18.8
12 7	6 14.13	+24 13.2	1.814	2.767	6.4	21.6	12 7	6 16.57	+18 34.9	1.062	2.018	9.4	18.5
12 17	6 4.99	+24 27.1	1.784	2.764	2.1	21.3	12 17	6 5.88	+18 24.1	1.043	2.022	3.9	18.2
12 27	5 55.25	+24 38.1	1.783	2.763	2.3	21.3	12 27	5 54.40	+18 18.6	1.048	2.026	4.1	18.2
1 6	5 46.10	+24 45.6	1.812	2.761	6.6	21.6	1 6	5 44.03	+18 18.7	1.079	2.031	9.5	18.5
1 16	5 38.61	+24 50.3	1.867	2.759	10.5	21.8	1 16	5 36.32	+18 24.8	1.133	2.036	14.7	18.8
1 26	5 33.56	+24 53.5	1.946	2.758	13.8	22.0	1 26	5 32.23	+18 36.9	1.207	2.042	19.1	19.1
9580	Tarumi		12 21.8	63°55	2°3/21.8	18	367458	2008 <i>UF</i> ₃₂₉		12 21.8 75°55	8		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
419407	2010 AC ₅₉		12 21.8 310°59	4.6/22.9	16		226478	2003 SQ ₁₈₄		12 21.8 25°59	3.9/21.9	17	
11 17	6 27.10	+ 6 29.8	2.111	2.898	13.9	20.5	11 17	6 24.16	+13 25.2	1.834	2.652	14.5	19.8
11 27	6 21.84	+ 7 7.8	2.009	2.878	11.2	20.3	11 27	6 19.60	+13 1.6	1.767	2.659	11.2	19.7
12 7	6 14.33	+ 8 2.3	1.931	2.859	8.0	20.1	12 7	6 12.82	+12 45.9	1.723	2.667	7.6	19.5
12 17	6 5.13	+ 9 13.8	1.880	2.840	5.3	19.9	12 17	6 4.58	+12 39.4	1.706	2.675	4.5	19.3
12 27	5 55.11	+10 40.3	1.858	2.822	5.0	19.8	12 27	5 55.91	+12 42.7	1.716	2.684	4.5	19.3
1 6	5 45.35	+12 18.0	1.868	2.803	7.6	19.9	1 6	5 47.90	+12 55.6	1.754	2.694	7.6	19.5
1 16	5 36.88	+14 2.2	1.906	2.785	11.0	20.1	1 16	5 41.50	+13 16.8	1.818	2.704	11.1	19.7
1 26	5 30.55	+15 48.3	1.970	2.768	14.2	20.3	1 26	5 37.39	+13 44.7	1.905	2.714	14.2	20.0
336671	2009 YS ₂₅		12 21.8 226°91	6.5/22.9	18		320139	2007 ER ₂₁₄		12 21.8 148°73	1.0/21.8	18	
11 17	6 23.82	+ 0 37.8	2.536	3.296	12.5	21.1	11 17	6 25.45	+19 45.3	2.939	3.739	10.1	22.3
11 27	6 18.81	+ 0 30.5	2.454	3.295	10.4	20.9	11 27	6 19.81	+19 43.0	2.861	3.749	7.6	22.1
12 7	6 12.13	+ 0 37.6	2.396	3.293	8.3	20.8	12 7	6 12.64	+19 42.3	2.810	3.758	4.7	21.9
12 17	6 4.31	+ 1 1.0	2.364	3.291	6.8	20.7	12 17	6 4.48	+19 42.9	2.788	3.767	1.8	21.7
12 27	5 56.08	+ 1 41.2	2.360	3.290	6.6	20.7	12 27	5 56.02	+19 44.4	2.797	3.775	1.9	21.7
1 6	5 48.24	+ 2 36.7	2.385	3.288	8.0	20.7	1 6	5 47.99	+19 46.9	2.838	3.783	4.8	22.0
1 16	5 41.51	+ 3 44.6	2.438	3.286	10.1	20.9	1 16	5 41.05	+19 50.5	2.909	3.790	7.6	22.2
1 26	5 36.47	+ 5 1.3	2.515	3.284	12.3	21.0	1 26	5 35.72	+19 55.5	3.005	3.796	10.0	22.3
5362	Johnyoung		12 21.8 38°55	1.9/21.9	18		487435	2014 RD ₂₇		12 21.8 178°58	3.4/21.5	18	
11 17	6 23.44	+16 56.1	2.504	3.312	11.3	17.0	11 17	6 26.78	+13 59.0	2.514	3.310	11.7	21.8
11 27	6 18.60	+16 54.9	2.424	3.314	8.6	16.8	11 27	6 21.00	+13 20.0	2.431	3.311	9.0	21.6
12 7	6 12.02	+16 57.8	2.368	3.315	5.5	16.6	12 7	6 13.47	+12 45.3	2.374	3.312	6.1	21.5
12 17	6 4.27	+17 4.8	2.341	3.317	2.5	16.4	12 17	6 4.77	+12 16.3	2.346	3.313	3.7	21.3
12 27	5 56.13	+17 15.6	2.343	3.319	2.6	16.4	12 27	5 55.70	+11 54.3	2.348	3.313	3.9	21.3
1 6	5 48.43	+17 29.7	2.376	3.320	5.6	16.6	1 6	5 47.12	+11 40.1	2.381	3.313	6.4	21.5
1 16	5 41.91	+17 46.6	2.437	3.322	8.7	16.8	1 16	5 39.77	+11 34.0	2.442	3.312	9.3	21.7
1 26	5 37.17	+18 6.1	2.523	3.324	11.4	17.0	1 26	5 34.25	+11 35.6	2.528	3.310	11.9	21.8
112727	2002 PY ₁₂₀		12 21.8 186°19	2.4/21.9	18		180058	2003 BM ₅₀		12 21.8 258°34	3.8/21.9	18	
11 17	6 27.93	+31 42.2	2.485	3.288	11.6	19.8	11 17	6 26.08	+12 19.6	2.129	2.932	13.3	20.5
11 27	6 22.12	+31 47.0	2.402	3.288	8.9	19.6	11 27	6 20.96	+12 9.1	2.036	2.919	10.4	20.3
12 7	6 14.26	+31 45.9	2.344	3.288	5.8	19.4	12 7	6 13.71	+12 6.7	1.967	2.906	7.1	20.1
12 17	6 5.02	+31 36.9	2.314	3.287	3.0	19.2	12 17	6 4.92	+12 13.3	1.925	2.893	4.3	19.9
12 27	5 55.36	+31 19.0	2.314	3.287	3.0	19.2	12 27	5 55.50	+12 29.2	1.913	2.880	4.3	19.9
1 6	5 46.29	+30 52.9	2.345	3.286	5.9	19.4	1 6	5 46.48	+12 53.8	1.929	2.866	7.2	20.0
1 16	5 38.68	+30 20.8	2.404	3.285	8.9	19.6	1 16	5 38.81	+13 25.8	1.973	2.853	10.2	20.2
1 26	5 33.21	+29 45.8	2.488	3.284	11.6	19.8	1 26	5 33.27	+14 3.6	2.041	2.839	13.8	20.4
198604	2005 AT ₁₈		12 21.8 306°74	0.4/21.8	18		154783	2004 PA ₄₄		12 21.8 112°02	0.1/21.8	05 C	
11 17	6 25.28	+21 44.7	2.132	2.950	12.7	20.3	11 17	6 6.15	+20 33.9	21.664	22.465	1.5	27.2
11 27	6 20.41	+21 53.7	2.045	2.942	9.6	20.1	11 27	6 4.66	+20 33.3	21.590	22.479	1.1	27.2
12 7	6 13.37	+22 4.5	1.981	2.933	6.0	19.9	12 7	6 3.02	+20 32.9	21.544	22.493	0.7	27.1
12 17	6 4.77	+22 16.0	1.944	2.925	2.0	19.6	12 17	6 1.28	+20 32.7	21.528	22.507	0.3	27.1
12 27	5 55.59	+22 27.0	1.938	2.917	2.2	19.6	12 27	5 59.51	+20 32.6	21.543	22.521	0.3	27.1
1 6	5 46.87	+22 36.9	1.960	2.909	6.2	19.9	1 6	5 57.78	+20 32.7	21.590	22.535	0.7	27.2
1 16	5 39.60	+22 46.1	2.010	2.901	9.9	20.1	1 16	5 56.15	+20 33.0	21.667	22.549	1.1	27.2
1 26	5 34.53	+22 55.1	2.084	2.894	13.1	20.3	1 26	5 54.69	+20 33.5	21.772	22.563	1.5	27.3
329436	2002 OC ₂₀		12 21.8 99°30	0.2/21.8	16		74479	1999 CJ ₇₂		12 21.8 323°29	2.7/21.6	18	
11 17	6 35.42	+22 49.4	1.654	2.468	16.0	22.1	11 17	6 23.73	+17 42.5	1.899	2.722	13.8	19.4
11 27	6 28.09	+22 53.0	1.601	2.496	11.9	21.9	11 27	6 19.50	+17 9.9	1.804	2.702	10.6	19.1
12 7	6 18.02	+22 56.9	1.571	2.523	7.3	21.7	12 7	6 12.94	+16 40.0	1.733	2.683	7.0	18.9
12 17	6 6.23	+22 59.1	1.569	2.549	2.4	21.5	12 17	6 4.69	+16 13.9	1.688	2.664	3.4	18.6
12 27	5 54.15	+22 58.5	1.595	2.575	2.6	21.5	12 27	5 55.77	+15 53.0	1.672	2.646	3.7	18.6
1 6	5 43.19	+22 55.4	1.651	2.599	7.2	21.9	1 6	5 47.30	+15 38.5	1.683	2.628	7.4	18.8
1 16	5 34.48	+22 51.4	1.734	2.623	11.4	22.2	1 16	5 40.34	+15 31.2	1.721	2.611	11.3	19.0
1 26	5 28.73	+22 48.2	1.841	2.646	14.7	22.5	1 26	5 35.73	+15 31.3	1.782	2.595	14.8	19.2
154733	2004 NJ ₁₂		12 21.8 137°81	1.1/21.8	18		313949	2004 RJ ₁₈₀		12 21.8 182°20	1.7/21.9	18	
11 17	6 32.76	+25 57.1	1.975	2.784	13.9	20.9	11 17	6 28.77	+29 37.5	2.664	3.463	11.0	21.4
11 27	6 26.01	+26 11.4	1.905	2.797	10.5	20.7	11 27	6 22.60	+29 42.9	2.578	3.464	8.3	21.2
12 7	6 16.77	+26 23.7	1.859	2.809	6.5	20.5	12 7	6 14.51	+29 44.0	2.519	3.464	5.4	21.0
12 17	6 5.87	+26 31.6	1.841	2.821	2.4	20.2	12 17	6 5.13	+29 39.0	2.488	3.464	2.4	20.8
12 27	5 54.49	+26 33.4	1.853	2.831	2.5	20.3	12 27	5 55.35	+29 26.9	2.488	3.463	2.5	20.8
1 6	5 43.92	+26 29.2	1.896	2.842	6.6	20.6	1 6	5 46.09	+29 8.2	2.519	3.462	5.4	21.0
1 16	5 35.20	+26 20.7	1.966	2.851	10.4	20.8	1 16	5 38.18	+28 44.7	2.580	3.460	8.4	21.2
1 26	5 29.11	+26 10.4	2.060	2.860	13.6	21.0	1 26	5 32.26	+28 18.9	2.666	3.458	11.1	21.4
156095	2001 SE ₂₁₃		12 21.8 355°31	0.9/21.8	18 R		297224	2011 OK ₃₁		12 21.8 179°17	1.2/21.8	18	
11 17	6 27.36	+24 7.1	1.243	2.089	18.3	19.9	11 17	6 31.46	+25 57.4	2.025	2.835	13.6	21.6
11 27	6 23.33	+24 27.0	1.174	2.085	13.9	19.6	11 27	6 25.15	+26 14.8	1.944	2.837	10.3	21.4
12 7	6 15.79	+24 48.3	1.125	2.082	8.7	19.3	12 7	6 16.34	+26 30.8	1.888	2.838	6.4	21.1
12 17	6 5.68	+25 7.8	1.099	2.080	3.0	19.0	12 17	6 5.79	+26 42.7	1.859	2.839	2.4	20.9
12 27	5 54.64	+25 22.5	1.100	2.079	3.3	19.0	12 27	5 54.63	+26 48.6	1.860	2.838	2.6	20.9
1 6	5 44.53	+25 31.3	1.125	2.079	8.9	19.3	1 6	5 44.11	+26 48.3	1.892	2.838	6.6	21.1
1 16	5 36.97	+25 35.5	1.174	2.080	14.1	19.6	1 16	5 35.35	+26 43.2	1.951	2.837	10.4	21.4
1 26	5 33.01	+25 37.5	1.243	2.081	18.5	19.9	1 26	5 29.14	+26 35.6	2.034	2.835	13.7	21.6
486918	2014 LC ₂₈		12 21.8 147°22	3.3/20.9	18		517341	2014 JV ₆₅		12 21.8 179°80	1.5/21.9	18	
11 17	6 36.10	+28 13.4	2.211										

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
193760	2001 KY ₇₃		12 21.8 138°99	2°8/21.8 18			271755	2004 RA ₃₄₆		12 21.8 134°68	18°7/22.7 17		
11 17	6 24.42	+13 27.9	2.917	3.710	10.3	20.8	11 17	6 56.90	+58 0.5	1.193	1.945	24.3	20.6
11 27	6 19.00	+13 5.4	2.843	3.721	7.9	20.7	11 27	6 49.90	+60 17.8	1.146	1.949	22.1	20.4
12 7	6 12.13	+12 47.5	2.794	3.732	5.4	20.5	12 7	6 34.58	+62 4.7	1.114	1.953	20.1	20.3
12 17	6 4.33	+12 35.1	2.775	3.742	3.2	20.4	12 17	6 12.34	+62 59.9	1.099	1.957	18.9	20.2
12 27	5 56.26	+12 28.8	2.787	3.752	3.3	20.4	12 27	5 47.73	+62 48.3	1.102	1.961	18.8	20.2
1 6	5 48.63	+12 28.6	2.829	3.762	5.5	20.6	1 6	5 26.49	+61 32.2	1.125	1.964	19.9	20.3
1 16	5 42.05	+12 34.4	2.900	3.771	7.9	20.8	1 16	5 12.47	+59 28.1	1.165	1.967	21.7	20.5
1 26	5 37.00	+12 45.5	2.997	3.780	10.2	20.9	1 26	5 6.69	+56 57.9	1.221	1.970	23.8	20.6
448291	2009 BV ₁₃		12 21.8 356°11	8°9/23.5 17			12428	1995 WJ ₅		12 21.8 169°10	0°6/21.8 18		
11 17	6 27.58	+42 22.3	1.072	1.910	21.1	19.2	11 17	6 29.99	+23 8.3	1.973	2.787	13.8	17.3
11 27	6 24.59	+42 30.1	1.007	1.902	17.3	18.9	11 27	6 23.95	+22 45.2	1.894	2.789	10.4	17.1
12 7	6 16.99	+42 13.4	0.960	1.895	13.2	18.7	12 7	6 15.55	+22 20.7	1.840	2.791	6.5	16.8
12 17	6 6.13	+41 23.8	0.933	1.891	9.7	18.5	12 17	6 5.54	+21 54.5	1.812	2.793	2.2	16.6
12 27	5 54.37	+39 58.6	0.928	1.888	9.1	18.4	12 27	5 55.05	+21 27.1	1.815	2.794	2.4	16.6
1 6	5 44.28	+38 3.9	0.946	1.888	12.1	18.6	1 6	5 45.27	+20 59.9	1.848	2.795	6.6	16.9
1 16	5 37.74	+35 52.6	0.986	1.890	16.3	18.8	1 16	5 37.23	+20 34.7	1.908	2.796	10.5	17.1
1 26	5 35.70	+33 38.8	1.045	1.894	20.4	19.1	1 26	5 31.66	+20 13.6	1.992	2.796	13.8	17.3
150787	2001 RZ ₂₁		12 21.8 235°17	3°3/21.9 18			479373	2013 XL ₂₀		12 21.8 359°86	1°2/21.7 18		
11 17	6 32.89	+31 14.1	1.655	2.473	15.8	20.0	11 17	6 26.88	+23 30.3	1.117	1.971	19.4	20.6
11 27	6 26.93	+31 32.1	1.574	2.467	12.2	19.8	11 27	6 23.32	+24 7.5	1.053	1.968	14.7	20.3
12 7	6 17.78	+31 43.6	1.515	2.462	8.1	19.5	12 7	6 15.99	+24 48.7	1.007	1.966	9.2	20.0
12 17	6 6.33	+31 44.3	1.482	2.456	4.1	19.3	12 17	6 5.86	+25 29.4	0.985	1.966	3.2	19.7
12 27	5 54.06	+31 31.3	1.477	2.450	4.2	19.3	12 27	5 54.67	+26 4.8	0.986	1.966	3.5	19.7
1 6	5 42.63	+31 5.3	1.500	2.444	8.2	19.5	1 6	5 44.49	+26 32.3	1.013	1.968	9.5	20.0
1 16	5 33.47	+30 30.1	1.549	2.438	12.4	19.7	1 16	5 37.06	+26 52.1	1.062	1.971	14.9	20.3
1 26	5 27.56	+29 51.0	1.620	2.431	16.2	20.0	1 26	5 33.53	+27 6.5	1.130	1.975	19.5	20.6
346895	2009 SN ₃₈		12 21.8 171°75	0°9/21.8 18			79540	1998 QW ₃₆		12 21.8 70°86	1°0/21.9 18		
11 17	6 32.69	+25 23.6	1.712	2.529	15.3	21.4	11 17	6 33.20	+26 48.8	1.398	2.228	17.5	18.8
11 27	6 26.43	+25 31.9	1.635	2.532	11.6	21.2	11 27	6 27.07	+26 37.7	1.340	2.243	13.2	18.6
12 7	6 17.29	+25 38.7	1.582	2.534	7.3	20.9	12 7	6 17.72	+26 22.3	1.304	2.258	8.2	18.3
12 17	6 6.14	+25 41.3	1.556	2.536	2.5	20.7	12 17	6 6.27	+26 0.5	1.293	2.273	2.9	18.0
12 27	5 54.31	+25 38.2	1.558	2.537	2.7	20.7	12 27	5 54.36	+25 32.1	1.309	2.288	3.0	18.1
1 6	5 43.29	+25 29.6	1.589	2.538	7.4	21.0	1 6	5 43.70	+24 59.3	1.353	2.304	8.1	18.4
1 16	5 34.36	+25 17.5	1.647	2.538	11.7	21.2	1 16	5 35.60	+24 25.7	1.422	2.319	12.7	18.7
1 26	5 28.40	+25 4.6	1.728	2.538	15.4	21.5	1 26	5 30.87	+23 55.1	1.513	2.334	16.6	19.0
29482	1997 VM ₃		12 21.8 284°42	0°8/21.7 18			342615	2008 UN ₃₃₆		12 21.8 89°43	0°4/21.8 18		
11 17	6 28.06	+23 56.6	1.911	2.730	13.9	17.8	11 17	6 26.55	+24 27.2	2.432	3.242	11.6	21.4
11 27	6 22.82	+24 26.0	1.827	2.725	10.5	17.6	11 27	6 20.96	+24 36.7	2.365	3.258	8.7	21.2
12 7	6 15.03	+24 57.0	1.766	2.719	6.6	17.3	12 7	6 13.50	+24 45.6	2.322	3.273	5.4	21.0
12 17	6 5.41	+25 26.6	1.733	2.713	2.3	17.0	12 17	6 4.84	+24 52.3	2.308	3.289	1.8	20.8
12 27	5 55.05	+25 52.3	1.729	2.708	2.5	17.0	12 27	5 55.84	+24 56.0	2.325	3.304	1.9	20.9
1 6	5 45.24	+26 12.8	1.754	2.702	6.8	17.3	1 6	5 47.43	+24 56.7	2.372	3.319	5.4	21.1
1 16	5 37.13	+26 28.3	1.806	2.697	10.8	17.5	1 16	5 40.41	+24 55.1	2.447	3.334	8.6	21.3
1 26	5 31.59	+26 40.1	1.881	2.691	14.3	17.7	1 26	5 35.37	+24 52.5	2.548	3.349	11.2	21.6
181383	2006 SN ₄₃		12 21.8 1°59	6°8/22.3 17			424372	2007 VT ₂₆₈		12 21.8 65°60	4°6/21.9 18		
11 17	6 31.05	+38 57.5	1.521	2.337	17.0	20.1	11 17	6 31.88	+14 17.8	1.190	2.023	19.8	20.4
11 27	6 25.97	+39 30.9	1.451	2.336	13.7	19.8	11 27	6 26.21	+13 50.6	1.141	2.042	15.2	20.2
12 7	6 17.33	+39 50.6	1.403	2.335	10.1	19.6	12 7	6 17.24	+13 34.3	1.112	2.061	10.1	20.0
12 17	6 6.19	+39 50.0	1.378	2.335	7.3	19.5	12 17	6 6.12	+13 30.3	1.107	2.080	5.5	19.8
12 27	5 54.28	+39 25.2	1.379	2.336	7.2	19.5	12 27	5 54.54	+13 38.8	1.127	2.099	5.5	19.8
1 6	5 43.50	+38 38.2	1.405	2.338	9.9	19.6	1 6	5 44.24	+13 58.7	1.173	2.119	9.8	20.1
1 16	5 35.40	+37 34.8	1.457	2.340	13.5	19.8	1 16	5 36.56	+14 27.9	1.243	2.138	14.4	20.4
1 26	5 30.93	+36 23.4	1.530	2.343	16.8	20.1	1 26	5 32.33	+15 4.0	1.333	2.157	18.3	20.7
522108	2016 AJ ₂₃₈		12 21.8 332°74	5°7/21.2 17			102921	1999 XH ₂₇		12 21.8 345°60	4°2/21.1 18		
11 17	6 28.67	+35 20.8	1.831	2.645	14.7	20.8	11 17	6 31.50	+29 10.5	1.626	2.449	15.8	18.9
11 27	6 23.83	+36 30.7	1.749	2.634	11.6	20.6	11 27	6 26.11	+30 35.3	1.550	2.447	12.2	18.6
12 7	6 15.96	+37 34.9	1.689	2.624	8.4	20.4	12 7	6 17.46	+32 0.3	1.497	2.445	8.1	18.4
12 17	6 5.78	+38 26.6	1.655	2.615	6.0	20.3	12 17	6 6.34	+33 18.2	1.471	2.443	4.6	18.2
12 27	5 54.61	+39 0.5	1.649	2.606	6.3	20.3	12 27	5 54.13	+34 22.0	1.473	2.441	5.1	18.2
1 6	5 44.01	+39 14.5	1.670	2.597	9.0	20.4	1 6	5 42.56	+35 8.0	1.502	2.440	8.8	18.4
1 16	5 35.43	+39 10.6	1.716	2.590	12.3	20.6	1 16	5 33.16	+35 36.6	1.557	2.439	12.8	18.7
1 26	5 29.93	+38 53.5	1.785	2.582	15.4	20.8	1 26	5 27.06	+35 51.7	1.635	2.438	16.4	18.9
31455	1999 CU ₁₄		12 21.8 75°76	2°5/21.9 18			27989	1997 VG ₄		12 21.8 319°35	0°8/21.8 18		
11 17	6 26.95	+16 39.0	1.892	2.708	14.2	18.3	11 17	6 24.35	+21 1.3	2.033	2.855	13.1	18.1
11 27	6 21.69	+16 27.8	1.821	2.715	10.8	18.0	11 27	6 19.89	+21 2.0	1.940	2.839	10.0	17.9
12 7	6 14.14	+16 21.9	1.773	2.721	7.0	17.8	12 7	6 13.17	+21 4.7	1.871	2.824	6.2	17.6
12 17	6 5.06	+16 21.6	1.752	2.728	3.3	17.6	12 17	6 4.82	+21 8.9	1.829	2.810	2.2	17.3
12 27	5 55.51	+16 26.7	1.761	2.735	3.4	17.6	12 27	5 55.81	+21 13.7	1.816	2.795	2.4	17.3
1 6	5 46.63	+16 37.0	1.797	2.742	7.0	17.9	1 6	5 47.24	+21 18.9	1.832	2.781	6.5	17.5
1 16	5 39.39	+16 52.0	1.861	2.749	10.7	18.1	1 16	5 40.12	+21 24.8	1.875	2.768	10.4	17.7
1 26	5 34.52	+17 11.1	1.948	2.756	13.9	18.3	1 26	5 35.28	+21 32.0	1.941	2.755	13.8	17.9
51052	2000 GP ₁₃₇		12 21.8 273°13	6°6/22.2 18			136166	2003 UH ₇₃		12 21.8 255°83	1°6/21.8 18		
11 17	6 23.44	+ 1 55.0											

EPHEMERIDES

12 21.8

12 21.8

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
356379	2010 <i>OW</i> ₄	12 21.8 170°41'		3°2'/21.9 18			181653	2007 <i>VM</i> ₉₉	12 21.8 151°37'		1°1'/21.7 18		
11 17	6 26.84	+12 21.5	2.660	3.450	11.3	22.3	11 17	6 30.07	+22 49.3	1.875	2.692	14.3	19.9
11 27	6 21.00	+12 6.4	2.579	3.454	8.7	22.1	11 27	6 24.11	+22 8.4	1.797	2.693	10.8	19.7
12 7	6 13.49	+11 57.3	2.523	3.458	6.0	22.0	12 7	6 15.71	+21 25.4	1.743	2.695	6.7	19.5
12 17	6 4.86	+11 55.1	2.496	3.462	3.7	21.8	12 17	6 5.67	+20 40.7	1.717	2.697	2.4	19.2
12 27	5 55.87	+12 0.0	2.499	3.464	3.7	21.8	12 27	5 55.16	+19 56.0	1.720	2.698	2.7	19.2
1 6	5 47.31	+12 11.8	2.534	3.466	6.0	22.0	1 6	5 45.43	+19 13.6	1.752	2.699	7.0	19.5
1 16	5 39.90	+12 29.8	2.597	3.468	8.8	22.2	1 16	5 37.50	+18 36.0	1.812	2.701	11.0	19.7
1 26	5 34.23	+12 53.2	2.686	3.468	11.2	22.3	1 26	5 32.14	+18 5.3	1.896	2.702	14.4	20.0
458566	2011 <i>EY</i> ₆₀	12 21.8 182°50'		1°3'/21.9 18			32737	1978 <i>UZ</i> ₆	12 21.8 79°70'		5°3'/21.6 18		
11 17	6 25.17	+17 54.6	2.627	3.431	11.0	21.6	11 17	6 31.56	+12 34.8	1.562	2.374	16.8	19.7
11 27	6 19.90	+18 7.9	2.543	3.431	8.3	21.4	11 27	6 25.21	+11 37.6	1.512	2.399	13.0	19.6
12 7	6 12.89	+18 25.2	2.483	3.431	5.3	21.2	12 7	6 16.30	+10 49.4	1.485	2.423	9.0	19.4
12 17	6 4.69	+18 45.6	2.453	3.431	2.2	21.0	12 17	6 5.82	+10 13.1	1.483	2.448	5.8	19.3
12 27	5 56.05	+19 8.3	2.454	3.431	2.2	21.0	12 27	5 55.08	+9 51.1	1.509	2.471	5.9	19.3
1 6	5 47.81	+19 32.4	2.485	3.430	5.3	21.2	1 6	5 45.39	+9 43.7	1.562	2.495	9.0	19.6
1 16	5 40.71	+19 57.2	2.545	3.429	8.4	21.4	1 16	5 37.79	+9 50.0	1.641	2.518	12.6	19.8
1 26	5 35.38	+20 22.6	2.631	3.428	11.0	21.6	1 26	5 32.95	+10 7.8	1.742	2.541	15.7	20.1
348680	2006 <i>BO</i> ₇₅	12 21.8 169°05'		1°0'/21.8 18			443044	2013 <i>EX</i> ₁₀₂	12 21.8 348°77'		5°0'/22.4 17		
11 17	6 31.47	+25 28.3	2.072	2.881	13.4	21.6	11 17	6 19.29	+12 36.4	1.073	1.930	19.7	20.2
11 27	6 25.10	+25 45.5	1.993	2.885	10.1	21.3	11 27	6 17.58	+12 36.5	0.999	1.913	15.5	19.9
12 7	6 16.31	+26 1.6	1.938	2.889	6.3	21.1	12 7	6 12.50	+12 53.3	0.945	1.898	10.6	19.5
12 17	6 5.85	+26 14.2	1.912	2.891	2.3	20.9	12 17	6 4.82	+13 28.9	0.911	1.885	6.0	19.2
12 27	5 54.82	+26 21.3	1.915	2.894	2.4	20.9	12 27	5 56.00	+14 22.5	0.900	1.875	5.8	19.2
1 6	5 44.43	+26 22.9	1.949	2.895	6.4	21.2	1 6	5 47.89	+15 30.3	0.913	1.867	10.4	19.4
1 16	5 35.75	+26 19.9	2.011	2.897	10.2	21.4	1 16	5 42.12	+16 46.9	0.946	1.861	15.7	19.7
1 26	5 29.57	+26 14.7	2.097	2.897	13.4	21.6	1 26	5 39.93	+18 6.9	0.999	1.858	20.4	20.0
267884	2003 <i>YH</i> ₆₉	12 21.8 296°88'		10°3'/23.9 18			370415	2002 <i>TS</i> ₃₇₇	12 21.8 284°25'		4°3'/21.8 18		
11 17	6 30.24	- 2 7.7	1.448	2.225	19.6	20.1	11 17	6 28.81	+35 52.5	2.358	3.156	12.3	21.2
11 27	6 25.27	- 2 3.5	1.351	2.200	16.8	19.9	11 27	6 23.15	+36 29.0	2.277	3.155	9.6	21.0
12 7	6 17.08	- 1 29.7	1.273	2.176	13.6	19.6	12 7	6 15.16	+36 58.2	2.221	3.154	6.9	20.8
12 17	6 6.30	- 0 20.4	1.217	2.151	11.0	19.4	12 17	6 5.53	+37 16.1	2.192	3.153	4.6	20.7
12 27	5 54.16	+ 1 26.2	1.186	2.126	10.4	19.3	12 27	5 55.32	+37 20.1	2.193	3.152	4.7	20.7
1 6	5 42.27	+ 3 45.4	1.182	2.102	12.7	19.3	1 6	5 45.71	+37 10.1	2.222	3.151	7.0	20.8
1 16	5 32.22	+ 6 27.7	1.203	2.078	16.4	19.5	1 16	5 37.71	+36 48.3	2.279	3.150	9.8	21.0
1 26	5 25.31	+ 9 21.3	1.247	2.054	20.3	19.7	1 26	5 32.10	+36 18.6	2.360	3.149	12.4	21.2
46932	1998 <i>SZ</i> ₆₀	12 21.8 129°96'		2°5'/21.9 18			101094	1998 <i>RJ</i> ₃₆	12 21.8 97°63'		0°2'/21.8 18		
11 17	6 29.00	+15 58.3	2.181	2.984	13.0	20.6	11 17	6 31.54	+23 3.9	1.977	2.788	13.8	20.5
11 27	6 22.89	+15 48.7	2.112	2.998	9.9	20.5	11 27	6 24.94	+23 0.4	1.918	2.812	10.4	20.3
12 7	6 14.75	+15 44.2	2.067	3.012	6.4	20.3	12 7	6 16.06	+22 56.7	1.884	2.835	6.4	20.1
12 17	6 5.30	+15 44.8	2.051	3.025	3.2	20.1	12 17	6 5.76	+22 51.6	1.877	2.858	2.1	19.9
12 27	5 55.47	+15 50.4	2.065	3.038	3.2	20.1	12 27	5 55.16	+22 44.6	1.901	2.880	2.2	19.9
1 6	5 46.28	+16 0.7	2.108	3.050	6.4	20.3	1 6	5 45.43	+22 36.1	1.954	2.902	6.3	20.3
1 16	5 38.59	+16 15.2	2.180	3.061	9.7	20.6	1 16	5 37.50	+22 27.5	2.035	2.923	10.0	20.5
1 26	5 33.04	+16 33.5	2.277	3.072	12.6	20.8	1 26	5 32.04	+22 20.2	2.141	2.944	13.0	20.8
259881	2004 <i>DJ</i> ₂₃	12 21.8 221°18'		4°9'/21.9 18			164876	1999 <i>UB</i> ₄₉	12 21.8 3°75'		9°9'/21.2 18		
11 17	6 26.18	+ 8 3.9	2.478	3.261	12.2	21.0	11 17	6 34.79	+43 30.7	1.538	2.338	17.6	19.8
11 27	6 20.72	+ 7 38.2	2.386	3.252	9.7	20.8	11 27	6 29.42	+45 4.3	1.473	2.337	14.7	19.6
12 7	6 13.45	+ 7 21.3	2.318	3.241	7.2	20.6	12 7	6 19.92	+46 23.5	1.428	2.337	11.9	19.4
12 17	6 4.90	+ 7 15.2	2.278	3.231	5.2	20.5	12 17	6 7.28	+47 17.6	1.407	2.338	10.1	19.3
12 27	5 55.86	+ 7 20.7	2.267	3.219	5.2	20.4	12 27	5 53.42	+47 39.1	1.411	2.339	10.3	19.3
1 6	5 47.17	+ 7 37.9	2.286	3.207	7.3	20.6	1 6	5 40.65	+47 27.0	1.439	2.340	12.3	19.5
1 16	5 39.65	+ 8 5.6	2.333	3.195	10.0	20.7	1 16	5 30.90	+46 47.0	1.490	2.342	15.1	19.7
1 26	5 33.93	+ 8 41.9	2.405	3.182	12.5	20.9	1 26	5 25.39	+45 48.9	1.561	2.345	17.9	19.8
361402	2006 <i>WQ</i> ₃₇	12 21.8 198°76'		2°5'/21.8 18			332708	2009 <i>SE</i> ₃₅	12 21.8 318°97'		3°1'/21.7 18		
11 17	6 27.00	+16 28.2	2.158	2.966	12.9	21.5	11 17	6 27.26	+18 44.8	1.289	2.130	18.0	20.6
11 27	6 21.58	+16 15.0	2.075	2.964	9.9	21.3	11 27	6 23.19	+18 8.5	1.208	2.116	13.9	20.3
12 7	6 14.07	+16 6.4	2.016	2.962	6.4	21.1	12 7	6 15.78	+17 35.1	1.147	2.102	9.0	20.0
12 17	6 5.12	+16 2.6	1.985	2.960	3.2	20.9	12 17	6 5.86	+17 5.9	1.110	2.088	4.2	19.7
12 27	5 55.66	+16 3.9	1.983	2.957	3.2	20.9	12 27	5 54.93	+16 43.0	1.099	2.075	4.4	19.7
1 6	5 46.72	+16 10.1	2.012	2.954	6.6	21.1	1 6	5 44.73	+16 27.9	1.112	2.063	9.6	19.9
1 16	5 39.20	+16 21.1	2.068	2.951	10.0	21.3	1 16	5 36.84	+16 22.0	1.150	2.051	14.7	20.2
1 26	5 33.82	+16 36.5	2.148	2.948	13.1	21.5	1 26	5 32.35	+16 25.6	1.207	2.040	19.2	20.4
520826	2014 <i>UH</i> ₂₁₆	12 21.8 70°95'		1°8'/22.1 18			231839	2000 <i>QX</i> ₁₆₄	12 21.8 99°45'		0°1'/21.8 18		
11 17	6 27.90	+15 30.4	2.204	3.008	12.8	21.0	11 17	6 33.20	+24 30.2	1.765	2.580	15.1	20.7
11 27	6 22.03	+16 0.3	2.145	3.033	9.7	20.8	11 27	6 26.43	+24 17.6	1.705	2.601	11.3	20.5
12 7	6 14.21	+16 36.9	2.111	3.057	6.2	20.6	12 7	6 17.09	+24 3.2	1.669	2.621	7.0	20.3
12 17	6 5.14	+17 18.6	2.105	3.082	2.7	20.4	12 17	6 6.11	+23 45.7	1.661	2.641	2.3	20.1
12 27	5 55.73	+18 3.4	2.130	3.106	2.6	20.5	12 27	5 54.81	+23 25.0	1.681	2.661	2.4	20.1
1 6	5 46.95	+18 49.4	2.185	3.131	5.9	20.7	1 6	5 44.51	+23 2.6	1.731	2.680	6.9	20.4
1 16	5 39.64	+19 35.0	2.269	3.155	9.2	21.0	1 16	5 36.29	+22 40.6	1.809	2.698	10.9	20.7
1 26	5 34.41	+20 19.3	2.378	3.179	12.0	21.2	1 26	5 30.83	+22 21.2	1.910	2.716	14.2	21.0
32537	2001 <i>PH</i> ₄₃	12 21.8 135°17'		3°1'/21.8 18			229239	2004 <i>XY</i> ₈₄	12 21.8 16°44'		1°5'/21.9 17		
11 17	6 30.81	+16 6.6											

EPHEMERIDES

12 21.8

12 21.9

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
431456	2007 <i>RX</i> ₂₃₂		12 21.8	54°12'	1°1/21.9	18	487482	2014 <i>SS</i> ₂₁₈		12 21.8	202°81'	4°5/22.1	18
11 17	6 32.89	+20 54.0	1.073	1.919	20.5	20.6	11 17	6 23.91	+8 52.4	2.475	3.266	12.0	21.2
11 27	6 27.40	+20 56.9	1.029	1.939	15.4	20.3	11 27	6 19.02	+8 34.1	2.394	3.265	9.5	21.0
12 7	6 18.20	+21 4.1	1.003	1.960	9.6	20.1	12 7	6 12.41	+8 24.8	2.336	3.264	6.9	20.8
12 17	6 6.55	+21 13.4	1.000	1.981	3.3	19.8	12 17	6 4.63	+8 25.7	2.306	3.262	4.8	20.7
12 27	5 54.40	+21 23.1	1.022	2.002	3.4	19.9	12 27	5 56.45	+8 37.4	2.305	3.261	4.8	20.7
1 6	5 43.76	+21 32.4	1.070	2.024	9.3	20.3	1 6	5 48.67	+8 59.6	2.333	3.260	6.8	20.8
1 16	5 36.11	+21 42.3	1.141	2.046	14.5	20.7	1 16	5 42.05	+9 30.8	2.389	3.258	9.5	21.0
1 26	5 32.29	+21 53.5	1.231	2.068	18.7	21.0	1 26	5 37.17	+10 9.1	2.470	3.256	12.0	21.2
313693	2003 <i>TZ</i> ₁₁		12 21.8	90°84'	13°1/21.8	18	313247	2001 <i>UO</i> ₁₃₈		12 21.9	55°30'	0°4/21.8	17
11 17	6 54.63	+57 25.3	1.969	2.676	17.3	20.8	11 17	6 29.66	+24 10.7	1.664	2.489	15.4	21.0
11 27	6 45.25	+59 38.5	1.933	2.703	15.5	20.7	11 27	6 23.99	+24 19.5	1.610	2.510	11.5	20.8
12 7	6 30.23	+61 27.6	1.918	2.729	14.0	20.7	12 7	6 15.70	+24 27.9	1.578	2.531	7.1	20.6
12 17	6 10.81	+62 40.1	1.925	2.755	13.2	20.7	12 17	6 5.73	+24 33.8	1.572	2.553	2.4	20.4
12 27	5 49.73	+63 8.1	1.956	2.781	13.2	20.7	12 27	5 55.37	+24 36.0	1.595	2.574	2.5	20.4
1 6	5 30.39	+62 52.8	2.010	2.806	14.0	20.9	1 6	5 45.98	+24 34.5	1.646	2.596	7.0	20.8
1 16	5 15.49	+62 3.1	2.085	2.830	15.2	21.0	1 16	5 38.65	+24 30.8	1.723	2.618	11.0	21.1
1 26	5 6.35	+60 51.5	2.178	2.854	16.5	21.2	1 26	5 34.08	+24 26.7	1.824	2.640	14.4	21.3
7082	La Serena		12 21.8	137°58'	4°8/22.3	18	44865	1999 <i>UO</i> ₂₃		12 21.9	305°16'	7°0/21.0	18
11 17	6 24.42	+6 7.1	2.659	3.436	11.6	18.0	11 17	6 26.75	+9 57.6	1.625	2.438	16.3	18.5
11 27	6 19.20	+5 55.3	2.584	3.444	9.3	17.9	11 27	6 22.02	+8 39.8	1.543	2.427	13.0	18.2
12 7	6 12.41	+5 53.7	2.534	3.452	6.9	17.7	12 7	6 14.68	+7 29.8	1.484	2.416	9.7	18.0
12 17	6 4.58	+6 3.6	2.512	3.459	5.1	17.6	12 17	6 5.47	+6 32.6	1.450	2.405	7.2	17.8
12 27	5 56.42	+6 25.3	2.519	3.467	5.1	17.6	12 27	5 55.55	+5 52.7	1.442	2.394	7.6	17.8
1 6	5 48.68	+6 57.8	2.555	3.474	6.8	17.7	1 6	5 46.24	+5 32.6	1.461	2.384	10.4	18.0
1 16	5 42.03	+7 39.4	2.620	3.480	9.1	17.9	1 16	5 38.70	+5 32.1	1.504	2.374	14.0	18.2
1 26	5 37.02	+8 27.8	2.710	3.487	11.3	18.1	1 26	5 33.80	+5 49.0	1.568	2.364	17.3	18.4
91601	1999 <i>TA</i> ₁₇		12 21.8	19°05'	1°4/21.9	18	195638	2002 <i>NT</i> ₁₆		12 21.9	91°75'	4°3/21.3	18
11 17	6 25.16	+19 53.0	1.584	2.417	15.6	18.9	11 17	6 26.81	+11 49.6	2.470	3.262	12.0	20.0
11 27	6 20.81	+19 52.0	1.520	2.425	11.8	18.7	11 27	6 20.95	+10 48.5	2.408	3.282	9.3	19.8
12 7	6 13.85	+19 54.9	1.478	2.433	7.4	18.4	12 7	6 13.45	+9 53.0	2.371	3.302	6.6	19.7
12 17	6 5.12	+20 0.8	1.462	2.442	2.8	18.2	12 17	6 4.94	+9 5.7	2.362	3.321	4.6	19.6
12 27	5 55.86	+20 9.1	1.473	2.452	2.9	18.2	12 27	5 56.21	+8 28.5	2.384	3.340	4.7	19.6
1 6	5 47.40	+20 19.2	1.511	2.463	7.4	18.5	1 6	5 48.09	+8 2.5	2.437	3.359	6.8	19.8
1 16	5 40.86	+20 31.1	1.575	2.474	11.6	18.8	1 16	5 41.26	+7 47.9	2.517	3.377	9.4	20.0
1 26	5 37.03	+20 44.9	1.661	2.487	15.2	19.0	1 26	5 36.24	+7 43.7	2.621	3.396	11.7	20.2
218485	2004 <i>TN</i> ₁₃		12 21.8	238°90'	17°1/18.9	18	262476	2006 <i>UM</i> ₁₇₅		12 21.9	34°42'	0°7/21.9	18
11 17	6 31.25	-4 11.6	1.165	1.951	22.9	20.0	11 17	6 30.06	+20 38.8	1.232	2.073	18.7	20.2
11 27	6 26.11	-7 4.2	1.109	1.948	20.4	19.8	11 27	6 25.26	+20 56.4	1.170	2.079	14.2	19.9
12 7	6 17.53	-9 33.4	1.070	1.944	18.2	19.6	12 7	6 17.00	+21 19.3	1.129	2.085	8.9	19.7
12 17	6 6.43	-11 24.5	1.052	1.940	17.1	19.6	12 17	6 6.28	+21 44.9	1.111	2.092	3.0	19.3
12 27	5 54.43	-12 26.2	1.055	1.936	17.6	19.6	12 27	5 54.76	+22 10.6	1.120	2.100	3.1	19.4
1 6	5 43.33	-12 35.5	1.077	1.931	19.4	19.7	1 6	5 44.29	+22 34.4	1.154	2.107	8.8	19.7
1 16	5 34.69	-11 57.1	1.117	1.927	21.9	19.8	1 16	5 36.40	+22 56.3	1.212	2.116	13.9	20.0
1 26	5 29.58	-10 41.5	1.171	1.922	24.5	20.0	1 26	5 32.07	+23 16.9	1.291	2.125	18.2	20.3
79716	1998 <i>SR</i> ₁₀₈		12 21.8	84°25'	0°9/21.8	18	370640	2003 <i>YR</i> ₁₇₆		12 21.9	150°51'	1°3/21.8	17
11 17	6 32.97	+21 58.0	1.493	2.317	16.9	19.3	11 17	6 27.07	+26 35.1	2.731	3.534	10.7	21.2
11 27	6 26.64	+21 44.2	1.437	2.337	12.7	19.1	11 27	6 21.37	+27 2.8	2.652	3.540	8.0	21.0
12 7	6 17.40	+21 31.3	1.403	2.356	7.9	18.9	12 7	6 13.87	+27 29.1	2.598	3.546	5.1	20.8
12 17	6 6.27	+21 18.4	1.395	2.375	2.7	18.6	12 17	6 5.14	+27 52.1	2.574	3.552	2.0	20.6
12 27	5 54.74	+21 5.4	1.415	2.394	2.9	18.6	12 27	5 55.98	+28 10.1	2.580	3.557	2.2	20.7
1 6	5 44.33	+20 53.2	1.463	2.412	7.8	19.0	1 6	5 47.27	+28 22.4	2.618	3.562	5.2	20.9
1 16	5 36.25	+20 43.4	1.537	2.431	12.2	19.3	1 16	5 39.79	+28 29.6	2.685	3.567	8.1	21.1
1 26	5 31.25	+20 37.3	1.633	2.449	15.8	19.6	1 26	5 34.15	+28 33.0	2.778	3.571	10.6	21.3
87106	2000 <i>LZ</i> ₁₈		12 21.8	157°13'	2°7/21.8	18	493159	2014 <i>TY</i> ₇₂		12 21.9	104°82'	0°3/21.9	18
11 17	6 30.65	+16 28.3	2.116	2.918	13.4	20.5	11 17	6 26.82	+21 57.2	2.435	3.243	11.6	21.2
11 27	6 24.24	+16 4.4	2.041	2.926	10.2	20.3	11 27	6 21.20	+22 3.5	2.365	3.257	8.7	21.0
12 7	6 15.69	+15 44.4	1.990	2.934	6.7	20.1	12 7	6 13.75	+22 10.8	2.320	3.271	5.4	20.8
12 17	6 5.70	+15 29.1	1.967	2.941	3.3	19.9	12 17	6 5.08	+22 18.0	2.304	3.284	1.8	20.6
12 27	5 55.29	+15 19.0	1.975	2.947	3.5	20.0	12 27	5 56.07	+22 24.3	2.319	3.298	1.9	20.6
1 6	5 45.52	+15 14.6	2.013	2.953	6.8	20.2	1 6	5 47.63	+22 29.5	2.364	3.311	5.4	20.9
1 16	5 37.32	+15 15.9	2.078	2.958	10.2	20.4	1 16	5 40.53	+22 34.0	2.437	3.324	8.6	21.1
1 26	5 31.37	+15 22.9	2.169	2.962	13.2	20.6	1 26	5 35.38	+22 38.5	2.536	3.337	11.3	21.3
274011	2007 <i>PA</i> ₅₀		12 21.8	158°63'	4°7/22.1	18	260792	2005 <i>NP</i> ₅₄		12 21.9	97°09'	0°0/21.9	18
11 17	6 23.52	+6 57.5	2.691	3.473	11.4	21.8	11 17	6 28.69	+24 12.2	1.935	2.752	13.8	21.0
11 27	6 18.55	+6 37.2	2.613	3.476	9.1	21.6	11 27	6 23.12	+24 0.2	1.859	2.755	10.4	20.8
12 7	6 12.03	+6 26.2	2.559	3.479	6.8	21.5	12 7	6 15.17	+23 46.7	1.806	2.758	6.5	20.6
12 17	6 4.48	+6 25.8	2.532	3.482	5.0	21.3	12 17	6 5.59	+23 30.9	1.781	2.761	2.2	20.3
12 27	5 56.58	+6 36.9	2.535	3.484	5.0	21.4	12 27	5 55.53	+23 12.5	1.785	2.764	2.3	20.3
1 6	5 49.07	+6 58.8	2.568	3.486	6.7	21.5	1 6	5 46.17	+22 52.6	1.818	2.767	6.6	20.6
1 16	5 42.63	+7 30.3	2.628	3.489	9.0	21.6	1 16	5 38.54	+22 32.8	1.879	2.770	10.5	20.8
1 26	5 37.78	+8 9.4	2.713	3.490	11.3	21.8	1 26	5 33.40	+22 15.2	1.963	2.773	13.8	21.1
382706	2002 <i>VE</i> ₁₄₇		12 21.8	36°08'	0°4/21.8	18	454141	2013 <i>EF</i> ₄		12 21.9	34°17'	3°8/21.8	17
11 17													

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
263340	2008 CA ₈₈		12 21.9 186°87	1°3/21.9 18			306071	2010 GH ₁₀₇		12 21.9 198°32	2°6/21.8 18		
11 17	6 32.18	+19 9.1	1.781	2.594	15.1	22.0	11 17	6 32.07	+30 5.3	2.203	3.006	12.9	22.6
11 27	6 26.00	+19 20.0	1.700	2.594	11.5	21.7	11 27	6 25.68	+30 32.3	2.116	3.003	9.9	22.4
12 7	6 17.12	+19 35.6	1.643	2.593	7.2	21.5	12 7	6 16.81	+30 55.4	2.054	2.999	6.5	22.1
12 17	6 6.29	+19 54.3	1.613	2.592	2.7	21.2	12 17	6 6.21	+31 11.1	2.021	2.995	3.2	21.9
12 27	5 54.75	+20 14.6	1.612	2.590	2.8	21.2	12 27	5 54.94	+31 16.8	2.017	2.990	3.3	21.9
1 6	5 43.85	+20 35.3	1.640	2.588	7.3	21.5	1 6	5 44.25	+31 12.4	2.043	2.984	6.6	22.1
1 16	5 34.81	+20 56.1	1.696	2.584	11.6	21.7	1 16	5 35.22	+30 59.5	2.098	2.978	10.1	22.3
1 26	5 28.51	+21 17.4	1.774	2.581	15.2	21.9	1 26	5 28.68	+30 41.5	2.177	2.972	13.1	22.5
481942	2009 CB ₄		12 21.9 281°85	3°2/21.7 17			63444	2001 ND ₈		12 21.9 111°44	1°6/21.9 18		
11 17	6 30.60	+30 1.0	1.794	2.611	14.8	21.6	11 17	6 26.99	+28 47.2	2.396	3.205	11.8	19.3
11 27	6 25.29	+30 36.0	1.699	2.593	11.4	21.3	11 27	6 21.55	+28 52.4	2.316	3.207	8.9	19.2
12 7	6 16.96	+31 7.9	1.627	2.574	7.6	21.1	12 7	6 14.09	+28 53.9	2.260	3.208	5.7	19.0
12 17	6 6.32	+31 32.2	1.581	2.555	3.9	20.8	12 17	6 5.25	+28 49.7	2.232	3.210	2.5	18.7
12 27	5 54.65	+31 44.9	1.563	2.536	4.1	20.8	12 27	5 55.98	+28 39.0	2.235	3.211	2.5	18.8
1 6	5 43.48	+31 44.9	1.574	2.517	8.0	21.0	1 6	5 47.28	+28 22.3	2.267	3.213	5.7	19.0
1 16	5 34.23	+31 34.0	1.611	2.498	12.1	21.2	1 16	5 40.01	+28 1.2	2.328	3.214	8.9	19.2
1 26	5 27.99	+31 16.2	1.670	2.479	15.9	21.3	1 26	5 34.84	+27 38.1	2.413	3.215	11.8	19.4
360066	2013 AZ ₁₁₁		12 21.9 212°02	5°1/22.1 18			450377	2005 GB ₂₀₁		12 21.9 143°33	2°7/21.9 18		
11 17	6 33.64	+38 1.8	2.116	2.908	13.7	20.7	11 17	6 32.24	+31 25.8	2.409	3.206	12.1	22.2
11 27	6 27.10	+38 27.7	2.032	2.904	10.9	20.5	11 27	6 25.45	+31 50.0	2.336	3.218	9.2	22.0
12 7	6 17.77	+38 43.2	1.971	2.900	7.9	20.3	12 7	6 16.48	+32 8.9	2.288	3.230	6.1	21.8
12 17	6 6.50	+38 43.5	1.938	2.895	5.5	20.2	12 17	6 6.04	+32 19.5	2.269	3.241	3.2	21.7
12 27	5 54.57	+38 25.9	1.933	2.890	5.5	20.2	12 27	5 55.18	+32 20.0	2.281	3.251	3.3	21.7
1 6	5 43.41	+37 51.0	1.957	2.885	7.9	20.3	1 6	5 44.98	+32 10.5	2.323	3.261	6.1	21.9
1 16	5 34.24	+37 2.9	2.008	2.879	10.9	20.5	1 16	5 36.39	+31 53.1	2.394	3.270	9.1	22.1
1 26	5 27.93	+36 7.1	2.084	2.873	13.8	20.7	1 26	5 30.11	+31 30.9	2.490	3.279	11.8	22.3
490618	2009 YA ₃		12 21.9 330°30	2°2/22.1 18			98934	2001 CA ₈		12 21.9 343°63	3°4/21.8 18		
11 17	6 25.07	+15 23.4	2.223	3.032	12.6	21.2	11 17	6 29.10	+29 59.4	1.464	2.297	16.7	19.7
11 27	6 20.18	+15 38.1	2.139	3.029	9.6	21.0	11 27	6 24.50	+30 30.9	1.389	2.291	12.9	19.5
12 7	6 13.28	+15 59.8	2.080	3.026	6.3	20.8	12 7	6 16.58	+30 58.0	1.335	2.286	8.5	19.2
12 17	6 4.98	+16 27.7	2.048	3.023	3.0	20.6	12 17	6 6.22	+31 15.8	1.306	2.281	4.3	19.0
12 27	5 56.15	+17 0.8	2.046	3.021	2.9	20.6	12 27	5 54.94	+31 20.6	1.303	2.277	4.4	18.9
1 6	5 47.75	+17 37.5	2.073	3.019	6.2	20.8	1 6	5 44.51	+31 12.2	1.327	2.274	8.7	19.2
1 16	5 40.66	+18 16.6	2.129	3.016	9.6	21.0	1 16	5 36.43	+30 53.3	1.375	2.271	13.2	19.4
1 26	5 35.59	+18 56.9	2.209	3.014	12.6	21.2	1 26	5 31.76	+30 28.6	1.444	2.269	17.1	19.7
455380	2002 UL ₅₈		12 21.9 164°29	3°1/22.0 18			138218	2000 EW ₁₉₃		12 21.9 257°77	3°0/21.9 18		
11 17	6 24.21	+12 44.2	2.557	3.355	11.4	21.8	11 17	6 30.54	+31 1.4	1.806	2.622	14.7	20.2
11 27	6 19.21	+12 36.9	2.476	3.357	8.9	21.6	11 27	6 24.92	+31 19.7	1.730	2.623	11.3	20.0
12 7	6 12.52	+12 36.0	2.419	3.358	6.0	21.4	12 7	6 16.50	+31 32.2	1.677	2.624	7.4	19.8
12 17	6 4.70	+12 42.3	2.391	3.359	3.6	21.3	12 17	6 6.12	+31 35.1	1.650	2.625	3.8	19.5
12 27	5 56.48	+12 55.7	2.393	3.360	3.6	21.3	12 27	5 55.09	+31 26.3	1.652	2.625	3.8	19.5
1 6	5 48.68	+13 15.6	2.425	3.361	6.0	21.4	1 6	5 44.86	+31 6.3	1.682	2.626	7.5	19.8
1 16	5 42.01	+13 41.2	2.485	3.362	8.8	21.6	1 16	5 36.65	+30 38.0	1.739	2.627	11.3	20.0
1 26	5 37.07	+14 11.3	2.570	3.363	11.4	21.8	1 26	5 31.33	+30 5.8	1.818	2.628	14.7	20.2
494052	2016 BO ₃₆		12 21.9 27°52	2°3/22.1 17			48259	2001 WL ₄₀		12 21.9 10°65	4°4/21.9 18		
11 17	6 25.09	+15 27.4	2.091	2.903	13.1	21.0	11 17	6 27.79	+13 54.8	1.475	2.300	17.0	18.9
11 27	6 20.24	+15 39.8	2.015	2.907	10.0	20.8	11 27	6 23.01	+13 28.4	1.405	2.301	13.2	18.6
12 7	6 13.33	+15 59.1	1.964	2.911	6.5	20.6	12 7	6 15.39	+13 11.0	1.356	2.302	8.9	18.4
12 17	6 4.99	+16 24.9	1.940	2.916	3.1	20.4	12 17	6 5.77	+13 4.1	1.331	2.303	5.1	18.2
12 27	5 56.17	+16 55.9	1.945	2.920	3.0	20.4	12 27	5 55.48	+13 8.9	1.333	2.304	5.2	18.2
1 6	5 47.86	+17 30.8	1.980	2.925	6.4	20.6	1 6	5 45.96	+13 24.7	1.362	2.306	9.0	18.4
1 16	5 40.98	+18 8.1	2.042	2.931	9.9	20.8	1 16	5 38.46	+13 50.3	1.416	2.308	13.2	18.6
1 26	5 36.22	+18 46.7	2.128	2.936	12.9	21.0	1 26	5 33.88	+14 23.6	1.491	2.310	16.9	18.9
473538	2015 XR ₁₇₁		12 21.9 55°15	1°7/21.6 18			361862	2008 EF ₇₁		12 21.9 227°81	4°1/21.8 17		
11 17	6 29.22	+25 10.6	1.887	2.705	14.1	20.7	11 17	6 31.26	+34 38.5	2.228	3.028	12.9	21.7
11 27	6 23.74	+26 2.4	1.816	2.713	10.6	20.5	11 27	6 25.21	+35 12.7	2.141	3.021	10.1	21.5
12 7	6 15.68	+26 55.2	1.769	2.721	6.7	20.3	12 7	6 16.61	+35 40.1	2.077	3.013	7.0	21.3
12 17	6 5.82	+27 45.0	1.750	2.729	2.7	20.1	12 17	6 6.18	+35 56.5	2.041	3.005	4.5	21.1
12 27	5 55.31	+28 28.1	1.760	2.737	2.9	20.1	12 27	5 55.05	+35 58.9	2.034	2.998	4.6	21.1
1 6	5 45.44	+29 2.4	1.799	2.745	6.9	20.4	1 6	5 44.49	+35 47.1	2.057	2.989	7.2	21.3
1 16	5 37.36	+29 28.0	1.865	2.754	10.7	20.6	1 16	5 35.65	+35 23.5	2.107	2.981	10.3	21.4
1 26	5 31.91	+29 46.7	1.955	2.762	13.9	20.9	1 26	5 29.38	+34 52.2	2.181	2.972	13.2	21.6
374625	2006 FS ₂₁		12 21.9 184°52	6°4/21.8 17			458720	2011 JQ ₂₉		12 21.9 202°15	16°6/24.4 17		
11 17	6 32.79	+44 5.1	2.625	3.392	12.0	21.2	11 17	6 32.88	-13 19.7	1.405	2.128	22.5	21.7
11 27	6 26.23	+44 55.0	2.547	3.392	9.9	21.0	11 27	6 27.02	-14 29.7	1.340	2.125	20.4	21.5
12 7	6 17.15	+45 33.5	2.492	3.392	7.9	20.9	12 7	6 18.00	-15 5.6	1.291	2.122	18.4	21.3
12 17	6 6.30	+45 55.7	2.465	3.391	6.6	20.8	12 17	6 6.69	-14 57.6	1.260	2.119	17.0	21.2
12 27	5 54.82	+45 58.1	2.465	3.390	6.6	20.8	12 27	5 54.51	-14 0.2	1.251	2.114	16.6	21.2
1 6	5 43.99	+45 41.0	2.494	3.389	8.0	20.9	1 6	5 43.09	-12 15.8	1.262	2.109	17.6	21.2
1 16	5 34.91	+45 7.1	2.550	3.388	10.0	21.0	1 16	5 33.84	-9 52.9	1.295	2.103	19.6	21.4
1 26	5 28.40	+44 21.5	2.629	3.387	12.1	21.2	1 26	5 27.80	-7 4.4	1.347	2.097	21.9	21.5
336816	2011 ED ₅		12 21.9 175°38	2°0/21.8 18			83117	2001 QM ₂₄₃		12 21.9 128°18	1°4/21.9 18		
11 17	6 33.49	+27 38.7	1.739	2.									

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
159317	2006 <i>BK</i> ₁₉₅		12 21.9 136°27'	4.7/22.1	18		354429	2003 <i>WB</i> ₁₃₄		12 21.9 18°49'	5.9/20.8	18	
11 17	6 24.84	+ 8 24.5	2.425	3.213	12.3	20.7	11 17	6 31.15	+30 28.8	1.316	2.152	18.1	19.6
11 27	6 19.72	+ 8 4.8	2.349	3.219	9.7	20.5	11 27	6 26.54	+32 23.5	1.257	2.158	14.0	19.4
12 7	6 12.87	+ 7 54.3	2.298	3.224	7.1	20.4	12 7	6 18.14	+34 17.4	1.219	2.165	9.6	19.1
12 17	6 4.86	+ 7 54.7	2.274	3.229	5.0	20.2	12 17	6 6.86	+35 59.8	1.206	2.174	6.3	19.0
12 27	5 56.48	+ 8 6.4	2.279	3.234	5.0	20.3	12 27	5 54.42	+37 21.0	1.219	2.183	6.8	19.0
1 6	5 48.55	+ 8 29.0	2.314	3.239	7.0	20.4	1 6	5 42.90	+38 16.3	1.258	2.193	10.5	19.3
1 16	5 41.83	+ 9 0.8	2.376	3.243	9.6	20.6	1 16	5 34.10	+38 47.4	1.321	2.204	14.6	19.5
1 26	5 36.90	+ 9 39.9	2.463	3.248	12.1	20.7	1 26	5 29.22	+38 59.8	1.404	2.217	18.1	19.8
189928	2003 <i>SV</i> ₁₉₁		12 21.9 72°44'	0.5/21.9	18		63945	2001 <i>ST</i> ₅₇		12 21.9 171°50'	2.0/21.9	18	
11 17	6 28.45	+26 18.7	2.161	2.974	12.8	19.3	11 17	6 29.73	+28 25.7	2.139	2.949	13.0	19.5
11 27	6 22.62	+26 2.5	2.095	2.989	9.6	19.1	11 27	6 23.91	+28 47.3	2.060	2.951	9.9	19.3
12 7	6 14.70	+25 43.1	2.053	3.004	5.9	18.9	12 7	6 15.72	+29 5.9	2.004	2.952	6.3	19.0
12 17	6 5.45	+25 19.8	2.039	3.020	2.1	18.7	12 17	6 5.89	+29 18.7	1.976	2.953	2.8	18.8
12 27	5 55.91	+24 52.6	2.056	3.035	2.1	18.7	12 27	5 55.50	+29 23.5	1.978	2.954	2.9	18.8
1 6	5 47.11	+24 23.1	2.102	3.050	5.9	19.0	1 6	5 45.71	+29 20.3	2.010	2.954	6.4	19.1
1 16	5 39.94	+23 53.2	2.176	3.066	9.3	19.2	1 16	5 37.57	+29 10.7	2.069	2.955	9.9	19.3
1 26	5 35.00	+23 25.2	2.275	3.081	12.3	19.5	1 26	5 31.84	+28 57.2	2.153	2.955	13.0	19.5
135039	2001 <i>OA</i> ₂		12 21.9 16°52'	5.6/21.9	18		139489	2001 <i>PU</i> ₂₃		12 21.9 140°10'	0.5/21.8	18	
11 17	6 26.73	+33 17.9	1.148	1.997	19.3	17.6	11 17	6 29.36	+23 11.8	2.022	2.836	13.5	20.1
11 27	6 23.23	+34 4.6	1.100	2.007	15.0	17.4	11 27	6 23.66	+23 39.7	1.946	2.841	10.2	19.9
12 7	6 15.92	+34 41.7	1.070	2.020	10.3	17.1	12 7	6 15.59	+24 9.1	1.893	2.845	6.3	19.6
12 17	6 5.99	+35 2.3	1.063	2.034	6.3	17.0	12 17	6 5.86	+24 37.5	1.869	2.849	2.1	19.4
12 27	5 55.37	+35 2.2	1.081	2.050	6.3	17.0	12 27	5 55.54	+25 2.6	1.874	2.853	2.3	19.4
1 6	5 46.12	+34 42.7	1.122	2.068	10.1	17.3	1 6	5 45.81	+25 23.3	1.908	2.856	6.4	19.7
1 16	5 39.80	+34 9.1	1.186	2.087	14.4	17.6	1 16	5 37.72	+25 39.7	1.971	2.860	10.2	19.9
1 26	5 37.31	+33 28.0	1.269	2.108	18.1	17.9	1 26	5 32.06	+25 53.1	2.057	2.863	13.4	20.1
379539	2010 <i>XA</i> ₄₈		12 21.9 248°16'	0.2/21.9	18		102384	1999 <i>TL</i> ₁₅₂		12 21.9 65°06'	0.7/21.9	18	
11 17	6 32.66	+21 55.2	1.565	2.387	16.3	21.5	11 17	6 30.80	+21 19.0	1.565	2.390	16.2	19.7
11 27	6 27.01	+22 12.0	1.475	2.374	12.5	21.3	11 27	6 24.99	+21 22.9	1.510	2.410	12.2	19.5
12 7	6 18.14	+22 32.2	1.407	2.360	7.9	21.0	12 7	6 16.44	+21 29.2	1.478	2.431	7.5	19.3
12 17	6 6.80	+22 53.2	1.364	2.345	2.7	20.6	12 17	6 6.11	+21 36.3	1.471	2.451	2.6	19.1
12 27	5 54.36	+23 12.5	1.350	2.330	2.8	20.6	12 27	5 55.36	+21 43.0	1.493	2.472	2.7	19.1
1 6	5 42.47	+23 28.7	1.364	2.314	8.2	20.9	1 6	5 45.62	+21 49.0	1.542	2.492	7.4	19.5
1 16	5 32.66	+23 42.0	1.404	2.298	13.1	21.1	1 16	5 38.02	+21 55.0	1.618	2.513	11.6	19.8
1 26	5 26.06	+23 54.1	1.466	2.281	17.4	21.3	1 26	5 33.31	+22 1.9	1.716	2.534	15.1	20.0
104952	2000 <i>JV</i> ₄₅		12 21.9 171°74'	0.2/21.9	18		84642	2002 <i>VQ</i> ₅₈		12 21.9 35°76'	1.6/21.7	18	
11 17	6 25.24	+22 13.5	2.870	3.674	10.2	20.4	11 17	6 30.96	+23 31.1	1.248	2.089	18.6	18.8
11 27	6 19.89	+22 18.8	2.786	3.676	7.6	20.2	11 27	6 26.08	+24 27.3	1.189	2.097	14.0	18.6
12 7	6 12.93	+22 24.7	2.728	3.678	4.7	20.0	12 7	6 17.64	+25 27.7	1.150	2.106	8.8	18.3
12 17	6 4.89	+22 30.3	2.699	3.679	1.6	19.8	12 17	6 6.63	+26 26.3	1.136	2.116	3.2	18.0
12 27	5 56.48	+22 35.1	2.702	3.681	1.7	19.8	12 27	5 54.75	+27 17.4	1.148	2.126	3.5	18.1
1 6	5 48.46	+22 38.9	2.735	3.682	4.8	20.0	1 6	5 43.92	+27 57.8	1.186	2.137	8.9	18.4
1 16	5 41.54	+22 41.9	2.798	3.683	7.7	20.2	1 16	5 35.73	+28 27.6	1.248	2.149	13.8	18.7
1 26	5 36.27	+22 44.8	2.887	3.683	10.2	20.4	1 26	5 31.21	+28 49.1	1.330	2.161	18.0	19.0
321589	2009 <i>UU</i> ₇₁		12 21.9 100°16'	0.3/21.9	18		214352	2005 <i>JX</i> ₁₆₃		12 21.9 180°18'	6.3/21.4	18	
11 17	6 28.02	+22 44.4	2.378	3.185	11.9	21.0	11 17	6 34.73	+39 5.2	2.086	2.875	14.0	20.5
11 27	6 22.10	+22 37.5	2.312	3.204	8.9	20.9	11 27	6 28.22	+40 15.8	2.009	2.876	11.3	20.3
12 7	6 14.31	+22 30.4	2.272	3.222	5.5	20.7	12 7	6 18.71	+41 17.4	1.957	2.877	8.5	20.1
12 17	6 5.34	+22 22.6	2.260	3.240	1.9	20.4	12 17	6 6.97	+42 3.2	1.930	2.877	6.6	20.0
12 27	5 56.07	+22 13.7	2.278	3.258	1.9	20.5	12 27	5 54.35	+42 28.2	1.933	2.876	6.7	20.0
1 6	5 47.44	+22 4.2	2.328	3.275	5.5	20.8	1 6	5 42.41	+42 31.3	1.964	2.876	8.8	20.2
1 16	5 40.25	+21 55.1	2.405	3.292	8.7	21.0	1 16	5 32.51	+42 15.6	2.020	2.875	11.6	20.3
1 26	5 35.07	+21 47.4	2.508	3.308	11.4	21.2	1 26	5 25.65	+41 46.5	2.100	2.874	14.2	20.5
228311	2000 <i>LB</i> ₃₁		12 21.9 105°02'	1.1/22.0	18		261481	2005 <i>VS</i> ₁₂₄		12 21.9 97°66'	0.7/21.8	18	
11 17	6 33.68	+18 18.0	1.856	2.662	14.8	20.5	11 17	6 28.56	+23 40.3	2.066	2.880	13.2	20.5
11 27	6 26.77	+18 49.3	1.797	2.686	11.1	20.3	11 27	6 23.01	+24 10.5	1.992	2.887	9.9	20.3
12 7	6 17.40	+19 25.9	1.761	2.710	7.0	20.1	12 7	6 15.16	+24 41.8	1.942	2.894	6.2	20.1
12 17	6 6.39	+20 5.6	1.754	2.733	2.6	19.9	12 17	6 5.71	+25 11.7	1.921	2.901	2.1	19.9
12 27	5 54.97	+20 45.5	1.777	2.756	2.5	19.9	12 27	5 55.73	+25 37.8	1.929	2.907	2.3	19.9
1 6	5 44.38	+21 23.8	1.830	2.777	6.7	20.2	1 6	5 46.34	+25 59.1	1.966	2.914	6.3	20.2
1 16	5 35.67	+21 59.6	1.912	2.799	10.6	20.5	1 16	5 38.55	+26 15.7	2.032	2.921	9.9	20.4
1 26	5 29.59	+22 32.9	2.017	2.819	13.8	20.8	1 26	5 33.11	+26 28.8	2.121	2.927	13.0	20.6
168570	1999 <i>XU</i> ₁₃₂		12 21.9 62°29'	4.7/21.8	18		465972	2011 <i>CL</i> ₂₀		12 21.9 319°42'	4.3/21.9	18	
11 17	6 34.07	+32 46.4	1.568	2.386	16.5	19.3	11 17	6 29.26	+35 3.1	2.061	2.868	13.5	21.4
11 27	6 27.81	+33 40.7	1.517	2.408	12.7	19.1	11 27	6 23.86	+35 29.2	1.978	2.862	10.6	21.2
12 7	6 18.35	+34 27.6	1.488	2.431	8.6	18.9	12 7	6 15.84	+35 47.5	1.918	2.856	7.4	21.0
12 17	6 6.75	+35 0.8	1.484	2.453	5.2	18.7	12 17	6 5.97	+35 53.7	1.885	2.850	4.7	20.9
12 27	5 54.62	+35 16.3	1.509	2.476	5.3	18.8	12 27	5 55.45	+35 45.3	1.880	2.845	4.7	20.8
1 6	5 43.65	+35 14.3	1.560	2.498	8.6	19.0	1 6	5 45.58	+35 22.6	1.904	2.840	7.5	21.0
1 16	5 35.19	+34 58.5	1.638	2.521	12.2	19.3	1 16	5 37.54	+34 48.7	1.954	2.835	10.7	21.2
1 26	5 30.07	+34 34.4	1.737	2.544	15.4	19.6	1 26	5 32.17	+34 8.0	2.028	2.830	13.7	21.4
109228	2001 <i>QN</i> ₉₂		12 21.9 191°78'	2.8/21.8	18		380685	2005 <i>GE</i> ₁₀₉		12 21.9 2			

EPHEMERIDES

12 21.9

12 21.9

2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
17593	1995 DV		12 21.9 204°16	2°7/21.9	18		360260	2000 KN ₃₇		12 21.9 274°67	3°2/21.6	17	
11 17	6 32.88	+29 59.0	1.989	2.797	13.9	19.4	11 17	6 30.37	+29 56.8	1.927	2.741	14.0	21.1
11 27	6 26.56	+30 23.6	1.904	2.793	10.7	19.2	11 27	6 24.95	+30 44.0	1.836	2.728	10.8	20.9
12 7	6 17.53	+30 43.9	1.842	2.788	7.0	19.0	12 7	6 16.72	+31 29.0	1.769	2.715	7.2	20.6
12 17	6 6.56	+30 56.2	1.808	2.783	3.4	18.7	12 17	6 6.38	+32 7.0	1.729	2.703	3.9	20.4
12 27	5 54.86	+30 57.8	1.804	2.778	3.5	18.7	12 27	5 55.11	+32 34.0	1.718	2.690	4.1	20.4
1 6	5 43.80	+30 48.7	1.829	2.772	7.1	18.9	1 6	5 44.32	+32 48.3	1.736	2.677	7.6	20.6
1 16	5 34.60	+30 31.0	1.882	2.765	10.9	19.2	1 16	5 35.32	+32 51.0	1.780	2.664	11.4	20.8
1 26	5 28.14	+30 8.4	1.958	2.758	14.2	19.4	1 26	5 29.11	+32 45.4	1.847	2.651	14.8	21.0
276307	2002 TB ₁₄₆		12 21.9 80°40	4°1/21.9	18		414934	2011 AW ₆₉		12 21.9 246°24	3°8/22.1	18	
11 17	6 31.95	+15 18.0	1.432	2.254	17.6	20.7	11 17	6 29.97	+34 52.3	2.281	3.081	12.6	21.7
11 27	6 25.93	+14 41.8	1.377	2.272	13.5	20.5	11 27	6 24.13	+35 10.7	2.196	3.076	9.8	21.5
12 7	6 17.06	+14 13.1	1.344	2.291	8.9	20.2	12 7	6 15.91	+35 21.5	2.134	3.071	6.8	21.3
12 17	6 6.34	+13 53.4	1.337	2.310	4.8	20.1	12 17	6 6.02	+35 21.1	2.100	3.066	4.2	21.1
12 27	5 55.21	+13 44.0	1.357	2.328	4.9	20.1	12 27	5 55.56	+35 7.5	2.095	3.061	4.2	21.1
1 6	5 45.16	+13 45.0	1.403	2.346	8.8	20.4	1 6	5 45.73	+34 41.4	2.120	3.055	6.8	21.3
1 16	5 37.37	+13 55.7	1.476	2.364	12.9	20.7	1 16	5 37.56	+34 5.4	2.172	3.050	9.9	21.4
1 26	5 32.59	+14 14.6	1.569	2.382	16.5	20.9	1 26	5 31.83	+33 23.7	2.249	3.044	12.7	21.6
34590	2000 TS ₂		12 21.9 324°04	7°0/22.1	18		421957	2014 QS ₂₆₈		12 21.9 343°94	5°0/22.3	17	
11 17	6 24.68	+ 5 48.6	1.819	2.618	15.4	19.1	11 17	6 25.21	+10 27.5	1.682	2.497	15.7	21.0
11 27	6 20.26	+ 5 11.2	1.739	2.610	12.5	18.9	11 27	6 20.88	+10 17.8	1.604	2.492	12.4	20.7
12 7	6 13.56	+ 4 47.4	1.681	2.602	9.6	18.7	12 7	6 14.05	+10 20.3	1.548	2.487	8.7	20.5
12 17	6 5.22	+ 4 40.6	1.647	2.595	7.3	18.6	12 17	6 5.44	+10 36.6	1.516	2.482	5.6	20.3
12 27	5 56.27	+ 4 52.6	1.640	2.588	7.3	18.6	12 27	5 56.15	+11 6.7	1.512	2.478	5.4	20.3
1 6	5 47.81	+ 5 23.0	1.660	2.581	9.5	18.7	1 6	5 47.42	+11 49.1	1.535	2.475	8.5	20.5
1 16	5 40.88	+ 6 9.3	1.705	2.575	12.6	18.9	1 16	5 40.36	+12 41.0	1.584	2.472	12.3	20.7
1 26	5 36.26	+ 7 7.6	1.772	2.569	15.6	19.0	1 26	5 35.83	+13 39.2	1.655	2.470	15.7	20.9
50823	2000 FL ₃₅		12 21.9 221°31	1°6/21.8	18		57581	2001 TH ₆₇		12 21.9 320°85	1°6/21.9	18	
11 17	6 26.90	+27 52.9	2.716	3.519	10.7	20.0	11 17	6 25.60	+20 35.4	1.599	2.431	15.6	18.6
11 27	6 21.40	+28 15.4	2.625	3.513	8.1	19.8	11 27	6 21.58	+20 17.5	1.505	2.409	11.9	18.3
12 7	6 14.03	+28 35.8	2.559	3.506	5.2	19.6	12 7	6 14.73	+20 1.2	1.433	2.388	7.6	18.0
12 17	6 5.34	+28 52.1	2.522	3.499	2.3	19.4	12 17	6 5.74	+19 46.7	1.387	2.366	3.0	17.7
12 27	5 56.15	+29 2.6	2.516	3.492	2.4	19.4	12 27	5 55.81	+19 34.1	1.367	2.346	3.1	17.6
1 6	5 47.34	+29 6.9	2.540	3.484	5.3	19.6	1 6	5 46.38	+19 24.2	1.375	2.326	8.0	17.9
1 16	5 39.74	+29 5.8	2.594	3.476	8.3	19.8	1 16	5 38.78	+19 18.2	1.407	2.307	12.7	18.1
1 26	5 34.01	+29 0.9	2.673	3.468	10.9	19.9	1 26	5 34.03	+19 17.1	1.462	2.288	16.8	18.3
378006	2006 SX ₃₂		12 21.9 104°07	2°2/21.9	18		225700	2001 QH ₁₉₃		12 21.9 22°83	2°5/22.4	18	
11 17	6 34.56	+18 18.6	1.595	2.409	16.5	21.7	11 17	6 31.21	+32 48.4	0.967	1.822	21.6	18.4
11 27	6 27.66	+18 3.6	1.539	2.432	12.4	21.5	11 27	6 26.66	+31 49.1	0.922	1.836	16.5	18.1
12 7	6 18.03	+17 53.0	1.506	2.455	7.9	21.3	12 7	6 17.96	+30 33.5	0.896	1.852	10.5	17.9
12 17	6 6.65	+17 46.6	1.499	2.477	3.4	21.1	12 17	6 6.69	+29 1.5	0.891	1.870	4.4	17.6
12 27	5 54.91	+17 44.0	1.522	2.498	3.4	21.1	12 27	5 55.14	+27 17.9	0.910	1.889	3.9	17.6
1 6	5 44.22	+17 45.5	1.573	2.519	7.7	21.4	1 6	5 45.50	+25 32.0	0.954	1.911	9.6	18.0
1 16	5 35.73	+17 51.3	1.650	2.539	11.9	21.7	1 16	5 39.21	+23 53.7	1.020	1.933	15.0	18.4
1 26	5 30.15	+18 1.4	1.751	2.558	15.3	22.0	1 26	5 36.96	+22 29.2	1.106	1.957	19.4	18.8
401682	2013 HL ₅		12 21.9 157°17	5°4/22.5	18		335340	2005 SR ₁₉		12 21.9 111°55	3°3/21.8	18	
11 17	6 26.44	+ 6 32.2	2.221	3.005	13.4	21.0	11 17	6 34.69	+29 44.4	1.647	2.463	15.9	20.8
11 27	6 21.11	+ 6 20.2	2.144	3.009	10.7	20.8	11 27	6 28.25	+30 27.2	1.583	2.476	12.2	20.6
12 7	6 13.85	+ 6 20.1	2.090	3.012	7.9	20.7	12 7	6 18.70	+31 5.8	1.541	2.488	8.0	20.4
12 17	6 5.28	+ 6 33.5	2.063	3.015	5.8	20.5	12 17	6 7.00	+31 35.1	1.526	2.500	4.0	20.2
12 27	5 56.25	+ 7 0.8	2.065	3.018	5.6	20.5	12 27	5 54.64	+31 51.2	1.539	2.512	4.2	20.2
1 6	5 47.71	+ 7 40.5	2.097	3.020	7.7	20.7	1 6	5 43.23	+31 53.7	1.580	2.523	8.0	20.5
1 16	5 40.48	+ 8 30.5	2.155	3.022	10.4	20.8	1 16	5 34.14	+31 45.2	1.648	2.534	12.0	20.7
1 26	5 35.22	+ 9 27.8	2.238	3.024	13.1	21.0	1 26	5 28.26	+31 30.2	1.738	2.545	15.4	21.0
284189	2006 AA ₁₀₅		12 21.9 251°58	1°6/21.9	18		402736	2006 WN ₁₆₉		12 21.9 137°40	0°1/21.9	18	
11 17	6 29.31	+18 59.6	1.724	2.543	15.2	21.2	11 17	6 28.58	+22 53.9	2.055	2.869	13.3	21.6
11 27	6 24.03	+19 1.7	1.640	2.537	11.6	21.0	11 27	6 23.01	+22 57.5	1.979	2.873	10.0	21.4
12 7	6 16.04	+19 8.5	1.579	2.530	7.4	20.7	12 7	6 15.17	+23 1.6	1.926	2.877	6.2	21.2
12 17	6 6.09	+19 19.0	1.545	2.524	2.9	20.5	12 17	6 5.78	+23 4.9	1.901	2.881	2.1	20.9
12 27	5 55.38	+19 32.2	1.539	2.517	2.9	20.4	12 27	5 55.88	+23 6.3	1.905	2.885	2.2	20.9
1 6	5 45.26	+19 47.3	1.561	2.510	7.5	20.7	1 6	5 46.60	+23 6.0	1.939	2.888	6.3	21.2
1 16	5 36.95	+20 4.2	1.610	2.503	11.8	20.9	1 16	5 38.93	+23 4.5	2.001	2.891	10.0	21.5
1 26	5 31.38	+20 22.9	1.682	2.496	15.5	21.2	1 26	5 33.58	+23 3.3	2.087	2.894	13.2	21.7
298433	2003 US ₁₀		12 21.9 31°90	10°4/21.3	18		465622	2009 FS ₅₂		12 21.9 283°03	3°5/21.9	18	
11 17	6 36.11	+44 1.9	1.482	2.281	18.2	19.6	11 17	6 22.72	+11 55.1	2.682	3.479	11.0	21.6
11 27	6 30.58	+45 47.2	1.427	2.289	15.2	19.4	11 27	6 18.13	+11 34.5	2.595	3.473	8.6	21.5
12 7	6 20.79	+47 16.5	1.392	2.298	12.4	19.3	12 7	6 11.94	+11 20.1	2.532	3.468	6.0	21.3
12 17	6 7.80	+48 18.7	1.381	2.308	10.6	19.2	12 17	6 4.68	+11 12.9	2.498	3.462	3.8	21.1
12 27	5 53.65	+48 45.7	1.394	2.318	10.8	19.2	12 27	5 57.02	+11 13.6	2.494	3.457	3.8	21.1
1 6	5 40.75	+48 37.4	1.432	2.329	12.7	19.4	1 6	5 49.71	+11 22.2	2.519	3.452	6.0	21.3
1 16	5 31.06	+48 0.1	1.492	2.340	15.3	19.6	1 16	5 43.45	+11 38.0	2.572	3.446	8.7	21.4
1 26	5 25.76	+47 3.9	1.571	2.352	18.0	19.8	1 26	5 38.79	+12 0.1	2.650	3.441	11.1	21.6
341990	2008 RT ₂		12 21.9 145°58	4°2/22.0	18		83811	2001 TR ₂₃₃		12 21.9 98°81	2°8/21.6	18	
11 17	6 36.20	+34 49.4	2.020	2.816									

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
156798	2003 BC ₁₆		12 21.9 284°02	2°1/21.9 18			153752	2001 UZ ₁₇₃		12 21.9 133°21	1°0/21.9 18		
11 17	6 31.14	+27 43.4	1.559	2.385	16.2	20.3	11 17	6 33.53	+25 32.2	1.910	2.719	14.3	20.7
11 27	6 26.00	+28 0.7	1.471	2.371	12.4	20.1	11 27	6 26.85	+25 49.3	1.841	2.733	10.8	20.5
12 7	6 17.61	+28 15.3	1.406	2.357	8.0	19.8	12 7	6 17.60	+26 5.0	1.796	2.746	6.7	20.3
12 17	6 6.76	+28 23.4	1.365	2.343	3.3	19.5	12 17	6 6.63	+26 16.6	1.779	2.758	2.5	20.0
12 27	5 54.87	+28 22.1	1.352	2.329	3.4	19.4	12 27	5 55.14	+26 22.3	1.792	2.770	2.5	20.1
1 6	5 43.64	+28 11.1	1.366	2.316	8.3	19.7	1 6	5 44.47	+26 21.9	1.834	2.781	6.7	20.3
1 16	5 34.60	+27 53.0	1.406	2.302	13.0	19.9	1 16	5 35.70	+26 17.0	1.904	2.791	10.6	20.6
1 26	5 28.84	+27 31.8	1.468	2.288	17.1	20.1	1 26	5 29.62	+26 10.1	1.998	2.801	13.8	20.8
390763	2003 TR ₁₉		12 21.9 71°94	8°6/21.8 18			321307	2009 HZ ₇		12 21.9 175°83	2°9/22.0 18		
11 17	6 38.50	+42 33.6	1.661	2.452	16.9	20.3	11 17	6 32.51	+16 14.2	1.606	2.421	16.3	21.1
11 27	6 31.65	+43 56.5	1.610	2.472	13.8	20.2	11 27	6 26.49	+16 6.5	1.531	2.423	12.5	20.9
12 7	6 21.06	+45 4.2	1.581	2.491	10.9	20.1	12 7	6 17.61	+16 5.7	1.477	2.425	8.2	20.6
12 17	6 7.84	+45 47.8	1.576	2.511	8.9	20.0	12 17	6 6.69	+16 11.7	1.450	2.426	3.9	20.4
12 27	5 53.87	+46 1.6	1.597	2.530	8.9	20.0	12 27	5 55.05	+16 24.2	1.451	2.426	3.9	20.4
1 6	5 41.18	+45 46.3	1.645	2.549	10.8	20.2	1 6	5 44.15	+16 42.3	1.481	2.426	8.2	20.6
1 16	5 31.40	+45 8.0	1.717	2.569	13.5	20.4	1 16	5 35.26	+17 5.2	1.536	2.425	12.5	20.9
1 26	5 25.48	+44 15.3	1.810	2.588	16.0	20.6	1 26	5 29.30	+17 32.2	1.614	2.424	16.3	21.1
248226	2005 EO ₂₀₆		12 21.9 278°05	7°8/21.7 18			83500	2001 SA ₁₁₈		12 21.9 182°42	0°2/21.9 18		
11 17	6 33.76	+47 21.9	2.454	3.213	13.0	20.1	11 17	6 29.07	+23 47.2	2.007	2.822	13.5	19.4
11 27	6 27.46	+48 20.3	2.372	3.205	11.0	20.0	11 27	6 23.45	+23 33.2	1.927	2.822	10.2	19.2
12 7	6 18.25	+49 5.4	2.312	3.196	9.2	19.9	12 7	6 15.50	+23 17.9	1.870	2.822	6.4	19.0
12 17	6 6.91	+49 31.1	2.278	3.188	8.0	19.8	12 17	6 5.94	+23 0.6	1.841	2.822	2.1	18.7
12 27	5 54.75	+49 33.1	2.271	3.180	8.0	19.8	12 27	5 55.87	+22 41.2	1.842	2.822	2.2	18.7
1 6	5 43.27	+49 11.2	2.291	3.171	9.3	19.8	1 6	5 46.45	+22 20.6	1.872	2.821	6.4	19.0
1 16	5 33.79	+48 28.9	2.336	3.163	11.2	19.9	1 16	5 38.68	+22 0.7	1.930	2.821	10.3	19.2
1 26	5 27.26	+47 32.0	2.404	3.155	13.3	20.1	1 26	5 33.33	+21 43.0	2.012	2.820	13.6	19.5
419506	2010 GE ₁₁		12 21.9 244°32	1°3/22.0 18			271031	2003 BD ₃₁		12 21.9 43°28	1°2/22.0 18		
11 17	6 25.41	+17 55.9	2.465	3.271	11.6	21.0	11 17	6 32.97	+27 17.2	1.147	1.990	19.7	19.4
11 27	6 20.36	+18 9.1	2.377	3.267	8.8	20.8	11 27	6 27.43	+27 0.9	1.103	2.012	14.8	19.2
12 7	6 13.45	+18 26.6	2.314	3.262	5.6	20.6	12 7	6 18.28	+26 39.5	1.078	2.034	9.2	18.9
12 17	6 5.23	+18 47.6	2.280	3.258	2.3	20.4	12 17	6 6.86	+26 10.8	1.076	2.057	3.3	18.6
12 27	5 56.51	+19 11.3	2.276	3.253	2.3	20.4	12 27	5 55.09	+25 35.4	1.100	2.080	3.2	18.7
1 6	5 48.18	+19 36.5	2.302	3.249	5.6	20.6	1 6	5 44.88	+24 56.3	1.150	2.104	8.8	19.1
1 16	5 41.05	+20 2.6	2.357	3.244	8.8	20.8	1 16	5 37.62	+24 18.0	1.224	2.129	13.7	19.5
1 26	5 35.77	+20 29.3	2.437	3.239	11.7	21.0	1 26	5 34.04	+23 44.3	1.318	2.154	17.8	19.8
164895	1999 VZ ₁₁₀		12 21.9 35°99	2°0/21.8 18			396743	2003 SC ₈₅		12 21.9 45°46	16°0/19.1 18		
11 17	6 28.56	+20 8.4	1.368	2.204	17.5	20.0	11 17	6 31.93	+ 1 6.0	1.017	1.832	23.7	19.8
11 27	6 23.67	+19 41.0	1.312	2.218	13.2	19.8	11 27	6 26.77	- 2 11.7	0.973	1.839	20.3	19.6
12 7	6 15.83	+19 16.3	1.278	2.232	8.3	19.6	12 7	6 18.02	- 5 7.5	0.948	1.847	17.5	19.4
12 17	6 6.04	+18 54.9	1.268	2.247	3.4	19.3	12 17	6 6.84	- 7 25.1	0.944	1.855	16.1	19.4
12 27	5 55.78	+18 37.5	1.285	2.263	3.5	19.4	12 27	5 55.03	- 8 52.1	0.961	1.864	16.7	19.5
1 6	5 46.58	+18 25.2	1.328	2.279	8.2	19.7	1 6	5 44.50	- 9 25.7	0.998	1.873	18.8	19.6
1 16	5 39.68	+18 18.9	1.396	2.296	12.7	20.0	1 16	5 36.75	- 9 11.2	1.052	1.883	21.6	19.8
1 26	5 35.84	+18 18.7	1.485	2.313	16.5	20.3	1 26	5 32.68	- 8 19.6	1.122	1.893	24.2	20.1
317688	2003 OD ₈		12 21.9 145°26	1°4/22.1 18			269340	2008 TB ₄₀		12 21.9 215°47	0°0/21.9 18		
11 17	6 27.20	+17 7.4	2.566	3.366	11.4	20.8	11 17	6 27.00	+24 30.4	2.425	3.234	11.7	20.2
11 27	6 21.53	+17 26.3	2.488	3.374	8.6	20.6	11 27	6 21.54	+24 12.2	2.340	3.232	8.8	20.0
12 7	6 14.08	+17 49.8	2.435	3.381	5.5	20.4	12 7	6 14.16	+23 52.0	2.280	3.230	5.5	19.8
12 17	6 5.42	+18 17.0	2.411	3.389	2.3	20.2	12 17	6 5.47	+23 29.4	2.248	3.228	1.8	19.5
12 27	5 56.34	+18 46.7	2.418	3.395	2.3	20.2	12 27	5 56.37	+23 4.5	2.247	3.226	1.9	19.5
1 6	5 47.71	+19 17.7	2.457	3.402	5.4	20.5	1 6	5 47.80	+22 38.5	2.276	3.224	5.5	19.8
1 16	5 40.28	+19 49.0	2.524	3.408	8.5	20.7	1 16	5 40.57	+22 12.8	2.334	3.221	8.9	20.0
1 26	5 34.67	+20 20.4	2.618	3.414	11.1	20.8	1 26	5 35.34	+21 49.2	2.417	3.219	11.7	20.2
143689	2003 UQ ₉		12 21.9 346°83	4°6/21.6 18			158968	2004 RA ₂₃₆		12 21.9 27°20	5°3/21.8 18		
11 17	6 30.73	+29 47.7	1.177	2.021	19.2	19.5	11 17	6 25.17	+10 47.9	1.838	2.648	14.8	19.9
11 27	6 26.60	+30 48.6	1.108	2.016	14.9	19.2	11 27	6 20.51	+10 2.2	1.770	2.653	11.6	19.7
12 7	6 18.41	+31 47.4	1.059	2.011	9.9	18.9	12 7	6 13.65	+ 9 25.5	1.724	2.659	8.3	19.5
12 17	6 7.11	+32 36.1	1.033	2.008	5.4	18.6	12 17	6 5.33	+ 9 0.5	1.705	2.666	5.7	19.3
12 27	5 54.54	+33 7.7	1.032	2.005	5.7	18.6	12 27	5 56.55	+ 8 49.1	1.713	2.673	5.8	19.4
1 6	5 42.96	+33 19.9	1.055	2.002	10.4	18.9	1 6	5 48.43	+ 8 51.6	1.749	2.680	8.4	19.5
1 16	5 34.29	+33 15.3	1.101	2.001	15.4	19.2	1 16	5 41.88	+ 9 7.0	1.810	2.688	11.6	19.7
1 26	5 29.82	+33 0.0	1.166	2.000	19.7	19.4	1 26	5 37.61	+ 9 32.9	1.895	2.696	14.6	20.0
112296	2002 LO ₃₇		12 21.9 210°42	5°4/22.1 18			420988	2013 PE ₃₅		12 21.9 335°96	4°7/22.2 18		
11 17	6 27.91	+ 7 25.6	2.239	3.023	13.3	19.9	11 17	6 24.19	+ 9 28.1	2.135	2.935	13.3	21.0
11 27	6 22.30	+ 6 58.8	2.151	3.017	10.7	19.7	11 27	6 19.62	+ 9 11.8	2.054	2.932	10.6	20.8
12 7	6 14.69	+ 6 42.2	2.087	3.010	7.9	19.6	12 7	6 13.07	+ 9 5.4	1.996	2.928	7.6	20.6
12 17	6 5.66	+ 6 38.0	2.050	3.002	5.8	19.4	12 17	6 5.15	+ 9 10.6	1.964	2.924	5.2	20.4
12 27	5 56.08	+ 6 47.4	2.043	2.994	5.8	19.4	12 27	5 56.72	+ 9 27.8	1.961	2.921	5.1	20.4
1 6	5 46.92	+ 7 10.1	2.064	2.986	7.9	19.5	1 6	5 48.74	+ 9 56.3	1.986	2.918	7.5	20.6
1 16	5 39.06	+ 7 44.4	2.113	2.976	10.8	19.7	1 16	5 42.07	+10 34.4	2.039	2.916	10.5	20.7
1 26	5 33.22	+ 8 27.9	2.186	2.967	13.5	19.8	1 26	5 37.40	+11 19.8	2.115	2.913	13.3	20.9
439888	2000 NO ₁		12 21.9 228°40	1°2/21.9 18			174413	2002 VC ₁₀₇		12 21.9 286°61	7°8/20.6 18		
11 17	6 30.55	+21 3.7	1.										

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
44322	1998 RZ ₄₂		12 21.9 121°41'	1°1'/21.9 18			47529	2000 AM ₉₆		12 21.9 285°72'	6°2'/22.8 18		
11 17	6 30.64	+20 27.9	2.140	2.946	13.1	20.2	11 17	6 27.32	+5 50.4	1.845	2.638	15.4	18.3
11 27	6 24.30	+20 17.2	2.073	2.963	9.9	20.0	11 27	6 22.28	+5 45.0	1.765	2.634	12.4	18.1
12 7	6 15.85	+20 8.0	2.030	2.979	6.2	19.8	12 7	6 14.89	+5 55.1	1.707	2.631	9.3	17.9
12 17	6 6.04	+19 59.8	2.016	2.995	2.3	19.6	12 17	6 5.82	+6 22.5	1.675	2.628	6.7	17.7
12 27	5 55.88	+19 52.6	2.032	3.010	2.4	19.6	12 27	5 56.12	+7 7.3	1.670	2.625	6.5	17.7
1 6	5 46.43	+19 46.7	2.078	3.024	6.1	19.9	1 6	5 46.92	+8 7.3	1.693	2.621	8.8	17.8
1 16	5 38.58	+19 42.7	2.153	3.038	9.6	20.1	1 16	5 39.27	+9 18.8	1.743	2.618	12.1	18.0
1 26	5 32.97	+19 41.4	2.252	3.052	12.6	20.3	1 26	5 33.98	+10 37.5	1.816	2.615	15.2	18.2
126203	2002 AL ₄₀		12 21.9 305°21'	1°5'/21.9 18			316002	2009 EK ₁₃		12 21.9 201°95'	2°0'/21.9 18		
11 17	6 28.27	+20 26.9	1.508	2.339	16.4	20.0	11 17	6 35.77	+27 58.0	1.635	2.450	16.1	21.4
11 27	6 23.74	+20 16.5	1.421	2.324	12.6	19.7	11 27	6 29.26	+28 11.8	1.553	2.447	12.3	21.1
12 7	6 16.17	+20 8.8	1.356	2.310	8.0	19.4	12 7	6 19.52	+28 21.9	1.494	2.443	7.9	20.9
12 17	6 6.32	+20 3.3	1.316	2.296	3.0	19.1	12 17	6 7.43	+28 24.6	1.460	2.438	3.3	20.6
12 27	5 55.51	+19 59.8	1.303	2.282	3.1	19.1	12 27	5 54.48	+28 17.2	1.456	2.433	3.3	20.6
1 6	5 45.31	+19 58.4	1.317	2.268	8.3	19.3	1 6	5 42.33	+28 0.2	1.480	2.427	8.0	20.8
1 16	5 37.13	+19 59.9	1.356	2.255	13.1	19.6	1 16	5 32.44	+27 36.6	1.530	2.420	12.5	21.1
1 26	5 32.01	+20 5.1	1.416	2.242	17.3	19.8	1 26	5 25.84	+27 10.6	1.603	2.413	16.4	21.3
257890	2000 SE ₂₉₂		12 21.9 129°69'	1°0'/21.9 18			177128	2003 HU ₂₄		12 21.9 116°92'	5°4'/21.9 18		
11 17	6 34.36	+21 22.1	1.559	2.378	16.5	21.6	11 17	6 26.32	+8 11.8	2.249	3.038	13.1	20.3
11 27	6 27.87	+21 12.7	1.493	2.390	12.5	21.4	11 27	6 20.97	+7 28.4	2.180	3.048	10.4	20.2
12 7	6 18.42	+21 4.9	1.449	2.401	7.8	21.2	12 7	6 13.78	+6 54.3	2.135	3.058	7.7	20.0
12 17	6 6.97	+20 57.6	1.432	2.412	2.8	20.9	12 17	6 5.38	+6 31.9	2.116	3.068	5.7	19.9
12 27	5 54.96	+20 50.2	1.443	2.422	2.9	20.9	12 27	5 56.64	+6 22.8	2.127	3.077	5.7	19.9
1 6	5 43.93	+20 43.3	1.483	2.432	7.8	21.2	1 6	5 48.43	+6 27.0	2.167	3.086	7.7	20.1
1 16	5 35.13	+20 38.1	1.548	2.441	12.2	21.5	1 16	5 41.56	+6 43.5	2.233	3.095	10.3	20.3
1 26	5 29.41	+20 36.0	1.637	2.449	16.0	21.8	1 26	5 36.62	+7 10.1	2.323	3.103	12.8	20.4
272280	2005 RM ₄₁		12 21.9 144°50'	2°1'/22.0 18			108838	2001 OZ ₈₇		12 21.9 96°71'	4°7'/22.4 18		
11 17	6 27.41	+17 7.0	2.090	2.900	13.2	20.8	11 17	6 28.50	+9 18.5	2.081	2.873	13.9	19.9
11 27	6 22.07	+17 2.3	2.013	2.903	10.1	20.6	11 27	6 22.66	+9 5.5	2.020	2.893	10.9	19.7
12 7	6 14.60	+17 2.4	1.959	2.906	6.5	20.4	12 7	6 14.84	+9 2.9	1.983	2.914	7.7	19.6
12 17	6 5.67	+17 7.0	1.933	2.909	3.0	20.2	12 17	6 5.73	+9 11.9	1.974	2.934	5.1	19.4
12 27	5 56.25	+17 15.9	1.936	2.912	3.0	20.2	12 27	5 56.30	+9 32.4	1.993	2.953	5.0	19.5
1 6	5 47.37	+17 28.5	1.969	2.914	6.5	20.4	1 6	5 47.54	+10 3.2	2.042	2.973	7.4	19.7
1 16	5 39.97	+17 44.6	2.029	2.916	10.0	20.6	1 16	5 40.27	+10 42.3	2.118	2.991	10.3	19.9
1 26	5 34.76	+18 3.7	2.114	2.919	13.1	20.8	1 26	5 35.13	+11 27.2	2.219	3.010	13.0	20.1
493410	2014 WU ₁₉₈		12 21.9 66°32'	3°4'/22.2 17			489239	2006 QX ₁₆₄		12 21.9 81°57'	4°6'/22.5 17		
11 17	6 24.88	+12 0.2	2.330	3.130	12.4	21.5	11 17	6 35.79	+36 51.8	1.870	2.668	15.0	21.5
11 27	6 19.97	+11 58.1	2.250	3.131	9.6	21.3	11 27	6 28.67	+37 0.9	1.811	2.689	11.7	21.4
12 7	6 13.22	+12 4.1	2.195	3.133	6.6	21.1	12 7	6 18.73	+36 58.1	1.776	2.710	8.2	21.2
12 17	6 5.20	+12 18.6	2.167	3.135	3.9	20.9	12 17	6 7.04	+36 39.7	1.767	2.731	5.2	21.0
12 27	5 56.74	+12 41.5	2.169	3.136	3.9	20.9	12 27	5 55.04	+36 4.3	1.787	2.751	5.0	21.1
1 6	5 48.71	+13 11.6	2.200	3.138	6.4	21.1	1 6	5 44.21	+35 14.5	1.836	2.771	7.7	21.3
1 16	5 41.93	+13 47.5	2.259	3.139	9.4	21.3	1 16	5 35.69	+34 15.4	1.912	2.791	10.9	21.5
1 26	5 37.02	+14 27.8	2.343	3.141	12.2	21.5	1 26	5 30.18	+33 13.0	2.011	2.811	13.9	21.8
103331	2000 AY ₆₉		12 21.9 10°20'	3°1'/22.0 18			7335	1989 JA		12 21.9 123°85'	5°0'/21.6 17		
11 17	6 27.04	+16 11.7	1.509	2.337	16.5	19.2	11 17	6 52.86	+31 43.6	1.557	2.344	18.0	20.7
11 27	6 22.51	+15 58.5	1.439	2.338	12.7	19.0	11 27	6 42.15	+33 9.6	1.503	2.378	13.9	20.6
12 7	6 15.20	+15 52.6	1.390	2.340	8.3	18.7	12 7	6 27.46	+34 28.7	1.474	2.410	9.4	20.4
12 17	6 5.93	+15 54.5	1.366	2.342	4.1	18.5	12 17	6 10.06	+35 30.7	1.472	2.439	5.6	20.2
12 27	5 56.00	+16 4.1	1.369	2.345	4.1	18.5	12 27	5 51.97	+36 8.3	1.502	2.467	5.7	20.3
1 6	5 46.82	+16 20.8	1.400	2.348	8.2	18.8	1 6	5 35.42	+36 21.1	1.562	2.492	9.3	20.6
1 16	5 39.62	+16 43.6	1.455	2.351	12.6	19.0	1 16	5 22.10	+36 14.4	1.650	2.515	13.2	20.9
1 26	5 35.26	+17 11.3	1.532	2.355	16.3	19.3	1 26	5 12.96	+35 56.2	1.761	2.536	16.5	21.1
184158	2004 KX ₁₆		12 21.9 238°81'	2°1'/22.2 18			512949	2017 DU ₁		12 21.9 11°10'	2°9'/22.1 18		
11 17	6 28.13	+15 23.4	2.043	2.850	13.6	20.4	11 17	6 25.87	+16 28.1	1.403	2.238	17.2	20.6
11 27	6 22.79	+15 48.7	1.958	2.846	10.4	20.2	11 27	6 21.80	+16 21.9	1.337	2.241	13.1	20.3
12 7	6 15.17	+16 22.1	1.896	2.843	6.8	20.0	12 7	6 14.84	+16 23.7	1.292	2.244	8.5	20.1
12 17	6 5.91	+17 2.7	1.863	2.839	3.1	19.7	12 17	6 5.85	+16 33.7	1.271	2.248	4.0	19.8
12 27	5 55.99	+17 48.4	1.859	2.835	2.9	19.7	12 27	5 56.18	+16 51.3	1.277	2.253	4.0	19.9
1 6	5 46.53	+18 37.0	1.885	2.832	6.6	19.9	1 6	5 47.32	+17 15.3	1.309	2.259	8.4	20.1
1 16	5 38.52	+19 26.6	1.939	2.828	10.3	20.2	1 16	5 40.54	+17 44.2	1.365	2.266	12.9	20.4
1 26	5 32.79	+20 15.9	2.018	2.824	13.6	20.4	1 26	5 36.73	+18 16.8	1.443	2.274	16.8	20.7
218510	2004 TY ₁₀₈		12 21.9 24°10'	3°5'/22.3 18			136780	1996 VV ₁₁		12 21.9 271°76'	5°1'/21.9 18		
11 17	6 25.39	+13 41.4	1.604	2.428	15.9	19.3	11 17	6 34.49	+33 54.7	1.484	2.304	17.2	19.6
11 27	6 21.01	+13 44.8	1.542	2.438	12.2	19.1	11 27	6 28.96	+34 32.0	1.401	2.293	13.5	19.3
12 7	6 14.12	+13 58.5	1.502	2.449	8.1	18.9	12 7	6 19.70	+35 1.5	1.339	2.281	9.4	19.0
12 17	6 5.54	+14 22.4	1.487	2.461	4.3	18.7	12 17	6 7.60	+35 16.4	1.301	2.269	5.8	18.8
12 27	5 56.43	+14 55.4	1.500	2.473	4.2	18.7	12 27	5 54.33	+35 11.7	1.290	2.258	5.8	18.8
1 6	5 48.07	+15 35.6	1.540	2.487	7.8	19.0	1 6	5 41.89	+34 47.0	1.305	2.246	9.6	19.0
1 16	5 41.54	+16 20.4	1.605	2.501	11.7	19.2	1 16	5 32.04	+34 7.0	1.345	2.234	14.0	19.2
1 26	5 37.58	+17 7.8	1.694	2.515	15.1	19.5	1 26	5 25.98	+33 18.9	1.406	2.222	18.0	19.4
439840	1997 SB ₃₃		12 21.9 34°69'	0°8'/21.9 15			155291	2005 XO ₅₆		12 21.9 95°26'	0°7'/21.9 18		
11 17	6 29.31	+24 54.1	1.333	2.172	17.7	21.1							

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
327124	2005 <i>ER</i> ₁₄₄		12 21.9 125°09	3°9/22.1	18		250502	2004 <i>GJ</i> ₄		12 21.9 92°79	6°1/21.9	18	
11 17	6 32.30	+14 3.5	1.590	2.402	16.6	21.5	11 17	6 27.65	+7 6.3	2.059	2.847	14.2	20.5
11 27	6 26.20	+13 46.6	1.525	2.414	12.8	21.3	11 27	6 22.05	+6 18.0	1.999	2.865	11.3	20.4
12 7	6 17.37	+13 38.3	1.481	2.425	8.6	21.1	12 7	6 14.48	+5 40.8	1.963	2.883	8.5	20.2
12 17	6 6.67	+13 39.4	1.464	2.436	4.7	20.9	12 17	6 5.66	+5 17.5	1.953	2.901	6.4	20.2
12 27	5 55.42	+13 50.1	1.475	2.446	4.6	20.9	12 27	5 56.53	+5 9.8	1.972	2.919	6.4	20.2
1 6	5 45.03	+14 9.4	1.514	2.456	8.4	21.1	1 6	5 48.06	+5 17.4	2.019	2.936	8.4	20.3
1 16	5 36.66	+14 36.1	1.579	2.465	12.4	21.4	1 16	5 41.09	+5 38.7	2.093	2.953	11.0	20.5
1 26	5 31.15	+15 8.5	1.666	2.474	15.9	21.6	1 26	5 36.20	+6 11.1	2.189	2.969	13.5	20.7
92526	2000 <i>OB</i> ₃		12 21.9 185°01	3°1/22.3	18		168945	2000 <i>YN</i> ₁₃₁		12 21.9 3°46	2°5/21.8	18	R
11 17	6 35.79	+33 20.5	2.033	2.832	14.0	20.2	11 17	6 30.31	+26 4.9	1.168	2.014	19.2	19.3
11 27	6 28.66	+33 19.0	1.950	2.832	10.8	20.0	11 27	6 26.09	+26 48.2	1.102	2.013	14.7	19.1
12 7	6 18.83	+33 8.6	1.891	2.832	7.2	19.8	12 7	6 18.01	+27 32.3	1.056	2.012	9.4	18.8
12 17	6 7.16	+32 46.1	1.859	2.831	3.9	19.6	12 17	6 7.06	+28 11.7	1.034	2.013	3.9	18.4
12 27	5 54.93	+32 10.3	1.857	2.829	3.8	19.6	12 27	5 55.03	+28 40.9	1.036	2.014	4.1	18.5
1 6	5 43.54	+31 22.9	1.886	2.827	7.1	19.8	1 6	5 44.01	+28 57.9	1.064	2.016	9.5	18.8
1 16	5 34.16	+30 28.1	1.942	2.824	10.7	20.0	1 16	5 35.80	+29 4.3	1.114	2.019	14.8	19.1
1 26	5 27.59	+29 31.2	2.023	2.821	13.9	20.2	1 26	5 31.54	+29 3.9	1.184	2.022	19.2	19.4
150214	1998 <i>SF</i> ₁₀₆		12 21.9 43°30	5°1/21.8	18		110292	2001 <i>SC</i> ₂₆₅		12 21.9 215°31	2°4/21.9	17	
11 17	6 33.43	+32 24.1	1.320	2.151	18.3	19.7	11 17	6 30.27	+29 44.8	2.186	2.993	12.8	20.1
11 27	6 28.14	+33 18.8	1.261	2.159	14.2	19.5	11 27	6 24.47	+30 9.8	2.100	2.989	9.8	19.9
12 7	6 19.08	+34 6.8	1.222	2.168	9.7	19.2	12 7	6 16.26	+30 31.1	2.039	2.985	6.4	19.7
12 17	6 7.34	+34 40.5	1.207	2.178	5.8	19.1	12 17	6 6.34	+30 45.6	2.005	2.980	3.1	19.5
12 27	5 54.75	+34 54.6	1.218	2.187	5.9	19.1	12 27	5 55.78	+30 50.9	2.001	2.975	3.2	19.5
1 6	5 43.33	+34 49.1	1.255	2.198	9.7	19.3	1 6	5 45.76	+30 46.8	2.026	2.969	6.5	19.7
1 16	5 34.76	+34 28.0	1.316	2.208	14.0	19.6	1 16	5 37.36	+30 34.9	2.080	2.963	10.0	19.9
1 26	5 30.03	+33 58.0	1.398	2.219	17.7	19.9	1 26	5 31.37	+30 18.1	2.157	2.958	13.0	20.1
180200	2003 <i>SC</i> ₂₅₀		12 21.9 95°43	4°3/21.8	18		427072	2014 <i>UF</i> ₂₂		12 21.9 127°33	0°5/21.9	17	
11 17	6 38.10	+31 12.1	1.467	2.284	17.5	20.2	11 17	6 27.18	+23 21.9	2.502	3.309	11.4	21.2
11 27	6 31.14	+32 6.7	1.412	2.304	13.4	20.0	11 27	6 21.71	+23 49.6	2.424	3.315	8.6	21.0
12 7	6 20.67	+32 55.3	1.380	2.325	8.9	19.8	12 7	6 14.33	+24 18.2	2.372	3.322	5.3	20.8
12 17	6 7.81	+33 31.0	1.373	2.345	5.0	19.7	12 17	6 5.65	+24 45.8	2.348	3.328	1.8	20.6
12 27	5 54.32	+33 49.0	1.394	2.364	5.1	19.7	12 27	5 56.51	+25 10.7	2.355	3.334	1.9	20.6
1 6	5 42.08	+33 49.4	1.443	2.383	8.9	20.0	1 6	5 47.84	+25 31.9	2.393	3.340	5.3	20.9
1 16	5 32.57	+33 35.9	1.517	2.402	12.9	20.3	1 16	5 40.44	+25 49.3	2.459	3.345	8.5	21.1
1 26	5 26.70	+33 14.4	1.613	2.420	16.4	20.5	1 26	5 34.98	+26 3.9	2.551	3.351	11.3	21.3
492182	2013 <i>QW</i> ₄₀		12 21.9 125°56	4°9/22.2	18		171649	2000 <i>FQ</i> ₆₃		12 21.9 345°62	7°9/21.3	17	
11 17	6 24.48	+6 35.6	2.668	3.446	11.5	21.7	11 17	6 31.99	+38 48.2	1.539	2.353	17.0	19.4
11 27	6 19.37	+6 10.4	2.596	3.456	9.3	21.6	11 27	6 27.22	+40 10.4	1.467	2.347	13.8	19.2
12 7	6 12.72	+5 54.6	2.549	3.466	6.9	21.4	12 7	6 18.71	+41 23.0	1.415	2.342	10.5	19.0
12 17	6 5.05	+5 49.8	2.529	3.476	5.2	21.4	12 17	6 7.33	+42 16.7	1.388	2.338	8.2	18.8
12 27	5 57.08	+5 56.9	2.539	3.486	5.1	21.4	12 27	5 54.76	+42 44.3	1.387	2.334	8.4	18.8
1 6	5 49.54	+6 15.2	2.578	3.495	6.8	21.5	1 6	5 43.02	+42 44.3	1.410	2.331	11.0	19.0
1 16	5 43.09	+6 43.6	2.645	3.504	9.0	21.6	1 16	5 33.91	+42 20.5	1.458	2.328	14.3	19.2
1 26	5 38.25	+7 20.0	2.737	3.512	11.2	21.8	1 26	5 28.64	+41 40.7	1.526	2.326	17.5	19.4
6096	1991 <i>UB</i> ₂		12 21.9 195°78	2°3/21.8	18		47910	2000 <i>GY</i> ₇₄		12 21.9 70°14	3°2/21.8	18	
11 17	6 31.46	+18 51.0	1.750	2.564	15.2	18.3	11 17	6 28.53	+31 52.0	2.317	3.123	12.2	18.6
11 27	6 25.55	+18 22.8	1.669	2.563	11.6	18.1	11 27	6 23.03	+32 31.6	2.243	3.128	9.4	18.5
12 7	6 16.99	+17 57.0	1.612	2.561	7.5	17.8	12 7	6 15.29	+33 6.7	2.192	3.134	6.3	18.3
12 17	6 6.58	+17 34.1	1.582	2.559	3.3	17.6	12 17	6 6.00	+33 33.7	2.170	3.140	3.7	18.1
12 27	5 55.52	+17 15.0	1.580	2.556	3.4	17.6	12 27	5 56.18	+33 50.0	2.177	3.146	3.8	18.1
1 6	5 45.16	+17 0.8	1.607	2.553	7.6	17.8	1 6	5 46.92	+33 55.1	2.214	3.151	6.4	18.3
1 16	5 36.66	+16 52.3	1.661	2.549	11.8	18.1	1 16	5 39.19	+33 50.4	2.278	3.157	9.4	18.5
1 26	5 30.86	+16 50.3	1.738	2.545	15.4	18.3	1 26	5 33.76	+33 38.7	2.367	3.163	12.1	18.7
415389	2013 <i>NW</i> ₁₁		12 21.9 100°41	3°1/22.7	18		15875	1996 <i>TP</i> ₆₆		12 21.9 30°47	0°1/21.9	17	
11 17	6 28.74	+9 46.6	2.608	3.388	11.7	20.6	11 17	6 5.20	+27 42.0	29.025	29.825	1.1	21.9
11 27	6 22.57	+10 19.9	2.539	3.408	9.1	20.5	11 27	6 4.16	+27 42.6	28.946	29.833	0.8	21.8
12 7	6 14.71	+11 2.8	2.495	3.427	6.2	20.3	12 7	6 3.01	+27 43.0	28.894	29.842	0.5	21.8
12 17	6 5.73	+11 54.5	2.481	3.446	3.7	20.2	12 17	6 1.77	+27 43.0	28.872	29.850	0.2	21.7
12 27	5 56.40	+12 53.2	2.498	3.465	3.5	20.2	12 27	6 0.51	+27 42.8	28.881	29.858	0.2	21.7
1 6	5 47.55	+13 56.5	2.547	3.484	5.8	20.4	1 6	5 59.28	+27 42.2	28.921	29.866	0.5	21.8
1 16	5 39.90	+15 2.1	2.626	3.502	8.5	20.6	1 16	5 58.12	+27 41.3	28.991	29.875	0.8	21.8
1 26	5 34.02	+16 7.9	2.733	3.520	10.9	20.8	1 26	5 57.09	+27 40.2	29.089	29.883	1.1	21.9
19522	1998 <i>XQ</i> ₈₃		12 21.9 326°78	7°9/21.6	18		11779	Zernike		12 21.9 76°29	1°0/21.9	18	
11 17	6 25.15	+6 34.2	1.631	2.438	16.5	17.1	11 17	6 30.74	+24 43.3	1.729	2.550	15.1	18.1
11 27	6 20.94	+5 29.1	1.552	2.427	13.5	16.9	11 27	6 25.07	+25 8.8	1.664	2.562	11.4	17.8
12 7	6 14.21	+4 36.4	1.495	2.418	10.4	16.7	12 7	6 16.71	+25 34.3	1.621	2.573	7.1	17.6
12 17	6 5.67	+4 0.8	1.461	2.408	8.2	16.5	12 17	6 6.50	+25 56.9	1.605	2.585	2.6	17.4
12 27	5 56.44	+3 46.3	1.454	2.399	8.3	16.5	12 27	5 55.72	+26 14.1	1.618	2.597	2.6	17.4
1 6	5 47.76	+3 53.7	1.472	2.391	10.7	16.6	1 6	5 45.75	+26 25.1	1.659	2.609	7.1	17.7
1 16	5 40.76	+4 21.3	1.514	2.383	13.9	16.8	1 16	5 37.76	+26 30.9	1.727	2.620	11.1	18.0
1 26	5 36.32	+5 5.4	1.578	2.376	17.1	17.0	1 26	5 32.57	+26 33.6	1.818	2.632	14.6	18.2
381399	2008 <i>GK</i> ₉₈		12 21.9 337°41	5°4/22.2	18		414943	2011 <i>BS</i> ₅₃		12 21.9 224°30	3°4/22.1	18	

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
239185	2006 <i>KM</i> ₉₃		12 21.9 114°29	1.8°/21.9	18		480042	2015 <i>BE</i> ₄₂₅		12 21.9 230°14	2.1°/22.0	18	
11 17	6 29.99	+19 2.8	1.869	2.683	14.4	21.4	11 17	6 31.80	+18 24.7	1.384	2.213	17.7	22.3
11 27	6 24.19	+18 50.3	1.799	2.693	10.9	21.2	11 27	6 26.53	+18 21.4	1.310	2.211	13.6	22.0
12 7	6 16.02	+18 40.9	1.753	2.703	6.9	21.0	12 7	6 17.98	+18 24.2	1.256	2.208	8.7	21.7
12 17	6 6.25	+18 34.5	1.734	2.712	2.9	20.8	12 17	6 7.05	+18 32.4	1.227	2.206	3.6	21.4
12 27	5 56.01	+18 30.9	1.745	2.722	2.9	20.8	12 27	5 55.22	+18 44.9	1.225	2.203	3.6	21.4
1 6	5 46.49	+18 30.4	1.784	2.731	6.9	21.1	1 6	5 44.18	+19 0.8	1.250	2.200	8.7	21.7
1 16	5 38.73	+18 33.2	1.851	2.740	10.7	21.3	1 16	5 35.44	+19 19.9	1.300	2.198	13.6	22.0
1 26	5 33.45	+18 39.7	1.941	2.749	14.0	21.5	1 26	5 30.01	+19 41.9	1.370	2.195	17.9	22.2
493086	2014 <i>SQ</i> ₃₁₇		12 21.9 66°80	7.4°/21.7	17		216885	2008 <i>SD</i> ₂₆₈		12 21.9 98°00	4.3°/21.9	17	
11 17	6 34.09	+43 13.4	2.129	2.909	14.0	21.3	11 17	6 25.14	+10 29.6	2.417	3.211	12.1	21.1
11 27	6 27.81	+44 22.3	2.066	2.919	11.6	21.1	11 27	6 20.03	+9 56.2	2.347	3.221	9.5	20.9
12 7	6 18.54	+45 18.8	2.025	2.930	9.2	21.0	12 7	6 13.22	+9 30.4	2.301	3.232	6.8	20.8
12 17	6 7.16	+45 56.0	2.011	2.940	7.6	20.9	12 17	6 5.30	+9 13.7	2.283	3.242	4.6	20.6
12 27	5 55.06	+46 9.9	2.023	2.951	7.7	20.9	12 27	5 57.05	+9 7.1	2.294	3.253	4.7	20.7
1 6	5 43.79	+46 0.2	2.063	2.962	9.3	21.0	1 6	5 49.30	+9 10.8	2.335	3.263	6.8	20.8
1 16	5 34.69	+45 30.9	2.128	2.973	11.5	21.2	1 16	5 42.78	+9 24.0	2.403	3.273	9.4	21.0
1 26	5 28.65	+44 48.0	2.216	2.984	13.8	21.4	1 26	5 38.04	+9 45.2	2.496	3.282	11.9	21.2
293091	2006 <i>WK</i> ₂₀₀		12 21.9 86°86	0.8°/21.9	18		406269	2007 <i>EA</i> ₅₈		12 21.9 216°75	4.7°/22.3	17	
11 17	6 28.74	+20 50.5	1.943	2.758	13.9	21.4	11 17	6 26.12	+8 51.4	2.231	3.022	13.1	21.9
11 27	6 23.23	+20 54.3	1.873	2.769	10.5	21.2	11 27	6 21.04	+8 37.5	2.147	3.019	10.4	21.7
12 7	6 15.42	+21 0.5	1.828	2.779	6.5	21.0	12 7	6 14.00	+8 33.6	2.087	3.016	7.5	21.5
12 17	6 6.05	+21 7.8	1.810	2.789	2.3	20.8	12 17	6 5.60	+8 41.3	2.054	3.013	5.2	21.4
12 27	5 56.21	+21 15.4	1.821	2.800	2.3	20.8	12 27	5 56.70	+9 1.0	2.051	3.009	5.1	21.4
1 6	5 47.06	+21 22.9	1.861	2.810	6.4	21.1	1 6	5 48.22	+9 31.7	2.076	3.006	7.4	21.5
1 16	5 39.57	+21 30.6	1.929	2.820	10.2	21.3	1 16	5 41.03	+10 11.9	2.129	3.002	10.3	21.7
1 26	5 34.49	+21 39.1	2.020	2.830	13.4	21.6	1 26	5 35.80	+10 59.0	2.206	2.998	13.1	21.9
194834	2001 <i>YY</i> ₁₅₅		12 21.9 331°53	7°1°/21.3	18		138243	2000 <i>FQ</i> ₃₅		12 21.9 212°65	6°1°/21.5	18	
11 17	6 32.44	+35 55.8	1.417	2.241	17.7	19.7	11 17	6 34.41	+38 56.9	2.129	2.919	13.7	20.5
11 27	6 27.74	+37 15.1	1.343	2.233	14.1	19.5	11 27	6 28.08	+40 1.8	2.048	2.915	11.1	20.3
12 7	6 19.15	+38 27.4	1.289	2.226	10.4	19.3	12 7	6 18.79	+40 58.2	1.990	2.910	8.4	20.1
12 17	6 7.53	+39 23.3	1.259	2.219	7.5	19.1	12 17	6 7.32	+41 39.4	1.959	2.906	6.4	20.0
12 27	5 54.60	+39 54.9	1.255	2.212	7.8	19.1	12 27	5 54.95	+42 0.7	1.956	2.901	6.5	20.0
1 6	5 42.49	+40 0.2	1.276	2.207	10.9	19.2	1 6	5 43.18	+42 0.9	1.982	2.896	8.6	20.1
1 16	5 33.11	+39 42.7	1.321	2.201	14.8	19.4	1 16	5 33.37	+41 43.0	2.034	2.891	11.4	20.2
1 26	5 27.72	+39 9.9	1.386	2.197	18.4	19.7	1 26	5 26.51	+41 12.1	2.109	2.885	14.1	20.4
72400	2001 <i>CX</i> ₂₂		12 21.9 50°44	0.7°/21.9	18		37308	2001 <i>OP</i> ₁₆		12 21.9 100°93	1°9°/21.9	17	
11 17	6 29.54	+20 53.6	1.595	2.421	15.9	19.5	11 17	6 41.14	+26 28.5	1.534	2.344	17.2	20.6
11 27	6 24.35	+21 5.5	1.526	2.427	12.0	19.3	11 27	6 32.94	+27 5.9	1.485	2.376	12.9	20.4
12 7	6 16.36	+21 21.0	1.480	2.433	7.5	19.0	12 7	6 21.56	+27 40.9	1.458	2.407	8.1	20.2
12 17	6 6.42	+21 38.1	1.459	2.439	2.6	18.7	12 17	6 8.13	+28 8.4	1.459	2.437	3.3	20.0
12 27	5 55.83	+21 55.2	1.466	2.445	2.6	18.8	12 27	5 54.31	+28 25.0	1.489	2.466	3.3	20.0
1 6	5 46.02	+22 11.3	1.501	2.452	7.4	19.1	1 6	5 41.82	+28 30.8	1.548	2.494	7.8	20.4
1 16	5 38.23	+22 26.3	1.562	2.459	11.8	19.3	1 16	5 31.96	+28 28.2	1.634	2.521	12.0	20.7
1 26	5 33.31	+22 41.1	1.645	2.466	15.5	19.6	1 26	5 25.51	+28 21.3	1.743	2.546	15.5	21.0
153363	2001 <i>PC</i> ₆₁		12 21.9 44°13	5°0°/22.2	18		207242	2005 <i>EJ</i> ₁₈₀		12 21.9 71°64	1°6°/21.9	18	
11 17	6 34.04	+34 9.1	1.352	2.178	18.2	19.8	11 17	6 29.77	+19 50.8	1.689	2.510	15.4	20.4
11 27	6 28.47	+34 35.0	1.291	2.187	14.2	19.6	11 27	6 24.23	+19 36.0	1.625	2.522	11.6	20.2
12 7	6 19.21	+34 50.4	1.251	2.196	9.7	19.3	12 7	6 16.14	+19 24.1	1.583	2.535	7.3	20.0
12 17	6 7.41	+34 49.5	1.235	2.205	5.8	19.1	12 17	6 6.34	+19 14.7	1.568	2.547	2.9	19.7
12 27	5 54.90	+34 29.0	1.245	2.215	5.6	19.2	12 27	5 56.07	+19 7.9	1.582	2.560	2.9	19.7
1 6	5 43.67	+33 50.9	1.281	2.225	9.4	19.4	1 6	5 46.64	+19 4.0	1.624	2.573	7.2	20.0
1 16	5 35.29	+33 1.1	1.341	2.235	13.6	19.7	1 16	5 39.14	+19 3.5	1.692	2.585	11.3	20.3
1 26	5 30.68	+32 6.8	1.423	2.246	17.4	19.9	1 26	5 34.31	+19 6.9	1.783	2.598	14.8	20.6
273471	2006 <i>YK</i> ₂		12 21.9 65°27	0.9°/21.9	18		84683	2002 <i>VT</i> ₉₅		12 21.9 346°08	8°9°/21.4	17	
11 17	6 35.63	+22 40.1	1.271	2.102	18.9	20.8	11 17	6 31.75	+41 2.6	1.508	2.319	17.4	18.7
11 27	6 29.01	+22 19.1	1.228	2.131	14.1	20.6	11 27	6 27.25	+42 24.1	1.436	2.312	14.3	18.5
12 7	6 19.14	+21 58.5	1.205	2.159	8.7	20.4	12 7	6 18.85	+43 33.6	1.384	2.305	11.3	18.3
12 17	6 7.27	+21 37.4	1.207	2.187	3.0	20.1	12 17	6 7.45	+44 21.4	1.356	2.299	9.1	18.2
12 27	5 55.15	+21 16.3	1.236	2.216	3.0	20.2	12 27	5 54.83	+44 40.2	1.353	2.294	9.3	18.2
1 6	5 44.49	+20 56.6	1.293	2.244	8.4	20.6	1 6	5 43.12	+44 28.8	1.375	2.290	11.6	18.3
1 16	5 36.55	+20 40.4	1.374	2.272	13.0	20.9	1 16	5 34.17	+43 52.0	1.419	2.287	14.8	18.5
1 26	5 32.04	+20 29.5	1.476	2.300	16.8	21.3	1 26	5 29.23	+42 58.2	1.484	2.285	17.9	18.7
228864	2003 <i>GL</i> ₃₅		12 21.9 318°01	0.8°/21.9	18		28642	Zbarsky		12 21.9 320°59	2°4°/22.1	18	
11 17	6 28.45	+23 50.5	1.351	2.190	17.5	20.7	11 17	6 30.50	+29 4.5	1.345	2.181	17.7	18.0
11 27	6 24.40	+24 12.4	1.267	2.175	13.4	20.4	11 27	6 25.97	+29 5.5	1.265	2.170	13.7	17.7
12 7	6 16.92	+24 36.6	1.203	2.159	8.5	20.1	12 7	6 17.86	+29 0.4	1.205	2.158	8.8	17.4
12 17	6 6.76	+25 0.1	1.164	2.144	3.0	19.7	12 17	6 7.07	+28 45.6	1.169	2.147	3.8	17.1
12 27	5 55.41	+25 19.5	1.150	2.130	3.1	19.7	12 27	5 55.25	+28 19.1	1.159	2.137	3.7	17.0
1 6	5 44.69	+25 33.3	1.163	2.116	8.8	20.0	1 6	5 44.31	+27 42.6	1.175	2.127	8.9	17.3
1 16	5 36.25	+25 42.1	1.199	2.103	14.0	20.2	1 16	5 35.88	+27 0.4	1.215	2.118	14.0	17.6
1 26	5 31.32	+25 48.0	1.256	2.091	18.5	20.4	1 26	5 31.10	+26 17.9	1.276	2.109	18.4	17.8
218387	2004 <i>PH</i> ₁₃		12 21.9 88°53	0.4°/21.9	18		365961	2012 <i>BU</i> ₂₄		12 21.9 350°71	7°3		

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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
348779	2006 <i>KJ</i> ₅₄		12 21.9 342°88	2°3/21.7	18		383497	2007 <i>BW</i> ₆₂		12 21.9 9°99	2°2/22.1	18	
11 17	6 31.60	+25 39.2	1.694	2.514	15.4	20.5	11 17	6 29.19	+28 35.2	1.116	1.967	19.6	20.5
11 27	6 26.12	+26 41.4	1.616	2.513	11.7	20.3	11 27	6 25.25	+28 33.5	1.056	1.968	15.0	20.2
12 7	6 17.66	+27 45.7	1.562	2.513	7.5	20.0	12 7	6 17.46	+28 25.5	1.014	1.970	9.6	19.9
12 17	6 6.97	+28 46.9	1.535	2.512	3.2	19.8	12 17	6 6.93	+28 7.8	0.995	1.974	3.9	19.6
12 27	5 55.35	+29 39.8	1.536	2.512	3.5	19.8	12 27	5 55.58	+27 39.2	1.000	1.979	3.8	19.6
1 6	5 44.35	+30 21.4	1.566	2.512	7.8	20.0	1 6	5 45.48	+27 2.2	1.030	1.985	9.4	20.0
1 16	5 35.33	+30 51.5	1.622	2.511	12.0	20.3	1 16	5 38.28	+26 21.5	1.082	1.992	14.6	20.3
1 26	5 29.33	+31 12.4	1.701	2.511	15.6	20.5	1 26	5 34.98	+25 42.5	1.154	2.000	19.1	20.6
464543	2016 <i>CU</i> ₃₂		12 21.9 300°78	9°0/22.5	18		162829	2001 <i>CX</i> ₁		12 21.9 271°44	0°9/22.0	18	
11 17	6 23.55	- 4 19.1	2.324	3.068	14.0	21.0	11 17	6 29.24	+19 52.3	1.759	2.579	14.9	19.5
11 27	6 19.06	- 5 4.6	2.244	3.060	12.1	20.8	11 27	6 24.08	+20 7.7	1.676	2.573	11.4	19.3
12 7	6 12.76	- 5 33.1	2.185	3.052	10.4	20.7	12 7	6 16.25	+20 27.8	1.616	2.568	7.2	19.0
12 17	6 5.21	- 5 40.6	2.150	3.044	9.2	20.6	12 17	6 6.49	+20 50.8	1.583	2.563	2.6	18.7
12 27	5 57.17	- 5 25.0	2.141	3.036	9.2	20.6	12 27	5 55.95	+21 15.1	1.578	2.557	2.6	18.7
1 6	5 49.52	- 4 46.5	2.158	3.028	10.3	20.6	1 6	5 45.97	+21 39.1	1.602	2.552	7.2	19.0
1 16	5 43.02	- 3 47.8	2.200	3.020	12.1	20.7	1 16	5 37.77	+22 2.4	1.652	2.546	11.5	19.2
1 26	5 38.33	- 2 33.4	2.264	3.013	14.1	20.9	1 26	5 32.24	+22 25.2	1.726	2.541	15.1	19.4
23955	Nishikota		12 21.9 118°58	2°9/21.9	18		6073	1939 <i>UB</i>		12 21.9 334°98	7°5/21.3	18	
11 17	6 29.51	+31 31.3	2.425	3.227	11.9	19.0	11 17	6 25.88	+ 9 12.6	1.530	2.346	16.9	15.9
11 27	6 23.64	+32 5.2	2.352	3.236	9.1	18.8	11 27	6 21.66	+ 7 54.1	1.453	2.338	13.6	15.6
12 7	6 15.63	+32 34.5	2.303	3.245	6.1	18.6	12 7	6 14.78	+ 6 45.0	1.398	2.329	10.3	15.4
12 17	6 6.17	+32 56.1	2.283	3.253	3.4	18.5	12 17	6 5.99	+ 5 50.9	1.368	2.322	7.8	15.3
12 27	5 56.23	+33 7.6	2.292	3.262	3.4	18.5	12 27	5 56.49	+ 5 16.2	1.363	2.314	8.0	15.3
1 6	5 46.86	+33 8.9	2.332	3.270	6.1	18.7	1 6	5 47.63	+ 5 3.1	1.384	2.308	10.8	15.4
1 16	5 38.99	+33 1.4	2.400	3.279	9.0	18.9	1 16	5 40.60	+ 5 10.9	1.428	2.302	14.3	15.6
1 26	5 33.32	+32 47.9	2.493	3.286	11.7	19.1	1 26	5 36.27	+ 5 36.6	1.493	2.297	17.7	15.8
305732	2009 <i>CM</i> ₄₂		12 21.9 287°41	3°9/22.0	17		255125	2005 <i>UH</i> ₁₂₀		12 21.9 304°97	0°9/21.9	17	
11 17	6 31.58	+32 52.4	1.764	2.579	15.1	20.9	11 17	6 28.35	+25 32.4	1.990	2.807	13.5	21.0
11 27	6 26.21	+33 16.4	1.674	2.564	11.8	20.7	11 27	6 23.15	+25 41.9	1.908	2.804	10.3	20.8
12 7	6 17.76	+33 33.5	1.607	2.550	8.0	20.4	12 7	6 15.53	+25 50.3	1.849	2.801	6.4	20.6
12 17	6 7.01	+33 39.1	1.565	2.536	4.6	20.2	12 17	6 6.21	+25 55.4	1.818	2.798	2.3	20.3
12 27	5 55.33	+33 29.8	1.551	2.521	4.6	20.2	12 27	5 56.27	+25 55.9	1.816	2.795	2.4	20.3
1 6	5 44.30	+33 5.7	1.565	2.507	8.1	20.3	1 6	5 46.92	+25 51.6	1.843	2.792	6.5	20.6
1 16	5 35.33	+32 30.3	1.605	2.493	12.2	20.5	1 16	5 39.22	+25 44.0	1.897	2.789	10.3	20.8
1 26	5 29.47	+31 48.7	1.668	2.479	15.8	20.7	1 26	5 33.97	+25 34.9	1.975	2.786	13.6	21.0
13722	Campobagatin		12 21.9 116°27	0°0/21.9	18		100975	1998 <i>QB</i> ₂₅		12 21.9 106°63	1°7/22.0	18	
11 17	6 31.55	+23 33.7	2.093	2.901	13.3	19.2	11 17	6 33.49	+18 51.0	1.656	2.470	15.9	20.5
11 27	6 25.14	+23 31.7	2.027	2.918	10.0	19.0	11 27	6 27.03	+18 49.0	1.595	2.489	12.1	20.3
12 7	6 16.51	+23 29.3	1.985	2.935	6.2	18.8	12 7	6 17.88	+18 51.3	1.558	2.507	7.6	20.1
12 17	6 6.44	+23 24.9	1.972	2.952	2.1	18.6	12 17	6 6.97	+18 57.0	1.547	2.525	3.0	19.9
12 27	5 56.01	+23 18.2	1.988	2.968	2.1	18.6	12 27	5 55.60	+19 5.1	1.565	2.543	3.0	19.9
1 6	5 46.33	+23 9.5	2.035	2.983	6.1	18.9	1 6	5 45.16	+19 15.3	1.612	2.560	7.4	20.2
1 16	5 38.32	+23 0.0	2.110	2.998	9.7	19.1	1 16	5 36.78	+19 27.4	1.685	2.576	11.5	20.5
1 26	5 32.67	+22 51.3	2.210	3.013	12.7	19.4	1 26	5 31.22	+19 41.8	1.782	2.592	15.0	20.8
416096	2002 <i>PS</i> ₉		12 21.9 143°92	1°9/22.1	16		449795	2014 <i>ON</i> ₂₃₅		12 21.9 115°15	6°1/21.9	18	
11 17	6 29.09	+31 5.6	2.969	3.762	10.1	22.4	11 17	6 28.17	+ 7 17.9	2.066	2.853	14.1	21.3
11 27	6 22.84	+31 7.1	2.892	3.773	7.7	22.2	11 27	6 22.52	+ 6 25.0	2.000	2.866	11.3	21.1
12 7	6 14.90	+31 3.6	2.841	3.783	5.0	22.1	12 7	6 14.88	+ 5 42.7	1.959	2.879	8.5	20.9
12 17	6 5.88	+30 53.6	2.820	3.793	2.5	21.9	12 17	6 5.93	+ 5 13.9	1.944	2.891	6.4	20.8
12 27	5 56.57	+30 36.5	2.830	3.803	2.4	21.9	12 27	5 56.62	+ 5 0.6	1.957	2.903	6.5	20.9
1 6	5 47.79	+30 12.9	2.871	3.812	4.9	22.1	1 6	5 47.94	+ 5 3.2	1.999	2.914	8.5	21.0
1 16	5 40.26	+29 44.6	2.942	3.821	7.6	22.3	1 16	5 40.73	+ 5 20.1	2.067	2.926	11.2	21.2
1 26	5 34.53	+29 14.1	3.039	3.829	9.9	22.5	1 26	5 35.63	+ 5 48.8	2.158	2.937	13.7	21.4
231519	2008 <i>SO</i> ₃₅		12 21.9 352°20	0°6/21.9	18		263067	2007 <i>JA</i> ₂₂		12 21.9 100°90	2°8/22.3	18	
11 17	6 25.75	+24 29.6	1.912	2.735	13.7	20.4	11 17	6 26.24	+13 34.0	2.324	3.124	12.4	20.2
11 27	6 21.26	+24 39.4	1.832	2.732	10.4	20.2	11 27	6 21.02	+13 37.3	2.250	3.133	9.5	20.1
12 7	6 14.38	+24 49.0	1.775	2.728	6.5	19.9	12 7	6 13.95	+13 47.7	2.201	3.142	6.4	19.9
12 17	6 5.81	+24 56.7	1.745	2.725	2.3	19.6	12 17	6 5.63	+14 5.3	2.179	3.151	3.5	19.7
12 27	5 56.62	+25 1.0	1.744	2.723	2.3	19.6	12 27	5 56.90	+14 29.4	2.188	3.159	3.4	19.7
1 6	5 48.02	+25 1.8	1.771	2.721	6.5	19.9	1 6	5 48.66	+14 58.9	2.226	3.168	6.1	19.9
1 16	5 41.05	+24 59.9	1.824	2.720	10.5	20.1	1 16	5 41.71	+15 32.6	2.293	3.176	9.2	20.1
1 26	5 36.52	+24 57.0	1.901	2.720	13.8	20.4	1 26	5 36.67	+16 9.2	2.385	3.184	12.0	20.3
14827	Hypnos		12 21.9 93°85	0°4/21.9	05 C		309005	2006 <i>UW</i> ₇₃		12 21.9 347°18	2°7/22.0	17	
11 17	6 33.27	+24 26.9	3.018	3.804	10.2	24.3	11 17	6 29.66	+29 53.5	1.711	2.533	15.2	21.2
11 27	6 25.61	+24 36.4	2.967	3.847	7.6	24.1	11 27	6 24.59	+30 8.7	1.633	2.530	11.6	21.0
12 7	6 16.44	+24 44.4	2.943	3.889	4.7	24.0	12 7	6 16.62	+30 18.9	1.578	2.527	7.6	20.7
12 17	6 6.36	+24 49.7	2.950	3.930	1.6	23.8	12 17	6 6.62	+30 20.6	1.549	2.525	3.6	20.5
12 27	5 56.17	+24 51.5	2.991	3.969	1.6	23.9	12 27	5 55.90	+30 11.7	1.548	2.523	3.6	20.5
1 6	5 46.63	+24 50.1	3.064	4.008	4.5	24.1	1 6	5 45.94	+29 52.6	1.574	2.522	7.6	20.7
1 16	5 38.39	+24 46.3	3.168	4.045	7.1	24.4	1 16	5 38.01	+29 26.3	1.627	2.520	11.6	21.0
1 26	5 31.93	+24 41.4	3.300	4.082	9.4	24.6	1 26	5 33.03	+28 56.6	1.702	2.520	15.2	21.2
459781	2013 <i>RG</i> ₁₇		12 21.9 185°97	6°3/22.1	18		207245	2005 <i>ER</i> ₁₉₈		12 21.9 220°95	0°9/21.9	18	
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2020/21	α_{2000}	δ_{2000}	Δ	r	β	V	2020/21	α_{2000}	δ_{2000}	Δ	r	β	V
492167	2013 <i>PP</i> ₄₅		12 21.9 154°55	1°5/22.1	18		29709	1999 <i>AF</i> ₂		12 21.9 316°45	2°1/21.9	18	
11 17	6 28.86	+29 18.9	2.403	3.208	11.9	21.2	11 17	6 29.37	+26 55.2	1.359	2.197	17.5	17.5
11 27	6 23.08	+29 11.9	2.322	3.211	9.0	21.0	11 27	6 25.20	+27 16.9	1.275	2.181	13.4	17.2
12 7	6 15.26	+29 0.1	2.266	3.213	5.8	20.8	12 7	6 17.51	+27 37.4	1.211	2.166	8.6	16.9
12 17	6 6.07	+28 42.0	2.237	3.215	2.5	20.6	12 17	6 7.09	+27 52.5	1.172	2.151	3.5	16.5
12 27	5 56.48	+28 17.1	2.239	3.216	2.4	20.6	12 27	5 55.47	+27 58.7	1.158	2.136	3.6	16.5
1 6	5 47.48	+27 46.5	2.272	3.218	5.7	20.8	1 6	5 44.53	+27 55.2	1.170	2.122	8.9	16.8
1 16	5 39.96	+27 12.5	2.333	3.220	8.9	21.0	1 16	5 35.96	+27 44.1	1.206	2.109	14.1	17.0
1 26	5 34.57	+26 37.7	2.419	3.221	11.7	21.2	1 26	5 30.98	+27 29.3	1.263	2.097	18.5	17.3
483270	2015 <i>TT</i> ₁₉₃		12 21.9 173°14	6°7/22.1	18		97690	2000 <i>GO</i> ₂₈		12 21.9 123°76	3°8/21.9	18	
11 17	6 37.49	+42 36.4	2.223	2.997	13.7	21.4	11 17	6 29.62	+35 8.4	2.497	3.292	11.8	19.7
11 27	6 30.25	+43 24.5	2.147	2.999	11.2	21.2	11 27	6 23.80	+35 40.9	2.421	3.298	9.2	19.5
12 7	6 20.05	+44 0.1	2.094	3.002	8.8	21.1	12 7	6 15.80	+36 6.5	2.369	3.303	6.4	19.4
12 17	6 7.76	+44 17.2	2.067	3.004	7.0	21.0	12 17	6 6.32	+36 21.9	2.345	3.308	4.2	19.2
12 27	5 54.77	+44 12.0	2.069	3.005	6.9	21.0	12 27	5 56.35	+36 24.8	2.351	3.313	4.2	19.2
1 6	5 42.61	+43 44.8	2.099	3.006	8.7	21.1	1 6	5 46.95	+36 15.2	2.387	3.318	6.4	19.4
1 16	5 32.59	+42 59.8	2.156	3.006	11.2	21.3	1 16	5 39.07	+35 55.2	2.450	3.323	9.1	19.6
1 26	5 25.61	+42 3.3	2.236	3.006	13.6	21.4	1 26	5 33.42	+35 28.1	2.538	3.328	11.6	19.7
162302	1999 <i>VO</i> ₁₈₄		12 21.9 31°51	2°4/21.8	18		62476	2000 <i>SH</i> ₂₁₉		12 22.0 218°70	0°4/21.9	18	
11 17	6 30.05	+26 39.0	1.366	2.202	17.5	19.1	11 17	6 28.92	+22 20.8	2.176	2.986	12.8	18.8
11 27	6 25.29	+27 22.8	1.308	2.213	13.3	18.9	11 27	6 23.44	+22 57.5	2.091	2.983	9.7	18.6
12 7	6 17.22	+28 5.8	1.271	2.224	8.4	18.6	12 7	6 15.70	+23 37.1	2.030	2.981	6.0	18.4
12 17	6 6.83	+28 43.0	1.258	2.236	3.6	18.4	12 17	6 6.33	+24 17.0	1.997	2.978	2.1	18.1
12 27	5 55.73	+29 10.2	1.272	2.249	3.7	18.4	12 27	5 56.30	+24 54.6	1.995	2.974	2.1	18.1
1 6	5 45.64	+29 25.9	1.312	2.263	8.4	18.7	1 6	5 46.71	+25 28.1	2.023	2.971	6.1	18.4
1 16	5 38.01	+29 31.9	1.377	2.277	12.9	19.0	1 16	5 38.57	+25 56.9	2.079	2.968	9.7	18.6
1 26	5 33.76	+29 31.5	1.464	2.292	16.7	19.3	1 26	5 32.67	+26 21.7	2.160	2.964	12.9	18.8
182609	2001 <i>US</i> ₅₈		12 21.9 2°91	1°5/21.9	17		101019	1998 <i>QQ</i> ₅₇		12 22.0 113°77	0°7/22.0	18	
11 17	6 28.65	+26 40.4	1.727	2.551	14.9	20.5	11 17	6 30.92	+21 26.5	2.009	2.819	13.7	21.1
11 27	6 23.71	+26 54.4	1.652	2.551	11.3	20.2	11 27	6 24.79	+21 25.0	1.942	2.835	10.3	20.9
12 7	6 16.03	+27 6.4	1.599	2.551	7.2	20.0	12 7	6 16.39	+21 24.8	1.900	2.850	6.4	20.7
12 17	6 6.42	+27 13.7	1.572	2.551	2.8	19.7	12 17	6 6.50	+21 25.0	1.884	2.864	2.3	20.4
12 27	5 56.14	+27 14.4	1.574	2.552	2.8	19.7	12 27	5 56.21	+21 24.8	1.899	2.878	2.2	20.4
1 6	5 46.58	+27 8.4	1.603	2.553	7.2	20.0	1 6	5 46.63	+21 24.3	1.944	2.892	6.3	20.7
1 16	5 38.95	+26 57.6	1.659	2.554	11.3	20.2	1 16	5 38.75	+21 24.2	2.016	2.905	10.0	21.0
1 26	5 34.10	+26 44.6	1.737	2.556	14.9	20.5	1 26	5 33.25	+21 25.4	2.113	2.918	13.1	21.2
184885	2005 <i>UY</i> ₂₁₄		12 21.9 136°87	0°0/21.9	18		83050	2001 <i>QQ</i> ₁₉₇		12 22.0 120°68	6°0/21.7	18	
11 17	6 34.26	+22 19.9	2.026	2.830	13.8	21.0	11 17	6 27.49	+ 8 4.4	2.108	2.898	13.8	19.0
11 27	6 27.33	+22 41.2	1.957	2.846	10.4	20.8	11 27	6 22.05	+ 7 6.0	2.039	2.907	11.1	18.9
12 7	6 17.99	+23 3.8	1.912	2.861	6.5	20.6	12 7	6 14.63	+ 6 16.9	1.993	2.915	8.3	18.7
12 17	6 7.03	+23 25.5	1.895	2.876	2.2	20.3	12 17	6 5.91	+ 5 40.4	1.974	2.922	6.2	18.6
12 27	5 55.57	+23 44.2	1.910	2.889	2.2	20.4	12 27	5 56.80	+ 5 18.6	1.983	2.930	6.3	18.6
1 6	5 44.84	+23 59.3	1.955	2.902	6.4	20.7	1 6	5 48.27	+ 5 12.4	2.021	2.937	8.4	18.7
1 16	5 35.88	+24 11.1	2.028	2.914	10.1	20.9	1 16	5 41.17	+ 5 20.7	2.085	2.945	11.1	18.9
1 26	5 29.43	+24 21.0	2.126	2.925	13.3	21.1	1 26	5 36.13	+ 5 41.5	2.173	2.951	13.7	19.1
84114	2002 <i>RB</i> ₂₅		12 21.9 38°18	1°8/21.9	18		169908	2002 <i>RU</i> ₃₃₈		12 22.0 348°77	1°6/22.1	18	
11 17	6 30.36	+26 22.8	1.381	2.216	17.4	18.9	11 17	6 25.76	+19 26.3	1.385	2.225	17.1	19.6
11 27	6 25.25	+26 47.5	1.331	2.236	13.1	18.7	11 27	6 22.05	+19 27.1	1.310	2.217	13.1	19.4
12 7	6 17.02	+27 10.2	1.303	2.257	8.2	18.5	12 7	6 15.28	+19 33.3	1.256	2.211	8.3	19.1
12 17	6 6.73	+27 27.3	1.300	2.279	3.2	18.3	12 17	6 6.28	+19 44.1	1.226	2.205	3.2	18.8
12 27	5 55.95	+27 36.2	1.323	2.302	3.2	18.3	12 27	5 56.40	+19 58.5	1.222	2.201	3.2	18.8
1 6	5 46.33	+27 36.8	1.373	2.325	7.9	18.7	1 6	5 47.23	+20 15.4	1.243	2.197	8.3	19.1
1 16	5 39.15	+27 31.4	1.448	2.349	12.3	19.0	1 16	5 40.18	+20 34.4	1.290	2.195	13.2	19.3
1 26	5 35.20	+27 23.0	1.545	2.373	16.0	19.3	1 26	5 36.23	+20 55.4	1.357	2.193	17.3	19.6
95911	2003 <i>HK</i> ₃₉		12 21.9 209°25	2°2/21.9	18		467060	2016 <i>DA</i> ₁₃		12 22.0 334°73	4°7/22.1	18	
11 17	6 30.53	+18 44.8	1.836	2.650	14.6	20.0	11 17	6 24.11	+10 2.2	2.115	2.917	13.4	20.7
11 27	6 24.84	+18 19.9	1.754	2.647	11.2	19.7	11 27	6 19.70	+ 9 37.4	2.032	2.911	10.6	20.5
12 7	6 16.61	+17 57.4	1.694	2.643	7.2	19.5	12 7	6 13.30	+ 9 21.8	1.973	2.906	7.6	20.3
12 17	6 6.62	+17 38.0	1.662	2.639	3.2	19.2	12 17	6 5.50	+ 9 17.1	1.940	2.901	5.2	20.2
12 27	5 55.98	+17 22.2	1.658	2.635	3.3	19.2	12 27	5 57.19	+ 9 24.5	1.935	2.896	5.1	20.2
1 6	5 45.97	+17 10.8	1.684	2.630	7.3	19.5	1 6	5 49.33	+ 9 43.4	1.959	2.891	7.5	20.3
1 16	5 37.70	+17 4.8	1.736	2.625	11.4	19.7	1 16	5 42.77	+10 12.7	2.009	2.887	10.6	20.5
1 26	5 31.99	+17 4.5	1.812	2.619	14.9	19.9	1 26	5 38.22	+10 50.2	2.083	2.883	13.5	20.7
46200	2001 <i>FE</i> ₁₄₈		12 21.9 125°46	4°0/22.3	18		516411	2002 <i>OZ</i> ₃₇		12 22.0 202°53	2°2/22.0	18	
11 17	6 34.79	+35 11.0	2.041	2.839	13.9	19.5	11 17	6 32.28	+29 48.3	2.334	3.133	12.3	22.2
11 27	6 27.93	+35 23.5	1.971	2.850	10.9	19.3	11 27	6 25.89	+30 4.0	2.244	3.129	9.5	22.0
12 7	6 18.43	+35 26.6	1.925	2.861	7.5	19.1	12 7	6 17.18	+30 15.5	2.179	3.124	6.2	21.7
12 17	6 7.18	+35 16.7	1.905	2.872	4.6	19.0	12 17	6 6.83	+30 20.0	2.142	3.118	2.9	21.5
12 27	5 55.49	+34 51.9	1.915	2.882	4.4	19.0	12 27	5 55.88	+30 15.7	2.137	3.111	2.9	21.5
1 6	5 44.71	+34 13.8	1.955	2.892	7.2	19.2	1 6	5 45.46	+30 2.7	2.161	3.104	6.2	21.7
1 16	5 35.96	+33 26.5	2.022	2.901	10.4	19.4	1 16	5 36.60	+29 42.9	2.214	3.096	9.6	21.9
1 26	5 29.99	+32 34.9	2.113	2.910	13.4	19.6	1 26	5 30.06	+29 19.2	2.292	3.088	12.5	22.1
183553	2003 <i>JP</i> ₁₀		12 21.9 161°11	0°1/21.9	18		448462	2010 <i>EH</i> ₁₂₉		12 22.0			