

EPHEMERIDES

3 21.9

3 22.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>376514</b>	2012 LA <sub>5</sub>		3 21.9 208°94	5°2/15.3	17		<b>489072</b>	2006 AK <sub>17</sub>		3 21.9 101°59	3°6/26.8	17	
2 11	12 30.48	+12 57.9	2.449	3.246	11.9	21.7	2 11	12 27.54	-15 28.5	2.850	3.544	12.7	22.0
2 21	12 26.67	+14 14.7	2.362	3.240	9.4	21.5	2 21	12 24.06	-15 40.8	2.752	3.552	10.7	21.8
3 2	12 20.92	+15 35.5	2.299	3.233	7.0	21.4	3 2	12 18.96	-15 38.0	2.676	3.560	8.3	21.7
3 12	12 13.69	+16 53.3	2.264	3.226	5.3	21.3	3 12	12 12.64	-15 20.3	2.625	3.568	5.9	21.5
3 22	12 5.64	+18 1.5	2.258	3.218	5.7	21.3	3 22	12 5.67	-14 49.2	2.602	3.576	3.9	21.4
4 1	11 57.54	+18 54.0	2.280	3.209	7.8	21.4	4 1	11 58.68	-14 7.6	2.607	3.584	4.0	21.4
4 11	11 50.22	+19 27.0	2.329	3.200	10.4	21.5	4 11	11 52.34	-13 19.9	2.642	3.591	5.9	21.6
4 21	11 44.30	+19 39.6	2.401	3.190	12.9	21.7	4 21	11 47.16	-12 30.8	2.703	3.599	8.4	21.7
<b>408240</b>	2013 ES <sub>109</sub>		3 21.9 89°59	5°5/17.5	18		<b>480349</b>	2015 KK <sub>13</sub>		3 21.9 232°56	3°1/17.2	18	
2 11	12 33.15	+ 8 38.3	1.457	2.274	17.5	21.1	2 11	12 26.04	+ 7 54.2	3.015	3.803	10.1	21.7
2 21	12 29.91	+ 9 46.4	1.390	2.281	13.8	20.9	2 21	12 22.80	+ 8 57.8	2.915	3.792	7.9	21.6
3 2	12 23.72	+11 3.6	1.343	2.289	9.7	20.7	3 2	12 18.06	+10 7.3	2.841	3.781	5.5	21.4
3 12	12 15.27	+12 20.2	1.321	2.297	6.2	20.5	3 12	12 12.19	+11 18.0	2.795	3.769	3.5	21.2
3 22	12 5.64	+13 26.1	1.325	2.304	6.0	20.5	3 22	12 5.67	+12 24.8	2.780	3.758	3.4	21.2
4 1	11 56.17	+14 12.1	1.354	2.312	9.3	20.7	4 1	11 59.10	+13 23.0	2.795	3.746	5.4	21.3
4 11	11 48.13	+14 33.3	1.408	2.319	13.3	20.9	4 11	11 53.08	+14 8.8	2.838	3.733	7.9	21.5
4 21	11 42.40	+14 28.8	1.482	2.326	16.9	21.2	4 21	11 48.09	+14 39.9	2.906	3.721	10.3	21.6
<b>122242</b>	2000 OL <sub>17</sub>		3 21.9 264°55	0°6/21.4	18		<b>86693</b>	2000 FR <sub>48</sub>		3 21.9 334°63	5°3/25.3	18	
2 11	12 32.07	- 1 4.2	2.102	2.873	14.4	20.0	2 11	12 31.72	-10 41.6	1.282	2.057	21.7	19.4
2 21	12 28.45	- 0 44.0	1.986	2.850	11.6	19.8	2 21	12 29.64	-11 37.5	1.195	2.050	18.3	19.1
3 2	12 22.52	- 0 11.0	1.892	2.827	8.1	19.5	3 2	12 24.19	-12 12.2	1.123	2.043	14.0	18.8
3 12	12 14.69	+ 0 31.8	1.824	2.804	4.1	19.2	3 12	12 15.85	-12 23.3	1.073	2.036	9.4	18.5
3 22	12 5.65	+ 1 20.0	1.784	2.780	0.7	18.9	3 22	12 5.67	-12 10.9	1.045	2.031	5.6	18.3
4 1	11 56.34	+ 2 7.5	1.773	2.755	4.8	19.2	4 1	11 55.20	-11 39.2	1.041	2.026	6.7	18.3
4 11	11 47.78	+ 2 48.4	1.790	2.730	9.0	19.4	4 11	11 46.11	-10 56.7	1.060	2.021	11.2	18.5
4 21	11 40.82	+ 3 18.0	1.832	2.705	12.9	19.5	4 21	11 39.67	-10 13.2	1.101	2.017	15.9	18.8
<b>98540</b>	2000 VV <sub>48</sub>		3 21.9 53°25	1°5/20.8	18		<b>153549</b>	2001 SG <sub>124</sub>		3 21.9 79°34	0°8/22.8	18	
2 11	12 30.45	- 1 1.1	1.357	2.162	19.2	19.8	2 11	12 32.28	- 6 20.5	1.821	2.583	16.6	20.4
2 21	12 27.89	- 0 21.9	1.291	2.176	15.1	19.6	2 21	12 28.43	- 5 52.0	1.754	2.610	13.3	20.2
3 2	12 22.36	+ 0 35.7	1.245	2.190	10.4	19.3	3 2	12 22.24	- 5 5.6	1.709	2.637	9.4	20.0
3 12	12 14.58	+ 1 45.3	1.221	2.204	5.1	19.1	3 12	12 14.36	- 4 5.2	1.688	2.664	5.0	19.8
3 22	12 5.65	+ 2 58.2	1.224	2.219	1.6	18.9	3 22	12 5.68	- 2 56.7	1.695	2.691	0.9	19.5
4 1	11 56.90	+ 4 4.4	1.252	2.234	6.3	19.2	4 1	11 57.22	- 1 47.2	1.731	2.717	4.2	19.8
4 11	11 49.63	+ 4 55.7	1.304	2.249	11.2	19.5	4 11	11 49.96	- 0 44.2	1.794	2.743	8.3	20.1
4 21	11 44.67	+ 5 27.3	1.379	2.265	15.5	19.8	4 21	11 44.54	+ 0 7.1	1.883	2.769	11.9	20.4
<b>435971</b>	2009 DJ <sub>80</sub>		3 21.9 215°28	0°6/21.4	17		<b>19641</b>	1999 RV <sub>91</sub>		3 21.9 225°65	0°4/22.3	18	
2 11	12 31.15	+ 0 19.3	2.419	3.188	12.8	21.5	2 11	12 32.81	- 2 50.9	2.220	2.979	14.1	18.5
2 21	12 27.15	+ 0 26.7	2.323	3.186	10.2	21.3	2 21	12 28.74	- 2 49.3	2.117	2.973	11.3	18.3
3 2	12 21.22	+ 0 43.0	2.249	3.185	7.0	21.1	3 2	12 22.51	- 2 36.2	2.036	2.966	8.0	18.1
3 12	12 13.85	+ 1 5.2	2.203	3.183	3.5	20.9	3 12	12 14.59	- 2 13.7	1.982	2.959	4.2	17.8
3 22	12 5.65	+ 1 29.8	2.185	3.181	0.7	20.6	3 22	12 5.68	- 1 45.2	1.956	2.952	0.4	17.5
4 1	11 57.44	+ 1 52.7	2.197	3.179	4.0	20.9	4 1	11 56.67	- 1 15.2	1.959	2.945	4.0	17.8
4 11	11 49.99	+ 2 10.1	2.238	3.177	7.5	21.1	4 11	11 48.47	- 0 48.5	1.991	2.937	7.9	18.0
4 21	11 43.93	+ 2 18.9	2.305	3.175	10.6	21.3	4 21	11 41.82	- 0 29.1	2.049	2.928	11.4	18.2
<b>479619</b>	2014 DM <sub>29</sub>		3 21.9 330°98	2°7/24.5	17		<b>114772</b>	2003 KD <sub>4</sub>		3 22.0 358°17	8°2/30.2	18	
2 11	12 29.47	- 8 45.5	2.126	2.872	15.0	21.3	2 21	12 26.15	-24 14.2	1.756	2.530	16.8	18.9
2 21	12 26.25	- 9 7.2	2.024	2.865	12.4	21.1	3 2	12 21.14	-24 36.1	1.677	2.529	14.1	18.7
3 2	12 20.87	- 9 14.4	1.943	2.858	9.2	20.8	3 12	12 14.05	-24 29.2	1.618	2.528	11.3	18.6
3 12	12 13.77	- 9 7.6	1.886	2.852	5.7	20.6	3 22	12 5.70	-23 52.4	1.582	2.528	9.0	18.4
3 22	12 5.66	- 8 48.5	1.856	2.845	2.9	20.4	4 1	11 57.20	-22 48.5	1.571	2.528	8.2	18.4
4 1	11 57.41	- 8 20.9	1.854	2.840	4.1	20.5	4 11	11 49.72	-21 24.9	1.585	2.528	9.7	18.4
4 11	11 49.98	- 7 49.8	1.880	2.834	7.6	20.7	4 21	11 44.17	-19 51.4	1.623	2.528	12.4	18.6
4 21	11 44.10	- 7 20.4	1.931	2.829	11.1	20.9	5 1	11 41.13	-18 18.0	1.683	2.529	15.3	18.8
<b>521155</b>	2015 FO <sub>407</sub>		3 21.9 341°45	0°5/22.6	17		<b>428397</b>	2007 SH <sub>17</sub>		3 22.0 254°57	1°1/21.0	18	
2 11	12 25.50	- 6 22.5	2.119	2.884	14.5	21.3	2 21	12 29.79	+ 2 4.4	2.188	3.053	10.6	21.0
2 21	12 23.03	- 5 44.0	2.024	2.882	11.7	21.1	3 2	12 23.22	+ 2 16.5	2.104	3.040	7.4	20.8
3 2	12 18.55	- 4 48.2	1.950	2.880	8.3	20.9	3 12	12 14.97	+ 2 33.5	2.047	3.028	3.7	20.5
3 12	12 12.54	- 3 38.1	1.902	2.879	4.4	20.7	3 22	12 5.71	+ 2 51.7	2.019	3.015	1.1	20.3
3 22	12 5.66	- 2 19.0	1.881	2.877	0.6	20.4	4 1	11 56.32	+ 3 7.0	2.021	3.001	4.5	20.5
4 1	11 58.74	- 0 57.7	1.890	2.876	3.9	20.6	4 11	11 47.71	+ 3 15.4	2.052	2.988	8.3	20.7
4 11	11 52.64	+ 0 18.6	1.926	2.875	7.9	20.9	4 21	11 40.63	+ 3 14.2	2.108	2.974	11.7	20.9
4 21	11 48.00	+ 1 23.8	1.988	2.874	11.4	21.1	5 1	11 35.59	+ 3 1.9	2.186	2.960	14.6	21.1
<b>399972</b>	2006 BN <sub>124</sub>		3 21.9 251°69	1°8/23.3	16		<b>10308</b>	1990 QC <sub>3</sub>		3 22.0 138°12	0°7/21.4	18	
2 11	12 34.63	- 6 4.5	1.695	2.458	17.6	21.4	2 21	12 29.65	- 2 0.7	1.752	2.617	12.9	19.1
2 21	12 31.08	- 6 16.6	1.591	2.446	14.5	21.2	3 2	12 23.22	- 1 3.7	1.694	2.630	8.9	18.8
3 2	12 24.68	- 6 12.0	1.506	2.433	10.6	20.9	3 12	12 14.95	+ 0 4.8	1.661	2.642	4.4	18.6
3 12	12 15.92	- 5 51.7	1.445	2.419	6.0	20.6	3 22	12 5.71	+ 1 18.2	1.657	2.653	0.7	18.3
3 22	12 5.66	- 5 18.7	1.411	2.405	1.9	20.3	4 1	11 56.56	+ 2 28.7	1.681	2.663	5.0	18.7
4 1	11 55.10	- 4 38.4	1.404	2.391	4.9	20.4	4 11	11 48.54	+ 3 29.2	1.733	2.673	9.2	18.9
4 11	11 45.58	- 3 58.1	1.424	2.377	9.7	20.7	4 21	11 42.41	+ 4 14.6	1.809	2.682	13.0	19.2
4 21	11 38.13	- 3 24.3	1.468	2.362	14.2	20.9	5 1	11 38.63	+ 4 42.6	1.906	2.690	16.1	19.4
<b>209632</b>	2005 AM <sub>61</sub>		3 21.9 54°86	2°3/23.6	18		<b>270591</b>	2002 LN <sub>42</sub>		3 22.0 249°52	0°1/22.2	18	
2 11	12 34.29	- 6 27.7											

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>302275</b>	2001 <i>XP</i> <sub>186</sub>		3 22.0 110°58'	4.1°/25.5	18		<b>145608</b>	2006 <i>QL</i> <sub>35</sub>		3 22.0 178°44'	3°0'/18.1	18	
2 21	12 29.44	-12 54.9	1.511	2.347	16.1	20.7	2 21	12 24.20	+ 7 2.0	2.464	3.342	9.1	20.5
3 2	12 23.44	-12 47.1	1.445	2.355	12.2	20.5	3 2	12 19.14	+ 8 10.1	2.401	3.343	6.3	20.3
3 12	12 15.20	-12 15.8	1.402	2.363	8.0	20.3	3 12	12 12.80	+ 9 20.4	2.366	3.343	3.7	20.1
3 22	12 5.71	-11 23.8	1.384	2.370	4.5	20.1	3 22	12 5.75	+10 27.2	2.360	3.344	3.3	20.1
4 1	11 56.21	-10 17.6	1.393	2.377	5.3	20.1	4 1	11 58.71	+11 24.9	2.384	3.344	5.7	20.3
4 11	11 47.96	- 9 6.2	1.427	2.385	9.2	20.4	4 11	11 52.37	+12 9.2	2.436	3.343	8.5	20.4
4 21	11 41.88	- 7 58.6	1.486	2.391	13.3	20.6	4 21	11 47.29	+12 37.8	2.512	3.343	11.2	20.6
5 1	11 38.53	- 7 2.1	1.566	2.398	16.8	20.9	5 1	11 43.87	+12 49.9	2.609	3.342	13.4	20.8
<b>165483</b>	2001 <i>BZ</i> <sub>12</sub>		3 22.0 99°97'	1.7°/23.6	18		<b>241695</b>	2000 <i>SL</i> <sub>136</sub>		3 22.0 180°23'	1°9'/24.7	18	
2 21	12 28.67	- 8 28.5	1.631	2.481	14.4	20.1	2 21	12 23.53	-10 24.4	2.823	3.648	9.7	21.3
3 2	12 22.61	- 7 43.8	1.576	2.499	10.4	19.9	3 2	12 18.58	- 9 50.7	2.741	3.649	7.2	21.1
3 12	12 14.65	- 6 40.8	1.545	2.518	5.9	19.7	3 12	12 12.49	- 9 4.5	2.686	3.649	4.4	20.9
3 22	12 5.71	- 5 25.0	1.541	2.535	1.9	19.5	3 22	12 5.75	- 8 8.3	2.659	3.650	2.0	20.8
4 1	11 56.92	- 4 4.5	1.565	2.553	4.4	19.7	4 1	11 58.99	- 7 6.3	2.664	3.649	3.0	20.8
4 11	11 49.36	- 2 48.1	1.617	2.570	8.7	20.0	4 11	11 52.82	- 6 3.4	2.697	3.649	5.8	21.0
4 21	11 43.77	- 1 42.9	1.693	2.586	12.6	20.3	4 21	11 47.75	- 5 4.0	2.759	3.648	8.5	21.2
5 1	11 40.61	- 0 53.5	1.790	2.603	15.9	20.5	5 1	11 44.16	- 4 12.1	2.845	3.647	10.9	21.4
<b>372497</b>	2009 <i>SW</i> <sub>254</sub>		3 22.0 240°07'	6°6'/14.2	17		<b>498617</b>	2008 <i>RF</i> <sub>108</sub>		3 22.0 207°37'	2°3'/24.4	17	
2 21	12 27.64	+16 15.3	1.989	2.871	10.8	21.0	2 21	12 26.19	- 9 44.4	2.095	2.932	12.2	21.6
3 2	12 21.89	+17 51.2	1.926	2.858	8.2	20.8	3 2	12 20.77	- 9 23.6	2.015	2.930	9.0	21.4
3 12	12 14.33	+19 22.8	1.889	2.845	6.7	20.7	3 12	12 13.73	- 8 47.2	1.961	2.927	5.5	21.1
3 22	12 5.71	+20 41.3	1.880	2.831	7.3	20.7	3 22	12 5.76	- 7 58.1	1.934	2.925	2.5	20.9
4 1	11 57.00	+21 39.0	1.898	2.817	9.7	20.8	4 1	11 57.70	- 7 1.2	1.935	2.922	3.9	21.0
4 11	11 49.19	+22 11.6	1.941	2.802	12.6	20.9	4 11	11 50.46	- 6 2.8	1.965	2.919	7.4	21.2
4 21	11 43.06	+22 18.5	2.005	2.787	15.3	21.1	4 21	11 44.73	- 5 8.8	2.021	2.915	10.8	21.4
5 1	11 39.13	+22 1.2	2.086	2.771	17.7	21.2	5 1	11 41.01	- 4 24.1	2.099	2.912	13.8	21.6
<b>154551</b>	2003 <i>GC</i> <sub>44</sub>		3 22.0 224°78'	15°2'/ 2.3	18		<b>170319</b>	2003 <i>SF</i> <sub>54</sub>		3 22.0 282°56'	4°4'/25.6	18	
2 21	12 42.37	+48 8.4	2.012	2.769	15.5	19.4	2 21	12 27.33	-13 19.0	1.515	2.353	16.0	19.9
3 2	12 32.25	+49 20.2	1.995	2.767	15.2	19.4	3 2	12 22.19	-13 11.0	1.431	2.341	12.3	19.7
3 12	12 19.54	+49 58.6	1.997	2.764	15.5	19.4	3 12	12 14.71	-12 38.5	1.369	2.329	8.2	19.4
3 22	12 5.71	+49 56.6	2.019	2.761	16.2	19.4	3 22	12 5.75	-11 43.4	1.332	2.318	4.8	19.2
4 1	11 52.50	+49 12.2	2.058	2.758	17.2	19.5	4 1	11 56.53	-10 31.3	1.321	2.306	5.5	19.2
4 11	11 41.41	+47 49.0	2.115	2.755	18.4	19.6	4 11	11 48.35	- 9 11.5	1.335	2.294	9.6	19.4
4 21	11 33.30	+45 54.1	2.186	2.752	19.5	19.7	4 21	11 42.24	- 7 54.0	1.373	2.282	13.9	19.6
5 1	11 28.51	+43 35.4	2.269	2.748	20.4	19.8	5 1	11 38.91	- 6 47.3	1.432	2.270	17.8	19.8
<b>455567</b>	2004 <i>RA</i> <sub>30</sub>		3 22.0 133°60'	6°3'/26.7	18		<b>381587</b>	2008 <i>UP</i> <sub>321</sub>		3 22.0 234°38'	1°2'/23.2	17	
2 21	12 38.48	-17 9.3	1.856	2.646	15.4	21.6	2 21	12 27.12	- 5 59.2	2.191	3.038	11.3	21.8
3 2	12 29.51	-18 3.1	1.787	2.661	12.3	21.4	3 2	12 21.39	- 5 39.2	2.106	3.029	8.2	21.6
3 12	12 18.27	-18 35.9	1.742	2.676	9.0	21.3	3 12	12 14.06	- 5 7.1	2.046	3.020	4.6	21.4
3 22	12 5.73	-18 46.4	1.725	2.690	6.6	21.1	3 22	12 5.76	- 4 26.0	2.015	3.010	1.3	21.1
4 1	11 53.13	-18 36.2	1.736	2.703	6.7	21.2	4 1	11 57.33	- 3 40.5	2.013	3.000	3.7	21.3
4 11	11 41.76	-18 10.9	1.776	2.715	9.2	21.3	4 11	11 49.66	- 2 56.2	2.040	2.989	7.5	21.5
4 21	11 32.57	-17 37.4	1.842	2.726	12.2	21.5	4 21	11 43.43	- 2 17.9	2.093	2.978	10.9	21.7
5 1	11 26.14	-17 3.2	1.930	2.737	15.1	21.8	5 1	11 39.17	- 1 49.4	2.168	2.967	13.9	21.8
<b>208432</b>	2001 <i>TF</i> <sub>84</sub>		3 22.0 259°17'	1°1'/23.1	17		<b>492502</b>	2014 <i>OQ</i>		3 22.0 174°78'	3°6'/18.5	17	
2 21	12 27.54	- 5 8.0	2.320	3.168	10.8	20.4	2 21	12 30.27	+ 7 0.9	1.859	2.737	11.6	21.8
3 2	12 21.63	- 5 3.2	2.232	3.155	7.8	20.2	3 2	12 23.66	+ 8 7.6	1.799	2.740	8.0	21.6
3 12	12 14.15	- 4 48.4	2.169	3.143	4.3	20.0	3 12	12 15.21	+ 9 16.9	1.765	2.742	4.6	21.4
3 22	12 5.73	- 4 26.1	2.135	3.130	1.2	19.7	3 22	12 5.76	+10 21.5	1.759	2.744	4.0	21.4
4 1	11 57.16	- 3 59.9	2.131	3.118	3.6	19.9	4 1	11 56.34	+11 13.9	1.782	2.745	7.0	21.6
4 11	11 49.28	- 3 34.1	2.156	3.105	7.2	20.1	4 11	11 47.97	+11 49.1	1.833	2.745	10.6	21.8
4 21	11 42.78	- 3 12.9	2.207	3.091	10.5	20.2	4 21	11 41.42	+12 4.9	1.906	2.745	13.9	22.0
5 1	11 38.17	- 2 59.4	2.281	3.078	13.3	20.4	5 1	11 37.18	+12 1.1	1.999	2.744	16.7	22.2
<b>265663</b>	2005 <i>UZ</i> <sub>16</sub>		3 22.0 241°39'	5°2'/27.2	17		<b>427268</b>	2014 <i>WJ</i> <sub>166</sub>		3 22.0 179°70'	0°8'/22.9	17	
2 21	12 26.46	-17 17.8	1.857	2.665	14.7	20.4	2 21	12 28.95	- 5 38.4	2.087	2.935	11.8	22.5
3 2	12 21.20	-17 13.3	1.775	2.662	11.7	20.2	3 2	12 22.65	- 5 3.7	2.012	2.937	8.4	22.2
3 12	12 14.03	-16 45.3	1.715	2.659	8.4	20.0	3 12	12 14.67	- 4 16.2	1.963	2.938	4.6	22.0
3 22	12 5.73	-15 55.1	1.681	2.655	5.7	19.8	3 22	12 5.76	- 3 19.9	1.943	2.939	0.9	21.7
4 1	11 57.30	-14 47.0	1.674	2.652	5.6	19.8	4 1	11 56.81	- 2 20.6	1.952	2.938	3.9	22.0
4 11	11 49.79	-13 28.7	1.694	2.648	8.3	19.9	4 11	11 48.73	- 1 24.5	1.991	2.937	7.8	22.2
4 21	11 44.03	-12 8.7	1.740	2.645	11.7	20.1	4 21	11 42.25	- 0 36.8	2.055	2.936	11.3	22.4
5 1	11 40.59	-10 54.8	1.807	2.641	14.9	20.3	5 1	11 37.84	- 0 1.3	2.141	2.933	14.3	22.6
<b>356466</b>	2011 <i>QG</i> <sub>37</sub>		3 22.0 248°75'	0°6'/22.5	17		<b>175951</b>	2000 <i>GL</i> <sub>141</sub>		3 22.0 353°35'	5°0'/17.5	18	
2 21	12 31.72	- 3 43.7	1.567	2.429	14.3	21.5	2 21	12 24.27	+ 7 14.7	1.325	2.224	13.7	19.0
3 2	12 25.18	- 3 26.1	1.482	2.414	10.2	21.2	3 2	12 20.01	+ 8 46.1	1.269	2.220	9.6	18.8
3 12	12 16.23	- 2 54.4	1.422	2.400	5.5	20.9	3 12	12 13.52	+10 22.3	1.238	2.217	5.8	18.6
3 22	12 5.74	- 2 12.8	1.388	2.384	0.7	20.5	3 22	12 5.76	+11 51.9	1.231	2.215	5.6	18.5
4 1	11 54.94	- 1 27.6	1.382	2.368	5.1	20.8	4 1	11 57.98	+13 3.9	1.250	2.213	9.2	18.7
4 11	11 45.19	- 0 46.5	1.402	2.351	10.2	21.0	4 11	11 51.47	+13 50.3	1.292	2.212	13.5	19.0
4 21	11 37.55	- 0 15.7	1.447	2.334	14.7	21.3	4 21	11 47.12	+14 8.5	1.354	2.212	17.4	19.2
5 1	11 32.73	+ 0 0.7	1.510	2.317	18.6	21.5	5 1	11 45.47	+13 59.1	1.432	2.212	20.6	19.4
<b>203656</b>	2002 <i>JL</i> <sub>14</sub>		3 22.0 34°38'	2°6'/19.7	18		<b>25197</b>	1998 <i>SX</i> <sub>137</sub>		3 22.			

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3 22.0

3 22.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>51424</b>	2001 <i>FK</i>		3 22.0 355°21	13°6/17.3	18		<b>414980</b>	2011 <i>DB<sub>21</sub></i>		3 22.0 316°27	1°6/20.5	17	
2 21	12 49.24	+26 47.1	0.989	1.860	19.9	18.2	2 21	12 25.78	+0 43.9	1.689	2.568	12.5	20.3
3 2	12 38.14	+27 8.9	0.942	1.858	16.5	18.0	3 2	12 20.76	+1 37.2	1.620	2.563	8.6	20.1
3 12	12 22.97	+26 59.3	0.916	1.857	14.0	17.9	3 12	12 13.83	+2 40.4	1.576	2.558	4.3	19.8
3 22	12 5.78	+26 5.4	0.911	1.856	14.0	17.8	3 22	12 5.81	+3 46.8	1.558	2.553	1.7	19.6
4 1	11 49.19	+24 23.2	0.930	1.856	16.4	18.0	4 1	11 57.72	+4 48.5	1.568	2.548	5.6	19.9
4 11	11 35.57	+21 59.7	0.970	1.856	20.1	18.2	4 11	11 50.62	+5 38.5	1.605	2.544	9.9	20.1
4 21	11 26.19	+19 8.6	1.028	1.857	23.8	18.4	4 21	11 45.32	+6 12.1	1.665	2.539	13.8	20.3
5 1	11 21.40	+16 2.5	1.103	1.857	27.0	18.7	5 1	11 42.36	+6 27.0	1.744	2.535	17.1	20.5
<b>183679</b>	2003 <i>XJ<sub>37</sub></i>		3 22.0 120°43	0°7/21.4	18		<b>500900</b>	2013 <i>LX<sub>31</sub></i>		3 22.0 262°26	0°2/22.2	17	
2 21	12 31.00	-0 31.0	1.866	2.729	12.3	21.4	2 21	12 27.23	-4 42.6	1.811	2.671	12.8	22.0
3 2	12 24.04	+0 3.1	1.811	2.747	8.4	21.2	3 2	12 21.86	-3 46.3	1.718	2.649	9.1	21.7
3 12	12 15.35	+0 45.7	1.783	2.763	4.2	20.9	3 12	12 14.48	-2 33.2	1.649	2.627	4.8	21.4
3 22	12 5.78	+1 31.3	1.783	2.779	0.8	20.7	3 22	12 5.81	-1 8.8	1.608	2.604	0.2	21.0
4 1	11 56.35	+2 14.1	1.813	2.795	4.7	21.0	4 1	11 56.86	+0 19.2	1.596	2.581	4.7	21.3
4 11	11 48.05	+2 48.6	1.870	2.810	8.7	21.3	4 11	11 48.70	+1 41.9	1.611	2.557	9.4	21.5
4 21	11 41.59	+3 11.1	1.953	2.824	12.2	21.5	4 21	11 42.26	+2 51.8	1.651	2.532	13.6	21.7
5 1	11 37.39	+3 19.9	2.056	2.838	15.1	21.8	5 1	11 38.16	+3 44.1	1.712	2.507	17.2	21.9
<b>110755</b>	2001 <i>UT<sub>13</sub></i>		3 22.0 51°10	9°3/12.8	18	R	<b>416174</b>	2002 <i>SY<sub>5</sub></i>		3 22.0 179°15	0°2/22.2	14	C
2 21	12 29.46	+22 42.0	1.675	2.553	12.6	19.1	2 21	12 28.40	-3 41.1	2.103	2.958	11.5	22.4
3 2	12 23.25	+24 7.4	1.638	2.557	10.3	19.0	3 2	12 22.26	-3 1.3	2.030	2.960	8.0	22.2
3 12	12 15.02	+25 18.6	1.624	2.561	9.3	18.9	3 12	12 14.49	-2 10.3	1.983	2.961	4.2	21.9
3 22	12 5.78	+26 6.4	1.636	2.566	10.1	19.0	3 22	12 5.82	-1 12.7	1.965	2.961	0.2	21.6
4 1	11 56.71	+26 24.7	1.673	2.570	12.2	19.1	4 1	11 57.11	-0 14.1	1.977	2.961	4.0	21.9
4 11	11 48.96	+26 12.3	1.731	2.574	14.7	19.3	4 11	11 49.27	+0 39.2	2.017	2.960	7.9	22.1
4 21	11 43.29	+25 31.8	1.809	2.579	17.2	19.5	4 21	11 42.99	+1 22.6	2.083	2.959	11.4	22.4
5 1	11 40.16	+24 27.5	1.903	2.584	19.3	19.6	5 1	11 38.74	+1 52.9	2.171	2.957	14.3	22.5
<b>38757</b>	2000 <i>RM<sub>1</sub></i>		3 22.0 136°64	0°6/22.6	18		<b>506437</b>	2000 <i>WL<sub>10</sub></i>		3 22.0 172°04	2°1/26.4	18	
2 21	12 30.53	-4 39.1	1.794	2.649	13.1	19.6	2 21	12 23.52	-14 41.5	4.586	5.372	6.9	25.5
3 2	12 23.85	-4 6.3	1.732	2.661	9.2	19.4	3 2	12 18.24	-14 20.6	4.498	5.377	5.3	25.4
3 12	12 15.31	-3 20.3	1.696	2.673	4.9	19.2	3 12	12 12.22	-13 50.4	4.438	5.381	3.7	25.2
3 22	12 5.79	-2 26.1	1.688	2.684	0.7	18.9	3 22	12 5.82	-13 12.3	4.408	5.385	2.3	25.1
4 1	11 56.35	-1 30.3	1.709	2.695	4.4	19.2	4 1	11 59.40	-12 28.2	4.410	5.388	2.4	25.1
4 11	11 48.01	-0 39.5	1.757	2.704	8.6	19.5	4 11	11 53.37	-11 41.0	4.444	5.390	3.9	25.3
4 21	11 41.56	+0 1.0	1.831	2.713	12.4	19.7	4 21	11 48.04	-10 53.3	4.507	5.391	5.6	25.4
5 1	11 37.47	+0 27.8	1.926	2.722	15.5	19.9	5 1	11 43.67	-10 7.9	4.598	5.392	7.1	25.5
<b>243252</b>	2007 <i>WS<sub>7</sub></i>		3 22.0 67°86	4°4/27.0	18		<b>223283</b>	2003 <i>HG<sub>19</sub></i>		3 22.0 147°39	1°8/20.1	18	
2 21	12 25.20	-16 21.9	2.184	2.990	12.9	19.9	2 21	12 27.80	+2 51.1	2.156	3.026	10.6	21.0
3 2	12 20.05	-16 19.2	2.109	2.995	10.1	19.8	3 2	12 21.74	+3 38.6	2.095	3.034	7.2	20.8
3 12	12 13.35	-15 57.3	2.057	3.001	7.2	19.6	3 12	12 14.18	+4 31.3	2.061	3.042	3.7	20.6
3 22	12 5.79	-15 17.8	2.032	3.007	4.8	19.4	3 22	12 5.82	+5 23.8	2.056	3.049	2.0	20.5
4 1	11 58.19	-14 24.7	2.035	3.012	4.8	19.4	4 1	11 57.51	+6 10.4	2.081	3.055	5.0	20.7
4 11	11 51.40	-13 23.7	2.066	3.018	7.2	19.6	4 11	11 50.08	+6 46.3	2.133	3.062	8.5	21.0
4 21	11 46.10	-12 21.3	2.122	3.024	10.1	19.8	4 21	11 44.18	+7 8.8	2.211	3.068	11.6	21.2
5 1	11 42.72	-11 23.6	2.202	3.030	12.8	20.0	5 1	11 40.22	+7 16.5	2.310	3.073	14.2	21.4
<b>362031</b>	2008 <i>YS<sub>121</sub></i>		3 22.0 308°52	4°5/25.3	16		<b>2232</b>	Altaj		3 22.0 245°61	1°1/23.2	18	
2 21	12 27.25	-12 11.0	1.329	2.179	17.1	20.4	2 21	12 26.28	-6 36.6	2.050	2.900	11.9	16.7
3 2	12 22.40	-12 14.6	1.247	2.164	13.1	20.1	3 2	12 20.93	-6 2.2	1.964	2.888	8.6	16.5
3 12	12 14.95	-11 53.3	1.186	2.150	8.7	19.8	3 12	12 13.88	-5 13.5	1.903	2.877	4.8	16.3
3 22	12 5.79	-11 8.3	1.149	2.136	4.9	19.6	3 22	12 5.82	-4 14.2	1.870	2.865	1.3	15.9
4 1	11 56.28	-10 5.4	1.136	2.123	5.9	19.6	4 1	11 57.61	-3 10.0	1.866	2.853	3.9	16.1
4 11	11 47.91	-8 54.3	1.148	2.110	10.4	19.8	4 11	11 50.17	-2 7.7	1.890	2.841	7.9	16.3
4 21	11 41.86	-7 45.5	1.183	2.097	15.2	20.0	4 21	11 44.26	-1 13.0	1.940	2.828	11.6	16.5
5 1	11 38.89	-6 48.0	1.236	2.085	19.5	20.2	5 1	11 40.40	-0 30.6	2.012	2.815	14.7	16.7
<b>82316</b>	2001 <i>KY<sub>59</sub></i>		3 22.0 212°81	2°7/24.9	17		<b>457498</b>	2008 <i>VP<sub>2</sub></i>		3 22.0 172°70	1°5/20.5	18	
2 21	12 26.86	-11 52.5	2.162	2.988	12.3	19.5	2 21	12 32.28	+1 53.3	2.056	2.918	11.3	22.5
3 2	12 21.26	-11 19.0	2.075	2.981	9.2	19.3	3 2	12 24.94	+2 36.7	1.988	2.924	7.8	22.3
3 12	12 14.01	-10 27.5	2.012	2.973	5.8	19.0	3 12	12 15.86	+3 26.5	1.948	2.928	3.9	22.0
3 22	12 5.79	-9 20.9	1.977	2.965	2.9	18.8	3 22	12 5.84	+4 17.3	1.937	2.931	1.7	21.9
4 1	11 57.46	-8 4.6	1.971	2.957	3.9	18.9	4 1	11 55.83	+5 3.1	1.957	2.933	5.1	22.1
4 11	11 49.89	-6 45.6	1.994	2.947	7.3	19.1	4 11	11 46.80	+5 38.8	2.005	2.934	8.9	22.3
4 21	11 43.81	-5 30.7	2.044	2.937	10.8	19.3	4 21	11 39.49	+6 1.1	2.079	2.934	12.3	22.6
5 1	11 39.74	-4 25.7	2.117	2.927	13.8	19.5	5 1	11 34.37	+6 8.6	2.174	2.933	15.1	22.8
<b>1728</b>	Goethe Link		3 22.0 245°49	3°5/25.5	18		<b>202876</b>	2008 <i>UT<sub>131</sub></i>		3 22.0 151°86	0°0/22.1	17	
2 21	12 26.54	-12 57.6	1.869	2.698	13.8	15.7	2 21	12 26.60	-2 45.1	2.238	3.095	10.7	21.7
3 2	12 21.25	-12 38.3	1.785	2.690	10.5	15.5	3 2	12 20.92	-2 12.8	2.169	3.100	7.5	21.5
3 12	12 14.09	-11 58.5	1.723	2.683	6.9	15.2	3 12	12 13.77	-1 31.1	2.127	3.105	3.9	21.3
3 22	12 5.80	-11 0.6	1.689	2.675	3.9	15.0	3 22	12 5.83	-0 44.4	2.113	3.110	0.0	20.9
4 1	11 57.35	-9 49.8	1.682	2.666	4.6	15.1	4 1	11 57.89	+0 2.6	2.129	3.114	3.8	21.3
4 11	11 49.78	-8 34.0	1.702	2.658	8.1	15.2	4 11	11 50.76	+0 44.5	2.174	3.117	7.4	21.5
4 21	11 43.91	-7 21.0	1.748	2.650	11.9	15.4	4 21	11 45.07	+1 17.5	2.244	3.121	10.6	21.7
5 1	11 40.31	-6 17.4	1.816	2.641	15.2	15.6	5 1	11 41.23	+1 38.9	2.337	3.124	13.4	21.9
<b>290968</b>	2005 <i>XS<sub>1</sub></i>		3 22.0 178°16	4°8/17.8	18		<b>508748</b>	2017 <i>UX<sub>35</sub></i>		3 22.0 144°43	2°4/24.9	17	
2 21	12 32.09	+9 47.2	1.696	2.577	12.4	20.8							

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>8744</b>	Cilla		3 22.0 96°88	1.1/20.7	18	R	<b>338249</b>	2002 TX <sub>182</sub>		3 22.0 236°35	1.2/23.6	17	
2 21	12 25.49	+ 1 5.0	2.364	3.231	9.9	18.5	2 21	12 25.45	- 7 41.9	2.752	3.587	9.7	22.3
3 2	12 20.01	+ 1 48.0	2.310	3.247	6.7	18.3	3 2	12 20.06	- 7 7.3	2.654	3.570	7.0	22.1
3 12	12 13.24	+ 2 36.7	2.282	3.263	3.3	18.1	3 12	12 13.35	- 6 20.9	2.582	3.552	4.1	21.9
3 22	12 5.83	+ 3 26.4	2.284	3.279	1.2	17.9	3 22	12 5.86	- 5 25.4	2.540	3.534	1.4	21.7
4 1	11 58.51	+ 4 12.2	2.316	3.294	4.2	18.2	4 1	11 58.22	- 4 25.0	2.529	3.515	3.1	21.8
4 11	11 51.99	+ 4 49.6	2.376	3.309	7.4	18.4	4 11	11 51.14	- 3 24.7	2.547	3.495	6.2	21.9
4 21	11 46.81	+ 5 15.9	2.461	3.324	10.3	18.6	4 21	11 45.17	- 2 29.1	2.594	3.475	9.2	22.1
5 1	11 43.35	+ 5 29.5	2.569	3.339	12.7	18.8	5 1	11 40.77	- 1 42.2	2.664	3.454	11.8	22.2
<b>200161</b>	1999 AG <sub>16</sub>		3 22.0 128°30	3.2/19.2	18		<b>230359</b>	2002 ER <sub>55</sub>		3 22.0 30°96	0.1/21.9	18	
2 21	12 30.27	+ 4 24.2	1.584	2.465	13.1	20.8	2 21	12 24.33	- 3 44.4	1.385	2.264	14.7	20.0
3 2	12 23.81	+ 5 34.7	1.533	2.477	8.9	20.6	3 2	12 19.89	- 2 48.0	1.335	2.276	10.2	19.8
3 12	12 15.35	+ 6 50.6	1.508	2.488	4.8	20.4	3 12	12 13.40	- 1 35.8	1.308	2.289	5.2	19.5
3 22	12 5.84	+ 8 3.3	1.509	2.499	3.4	20.3	3 22	12 5.85	- 0 15.8	1.306	2.302	0.2	19.1
4 1	11 56.46	+ 9 4.5	1.539	2.509	7.0	20.6	4 1	11 58.43	+ 1 2.5	1.331	2.317	5.3	19.6
4 11	11 48.36	+ 9 47.7	1.595	2.519	11.1	20.8	4 11	11 52.26	+ 2 9.9	1.380	2.332	10.0	19.9
4 21	11 42.32	+ 10 10.1	1.673	2.528	14.7	21.1	4 21	11 48.15	+ 3 0.2	1.453	2.348	14.2	20.2
5 1	11 38.82	+ 10 11.6	1.770	2.537	17.7	21.3	5 1	11 46.55	+ 3 30.2	1.544	2.364	17.6	20.4
<b>501008</b>	2013 RV <sub>33</sub>		3 22.0 227°79	2.7/24.5	17		<b>147673</b>	2004 LO <sub>15</sub>		3 22.0 250°33	5.6/14.6	18	
2 21	12 29.47	- 9 44.9	2.100	2.932	12.4	22.0	2 21	12 25.46	+ 16 58.3	2.473	3.350	9.1	20.0
3 2	12 23.16	- 9 44.0	2.012	2.922	9.3	21.8	3 2	12 20.11	+ 18 7.1	2.410	3.340	6.9	19.8
3 12	12 15.05	- 9 28.2	1.948	2.912	5.8	21.5	3 12	12 13.37	+ 19 10.9	2.375	3.330	5.6	19.7
3 22	12 5.84	- 8 59.6	1.912	2.902	2.9	21.3	3 22	12 5.86	+ 20 3.5	2.369	3.320	6.1	19.8
4 1	11 56.45	- 8 21.8	1.906	2.891	4.1	21.4	4 1	11 58.31	+ 20 39.9	2.390	3.309	8.0	19.9
4 11	11 47.85	- 7 40.5	1.928	2.879	7.7	21.6	4 11	11 51.49	+ 20 57.2	2.437	3.299	10.4	20.0
4 21	11 40.83	- 7 1.1	1.976	2.868	11.2	21.8	4 21	11 45.99	+ 20 54.8	2.506	3.288	12.6	20.1
5 1	11 35.94	- 6 28.6	2.047	2.855	14.3	21.9	5 1	11 42.25	+ 20 33.7	2.595	3.277	14.6	20.3
<b>306760</b>	2000 YM <sub>109</sub>		3 22.0 60°59	2.2/23.7	18		<b>337000</b>	2012 MJ <sub>3</sub>		3 22.0 237°27	4.9/15.9	17	
2 21	12 29.62	- 7 28.1	1.413	2.273	15.7	20.0	2 21	12 25.47	+ 11 27.9	2.117	3.001	10.1	20.9
3 2	12 23.63	- 7 19.5	1.355	2.282	11.4	19.8	3 2	12 20.30	+ 12 59.8	2.052	2.992	7.3	20.7
3 12	12 15.36	- 6 52.5	1.319	2.292	6.6	19.5	3 12	12 13.54	+ 14 31.7	2.013	2.982	5.2	20.5
3 22	12 5.84	- 6 11.4	1.308	2.302	2.4	19.3	3 22	12 5.86	+ 15 55.7	2.004	2.972	5.5	20.5
4 1	11 56.38	- 5 22.7	1.324	2.312	4.9	19.4	4 1	11 58.11	+ 17 4.4	2.022	2.962	7.9	20.6
4 11	11 48.26	- 4 34.9	1.365	2.322	9.6	19.7	4 11	11 51.16	+ 17 52.8	2.067	2.952	10.9	20.8
4 21	11 42.39	- 3 54.9	1.430	2.332	13.9	20.0	4 21	11 45.69	+ 18 19.0	2.134	2.941	13.7	21.0
5 1	11 39.31	- 3 27.9	1.514	2.343	17.5	20.3	5 1	11 42.20	+ 18 23.1	2.220	2.930	16.1	21.1
<b>158168</b>	2001 QQ <sub>206</sub>		3 22.0 170°90	0.3/22.3	18		<b>168851</b>	2000 UQ <sub>67</sub>		3 22.0 65°54	4.5/25.8	18	
2 21	12 31.05	- 4 0.2	1.815	2.671	12.9	21.7	2 21	12 28.19	- 13 40.9	1.439	2.277	16.7	19.8
3 2	12 24.29	- 3 24.4	1.746	2.676	9.1	21.5	3 2	12 22.70	- 13 33.2	1.374	2.284	12.8	19.5
3 12	12 15.61	- 2 35.7	1.702	2.679	4.8	21.2	3 12	12 14.93	- 13 0.2	1.332	2.291	8.5	19.3
3 22	12 5.85	- 1 39.1	1.686	2.682	0.4	20.9	3 22	12 5.87	- 12 4.8	1.313	2.298	4.9	19.1
4 1	11 56.07	- 0 41.1	1.699	2.684	4.5	21.2	4 1	11 56.79	- 10 53.6	1.321	2.306	5.6	19.2
4 11	11 47.35	+ 0 11.4	1.740	2.686	8.8	21.4	4 11	11 48.98	- 9 36.4	1.354	2.313	9.4	19.4
4 21	11 40.50	+ 0 52.9	1.807	2.686	12.7	21.7	4 21	11 43.39	- 8 22.9	1.411	2.321	13.5	19.7
5 1	11 36.03	+ 1 20.1	1.894	2.686	15.9	21.9	5 1	11 40.56	- 7 21.0	1.488	2.328	17.2	19.9
<b>436733</b>	2011 UP <sub>271</sub>		3 22.0 207°18	2.0/24.8	17		<b>306034</b>	2010 EF <sub>126</sub>		3 22.0 319°57	4.4/18.9	15	
2 21	12 24.19	- 10 31.7	2.934	3.756	9.5	21.8	2 21	12 28.69	+ 6 25.0	1.166	2.064	15.3	20.6
3 2	12 19.07	- 10 12.8	2.846	3.751	7.1	21.7	3 2	12 23.53	+ 7 18.0	1.100	2.050	10.7	20.2
3 12	12 12.79	- 9 42.0	2.784	3.746	4.4	21.5	3 12	12 15.57	+ 8 16.9	1.055	2.037	6.1	19.9
3 22	12 5.85	- 9 1.6	2.752	3.740	2.2	21.3	3 22	12 5.87	+ 9 11.4	1.035	2.024	4.8	19.8
4 1	11 58.84	- 8 14.7	2.749	3.734	3.0	21.4	4 1	11 55.95	+ 9 51.2	1.039	2.012	9.0	20.0
4 11	11 52.38	- 7 25.7	2.777	3.728	5.6	21.5	4 11	11 47.43	+ 10 8.2	1.065	2.000	14.2	20.2
4 21	11 46.98	- 6 38.6	2.832	3.721	8.3	21.7	4 21	11 41.50	+ 9 59.7	1.110	1.989	18.9	20.5
5 1	11 43.02	- 5 57.2	2.911	3.714	10.6	21.8	5 1	11 38.86	+ 9 26.0	1.172	1.979	22.9	20.7
<b>11701</b>	1998 FY <sub>116</sub>		3 22.0 260°30	2.9/24.9	18		<b>330759</b>	2008 SO <sub>218</sub>		3 22.0 159°61	0.2/21.2	14	C
2 21	12 26.84	- 10 52.2	2.030	2.863	12.7	18.1	2 21	12 16.59	+ 0 42.2	11.709	12.558	2.4	23.9
3 2	12 21.40	- 10 39.8	1.939	2.849	9.6	17.8	3 2	12 13.21	+ 1 3.5	11.634	12.563	1.6	23.8
3 12	12 14.18	- 10 10.3	1.872	2.835	6.1	17.6	3 12	12 9.60	+ 1 25.9	11.589	12.568	0.8	23.8
3 22	12 5.85	- 9 26.1	1.832	2.821	3.1	17.4	3 22	12 5.87	+ 1 48.7	11.578	12.573	0.2	23.7
4 1	11 57.32	- 8 31.5	1.821	2.807	4.2	17.4	4 1	12 2.13	+ 2 11.0	11.599	12.578	0.9	23.8
4 11	11 49.56	- 7 33.1	1.838	2.792	7.8	17.6	4 11	11 58.52	+ 2 32.2	11.653	12.583	1.8	23.9
4 21	11 43.36	- 6 37.2	1.881	2.778	11.4	17.8	4 21	11 55.14	+ 2 51.5	11.737	12.588	2.5	23.9
5 1	11 39.29	- 5 49.5	1.945	2.763	14.6	18.0	5 1	11 52.10	+ 3 8.3	11.847	12.592	3.2	24.0
<b>346836</b>	2009 DQ <sub>35</sub>		3 22.0 52°49	0.4/21.7	18		<b>302420</b>	2002 CV <sub>228</sub>		3 22.0 163°49	3.8/18.4	18	
2 21	12 29.17	- 0 18.7	1.885	2.752	12.0	20.2	2 21	12 30.38	+ 7 16.8	1.799	2.678	11.9	21.5
3 2	12 22.74	- 0 9.1	1.838	2.774	8.3	20.0	3 2	12 23.79	+ 8 23.1	1.742	2.683	8.2	21.3
3 12	12 14.69	+ 0 7.7	1.817	2.796	4.2	19.8	3 12	12 15.33	+ 9 31.8	1.711	2.688	4.8	21.1
3 22	12 5.86	+ 0 27.7	1.823	2.819	0.4	19.5	3 22	12 5.87	+ 10 35.0	1.708	2.692	4.1	21.1
4 1	11 57.21	+ 0 46.3	1.858	2.842	4.3	19.9	4 1	11 56.47	+ 11 25.5	1.734	2.696	7.1	21.3
4 11	11 49.68	+ 0 59.1	1.920	2.865	8.2	20.2	4 11	11 48.17	+ 11 58.1	1.786	2.699	10.8	21.5
4 21	11 43.89	+ 1 3.3	2.008	2.888	11.6	20.4	4 21	11 41.75	+ 12 10.8	1.861	2.701	14.1	21.7
5 1	11 40.26	+ 0 57.0	2.117	2.911	14.3	20.7	5 1	11 37.68	+ 12 3.9	1.956	2.703	16.9	21.9
<b>364203</b>	2006 QO <sub>96</sub>		3 22.0 220°19	1.2/20.8	16		<b>88825</b>	2001 SG <sub>159</sub>		3 22.0 260°00	1.8/23.7	17	R
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>122292</b>	2000 <i>PG</i> <sub>20</sub>		3 22.0 238°89	5°5/15.3	17		<b>357128</b>	2001 <i>XP</i> <sub>262</sub>		3 22.1 81°16	0°5/21.6	18	
2 21	12 26.38	+12 43.6	2.052	2.936	10.4	20.1	2 21	12 29.94	- 2 32.5	1.368	2.242	15.1	21.2
3 2	12 21.00	+14 21.3	1.986	2.924	7.6	19.9	3 2	12 23.76	- 1 40.3	1.322	2.261	10.5	20.9
3 12	12 13.93	+15 58.3	1.946	2.912	5.7	19.7	3 12	12 15.40	- 0 34.3	1.299	2.280	5.3	20.7
3 22	12 5.87	+17 25.9	1.935	2.899	6.1	19.7	3 22	12 5.93	+ 0 37.8	1.302	2.298	0.5	20.4
4 1	11 57.71	+18 36.5	1.952	2.886	8.6	19.8	4 1	11 56.69	+ 1 46.5	1.332	2.316	5.6	20.8
4 11	11 50.37	+19 24.8	1.995	2.872	11.6	20.0	4 11	11 48.90	+ 2 43.4	1.387	2.334	10.4	21.1
4 21	11 44.59	+19 49.1	2.060	2.858	14.5	20.2	4 21	11 43.40	+ 3 23.2	1.466	2.352	14.6	21.4
5 1	11 40.89	+19 50.0	2.143	2.844	16.9	20.3	5 1	11 40.64	+ 3 43.3	1.563	2.370	18.0	21.7
<b>429126</b>	2009 <i>SJ</i> <sub>334</sub>		3 22.0 105°11	1°1/21.1	18		<b>119314</b>	2001 <i>SW</i> <sub>72</sub>		3 22.1 318°45	2°0/20.5	18	
2 21	12 31.66	+ 1 42.0	1.946	2.811	11.7	21.0	2 21	12 27.35	+ 2 11.2	1.462	2.347	13.7	19.0
3 2	12 24.49	+ 1 56.2	1.890	2.826	8.1	20.8	3 2	12 22.22	+ 2 46.4	1.387	2.332	9.5	18.7
3 12	12 15.63	+ 2 16.0	1.860	2.841	4.1	20.6	3 12	12 14.78	+ 3 30.4	1.335	2.318	4.9	18.4
3 22	12 5.90	+ 2 36.9	1.860	2.855	1.1	20.4	3 22	12 5.93	+ 4 16.7	1.309	2.303	2.1	18.1
4 1	11 56.29	+ 2 54.3	1.888	2.869	4.7	20.7	4 1	11 56.88	+ 4 57.5	1.309	2.290	6.4	18.4
4 11	11 47.78	+ 3 4.3	1.945	2.883	8.6	20.9	4 11	11 48.91	+ 5 25.6	1.334	2.277	11.2	18.6
4 21	11 41.07	+ 3 4.1	2.027	2.896	12.0	21.2	4 21	11 43.03	+ 5 36.7	1.381	2.264	15.6	18.8
5 1	11 36.57	+ 2 52.7	2.131	2.909	14.8	21.4	5 1	11 39.88	+ 5 28.7	1.447	2.252	19.3	19.0
<b>400229</b>	2007 <i>EY</i> <sub>115</sub>		3 22.0 279°21	4°1/19.2	17		<b>327446</b>	2005 <i>WK</i> <sub>126</sub>		3 22.1 168°02	0°7/22.8	16	
2 21	12 31.77	+ 6 45.0	1.358	2.246	14.3	21.2	2 21	12 27.35	- 5 21.5	2.176	3.026	11.3	22.4
3 2	12 25.46	+ 7 29.9	1.286	2.231	10.1	20.9	3 2	12 21.52	- 4 45.2	2.104	3.029	8.0	22.2
3 12	12 16.50	+ 8 19.1	1.237	2.217	5.7	20.6	3 12	12 14.15	- 3 56.8	2.057	3.033	4.4	22.0
3 22	12 5.90	+ 9 3.8	1.214	2.202	4.4	20.5	3 22	12 5.94	- 3 0.5	2.040	3.036	0.8	21.7
4 1	11 55.07	+ 9 35.4	1.217	2.188	8.3	20.7	4 1	11 57.70	- 2 1.8	2.052	3.038	3.7	21.9
4 11	11 45.51	+ 9 47.2	1.244	2.173	13.1	20.9	4 11	11 50.30	- 1 6.6	2.093	3.040	7.4	22.2
4 21	11 38.36	+ 9 36.7	1.292	2.159	17.5	21.1	4 21	11 44.38	- 0 19.7	2.160	3.041	10.8	22.4
5 1	11 34.31	+ 9 4.3	1.358	2.144	21.3	21.4	5 1	11 40.39	+ 0 15.3	2.249	3.042	13.6	22.6
<b>187430</b>	2005 <i>WO</i> <sub>27</sub>		3 22.0 263°49	1°7/20.4	18		<b>371970</b>	2008 <i>FV</i> <sub>132</sub>		3 22.1 291°08	0°7/21.4	17	
2 21	12 28.43	+ 2 4.4	1.985	2.855	11.3	20.3	2 21	12 24.98	- 2 43.2	1.655	2.528	13.1	21.6
3 2	12 22.55	+ 2 47.4	1.895	2.834	7.8	20.0	3 2	12 20.36	- 1 38.7	1.574	2.513	9.1	21.3
3 12	12 14.81	+ 3 38.1	1.832	2.813	4.0	19.7	3 12	12 13.76	- 0 18.7	1.518	2.499	4.6	21.0
3 22	12 5.89	+ 4 31.1	1.797	2.791	1.8	19.5	3 22	12 5.93	+ 1 10.2	1.488	2.484	0.7	20.7
4 1	11 56.75	+ 5 20.0	1.791	2.768	5.4	19.7	4 1	11 57.92	+ 2 38.8	1.486	2.470	5.3	21.0
4 11	11 48.37	+ 5 59.0	1.812	2.745	9.4	19.9	4 11	11 50.83	+ 3 58.1	1.511	2.456	10.0	21.2
4 21	11 41.59	+ 6 23.8	1.859	2.722	13.1	20.1	4 21	11 45.54	+ 5 1.0	1.559	2.441	14.2	21.4
5 1	11 37.01	+ 6 32.4	1.925	2.698	16.3	20.3	5 1	11 42.64	+ 5 43.5	1.627	2.427	17.7	21.6
<b>54601</b>	2000 <i>RZ</i> <sub>13</sub>		3 22.0 66°93	0°9/23.2	18		<b>127212</b>	2002 <i>HB</i> <sub>14</sub>		3 22.1 68°37	12°1/13.3	18	
2 21	12 22.47	- 8 22.9	2.185	3.032	11.4	18.3	2 21	12 42.33	+34 20.5	1.766	2.595	14.5	18.8
3 2	12 18.10	- 7 2.1	2.117	3.040	8.1	18.1	3 2	12 31.80	+35 1.8	1.751	2.618	12.9	18.8
3 12	12 12.36	- 5 25.4	2.075	3.049	4.5	17.9	3 12	12 19.22	+35 16.0	1.759	2.642	12.1	18.8
3 22	12 5.90	- 3 38.7	2.062	3.057	1.0	17.7	3 22	12 5.96	+34 56.9	1.791	2.665	12.6	18.8
4 1	11 59.47	- 1 49.4	2.079	3.066	3.6	17.9	4 1	11 53.52	+34 3.2	1.847	2.688	13.9	19.0
4 11	11 53.82	- 0 5.6	2.126	3.075	7.2	18.1	4 11	11 43.09	+32 38.8	1.926	2.712	15.6	19.1
4 21	11 49.53	+ 1 26.2	2.199	3.084	10.5	18.3	4 21	11 35.38	+30 50.7	2.025	2.735	17.4	19.3
5 1	11 46.99	+ 2 41.6	2.296	3.092	13.3	18.5	5 1	11 30.63	+28 46.0	2.140	2.758	18.9	19.5
<b>37747</b>	1996 <i>YS</i>		3 22.0 113°74	4°7/28.2	18		<b>289873</b>	2005 <i>ME</i> <sub>21</sub>		3 22.1 220°26	0°6/21.4	17	
2 21	12 26.59	-19 24.8	2.689	3.464	11.6	20.0	2 21	12 26.93	- 1 55.6	1.868	2.735	12.1	21.1
3 2	12 20.79	-19 28.6	2.618	3.480	9.3	19.8	3 2	12 21.48	- 1 2.1	1.793	2.730	8.4	20.8
3 12	12 13.69	-19 14.9	2.572	3.497	6.9	19.7	3 12	12 14.23	+ 0 3.2	1.744	2.724	4.3	20.6
3 22	12 5.91	-18 45.0	2.553	3.513	5.1	19.6	3 22	12 5.95	+ 1 14.5	1.723	2.719	0.7	20.3
4 1	11 58.15	-18 1.5	2.562	3.529	4.8	19.6	4 1	11 57.57	+ 2 24.4	1.730	2.713	4.8	20.6
4 11	11 51.11	-17 9.2	2.601	3.544	6.4	19.7	4 11	11 50.11	+ 3 25.9	1.765	2.706	9.0	20.8
4 21	11 45.36	-16 13.2	2.666	3.559	8.6	19.9	4 21	11 44.31	+ 4 13.7	1.824	2.700	12.8	21.0
5 1	11 41.28	-15 18.7	2.757	3.574	10.8	20.0	5 1	11 40.71	+ 4 44.5	1.905	2.693	15.9	21.2
<b>31891</b>	2000 <i>FR</i> <sub>42</sub>		3 22.0 284°30	2°3/20.2	18		<b>120068</b>	2003 <i>DC</i> <sub>1</sub>		3 22.1 239°54	2°8/19.1	17	
2 21	12 29.91	+ 3 55.1	1.629	2.508	12.8	17.9	2 21	12 26.79	+ 4 27.0	1.940	2.819	11.2	19.9
3 2	12 23.73	+ 4 26.2	1.560	2.503	8.9	17.7	3 2	12 21.36	+ 5 35.2	1.866	2.809	7.7	19.6
3 12	12 15.43	+ 5 2.8	1.516	2.498	4.6	17.4	3 12	12 14.17	+ 6 49.6	1.818	2.799	4.1	19.4
3 22	12 5.92	+ 5 38.6	1.499	2.492	2.5	17.2	3 22	12 5.95	+ 8 3.2	1.799	2.788	3.1	19.3
4 1	11 56.34	+ 6 7.2	1.510	2.487	6.2	17.5	4 1	11 57.62	+ 9 8.5	1.808	2.777	6.2	19.5
4 11	11 47.86	+ 6 23.0	1.547	2.482	10.6	17.7	4 11	11 50.16	+ 9 59.2	1.844	2.766	10.0	19.7
4 21	11 41.38	+ 6 23.1	1.606	2.476	14.5	17.9	4 21	11 44.30	+10 31.7	1.904	2.754	13.4	19.9
5 1	11 37.47	+ 6 6.6	1.685	2.471	17.8	18.1	5 1	11 40.59	+10 44.6	1.984	2.742	16.3	20.1
<b>435363</b>	2007 <i>VT</i> <sub>286</sub>		3 22.0 48°22	6°9/30.2	18		<b>108614</b>	2001 <i>ME</i> <sub>25</sub>		3 22.1 181°88	4°9/27.9	17	
2 21	12 25.65	-23 30.7	1.925	2.697	15.6	20.0	2 21	12 27.53	-19 28.9	2.333	3.114	12.9	20.0
3 2	12 20.49	-23 35.1	1.868	2.721	12.8	19.9	3 2	12 21.69	-19 13.3	2.247	3.116	10.4	19.8
3 12	12 13.64	-23 13.0	1.832	2.745	10.0	19.8	3 12	12 14.27	-18 36.5	2.185	3.116	7.6	19.6
3 22	12 5.91	-22 25.4	1.820	2.770	7.7	19.7	3 22	12 5.95	-17 39.8	2.149	3.116	5.4	19.5
4 1	11 58.29	-21 16.7	1.834	2.795	7.0	19.7	4 1	11 57.55	-16 27.1	2.143	3.115	5.1	19.4
4 11	11 51.73	-19 54.5	1.875	2.820	8.3	19.8	4 11	11 49.94	-15 4.7	2.165	3.113	7.1	19.6
4 21	11 46.90	-18 27.2	1.941	2.845	10.7	20.0	4 21	11 43.79	-13 39.7	2.214	3.111	9.9	19.7
5 1	11 44.24	-17 3.1	2.030	2.871	13.2	20.2	5 1	11 39.59	-12 19.1	2.288	3.108	12.6	19.9
<b>368577</b>	2004 <i>PZ</i> <sub>42</sub>		3 22.0 148°96	2°6/25.3	15 R		<b>169676</b>	2002 <i>JS</i> <sub>97</sub>		3 22			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>285663</b>	2000 SY <sub>77</sub>		3 22.1 107°22	0°0/22.1 18			<b>8644</b>	Betulapendula		3 22.1 248°17	0°7/21.5 18		
2 21	12 31.36	- 2 49.5	1.605	2.469	13.9	20.9	2 21	12 30.54	- 0 31.9	1.758	2.625	12.7	17.6
3 2	12 24.57	- 2 18.0	1.551	2.485	9.7	20.7	3 2	12 24.20	- 0 3.3	1.675	2.611	8.9	17.3
3 12	12 15.78	- 1 34.5	1.523	2.502	5.0	20.4	3 12	12 15.75	+ 0 35.5	1.616	2.597	4.5	17.0
3 22	12 5.97	- 0 44.5	1.521	2.517	0.1	20.0	3 22	12 5.99	+ 1 19.3	1.585	2.582	0.7	16.7
4 1	11 56.30	+ 0 5.0	1.548	2.533	4.8	20.5	4 1	11 56.01	+ 2 1.9	1.583	2.566	5.1	17.0
4 11	11 47.92	+ 0 47.1	1.601	2.548	9.3	20.8	4 11	11 46.97	+ 2 36.9	1.608	2.550	9.7	17.2
4 21	11 41.61	+ 1 17.0	1.679	2.562	13.3	21.0	4 21	11 39.78	+ 2 59.5	1.657	2.534	13.8	17.4
5 1	11 37.85	+ 1 32.1	1.777	2.576	16.5	21.3	5 1	11 35.09	+ 3 7.0	1.727	2.517	17.2	17.6
<b>175982</b>	2000 QS <sub>40</sub>		3 22.1 201°58	2°2/24.6 18			<b>11342</b>	1996 XJ <sub>19</sub>		3 22.1 6°97	0°9/22.9 18		
2 21	12 26.35	- 9 42.2	2.683	3.509	10.2	20.6	2 21	12 25.82	- 5 40.6	1.736	2.597	13.2	17.5
3 2	12 20.68	- 9 36.5	2.598	3.505	7.6	20.4	3 2	12 20.79	- 5 5.1	1.666	2.597	9.4	17.3
3 12	12 13.70	- 9 19.1	2.539	3.502	4.7	20.3	3 12	12 13.91	- 4 14.5	1.621	2.597	5.1	17.0
3 22	12 5.96	- 8 51.9	2.509	3.498	2.3	20.1	3 22	12 5.98	- 3 13.6	1.602	2.598	1.0	16.8
4 1	11 58.14	- 8 17.9	2.509	3.494	3.3	20.1	4 1	11 58.01	- 2 9.4	1.611	2.599	4.3	17.0
4 11	11 50.95	- 7 41.4	2.539	3.490	6.1	20.3	4 11	11 51.02	- 1 9.3	1.647	2.599	8.7	17.2
4 21	11 44.95	- 7 6.5	2.596	3.485	8.9	20.5	4 21	11 45.79	- 0 19.6	1.707	2.600	12.6	17.5
5 1	11 40.58	- 6 36.9	2.676	3.480	11.4	20.6	5 1	11 42.83	+ 0 15.7	1.788	2.601	15.9	17.7
<b>387339</b>	2012 VS <sub>108</sub>		3 22.1 161°23	0°7/22.9 17			<b>168895</b>	2000 WE <sub>131</sub>		3 22.1 215°48	2°2/24.1 18		
2 21	12 25.68	- 4 55.4	2.647	3.492	9.7	21.7	2 21	12 27.98	- 9 33.9	1.734	2.579	14.0	20.3
3 2	12 20.16	- 4 32.2	2.573	3.497	6.9	21.5	3 2	12 22.39	- 8 57.2	1.655	2.574	10.3	20.0
3 12	12 13.40	- 3 59.8	2.526	3.501	3.7	21.3	3 12	12 14.79	- 8 0.8	1.599	2.568	6.1	19.7
3 22	12 5.96	- 3 21.3	2.509	3.504	0.8	21.1	3 22	12 5.99	- 6 48.7	1.569	2.562	2.4	19.5
4 1	11 58.51	- 2 40.5	2.522	3.508	3.1	21.2	4 1	11 57.07	- 5 28.0	1.568	2.556	4.4	19.6
4 11	11 51.72	- 2 1.9	2.564	3.511	6.3	21.5	4 11	11 49.11	- 4 7.3	1.595	2.549	8.7	19.8
4 21	11 46.13	- 1 28.9	2.633	3.513	9.1	21.6	4 21	11 43.00	- 2 54.7	1.646	2.542	12.8	20.1
5 1	11 42.14	- 1 4.5	2.726	3.516	11.6	21.8	5 1	11 39.30	- 1 56.2	1.719	2.535	16.3	20.3
<b>348162</b>	2004 HN <sub>55</sub>		3 22.1 327°39	5°4/16.4 17			<b>222727</b>	2002 AG <sub>164</sub>		3 22.1 107°74	4°2/17.1 18		
2 21	12 23.94	+ 11 16.4	1.729	2.622	11.5	20.2	2 21	12 25.23	+ 7 32.4	1.852	2.738	11.2	19.9
3 2	12 19.57	+ 12 32.3	1.659	2.604	8.3	20.0	3 2	12 20.22	+ 9 14.1	1.800	2.745	7.7	19.7
3 12	12 13.33	+ 13 48.5	1.614	2.586	5.8	19.8	3 12	12 13.55	+ 10 58.5	1.775	2.751	4.8	19.6
3 22	12 5.95	+ 14 56.4	1.595	2.569	6.0	19.7	3 22	12 5.99	+ 12 36.4	1.779	2.758	4.7	19.6
4 1	11 58.45	+ 15 47.7	1.603	2.552	8.8	19.9	4 1	11 58.48	+ 13 59.4	1.810	2.765	7.6	19.7
4 11	11 51.86	+ 16 16.9	1.634	2.537	12.3	20.0	4 11	11 51.94	+ 15 1.3	1.868	2.771	11.0	20.0
4 21	11 46.99	+ 16 21.8	1.688	2.521	15.6	20.2	4 21	11 47.06	+ 15 39.8	1.949	2.777	14.0	20.2
5 1	11 44.42	+ 16 3.1	1.758	2.507	18.5	20.4	5 1	11 44.28	+ 15 54.8	2.048	2.784	16.6	20.4
<b>277249</b>	2005 RT <sub>30</sub>		3 22.1 133°77	5°1/27.9 15			<b>202666</b>	2006 KG <sub>101</sub>		3 22.1 158°24	0°4/22.5 17		
2 21	12 29.74	- 19 15.4	2.387	3.164	12.8	21.7	2 21	12 26.26	- 4 0.5	2.120	2.976	11.3	21.0
3 2	12 23.11	- 19 21.1	2.316	3.180	10.2	21.6	3 2	12 20.82	- 3 28.4	2.049	2.978	8.0	20.8
3 12	12 14.95	- 19 7.3	2.268	3.196	7.6	21.4	3 12	12 13.83	- 2 45.3	2.003	2.980	4.2	20.6
3 22	12 5.97	- 18 35.0	2.248	3.211	5.5	21.3	3 22	12 5.99	- 1 55.5	1.986	2.982	0.4	20.3
4 1	11 57.00	- 17 47.3	2.257	3.225	5.3	21.3	4 1	11 58.13	- 1 4.2	1.998	2.984	3.8	20.5
4 11	11 48.88	- 16 49.7	2.294	3.238	7.1	21.5	4 11	11 51.09	- 0 17.1	2.038	2.985	7.6	20.8
4 21	11 42.28	- 15 48.2	2.359	3.251	9.6	21.7	4 21	11 45.54	+ 0 21.2	2.104	2.987	11.0	21.0
5 1	11 37.64	- 14 49.1	2.447	3.263	12.0	21.8	5 1	11 41.92	+ 0 47.5	2.192	2.988	13.9	21.2
<b>406587</b>	2008 AX <sub>103</sub>		3 22.1 96°58	0°4/22.4 18			<b>491698</b>	2012 UP <sub>90</sub>		3 22.1 140°74	0°5/21.3 17		
2 21	12 30.11	- 4 3.2	1.658	2.520	13.7	21.8	2 21	12 25.25	- 0 35.0	2.745	3.603	9.0	22.5
3 2	12 23.64	- 3 29.5	1.606	2.538	9.6	21.6	3 2	12 19.80	+ 0 1.8	2.680	3.613	6.2	22.3
3 12	12 15.29	- 2 42.8	1.578	2.556	5.0	21.4	3 12	12 13.20	+ 0 44.8	2.643	3.623	3.1	22.1
3 22	12 5.97	- 1 48.6	1.578	2.574	0.5	21.0	3 22	12 6.00	+ 1 30.2	2.636	3.632	0.6	21.9
4 1	11 56.81	- 0 53.9	1.606	2.592	4.6	21.4	4 1	11 58.83	+ 2 13.9	2.660	3.641	3.5	22.2
4 11	11 48.87	- 0 5.6	1.661	2.609	8.9	21.7	4 11	11 52.32	+ 2 51.9	2.713	3.649	6.5	22.4
4 21	11 42.92	+ 0 31.3	1.740	2.626	12.8	22.0	4 21	11 46.97	+ 3 21.3	2.792	3.657	9.2	22.6
5 1	11 39.37	+ 0 53.6	1.840	2.642	15.9	22.2	5 1	11 43.14	+ 3 40.1	2.894	3.665	11.4	22.7
<b>215083</b>	2009 FH <sub>23</sub>		3 22.1 290°70	1°9/20.0 17			<b>182871</b>	2002 CT <sub>211</sub>		3 22.1 184°15	0°9/23.2 18		
2 21	12 25.72	+ 3 37.8	2.206	3.080	10.2	20.3	2 21	12 24.96	- 5 30.5	2.682	3.526	9.6	21.1
3 2	12 20.48	+ 4 14.3	2.124	3.064	7.0	20.1	3 2	12 19.70	- 5 9.0	2.604	3.526	6.8	20.9
3 12	12 13.68	+ 4 55.9	2.069	3.049	3.6	19.8	3 12	12 13.20	- 4 38.1	2.553	3.526	3.8	20.7
3 22	12 5.96	+ 5 37.5	2.042	3.034	2.0	19.7	3 22	12 6.02	- 4 0.5	2.531	3.526	1.0	20.5
4 1	11 58.13	+ 6 14.1	2.044	3.019	5.0	19.9	4 1	11 58.80	- 3 20.2	2.539	3.525	3.1	20.7
4 11	11 51.01	+ 6 40.9	2.074	3.004	8.6	20.1	4 11	11 52.21	- 2 41.2	2.576	3.524	6.2	20.9
4 21	11 45.29	+ 6 54.9	2.128	2.989	11.8	20.2	4 21	11 46.78	- 2 7.5	2.640	3.523	9.0	21.1
5 1	11 41.46	+ 6 54.7	2.204	2.974	14.6	20.4	5 1	11 42.91	- 1 41.8	2.728	3.522	11.5	21.2
<b>321756</b>	2010 NK <sub>85</sub>		3 22.1 282°11	2°4/19.2 17			<b>168901</b>	2000 WJ <sub>164</sub>		3 22.1 222°34	2°1/24.3 17		
2 21	12 23.73	+ 3 10.5	2.076	2.955	10.5	20.2	2 21	12 27.94	- 10 35.8	1.997	2.830	12.9	20.7
3 2	12 19.12	+ 4 25.5	2.004	2.947	7.2	20.0	3 2	12 22.22	- 9 44.8	1.906	2.819	9.5	20.5
3 12	12 12.98	+ 5 47.5	1.959	2.940	3.8	19.8	3 12	12 14.68	- 8 33.9	1.840	2.808	5.8	20.2
3 22	12 5.96	+ 7 9.8	1.942	2.932	2.6	19.7	3 22	12 6.04	- 7 7.3	1.803	2.795	2.3	20.0
4 1	11 58.87	+ 8 25.1	1.954	2.925	5.7	19.8	4 1	11 57.21	- 5 31.6	1.795	2.781	4.0	20.1
4 11	11 52.55	+ 9 27.2	1.993	2.917	9.2	20.0	4 11	11 49.21	- 3 55.4	1.815	2.767	8.0	20.3
4 21	11 47.67	+ 10 12.1	2.057	2.910	12.5	20.2	4 21	11 42.81	- 2 26.6	1.863	2.752	11.9	20.5
5 1	11 44.69	+ 10 38.0	2.141	2.902	15.2	20.4	5 1	11 38.58	- 1 11.6	1.932	2.736	15.2	20.7
<b>425001</b>	2009 CN <sub>64</sub>		3 22.1 258°97	1°3/20.3 17			<b>173740</b>	2001 QX <sub>287</sub>		3 22.1 240°28	2°8/25.0 18		
2 21	12 23.29	+ 0 14.0											

EPHEMERIDES

3 22.1

3 22.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>378767</b>	2008 <i>RL</i> <sub>130</sub>		3 22.1 92°73	1.6°/20.5	15		<b>265692</b>	2005 <i>UN</i> <sub>126</sub>		3 22.1 153°68	1.5°/20.7	17	
2 21	12 26.72	+ 1 38.1	1.923	2.797	11.5	21.5	2 21	12 28.33	+ 1 35.5	1.863	2.735	11.8	21.0
3 2	12 21.24	+ 2 22.5	1.860	2.800	7.9	21.2	3 2	12 22.42	+ 2 15.1	1.798	2.738	8.1	20.7
3 12	12 14.09	+ 3 14.0	1.823	2.804	4.0	21.0	3 12	12 14.74	+ 3 1.9	1.759	2.740	4.1	20.5
3 22	12 6.04	+ 4 6.7	1.813	2.808	1.7	20.8	3 22	12 6.08	+ 3 50.2	1.748	2.742	1.6	20.3
4 1	11 58.00	+ 4 54.6	1.833	2.811	5.1	21.1	4 1	11 57.43	+ 4 33.8	1.765	2.744	5.2	20.6
4 11	11 50.90	+ 5 31.9	1.879	2.815	8.9	21.3	4 11	11 49.76	+ 5 7.1	1.809	2.746	9.2	20.8
4 21	11 45.43	+ 5 55.4	1.950	2.818	12.4	21.5	4 21	11 43.81	+ 5 26.7	1.878	2.747	12.7	21.0
5 1	11 42.05	+ 6 3.2	2.041	2.822	15.3	21.7	5 1	11 40.07	+ 5 30.8	1.967	2.749	15.7	21.2
<b>88586</b>	2001 <i>QT</i> <sub>262</sub>		3 22.1 142°68	0.7°/21.3	18		<b>312013</b>	2007 <i>RV</i> <sub>16</sub>		3 22.1 142°48	1.0°/21.1	18	
2 21	12 25.73	- 3 3.6	1.995	2.857	11.6	19.3	2 21	12 31.28	+ 0 15.9	1.974	2.836	11.7	21.9
3 2	12 20.49	- 1 41.0	1.930	2.865	8.0	19.1	3 2	12 24.31	+ 0 56.7	1.915	2.850	8.1	21.7
3 12	12 13.68	- 0 6.0	1.893	2.873	4.0	18.8	3 12	12 15.64	+ 1 45.2	1.882	2.862	4.0	21.4
3 22	12 6.03	+ 1 34.5	1.884	2.880	0.8	18.6	3 22	12 6.10	+ 2 36.0	1.879	2.874	1.1	21.2
4 1	11 58.41	+ 3 12.3	1.905	2.887	4.6	18.9	4 1	11 56.64	+ 3 23.1	1.905	2.885	4.8	21.5
4 11	11 51.69	+ 4 39.6	1.955	2.893	8.5	19.1	4 11	11 48.22	+ 4 1.1	1.960	2.896	8.6	21.8
4 21	11 46.51	+ 5 51.0	2.030	2.899	12.0	19.4	4 21	11 41.55	+ 4 26.5	2.040	2.905	12.1	22.0
5 1	11 43.33	+ 6 43.5	2.127	2.904	14.8	19.6	5 1	11 37.06	+ 4 37.5	2.141	2.914	14.9	22.2
<b>330405</b>	2007 <i>BX</i> <sub>19</sub>		3 22.1 136°42	1.0°/21.0	18		<b>462876</b>	2010 <i>VH</i> <sub>114</sub>		3 22.1 88°43	1.2°/21.0	18	
2 21	12 29.46	+ 0 28.6	2.083	2.947	11.1	21.1	2 21	12 30.66	+ 1 0.9	1.707	2.578	12.8	21.4
3 2	12 22.98	+ 1 7.8	2.024	2.960	7.7	20.9	3 2	12 24.00	+ 1 33.3	1.658	2.596	8.8	21.2
3 12	12 14.93	+ 1 54.1	1.991	2.972	3.8	20.7	3 12	12 15.50	+ 2 12.9	1.634	2.615	4.4	20.9
3 22	12 6.06	+ 2 42.4	1.988	2.983	1.1	20.5	3 22	12 6.10	+ 2 54.1	1.637	2.633	1.3	20.8
4 1	11 57.27	+ 3 27.1	2.014	2.994	4.6	20.8	4 1	11 56.87	+ 3 30.6	1.670	2.651	5.2	21.1
4 11	11 49.43	+ 4 3.2	2.068	3.004	8.2	21.0	4 11	11 48.85	+ 3 57.1	1.729	2.668	9.3	21.3
4 21	11 43.21	+ 4 27.5	2.148	3.014	11.5	21.3	4 21	11 42.78	+ 4 10.4	1.812	2.685	12.9	21.6
5 1	11 39.02	+ 4 38.1	2.250	3.023	14.2	21.5	5 1	11 39.09	+ 4 9.2	1.915	2.702	15.9	21.8
<b>177109</b>	2003 <i>GZ</i> <sub>2</sub>		3 22.1 284°46	0.7°/22.8	17 R		<b>350234</b>	2012 <i>TS</i> <sub>56</sub>		3 22.1 38°16	3.5°/26.1	18	
2 21	12 26.00	- 4 6.1	2.299	3.152	10.6	20.1	2 21	12 24.29	- 13 51.1	2.156	2.977	12.5	20.4
3 2	12 20.67	- 3 51.5	2.212	3.140	7.6	19.9	3 2	12 19.51	- 13 33.0	2.080	2.980	9.6	20.2
3 12	12 13.82	- 3 27.1	2.151	3.127	4.1	19.6	3 12	12 13.22	- 12 56.8	2.028	2.983	6.4	20.0
3 22	12 6.06	- 2 55.9	2.119	3.114	0.7	19.3	3 22	12 6.08	- 12 4.9	2.003	2.987	3.8	19.8
4 1	11 58.17	- 2 22.0	2.115	3.102	3.6	19.5	4 1	11 58.91	- 11 1.9	2.007	2.990	4.2	19.9
4 11	11 50.96	- 1 50.1	2.141	3.089	7.2	19.7	4 11	11 52.52	- 9 54.3	2.038	2.994	7.0	20.0
4 21	11 45.09	- 1 24.3	2.192	3.077	10.5	19.9	4 21	11 47.58	- 8 48.3	2.096	2.998	10.1	20.2
5 1	11 41.06	- 1 7.8	2.266	3.064	13.4	20.1	5 1	11 44.53	- 7 49.8	2.176	3.002	13.0	20.4
<b>425167</b>	2009 <i>TO</i> <sub>13</sub>		3 22.1 97°36	2.3°/19.5	18		<b>79428</b>	1997 <i>SL</i> <sub>10</sub>		3 22.1 228°11	0.1°/22.2	17	
2 21	12 27.10	+ 2 58.7	1.983	2.857	11.1	21.4	2 21	12 27.25	- 3 47.8	1.918	2.778	12.1	19.6
3 2	12 21.34	+ 4 10.8	1.937	2.878	7.5	21.2	3 2	12 21.74	- 3 2.4	1.839	2.771	8.6	19.3
3 12	12 14.07	+ 5 28.2	1.918	2.899	3.9	21.0	3 12	12 14.45	- 2 4.0	1.785	2.763	4.5	19.1
3 22	12 6.06	+ 6 43.7	1.928	2.919	2.5	20.9	3 22	12 6.10	- 0 57.6	1.758	2.755	0.1	18.7
4 1	11 58.21	+ 7 50.5	1.968	2.939	5.5	21.2	4 1	11 57.62	+ 0 10.2	1.761	2.746	4.4	19.0
4 11	11 51.35	+ 8 43.2	2.034	2.959	9.0	21.4	4 11	11 50.01	+ 1 12.3	1.792	2.737	8.6	19.2
4 21	11 46.11	+ 9 18.7	2.126	2.978	12.1	21.6	4 21	11 44.04	+ 2 2.9	1.847	2.728	12.4	19.5
5 1	11 42.86	+ 9 36.3	2.237	2.997	14.7	21.9	5 1	11 40.23	+ 2 38.4	1.924	2.718	15.6	19.6
<b>285530</b>	2000 <i>GT</i> <sub>15</sub>		3 22.1 338°22	0.5°/22.4	16		<b>262775</b>	2006 <i>YR</i> <sub>8</sub>		3 22.1 346°55	0.4°/22.5	17	
2 21	12 24.41	- 3 39.8	0.995	1.889	17.7	20.4	2 21	12 27.77	- 3 40.4	1.647	2.513	13.5	20.9
3 2	12 20.90	- 3 18.9	0.927	1.874	12.7	20.0	3 2	12 22.27	- 3 15.0	1.577	2.512	9.5	20.6
3 12	12 14.45	- 2 37.3	0.878	1.860	6.8	19.7	3 12	12 14.76	- 2 36.3	1.532	2.510	5.1	20.3
3 22	12 6.07	- 1 41.2	0.850	1.847	0.6	19.2	3 22	12 6.10	- 1 49.3	1.513	2.510	0.5	20.0
4 1	11 57.36	- 0 40.8	0.846	1.835	6.4	19.5	4 1	11 57.38	- 1 0.4	1.522	2.509	4.6	20.3
4 11	11 50.08	+ 0 12.0	0.863	1.825	12.7	19.8	4 11	11 49.70	- 0 16.6	1.557	2.508	9.2	20.6
4 21	11 45.43	+ 0 47.9	0.898	1.817	18.4	20.1	4 21	11 43.93	+ 0 16.4	1.617	2.508	13.3	20.8
5 1	11 44.59	+ 1 1.5	0.950	1.810	23.1	20.4	5 1	11 40.60	+ 0 35.2	1.696	2.507	16.7	21.0
<b>245671</b>	2006 <i>BF</i> <sub>11</sub>		3 22.1 30°09	1.4°/21.2	18		<b>177924</b>	2005 <i>SV</i> <sub>246</sub>		3 22.1 299°24	1.1°/23.4	17	
2 21	12 29.77	+ 0 34.5	1.148	2.037	16.3	20.3	2 21	12 23.76	- 6 31.5	2.277	3.126	10.9	20.4
3 2	12 24.10	+ 1 2.1	1.097	2.044	11.3	20.1	3 2	12 19.12	- 6 0.2	2.193	3.117	7.8	20.2
3 12	12 15.81	+ 1 41.0	1.069	2.051	5.7	19.8	3 12	12 13.03	- 5 16.4	2.134	3.108	4.4	20.0
3 22	12 6.08	+ 2 23.5	1.064	2.059	1.5	19.5	3 22	12 6.10	- 4 23.4	2.104	3.099	1.2	19.7
4 1	11 56.47	+ 3 0.9	1.084	2.068	6.6	19.9	4 1	11 59.07	- 3 26.3	2.103	3.090	3.5	19.9
4 11	11 48.46	+ 3 25.4	1.127	2.078	11.9	20.2	4 11	11 52.72	- 2 30.7	2.130	3.081	7.0	20.1
4 21	11 43.06	+ 3 32.6	1.192	2.087	16.6	20.5	4 21	11 47.69	- 1 41.6	2.183	3.073	10.4	20.3
5 1	11 40.80	+ 3 21.0	1.273	2.098	20.4	20.7	5 1	11 44.43	- 1 3.1	2.259	3.064	13.2	20.5
<b>408167</b>	2013 <i>CT</i> <sub>169</sub>		3 22.1 111°66	4.2°/17.5	18		<b>1723</b>	Klemola		3 22.1 26°18	2.8°/18.8	18 R	
2 21	12 28.61	+ 4 18.4	1.619	2.501	12.7	21.1	2 21	12 23.79	+ 4 18.7	2.015	2.896	10.6	14.6
3 2	12 22.65	+ 6 42.5	1.578	2.522	8.6	20.9	3 2	12 19.19	+ 5 36.1	1.954	2.898	7.3	14.4
3 12	12 14.83	+ 9 12.3	1.564	2.543	5.0	20.7	3 12	12 13.06	+ 6 58.9	1.919	2.900	3.9	14.1
3 22	12 6.08	+ 11 35.2	1.580	2.563	4.7	20.7	3 22	12 6.10	+ 8 20.1	1.913	2.902	3.1	14.1
4 1	11 57.51	+ 13 39.3	1.625	2.582	8.1	21.0	4 1	11 59.14	+ 9 32.2	1.936	2.904	6.0	14.3
4 11	11 50.18	+ 15 16.5	1.697	2.600	11.9	21.2	4 11	11 53.02	+ 10 29.4	1.985	2.906	9.4	14.5
4 21	11 44.80	+ 16 23.9	1.791	2.618	15.2	21.5	4 21	11 48.39	+ 11 8.4	2.058	2.908	12.6	14.7
5 1	11 41.80	+ 17 2.2	1.904	2.635	17.8	21.7	5 1	11 45.67	+ 11 27.9	2.151	2.910	15.2	14.9
<b>345551</b>	2006 <i>RV</i> <sub>15</sub>		3 22.1 154°59	1.6°/24.4	18		<b>114055</b>	2002 <i>VG</i> <sub>20</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>181235</b>	2005 $TQ_{130}$		3 22.1 250°78	2°3/19.3	17		<b>286165</b>	2001 $US_6$		3 22.1 56°04	0°8/21.6	18	
2 21	12 25.58	+ 5 47.1	2.531	3.404	9.1	20.8	2 21	12 32.97	+ 0 14.9	1.240	2.121	15.9	20.0
3 2	12 20.23	+ 6 25.1	2.456	3.396	6.2	20.6	3 2	12 26.19	+ 0 26.0	1.190	2.132	11.1	19.7
3 12	12 13.55	+ 7 5.7	2.409	3.388	3.4	20.4	3 12	12 16.86	+ 0 47.2	1.162	2.144	5.6	19.4
3 22	12 6.12	+ 7 44.4	2.390	3.379	2.5	20.3	3 22	12 6.18	+ 1 12.5	1.160	2.156	0.8	19.1
4 1	11 58.64	+ 8 16.7	2.402	3.371	4.9	20.5	4 1	11 55.66	+ 1 34.8	1.183	2.168	6.0	19.5
4 11	11 51.82	+ 8 38.9	2.441	3.362	7.9	20.6	4 11	11 46.76	+ 1 47.6	1.231	2.181	11.2	19.8
4 21	11 46.23	+ 8 48.9	2.506	3.353	10.7	20.8	4 21	11 40.47	+ 1 47.1	1.301	2.194	15.7	20.1
5 1	11 42.31	+ 8 45.6	2.592	3.344	13.1	21.0	5 1	11 37.27	+ 1 31.6	1.389	2.206	19.4	20.4
<b>219554</b>	2001 $RM_{123}$		3 22.1 107°31	0°9/21.2	18		<b>18322</b>	Korokan		3 22.1 182°46	1°0/23.2	18	
2 21	12 26.78	- 1 27.4	1.758	2.628	12.5	20.8	2 21	12 26.40	- 6 36.5	2.299	3.144	11.0	19.2
3 2	12 21.39	- 0 27.0	1.698	2.636	8.6	20.5	3 2	12 20.90	- 5 56.6	2.222	3.145	7.9	19.0
3 12	12 14.24	+ 0 44.7	1.663	2.644	4.3	20.3	3 12	12 13.93	- 5 3.9	2.171	3.145	4.4	18.8
3 22	12 6.12	+ 2 0.7	1.656	2.652	1.0	20.1	3 22	12 6.15	- 4 2.5	2.149	3.144	1.1	18.5
4 1	11 58.05	+ 3 13.4	1.677	2.659	5.0	20.4	4 1	11 58.32	- 2 57.6	2.157	3.144	3.5	18.7
4 11	11 51.01	+ 4 15.5	1.726	2.667	9.2	20.6	4 11	11 51.25	- 1 55.1	2.194	3.142	7.1	18.9
4 21	11 45.74	+ 5 1.9	1.798	2.674	12.9	20.9	4 21	11 45.55	- 1 0.2	2.257	3.141	10.3	19.1
5 1	11 42.69	+ 5 30.3	1.891	2.681	16.0	21.1	5 1	11 41.67	- 0 16.7	2.343	3.138	13.1	19.3
<b>155085</b>	2005 $SW_{147}$		3 22.1 84°45	0°1/21.9	17		<b>211940</b>	2004 $XU_{50}$		3 22.1 23°24	1°1/21.4	18	
2 21	12 26.61	- 3 10.8	1.731	2.598	12.9	20.6	2 21	12 28.39	+ 0 17.2	1.055	1.949	16.9	19.6
3 2	12 21.33	- 2 23.4	1.667	2.602	9.0	20.4	3 2	12 23.25	+ 0 36.8	1.010	1.958	11.7	19.3
3 12	12 14.24	- 1 23.1	1.627	2.607	4.6	20.1	3 12	12 15.42	+ 1 8.1	0.985	1.969	5.9	19.0
3 22	12 6.12	- 0 15.8	1.614	2.611	0.1	19.8	3 22	12 6.17	+ 1 43.7	0.984	1.980	1.2	18.7
4 1	11 58.01	+ 0 51.1	1.630	2.615	4.7	20.2	4 1	11 57.09	+ 2 14.8	1.007	1.993	6.5	19.1
4 11	11 50.92	+ 1 50.2	1.672	2.619	9.0	20.4	4 11	11 49.70	+ 2 33.7	1.053	2.007	12.0	19.5
4 21	11 45.61	+ 2 36.0	1.739	2.623	12.8	20.7	4 21	11 45.01	+ 2 36.1	1.119	2.022	16.8	19.8
5 1	11 42.57	+ 3 5.4	1.826	2.627	16.0	20.9	5 1	11 43.50	+ 2 20.4	1.202	2.038	20.7	20.1
<b>64617</b>	2001 $XP_{28}$		3 22.1 195°01	3°2/18.8	18		<b>468825</b>	2012 $TL_{60}$		3 22.1 243°11	4°0/16.9	18	
2 21	12 29.74	+ 5 8.9	1.856	2.732	11.7	19.8	2 21	12 26.62	+ 10 34.5	2.457	3.334	9.2	21.7
3 2	12 23.47	+ 6 25.1	1.789	2.730	8.1	19.6	3 2	12 21.07	+ 11 45.9	2.378	3.316	6.5	21.5
3 12	12 15.34	+ 7 46.9	1.748	2.727	4.5	19.4	3 12	12 14.05	+ 12 57.8	2.328	3.298	4.4	21.3
3 22	12 6.14	+ 9 6.2	1.736	2.723	3.5	19.3	3 22	12 6.16	+ 14 4.2	2.306	3.280	4.4	21.3
4 1	11 56.88	+ 10 15.2	1.753	2.719	6.7	19.5	4 1	11 58.15	+ 14 59.1	2.314	3.261	6.7	21.4
4 11	11 48.61	+ 11 7.4	1.797	2.713	10.5	19.7	4 11	11 50.79	+ 15 38.1	2.350	3.241	9.5	21.5
4 21	11 42.12	+ 11 39.4	1.864	2.707	14.0	19.9	4 21	11 44.72	+ 15 59.2	2.409	3.220	12.2	21.7
5 1	11 37.91	+ 11 50.7	1.951	2.700	16.9	20.1	5 1	11 40.42	+ 16 2.0	2.489	3.200	14.5	21.8
<b>374548</b>	2006 $BQ_{96}$		3 22.1 66°70	0°5/21.6	18		<b>297637</b>	2001 $TX_{140}$		3 22.1 242°58	3°0/19.3	17	
2 21	12 25.85	- 2 9.2	1.840	2.708	12.2	20.8	2 21	12 30.39	+ 3 59.8	1.734	2.610	12.4	21.8
3 2	12 20.72	- 1 20.7	1.776	2.713	8.4	20.6	3 2	12 24.20	+ 5 10.0	1.651	2.593	8.6	21.5
3 12	12 13.89	+ 0 21.0	1.737	2.717	4.3	20.4	3 12	12 15.87	+ 6 28.6	1.594	2.575	4.6	21.3
3 22	12 6.13	+ 0 44.1	1.726	2.722	0.5	20.1	3 22	12 6.19	+ 7 47.6	1.566	2.556	3.3	21.1
4 1	11 58.38	+ 1 47.6	1.743	2.727	4.6	20.4	4 1	11 56.25	+ 8 58.3	1.566	2.536	6.9	21.3
4 11	11 51.58	+ 2 42.9	1.788	2.732	8.7	20.6	4 11	11 47.24	+ 9 53.1	1.592	2.515	11.2	21.5
4 21	11 46.45	+ 3 25.0	1.857	2.737	12.3	20.9	4 21	11 40.11	+ 10 27.4	1.642	2.494	15.1	21.7
5 1	11 43.44	+ 3 51.1	1.946	2.742	15.4	21.1	5 1	11 35.48	+ 10 39.8	1.711	2.472	18.5	21.9
<b>59675</b>	1999 $JC_{101}$		3 22.1 296°87	5°8/15.7	18		<b>209099</b>	2003 $SM_{55}$		3 22.1 207°26	2°1/24.0	16	
2 21	12 25.09	+ 10 54.6	1.670	2.562	11.8	19.0	2 21	12 29.36	- 8 37.1	1.796	2.639	13.6	21.1
3 2	12 20.51	+ 12 39.7	1.600	2.545	8.5	18.7	3 2	12 23.35	- 8 14.6	1.716	2.635	10.0	20.8
3 12	12 13.93	+ 14 27.1	1.556	2.527	6.1	18.5	3 12	12 15.36	- 7 34.8	1.661	2.631	5.9	20.6
3 22	12 6.13	+ 16 6.2	1.539	2.510	6.6	18.5	3 22	12 6.18	- 6 41.2	1.633	2.626	2.3	20.3
4 1	11 58.16	+ 17 26.9	1.548	2.492	9.6	18.7	4 1	11 56.87	- 5 39.7	1.634	2.621	4.3	20.4
4 11	11 51.13	+ 18 22.2	1.582	2.475	13.2	18.8	4 11	11 48.52	- 4 37.8	1.662	2.615	8.5	20.7
4 21	11 45.91	+ 18 49.2	1.637	2.458	16.6	19.0	4 21	11 41.99	- 3 42.5	1.715	2.609	12.5	20.9
5 1	11 43.09	+ 18 48.6	1.708	2.441	19.5	19.2	5 1	11 37.84	- 2 58.9	1.790	2.602	15.9	21.1
<b>377970</b>	2006 $KG_{117}$		3 22.1 88°86	2°2/24.6	18		<b>114355</b>	2002 $XX_{80}$		3 22.1 132°84	4°0/17.2	18	
2 21	12 25.02	- 10 23.7	2.042	2.879	12.4	20.9	2 21	12 26.42	+ 11 30.5	2.494	3.371	9.0	19.7
3 2	12 20.03	- 9 45.1	1.974	2.888	9.2	20.7	3 2	12 20.74	+ 12 26.6	2.443	3.380	6.4	19.6
3 12	12 13.49	- 8 49.6	1.931	2.898	5.6	20.5	3 12	12 13.78	+ 13 20.7	2.419	3.389	4.3	19.5
3 22	12 6.13	- 7 41.3	1.915	2.907	2.4	20.3	3 22	12 6.16	+ 14 7.4	2.425	3.398	4.3	19.5
4 1	11 58.78	- 6 26.1	1.929	2.916	3.7	20.4	4 1	11 58.62	+ 14 42.2	2.459	3.406	6.3	19.6
4 11	11 52.31	- 5 11.1	1.970	2.925	7.3	20.6	4 11	11 51.85	+ 15 2.1	2.521	3.414	8.9	19.8
4 21	11 47.36	- 4 2.8	2.038	2.934	10.7	20.9	4 21	11 46.40	+ 15 6.0	2.607	3.422	11.3	20.0
5 1	11 44.36	- 3 6.2	2.128	2.943	13.6	21.1	5 1	11 42.65	+ 14 54.4	2.714	3.429	13.3	20.1
<b>244761</b>	2003 $SD_{98}$		3 22.1 118°37	0°3/22.4	18		<b>508228</b>	2015 $HP$		3 22.1 190°74	4°4/16.3	18	
2 21	12 29.94	- 4 4.6	1.761	2.620	13.1	20.9	2 21	12 25.66	+ 13 22.1	2.596	3.473	8.7	21.4
3 2	12 23.54	- 3 25.2	1.704	2.635	9.2	20.7	3 2	12 20.24	+ 14 21.9	2.537	3.472	6.3	21.2
3 12	12 15.32	- 2 33.0	1.672	2.650	4.8	20.4	3 12	12 13.55	+ 15 18.9	2.506	3.471	4.6	21.1
3 22	12 6.15	- 1 33.5	1.668	2.664	0.4	20.1	3 22	12 6.17	+ 16 7.8	2.503	3.469	4.7	21.1
4 1	11 57.08	- 0 33.5	1.692	2.678	4.4	20.5	4 1	11 58.80	+ 16 43.9	2.530	3.468	6.7	21.2
4 11	11 49.14	+ 0 19.9	1.744	2.691	8.7	20.8	4 11	11 52.13	+ 17 4.2	2.583	3.466	9.1	21.4
4 21	11 43.08	+ 1 1.7	1.821	2.704	12.4	21.0	4 21	11 46.71	+ 17 7.9	2.661	3.463	11.4	21.5
5 1	11 39.34	+ 1 28.8	1.919	2.716	15.5	21.2	5 1	11 42.94	+ 16 55.2	2.758	3.461	13.4	21.7
<b>330391</b>	2006 $YL_4$		3 22.1 346°37	4°8/26.3	18		<b>3438</b>	Inarradas		3 22.1 193°67	0°1/21.9	18	
2 21	12 27.03</												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>196510</b>	2003 NR <sub>1</sub>		3 22.1 272°55	4.3/26.0	18		<b>425280</b>	2009 WQ <sub>180</sub>		3 22.1 151°18	2.9/18.9	17	
2 21	12 28.14	-14 5.9	2.028	2.844	13.3	20.5	2 21	12 27.53	+ 5 57.9	2.130	3.006	10.4	21.7
3 2	12 22.51	-14 13.3	1.929	2.825	10.4	20.2	3 2	12 21.71	+ 6 55.8	2.071	3.012	7.2	21.5
3 12	12 14.97	-14 2.2	1.854	2.806	7.2	20.0	3 12	12 14.36	+ 7 56.5	2.039	3.018	4.0	21.3
3 22	12 6.19	-13 33.4	1.806	2.786	4.6	19.8	3 22	12 6.20	+ 8 54.0	2.036	3.023	3.1	21.3
4 1	11 57.10	-12 49.8	1.786	2.766	5.0	19.8	4 1	11 58.08	+ 9 42.3	2.062	3.028	5.8	21.4
4 11	11 48.73	-11 57.5	1.793	2.746	8.0	19.9	4 11	11 50.84	+10 16.9	2.115	3.033	9.1	21.6
4 21	11 41.94	-11 2.9	1.826	2.726	11.5	20.1	4 21	11 45.11	+10 35.4	2.193	3.037	12.1	21.8
5 1	11 37.37	-10 12.7	1.881	2.705	14.8	20.3	5 1	11 41.34	+10 37.3	2.291	3.041	14.7	22.0
<b>14801</b>	1980 PE <sub>3</sub>		3 22.1 278°30	9.0/13.3	18		<b>264935</b>	2002 VW <sub>40</sub>		3 22.1 113°53	3.8/25.8	18	R
2 21	12 31.56	+22 5.9	1.739	2.614	12.4	17.7	2 21	12 28.48	-13 23.4	1.794	2.620	14.4	20.5
3 2	12 25.01	+23 22.3	1.678	2.597	10.2	17.5	3 2	12 22.65	-13 9.5	1.726	2.630	11.0	20.3
3 12	12 16.25	+24 27.0	1.641	2.580	9.0	17.4	3 12	12 14.95	-12 34.7	1.682	2.640	7.2	20.1
3 22	12 6.20	+25 10.5	1.629	2.563	9.7	17.4	3 22	12 6.21	-11 42.0	1.665	2.649	4.1	19.9
4 1	11 56.07	+25 26.0	1.643	2.546	12.0	17.5	4 1	11 57.48	-10 36.8	1.675	2.659	4.7	19.9
4 11	11 47.10	+25 10.8	1.680	2.529	14.8	17.7	4 11	11 49.80	- 9 27.0	1.712	2.668	8.1	20.2
4 21	11 40.20	+24 26.6	1.737	2.512	17.6	17.8	4 21	11 43.95	- 8 20.1	1.775	2.677	11.7	20.4
5 1	11 35.95	+23 17.6	1.810	2.495	20.0	18.0	5 1	11 40.43	- 7 22.7	1.860	2.686	14.8	20.6
<b>310938</b>	2003 SK <sub>332</sub>		3 22.1 113°35	1.7/20.5	18		<b>133027</b>	2002 XJ <sub>4</sub>		3 22.1 238°45	11.9/14.4	18	
2 21	12 29.74	+ 0 54.4	1.738	2.610	12.6	21.6	2 21	12 42.77	+22 4.6	1.173	2.050	17.0	20.1
3 2	12 23.39	+ 1 54.1	1.687	2.627	8.6	21.4	3 2	12 33.83	+23 37.1	1.112	2.035	13.8	19.9
3 12	12 15.25	+ 3 1.9	1.662	2.644	4.3	21.2	3 12	12 21.20	+24 54.1	1.074	2.019	12.0	19.7
3 22	12 6.19	+ 4 10.8	1.665	2.660	1.8	21.1	3 22	12 6.29	+25 39.9	1.059	2.002	12.7	19.7
4 1	11 57.28	+ 5 13.1	1.697	2.675	5.5	21.3	4 1	11 51.17	+25 43.0	1.068	1.984	15.8	19.8
4 11	11 49.54	+ 6 2.6	1.756	2.691	9.6	21.6	4 11	11 37.97	+25 1.0	1.098	1.965	19.7	20.0
4 21	11 43.67	+ 6 35.5	1.839	2.705	13.1	21.9	4 21	11 28.19	+23 39.7	1.145	1.944	23.5	20.1
5 1	11 40.11	+ 6 50.4	1.942	2.719	16.0	22.1	5 1	11 22.54	+21 48.1	1.205	1.923	26.9	20.3
<b>366690</b>	2003 UQ <sub>340</sub>		3 22.1 14°19	1.8/20.8	18		<b>69098</b>	2003 BZ <sub>59</sub>		3 22.1 107°87	3.2/19.7	18	
2 21	12 29.43	+ 1 39.7	1.372	2.256	14.5	20.6	2 21	12 32.06	+ 4 42.7	1.412	2.296	14.2	19.8
3 2	12 23.68	+ 2 13.9	1.312	2.257	10.0	20.3	3 2	12 25.37	+ 5 33.1	1.361	2.305	9.8	19.5
3 12	12 15.60	+ 2 57.0	1.276	2.258	5.1	20.0	3 12	12 16.40	+ 6 28.7	1.334	2.315	5.2	19.3
3 22	12 6.20	+ 3 42.1	1.265	2.260	1.9	19.8	3 22	12 6.24	+ 7 21.1	1.333	2.324	3.4	19.2
4 1	11 56.79	+ 4 21.2	1.280	2.262	6.3	20.1	4 1	11 56.20	+ 8 2.1	1.359	2.333	7.2	19.4
4 11	11 48.70	+ 4 47.4	1.320	2.264	11.2	20.4	4 11	11 47.60	+ 8 25.7	1.411	2.342	11.7	19.7
4 21	11 42.89	+ 4 56.9	1.383	2.267	15.5	20.6	4 21	11 41.32	+ 8 29.6	1.484	2.351	15.6	20.0
5 1	11 39.89	+ 4 48.1	1.463	2.270	19.1	20.9	5 1	11 37.84	+ 8 13.8	1.576	2.359	18.9	20.2
<b>500905</b>	2013 NA <sub>1</sub>		3 22.1 300°35	1.5/23.4	17		<b>332371</b>	2007 EG <sub>172</sub>		3 22.1 99°22	1.3/23.7	18	
2 21	12 25.67	- 7 35.6	1.435	2.299	15.2	21.1	2 21	12 24.34	-10 12.3	1.837	2.681	13.3	20.3
3 2	12 21.21	- 6 51.0	1.352	2.283	11.1	20.8	3 2	12 19.72	- 8 41.0	1.766	2.687	9.6	20.1
3 12	12 14.43	- 5 44.1	1.292	2.268	6.3	20.5	3 12	12 13.42	- 6 48.2	1.721	2.693	5.5	19.9
3 22	12 6.19	- 4 20.1	1.257	2.253	1.6	20.2	3 22	12 6.20	- 4 41.1	1.704	2.699	1.5	19.6
4 1	11 57.67	- 2 47.8	1.249	2.238	5.0	20.4	4 1	11 59.00	- 2 29.4	1.718	2.705	4.0	19.8
4 11	11 50.18	- 1 18.4	1.266	2.223	10.2	20.6	4 11	11 52.74	- 0 23.7	1.760	2.711	8.2	20.1
4 21	11 44.76	- 0 1.4	1.306	2.208	15.0	20.8	4 21	11 48.12	+ 1 27.2	1.828	2.717	12.1	20.3
5 1	11 42.09	+ 0 56.3	1.365	2.194	19.1	21.1	5 1	11 45.60	+ 2 57.6	1.918	2.723	15.3	20.5
<b>496320</b>	2013 HZ <sub>142</sub>		3 22.1 259°79	0.0/22.1	17		<b>386555</b>	2009 DJ <sub>53</sub>		3 22.1 105°44	3.8/17.1	18	
2 21	12 28.99	- 3 23.4	1.701	2.565	13.2	22.6	2 21	12 24.74	+ 8 59.8	2.340	3.220	9.4	20.8
3 2	12 23.28	- 2 43.8	1.613	2.547	9.4	22.3	3 2	12 19.65	+10 24.5	2.294	3.234	6.6	20.6
3 12	12 15.42	- 1 49.7	1.550	2.529	4.9	22.0	3 12	12 13.26	+11 49.3	2.275	3.249	4.2	20.5
3 22	12 6.20	- 0 46.1	1.514	2.510	0.1	21.5	3 22	12 6.22	+13 7.5	2.286	3.263	4.2	20.5
4 1	11 56.69	+ 0 19.6	1.506	2.491	4.9	21.9	4 1	11 59.24	+14 13.2	2.327	3.277	6.2	20.7
4 11	11 48.08	+ 1 19.6	1.525	2.471	9.7	22.1	4 11	11 53.07	+15 2.1	2.394	3.290	9.2	20.9
4 21	11 41.32	+ 2 7.1	1.567	2.451	14.0	22.3	4 21	11 48.23	+15 32.5	2.485	3.303	11.7	21.1
5 1	11 37.07	+ 2 38.0	1.631	2.431	17.7	22.5	5 1	11 45.10	+15 44.5	2.597	3.316	13.8	21.3
<b>290633</b>	2005 UM <sub>246</sub>		3 22.1 273°48	0.2/21.9	17		<b>376155</b>	2011 BP <sub>75</sub>		3 22.1 226°81	1.5/20.4	17	
2 21	12 28.14	- 3 42.5	1.370	2.244	15.2	21.5	2 21	12 24.98	- 0 36.4	1.968	2.839	11.4	20.7
3 2	12 23.00	- 2 49.7	1.292	2.231	10.7	21.2	3 2	12 20.14	+ 0 46.9	1.895	2.834	7.8	20.5
3 12	12 15.38	- 1 38.3	1.237	2.218	5.6	20.8	3 12	12 13.65	+ 2 21.6	1.848	2.829	3.9	20.3
3 22	12 6.20	- 0 15.0	1.208	2.205	0.2	20.4	3 22	12 6.22	+ 4 0.5	1.829	2.823	1.6	20.1
4 1	11 56.76	+ 1 10.1	1.205	2.191	5.7	20.8	4 1	11 58.72	+ 5 35.4	1.840	2.818	5.2	20.3
4 11	11 48.45	+ 2 26.3	1.227	2.177	11.2	21.0	4 11	11 52.04	+ 6 58.3	1.879	2.812	9.1	20.5
4 21	11 42.37	+ 3 25.3	1.272	2.164	16.0	21.3	4 21	11 46.89	+ 8 4.0	1.942	2.806	12.7	20.7
5 1	11 39.20	+ 4 2.3	1.335	2.150	20.1	21.5	5 1	11 43.76	+ 8 49.7	2.027	2.799	15.6	20.9
<b>307521</b>	2003 AN <sub>61</sub>		3 22.1 162°26	1.4/23.7	17		<b>33728</b>	1999 NO <sub>16</sub>		3 22.1 289°47	6.0/28.7	18	
2 21	12 27.91	- 7 56.7	2.301	3.137	11.2	20.6	2 21	12 26.14	-20 51.2	2.297	3.074	13.2	18.8
3 2	12 21.92	- 7 18.0	2.227	3.145	8.1	20.4	3 2	12 20.93	-21 10.4	2.206	3.065	10.9	18.6
3 12	12 14.46	- 6 25.8	2.181	3.151	4.7	20.2	3 12	12 14.09	-21 9.3	2.137	3.056	8.4	18.5
3 22	12 6.19	- 5 23.9	2.163	3.157	1.5	20.0	3 22	12 6.23	-20 47.7	2.093	3.048	6.5	18.3
4 1	11 57.93	- 4 17.6	2.175	3.162	3.5	20.1	4 1	11 58.18	-20 7.5	2.077	3.039	6.1	18.3
4 11	11 50.46	- 3 12.9	2.217	3.166	7.0	20.3	4 11	11 50.83	-19 13.7	2.087	3.031	7.7	18.4
4 21	11 44.42	- 2 15.0	2.286	3.170	10.2	20.6	4 21	11 44.91	-18 12.6	2.124	3.022	10.2	18.5
5 1	11 40.24	- 1 28.1	2.377	3.172	12.9	20.7	5 1	11 40.96	-17 10.9	2.184	3.014	12.8	18.6
<b>65295</b>	2002 JC <sub>24</sub>		3 22.1 280°07	1.9/20.3	18		<b>238519</b>	2004 TC <sub>133</sub>		3 22.1 198°73	1.6/20.5	17	
2 21	12 26.94												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>329237</b>	2012 <i>FG</i> <sub>14</sub>		3 22.1 255°79	7.7/15.1	18		<b>437243</b>	2012 <i>XG</i> <sub>27</sub>		3 22.1 111°97	4.5/16.7	17	
2 21	12 32.57	+19 18.6	1.783	2.658	12.1	20.0	2 21	12 26.49	+13 8.3	2.387	3.265	9.3	21.3
3 2	12 25.59	+20 18.5	1.723	2.649	9.5	19.8	3 2	12 20.87	+14 1.1	2.335	3.271	6.8	21.1
3 12	12 16.51	+21 8.8	1.689	2.640	7.8	19.7	3 12	12 13.91	+14 50.7	2.310	3.276	4.8	21.0
3 22	12 6.26	+21 41.1	1.681	2.630	8.3	19.7	3 22	12 6.25	+15 31.5	2.313	3.282	4.8	21.0
4 1	11 56.01	+21 49.3	1.699	2.620	10.5	19.8	4 1	11 58.65	+15 58.9	2.345	3.287	6.9	21.1
4 11	11 46.92	+21 31.0	1.742	2.610	13.5	20.0	4 11	11 51.86	+16 10.2	2.403	3.292	9.4	21.3
4 21	11 39.88	+20 47.7	1.806	2.600	16.3	20.1	4 21	11 46.45	+16 4.7	2.486	3.298	11.9	21.5
5 1	11 35.40	+19 42.8	1.887	2.590	18.8	20.3	5 1	11 42.80	+15 43.1	2.588	3.303	14.0	21.7
<b>292841</b>	2006 <i>UA</i> <sub>290</sub>		3 22.1 308°53	0°0/22.1	17		<b>303326</b>	2004 <i>TS</i> <sub>110</sub>		3 22.1 138°64	2°2/24.3	18	
2 21	12 29.83	- 1 42.2	1.505	2.377	14.2	20.2	2 21	12 29.70	-10 9.6	1.841	2.677	13.7	21.4
3 2	12 23.98	- 1 30.6	1.430	2.367	10.0	19.9	3 2	12 23.42	- 9 27.6	1.776	2.690	10.0	21.2
3 12	12 15.83	- 1 7.6	1.378	2.358	5.2	19.6	3 12	12 15.33	- 8 27.1	1.736	2.703	6.0	21.0
3 22	12 6.25	- 0 37.7	1.353	2.349	0.1	19.1	3 22	12 6.27	- 7 12.6	1.723	2.715	2.4	20.8
4 1	11 56.49	- 0 7.1	1.354	2.340	5.2	19.5	4 1	11 57.26	- 5 51.1	1.739	2.726	4.1	21.0
4 11	11 47.84	+ 0 17.5	1.381	2.332	10.2	19.8	4 11	11 49.32	- 4 30.8	1.784	2.737	8.1	21.2
4 21	11 41.29	+ 0 31.2	1.431	2.323	14.6	20.0	4 21	11 43.19	- 3 18.9	1.854	2.746	11.8	21.5
5 1	11 37.50	+ 0 30.7	1.501	2.315	18.3	20.3	5 1	11 39.34	- 2 20.7	1.947	2.755	14.9	21.7
<b>21084</b>	1991 <i>UV</i> <sub>3</sub>		3 22.1 63°29	4°3/26.5	18		<b>339013</b>	2004 <i>GT</i> <sub>76</sub>		3 22.1 310°41	7°9/13.4	17	
2 21	12 26.60	-15 17.2	1.710	2.533	15.1	18.1	2 21	12 29.54	+23 13.4	2.100	2.968	10.9	20.0
3 2	12 21.35	-14 56.0	1.651	2.550	11.6	17.9	3 2	12 23.23	+24 11.3	2.047	2.961	8.9	19.8
3 12	12 14.28	-14 11.4	1.615	2.568	7.9	17.7	3 12	12 15.21	+24 57.2	2.020	2.954	8.0	19.7
3 22	12 6.24	-13 6.8	1.604	2.586	4.8	17.6	3 22	12 6.27	+25 24.5	2.020	2.948	8.5	19.8
4 1	11 58.29	-11 48.5	1.621	2.604	5.0	17.6	4 1	11 57.39	+25 28.3	2.045	2.941	10.3	19.9
4 11	11 51.46	-10 25.3	1.664	2.622	8.1	17.9	4 11	11 49.52	+25 7.2	2.094	2.935	12.6	20.0
4 21	11 46.48	- 9 5.8	1.733	2.640	11.6	18.1	4 21	11 43.38	+24 22.9	2.165	2.929	14.9	20.1
5 1	11 43.80	- 7 56.7	1.824	2.658	14.7	18.4	5 1	11 39.40	+23 18.6	2.253	2.923	16.9	20.3
<b>264396</b>	2000 <i>EP</i> <sub>52</sub>		3 22.1 170°67	0°1/21.9	16		<b>260872</b>	2005 <i>QR</i> <sub>110</sub>		3 22.1 266°17	0°6/22.8	17	
2 21	12 28.21	- 2 53.9	1.873	2.735	12.3	21.8	2 21	12 26.38	- 3 58.0	2.409	3.261	10.3	20.8
3 2	12 22.41	- 2 11.1	1.804	2.737	8.6	21.6	3 2	12 20.94	- 3 42.7	2.322	3.249	7.3	20.6
3 12	12 14.83	- 1 16.6	1.760	2.739	4.4	21.3	3 12	12 14.04	- 3 18.0	2.260	3.236	4.0	20.4
3 22	12 6.25	- 0 15.6	1.744	2.740	0.1	20.9	3 22	12 6.27	- 2 46.9	2.228	3.224	0.7	20.1
4 1	11 57.65	+ 0 45.3	1.757	2.742	4.5	21.3	4 1	11 58.37	- 2 13.4	2.225	3.211	3.5	20.3
4 11	11 50.00	+ 1 39.3	1.798	2.743	8.6	21.6	4 11	11 51.12	- 1 41.9	2.251	3.199	7.0	20.5
4 21	11 44.05	+ 2 21.3	1.863	2.743	12.3	21.8	4 21	11 45.16	- 1 16.4	2.303	3.186	10.2	20.7
5 1	11 40.31	+ 2 48.3	1.950	2.743	15.4	22.0	5 1	11 40.96	- 0 59.8	2.378	3.173	12.9	20.8
<b>423670</b>	2005 <i>YP</i> <sub>175</sub>		3 22.1 319°20	6°6/15.9	17		<b>43104</b>	1999 <i>XP</i> <sub>21</sub>		3 22.1 272°86	4°5/17.2	18	
2 21	12 25.66	+12 12.9	1.473	2.369	12.9	20.0	2 21	12 26.12	+ 9 39.6	1.929	2.814	10.9	18.5
3 2	12 21.22	+13 37.4	1.397	2.342	9.4	19.7	3 2	12 20.97	+10 54.4	1.864	2.806	7.7	18.2
3 12	12 14.47	+15 2.6	1.345	2.316	6.9	19.5	3 12	12 14.11	+12 10.2	1.825	2.799	5.0	18.1
3 22	12 6.25	+16 17.9	1.318	2.290	7.3	19.4	3 22	12 6.27	+13 19.3	1.815	2.792	4.9	18.0
4 1	11 57.73	+17 12.8	1.316	2.265	10.5	19.5	4 1	11 58.38	+14 14.4	1.832	2.785	7.6	18.2
4 11	11 50.22	+17 40.3	1.338	2.240	14.5	19.7	4 11	11 51.37	+14 50.5	1.875	2.778	10.9	18.4
4 21	11 44.76	+17 38.2	1.379	2.216	18.3	19.9	4 21	11 45.98	+15 5.4	1.940	2.771	14.0	18.6
5 1	11 42.03	+17 7.6	1.435	2.193	21.6	20.0	5 1	11 42.70	+14 59.3	2.025	2.763	16.7	18.7
<b>197215</b>	2003 <i>WY</i> <sub>24</sub>		3 22.1 92°28	18°3/ 8.3	18		<b>7348</b>	1993 <i>FJ</i> <sub>22</sub>		3 22.1 15°35	0°1/22.0	18	
2 21	12 33.44	-39 32.3	1.170	1.872	27.2	19.8	2 21	12 25.36	- 2 21.4	1.902	2.769	11.9	17.2
3 2	12 27.73	-41 11.9	1.111	1.881	24.9	19.7	3 2	12 20.40	- 1 51.8	1.836	2.772	8.3	17.0
3 12	12 18.24	-42 1.9	1.064	1.890	22.5	19.5	3 12	12 13.79	- 1 11.9	1.795	2.775	4.3	16.8
3 22	12 6.29	-41 52.9	1.032	1.898	20.3	19.4	3 22	12 6.27	- 0 26.3	1.781	2.778	0.1	16.4
4 1	11 53.99	-40 41.4	1.016	1.907	18.7	19.3	4 1	11 58.74	+ 0 19.2	1.796	2.781	4.2	16.8
4 11	11 43.64	-38 35.7	1.018	1.915	18.4	19.3	4 11	11 52.11	+ 0 58.7	1.838	2.785	8.2	17.0
4 21	11 36.89	-35 52.6	1.038	1.923	19.4	19.4	4 21	11 47.07	+ 1 27.9	1.904	2.790	11.8	17.2
5 1	11 34.49	-32 53.0	1.077	1.931	21.3	19.5	5 1	11 44.09	+ 1 44.0	1.991	2.794	14.8	17.5
<b>173929</b>	2001 <i>VH</i> <sub>93</sub>		3 22.1 176°23	4°5/15.2	18		<b>388583</b>	2007 <i>RE</i> <sub>97</sub>		3 22.1 143°42	3°3/18.5	18	
2 21	12 25.01	+15 10.5	2.952	3.826	7.9	21.2	2 21	12 27.29	+ 8 35.9	2.297	3.174	9.7	20.6
3 2	12 19.70	+16 22.1	2.898	3.828	5.9	21.1	3 2	12 21.49	+ 9 19.3	2.238	3.177	6.8	20.4
3 12	12 13.27	+17 30.1	2.872	3.830	4.6	21.0	3 12	12 14.26	+10 2.9	2.205	3.181	4.0	20.2
3 22	12 6.24	+18 29.4	2.876	3.831	4.9	21.0	3 22	12 6.28	+10 41.4	2.201	3.184	3.5	20.2
4 1	11 59.21	+19 15.8	2.909	3.832	6.6	21.1	4 1	11 58.33	+11 10.2	2.226	3.187	5.9	20.3
4 11	11 52.80	+19 46.3	2.969	3.832	8.7	21.3	4 11	11 51.20	+11 25.6	2.279	3.190	8.9	20.5
4 21	11 47.50	+20 0.2	3.053	3.832	10.7	21.4	4 21	11 45.49	+11 26.3	2.356	3.193	11.6	20.7
5 1	11 43.66	+19 57.9	3.157	3.831	12.4	21.6	5 1	11 41.62	+11 12.2	2.454	3.196	14.0	20.9
<b>292115</b>	2006 <i>RO</i> <sub>59</sub>		3 22.1 106°18	0°7/22.9	17		<b>135316</b>	2001 <i>SN</i> <sub>277</sub>		3 22.1 162°46	2°7/25.4	18	
2 21	12 23.79	- 5 59.5	2.344	3.194	10.6	20.9	2 21	12 26.90	-11 43.0	2.664	3.481	10.5	20.0
3 2	12 19.06	- 5 10.2	2.274	3.200	7.5	20.8	3 2	12 21.14	-11 40.6	2.585	3.485	8.0	19.8
3 12	12 13.01	- 4 9.0	2.231	3.206	4.1	20.5	3 12	12 14.08	-11 25.2	2.532	3.488	5.2	19.7
3 22	12 6.24	- 3 0.1	2.217	3.213	0.7	20.3	3 22	12 6.28	-10 58.6	2.507	3.492	2.9	19.5
4 1	11 59.47	- 1 49.3	2.232	3.219	3.4	20.5	4 1	11 58.44	-10 23.8	2.512	3.495	3.5	19.6
4 11	11 53.44	- 0 42.3	2.276	3.225	6.8	20.7	4 11	11 51.25	- 9 45.1	2.547	3.498	6.1	19.7
4 21	11 48.69	+ 0 15.9	2.347	3.230	10.0	20.9	4 21	11 45.29	- 9 6.9	2.608	3.500	8.8	19.9
5 1	11 45.63	+ 1 1.9	2.440	3.236	12.6	21.1	5 1	11 40.97	- 8 33.1	2.694	3.502	11.2	20.1
<b>368988</b>	2007 <i>EB</i> <sub>159</sub>		3 22.1 99°29	4°2/25.8	18		<b>63104</b>	2000 <i>WR</i> <sub>151</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>265540</b>	2005 <i>NZ</i> <sub>121</sub>		3 22.1 189°67	1°0/21.1	17		<b>373502</b>	2001 <i>BE</i> <sub>63</sub>		3 22.1 74°02	6°7/28.9	18	
2 21	12 28.78	+ 0 6.1	2.137	3.000	10.9	21.7	2 21	12 30.42	-21 6.8	1.896	2.676	15.5	20.4
3 2	12 22.67	+ 0 47.7	2.064	2.999	7.6	21.5	3 2	12 23.95	-21 31.0	1.838	2.700	12.6	20.2
3 12	12 14.94	+ 1 37.3	2.018	2.998	3.8	21.3	3 12	12 15.63	-21 30.6	1.803	2.724	9.6	20.1
3 22	12 6.30	+ 2 29.9	2.000	2.996	1.0	21.0	3 22	12 6.34	-21 5.9	1.793	2.748	7.3	20.0
4 1	11 57.61	+ 3 19.7	2.013	2.993	4.5	21.3	4 1	11 57.13	-20 20.5	1.809	2.772	6.8	20.0
4 11	11 49.76	+ 4 1.5	2.053	2.990	8.3	21.5	4 11	11 49.04	-19 21.2	1.852	2.796	8.5	20.2
4 21	11 43.43	+ 4 31.5	2.120	2.986	11.6	21.7	4 21	11 42.84	-18 15.9	1.921	2.819	11.1	20.4
5 1	11 39.11	+ 4 47.4	2.207	2.982	14.4	21.9	5 1	11 38.99	-17 12.3	2.012	2.843	13.7	20.6
<b>369652</b>	2011 <i>FW</i> <sub>38</sub>		3 22.1 163°03	2°2/19.7	17		<b>300875</b>	2008 <i>AM</i> <sub>65</sub>		3 22.1 358°84	1°5/23.8	17	
2 21	12 27.37	+ 3 58.6	2.141	3.014	10.5	21.1	2 21	12 23.99	- 7 25.4	2.011	2.862	12.0	20.8
3 2	12 21.64	+ 4 48.9	2.077	3.017	7.2	20.9	3 2	12 19.44	- 6 58.1	1.937	2.861	8.7	20.6
3 12	12 14.38	+ 5 43.7	2.040	3.020	3.8	20.7	3 12	12 13.33	- 6 16.4	1.888	2.860	5.0	20.4
3 22	12 6.29	+ 6 37.5	2.031	3.023	2.4	20.6	3 22	12 6.31	- 5 24.1	1.865	2.860	1.7	20.1
4 1	11 58.21	+ 7 24.4	2.052	3.025	5.3	20.8	4 1	11 59.24	- 4 26.7	1.872	2.860	3.7	20.3
4 11	11 50.98	+ 7 59.7	2.101	3.027	8.7	21.0	4 11	11 52.98	- 3 30.4	1.905	2.860	7.5	20.5
4 21	11 45.24	+ 8 20.6	2.175	3.029	11.8	21.2	4 21	11 48.21	- 2 40.9	1.964	2.861	11.0	20.7
5 1	11 41.45	+ 8 25.9	2.269	3.030	14.5	21.4	5 1	11 45.39	- 2 2.6	2.045	2.862	14.0	20.9
<b>328355</b>	2008 <i>LZ</i> <sub>16</sub>		3 22.1 57°57	3°4/25.7	18		<b>161691</b>	2006 <i>HX</i> <sub>41</sub>		3 22.1 295°83	8°6/12.5	17	
2 21	12 25.32	-13 50.0	1.572	2.408	15.6	19.7	2 21	12 28.75	+23 6.6	1.921	2.794	11.5	19.7
3 2	12 20.61	-13 1.9	1.511	2.421	11.8	19.5	3 2	12 22.88	+24 25.7	1.869	2.785	9.5	19.5
3 12	12 13.97	-11 48.5	1.473	2.435	7.6	19.3	3 12	12 15.13	+25 32.7	1.842	2.775	8.6	19.4
3 22	12 6.30	-10 15.1	1.460	2.448	3.9	19.1	3 22	12 6.34	+26 19.4	1.841	2.766	9.4	19.5
4 1	11 58.69	- 8 30.2	1.475	2.462	4.6	19.2	4 1	11 57.56	+26 39.8	1.865	2.757	11.4	19.6
4 11	11 52.24	- 6 44.7	1.516	2.476	8.5	19.5	4 11	11 49.83	+26 31.9	1.912	2.748	13.8	19.7
4 21	11 47.71	- 5 8.2	1.582	2.490	12.5	19.7	4 21	11 43.93	+25 57.2	1.978	2.739	16.2	19.8
5 1	11 45.57	- 3 47.7	1.670	2.504	15.9	20.0	5 1	11 40.34	+24 59.1	2.061	2.730	18.3	20.0
<b>75854</b>	2000 <i>CZ</i> <sub>4</sub>		3 22.1 88°73	3°9/18.5	18		<b>90654</b>	2067 <i>T</i> <sub>-3</sub>		3 22.1 70°83	2°0/23.9	18	
2 21	12 28.29	+ 6 2.8	1.583	2.468	12.8	19.1	2 21	12 27.73	- 8 19.8	1.626	2.478	14.3	19.6
3 2	12 22.58	+ 7 22.3	1.536	2.481	8.8	18.9	3 2	12 22.27	- 7 53.9	1.562	2.486	10.5	19.4
3 12	12 14.94	+ 8 45.3	1.515	2.494	5.0	18.7	3 12	12 14.85	- 7 10.0	1.522	2.494	6.1	19.2
3 22	12 6.31	+10 2.7	1.521	2.507	4.2	18.7	3 22	12 6.34	- 6 12.5	1.508	2.502	2.2	18.9
4 1	11 57.82	+11 6.0	1.554	2.520	7.5	18.9	4 1	11 57.85	- 5 8.3	1.522	2.510	4.4	19.1
4 11	11 50.55	+11 49.2	1.613	2.532	11.3	19.2	4 11	11 50.46	- 4 5.5	1.562	2.518	8.7	19.4
4 21	11 45.26	+12 10.0	1.694	2.544	14.8	19.4	4 21	11 45.00	- 3 11.1	1.627	2.526	12.7	19.6
5 1	11 42.39	+12 8.7	1.793	2.557	17.7	19.6	5 1	11 41.97	- 2 30.1	1.712	2.535	16.1	19.9
<b>502530</b>	2015 <i>BG</i> <sub>439</sub>		3 22.1 39°48	1°9/23.9	17		<b>282308</b>	2002 <i>TH</i> <sub>26</sub>		3 22.1 156°38	0°0/22.1	18	
2 21	12 27.62	- 7 22.2	1.882	2.730	12.9	21.5	2 21	12 30.11	- 4 25.0	1.609	2.471	14.0	21.6
3 2	12 22.04	- 7 12.2	1.810	2.732	9.4	21.3	3 2	12 23.94	- 3 22.4	1.545	2.478	9.8	21.4
3 12	12 14.68	- 6 47.7	1.763	2.734	5.5	21.1	3 12	12 15.72	- 2 3.9	1.506	2.484	5.1	21.1
3 22	12 6.31	- 6 12.1	1.743	2.737	2.0	20.8	3 22	12 6.36	- 0 36.5	1.494	2.490	0.1	20.7
4 1	11 57.89	- 5 30.3	1.751	2.739	4.0	21.0	4 1	11 57.02	+ 0 50.8	1.510	2.495	5.0	21.1
4 11	11 50.39	- 4 48.4	1.787	2.741	7.9	21.2	4 11	11 48.84	+ 2 8.8	1.554	2.500	9.6	21.4
4 21	11 44.58	- 4 11.8	1.848	2.743	11.6	21.4	4 21	11 42.67	+ 3 11.0	1.622	2.504	13.8	21.6
5 1	11 40.97	- 3 45.0	1.930	2.746	14.8	21.6	5 1	11 39.03	+ 3 53.6	1.710	2.507	17.1	21.9
<b>467972</b>	2012 <i>KG</i> <sub>48</sub>		3 22.1 216°28	5°4/15.7	17		<b>449595</b>	2014 <i>JB</i> <sub>45</sub>		3 22.1 290°85	1°2/21.3	18	
2 21	12 27.62	+13 54.1	2.136	3.015	10.2	21.3	2 21	12 30.09	- 0 26.1	1.224	2.108	15.9	21.2
3 2	12 21.90	+15 13.0	2.074	3.010	7.5	21.1	3 2	12 24.58	+ 0 13.6	1.154	2.098	11.1	20.9
3 12	12 14.56	+16 29.0	2.040	3.003	5.6	21.0	3 12	12 16.33	+ 1 7.7	1.106	2.088	5.7	20.6
3 22	12 6.31	+17 34.6	2.034	2.996	6.0	21.0	3 22	12 6.37	+ 2 8.6	1.083	2.079	1.3	20.2
4 1	11 58.02	+18 23.5	2.056	2.989	8.2	21.1	4 1	11 56.18	+ 3 6.4	1.085	2.069	6.6	20.6
4 11	11 50.58	+18 51.7	2.103	2.982	11.1	21.3	4 11	11 47.33	+ 3 51.6	1.111	2.060	12.2	20.8
4 21	11 44.69	+18 58.2	2.174	2.974	13.7	21.4	4 21	11 40.99	+ 4 17.9	1.158	2.051	17.2	21.1
5 1	11 40.80	+18 44.0	2.263	2.966	16.0	21.6	5 1	11 37.86	+ 4 22.5	1.223	2.042	21.4	21.3
<b>419740</b>	2010 <i>VN</i> <sub>72</sub>		3 22.1 170°43	4°6/27.5	17		<b>172466</b>	2003 <i>SN</i> <sub>17</sub>		3 22.1 231°87	0°9/23.1	17	
2 21	12 28.41	-18 19.3	2.251	3.039	13.1	22.7	2 21	12 29.08	- 6 22.7	1.978	2.825	12.4	20.7
3 2	12 22.42	-17 57.7	2.169	3.044	10.4	22.6	3 2	12 23.14	- 5 41.0	1.888	2.812	8.9	20.4
3 12	12 14.83	-17 14.8	2.111	3.048	7.5	22.4	3 12	12 15.33	- 4 43.9	1.823	2.797	5.0	20.2
3 22	12 6.32	-16 12.4	2.080	3.051	5.0	22.2	3 22	12 6.36	- 3 35.4	1.786	2.781	1.1	19.8
4 1	11 57.76	-14 54.8	2.078	3.054	4.9	22.2	4 1	11 57.18	- 2 22.1	1.778	2.765	4.1	20.0
4 11	11 50.04	-13 29.0	2.105	3.055	7.2	22.4	4 11	11 48.79	- 1 11.2	1.800	2.748	8.4	20.2
4 21	11 43.83	-12 2.4	2.159	3.056	10.1	22.5	4 21	11 42.01	- 0 9.3	1.847	2.730	12.2	20.4
5 1	11 39.62	-10 41.8	2.237	3.056	12.9	22.7	5 1	11 37.45	+ 0 38.7	1.915	2.711	15.6	20.6
<b>5076</b>	Lebedev-Kumach		3 22.1 110°09	0°7/22.9	18		<b>60932</b>	2000 <i>JY</i> <sub>49</sub>		3 22.1 246°92	5°1/26.8	18	
2 21	12 28.86	- 6 40.7	1.800	2.651	13.2	17.5	2 21	12 28.34	-16 1.4	1.822	2.636	14.8	19.1
3 2	12 22.78	- 5 36.2	1.746	2.672	9.4	17.3	3 2	12 22.76	-16 7.5	1.739	2.630	11.6	18.9
3 12	12 14.98	- 4 16.0	1.717	2.693	5.0	17.0	3 12	12 15.18	-15 51.4	1.678	2.624	8.3	18.7
3 22	12 6.32	- 2 46.8	1.717	2.713	0.8	16.8	3 22	12 6.36	-15 14.1	1.642	2.618	5.5	18.5
4 1	11 57.81	- 1 16.6	1.746	2.733	4.2	17.1	4 1	11 57.35	-14 19.5	1.634	2.613	5.6	18.5
4 11	11 50.41	+ 0 6.3	1.803	2.751	8.4	17.4	4 11	11 49.26	-13 14.6	1.652	2.606	8.5	18.7
4 21	11 44.81	+ 1 15.5	1.886	2.770	12.0	17.6	4 21	11 42.96	-12 7.3	1.696	2.600	12.0	18.8
5 1	11 41.44	+ 2 7.6	1.990	2.787	15.1	17.9	5 1	11 39.06	-11 5.3	1.761	2.594	15.2	19.0
<b>243751</b>	2000 <i>QZ</i> <sub>129</sub>		3 22.1 176°22	5°6/16.5	18		<b>381511</b>	2008 <i>SX</i> <sub>166</sub>		3 22.1 226°77	3°2/		

EPHEMERIDES

3 22.1

3 22.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>295775</b>	2008 <i>UO</i> <sub>201</sub>		3 22.1 166°98	1°2/21.0	18		<b>120088</b>	2003 <i>EW</i> <sub>32</sub>		3 22.2 198°69	0°8/21.2	17	R
2 21	12 32.03	+ 0 25.9	1.816	2.681	12.5	21.8	2 21	12 27.09	- 1 6.3	2.193	3.055	10.7	20.2
3 2	12 25.11	+ 1 10.0	1.750	2.686	8.6	21.6	3 2	12 21.51	- 0 12.0	2.117	3.052	7.4	20.0
3 12	12 16.28	+ 2 2.7	1.711	2.691	4.3	21.3	3 12	12 14.39	+ 0 51.8	2.068	3.048	3.7	19.7
3 22	12 6.39	+ 2 58.2	1.700	2.695	1.3	21.1	3 22	12 6.38	+ 1 59.8	2.048	3.044	0.9	19.5
4 1	11 56.51	+ 3 49.6	1.719	2.699	5.2	21.4	4 1	11 58.32	+ 3 5.8	2.058	3.039	4.3	19.8
4 11	11 47.70	+ 4 30.8	1.765	2.701	9.4	21.6	4 11	11 51.03	+ 4 3.8	2.097	3.034	8.1	20.0
4 21	11 40.77	+ 4 57.9	1.836	2.703	13.1	21.8	4 21	11 45.17	+ 4 49.5	2.161	3.029	11.4	20.2
5 1	11 36.23	+ 5 8.9	1.927	2.703	16.2	22.1	5 1	11 41.23	+ 5 20.2	2.247	3.022	14.2	20.4
<b>154944</b>	2004 <i>TZ</i> <sub>61</sub>		3 22.1 244°18	1°1/20.9	18		<b>136089</b>	2003 <i>BG</i> <sub>17</sub>		3 22.2 142°12	2°1/24.4	18	
2 21	12 28.28	+ 0 41.3	2.126	2.992	10.9	20.8	2 21	12 29.65	- 8 27.3	2.587	3.413	10.5	19.7
3 2	12 22.45	+ 1 20.0	2.041	2.978	7.6	20.6	3 2	12 23.08	- 8 38.3	2.511	3.420	7.7	19.5
3 12	12 14.92	+ 2 6.5	1.983	2.963	3.8	20.3	3 12	12 15.13	- 8 38.7	2.463	3.427	4.7	19.3
3 22	12 6.37	+ 2 56.0	1.953	2.948	1.2	20.1	3 22	12 6.40	- 8 29.9	2.443	3.433	2.3	19.2
4 1	11 57.67	+ 3 43.1	1.953	2.933	4.7	20.3	4 1	11 57.64	- 8 14.8	2.455	3.439	3.4	19.3
4 11	11 49.71	+ 4 22.1	1.981	2.917	8.5	20.5	4 11	11 49.60	- 7 56.9	2.495	3.445	6.3	19.5
4 21	11 43.24	+ 4 49.2	2.034	2.901	12.0	20.7	4 21	11 42.87	- 7 40.0	2.564	3.450	9.1	19.6
5 1	11 38.80	+ 5 1.9	2.108	2.884	15.0	20.9	5 1	11 37.89	- 7 27.2	2.656	3.456	11.6	19.8
<b>369830</b>	2012 <i>JS</i>		3 22.1 28°08	6°2/28.4	18		<b>382302</b>	2012 <i>VZ</i> <sub>112</sub>		3 22.2 180°74	4°2/27.6	18	
2 21	12 25.15	-19 34.3	1.558	2.368	17.0	19.9	2 21	12 25.56	-17 43.4	2.654	3.441	11.4	21.5
3 2	12 20.68	-19 20.5	1.487	2.372	13.6	19.7	3 2	12 20.31	-17 36.7	2.568	3.442	9.0	21.3
3 12	12 14.12	-18 36.7	1.438	2.377	10.0	19.5	3 12	12 13.73	-17 12.9	2.507	3.442	6.6	21.2
3 22	12 6.36	-17 24.8	1.411	2.383	6.9	19.3	3 22	12 6.39	-16 33.4	2.473	3.442	4.6	21.0
4 1	11 58.55	-15 50.9	1.411	2.389	6.5	19.3	4 1	11 58.98	-15 41.0	2.468	3.442	4.4	21.0
4 11	11 51.86	-14 5.3	1.436	2.395	9.0	19.5	4 11	11 52.21	-14 40.8	2.492	3.441	6.3	21.2
4 21	11 47.17	-12 19.1	1.486	2.401	12.6	19.7	4 21	11 46.66	-13 38.1	2.543	3.440	8.8	21.3
5 1	11 45.01	-10 42.4	1.557	2.408	16.0	19.9	5 1	11 42.77	-12 38.2	2.619	3.439	11.2	21.5
<b>427628</b>	2003 <i>UK</i> <sub>110</sub>		3 22.1 201°50	3°7/18.1	17		<b>191924</b>	2005 <i>SG</i> <sub>64</sub>		3 22.2 152°31	0°7/21.6	18	
2 21	12 28.29	+ 9 40.2	2.227	3.103	10.0	21.7	2 21	12 33.10	- 0 53.1	1.659	2.523	13.5	20.7
3 2	12 22.29	+10 27.8	2.162	3.101	7.0	21.6	3 2	12 25.98	- 0 17.4	1.597	2.532	9.4	20.5
3 12	12 14.75	+11 15.0	2.124	3.098	4.4	21.4	3 12	12 16.78	+ 0 28.5	1.560	2.540	4.8	20.2
3 22	12 6.37	+11 56.3	2.115	3.096	4.0	21.3	3 22	12 6.45	+ 1 18.8	1.551	2.547	0.8	19.9
4 1	11 57.99	+12 26.4	2.135	3.093	6.4	21.5	4 1	11 56.16	+ 2 6.7	1.571	2.554	5.1	20.2
4 11	11 50.43	+12 41.7	2.183	3.089	9.4	21.7	4 11	11 47.09	+ 2 45.5	1.618	2.560	9.7	20.5
4 21	11 44.36	+12 40.8	2.254	3.086	12.3	21.8	4 21	11 40.07	+ 3 10.9	1.689	2.565	13.6	20.8
5 1	11 40.21	+12 23.8	2.346	3.082	14.7	22.0	5 1	11 35.64	+ 3 20.5	1.781	2.569	16.9	21.0
<b>62760</b>	2000 <i>UR</i> <sub>9</sub>		3 22.1 148°17	8°0/11.8	18		<b>221676</b>	2007 <i>DP</i> <sub>4</sub>		3 22.2 105°60	3°8/24.7	18	
2 21	12 29.84	+27 53.7	2.532	3.382	9.9	18.2	2 21	12 35.82	- 9 41.1	1.838	2.666	14.0	19.8
3 2	12 23.21	+28 50.3	2.493	3.385	8.5	18.1	3 2	12 27.90	-10 28.1	1.764	2.671	10.6	19.5
3 12	12 15.15	+29 32.9	2.480	3.387	8.0	18.1	3 12	12 17.83	-11 0.9	1.715	2.675	6.9	19.3
3 22	12 6.38	+29 56.4	2.494	3.390	8.6	18.1	3 22	12 6.47	-11 19.7	1.694	2.679	4.0	19.1
4 1	11 57.74	+29 57.1	2.533	3.392	10.0	18.2	4 1	11 54.99	-11 26.3	1.702	2.684	5.0	19.2
4 11	11 50.05	+29 34.8	2.596	3.394	11.7	18.3	4 11	11 44.58	-11 24.9	1.739	2.688	8.5	19.4
4 21	11 43.89	+28 51.2	2.680	3.396	13.4	18.5	4 21	11 36.17	-11 20.4	1.801	2.692	12.1	19.7
5 1	11 39.66	+27 49.4	2.782	3.398	14.9	18.6	5 1	11 30.34	-11 17.7	1.885	2.696	15.2	19.9
<b>248045</b>	2004 <i>HT</i> <sub>49</sub>		3 22.2 290°50	2°1/19.8	17		<b>194039</b>	2001 <i>SF</i> <sub>88</sub>		3 22.2 64°90	0°0/22.1	18	
2 21	12 25.74	+ 3 42.6	2.170	3.045	10.3	20.7	2 21	12 27.32	- 4 54.7	1.295	2.169	15.8	19.4
3 2	12 20.68	+ 4 28.6	2.083	3.024	7.1	20.4	3 2	12 22.33	- 3 46.0	1.238	2.176	11.1	19.1
3 12	12 14.02	+ 5 20.4	2.022	3.002	3.7	20.2	3 12	12 15.03	- 2 17.6	1.204	2.184	5.8	18.9
3 22	12 6.37	+ 6 12.7	1.989	2.981	2.3	20.0	3 22	12 6.44	- 0 38.3	1.195	2.191	0.1	18.4
4 1	11 58.54	+ 6 59.6	1.986	2.960	5.3	20.2	4 1	11 57.89	+ 1 0.4	1.212	2.199	5.6	18.9
4 11	11 51.39	+ 7 36.0	2.009	2.938	8.9	20.4	4 11	11 50.70	+ 2 27.3	1.255	2.207	10.8	19.2
4 21	11 45.64	+ 7 58.3	2.058	2.917	12.2	20.5	4 21	11 45.78	+ 3 34.2	1.320	2.214	15.4	19.5
5 1	11 41.80	+ 8 4.8	2.127	2.895	15.1	20.7	5 1	11 43.66	+ 4 17.5	1.403	2.222	19.1	19.7
<b>205365</b>	2000 <i>YE</i> <sub>37</sub>		3 22.2 89°49	17°9/ 7.2	18		<b>283521</b>	2001 <i>TM</i> <sub>83</sub>		3 22.2 161°51	1°5/24.1	18	
2 21	12 34.19	-38 13.0	1.194	1.902	26.5	20.3	2 21	12 25.48	- 8 21.3	2.705	3.538	9.9	21.2
3 2	12 28.24	-39 58.3	1.135	1.910	24.2	20.1	3 2	12 20.16	- 7 55.5	2.629	3.543	7.2	21.1
3 12	12 18.57	-40 56.2	1.088	1.919	21.7	20.0	3 12	12 13.63	- 7 18.3	2.579	3.547	4.3	20.9
3 22	12 6.44	-40 57.4	1.057	1.927	19.6	19.8	3 22	12 6.42	- 6 32.6	2.559	3.551	1.7	20.7
4 1	11 53.91	-39 58.6	1.043	1.936	18.1	19.8	4 1	11 59.20	- 5 42.1	2.568	3.555	3.0	20.8
4 11	11 43.28	-38 7.6	1.047	1.944	18.0	19.8	4 11	11 52.61	- 4 51.7	2.608	3.558	6.0	21.0
4 21	11 36.15	-35 40.5	1.069	1.952	19.1	19.9	4 21	11 47.19	- 4 5.5	2.674	3.561	8.8	21.2
5 1	11 33.34	-32 57.3	1.110	1.960	21.1	20.0	5 1	11 43.32	- 3 27.0	2.765	3.564	11.2	21.4
<b>102214</b>	1999 <i>TO</i> <sub>1</sub>		3 22.2 170°73	1°7/20.7	18		<b>186906</b>	2004 <i>LC</i> <sub>20</sub>		3 22.2 197°65	7°2/12.8	18	
2 21	12 32.73	+ 3 1.0	1.942	2.808	11.7	19.7	2 21	12 30.34	+22 57.0	2.444	3.306	9.8	20.4
3 2	12 25.51	+ 3 27.8	1.875	2.812	8.1	19.5	3 2	12 23.68	+24 13.7	2.393	3.303	8.0	20.3
3 12	12 16.47	+ 3 59.5	1.835	2.815	4.1	19.2	3 12	12 15.49	+25 20.4	2.369	3.298	7.2	20.2
3 22	12 6.41	+ 4 31.2	1.824	2.818	1.8	19.1	3 22	12 6.45	+26 10.4	2.373	3.293	7.8	20.2
4 1	11 56.36	+ 4 57.6	1.842	2.819	5.2	19.3	4 1	11 57.43	+26 38.9	2.404	3.288	9.5	20.4
4 11	11 47.33	+ 5 14.1	1.888	2.821	9.1	19.5	4 11	11 49.28	+26 44.1	2.460	3.281	11.6	20.3
4 21	11 40.10	+ 5 18.2	1.960	2.821	12.6	19.8	4 21	11 42.65	+26 26.7	2.538	3.274	13.6	20.6
5 1	11 35.16	+ 5 8.6	2.052	2.821	15.5	20.0	5 1	11 37.97	+25 49.2	2.633	3.266	15.4	20.7
<b>302486</b>	2002 <i>GP</i> <sub>61</sub>		3 22.2 56°60	0°5/21.8	18		<b>389980</b>	2012 <i>TQ</i> <sub>254</sub>		3 22.			

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3 22.2

3 22.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>350435</b>	2012 <i>VO</i> <sub>91</sub>		3 22.2 175°30	1.7°/19.9	17		<b>106147</b>	2000 <i>TB</i> <sub>51</sub>		3 22.2 245°35	8.6°/10.6	17	
2 21	12 25.48	+ 3 29.4	2.606	3.474	9.0	21.6	2 21	12 32.66	+31 5.7	2.637	3.472	10.1	20.0
3 2	12 20.18	+ 4 16.1	2.538	3.476	6.2	21.4	3 2	12 25.26	+31 59.2	2.586	3.460	9.0	19.9
3 12	12 13.64	+ 5 7.0	2.497	3.477	3.2	21.2	3 12	12 16.30	+32 37.5	2.559	3.447	8.6	19.8
3 22	12 6.43	+ 5 57.4	2.487	3.478	1.9	21.1	3 22	12 6.51	+32 54.9	2.559	3.434	9.2	19.8
4 1	11 59.20	+ 6 42.8	2.506	3.479	4.4	21.3	4 1	11 56.79	+32 47.9	2.585	3.421	10.6	19.9
4 11	11 52.64	+ 7 19.1	2.554	3.479	7.4	21.5	4 11	11 47.99	+32 16.2	2.634	3.408	12.2	20.0
4 21	11 47.27	+ 7 43.7	2.628	3.479	10.1	21.7	4 21	11 40.80	+31 21.9	2.704	3.394	13.9	20.1
5 1	11 43.50	+ 7 55.2	2.723	3.479	12.4	21.8	5 1	11 35.63	+30 8.5	2.792	3.380	15.3	20.2
<b>189046</b>	2000 <i>QR</i> <sub>30</sub>		3 22.2 241°86	0°8'/21.3	18		<b>85688</b>	1998 <i>RN</i> <sub>55</sub>		3 22.2 200°82	2°0'/23.9	18	
2 21	12 28.85	- 0 8.3	2.304	3.164	10.4	21.1	2 21	12 30.75	- 8 32.0	1.742	2.585	14.0	20.0
3 2	12 22.80	+ 0 28.9	2.212	3.146	7.2	20.8	3 2	12 24.48	- 8 2.4	1.663	2.582	10.3	19.7
3 12	12 15.13	+ 1 14.3	2.147	3.127	3.7	20.6	3 12	12 16.12	- 7 14.6	1.608	2.578	6.0	19.5
3 22	12 6.46	+ 2 3.4	2.112	3.108	0.9	20.3	3 22	12 6.52	- 6 12.4	1.580	2.573	2.2	19.2
4 1	11 57.60	+ 2 51.2	2.107	3.088	4.3	20.5	4 1	11 56.76	- 5 2.6	1.580	2.568	4.4	19.3
4 11	11 49.40	+ 3 32.3	2.130	3.067	8.0	20.7	4 11	11 48.01	- 3 53.1	1.608	2.561	8.8	19.6
4 21	11 42.59	+ 4 3.0	2.180	3.045	11.4	20.9	4 21	11 41.16	- 2 51.5	1.662	2.554	12.9	19.8
5 1	11 37.68	+ 4 20.5	2.251	3.023	14.3	21.1	5 1	11 36.79	- 2 3.2	1.736	2.546	16.4	20.0
<b>54061</b>	2000 <i>GX</i> <sub>134</sub>		3 22.2 314°22	4°8'/18.6	18		<b>268073</b>	2004 <i>RL</i> <sub>78</sub>		3 22.2 172°87	2°1'/19.8	17	
2 21	12 28.84	+ 6 55.7	1.198	2.095	15.1	18.9	2 21	12 28.52	+ 4 26.1	2.313	3.182	10.0	21.2
3 2	12 23.79	+ 7 59.0	1.131	2.081	10.6	18.6	3 2	12 22.41	+ 5 10.4	2.247	3.185	6.9	21.0
3 12	12 15.99	+ 9 8.1	1.086	2.067	6.2	18.3	3 12	12 14.85	+ 5 58.5	2.208	3.187	3.6	20.8
3 22	12 6.48	+ 10 12.3	1.066	2.053	5.2	18.2	3 22	12 6.49	+ 6 45.1	2.198	3.189	2.3	20.7
4 1	11 56.73	+ 11 0.6	1.070	2.040	9.3	18.4	4 1	11 58.14	+ 7 25.4	2.219	3.191	5.0	20.9
4 11	11 48.33	+ 11 24.9	1.096	2.027	14.3	18.6	4 11	11 50.59	+ 7 54.9	2.268	3.191	8.3	21.1
4 21	11 42.44	+ 11 22.1	1.142	2.016	18.9	18.9	4 21	11 44.45	+ 8 11.2	2.342	3.192	11.3	21.3
5 1	11 39.76	+ 10 52.7	1.204	2.004	22.7	19.1	5 1	11 40.17	+ 8 13.4	2.437	3.192	13.8	21.4
<b>120325</b>	2004 <i>MH</i> <sub>7</sub>		3 22.2 173°33	2°9'/18.5	16		<b>118892</b>	2000 <i>UE</i> <sub>44</sub>		3 22.2 49°06	3°7'/19.4	18	
2 21	12 26.90	+ 5 29.8	2.255	3.129	10.0	20.6	2 21	12 31.58	+ 7 23.5	1.471	2.356	13.6	18.4
3 2	12 21.32	+ 6 49.8	2.192	3.133	6.8	20.4	3 2	12 24.85	+ 7 57.8	1.437	2.381	9.4	18.2
3 12	12 14.29	+ 8 13.8	2.157	3.135	3.9	20.2	3 12	12 16.13	+ 8 32.4	1.426	2.405	5.2	18.0
3 22	12 6.46	+ 9 35.1	2.152	3.137	3.2	20.2	3 22	12 6.51	+ 9 0.4	1.442	2.431	3.9	18.0
4 1	11 58.62	+ 10 46.9	2.176	3.139	5.9	20.3	4 1	11 57.24	+ 9 15.6	1.485	2.456	7.1	18.2
4 11	11 51.57	+ 11 44.1	2.228	3.139	9.0	20.5	4 11	11 49.43	+ 9 14.6	1.554	2.482	11.0	18.5
4 21	11 45.94	+ 12 23.7	2.305	3.140	12.0	20.7	4 21	11 43.83	+ 8 56.7	1.644	2.508	14.6	18.8
5 1	11 42.14	+ 12 44.9	2.403	3.139	14.4	20.9	5 1	11 40.81	+ 8 22.9	1.754	2.534	17.4	19.1
<b>96076</b>	6825 <i>P-L</i>		3 22.2 244°82	1°5'/20.9	17		<b>285780</b>	2000 <i>VB</i> <sub>61</sub>		3 22.2 177°61	0°7'/21.2	18	
2 21	12 31.68	+ 0 53.0	1.752	2.620	12.7	20.7	2 21	12 25.00	+ 0 16.6	2.949	3.807	8.4	21.5
3 2	12 25.21	+ 1 35.1	1.665	2.603	8.9	20.4	3 2	12 19.76	+ 0 53.7	2.875	3.809	5.8	21.4
3 12	12 16.55	+ 2 27.0	1.604	2.585	4.5	20.1	3 12	12 13.42	+ 1 36.3	2.830	3.810	2.9	21.2
3 22	12 6.51	+ 3 22.9	1.571	2.566	1.6	19.8	3 22	12 6.47	+ 2 20.9	2.815	3.811	0.8	21.0
4 1	11 56.18	+ 4 15.4	1.566	2.546	5.6	20.1	4 1	11 59.51	+ 3 3.5	2.831	3.811	3.4	21.2
4 11	11 46.76	+ 4 57.7	1.589	2.526	10.2	20.3	4 11	11 53.12	+ 3 40.4	2.876	3.811	6.3	21.4
4 21	11 39.21	+ 5 25.0	1.636	2.505	14.3	20.5	4 21	11 47.78	+ 4 9.0	2.948	3.811	8.8	21.6
5 1	11 34.20	+ 5 34.7	1.702	2.483	17.8	20.7	5 1	11 43.86	+ 4 27.3	3.044	3.810	11.0	21.7
<b>382619</b>	2002 <i>PB</i> <sub>31</sub>		3 22.2 284°17	5°9'/27.3	18		<b>488561</b>	2001 <i>UR</i> <sub>231</sub>		3 22.2 188°71	1°9'/20.4	17	
2 21	12 29.33	-17 51.4	2.060	2.855	13.9	20.9	2 21	12 31.42	+ 1 56.0	1.793	2.663	12.4	22.8
3 2	12 23.50	-18 23.1	1.958	2.834	11.3	20.7	3 2	12 24.81	+ 2 48.5	1.724	2.662	8.5	22.6
3 12	12 15.67	-18 35.5	1.879	2.813	8.5	20.5	3 12	12 16.23	+ 3 48.9	1.681	2.661	4.4	22.3
3 22	12 6.49	-18 27.7	1.826	2.791	6.3	20.3	3 22	12 6.53	+ 4 50.7	1.666	2.659	2.0	22.2
4 1	11 56.93	-18 1.0	1.800	2.770	6.2	20.3	4 1	11 56.77	+ 5 46.5	1.680	2.656	5.7	22.4
4 11	11 48.04	-17 20.2	1.802	2.748	8.5	20.4	4 11	11 48.05	+ 6 30.1	1.721	2.653	9.9	22.6
4 21	11 40.74	-16 31.7	1.828	2.727	11.6	20.5	4 21	11 41.19	+ 6 57.5	1.786	2.649	13.6	22.9
5 1	11 35.72	-15 42.7	1.877	2.705	14.7	20.7	5 1	11 36.72	+ 7 7.0	1.872	2.644	16.7	23.1
<b>521030</b>	2015 <i>CL</i> <sub>70</sub>		3 22.2 124°68	0°2'/22.4	17		<b>48920</b>	1998 <i>OE</i> <sub>11</sub>		3 22.2 261°19	0°7'/21.6	17	
2 21	12 25.82	- 4 18.5	2.010	2.869	11.7	21.1	2 21	12 28.65	- 1 38.9	1.776	2.642	12.6	20.6
3 2	12 20.71	- 3 29.7	1.942	2.873	8.2	20.9	3 2	12 23.06	- 0 53.8	1.688	2.625	8.9	20.3
3 12	12 14.02	- 2 28.5	1.900	2.877	4.3	20.7	3 12	12 15.43	+ 0 3.9	1.626	2.607	4.6	20.0
3 22	12 6.46	- 1 20.1	1.885	2.881	0.3	20.3	3 22	12 6.52	+ 1 8.6	1.592	2.588	0.7	19.7
4 1	11 58.89	- 0 10.9	1.900	2.886	4.0	20.7	4 1	11 57.35	+ 2 13.1	1.586	2.569	5.0	20.0
4 11	11 52.18	+ 0 52.5	1.942	2.889	7.9	20.9	4 11	11 49.03	+ 3 9.7	1.607	2.550	9.6	20.2
4 21	11 47.00	+ 1 44.7	2.010	2.893	11.4	21.1	4 21	11 42.48	+ 3 52.7	1.652	2.530	13.7	20.4
5 1	11 43.80	+ 2 22.4	2.100	2.897	14.4	21.3	5 1	11 38.31	+ 4 18.6	1.717	2.510	17.2	20.6
<b>20868</b>	2000 <i>VR</i> <sub>39</sub>		3 22.2 192°26	0°8'/23.3	18		<b>267698</b>	2002 <i>XW</i> <sub>43</sub>		3 22.2 135°68	2°4'/24.6	18	
2 21	12 25.02	- 5 52.8	2.934	3.773	9.0	19.6	2 21	12 29.87	-10 3.7	2.087	2.917	12.5	20.9
3 2	12 19.80	- 5 26.0	2.852	3.772	6.4	19.5	3 2	12 23.47	- 9 45.0	2.021	2.931	9.3	20.7
3 12	12 13.45	- 4 50.0	2.797	3.769	3.6	19.3	3 12	12 15.44	- 9 10.8	1.979	2.943	5.7	20.5
3 22	12 6.46	- 4 7.6	2.772	3.767	0.9	19.0	3 22	12 6.53	- 8 24.2	1.965	2.956	2.6	20.3
4 1	11 59.42	- 3 22.4	2.777	3.764	2.8	19.2	4 1	11 57.65	- 7 30.0	1.981	2.967	3.8	20.4
4 11	11 52.93	- 2 38.5	2.813	3.760	5.7	19.4	4 11	11 49.71	- 6 34.6	2.026	2.978	7.3	20.6
4 21	11 47.50	- 1 59.5	2.875	3.756	8.4	19.5	4 21	11 43.38	- 5 43.6	2.097	2.988	10.6	20.9
5 1	11 43.50	- 1 28.3	2.962	3.752	10.8	19.7	5 1	11 39.13	- 5 1.6	2.190	2.998	13.5	21.1
<b>130689</b>	2000 <i>SM</i> <sub>138</sub>		3 22.2 229°94	2°0'/24.0	18		<b>380918</b>	2006 <i>FM</i> <sub>20</sub>		3 22.2			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>289714</b>	2005 <i>JJ</i> <sub>2</sub>		3 22.2	3°91	0°4/22.5	18	<b>141094</b>	2001 <i>XL</i> <sub>45</sub>		3 22.2	101°01	0°5/22.7	17
2 21	12 26.59	- 3 49.0	1.220	2.101	16.1	20.4	2 21	12 27.30	- 3 24.8	2.377	3.229	10.4	20.3
3 2	12 22.04	- 3 19.8	1.159	2.100	11.4	20.1	3 2	12 21.55	- 3 11.2	2.310	3.237	7.3	20.1
3 12	12 15.00	- 2 33.2	1.120	2.100	6.1	19.8	3 12	12 14.42	- 2 49.0	2.269	3.245	3.9	19.9
3 22	12 6.53	- 1 35.7	1.105	2.101	0.5	19.4	3 22	12 6.55	- 2 21.3	2.257	3.253	0.5	19.6
4 1	11 57.99	+ 0 36.2	1.115	2.103	5.5	19.8	4 1	11 58.69	- 1 52.3	2.275	3.261	3.4	19.9
4 11	11 50.80	+ 0 15.5	1.148	2.106	10.9	20.1	4 11	11 51.60	- 1 25.9	2.322	3.269	6.8	20.1
4 21	11 45.97	+ 0 52.3	1.203	2.109	15.7	20.4	4 21	11 45.86	- 1 5.8	2.395	3.277	9.9	20.3
5 1	11 44.09	+ 1 10.1	1.277	2.113	19.7	20.6	5 1	11 41.88	- 0 54.4	2.491	3.285	12.5	20.5
<b>310308</b>	2011 <i>UH</i> <sub>112</sub>		3 22.2	272°55	2°0/20.7	17	<b>202743</b>	2007 <i>MB</i> <sub>12</sub>		3 22.2	147°86	0°4/22.6	17
2 21	12 30.98	+ 1 41.1	1.438	2.318	14.2	21.2	2 21	12 26.69	- 4 12.2	2.269	3.121	10.8	20.9
3 2	12 25.05	+ 2 21.8	1.359	2.301	9.9	20.9	3 2	12 21.19	- 3 37.6	2.199	3.127	7.6	20.7
3 12	12 16.61	+ 3 12.8	1.303	2.285	5.1	20.6	3 12	12 14.27	- 2 52.7	2.156	3.132	4.1	20.5
3 22	12 6.56	+ 4 7.2	1.274	2.268	2.1	20.3	3 22	12 6.55	- 2 1.3	2.141	3.137	0.5	20.2
4 1	11 56.21	+ 4 56.4	1.271	2.251	6.5	20.6	4 1	11 58.83	- 1 8.6	2.156	3.142	3.6	20.5
4 11	11 46.96	+ 5 32.7	1.293	2.234	11.6	20.8	4 11	11 51.88	- 0 20.0	2.200	3.146	7.2	20.7
4 21	11 39.92	+ 5 50.8	1.338	2.217	16.3	21.0	4 21	11 46.33	+ 0 20.3	2.270	3.151	10.4	20.9
5 1	11 35.80	+ 5 48.7	1.401	2.200	20.1	21.2	5 1	11 42.60	+ 0 49.2	2.362	3.155	13.1	21.1
<b>32364</b>	2000 <i>QS</i> <sub>137</sub>		3 22.2	290°56	1°0/21.1	18	<b>106190</b>	2000 <i>UH</i> <sub>12</sub>		3 22.2	209°33	0°6/21.6	17
2 21	12 26.59	+ 0 54.4	2.172	3.040	10.6	18.7	2 21	12 28.19	- 0 52.9	2.085	2.947	11.2	20.8
3 2	12 21.27	+ 1 22.1	2.090	3.027	7.3	18.4	3 2	12 22.40	- 0 17.2	2.009	2.943	7.8	20.6
3 12	12 14.36	+ 1 56.7	2.035	3.015	3.7	18.2	3 12	12 14.96	+ 0 27.3	1.960	2.939	4.0	20.4
3 22	12 6.52	+ 2 33.7	2.008	3.003	1.1	18.0	3 22	12 6.57	+ 1 16.0	1.939	2.935	0.6	20.1
4 1	11 58.56	+ 3 8.4	2.010	2.991	4.4	18.2	4 1	11 58.10	+ 2 3.3	1.947	2.930	4.3	20.4
4 11	11 51.33	+ 3 35.9	2.040	2.979	8.1	18.4	4 11	11 50.45	+ 2 43.7	1.984	2.925	8.2	20.6
4 21	11 45.51	+ 3 52.8	2.095	2.968	11.5	18.6	4 21	11 44.33	+ 3 13.2	2.045	2.919	11.7	20.8
5 1	11 41.62	+ 3 57.0	2.172	2.956	14.3	18.7	5 1	11 40.22	+ 3 29.2	2.129	2.913	14.6	21.0
<b>197016</b>	2003 <i>UY</i> <sub>104</sub>		3 22.2	67°90	0°2/22.3	18	<b>437736</b>	2014 <i>EC</i> <sub>10</sub>		3 22.2	42°75	3°7/26.4	17
2 21	12 27.09	- 3 5.1	1.959	2.820	11.9	20.1	2 21	12 25.29	- 14 22.4	2.249	3.063	12.3	20.6
3 2	12 21.66	- 2 36.9	1.889	2.821	8.3	19.9	3 2	12 20.32	- 14 15.6	2.171	3.066	9.5	20.4
3 12	12 14.56	- 1 57.8	1.845	2.823	4.4	19.7	3 12	12 13.86	- 13 51.4	2.118	3.069	6.5	20.3
3 22	12 6.52	- 1 12.4	1.828	2.825	0.2	19.3	3 22	12 6.55	- 13 11.8	2.092	3.072	4.1	20.1
4 1	11 58.45	- 0 26.2	1.841	2.827	4.1	19.7	4 1	11 59.18	- 12 20.6	2.094	3.075	4.2	20.1
4 11	11 51.27	+ 0 14.9	1.881	2.828	8.1	19.9	4 11	11 52.57	- 11 23.4	2.124	3.079	6.8	20.3
4 21	11 45.67	+ 0 46.6	1.945	2.830	11.7	20.1	4 21	11 47.35	- 10 26.3	2.180	3.082	9.8	20.5
5 1	11 42.16	+ 1 5.6	2.032	2.832	14.7	20.3	5 1	11 43.99	- 9 34.5	2.260	3.086	12.5	20.7
<b>151799</b>	2003 <i>FN</i> <sub>56</sub>		3 22.2	263°88	0°3/22.4	18	<b>85116</b>	4342 <i>T</i> <sub>-3</sub>		3 22.2	146°93	1°6/20.5	18
2 21	12 29.74	- 2 44.8	1.864	2.724	12.4	20.2	2 21	12 27.79	+ 0 49.0	1.842	2.714	12.0	19.7
3 2	12 23.72	- 2 30.4	1.780	2.712	8.8	19.9	3 2	12 22.20	+ 1 49.3	1.779	2.719	8.2	19.5
3 12	12 15.73	- 2 5.3	1.722	2.699	4.7	19.6	3 12	12 14.86	+ 2 58.2	1.742	2.723	4.1	19.3
3 22	12 6.55	- 1 33.2	1.691	2.687	0.4	19.3	3 22	12 6.57	+ 4 9.2	1.733	2.728	1.7	19.1
4 1	11 57.17	- 0 59.3	1.688	2.674	4.4	19.6	4 1	11 58.28	+ 5 14.9	1.753	2.732	5.3	19.3
4 11	11 48.66	- 0 29.4	1.713	2.661	8.7	19.8	4 11	11 50.97	+ 6 8.6	1.800	2.735	9.3	19.6
4 21	11 41.87	- 0 8.0	1.763	2.648	12.6	20.0	4 21	11 45.37	+ 6 46.4	1.872	2.739	12.9	19.8
5 1	11 37.40	+ 0 1.4	1.834	2.635	16.0	20.2	5 1	11 41.94	+ 7 6.2	1.963	2.742	15.8	20.0
<b>493157</b>	2014 <i>TG</i> <sub>71</sub>		3 22.2	57°68	2°2/24.4	18	<b>46000</b>	2001 <i>BO</i> <sub>79</sub>		3 22.2	237°39	2°9/19.4	18
2 21	12 25.67	- 10 42.8	1.531	2.381	15.2	21.0	2 21	12 28.16	+ 3 35.2	1.725	2.604	12.3	19.5
3 2	12 20.90	- 9 43.4	1.476	2.397	11.1	20.7	3 2	12 22.67	+ 4 48.9	1.653	2.595	8.5	19.2
3 12	12 14.22	- 8 21.6	1.444	2.414	6.6	20.5	3 12	12 15.21	+ 6 10.6	1.606	2.586	4.5	19.0
3 22	12 6.53	- 6 43.8	1.438	2.431	2.5	20.3	3 22	12 6.58	+ 7 32.5	1.587	2.577	3.1	18.9
4 1	11 58.94	- 4 59.5	1.459	2.448	4.4	20.5	4 1	11 57.81	+ 8 45.7	1.595	2.567	6.6	19.1
4 11	11 52.54	- 3 19.5	1.507	2.465	8.8	20.7	4 11	11 50.01	+ 9 42.8	1.631	2.557	10.8	19.3
4 21	11 48.08	- 1 52.3	1.579	2.482	12.8	21.0	4 21	11 44.02	+ 10 19.7	1.689	2.546	14.6	19.5
5 1	11 46.01	- 0 43.7	1.673	2.500	16.2	21.3	5 1	11 40.40	+ 10 34.8	1.767	2.535	17.7	19.7
<b>217069</b>	2001 <i>SQ</i> <sub>107</sub>		3 22.2	178°88	2°4/24.9	18	<b>271150</b>	2003 <i>SL</i> <sub>169</sub>		3 22.2	215°91	1°5/20.5	17
2 21	12 28.88	- 10 37.0	2.347	3.170	11.5	20.6	2 21	12 28.50	+ 2 53.4	2.509	3.373	9.5	20.9
3 2	12 22.75	- 10 20.6	2.266	3.172	8.6	20.4	3 2	12 22.41	+ 3 27.6	2.429	3.365	6.6	20.7
3 12	12 15.08	- 9 49.6	2.211	3.173	5.4	20.2	3 12	12 14.91	+ 4 6.4	2.376	3.356	3.4	20.4
3 22	12 6.55	- 9 6.5	2.185	3.174	2.7	20.0	3 22	12 6.58	+ 4 45.7	2.353	3.346	1.6	20.3
4 1	11 57.95	- 8 15.4	2.189	3.174	3.6	20.1	4 1	11 58.16	+ 5 21.0	2.360	3.336	4.4	20.5
4 11	11 50.11	- 7 21.9	2.222	3.173	6.8	20.2	4 11	11 50.42	+ 5 48.2	2.396	3.325	7.6	20.7
4 21	11 43.68	- 6 31.2	2.282	3.172	9.9	20.4	4 21	11 43.96	+ 6 4.6	2.459	3.314	10.6	20.8
5 1	11 39.13	- 5 47.9	2.365	3.170	12.7	20.6	5 1	11 39.25	+ 6 8.6	2.543	3.302	13.1	21.0
<b>506368</b>	2017 <i>QS</i> <sub>24</sub>		3 22.2	94°93	2°1/19.6	17	<b>298921</b>	2004 <i>TM</i> <sub>126</sub>		3 22.2	122°55	3°6/19.3	18
2 21	12 24.28	+ 3 0.8	2.239	3.114	10.0	20.9	2 21	12 33.03	+ 6 32.1	1.581	2.460	13.2	20.8
3 2	12 19.53	+ 4 7.9	2.178	3.119	6.8	20.7	3 2	12 25.98	+ 7 20.9	1.530	2.471	9.1	20.6
3 12	12 13.39	+ 5 20.6	2.143	3.124	3.5	20.5	3 12	12 16.83	+ 8 12.1	1.504	2.483	5.1	20.4
3 22	12 6.52	+ 6 32.8	2.137	3.129	2.3	20.4	3 22	12 6.61	+ 8 58.1	1.506	2.494	3.8	20.3
4 1	11 59.66	+ 7 38.5	2.161	3.133	5.1	20.6	4 1	11 56.53	+ 9 31.7	1.535	2.504	7.1	20.5
4 11	11 53.56	+ 8 32.2	2.212	3.138	8.4	20.8	4 11	11 47.78	+ 9 48.3	1.590	2.514	11.1	20.8
4 21	11 48.80	+ 9 10.8	2.289	3.143	11.3	21.0	4 21	11 41.18	+ 9 46.1	1.669	2.524	14.8	21.0
5 1	11 45.79	+ 9 32.7	2.386	3.147	13.8	21.2	5 1	11 37.19	+ 9 25.6	1.766	2.533	17.8	21.3
<b>106979</b>	2000 <i>YV</i> <sub>94</sub>		3 22.2	132°08	2°0/20.3	18	<b>435315</b>	2007 <i>UH</i> <sub>102</sub>					

EPHEMERIDES

3 22.2

3 22.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>278758</b>	2008 <i>SC</i> <sub>122</sub>		3 22.2 208°60	0°8/23.1	17		<b>501194</b>	2013 <i>TM</i> <sub>116</sub>		3 22.2 151°96	2°8/25.2	17	
2 21	12 26.62	- 5 48.2	2.193	3.042	11.3	21.4	2 21	12 27.30	-11 24.9	2.058	2.887	12.7	21.4
3 2	12 21.27	- 5 14.1	2.114	3.039	8.1	21.2	3 2	12 21.82	-11 7.5	1.983	2.890	9.5	21.2
3 12	12 14.37	- 4 27.4	2.060	3.035	4.5	21.0	3 12	12 14.70	-10 33.1	1.932	2.893	6.1	21.0
3 22	12 6.59	- 3 32.2	2.035	3.031	1.0	20.7	3 22	12 6.63	- 9 44.5	1.908	2.896	3.1	20.8
4 1	11 58.72	- 2 33.7	2.040	3.026	3.6	20.9	4 1	11 58.51	- 8 46.5	1.913	2.899	4.0	20.9
4 11	11 51.60	- 1 37.7	2.072	3.022	7.3	21.1	4 11	11 51.24	- 7 45.6	1.946	2.901	7.3	21.1
4 21	11 45.91	- 0 49.5	2.131	3.017	10.7	21.3	4 21	11 45.52	- 6 47.9	2.005	2.904	10.7	21.3
5 1	11 42.11	- 0 12.7	2.213	3.012	13.7	21.5	5 1	11 41.83	- 5 58.9	2.087	2.906	13.7	21.5
<b>142117</b>	2002 <i>RY</i> <sub>5</sub>		3 22.2 268°37	0°3/22.4	17		<b>175616</b>	2006 <i>WV</i> <sub>33</sub>		3 22.2 277°96	1°2/20.7	17	
2 21	12 29.17	- 3 43.9	1.697	2.559	13.3	20.4	2 21	12 25.07	+ 1 0.7	2.298	3.167	10.0	21.0
3 2	12 23.55	- 3 11.9	1.609	2.541	9.5	20.1	3 2	12 20.18	+ 1 46.1	2.215	3.153	6.9	20.7
3 12	12 15.77	- 2 25.5	1.545	2.523	5.1	19.8	3 12	12 13.83	+ 2 38.8	2.158	3.139	3.5	20.5
3 22	12 6.62	- 1 29.4	1.508	2.504	0.4	19.4	3 22	12 6.61	+ 3 34.2	2.130	3.125	1.3	20.3
4 1	11 57.17	- 0 30.5	1.499	2.485	4.8	19.7	4 1	11 59.27	+ 4 26.6	2.132	3.111	4.4	20.5
4 11	11 48.60	+ 0 23.7	1.516	2.466	9.5	19.9	4 11	11 52.60	+ 5 11.0	2.161	3.097	8.0	20.7
4 21	11 41.88	+ 1 6.8	1.558	2.446	13.9	20.1	4 21	11 47.22	+ 5 43.5	2.216	3.083	11.2	20.9
5 1	11 37.66	+ 1 34.2	1.620	2.426	17.6	20.3	5 1	11 43.62	+ 6 1.8	2.292	3.068	13.9	21.0
<b>259110</b>	2002 <i>WT</i> <sub>18</sub>		3 22.2 30°82	0°7/21.7	18	R	<b>195184</b>	2002 <i>CP</i> <sub>267</sub>		3 22.2 286°97	5°5/15.6	18	
2 21	12 29.84	- 0 18.3	1.297	2.179	15.3	20.1	2 21	12 26.15	+10 44.6	1.884	2.770	11.0	19.9
3 2	12 24.08	- 0 3.5	1.246	2.189	10.6	19.9	3 2	12 21.35	+12 34.9	1.799	2.740	8.0	19.6
3 12	12 15.98	+ 0 22.0	1.218	2.200	5.4	19.6	3 12	12 14.62	+14 29.3	1.741	2.710	5.7	19.4
3 22	12 6.63	+ 0 52.0	1.215	2.211	0.7	19.3	3 22	12 6.63	+16 18.0	1.711	2.680	6.2	19.4
4 1	11 57.39	+ 1 19.6	1.238	2.224	5.6	19.7	4 1	11 58.34	+17 51.1	1.709	2.649	9.1	19.5
4 11	11 49.60	+ 1 38.2	1.285	2.237	10.6	20.0	4 11	11 50.77	+19 0.9	1.733	2.618	12.6	19.6
4 21	11 44.16	+ 1 43.7	1.355	2.251	15.0	20.3	4 21	11 44.82	+19 43.8	1.778	2.587	16.0	19.8
5 1	11 41.57	+ 1 33.9	1.443	2.265	18.6	20.5	5 1	11 41.11	+19 59.4	1.841	2.556	18.8	19.9
<b>38406</b>	1999 <i>RS</i> <sub>203</sub>		3 22.2 185°84	4°9/27.9	18		<b>111854</b>	2002 <i>EN</i> <sub>65</sub>		3 22.2 268°19	1°0/23.1	17	
2 21	12 27.32	-18 48.6	2.607	3.386	11.8	19.3	2 21	12 29.64	- 5 43.6	1.678	2.534	13.8	20.3
3 2	12 21.66	-19 8.7	2.521	3.386	9.5	19.2	3 2	12 23.97	- 5 14.5	1.584	2.513	10.0	20.0
3 12	12 14.56	-19 12.0	2.460	3.386	7.2	19.0	3 12	12 16.06	- 4 28.8	1.515	2.491	5.6	19.7
3 22	12 6.60	-18 58.7	2.425	3.385	5.3	18.9	3 22	12 6.67	- 3 30.3	1.472	2.468	1.2	19.4
4 1	11 58.53	-18 30.9	2.419	3.385	5.1	18.9	4 1	11 56.90	- 2 25.8	1.458	2.445	4.7	19.6
4 11	11 51.11	-17 52.5	2.441	3.384	6.7	19.0	4 11	11 47.99	- 1 23.5	1.470	2.422	9.5	19.8
4 21	11 44.96	-17 8.6	2.490	3.384	9.1	19.1	4 21	11 40.95	- 0 30.6	1.506	2.398	14.0	20.0
5 1	11 40.56	-16 24.5	2.562	3.383	11.4	19.3	5 1	11 36.48	+ 0 7.3	1.563	2.374	17.9	20.2
<b>161648</b>	2006 <i>BH</i> <sub>87</sub>		3 22.2 269°35	11°1/ 8.8	17		<b>178205</b>	2006 <i>VZ</i> <sub>15</sub>		3 22.2 240°89	1°1/23.4	18	
2 21	12 27.78	+22 29.8	1.477	2.363	13.5	20.0	2 21	12 25.33	- 6 7.3	2.354	3.201	10.7	20.6
3 2	12 22.86	+25 21.7	1.428	2.348	11.5	19.8	3 2	12 20.29	- 5 43.2	2.277	3.200	7.7	20.4
3 12	12 15.50	+28 2.4	1.405	2.334	11.2	19.8	3 12	12 13.86	- 5 7.7	2.225	3.198	4.3	20.1
3 22	12 6.62	+30 16.3	1.406	2.319	12.7	19.8	3 22	12 6.62	- 4 24.2	2.202	3.197	1.2	19.9
4 1	11 57.54	+31 51.5	1.432	2.304	15.5	19.9	4 1	11 59.33	- 3 37.0	2.208	3.195	3.3	20.1
4 11	11 49.65	+32 43.2	1.477	2.288	18.4	20.1	4 11	11 52.73	- 2 51.3	2.243	3.194	6.8	20.3
4 21	11 44.00	+32 53.0	1.539	2.273	21.1	20.3	4 21	11 47.44	- 2 11.6	2.304	3.192	9.9	20.5
5 1	11 41.23	+32 26.1	1.612	2.257	23.4	20.4	5 1	11 43.89	- 1 41.2	2.387	3.191	12.7	20.7
<b>280749</b>	2005 <i>OL</i> <sub>1</sub>		3 22.2 116°88	1°0/20.8	17		<b>57682</b>	2001 <i>UO</i> <sub>48</sub>		3 22.2 119°77	8°2/14.1	18	
2 21	12 24.36	+ 0 4.3	2.541	3.405	9.4	20.9	2 21	12 31.90	+21 29.4	1.855	2.728	11.9	18.2
3 2	12 19.45	+ 1 1.5	2.480	3.416	6.4	20.7	3 2	12 25.04	+22 40.9	1.816	2.736	9.5	18.1
3 12	12 13.34	+ 2 5.2	2.446	3.426	3.2	20.5	3 12	12 16.32	+23 40.1	1.803	2.744	8.2	18.0
3 22	12 6.60	+ 3 10.8	2.442	3.437	1.1	20.4	3 22	12 6.67	+24 19.2	1.815	2.751	8.8	18.1
4 1	11 59.88	+ 4 13.0	2.468	3.447	3.9	20.6	4 1	11 57.21	+24 32.8	1.854	2.759	10.8	18.2
4 11	11 53.86	+ 5 7.1	2.523	3.457	7.1	20.8	4 11	11 48.97	+24 19.6	1.917	2.766	13.3	18.4
4 21	11 49.04	+ 5 49.6	2.604	3.467	9.8	21.0	4 21	11 42.70	+23 41.7	2.000	2.773	15.7	18.6
5 1	11 45.79	+ 6 18.7	2.708	3.476	12.2	21.2	5 1	11 38.81	+22 42.9	2.100	2.780	17.7	18.8
<b>505965</b>	2015 <i>FF</i> <sub>291</sub>		3 22.2 287°53	5°2/16.6	17		<b>42158</b>	2001 <i>BT</i> <sub>70</sub>		3 22.2 101°28	0°1/22.0	18	R
2 21	12 27.38	+12 30.8	1.991	2.874	10.7	20.9	2 21	12 26.98	- 3 16.1	1.999	2.859	11.7	19.3
3 2	12 21.99	+13 35.1	1.919	2.858	7.8	20.6	3 2	12 21.50	- 2 24.9	1.942	2.874	8.2	19.1
3 12	12 14.83	+14 37.9	1.873	2.842	5.5	20.5	3 12	12 14.47	- 1 22.8	1.910	2.889	4.2	18.9
3 22	12 6.63	+15 31.8	1.855	2.826	5.6	20.4	3 22	12 6.64	- 0 15.2	1.907	2.903	0.1	18.6
4 1	11 58.30	+16 10.3	1.864	2.809	8.1	20.6	4 1	11 58.88	+ 0 51.4	1.933	2.917	4.1	18.9
4 11	11 50.82	+16 28.9	1.899	2.793	11.3	20.7	4 11	11 52.05	+ 1 50.6	1.986	2.931	8.0	19.2
4 21	11 44.93	+16 26.3	1.956	2.777	14.3	20.9	4 21	11 46.78	+ 2 37.7	2.066	2.945	11.3	19.4
5 1	11 41.17	+16 3.1	2.032	2.761	16.9	21.0	5 1	11 43.51	+ 3 10.1	2.166	2.958	14.2	19.6
<b>196573</b>	2003 <i>QR</i> <sub>34</sub>		3 22.2 137°23	1°8/20.2	17		<b>116369</b>	2003 <i>YS</i> <sub>106</sub>		3 22.2 167°98	4°1/18.5	18	
2 21	12 26.63	+ 2 1.7	2.070	2.941	10.8	20.2	2 21	12 29.21	+ 7 29.9	1.616	2.501	12.6	19.6
3 2	12 21.26	+ 2 58.8	2.007	2.947	7.4	20.0	3 2	12 23.43	+ 8 33.6	1.558	2.502	8.8	19.3
3 12	12 14.36	+ 4 2.4	1.971	2.952	3.8	19.8	3 12	12 15.61	+ 9 39.9	1.524	2.502	5.2	19.1
3 22	12 6.62	+ 5 6.8	1.964	2.957	1.9	19.7	3 22	12 6.66	+10 40.5	1.517	2.502	4.5	19.1
4 1	11 58.89	+ 6 5.3	1.986	2.962	5.1	19.9	4 1	11 57.72	+11 27.4	1.538	2.502	7.6	19.3
4 11	11 52.03	+ 6 52.7	2.035	2.966	8.6	20.1	4 11	11 49.91	+11 55.1	1.584	2.502	11.5	19.5
4 21	11 46.66	+ 7 25.4	2.109	2.971	11.9	20.3	4 21	11 44.07	+12 1.5	1.652	2.503	15.1	19.7
5 1	11 43.25	+ 7 41.8	2.204	2.975	14.6	20.5	5 1	11 40.72	+11 46.8	1.738	2.503	18.1	19.9
<b>278788</b>	2008 <i>SF</i> <sub>191</sub>		3 22.2 99°42	2°0/24.3	18		<b>37854</b>	1998 <i>EY</i> <sub>11</sub>					

EPHEMERIDES

3 22.2

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>364697</b>	2007 <i>US</i> <sub>49</sub>		3 22.2 121°33'	4.5/18.2	18		<b>404079</b>	2012 <i>DL</i> <sub>88</sub>		3 22.2 17°67'	0.3/22.6	17	
2 21	12 31.13	+ 8 52.3	1.635	2.517	12.6	21.0	2 21	12 23.40	- 3 18.7	2.523	3.380	9.7	20.7
3 2	12 24.65	+ 9 55.4	1.584	2.526	8.8	20.8	3 2	12 18.85	- 2 56.1	2.454	3.384	6.8	20.5
3 12	12 16.19	+10 58.9	1.560	2.535	5.4	20.6	3 12	12 13.08	- 2 25.1	2.412	3.389	3.6	20.3
3 22	12 6.68	+11 54.3	1.562	2.544	4.9	20.6	3 22	12 6.65	- 1 49.2	2.398	3.394	0.4	20.0
4 1	11 57.29	+12 34.3	1.592	2.552	7.8	20.8	4 1	12 0.21	- 1 12.3	2.413	3.400	3.2	20.3
4 11	11 49.13	+12 54.4	1.647	2.560	11.5	21.0	4 11	11 54.42	- 0 38.7	2.457	3.405	6.4	20.5
4 21	11 42.99	+12 53.3	1.725	2.568	14.9	21.3	4 21	11 49.81	- 0 11.7	2.527	3.412	9.3	20.7
5 1	11 39.35	+12 32.0	1.821	2.575	17.7	21.5	5 1	11 46.76	+ 0 6.0	2.620	3.418	11.8	20.9
<b>285963</b>	2001 <i>RD</i> <sub>87</sub>		3 22.2 233°20'	1°0/23.4	17		<b>89730</b>	2001 <i>YK</i> <sub>137</sub>		3 22.2 193°56'	2°0/20.4	18	
2 21	12 27.53	- 5 33.2	2.518	3.360	10.2	20.9	2 21	12 32.60	+ 3 1.4	1.871	2.739	12.0	20.1
3 2	12 21.81	- 5 20.7	2.430	3.351	7.4	20.7	3 2	12 25.64	+ 3 42.8	1.800	2.737	8.3	19.8
3 12	12 14.66	- 4 58.3	2.368	3.341	4.1	20.5	3 12	12 16.74	+ 4 30.3	1.755	2.735	4.3	19.6
3 22	12 6.66	- 4 28.5	2.335	3.330	1.2	20.2	3 22	12 6.73	+ 5 18.0	1.738	2.732	2.2	19.4
4 1	11 58.53	- 3 55.1	2.333	3.320	3.3	20.4	4 1	11 56.65	+ 5 59.5	1.751	2.727	5.6	19.6
4 11	11 51.04	- 3 22.2	2.360	3.309	6.6	20.6	4 11	11 47.57	+ 6 29.4	1.792	2.722	9.7	19.9
4 21	11 44.80	- 2 54.0	2.413	3.297	9.7	20.7	4 21	11 40.32	+ 6 44.4	1.857	2.717	13.3	20.1
5 1	11 40.27	- 2 33.4	2.490	3.286	12.4	20.9	5 1	11 35.42	+ 6 43.3	1.942	2.710	16.4	20.3
<b>381444</b>	2008 <i>QV</i> <sub>32</sub>		3 22.2 240°47'	1°3/23.8	17		<b>310907</b>	2003 <i>SK</i> <sub>45</sub>		3 22.2 128°08'	1°0/21.3	18	
2 21	12 25.80	- 8 37.3	2.250	3.089	11.4	21.4	2 21	12 32.13	+ 0 12.0	1.907	2.770	12.1	21.2
3 2	12 20.77	- 7 42.4	2.157	3.075	8.3	21.2	3 2	12 25.11	+ 0 49.1	1.852	2.786	8.3	21.0
3 12	12 14.18	- 6 31.1	2.090	3.060	4.8	20.9	3 12	12 16.36	+ 1 33.8	1.823	2.802	4.2	20.8
3 22	12 6.65	- 5 7.6	2.051	3.046	1.5	20.7	3 22	12 6.72	+ 2 20.9	1.822	2.818	1.1	20.6
4 1	11 58.96	- 3 37.9	2.043	3.030	3.5	20.8	4 1	11 57.20	+ 3 4.2	1.851	2.832	4.7	20.9
4 11	11 51.95	- 2 9.5	2.064	3.015	7.3	21.0	4 11	11 48.77	+ 3 38.7	1.908	2.846	8.7	21.2
4 21	11 46.30	- 0 48.9	2.112	2.998	10.8	21.2	4 21	11 42.14	+ 4 0.7	1.991	2.859	12.2	21.4
5 1	11 42.50	+ 0 18.8	2.182	2.982	13.8	21.4	5 1	11 37.75	+ 4 8.6	2.094	2.872	15.0	21.6
<b>330361</b>	2006 <i>VN</i> <sub>140</sub>		3 22.2 273°06'	9°6/13.0	18		<b>274782</b>	2008 <i>VS</i> <sub>50</sub>		3 22.2 225°21'	2°1/24.8	17	
2 21	12 31.98	+23 12.5	1.673	2.547	12.9	20.4	2 21	12 26.32	-10 35.3	2.380	3.207	11.2	22.1
3 2	12 25.42	+24 32.8	1.624	2.540	10.6	20.2	3 2	12 21.06	-10 2.3	2.289	3.198	8.4	21.9
3 12	12 16.66	+25 39.3	1.598	2.534	9.6	20.2	3 12	12 14.31	- 9 13.8	2.224	3.188	5.2	21.7
3 22	12 6.70	+26 22.3	1.598	2.527	10.3	20.2	3 22	12 6.68	- 8 12.7	2.187	3.177	2.4	21.5
4 1	11 56.78	+26 35.2	1.623	2.520	12.5	20.3	4 1	11 58.92	- 7 3.8	2.179	3.166	3.5	21.5
4 11	11 48.14	+26 16.3	1.669	2.513	15.2	20.5	4 11	11 51.81	- 5 53.0	2.201	3.154	6.7	21.7
4 21	11 41.66	+25 28.2	1.736	2.507	17.8	20.6	4 21	11 46.01	- 4 46.3	2.250	3.142	10.0	21.9
5 1	11 37.85	+24 15.5	1.818	2.500	20.0	20.8	5 1	11 42.01	- 3 48.6	2.322	3.130	12.8	22.1
<b>97071</b>	1999 <i>VO</i> <sub>27</sub>		3 22.2 99°15'	1°0/21.2	18		<b>257235</b>	2009 <i>DO</i> <sub>124</sub>		3 22.2 260°32'	1°6/20.8	17	
2 21	12 29.54	+ 1 0.0	1.988	2.855	11.5	19.0	2 21	12 29.59	+ 0 45.0	1.704	2.576	12.8	21.3
3 2	12 23.29	+ 1 26.3	1.930	2.867	7.9	18.8	3 2	12 23.83	+ 1 33.7	1.620	2.559	8.9	21.0
3 12	12 15.41	+ 1 59.0	1.899	2.879	4.0	18.6	3 12	12 15.95	+ 2 32.9	1.561	2.542	4.6	20.7
3 22	12 6.68	+ 2 33.5	1.895	2.890	1.1	18.4	3 22	12 6.72	+ 3 36.4	1.529	2.524	1.7	20.4
4 1	11 58.02	+ 3 4.6	1.920	2.902	4.6	18.6	4 1	11 57.23	+ 4 36.4	1.525	2.505	5.7	20.7
4 11	11 50.34	+ 3 27.7	1.974	2.913	8.4	18.9	4 11	11 48.65	+ 5 25.5	1.548	2.486	10.3	20.9
4 21	11 44.31	+ 3 39.8	2.052	2.924	11.7	19.1	4 21	11 41.91	+ 5 58.5	1.595	2.467	14.4	21.1
5 1	11 40.37	+ 3 39.2	2.152	2.935	14.5	19.3	5 1	11 37.67	+ 6 12.8	1.661	2.448	18.0	21.3
<b>499123</b>	2009 <i>KZ</i> <sub>2</sub>		3 22.2 323°72'	7°4/17.7	17		<b>283618</b>	2002 <i>CB</i> <sub>138</sub>		3 22.2 131°10'	6°8/2.6	18	
2 21	12 32.19	+13 48.1	1.174	2.070	15.4	20.1	2 21	12 29.02	-32 16.5	3.423	4.084	11.3	21.4
3 2	12 26.48	+14 26.7	1.099	2.043	11.5	19.8	3 2	12 22.64	-32 42.5	3.345	4.102	9.9	21.3
3 12	12 17.65	+14 59.8	1.045	2.017	8.1	19.5	3 12	12 15.02	-32 49.4	3.289	4.120	8.5	21.2
3 22	12 6.74	+15 16.7	1.014	1.991	7.9	19.4	3 22	12 6.71	-32 36.7	3.258	4.137	7.3	21.2
4 1	11 55.37	+15 7.7	1.007	1.967	11.4	19.5	4 1	11 58.37	-32 5.2	3.253	4.153	6.8	21.2
4 11	11 45.35	+14 28.3	1.022	1.943	16.1	19.7	4 11	11 50.64	-31 18.3	3.276	4.168	7.1	21.2
4 21	11 38.07	+13 19.4	1.056	1.921	20.7	19.9	4 21	11 44.08	-30 20.2	3.326	4.183	8.0	21.3
5 1	11 34.35	+11 45.0	1.105	1.900	24.6	20.1	5 1	11 39.07	-29 16.4	3.400	4.198	9.3	21.4
<b>305921</b>	2009 <i>FP</i> <sub>62</sub>		3 22.2 292°17'	2°6/19.6	17		<b>385904</b>	2006 <i>SW</i> <sub>375</sub>		3 22.2 17°09'	3°0/19.1	17	
2 21	12 28.05	+ 6 28.4	2.205	3.080	10.2	20.9	2 21	12 26.13	+ 6 26.1	1.996	2.877	10.8	20.5
3 2	12 22.28	+ 6 56.4	2.130	3.070	7.1	20.7	3 2	12 20.99	+ 7 13.9	1.936	2.879	7.4	20.3
3 12	12 14.93	+ 7 26.4	2.082	3.061	3.9	20.5	3 12	12 14.27	+ 8 4.2	1.902	2.881	4.2	20.1
3 22	12 6.68	+ 7 53.6	2.062	3.051	2.8	20.4	3 22	12 6.70	+ 8 50.9	1.896	2.884	3.3	20.0
4 1	11 58.35	+ 8 13.2	2.072	3.042	5.4	20.5	4 1	11 59.13	+ 9 28.3	1.918	2.887	6.0	20.2
4 11	11 50.80	+ 8 21.7	2.109	3.033	8.8	20.7	4 11	11 52.46	+ 9 51.9	1.967	2.890	9.4	20.4
4 21	11 44.70	+ 8 17.0	2.170	3.024	11.9	20.9	4 21	11 47.32	+ 9 59.6	2.040	2.893	12.5	20.6
5 1	11 40.53	+ 7 58.5	2.253	3.015	14.5	21.1	5 1	11 44.18	+ 9 50.8	2.132	2.897	15.2	20.8
<b>34431</b>	2000 <i>SZ</i> <sub>33</sub>		3 22.2 142°30'	1°7/20.1	18		<b>171825</b>	2001 <i>FQ</i> <sub>63</sub>		3 22.2 81°26'	1°6/20.8	18	
2 21	12 27.25	+ 4 18.8	2.728	3.594	8.8	20.5	2 21	12 30.60	+ 0 52.9	1.507	2.384	13.9	20.1
3 2	12 21.39	+ 4 48.6	2.666	3.602	6.0	20.3	3 2	12 24.33	+ 1 42.1	1.461	2.402	9.5	19.9
3 12	12 14.34	+ 5 21.1	2.631	3.610	3.1	20.1	3 12	12 16.05	+ 2 40.0	1.439	2.420	4.8	19.6
3 22	12 6.67	+ 5 52.5	2.626	3.618	1.8	20.0	3 22	12 6.74	+ 3 39.3	1.443	2.438	1.7	19.5
4 1	11 59.02	+ 6 19.0	2.652	3.626	4.2	20.2	4 1	11 57.61	+ 4 32.0	1.475	2.456	5.8	19.8
4 11	11 52.07	+ 6 37.4	2.707	3.633	7.0	20.4	4 11	11 49.82	+ 5 11.5	1.533	2.474	10.2	20.1
4 21	11 46.30	+ 6 45.9	2.788	3.639	9.6	20.6	4 21	11 44.14	+ 5 34.2	1.614	2.491	14.1	20.3
5 1	11 42.10	+ 6 43.3	2.891	3.646	11.8	20.7	5 1	11 41.00	+ 5 38.8	1.715	2.508	17.2	20.6
<b>52539</b>	1996 <i>TB</i> <sub>41</sub>		3 22.2 195°16'	1°0/20.9	18		<b>80043</b>	1999 <i>JS</i> <sub>39</sub>		3 22			

EPHEMERIDES

3 22.2

3 22.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>463821</b>	2014 <i>TW</i> <sub>41</sub>		3 22.2 112°45'	0°2/22.4	18		<b>163502</b>	2002 <i>SA</i> <sub>46</sub>		3 22.2 145°16'	1°4/20.4	17	R
2 21	12 31.05	- 2 56.2	1.835	2.693	12.7	21.8	2 21	12 26.35	+ 2 6.6	2.623	3.488	9.1	21.1
3 2	12 24.46	- 2 32.2	1.777	2.708	8.9	21.6	3 2	12 20.84	+ 2 54.6	2.561	3.497	6.2	20.9
3 12	12 16.07	- 1 57.5	1.745	2.722	4.7	21.4	3 12	12 14.11	+ 3 47.3	2.527	3.507	3.2	20.8
3 22	12 6.75	- 1 16.8	1.740	2.736	0.3	21.1	3 22	12 6.74	+ 4 40.5	2.522	3.516	1.5	20.6
4 1	11 57.51	- 0 35.7	1.764	2.750	4.3	21.4	4 1	11 59.40	+ 5 29.3	2.548	3.524	4.1	20.8
4 11	11 49.35	+ 0 0.0	1.816	2.763	8.4	21.7	4 11	11 52.74	+ 6 9.7	2.603	3.532	7.1	21.0
4 21	11 43.02	+ 0 26.0	1.893	2.776	12.0	21.9	4 21	11 47.30	+ 6 38.9	2.684	3.540	9.8	21.2
5 1	11 38.96	+ 0 39.5	1.992	2.788	15.0	22.2	5 1	11 43.45	+ 6 55.4	2.788	3.547	12.1	21.4
<b>126142</b>	2001 <i>YK</i> <sub>129</sub>		3 22.2 204°01'	6°6/15.3	17		<b>195514</b>	2002 <i>HG</i> <sub>14</sub>		3 22.2 275°89'	2°1/23.9	17	
2 21	12 29.78	+16 51.0	1.963	2.841	11.0	19.6	2 21	12 30.77	- 6 54.4	1.947	2.790	12.7	19.8
3 2	12 23.61	+18 3.2	1.909	2.839	8.4	19.5	3 2	12 24.51	- 7 4.9	1.857	2.776	9.4	19.6
3 12	12 15.66	+19 8.9	1.880	2.837	6.7	19.3	3 12	12 16.28	- 7 2.8	1.791	2.761	5.6	19.3
3 22	12 6.74	+20 0.3	1.879	2.834	7.1	19.4	3 22	12 6.80	- 6 50.0	1.753	2.746	2.3	19.1
4 1	11 57.84	+20 31.3	1.905	2.831	9.3	19.5	4 1	11 57.05	- 6 30.1	1.744	2.731	4.1	19.2
4 11	11 49.94	+20 38.9	1.957	2.827	12.1	19.6	4 11	11 48.09	- 6 7.9	1.763	2.716	8.1	19.4
4 21	11 43.78	+20 23.2	2.029	2.824	14.8	19.8	4 21	11 40.80	- 5 48.5	1.807	2.701	12.0	19.6
5 1	11 39.84	+19 46.5	2.120	2.820	17.0	20.0	5 1	11 35.80	- 5 36.1	1.873	2.685	15.3	19.8
<b>156546</b>	2002 <i>DN</i> <sub>14</sub>		3 22.2 284°46'	0°7/21.5	17	R	<b>363087</b>	2000 <i>RU</i> <sub>102</sub>		3 22.2 127°56'	4°2/27.2	18	
2 21	12 27.00	- 1 8.6	1.821	2.690	12.2	20.5	2 21	12 27.65	-16 46.3	2.152	2.952	13.2	21.0
3 2	12 21.80	- 0 25.0	1.749	2.686	8.5	20.2	3 2	12 22.03	-16 26.7	2.080	2.964	10.3	20.8
3 12	12 14.79	+ 0 29.1	1.702	2.683	4.3	20.0	3 12	12 14.83	-15 46.7	2.032	2.976	7.2	20.6
3 22	12 6.73	+ 1 28.3	1.683	2.679	0.8	19.7	3 22	12 6.76	-14 48.4	2.011	2.987	4.7	20.5
4 1	11 58.59	+ 2 25.7	1.692	2.675	4.8	20.0	4 1	11 58.70	-13 36.7	2.019	2.998	4.6	20.5
4 11	11 51.36	+ 3 14.7	1.727	2.671	9.0	20.2	4 11	11 51.51	-12 18.4	2.055	3.008	7.1	20.7
4 21	11 45.82	+ 3 50.5	1.788	2.667	12.8	20.4	4 21	11 45.87	-11 0.6	2.118	3.018	10.1	20.9
5 1	11 42.48	+ 4 10.2	1.868	2.664	15.9	20.7	5 1	11 42.21	- 9 49.7	2.204	3.028	12.9	21.1
<b>67629</b>	2000 <i>SK</i> <sub>193</sub>		3 22.2 254°18'	1°1/23.3	18		<b>316290</b>	2010 <i>RD</i> <sub>9</sub>		3 22.2 212°59'	1°5/20.7	16	
2 21	12 28.87	- 4 42.8	2.304	3.151	10.9	19.6	2 21	12 29.66	+ 0 56.4	1.939	2.806	11.7	21.4
3 2	12 22.82	- 4 44.4	2.224	3.147	7.8	19.4	3 2	12 23.61	+ 1 49.7	1.862	2.800	8.1	21.2
3 12	12 15.23	- 4 36.7	2.170	3.144	4.4	19.2	3 12	12 15.74	+ 2 51.9	1.812	2.792	4.1	20.9
3 22	12 6.74	- 4 22.0	2.145	3.140	1.2	18.9	3 22	12 6.79	+ 3 56.8	1.790	2.785	1.6	20.7
4 1	11 58.16	- 4 3.7	2.150	3.137	3.5	19.1	4 1	11 57.72	+ 4 57.6	1.798	2.776	5.2	20.9
4 11	11 50.32	- 3 45.9	2.184	3.133	7.0	19.3	4 11	11 49.53	+ 5 47.9	1.833	2.767	9.2	21.1
4 21	11 43.88	- 3 32.3	2.243	3.130	10.3	19.5	4 21	11 43.00	+ 6 23.4	1.893	2.757	12.9	21.3
5 1	11 39.32	- 3 25.8	2.326	3.126	13.0	19.7	5 1	11 38.67	+ 6 41.8	1.973	2.746	15.9	21.5
<b>115016</b>	2003 <i>QQ</i> <sub>87</sub>		3 22.2 80°71'	0°3/22.5	18		<b>306288</b>	2011 <i>SM</i> <sub>28</sub>		3 22.2 243°15'	3°7/25.2	17	
2 21	12 29.67	- 4 32.4	1.480	2.346	14.7	19.8	2 21	12 33.65	-11 49.7	1.849	2.671	14.2	21.3
3 2	12 23.75	- 3 45.1	1.430	2.364	10.3	19.6	3 2	12 26.76	-11 53.8	1.748	2.652	10.9	21.0
3 12	12 15.78	- 2 42.5	1.404	2.382	5.4	19.4	3 12	12 17.57	-11 39.3	1.672	2.631	7.1	20.7
3 22	12 6.75	- 1 31.4	1.404	2.400	0.4	19.0	3 22	12 6.84	-11 7.1	1.623	2.609	4.0	20.5
4 1	11 57.88	- 0 20.4	1.432	2.418	4.9	19.4	4 1	11 55.66	-10 21.0	1.603	2.587	4.9	20.5
4 11	11 50.32	+ 0 42.0	1.485	2.436	9.6	19.7	4 11	11 45.28	- 9 27.4	1.611	2.563	8.8	20.7
4 21	11 44.87	+ 1 29.8	1.563	2.454	13.6	20.0	4 21	11 36.73	- 8 33.8	1.644	2.538	12.9	20.9
5 1	11 41.99	+ 1 59.8	1.660	2.471	17.0	20.3	5 1	11 30.74	- 7 47.1	1.700	2.513	16.6	21.0
<b>329324</b>	2000 <i>UB</i> <sub>73</sub>		3 22.2 210°74'	4°0/26.9	17		<b>289795</b>	2005 <i>JF</i> <sub>122</sub>		3 22.2 230°60'	6°3/12.2	18	
2 21	12 27.20	-16 31.1	2.326	3.124	12.4	20.9	2 21	12 26.13	+21 20.7	2.753	3.621	8.6	21.5
3 2	12 21.74	-16 12.8	2.235	3.118	9.8	20.8	3 2	12 20.82	+22 48.6	2.694	3.609	7.0	21.4
3 12	12 14.70	-15 35.3	2.168	3.111	6.9	20.6	3 12	12 14.17	+24 9.4	2.663	3.596	6.3	21.3
3 22	12 6.74	-14 39.9	2.128	3.104	4.5	20.4	3 22	12 6.76	+25 16.9	2.660	3.583	7.0	21.3
4 1	11 58.64	-13 30.8	2.118	3.097	4.5	20.4	4 1	11 59.28	+26 6.2	2.685	3.570	8.6	21.4
4 11	11 51.25	-12 14.2	2.136	3.089	6.9	20.5	4 11	11 52.43	+26 34.5	2.735	3.556	10.6	21.5
4 21	11 45.25	-10 56.7	2.181	3.080	10.0	20.7	4 21	11 46.80	+26 41.6	2.807	3.541	12.5	21.6
5 1	11 41.15	- 9 44.8	2.250	3.071	12.8	20.9	5 1	11 42.80	+26 28.9	2.897	3.527	14.1	21.7
<b>403016</b>	2007 <i>WY</i> <sub>7</sub>		3 22.2 150°22'	0°4/22.6	18		<b>302000</b>	2000 <i>QD</i> <sub>163</sub>		3 22.2 171°86'	3°1/25.2	18	
2 21	12 31.44	- 4 1.6	2.078	2.927	11.8	22.5	2 21	12 30.75	-11 41.1	1.882	2.709	13.8	21.3
3 2	12 24.62	- 3 29.8	2.013	2.939	8.3	22.3	3 2	12 24.41	-11 22.8	1.806	2.713	10.4	21.1
3 12	12 16.14	- 2 47.0	1.974	2.950	4.4	22.1	3 12	12 16.17	-10 45.6	1.754	2.716	6.6	20.9
3 22	12 6.78	- 1 57.6	1.963	2.959	0.5	21.8	3 22	12 6.82	- 9 52.2	1.730	2.718	3.4	20.7
4 1	11 57.45	- 1 7.0	1.983	2.969	3.9	22.1	4 1	11 57.39	- 8 48.1	1.734	2.720	4.3	20.8
4 11	11 49.06	- 0 20.9	2.032	2.977	7.8	22.4	4 11	11 48.94	- 7 40.8	1.767	2.721	8.0	21.0
4 21	11 42.33	+ 0 16.1	2.107	2.984	11.2	22.6	4 21	11 42.27	- 6 37.3	1.825	2.721	11.7	21.2
5 1	11 37.69	+ 0 41.1	2.204	2.991	14.1	22.8	5 1	11 37.92	- 5 43.8	1.905	2.721	14.9	21.4
<b>435134</b>	2007 <i>FT</i> <sub>35</sub>		3 22.2 293°35'	0°7/21.5	18		<b>96905</b>	1999 <i>TT</i> <sub>95</sub>		3 22.2 172°53'	2°2/19.8	18	
2 21	12 23.75	-10 24.7	0.999	1.876	19.2	20.8	2 21	12 28.19	+ 4 15.7	2.173	3.044	10.4	19.8
3 2	12 20.59	- 7 21.8	0.927	1.867	13.7	20.5	3 2	12 22.37	+ 5 2.0	2.107	3.046	7.2	19.6
3 12	12 14.57	- 3 29.1	0.877	1.858	7.0	20.1	3 12	12 15.01	+ 5 52.4	2.068	3.048	3.8	19.4
3 22	12 6.74	+ 0 56.0	0.853	1.850	0.8	19.6	3 22	12 6.80	+ 6 41.6	2.058	3.049	2.4	19.3
4 1	11 58.66	+ 5 24.6	0.857	1.841	7.9	20.1	4 1	11 58.59	+ 7 24.0	2.077	3.050	5.2	19.4
4 11	11 52.02	+ 9 26.2	0.886	1.833	14.8	20.4	4 11	11 51.20	+ 7 55.2	2.125	3.051	8.6	19.6
4 21	11 48.05	+12 40.5	0.937	1.825	20.8	20.7	4 21	11 45.30	+ 8 12.3	2.197	3.051	11.7	19.8
5 1	11 47.45	+14 59.8	1.004	1.817	25.5	21.0	5 1	11 41.32	+ 8 14.4	2.290	3.051	14.3	20.0
<b>182098</b>	2000 <i>KO</i> <sub>31</sub>		3 22.2 295°78'	4°1/25.8	17		<b>74613</b>	1999 <i>RP</i> <sub>19</sub>					

EPHEMERIDES

3 22.2

3 22.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>287190</b>	2002 <i>SL</i> <sub>4</sub>		3 22.2 185°55'	13°7/30.5	18	R	<b>62784</b>	2000 <i>UW</i> <sub>23</sub>		3 22.3 209°82'	4°3/16.4	18	
2 21	12 39.89	-28 7.8	1.329	2.083	22.1	20.8	2 21	12 26.56	+13 56.2	2.751	3.625	8.4	19.8
3 2	12 32.15	-29 59.0	1.256	2.084	19.4	20.6	3 2	12 21.04	+14 50.6	2.688	3.620	6.2	19.6
3 12	12 20.81	-31 16.6	1.201	2.084	16.6	20.4	3 12	12 14.29	+15 42.0	2.652	3.615	4.5	19.5
3 22	12 6.96	-31 51.8	1.166	2.083	14.4	20.2	3 22	12 6.85	+16 25.4	2.645	3.609	4.6	19.5
4 1	11 52.45	-31 41.4	1.154	2.082	13.7	20.2	4 1	11 59.39	+16 56.6	2.667	3.603	6.5	19.6
4 11	11 39.36	-30 50.9	1.164	2.081	14.9	20.3	4 11	11 52.58	+17 12.9	2.717	3.597	8.8	19.7
4 21	11 29.38	-29 33.1	1.194	2.079	17.4	20.4	4 21	11 46.94	+17 13.2	2.791	3.591	11.0	19.9
5 1	11 23.45	-28 3.3	1.243	2.076	20.3	20.6	5 1	11 42.89	+16 58.0	2.885	3.584	13.0	20.0
<b>403828</b>	2011 <i>UU</i> <sub>185</sub>		3 22.2 171°54'	2°3/20.1	18		<b>83724</b>	2001 <i>TA</i> <sub>101</sub>		3 22.3 80°75'	1°8/20.4	18	
2 21	12 29.29	+ 1 38.1	1.619	2.496	13.1	21.8	2 21	12 28.32	+ 3 52.9	2.199	3.069	10.4	19.6
3 2	12 23.54	+ 2 49.8	1.556	2.498	9.0	21.6	3 2	12 22.44	+ 4 18.2	2.135	3.073	7.1	19.4
3 12	12 15.76	+ 4 11.2	1.518	2.500	4.6	21.3	3 12	12 15.07	+ 4 47.1	2.097	3.077	3.7	19.2
3 22	12 6.83	+ 5 34.0	1.508	2.501	2.5	21.2	3 22	12 6.88	+ 5 15.3	2.088	3.081	1.9	19.1
4 1	11 57.89	+ 6 49.2	1.526	2.502	6.3	21.4	4 1	11 58.70	+ 5 38.1	2.108	3.085	4.8	19.3
4 11	11 50.04	+ 7 49.1	1.570	2.503	10.6	21.6	4 11	11 51.35	+ 5 51.9	2.156	3.089	8.2	19.5
4 21	11 44.14	+ 8 29.1	1.637	2.503	14.5	21.9	4 21	11 45.48	+ 5 54.3	2.230	3.093	11.3	19.7
5 1	11 40.71	+ 8 47.6	1.724	2.503	17.7	22.1	5 1	11 41.50	+ 5 44.2	2.325	3.096	13.9	19.9
<b>58547</b>	1997 <i>FZ</i> <sub>2</sub>		3 22.3 325°73'	0°8/23.0	17		<b>96250</b>	1994 <i>PE</i> <sub>25</sub>		3 22.3 148°92'	0°9/23.2	18	
2 21	12 25.83	- 4 26.2	1.988	2.847	11.8	19.0	2 21	12 28.58	- 5 14.6	2.222	3.069	11.2	20.1
3 2	12 20.97	- 4 11.8	1.904	2.834	8.5	18.7	3 2	12 22.64	- 4 53.2	2.151	3.075	8.0	19.9
3 12	12 14.42	- 3 45.8	1.846	2.822	4.7	18.5	3 12	12 15.18	- 4 20.7	2.107	3.081	4.4	19.7
3 22	12 6.83	- 3 11.7	1.814	2.810	0.9	18.2	3 22	12 6.89	- 3 40.8	2.091	3.087	1.0	19.4
4 1	11 59.08	- 2 34.3	1.811	2.799	3.9	18.4	4 1	11 58.57	- 2 57.9	2.105	3.092	3.5	19.6
4 11	11 52.09	- 1 59.0	1.835	2.788	7.9	18.6	4 11	11 51.07	- 2 17.4	2.148	3.097	7.1	19.8
4 21	11 46.61	- 1 30.7	1.884	2.777	11.6	18.8	4 21	11 45.04	- 1 43.4	2.217	3.102	10.4	20.1
5 1	11 43.18	- 1 13.1	1.955	2.767	14.7	19.0	5 1	11 40.90	- 1 19.4	2.308	3.106	13.2	20.2
<b>32092</b>	Brianxia		3 22.3 244°67'	0°4/21.9	18		<b>203413</b>	2001 <i>XD</i> <sub>191</sub>		3 22.3 106°11'	1°8/23.9	18	
2 21	12 28.41	- 2 4.9	1.933	2.796	11.9	19.4	2 21	12 31.89	- 8 12.9	1.622	2.469	14.7	20.7
3 2	12 22.81	- 1 26.1	1.851	2.785	8.4	19.1	3 2	12 25.23	- 7 40.3	1.569	2.490	10.6	20.5
3 12	12 15.39	- 0 36.2	1.794	2.773	4.3	18.9	3 12	12 16.58	- 6 50.1	1.539	2.510	6.1	20.3
3 22	12 6.86	+ 0 20.1	1.765	2.762	0.4	18.5	3 22	12 6.92	- 5 47.2	1.536	2.530	2.0	20.1
4 1	11 58.17	+ 1 16.4	1.766	2.750	4.5	18.8	4 1	11 57.40	- 4 38.9	1.561	2.549	4.3	20.3
4 11	11 50.30	+ 2 6.1	1.793	2.738	8.7	19.0	4 11	11 49.15	- 3 33.7	1.614	2.568	8.7	20.6
4 21	11 44.05	+ 2 44.4	1.846	2.725	12.5	19.3	4 21	11 42.96	- 2 38.1	1.692	2.586	12.6	20.9
5 1	11 39.98	+ 3 8.0	1.920	2.712	15.7	19.4	5 1	11 39.27	- 1 56.7	1.791	2.603	15.9	21.1
<b>494819</b>	2007 <i>TP</i> <sub>39</sub>		3 22.3 192°61'	1°2/21.1	17		<b>458250</b>	2010 <i>TB</i> <sub>96</sub>		3 22.3 277°15'	1°1/21.3	17	
2 21	12 31.05	+ 0 25.3	2.035	2.897	11.5	22.5	2 21	12 30.11	- 0 5.2	1.588	2.461	13.5	21.8
3 2	12 24.51	+ 1 10.1	1.960	2.895	7.9	22.2	3 2	12 24.41	+ 0 31.0	1.503	2.442	9.5	21.5
3 12	12 16.20	+ 2 3.3	1.913	2.892	4.0	22.0	3 12	12 16.41	+ 1 18.6	1.441	2.422	4.9	21.2
3 22	12 6.88	+ 2 59.3	1.894	2.889	1.2	21.8	3 22	12 6.92	+ 2 11.8	1.407	2.402	1.2	20.9
4 1	11 57.48	+ 3 52.1	1.905	2.885	4.8	22.0	4 1	11 57.10	+ 3 3.1	1.400	2.383	5.6	21.2
4 11	11 48.97	+ 4 35.8	1.944	2.880	8.7	22.2	4 11	11 48.23	+ 3 44.9	1.419	2.362	10.6	21.4
4 21	11 42.09	+ 5 6.6	2.009	2.874	12.2	22.4	4 21	11 41.33	+ 4 11.7	1.461	2.342	15.0	21.6
5 1	11 37.36	+ 5 22.2	2.095	2.867	15.2	22.6	5 1	11 37.10	+ 4 20.5	1.522	2.322	18.8	21.8
<b>8994</b>	Kashkashian		3 22.3 190°75'	2°4/25.1	18		<b>54028</b>	2000 <i>GW</i> <sub>104</sub>		3 22.3 22°68'	2°7/20.1	18	
2 21	12 28.36	-10 42.4	2.615	3.434	10.6	18.4	2 21	12 28.19	+ 3 24.1	1.380	2.268	14.1	18.7
3 2	12 22.39	-10 32.5	2.530	3.433	8.0	18.3	3 2	12 22.97	+ 4 14.0	1.326	2.272	9.7	18.4
3 12	12 15.02	-10 9.6	2.470	3.430	5.0	18.1	3 12	12 15.55	+ 5 11.0	1.295	2.277	5.1	18.2
3 22	12 6.85	- 9 35.7	2.440	3.428	2.6	17.9	3 22	12 6.90	+ 6 7.1	1.290	2.283	2.9	18.0
4 1	11 58.59	- 8 54.2	2.440	3.424	3.4	17.9	4 1	11 58.29	+ 6 53.7	1.311	2.289	6.8	18.3
4 11	11 50.98	- 8 9.7	2.469	3.421	6.2	18.1	4 11	11 50.97	+ 7 24.0	1.356	2.295	11.4	18.6
4 21	11 44.62	- 7 26.8	2.526	3.416	9.1	18.3	4 21	11 45.82	+ 7 34.6	1.423	2.302	15.5	18.8
5 1	11 39.95	- 6 49.5	2.607	3.411	11.7	18.5	5 1	11 43.36	+ 7 25.0	1.509	2.309	18.9	19.1
<b>124672</b>	2001 <i>SX</i> <sub>106</sub>		3 22.3 153°00'	1°0/23.3	18		<b>396959</b>	2005 <i>QW</i> <sub>24</sub>		3 22.3 175°06'	1°6/20.7	18	
2 21	12 30.31	- 5 37.8	2.236	3.078	11.3	20.3	2 21	12 30.98	+ 0 0.5	1.695	2.564	13.0	22.0
3 2	12 23.82	- 5 19.3	2.166	3.087	8.1	20.1	3 2	12 24.68	+ 1 8.8	1.629	2.567	9.0	21.7
3 12	12 15.77	- 4 49.7	2.122	3.095	4.5	19.9	3 12	12 16.37	+ 2 28.1	1.589	2.570	4.5	21.5
3 22	12 6.87	- 4 12.3	2.107	3.102	1.2	19.6	3 22	12 6.92	+ 3 50.9	1.577	2.572	1.7	21.3
4 1	11 57.97	- 3 31.6	2.122	3.109	3.5	19.8	4 1	11 57.44	+ 5 8.4	1.593	2.572	5.7	21.5
4 11	11 49.92	- 2 52.5	2.167	3.115	7.1	20.1	4 11	11 49.05	+ 6 12.7	1.637	2.572	10.1	21.8
4 21	11 43.37	- 2 19.6	2.238	3.121	10.4	20.3	4 21	11 42.58	+ 6 59.1	1.705	2.572	14.0	22.0
5 1	11 38.77	- 1 56.1	2.332	3.126	13.2	20.5	5 1	11 38.56	+ 7 25.2	1.793	2.570	17.2	22.2
<b>102090</b>	1999 <i>RP</i> <sub>153</sub>		3 22.3 139°70'	0°6/22.9	18		<b>197023</b>	2003 <i>UZ</i> <sub>114</sub>		3 22.3 105°95'	0°6/21.6	17	
2 21	12 29.13	- 6 27.1	2.091	2.936	11.9	20.8	2 21	12 27.55	- 0 45.0	2.059	2.924	11.2	20.6
3 2	12 23.02	- 5 27.1	2.028	2.951	8.5	20.6	3 2	12 21.98	- 0 9.9	1.995	2.930	7.8	20.4
3 12	12 15.35	- 4 13.2	1.990	2.965	4.6	20.4	3 12	12 14.86	+ 0 33.5	1.957	2.937	4.0	20.2
3 22	12 6.87	- 2 50.9	1.982	2.978	0.8	20.1	3 22	12 6.88	+ 1 20.4	1.948	2.944	0.7	19.9
4 1	11 58.44	- 1 26.9	2.005	2.991	3.8	20.3	4 1	11 58.92	+ 2 5.3	1.967	2.950	4.3	20.2
4 11	11 50.93	- 0 8.5	2.056	3.003	7.6	20.6	4 11	11 51.83	+ 2 42.9	2.014	2.956	8.0	20.4
4 21	11 45.00	+ 0 58.8	2.134	3.014	11.0	20.8	4 21	11 46.26	+ 3 9.6	2.087	2.963	11.4	20.7
5 1	11 41.06	+ 1 51.1	2.235	3.024	13.8	21.0	5 1	11 42.67	+ 3 23.1	2.181	2.969	14.2	20.9
<b>229233</b>	2004 <i>XV</i> <sub>64</sub>		3 22.3 132°31'	3°7/26.3	17		<b>269449</b>	2009 <i>SC</i> <sub>253</sub>		3 22.3 186°46'	0°0/22.3		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>52295</b>	<b>Köppen</b>		3 22.3 117°68	2°0/20.2	18		<b>426745</b>	<b>2013 TD<sub>84</sub></b>		3 22.3 142°27	0°8/23.1	17	
2 21	12 29.18	+ 1 58.6	1.887	2.758	11.8	19.4	2 21	12 28.66	- 4 48.2	2.044	2.896	11.8	21.7
3 2	12 23.15	+ 3 2.9	1.834	2.774	8.0	19.2	3 2	12 22.83	- 4 26.6	1.975	2.901	8.4	21.5
3 12	12 15.46	+ 4 14.0	1.808	2.789	4.1	19.0	3 12	12 15.35	- 3 53.4	1.930	2.905	4.6	21.2
3 22	12 6.91	+ 5 24.9	1.811	2.804	2.1	18.9	3 22	12 6.96	- 3 12.5	1.914	2.910	0.9	21.0
4 1	11 58.46	+ 6 28.6	1.842	2.818	5.4	19.1	4 1	11 58.53	- 2 28.9	1.927	2.914	3.8	21.2
4 11	11 51.05	+ 7 19.0	1.901	2.832	9.2	19.4	4 11	11 50.98	- 1 48.2	1.968	2.917	7.6	21.4
4 21	11 45.34	+ 7 52.9	1.985	2.845	12.5	19.6	4 21	11 45.00	- 1 14.9	2.034	2.921	11.1	21.7
5 1	11 41.77	+ 8 9.0	2.089	2.858	15.3	19.8	5 1	11 41.06	- 0 52.6	2.123	2.924	14.1	21.9
<b>18174</b>	<b>Khachatryan</b>		3 22.3 142°41	1°4/23.4	18		<b>8969</b>	<b>Alexandrinus</b>		3 22.3 96°00	0°3/22.0	18	
2 21	12 32.51	- 5 56.1	1.650	2.502	14.2	18.7	2 21	12 29.60	- 2 38.9	1.546	2.415	14.0	17.8
3 2	12 25.80	- 5 43.2	1.584	2.509	10.2	18.5	3 2	12 23.81	- 1 55.9	1.488	2.424	9.8	17.5
3 12	12 16.97	- 5 15.6	1.542	2.516	5.8	18.2	3 12	12 15.95	- 0 59.6	1.453	2.433	5.1	17.3
3 22	12 6.95	- 4 37.1	1.528	2.522	1.6	17.9	3 22	12 6.97	+ 0 3.4	1.445	2.441	0.3	16.9
4 1	11 56.92	- 3 53.6	1.541	2.529	4.4	18.1	4 1	11 58.02	+ 1 5.2	1.464	2.450	5.0	17.3
4 11	11 48.04	- 3 12.1	1.582	2.534	8.9	18.4	4 11	11 50.27	+ 1 58.0	1.510	2.458	9.7	17.6
4 21	11 41.20	- 2 38.3	1.647	2.539	13.0	18.7	4 21	11 44.54	+ 2 36.5	1.579	2.466	13.7	17.8
5 1	11 36.93	- 2 16.4	1.733	2.544	16.4	18.9	5 1	11 41.35	+ 2 57.7	1.668	2.474	17.1	18.1
<b>431537</b>	<b>2007 TF<sub>381</sub></b>		3 22.3 159°56	3°2/18.4	17		<b>105556</b>	<b>2000 RU<sub>53</sub></b>		3 22.3 205°18	3°5/23.6	18	R
2 21	12 28.49	+ 9 32.3	2.577	3.448	9.0	21.4	2 21	12 46.19	- 4 56.6	1.179	2.032	18.6	19.8
3 2	12 22.39	+ 10 13.5	2.517	3.453	6.3	21.3	3 2	12 36.47	- 6 8.6	1.106	2.029	13.8	19.4
3 12	12 14.99	+ 10 54.0	2.485	3.458	3.9	21.1	3 12	12 23.03	- 7 9.0	1.056	2.027	8.3	19.1
3 22	12 6.91	+ 11 29.3	2.482	3.463	3.5	21.1	3 22	12 7.18	- 7 56.3	1.031	2.023	3.6	18.8
4 1	11 58.86	+ 11 55.0	2.510	3.467	5.6	21.2	4 1	11 50.90	- 8 31.0	1.034	2.020	6.6	19.0
4 11	11 51.55	+ 12 8.3	2.565	3.471	8.2	21.4	4 11	11 36.34	- 8 57.1	1.063	2.015	12.3	19.3
4 21	11 45.54	+ 12 7.9	2.646	3.474	10.8	21.6	4 21	11 25.09	- 9 19.8	1.116	2.011	17.5	19.6
5 1	11 41.22	+ 11 53.8	2.748	3.477	12.9	21.8	5 1	11 17.99	- 9 45.0	1.186	2.006	21.9	19.8
<b>32768</b>	<b>Alexandripatov</b>		3 22.3 224°14	2°0/24.2	18		<b>364615</b>	<b>2007 RL<sub>325</sub></b>		3 22.3 280°27	0°1/22.2	17	
2 21	12 30.55	- 9 2.0	1.972	2.808	12.9	19.6	2 21	12 28.82	- 3 16.4	1.516	2.385	14.2	21.1
3 2	12 24.37	- 8 31.4	1.881	2.796	9.5	19.3	3 2	12 23.56	- 2 37.7	1.434	2.370	10.1	20.8
3 12	12 16.26	- 7 43.5	1.815	2.783	5.7	19.1	3 12	12 16.00	- 1 43.4	1.376	2.355	5.3	20.5
3 22	12 6.95	- 6 41.7	1.776	2.769	2.2	18.8	3 22	12 6.99	- 0 39.0	1.344	2.341	0.1	20.0
4 1	11 57.41	- 5 31.6	1.767	2.754	4.0	18.9	4 1	11 57.69	+ 0 27.3	1.339	2.326	5.2	20.4
4 11	11 48.68	- 4 20.6	1.787	2.739	8.1	19.1	4 11	11 49.39	+ 1 26.7	1.360	2.311	10.3	20.6
4 21	11 41.59	- 3 15.8	1.833	2.722	12.0	19.3	4 21	11 43.12	+ 2 12.3	1.404	2.295	14.8	20.9
5 1	11 36.76	- 2 22.6	1.901	2.705	15.4	19.5	5 1	11 39.54	+ 2 39.6	1.467	2.281	18.7	21.1
<b>372493</b>	<b>2009 SO<sub>243</sub></b>		3 22.3 215°25	6°1/28.9	17		<b>265766</b>	<b>2005 WS<sub>20</sub></b>		3 22.3 96°84	0°1/22.2	17	
2 21	12 29.39	- 21 45.7	2.258	3.025	13.7	21.9	2 21	12 29.41	- 2 15.7	1.825	2.688	12.5	21.4
3 2	12 23.46	- 21 55.7	2.164	3.017	11.3	21.7	3 2	12 23.44	- 1 48.2	1.764	2.697	8.8	21.2
3 12	12 15.75	- 21 43.6	2.093	3.009	8.8	21.5	3 12	12 15.69	- 1 10.3	1.728	2.707	4.5	20.9
3 22	12 6.94	- 21 9.2	2.047	3.001	6.7	21.3	3 22	12 6.98	- 0 26.9	1.720	2.716	0.1	20.6
4 1	11 57.92	- 20 14.8	2.029	2.991	6.3	21.3	4 1	11 58.30	+ 0 16.1	1.740	2.725	4.4	21.0
4 11	11 49.64	- 19 6.0	2.039	2.982	7.9	21.4	4 11	11 50.64	+ 0 52.9	1.787	2.734	8.5	21.2
4 21	11 42.88	- 17 49.9	2.075	2.971	10.5	21.5	4 21	11 44.74	+ 1 19.1	1.860	2.743	12.2	21.5
5 1	11 38.21	- 16 34.0	2.135	2.960	13.2	21.7	5 1	11 41.07	+ 1 32.2	1.953	2.752	15.2	21.7
<b>504542</b>	<b>2008 SD<sub>117</sub></b>		3 22.3 218°96	1°1/21.1	17		<b>296258</b>	<b>2009 DW<sub>32</sub></b>		3 22.3 1°30	1°2/20.9	17	
2 21	12 29.86	+ 1 39.7	2.319	3.180	10.3	21.7	2 21	12 25.08	+ 0 28.9	2.084	2.955	10.8	20.6
3 2	12 23.57	+ 2 4.4	2.238	3.173	7.1	21.5	3 2	12 20.32	+ 1 16.8	2.016	2.955	7.5	20.4
3 12	12 15.71	+ 2 34.5	2.185	3.164	3.6	21.2	3 12	12 14.05	+ 2 12.6	1.974	2.955	3.8	20.2
3 22	12 6.94	+ 3 6.3	2.161	3.156	1.2	21.0	3 22	12 6.94	+ 3 10.9	1.960	2.955	1.3	20.0
4 1	11 58.08	+ 3 35.1	2.167	3.147	4.3	21.3	4 1	11 59.79	+ 4 5.8	1.975	2.955	4.6	20.2
4 11	11 49.94	+ 3 56.7	2.202	3.138	7.8	21.5	4 11	11 53.43	+ 4 51.6	2.017	2.955	8.2	20.5
4 21	11 43.22	+ 4 8.3	2.263	3.128	11.1	21.6	4 21	11 48.51	+ 5 24.6	2.084	2.956	11.5	20.7
5 1	11 38.39	+ 4 8.1	2.346	3.117	13.8	21.8	5 1	11 45.47	+ 5 42.5	2.172	2.957	14.3	20.8
<b>387378</b>	<b>2012 XP<sub>149</sub></b>		3 22.3 159°23	2°7/25.6	17		<b>442605</b>	<b>2012 HY<sub>33</sub></b>		3 22.3 235°99	7°0/14.9	15	
2 21	12 25.61	- 12 13.9	2.522	3.340	11.0	21.3	2 21	12 38.19	+ 17 46.0	2.076	2.938	11.3	23.7
3 2	12 20.51	- 11 54.9	2.443	3.343	8.3	21.1	3 2	12 29.79	+ 19 15.4	1.994	2.915	8.8	23.5
3 12	12 14.08	- 11 21.2	2.389	3.346	5.4	21.0	3 12	12 19.16	+ 20 39.9	1.941	2.890	7.1	23.4
3 22	12 6.90	- 10 35.2	2.363	3.349	3.0	20.8	3 22	12 7.10	+ 21 50.1	1.916	2.863	7.6	23.3
4 1	11 59.68	- 9 40.8	2.367	3.351	3.5	20.8	4 1	11 54.72	+ 22 38.3	1.921	2.834	10.0	23.4
4 11	11 53.12	- 8 43.3	2.399	3.353	6.2	21.0	4 11	11 43.23	+ 22 59.8	1.953	2.803	13.0	23.6
4 21	11 47.81	- 7 47.6	2.459	3.355	9.1	21.2	4 21	11 33.58	+ 22 54.6	2.007	2.771	15.9	23.7
5 1	11 44.15	- 6 58.3	2.543	3.357	11.6	21.4	5 1	11 26.45	+ 22 25.1	2.080	2.736	18.4	23.8
<b>159325</b>	<b>2006 CN<sub>14</sub></b>		3 22.3 260°34	2°3/19.7	17		<b>165342</b>	<b>2000 VA<sub>31</sub></b>		3 22.3 104°71	0°2/22.5	18	
2 21	12 26.64	+ 3 0.3	2.085	2.959	10.7	20.5	2 21	12 31.47	- 3 46.1	1.625	2.486	13.9	20.4
3 2	12 21.52	+ 4 7.0	2.001	2.942	7.4	20.3	3 2	12 24.97	- 3 8.8	1.572	2.503	9.8	20.2
3 12	12 14.73	+ 5 21.4	1.944	2.924	3.9	20.0	3 12	12 16.51	- 2 18.5	1.543	2.520	5.1	20.0
3 22	12 6.93	+ 6 37.1	1.915	2.907	2.5	19.9	3 22	12 7.02	- 1 20.8	1.541	2.537	0.3	19.6
4 1	11 58.94	+ 7 47.1	1.916	2.889	5.6	20.1	4 1	11 57.66	- 0 23.0	1.567	2.554	4.6	20.0
4 11	11 51.67	+ 8 44.8	1.944	2.870	9.3	20.3	4 11	11 49.53	+ 0 27.6	1.621	2.569	9.1	20.3
4 21	11 45.86	+ 9 26.2	1.997	2.851	12.7	20.4	4 21	11 43.42	+ 1 5.9	1.699	2.585	13.0	20.6
5 1	11 42.03	+ 9 49.2	2.070	2.832	15.6	20.6	5 1	11 39.78	+ 1 28.7	1.797	2.600	16.2	20.8
<b>336765</b>	<b>2011 AA<sub>57</sub></b>		3 22.3 274°00	4°7/17.1	18		<b>523546</b>						

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>4783</b>	Wasson		3 22.3	48°30'	11°1'/11.8	18	<b>346201</b>	2007 XF <sub>31</sub>		3 22.3	160°26'	3°1'/26.1	17
2 21	12 28.92	+22 46.0	1.329	2.218	14.5	16.7	2 21	12 26.49	-13 17.9	2.603	3.414	10.9	21.4
3 2	12 23.45	+24 53.6	1.314	2.237	12.0	16.6	3 2	12 21.13	-13 11.0	2.523	3.417	8.4	21.3
3 12	12 15.75	+26 41.3	1.322	2.258	11.1	16.6	3 12	12 14.45	-12 49.7	2.468	3.420	5.6	21.1
3 22	12 7.00	+27 57.3	1.353	2.279	12.1	16.7	3 22	12 7.02	-12 15.7	2.441	3.423	3.4	20.9
4 1	11 58.60	+28 35.0	1.407	2.300	14.3	16.9	4 1	11 59.52	-11 32.3	2.444	3.426	3.7	21.0
4 11	11 51.79	+28 33.9	1.481	2.322	16.9	17.1	4 11	11 52.68	-10 44.2	2.475	3.428	6.1	21.1
4 21	11 47.36	+27 58.8	1.572	2.343	19.3	17.3	4 21	11 47.07	-9 56.1	2.534	3.430	8.8	21.3
5 1	11 45.65	+26 55.9	1.678	2.366	21.3	17.5	5 1	11 43.10	-9 12.6	2.616	3.432	11.3	21.5
<b>258950</b>	2002 RU <sub>219</sub>		3 22.3	216°22'	1°4'/20.8	16	<b>14940</b>	Freiligrath		3 22.3	45°45'	2°5'/19.9	18
2 21	12 30.02	+ 1 6.1	2.024	2.890	11.4	22.5	2 21	12 27.49	+ 2 47.2	1.620	2.502	12.8	17.4
3 2	12 23.88	+ 1 52.5	1.946	2.882	7.9	22.3	3 2	12 22.33	+ 3 51.6	1.561	2.505	8.8	17.2
3 12	12 15.98	+ 2 47.0	1.893	2.873	4.0	22.0	3 12	12 15.22	+ 5 3.7	1.527	2.508	4.6	16.9
3 22	12 7.02	+ 3 44.0	1.870	2.864	1.5	21.8	3 22	12 7.04	+ 6 15.8	1.519	2.511	2.7	16.8
4 1	11 57.92	+ 4 37.3	1.875	2.854	5.0	22.1	4 1	11 58.85	+ 7 19.4	1.539	2.514	6.3	17.0
4 11	11 49.67	+ 5 21.1	1.909	2.844	8.9	22.3	4 11	11 51.74	+ 8 7.5	1.584	2.518	10.5	17.3
4 21	11 43.00	+ 5 51.2	1.968	2.833	12.5	22.5	4 21	11 46.51	+ 8 36.5	1.653	2.521	14.2	17.5
5 1	11 38.47	+ 6 5.6	2.048	2.821	15.5	22.7	5 1	11 43.64	+ 8 45.0	1.741	2.525	17.4	17.7
<b>257180</b>	2008 JF <sub>31</sub>		3 22.3	75°82'	8°3'/15.5	18	<b>407875</b>	2012 BD <sub>92</sub>		3 22.3	74°57'	1°9'/20.7	18
2 21	12 34.13	+20 14.3	1.631	2.507	13.0	19.7	2 21	12 30.02	+ 1 10.7	1.491	2.369	13.9	21.1
3 2	12 26.77	+21 14.6	1.598	2.523	10.2	19.6	3 2	12 24.08	+ 2 4.4	1.444	2.386	9.5	20.9
3 12	12 17.38	+22 1.9	1.590	2.539	8.5	19.5	3 12	12 16.10	+ 3 6.8	1.421	2.402	4.8	20.7
3 22	12 7.06	+22 28.1	1.608	2.554	8.8	19.6	3 22	12 7.07	+ 4 10.2	1.424	2.419	2.0	20.5
4 1	11 57.05	+22 28.0	1.651	2.570	10.9	19.7	4 1	11 58.21	+ 5 6.3	1.455	2.435	5.9	20.8
4 11	11 48.51	+22 1.2	1.718	2.586	13.7	19.9	4 11	11 50.64	+ 5 48.4	1.511	2.451	10.4	21.1
4 21	11 42.19	+21 10.4	1.806	2.601	16.3	20.1	4 21	11 45.17	+ 6 12.6	1.591	2.468	14.2	21.4
5 1	11 38.48	+20 0.0	1.911	2.617	18.5	20.3	5 1	11 42.23	+ 6 17.9	1.689	2.484	17.4	21.6
<b>248022</b>	2004 FQ <sub>65</sub>		3 22.3	301°23'	0°4'/22.7	17	<b>163532</b>	2002 TR <sub>44</sub>		3 22.3	104°41'	1°0'/23.5	18
2 21	12 24.17	- 5 26.4	2.056	2.913	11.6	20.4	2 21	12 24.98	- 7 9.3	2.147	2.995	11.5	19.7
3 2	12 19.91	- 4 32.1	1.957	2.887	8.3	20.1	3 2	12 20.25	- 6 20.6	2.075	2.999	8.3	19.5
3 12	12 13.98	- 3 22.4	1.884	2.861	4.5	19.9	3 12	12 14.04	- 5 17.6	2.029	3.002	4.6	19.3
3 22	12 6.98	- 2 1.8	1.838	2.835	0.5	19.5	3 22	12 7.02	- 4 5.1	2.010	3.006	1.2	19.1
4 1	11 59.73	+ 0 36.9	1.822	2.809	4.0	19.7	4 1	11 59.97	- 2 49.1	2.021	3.009	3.5	19.3
4 11	11 53.12	+ 0 44.4	1.834	2.783	8.1	19.9	4 11	11 53.69	- 1 36.3	2.061	3.013	7.2	19.5
4 21	11 47.91	+ 1 55.7	1.871	2.757	12.0	20.1	4 21	11 48.81	- 0 32.4	2.126	3.016	10.6	19.7
5 1	11 44.67	+ 2 51.9	1.929	2.732	15.2	20.3	5 1	11 45.78	+ 0 18.4	2.214	3.019	13.5	19.9
<b>330853</b>	2009 PR <sub>15</sub>		3 22.3	357°20'	0°7'/21.5	18	<b>380540</b>	2004 KQ <sub>10</sub>		3 22.3	73°33'	21°4'/6.9	17
2 21	12 23.97	- 4 32.9	1.550	2.422	13.8	19.7	2 21	12 46.45	+43 47.3	1.059	1.882	22.4	20.1
3 2	12 19.97	- 2 54.5	1.482	2.421	9.6	19.4	3 2	12 36.51	+45 34.7	1.055	1.894	21.5	20.0
3 12	12 14.04	- 0 57.0	1.439	2.420	4.9	19.1	3 12	12 22.65	+46 30.9	1.066	1.905	21.5	20.1
3 22	12 6.99	+ 1 10.5	1.423	2.419	0.8	18.8	3 22	12 7.26	+46 24.8	1.093	1.916	22.4	20.2
4 1	11 59.88	+ 3 16.2	1.435	2.419	5.4	19.1	4 1	11 53.07	+45 15.4	1.136	1.928	23.7	20.3
4 11	11 53.78	+ 5 8.8	1.474	2.419	10.1	19.4	4 11	11 42.22	+43 11.9	1.192	1.940	25.4	20.5
4 21	11 49.51	+ 6 40.0	1.536	2.419	14.3	19.7	4 21	11 35.60	+40 28.5	1.261	1.951	26.9	20.7
5 1	11 47.59	+ 7 45.6	1.618	2.420	17.7	19.9	5 1	11 33.26	+37 18.5	1.341	1.963	28.3	20.9
<b>162476</b>	2000 NC <sub>21</sub>		3 22.3	283°79'	3°4'/19.3	18	<b>35838</b>	1999 JN <sub>58</sub>		3 22.3	245°05'	4°3'/18.6	18
2 21	12 28.17	+ 3 19.5	1.421	2.308	13.9	19.4	2 21	12 31.63	+ 8 6.2	1.635	2.516	12.7	18.8
3 2	12 23.25	+ 4 40.4	1.343	2.289	9.7	19.1	3 2	12 25.36	+ 9 4.0	1.564	2.506	8.9	18.6
3 12	12 15.93	+ 6 13.1	1.289	2.270	5.2	18.8	3 12	12 16.89	+10 4.2	1.519	2.496	5.4	18.3
3 22	12 7.05	+ 7 47.8	1.260	2.251	3.7	18.6	3 22	12 7.11	+10 58.9	1.501	2.485	4.6	18.3
4 1	11 57.86	+ 9 13.2	1.258	2.231	7.8	18.8	4 1	11 57.17	+11 39.9	1.510	2.473	7.8	18.4
4 11	11 49.70	+10 19.5	1.281	2.212	12.7	19.0	4 11	11 48.31	+12 1.8	1.544	2.462	11.9	18.6
4 21	11 43.66	+11 0.7	1.325	2.193	17.1	19.2	4 21	11 41.46	+12 2.1	1.601	2.450	15.6	18.8
5 1	11 40.43	+11 15.1	1.387	2.173	20.9	19.4	5 1	11 37.21	+11 41.3	1.677	2.438	18.8	19.0
<b>356388</b>	2010 PX <sub>22</sub>		3 22.3	244°78'	3°2'/26.6	18	<b>247370</b>	2001 XJ <sub>65</sub>		3 22.3	118°40'	5°2'/27.1	18
2 21	12 24.23	-14 39.5	2.804	3.608	10.4	21.0	2 21	12 32.43	-16 44.0	1.715	2.522	15.8	20.6
3 2	12 19.54	-14 27.4	2.714	3.602	8.1	20.8	3 2	12 25.73	-16 41.7	1.652	2.540	12.4	20.5
3 12	12 13.62	-14 0.6	2.649	3.596	5.6	20.6	3 12	12 16.99	-16 15.2	1.612	2.557	8.7	20.3
3 22	12 6.99	-13 20.9	2.612	3.590	3.5	20.5	3 22	12 7.12	-15 26.3	1.597	2.573	5.7	20.1
4 1	12 0.26	-12 31.4	2.604	3.584	3.6	20.5	4 1	11 57.30	-14 20.3	1.610	2.588	5.6	20.2
4 11	11 54.09	-11 36.4	2.625	3.578	5.8	20.6	4 11	11 48.68	-13 5.5	1.650	2.603	8.5	20.3
4 21	11 49.01	-10 40.8	2.674	3.572	8.4	20.8	4 21	11 42.08	-11 50.8	1.715	2.618	12.0	20.6
5 1	11 45.42	- 9 49.2	2.746	3.566	10.8	20.9	5 1	11 38.03	-10 43.7	1.802	2.631	15.1	20.8
<b>68373</b>	2001 PP <sub>13</sub>		3 22.3	157°10'	2°2'/20.1	18	<b>346043</b>	2007 TO <sub>440</sub>		3 22.3	290°69'	3°9'/26.8	18
2 21	12 30.81	+ 1 47.4	1.708	2.580	12.7	19.9	2 21	12 25.31	-15 20.5	2.152	2.964	12.8	20.5
3 2	12 24.55	+ 2 59.6	1.648	2.588	8.8	19.6	3 2	12 20.61	-15 4.4	2.066	2.958	10.0	20.3
3 12	12 16.34	+ 4 20.4	1.614	2.594	4.5	19.4	3 12	12 14.30	-14 28.7	2.003	2.952	6.9	20.1
3 22	12 7.07	+ 5 41.9	1.607	2.600	2.4	19.3	3 22	12 7.05	-13 35.3	1.967	2.947	4.4	19.9
4 1	11 57.81	+ 6 55.6	1.630	2.605	6.0	19.5	4 1	11 59.66	-12 28.6	1.959	2.941	4.4	19.9
4 11	11 49.66	+ 7 54.3	1.680	2.610	10.2	19.8	4 11	11 53.02	-11 15.1	1.979	2.936	7.1	20.0
4 21	11 43.42	+ 8 33.8	1.753	2.614	13.9	20.0	4 21	11 47.81	-10 1.6	2.025	2.930	10.3	20.2
5 1	11 39.58	+ 8 52.8	1.846	2.617	17.0	20.2	5 1	11 44.53	- 8 54.6	2.095	2.925	13.3	20.4
<b>458943</b>	2011 UR <sub>337</sub>		3 22.3	126°42'	2°3'/20.2	18	<b>500457</b>	2012 TZ <sub>066</sub>		3 22.3	89°84'	2°4'/19.7	17
2 21	12 32.31	+ 2 55.5	1.733	2.6									

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>274560</b>	2008 <i>SN</i> <sub>273</sub>		3 22.3 221°72	2°9/18.9	17		<b>491240</b>	2011 <i>UU</i> <sub>204</sub>		3 22.3 201°32	0°8/21.4	17	
2 21	12 28.61	+ 7 18.6	2.492	3.362	9.3	21.6	2 21	12 30.17	- 2 3.4	2.068	2.925	11.5	22.4
3 2	12 22.67	+ 8 5.6	2.415	3.352	6.5	21.4	3 2	12 24.00	- 0 54.9	1.988	2.920	8.0	22.2
3 12	12 15.29	+ 8 54.4	2.365	3.342	3.8	21.2	3 12	12 16.08	+ 0 25.4	1.935	2.914	4.1	21.9
3 22	12 7.09	+ 9 40.1	2.345	3.331	3.1	21.2	3 22	12 7.13	+ 1 51.6	1.911	2.907	0.9	21.7
4 1	11 58.79	+10 17.7	2.355	3.319	5.4	21.3	4 1	11 58.07	+ 3 16.2	1.917	2.898	4.6	21.9
4 11	11 51.17	+10 43.3	2.394	3.307	8.4	21.5	4 11	11 49.82	+ 4 32.0	1.953	2.889	8.6	22.1
4 21	11 44.85	+10 54.9	2.458	3.294	11.2	21.6	4 21	11 43.14	+ 5 33.4	2.014	2.879	12.2	22.3
5 1	11 40.27	+10 51.6	2.543	3.281	13.6	21.8	5 1	11 38.55	+ 6 17.5	2.097	2.868	15.2	22.5
<b>128955</b>	2004 <i>TE</i> <sub>134</sub>		3 22.3 237°85	1°2/21.2	18		<b>154320</b>	2002 <i>VO</i> <sub>28</sub>		3 22.3 147°34	1°0/23.2	18	
2 21	12 29.57	- 1 6.7	1.701	2.570	13.0	20.0	2 21	12 31.13	- 6 35.0	1.556	2.411	14.7	20.5
3 2	12 23.91	- 0 4.6	1.620	2.558	9.1	19.7	3 2	12 24.97	- 5 49.4	1.491	2.419	10.6	20.3
3 12	12 16.16	+ 1 10.9	1.564	2.545	4.6	19.4	3 12	12 16.66	- 4 45.8	1.451	2.426	5.8	20.0
3 22	12 7.12	+ 2 32.7	1.536	2.531	1.3	19.1	3 22	12 7.15	- 3 30.0	1.437	2.433	1.2	19.7
4 1	11 57.86	+ 3 52.5	1.536	2.518	5.5	19.4	4 1	11 57.63	- 2 10.6	1.451	2.439	4.6	19.9
4 11	11 49.52	+ 5 1.6	1.563	2.503	10.1	19.6	4 11	11 49.31	- 0 56.6	1.493	2.445	9.4	20.2
4 21	11 43.03	+ 5 54.0	1.614	2.488	14.2	19.8	4 21	11 43.06	+ 0 4.6	1.558	2.450	13.6	20.5
5 1	11 38.99	+ 6 26.3	1.685	2.473	17.7	20.0	5 1	11 39.42	+ 0 48.5	1.644	2.454	17.1	20.7
<b>508922</b>	2004 <i>EH</i> <sub>116</sub>		3 22.3 42°12	0°5/22.9	17		<b>262325</b>	2006 <i>TN</i> <sub>29</sub>		3 22.3 177°73	2°6/19.9	16	
2 21	12 23.52	- 4 19.2	2.762	3.612	9.2	21.6	2 21	12 31.15	+ 4 41.1	1.836	2.710	11.9	21.2
3 2	12 18.96	- 3 55.4	2.695	3.621	6.5	21.4	3 2	12 24.75	+ 5 23.3	1.771	2.711	8.2	21.0
3 12	12 13.29	- 3 23.4	2.654	3.629	3.5	21.3	3 12	12 16.47	+ 6 9.8	1.732	2.712	4.4	20.7
3 22	12 7.03	- 2 46.1	2.642	3.638	0.6	21.0	3 22	12 7.15	+ 6 54.4	1.721	2.712	2.8	20.6
4 1	12 0.77	- 2 7.4	2.660	3.647	2.9	21.2	4 1	11 57.80	+ 7 30.9	1.739	2.713	6.0	20.8
4 11	11 55.11	- 1 31.2	2.707	3.656	5.9	21.4	4 11	11 49.47	+ 7 54.3	1.784	2.712	9.8	21.1
4 21	11 50.53	- 1 0.7	2.781	3.665	8.6	21.6	4 21	11 42.93	+ 8 1.9	1.852	2.712	13.4	21.3
5 1	11 47.38	- 0 38.5	2.878	3.675	10.9	21.8	5 1	11 38.71	+ 7 53.0	1.941	2.711	16.3	21.5
<b>166611</b>	2002 <i>RT</i> <sub>239</sub>		3 22.3 185°89	0°6/21.6	17		<b>87420</b>	2000 <i>QN</i> <sub>95</sub>		3 22.3 145°96	1°4/23.5	18	
2 21	12 26.51	- 1 14.3	2.338	3.198	10.2	21.5	2 21	12 32.52	- 5 19.2	1.997	2.842	12.4	19.3
3 2	12 21.23	- 0 29.6	2.265	3.198	7.1	21.3	3 2	12 25.62	- 5 25.2	1.925	2.847	8.9	19.1
3 12	12 14.55	+ 0 23.5	2.219	3.198	3.6	21.1	3 12	12 16.90	- 5 20.1	1.879	2.851	5.1	18.9
3 22	12 7.07	+ 1 20.5	2.201	3.197	0.6	20.9	3 22	12 7.16	- 5 6.4	1.861	2.856	1.6	18.6
4 1	11 59.55	+ 2 16.0	2.213	3.196	3.9	21.1	4 1	11 57.37	- 4 48.0	1.873	2.860	3.9	18.8
4 11	11 52.74	+ 3 4.9	2.254	3.195	7.4	21.3	4 11	11 48.52	- 4 29.5	1.914	2.864	7.8	19.0
4 21	11 47.26	+ 3 43.2	2.321	3.193	10.5	21.5	4 21	11 41.38	- 4 15.2	1.980	2.868	11.3	19.3
5 1	11 43.52	+ 4 8.6	2.410	3.191	13.2	21.7	5 1	11 36.47	- 4 8.5	2.068	2.871	14.3	19.5
<b>19389</b>	1998 <i>DD</i> <sub>14</sub>		3 22.3 225°76	1°0/23.7	18 R		<b>428033</b>	2006 <i>DF</i> <sub>12</sub>		3 22.3 342°65	4°2/17.5	18	
2 21	12 24.42	- 7 24.0	2.911	3.747	9.2	19.1	2 21	12 24.93	+ 6 38.1	1.765	2.653	11.6	20.4
3 2	12 19.63	- 6 41.4	2.820	3.736	6.6	18.9	3 2	12 20.49	+ 8 20.7	1.705	2.651	8.0	20.1
3 12	12 13.68	- 5 47.7	2.755	3.726	3.8	18.7	3 12	12 14.28	+10 8.1	1.672	2.649	4.9	19.9
3 22	12 7.05	- 4 45.9	2.720	3.714	1.1	18.5	3 22	12 7.08	+11 50.9	1.666	2.648	4.7	19.9
4 1	12 0.33	- 3 40.2	2.716	3.703	2.8	18.6	4 1	11 59.83	+13 19.7	1.688	2.646	7.7	20.1
4 11	11 54.12	- 2 35.6	2.741	3.691	5.8	18.8	4 11	11 53.51	+14 27.4	1.736	2.645	11.3	20.3
4 21	11 48.93	- 1 36.3	2.795	3.678	8.6	18.9	4 21	11 48.85	+15 10.7	1.806	2.644	14.6	20.5
5 1	11 45.17	- 0 45.8	2.873	3.665	11.0	19.1	5 1	11 46.35	+15 29.3	1.894	2.643	17.3	20.7
<b>348610</b>	2005 <i>XG</i> <sub>116</sub>		3 22.3 116°71	2°0/23.9	18		<b>463133</b>	2011 <i>WG</i> <sub>50</sub>		3 22.3 8°83	7°0/27.7	18	
2 21	12 33.07	- 7 35.9	1.501	2.352	15.4	21.2	2 21	12 29.00	-17 32.3	1.343	2.167	18.4	20.1
3 2	12 26.35	- 7 21.7	1.441	2.365	11.2	21.0	3 2	12 23.95	-18 0.1	1.274	2.168	14.8	19.8
3 12	12 17.38	- 6 49.7	1.405	2.377	6.5	20.7	3 12	12 16.33	-17 59.2	1.224	2.169	10.9	19.6
3 22	12 7.16	- 6 3.9	1.394	2.388	2.3	20.5	3 22	12 7.15	-17 29.1	1.197	2.170	7.7	19.4
4 1	11 57.00	- 5 11.2	1.412	2.400	4.7	20.7	4 1	11 57.76	-16 34.2	1.195	2.172	7.4	19.4
4 11	11 48.14	- 4 19.7	1.455	2.410	9.3	20.9	4 11	11 49.64	-15 23.5	1.217	2.175	10.3	19.6
4 21	11 41.50	- 3 36.2	1.523	2.421	13.5	21.2	4 21	11 43.88	-14 8.2	1.261	2.178	14.2	19.8
5 1	11 37.60	- 3 5.6	1.611	2.431	17.0	21.5	5 1	11 41.14	-12 58.5	1.325	2.182	17.9	20.0
<b>209699</b>	2005 <i>ED</i> <sub>45</sub>		3 22.3 23°29	0°9/21.5	18		<b>139794</b>	2001 <i>RJ</i> <sub>8</sub>		3 22.3 237°12	2°2/24.6	18	
2 21	12 27.87	- 1 47.7	1.382	2.260	14.7	19.8	2 21	12 28.33	- 8 46.4	2.355	3.187	11.2	20.6
3 2	12 22.88	- 0 53.8	1.321	2.262	10.3	19.5	3 2	12 22.59	- 8 45.3	2.269	3.180	8.3	20.4
3 12	12 15.64	+ 0 14.6	1.283	2.265	5.2	19.3	3 12	12 15.31	- 8 31.8	2.208	3.173	5.1	20.2
3 22	12 7.11	+ 1 29.7	1.271	2.267	0.9	18.9	3 22	12 7.12	- 8 7.8	2.176	3.166	2.4	20.0
4 1	11 58.55	+ 2 41.9	1.286	2.270	5.7	19.3	4 1	11 58.78	- 7 36.8	2.173	3.159	3.5	20.0
4 11	11 51.23	+ 3 42.1	1.325	2.274	10.7	19.6	4 11	11 51.13	- 7 3.4	2.199	3.152	6.8	20.2
4 21	11 46.05	+ 4 24.2	1.387	2.277	15.1	19.8	4 21	11 44.83	- 6 32.0	2.251	3.144	10.0	20.4
5 1	11 43.57	+ 4 45.5	1.468	2.281	18.7	20.1	5 1	11 40.37	- 6 6.7	2.327	3.136	12.8	20.6
<b>291799</b>	2006 <i>KL</i> <sub>69</sub>		3 22.3 308°68	1°2/23.4	16		<b>52007</b>	2002 <i>EQ</i> <sub>47</sub>		3 22.3 124°40	1°0/24.2	18	
2 21	12 26.66	- 7 11.1	1.379	2.245	15.6	20.4	2 21	12 23.38	- 7 2.4	4.063	4.890	7.0	20.4
3 2	12 22.19	- 6 23.1	1.304	2.236	11.3	20.1	3 2	12 18.58	- 6 54.0	3.991	4.903	5.0	20.3
3 12	12 15.38	- 5 12.8	1.251	2.227	6.4	19.8	3 12	12 13.02	- 6 39.1	3.947	4.914	3.0	20.1
3 22	12 7.11	- 3 46.3	1.222	2.218	1.4	19.5	3 22	12 7.05	- 6 19.2	3.934	4.926	1.2	20.0
4 1	11 58.62	- 2 13.1	1.220	2.209	5.0	19.7	4 1	12 1.08	- 5 56.6	3.951	4.938	2.1	20.1
4 11	11 51.25	- 0 44.5	1.244	2.201	10.3	19.9	4 11	11 55.52	- 5 33.5	3.999	4.949	4.1	20.3
4 21	11 46.00	+ 0 30.1	1.290	2.193	15.0	20.2	4 21	11 50.71	- 5 12.3	4.076	4.960	6.1	20.4
5 1	11 43.53	+ 1 24.4	1.355	2.186	19.1	20.4	5 1	11 46.92	- 4 55.0	4.178	4.971	7.8	20.5
<b>208602</b>	2002 <i>CB</i> <sub>208</sub>		3 22.3 101°60	0°3/22.6	18		<b>113851</b>	2002 <i>TL</i> <sub>242</sub>		3 22.3 119			

EPHEMERIDES

3 22.3

3 22.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>282635</b>	2005 <i>SK</i> <sub>276</sub>		3 22.3 16°82'	4.6/18.6	18		<b>231796</b>	2000 <i>DU</i> <sub>63</sub>		3 22.3 314°29'	1.0/23.0	16	
2 21	12 28.94	+ 8 25.1	1.414	2.305	13.6	20.0	2 21	12 26.83	- 5 33.1	1.165	2.044	16.9	20.0
3 2	12 23.54	+ 9 17.4	1.362	2.308	9.5	19.8	3 2	12 22.79	- 5 2.0	1.084	2.023	12.3	19.6
3 12	12 15.93	+10 10.7	1.335	2.312	5.7	19.6	3 12	12 15.94	- 4 8.3	1.023	2.002	6.8	19.3
3 22	12 7.14	+10 56.2	1.332	2.317	4.9	19.6	3 22	12 7.19	- 2 57.2	0.986	1.982	1.2	18.8
4 1	11 58.40	+11 26.2	1.356	2.322	8.2	19.8	4 1	11 57.96	- 1 38.3	0.973	1.963	5.8	19.1
4 11	11 50.97	+11 35.7	1.403	2.328	12.2	20.0	4 11	11 49.88	- 0 23.7	0.983	1.944	11.9	19.3
4 21	11 45.69	+11 23.5	1.472	2.335	16.0	20.2	4 21	11 44.25	+ 0 36.0	1.014	1.926	17.4	19.6
5 1	11 43.08	+10 50.6	1.559	2.342	19.1	20.5	5 1	11 41.92	+ 1 14.1	1.062	1.909	22.1	19.8
<b>153169</b>	2000 <i>TK</i> <sub>36</sub>		3 22.3 226°81'	1.7/20.3	18		<b>424993</b>	2009 <i>CH</i> <sub>30</sub>		3 22.3 45°31'	3.5/18.2	17	
2 21	12 27.61	+ 4 1.6	2.477	3.345	9.5	20.0	2 21	12 25.19	+ 7 2.4	2.062	2.944	10.4	20.9
3 2	12 21.95	+ 4 30.0	2.403	3.340	6.5	19.8	3 2	12 20.45	+ 8 16.0	2.005	2.947	7.2	20.7
3 12	12 14.92	+ 5 1.9	2.356	3.336	3.4	19.6	3 12	12 14.20	+ 9 32.0	1.974	2.951	4.3	20.5
3 22	12 7.11	+ 5 33.1	2.339	3.331	1.8	19.5	3 22	12 7.13	+10 43.7	1.972	2.955	3.8	20.5
4 1	11 59.25	+ 5 59.5	2.351	3.326	4.5	19.7	4 1	12 0.07	+11 44.2	1.998	2.960	6.4	20.7
4 11	11 52.08	+ 6 17.5	2.392	3.321	7.6	19.8	4 11	11 53.84	+12 28.6	2.051	2.964	9.6	20.9
4 21	11 46.19	+ 6 24.6	2.458	3.316	10.5	20.0	4 21	11 49.08	+12 54.4	2.127	2.968	12.6	21.0
5 1	11 42.00	+ 6 19.7	2.547	3.311	13.0	20.2	5 1	11 46.20	+13 1.2	2.224	2.973	15.1	21.2
<b>377882</b>	2006 <i>DL</i> <sub>36</sub>		3 22.3 23°87'	0.9/23.0	17		<b>11776</b>	Milstein		3 22.3 184°62'	0.2/22.5	18	R
2 21	12 30.42	- 3 35.7	1.680	2.541	13.5	20.3	2 21	12 25.53	- 3 21.8	2.899	3.747	8.8	19.5
3 2	12 24.38	- 3 38.6	1.614	2.545	9.6	20.1	3 2	12 20.37	- 2 49.7	2.821	3.747	6.2	19.3
3 12	12 16.34	- 3 30.2	1.573	2.549	5.3	19.9	3 12	12 14.07	- 2 9.8	2.770	3.746	3.3	19.1
3 22	12 7.16	- 3 13.9	1.558	2.554	1.0	19.6	3 22	12 7.13	- 1 25.3	2.749	3.746	0.2	18.8
4 1	11 57.94	- 2 54.4	1.571	2.559	4.3	19.8	4 1	12 0.15	- 0 39.9	2.759	3.744	3.0	19.1
4 11	11 49.80	- 2 37.1	1.611	2.564	8.7	20.1	4 11	11 53.74	+ 0 2.2	2.799	3.743	5.9	19.3
4 21	11 43.56	- 2 26.4	1.675	2.570	12.7	20.3	4 21	11 48.38	+ 0 37.8	2.865	3.741	8.6	19.4
5 1	11 39.78	- 2 25.8	1.760	2.576	16.0	20.5	5 1	11 44.45	+ 1 4.3	2.956	3.739	10.9	19.6
<b>237647</b>	2001 <i>SK</i> <sub>145</sub>		3 22.3 153°26'	0.7/23.0	18		<b>500362</b>	2012 <i>TP</i> <sub>33</sub>		3 22.3 132°14'	0.1/22.2	17	
2 21	12 30.58	- 6 16.8	1.793	2.643	13.3	21.2	2 21	12 26.11	- 2 38.3	2.688	3.540	9.3	22.6
3 2	12 24.37	- 5 22.2	1.727	2.652	9.5	20.9	3 2	12 20.78	- 1 57.2	2.624	3.553	6.5	22.4
3 12	12 16.28	- 4 11.7	1.686	2.661	5.2	20.7	3 12	12 14.27	- 1 8.3	2.588	3.565	3.4	22.3
3 22	12 7.16	- 2 51.0	1.673	2.669	0.8	20.4	3 22	12 7.14	- 0 15.6	2.581	3.577	0.1	22.0
4 1	11 58.04	- 1 27.9	1.689	2.675	4.2	20.7	4 1	12 0.04	+ 0 36.7	2.604	3.588	3.2	22.3
4 11	11 49.97	- 0 10.7	1.733	2.682	8.6	20.9	4 11	11 53.60	+ 1 24.0	2.657	3.600	6.3	22.5
4 21	11 43.73	+ 0 54.3	1.802	2.687	12.4	21.2	4 21	11 48.33	+ 2 3.0	2.737	3.610	9.1	22.7
5 1	11 39.80	+ 1 42.7	1.893	2.692	15.7	21.4	5 1	11 44.60	+ 2 31.2	2.841	3.620	11.4	22.9
<b>231474</b>	2007 <i>UX</i> <sub>82</sub>		3 22.3 311°19'	1.2/23.3	17		<b>296950</b>	Robertbauer		3 22.3 183°41'	2.5/18.2	18	
2 21	12 27.60	- 5 58.7	1.337	2.207	15.7	20.6	2 21	12 24.24	+ 5 4.8	2.865	3.736	8.2	21.2
3 2	12 23.00	- 5 31.9	1.258	2.192	11.4	20.3	3 2	12 19.49	+ 6 40.4	2.797	3.736	5.6	21.0
3 12	12 15.89	- 4 45.3	1.200	2.177	6.4	20.0	3 12	12 13.62	+ 8 20.2	2.759	3.736	3.2	20.9
3 22	12 7.16	- 3 43.6	1.166	2.162	1.4	19.6	3 22	12 7.12	+ 9 58.1	2.751	3.735	2.8	20.9
4 1	11 58.10	- 2 34.9	1.159	2.148	5.2	19.8	4 1	12 0.58	+11 28.3	2.776	3.734	5.0	21.0
4 11	11 50.12	- 1 29.4	1.176	2.134	10.6	20.1	4 11	11 54.59	+12 46.0	2.829	3.733	7.6	21.2
4 21	11 44.36	- 0 35.7	1.215	2.121	15.6	20.3	4 21	11 49.65	+13 47.9	2.909	3.731	10.1	21.3
5 1	11 41.54	+ 0 0.1	1.272	2.108	19.8	20.5	5 1	11 46.12	+14 32.8	3.011	3.729	12.1	21.5
<b>51305</b>	2000 <i>KL</i> <sub>58</sub>		3 22.3 143°48'	2.5/19.1	18		<b>123807</b>	2001 <i>BH</i> <sub>64</sub>		3 22.3 338°23'	3.7/18.5	18	
2 21	12 25.55	+ 4 36.5	2.322	3.196	9.7	19.1	2 21	12 22.68	+ 3 36.4	1.476	2.370	13.0	18.7
3 2	12 20.55	+ 5 47.2	2.261	3.202	6.7	18.9	3 2	12 19.25	+ 5 16.5	1.408	2.357	9.0	18.4
3 12	12 14.19	+ 7 2.1	2.228	3.207	3.6	18.7	3 12	12 13.80	+ 7 7.4	1.364	2.346	4.9	18.1
3 22	12 7.10	+ 8 15.1	2.224	3.212	2.7	18.7	3 22	12 7.13	+ 8 58.6	1.347	2.335	4.1	18.1
4 1	12 0.02	+ 9 20.2	2.249	3.217	5.3	18.8	4 1	12 0.31	+10 38.5	1.356	2.325	7.8	18.2
4 11	11 53.67	+10 12.4	2.302	3.221	8.4	19.0	4 11	11 54.48	+11 57.4	1.389	2.317	12.2	18.5
4 21	11 48.64	+10 48.9	2.380	3.225	11.3	19.2	4 21	11 50.51	+12 49.8	1.444	2.309	16.1	18.7
5 1	11 45.33	+11 8.4	2.480	3.229	13.7	19.4	5 1	11 48.98	+13 14.2	1.517	2.301	19.5	18.9
<b>469137</b>	2015 <i>FF</i> <sub>76</sub>		3 22.3 113°80'	3.1/18.8	17		<b>167016</b>	2003 <i>QZ</i> <sub>22</sub>		3 22.3 199°81'	1.6/23.8	17	
2 21	12 28.00	+ 8 26.6	2.410	3.283	9.5	21.2	2 21	12 30.50	- 7 37.5	1.910	2.753	13.0	20.7
3 2	12 22.17	+ 9 5.3	2.353	3.292	6.6	21.0	3 2	12 24.38	- 7 10.1	1.830	2.750	9.5	20.4
3 12	12 15.01	+ 9 43.9	2.324	3.299	3.9	20.9	3 12	12 16.36	- 6 27.0	1.775	2.746	5.5	20.2
3 22	12 7.14	+10 17.9	2.324	3.307	3.3	20.9	3 22	12 7.22	- 5 31.9	1.747	2.741	1.8	19.9
4 1	11 59.32	+10 42.7	2.353	3.315	5.5	21.0	4 1	11 57.94	- 4 30.7	1.749	2.736	4.0	20.1
4 11	11 52.29	+10 55.3	2.409	3.323	8.4	21.2	4 11	11 49.55	- 3 30.3	1.778	2.731	8.1	20.3
4 21	11 46.62	+10 54.3	2.491	3.330	11.0	21.4	4 21	11 42.87	- 2 37.0	1.834	2.724	12.0	20.5
5 1	11 42.69	+10 39.6	2.594	3.337	13.3	21.6	5 1	11 38.45	- 1 55.7	1.911	2.717	15.2	20.7
<b>419859</b>	2011 <i>AU</i> <sub>14</sub>		3 22.3 76°76'	6.8/27.9	17		<b>25868</b>	2000 <i>JT</i> <sub>6</sub>		3 22.3 244°87'	4.1/17.8	18	
2 21	12 32.26	-18 45.2	1.772	2.567	15.8	21.1	2 21	12 27.08	+ 6 55.6	1.872	2.754	11.3	18.3
3 2	12 25.81	-19 29.6	1.699	2.572	12.9	20.9	3 2	12 22.01	+ 8 29.0	1.801	2.744	7.9	18.0
3 12	12 17.17	-19 51.3	1.648	2.578	9.7	20.7	3 12	12 15.13	+10 7.4	1.757	2.734	4.8	17.8
3 22	12 7.22	-19 49.2	1.621	2.583	7.3	20.5	3 22	12 7.18	+11 42.2	1.741	2.723	4.5	17.8
4 1	11 57.09	-19 25.2	1.621	2.588	7.0	20.5	4 1	11 59.10	+13 4.5	1.754	2.712	7.4	17.9
4 11	11 48.00	-18 45.2	1.647	2.593	9.2	20.7	4 11	11 51.87	+14 7.5	1.793	2.701	11.0	18.1
4 21	11 40.89	-17 57.0	1.698	2.599	12.2	20.9	4 21	11 46.28	+14 47.7	1.854	2.689	14.4	18.3
5 1	11 36.36	-17 8.4	1.771	2.604	15.2	21.1	5 1	11 42.86	+15 4.4	1.935	2.677	17.2	18.5
<b>379988</b>	2012 <i>TP</i> <sub>308</sub>		3 22.3 69°18'	4.9/27.8	17		<b>206856</b>	2004 <i>FO</i> <sub>44</sub>		3 22.3 327°44'	3.1/19.4	17	

EPHEMERIDES

3 22.3

3 22.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>230677</b>	2003 <i>SO</i> <sub>297</sub>		3 22.3 138°47'	6°1'/30.0	18		<b>300031</b>	2006 <i>UC</i> <sub>107</sub>		3 22.3 201°14'	0°7'/21.4	18	
2 21	12 29.50	-23 50.3	2.596	3.340	12.7	20.7	2 21	12 25.64	-0 18.1	2.792	3.650	8.8	22.1
3 2	12 23.33	-24 5.3	2.519	3.352	10.6	20.6	3 2	12 20.52	+0 23.1	2.714	3.646	6.1	22.0
3 12	12 15.69	-24 0.0	2.464	3.364	8.4	20.5	3 12	12 14.20	+1 10.7	2.663	3.642	3.1	21.7
3 22	12 7.21	-23 34.5	2.436	3.376	6.6	20.4	3 22	12 7.21	+2 1.1	2.642	3.638	0.7	21.5
4 1	11 58.68	-22 50.8	2.435	3.386	6.1	20.4	4 1	12 0.16	+2 49.9	2.652	3.633	3.5	21.8
4 11	11 50.89	-21 53.8	2.463	3.397	7.2	20.4	4 11	11 53.69	+3 32.9	2.691	3.628	6.5	21.9
4 21	11 44.49	-20 49.4	2.517	3.406	9.2	20.6	4 21	11 48.31	+4 6.9	2.757	3.622	9.3	22.1
5 1	11 39.93	-19 43.8	2.596	3.416	11.3	20.7	5 1	11 44.41	+4 29.9	2.846	3.617	11.6	22.3
<b>343126</b>	2009 <i>EQ</i> <sub>19</sub>		3 22.3 31°49'	0°3'/22.1	17		<b>344287</b>	2001 <i>TD</i> <sub>226</sub>		3 22.3 155°41'	4°7'/16.2	17	
2 21	12 25.86	-2 21.8	1.882	2.749	12.0	20.7	2 21	12 29.24	+16 27.0	2.849	3.716	8.4	21.4
3 2	12 21.02	-1 43.0	1.820	2.755	8.4	20.5	3 2	12 22.91	+17 13.5	2.798	3.724	6.3	21.3
3 12	12 14.55	-0 53.5	1.783	2.762	4.3	20.2	3 12	12 15.39	+17 54.9	2.775	3.731	4.8	21.2
3 22	12 7.18	+0 1.4	1.773	2.769	0.3	19.9	3 22	12 7.25	+18 26.4	2.782	3.738	5.0	21.2
4 1	11 59.81	+0 55.5	1.791	2.776	4.3	20.3	4 1	11 59.18	+18 44.6	2.818	3.744	6.6	21.3
4 11	11 53.35	+1 42.6	1.836	2.784	8.3	20.5	4 11	11 51.83	+18 47.5	2.881	3.750	8.7	21.5
4 21	11 48.48	+2 18.2	1.906	2.792	11.8	20.7	4 21	11 45.72	+18 34.9	2.969	3.755	10.8	21.6
5 1	11 45.65	+2 39.4	1.997	2.800	14.8	21.0	5 1	11 41.20	+18 8.0	3.077	3.760	12.5	21.8
<b>463700</b>	2014 <i>PP</i> <sub>30</sub>		3 22.3 135°39'	1°4'/21.0	18		<b>461955</b>	2006 <i>TV</i> <sub>87</sub>		3 22.3 222°81'	0°8'/21.6	17	
2 21	12 30.95	+0 28.5	1.852	2.718	12.2	22.6	2 21	12 30.91	-0 20.9	2.031	2.892	11.5	21.9
3 2	12 24.54	+1 19.4	1.795	2.731	8.4	22.4	3 2	12 24.62	+0 13.3	1.949	2.882	8.1	21.6
3 12	12 16.36	+2 18.7	1.763	2.743	4.3	22.2	3 12	12 16.51	+0 56.2	1.892	2.872	4.2	21.4
3 22	12 7.24	+3 20.0	1.759	2.754	1.4	22.0	3 22	12 7.30	+1 43.3	1.865	2.861	0.8	21.1
4 1	11 58.18	+4 16.5	1.785	2.765	5.0	22.3	4 1	11 57.93	+2 28.8	1.867	2.849	4.6	21.3
4 11	11 50.18	+5 2.2	1.838	2.775	9.0	22.5	4 11	11 49.37	+3 6.9	1.897	2.837	8.6	21.5
4 21	11 43.95	+5 33.2	1.916	2.784	12.6	22.8	4 21	11 42.41	+3 33.7	1.952	2.824	12.2	21.7
5 1	11 39.96	+5 47.9	2.015	2.793	15.5	23.0	5 1	11 37.60	+3 46.5	2.029	2.810	15.3	21.9
<b>262004</b>	2006 <i>QZ</i> <sub>60</sub>		3 22.3 260°30'	0°1'/22.4	17		<b>280162</b>	2002 <i>QZ</i> <sub>57</sub>		3 22.3 248°92'	3°3'/24.8	17	
2 21	12 30.61	-3 14.6	1.786	2.645	12.9	21.7	2 21	12 31.92	-10 14.0	1.450	2.295	16.2	21.4
3 2	12 24.70	-2 43.7	1.694	2.626	9.2	21.5	3 2	12 26.00	-10 7.0	1.367	2.284	12.2	21.1
3 12	12 16.67	-1 59.6	1.628	2.605	4.9	21.2	3 12	12 17.51	-9 38.1	1.306	2.272	7.6	20.8
3 22	12 7.27	-1 6.6	1.588	2.584	0.2	20.7	3 22	12 7.34	-8 49.6	1.269	2.260	3.6	20.5
4 1	11 57.53	-0 11.3	1.577	2.563	4.6	21.0	4 1	11 56.81	-7 47.6	1.260	2.247	5.2	20.6
4 11	11 48.61	+0 39.3	1.593	2.541	9.3	21.3	4 11	11 47.36	-6 41.2	1.276	2.235	10.0	20.8
4 21	11 41.46	+1 19.1	1.634	2.519	13.5	21.5	4 21	11 40.14	-5 39.6	1.316	2.221	14.7	21.1
5 1	11 36.74	+1 44.0	1.696	2.496	17.1	21.6	5 1	11 35.89	-4 50.5	1.376	2.207	18.8	21.3
<b>96860</b>	1999 <i>SG</i> <sub>2</sub>		3 22.3 12°52'	6°3'/17.9	18		<b>383624</b>	2007 <i>PH</i> <sub>21</sub>		3 22.3 227°73'	8°6'/26.2	18	
2 21	12 32.01	+12 3.5	1.303	2.195	14.5	17.5	2 21	12 42.09	-15 54.8	1.259	2.076	19.8	20.3
3 2	12 25.88	+12 52.5	1.253	2.196	10.5	17.3	3 2	12 33.77	-17 30.6	1.181	2.071	16.0	20.0
3 12	12 17.26	+13 37.5	1.225	2.198	7.0	17.1	3 12	12 21.88	-18 44.0	1.125	2.066	12.0	19.8
3 22	12 7.28	+14 9.1	1.223	2.201	6.6	17.1	3 22	12 7.50	-19 29.2	1.092	2.060	9.0	19.6
4 1	11 57.39	+14 19.8	1.245	2.204	9.7	17.2	4 1	11 52.44	-19 44.3	1.084	2.054	9.3	19.6
4 11	11 48.98	+14 5.8	1.291	2.208	13.7	17.5	4 11	11 38.76	-19 34.4	1.102	2.047	12.7	19.7
4 21	11 43.03	+13 27.7	1.357	2.212	17.5	17.7	4 21	11 28.10	-19 9.1	1.141	2.040	16.9	19.9
5 1	11 40.05	+12 28.6	1.440	2.217	20.7	17.9	5 1	11 21.42	-18 39.6	1.199	2.033	20.9	20.2
<b>388799</b>	2008 <i>BT</i> <sub>4</sub>		3 22.3 101°63'	1°8'/24.3	16		<b>441659</b>	2008 <i>WV</i> <sub>05</sub>		3 22.4 56°56'	17°2'/9.5	18	
2 21	12 27.78	-7 55.9	2.382	3.218	11.0	21.6	2 21	12 28.80	-39 47.2	1.105	1.818	28.0	20.4
3 2	12 22.13	-7 50.8	2.311	3.225	8.0	21.4	3 2	12 24.71	-40 44.5	1.044	1.825	25.5	20.2
3 12	12 15.07	-7 34.0	2.265	3.233	4.8	21.2	3 12	12 17.12	-40 46.7	0.994	1.833	22.7	20.0
3 22	12 7.22	-7 7.9	2.248	3.240	2.0	21.0	3 22	12 7.33	-39 45.3	0.958	1.841	20.0	19.8
4 1	11 59.35	-6 36.3	2.260	3.247	3.3	21.2	4 1	11 57.34	-37 38.8	0.938	1.850	17.9	19.7
4 11	11 52.22	-6 3.6	2.302	3.255	6.5	21.4	4 11	11 49.27	-34 38.2	0.938	1.858	17.3	19.7
4 21	11 46.43	-5 34.0	2.369	3.262	9.5	21.6	4 21	11 44.54	-31 4.3	0.957	1.867	18.4	19.8
5 1	11 42.41	-5 11.1	2.460	3.269	12.2	21.8	5 1	11 43.81	-27 21.2	0.997	1.876	20.7	20.0
<b>213184</b>	2000 <i>SQ</i> <sub>222</sub>		3 22.3 149°85'	2°7'/19.4	18		<b>13370</b>	Júliusbreza		3 22.4 263°61'	3°3'/19.8	18	
2 21	12 30.52	+4 0.0	2.041	2.911	11.1	21.2	2 21	12 32.89	+4 54.4	1.495	2.375	13.8	17.9
3 2	12 24.13	+5 15.8	1.985	2.923	7.6	21.0	3 2	12 26.62	+5 45.4	1.414	2.356	9.7	17.6
3 12	12 16.12	+6 36.7	1.955	2.934	4.1	20.8	3 12	12 17.81	+6 43.5	1.357	2.336	5.3	17.3
3 22	12 7.26	+7 55.5	1.955	2.945	2.9	20.7	3 22	12 7.36	+7 40.8	1.326	2.316	3.6	17.2
4 1	11 58.45	+9 5.1	1.985	2.954	5.8	20.9	4 1	11 56.56	+8 28.3	1.322	2.296	7.4	17.3
4 11	11 50.59	+9 59.8	2.044	2.963	9.3	21.1	4 11	11 46.80	+8 58.7	1.344	2.274	12.2	17.6
4 21	11 44.35	+10 36.7	2.126	2.970	12.5	21.3	4 21	11 39.21	+9 8.0	1.388	2.253	16.6	17.8
5 1	11 40.19	+10 54.8	2.230	2.977	15.1	21.5	5 1	11 34.51	+8 55.4	1.450	2.231	20.4	18.0
<b>214492</b>	2005 <i>UA</i> <sub>208</sub>		3 22.3 253°67'	0°3'/21.9	17		<b>473161</b>	2015 <i>KE</i> <sub>29</sub>		3 22.4 75°56'	4°0'/27.1	17	
2 21	12 25.51	-1 49.3	2.620	3.476	9.4	21.2	2 21	12 25.66	-15 53.6	2.252	3.058	12.5	20.5
3 2	12 20.54	-1 13.7	2.532	3.463	6.6	21.0	3 2	12 20.78	-15 39.5	2.177	3.064	9.8	20.4
3 12	12 14.26	-0 30.0	2.471	3.449	3.4	20.8	3 12	12 14.43	-15 6.6	2.125	3.071	6.8	20.2
3 22	12 7.20	+0 18.1	2.439	3.436	0.3	20.5	3 22	12 7.24	-14 17.2	2.100	3.077	4.4	20.0
4 1	12 0.02	+1 6.2	2.438	3.421	3.5	20.7	4 1	12 0.01	-13 15.2	2.103	3.083	4.4	20.0
4 11	11 53.41	+1 49.8	2.465	3.407	6.7	20.9	4 11	11 53.55	-12 6.8	2.135	3.090	6.8	20.2
4 21	11 47.94	+2 25.2	2.519	3.393	9.7	21.1	4 21	11 48.47	-10 58.4	2.192	3.096	9.7	20.4
5 1	11 44.05	+2 49.7	2.595	3.378	12.3	21.3	5 1	11 45.24	-9 55.8	2.274	3.103	12.4	20.6
<b>148788</b>	2001 <i>UP</i> <sub>42</sub>		3 22.3 32°28'	1°2'/23.5	18		<b>435267</b>	2007 <i>TH</i> <sub>228</sub>		3 22.4 159°72'	2°9'/26.1	17	
2 21	12 25.53	-7 32.6	1.424										

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>135159</b>	2001 <i>QG</i> <sub>235</sub>		3 22.4 167°93		0°1/22.4 18		<b>305338</b>	2008 <i>AB</i> <sub>111</sub>		3 22.4 281°54		6°0/28.7 17	
2 21	12 32.62	- 3 19.4	1.836	2.691	12.9	20.2	2 21	12 28.27	-20 37.5	2.378	3.150	13.0	20.7
3 2	12 25.85	- 2 43.8	1.767	2.696	9.1	20.0	3 2	12 22.76	-21 6.7	2.283	3.139	10.7	20.6
3 12	12 17.15	- 1 56.2	1.724	2.701	4.8	19.7	3 12	12 15.58	-21 16.9	2.211	3.128	8.3	20.4
3 22	12 7.36	- 1 1.5	1.708	2.705	0.2	19.4	3 22	12 7.33	-21 7.6	2.164	3.117	6.4	20.2
4 1	11 57.53	- 0 6.1	1.722	2.708	4.4	19.7	4 1	11 58.85	-20 40.2	2.145	3.106	6.1	20.2
4 11	11 48.74	+ 0 43.1	1.764	2.710	8.7	20.0	4 11	11 51.00	-19 58.9	2.154	3.095	7.6	20.3
4 21	11 41.77	+ 1 21.3	1.832	2.711	12.5	20.2	4 21	11 44.53	-19 9.4	2.189	3.084	10.1	20.4
5 1	11 37.17	+ 1 45.2	1.920	2.712	15.7	20.4	5 1	11 40.00	-18 18.0	2.246	3.074	12.6	20.5
<b>114868</b>	2003 <i>QW</i> <sub>5</sub>		3 22.4 178°45		2°9/24.8 18		<b>445065</b>	2008 <i>SO</i> <sub>232</sub>		3 22.4 72°24		1°5/24.7 17	
2 21	12 33.68	- 9 52.7	1.907	2.735	13.6	19.8	2 21	12 22.61	- 9 14.4	3.062	3.891	9.0	20.8
3 2	12 26.65	- 9 59.5	1.829	2.737	10.2	19.6	3 2	12 18.34	- 8 46.2	2.989	3.899	6.6	20.6
3 12	12 17.61	- 9 50.4	1.776	2.739	6.4	19.3	3 12	12 13.06	- 8 7.5	2.942	3.907	4.0	20.5
3 22	12 7.38	- 9 27.4	1.750	2.739	3.2	19.1	3 22	12 7.24	- 7 20.8	2.924	3.915	1.7	20.3
4 1	11 57.03	- 8 54.4	1.754	2.739	4.4	19.2	4 1	12 1.41	- 6 29.7	2.936	3.923	2.6	20.4
4 11	11 47.63	- 8 17.2	1.786	2.739	8.1	19.4	4 11	11 56.11	- 5 38.3	2.978	3.931	5.2	20.6
4 21	11 40.05	- 7 41.7	1.844	2.738	11.7	19.6	4 21	11 51.77	- 4 50.2	3.047	3.939	7.6	20.7
5 1	11 34.85	- 7 13.0	1.924	2.736	14.9	19.8	5 1	11 48.73	- 4 8.8	3.140	3.947	9.8	20.9
<b>338784</b>	2003 <i>UL</i> <sub>298</sub>		3 22.4 271°87		2°6/25.2 17		<b>502799</b>	2015 <i>DE</i> <sub>107</sub>		3 22.4 232°21		2°2/20.4 17	
2 21	12 26.14	-11 42.0	2.088	2.917	12.5	21.5	2 21	12 30.66	+ 4 31.7	1.977	2.849	11.3	20.9
3 2	12 21.36	-11 7.1	1.991	2.899	9.5	21.2	3 2	12 24.42	+ 4 58.7	1.907	2.845	7.8	20.6
3 12	12 14.87	-10 13.2	1.918	2.880	6.0	21.0	3 12	12 16.40	+ 5 29.5	1.862	2.842	4.2	20.4
3 22	12 7.30	- 9 3.1	1.872	2.861	2.9	20.7	3 22	12 7.37	+ 5 59.0	1.846	2.838	2.3	20.3
4 1	11 59.49	- 7 42.2	1.854	2.842	3.9	20.8	4 1	11 58.27	+ 6 22.0	1.858	2.834	5.4	20.4
4 11	11 52.36	- 6 17.9	1.866	2.822	7.5	20.9	4 11	11 50.08	+ 6 34.1	1.898	2.830	9.1	20.7
4 21	11 46.68	- 4 57.6	1.903	2.802	11.1	21.1	4 21	11 43.55	+ 6 33.1	1.963	2.826	12.6	20.9
5 1	11 43.01	- 3 47.5	1.963	2.782	14.4	21.3	5 1	11 39.17	+ 6 18.0	2.048	2.822	15.4	21.1
<b>97806</b>	2000 <i>OH</i> <sub>18</sub>		3 22.4 252°40		2°6/24.4 17		<b>402011</b>	2003 <i>RN</i> <sub>7</sub>		3 22.4 175°14		1°9/24.2 17	
2 21	12 31.79	- 8 55.3	1.673	2.516	14.5	19.8	2 21	12 33.13	- 8 0.6	2.163	2.993	12.1	21.7
3 2	12 25.69	- 8 48.0	1.583	2.500	10.8	19.6	3 2	12 26.05	- 7 53.6	2.085	2.997	8.9	21.5
3 12	12 17.29	- 8 22.5	1.516	2.484	6.6	19.3	3 12	12 17.23	- 7 33.5	2.033	3.000	5.3	21.3
3 22	12 7.39	- 7 41.3	1.476	2.468	2.9	19.0	3 22	12 7.41	- 7 2.7	2.010	3.002	2.1	21.0
4 1	11 57.11	- 6 49.7	1.463	2.451	4.6	19.1	4 1	11 57.50	- 6 25.3	2.017	3.003	3.7	21.2
4 11	11 47.74	- 5 55.0	1.477	2.433	9.1	19.3	4 11	11 48.45	- 5 46.7	2.053	3.003	7.3	21.4
4 21	11 40.30	- 5 4.7	1.516	2.415	13.5	19.5	4 21	11 41.00	- 5 11.8	2.116	3.003	10.8	21.6
5 1	11 35.51	- 4 25.2	1.576	2.396	17.3	19.7	5 1	11 35.67	- 4 44.7	2.202	3.001	13.7	21.8
<b>163722</b>	2003 <i>HC</i> <sub>29</sub>		3 22.4 330°18		0°3/22.5 18		<b>428784</b>	2008 <i>SC</i> <sub>275</sub>		3 22.4 250°87		3°3/19.1 17	
2 21	12 30.62	- 2 23.4	1.208	2.087	16.3	19.6	2 21	12 30.09	+ 7 38.5	2.102	2.976	10.6	21.5
3 2	12 25.31	- 2 15.4	1.138	2.078	11.7	19.3	3 2	12 24.01	+ 8 20.3	2.024	2.963	7.4	21.2
3 12	12 17.22	- 1 53.0	1.090	2.070	6.2	18.9	3 12	12 16.21	+ 9 3.9	1.973	2.950	4.4	21.0
3 22	12 7.38	- 1 21.0	1.065	2.062	0.4	18.5	3 22	12 7.37	+ 9 43.6	1.951	2.936	3.5	20.9
4 1	11 57.28	- 0 47.1	1.066	2.054	5.7	18.9	4 1	11 58.40	+10 13.8	1.957	2.923	6.2	21.1
4 11	11 48.51	- 0 19.3	1.090	2.048	11.4	19.1	4 11	11 50.23	+10 30.2	1.991	2.908	9.6	21.2
4 21	11 42.24	- 0 4.1	1.136	2.042	16.5	19.4	4 21	11 43.60	+10 30.6	2.049	2.894	12.8	21.4
5 1	11 39.19	- 0 5.3	1.200	2.036	20.7	19.7	5 1	11 39.04	+10 14.7	2.127	2.879	15.6	21.6
<b>281808</b>	2009 <i>WH</i> <sub>117</sub>		3 22.4 232°27		0°4/22.6 18		<b>371047</b>	2005 <i>UT</i> <sub>174</sub>		3 22.4 209°90		0°3/22.6 17	
2 21	12 31.56	- 4 6.6	1.288	2.160	16.1	21.4	2 21	12 29.47	- 3 38.2	2.247	3.097	11.0	22.3
3 2	12 25.77	- 3 34.2	1.221	2.157	11.5	21.1	3 2	12 23.48	- 3 7.8	2.164	3.091	7.8	22.1
3 12	12 17.37	- 2 44.2	1.176	2.155	6.2	20.8	3 12	12 15.90	- 2 27.0	2.108	3.084	4.2	21.8
3 22	12 7.39	- 1 42.7	1.156	2.153	0.5	20.4	3 22	12 7.36	- 1 39.5	2.080	3.076	0.4	21.5
4 1	11 57.25	- 0 38.6	1.162	2.150	5.5	20.7	4 1	11 58.70	- 0 50.4	2.082	3.068	3.7	21.8
4 11	11 48.43	+ 0 18.2	1.193	2.148	11.0	21.0	4 11	11 50.78	- 0 5.1	2.114	3.059	7.5	22.0
4 21	11 42.04	+ 1 0.4	1.246	2.145	15.8	21.3	4 21	11 44.28	+ 0 32.0	2.171	3.050	10.9	22.2
5 1	11 38.71	+ 1 23.6	1.318	2.142	19.9	21.5	5 1	11 39.70	+ 0 57.7	2.251	3.040	13.8	22.4
<b>433704</b>	2014 <i>WP</i> <sub>469</sub>		3 22.4 255°43		1°6/20.6 18		<b>292885</b>	2006 <i>VT</i> <sub>27</sub>		3 22.4 128°95		5°1/15.9 17	
2 21	12 26.26	+ 0 41.2	1.941	2.814	11.4	20.6	2 21	12 28.39	+16 50.5	2.598	3.469	8.9	21.3
3 2	12 21.36	+ 1 43.2	1.872	2.811	7.9	20.4	3 2	12 22.44	+17 41.4	2.550	3.477	6.8	21.1
3 12	12 14.80	+ 2 54.2	1.829	2.809	4.0	20.1	3 12	12 15.21	+18 26.5	2.530	3.485	5.3	21.1
3 22	12 7.30	+ 4 7.8	1.813	2.807	1.7	19.9	3 22	12 7.34	+19 0.6	2.539	3.493	5.5	21.1
4 1	11 59.73	+ 5 16.9	1.826	2.805	5.1	20.2	4 1	11 59.54	+19 19.9	2.576	3.501	7.2	21.2
4 11	11 53.00	+ 6 14.8	1.867	2.803	9.0	20.4	4 11	11 52.52	+19 22.3	2.639	3.508	9.4	21.4
4 21	11 47.83	+ 6 57.2	1.932	2.801	12.5	20.6	4 21	11 46.81	+19 7.8	2.726	3.516	11.5	21.5
5 1	11 44.68	+ 7 21.8	2.017	2.799	15.4	20.8	5 1	11 42.79	+18 37.7	2.833	3.523	13.4	21.7
<b>83094</b>	2001 <i>QS</i> <sub>233</sub>		3 22.4 129°62		0°4/21.9 18		<b>301284</b>	2009 <i>BF</i> <sub>105</sub>		3 22.4 258°95		3°3/25.9 18	
2 21	12 25.63	- 2 21.8	2.448	3.304	10.0	20.1	2 21	12 27.68	-12 44.4	2.345	3.161	11.8	20.7
3 2	12 20.60	- 1 31.0	2.382	3.313	6.9	19.9	3 2	12 22.27	-12 45.7	2.253	3.150	9.1	20.5
3 12	12 14.28	- 0 31.5	2.343	3.322	3.5	19.7	3 12	12 15.30	-12 31.6	2.185	3.139	6.1	20.3
3 22	12 7.28	+ 0 32.1	2.334	3.330	0.4	19.4	3 22	12 7.35	-12 3.6	2.145	3.128	3.6	20.1
4 1	12 0.29	+ 1 34.5	2.355	3.338	3.6	19.7	4 1	11 59.22	-11 24.7	2.133	3.116	4.0	20.1
4 11	11 53.99	+ 2 30.7	2.404	3.346	6.9	19.9	4 11	11 51.73	-10 39.9	2.150	3.104	6.8	20.2
4 21	11 48.95	+ 3 16.6	2.480	3.353	9.9	20.1	4 21	11 45.58	- 9 54.5	2.194	3.092	9.9	20.4
5 1	11 45.55	+ 3 49.8	2.579	3.361	12.4	20.3	5 1	11 41.28	- 9 13.6	2.261	3.080	12.8	20.6
<b>35547</b>	1998 <i>FV</i> <sub>106</sub>		3 22.4 252°37		2°5/24.5 18		<b>327336</b>	2005 <i>UJ</i> <sub>142</sub>		3 2			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>321995</b>	2010 <i>UQ</i> <sub>75</sub>		3 22.4 264°06	3°3/25.2	17		<b>57871</b>	2001 <i>YB</i> <sub>52</sub>		3 22.4 231°42	3°2/18.3	18	
2 21	12 29.74	-11 13.0	1.724	2.559	14.5	21.2	2 21	12 26.95	+ 8 49.2	2.613	3.486	8.8	19.7
3 2	12 24.19	-11 7.3	1.635	2.546	11.0	21.0	3 2	12 21.54	+ 9 38.3	2.539	3.477	6.2	19.5
3 12	12 16.48	-10 42.0	1.570	2.533	7.1	20.7	3 12	12 14.83	+10 28.1	2.493	3.468	3.8	19.3
3 22	12 7.40	- 9 59.1	1.531	2.519	3.7	20.5	3 22	12 7.36	+11 13.7	2.477	3.458	3.4	19.3
4 1	11 58.01	- 9 3.3	1.519	2.505	4.7	20.5	4 1	11 59.81	+11 50.4	2.489	3.448	5.5	19.4
4 11	11 49.51	- 8 2.3	1.534	2.491	8.7	20.7	4 11	11 52.90	+12 14.8	2.530	3.437	8.3	19.6
4 21	11 42.84	- 7 3.6	1.573	2.477	12.8	20.9	4 21	11 47.19	+12 24.8	2.596	3.427	10.9	19.7
5 1	11 38.68	- 6 14.3	1.634	2.462	16.4	21.1	5 1	11 43.10	+12 20.2	2.683	3.416	13.1	19.9
<b>308189</b>	2005 <i>CB</i> <sub>60</sub>		3 22.4 74°54	1°9/23.7	18		<b>226745</b>	2004 <i>RC</i> <sub>23</sub>		3 22.4 231°85	0°4/21.9	17	
2 21	12 34.66	- 6 12.0	1.427	2.283	15.8	20.7	2 21	12 29.10	- 1 36.3	2.031	2.891	11.5	20.8
3 2	12 27.49	- 6 14.3	1.379	2.304	11.4	20.5	3 2	12 23.37	- 1 4.6	1.951	2.883	8.1	20.5
3 12	12 18.05	- 6 0.5	1.353	2.326	6.5	20.3	3 12	12 15.90	- 0 23.2	1.897	2.876	4.2	20.3
3 22	12 7.45	- 5 34.7	1.353	2.347	2.1	20.1	3 22	12 7.40	+ 0 23.4	1.871	2.867	0.4	19.9
4 1	11 57.03	- 5 2.6	1.381	2.369	4.7	20.3	4 1	11 58.76	+ 1 9.7	1.875	2.859	4.2	20.2
4 11	11 48.09	- 4 31.5	1.434	2.390	9.4	20.6	4 11	11 50.93	+ 1 49.9	1.906	2.850	8.3	20.4
4 21	11 41.50	- 4 7.1	1.512	2.411	13.5	20.9	4 21	11 44.65	+ 2 19.8	1.963	2.841	11.9	20.7
5 1	11 37.73	- 3 53.7	1.610	2.432	16.9	21.2	5 1	11 40.45	+ 2 36.3	2.041	2.832	14.9	20.8
<b>430422</b>	1999 <i>RU</i> <sub>144</sub>		3 22.4 237°55	0°2/22.7	16		<b>274572</b>	2008 <i>SD</i> <sub>299</sub>		3 22.4 216°44	3°9/18.2	18	
2 21	12 24.56	- 4 40.2	3.116	3.959	8.4	22.0	2 21	12 27.95	+ 8 22.4	2.008	2.888	10.8	20.3
3 2	12 19.77	- 3 49.0	3.019	3.942	6.0	21.8	3 2	12 22.50	+ 9 25.0	1.945	2.886	7.5	20.1
3 12	12 13.87	- 2 48.4	2.950	3.925	3.2	21.6	3 12	12 15.41	+10 29.1	1.908	2.884	4.6	19.9
3 22	12 7.30	- 1 41.7	2.911	3.907	0.3	21.4	3 22	12 7.38	+11 27.8	1.899	2.881	4.2	19.9
4 1	12 0.62	- 0 33.2	2.904	3.889	2.8	21.6	4 1	11 59.31	+12 14.6	1.919	2.879	6.8	20.0
4 11	11 54.40	+ 0 32.5	2.927	3.870	5.8	21.7	4 11	11 52.12	+12 45.0	1.965	2.876	10.1	20.2
4 21	11 49.11	+ 1 31.5	2.978	3.851	8.4	21.9	4 21	11 46.49	+12 56.8	2.034	2.873	13.1	20.4
5 1	11 45.15	+ 2 20.7	3.053	3.831	10.7	22.0	5 1	11 42.90	+12 49.9	2.124	2.871	15.7	20.6
<b>467656</b>	2008 <i>TB</i> <sub>139</sub>		3 22.4 284°21	3°9/26.3	17		<b>10320</b>	Reiland		3 22.4 243°75	0°2/22.5	18	
2 21	12 27.32	-14 46.6	1.987	2.802	13.6	21.8	2 21	12 28.99	- 4 50.2	1.625	2.487	13.9	18.1
3 2	12 22.40	-14 22.7	1.876	2.772	10.6	21.6	3 2	12 23.67	- 3 53.5	1.544	2.476	9.9	17.9
3 12	12 15.54	-13 36.3	1.789	2.742	7.3	21.3	3 12	12 16.21	- 2 39.1	1.487	2.465	5.3	17.6
3 22	12 7.37	-12 28.9	1.728	2.711	4.3	21.0	3 22	12 7.41	- 1 13.2	1.457	2.453	0.3	17.1
4 1	11 58.79	-11 4.9	1.695	2.679	4.7	21.0	4 1	11 58.39	+ 0 15.4	1.454	2.441	4.9	17.5
4 11	11 50.84	- 9 31.9	1.690	2.647	8.1	21.1	4 11	11 50.32	+ 1 37.3	1.479	2.428	9.7	17.7
4 21	11 44.42	- 7 58.6	1.711	2.615	11.9	21.3	4 21	11 44.15	+ 2 44.7	1.528	2.415	14.1	17.9
5 1	11 40.20	- 6 33.3	1.755	2.582	15.5	21.4	5 1	11 40.49	+ 3 32.8	1.596	2.402	17.8	18.1
<b>15282</b>	Franzmarc		3 22.4 196°02	1°3/24.0	18		<b>209436</b>	2004 <i>FV</i> <sub>69</sub>		3 22.4 177°67	0°9/23.6	18	
2 21	12 25.47	- 8 5.8	2.386	3.225	10.8	18.6	2 21	12 25.05	- 7 8.5	2.602	3.442	10.0	20.9
3 2	12 20.61	- 7 25.4	2.306	3.224	7.9	18.4	3 2	12 20.21	- 6 24.2	2.524	3.443	7.2	20.7
3 12	12 14.36	- 6 31.6	2.252	3.222	4.6	18.2	3 12	12 14.12	- 5 28.1	2.472	3.444	4.1	20.5
3 22	12 7.32	- 5 27.9	2.227	3.221	1.5	18.0	3 22	12 7.33	- 4 23.9	2.449	3.444	1.1	20.3
4 1	12 0.22	- 4 19.5	2.231	3.219	3.2	18.1	4 1	12 0.50	- 3 16.3	2.457	3.444	3.0	20.4
4 11	11 53.79	- 3 12.3	2.264	3.217	6.6	18.3	4 11	11 54.29	- 2 10.7	2.494	3.444	6.2	20.7
4 21	11 48.63	- 2 11.5	2.324	3.214	9.8	18.5	4 21	11 49.24	- 1 11.9	2.558	3.444	9.2	20.8
5 1	11 45.17	- 1 21.3	2.407	3.212	12.5	18.7	5 1	11 45.75	- 0 23.3	2.646	3.443	11.7	21.0
<b>77124</b>	2001 <i>DA</i> <sub>89</sub>		3 22.4 53°17	0°5/21.9	18		<b>109157</b>	2001 <i>QW</i> <sub>60</sub>		3 22.4 99°05	0°2/22.1	18	
2 21	12 30.44	- 1 42.4	1.333	2.210	15.3	20.0	2 21	12 25.30	- 3 25.1	2.274	3.131	10.6	19.6
3 2	12 24.67	- 1 8.2	1.284	2.224	10.7	19.8	3 2	12 20.45	- 2 24.7	2.212	3.143	7.4	19.4
3 12	12 16.64	- 0 21.3	1.258	2.239	5.5	19.5	3 12	12 14.25	- 1 14.0	2.177	3.155	3.8	19.2
3 22	12 7.40	+ 0 31.4	1.258	2.254	0.5	19.2	3 22	12 7.34	+ 0 1.7	2.171	3.167	0.2	18.9
4 1	11 58.31	+ 1 21.7	1.284	2.270	5.4	19.6	4 1	12 0.46	+ 1 16.4	2.194	3.179	3.7	19.3
4 11	11 50.62	+ 2 1.7	1.334	2.285	10.4	19.9	4 11	11 54.34	+ 2 24.0	2.247	3.190	7.2	19.5
4 21	11 45.23	+ 2 26.6	1.408	2.301	14.7	20.2	4 21	11 49.55	+ 3 20.0	2.325	3.202	10.3	19.7
5 1	11 42.59	+ 2 34.0	1.500	2.318	18.2	20.4	5 1	11 46.48	+ 4 1.7	2.426	3.213	12.9	19.9
<b>463733</b>	2014 <i>QH</i> <sub>354</sub>		3 22.4 1°87	0°9/22.9	18		<b>200318</b>	2000 <i>ER</i> <sub>197</sub>		3 22.4 208°69	0°6/22.8	18	
2 21	12 33.75	- 2 45.1	1.337	2.207	15.8	20.8	2 21	12 33.27	- 3 55.9	1.664	2.520	13.9	20.3
3 2	12 27.25	- 2 59.2	1.271	2.206	11.3	20.5	3 2	12 26.61	- 3 36.1	1.587	2.516	9.9	20.0
3 12	12 18.14	- 3 1.3	1.228	2.206	6.2	20.2	3 12	12 17.72	- 3 2.8	1.534	2.510	5.4	19.8
3 22	12 7.47	- 2 54.6	1.210	2.206	1.1	19.9	3 22	12 7.48	- 2 20.4	1.509	2.505	0.7	19.4
4 1	11 56.66	- 2 44.4	1.218	2.206	5.2	20.2	4 1	11 57.05	- 1 35.2	1.511	2.498	4.6	19.7
4 11	11 47.21	- 2 36.7	1.252	2.207	10.4	20.5	4 11	11 47.68	- 0 54.0	1.542	2.491	9.4	19.9
4 21	11 40.18	- 2 36.4	1.308	2.209	15.1	20.7	4 21	11 40.30	- 0 22.6	1.596	2.484	13.6	20.2
5 1	11 36.22	- 2 47.1	1.383	2.210	18.9	21.0	5 1	11 35.53	- 0 4.8	1.671	2.476	17.2	20.4
<b>36542</b>	2000 <i>QZ</i> <sub>97</sub>		3 22.4 114°94	1°9/19.8	18	R	<b>128328</b>	2004 <i>FU</i> <sub>15</sub>		3 22.4 337°17	15°8/ 6.7	18	
2 21	12 25.75	+ 3 47.2	2.573	3.442	9.1	19.5	2 21	12 27.19	-36 20.0	1.118	1.856	26.4	19.5
3 2	12 20.62	+ 4 42.6	2.517	3.455	6.2	19.4	3 2	12 23.57	-37 4.9	1.046	1.853	23.9	19.3
3 12	12 14.28	+ 5 41.6	2.489	3.468	3.3	19.2	3 12	12 16.61	-36 57.1	0.987	1.850	21.0	19.0
3 22	12 7.33	+ 6 39.5	2.490	3.480	2.1	19.1	3 22	12 7.44	-35 48.0	0.942	1.848	18.1	18.8
4 1	12 0.42	+ 7 31.2	2.521	3.493	4.5	19.3	4 1	11 57.88	-33 36.2	0.916	1.846	16.1	18.7
4 11	11 54.20	+ 8 12.8	2.581	3.505	7.4	19.5	4 11	11 49.96	-30 32.6	0.909	1.844	16.0	18.7
4 21	11 49.19	+ 8 41.7	2.666	3.517	10.0	19.7	4 21	11 45.17	-26 57.8	0.923	1.843	17.8	18.8
5 1	11 45.74	+ 8 56.7	2.774	3.528	12.3	19.9	5 1	11 44.28	-23 16.6	0.957	1.842	20.9	19.0
<b>208208</b>	2000 <i>SJ</i> <sub>53</sub>		3 22.4 160°47	0°7/23.3	18		<b>350049</b>	2010 <i>OE</i> <sub>91</sub>		3 22.4 218°64	3°3/18.2		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>505072</b>	2011 <i>SV</i> <sub>225</sub>		3 22.4 191°77	2°6/26.1	17		<b>212325</b>	2005 <i>SB</i> <sub>22</sub>		3 22.4 214°23	1°1/20.9	17	
2 21	12 25.03	-13 24.7	2.904	3.711	10.0	22.2	2 21	12 25.12	+ 0 54.8	2.766	3.628	8.8	21.1
3 2	12 20.14	-13 0.0	2.817	3.710	7.6	22.0	3 2	12 20.23	+ 1 42.1	2.688	3.623	6.0	20.9
3 12	12 14.08	-12 21.5	2.755	3.708	5.1	21.9	3 12	12 14.14	+ 2 35.3	2.637	3.617	3.1	20.7
3 22	12 7.35	-11 31.2	2.722	3.706	2.9	21.7	3 22	12 7.38	+ 3 30.5	2.616	3.611	1.1	20.5
4 1	12 0.55	-10 32.7	2.719	3.703	3.2	21.7	4 1	12 0.54	+ 4 23.0	2.626	3.604	3.8	20.7
4 11	11 54.31	- 9 30.5	2.746	3.700	5.5	21.9	4 11	11 54.28	+ 5 8.5	2.664	3.597	6.8	20.9
4 21	11 49.12	- 8 29.4	2.801	3.697	8.1	22.0	4 21	11 49.09	+ 5 44.0	2.729	3.590	9.5	21.1
5 1	11 45.39	- 7 33.7	2.881	3.693	10.5	22.2	5 1	11 45.39	+ 6 7.4	2.817	3.583	11.8	21.2
<b>464676</b>	2001 <i>TG</i> <sub>93</sub>		3 22.4 64°17	5°3/28.1	18		<b>168472</b>	1999 <i>PQ</i> <sub>4</sub>		3 22.4 245°96	1°5/21.0	17	
2 21	12 28.50	-19 0.3	1.617	2.422	16.7	20.8	2 21	12 30.79	+ 0 49.1	1.742	2.612	12.7	20.7
3 2	12 23.04	-18 25.4	1.566	2.451	13.1	20.6	3 2	12 24.85	+ 1 34.0	1.661	2.599	8.9	20.5
3 12	12 15.69	-17 22.3	1.538	2.480	9.3	20.4	3 12	12 16.81	+ 2 28.7	1.605	2.585	4.6	20.2
3 22	12 7.40	-15 55.0	1.534	2.509	6.0	20.3	3 22	12 7.48	+ 3 27.1	1.576	2.571	1.6	19.9
4 1	11 59.31	-14 11.3	1.558	2.538	5.6	20.3	4 1	11 57.92	+ 4 22.0	1.576	2.557	5.5	20.2
4 11	11 52.47	-12 21.9	1.608	2.567	8.3	20.6	4 11	11 49.28	+ 5 6.3	1.603	2.542	10.0	20.4
4 21	11 47.61	-10 37.1	1.684	2.595	11.6	20.8	4 21	11 42.46	+ 5 35.3	1.654	2.526	14.0	20.6
5 1	11 45.14	- 9 4.9	1.783	2.624	14.8	21.1	5 1	11 38.08	+ 5 46.6	1.724	2.511	17.4	20.8
<b>189471</b>	1999 <i>TU</i> <sub>76</sub>		3 22.4 284°29	1°1/23.2	17		<b>244055</b>	2001 <i>TR</i> <sub>77</sub>		3 22.4 134°23	7°2/12.8	17	
2 21	12 29.86	- 5 57.2	1.306	2.174	16.2	20.7	2 21	12 31.11	+26 10.9	2.726	3.576	9.3	20.8
3 2	12 24.83	- 5 24.6	1.221	2.154	11.8	20.4	3 2	12 24.30	+27 6.4	2.692	3.588	7.8	20.7
3 12	12 17.07	- 4 30.7	1.157	2.134	6.6	20.1	3 12	12 16.19	+27 49.8	2.685	3.599	7.2	20.7
3 22	12 7.47	- 3 20.2	1.118	2.114	1.3	19.6	3 22	12 7.45	+28 16.1	2.705	3.610	7.7	20.7
4 1	11 57.39	- 2 2.0	1.105	2.094	5.4	19.9	4 1	11 58.86	+28 22.2	2.752	3.620	9.0	20.8
4 11	11 48.37	+ 0 47.1	1.116	2.073	11.2	20.1	4 11	11 51.15	+28 7.3	2.824	3.630	10.7	20.9
4 21	11 41.67	+ 0 14.7	1.150	2.053	16.5	20.3	4 21	11 44.86	+27 33.1	2.918	3.640	12.3	21.1
5 1	11 38.10	+ 0 56.7	1.201	2.033	21.0	20.6	5 1	11 40.36	+26 42.1	3.030	3.649	13.7	21.2
<b>412226</b>	2013 <i>GB</i> <sub>136</sub>		3 22.4 313°00	4°5/18.8	17		<b>218027</b>	2001 <i>YA</i> <sub>108</sub>		3 22.4 123°83	4°6/16.7	18	
2 21	12 29.03	+ 6 50.3	1.344	2.236	14.1	20.7	2 21	12 29.08	+11 24.3	2.258	3.134	9.9	20.6
3 2	12 23.99	+ 7 55.1	1.276	2.223	9.9	20.4	3 2	12 23.04	+12 49.9	2.217	3.153	7.1	20.4
3 12	12 16.48	+ 8 5.1	1.232	2.211	5.8	20.1	3 12	12 15.59	+14 13.3	2.204	3.171	4.9	20.3
3 22	12 7.45	+10 10.8	1.212	2.199	4.9	20.0	3 22	12 7.43	+15 27.4	2.220	3.189	5.0	20.4
4 1	11 58.21	+11 1.9	1.218	2.187	8.6	20.2	4 1	11 59.38	+16 26.3	2.265	3.206	7.1	20.5
4 11	11 50.16	+11 31.1	1.248	2.176	13.2	20.4	4 11	11 52.23	+17 6.3	2.337	3.222	9.8	20.7
4 21	11 44.36	+11 35.2	1.298	2.166	17.4	20.7	4 21	11 46.55	+17 26.4	2.432	3.238	12.3	20.9
5 1	11 41.46	+11 14.5	1.366	2.156	21.0	20.9	5 1	11 42.73	+17 27.4	2.548	3.253	14.4	21.1
<b>217028</b>	2001 <i>OK</i> <sub>80</sub>		3 22.4 185°72	2°6/19.2	16		<b>225610</b>	2000 <i>YJ</i> <sub>74</sub>		3 22.4 91°55	6°6/29.6	18	
2 21	12 27.85	+ 3 55.8	2.199	3.070	10.3	21.3	2 21	12 29.00	-22 3.9	1.977	2.751	15.2	20.0
3 2	12 22.34	+ 5 16.8	2.131	3.070	7.1	21.1	3 2	12 23.36	-22 14.0	1.907	2.764	12.5	19.9
3 12	12 15.30	+ 6 43.6	2.091	3.070	3.9	20.9	3 12	12 15.92	-21 59.3	1.859	2.777	9.6	19.7
3 22	12 7.40	+ 8 9.4	2.080	3.068	2.8	20.8	3 22	12 7.45	-21 20.1	1.835	2.790	7.3	19.6
4 1	11 59.45	+ 9 27.2	2.099	3.067	5.6	21.0	4 1	11 58.95	-20 20.0	1.839	2.803	6.7	19.6
4 11	11 52.27	+10 31.0	2.146	3.064	9.0	21.2	4 11	11 51.41	-19 5.8	1.869	2.815	8.2	19.7
4 21	11 46.53	+11 17.3	2.219	3.061	12.1	21.4	4 21	11 45.61	-17 45.9	1.925	2.828	10.8	19.9
5 1	11 42.66	+11 44.7	2.312	3.057	14.6	21.6	5 1	11 42.03	-16 28.1	2.004	2.840	13.5	20.1
<b>292268</b>	2006 <i>SF</i> <sub>110</sub>		3 22.4 135°22	0°6/21.5	18		<b>109262</b>	2001 <i>QE</i> <sub>108</sub>		3 22.4 184°14	0°7/21.4	18	
2 21	12 26.32	- 0 15.9	2.871	3.727	8.7	21.4	2 21	12 25.88	- 0 13.1	3.005	3.861	8.4	20.1
3 2	12 20.93	+ 0 22.4	2.809	3.740	6.0	21.3	3 2	12 20.66	+ 0 29.7	2.929	3.861	5.8	19.9
3 12	12 14.44	+ 1 6.4	2.774	3.752	3.0	21.1	3 12	12 14.33	+ 1 18.3	2.881	3.860	2.9	19.7
3 22	12 7.37	+ 1 52.4	2.769	3.764	0.7	20.9	3 22	12 7.39	+ 2 9.3	2.864	3.859	0.7	19.5
4 1	12 0.33	+ 2 36.4	2.794	3.776	3.3	21.1	4 1	12 0.41	+ 2 58.6	2.877	3.858	3.3	19.8
4 11	11 53.91	+ 3 14.6	2.850	3.787	6.2	21.3	4 11	11 53.98	+ 3 42.3	2.921	3.856	6.1	19.9
4 21	11 48.59	+ 3 44.4	2.932	3.797	8.8	21.5	4 21	11 48.57	+ 4 17.5	2.991	3.854	8.7	20.1
5 1	11 44.71	+ 4 3.8	3.038	3.808	11.0	21.7	5 1	11 44.55	+ 4 42.2	3.085	3.851	10.9	20.3
<b>507489</b>	2012 <i>UF</i> <sub>28</sub>		3 22.4 67°14	2°6/25.7	17		<b>236052</b>	2005 <i>JQ</i> <sub>19</sub>		3 22.4 259°86	0°9/21.2	17	
2 21	12 24.32	-13 6.6	2.176	3.000	12.3	21.0	2 21	12 25.87	- 0 27.3	2.383	3.245	10.0	21.1
3 2	12 19.90	-12 15.0	2.100	3.004	9.3	20.8	3 2	12 20.97	+ 0 25.3	2.294	3.229	6.9	20.9
3 12	12 14.04	-11 4.4	2.049	3.009	5.9	20.6	3 12	12 14.63	+ 1 26.7	2.232	3.212	3.5	20.6
3 22	12 7.36	- 9 38.7	2.025	3.013	3.0	20.4	3 22	12 7.41	+ 2 32.3	2.200	3.195	1.0	20.4
4 1	12 0.65	- 8 4.0	2.031	3.018	3.6	20.5	4 1	12 0.03	+ 3 36.2	2.197	3.178	4.1	20.6
4 11	11 54.70	- 6 28.1	2.066	3.023	6.8	20.7	4 11	11 53.26	+ 4 33.1	2.223	3.160	7.7	20.8
4 21	11 50.14	- 4 58.1	2.127	3.028	10.1	20.9	4 21	11 47.74	+ 5 18.5	2.274	3.142	10.9	21.0
5 1	11 47.39	- 3 39.8	2.212	3.033	13.0	21.1	5 1	11 43.94	+ 5 49.7	2.348	3.124	13.6	21.1
<b>380433</b>	2003 <i>QK</i> <sub>97</sub>		3 22.4 36°07	1°4/20.9	17		<b>208460</b>	2001 <i>TT</i> <sub>213</sub>		3 22.4 150°85	3°5/26.7	18	
2 21	12 26.33	+ 0 0.3	1.769	2.644	12.3	20.7	2 21	12 26.75	-14 51.9	2.496	3.300	11.5	20.5
3 2	12 21.51	+ 1 0.5	1.707	2.647	8.5	20.5	3 2	12 21.49	-14 42.9	2.416	3.304	8.9	20.3
3 12	12 14.94	+ 2 10.5	1.670	2.651	4.3	20.2	3 12	12 14.85	-14 17.8	2.361	3.309	6.2	20.1
3 22	12 7.40	+ 3 23.7	1.660	2.655	1.5	20.0	3 22	12 7.43	-13 38.3	2.334	3.312	3.9	20.0
4 1	11 59.83	+ 4 32.3	1.678	2.659	5.2	20.3	4 1	11 59.94	-12 47.8	2.336	3.316	4.0	20.0
4 11	11 53.22	+ 5 29.4	1.723	2.663	9.3	20.5	4 11	11 53.13	-11 51.5	2.366	3.319	6.3	20.2
4 21	11 48.29	+ 6 10.3	1.792	2.668	12.9	20.8	4 21	11 47.60	-10 54.8	2.423	3.323	9.1	20.3
5 1	11 45.52	+ 6 32.8	1.881	2.673	16.0	21.0	5 1	11 43.78	-10 2.6	2.505	3.326	11.6	20.5
<b>350971</b>	2003 <i>EA</i> <sub>22</sub>		3 22.4 43°03	2°6/20.1	18		<b>110959</b>	2001 <i>UT</i> <sub>167</sub>		3 22.4 157°92			

EPHEMERIDES

3 22.4

3 22.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>320602</b>	2008 BA <sub>50</sub>		3 22.4 203°39	2°7/19.7	16		<b>376042</b>	2010 CB <sub>146</sub>		3 22.4 77°00	3°6/18.9	18	
2 21	12 28.25	+ 2 49.1	1.689	2.568	12.5	21.3	2 21	12 30.78	+ 8 6.8	1.920	2.796	11.3	20.9
3 2	12 22.98	+ 4 3.6	1.624	2.567	8.6	21.1	3 2	12 24.33	+ 8 56.6	1.882	2.821	7.9	20.8
3 12	12 15.78	+ 5 26.6	1.585	2.565	4.6	20.8	3 12	12 16.30	+ 9 46.2	1.870	2.846	4.6	20.6
3 22	12 7.47	+ 6 49.8	1.572	2.564	2.9	20.7	3 22	12 7.52	+10 29.3	1.887	2.871	3.8	20.6
4 1	11 59.09	+ 8 4.4	1.588	2.562	6.4	20.9	4 1	11 58.96	+11 0.3	1.932	2.895	6.4	20.8
4 11	11 51.71	+ 9 3.1	1.630	2.560	10.5	21.2	4 11	11 51.50	+11 15.9	2.004	2.920	9.6	21.1
4 21	11 46.14	+ 9 41.7	1.695	2.557	14.2	21.4	4 21	11 45.78	+11 15.0	2.099	2.943	12.6	21.3
5 1	11 42.92	+ 9 58.7	1.780	2.555	17.3	21.6	5 1	11 42.17	+10 58.0	2.215	2.967	15.0	21.5
<b>327314</b>	2005 UE <sub>27</sub>		3 22.4 201°93	2°5/20.0	17		<b>327839</b>	2006 WC <sub>89</sub>		3 22.4 43°32	20°2/23.5	18	
2 21	12 29.91	+ 4 20.2	1.885	2.759	11.6	21.0	2 21	12 40.40	+54 30.7	1.518	2.263	20.2	19.4
3 2	12 23.99	+ 5 4.9	1.817	2.757	8.1	20.8	3 2	12 32.23	+56 22.5	1.540	2.279	20.3	19.4
3 12	12 16.25	+ 5 54.4	1.776	2.756	4.3	20.5	3 12	12 20.63	+57 26.3	1.577	2.295	20.8	19.5
3 22	12 7.49	+ 6 42.7	1.762	2.754	2.7	20.4	3 22	12 7.67	+57 36.6	1.627	2.312	21.5	19.6
4 1	11 58.66	+ 7 23.4	1.777	2.751	5.8	20.6	4 1	11 55.67	+56 54.3	1.689	2.330	22.3	19.7
4 11	11 50.78	+ 7 51.3	1.819	2.749	9.6	20.8	4 11	11 46.48	+55 26.2	1.762	2.348	23.1	19.9
4 21	11 44.60	+ 8 3.6	1.885	2.746	13.1	21.0	4 21	11 40.95	+53 21.9	1.844	2.366	23.7	20.0
5 1	11 40.62	+ 7 59.2	1.971	2.743	16.0	21.2	5 1	11 39.18	+50 50.8	1.933	2.385	24.2	20.1
<b>491111</b>	2011 SM <sub>75</sub>		3 22.4 221°05	1°4/23.7	17		<b>409005</b>	2002 XQ <sub>61</sub>		3 22.4 131°65	0°6/21.7	18	
2 21	12 30.67	- 7 39.9	1.728	2.575	13.9	22.9	2 21	12 29.75	- 1 47.1	2.072	2.930	11.4	21.9
3 2	12 24.79	- 6 57.2	1.644	2.566	10.1	22.7	3 2	12 23.65	- 0 54.0	2.013	2.945	7.9	21.7
3 12	12 16.80	- 5 55.9	1.584	2.557	5.8	22.4	3 12	12 15.99	+ 0 8.4	1.981	2.960	4.0	21.5
3 22	12 7.51	- 4 40.4	1.552	2.547	1.6	22.1	3 22	12 7.52	+ 1 14.8	1.978	2.974	0.6	21.3
4 1	11 58.00	- 3 18.2	1.548	2.536	4.3	22.3	4 1	11 59.10	+ 2 18.8	2.004	2.987	4.2	21.6
4 11	11 49.41	- 1 58.3	1.571	2.524	9.0	22.5	4 11	11 51.60	+ 3 14.4	2.059	2.999	8.0	21.8
4 21	11 42.67	- 0 48.2	1.620	2.512	13.2	22.7	4 21	11 45.67	+ 3 57.5	2.140	3.011	11.3	22.0
5 1	11 38.41	+ 0 6.1	1.690	2.499	16.8	22.9	5 1	11 41.74	+ 4 25.6	2.242	3.022	14.1	22.3
<b>357355</b>	2003 RV <sub>8</sub>		3 22.4 261°09	2°6/25.3	18		<b>115717</b>	2003 UQ <sub>174</sub>		3 22.4 49°36	0°4/22.7	18	
2 21	12 28.82	-13 29.6	1.915	2.736	13.8	21.1	2 21	12 30.12	- 3 52.2	1.336	2.208	15.6	19.6
3 2	12 23.50	-12 20.6	1.806	2.710	10.5	20.8	3 2	12 24.53	- 3 24.4	1.284	2.221	11.0	19.4
3 12	12 16.17	-10 45.1	1.721	2.682	6.7	20.5	3 12	12 16.66	- 2 41.2	1.255	2.233	5.9	19.1
3 22	12 7.49	- 8 46.6	1.663	2.654	3.1	20.2	3 22	12 7.54	- 1 48.8	1.250	2.246	0.6	18.8
4 1	11 58.43	- 6 32.7	1.636	2.624	4.2	20.2	4 1	11 58.51	- 0 55.4	1.272	2.260	5.0	19.1
4 11	11 50.07	- 4 14.4	1.639	2.594	8.5	20.4	4 11	11 50.85	- 0 9.2	1.319	2.274	10.1	19.4
4 21	11 43.32	- 2 2.8	1.669	2.563	12.8	20.6	4 21	11 45.47	+ 0 23.8	1.388	2.288	14.4	19.7
5 1	11 38.88	- 0 7.1	1.722	2.531	16.5	20.8	5 1	11 42.85	+ 0 40.1	1.477	2.302	18.0	20.0
<b>123668</b>	2000 YB <sub>81</sub>		3 22.4 74°71	3°5/19.0	18		<b>70744</b>	Maffucci		3 22.4 134°28	5°5/28.1	18	
2 21	12 29.25	+ 6 42.4	1.771	2.651	11.9	19.6	2 21	12 30.56	-19 7.8	1.900	2.691	15.1	19.2
3 2	12 23.46	+ 7 39.6	1.723	2.665	8.2	19.4	3 2	12 24.50	-19 2.1	1.829	2.703	12.1	19.0
3 12	12 15.91	+ 8 38.8	1.701	2.679	4.7	19.2	3 12	12 16.56	-18 32.1	1.779	2.713	8.8	18.8
3 22	12 7.48	+ 9 32.9	1.707	2.693	3.7	19.2	3 22	12 7.54	-17 39.0	1.755	2.724	6.2	18.7
4 1	11 59.15	+10 15.3	1.740	2.707	6.6	19.4	4 1	11 58.49	-16 27.5	1.759	2.734	5.8	18.7
4 11	11 51.91	+10 41.2	1.799	2.721	10.2	19.6	4 11	11 50.45	-15 5.3	1.791	2.743	8.1	18.8
4 21	11 46.47	+10 48.8	1.882	2.735	13.5	19.8	4 21	11 44.21	-13 41.0	1.848	2.752	11.2	19.0
5 1	11 43.24	+10 38.3	1.984	2.749	16.2	20.1	5 1	11 40.28	-12 22.6	1.928	2.760	14.2	19.2
<b>227537</b>	2005 YP <sub>91</sub>		3 22.4 132°76	1°4/23.8	17		<b>426576</b>	2013 SA <sub>19</sub>		3 22.4 169°93	0°2/22.6	17	
2 21	12 28.51	- 7 14.2	2.052	2.896	12.1	21.4	2 21	12 27.45	- 4 33.5	2.085	2.939	11.6	21.6
3 2	12 22.87	- 6 45.7	1.983	2.903	8.8	21.2	3 2	12 22.15	- 3 43.9	2.013	2.941	8.2	21.4
3 12	12 15.62	- 6 3.3	1.940	2.911	5.0	21.0	3 12	12 15.27	- 2 41.9	1.967	2.943	4.4	21.2
3 22	12 7.47	- 5 11.0	1.924	2.918	1.6	20.8	3 22	12 7.49	- 1 32.4	1.949	2.945	0.3	20.9
4 1	11 59.30	- 4 14.1	1.937	2.925	3.6	20.9	4 1	11 59.67	- 0 21.7	1.960	2.946	3.8	21.2
4 11	11 52.00	- 3 18.9	1.979	2.932	7.4	21.2	4 11	11 52.66	+ 0 43.6	2.000	2.948	7.7	21.4
4 21	11 46.25	- 2 30.7	2.047	2.938	10.9	21.4	4 21	11 47.12	+ 1 38.3	2.066	2.948	11.2	21.6
5 1	11 42.51	- 1 53.7	2.137	2.944	13.8	21.6	5 1	11 43.54	+ 2 18.7	2.153	2.949	14.1	21.8
<b>341721</b>	2007 VF <sub>213</sub>		3 22.4 91°18	4°3/17.5	17		<b>168778</b>	2000 RK <sub>48</sub>		3 22.4 247°18	4°4/26.3	17	
2 21	12 27.94	+11 19.8	2.207	3.085	10.0	20.4	2 21	12 31.39	-14 41.0	1.874	2.687	14.4	20.2
3 2	12 22.32	+12 17.0	2.158	3.096	7.1	20.2	3 2	12 25.37	-14 37.3	1.774	2.668	11.3	20.0
3 12	12 15.27	+13 12.1	2.137	3.107	4.8	20.1	3 12	12 17.19	-14 12.0	1.698	2.649	7.8	19.7
3 22	12 7.48	+13 59.1	2.144	3.118	4.6	20.1	3 22	12 7.58	-13 26.1	1.648	2.629	4.8	19.5
4 1	11 59.76	+14 32.9	2.180	3.130	6.8	20.3	4 1	11 57.59	-12 23.5	1.627	2.609	5.1	19.5
4 11	11 52.92	+14 50.1	2.242	3.141	9.6	20.5	4 11	11 48.37	-11 11.2	1.633	2.587	8.5	19.6
4 21	11 47.55	+14 50.0	2.327	3.151	12.2	20.7	4 21	11 40.89	- 9 57.7	1.664	2.565	12.4	19.8
5 1	11 44.03	+14 33.1	2.433	3.162	14.4	20.8	5 1	11 35.85	- 8 50.6	1.718	2.542	15.9	20.0
<b>87423</b>	2000 QW <sub>99</sub>		3 22.4 170°76	2°1/19.9	16		<b>309238</b>	2007 RV <sub>10</sub>		3 22.4 134°17	0°9/21.5	18	
2 21	12 28.79	+ 3 48.5	2.424	3.290	9.7	21.1	2 21	12 30.83	- 1 34.6	1.797	2.660	12.7	21.6
3 2	12 22.87	+ 4 42.3	2.358	3.295	6.7	21.0	3 2	12 24.60	- 0 36.4	1.739	2.673	8.8	21.4
3 12	12 15.57	+ 5 40.4	2.319	3.298	3.5	20.8	3 12	12 16.57	+ 0 32.6	1.706	2.686	4.5	21.2
3 22	12 7.50	+ 6 37.6	2.310	3.301	2.2	20.7	3 22	12 7.56	+ 1 45.9	1.702	2.698	0.9	21.0
4 1	11 59.41	+ 7 28.7	2.332	3.304	4.8	20.8	4 1	11 58.61	+ 2 55.9	1.726	2.709	4.8	21.3
4 11	11 52.07	+ 8 9.2	2.382	3.305	7.9	21.0	4 11	11 50.72	+ 3 55.6	1.779	2.720	9.0	21.5
4 21	11 46.05	+ 8 36.4	2.458	3.306	10.8	21.2	4 21	11 44.64	+ 4 40.2	1.856	2.730	12.7	21.8
5 1	11 41.80	+ 8 48.9	2.555	3.307	13.3	21.4	5 1	11 40.83	+ 5 7.5	1.954	2.739	15.7	22.0
<b>5475</b>	Hanskennedy		3 22.4 105°28	18°5/ 3.7	18 R		<b>11730</b>	Yanhua		3 22.4 28°20	1°8/20.		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>1222</b> Tina			3 22.4 269°47'	8°0/31.8	18		<b>424062</b> 2007 CE <sub>45</sub>			3 22.4 52°74'	7°5/28.6	17	
2 21	12 27.80	-28 21.5	2.313	3.036	14.6	16.3	2 21	12 31.93	-19 53.1	1.599	2.396	17.2	20.6
3 2	12 22.67	-28 32.2	2.202	3.013	12.7	16.1	3 2	12 25.79	-20 38.3	1.536	2.408	14.0	20.4
3 12	12 15.71	-28 17.0	2.111	2.990	10.6	15.9	3 12	12 17.37	-20 57.2	1.493	2.421	10.7	20.3
3 22	12 7.53	-27 34.1	2.044	2.967	8.8	15.7	3 22	12 7.62	-20 49.0	1.474	2.434	8.1	20.1
4 1	11 59.03	-26 24.7	2.003	2.943	8.0	15.6	4 1	11 57.78	-20 16.3	1.481	2.447	7.7	20.1
4 11	11 51.16	-24 53.7	1.989	2.919	8.9	15.6	4 11	11 49.14	-19 26.1	1.513	2.460	9.7	20.3
4 21	11 44.78	-23 9.0	2.001	2.895	10.9	15.7	4 21	11 42.65	-18 27.5	1.568	2.474	12.7	20.5
5 1	11 40.51	-21 19.5	2.036	2.870	13.4	15.8	5 1	11 38.89	-17 29.3	1.645	2.488	15.7	20.7
<b>60221</b> 1999 VY <sub>96</sub>			3 22.4 232°24'	0°8/21.6	18		<b>385924</b> 2006 TS <sub>113</sub>			3 22.4 291°15'	3°3/18.2	17	
2 21	12 28.43	+ 0 26.8	2.087	2.951	11.1	19.9	2 21	12 24.96	+ 6 49.3	2.208	3.088	9.9	21.1
3 2	12 22.89	+ 0 9.2	2.010	2.944	7.8	19.7	3 2	12 20.38	+ 8 4.8	2.142	3.084	6.9	20.9
3 12	12 15.70	+ 0 53.7	1.959	2.938	4.0	19.5	3 12	12 14.35	+ 9 23.6	2.103	3.080	4.1	20.7
3 22	12 7.53	+ 1 42.1	1.935	2.931	0.8	19.2	3 22	12 7.50	+10 38.9	2.093	3.076	3.6	20.7
4 1	11 59.26	+ 2 28.7	1.942	2.924	4.3	19.5	4 1	12 0.59	+11 44.2	2.111	3.072	6.2	20.8
4 11	11 51.76	+ 3 8.2	1.976	2.917	8.2	19.7	4 11	11 54.41	+12 34.5	2.157	3.068	9.3	21.0
4 21	11 45.76	+ 3 36.5	2.035	2.910	11.7	19.9	4 21	11 49.58	+13 6.7	2.226	3.065	12.2	21.2
5 1	11 41.75	+ 3 51.2	2.116	2.902	14.6	20.1	5 1	11 46.53	+13 20.3	2.316	3.061	14.6	21.4
<b>470518</b> 2008 CR <sub>148</sub>			3 22.4 224°74'	3°1/26.1	17		<b>410173</b> 2007 PB <sub>42</sub>			3 22.4 196°69'	1°2/21.2	17	
2 21	12 26.85	-13 2.9	2.550	3.362	11.1	21.4	2 21	12 31.17	- 0 9.3	2.001	2.862	11.7	22.3
3 2	12 21.60	-13 0.0	2.463	3.358	8.5	21.2	3 2	12 24.86	+ 0 44.6	1.925	2.859	8.1	22.1
3 12	12 14.97	-12 42.5	2.401	3.353	5.7	21.0	3 12	12 16.76	+ 1 47.9	1.875	2.855	4.1	21.8
3 22	12 7.51	-12 12.2	2.367	3.349	3.4	20.8	3 22	12 7.61	+ 2 55.0	1.855	2.850	1.2	21.6
4 1	11 59.93	-11 32.1	2.362	3.344	3.7	20.8	4 1	11 58.35	+ 3 58.9	1.864	2.845	4.8	21.8
4 11	11 52.97	-10 46.7	2.386	3.339	6.3	21.0	4 11	11 49.95	+ 4 53.4	1.902	2.838	8.8	22.1
4 21	11 47.23	-10 1.0	2.436	3.334	9.1	21.2	4 21	11 43.19	+ 5 33.9	1.965	2.831	12.4	22.3
5 1	11 43.18	- 9 19.6	2.511	3.329	11.7	21.3	5 1	11 38.58	+ 5 58.1	2.049	2.823	15.4	22.5
<b>181611</b> 2006 WJ <sub>103</sub>			3 22.4 205°44'	0°8/23.1	17		<b>374377</b> 2005 UM <sub>387</sub>			3 22.4 196°41'	4°3/27.5	17	
2 21	12 29.27	- 5 16.6	1.811	2.666	13.0	21.4	2 21	12 28.57	-17 35.1	2.353	3.143	12.6	22.5
3 2	12 23.66	- 4 44.3	1.736	2.664	9.3	21.1	3 2	12 22.93	-17 19.0	2.264	3.140	10.0	22.3
3 12	12 16.17	- 3 57.8	1.686	2.662	5.1	20.9	3 12	12 15.71	-16 43.1	2.198	3.137	7.1	22.1
3 22	12 7.56	- 3 1.6	1.663	2.659	0.9	20.6	3 22	12 7.56	-15 49.0	2.160	3.133	4.8	22.0
4 1	11 58.83	- 2 2.0	1.669	2.656	4.1	20.8	4 1	11 59.29	-14 40.3	2.151	3.128	4.6	21.9
4 11	11 51.03	- 1 6.2	1.702	2.653	8.5	21.1	4 11	11 51.72	-13 23.3	2.170	3.122	6.9	22.1
4 21	11 44.97	- 0 20.1	1.760	2.650	12.4	21.3	4 21	11 45.56	-12 4.6	2.217	3.117	9.8	22.2
5 1	11 41.18	+ 0 12.3	1.839	2.647	15.7	21.5	5 1	11 41.28	-10 50.8	2.288	3.110	12.6	22.4
<b>20229</b> 1997 XX <sub>4</sub>			3 22.4 20°83'	6°1/17.2	18		<b>444657</b> 2007 CY <sub>12</sub>			3 22.4 53°16'	3°8/25.2	18	
2 21	12 26.68	+ 8 28.0	1.175	2.077	14.9	18.3	2 21	12 33.82	-12 8.1	0.971	1.831	21.0	20.0
3 2	12 22.37	+10 12.3	1.131	2.082	10.5	18.0	3 2	12 27.29	-11 34.9	0.945	1.869	15.5	19.8
3 12	12 15.62	+11 59.0	1.110	2.087	6.8	17.8	3 12	12 18.06	-10 31.2	0.938	1.906	9.5	19.6
3 22	12 7.53	+13 34.7	1.113	2.093	6.7	17.8	3 22	12 7.65	- 9 5.2	0.953	1.944	4.3	19.4
4 1	11 59.51	+14 47.4	1.140	2.100	10.3	18.1	4 1	11 57.84	- 7 29.7	0.993	1.983	5.7	19.6
4 11	11 52.92	+15 29.6	1.189	2.108	14.6	18.3	4 11	11 50.15	- 5 59.0	1.057	2.021	10.7	20.0
4 21	11 48.71	+15 39.8	1.258	2.116	18.4	18.6	4 21	11 45.41	- 4 43.4	1.141	2.058	15.4	20.4
5 1	11 47.36	+15 20.5	1.342	2.125	21.6	18.8	5 1	11 43.92	- 3 48.9	1.245	2.096	19.2	20.8
<b>354856</b> 2005 YU <sub>203</sub>			3 22.4 39°33'	2°2/20.7	18		<b>292750</b> 2006 UT <sub>177</sub>			3 22.4 149°61'	1°8/19.9	17	
2 21	12 29.78	+ 1 3.9	1.232	2.119	15.6	21.2	2 21	12 25.88	+ 3 32.3	2.759	3.625	8.6	21.3
3 2	12 24.50	+ 2 0.1	1.179	2.124	10.8	21.0	3 2	12 20.73	+ 4 23.5	2.696	3.633	5.9	21.1
3 12	12 16.74	+ 3 7.9	1.148	2.130	5.5	20.7	3 12	12 14.43	+ 5 18.5	2.661	3.640	3.1	20.9
3 22	12 7.58	+ 4 18.0	1.142	2.136	2.3	20.5	3 22	12 7.52	+ 6 12.9	2.655	3.646	1.9	20.9
4 1	11 58.45	+ 5 20.2	1.161	2.143	6.8	20.8	4 1	12 0.60	+ 7 2.0	2.680	3.653	4.2	21.0
4 11	11 50.75	+ 6 5.7	1.204	2.149	11.9	21.1	4 11	11 54.31	+ 7 42.2	2.734	3.659	7.0	21.2
4 21	11 45.46	+ 6 30.0	1.269	2.157	16.4	21.4	4 21	11 49.14	+ 8 10.9	2.814	3.664	9.6	21.4
5 1	11 43.10	+ 6 31.6	1.351	2.164	20.1	21.6	5 1	11 45.46	+ 8 26.7	2.916	3.669	11.7	21.6
<b>457444</b> 2008 UW <sub>125</sub>			3 22.4 175°77'	2°9/25.1	16		<b>78291</b> 2002 PH <sub>51</sub>			3 22.4 191°27'	1°6/20.6	17	
2 21	12 32.46	-11 6.5	1.868	2.695	13.9	22.6	2 21	12 27.71	+ 2 15.7	2.375	3.241	9.9	21.0
3 2	12 25.88	-10 48.4	1.792	2.699	10.4	22.4	3 2	12 22.20	+ 3 0.4	2.304	3.240	6.8	20.8
3 12	12 17.33	-10 11.6	1.739	2.701	6.6	22.2	3 12	12 15.28	+ 3 50.7	2.259	3.238	3.5	20.6
3 22	12 7.62	- 9 19.2	1.714	2.703	3.2	21.9	3 22	12 7.55	+ 4 41.8	2.243	3.237	1.6	20.4
4 1	11 57.80	- 8 16.4	1.717	2.704	4.3	22.0	4 1	11 59.78	+ 5 28.5	2.257	3.234	4.5	20.6
4 11	11 48.96	- 7 10.7	1.749	2.704	8.1	22.2	4 11	11 52.71	+ 6 6.3	2.300	3.232	7.8	20.8
4 21	11 41.93	- 6 9.3	1.807	2.703	11.8	22.5	4 21	11 46.96	+ 6 32.2	2.368	3.229	10.8	21.0
5 1	11 37.27	- 5 18.0	1.887	2.701	15.1	22.7	5 1	11 42.97	+ 6 44.3	2.459	3.226	13.3	21.2
<b>207856</b> 2007 VM <sub>52</sub>			3 22.4 300°23'	0°6/21.8	17		<b>162614</b> 2000 SJ <sub>103</sub>			3 22.4 77°03'	0°9/23.1	18	
2 21	12 25.86	- 1 44.2	2.022	2.887	11.4	20.8	2 21	12 31.84	- 5 20.9	1.416	2.278	15.5	19.7
3 2	12 21.16	- 0 59.6	1.942	2.877	8.0	20.6	3 2	12 25.61	- 4 50.9	1.366	2.297	11.0	19.5
3 12	12 14.83	- 0 4.4	1.887	2.867	4.1	20.3	3 12	12 17.19	- 4 4.6	1.340	2.316	6.0	19.2
3 22	12 7.52	+ 0 56.3	1.860	2.857	0.6	20.0	3 22	12 7.63	- 3 8.0	1.339	2.335	1.1	18.9
4 1	12 0.07	+ 1 56.5	1.862	2.847	4.3	20.3	4 1	11 58.21	- 2 9.0	1.365	2.353	4.7	19.2
4 11	11 53.37	+ 2 49.6	1.892	2.837	8.3	20.5	4 11	11 50.18	- 1 16.0	1.417	2.372	9.6	19.6
4 21	11 48.14	+ 3 31.1	1.946	2.827	11.8	20.7	4 21	11 44.39	- 0 35.1	1.493	2.390	13.8	19.9
5 1	11 44.87	+ 3 57.6	2.022	2.817	14.9	20.9	5 1	11 41.30	- 0 10.2	1.589	2.408	17.2	20.1
<b>16418</b> Lortzing			3 22.4 34°75'	1°9/20.7	18		<b>100233</b> 1994 PL <sub>24</sub>			3 22.4 218°65'	7°1/29.9	17	
2 21	12 27.33	- 1 2.1	1.279	2.164									

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>124701</b>	2001 SG <sub>144</sub>		3 22.4 67°74	1.7°/23.5	18		<b>344613</b>	2003 FB <sub>1</sub>		3 22.4 45°00	11.8°/4.9	18	
2 21	12 35.29	- 5 15.3	1.264	2.128	16.9	19.3	2 21	12 27.62	+34 54.5	1.999	2.840	12.6	19.2
3 2	12 28.21	- 5 19.0	1.217	2.147	12.1	19.1	3 2	12 22.48	+37 2.4	1.992	2.852	11.8	19.2
3 12	12 18.61	- 5 6.2	1.191	2.166	6.8	18.9	3 12	12 15.51	+38 46.2	2.008	2.865	12.0	19.2
3 22	12 7.69	- 4 41.3	1.191	2.186	1.9	18.6	3 22	12 7.59	+39 58.3	2.047	2.878	13.0	19.3
4 1	11 56.95	- 4 10.8	1.217	2.205	5.1	18.9	4 1	11 59.81	+40 34.8	2.108	2.891	14.4	19.4
4 11	11 47.84	- 3 42.3	1.268	2.225	10.2	19.2	4 11	11 53.19	+40 36.2	2.186	2.905	15.9	19.6
4 21	11 41.33	- 3 22.0	1.342	2.244	14.6	19.5	4 21	11 48.43	+40 6.4	2.280	2.919	17.3	19.7
5 1	11 37.88	- 3 14.0	1.435	2.264	18.3	19.8	5 1	11 45.96	+39 10.7	2.386	2.933	18.4	19.9
<b>46366</b>	2001 UA <sub>66</sub>		3 22.4 262°27	4.1°/26.5	18		<b>166582</b>	2002 RP <sub>149</sub>		3 22.4 157°89	0°3/22.8	17	
2 21	12 28.39	-14 39.0	1.920	2.737	14.0	19.0	2 21	12 27.59	- 4 0.5	2.382	3.231	10.5	21.1
3 2	12 23.17	-14 28.9	1.826	2.722	10.9	18.8	3 2	12 22.11	- 3 29.8	2.310	3.236	7.4	20.9
3 12	12 16.00	-13 57.6	1.755	2.707	7.5	18.5	3 12	12 15.24	- 2 49.4	2.264	3.240	4.0	20.7
3 22	12 7.60	-13 6.6	1.710	2.692	4.6	18.3	3 22	12 7.60	- 2 2.9	2.247	3.244	0.5	20.4
4 1	11 58.92	-12 0.1	1.693	2.676	4.8	18.3	4 1	11 59.92	- 1 15.1	2.260	3.247	3.4	20.7
4 11	11 51.01	-10 45.4	1.704	2.660	8.0	18.4	4 11	11 52.96	- 0 30.9	2.303	3.250	6.8	20.9
4 21	11 44.74	- 9 30.4	1.740	2.644	11.7	18.6	4 21	11 47.32	+ 0 5.7	2.371	3.253	10.0	21.1
5 1	11 40.72	- 8 22.6	1.798	2.628	15.1	18.8	5 1	11 43.41	+ 0 31.7	2.462	3.255	12.6	21.3
<b>271116</b>	2003 ST <sub>2</sub>		3 22.4 247°95	0°2/22.7	17		<b>435986</b>	2009 EO <sub>8</sub>		3 22.4 286°36	0°6/22.9	16	
2 21	12 24.09	- 4 2.4	2.772	3.622	9.1	21.5	2 21	12 32.30	- 2 29.7	2.217	3.066	11.2	20.8
3 2	12 19.57	- 3 23.4	2.689	3.616	6.5	21.3	3 2	12 25.68	- 2 41.9	2.122	3.047	8.0	20.5
3 12	12 13.88	- 2 35.3	2.633	3.609	3.5	21.1	3 12	12 17.26	- 2 46.8	2.053	3.028	4.4	20.3
3 22	12 7.52	- 1 41.7	2.605	3.602	0.3	20.8	3 22	12 7.69	- 2 46.5	2.013	3.009	0.7	19.9
4 1	12 1.07	+ 0 46.7	2.608	3.595	3.0	21.1	4 1	11 57.86	- 2 43.9	2.004	2.991	3.7	20.1
4 11	11 55.17	+ 0 5.1	2.641	3.587	6.1	21.3	4 11	11 48.71	- 2 42.7	2.024	2.972	7.6	20.3
4 21	11 50.32	+ 0 49.8	2.700	3.580	8.9	21.4	4 21	11 41.02	- 2 46.0	2.070	2.953	11.1	20.5
5 1	11 46.92	+ 1 24.6	2.782	3.573	11.4	21.6	5 1	11 35.38	- 2 56.5	2.138	2.934	14.2	20.7
<b>455510</b>	2003 WC <sub>40</sub>		3 22.4 120°23	2°2/24.5	18		<b>204197</b>	2004 BE <sub>121</sub>		3 22.4 34°46	1°2/21.3	18	
2 21	12 31.22	- 9 23.6	1.796	2.634	13.9	22.0	2 21	12 27.42	+ 0 28.8	1.673	2.549	12.8	20.2
3 2	12 24.94	- 8 59.7	1.734	2.649	10.2	21.8	3 2	12 22.33	+ 1 5.7	1.622	2.562	8.8	20.0
3 12	12 16.79	- 8 18.5	1.696	2.663	6.1	21.6	3 12	12 15.44	+ 1 51.0	1.595	2.576	4.5	19.8
3 22	12 7.64	- 7 23.9	1.684	2.677	2.5	21.3	3 22	12 7.61	+ 2 38.5	1.594	2.590	1.3	19.6
4 1	11 58.51	- 6 22.1	1.702	2.690	4.1	21.5	4 1	11 59.86	+ 3 21.8	1.622	2.605	5.0	19.8
4 11	11 50.46	- 5 20.3	1.747	2.702	8.0	21.7	4 11	11 53.19	+ 3 54.9	1.675	2.620	9.2	20.1
4 21	11 44.25	- 4 25.2	1.818	2.714	11.7	22.0	4 21	11 48.31	+ 4 14.1	1.752	2.635	12.8	20.4
5 1	11 40.35	- 3 41.8	1.911	2.726	14.9	22.2	5 1	11 45.66	+ 4 17.9	1.849	2.652	15.8	20.6
<b>204263</b>	2004 FG <sub>30</sub>		3 22.4 36°06	10°0/10.5	18		<b>130079</b>	1999 WW <sub>2</sub>		3 22.4 176°93	1°9/20.5	18	
2 21	12 26.65	+24 59.1	1.731	2.608	12.4	18.7	2 21	12 30.88	+ 2 22.1	2.034	2.900	11.3	20.1
3 2	12 21.81	+26 55.6	1.711	2.622	10.6	18.6	3 2	12 24.60	+ 3 13.7	1.966	2.903	7.8	19.8
3 12	12 15.14	+28 34.8	1.715	2.636	10.0	18.6	3 12	12 16.61	+ 4 11.8	1.925	2.905	4.0	19.6
3 22	12 7.56	+29 47.6	1.744	2.651	11.0	18.7	3 22	12 7.67	+ 5 10.6	1.913	2.906	2.0	19.5
4 1	12 0.15	+30 28.3	1.796	2.667	12.9	18.9	4 1	11 58.69	+ 6 3.6	1.930	2.906	5.2	19.7
4 11	11 53.91	+30 35.8	1.869	2.683	15.0	19.0	4 11	11 50.59	+ 6 45.4	1.975	2.906	8.9	19.9
4 21	11 49.55	+30 13.0	1.961	2.699	17.0	19.2	4 21	11 44.12	+ 7 12.5	2.046	2.905	12.3	20.1
5 1	11 47.46	+29 24.4	2.067	2.716	18.7	19.4	5 1	11 39.73	+ 7 23.6	2.137	2.904	15.1	20.3
<b>90576</b>	2004 GA <sub>29</sub>		3 22.4 76°09	0°9/23.5	17		<b>289830</b>	2005 LC <sub>11</sub>		3 22.4 335°94	4°0/17.9	17	
2 21	12 24.69	- 7 4.7	2.221	3.068	11.2	20.2	2 21	12 25.83	+ 8 13.5	2.002	2.885	10.6	20.2
3 2	12 20.19	- 6 11.6	2.147	3.070	8.1	20.0	3 2	12 21.12	+ 9 27.4	1.940	2.882	7.4	20.0
3 12	12 14.26	- 5 4.7	2.098	3.072	4.5	19.7	3 12	12 14.81	+10 43.3	1.904	2.879	4.6	19.8
3 22	12 7.53	- 3 48.3	2.078	3.073	1.0	19.5	3 22	12 7.59	+11 53.9	1.896	2.877	4.3	19.8
4 1	12 0.76	- 2 28.7	2.087	3.075	3.4	19.7	4 1	12 0.34	+12 52.3	1.917	2.875	6.9	19.9
4 11	11 54.71	- 1 12.5	2.125	3.077	7.0	19.9	4 11	11 53.91	+13 33.4	1.963	2.873	10.1	20.1
4 21	11 49.99	- 0 5.3	2.189	3.078	10.3	20.1	4 21	11 48.98	+13 54.7	2.033	2.871	13.2	20.3
5 1	11 47.04	+ 0 48.8	2.276	3.080	13.2	20.3	5 1	11 46.02	+13 56.1	2.122	2.870	15.7	20.5
<b>113234</b>	2002 RJ <sub>123</sub>		3 22.4 191°25	3°7/18.8	18		<b>153888</b>	2001 XU <sub>178</sub>		3 22.4 21°74	0°1/22.4	18	
2 21	12 30.70	+ 7 20.1	1.892	2.768	11.5	20.0	2 21	12 27.13	- 3 9.8	1.470	2.343	14.3	19.5
3 2	12 24.58	+ 8 21.1	1.827	2.767	8.0	19.8	3 2	12 22.40	- 2 30.8	1.410	2.348	10.1	19.3
3 12	12 16.63	+ 9 24.6	1.789	2.766	4.7	19.6	3 12	12 15.60	- 1 37.5	1.374	2.354	5.3	19.0
3 22	12 7.64	+10 23.4	1.779	2.764	4.0	19.5	3 22	12 7.63	- 0 36.3	1.364	2.360	0.2	18.6
4 1	11 58.61	+11 10.6	1.798	2.762	6.8	19.7	4 1	11 59.65	+ 0 24.7	1.380	2.367	4.9	19.0
4 11	11 50.53	+11 41.3	1.843	2.759	10.4	19.9	4 11	11 52.81	+ 1 17.5	1.421	2.374	9.7	19.3
4 21	11 44.19	+11 53.0	1.912	2.756	13.7	20.1	4 21	11 47.96	+ 1 56.2	1.486	2.382	13.9	19.5
5 1	11 40.07	+11 45.8	2.000	2.752	16.4	20.3	5 1	11 45.62	+ 2 17.3	1.570	2.390	17.3	19.8
<b>432471</b>	2010 DX <sub>27</sub>		3 22.4 238°36	0°1/22.6	17		<b>133924</b>	2004 SX <sub>23</sub>		3 22.4 13°47	0°4/22.2	18	
2 21	12 24.83	- 4 45.7	2.604	3.452	9.7	21.3	2 21	12 26.83	- 3 13.5	1.109	1.996	16.9	19.7
3 2	12 20.18	- 3 45.7	2.515	3.441	6.9	21.1	3 2	12 22.67	- 2 25.6	1.054	1.999	11.9	19.4
3 12	12 14.24	- 2 34.2	2.453	3.429	3.7	20.9	3 12	12 15.91	- 1 18.9	1.020	2.002	6.2	19.1
3 22	12 7.55	- 1 15.6	2.421	3.417	0.2	20.5	3 22	12 7.65	- 0 2.0	1.010	2.006	0.4	18.7
4 1	12 0.74	+ 0 4.6	2.419	3.405	3.3	20.8	4 1	11 59.35	+ 1 13.9	1.023	2.011	6.0	19.1
4 11	11 54.49	+ 1 20.7	2.447	3.392	6.7	21.0	4 11	11 52.49	+ 2 17.5	1.060	2.018	11.6	19.5
4 21	11 49.37	+ 2 27.7	2.502	3.379	9.7	21.2	4 21	11 48.12	+ 3 1.5	1.118	2.025	16.6	19.8
5 1	11 45.81	+ 3 22.0	2.581	3.365	12.3	21.3	5 1	11 46.78	+ 3 22.1	1.193	2.033	20.6	20.0
<b>124931</b>	2001 TE <sub>72</sub>		3 22.4 120°44	2°7/20.1	18		<b>61958</b>	2000 RR <sub>19</sub>		3 22.4 200°82	4°6/26.7	18	
2 21	12 32.32	+ 3 12.7	1.										

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3 22.4

3 22.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>249556</b>	2010 <i>KX</i> <sub>29</sub>		3 22.4 280°07	9°4/ 2.1 16			<b>131270</b>	2001 <i>FY</i> <sub>59</sub>		3 22.4 85°38	0°9/21.6 18		
2 21	12 29.91	-32 25.2	2.524	3.206	14.5	20.2	2 21	12 29.25	+ 0 6.8	1.929	2.795	11.8	20.0
3 2	12 24.19	-33 21.0	2.421	3.189	12.9	20.0	3 2	12 23.51	+ 0 36.1	1.865	2.801	8.2	19.8
3 12	12 16.58	-33 53.7	2.337	3.173	11.3	19.9	3 12	12 16.07	+ 1 13.2	1.827	2.807	4.2	19.5
3 22	12 7.70	-34 0.5	2.276	3.156	10.0	19.7	3 22	12 7.69	+ 1 53.2	1.817	2.812	0.9	19.3
4 1	11 58.41	-33 40.7	2.240	3.140	9.4	19.7	4 1	11 59.31	+ 2 30.6	1.835	2.818	4.5	19.6
4 11	11 49.72	-32 56.9	2.229	3.123	9.8	19.7	4 11	11 51.85	+ 3 0.3	1.881	2.824	8.4	19.8
4 21	11 42.48	-31 54.8	2.241	3.107	11.1	19.7	4 21	11 46.03	+ 3 18.5	1.951	2.829	11.9	20.0
5 1	11 37.34	-30 41.8	2.277	3.090	12.9	19.8	5 1	11 42.32	+ 3 23.4	2.043	2.835	14.9	20.2
<b>432168</b>	2009 <i>BT</i> <sub>179</sub>		3 22.4 188°94	4°1/27.3 17			<b>207472</b>	2006 <i>HT</i> <sub>6</sub>		3 22.4 316°48	3°6/25.4 18		
2 21	12 27.54	-16 18.7	2.437	3.233	12.0	21.8	2 21	12 28.49	-11 33.1	1.376	2.224	16.7	19.6
3 2	12 22.18	-16 15.0	2.351	3.232	9.4	21.6	3 2	12 23.71	-11 18.5	1.300	2.218	12.7	19.3
3 12	12 15.34	-15 54.0	2.290	3.232	6.7	21.5	3 12	12 16.48	-10 39.1	1.246	2.211	8.1	19.1
3 22	12 7.64	-15 16.9	2.257	3.230	4.5	21.3	3 22	12 7.72	-9 38.0	1.216	2.205	4.1	18.8
4 1	11 59.82	-14 26.9	2.251	3.229	4.4	21.3	4 1	11 58.71	-8 22.1	1.211	2.200	5.2	18.9
4 11	11 52.69	-13 29.2	2.275	3.227	6.6	21.4	4 11	11 50.84	-7 1.8	1.232	2.194	9.8	19.1
4 21	11 46.87	-12 29.5	2.325	3.225	9.4	21.6	4 21	11 45.17	-5 47.4	1.275	2.189	14.4	19.3
5 1	11 42.84	-11 33.5	2.400	3.223	12.0	21.8	5 1	11 42.37	-4 46.9	1.339	2.184	18.4	19.6
<b>204735</b>	2006 <i>HX</i> <sub>67</sub>		3 22.4 174°41	0°2/22.2 17			<b>301072</b>	2008 <i>UZ</i> <sub>190</sub>		3 22.4 343°31	1°9/21.1 18		
2 21	12 28.07	- 2 8.7	2.250	3.106	10.7	21.1	2 21	12 27.99	- 0 4.4	1.149	2.040	16.1	20.5
3 2	12 22.54	- 1 36.5	2.177	3.108	7.5	20.9	3 2	12 23.55	+ 0 51.0	1.087	2.034	11.3	20.2
3 12	12 15.51	- 0 55.5	2.131	3.109	3.9	20.7	3 12	12 16.45	+ 2 1.4	1.046	2.029	5.8	19.9
3 22	12 7.65	- 0 9.6	2.113	3.110	0.2	20.3	3 22	12 7.72	+ 3 17.7	1.029	2.025	1.9	19.6
4 1	11 59.73	+ 0 36.0	2.125	3.110	3.8	20.7	4 1	11 58.83	+ 4 28.7	1.037	2.021	6.9	19.9
4 11	11 52.57	+ 1 16.4	2.166	3.110	7.4	20.9	4 11	11 51.30	+ 5 23.6	1.068	2.018	12.5	20.2
4 21	11 46.80	+ 1 47.6	2.232	3.110	10.6	21.1	4 21	11 46.24	+ 5 56.1	1.119	2.016	17.4	20.5
5 1	11 42.87	+ 2 7.1	2.321	3.110	13.4	21.3	5 1	11 44.29	+ 6 3.8	1.187	2.014	21.4	20.7
<b>50806</b>	2000 <i>FH</i> <sub>28</sub>		3 22.4 92°67	2°0/24.9 18			<b>226000</b>	2002 <i>DK</i> <sub>11</sub>		3 22.4 151°67	4°5/16.3 17		
2 21	12 25.67	-10 46.5	2.111	2.944	12.3	18.6	2 21	12 26.92	+ 8 30.3	2.149	3.028	10.2	19.9
3 2	12 20.92	- 9 59.0	2.041	2.953	9.1	18.4	3 2	12 21.79	+10 39.8	2.095	3.034	7.2	19.7
3 12	12 14.68	- 8 54.3	1.996	2.961	5.5	18.2	3 12	12 15.14	+12 51.5	2.070	3.041	4.8	19.6
3 22	12 7.61	- 7 36.7	1.978	2.970	2.3	18.0	3 22	12 7.66	+14 56.0	2.075	3.047	5.0	19.6
4 1	12 0.54	- 6 12.4	1.990	2.978	3.5	18.1	4 1	12 0.15	+16 44.8	2.110	3.052	7.6	19.8
4 11	11 54.27	- 4 48.6	2.030	2.986	7.0	18.3	4 11	11 53.45	+18 11.5	2.173	3.057	10.5	20.0
4 21	11 49.44	- 3 32.0	2.097	2.994	10.3	18.6	4 21	11 48.18	+19 13.5	2.260	3.061	13.2	20.2
5 1	11 46.48	- 2 27.6	2.187	3.003	13.2	18.8	5 1	11 44.80	+19 51.0	2.365	3.066	15.5	20.4
<b>227458</b>	2005 <i>WB</i> <sub>103</sub>		3 22.4 203°85	2°5/25.2 18			<b>120248</b>	2004 <i>FR</i> <sub>140</sub>		3 22.4 286°25	4°0/25.1 18		
2 21	12 28.62	-11 18.8	2.321	3.142	11.7	21.0	2 21	12 31.77	-10 30.9	1.322	2.172	17.1	19.9
3 2	12 22.98	-10 53.1	2.234	3.138	8.8	20.8	3 2	12 26.25	-10 41.3	1.240	2.159	13.1	19.6
3 12	12 15.79	-10 11.5	2.172	3.132	5.6	20.6	3 12	12 17.95	-10 29.2	1.180	2.146	8.4	19.3
3 22	12 7.67	- 9 16.7	2.138	3.126	2.8	20.4	3 22	12 7.79	- 9 56.0	1.143	2.132	4.3	19.0
4 1	11 59.42	- 8 13.1	2.133	3.120	3.6	20.5	4 1	11 57.20	- 9 7.0	1.132	2.119	5.7	19.1
4 11	11 51.87	- 7 6.8	2.159	3.112	6.8	20.6	4 11	11 47.73	- 8 11.0	1.145	2.106	10.5	19.3
4 21	11 45.70	- 6 3.7	2.211	3.105	10.0	20.8	4 21	11 40.64	- 7 17.7	1.181	2.093	15.4	19.5
5 1	11 41.38	- 5 8.9	2.286	3.096	12.9	21.0	5 1	11 36.74	- 6 35.2	1.236	2.081	19.7	19.7
<b>244564</b>	2002 <i>VF</i> <sub>116</sub>		3 22.4 72°38	7°1/28.7 18			<b>155546</b>	1999 <i>TP</i> <sub>310</sub>		3 22.4 226°56	0°2/22.6 18		
2 21	12 33.68	-20 2.7	1.626	2.418	17.2	19.7	2 21	12 28.55	- 3 39.0	2.325	3.175	10.7	21.4
3 2	12 26.88	-20 33.7	1.573	2.443	13.9	19.5	3 2	12 22.94	- 3 3.8	2.238	3.164	7.6	21.2
3 12	12 17.90	-20 37.8	1.541	2.469	10.4	19.4	3 12	12 15.78	- 2 18.1	2.177	3.153	4.0	21.0
3 22	12 7.76	-20 15.1	1.533	2.494	7.7	19.3	3 22	12 7.70	- 1 25.7	2.145	3.142	0.3	20.6
4 1	11 57.72	-19 29.5	1.551	2.519	7.2	19.3	4 1	11 59.46	- 0 31.7	2.143	3.129	3.6	20.9
4 11	11 48.99	-18 29.0	1.596	2.544	9.2	19.5	4 11	11 51.89	+ 0 18.5	2.171	3.116	7.3	21.1
4 21	11 42.46	-17 22.8	1.665	2.569	12.2	19.7	4 21	11 45.66	+ 1 0.3	2.224	3.103	10.6	21.3
5 1	11 38.59	-16 19.4	1.756	2.593	15.1	19.9	5 1	11 41.26	+ 1 30.5	2.300	3.089	13.5	21.4
<b>500001</b>	2011 <i>PX</i> <sub>10</sub>		3 22.4 191°99	3°2/18.6 17			<b>148690</b>	2001 <i>SV</i> <sub>247</sub>		3 22.4 204°19	1°3/21.1 17		
2 21	12 28.22	+ 9 3.5	2.505	3.378	9.2	21.4	2 21	12 28.94	+ 0 19.0	1.850	2.719	12.1	20.5
3 2	12 22.52	+ 9 46.7	2.440	3.377	6.4	21.2	3 2	12 23.42	+ 1 7.9	1.780	2.718	8.4	20.3
3 12	12 15.46	+10 29.8	2.401	3.375	4.0	21.0	3 12	12 16.09	+ 2 6.0	1.735	2.716	4.3	20.0
3 22	12 7.66	+11 8.2	2.392	3.374	3.5	21.0	3 22	12 7.71	+ 3 7.4	1.718	2.714	1.4	19.8
4 1	11 59.84	+11 37.2	2.412	3.372	5.6	21.1	4 1	11 59.25	+ 4 5.1	1.730	2.711	5.0	20.1
4 11	11 52.73	+11 53.6	2.461	3.370	8.4	21.3	4 11	11 51.70	+ 4 52.6	1.769	2.709	9.1	20.3
4 21	11 46.89	+11 55.9	2.534	3.368	11.0	21.4	4 21	11 45.84	+ 5 25.8	1.832	2.706	12.8	20.5
5 1	11 42.76	+11 43.8	2.628	3.365	13.3	21.6	5 1	11 42.16	+ 5 42.1	1.916	2.703	15.9	20.7
<b>209437</b>	2004 <i>FB</i> <sub>70</sub>		3 22.4 336°34	0°5/22.9 17			<b>435009</b>	2006 <i>VM</i> <sub>17</sub>		3 22.4 233°03	3°2/26.4 18		
2 21	12 25.83	- 4 38.1	2.082	2.938	11.5	20.4	2 21	12 25.70	-13 58.6	2.480	3.291	11.4	21.5
3 2	12 21.11	- 4 2.6	2.007	2.935	8.2	20.2	3 2	12 20.88	-13 40.1	2.392	3.286	8.8	21.3
3 12	12 14.82	- 3 15.2	1.957	2.933	4.4	20.0	3 12	12 14.68	-13 5.3	2.329	3.281	5.9	21.1
3 22	12 7.64	- 2 19.9	1.934	2.931	0.6	19.7	3 22	12 7.65	-12 16.3	2.294	3.276	3.5	20.9
4 1	12 0.37	- 1 22.6	1.941	2.928	3.7	19.9	4 1	12 0.52	-11 16.9	2.288	3.271	3.7	20.9
4 11	11 53.86	- 0 29.1	1.975	2.926	7.5	20.2	4 11	11 54.02	-10 12.5	2.310	3.266	6.3	21.1
4 21	11 48.78	+ 0 15.4	2.035	2.924	11.0	20.4	4 21	11 48.75	- 9 8.7	2.360	3.260	9.2	21.2
5 1	11 45.61	+ 0 47.5	2.117	2.923	14.0	20.6	5 1	11 45.17	- 8 10.8	2.433	3.255	11.9	21.4
<b>465410</b>	2008 <i>JN</i> <sub>40</sub>		3 22.4 304°44</										

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>195660</b>	2002 <i>NB</i> <sub>63</sub>		3 22.4 240°59	1.2/21.2	17		<b>350736</b>	2001 <i>YO</i> <sub>17</sub>		3 22.5 162°02	7.1/ 9.7	18	
2 21	12 28.11	+ 0 41.2	2.107	2.974	10.9	21.2	2 21	12 30.42	+31 56.0	3.433	4.258	8.2	23.0
3 2	12 22.70	+ 1 19.5	2.032	2.968	7.6	20.9	3 2	12 23.80	+32 58.4	3.403	4.266	7.3	22.9
3 12	12 15.67	+ 2 5.3	1.982	2.962	3.9	20.7	3 12	12 16.06	+33 48.0	3.400	4.273	7.2	22.9
3 22	12 7.70	+ 2 53.8	1.961	2.956	1.2	20.5	3 22	12 7.74	+34 20.8	3.424	4.279	7.7	23.0
4 1	11 59.63	+ 3 39.4	1.969	2.950	4.5	20.7	4 1	11 59.51	+34 34.1	3.475	4.285	8.7	23.1
4 11	11 52.33	+ 4 16.8	2.004	2.943	8.3	20.9	4 11	11 51.98	+34 27.5	3.549	4.290	9.9	23.2
4 21	11 46.50	+ 4 42.3	2.065	2.937	11.6	21.1	4 21	11 45.65	+34 2.3	3.643	4.295	11.1	23.3
5 1	11 42.63	+ 4 53.8	2.147	2.930	14.5	21.3	5 1	11 40.85	+33 20.8	3.755	4.299	12.1	23.4
<b>74202</b>	1998 <i>RL</i> <sub>56</sub>		3 22.5 233°94	1.9/23.9	18		<b>83171</b>	2001 <i>QP</i> <sub>283</sub>		3 22.5 21°82	4.8/16.7	18	
2 21	12 33.48	- 6 12.9	1.783	2.628	13.6	19.0	2 21	12 26.45	+11 30.8	2.089	2.971	10.3	19.2
3 2	12 26.79	- 6 21.1	1.701	2.622	10.0	18.8	3 2	12 21.52	+12 49.2	2.032	2.971	7.4	19.0
3 12	12 17.97	- 6 16.2	1.644	2.615	5.8	18.5	3 12	12 15.03	+14 6.3	2.003	2.972	5.2	18.9
3 22	12 7.82	- 6 0.5	1.615	2.608	2.1	18.3	3 22	12 7.70	+15 15.0	2.001	2.972	5.3	18.9
4 1	11 57.44	- 5 38.0	1.614	2.601	4.3	18.4	4 1	12 0.35	+16 8.7	2.028	2.973	7.6	19.0
4 11	11 48.01	- 5 14.4	1.640	2.594	8.6	18.6	4 11	11 53.82	+16 43.2	2.080	2.973	10.5	19.2
4 21	11 40.45	- 4 54.7	1.692	2.586	12.6	18.9	4 21	11 48.77	+16 56.8	2.155	2.973	13.2	19.4
5 1	11 35.39	- 4 43.5	1.765	2.578	16.0	19.1	5 1	11 45.64	+16 50.3	2.249	2.974	15.5	19.6
<b>82350</b>	2001 <i>LF</i> <sub>19</sub>		3 22.5 180°98	3.7/27.1	18		<b>196984</b>	2003 <i>UQ</i> <sub>79</sub>		3 22.5 146°86	2.1/24.8	18	
2 21	12 27.29	-15 55.2	2.608	3.404	11.3	19.4	2 21	12 27.58	- 9 38.6	2.183	3.016	11.9	20.1
3 2	12 21.93	-15 47.3	2.523	3.405	8.9	19.3	3 2	12 22.27	- 9 14.6	2.109	3.021	8.8	19.9
3 12	12 15.21	-15 23.1	2.463	3.405	6.3	19.1	3 12	12 15.43	- 8 35.7	2.059	3.025	5.4	19.7
3 22	12 7.69	-14 44.2	2.430	3.405	4.1	19.0	3 22	12 7.72	- 7 44.9	2.037	3.028	2.3	19.5
4 1	12 0.09	-13 53.7	2.426	3.405	4.1	19.0	4 1	11 59.95	- 6 47.3	2.044	3.032	3.5	19.6
4 11	11 53.11	-12 56.5	2.452	3.404	6.2	19.1	4 11	11 52.95	- 5 48.7	2.080	3.035	6.9	19.8
4 21	11 47.37	-11 57.9	2.504	3.403	8.8	19.3	4 21	11 47.39	- 4 54.7	2.142	3.038	10.2	20.0
5 1	11 43.30	-11 2.9	2.581	3.401	11.3	19.4	5 1	11 43.72	- 4 10.0	2.227	3.041	13.1	20.2
<b>379360</b>	2009 <i>WJ</i> <sub>180</sub>		3 22.5 203°28	0.2/22.7	17		<b>166260</b>	2002 <i>GF</i> <sub>65</sub>		3 22.5 274°72	0.8/21.9	17	
2 21	12 28.38	- 4 3.1	2.239	3.090	11.0	22.0	2 21	12 32.58	- 0 7.8	1.525	2.396	14.1	19.8
3 2	12 22.83	- 3 22.6	2.159	3.086	7.8	21.8	3 2	12 26.44	+ 0 11.0	1.446	2.384	9.9	19.5
3 12	12 15.72	- 2 30.9	2.105	3.082	4.2	21.5	3 12	12 17.90	+ 0 40.0	1.391	2.371	5.2	19.2
3 22	12 7.72	- 1 32.2	2.080	3.077	0.3	21.2	3 22	12 7.83	+ 1 13.9	1.362	2.359	0.8	18.9
4 1	11 59.61	- 0 32.0	2.085	3.071	3.7	21.5	4 1	11 57.49	+ 1 46.3	1.361	2.346	5.4	19.2
4 11	11 52.22	+ 0 23.8	2.119	3.065	7.4	21.7	4 11	11 48.20	+ 2 10.5	1.386	2.333	10.4	19.4
4 21	11 46.23	+ 1 10.5	2.179	3.059	10.8	21.9	4 21	11 41.02	+ 2 21.7	1.433	2.320	14.9	19.6
5 1	11 42.12	+ 1 44.7	2.261	3.052	13.6	22.1	5 1	11 36.61	+ 2 17.4	1.500	2.308	18.6	19.9
<b>354773</b>	2005 <i>UV</i> <sub>112</sub>		3 22.5 160°58	1.0/23.4	18		<b>293705</b>	2007 <i>QK</i>		3 22.5 291°79	11.7/ 1.9	18	
2 21	12 33.01	- 6 10.9	1.788	2.635	13.5	22.5	2 21	12 31.80	-33 9.6	2.047	2.738	17.2	20.3
3 2	12 26.29	- 5 36.7	1.720	2.642	9.7	22.3	3 2	12 26.02	-34 26.9	1.944	2.716	15.5	20.1
3 12	12 17.61	- 4 47.4	1.676	2.649	5.4	22.1	3 12	12 17.81	-35 17.8	1.860	2.695	13.8	19.9
3 22	12 7.80	- 3 47.7	1.660	2.655	1.2	21.8	3 22	12 7.84	-35 37.1	1.796	2.674	12.3	19.7
4 1	11 57.96	- 2 44.2	1.673	2.661	4.2	22.0	4 1	11 57.22	-35 22.3	1.755	2.653	11.7	19.7
4 11	11 49.18	- 1 44.3	1.715	2.665	8.5	22.3	4 11	11 47.26	-34 36.0	1.738	2.632	12.2	19.6
4 21	11 42.28	- 0 54.2	1.781	2.668	12.4	22.5	4 21	11 39.14	-33 25.0	1.743	2.610	13.7	19.7
5 1	11 37.78	- 0 17.9	1.869	2.671	15.7	22.7	5 1	11 33.71	-31 59.0	1.770	2.589	15.7	19.8
<b>243308</b>	2008 <i>KJ</i> <sub>30</sub>		3 22.5 193°05	0.9/21.3	17		<b>335593</b>	2006 <i>DM</i> <sub>140</sub>		3 22.5 327°34	3.4/19.1	17	
2 21	12 27.31	- 1 40.0	2.360	3.218	10.3	21.6	2 21	12 25.65	+ 4 34.8	1.600	2.488	12.6	19.9
3 2	12 21.99	- 0 27.3	2.283	3.216	7.1	21.4	3 2	12 21.40	+ 5 47.0	1.529	2.475	8.7	19.7
3 12	12 15.26	+ 0 55.4	2.234	3.213	3.6	21.1	3 12	12 15.16	+ 7 6.9	1.483	2.464	4.8	19.4
3 22	12 7.70	+ 2 22.6	2.214	3.210	0.9	20.9	3 22	12 7.71	+ 8 25.8	1.463	2.452	3.7	19.3
4 1	12 0.07	+ 3 47.7	2.225	3.206	4.1	21.1	4 1	12 0.10	+ 9 34.8	1.470	2.442	7.1	19.5
4 11	11 53.12	+ 5 4.3	2.266	3.201	7.7	21.4	4 11	11 53.44	+10 26.1	1.502	2.432	11.3	19.7
4 21	11 47.48	+ 6 7.7	2.333	3.196	10.8	21.5	4 21	11 48.58	+10 55.6	1.557	2.422	15.1	19.9
5 1	11 43.59	+ 6 55.1	2.422	3.190	13.5	21.7	5 1	11 46.10	+11 2.1	1.629	2.413	18.4	20.1
<b>204893</b>	2007 <i>TD</i> <sub>355</sub>		3 22.5 114°75	4.7/16.8	18		<b>519654</b>	2012 <i>VC</i> <sub>115</sub>		3 22.5 220°54	4.3/27.7	17	
2 21	12 27.87	+12 38.9	2.294	3.171	9.7	20.1	2 21	12 26.62	-17 20.9	2.430	3.222	12.1	21.4
3 2	12 22.32	+13 45.3	2.246	3.181	7.0	20.0	3 2	12 21.60	-17 15.5	2.342	3.219	9.6	21.2
3 12	12 15.38	+14 48.6	2.225	3.192	5.0	19.9	3 12	12 15.10	-16 51.9	2.278	3.215	7.0	21.0
3 22	12 7.71	+15 42.9	2.233	3.202	5.0	19.9	3 22	12 7.73	-16 11.3	2.241	3.212	4.8	20.9
4 1	12 0.10	+16 22.9	2.270	3.212	7.1	20.0	4 1	12 0.24	-15 16.8	2.232	3.208	4.6	20.9
4 11	11 53.32	+16 45.3	2.333	3.221	9.7	20.2	4 11	11 53.40	-14 13.9	2.252	3.204	6.6	21.0
4 21	11 47.95	+16 49.4	2.419	3.231	12.2	20.4	4 21	11 47.87	-13 8.4	2.298	3.200	9.4	21.2
5 1	11 44.39	+16 36.0	2.525	3.240	14.3	20.6	5 1	11 44.10	-12 6.3	2.368	3.196	12.0	21.3
<b>190828</b>	2001 <i>SJ</i> <sub>47</sub>		3 22.5 216°01	2.4/20.5	18		<b>159541</b>	2001 <i>QU</i> <sub>236</sub>		3 22.5 127°68	0.1/22.4	18	
2 21	12 33.38	+ 3 9.7	1.663	2.535	13.0	20.7	2 21	12 31.43	- 4 9.8	1.609	2.469	14.1	21.2
3 2	12 26.77	+ 3 53.7	1.590	2.529	9.1	20.4	3 2	12 25.27	- 3 14.2	1.550	2.482	9.9	21.0
3 12	12 17.96	+ 4 44.9	1.542	2.522	4.8	20.2	3 12	12 17.09	- 2 3.7	1.517	2.494	5.2	20.7
3 22	12 7.83	+ 5 36.5	1.521	2.514	2.5	20.0	3 22	12 7.82	- 0 45.2	1.510	2.506	0.2	20.3
4 1	11 57.54	+ 6 21.1	1.529	2.506	6.1	20.2	4 1	11 58.59	+ 0 32.8	1.532	2.518	4.7	20.7
4 11	11 48.30	+ 6 52.3	1.564	2.497	10.6	20.4	4 11	11 50.55	+ 1 41.9	1.581	2.528	9.3	21.0
4 21	11 41.06	+ 7 6.7	1.622	2.488	14.6	20.6	4 21	11 44.50	+ 2 36.0	1.654	2.539	13.3	21.3
5 1	11 36.40	+ 7 2.7	1.699	2.478	17.9	20.9	5 1	11 40.93	+ 3 11.8	1.747	2.548	16.7	21.5
<b>211500</b>	2003 <i>PD</i> <sub>9</sub>		3 22.5 236°										

EPHEMERIDES

3 22.5

3 22.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>317745</b>	2003 <i>SF</i> <sub>38</sub>		3 22.5 174°17'		3°7/26.4 17		<b>208209</b>	2000 <i>SQ</i> <sub>60</sub>		3 22.5 219°16'		0°2/22.7 18	
2 21	12 30.94	-14 33.7	2.112	2.920	13.2	21.5	2 21	12 24.66	-4 57.9	2.497	3.346	10.0	20.1
3 2	12 24.73	-14 15.2	2.032	2.923	10.2	21.3	3 2	12 20.13	-3 58.0	2.416	3.342	7.1	19.9
3 12	12 16.78	-13 37.3	1.975	2.926	6.9	21.1	3 12	12 14.31	-2 46.5	2.362	3.338	3.8	19.6
3 22	12 7.82	-12 42.0	1.947	2.928	4.1	21.0	3 22	12 7.74	-1 28.0	2.337	3.334	0.3	19.3
4 1	11 58.76	-11 34.2	1.947	2.930	4.3	21.0	4 1	12 1.09	0 8.1	2.343	3.329	3.3	19.6
4 11	11 50.55	-10 20.7	1.976	2.930	7.3	21.1	4 11	11 55.06	+1 7.2	2.378	3.324	6.7	19.8
4 21	11 43.93	-9 8.5	2.032	2.930	10.6	21.3	4 21	11 50.20	+2 13.0	2.440	3.319	9.8	20.0
5 1	11 39.42	-8 3.9	2.112	2.929	13.6	21.5	5 1	11 46.94	+3 5.7	2.525	3.314	12.4	20.2
<b>361144</b>	2006 <i>HK</i> <sub>83</sub>		3 22.5 253°76'		0°7/23.2 17		<b>192532</b>	1998 <i>SZ</i> <sub>63</sub>		3 22.5 173°27'		3°0/19.9 18	
2 21	12 30.11	-6 3.2	1.904	2.753	12.7	22.2	2 21	12 35.69	+5 44.4	1.790	2.659	12.4	20.6
3 2	12 24.46	-5 16.2	1.806	2.731	9.2	22.0	3 2	12 28.18	+6 24.1	1.726	2.663	8.7	20.4
3 12	12 16.80	-4 12.4	1.733	2.708	5.1	21.7	3 12	12 18.63	+7 6.9	1.688	2.666	4.8	20.2
3 22	12 7.83	-2 56.4	1.688	2.684	0.9	21.3	3 22	12 7.94	+7 46.4	1.678	2.668	3.1	20.1
4 1	11 58.51	-1 34.9	1.673	2.660	4.2	21.5	4 1	11 57.23	+8 16.5	1.698	2.669	6.3	20.3
4 11	11 49.91	0 16.2	1.685	2.635	8.7	21.7	4 11	11 47.65	+8 32.3	1.745	2.670	10.2	20.5
4 21	11 42.94	+0 52.6	1.723	2.609	12.9	21.9	4 21	11 40.03	+8 31.8	1.816	2.670	13.8	20.7
5 1	11 38.25	+1 46.0	1.783	2.582	16.4	22.1	5 1	11 34.91	+8 14.8	1.907	2.669	16.8	20.9
<b>167101</b>	2003 <i>ST</i> <sub>46</sub>		3 22.5 148°25'		0°6/23.0 18		<b>166731</b>	2002 <i>TB</i> <sub>259</sub>		3 22.5 53°89'		3°3/26.5 18	
2 21	12 30.47	-5 12.8	1.728	2.583	13.5	20.6	2 21	12 25.19	-14 58.3	1.910	2.730	13.9	19.5
3 2	12 24.58	-4 32.9	1.661	2.589	9.6	20.4	3 2	12 20.71	-14 5.8	1.849	2.749	10.6	19.3
3 12	12 16.75	-3 38.2	1.619	2.595	5.2	20.1	3 12	12 14.64	-12 51.3	1.812	2.768	7.0	19.1
3 22	12 7.82	-2 34.0	1.604	2.600	0.8	19.8	3 22	12 7.75	-11 19.3	1.802	2.787	3.8	19.0
4 1	11 58.85	-1 27.4	1.618	2.605	4.3	20.1	4 1	12 0.93	-9 37.1	1.820	2.806	4.0	19.0
4 11	11 50.92	0 26.1	1.659	2.609	8.7	20.4	4 11	11 55.04	-7 53.5	1.866	2.825	7.2	19.2
4 21	11 44.84	+0 24.0	1.724	2.613	12.7	20.6	4 21	11 50.72	-6 16.8	1.938	2.845	10.6	19.5
5 1	11 41.11	+0 58.7	1.811	2.617	15.9	20.8	5 1	11 48.40	-4 53.3	2.034	2.865	13.6	19.7
<b>232500</b>	2003 <i>QF</i> <sub>13</sub>		3 22.5 186°41'		2°8/18.9 18		<b>74741</b>	1999 <i>RP</i> <sub>184</sub>		3 22.5 237°85'		2°0/20.6 16	
2 21	12 27.23	+5 51.8	2.414	3.286	9.5	20.8	2 21	12 31.31	+2 19.6	1.846	2.715	12.1	20.6
3 2	12 21.91	+7 1.3	2.347	3.286	6.6	20.6	3 2	12 25.24	+3 9.1	1.764	2.702	8.4	20.4
3 12	12 15.22	+8 14.2	2.308	3.285	3.7	20.5	3 12	12 17.17	+4 6.6	1.709	2.688	4.4	20.1
3 22	12 7.75	+9 24.6	2.298	3.284	3.0	20.4	3 22	12 7.88	+5 6.0	1.681	2.674	2.1	19.9
4 1	12 0.24	+10 26.6	2.318	3.282	5.5	20.6	4 1	11 58.36	+6 0.1	1.682	2.659	5.6	20.1
4 11	11 53.42	+11 15.6	2.367	3.280	8.5	20.7	4 11	11 49.71	+6 42.5	1.711	2.644	9.8	20.3
4 21	11 47.90	+11 48.8	2.440	3.278	11.3	20.9	4 21	11 42.79	+7 8.9	1.763	2.628	13.7	20.5
5 1	11 44.08	+12 5.2	2.534	3.274	13.6	21.1	5 1	11 38.21	+7 17.5	1.836	2.612	16.9	20.7
<b>341822</b>	2007 <i>YW</i> <sub>65</sub>		3 22.5 104°45'		0°6/21.7 17		<b>327448</b>	2005 <i>WU</i> <sub>128</sub>		3 22.5 252°31'		1°4/23.8 17	
2 21	12 27.02	-0 42.4	2.551	3.409	9.6	21.9	2 21	12 28.81	-7 6.2	1.971	2.817	12.5	21.1
3 2	12 21.61	-0 1.7	2.495	3.427	6.6	21.8	3 2	12 23.42	-6 37.5	1.882	2.804	9.1	20.8
3 12	12 14.99	+0 45.5	2.466	3.445	3.4	21.6	3 12	12 16.20	-5 53.6	1.818	2.790	5.3	20.6
3 22	12 7.74	+1 35.1	2.466	3.462	0.7	21.4	3 22	12 7.84	-4 58.0	1.781	2.776	1.6	20.3
4 1	12 0.56	+2 22.4	2.497	3.479	3.6	21.6	4 1	11 59.25	-3 56.4	1.773	2.761	3.9	20.4
4 11	11 54.09	+3 3.3	2.557	3.496	6.7	21.9	4 11	11 51.41	-2 55.6	1.793	2.746	8.0	20.6
4 21	11 48.86	+3 34.6	2.643	3.513	9.5	22.1	4 21	11 45.14	-2 1.9	1.838	2.731	11.8	20.8
5 1	11 45.22	+3 54.5	2.752	3.529	11.8	22.3	5 1	11 41.02	-1 20.1	1.906	2.716	15.1	21.0
<b>472713</b>	2015 <i>FD</i> <sub>45</sub>		3 22.5 314°80'		0°9/23.5 17		<b>39678</b>	Ammannito		3 22.5 258°90'		0°5/21.9 17	
2 21	12 24.51	-6 59.3	2.029	2.881	11.9	21.1	2 21	12 29.71	-2 46.0	1.587	2.455	13.8	20.3
3 2	12 20.29	-6 7.3	1.947	2.873	8.6	20.8	3 2	12 24.39	-1 52.7	1.505	2.441	9.8	20.1
3 12	12 14.48	-4 59.7	1.890	2.864	4.8	20.6	3 12	12 16.84	-0 43.9	1.447	2.426	5.1	19.8
3 22	12 7.73	-3 41.1	1.861	2.856	1.1	20.3	3 22	12 7.87	+0 34.2	1.415	2.411	0.5	19.4
4 1	12 0.85	-2 18.2	1.860	2.849	3.7	20.5	4 1	11 58.62	+1 52.8	1.411	2.396	5.2	19.7
4 11	11 54.70	-0 58.5	1.888	2.841	7.6	20.7	4 11	11 50.32	+3 2.9	1.433	2.381	10.2	19.9
4 21	11 49.98	+0 11.6	1.941	2.834	11.3	20.9	4 21	11 43.95	+3 57.4	1.479	2.365	14.6	20.1
5 1	11 47.18	+1 7.3	2.016	2.827	14.4	21.1	5 1	11 40.17	+4 32.2	1.545	2.349	18.3	20.3
<b>178076</b>	2006 <i>SV</i> <sub>117</sub>		3 22.5 126°67'		0°3/22.9 18		<b>33095</b>	1997 <i>YM</i> <sub>5</sub>		3 22.5 250°81'		0°1/22.6 18	
2 21	12 26.12	-4 18.6	2.476	3.325	10.1	20.8	2 21	12 28.51	-3 30.7	1.857	2.717	12.5	19.0
3 2	12 21.09	-3 41.6	2.406	3.332	7.2	20.6	3 2	12 23.21	-2 53.5	1.780	2.711	8.8	18.7
3 12	12 14.77	-2 55.0	2.364	3.339	3.8	20.4	3 12	12 16.07	-2 3.7	1.727	2.705	4.7	18.5
3 22	12 7.74	-2 2.4	2.350	3.346	0.5	20.2	3 22	12 7.83	-1 6.2	1.702	2.699	0.3	18.1
4 1	12 0.70	-1 8.7	2.366	3.352	3.2	20.4	4 1	11 59.45	-0 7.2	1.705	2.692	4.3	18.4
4 11	11 54.34	0 18.8	2.411	3.359	6.6	20.6	4 11	11 51.93	+0 46.2	1.736	2.685	8.5	18.6
4 21	11 49.21	+0 23.3	2.482	3.365	9.5	20.8	4 21	11 46.06	+1 28.7	1.792	2.678	12.4	18.8
5 1	11 45.71	+0 54.6	2.577	3.371	12.1	21.0	5 1	11 42.38	+1 56.6	1.868	2.672	15.6	19.0
<b>117823</b>	2005 <i>JY</i> <sub>24</sub>		3 22.5 72°53'		3°0/25.4 18		<b>253110</b>	2002 <i>US</i> <sub>15</sub>		3 22.5 115°32'		1°4/20.9 18	
2 21	12 27.88	-12 0.7	1.572	2.412	15.4	19.7	2 21	12 30.20	+0 8.6	1.976	2.840	11.7	21.2
3 2	12 22.97	-11 24.0	1.502	2.416	11.6	19.5	3 2	12 24.08	+1 12.7	1.925	2.860	8.0	21.0
3 12	12 15.99	-10 23.8	1.455	2.420	7.3	19.3	3 12	12 16.36	+2 24.7	1.900	2.880	4.1	20.8
3 22	12 7.81	-9 4.6	1.434	2.424	3.5	19.0	3 22	12 7.84	+3 38.3	1.904	2.899	1.5	20.6
4 1	11 59.55	-7 33.9	1.440	2.428	4.5	19.1	4 1	11 59.43	+4 46.4	1.938	2.917	4.8	20.9
4 11	11 52.38	-6 2.0	1.472	2.432	8.7	19.4	4 11	11 52.00	+5 43.0	2.000	2.935	8.5	21.1
4 21	11 47.14	-4 38.0	1.529	2.436	12.8	19.6	4 21	11 46.22	+6 24.5	2.086	2.952	11.8	21.4
5 1	11 44.38	-3 28.9	1.607	2.441	16.4	19.8	5 1	11 42.49	+6 49.1	2.195	2.968	14.5	21.6
<b>422778</b>	2001 <i>VU</i> <sub>23</sub>		3 22.5 134°55'		2°3/25.3 18		<b>119632</b>	2001 <i>XE</i> <sub>11</sub>		3 22.5 247°06'		4°1/25.7 17	
2 21	12 29.86	-11 32.7	2.472</										

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>270543</b>	2002 GY <sub>128</sub>		3 22.5 264°42'	1.4°/23.9	17		<b>185183</b>	2006 SP <sub>345</sub>		3 22.5 79°99'	2.2°/24.6	18	
2 21	12 26.64	- 8 4.9	1.970	2.816	12.5	20.4	2 21	12 29.35	- 9 35.1	1.615	2.460	14.8	20.4
3 2	12 21.86	- 7 22.2	1.886	2.807	9.1	20.1	3 2	12 23.85	- 9 1.4	1.556	2.475	10.8	20.2
3 12	12 15.36	- 6 22.8	1.826	2.797	5.3	19.9	3 12	12 16.39	- 8 8.2	1.522	2.490	6.5	20.0
3 22	12 7.81	- 5 10.9	1.793	2.787	1.6	19.6	3 22	12 7.88	- 7 0.5	1.513	2.506	2.5	19.8
4 1	12 0.10	- 3 52.8	1.789	2.778	3.8	19.7	4 1	11 59.42	- 5 45.6	1.532	2.520	4.2	19.9
4 11	11 53.15	- 2 36.0	1.813	2.768	7.8	20.0	4 11	11 52.10	- 4 32.3	1.578	2.535	8.5	20.2
4 21	11 47.73	- 1 27.4	1.863	2.758	11.6	20.2	4 21	11 46.71	- 3 28.0	1.648	2.550	12.4	20.5
5 1	11 44.36	- 0 32.2	1.935	2.748	14.8	20.4	5 1	11 43.72	- 2 38.0	1.739	2.565	15.7	20.7
<b>518802</b>	2010 BU <sub>97</sub>		3 22.5 4°82'	6°3/28.8	17		<b>354744</b>	2005 TT <sub>79</sub>		3 22.5 211°09'	2°1/25.5	18	
2 21	12 26.95	-19 40.9	1.847	2.643	15.3	20.5	2 21	12 25.67	-11 24.7	3.102	3.915	9.3	21.8
3 2	12 22.22	-19 56.9	1.769	2.643	12.4	20.3	3 2	12 20.68	-11 1.2	3.009	3.908	7.0	21.7
3 12	12 15.60	-19 48.9	1.713	2.643	9.4	20.1	3 12	12 14.57	-10 25.9	2.943	3.901	4.5	21.5
3 22	12 7.82	-19 17.1	1.681	2.644	6.9	20.0	3 22	12 7.80	- 9 40.6	2.905	3.893	2.3	21.3
4 1	11 59.89	-18 24.7	1.675	2.645	6.4	19.9	4 1	12 0.94	- 8 48.6	2.899	3.884	2.8	21.4
4 11	11 52.85	-17 18.4	1.695	2.647	8.4	20.0	4 11	11 54.57	- 7 54.1	2.922	3.875	5.3	21.5
4 21	11 47.52	-16 6.3	1.739	2.650	11.4	20.2	4 21	11 49.17	- 7 1.1	2.973	3.866	7.8	21.7
5 1	11 44.47	-14 56.6	1.806	2.652	14.4	20.4	5 1	11 45.13	- 6 13.4	3.050	3.856	10.1	21.8
<b>236104</b>	2005 QJ <sub>71</sub>		3 22.5 105°74'	2°9/19.3	17		<b>365497</b>	2010 RE <sub>9</sub>		3 22.5 232°59'	1°5/21.1	16	
2 21	12 31.25	- 0 1.8	1.576	2.447	13.7	21.0	2 21	12 30.88	+ 0 35.9	1.879	2.744	12.1	22.1
3 2	12 25.05	+ 2 23.6	1.534	2.474	9.2	20.8	3 2	12 24.93	+ 1 26.6	1.796	2.732	8.4	21.8
3 12	12 16.94	+ 4 59.8	1.519	2.499	4.8	20.6	3 12	12 17.02	+ 2 27.0	1.740	2.720	4.4	21.6
3 22	12 7.88	+ 7 33.9	1.534	2.524	3.2	20.6	3 22	12 7.92	+ 3 31.1	1.712	2.707	1.5	21.3
4 1	11 59.02	+ 9 53.0	1.578	2.548	7.0	20.8	4 1	11 58.61	+ 4 31.9	1.713	2.693	5.2	21.6
4 11	11 51.43	+11 47.1	1.651	2.571	11.1	21.1	4 11	11 50.14	+ 5 22.5	1.741	2.678	9.4	21.8
4 21	11 45.86	+13 11.8	1.747	2.593	14.7	21.4	4 21	11 43.36	+ 5 58.3	1.794	2.663	13.3	22.0
5 1	11 42.71	+14 6.8	1.863	2.614	17.5	21.7	5 1	11 38.86	+ 6 16.7	1.867	2.647	16.5	22.2
<b>200935</b>	2002 AO <sub>164</sub>		3 22.5 59°76'	0°7/22.9	18		<b>399632</b>	2004 PL <sub>2</sub>		3 22.5 189°37'	3°0/19.2	14 C	
2 21	12 30.66	- 4 54.2	1.305	2.175	16.1	20.0	2 21	12 32.89	+ 6 13.3	2.219	3.085	10.5	23.3
3 2	12 25.07	- 4 20.3	1.253	2.187	11.4	19.8	3 2	12 26.00	+ 7 14.3	2.148	3.084	7.3	23.1
3 12	12 17.12	- 3 29.1	1.223	2.200	6.2	19.5	3 12	12 17.44	+ 8 18.5	2.106	3.082	4.2	22.9
3 22	12 7.89	- 2 27.1	1.218	2.214	0.9	19.2	3 22	12 7.94	+ 9 19.7	2.093	3.079	3.2	22.9
4 1	11 58.74	- 1 23.1	1.239	2.227	5.0	19.5	4 1	11 58.37	+10 11.7	2.110	3.075	5.9	23.0
4 11	11 50.99	- 0 26.5	1.285	2.241	10.2	19.8	4 11	11 49.63	+10 49.8	2.156	3.069	9.2	23.2
4 21	11 45.57	+ 0 16.1	1.353	2.255	14.6	20.1	4 21	11 42.43	+11 11.5	2.227	3.063	12.3	23.4
5 1	11 42.96	+ 0 40.7	1.441	2.268	18.3	20.4	5 1	11 37.25	+11 16.1	2.319	3.055	14.8	23.6
<b>372630</b>	2009 VU <sub>68</sub>		3 22.5 187°80'	0°2/22.7	17		<b>330032</b>	2005 UN <sub>193</sub>		3 22.5 242°86'	1°4/21.2	17	
2 21	12 29.37	- 3 41.6	2.398	3.245	10.5	22.6	2 21	12 29.97	+ 0 57.3	1.840	2.709	12.1	21.8
3 2	12 23.45	- 3 8.8	2.319	3.244	7.4	22.4	3 2	12 24.25	+ 1 35.6	1.765	2.702	8.5	21.6
3 12	12 16.07	- 2 26.3	2.267	3.243	4.0	22.2	3 12	12 16.64	+ 2 22.2	1.716	2.696	4.4	21.3
3 22	12 7.85	- 1 37.7	2.245	3.241	0.4	21.9	3 22	12 7.91	+ 3 11.7	1.694	2.689	1.4	21.1
4 1	11 59.55	- 0 47.9	2.253	3.239	3.5	22.1	4 1	11 59.04	+ 3 57.5	1.700	2.682	5.1	21.3
4 11	11 51.95	- 0 1.9	2.290	3.236	7.0	22.4	4 11	11 51.06	+ 4 33.8	1.734	2.674	9.2	21.5
4 21	11 45.69	+ 0 36.2	2.354	3.232	10.2	22.6	4 21	11 44.80	+ 4 56.4	1.792	2.667	13.0	21.8
5 1	11 41.22	+ 1 3.4	2.441	3.228	12.9	22.7	5 1	11 40.79	+ 5 3.3	1.871	2.659	16.2	22.0
<b>417234</b>	2005 YM <sub>74</sub>		3 22.5 84°72'	2°1/24.5	18		<b>458939</b>	2011 UO <sub>333</sub>		3 22.5 133°99'	4°8/18.1	18	
2 21	12 30.81	- 9 4.4	1.903	2.740	13.2	21.9	2 21	12 32.63	+ 9 14.8	1.703	2.582	12.4	21.3
3 2	12 24.55	- 8 41.4	1.851	2.766	9.7	21.7	3 2	12 26.03	+10 29.9	1.654	2.594	8.7	21.1
3 12	12 16.63	- 8 2.9	1.824	2.792	5.8	21.5	3 12	12 17.50	+11 45.1	1.632	2.605	5.5	20.9
3 22	12 7.88	- 7 12.7	1.825	2.817	2.3	21.3	3 22	12 7.95	+12 51.6	1.637	2.616	5.1	20.9
4 1	11 59.26	- 6 16.6	1.855	2.842	3.8	21.5	4 1	11 58.49	+13 41.9	1.670	2.627	7.9	21.1
4 11	11 51.71	- 5 21.2	1.912	2.867	7.5	21.7	4 11	11 50.23	+14 11.1	1.729	2.637	11.4	21.3
4 21	11 45.89	- 4 32.3	1.996	2.891	10.9	22.0	4 21	11 43.92	+14 18.1	1.811	2.646	14.7	21.5
5 1	11 42.21	- 3 54.0	2.101	2.915	13.8	22.2	5 1	11 40.04	+14 4.1	1.911	2.654	17.4	21.7
<b>503492</b>	2016 EM <sub>188</sub>		3 22.5 307°32'	9°5/28.7	17		<b>207391</b>	2005 WT <sub>3</sub>		3 22.5 162°59'	13°2/30.6	18	
2 21	12 33.67	-21 40.0	1.535	2.322	18.2	21.4	2 21	12 42.28	-27 43.8	1.355	2.106	21.9	20.3
3 2	12 27.62	-22 58.3	1.448	2.310	15.4	21.2	3 2	12 34.11	-29 32.7	1.284	2.111	19.1	20.1
3 12	12 18.78	-23 51.5	1.381	2.298	12.4	20.9	3 12	12 22.37	-30 48.1	1.232	2.116	16.2	20.0
3 22	12 8.00	-24 15.2	1.338	2.286	10.1	20.8	3 22	12 8.19	-31 21.8	1.201	2.119	13.9	19.8
4 1	11 56.61	-24 8.3	1.318	2.274	9.7	20.7	4 1	11 53.41	-31 11.0	1.192	2.122	13.2	19.8
4 11	11 46.19	-23 35.4	1.323	2.263	11.6	20.8	4 11	11 40.09	-30 21.7	1.207	2.125	14.4	19.9
4 21	11 38.02	-22 45.4	1.351	2.252	14.7	20.9	4 21	11 29.86	-29 6.4	1.242	2.126	16.9	20.0
5 1	11 33.00	-21 48.9	1.398	2.241	17.9	21.1	5 1	11 23.62	-27 40.3	1.297	2.127	19.8	20.2
<b>376032</b>	2010 CA <sub>35</sub>		3 22.5 80°52'	4°1/17.9	18		<b>417736</b>	2007 CP <sub>55</sub>		3 22.5 159°16'	1°1/23.7	16	
2 21	12 28.88	+ 8 51.9	2.003	2.881	10.8	20.8	2 21	12 30.36	- 6 37.4	2.192	3.032	11.6	21.9
3 2	12 23.10	+10 8.1	1.967	2.907	7.6	20.6	3 2	12 24.22	- 6 9.6	2.120	3.039	8.4	21.7
3 12	12 15.83	+11 23.7	1.959	2.933	4.7	20.5	3 12	12 16.50	- 5 29.2	2.074	3.045	4.8	21.5
3 22	12 7.84	+12 31.3	1.979	2.958	4.4	20.5	3 22	12 7.91	- 4 39.9	2.056	3.051	1.3	21.3
4 1	12 0.03	+13 24.8	2.027	2.983	6.8	20.7	4 1	11 59.27	- 3 46.6	2.069	3.056	3.5	21.4
4 11	11 53.23	+14 0.2	2.102	3.007	9.8	20.9	4 11	11 51.46	- 2 55.2	2.110	3.061	7.2	21.7
4 21	11 48.03	+14 16.2	2.201	3.031	12.6	21.2	4 21	11 45.13	- 2 10.4	2.178	3.065	10.5	21.9
5 1	11 44.79	+14 13.6	2.319	3.055	14.8	21.4	5 1	11 40.77	- 1 36.2	2.269	3.068	13.4	22.1
<b>412881</b>	2014 QD <sub>25</sub>		3 22.5 328°64'	4°6/25.7	18		<b>328306</b>	2008 HS <sub>10</sub>		3 22.5 282°54'	2°3/24.6	17	
2 21	12 27.64	-11 49.											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>471416</b>	2011 TL <sub>2</sub>		3 22.5 278°94	0°4/22.9	17		<b>317149</b>	2001 UB <sub>228</sub>		3 22.5 116°51	0°5/23.1	17	
2 21	12 25.67	- 4 40.7	2.270	3.122	10.8	21.2	2 21	12 27.13	- 4 38.5	2.395	3.243	10.5	21.4
3 2	12 21.00	- 4 1.7	2.185	3.112	7.7	21.0	3 2	12 21.86	- 4 8.7	2.327	3.252	7.4	21.2
3 12	12 14.86	- 3 11.0	2.127	3.102	4.2	20.8	3 12	12 15.23	- 3 28.8	2.286	3.261	4.0	21.0
3 22	12 7.83	- 2 12.7	2.096	3.092	0.5	20.5	3 22	12 7.88	- 2 42.7	2.273	3.269	0.7	20.8
4 1	12 0.68	- 1 12.1	2.095	3.082	3.5	20.7	4 1	12 0.51	- 1 54.8	2.291	3.278	3.2	21.0
4 11	11 54.18	- 0 14.8	2.123	3.072	7.2	20.9	4 11	11 53.87	- 1 10.2	2.337	3.286	6.6	21.2
4 21	11 48.98	+ 0 34.0	2.176	3.062	10.5	21.1	4 21	11 48.52	- 0 32.8	2.409	3.294	9.7	21.4
5 1	11 45.55	+ 1 10.9	2.252	3.052	13.4	21.3	5 1	11 44.88	- 0 5.5	2.505	3.302	12.3	21.6
<b>93268</b>	2000 SX <sub>173</sub>		3 22.5 281°86	6°9/28.7	18 R		<b>211429</b>	2002 XD <sub>37</sub>		3 22.5 44°88	4°4/19.0	18	
2 21	12 29.41	-20 34.8	1.870	2.656	15.5	19.5	2 21	12 33.56	+11 19.4	1.771	2.648	12.1	19.3
3 2	12 24.15	-20 58.3	1.772	2.638	12.8	19.3	3 2	12 26.50	+11 39.2	1.731	2.669	8.6	19.1
3 12	12 16.75	-20 57.8	1.696	2.621	9.9	19.1	3 12	12 17.66	+11 55.3	1.717	2.690	5.4	19.0
3 22	12 7.93	-20 31.9	1.644	2.603	7.5	18.9	3 22	12 7.99	+12 2.2	1.730	2.711	4.6	19.0
4 1	11 58.71	-19 42.5	1.618	2.585	7.0	18.8	4 1	11 58.57	+11 55.6	1.771	2.732	7.1	19.1
4 11	11 50.25	-18 35.7	1.619	2.568	9.1	18.9	4 11	11 50.40	+11 33.7	1.838	2.754	10.4	19.4
4 21	11 43.53	-17 19.7	1.644	2.550	12.2	19.0	4 21	11 44.18	+10 56.8	1.929	2.776	13.4	19.6
5 1	11 39.25	-16 3.7	1.691	2.532	15.4	19.2	5 1	11 40.30	+10 6.4	2.040	2.799	16.0	19.8
<b>338079</b>	2002 PB <sub>107</sub>		3 22.5 207°49	4°6/28.2	18		<b>391049</b>	2005 TH <sub>161</sub>		3 22.5 281°69	2°0/20.5	16	
2 21	12 28.75	-18 55.9	2.674	3.448	11.6	22.1	2 21	12 30.38	+ 5 1.4	2.365	3.231	9.9	21.2
3 2	12 23.05	-19 0.8	2.580	3.443	9.4	22.0	3 2	12 24.29	+ 5 19.2	2.276	3.212	6.9	20.9
3 12	12 15.91	-18 48.4	2.510	3.436	7.0	21.8	3 12	12 16.61	+ 5 39.7	2.213	3.192	3.7	20.7
3 22	12 7.89	-18 19.2	2.467	3.430	5.1	21.7	3 22	12 7.95	+ 5 59.0	2.180	3.172	2.1	20.5
4 1	11 59.71	-17 35.6	2.453	3.422	4.8	21.6	4 1	11 59.10	+ 6 12.9	2.176	3.152	4.8	20.7
4 11	11 52.13	-16 42.0	2.468	3.415	6.5	21.7	4 11	11 50.90	+ 6 17.8	2.202	3.131	8.2	20.9
4 21	11 45.77	-15 43.9	2.511	3.406	8.9	21.9	4 21	11 44.04	+ 6 11.6	2.252	3.111	11.3	21.0
5 1	11 41.13	-14 46.6	2.578	3.398	11.4	22.0	5 1	11 39.04	+ 5 53.3	2.325	3.091	14.0	21.2
<b>135323</b>	2001 SG <sub>309</sub>		3 22.5 73°89	2°7/25.3	17		<b>415346</b>	2013 JU <sub>24</sub>		3 22.5 263°55	2°2/20.6	17	
2 21	12 28.69	-10 18.7	2.163	2.992	12.2	19.3	2 21	12 31.03	+ 2 20.5	1.598	2.474	13.3	21.4
3 2	12 23.12	-10 19.2	2.090	2.997	9.1	19.1	3 2	12 25.29	+ 3 7.0	1.521	2.461	9.3	21.1
3 12	12 15.96	-10 5.3	2.041	3.003	5.8	18.9	3 12	12 17.33	+ 4 2.4	1.469	2.449	4.9	20.8
3 22	12 7.89	- 9 39.0	2.020	3.008	3.0	18.7	3 22	12 7.99	+ 4 59.7	1.443	2.436	2.3	20.6
4 1	11 59.76	- 9 4.2	2.028	3.014	3.8	18.8	4 1	11 58.41	+ 5 51.1	1.445	2.424	6.2	20.8
4 11	11 52.42	- 8 25.9	2.064	3.019	6.9	19.0	4 11	11 49.83	+ 6 29.3	1.473	2.411	10.7	21.0
4 21	11 46.56	- 7 49.4	2.126	3.025	10.2	19.2	4 21	11 43.21	+ 6 50.1	1.523	2.397	14.9	21.2
5 1	11 42.64	- 7 18.9	2.211	3.031	13.0	19.4	5 1	11 39.19	+ 6 51.4	1.593	2.384	18.4	21.4
<b>456279</b>	2006 RL <sub>108</sub>		3 22.5 296°64	0°3/22.7	17		<b>52538</b>	1996 TT <sub>39</sub>		3 22.5 236°26	1°5/21.1	18	
2 21	12 28.37	- 4 23.1	1.485	2.353	14.6	21.4	2 21	12 30.51	+ 0 4.9	1.766	2.634	12.6	20.0
3 2	12 23.63	- 3 44.3	1.399	2.333	10.5	21.1	3 2	12 24.77	+ 1 1.6	1.685	2.622	8.8	19.7
3 12	12 16.55	- 2 47.9	1.336	2.314	5.7	20.8	3 12	12 17.00	+ 2 9.5	1.630	2.610	4.5	19.4
3 22	12 7.93	- 1 39.1	1.298	2.295	0.5	20.4	3 22	12 7.98	+ 3 21.9	1.603	2.597	1.5	19.2
4 1	11 58.94	+ 0 26.3	1.288	2.275	5.0	20.7	4 1	11 58.73	+ 4 31.2	1.604	2.584	5.4	19.4
4 11	11 50.89	+ 0 41.2	1.302	2.256	10.3	20.9	4 11	11 50.38	+ 5 29.5	1.632	2.570	9.8	19.7
4 21	11 44.83	+ 1 35.4	1.340	2.238	15.0	21.1	4 21	11 43.80	+ 6 11.7	1.684	2.556	13.8	19.9
5 1	11 41.49	+ 2 10.9	1.397	2.219	19.0	21.3	5 1	11 39.59	+ 6 35.0	1.757	2.541	17.2	20.1
<b>156972</b>	2003 JY <sub>3</sub>		3 22.5 295°27	2°4/24.2	18		<b>44726</b>	1999 TT <sub>14</sub>		3 22.5 329°94	2°0/21.0	18	
2 21	12 32.47	- 7 3.3	1.751	2.597	13.8	19.7	2 21	12 29.30	+ 1 44.2	1.281	2.168	15.1	18.1
3 2	12 26.40	- 7 20.3	1.651	2.570	10.3	19.4	3 2	12 24.44	+ 2 19.6	1.211	2.156	10.6	17.8
3 12	12 18.00	- 7 23.9	1.575	2.544	6.3	19.1	3 12	12 17.01	+ 3 5.4	1.164	2.146	5.5	17.4
3 22	12 8.01	- 7 15.5	1.525	2.518	2.6	18.8	3 22	12 7.98	+ 3 54.3	1.141	2.136	2.1	17.2
4 1	11 57.50	- 6 58.4	1.504	2.491	4.5	18.9	4 1	11 58.72	+ 4 37.4	1.143	2.126	6.6	17.4
4 11	11 47.73	- 6 37.8	1.509	2.465	9.0	19.1	4 11	11 50.66	+ 5 6.7	1.170	2.118	11.9	17.7
4 21	11 39.75	- 6 19.3	1.540	2.438	13.3	19.2	4 21	11 44.91	+ 5 17.3	1.217	2.110	16.6	17.9
5 1	11 34.35	- 6 8.2	1.591	2.412	17.1	19.4	5 1	11 42.14	+ 5 7.2	1.282	2.103	20.5	18.2
<b>296497</b>	2009 JY <sub>10</sub>		3 22.5 233°28	1°3/21.1	17		<b>443695</b>	2015 KJ <sub>103</sub>		3 22.5 354°42	3°0/19.1	17	
2 21	12 30.33	+ 0 24.0	1.955	2.819	11.7	22.0	2 21	12 25.22	+ 5 19.9	2.031	2.911	10.6	20.6
3 2	12 24.49	+ 1 13.6	1.872	2.807	8.2	21.8	3 2	12 20.76	+ 6 24.8	1.967	2.909	7.3	20.4
3 12	12 16.79	+ 2 12.7	1.815	2.795	4.2	21.5	3 12	12 14.75	+ 7 33.9	1.929	2.908	4.1	20.2
3 22	12 7.94	+ 3 15.5	1.787	2.782	1.4	21.3	3 22	12 7.87	+ 8 40.8	1.919	2.907	3.2	20.1
4 1	11 58.91	+ 4 15.4	1.787	2.768	5.0	21.5	4 1	12 0.95	+ 9 38.8	1.937	2.906	5.9	20.3
4 11	11 50.67	+ 5 5.8	1.816	2.753	9.1	21.7	4 11	11 54.81	+10 22.5	1.982	2.905	9.3	20.5
4 21	11 44.05	+ 5 42.2	1.869	2.738	12.8	21.9	4 21	11 50.12	+10 48.9	2.051	2.905	12.5	20.7
5 1	11 39.60	+ 6 1.9	1.944	2.723	16.0	22.1	5 1	11 47.33	+10 57.1	2.140	2.905	15.1	20.9
<b>116777</b>	2004 EJ <sub>22</sub>		3 22.5 3°25	5°2/16.9	18		<b>12834</b>	Bomben		3 22.5 234°66	2°2/20.5	18 R	
2 21	12 25.29	+10 34.3	1.722	2.612	11.6	18.7	2 21	12 31.65	+ 1 24.1	1.558	2.432	13.6	18.1
3 2	12 20.99	+11 55.8	1.668	2.612	8.3	18.5	3 2	12 25.78	+ 2 28.6	1.482	2.422	9.5	17.8
3 12	12 14.92	+13 16.9	1.639	2.612	5.7	18.3	3 12	12 17.61	+ 3 44.4	1.430	2.411	5.0	17.5
3 22	12 7.85	+14 29.0	1.638	2.613	5.7	18.3	3 22	12 8.02	+ 5 3.7	1.406	2.399	2.4	17.3
4 1	12 0.77	+15 24.3	1.662	2.614	8.4	18.5	4 1	11 58.19	+ 6 17.0	1.409	2.387	6.4	17.5
4 11	11 54.65	+15 57.4	1.712	2.616	11.7	18.7	4 11	11 49.38	+ 7 15.8	1.438	2.374	11.1	17.8
4 21	11 50.24	+16 7.0	1.783	2.619	14.8	18.9	4 21	11 42.60	+ 7 54.8	1.490	2.361	15.4	18.0
5 1	11 47.99	+15 53.7	1.872	2.623	17.4	19.1	5 1	11 38.50	+ 8 11.6	1.561	2.347	19.0	18.2
<b>388377</b>	2006 UY <sub>160</sub>		3 22.5 101°95	1°1/21.1	17		<b>340812</b>	2006 UM <sub>20</sub>		3 22.5 63°04	0°2/22.3	17	
2 21	12 26.96	+ 0 58.2	2.499	3.361									

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>241041</b>	2006 <i>RP</i> <sub>5</sub>		3 22.5 174°88	3°0/18.4	17		<b>412221</b>	2013 <i>GT</i> <sub>121</sub>		3 22.5 340°70	0°2/22.6	17	
2 21	12 26.05	+ 7 5.6	2.548	3.421	9.0	20.7	2 21	12 28.64	- 3 12.5	1.205	2.086	16.3	21.1
3 2	12 21.08	+ 8 13.5	2.484	3.423	6.2	20.5	3 2	12 24.08	- 2 49.0	1.137	2.078	11.7	20.8
3 12	12 14.83	+ 9 23.5	2.448	3.424	3.7	20.4	3 12	12 16.88	- 2 8.7	1.091	2.071	6.3	20.5
3 22	12 7.89	+10 30.1	2.442	3.425	3.2	20.3	3 22	12 8.03	- 1 17.5	1.068	2.064	0.4	20.0
4 1	12 0.91	+11 27.9	2.466	3.426	5.4	20.5	4 1	11 58.95	- 0 24.0	1.070	2.058	5.6	20.4
4 11	11 54.59	+12 12.6	2.517	3.426	8.2	20.7	4 11	11 51.13	+ 0 22.1	1.095	2.054	11.2	20.7
4 21	11 49.47	+12 42.0	2.593	3.426	10.8	20.8	4 21	11 45.72	+ 0 53.6	1.142	2.050	16.2	20.9
5 1	11 45.94	+12 55.2	2.691	3.426	13.0	21.0	5 1	11 43.38	+ 1 6.1	1.206	2.046	20.4	21.2
<b>340584</b>	2006 <i>PP</i> <sub>10</sub>		3 22.5 105°11	3°6/27.0	18		<b>245215</b>	2004 <i>WW</i> <sub>9</sub>		3 22.5 140°32	11°0/11.1	17	
2 21	12 29.38	-15 19.8	2.699	3.492	11.0	21.4	2 21	12 40.68	+32 37.4	2.027	2.856	12.9	20.7
3 2	12 23.31	-15 22.5	2.634	3.514	8.6	21.2	3 2	12 31.49	+33 58.2	2.005	2.872	11.5	20.6
3 12	12 15.96	-15 10.5	2.594	3.535	6.0	21.1	3 12	12 20.29	+34 56.7	2.008	2.888	11.0	20.6
3 22	12 7.94	-14 45.1	2.582	3.556	3.9	21.0	3 22	12 8.19	+35 25.7	2.037	2.902	11.7	20.7
4 1	11 59.95	-14 9.2	2.599	3.577	3.9	21.0	4 1	11 56.45	+35 21.5	2.089	2.915	13.1	20.8
4 11	11 52.67	-13 27.3	2.647	3.597	5.9	21.2	4 11	11 46.23	+34 45.5	2.164	2.928	14.8	20.9
4 21	11 46.66	-12 43.9	2.721	3.616	8.4	21.3	4 21	11 38.28	+33 42.4	2.258	2.939	16.5	21.1
5 1	11 42.28	-12 3.4	2.821	3.635	10.6	21.5	5 1	11 33.00	+32 18.2	2.367	2.950	17.9	21.3
<b>247809</b>	2003 <i>SN</i> <sub>111</sub>		3 22.5 287°31	13°6/29.8	18		<b>70290</b>	1999 <i>RZ</i> <sub>118</sub>		3 22.5 218°74	2°1/24.7	17	
2 21	12 40.00	-29 22.0	1.602	2.330	19.9	20.0	2 21	12 28.62	-10 44.9	1.828	2.664	13.7	19.7
3 2	12 32.56	-31 34.6	1.511	2.315	17.8	19.7	3 2	12 23.41	- 9 50.9	1.744	2.658	10.2	19.5
3 12	12 21.71	-33 21.3	1.440	2.300	15.7	19.6	3 12	12 16.29	- 8 35.6	1.684	2.651	6.2	19.2
3 22	12 8.25	-34 33.1	1.390	2.286	14.1	19.4	3 22	12 8.01	- 7 3.4	1.651	2.643	2.4	19.0
4 1	11 53.68	-35 4.1	1.364	2.271	13.7	19.3	4 1	11 59.56	- 5 22.0	1.647	2.635	4.0	19.1
4 11	11 39.90	-34 55.8	1.360	2.256	14.7	19.4	4 11	11 51.97	- 3 40.7	1.671	2.627	8.2	19.3
4 21	11 28.61	-34 16.3	1.378	2.241	16.8	19.4	4 21	11 46.07	- 2 8.2	1.721	2.618	12.3	19.5
5 1	11 20.98	-33 17.8	1.415	2.227	19.3	19.6	5 1	11 42.44	- 0 51.2	1.793	2.608	15.7	19.7
<b>239490</b>	2007 <i>UN</i> <sub>118</sub>		3 22.5 295°04	0°3/22.8	17		<b>139533</b>	2001 <i>QW</i> <sub>12</sub>		3 22.5 142°74	3°0/25.9	18	
2 21	12 27.33	- 3 44.8	2.109	2.965	11.4	20.9	2 21	12 30.07	-12 14.4	2.570	3.380	11.0	20.1
3 2	12 22.23	- 3 17.4	2.032	2.961	8.1	20.7	3 2	12 23.92	-12 22.6	2.494	3.388	8.4	19.9
3 12	12 15.55	- 2 39.2	1.981	2.958	4.4	20.4	3 12	12 16.37	-12 17.6	2.443	3.395	5.6	19.7
3 22	12 7.93	- 1 54.2	1.958	2.954	0.5	20.1	3 22	12 8.02	-12 0.5	2.420	3.402	3.3	19.6
4 1	12 0.22	- 1 7.4	1.964	2.951	3.7	20.4	4 1	11 59.60	-11 34.3	2.427	3.409	3.7	19.6
4 11	11 53.26	- 0 24.5	1.997	2.947	7.5	20.6	4 11	11 51.87	-11 2.9	2.464	3.416	6.2	19.8
4 21	11 47.74	+ 0 10.0	2.056	2.944	11.0	20.8	4 21	11 45.43	-10 30.8	2.527	3.422	8.9	20.0
5 1	11 44.14	+ 0 32.9	2.137	2.940	13.9	21.0	5 1	11 40.73	-10 2.1	2.615	3.427	11.4	20.2
<b>19028</b>	2000 <i>SC</i> <sub>165</sub>		3 22.5 224°31	5°4/28.8	18		<b>19635</b>	1999 <i>RC</i> <sub>47</sub>		3 22.5 276°90	3°0/24.9	18	
2 21	12 27.56	-20 1.9	2.390	3.166	12.8	17.3	2 21	12 31.90	- 9 30.2	1.927	2.760	13.3	18.8
3 2	12 22.36	-20 14.2	2.304	3.165	10.4	17.2	3 2	12 25.80	- 9 44.9	1.831	2.741	10.0	18.6
3 12	12 15.61	-20 7.2	2.242	3.164	7.9	17.0	3 12	12 17.63	- 9 44.8	1.759	2.722	6.4	18.3
3 22	12 7.94	-19 41.1	2.205	3.163	5.9	16.9	3 22	12 8.09	- 9 31.2	1.714	2.703	3.3	18.1
4 1	12 0.13	-18 58.4	2.196	3.162	5.5	16.9	4 1	11 58.17	- 9 7.2	1.697	2.683	4.4	18.1
4 11	11 53.00	-18 3.9	2.215	3.161	7.1	16.9	4 11	11 48.99	- 8 37.8	1.709	2.664	8.2	18.3
4 21	11 47.23	-17 3.8	2.260	3.160	9.6	17.1	4 21	11 41.46	- 8 8.9	1.745	2.644	12.0	18.4
5 1	11 43.31	-16 4.2	2.328	3.159	12.1	17.3	5 1	11 36.27	- 7 45.6	1.804	2.624	15.5	18.6
<b>166766</b>	2002 <i>UZ</i> <sub>48</sub>		3 22.5 111°60	1°9/20.0	18		<b>427265</b>	2014 <i>WW</i> <sub>163</sub>		3 22.5 92°89	11°9/10.1	18	
2 21	12 26.35	+ 2 20.1	2.391	3.259	9.7	20.3	2 21	12 36.20	+33 11.5	1.836	2.675	13.6	20.5
3 2	12 21.28	+ 3 32.1	2.336	3.274	6.7	20.1	3 2	12 28.61	+34 27.9	1.808	2.679	12.3	20.5
3 12	12 14.93	+ 4 49.3	2.310	3.289	3.5	19.9	3 12	12 18.89	+35 21.0	1.802	2.684	12.0	20.4
3 22	12 7.91	+ 6 6.1	2.312	3.304	2.0	19.9	3 22	12 8.13	+35 42.9	1.820	2.688	12.7	20.5
4 1	12 0.93	+ 7 16.5	2.345	3.318	4.7	20.1	4 1	11 57.64	+35 29.8	1.860	2.692	14.2	20.6
4 11	11 54.69	+ 8 15.4	2.406	3.332	7.8	20.3	4 11	11 48.62	+34 42.7	1.921	2.697	16.0	20.7
4 21	11 49.74	+ 8 59.7	2.493	3.346	10.6	20.5	4 21	11 41.87	+33 26.5	2.000	2.701	17.8	20.9
5 1	11 46.44	+ 9 28.0	2.602	3.359	12.9	20.7	5 1	11 37.82	+31 47.4	2.094	2.705	19.4	21.0
<b>133043</b>	2003 <i>BC</i> <sub>43</sub>		3 22.5 202°97	9°2/15.8	18		<b>422138</b>	2014 <i>QH</i> <sub>428</sub>		3 22.5 269°56	2°8/24.9	16	
2 21	12 38.70	+15 12.0	1.174	2.061	16.1	20.1	2 21	12 29.49	-10 32.7	1.497	2.343	15.7	21.9
3 2	12 31.27	+17 1.8	1.121	2.058	12.2	19.8	3 2	12 24.44	-10 6.0	1.412	2.330	11.8	21.6
3 12	12 20.68	+18 46.1	1.091	2.054	9.5	19.7	3 12	12 17.02	- 9 15.9	1.349	2.317	7.3	21.3
3 22	12 8.20	+20 9.5	1.086	2.048	9.9	19.7	3 22	12 8.06	- 8 5.9	1.312	2.303	3.2	21.0
4 1	11 55.62	+20 59.6	1.105	2.042	13.3	19.8	4 1	11 58.77	- 6 42.9	1.301	2.290	4.8	21.1
4 11	11 44.76	+21 10.9	1.146	2.035	17.4	20.1	4 11	11 50.46	- 5 17.2	1.316	2.276	9.5	21.3
4 21	11 36.87	+20 45.4	1.204	2.026	21.3	20.3	4 21	11 44.21	- 3 58.6	1.355	2.262	14.2	21.5
5 1	11 32.60	+19 48.7	1.278	2.017	24.6	20.5	5 1	11 40.71	- 2 54.8	1.414	2.249	18.2	21.8
<b>88553</b>	2001 <i>QN</i> <sub>198</sub>		3 22.5 230°99	2°5/20.4	18		<b>123404</b>	2000 <i>WS</i> <sub>88</sub>		3 22.5 56°39	5°6/27.3	18	
2 21	12 34.25	+ 5 34.7	1.991	2.858	11.5	19.1	2 21	12 33.09	-15 53.9	1.666	2.478	16.0	18.9
3 2	12 27.19	+ 5 54.5	1.913	2.849	8.0	18.8	3 2	12 26.49	-16 25.4	1.613	2.502	12.5	18.8
3 12	12 18.20	+ 6 16.8	1.862	2.840	4.4	18.6	3 12	12 17.84	-16 34.6	1.583	2.526	8.9	18.6
3 22	12 8.08	+ 6 36.7	1.839	2.830	2.5	18.5	3 22	12 8.10	-16 21.9	1.578	2.551	6.1	18.5
4 1	11 57.81	+ 6 49.5	1.846	2.820	5.6	18.6	4 1	11 58.44	-15 51.4	1.599	2.576	6.0	18.5
4 11	11 48.44	+ 6 51.1	1.881	2.810	9.4	18.8	4 11	11 50.02	-15 9.7	1.648	2.601	8.6	18.7
4 21	11 40.79	+ 6 39.6	1.941	2.799	12.9	19.0	4 21	11 43.66	-14 24.5	1.720	2.626	11.8	19.0
5 1	11 35.41	+ 6 14.4	2.022	2.788	15.8	19.2	5 1	11 39.83	-13 42.7	1.815	2.651	14.7	19.2
<b>199596</b>	2006 <i>FD</i> <sub>23</sub>	</											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>124474</b>	2001 <i>RQ</i> <sub>6</sub>		3 22.5 103°94	0°3/22.8	18		<b>291399</b>	2006 <i>CD</i> <sub>60</sub>		3 22.5 103°62	0°5/22.9	18	
2 21	12 30.32	- 6 11.2	1.500	2.360	14.9	19.6	2 21	12 30.22	- 5 53.9	1.459	2.321	15.1	21.2
3 2	12 24.64	- 4 58.6	1.446	2.376	10.6	19.4	3 2	12 24.69	- 4 56.2	1.400	2.332	10.8	20.9
3 12	12 16.90	- 3 27.5	1.416	2.393	5.7	19.1	3 12	12 17.00	- 3 40.1	1.366	2.342	5.8	20.7
3 22	12 8.06	- 1 46.1	1.412	2.409	0.5	18.8	3 22	12 8.11	- 2 12.8	1.357	2.353	0.7	20.3
4 1	11 59.31	- 0 4.6	1.437	2.424	4.7	19.1	4 1	11 59.24	- 0 43.9	1.375	2.363	4.8	20.7
4 11	11 51.81	+ 1 26.6	1.488	2.439	9.5	19.4	4 11	11 51.61	+ 0 36.5	1.420	2.373	9.7	21.0
4 21	11 46.36	+ 2 40.4	1.564	2.454	13.7	19.7	4 21	11 46.09	+ 1 41.2	1.489	2.383	14.0	21.2
5 1	11 43.45	+ 3 32.8	1.660	2.468	17.1	20.0	5 1	11 43.17	+ 2 25.9	1.577	2.393	17.5	21.5
<b>472934</b>	2015 <i>GT</i> <sub>23</sub>		3 22.5 289°61	8°0/11.9	18		<b>123041</b>	2000 <i>SP</i> <sub>291</sub>		3 22.5 154°28	1°4/23.9	17	
2 21	12 28.03	+23 17.6	2.225	3.093	10.3	20.8	2 21	12 29.49	- 7 7.8	2.034	2.877	12.3	20.5
3 2	12 22.79	+24 42.2	2.166	3.077	8.7	20.7	3 2	12 23.79	- 6 44.3	1.962	2.881	8.9	20.3
3 12	12 15.88	+25 56.9	2.133	3.061	8.0	20.6	3 12	12 16.41	- 6 7.1	1.914	2.885	5.2	20.0
3 22	12 8.01	+26 54.1	2.127	3.045	8.7	20.6	3 22	12 8.08	- 5 19.7	1.895	2.889	1.6	19.8
4 1	12 0.04	+27 28.0	2.146	3.029	10.5	20.7	4 1	11 59.68	- 4 27.3	1.904	2.892	3.6	19.9
4 11	11 52.87	+27 36.0	2.189	3.013	12.7	20.8	4 11	11 52.13	- 3 36.0	1.942	2.895	7.5	20.2
4 21	11 47.21	+27 18.7	2.252	2.998	14.9	21.0	4 21	11 46.15	- 2 51.3	2.005	2.898	11.0	20.4
5 1	11 43.55	+26 38.5	2.331	2.982	16.8	21.1	5 1	11 42.20	- 2 17.3	2.091	2.900	14.0	20.6
<b>204771</b>	2006 <i>KB</i> <sub>20</sub>		3 22.5 323°18	6°3/26.3	17		<b>464911</b>	2005 <i>TZ</i> <sub>12</sub>		3 22.5 187°59	2°6/25.4	17	
2 21	12 30.93	-13 32.7	1.251	2.095	18.3	20.0	2 21	12 27.83	-12 6.6	2.016	2.842	13.0	22.0
3 2	12 25.96	-14 20.1	1.169	2.079	14.5	19.7	3 2	12 22.70	-11 25.6	1.935	2.842	9.8	21.7
3 12	12 18.06	-14 44.2	1.107	2.063	10.3	19.5	3 12	12 15.87	-10 25.1	1.879	2.841	6.2	21.5
3 22	12 8.14	-14 43.2	1.068	2.049	6.8	19.2	3 22	12 8.06	- 9 8.9	1.851	2.840	3.0	21.3
4 1	11 57.65	-14 19.4	1.052	2.035	7.2	19.2	4 1	12 0.14	- 7 42.9	1.851	2.839	3.8	21.4
4 11	11 48.27	-13 40.0	1.060	2.021	11.1	19.3	4 11	11 53.03	- 6 15.1	1.880	2.837	7.4	21.6
4 21	11 41.36	-12 54.7	1.089	2.009	15.7	19.6	4 21	11 47.47	- 4 52.9	1.935	2.835	11.0	21.8
5 1	11 37.81	-12 13.4	1.137	1.998	20.0	19.8	5 1	11 43.96	- 3 42.5	2.014	2.833	14.1	22.0
<b>316024</b>	2009 <i>FA</i> <sub>39</sub>		3 22.5 343°72	5°1/18.8	17		<b>264973</b>	2003 <i>BQ</i> <sub>18</sub>		3 22.5 108°32	1°5/23.9	18	
2 21	12 29.18	+ 7 38.4	1.200	2.097	15.1	20.1	2 21	12 31.59	- 7 17.5	1.963	2.803	12.8	21.4
3 2	12 24.43	+ 8 38.9	1.140	2.089	10.6	19.9	3 2	12 25.17	- 6 53.8	1.905	2.823	9.2	21.2
3 12	12 17.04	+ 9 43.1	1.103	2.083	6.4	19.6	3 12	12 17.08	- 6 16.2	1.872	2.843	5.3	21.0
3 22	12 8.09	+10 40.5	1.090	2.077	5.4	19.5	3 22	12 8.12	- 5 28.6	1.868	2.862	1.7	20.8
4 1	11 59.00	+11 20.9	1.102	2.072	9.1	19.7	4 1	11 59.23	- 4 36.7	1.892	2.880	3.7	20.9
4 11	11 51.27	+11 37.3	1.136	2.068	13.8	19.9	4 11	11 51.35	- 3 46.5	1.945	2.898	7.5	21.2
4 21	11 45.97	+11 27.5	1.189	2.064	18.1	20.2	4 21	11 45.16	- 3 3.3	2.024	2.916	11.0	21.4
5 1	11 43.73	+10 52.6	1.259	2.062	21.8	20.4	5 1	11 41.10	- 2 31.0	2.126	2.932	13.9	21.7
<b>289553</b>	2005 <i>EE</i> <sub>241</sub>		3 22.5 341°54	2°9/20.2	17		<b>159376</b>	1997 <i>GW</i> <sub>31</sub>		3 22.5 135°22	0°8/23.5	17	
2 21	12 29.72	+ 5 31.3	1.621	2.503	12.7	19.6	2 21	12 25.88	- 7 48.3	1.958	2.806	12.5	19.8
3 2	12 24.31	+ 5 55.4	1.551	2.494	8.9	19.3	3 2	12 21.32	- 6 38.4	1.884	2.808	9.0	19.6
3 12	12 16.81	+ 6 22.9	1.506	2.486	4.9	19.1	3 12	12 15.13	- 5 11.4	1.836	2.810	5.0	19.4
3 22	12 8.08	+ 6 47.8	1.487	2.479	3.0	18.9	3 22	12 8.02	- 3 32.8	1.816	2.811	1.1	19.1
4 1	11 59.22	+ 7 4.2	1.495	2.472	6.3	19.1	4 1	12 0.85	- 1 50.6	1.825	2.813	3.8	19.3
4 11	11 51.38	+ 7 7.1	1.529	2.466	10.5	19.3	4 11	11 54.49	- 0 13.4	1.862	2.814	7.8	19.6
4 21	11 45.45	+ 6 54.3	1.586	2.461	14.4	19.6	4 21	11 49.65	+ 1 11.7	1.925	2.816	11.5	19.8
5 1	11 42.00	+ 6 25.2	1.662	2.456	17.6	19.8	5 1	11 46.80	+ 2 19.8	2.011	2.817	14.6	20.0
<b>426433</b>	2013 <i>QS</i> <sub>34</sub>		3 22.5 120°19	7°0/14.4	18		<b>14356</b>	1987 <i>SF</i> <sub>6</sub>		3 22.5 190°31	0°4/22.0	18	
2 21	12 29.35	+17 6.9	1.951	2.830	11.1	21.1	2 21	12 29.86	- 2 38.1	2.152	3.006	11.2	19.5
3 2	12 23.67	+18 47.4	1.912	2.841	8.5	21.0	3 2	12 24.00	- 1 43.4	2.075	3.004	7.9	19.3
3 12	12 16.30	+20 20.4	1.900	2.852	7.0	20.9	3 12	12 16.52	- 0 37.7	2.025	3.003	4.1	19.1
3 22	12 8.05	+21 37.4	1.915	2.862	7.6	20.9	3 22	12 8.09	+ 0 33.8	2.004	3.000	0.4	18.8
4 1	11 59.88	+22 31.8	1.957	2.872	9.7	21.1	4 1	11 59.58	+ 1 44.7	2.013	2.996	4.1	19.1
4 11	11 52.71	+23 0.2	2.023	2.882	12.3	21.3	4 11	11 51.84	+ 2 48.6	2.051	2.992	7.9	19.3
4 21	11 47.24	+23 3.2	2.111	2.891	14.7	21.5	4 21	11 45.58	+ 3 40.6	2.115	2.987	11.4	19.5
5 1	11 43.89	+22 43.1	2.216	2.901	16.8	21.6	5 1	11 41.28	+ 4 17.6	2.201	2.982	14.3	19.7
<b>99890</b>	2002 <i>PZ</i> <sub>164</sub>		3 22.5 286°14	0°7/21.8	17		<b>174586</b>	2003 <i>QQ</i> <sub>39</sub>		3 22.5 199°87	0°1/22.6	17	
2 21	12 27.55	- 1 13.2	1.950	2.816	11.7	20.0	2 21	12 31.50	- 3 32.5	2.157	3.005	11.4	22.1
3 2	12 22.56	- 0 32.7	1.870	2.806	8.2	19.8	3 2	12 25.18	- 2 52.2	2.075	3.001	8.1	21.8
3 12	12 15.82	+ 0 18.2	1.816	2.796	4.3	19.5	3 12	12 17.16	- 2 0.7	2.020	2.996	4.3	21.6
3 22	12 8.04	+ 1 14.2	1.790	2.786	0.7	19.2	3 22	12 8.13	- 1 2.3	1.993	2.990	0.2	21.2
4 1	12 0.10	+ 2 9.2	1.791	2.776	4.4	19.5	4 1	11 58.96	- 0 2.7	1.997	2.983	3.9	21.5
4 11	11 52.94	+ 2 56.9	1.821	2.766	8.5	19.7	4 11	11 50.57	+ 0 52.0	2.030	2.975	7.8	21.8
4 21	11 47.32	+ 3 32.5	1.875	2.756	12.2	19.9	4 21	11 43.69	+ 1 36.9	2.089	2.966	11.3	22.0
5 1	11 43.78	+ 3 53.2	1.950	2.746	15.3	20.1	5 1	11 38.83	+ 2 8.7	2.171	2.956	14.3	22.1
<b>359660</b>	2011 <i>SV</i> <sub>63</sub>		3 22.5 116°33	1°3/21.3	18		<b>431825</b>	2008 <i>RF</i> <sub>122</sub>		3 22.5 179°62	0°4/22.2	17	
2 21	12 30.17	- 1 55.5	1.659	2.526	13.4	20.9	2 21	12 29.94	- 1 19.6	2.149	3.006	11.1	21.6
3 2	12 24.39	- 0 32.8	1.606	2.542	9.2	20.7	3 2	12 24.04	- 0 53.6	2.076	3.007	7.8	21.4
3 12	12 16.73	+ 1 2.6	1.577	2.558	4.7	20.4	3 12	12 16.53	- 0 19.2	2.029	3.007	4.1	21.2
3 22	12 8.08	+ 2 42.0	1.577	2.573	1.3	20.2	3 22	12 8.11	+ 0 19.5	2.011	3.008	0.4	20.9
4 1	11 59.50	+ 4 16.1	1.606	2.587	5.3	20.5	4 1	11 59.62	+ 0 57.6	2.023	3.007	3.9	21.2
4 11	11 52.06	+ 5 36.3	1.661	2.601	9.6	20.8	4 11	11 51.92	+ 1 30.0	2.063	3.007	7.7	21.4
4 21	11 46.50	+ 6 37.2	1.741	2.614	13.4	21.1	4 21	11 45.72	+ 1 53.1	2.128	3.006	11.1	21.6
5 1	11 43.27	+ 7 16.7	1.842	2.627	16.5	21.3	5 1	11 41.47	+ 2 4.4	2.216	3.005	13.9	21.8
<b>64810</b>	2001 <i>XH</i> <sub>216</sub>		3 22.5 7°48	0°3/22.8	18		<b>335839</b>	2007 <i>MQ</i> <sub>1</sub>		3			

EPHEMERIDES

3 22.5

3 22.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>98432</b>	2000 <i>UR</i> <sub>36</sub>		3 22.5 346°04	1°6/21.4	18		<b>166294</b>	2002 <i>HJ</i> <sub>16</sub>		3 22.5 208°94	1°7/21.0	16	
2 21	12 30.18	+ 0 32.7	1.297	2.180	15.2	18.8	2 21	12 32.34	+ 1 36.9	1.816	2.683	12.4	20.3
3 2	12 25.00	+ 1 9.9	1.233	2.176	10.6	18.5	3 2	12 26.01	+ 2 18.0	1.742	2.678	8.6	20.0
3 12	12 17.33	+ 1 58.7	1.191	2.173	5.5	18.2	3 12	12 17.70	+ 3 7.1	1.693	2.673	4.5	19.8
3 22	12 8.16	+ 2 51.6	1.175	2.170	1.6	17.9	3 22	12 8.20	+ 3 58.3	1.673	2.667	1.7	19.6
4 1	11 58.85	+ 3 40.0	1.184	2.168	6.2	18.2	4 1	11 58.57	+ 4 44.9	1.681	2.661	5.3	19.8
4 11	11 50.81	+ 4 15.6	1.217	2.166	11.4	18.5	4 11	11 49.89	+ 5 20.7	1.717	2.654	9.5	20.0
4 21	11 45.08	+ 4 33.4	1.272	2.165	16.0	18.8	4 21	11 43.00	+ 5 42.1	1.777	2.647	13.3	20.2
5 1	11 42.26	+ 4 31.3	1.345	2.164	19.8	19.0	5 1	11 38.46	+ 5 47.0	1.857	2.639	16.5	20.4
<b>38409</b>	1999 <i>RK</i> <sub>205</sub>		3 22.5 237°53	4°7/28.9	18		<b>240466</b>	2004 <i>BZ</i> <sub>3</sub>		3 22.5 340°70	5°4/16.7	17	
2 21	12 26.28	-20 27.4	2.838	3.604	11.2	19.3	2 21	12 27.20	+12 21.7	1.905	2.789	11.0	19.8
3 2	12 21.35	-20 22.6	2.738	3.593	9.2	19.2	3 2	12 22.30	+13 35.2	1.847	2.786	8.0	19.6
3 12	12 15.10	-20 0.2	2.662	3.582	7.0	19.0	3 12	12 15.68	+14 46.7	1.814	2.782	5.7	19.5
3 22	12 8.04	-19 20.9	2.612	3.570	5.1	18.9	3 22	12 8.10	+15 48.4	1.809	2.779	5.8	19.5
4 1	12 0.83	-18 26.9	2.591	3.558	4.8	18.8	4 1	12 0.47	+16 33.5	1.831	2.777	8.2	19.6
4 11	11 54.15	-17 22.8	2.599	3.546	6.2	18.9	4 11	11 53.74	+16 57.7	1.878	2.774	11.3	19.8
4 21	11 48.58	-16 13.9	2.634	3.533	8.5	19.0	4 21	11 48.62	+16 59.7	1.948	2.772	14.2	20.0
5 1	11 44.57	-15 5.6	2.695	3.520	10.8	19.2	5 1	11 45.60	+16 40.6	2.036	2.770	16.7	20.1
<b>337758</b>	2001 <i>UK</i> <sub>124</sub>		3 22.5 153°13	6°0/13.6	17		<b>73173</b>	2002 <i>HV</i> <sub>2</sub>		3 22.5 219°74	1°8/20.7	18	
2 21	12 28.93	+22 2.0	2.907	3.767	8.5	21.4	2 21	12 29.80	+ 0 36.9	1.776	2.646	12.4	19.9
3 2	12 22.98	+23 7.3	2.866	3.776	6.8	21.3	3 2	12 24.27	+ 1 45.9	1.702	2.640	8.6	19.7
3 12	12 15.84	+24 4.2	2.852	3.784	6.0	21.2	3 12	12 16.80	+ 3 5.7	1.652	2.633	4.5	19.4
3 22	12 8.08	+24 47.6	2.867	3.792	6.5	21.3	3 22	12 8.16	+ 4 29.1	1.631	2.625	1.9	19.2
4 1	12 0.37	+25 13.9	2.910	3.799	7.9	21.4	4 1	11 59.36	+ 5 47.5	1.638	2.617	5.6	19.4
4 11	11 53.37	+25 21.4	2.979	3.805	9.7	21.5	4 11	11 51.47	+ 6 53.4	1.673	2.608	9.9	19.6
4 21	11 47.59	+25 10.6	3.070	3.811	11.4	21.6	4 21	11 45.33	+ 7 41.4	1.731	2.599	13.7	19.9
5 1	11 43.38	+24 43.0	3.179	3.817	12.9	21.8	5 1	11 41.49	+ 8 9.1	1.810	2.589	17.0	20.1
<b>354497</b>	2004 <i>JE</i> <sub>54</sub>		3 22.5 247°40	4°1/28.0	17		<b>96851</b>	1999 <i>RE</i> <sub>229</sub>		3 22.5 285°40	9°2/31.3	18	
2 21	12 25.42	-18 8.8	2.562	3.349	11.7	20.9	2 21	12 29.57	-27 19.5	1.965	2.705	16.4	19.3
3 2	12 20.82	-17 43.7	2.466	3.339	9.4	20.7	3 2	12 24.42	-27 57.1	1.860	2.683	14.2	19.1
3 12	12 14.84	-16 59.5	2.393	3.330	6.8	20.5	3 12	12 17.07	-28 7.9	1.775	2.661	11.9	18.9
3 22	12 8.04	-15 57.8	2.348	3.320	4.6	20.4	3 22	12 8.20	-27 48.7	1.713	2.638	9.9	18.7
4 1	12 1.09	-14 42.4	2.332	3.310	4.3	20.3	4 1	11 58.84	-26 59.5	1.675	2.616	9.2	18.6
4 11	11 54.74	-13 18.8	2.345	3.299	6.3	20.4	4 11	11 50.18	-25 45.1	1.662	2.593	10.2	18.6
4 21	11 49.60	-11 53.7	2.386	3.289	9.0	20.6	4 21	11 43.24	-24 13.8	1.673	2.570	12.5	18.7
5 1	11 46.10	-10 33.1	2.451	3.278	11.6	20.7	5 1	11 38.80	-22 35.7	1.707	2.548	15.3	18.8
<b>275603</b>	1999 <i>VW</i> <sub>211</sub>		3 22.5 173°55	2°1/20.1	17		<b>298289</b>	2003 <i>AF</i> <sub>70</sub>		3 22.5 346°82	5°0/27.8	17	
2 21	12 29.52	+ 4 21.0	2.377	3.243	9.9	21.5	2 21	12 28.32	-17 19.0	2.192	2.988	13.2	20.2
3 2	12 23.60	+ 5 4.6	2.310	3.246	6.8	21.3	3 2	12 23.04	-17 34.2	2.110	2.987	10.5	20.1
3 12	12 16.25	+ 5 52.0	2.270	3.248	3.6	21.1	3 12	12 16.10	-17 30.5	2.050	2.986	7.7	19.9
3 22	12 8.11	+ 6 38.1	2.259	3.250	2.2	21.0	3 22	12 8.14	-17 8.5	2.016	2.985	5.5	19.7
4 1	11 59.94	+ 7 18.1	2.278	3.251	4.8	21.2	4 1	12 0.04	-16 30.9	2.011	2.985	5.2	19.7
4 11	11 52.51	+ 7 47.8	2.326	3.252	8.0	21.4	4 11	11 52.67	-15 42.7	2.032	2.984	7.3	19.8
4 21	11 46.44	+ 8 4.8	2.399	3.252	10.9	21.5	4 21	11 46.77	-14 50.3	2.080	2.983	10.1	20.0
5 1	11 42.15	+ 8 7.8	2.494	3.252	13.4	21.7	5 1	11 42.85	-13 59.7	2.151	2.983	12.9	20.2
<b>353830</b>	2012 <i>UX</i> <sub>97</sub>		3 22.5 122°57	1°6/24.3	17		<b>340784</b>	2006 <i>SW</i> <sub>391</sub>		3 22.5 110°82	2°8/26.3	17	
2 21	12 29.18	- 7 27.1	2.439	3.273	10.8	20.9	2 21	12 26.07	-13 34.5	2.474	3.286	11.4	21.0
3 2	12 23.35	- 7 22.1	2.368	3.281	7.9	20.7	3 2	12 21.18	-13 2.8	2.402	3.297	8.6	20.8
3 12	12 16.12	- 7 6.0	2.322	3.289	4.7	20.5	3 12	12 14.99	-12 15.1	2.354	3.308	5.7	20.6
3 22	12 8.10	- 6 41.2	2.305	3.297	1.8	20.3	3 22	12 8.08	-11 14.1	2.335	3.319	3.2	20.5
4 1	12 0.05	- 6 11.4	2.318	3.305	3.2	20.4	4 1	12 1.16	-10 4.4	2.345	3.330	3.4	20.5
4 11	11 52.72	- 5 40.7	2.359	3.312	6.4	20.7	4 11	11 54.94	- 8 51.8	2.384	3.340	6.1	20.7
4 21	11 46.71	- 5 13.2	2.428	3.319	9.4	20.9	4 21	11 49.97	- 7 42.0	2.450	3.350	9.0	20.9
5 1	11 42.45	- 4 52.3	2.520	3.326	12.0	21.0	5 1	11 46.65	- 6 39.8	2.541	3.360	11.5	21.1
<b>379724</b>	2011 <i>GP</i> <sub>42</sub>		3 22.5 198°63	0°6/21.9	17		<b>294016</b>	2007 <i>TZ</i> <sub>108</sub>		3 22.5 237°00	1°5/23.8	16	
2 21	12 27.63	- 2 16.6	1.963	2.825	11.8	21.5	2 21	12 32.95	- 6 33.1	1.785	2.630	13.6	21.4
3 2	12 22.56	- 1 22.1	1.891	2.824	8.3	21.3	3 2	12 26.63	- 6 19.5	1.696	2.617	10.0	21.2
3 12	12 15.81	- 0 16.1	1.844	2.823	4.3	21.1	3 12	12 18.14	- 5 50.8	1.633	2.604	5.8	20.9
3 22	12 8.09	+ 0 55.6	1.826	2.822	0.6	20.8	3 22	12 8.26	- 5 10.2	1.596	2.590	1.8	20.6
4 1	12 0.29	+ 2 6.2	1.836	2.820	4.4	21.1	4 1	11 58.08	- 4 22.9	1.588	2.576	4.2	20.7
4 11	11 53.32	+ 3 8.8	1.874	2.818	8.4	21.3	4 11	11 48.76	- 3 35.9	1.608	2.561	8.7	21.0
4 21	11 47.88	+ 3 58.4	1.937	2.817	12.0	21.5	4 21	11 41.26	- 2 55.3	1.652	2.545	12.9	21.2
5 1	11 44.49	+ 4 31.8	2.022	2.814	15.0	21.7	5 1	11 36.23	- 2 26.1	1.718	2.529	16.5	21.4
<b>425122</b>	2009 <i>SD</i> <sub>189</sub>		3 22.5 197°09	7°1/30.2	17		<b>378884</b>	2008 <i>TJ</i> <sub>174</sub>		3 22.6 2°21	5°4/28.6	17	
2 21	12 30.49	-23 57.0	2.136	2.890	14.8	21.2	2 21	12 25.42	-19 21.0	1.822	2.622	15.3	20.9
3 2	12 24.69	-24 17.2	2.048	2.888	12.4	21.0	3 2	12 21.24	-18 58.9	1.742	2.621	12.3	20.7
3 12	12 17.00	-24 13.2	1.982	2.886	9.9	20.8	3 12	12 15.22	-18 10.3	1.684	2.621	9.0	20.5
3 22	12 8.16	-23 44.4	1.941	2.884	7.8	20.7	3 22	12 8.11	-16 56.9	1.650	2.621	6.1	20.4
4 1	11 59.09	-22 52.6	1.926	2.880	7.2	20.6	4 1	12 0.89	-15 24.1	1.644	2.622	5.6	20.3
4 11	11 50.84	-21 43.6	1.938	2.877	8.5	20.7	4 11	11 54.55	-13 40.8	1.664	2.623	8.0	20.5
4 21	11 44.20	-20 25.1	1.976	2.873	10.9	20.9	4 21	11 49.89	-11 56.7	1.710	2.624	11.3	20.7
5 1	11 39.77	-19 5.1	2.037	2.869	13.5	21.0	5 1	11 47.43	-10 20.5	1.779	2.626	14.5	20.9
<b>208247</b>	2000 <i>US</i> <sub>32</sub>		3 22.5 71°45	0°6/22.1	18		<b>61168</b>	2000 <i>NU</i> <sub>20</sub>		3 22.6 304°07			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>251992</b>	2000 $EO_{53}$		3 22.6 108 <sup>o</sup> 75	0 <sup>o</sup> 2/22.4 18			<b>16432</b>	1988 $VL_2$		3 22.6 76 <sup>o</sup> 32	5 <sup>o</sup> 6/27.9 18		
2 21	12 30.25	- 3 11.1	1.772	2.633	13.0	20.4	2 21	12 29.09	-18 9.4	1.546	2.358	17.0	17.0
3 2	12 24.43	- 2 25.1	1.714	2.646	9.1	20.2	3 2	12 23.97	-17 53.7	1.480	2.369	13.5	16.8
3 12	12 16.80	- 1 26.9	1.681	2.659	4.8	20.0	3 12	12 16.71	-17 9.4	1.435	2.379	9.6	16.6
3 22	12 8.20	- 0 22.4	1.675	2.671	0.3	19.6	3 22	12 8.21	-15 58.7	1.414	2.390	6.3	16.4
4 1	11 59.63	+ 0 41.2	1.698	2.684	4.4	20.0	4 1	11 59.68	-14 28.1	1.420	2.400	6.0	16.4
4 11	11 52.11	+ 1 37.1	1.748	2.696	8.6	20.3	4 11	11 52.30	-12 48.1	1.451	2.411	8.8	16.6
4 21	11 46.37	+ 2 20.1	1.823	2.707	12.3	20.5	4 21	11 46.98	-11 9.3	1.507	2.422	12.5	16.9
5 1	11 42.87	+ 2 47.4	1.919	2.719	15.4	20.7	5 1	11 44.23	- 9 41.0	1.585	2.432	16.0	17.1
<b>489466</b>	2007 $DD_{31}$		3 22.6 46 <sup>o</sup> 38	1 <sup>o</sup> 8/23.7 18			<b>435377</b>	2007 $WL_{14}$		3 22.6 55 <sup>o</sup> 77	3 <sup>o</sup> 4/26.5 17		
2 21	12 33.92	- 5 40.8	1.219	2.086	17.2	21.1	2 21	12 26.51	-14 3.1	2.010	2.830	13.3	21.1
3 2	12 27.76	- 5 43.4	1.159	2.090	12.5	20.9	3 2	12 21.70	-13 38.0	1.948	2.847	10.2	21.0
3 12	12 18.85	- 5 28.2	1.120	2.095	7.2	20.6	3 12	12 15.34	-12 53.7	1.910	2.864	6.8	20.8
3 22	12 8.31	- 4 59.2	1.105	2.100	2.1	20.3	3 22	12 8.14	-11 53.3	1.898	2.881	3.9	20.6
4 1	11 57.69	- 4 23.0	1.116	2.105	5.2	20.5	4 1	12 0.96	-10 42.2	1.914	2.899	4.1	20.7
4 11	11 48.53	- 3 48.3	1.151	2.111	10.6	20.8	4 11	11 54.67	- 9 27.7	1.958	2.916	7.0	20.9
4 21	11 41.96	- 3 22.1	1.208	2.116	15.5	21.1	4 21	11 49.91	- 8 16.5	2.028	2.934	10.2	21.1
5 1	11 38.59	- 3 9.4	1.284	2.122	19.5	21.4	5 1	11 47.11	- 7 14.5	2.121	2.952	13.1	21.3
<b>318604</b>	2005 $JN_{54}$		3 22.6 243 <sup>o</sup> 18	4 <sup>o</sup> 0/18.8 18			<b>52151</b>	1180 $T_{-1}$		3 22.6 100 <sup>o</sup> 14	2 <sup>o</sup> 5/24.4 18		
2 21	12 30.32	+ 7 0.0	1.710	2.591	12.3	21.1	2 21	12 33.61	- 8 17.8	1.368	2.221	16.5	18.7
3 2	12 24.70	+ 8 7.5	1.642	2.584	8.6	20.8	3 2	12 27.29	- 8 8.6	1.308	2.231	12.1	18.5
3 12	12 17.06	+ 9 19.0	1.599	2.576	5.1	20.6	3 12	12 18.51	- 7 39.5	1.270	2.241	7.2	18.2
3 22	12 8.22	+10 26.2	1.583	2.568	4.3	20.5	3 22	12 8.31	- 6 54.4	1.257	2.250	2.8	18.0
4 1	11 59.25	+11 21.2	1.595	2.560	7.3	20.7	4 1	11 58.10	- 6 0.4	1.271	2.260	4.9	18.1
4 11	11 51.25	+11 57.7	1.633	2.552	11.2	20.9	4 11	11 49.24	- 5 6.3	1.310	2.269	9.7	18.4
4 21	11 45.10	+12 12.9	1.693	2.544	14.8	21.1	4 21	11 42.74	- 4 20.1	1.373	2.278	14.2	18.7
5 1	11 41.34	+12 6.7	1.773	2.535	17.9	21.3	5 1	11 39.17	- 3 47.3	1.455	2.286	17.9	18.9
<b>369287</b>	2009 $RV_{34}$		3 22.6 171 <sup>o</sup> 16	0 <sup>o</sup> 5/23.1 17			<b>377763</b>	2005 $YH_{70}$		3 22.6 220 <sup>o</sup> 25	3 <sup>o</sup> 6/18.9 17		
2 21	12 28.54	- 5 19.7	2.010	2.861	12.1	21.8	2 21	12 29.17	+ 7 3.7	1.900	2.778	11.3	20.6
3 2	12 23.18	- 4 36.5	1.937	2.863	8.6	21.6	3 2	12 23.69	+ 8 3.4	1.836	2.776	7.9	20.4
3 12	12 16.15	- 3 39.9	1.889	2.864	4.7	21.4	3 12	12 16.45	+ 9 5.7	1.798	2.775	4.7	20.2
3 22	12 8.17	- 2 34.8	1.870	2.866	0.7	21.1	3 22	12 8.21	+10 3.9	1.787	2.773	3.8	20.1
4 1	12 0.12	- 1 27.2	1.879	2.867	3.8	21.3	4 1	11 59.92	+10 51.1	1.805	2.770	6.6	20.3
4 11	11 52.90	- 0 24.1	1.917	2.867	7.8	21.6	4 11	11 52.53	+11 22.1	1.849	2.768	10.1	20.5
4 21	11 47.22	+ 0 29.2	1.980	2.868	11.4	21.8	4 21	11 46.78	+11 34.7	1.917	2.766	13.4	20.7
5 1	11 43.56	+ 1 8.7	2.066	2.868	14.4	22.0	5 1	11 43.17	+11 28.4	2.005	2.764	16.2	20.9
<b>222783</b>	2002 $CO_{171}$		3 22.6 53 <sup>o</sup> 23	4 <sup>o</sup> 2/18.7 18			<b>8300</b>	lga		3 22.6 110 <sup>o</sup> 36	5 <sup>o</sup> 2/27.7 18		
2 21	12 29.67	+ 7 50.8	1.631	2.515	12.5	19.9	2 21	12 32.46	-17 18.3	1.989	2.783	14.4	18.8
3 2	12 24.13	+ 8 51.5	1.582	2.524	8.8	19.7	3 2	12 25.97	-17 34.3	1.921	2.799	11.4	18.7
3 12	12 16.67	+ 9 53.5	1.557	2.534	5.3	19.5	3 12	12 17.64	-17 29.5	1.877	2.814	8.3	18.5
3 22	12 8.20	+10 48.9	1.560	2.544	4.5	19.5	3 22	12 8.28	-17 4.7	1.859	2.828	5.7	18.4
4 1	11 59.80	+11 30.3	1.590	2.555	7.4	19.7	4 1	11 58.88	-16 23.2	1.869	2.843	5.5	18.4
4 11	11 52.54	+11 53.0	1.645	2.565	11.1	19.9	4 11	11 50.46	-15 31.2	1.906	2.857	7.8	18.5
4 21	11 47.18	+11 55.2	1.722	2.576	14.5	20.1	4 21	11 43.78	-14 35.7	1.969	2.870	10.8	18.7
5 1	11 44.19	+11 37.6	1.818	2.587	17.3	20.4	5 1	11 39.36	-13 43.3	2.056	2.883	13.6	18.9
<b>308273</b>	2005 $GL_{156}$		3 22.6 252 <sup>o</sup> 36	0 <sup>o</sup> 7/21.8 18			<b>174008</b>	2001 $YW_8$		3 22.6 33 <sup>o</sup> 08	2 <sup>o</sup> 9/19.5 17		
2 21	12 31.42	- 1 19.0	2.325	3.177	10.6	21.1	2 21	12 27.28	+ 5 56.9	2.023	2.901	10.8	20.1
3 2	12 25.23	- 0 32.8	2.221	3.150	7.5	20.9	3 2	12 22.23	+ 6 44.8	1.966	2.907	7.5	19.9
3 12	12 17.31	+ 0 23.4	2.144	3.122	3.9	20.6	3 12	12 15.62	+ 7 35.4	1.935	2.913	4.2	19.7
3 22	12 8.25	+ 1 25.5	2.097	3.093	0.7	20.3	3 22	12 8.17	+ 8 22.8	1.931	2.920	3.1	19.7
4 1	11 58.86	+ 2 27.6	2.080	3.062	4.2	20.5	4 1	12 0.73	+ 9 1.4	1.956	2.926	5.7	19.8
4 11	11 50.04	+ 3 23.9	2.093	3.031	8.0	20.7	4 11	11 54.16	+ 9 26.7	2.008	2.933	9.1	20.1
4 21	11 42.55	+ 4 9.6	2.133	2.999	11.6	20.8	4 21	11 49.09	+ 9 36.5	2.084	2.941	12.2	20.3
5 1	11 36.98	+ 4 41.3	2.195	2.965	14.6	21.0	5 1	11 45.95	+ 9 30.2	2.180	2.948	14.8	20.5
<b>176824</b>	2002 $TH_{109}$		3 22.6 235 <sup>o</sup> 35	4 <sup>o</sup> 0/18.6 17			<b>499246</b>	2009 $UF_{148}$		3 22.6 202 <sup>o</sup> 65	4 <sup>o</sup> 8/16.9 17		
2 21	12 30.76	+ 7 31.5	1.811	2.689	11.8	20.6	2 21	12 31.81	+14 9.1	2.482	3.350	9.4	22.6
3 2	12 24.95	+ 8 38.3	1.740	2.680	8.3	20.3	3 2	12 25.24	+15 5.6	2.415	3.344	7.0	22.5
3 12	12 17.18	+ 9 48.3	1.694	2.670	5.0	20.1	3 12	12 17.17	+15 58.8	2.377	3.338	5.1	22.3
3 22	12 8.24	+10 54.0	1.676	2.660	4.3	20.0	3 22	12 8.26	+16 42.8	2.367	3.331	5.1	22.3
4 1	11 59.14	+11 47.5	1.687	2.650	7.2	20.2	4 1	11 59.29	+17 12.8	2.387	3.324	7.1	22.4
4 11	11 50.97	+12 23.1	1.723	2.639	11.0	20.4	4 11	11 51.07	+17 25.7	2.434	3.316	9.6	22.6
4 21	11 44.55	+12 37.9	1.783	2.628	14.4	20.6	4 21	11 44.24	+17 20.8	2.506	3.307	12.1	22.7
5 1	11 40.46	+12 31.9	1.862	2.616	17.4	20.8	5 1	11 39.24	+16 59.0	2.598	3.297	14.2	22.9
<b>435985</b>	2009 $ED_7$		3 22.6 10 <sup>o</sup> 77	1 <sup>o</sup> 7/21.1 17			<b>381424</b>	2008 $MC_5$		3 22.6 195 <sup>o</sup> 14	5 <sup>o</sup> 6/15.0 17		
2 21	12 29.81	+ 2 59.7	1.855	2.728	11.9	21.1	2 21	12 28.90	+16 5.6	2.431	3.303	9.4	21.0
3 2	12 24.13	+ 3 17.5	1.791	2.729	8.2	20.9	3 2	12 23.24	+17 30.6	2.373	3.301	7.1	20.9
3 12	12 16.67	+ 3 40.2	1.751	2.731	4.3	20.7	3 12	12 16.13	+18 51.3	2.344	3.298	5.7	20.8
3 22	12 8.21	+ 4 3.1	1.739	2.734	1.7	20.5	3 22	12 8.20	+20 0.8	2.343	3.294	6.1	20.8
4 1	11 59.71	+ 4 21.1	1.756	2.736	5.0	20.7	4 1	12 0.22	+20 53.4	2.370	3.290	8.0	20.9
4 11	11 52.16	+ 4 30.0	1.799	2.740	8.9	21.0	4 11	11 52.97	+21 25.7	2.424	3.285	10.4	21.1
4 21	11 46.30	+ 4 27.0	1.866	2.743	12.5	21.2	4 21	11 47.08	+21 36.9	2.501	3.280	12.7	21.2
5 1	11 42.62	+ 4 11.0	1.955	2.747	15.4	21.4	5 1	11 42.98	+21 28.2	2.596	3.274	14.7	21.4
<b>24207</b>	1999 $XJ_{49}$	</											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	
<b>128844</b>	2004 SW <sub>4</sub>	3 22.6 238°25			0°9/23.4 17			<b>382677</b>	2002 TG <sub>314</sub>	3 22.6 160°06			3°8/17.7 17	
2 21	12 29.45	- 5 14.7	2.000	2.850	12.1	20.3	2 21	12 27.57	+ 9 49.9	2.393	3.269	9.4	21.6	
3 2	12 23.91	- 4 52.3	1.919	2.843	8.8	20.1	3 2	12 22.28	+10 57.3	2.335	3.273	6.7	21.4	
3 12	12 16.61	- 4 17.3	1.863	2.837	4.9	19.8	3 12	12 15.63	+12 4.5	2.305	3.276	4.3	21.3	
3 22	12 8.24	- 3 33.4	1.835	2.830	1.1	19.5	3 22	12 8.22	+13 5.7	2.303	3.279	4.1	21.3	
4 1	11 59.72	- 2 45.7	1.835	2.823	3.8	19.7	4 1	12 0.81	+13 55.3	2.330	3.282	6.3	21.4	
4 11	11 51.99	- 2 0.3	1.864	2.816	7.8	20.0	4 11	11 54.12	+14 29.4	2.385	3.285	9.0	21.6	
4 21	11 45.81	- 1 22.3	1.918	2.809	11.5	20.2	4 21	11 48.75	+14 46.4	2.464	3.287	11.6	21.8	
5 1	11 41.73	- 0 55.7	1.994	2.801	14.7	20.4	5 1	11 45.09	+14 46.3	2.563	3.290	13.8	21.9	
<b>172837</b>	2005 CR <sub>43</sub>	3 22.6 296°71			2°4/24.3 18			<b>502823</b>	2015 DM <sub>139</sub>	3 22.6 109°68			2°7/19.7 17	
2 21	12 31.55	- 7 37.9	1.482	2.336	15.4	19.8	2 21	12 27.58	+ 3 36.3	1.891	2.768	11.5	21.4	
3 2	12 25.92	- 7 37.5	1.405	2.329	11.4	19.6	3 2	12 22.57	+ 4 46.9	1.830	2.771	7.9	21.2	
3 12	12 17.88	- 7 19.4	1.350	2.321	6.8	19.3	3 12	12 15.88	+ 6 3.7	1.794	2.774	4.3	21.0	
3 22	12 8.32	- 6 46.4	1.321	2.314	2.7	19.0	3 22	12 8.24	+ 7 19.5	1.786	2.777	2.9	20.9	
4 1	11 58.49	- 6 4.2	1.318	2.307	4.7	19.1	4 1	12 0.56	+ 8 27.0	1.807	2.779	5.9	21.1	
4 11	11 49.72	- 5 20.3	1.341	2.300	9.5	19.4	4 11	11 53.78	+ 9 19.7	1.855	2.782	9.6	21.3	
4 21	11 43.07	- 4 42.1	1.387	2.293	14.0	19.6	4 21	11 48.60	+ 9 54.4	1.926	2.785	12.9	21.5	
5 1	11 39.22	- 4 15.4	1.453	2.286	17.9	19.8	5 1	11 45.47	+10 9.6	2.017	2.787	15.8	21.7	
<b>212549</b>	2006 SA <sub>24</sub>	3 22.6 145°44			2°6/18.9 17			<b>460028</b>	2014 OH <sub>165</sub>	3 22.6 170°25			2°7/20.4 18	
2 21	12 25.77	+ 5 29.6	2.544	3.416	9.1	20.6	2 21	12 32.74	+ 3 31.7	1.520	2.397	13.7	22.0	
3 2	12 20.96	+ 6 38.9	2.482	3.421	6.2	20.4	3 2	12 26.54	+ 4 21.5	1.458	2.399	9.5	21.7	
3 12	12 14.90	+ 7 51.3	2.449	3.426	3.5	20.3	3 12	12 18.10	+ 5 18.3	1.420	2.400	5.1	21.5	
3 22	12 8.16	+ 9 1.4	2.445	3.431	2.8	20.2	3 22	12 8.37	+ 6 14.4	1.409	2.401	2.9	21.3	
4 1	12 1.41	+10 3.7	2.471	3.436	5.1	20.4	4 1	11 58.58	+ 7 1.7	1.425	2.402	6.5	21.6	
4 11	11 55.31	+10 53.7	2.525	3.440	7.9	20.6	4 11	11 49.98	+ 7 33.7	1.467	2.402	11.0	21.8	
4 21	11 50.39	+11 28.8	2.604	3.445	10.6	20.7	4 21	11 43.49	+ 7 46.9	1.532	2.402	15.0	22.1	
5 1	11 47.05	+11 48.1	2.705	3.449	12.8	20.9	5 1	11 39.67	+ 7 40.5	1.615	2.402	18.4	22.3	
<b>372032</b>	2008 RW <sub>17</sub>	3 22.6 151°00			1°6/24.3 17			<b>118505</b>	2000 DL <sub>76</sub>	3 22.6 142°21			2°7/24.7 18	
2 21	12 27.72	- 8 21.3	2.001	2.843	12.5	21.1	2 21	12 35.66	- 9 7.9	1.685	2.520	14.8	19.8	
3 2	12 22.64	- 7 47.0	1.927	2.845	9.1	20.9	3 2	12 28.43	- 9 5.7	1.618	2.531	10.9	19.5	
3 12	12 15.91	- 6 57.1	1.877	2.847	5.4	20.7	3 12	12 19.04	- 8 46.1	1.576	2.542	6.7	19.3	
3 22	12 8.22	- 5 55.5	1.855	2.849	1.9	20.4	3 22	12 8.42	- 8 12.1	1.560	2.551	3.0	19.1	
4 1	12 0.45	- 4 48.0	1.862	2.850	3.6	20.6	4 1	11 57.76	- 7 28.8	1.573	2.561	4.4	19.2	
4 11	11 53.50	- 3 41.6	1.896	2.852	7.5	20.8	4 11	11 48.26	- 6 43.4	1.614	2.569	8.6	19.5	
4 21	11 48.08	- 2 42.4	1.957	2.853	11.0	21.0	4 21	11 40.83	- 6 2.2	1.680	2.577	12.5	19.7	
5 1	11 44.67	- 1 55.1	2.039	2.854	14.1	21.2	5 1	11 36.01	- 5 30.7	1.768	2.584	15.9	20.0	
<b>268561</b>	2006 BX <sub>38</sub>	3 22.6 185°75			2°0/20.4 17			<b>179799</b>	2002 TA <sub>38</sub>	3 22.6 99°53			2°3/20.5 18	
2 21	12 29.47	+ 2 42.3	2.108	2.976	10.9	21.2	2 21	12 32.84	+ 3 30.2	1.795	2.665	12.3	20.6	
3 2	12 23.78	+ 3 36.0	2.038	2.976	7.5	21.0	3 2	12 26.15	+ 4 16.3	1.749	2.686	8.5	20.4	
3 12	12 16.47	+ 4 35.8	1.996	2.975	3.9	20.7	3 12	12 17.69	+ 5 7.2	1.728	2.707	4.5	20.2	
3 22	12 8.25	+ 5 36.0	1.982	2.974	2.1	20.6	3 22	12 8.34	+ 5 56.3	1.735	2.727	2.4	20.1	
4 1	11 59.97	+ 6 30.4	1.997	2.973	5.1	20.8	4 1	11 59.15	+ 6 37.5	1.771	2.747	5.6	20.4	
4 11	11 52.49	+ 7 13.7	2.041	2.971	8.7	21.0	4 11	11 51.11	+ 7 5.7	1.834	2.766	9.4	20.6	
4 21	11 46.51	+ 7 42.4	2.109	2.969	11.9	21.2	4 21	11 44.92	+ 7 18.6	1.922	2.785	12.8	20.9	
5 1	11 42.50	+ 7 55.0	2.198	2.966	14.7	21.4	5 1	11 41.00	+ 7 15.4	2.030	2.804	15.5	21.1	
<b>41498</b>	2000 QK <sub>128</sub>	3 22.6 96°40			1°0/21.7 18			<b>316755</b>	1999 RZ <sub>35</sub>	3 22.6 188°97			2°8/19.9 18	
2 21	12 32.91	- 0 51.5	1.575	2.442	13.9	19.0	2 21	12 32.94	+ 5 12.5	1.898	2.769	11.8	21.2	
3 2	12 26.39	- 0 4.6	1.527	2.462	9.7	18.8	3 2	12 26.36	+ 5 58.2	1.830	2.768	8.2	21.0	
3 12	12 17.87	+ 0 52.5	1.503	2.482	4.9	18.6	3 12	12 17.90	+ 6 47.8	1.789	2.767	4.5	20.8	
3 22	12 8.33	+ 1 53.2	1.506	2.502	1.0	18.3	3 22	12 8.36	+ 7 35.2	1.775	2.765	3.0	20.7	
4 1	11 58.93	+ 2 49.6	1.537	2.521	5.1	18.7	4 1	11 58.76	+ 8 14.0	1.791	2.763	6.0	20.8	
4 11	11 50.81	+ 3 34.9	1.596	2.540	9.6	19.0	4 11	11 50.11	+ 8 39.3	1.834	2.760	9.8	21.1	
4 21	11 44.74	+ 4 5.0	1.678	2.558	13.4	19.2	4 21	11 43.22	+ 8 48.3	1.901	2.757	13.2	21.3	
5 1	11 41.18	+ 4 17.8	1.780	2.576	16.6	19.5	5 1	11 38.60	+ 8 40.6	1.989	2.753	16.1	21.5	
<b>54065</b>	2000 GZ <sub>138</sub>	3 22.6 250°64			3°4/18.2 18			<b>508516</b>	2016 QY <sub>62</sub>	3 22.6 270°13			2°3/25.4 17	
2 21	12 26.49	+ 7 6.4	2.270	3.146	9.8	19.8	2 21	12 26.10	-10 57.5	2.397	3.223	11.2	21.8	
3 2	12 21.67	+ 8 22.9	2.196	3.136	6.9	19.6	3 2	12 21.40	-10 33.9	2.305	3.211	8.5	21.6	
3 12	12 15.37	+ 9 42.9	2.150	3.125	4.1	19.4	3 12	12 15.25	- 9 55.2	2.238	3.199	5.4	21.4	
3 22	12 8.20	+10 59.8	2.132	3.114	3.7	19.4	3 22	12 8.22	- 9 4.0	2.198	3.187	2.6	21.2	
4 1	12 0.90	+12 7.0	2.144	3.103	6.2	19.5	4 1	12 1.03	- 8 4.3	2.188	3.175	3.4	21.2	
4 11	11 54.28	+12 59.2	2.183	3.092	9.3	19.7	4 11	11 54.44	- 7 1.9	2.207	3.163	6.5	21.4	
4 21	11 48.98	+13 33.4	2.246	3.081	12.2	19.8	4 21	11 49.09	- 6 2.2	2.252	3.151	9.7	21.6	
5 1	11 45.46	+13 48.7	2.329	3.069	14.7	20.0	5 1	11 45.47	- 5 10.2	2.321	3.139	12.5	21.8	
<b>271880</b>	2004 UO <sub>7</sub>	3 22.6 177°18			1°3/21.2 17			<b>3161</b>	Beadell	3 22.6 312°88			2°5/23.9 18 R	
2 21	12 31.06	+ 1 54.8	2.293	3.154	10.4	20.9	2 21	12 35.25	- 5 25.6	1.520	2.373	15.1	16.1	
3 2	12 24.77	+ 2 23.0	2.222	3.155	7.2	20.7	3 2	12 28.68	- 6 5.6	1.432	2.356	11.2	15.8	
3 12	12 16.96	+ 2 56.6	2.178	3.157	3.7	20.4	3 12	12 19.46	- 6 34.3	1.367	2.339	6.7	15.5	
3 22	12 8.29	+ 3 31.2	2.163	3.158	1.3	20.3	3 22	12 8.47	- 6 52.3	1.329	2.322	2.7	15.2	
4 1	11 59.56	+ 4 2.3	2.178	3.158	4.3	20.5	4 1	11 56.98	- 7 2.1	1.318	2.305	5.0	15.3	
4 11	11 51.61	+ 4 25.7	2.222	3.158	7.8	20.7	4 11	11 46.45	- 7 8.1	1.333	2.290	9.8	15.6	
4 21	11 45.09	+ 4 38.5	2.292	3.157	10.9	20.9	4 21	11 38.08	- 7 15.1	1.372	2.274	14.4	15.8	
5 1	11 40.46	+ 4 39.2	2.384	3.156	13.5	21.1	5 1	11 32.67	- 7 27.8	1.431	2.259	18.4	16.0	
<b>16566</b>	1992 CZ <sub>2</sub>	3 22.6 310°51			3°1/24.9 18			<b>4175</b>	Billbaum	3 22.6 43°32			2°8/19.7 18	
2 21	12 28.17	-10 15.1	1.290	2.148	17.0	17.9	2 21	12 25.73	+ 0 47.1	1.440	2.325	13.8	15.8	
3 2	12 23.87	- 9 57.7	1.209	2.132	12.8	17.6								

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>27143</b>	1998 <i>XK</i> <sub>63</sub>		3 22.6 210°43	4.2/26.3	18		<b>498960</b>	2009 <i>BQ</i> <sub>94</sub>		3 22.6 90°10	3.2/18.6	18	
2 21	12 33.50	-14 4.4	1.845	2.659	14.6	19.6	2 21	12 27.06	+ 6 18.4	2.216	3.092	10.1	21.2
3 2	12 27.02	-14 3.6	1.758	2.652	11.3	19.3	3 2	12 21.94	+ 7 35.5	2.170	3.110	6.9	21.1
3 12	12 18.39	-13 41.9	1.693	2.645	7.7	19.1	3 12	12 15.45	+ 8 54.7	2.151	3.127	4.0	20.9
3 22	12 8.41	-13 0.7	1.655	2.637	4.7	18.9	3 22	12 8.26	+10 9.6	2.161	3.145	3.4	20.9
4 1	11 58.14	-12 4.1	1.645	2.628	5.0	18.9	4 1	12 1.14	+11 13.7	2.200	3.163	5.8	21.1
4 11	11 48.76	-10 59.2	1.663	2.618	8.4	19.1	4 11	11 54.85	+12 2.7	2.267	3.180	8.8	21.3
4 21	11 41.20	- 9 53.9	1.707	2.607	12.1	19.3	4 21	11 49.94	+12 34.1	2.358	3.197	11.6	21.5
5 1	11 36.12	- 8 55.5	1.773	2.596	15.6	19.5	5 1	11 46.79	+12 47.6	2.470	3.214	13.9	21.7
<b>22517</b>	Alexzanardi		3 22.6 99°35	1.5/21.5	18		<b>384250</b>	2009 <i>DZ</i> <sub>138</sub>		3 22.6 63°12	1°1/23.7	17	
2 21	12 33.99	+ 1 16.2	1.494	2.367	14.2	18.1	2 21	12 28.41	- 5 42.8	2.108	2.956	11.7	21.2
3 2	12 27.38	+ 1 42.5	1.437	2.375	9.9	17.9	3 2	12 23.02	- 5 27.0	2.043	2.966	8.4	21.0
3 12	12 18.51	+ 2 17.0	1.403	2.383	5.1	17.6	3 12	12 16.09	- 4 59.6	2.003	2.976	4.8	20.8
3 22	12 8.41	+ 2 53.6	1.396	2.391	1.5	17.4	3 22	12 8.30	- 4 24.1	1.991	2.986	1.3	20.5
4 1	11 58.32	+ 3 25.5	1.416	2.399	5.6	17.7	4 1	12 0.51	- 3 45.0	2.007	2.996	3.5	20.7
4 11	11 49.52	+ 3 46.7	1.463	2.407	10.2	18.0	4 11	11 53.54	- 3 7.7	2.052	3.006	7.1	21.0
4 21	11 42.91	+ 3 53.6	1.533	2.415	14.4	18.3	4 21	11 48.04	- 2 36.5	2.123	3.016	10.4	21.2
5 1	11 39.00	+ 3 44.7	1.622	2.423	17.7	18.5	5 1	11 44.47	- 2 14.8	2.215	3.026	13.3	21.4
<b>170994</b>	2005 <i>CH</i> <sub>79</sub>		3 22.6 306°95	7.8/13.4	17		<b>341524</b>	2007 <i>TL</i> <sub>434</sub>		3 22.6 270°72	4.1/27.3	17	
2 21	12 27.19	+18 14.8	1.829	2.713	11.4	19.0	2 21	12 27.03	-16 0.7	2.186	2.991	12.9	20.6
3 2	12 22.54	+19 56.8	1.767	2.696	9.1	18.8	3 2	12 22.17	-15 51.0	2.101	2.988	10.1	20.4
3 12	12 15.98	+21 32.7	1.731	2.681	7.8	18.7	3 12	12 15.71	-15 21.9	2.040	2.985	7.2	20.2
3 22	12 8.28	+22 52.8	1.721	2.665	8.6	18.7	3 22	12 8.29	-14 35.1	2.005	2.982	4.6	20.1
4 1	12 0.42	+23 49.0	1.737	2.649	10.9	18.8	4 1	12 0.74	-13 34.4	1.998	2.979	4.5	20.1
4 11	11 53.44	+24 16.8	1.776	2.634	13.7	18.9	4 11	11 53.91	-12 26.0	2.020	2.976	7.0	20.2
4 21	11 48.18	+24 15.7	1.835	2.619	16.5	19.1	4 21	11 48.49	-11 16.7	2.067	2.973	10.1	20.4
5 1	11 45.17	+23 47.9	1.910	2.604	18.8	19.2	5 1	11 45.00	-10 12.6	2.138	2.970	12.9	20.6
<b>206256</b>	2002 <i>XR</i> <sub>73</sub>		3 22.6 59°11	0°1/22.5	18		<b>945</b>	Barcelona		3 22.6 61°88	16°7/ 8.3	18	
2 21	12 29.76	- 2 20.9	1.919	2.779	12.1	20.1	2 21	12 45.68	-43 54.2	1.850	2.442	21.5	14.5
3 2	12 23.92	- 1 54.1	1.873	2.804	8.5	19.9	3 2	12 36.80	-46 31.0	1.792	2.459	20.1	14.4
3 12	12 16.50	- 1 17.9	1.852	2.830	4.4	19.7	3 12	12 24.17	-48 32.3	1.750	2.476	18.8	14.3
3 22	12 8.30	- 0 37.2	1.859	2.855	0.2	19.4	3 22	12 8.80	-49 49.3	1.725	2.493	17.6	14.2
4 1	12 0.25	+ 0 2.8	1.894	2.881	3.9	19.7	4 1	11 52.49	-50 17.2	1.720	2.510	16.9	14.2
4 11	11 53.21	+ 0 36.7	1.958	2.906	7.8	20.0	4 11	11 37.45	-49 58.7	1.733	2.528	16.8	14.2
4 21	11 47.82	+ 1 0.8	2.046	2.932	11.1	20.3	4 21	11 25.46	-49 3.1	1.765	2.545	17.2	14.3
5 1	11 44.47	+ 1 12.8	2.156	2.957	13.9	20.5	5 1	11 17.60	-47 43.0	1.814	2.563	18.0	14.4
<b>207238</b>	2005 <i>EE</i> <sub>168</sub>		3 22.6 145°82	0°3/22.9	17		<b>349402</b>	2007 <i>YL</i> <sub>12</sub>		3 22.6 320°11	9°2/11.2	17	
2 21	12 28.04	- 4 1.0	2.306	3.157	10.7	21.2	2 21	12 28.38	+25 16.5	1.997	2.865	11.4	20.1
3 2	12 22.67	- 3 27.1	2.236	3.162	7.6	21.0	3 2	12 23.26	+26 43.7	1.945	2.852	9.7	20.0
3 12	12 15.87	- 2 43.1	2.192	3.167	4.1	20.8	3 12	12 16.32	+27 58.1	1.918	2.839	9.2	19.9
3 22	12 8.28	- 1 53.0	2.176	3.172	0.4	20.5	3 22	12 8.33	+28 51.3	1.916	2.827	10.0	19.9
4 1	12 0.64	- 1 1.6	2.190	3.177	3.4	20.7	4 1	12 0.27	+29 17.3	1.939	2.814	11.8	20.0
4 11	11 53.75	- 0 14.3	2.233	3.182	7.0	21.0	4 11	11 53.14	+29 13.9	1.983	2.802	14.1	20.1
4 21	11 48.19	+ 0 24.8	2.303	3.186	10.1	21.2	4 21	11 47.72	+28 42.6	2.047	2.791	16.3	20.3
5 1	11 44.42	+ 0 52.7	2.394	3.190	12.8	21.4	5 1	11 44.49	+27 46.8	2.127	2.780	18.2	20.4
<b>77669</b>	2001 <i>MY</i> <sub>9</sub>		3 22.6 118°86	4°0/18.1	18		<b>502479</b>	2015 <i>BB</i> <sub>346</sub>		3 22.6 154°00	5°7/28.0	17	
2 21	12 28.90	+10 2.9	2.197	3.074	10.1	19.8	2 21	12 31.64	-18 14.8	1.991	2.782	14.5	21.3
3 2	12 23.29	+10 57.9	2.142	3.080	7.2	19.6	3 2	12 25.56	-18 35.6	1.913	2.786	11.7	21.1
3 12	12 16.19	+11 52.1	2.114	3.086	4.6	19.5	3 12	12 17.56	-18 35.3	1.857	2.789	8.6	21.0
3 22	12 8.29	+12 39.5	2.114	3.092	4.2	19.5	3 22	12 8.40	-18 13.7	1.826	2.792	6.2	20.8
4 1	12 0.42	+13 14.9	2.143	3.098	6.5	19.6	4 1	11 59.09	-17 33.8	1.823	2.795	5.9	20.8
4 11	11 53.38	+13 34.6	2.198	3.104	9.4	19.8	4 11	11 50.65	-16 41.5	1.848	2.798	8.1	20.9
4 21	11 47.80	+13 37.3	2.278	3.110	12.2	20.0	4 21	11 43.91	-15 43.7	1.898	2.800	11.0	21.1
5 1	11 44.09	+13 23.3	2.378	3.115	14.5	20.2	5 1	11 39.44	-14 47.8	1.971	2.802	13.9	21.3
<b>121002</b>	1998 <i>YZ</i> <sub>15</sub>		3 22.6 348°31	3°1/24.8	18		<b>369362</b>	2009 <i>UW</i> <sub>20</sub>		3 22.6 180°07	1°1/24.0	14	C
2 21	12 30.16	- 9 27.3	1.277	2.135	17.1	19.5	2 21	12 29.94	- 7 10.9	2.676	3.506	10.1	23.1
3 2	12 25.17	- 9 21.3	1.208	2.132	12.8	19.2	3 2	12 23.88	- 6 42.4	2.595	3.508	7.3	22.9
3 12	12 17.58	- 8 52.6	1.160	2.129	7.9	18.9	3 12	12 16.49	- 6 3.0	2.540	3.509	4.2	22.7
3 22	12 8.38	- 8 4.5	1.136	2.127	3.5	18.7	3 22	12 8.34	- 5 15.5	2.515	3.509	1.3	22.5
4 1	11 58.96	- 7 4.0	1.136	2.126	5.2	18.7	4 1	12 0.12	- 4 23.9	2.522	3.509	3.0	22.6
4 11	11 50.79	- 6 1.0	1.162	2.125	10.1	19.0	4 11	11 52.53	- 3 33.1	2.558	3.508	6.1	22.8
4 21	11 44.98	- 5 5.0	1.210	2.124	14.9	19.3	4 21	11 46.15	- 2 47.3	2.622	3.506	9.1	23.0
5 1	11 42.20	- 4 23.1	1.276	2.124	19.0	19.5	5 1	11 41.41	- 2 9.9	2.711	3.503	11.6	23.2
<b>386169</b>	2007 <i>UX</i> <sub>48</sub>		3 22.6 82°47	2°2/25.3	17		<b>177099</b>	2003 <i>FW</i> <sub>97</sub>		3 22.6 82°49	0°0/22.5	18	
2 21	12 26.54	-10 58.4	2.221	3.049	11.9	21.1	2 21	12 25.84	- 4 6.5	2.297	3.151	10.6	20.3
3 2	12 21.65	-10 25.3	2.154	3.062	8.9	20.9	3 2	12 21.10	- 3 9.2	2.238	3.166	7.5	20.1
3 12	12 15.34	- 9 36.5	2.111	3.074	5.5	20.7	3 12	12 15.03	- 2 1.4	2.205	3.181	3.9	19.9
3 22	12 8.25	- 8 35.4	2.097	3.087	2.6	20.5	3 22	12 8.26	- 0 48.2	2.200	3.197	0.2	19.6
4 1	12 1.16	- 7 27.4	2.111	3.099	3.4	20.6	4 1	12 1.52	+ 0 24.6	2.226	3.212	3.5	19.9
4 11	11 54.84	- 6 18.5	2.154	3.111	6.6	20.8	4 11	11 55.53	+ 1 31.0	2.280	3.227	7.0	20.1
4 21	11 49.91	- 5 14.8	2.224	3.123	9.8	21.0	4 21	11 50.84	+ 2 26.6	2.360	3.241	10.0	20.4
5 1	11 46.76	- 4 20.8	2.317	3.136	12.5	21.3	5 1	11 47.84	+ 3 8.5	2.464	3.256	12.6	20.6
<b>250601</b>	2005 <i>EF</i> <sub>154</sub>		3 22.6 266°24	0°8/23.2	17		<b>385287</b>	2001 <i>TY</i> <sub>26</sub>		3 22.6 66°29	4°4/19.1	18	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>327871</b>	2007 AN <sub>3</sub>		3 22.6 319°35	4.1/19.1	17		<b>301988</b>	2000 NN <sub>10</sub>		3 22.6 181°19	8.7/	2.2 18	
2 21	12 28.20	+ 6 4.7	1.417	2.307	13.7	19.8	2 21	12 33.01	-31 19.4	2.283	2.976	15.5	20.3
3 2	12 23.68	+ 7 5.5	1.341	2.288	9.6	19.5	3 2	12 26.52	-31 30.5	2.192	2.978	13.6	20.2
3 12	12 16.78	+ 8 12.7	1.289	2.269	5.6	19.2	3 12	12 18.09	-31 13.6	2.121	2.979	11.4	20.0
3 22	12 8.37	+ 9 17.5	1.263	2.251	4.4	19.1	3 22	12 8.49	-30 26.7	2.073	2.979	9.6	19.9
4 1	11 59.66	+10 10.2	1.262	2.233	8.0	19.2	4 1	11 58.71	-29 11.6	2.052	2.978	8.7	19.8
4 11	11 51.97	+10 43.2	1.285	2.216	12.6	19.4	4 11	11 49.82	-27 34.1	2.057	2.976	9.2	19.9
4 21	11 46.36	+10 52.4	1.329	2.200	16.8	19.6	4 21	11 42.63	-25 42.8	2.089	2.974	11.0	20.0
5 1	11 43.49	+10 37.4	1.390	2.185	20.5	19.8	5 1	11 37.72	-23 47.5	2.145	2.970	13.2	20.1
<b>124286</b>	2001 QV <sub>43</sub>		3 22.6 173°08	0.4/22.9	18		<b>138610</b>	2000 QY <sub>188</sub>		3 22.6 167°67	2.3/	19.6 18	
2 21	12 34.06	- 3 54.6	1.791	2.643	13.3	20.8	2 21	12 27.21	+ 5 32.7	2.701	3.569	8.8	20.5
3 2	12 27.26	- 3 25.6	1.720	2.647	9.5	20.6	3 2	12 21.95	+ 6 21.0	2.635	3.572	6.0	20.3
3 12	12 18.45	- 2 43.8	1.674	2.650	5.1	20.4	3 12	12 15.48	+ 7 11.8	2.597	3.575	3.4	20.2
3 22	12 8.46	- 1 54.0	1.656	2.652	0.5	20.0	3 22	12 8.34	+ 8 0.7	2.589	3.577	2.4	20.1
4 1	11 58.39	- 1 2.4	1.667	2.653	4.3	20.3	4 1	12 1.17	+ 8 43.1	2.611	3.580	4.6	20.3
4 11	11 49.34	- 0 15.8	1.706	2.654	8.7	20.6	4 11	11 54.63	+ 9 15.4	2.661	3.581	7.4	20.4
4 21	11 42.16	+ 0 20.7	1.770	2.654	12.6	20.8	4 21	11 49.24	+ 9 35.4	2.738	3.583	10.0	20.6
5 1	11 37.40	+ 0 43.5	1.855	2.653	15.9	21.0	5 1	11 45.37	+ 9 42.1	2.836	3.584	12.1	20.8
<b>170798</b>	2004 DH <sub>22</sub>		3 22.6 17°12	0.2/22.5	18		<b>341446</b>	2007 TC <sub>256</sub>		3 22.6 341°16	3.8/	19.1 17	
2 21	12 32.62	+ 0 13.0	1.528	2.400	14.0	18.5	2 21	12 30.56	+ 9 8.5	1.969	2.845	11.1	20.3
3 2	12 26.39	- 0 6.0	1.471	2.408	9.9	18.3	3 2	12 24.67	+ 9 43.2	1.904	2.843	7.8	20.1
3 12	12 18.01	- 0 17.7	1.437	2.416	5.2	18.0	3 12	12 17.04	+10 17.6	1.866	2.841	4.8	19.9
3 22	12 8.43	- 0 25.5	1.430	2.426	0.3	17.7	3 22	12 8.43	+10 45.9	1.855	2.839	4.0	19.9
4 1	11 58.88	- 0 33.4	1.450	2.437	4.7	18.0	4 1	11 59.78	+11 3.0	1.873	2.837	6.5	20.0
4 11	11 50.56	- 0 45.3	1.496	2.449	9.3	18.3	4 11	11 52.05	+11 5.2	1.917	2.836	9.9	20.2
4 21	11 44.32	- 1 4.2	1.566	2.462	13.3	18.6	4 21	11 45.95	+10 51.2	1.985	2.834	13.0	20.4
5 1	11 40.69	- 1 31.9	1.656	2.475	16.6	18.9	5 1	11 41.98	+10 21.5	2.073	2.833	15.7	20.6
<b>305777</b>	2009 DO <sub>47</sub>		3 22.6 78°62	2.4/24.3	18		<b>374584</b>	2006 DQ <sub>23</sub>		3 22.6 84°69	0.3/	22.4 17	
2 21	12 36.95	- 7 18.6	1.441	2.289	16.1	20.7	2 21	12 30.37	- 1 45.0	1.880	2.741	12.3	21.0
3 2	12 29.40	- 7 28.1	1.393	2.313	11.7	20.5	3 2	12 24.54	- 1 20.3	1.818	2.750	8.6	20.8
3 12	12 19.56	- 7 20.6	1.368	2.338	6.9	20.2	3 12	12 16.97	- 0 46.2	1.780	2.759	4.5	20.6
3 22	12 8.52	- 6 59.4	1.369	2.361	2.7	20.0	3 22	12 8.43	- 0 7.1	1.771	2.767	0.3	20.2
4 1	11 57.68	- 6 30.2	1.397	2.385	4.7	20.2	4 1	11 59.88	+ 0 31.4	1.790	2.776	4.2	20.6
4 11	11 48.33	- 5 59.9	1.452	2.409	9.2	20.5	4 11	11 52.30	+ 1 3.7	1.837	2.785	8.2	20.8
4 21	11 41.35	- 5 34.7	1.531	2.432	13.3	20.8	4 21	11 46.40	+ 1 25.9	1.909	2.794	11.8	21.1
5 1	11 37.23	- 5 19.2	1.631	2.454	16.7	21.1	5 1	11 42.66	+ 1 35.5	2.002	2.802	14.8	21.3
<b>467209</b>	2016 ER <sub>143</sub>		3 22.6 339°34	0.9/21.9	17		<b>31494</b>	Emmafreesman		3 22.6 194°79	1.5/	24.0 18	
2 21	12 31.05	+ 0 4.1	1.512	2.386	14.0	20.9	2 21	12 32.50	- 7 33.2	1.872	2.712	13.3	18.9
3 2	12 25.46	+ 0 24.4	1.443	2.382	9.8	20.6	3 2	12 26.20	- 7 5.0	1.792	2.710	9.7	18.7
3 12	12 17.62	+ 0 54.4	1.398	2.378	5.1	20.3	3 12	12 17.94	- 6 20.8	1.737	2.707	5.6	18.4
3 22	12 8.44	+ 1 28.7	1.378	2.374	0.9	20.0	3 22	12 8.49	- 5 24.4	1.710	2.704	1.8	18.1
4 1	11 59.12	+ 2 0.8	1.386	2.371	5.3	20.3	4 1	11 58.88	- 4 21.8	1.711	2.700	4.0	18.3
4 11	11 50.89	+ 2 24.1	1.419	2.368	10.1	20.6	4 11	11 50.18	- 3 20.2	1.741	2.694	8.2	18.5
4 21	11 44.71	+ 2 34.4	1.476	2.366	14.3	20.8	4 21	11 43.22	- 2 26.1	1.797	2.688	12.1	18.7
5 1	11 41.18	+ 2 29.2	1.551	2.364	17.9	21.1	5 1	11 38.58	- 1 44.4	1.874	2.682	15.4	19.0
<b>92779</b>	2000 QR <sub>135</sub>		3 22.6 229°10	2.8/19.4	18		<b>400267</b>	2007 RU <sub>148</sub>		3 22.6 187°92	1.3/	21.2 18	
2 21	12 29.80	+ 5 30.0	2.178	3.049	10.4	20.0	2 21	12 31.58	+ 0 0.8	2.002	2.863	11.7	22.4
3 2	12 24.09	+ 6 28.5	2.100	3.038	7.3	19.8	3 2	12 25.39	+ 0 58.3	1.929	2.862	8.1	22.2
3 12	12 16.74	+ 7 31.4	2.049	3.026	4.1	19.5	3 12	12 17.45	+ 2 5.2	1.882	2.861	4.2	21.9
3 22	12 8.39	+ 8 32.6	2.026	3.014	3.0	19.4	3 22	12 8.47	+ 3 15.4	1.865	2.859	1.4	21.7
4 1	11 59.90	+ 9 25.9	2.033	3.001	5.7	19.6	4 1	11 59.39	+ 4 22.0	1.876	2.857	4.8	22.0
4 11	11 52.14	+10 6.1	2.068	2.988	9.2	19.8	4 11	11 51.18	+ 5 18.6	1.917	2.853	8.8	22.2
4 21	11 45.82	+10 30.2	2.128	2.975	12.3	19.9	4 21	11 44.59	+ 6 0.8	1.982	2.849	12.3	22.4
5 1	11 41.45	+10 36.9	2.208	2.960	15.1	20.1	5 1	11 40.12	+ 6 26.1	2.069	2.843	15.3	22.6
<b>314196</b>	2005 JZ <sub>153</sub>		3 22.6 338°63	5.1/18.1	18		<b>96650</b>	1999 GX <sub>60</sub>		3 22.6 35°86	2.3/	24.6 18	
2 21	12 29.27	+ 8 24.4	1.434	2.324	13.5	20.3	2 21	12 28.47	- 9 51.5	1.352	2.208	16.5	19.3
3 2	12 24.25	+ 9 43.3	1.376	2.321	9.6	20.1	3 2	12 23.81	- 9 8.3	1.287	2.211	12.2	19.0
3 12	12 16.98	+11 4.9	1.341	2.318	6.0	19.8	3 12	12 16.81	- 8 0.7	1.243	2.214	7.3	18.7
3 22	12 8.41	+12 19.1	1.333	2.315	5.5	19.8	3 22	12 8.43	- 6 34.3	1.225	2.218	2.7	18.5
4 1	11 59.75	+13 16.3	1.350	2.312	8.8	20.0	4 1	11 59.96	- 4 58.6	1.232	2.222	4.7	18.6
4 11	11 52.27	+13 49.7	1.391	2.310	12.8	20.2	4 11	11 52.70	- 3 25.3	1.265	2.226	9.7	18.9
4 21	11 46.88	+13 57.3	1.454	2.308	16.6	20.4	4 21	11 47.61	- 2 4.2	1.320	2.230	14.3	19.2
5 1	11 44.15	+13 39.9	1.533	2.306	19.8	20.6	5 1	11 45.28	- 1 2.1	1.396	2.235	18.2	19.4
<b>162762</b>	2000 WN <sub>115</sub>		3 22.6 119°34	3.4/19.6	18		<b>103005</b>	1999 XN <sub>99</sub>		3 22.6 146°25	1.8/	24.2 18	
2 21	12 33.81	+ 6 10.9	1.690	2.565	12.7	20.0	2 21	12 34.06	- 8 12.7	1.678	2.520	14.5	19.9
3 2	12 27.01	+ 7 4.0	1.640	2.580	8.8	19.8	3 2	12 27.33	- 7 44.5	1.613	2.531	10.6	19.7
3 12	12 18.25	+ 7 59.8	1.616	2.593	5.0	19.6	3 12	12 18.52	- 6 58.6	1.571	2.541	6.2	19.5
3 22	12 8.48	+ 8 50.9	1.619	2.607	3.6	19.6	3 22	12 8.53	- 5 59.4	1.557	2.551	2.1	19.2
4 1	11 58.81	+ 9 30.5	1.650	2.620	6.7	19.8	4 1	11 58.52	- 4 53.6	1.571	2.559	4.2	19.4
4 11	11 50.35	+ 9 53.6	1.708	2.632	10.5	20.0	4 11	11 49.64	- 3 49.5	1.613	2.567	8.6	19.7
4 21	11 43.87	+ 9 58.3	1.789	2.644	13.9	20.3	4 21	11 42.77	- 2 54.0	1.680	2.574	12.6	19.9
5 1	11 39.83	+ 9 45.0	1.890	2.656	16.8	20.5	5 1	11 38.42	- 2 11.9	1.768	2.581	16.0	20.2
<b>112208</b>	2002 JA <sub>132</sub>		3 22.6 184°83	0.8/21.9	18		<b>423299</b>	2005 EM <sub>103</sub>		3			

EPHEMERIDES

3 22.6

3 22.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>210159</b>	2006 <i>SU</i> <sub>219</sub>		3 22.6 298°54	1.7°/20.6	18		<b>326349</b>	2000 <i>SP</i> <sub>202</sub>		3 22.6 156°37	0°1/22.7	18	
2 21	12 25.66	+ 1 5.1	2.163	3.033	10.5	20.3	2 21	12 27.87	- 5 5.9	2.223	3.071	11.2	21.4
3 2	12 21.16	+ 2 11.2	2.092	3.030	7.3	20.0	3 2	12 22.64	- 4 0.0	2.152	3.078	7.9	21.2
3 12	12 15.18	+ 3 25.3	2.047	3.027	3.8	19.8	3 12	12 15.95	- 2 41.4	2.108	3.084	4.2	20.9
3 22	12 8.35	+ 4 41.5	2.030	3.024	1.8	19.7	3 22	12 8.44	- 1 15.5	2.093	3.089	0.3	20.6
4 1	12 1.45	+ 5 53.2	2.043	3.021	4.8	19.9	4 1	12 0.90	+ 0 11.0	2.108	3.094	3.6	20.9
4 11	11 55.26	+ 6 54.2	2.084	3.018	8.3	20.1	4 11	11 54.11	+ 1 31.3	2.153	3.099	7.3	21.2
4 21	11 50.42	+ 7 40.5	2.150	3.015	11.5	20.3	4 21	11 48.71	+ 2 40.0	2.224	3.103	10.6	21.4
5 1	11 47.38	+ 8 9.9	2.237	3.013	14.2	20.4	5 1	11 45.13	+ 3 33.6	2.317	3.106	13.4	21.6
<b>290752</b>	2005 <i>UV</i> <sub>492</sub>		3 22.6 246°80	6°3/28.6	17		<b>181687</b>	9568 <i>P-L</i>		3 22.6 131°76	1°9/20.5	18	
2 21	12 30.59	-20 1.7	1.962	2.746	14.9	20.8	2 21	12 32.57	+ 3 33.7	2.385	3.244	10.1	20.6
3 2	12 25.01	-20 19.4	1.870	2.736	12.2	20.6	3 2	12 25.72	+ 4 16.8	2.331	3.264	6.9	20.4
3 12	12 17.40	-20 14.0	1.800	2.726	9.3	20.4	3 12	12 17.48	+ 5 3.6	2.305	3.282	3.7	20.2
3 22	12 8.50	-19 45.0	1.755	2.716	6.9	20.2	3 22	12 8.53	+ 5 49.2	2.308	3.300	2.0	20.1
4 1	11 59.29	-18 54.7	1.737	2.705	6.5	20.2	4 1	11 59.67	+ 6 28.9	2.343	3.317	4.6	20.3
4 11	11 50.86	-17 49.2	1.745	2.695	8.5	20.2	4 11	11 51.66	+ 6 58.6	2.407	3.333	7.7	20.6
4 21	11 44.12	-16 36.4	1.779	2.683	11.5	20.4	4 21	11 45.09	+ 7 16.0	2.497	3.349	10.6	20.8
5 1	11 39.70	-15 24.6	1.836	2.672	14.6	20.6	5 1	11 40.37	+ 7 20.3	2.609	3.363	12.9	21.0
<b>3582</b>	Cyrano		3 22.6 118°03	4°5/17.7	18		<b>46039</b>	2001 <i>DW</i> <sub>39</sub>		3 22.6 271°32	0°5/22.1	18	
2 21	12 29.84	+12 3.6	2.234	3.108	10.0	16.6	2 21	12 28.56	- 3 21.6	1.606	2.473	13.7	19.4
3 2	12 23.96	+12 54.3	2.180	3.115	7.2	16.4	3 2	12 23.73	- 2 20.3	1.526	2.461	9.7	19.1
3 12	12 16.60	+13 42.4	2.154	3.122	4.9	16.3	3 12	12 16.78	- 1 2.6	1.469	2.448	5.1	18.8
3 22	12 8.46	+14 22.2	2.155	3.128	4.7	16.3	3 22	12 8.50	+ 0 24.9	1.439	2.436	0.5	18.4
4 1	12 0.35	+14 48.6	2.186	3.135	6.8	16.4	4 1	11 59.97	+ 1 53.2	1.437	2.423	5.1	18.7
4 11	11 53.09	+14 58.7	2.243	3.141	9.6	16.6	4 11	11 52.35	+ 3 12.7	1.461	2.410	9.9	19.0
4 21	11 47.30	+14 51.7	2.324	3.147	12.2	16.8	4 21	11 46.58	+ 4 16.2	1.509	2.397	14.2	19.2
5 1	11 43.40	+14 28.3	2.425	3.153	14.5	16.9	5 1	11 43.29	+ 4 59.2	1.577	2.384	17.9	19.4
<b>296134</b>	2009 <i>BN</i> <sub>81</sub>		3 22.6 135°21	7°2/13.5	18		<b>336970</b>	2011 <i>JS</i> <sub>21</sub>		3 22.6 325°19	0°1/22.7	17	
2 21	12 30.16	+22 37.0	2.378	3.242	9.9	20.5	2 21	12 27.26	- 4 4.9	1.911	2.770	12.2	21.6
3 2	12 24.16	+23 45.3	2.337	3.248	8.1	20.4	3 2	12 22.45	- 3 17.8	1.838	2.769	8.7	21.3
3 12	12 16.69	+24 43.0	2.322	3.254	7.2	20.3	3 12	12 15.95	- 2 17.7	1.790	2.767	4.6	21.1
3 22	12 8.47	+25 24.2	2.334	3.259	7.7	20.4	3 22	12 8.45	- 1 9.8	1.770	2.766	0.3	20.7
4 1	12 0.30	+25 44.5	2.373	3.265	9.3	20.5	4 1	12 0.85	- 0 0.7	1.778	2.765	4.0	21.0
4 11	11 53.02	+25 42.2	2.437	3.270	11.3	20.6	4 11	11 54.09	+ 1 2.4	1.814	2.764	8.2	21.3
4 21	11 47.21	+25 18.4	2.522	3.275	13.3	20.8	4 21	11 48.89	+ 1 54.0	1.875	2.764	11.9	21.5
5 1	11 43.29	+24 35.7	2.625	3.279	15.0	20.9	5 1	11 45.74	+ 2 30.4	1.958	2.763	15.0	21.7
<b>521045</b>	2015 <i>DX</i> <sub>235</sub>		3 22.6 184°58	2°4/20.1	17		<b>436893</b>	2012 <i>TG</i> <sub>50</sub>		3 22.6 189°93	0°1/22.7	17	
2 21	12 29.95	+ 5 4.8	2.206	3.075	10.4	21.8	2 21	12 28.18	- 3 12.2	2.348	3.200	10.5	21.9
3 2	12 24.11	+ 5 43.6	2.138	3.076	7.2	21.6	3 2	12 22.85	- 2 41.4	2.272	3.199	7.4	21.7
3 12	12 16.73	+ 6 25.6	2.097	3.075	3.9	21.4	3 12	12 16.07	- 2 1.3	2.222	3.198	4.0	21.5
3 22	12 8.48	+ 7 5.8	2.085	3.075	2.5	21.3	3 22	12 8.46	- 1 15.5	2.201	3.197	0.3	21.2
4 1	12 0.18	+ 7 39.1	2.102	3.074	5.2	21.5	4 1	12 0.76	- 0 28.9	2.209	3.196	3.4	21.5
4 11	11 52.66	+ 8 1.3	2.146	3.073	8.5	21.7	4 11	11 53.77	+ 0 13.7	2.247	3.194	7.0	21.7
4 21	11 46.59	+ 8 10.1	2.216	3.072	11.6	21.9	4 21	11 48.08	+ 0 48.2	2.310	3.192	10.2	21.9
5 1	11 42.43	+ 8 4.5	2.307	3.071	14.2	22.1	5 1	11 44.14	+ 1 11.7	2.396	3.190	12.9	22.1
<b>212057</b>	2005 <i>EH</i> <sub>25</sub>		3 22.6 312°98	2°7/20.4	17		<b>12897</b>	Bougeret		3 22.6 20°08	1°4/21.7	18	
2 21	12 28.62	+ 2 12.9	1.370	2.256	14.4	19.8	2 21	12 32.69	+ 0 31.0	1.141	2.027	16.6	17.1
3 2	12 24.02	+ 3 13.3	1.297	2.242	10.0	19.5	3 2	12 27.06	+ 0 54.0	1.085	2.029	11.7	16.8
3 12	12 17.02	+ 4 25.0	1.247	2.229	5.3	19.2	3 12	12 18.64	+ 1 28.6	1.051	2.033	6.1	16.5
3 22	12 8.50	+ 5 39.5	1.223	2.216	2.8	19.0	3 22	12 8.61	+ 2 7.3	1.041	2.036	1.4	16.2
4 1	11 59.71	+ 6 46.6	1.224	2.203	7.0	19.2	4 1	11 58.52	+ 2 41.7	1.055	2.041	6.4	16.6
4 11	11 52.01	+ 7 37.4	1.250	2.191	11.9	19.4	4 11	11 49.96	+ 3 3.8	1.093	2.046	11.9	16.9
4 21	11 46.43	+ 8 6.4	1.297	2.180	16.4	19.6	4 21	11 44.03	+ 3 9.1	1.151	2.051	16.7	17.2
5 1	11 43.65	+ 8 11.5	1.362	2.169	20.2	19.9	5 1	11 41.32	+ 2 55.6	1.228	2.057	20.7	17.4
<b>2484</b>	Parentago		3 22.6 195°68	0°2/22.9	18		<b>428041</b>	2006 <i>DB</i> <sub>48</sub>		3 22.6 106°72	1°8/24.4	18	
2 21	12 31.79	- 4 16.4	2.088	2.935	11.8	17.8	2 21	12 31.42	- 7 45.8	2.090	2.926	12.3	21.7
3 2	12 25.55	- 3 35.2	2.007	2.932	8.4	17.5	3 2	12 25.15	- 7 34.3	2.028	2.943	8.9	21.5
3 12	12 17.56	- 2 41.8	1.953	2.928	4.5	17.3	3 12	12 17.27	- 7 9.6	1.991	2.959	5.3	21.3
3 22	12 8.53	- 1 40.6	1.928	2.924	0.4	16.9	3 22	12 8.53	- 6 34.8	1.983	2.975	2.0	21.1
4 1	11 59.37	- 0 37.6	1.932	2.919	3.9	17.2	4 1	11 59.81	- 5 54.5	2.003	2.991	3.5	21.2
4 11	11 51.02	+ 0 20.8	1.966	2.912	7.9	17.4	4 11	11 52.01	- 5 14.2	2.053	3.007	7.1	21.5
4 21	11 44.21	+ 1 9.4	2.025	2.905	11.5	17.7	4 21	11 45.78	- 4 38.6	2.128	3.022	10.4	21.7
5 1	11 39.48	+ 1 44.5	2.107	2.897	14.5	17.8	5 1	11 41.59	- 4 11.7	2.226	3.036	13.2	21.9
<b>165243</b>	2000 <i>ST</i> <sub>147</sub>		3 22.6 213°02	0°3/22.4	17		<b>154676</b>	2004 <i>GM</i> <sub>24</sub>		3 22.6 3°35	5°1/28.6	18	
2 21	12 32.74	- 2 20.4	1.843	2.700	12.7	21.0	2 21	12 15.80	-24 16.9	0.906	1.744	24.1	18.9
3 2	12 26.42	- 1 46.9	1.763	2.693	9.0	20.8	3 2	12 15.60	-21 47.5	0.837	1.741	19.3	18.6
3 12	12 18.11	- 1 1.9	1.708	2.686	4.8	20.5	3 12	12 12.73	-18 5.4	0.785	1.740	13.4	18.3
3 22	12 8.57	- 0 10.2	1.682	2.678	0.3	20.1	3 22	12 8.26	-13 19.5	0.756	1.742	7.2	17.9
4 1	11 58.84	+ 0 41.8	1.684	2.670	4.5	20.5	4 1	12 3.69	- 7 56.2	0.752	1.745	5.8	17.9
4 11	11 50.01	+ 1 27.7	1.714	2.661	8.9	20.7	4 11	12 0.55	- 2 34.9	0.775	1.750	11.4	18.2
4 21	11 42.93	+ 2 2.2	1.770	2.651	12.8	20.9	4 21	11 59.89	+ 2 8.8	0.822	1.757	17.6	18.5
5 1	11 38.20	+ 2 22.1	1.846	2.640	16.1	21.1	5 1	12 2.22	+ 5 54.2	0.890	1.766	22.9	18.9
<b>505250</b>	2012 <i>UM</i> <sub>123</sub>		3 22.6 174°45	3°1/26.5	17		<b>322704</b>	2000 <i>CP</i> <sub>109</sub>		3 22.6 169°54	2°7/25.2	16	
2 21	12 27												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>229187</b>	2004 <i>TP</i> <sub>219</sub>		3 22.6 116°34'	0°0'/22.6 17			<b>346234</b>	2008 <i>AZ</i> <sub>59</sub>		3 22.6 85°20'	3°8'/18.4 18		
2 21	12 29.70	- 2 51.7	1.968	2.825	12.0	21.3	2 21	12 29.21	+10 14.0	2.266	3.140	9.9	20.5
3 2	12 24.07	- 2 19.8	1.902	2.832	8.5	21.1	3 2	12 23.53	+10 57.8	2.210	3.147	7.0	20.3
3 12	12 16.76	- 1 37.3	1.862	2.839	4.5	20.9	3 12	12 16.41	+11 40.5	2.182	3.154	4.5	20.2
3 22	12 8.51	- 0 49.0	1.849	2.846	0.3	20.6	3 22	12 8.52	+12 16.6	2.182	3.161	4.0	20.2
4 1	12 0.24	- 0 0.5	1.866	2.852	4.0	20.9	4 1	12 0.66	+12 41.4	2.211	3.168	6.2	20.3
4 11	11 52.85	+ 0 42.4	1.910	2.859	7.9	21.1	4 11	11 53.62	+12 51.8	2.267	3.175	9.1	20.5
4 21	11 47.06	+ 1 15.3	1.980	2.865	11.5	21.4	4 21	11 48.00	+12 46.7	2.347	3.182	11.7	20.7
5 1	11 43.34	+ 1 35.2	2.071	2.871	14.4	21.6	5 1	11 44.21	+12 26.3	2.448	3.189	14.0	20.9
<b>363483</b>	2003 <i>SB</i> <sub>347</sub>		3 22.6 77°41'	0°1'/22.5 18			<b>240047</b>	2001 <i>VF</i> <sub>106</sub>		3 22.6 120°82'	3°1'/20.3 18		
2 21	12 32.62	- 2 22.9	1.469	2.337	14.7	21.2	2 21	12 35.38	+ 5 13.3	1.491	2.367	14.0	20.6
3 2	12 26.51	- 1 58.1	1.412	2.347	10.4	21.0	3 2	12 28.42	+ 5 51.5	1.436	2.376	9.8	20.4
3 12	12 18.18	- 1 20.9	1.378	2.357	5.5	20.7	3 12	12 19.18	+ 6 33.8	1.405	2.384	5.3	20.2
3 22	12 8.61	- 0 36.7	1.371	2.367	0.3	20.3	3 22	12 8.69	+ 7 12.8	1.401	2.392	3.3	20.0
4 1	11 59.05	+ 0 7.2	1.390	2.377	4.9	20.7	4 1	11 58.25	+ 7 41.3	1.425	2.400	6.8	20.3
4 11	11 50.76	+ 0 43.8	1.435	2.387	9.7	21.0	4 11	11 49.14	+ 7 54.1	1.474	2.407	11.1	20.5
4 21	11 44.62	+ 1 7.9	1.504	2.397	13.9	21.3	4 21	11 42.27	+ 7 49.2	1.546	2.415	15.0	20.8
5 1	11 41.15	+ 1 16.6	1.593	2.407	17.4	21.5	5 1	11 38.15	+ 7 26.6	1.637	2.421	18.3	21.0
<b>99636</b>	2002 <i>GF</i> <sub>107</sub>		3 22.6 252°25'	3°3'/19.5 18			<b>287976</b>	2003 <i>UE</i> <sub>153</sub>		3 22.6 144°87'	0°2'/22.5 18		
2 21	12 30.21	+ 4 0.8	1.641	2.519	12.8	19.6	2 21	12 31.45	- 3 16.9	1.885	2.740	12.5	21.6
3 2	12 24.85	+ 5 15.6	1.566	2.508	8.9	19.4	3 2	12 25.35	- 2 30.6	1.821	2.750	8.8	21.4
3 12	12 17.37	+ 6 38.9	1.516	2.495	4.9	19.1	3 12	12 17.46	- 1 32.4	1.782	2.759	4.7	21.2
3 22	12 8.57	+ 8 2.1	1.493	2.483	3.5	19.0	3 22	12 8.59	- 0 27.8	1.772	2.768	0.3	20.8
4 1	11 59.54	+ 9 16.1	1.498	2.470	7.0	19.2	4 1	11 59.70	+ 0 36.5	1.790	2.776	4.2	21.2
4 11	11 51.46	+10 12.9	1.529	2.457	11.2	19.4	4 11	11 51.79	+ 1 33.7	1.837	2.783	8.4	21.4
4 21	11 45.25	+10 48.0	1.583	2.443	15.2	19.6	4 21	11 45.58	+ 2 18.8	1.909	2.790	12.0	21.7
5 1	11 41.52	+10 59.9	1.655	2.429	18.5	19.8	5 1	11 41.57	+ 2 48.6	2.002	2.796	15.1	21.9
<b>183083</b>	2002 <i>RL</i> <sub>54</sub>		3 22.6 178°38'	1°4'/21.1 17			<b>163754</b>	2003 <i>OD</i> <sub>6</sub>		3 22.6 241°91'	0°6'/23.2 17		
2 21	12 31.06	+ 0 53.2	2.137	2.998	11.0	21.4	2 21	12 31.92	- 5 10.5	1.918	2.766	12.7	21.2
3 2	12 24.96	+ 1 43.4	2.066	3.000	7.7	21.2	3 2	12 25.93	- 4 34.4	1.824	2.749	9.2	20.9
3 12	12 17.22	+ 2 41.2	2.022	3.001	4.0	21.0	3 12	12 17.93	- 3 43.6	1.756	2.730	5.1	20.6
3 22	12 8.56	+ 3 41.0	2.008	3.002	1.4	20.8	3 22	12 8.63	- 2 42.4	1.715	2.711	0.8	20.3
4 1	11 59.83	+ 4 36.9	2.023	3.002	4.6	21.0	4 1	11 59.00	- 1 36.8	1.704	2.691	4.1	20.5
4 11	11 51.92	+ 5 23.4	2.067	3.002	8.3	21.2	4 11	11 50.13	- 0 34.3	1.721	2.671	8.6	20.7
4 21	11 45.52	+ 5 56.6	2.136	3.000	11.6	21.4	4 21	11 42.90	+ 0 18.9	1.764	2.649	12.6	20.9
5 1	11 41.11	+ 6 14.7	2.227	2.998	14.4	21.6	5 1	11 37.95	+ 0 58.1	1.828	2.627	16.1	21.1
<b>368954</b>	2007 <i>AF</i> <sub>19</sub>		3 22.6 13°83'	3°9'/25.1 18			<b>146226</b>	2000 <i>WZ</i> <sub>70</sub>		3 22.6 124°55'	2°0'/24.9 18		
2 21	12 34.45	- 9 16.3	1.482	2.326	16.0	20.1	2 21	12 27.97	- 9 9.9	2.534	3.362	10.6	19.7
3 2	12 28.00	- 9 59.2	1.413	2.328	12.1	19.8	3 2	12 22.62	- 9 0.2	2.459	3.368	7.9	19.5
3 12	12 19.09	-10 25.4	1.367	2.330	7.8	19.6	3 12	12 15.94	- 8 38.4	2.410	3.374	4.9	19.4
3 22	12 8.68	-10 35.4	1.345	2.333	4.3	19.4	3 22	12 8.50	- 8 7.0	2.389	3.380	2.2	19.2
4 1	11 58.07	-10 32.1	1.351	2.337	5.3	19.4	4 1	12 1.00	- 7 29.4	2.398	3.385	3.1	19.3
4 11	11 48.64	-10 20.9	1.383	2.341	9.4	19.7	4 11	11 54.17	- 6 50.2	2.436	3.391	6.1	19.5
4 21	11 41.44	-10 8.1	1.438	2.345	13.5	19.9	4 21	11 48.57	- 6 13.6	2.501	3.397	9.0	19.7
5 1	11 37.12	- 9 59.5	1.513	2.350	17.1	20.2	5 1	11 44.62	- 5 43.3	2.590	3.402	11.5	19.8
<b>217281</b>	2004 <i>DU</i> <sub>71</sub>		3 22.6 55°40'	8°6'/11.3 17			<b>241487</b>	2009 <i>BP</i> <sub>99</sub>		3 22.6 69°47'	3°8'/18.7 17		
2 21	12 27.03	+22 33.6	1.976	2.851	11.1	19.5	2 21	12 29.68	+ 9 25.1	2.070	2.947	10.6	20.4
3 2	12 22.23	+24 33.4	1.947	2.862	9.3	19.4	3 2	12 23.96	+10 10.5	2.015	2.954	7.5	20.2
3 12	12 15.79	+26 20.6	1.945	2.874	8.6	19.4	3 12	12 16.67	+10 55.3	1.987	2.961	4.7	20.1
3 22	12 8.47	+27 46.3	1.969	2.885	9.5	19.5	3 22	12 8.54	+11 33.7	1.986	2.968	4.1	20.0
4 1	12 1.21	+28 44.4	2.019	2.897	11.3	19.6	4 1	12 0.44	+12 0.4	2.014	2.975	6.4	20.2
4 11	11 54.92	+29 12.7	2.091	2.909	13.5	19.8	4 11	11 53.24	+12 12.0	2.069	2.982	9.5	20.4
4 21	11 50.26	+29 12.5	2.182	2.921	15.5	20.0	4 21	11 47.59	+12 7.2	2.148	2.990	12.4	20.6
5 1	11 47.66	+28 47.1	2.289	2.933	17.2	20.1	5 1	11 43.92	+11 46.3	2.247	2.997	14.9	20.8
<b>495104</b>	2011 <i>UG</i> <sub>146</sub>		3 22.6 206°61'	3°2'/25.6 17			<b>159788</b>	2003 <i>OF</i> <sub>23</sub>		3 22.6 222°61'	0°1'/22.7 17		
2 21	12 31.40	-12 15.8	1.782	2.608	14.5	22.1	2 21	12 28.63	- 3 38.6	2.056	2.912	11.6	20.9
3 2	12 25.60	-11 53.5	1.699	2.604	11.0	21.8	3 2	12 23.37	- 3 1.3	1.979	2.907	8.3	20.7
3 12	12 17.73	-11 10.2	1.639	2.599	7.1	21.6	3 12	12 16.44	- 2 12.4	1.927	2.903	4.4	20.4
3 22	12 8.60	-10 8.5	1.606	2.594	3.7	21.3	3 22	12 8.54	- 1 16.5	1.902	2.899	0.3	20.1
4 1	11 59.25	- 8 54.4	1.601	2.588	4.4	21.4	4 1	12 0.51	- 0 19.2	1.907	2.894	3.8	20.4
4 11	11 50.82	- 7 36.0	1.624	2.581	8.3	21.6	4 11	11 53.25	+ 0 33.2	1.940	2.889	7.8	20.6
4 21	11 44.20	- 6 21.7	1.672	2.574	12.2	21.8	4 21	11 47.48	+ 1 15.8	1.999	2.884	11.4	20.8
5 1	11 39.98	- 5 18.3	1.742	2.567	15.7	22.0	5 1	11 43.70	+ 1 45.2	2.079	2.879	14.4	21.0
<b>341814</b>	2007 <i>XR</i> <sub>57</sub>		3 22.6 85°12'	4°9'/16.6 18			<b>459058</b>	2012 <i>BW</i> <sub>17</sub>		3 22.6 80°57'	1°0'/21.9 18		
2 21	12 27.57	+13 5.9	2.252	3.130	9.8	20.3	2 21	12 34.78	+ 0 51.4	1.531	2.401	14.1	20.3
3 2	12 22.40	+14 16.0	2.204	3.139	7.2	20.1	3 2	12 27.96	+ 1 4.2	1.474	2.411	9.9	20.1
3 12	12 15.81	+15 23.0	2.184	3.149	5.2	20.0	3 12	12 18.93	+ 1 25.0	1.441	2.421	5.1	19.8
3 22	12 8.47	+16 20.3	2.192	3.158	5.3	20.0	3 22	12 8.69	+ 1 48.5	1.435	2.431	1.0	19.6
4 1	12 1.18	+17 2.6	2.228	3.168	7.3	20.2	4 1	11 58.48	+ 2 8.8	1.457	2.441	5.2	19.9
4 11	11 54.70	+17 26.6	2.290	3.177	9.9	20.4	4 11	11 49.55	+ 2 20.6	1.505	2.451	9.8	20.2
4 21	11 49.62	+17 31.5	2.375	3.186	12.4	20.5	4 21	11 42.78	+ 2 20.6	1.576	2.461	13.9	20.4
5 1	11 46.34	+17 18.1	2.480	3.196	14.5	20.7	5 1	11 38.69	+ 2 7.1	1.668	2.471	17.2	20.7
<b>100414</b>	1996 <i>AJ</i> <sub>18</sub>		3 22.6 205°72'	2°5'/25.5 17			<b>293788</b>	2007 <i>RM</i> <sub>134</sub>		3 22.6 236			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>118984</b>	2000 <i>XC</i> <sub>21</sub>		3 22.6 224°98	4 <sup>2</sup> /16.6	17		<b>405187</b>	2003 <i>AV</i> <sub>66</sub>		3 22.6 117°40	1 <sup>5</sup> /24.2	18	
2 21	12 29.21	+15 9.8	3.073	3.938	7.9	20.7	2 21	12 34.13	-7 2.7	2.136	2.969	12.1	21.0
3 2	12 23.35	+15 55.9	3.000	3.926	5.9	20.5	3 2	12 27.00	-6 52.3	2.077	2.991	8.8	20.9
3 12	12 16.29	+16 38.5	2.956	3.914	4.4	20.4	3 12	12 18.27	-6 29.5	2.043	3.012	5.1	20.7
3 22	12 8.54	+17 13.3	2.941	3.901	4.5	20.4	3 22	12 8.69	-5 57.6	2.039	3.032	1.8	20.5
4 1	12 0.73	+17 36.6	2.956	3.888	6.1	20.5	4 1	11 59.18	-5 20.8	2.065	3.052	3.5	20.6
4 11	11 53.46	+17 46.0	2.999	3.874	8.2	20.6	4 11	11 50.63	-4 44.5	2.120	3.071	7.1	20.9
4 21	11 47.27	+17 40.6	3.066	3.860	10.3	20.7	4 21	11 43.72	-4 13.0	2.201	3.089	10.4	21.1
5 1	11 42.53	+17 21.0	3.155	3.845	12.1	20.8	5 1	11 38.88	-3 50.0	2.306	3.107	13.1	21.3
<b>350721</b>	2001 <i>XY</i> <sub>148</sub>		3 22.6 179°79	3 <sup>0</sup> /26.7	18		<b>265780</b>	2005 <i>WT</i> <sub>100</sub>		3 22.6 133°21	1 <sup>4</sup> /21.3	18	
2 21	12 26.94	-14 10.0	2.721	3.524	10.7	21.3	2 21	12 30.33	+0 51.8	1.958	2.824	11.7	21.3
3 2	12 21.89	-13 53.4	2.636	3.525	8.3	21.1	3 2	12 24.53	+1 34.8	1.895	2.831	8.1	21.1
3 12	12 15.56	-13 21.9	2.576	3.525	5.6	20.9	3 12	12 17.04	+2 25.4	1.858	2.838	4.2	20.9
3 22	12 8.50	-12 37.6	2.545	3.525	3.4	20.8	3 22	12 8.62	+3 17.9	1.850	2.844	1.4	20.7
4 1	12 1.35	-11 43.7	2.543	3.525	3.5	20.8	4 1	12 0.18	+4 6.3	1.870	2.851	4.7	20.9
4 11	11 54.79	-10 45.0	2.570	3.525	5.8	20.9	4 11	11 52.65	+4 45.1	1.918	2.857	8.6	21.2
4 21	11 49.37	-9 46.6	2.625	3.524	8.5	21.1	4 21	11 46.74	+5 10.6	1.990	2.863	12.0	21.4
5 1	11 45.50	-8 53.0	2.704	3.523	10.9	21.3	5 1	11 42.91	+5 21.1	2.084	2.868	14.9	21.6
<b>469644</b>	2004 <i>TP</i> <sub>82</sub>		3 22.6 111°24	0 <sup>1</sup> /22.8	15		<b>118227</b>	1996 <i>TR</i> <sub>39</sub>		3 22.6 92°94	2 <sup>9</sup> /20.7	18	
2 21	12 30.89	-3 0.3	2.058	2.911	11.7	22.2	2 21	12 38.95	+7 32.0	1.798	2.663	12.6	18.8
3 2	12 24.81	-2 34.4	1.997	2.925	8.3	22.0	3 2	12 30.61	+7 31.3	1.741	2.674	8.8	18.6
3 12	12 17.13	-1 58.8	1.962	2.938	4.4	21.8	3 12	12 20.24	+7 30.1	1.709	2.685	4.9	18.4
3 22	12 8.59	-1 17.5	1.955	2.951	0.3	21.5	3 22	12 8.81	+7 24.0	1.706	2.696	3.0	18.3
4 1	12 0.08	-0 35.9	1.978	2.964	3.8	21.8	4 1	11 57.49	+7 9.0	1.733	2.707	5.9	18.5
4 11	11 52.47	+0 0.9	2.029	2.977	7.6	22.0	4 11	11 47.42	+6 43.0	1.788	2.718	9.7	18.8
4 21	11 46.43	+0 28.9	2.105	2.989	10.9	22.3	4 21	11 39.41	+6 5.5	1.868	2.728	13.2	19.0
5 1	11 42.40	+0 45.3	2.204	3.001	13.8	22.5	5 1	11 33.94	+5 17.1	1.969	2.739	16.1	19.2
<b>135306</b>	2001 <i>SD</i> <sub>253</sub>		3 22.6 105°26	0 <sup>0</sup> /22.6	18		<b>133182</b>	2003 <i>QV</i> <sub>50</sub>		3 22.6 256°17	2 <sup>3</sup> /20.6	16	
2 21	12 26.94	-3 49.4	2.560	3.408	9.9	20.5	2 21	12 31.65	+2 27.3	1.665	2.538	13.0	20.7
3 2	12 21.80	-2 58.5	2.502	3.428	6.9	20.4	3 2	12 25.92	+3 21.0	1.584	2.523	9.1	20.4
3 12	12 15.46	-1 58.6	2.470	3.447	3.6	20.2	3 12	12 18.00	+4 23.8	1.528	2.508	4.8	20.1
3 22	12 8.49	-0 54.1	2.469	3.465	0.2	19.9	3 22	12 8.69	+5 28.8	1.499	2.492	2.5	19.9
4 1	12 1.57	+0 10.0	2.498	3.483	3.2	20.2	4 1	11 59.10	+6 27.7	1.498	2.475	6.1	20.1
4 11	11 55.35	+1 8.6	2.556	3.501	6.4	20.4	4 11	11 50.42	+7 13.3	1.523	2.459	10.6	20.3
4 21	11 50.33	+1 58.0	2.641	3.519	9.2	20.7	4 21	11 43.61	+7 40.8	1.572	2.442	14.8	20.5
5 1	11 46.88	+2 35.6	2.750	3.536	11.6	20.8	5 1	11 39.33	+7 48.2	1.640	2.424	18.2	20.7
<b>164102</b>	2003 <i>WY</i> <sub>175</sub>		3 22.6 205°61	1 <sup>5</sup> /20.9	18		<b>92456</b>	2000 <i>KB</i> <sub>34</sub>		3 22.6 219°84	2 <sup>9</sup> /25.2	18	
2 21	12 28.51	+1 47.4	2.312	3.176	10.2	20.7	2 21	12 32.46	-10 57.5	1.835	2.663	14.0	19.7
3 2	12 23.12	+2 33.4	2.238	3.173	7.1	20.5	3 2	12 26.37	-10 40.6	1.747	2.655	10.6	19.5
3 12	12 16.26	+3 25.6	2.190	3.169	3.7	20.3	3 12	12 18.19	-10 4.7	1.683	2.645	6.7	19.2
3 22	12 8.55	+4 19.3	2.171	3.165	1.6	20.1	3 22	12 8.71	-9 12.1	1.646	2.635	3.2	19.0
4 1	12 0.75	+5 8.9	2.182	3.161	4.4	20.3	4 1	11 58.95	-8 8.2	1.637	2.624	4.3	19.0
4 11	11 53.65	+5 49.7	2.222	3.156	7.9	20.5	4 11	11 50.04	-7 0.5	1.657	2.613	8.3	19.3
4 21	11 47.88	+6 18.2	2.287	3.151	11.0	20.7	4 21	11 42.91	-5 56.6	1.702	2.601	12.3	19.5
5 1	11 43.90	+6 32.7	2.373	3.145	13.6	20.8	5 1	11 38.17	-5 2.8	1.769	2.588	15.8	19.7
<b>160525</b>	1996 <i>EW</i> <sub>10</sub>		3 22.6 283°38	2 <sup>4</sup> /20.6	18		<b>291232</b>	2006 <i>BA</i> <sub>25</sub>		3 22.7 60°34	2 <sup>4</sup> /20.3	17	
2 21	12 29.27	+0 33.4	1.412	2.292	14.4	19.9	2 21	12 28.31	+2 32.0	1.739	2.616	12.3	20.9
3 2	12 24.55	+1 48.4	1.331	2.274	10.1	19.6	3 2	12 23.27	+3 35.5	1.682	2.623	8.5	20.7
3 12	12 17.38	+3 18.6	1.275	2.256	5.3	19.2	3 12	12 16.42	+4 46.3	1.650	2.630	4.5	20.5
3 22	12 8.63	+4 55.0	1.244	2.237	2.5	19.0	3 22	12 8.59	+5 57.0	1.645	2.638	2.5	20.4
4 1	11 59.51	+6 26.5	1.239	2.219	6.8	19.2	4 1	12 0.76	+6 59.9	1.669	2.645	5.8	20.6
4 11	11 51.38	+7 42.4	1.260	2.200	11.9	19.4	4 11	11 53.91	+7 48.5	1.719	2.653	9.7	20.8
4 21	11 45.34	+8 35.6	1.302	2.182	16.6	19.7	4 21	11 48.80	+8 19.3	1.792	2.661	13.3	21.1
5 1	11 42.10	+9 2.9	1.363	2.163	20.5	19.9	5 1	11 45.87	+8 30.9	1.885	2.668	16.2	21.3
<b>203349</b>	2001 <i>UO</i> <sub>200</sub>		3 22.6 284°76	2 <sup>2</sup> /24.3	17		<b>216063</b>	2006 <i>QZ</i> <sub>8</sub>		3 22.7 222°81	0 <sup>4</sup> /22.3	16	
2 21	12 30.60	-8 15.8	1.382	2.239	16.1	20.4	2 21	12 31.05	-2 34.4	2.022	2.877	11.8	21.9
3 2	12 25.56	-7 55.8	1.300	2.226	12.0	20.1	3 2	12 25.17	-1 50.0	1.937	2.867	8.4	21.7
3 12	12 17.95	-7 14.1	1.240	2.212	7.2	19.8	3 12	12 17.48	-0 53.9	1.878	2.856	4.4	21.4
3 22	12 8.67	-6 14.5	1.205	2.199	2.6	19.5	3 22	12 8.67	+0 8.8	1.848	2.844	0.4	21.1
4 1	11 59.00	-5 4.3	1.196	2.185	4.9	19.6	4 1	11 59.65	+1 12.0	1.847	2.832	4.2	21.4
4 11	11 50.38	-3 53.5	1.211	2.172	10.1	19.9	4 11	11 51.41	+2 8.9	1.875	2.819	8.4	21.6
4 21	11 43.95	-2 51.5	1.250	2.159	15.0	20.1	4 21	11 44.72	+2 54.4	1.928	2.805	12.1	21.8
5 1	11 40.47	-2 5.2	1.308	2.145	19.3	20.3	5 1	11 40.15	+3 25.1	2.002	2.791	15.2	22.0
<b>388814</b>	2008 <i>CP</i> <sub>9</sub>		3 22.6 97°02	4 <sup>4</sup> /27.4	17		<b>366433</b>	2001 <i>WZ</i> <sub>25</sub>		3 22.7 188°15	1 <sup>6</sup> /20.8	13	C
2 21	12 30.07	-16 3.6	2.424	3.218	12.1	21.2	2 21	12 30.81	+2 12.5	2.408	3.268	10.0	22.9
3 2	12 24.23	-16 24.5	2.346	3.224	9.6	21.0	3 2	12 24.68	+2 57.7	2.334	3.267	6.9	22.7
3 12	12 16.86	-16 29.3	2.293	3.230	6.9	20.9	3 12	12 17.08	+3 48.6	2.287	3.266	3.6	22.5
3 22	12 8.60	-16 18.5	2.266	3.237	4.8	20.7	3 22	12 8.64	+4 40.4	2.270	3.263	1.6	22.4
4 1	12 0.23	-15 54.5	2.268	3.243	4.7	20.7	4 1	12 0.12	+5 27.9	2.283	3.261	4.4	22.5
4 11	11 52.57	-15 21.5	2.299	3.249	6.7	20.9	4 11	11 52.31	+6 6.5	2.326	3.257	7.7	22.7
4 21	11 46.27	-14 44.5	2.356	3.255	9.3	21.0	4 21	11 45.85	+6 33.1	2.395	3.252	10.8	22.9
5 1	11 41.80	-14 8.7	2.437	3.261	11.8	21.2	5 1	11 41.17	+6 46.1	2.485	3.247	13.3	23.1
<b>37050</b>	2000 <i>UW</i> <sub>38</sub>		3 22.6 226°20	0 <sup>6</sup> /21.9	18		<b>511575</b>	2014 <i>WE</i> <sub>495</sub>		3 22.7 320°16	4 <sup>5</sup> /17.6	17	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>275987</b>	2001 XE <sub>96</sub>		3 22.7 136°40	1.4/21.3	17		<b>470463</b>	2008 AZ <sub>26</sub>		3 22.7 145°90	8°0/	1.3	17
2 21	12 30.63	+ 0 59.4	1.922	2.788	11.8	20.8	2 21	12 33.04	-29 54.6	2.737	3.427	13.3	21.3
3 2	12 24.78	+ 1 41.5	1.859	2.794	8.2	20.5	3 2	12 26.42	-30 49.5	2.652	3.432	11.6	21.2
3 12	12 17.20	+ 2 31.1	1.821	2.801	4.2	20.3	3 12	12 18.11	-31 23.6	2.588	3.437	9.9	21.1
3 22	12 8.65	+ 3 22.7	1.812	2.806	1.4	20.1	3 22	12 8.74	-31 34.8	2.549	3.442	8.6	21.0
4 1	12 0.09	+ 4 10.0	1.831	2.812	4.8	20.4	4 1	11 59.14	-31 23.3	2.537	3.447	8.0	21.0
4 11	11 52.45	+ 4 47.5	1.878	2.817	8.7	20.6	4 11	11 50.19	-30 52.1	2.551	3.451	8.5	21.0
4 21	11 46.46	+ 5 11.7	1.950	2.822	12.2	20.8	4 21	11 42.62	-30 6.5	2.590	3.456	9.8	21.1
5 1	11 42.60	+ 5 20.6	2.042	2.827	15.1	21.0	5 1	11 36.98	-29 12.6	2.653	3.460	11.5	21.2
<b>368680</b>	2005 QZ <sub>155</sub>		3 22.7 239°03	7°8/30.4	17		<b>348804</b>	2006 QG <sub>115</sub>		3 22.7 201°73	2°5/25.4	17	
2 21	12 31.29	-24 37.4	2.022	2.775	15.6	21.3	2 21	12 31.09	-11 19.6	2.199	3.019	12.3	22.0
3 2	12 25.59	-25 5.9	1.928	2.766	13.2	21.1	3 2	12 25.11	-10 55.3	2.111	3.014	9.3	21.8
3 12	12 17.82	-25 9.2	1.855	2.756	10.7	20.9	3 12	12 17.42	-10 14.3	2.048	3.009	5.9	21.6
3 22	12 8.70	-24 45.6	1.806	2.745	8.5	20.8	3 22	12 8.71	-9 19.2	2.014	3.002	2.9	21.4
4 1	11 59.25	-23 56.4	1.782	2.735	7.9	20.7	4 1	11 59.83	-8 14.7	2.009	2.995	3.7	21.4
4 11	11 50.56	-22 47.0	1.785	2.724	9.2	20.7	4 11	11 51.68	-7 7.1	2.033	2.988	7.1	21.6
4 21	11 43.58	-21 25.7	1.813	2.712	11.6	20.9	4 21	11 45.00	-6 3.0	2.084	2.979	10.5	21.8
5 1	11 38.96	-20 1.4	1.864	2.700	14.4	21.0	5 1	11 40.31	-5 7.5	2.158	2.970	13.6	22.0
<b>506707</b>	2006 UE <sub>93</sub>		3 22.7 186°69	0°2/22.9	17		<b>81833</b>	2000 KW <sub>46</sub>		3 22.7 309°17	2°6/19.8	18	
2 21	12 26.62	- 4 2.3	2.900	3.744	9.0	22.9	2 21	12 25.92	+ 3 2.1	1.902	2.780	11.3	18.8
3 2	12 21.58	- 3 24.3	2.821	3.744	6.4	22.7	3 2	12 21.65	+ 4 13.0	1.823	2.765	7.9	18.6
3 12	12 15.39	- 2 37.8	2.768	3.743	3.4	22.5	3 12	12 15.66	+ 5 32.2	1.770	2.750	4.2	18.3
3 22	12 8.54	- 1 46.1	2.745	3.741	0.4	22.2	3 22	12 8.60	+ 6 52.7	1.744	2.735	2.7	18.2
4 1	12 1.64	- 0 53.2	2.753	3.740	2.9	22.5	4 1	12 1.35	+ 8 6.6	1.746	2.720	5.9	18.3
4 11	11 55.27	- 0 3.5	2.791	3.737	5.9	22.7	4 11	11 54.86	+ 9 7.0	1.775	2.706	9.7	18.5
4 21	11 49.94	+ 0 39.5	2.856	3.735	8.6	22.8	4 21	11 49.86	+ 9 49.2	1.828	2.692	13.3	18.7
5 1	11 46.03	+ 1 13.0	2.945	3.732	10.9	23.0	5 1	11 46.92	+10 11.2	1.901	2.678	16.3	18.9
<b>144414</b>	2004 EM <sub>11</sub>		3 22.7 292°09	3°7/18.2	18		<b>110872</b>	2001 UJ <sub>94</sub>		3 22.7 332°84	4°2/17.6	18	
2 21	12 26.11	+ 7 2.8	2.090	2.970	10.4	19.2	2 21	12 26.53	+ 9 26.3	2.153	3.033	10.1	19.2
3 2	12 21.64	+ 8 21.8	2.016	2.957	7.3	19.0	3 2	12 21.83	+10 41.7	2.092	3.032	7.2	19.0
3 12	12 15.58	+ 9 45.0	1.968	2.944	4.4	18.8	3 12	12 15.64	+11 57.9	2.058	3.031	4.7	18.9
3 22	12 8.56	+11 5.0	1.949	2.931	4.0	18.7	3 22	12 8.59	+13 7.9	2.052	3.029	4.5	18.9
4 1	12 1.39	+12 14.7	1.958	2.918	6.6	18.9	4 1	12 1.50	+14 5.4	2.075	3.028	6.8	19.0
4 11	11 54.93	+13 8.3	1.993	2.906	9.9	19.1	4 11	11 55.17	+14 45.7	2.124	3.027	9.8	19.2
4 21	11 49.87	+13 42.3	2.053	2.893	13.0	19.2	4 21	11 50.23	+15 6.7	2.196	3.026	12.6	19.4
5 1	11 46.71	+13 56.0	2.132	2.880	15.6	19.4	5 1	11 47.13	+15 8.3	2.288	3.025	15.0	19.5
<b>307258</b>	2002 LJ <sub>64</sub>		3 22.7 228°04	2°5/20.0	16		<b>263206</b>	2008 AS <sub>19</sub>		3 22.7 287°97	0°5/22.0	17	
2 21	12 30.77	+ 3 19.8	2.047	2.915	11.1	22.4	2 21	12 27.37	- 0 56.0	2.292	3.152	10.4	20.7
3 2	12 24.96	+ 4 25.6	1.966	2.903	7.7	22.1	3 2	12 22.40	- 0 25.2	2.212	3.144	7.3	20.4
3 12	12 17.37	+ 5 38.7	1.911	2.890	4.2	21.9	3 12	12 15.95	+ 0 13.6	2.158	3.137	3.8	20.2
3 22	12 8.68	+ 6 52.5	1.885	2.876	2.6	21.8	3 22	12 8.62	+ 0 56.4	2.133	3.129	0.5	19.9
4 1	11 59.79	+ 7 59.8	1.889	2.861	5.7	21.9	4 1	12 1.18	+ 1 38.3	2.137	3.122	3.8	20.2
4 11	11 51.66	+ 8 54.3	1.920	2.846	9.4	22.1	4 11	11 54.40	+ 2 14.6	2.169	3.114	7.4	20.4
4 21	11 45.06	+ 9 32.0	1.976	2.830	12.9	22.3	4 21	11 48.92	+ 2 41.4	2.227	3.107	10.6	20.6
5 1	11 40.55	+ 9 51.1	2.053	2.813	15.8	22.5	5 1	11 45.21	+ 2 56.2	2.308	3.099	13.4	20.7
<b>32250</b>	Karthik		3 22.7 223°22	2°9/26.3	18		<b>318134</b>	2004 PT <sub>15</sub>		3 22.7 247°55	1°2/21.4	17	
2 21	12 26.59	-13 24.1	2.508	3.320	11.2	19.5	2 21	12 29.72	+ 0 12.1	2.103	2.965	11.1	21.3
3 2	12 21.78	-13 1.1	2.420	3.315	8.6	19.3	3 2	12 24.22	+ 0 58.7	2.016	2.950	7.8	21.0
3 12	12 15.58	-12 22.2	2.356	3.309	5.7	19.1	3 12	12 16.99	+ 1 54.3	1.955	2.934	4.0	20.8
3 22	12 8.57	-11 29.6	2.320	3.304	3.3	18.9	3 22	12 8.69	+ 2 53.8	1.923	2.918	1.2	20.5
4 1	12 1.42	-10 27.1	2.314	3.298	3.5	19.0	4 1	12 0.18	+ 3 51.0	1.920	2.902	4.6	20.7
4 11	11 54.89	- 9 20.4	2.336	3.293	6.2	19.1	4 11	11 52.37	+ 4 39.9	1.946	2.885	8.5	20.9
4 21	11 49.57	- 8 15.0	2.386	3.286	9.1	19.3	4 21	11 46.01	+ 5 16.2	1.996	2.867	12.0	21.1
5 1	11 45.91	- 7 15.9	2.459	3.280	11.8	19.5	5 1	11 41.65	+ 5 37.1	2.068	2.849	15.1	21.3
<b>505991</b>	2015 GU <sub>35</sub>		3 22.7 245°66	0°5/23.3	17		<b>367111</b>	2006 SQ <sub>17</sub>		3 22.7 222°80	0°8/23.4	16	
2 21	12 26.02	- 5 40.0	2.291	3.139	10.9	22.1	2 21	12 31.42	- 5 28.1	1.975	2.822	12.4	22.0
3 2	12 21.44	- 4 50.5	2.210	3.134	7.8	21.9	3 2	12 25.49	- 4 59.1	1.890	2.813	9.0	21.7
3 12	12 15.42	- 3 48.5	2.155	3.130	4.3	21.6	3 12	12 17.69	- 4 16.6	1.830	2.803	5.0	21.5
3 22	12 8.56	- 2 38.1	2.129	3.125	0.7	21.3	3 22	12 8.74	- 3 24.4	1.797	2.793	1.0	21.2
4 1	12 1.59	- 1 25.2	2.132	3.120	3.4	21.5	4 1	11 59.58	- 2 28.1	1.795	2.782	3.9	21.4
4 11	11 55.29	- 0 15.9	2.164	3.115	7.0	21.8	4 11	11 51.20	- 1 34.4	1.820	2.771	8.1	21.6
4 21	11 50.27	+ 0 44.5	2.222	3.110	10.3	22.0	4 21	11 44.43	- 0 48.8	1.871	2.759	11.9	21.8
5 1	11 46.98	+ 1 32.1	2.303	3.104	13.1	22.1	5 1	11 39.84	- 0 15.6	1.944	2.747	15.1	22.0
<b>202235</b>	2004 YC <sub>29</sub>		3 22.7 25°76	0°6/22.2	18		<b>375909</b>	2009 VH <sub>114</sub>		3 22.7 147°10	2°2/20.4	17	
2 21	12 28.51	- 2 31.4	1.146	2.031	16.6	19.6	2 21	12 30.54	+ 3 52.4	2.085	2.953	10.9	21.5
3 2	12 24.06	- 1 45.1	1.095	2.038	11.7	19.4	3 2	12 24.63	+ 4 36.0	2.022	2.959	7.6	21.3
3 12	12 17.07	- 0 42.1	1.065	2.046	6.1	19.1	3 12	12 17.11	+ 5 24.0	1.986	2.965	4.0	21.1
3 22	12 8.66	+ 0 29.1	1.060	2.056	0.6	18.7	3 22	12 8.70	+ 6 11.1	1.978	2.970	2.3	21.0
4 1	12 0.27	+ 1 37.8	1.078	2.066	5.8	19.1	4 1	12 0.28	+ 6 51.5	1.999	2.975	5.1	21.2
4 11	11 53.31	+ 2 33.9	1.121	2.077	11.3	19.4	4 11	11 52.71	+ 7 20.7	2.049	2.979	8.6	21.4
4 21	11 48.78	+ 3 11.0	1.184	2.089	16.0	19.7	4 21	11 46.69	+ 7 35.9	2.123	2.983	11.8	21.6
5 1	11 47.19	+ 3 26.1	1.266	2.101	19.9	20.0	5 1	11 42.65	+ 7 36.1	2.218	2.987	14.5	21.8
<b>264615</b>	2001 UP <sub>202</sub>		3 22.7 194°30	1°2/23.9	17		<b>79558</b>	1998 QE <sub>51</sub>		3 22.7 269°26	0°9/23.3	17	
2 21	12 30.65	- 6 45.2	2.161	3.000	11.8								

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>396289</b>	2014 <i>DR</i> <sub>18</sub>		3 22.7 135°77	2°5/19.2	17		<b>334526</b>	2002 <i>RX</i> <sub>186</sub>		3 22.7 111°86	3°4/26.9	18	
2 21	12 26.16	+ 4 46.3	2.529	3.400	9.2	21.1	2 21	12 31.10	-15 0.5	2.789	3.579	10.8	21.3
3 2	12 21.36	+ 5 59.4	2.469	3.407	6.3	20.9	3 2	12 24.70	-15 1.3	2.725	3.604	8.4	21.1
3 12	12 15.32	+ 7 16.3	2.437	3.415	3.5	20.7	3 12	12 17.05	-14 47.9	2.686	3.628	5.8	21.0
3 22	12 8.60	+ 8 31.2	2.434	3.422	2.7	20.7	3 22	12 8.74	-14 21.8	2.675	3.651	3.7	20.9
4 1	12 1.87	+ 9 38.6	2.462	3.428	5.0	20.9	4 1	12 0.47	-13 45.8	2.695	3.673	3.7	20.9
4 11	11 55.79	+10 33.7	2.518	3.435	7.9	21.0	4 11	11 52.90	-13 4.1	2.745	3.695	5.7	21.1
4 21	11 50.90	+11 13.7	2.599	3.441	10.5	21.2	4 21	11 46.58	-12 21.2	2.823	3.717	8.1	21.3
5 1	11 47.58	+11 37.6	2.701	3.447	12.7	21.4	5 1	11 41.87	-11 41.3	2.926	3.737	10.4	21.5
<b>238688</b>	2005 <i>EO</i> <sub>248</sub>		3 22.7 249°95	0°3/22.9	17		<b>210368</b>	2007 <i>UZ</i> <sub>115</sub>		3 22.7 62°75	5°0/17.3	18	
2 21	12 27.93	- 4 3.8	2.154	3.007	11.3	21.4	2 21	12 29.60	+13 6.7	2.118	2.995	10.4	19.7
3 2	12 22.87	- 3 30.3	2.074	3.001	8.0	21.1	3 2	12 23.97	+14 0.7	2.064	2.999	7.6	19.5
3 12	12 16.24	- 2 45.5	2.020	2.996	4.4	20.9	3 12	12 16.77	+14 51.4	2.036	3.002	5.4	19.4
3 22	12 8.67	- 1 53.6	1.994	2.990	0.5	20.6	3 22	12 8.72	+15 32.4	2.035	3.005	5.3	19.4
4 1	12 0.97	- 0 59.8	1.997	2.985	3.6	20.8	4 1	12 0.69	+15 58.5	2.063	3.009	7.4	19.5
4 11	11 54.00	- 0 9.9	2.029	2.979	7.4	21.0	4 11	11 53.53	+16 6.6	2.117	3.012	10.2	19.7
4 21	11 48.42	+ 0 31.3	2.086	2.973	10.9	21.2	4 21	11 47.89	+15 56.1	2.194	3.016	12.9	19.9
5 1	11 44.72	+ 1 0.5	2.165	2.967	13.8	21.4	5 1	11 44.21	+15 28.0	2.290	3.019	15.2	20.0
<b>248050</b>	2004 <i>JT</i> <sub>14</sub>		3 22.7 259°70	3°2/27.0	18		<b>38056</b>	1999 <i>BZ</i> <sub>10</sub>		3 22.7 228°81	0°8/23.4	18	
2 21	12 26.22	-15 27.6	2.683	3.481	11.0	21.0	2 21	12 32.83	- 5 17.9	1.774	2.624	13.5	19.7
3 2	12 21.55	-14 59.1	2.578	3.462	8.6	20.8	3 2	12 26.70	- 4 50.0	1.689	2.614	9.7	19.5
3 12	12 15.52	-14 13.6	2.497	3.443	5.9	20.6	3 12	12 18.44	- 4 7.2	1.628	2.602	5.4	19.2
3 22	12 8.63	-13 12.8	2.444	3.424	3.6	20.5	3 22	12 8.84	- 3 13.8	1.595	2.590	1.0	18.8
4 1	12 1.56	-12 0.3	2.421	3.404	3.6	20.4	4 1	11 58.97	- 2 15.8	1.590	2.578	4.2	19.0
4 11	11 55.00	-10 41.6	2.428	3.384	6.0	20.5	4 11	11 49.97	- 1 20.8	1.613	2.565	8.8	19.3
4 21	11 49.55	- 9 22.6	2.462	3.363	8.9	20.7	4 21	11 42.77	- 0 34.9	1.661	2.551	13.0	19.5
5 1	11 45.68	- 8 8.8	2.521	3.342	11.6	20.8	5 1	11 38.01	- 0 2.9	1.730	2.536	16.6	19.7
<b>372658</b>	2009 <i>WR</i> <sub>55</sub>		3 22.7 166°96	1°9/24.9	15		<b>95202</b>	2002 <i>BR</i> <sub>21</sub>		3 22.7 120°11	13°4/9.9	18	
2 21	12 29.44	-10 0.4	2.502	3.324	10.9	22.7	2 21	12 42.55	+36 41.0	1.763	2.583	14.9	18.8
3 2	12 23.72	- 9 29.4	2.424	3.330	8.1	22.5	3 2	12 33.28	+38 7.2	1.750	2.600	13.7	18.8
3 12	12 16.61	- 8 44.7	2.371	3.335	5.0	22.3	3 12	12 21.66	+39 4.6	1.759	2.617	13.4	18.8
3 22	12 8.71	- 7 49.2	2.348	3.339	2.2	22.1	3 22	12 9.03	+39 25.5	1.791	2.633	14.1	18.9
4 1	12 0.75	- 6 47.4	2.355	3.342	3.1	22.2	4 1	11 56.90	+39 6.7	1.844	2.648	15.4	19.0
4 11	11 53.47	- 5 44.8	2.392	3.345	6.2	22.4	4 11	11 46.62	+38 11.3	1.918	2.663	17.1	19.1
4 21	11 47.47	- 4 46.5	2.456	3.348	9.3	22.6	4 21	11 38.99	+36 45.8	2.008	2.677	18.6	19.3
5 1	11 43.18	- 3 56.8	2.544	3.349	11.9	22.8	5 1	11 34.37	+34 57.7	2.113	2.690	20.0	19.5
<b>370784</b>	2004 <i>SJ</i> <sub>50</sub>		3 22.7 120°47	0°7/21.9	18		<b>457685</b>	2009 <i>DB</i> <sub>103</sub>		3 22.7 283°60	4°0/18.9	17	
2 21	12 31.82	- 0 16.9	2.258	3.112	10.8	21.6	2 21	12 29.87	+ 5 23.7	1.530	2.414	13.2	21.0
3 2	12 25.37	+ 0 10.7	2.199	3.129	7.5	21.4	3 2	12 24.89	+ 6 42.2	1.450	2.394	9.3	20.7
3 12	12 17.45	+ 0 45.1	2.168	3.146	3.9	21.0	3 12	12 17.59	+ 8 9.3	1.395	2.373	5.4	20.4
3 22	12 8.76	+ 1 22.1	2.166	3.162	0.7	21.0	3 22	12 8.80	+ 9 35.5	1.365	2.353	4.3	20.3
4 1	12 0.12	+ 1 57.0	2.194	3.177	3.9	21.3	4 1	11 59.65	+10 50.6	1.363	2.332	7.9	20.5
4 11	11 52.34	+ 2 25.4	2.251	3.192	7.4	21.5	4 11	11 51.43	+11 46.0	1.386	2.311	12.3	20.7
4 21	11 46.04	+ 2 44.4	2.334	3.206	10.5	21.7	4 21	11 45.17	+12 16.8	1.430	2.290	16.5	20.9
5 1	11 41.62	+ 2 52.0	2.439	3.220	13.0	21.9	5 1	11 41.57	+12 21.9	1.492	2.269	20.1	21.1
<b>374108</b>	2004 <i>SY</i> <sub>7</sub>		3 22.7 147°35	0°3/22.3	15		<b>301818</b>	2011 <i>PC</i> <sub>6</sub>		3 22.7 198°70	1°3/20.6	18	
2 21	12 30.64	- 1 47.2	2.507	3.356	10.0	22.6	2 21	12 26.01	+ 1 33.3	2.981	3.840	8.3	22.2
3 2	12 24.48	- 1 14.8	2.441	3.368	7.0	22.4	3 2	12 21.17	+ 2 33.0	2.903	3.837	5.7	22.0
3 12	12 16.97	- 0 35.0	2.402	3.379	3.7	22.2	3 12	12 15.22	+ 3 38.2	2.854	3.832	3.0	21.8
3 22	12 8.73	+ 0 8.6	2.393	3.389	0.3	21.9	3 22	12 8.63	+ 4 44.8	2.835	3.828	1.4	21.7
4 1	12 0.49	+ 0 51.4	2.414	3.399	3.4	22.2	4 1	12 1.97	+ 5 47.9	2.847	3.823	3.7	21.8
4 11	11 52.98	+ 1 29.1	2.465	3.408	6.7	22.4	4 11	11 55.82	+ 6 43.5	2.888	3.817	6.5	22.0
4 21	11 46.77	+ 1 58.4	2.543	3.416	9.7	22.6	4 21	11 50.67	+ 7 28.3	2.957	3.811	9.0	22.2
5 1	11 42.27	+ 2 17.0	2.644	3.423	12.2	22.8	5 1	11 46.87	+ 8 0.5	3.048	3.804	11.2	22.3
<b>508704</b>	2017 <i>UY</i> <sub>20</sub>		3 22.7 152°49	1°4/20.8	17		<b>72282</b>	2001 <i>BH</i> <sub>6</sub>		3 22.7 275°30	4°2/17.8	18	
2 21	12 26.47	+ 0 50.2	2.475	3.338	9.6	21.7	2 21	12 27.29	+ 7 23.6	1.942	2.823	11.0	18.9
3 2	12 21.63	+ 1 52.1	2.408	3.343	6.6	21.5	3 2	12 22.64	+ 8 56.7	1.865	2.807	7.8	18.6
3 12	12 15.49	+ 3 0.7	2.368	3.347	3.4	21.3	3 12	12 16.22	+10 34.9	1.815	2.790	4.9	18.4
3 22	12 8.63	+ 4 10.9	2.357	3.351	1.4	21.2	3 22	12 8.71	+12 9.8	1.793	2.773	4.6	18.4
4 1	12 1.75	+ 5 17.2	2.377	3.355	4.2	21.4	4 1	12 0.99	+13 32.8	1.799	2.757	7.4	18.5
4 11	11 55.52	+ 6 14.4	2.425	3.359	7.3	21.6	4 11	11 54.02	+14 37.0	1.832	2.740	10.9	18.7
4 21	11 50.49	+ 6 59.1	2.500	3.362	10.2	21.8	4 21	11 48.57	+15 18.7	1.888	2.722	14.2	18.9
5 1	11 47.08	+ 7 29.1	2.596	3.365	12.7	22.0	5 1	11 45.19	+15 36.9	1.962	2.705	17.0	19.0
<b>458853</b>	2011 <i>UW</i> <sub>80</sub>		3 22.7 130°11	0°2/22.9	18		<b>417661</b>	2006 <i>YR</i> <sub>30</sub>		3 22.7 50°79	6°4/16.4	17	
2 21	12 32.96	- 4 5.7	1.766	2.619	13.3	22.5	2 21	12 30.60	+13 44.1	1.669	2.553	12.3	20.9
3 2	12 26.52	- 3 25.2	1.706	2.634	9.4	22.3	3 2	12 25.03	+15 4.4	1.618	2.555	9.1	20.7
3 12	12 18.18	- 2 31.7	1.671	2.647	5.1	22.1	3 12	12 17.46	+16 20.8	1.591	2.556	6.8	20.6
3 22	12 8.81	- 1 30.8	1.664	2.660	0.4	21.7	3 22	12 8.79	+17 24.0	1.591	2.557	6.9	20.6
4 1	11 59.47	- 0 29.2	1.685	2.672	4.2	22.0	4 1	12 0.10	+18 6.4	1.617	2.558	9.5	20.7
4 11	11 51.20	+ 0 25.9	1.735	2.684	8.6	22.3	4 11	11 52.52	+18 23.7	1.668	2.560	12.7	20.9
4 21	11 44.80	+ 1 9.2	1.809	2.695	12.4	22.6	4 21	11 46.84	+18 15.8	1.740	2.561	15.8	21.1
5 1	11 40.73	+ 1 37.5	1.905	2.705	15.5	22.8	5 1	11 43.58	+17 44.7	1.829	2.563	18.4	21.3
<b>178637</b>	2000 <i>JK</i> <sub>19</sub>		3 22.7 294°24	1°5/21.2	17		<b>29547</b>	1998 <i>BA</i> <sub>34</sub>		3 22.7 140°48	4°9/16.9</		

EPHEMERIDES

3 22.7

3 22.7

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>185165</b>	2006 <i>SK</i> <sub>219</sub>	3 22.7 28°66	0°3/22.9 18				<b>48614</b>	1995 <i>FP</i> <sub>14</sub>	3 22.7 174°41	1°7/20.8 18	R		
2 21	12 28.05	- 5 13.3	1.416	2.285	15.1	20.1	2 21	12 28.57	+ 2 28.5	2.331	3.196	10.1	19.5
3 2	12 23.49	- 4 17.8	1.354	2.289	10.8	19.8	3 2	12 23.19	+ 3 13.3	2.262	3.198	7.0	19.3
3 12	12 16.75	- 3 3.9	1.315	2.293	5.8	19.6	3 12	12 16.39	+ 4 3.4	2.220	3.199	3.6	19.1
3 22	12 8.75	- 1 38.9	1.301	2.297	0.6	19.2	3 22	12 8.77	+ 4 54.0	2.207	3.200	1.7	19.0
4 1	12 0.68	- 0 12.2	1.314	2.302	4.8	19.5	4 1	12 1.11	+ 5 40.0	2.223	3.200	4.5	19.2
4 11	11 53.75	+ 1 5.9	1.352	2.307	9.8	19.8	4 11	11 54.16	+ 6 16.8	2.268	3.201	7.8	19.4
4 21	11 48.87	+ 2 7.8	1.413	2.313	14.2	20.1	4 21	11 48.53	+ 6 41.3	2.338	3.201	10.8	19.5
5 1	11 46.56	+ 2 49.3	1.494	2.318	17.9	20.3	5 1	11 44.66	+ 6 51.9	2.430	3.201	13.4	19.7
<b>369353</b>	2009 <i>TU</i> <sub>12</sub>	3 22.7 197°76	0°8/21.7 13	C			<b>262827</b>	2007 <i>AN</i> <sub>23</sub>	3 22.7 138°96	1°2/24.0 18			
2 21	12 29.50	- 0 57.2	2.488	3.341	9.9	22.7	2 21	12 31.02	- 7 19.0	2.187	3.023	11.8	21.5
3 2	12 23.80	- 0 4.2	2.407	3.337	6.9	22.5	3 2	12 24.94	- 6 46.2	2.120	3.036	8.5	21.3
3 12	12 16.69	+ 0 57.2	2.355	3.333	3.6	22.3	3 12	12 17.32	- 6 0.3	2.079	3.049	4.9	21.1
3 22	12 8.75	+ 2 2.4	2.332	3.327	0.8	22.1	3 22	12 8.84	- 5 5.0	2.066	3.061	1.5	20.9
4 1	12 0.70	+ 3 5.9	2.339	3.321	3.8	22.3	4 1	12 0.37	- 4 5.8	2.084	3.072	3.4	21.1
4 11	11 53.30	+ 4 2.4	2.377	3.314	7.2	22.5	4 11	11 52.73	- 3 8.5	2.130	3.082	7.0	21.3
4 21	11 47.15	+ 4 48.1	2.441	3.307	10.3	22.7	4 21	11 46.58	- 2 18.2	2.203	3.092	10.3	21.5
5 1	11 42.71	+ 5 20.2	2.527	3.298	12.9	22.9	5 1	11 42.36	- 1 38.8	2.300	3.102	13.1	21.7
<b>422522</b>	2014 <i>TP</i> <sub>9</sub>	3 22.7 145°78	0°1/22.8 18	R			<b>194261</b>	2001 <i>TP</i> <sub>250</sub>	3 22.7 19°50	3°9/20.1 18			
2 21	12 31.94	- 3 32.0	2.020	2.871	12.0	22.2	2 21	12 34.04	+ 6 4.2	1.257	2.144	15.3	20.0
3 2	12 25.67	- 2 54.2	1.955	2.882	8.5	22.0	3 2	12 27.95	+ 6 44.6	1.201	2.145	10.7	19.7
3 12	12 17.71	- 2 5.4	1.915	2.892	4.5	21.8	3 12	12 19.22	+ 7 29.0	1.167	2.147	6.0	19.5
3 22	12 8.82	- 1 10.2	1.904	2.901	0.3	21.5	3 22	12 8.98	+ 8 8.8	1.159	2.149	4.1	19.4
4 1	11 59.92	- 0 14.6	1.923	2.910	3.9	21.8	4 1	11 58.70	+ 8 35.4	1.176	2.151	7.8	19.6
4 11	11 51.93	+ 0 35.4	1.970	2.918	7.8	22.1	4 11	11 49.86	+ 8 43.0	1.216	2.154	12.6	19.8
4 21	11 45.56	+ 1 15.2	2.044	2.925	11.3	22.3	4 21	11 43.51	+ 8 29.5	1.278	2.156	16.9	20.1
5 1	11 41.27	+ 1 41.8	2.139	2.932	14.3	22.5	5 1	11 40.22	+ 7 55.6	1.358	2.160	20.5	20.4
<b>136980</b>	1998 <i>SR</i>	3 22.7 76°92	0°7/22.1 18				<b>465718</b>	2009 <i>UT</i> <sub>84</sub>	3 22.7 203°20	1°5/20.9 17			
2 21	12 31.99	- 1 9.1	1.578	2.446	13.9	20.0	2 21	12 30.14	+ 1 42.3	2.320	3.181	10.3	22.7
3 2	12 25.99	- 0 35.7	1.524	2.459	9.7	19.8	3 2	12 24.35	+ 2 30.9	2.243	3.176	7.1	22.5
3 12	12 17.96	+ 0 8.2	1.494	2.473	5.0	19.6	3 12	12 17.04	+ 3 26.0	2.192	3.171	3.7	22.3
3 22	12 8.84	+ 0 56.7	1.490	2.486	0.7	19.3	3 22	12 8.84	+ 4 22.7	2.171	3.165	1.6	22.1
4 1	11 59.77	+ 1 42.7	1.514	2.500	4.9	19.6	4 1	12 0.52	+ 5 15.5	2.180	3.159	4.5	22.3
4 11	11 51.89	+ 2 19.8	1.565	2.513	9.4	19.9	4 11	11 52.91	+ 5 59.2	2.218	3.151	7.9	22.5
4 21	11 46.00	+ 2 43.5	1.640	2.527	13.3	20.2	4 21	11 46.65	+ 6 30.5	2.282	3.144	11.1	22.7
5 1	11 42.59	+ 2 51.6	1.734	2.540	16.6	20.4	5 1	11 42.22	+ 6 47.3	2.368	3.135	13.8	22.8
<b>40468</b>	1999 <i>RF</i> <sub>46</sub>	3 22.7 324°35	19°5/25.1 17	R			<b>154683</b>	2004 <i>GK</i> <sub>59</sub>	3 22.7 318°99	3°1/20.4 18			
2 21	12 40.28	-29 35.8	1.205	1.960	24.0	17.9	2 21	12 30.59	+ 2 48.8	1.169	2.060	15.9	19.6
3 2	12 34.44	-33 12.3	1.109	1.925	22.2	17.6	3 2	12 25.81	+ 3 45.0	1.102	2.050	11.2	19.3
3 12	12 24.02	-36 31.3	1.032	1.892	20.5	17.4	3 12	12 18.24	+ 4 52.6	1.058	2.040	6.0	18.9
3 22	12 9.33	-39 16.6	0.974	1.859	19.6	17.2	3 22	12 8.93	+ 6 1.8	1.038	2.030	3.3	18.7
4 1	11 51.89	-41 12.0	0.936	1.828	19.8	17.1	4 1	11 59.33	+ 7 1.6	1.042	2.022	7.7	19.0
4 11	11 34.36	-42 10.5	0.917	1.798	21.4	17.0	4 11	11 51.04	+ 7 42.3	1.069	2.013	13.1	19.2
4 21	11 19.66	-42 17.0	0.914	1.770	23.9	17.1	4 21	11 45.24	+ 7 58.8	1.116	2.006	18.0	19.5
5 1	11 10.08	-41 46.3	0.924	1.743	26.7	17.1	5 1	11 42.63	+ 7 50.0	1.180	1.998	22.1	19.7
<b>153777</b>	2001 <i>VK</i> <sub>42</sub>	3 22.7 177°58	6°3/29.9 18				<b>413874</b>	2006 <i>UQ</i> <sub>262</sub>	3 22.7 27°86	9°3/16.1 18			
2 21	12 30.09	-22 52.1	2.175	2.936	14.4	20.0	2 21	12 36.16	+20 27.7	1.401	2.281	14.5	20.4
3 2	12 24.52	-22 54.5	2.090	2.937	11.9	19.9	3 2	12 29.16	+21 20.2	1.360	2.286	11.5	20.3
3 12	12 17.19	-22 33.0	2.026	2.938	9.3	19.7	3 12	12 19.71	+21 58.3	1.342	2.292	9.5	20.2
3 22	12 8.80	-21 47.7	1.988	2.939	7.0	19.6	3 22	12 9.01	+22 12.9	1.348	2.299	9.7	20.2
4 1	12 0.25	-20 41.6	1.977	2.939	6.4	19.5	4 1	11 58.51	+21 58.1	1.379	2.306	12.0	20.3
4 11	11 52.50	-19 21.0	1.993	2.939	7.9	19.6	4 11	11 49.59	+21 13.3	1.432	2.314	15.0	20.5
4 21	11 46.31	-17 53.6	2.036	2.938	10.4	19.7	4 21	11 43.16	+20 2.4	1.505	2.322	18.0	20.8
5 1	11 42.21	-16 27.6	2.103	2.937	13.1	19.9	5 1	11 39.66	+18 30.8	1.596	2.331	20.6	21.0
<b>241385</b>	2008 <i>SQ</i> <sub>182</sub>	3 22.7 37°18	0°9/23.5 18				<b>129395</b>	1421 <i>T-2</i>	3 22.7 165°52	0°2/22.5 18			
2 21	12 28.56	- 7 5.6	1.222	2.092	16.9	20.8	2 21	12 33.89	- 2 35.9	1.838	2.692	12.9	21.4
3 2	12 24.10	- 6 9.0	1.164	2.098	12.2	20.6	3 2	12 27.24	- 2 0.9	1.769	2.698	9.1	21.2
3 12	12 17.17	- 4 49.3	1.127	2.104	6.8	20.3	3 12	12 18.65	- 1 14.6	1.726	2.703	4.8	21.0
3 22	12 8.81	- 3 14.2	1.115	2.110	1.3	19.9	3 22	12 8.95	- 0 22.0	1.710	2.707	0.3	20.6
4 1	12 0.40	- 1 35.0	1.128	2.118	5.1	20.2	4 1	11 59.18	+ 0 30.4	1.724	2.710	4.3	20.9
4 11	11 53.33	- 0 4.3	1.165	2.125	10.5	20.5	4 11	11 50.42	+ 1 16.3	1.767	2.713	8.6	21.2
4 21	11 48.57	+ 1 8.8	1.225	2.133	15.3	20.8	4 21	11 43.46	+ 1 50.7	1.834	2.715	12.4	21.4
5 1	11 46.70	+ 1 58.8	1.304	2.141	19.3	21.1	5 1	11 38.83	+ 2 10.9	1.923	2.716	15.6	21.6
<b>54560</b>	2000 <i>QM</i> <sub>132</sub>	3 22.7 259°12	4°1/18.3 18				<b>34086</b>	2000 <i>PP</i> <sub>5</sub>	3 22.7 105°54	3°1/25.1 18			
2 21	12 29.46	+ 7 40.7	1.904	2.782	11.3	18.2	2 21	12 33.91	- 9 45.5	1.512	2.354	15.8	18.0
3 2	12 24.20	+ 8 55.7	1.828	2.768	8.0	18.0	3 2	12 27.59	- 9 47.1	1.447	2.362	11.8	17.8
3 12	12 17.07	+10 14.6	1.778	2.753	4.9	17.8	3 12	12 18.95	- 9 29.4	1.405	2.371	7.4	17.5
3 22	12 8.81	+11 29.6	1.756	2.738	4.4	17.7	3 22	12 8.97	- 8 55.0	1.388	2.379	3.5	17.3
4 1	12 0.34	+12 32.9	1.762	2.722	7.2	17.8	4 1	11 58.91	- 8 9.6	1.399	2.387	4.7	17.4
4 11	11 52.68	+13 18.2	1.794	2.707	10.8	18.0	4 11	11 50.05	- 7 21.0	1.436	2.395	9.0	17.7
4 21	11 46.63	+13 42.4	1.850	2.691	14.2	18.2	4 21	11 43.35	- 6 36.7	1.497	2.402	13.2	17.9
5 1	11 42.75	+13 45.0	1.925	2.675	17.1	18.4	5 1	11 39.40	- 6 2.5	1.578	2.410	16.8	18.2
<b>261184</b>	2005 <i>TN</i> <sub>135</sub>	3 22.7 121°19	0°6/22.1 16				<b>497155</b>	2004 <i>RW</i> <sub>191</sub>	3 22.7 197°28	0°6/23.4 18			
2 21	12 30.03	- 2 1.3	1.872	2.733	12.3	21.7	2 21	12 28.66	- 5 58.1	2.660	3.497	9.9	22.7
3 2	12 24.44	- 1 15.3	1.809	2.742	8.6	21.5	3 2	12 23.18	- 5 11.1	2.574	3.493	7.1	22.5
3 12	12 17.11	- 0 18.6	1.772	2.750	4.5	21.2	3 12	12 16.38	- 4 12.8	2.516	3.488	4.0	22.3
3 22	12 8.81	+ 0 43.2	1.762	2.758	0.6	20.9	3 22	12 8.80	- 3 7.1	2.487	3.483	0.7	22.0
4 1	12 0.49	+ 1 43.4	1.781	2.766	4.4	21.2	4 1	12 1.12	- 1 58.6	2.490	3.477	3.0	22.2
4 11	11 53.11	+ 2 35.5	1.828	2.774	8.4	21.5	4 11	11 54.03	- 0 52.8	2.522	3.470	6.3	22.4
4 21	11 47.40	+ 3 14.8	1.899	2.781	12.1	21.7	4 21	11 48.10	+ 0 5.7	2.582	3.462	9.3	22.6
5 1	11 43.82	+ 3 38.7	1.992	2.78									

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>378789</b>	2008 <i>SU</i> <sub>75</sub>		3 22.7 170°65	0°9/23.6	17		<b>281062</b>	2006 <i>KQ</i> <sub>33</sub>		3 22.7 100°21	1°7/20.9	18	
2 21	12 29.98	- 5 32.0	2.183	3.027	11.5	21.4	2 21	12 28.89	+ 2 3.8	2.027	2.897	11.2	20.7
3 2	12 24.30	- 5 9.7	2.108	3.029	8.3	21.2	3 2	12 23.58	+ 2 50.0	1.964	2.901	7.7	20.5
3 12	12 17.03	- 4 35.8	2.058	3.031	4.7	21.0	3 12	12 16.67	+ 3 42.5	1.927	2.906	4.0	20.3
3 22	12 8.85	- 3 53.8	2.037	3.032	1.1	20.7	3 22	12 8.86	+ 4 35.8	1.917	2.911	1.8	20.2
4 1	12 0.58	- 3 8.4	2.046	3.034	3.4	20.9	4 1	12 1.02	+ 5 23.9	1.937	2.916	4.8	20.4
4 11	11 53.08	- 2 25.0	2.083	3.035	7.1	21.1	4 11	11 54.03	+ 6 1.6	1.984	2.920	8.5	20.6
4 21	11 47.02	- 1 48.3	2.146	3.035	10.5	21.3	4 21	11 48.55	+ 6 25.6	2.055	2.925	11.8	20.8
5 1	11 42.87	- 1 21.7	2.231	3.035	13.4	21.5	5 1	11 45.03	+ 6 34.3	2.148	2.929	14.6	21.0
<b>213870</b>	2003 <i>SQ</i> <sub>173</sub>		3 22.7 98°25	1°7/24.2	18		<b>353423</b>	2011 <i>QU</i> <sub>27</sub>		3 22.7 179°62	0°1/22.9	17	
2 21	12 31.23	- 8 15.3	1.602	2.450	14.8	20.6	2 21	12 26.65	- 3 32.6	3.278	4.120	8.1	23.1
3 2	12 25.50	- 7 38.5	1.542	2.464	10.8	20.4	3 2	12 21.56	- 2 56.7	3.199	4.121	5.7	23.0
3 12	12 17.76	- 6 43.3	1.506	2.477	6.3	20.1	3 12	12 15.46	- 2 13.7	3.147	4.122	3.1	22.8
3 22	12 8.90	- 5 34.9	1.497	2.491	2.0	19.9	3 22	12 8.78	- 1 26.5	3.126	4.122	0.3	22.5
4 1	12 0.06	- 4 20.8	1.515	2.504	4.2	20.1	4 1	12 2.06	- 0 38.5	3.136	4.122	2.6	22.7
4 11	11 52.37	- 3 9.8	1.560	2.517	8.6	20.4	4 11	11 55.81	+ 0 6.5	3.177	4.122	5.3	22.9
4 21	11 46.63	- 2 9.0	1.630	2.530	12.6	20.6	4 21	11 50.49	+ 0 45.6	3.245	4.120	7.7	23.1
5 1	11 43.34	- 1 23.3	1.721	2.543	16.0	20.9	5 1	11 46.42	+ 1 16.3	3.338	4.119	9.9	23.2
<b>381149</b>	2007 <i>GN</i> <sub>5</sub>		3 22.7 197°20	4°6/17.4	17		<b>437236</b>	2012 <i>XO</i> <sub>20</sub>		3 22.7 102°11	4°3/17.6	17	
2 21	12 28.84	+10 21.9	2.073	2.952	10.5	20.8	2 21	12 28.73	+11 59.2	2.336	3.211	9.6	20.7
3 2	12 23.56	+11 39.3	2.013	2.950	7.5	20.6	3 2	12 23.29	+12 52.8	2.281	3.216	7.0	20.5
3 12	12 16.66	+12 56.7	1.978	2.949	5.1	20.5	3 12	12 16.45	+13 44.0	2.254	3.222	4.8	20.4
3 22	12 8.83	+14 6.9	1.973	2.947	4.9	20.4	3 22	12 8.85	+14 27.4	2.255	3.227	4.6	20.4
4 1	12 0.94	+15 3.0	1.995	2.945	7.3	20.6	4 1	12 1.26	+14 58.0	2.284	3.232	6.6	20.5
4 11	11 53.88	+15 40.4	2.044	2.943	10.4	20.8	4 11	11 54.45	+15 12.7	2.340	3.238	9.3	20.7
4 21	11 48.31	+15 57.3	2.116	2.940	13.2	20.9	4 21	11 49.00	+15 10.6	2.420	3.243	11.8	20.9
5 1	11 44.72	+15 53.9	2.207	2.938	15.7	21.1	5 1	11 45.33	+14 52.2	2.520	3.248	14.0	21.1
<b>230646</b>	2003 <i>RF</i> <sub>19</sub>		3 22.7 152°86	0°9/23.8	17		<b>104402</b>	2000 <i>FU</i> <sub>46</sub>		3 22.7 328°18	7°7/16.8	18	
2 21	12 28.74	- 6 26.0	2.241	3.084	11.3	20.8	2 21	12 36.44	+18 2.9	1.601	2.476	13.3	19.2
3 2	12 23.38	- 5 52.2	2.169	3.089	8.2	20.6	3 2	12 29.27	+18 49.5	1.546	2.474	10.2	19.0
3 12	12 16.53	- 5 5.9	2.121	3.093	4.6	20.4	3 12	12 19.80	+19 26.2	1.516	2.472	8.0	18.8
3 22	12 8.84	- 4 11.1	2.103	3.098	1.2	20.1	3 22	12 9.08	+19 44.6	1.512	2.470	8.1	18.8
4 1	12 1.08	- 3 12.8	2.114	3.102	3.3	20.3	4 1	11 58.39	+19 38.7	1.534	2.469	10.4	19.0
4 11	11 54.07	- 2 16.8	2.153	3.106	6.9	20.5	4 11	11 49.01	+19 6.8	1.580	2.467	13.5	19.1
4 21	11 48.44	- 1 28.1	2.220	3.109	10.2	20.7	4 21	11 41.86	+18 10.8	1.647	2.466	16.6	19.3
5 1	11 44.64	- 0 50.3	2.308	3.112	13.0	20.9	5 1	11 37.46	+16 54.8	1.733	2.465	19.3	19.5
<b>430421</b>	1998 <i>TA</i> <sub>3</sub>		3 22.7 111°23	5°5/20.9	16		<b>405167</b>	2002 <i>VF</i> <sub>13</sub>		3 22.7 81°33	3°2/25.9	18	
2 21	12 53.49	+11 55.3	1.051	1.923	18.9	20.5	2 21	12 32.96	-13 6.0	1.774	2.594	14.8	21.6
3 2	12 41.97	+11 35.5	1.001	1.936	13.6	20.2	3 2	12 26.43	-12 35.2	1.727	2.628	11.1	21.5
3 12	12 26.72	+11 6.6	0.974	1.948	8.2	20.0	3 12	12 18.12	-11 44.0	1.704	2.662	7.1	21.3
3 22	12 9.51	+10 21.7	0.972	1.959	5.6	19.8	3 22	12 8.96	-10 36.7	1.708	2.695	3.7	21.2
4 1	11 52.70	+ 9 17.7	0.997	1.970	9.3	20.1	4 1	12 0.00	- 9 20.1	1.741	2.727	4.2	21.3
4 11	11 38.45	+ 7 56.0	1.048	1.981	14.6	20.4	4 11	11 52.24	- 8 2.5	1.802	2.759	7.6	21.5
4 21	11 28.05	+ 6 21.2	1.121	1.991	19.3	20.7	4 21	11 46.36	- 6 51.2	1.889	2.790	11.1	21.8
5 1	11 21.95	+ 4 37.6	1.211	2.001	23.2	21.0	5 1	11 42.77	- 5 51.8	1.998	2.821	14.1	22.1
<b>473926</b>	2016 <i>ES</i> <sub>158</sub>		3 22.7 5°44	3°8/19.8	17		<b>344866</b>	2004 <i>JP</i> <sub>5</sub>		3 22.7 304°50	12°7/2.7	17	
2 21	12 28.63	+ 4 51.5	1.223	2.117	15.1	20.9	2 21	12 33.38	+41 17.2	2.193	2.993	13.0	20.0
3 2	12 24.17	+ 5 49.4	1.169	2.117	10.5	20.6	3 2	12 27.01	+42 50.2	2.166	2.983	12.7	20.0
3 12	12 17.24	+ 6 53.9	1.137	2.118	5.8	20.4	3 12	12 18.56	+43 58.5	2.160	2.973	12.9	20.0
3 22	12 8.89	+ 7 55.5	1.129	2.119	4.0	20.3	3 22	12 8.99	+44 35.0	2.176	2.964	13.8	20.0
4 1	12 0.48	+ 8 44.1	1.146	2.122	7.8	20.5	4 1	11 59.47	+44 36.2	2.211	2.954	15.0	20.1
4 11	11 53.40	+ 9 12.2	1.186	2.125	12.6	20.8	4 11	11 51.16	+44 2.6	2.264	2.945	16.4	20.2
4 21	11 48.62	+ 9 16.9	1.246	2.130	16.9	21.0	4 21	11 44.87	+42 58.2	2.332	2.936	17.7	20.3
5 1	11 46.72	+ 8 58.0	1.324	2.135	20.5	21.3	5 1	11 41.10	+41 28.4	2.412	2.926	18.8	20.4
<b>273566</b>	2007 <i>BB</i> <sub>100</sub>		3 22.7 154°36	1°7/21.1	17		<b>266313</b>	2007 <i>CU</i> <sub>40</sub>		3 22.7 106°79	1°6/21.1	16	
2 21	12 30.37	+ 1 14.9	1.867	2.736	12.0	21.3	2 21	12 29.82	+ 0 40.0	1.814	2.683	12.3	21.3
3 2	12 24.74	+ 2 4.6	1.802	2.739	8.3	21.0	3 2	12 24.34	+ 1 38.8	1.756	2.693	8.5	21.1
3 12	12 17.33	+ 3 2.3	1.762	2.742	4.3	20.8	3 12	12 17.10	+ 2 46.1	1.723	2.703	4.4	20.8
3 22	12 8.90	+ 4 1.9	1.751	2.745	1.7	20.6	3 22	12 8.90	+ 3 55.4	1.718	2.713	1.7	20.7
4 1	12 0.41	+ 4 56.5	1.768	2.748	5.1	20.9	4 1	12 0.71	+ 4 59.2	1.742	2.723	5.1	20.9
4 11	11 52.85	+ 5 40.2	1.812	2.750	9.0	21.1	4 11	11 53.49	+ 5 51.1	1.793	2.732	9.1	21.2
4 21	11 46.96	+ 6 9.0	1.880	2.752	12.6	21.3	4 21	11 47.98	+ 6 27.1	1.869	2.741	12.6	21.4
5 1	11 43.23	+ 6 21.1	1.970	2.754	15.6	21.5	5 1	11 44.63	+ 6 45.4	1.965	2.750	15.6	21.6
<b>452781</b>	2006 <i>DY</i> <sub>112</sub>		3 22.7 114°52	1°5/21.5	18		<b>134679</b>	1999 <i>XX</i> <sub>4</sub>		3 22.7 210°52	0°3/22.4	17	
2 21	12 34.78	+ 0 39.2	1.609	2.475	13.7	21.8	2 21	12 31.20	- 3 0.9	2.073	2.925	11.7	20.7
3 2	12 27.92	+ 1 20.7	1.556	2.492	9.5	21.6	3 2	12 25.31	- 2 13.9	1.990	2.918	8.3	20.5
3 12	12 19.01	+ 2 10.8	1.529	2.508	4.9	21.3	3 12	12 17.66	- 1 15.2	1.933	2.910	4.4	20.2
3 22	12 9.01	+ 3 3.0	1.528	2.524	1.5	21.1	3 22	12 8.95	- 0 9.7	1.905	2.902	0.3	19.9
4 1	11 59.11	+ 3 50.0	1.556	2.539	5.3	21.4	4 1	12 0.06	+ 0 56.4	1.907	2.893	4.1	20.2
4 11	11 50.46	+ 4 25.5	1.612	2.553	9.7	21.7	4 11	11 51.94	+ 1 56.5	1.938	2.883	8.1	20.4
4 21	11 43.87	+ 4 46.0	1.691	2.567	13.5	22.0	4 21	11 45.34	+ 2 45.3	1.994	2.872	11.7	20.6
5 1	11 39.81	+ 4 49.9	1.790	2.580	16.7	22.2	5 1	11 40.80	+ 3 19.6	2.073	2.861	14.8	20.8
<b>505201</b>	2012 <i>TY</i> <sub>166</sub>		3 22.7 156°61	0°9/21.4	17		<b>415062</b>	2012 <i>BM</i> <sub>44</sub>		3 22.7 17°70			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>321137</b>	2008 <i>UY</i> <sub>147</sub>		3 22.7 80°20	0°5/22.2	17		<b>132173</b>	2002 <i>EU</i> <sub>22</sub>		3 22.7 6°05	4°4/19.7	18	
2 21	12 29.26	- 1 22.7	1.990	2.851	11.7	21.2	2 21	12 33.26	+ 7 19.7	1.264	2.153	15.1	19.3
3 2	12 23.89	- 0 50.8	1.922	2.854	8.2	21.0	3 2	12 27.42	+ 8 0.7	1.208	2.153	10.6	19.0
3 12	12 16.87	- 0 9.8	1.879	2.857	4.3	20.7	3 12	12 18.99	+ 8 44.0	1.175	2.154	6.2	18.8
3 22	12 8.89	+ 0 35.8	1.864	2.861	0.5	20.4	3 22	12 9.06	+ 9 20.9	1.166	2.154	4.6	18.7
4 1	12 0.86	+ 1 20.3	1.878	2.864	4.1	20.7	4 1	11 59.07	+ 9 43.1	1.183	2.156	8.2	18.9
4 11	11 53.66	+ 1 58.2	1.920	2.867	8.0	21.0	4 11	11 50.50	+ 9 45.1	1.223	2.158	12.8	19.2
4 21	11 48.02	+ 2 25.4	1.987	2.870	11.5	21.2	4 21	11 44.38	+ 9 25.4	1.284	2.160	17.0	19.4
5 1	11 44.39	+ 2 39.4	2.075	2.873	14.5	21.4	5 1	11 41.28	+ 8 45.1	1.363	2.163	20.5	19.7
<b>227614</b>	2006 <i>BJ</i> <sub>1</sub>		3 22.7 89°58	1°1/21.6	18		<b>243739</b>	2000 <i>PO</i> <sub>18</sub>		3 22.7 212°54	0°5/22.3	17	
2 21	12 30.23	- 0 21.2	1.889	2.754	12.1	20.8	2 21	12 33.45	- 1 44.8	1.853	2.710	12.6	21.4
3 2	12 24.51	+ 0 26.9	1.837	2.772	8.4	20.6	3 2	12 27.06	- 1 9.8	1.773	2.704	9.0	21.1
3 12	12 17.14	+ 1 23.5	1.810	2.789	4.3	20.4	3 12	12 18.67	- 0 23.9	1.718	2.696	4.7	20.8
3 22	12 8.91	+ 2 22.7	1.810	2.806	1.1	20.2	3 22	12 9.04	+ 0 28.0	1.692	2.688	0.5	20.5
4 1	12 0.74	+ 3 18.1	1.840	2.823	4.6	20.5	4 1	11 59.21	+ 1 19.6	1.694	2.679	4.5	20.8
4 11	11 53.55	+ 4 3.6	1.897	2.840	8.4	20.7	4 11	11 50.26	+ 2 4.3	1.724	2.669	8.9	21.0
4 21	11 48.03	+ 4 35.7	1.979	2.856	11.9	21.0	4 21	11 43.06	+ 2 37.3	1.780	2.659	12.8	21.2
5 1	11 44.59	+ 4 52.2	2.083	2.872	14.7	21.2	5 1	11 38.20	+ 2 55.4	1.856	2.648	16.2	21.4
<b>459776</b>	2013 <i>RU</i> <sub>7</sub>		3 22.7 311°51	2°5/19.9	17		<b>68710</b>	2002 <i>CN</i> <sub>244</sub>		3 22.7 40°17	0°2/22.5	18	
2 21	12 25.66	- 0 32.7	1.537	2.417	13.4	20.8	2 21	12 30.06	- 3 24.3	1.273	2.149	16.0	19.0
3 2	12 21.83	+ 1 21.4	1.464	2.407	9.3	20.6	3 2	12 25.09	- 2 39.4	1.218	2.156	11.3	18.7
3 12	12 15.96	+ 3 32.2	1.416	2.397	4.8	20.3	3 12	12 17.71	- 1 37.9	1.185	2.164	6.0	18.4
3 22	12 8.83	+ 5 49.2	1.395	2.388	2.7	20.1	3 22	12 8.98	- 0 27.4	1.177	2.173	0.4	18.0
4 1	12 1.51	+ 7 59.6	1.403	2.379	6.7	20.3	4 1	12 0.22	+ 0 42.5	1.194	2.182	5.3	18.4
4 11	11 55.12	+ 9 51.7	1.436	2.370	11.3	20.6	4 11	11 52.81	+ 1 42.1	1.236	2.191	10.6	18.7
4 21	11 50.54	+ 11 18.0	1.492	2.361	15.5	20.8	4 21	11 47.67	+ 2 24.8	1.300	2.201	15.1	19.0
5 1	11 48.37	+ 12 15.3	1.568	2.353	18.9	21.0	5 1	11 45.36	+ 2 47.2	1.383	2.211	18.9	19.3
<b>83728</b>	2001 <i>TH</i> <sub>110</sub>		3 22.7 229°23	0°2/22.5	18		<b>352707</b>	2008 <i>SQ</i> <sub>179</sub>		3 22.7 71°34	1°9/21.2	18	
2 21	12 29.78	- 1 17.9	2.359	3.213	10.4	19.5	2 21	12 31.29	- 0 5.1	1.285	2.165	15.5	20.6
3 2	12 24.11	- 1 1.0	2.279	3.208	7.3	19.3	3 2	12 25.94	+ 0 59.3	1.231	2.173	10.8	20.3
3 12	12 16.94	- 0 36.8	2.227	3.204	3.9	19.0	3 12	12 18.16	+ 2 16.7	1.200	2.181	5.6	20.0
3 22	12 8.90	- 0 8.5	2.203	3.199	0.3	18.7	3 22	12 9.02	+ 3 37.9	1.194	2.189	2.0	19.8
4 1	12 0.75	+ 0 19.6	2.209	3.195	3.5	19.0	4 1	11 59.88	+ 4 52.1	1.215	2.197	6.4	20.1
4 11	11 53.28	+ 0 43.5	2.244	3.190	7.1	19.2	4 11	11 52.09	+ 5 50.1	1.260	2.206	11.4	20.4
4 21	11 47.13	+ 0 59.7	2.305	3.185	10.3	19.4	4 21	11 46.62	+ 6 26.7	1.327	2.214	15.8	20.7
5 1	11 42.77	+ 1 6.0	2.388	3.180	13.0	19.6	5 1	11 44.00	+ 6 40.1	1.412	2.222	19.5	21.0
<b>82641</b>	2001 <i>PO</i> <sub>5</sub>		3 22.7 220°52	3°3/26.6	18		<b>298990</b>	2004 <i>XY</i> <sub>23</sub>		3 22.7 141°03	0°5/22.3	18	
2 21	12 28.00	- 13 49.3	2.389	3.198	11.8	19.2	2 21	12 34.08	- 1 50.4	1.826	2.683	12.8	21.6
3 2	12 22.91	- 13 38.3	2.302	3.194	9.1	19.0	3 2	12 27.34	- 1 13.5	1.765	2.695	9.0	21.4
3 12	12 16.33	- 13 10.9	2.239	3.190	6.2	18.8	3 12	12 18.73	- 0 26.3	1.729	2.706	4.7	21.2
3 22	12 8.86	- 12 29.0	2.204	3.185	3.7	18.7	3 22	12 9.07	+ 0 26.0	1.721	2.717	0.5	20.8
4 1	12 1.25	- 11 36.1	2.197	3.181	3.8	18.7	4 1	11 59.43	+ 1 16.8	1.742	2.727	4.4	21.2
4 11	11 54.28	- 10 37.7	2.220	3.176	6.5	18.8	4 11	11 50.84	+ 1 59.9	1.792	2.737	8.6	21.4
4 21	11 48.60	- 9 39.3	2.269	3.171	9.5	19.0	4 21	11 44.07	+ 2 31.1	1.866	2.745	12.3	21.7
5 1	11 44.69	- 8 46.4	2.341	3.165	12.2	19.2	5 1	11 39.62	+ 2 47.7	1.962	2.753	15.4	21.9
<b>455692</b>	2005 <i>EA</i> <sub>125</sub>		3 22.7 27°00	0°3/22.5	18		<b>244964</b>	2004 <i>AT</i> <sub>7</sub>		3 22.7 268°84	15°2/5.4	18	
2 21	12 32.79	- 1 12.1	1.290	2.166	15.8	20.8	2 21	12 29.72	+ 24 25.0	1.030	1.926	17.1	19.5
3 2	12 27.02	- 1 2.1	1.233	2.171	11.2	20.5	3 2	12 25.66	+ 28 37.6	1.001	1.921	15.3	19.4
3 12	12 18.74	- 0 40.3	1.198	2.177	5.9	20.2	3 12	12 18.37	+ 32 28.5	0.995	1.915	15.7	19.4
3 22	12 9.03	- 0 12.1	1.188	2.184	0.4	19.9	3 22	12 9.06	+ 35 33.5	1.012	1.909	17.9	19.5
4 1	11 59.27	+ 0 15.5	1.203	2.191	5.3	20.2	4 1	11 59.53	+ 37 36.9	1.049	1.904	21.1	19.6
4 11	11 50.89	+ 0 35.6	1.244	2.199	10.5	20.6	4 11	11 51.67	+ 38 35.9	1.101	1.898	24.3	19.8
4 21	11 44.88	+ 0 43.3	1.306	2.207	15.1	20.8	4 21	11 46.79	+ 38 37.1	1.165	1.892	27.0	20.0
5 1	11 41.80	+ 0 36.1	1.388	2.216	18.8	21.1	5 1	11 45.53	+ 37 50.9	1.237	1.887	29.2	20.2
<b>253324</b>	2003 <i>EP</i> <sub>21</sub>		3 22.7 68°68	1°3/23.8	18		<b>295700</b>	2008 <i>TQ</i> <sub>174</sub>		3 22.7 351°93	2°5/20.6	18	
2 21	12 33.29	- 6 25.8	1.604	2.455	14.6	20.3	2 21	12 28.06	- 0 5.5	1.185	2.073	15.9	20.9
3 2	12 26.77	- 5 59.6	1.562	2.486	10.4	20.1	3 2	12 23.91	+ 1 20.2	1.124	2.071	11.1	20.6
3 12	12 18.34	- 5 18.3	1.544	2.517	5.9	19.9	3 12	12 17.21	+ 3 2.4	1.087	2.069	5.7	20.3
3 22	12 8.99	- 4 27.0	1.552	2.547	1.5	19.7	3 22	12 8.98	+ 4 49.8	1.073	2.067	2.7	20.1
4 1	11 59.86	- 3 32.7	1.589	2.578	4.1	19.9	4 1	12 0.60	+ 6 29.1	1.085	2.066	7.2	20.4
4 11	11 52.03	- 2 42.5	1.653	2.608	8.4	20.3	4 11	11 53.52	+ 7 48.5	1.120	2.066	12.6	20.7
4 21	11 46.21	- 2 2.0	1.741	2.638	12.2	20.5	4 21	11 48.78	+ 8 41.1	1.177	2.066	17.3	20.9
5 1	11 42.81	- 1 34.8	1.851	2.667	15.3	20.8	5 1	11 46.99	+ 9 4.7	1.250	2.066	21.2	21.2
<b>500526</b>	2012 <i>TW</i> <sub>308</sub>		3 22.7 127°08	0°3/23.0	17		<b>78040</b>	2002 <i>JA</i> <sub>106</sub>		3 22.7 276°76	1°5/21.5	17	
2 21	12 29.13	- 3 25.6	2.554	3.400	10.0	21.7	2 21	12 31.49	+ 0 17.7	1.594	2.465	13.5	20.6
3 2	12 23.48	- 3 2.5	2.487	3.412	7.1	21.6	3 2	12 26.05	+ 1 0.8	1.508	2.446	9.6	20.3
3 12	12 16.53	- 2 31.2	2.448	3.423	3.8	21.4	3 12	12 18.31	+ 1 55.4	1.447	2.427	5.0	20.0
3 22	12 8.88	- 1 54.9	2.437	3.433	0.4	21.1	3 22	12 9.06	+ 2 55.3	1.412	2.408	1.5	19.7
4 1	12 1.22	- 1 17.7	2.457	3.444	3.1	21.3	4 1	11 59.45	+ 3 52.6	1.405	2.388	5.6	19.9
4 11	11 54.24	- 0 43.7	2.506	3.454	6.3	21.6	4 11	11 50.72	+ 4 39.4	1.424	2.368	10.5	20.1
4 21	11 48.51	- 0 16.3	2.582	3.464	9.2	21.8	4 21	11 43.91	+ 5 10.1	1.466	2.348	14.9	20.3
5 1	11 44.41	+ 0 1.9	2.681	3.473	11.7	22.0	5 1	11 39.72	+ 5 21.6	1.527	2.328	18.7	20.5
<b>148321</b>	2000 <i>QV</i> <sub>52</sub>		3 22.7 287°12	2°1/20.7	17		<b>102712</b>	1999 <i>VQ</i> <sub>93&lt;/</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>409256</b>	2004 <i>HO</i> <sub>1</sub>		3 22.7 275°68	11.4/10.5	17		<b>458122</b>	2010 <i>EW</i> <sub>45</sub>		3 22.7 159°38	0.7/23.5	18	
2 21	12 45.83	+30 12.4	1.939	2.770	13.3	22.6	2 21	12 36.56	- 6 21.7	2.551	3.374	10.7	22.9
3 2	12 36.40	+31 45.4	1.852	2.727	11.9	22.4	3 2	12 28.68	- 5 34.5	2.477	3.388	7.7	22.8
3 12	12 23.97	+33 2.5	1.790	2.683	11.4	22.3	3 12	12 19.32	- 4 35.7	2.431	3.401	4.3	22.6
3 22	12 9.47	+33 51.7	1.754	2.637	12.4	22.3	3 22	12 9.16	- 3 29.3	2.417	3.413	0.9	22.3
4 1	11 54.33	+34 4.1	1.744	2.589	14.4	22.3	4 1	11 58.99	- 2 20.5	2.436	3.422	3.2	22.5
4 11	11 40.18	+33 36.5	1.758	2.540	17.0	22.4	4 11	11 49.63	- 1 15.0	2.486	3.430	6.6	22.8
4 21	11 28.34	+32 32.0	1.790	2.489	19.7	22.4	4 21	11 41.70	- 0 17.4	2.566	3.436	9.7	23.0
5 1	11 19.69	+30 56.7	1.839	2.436	22.1	22.5	5 1	11 35.64	+ 0 28.8	2.670	3.441	12.3	23.2
<b>419205</b>	2009 <i>UN</i> <sub>99</sub>		3 22.7 64°14	3°9/19.3	18		<b>153117</b>	2000 <i>SA</i> <sub>78</sub>		3 22.7 102°33	0°6/23.3	18	
2 21	12 32.33	+ 8 6.9	1.696	2.575	12.5	20.5	2 21	12 29.67	- 5 25.2	1.912	2.763	12.6	20.3
3 2	12 26.12	+ 8 51.7	1.651	2.591	8.7	20.3	3 2	12 24.21	- 4 43.7	1.850	2.776	9.0	20.1
3 12	12 18.05	+ 9 36.8	1.631	2.607	5.2	20.2	3 12	12 17.07	- 3 48.8	1.814	2.789	4.9	19.8
3 22	12 9.03	+10 15.3	1.639	2.624	4.1	20.1	3 22	12 9.00	- 2 45.6	1.805	2.801	0.8	19.6
4 1	12 0.15	+10 40.9	1.674	2.640	6.9	20.3	4 1	12 0.94	- 1 40.5	1.825	2.813	3.8	19.8
4 11	11 52.44	+10 50.0	1.735	2.657	10.5	20.6	4 11	11 53.81	- 0 40.3	1.873	2.825	7.8	20.1
4 21	11 46.63	+10 41.3	1.819	2.674	13.7	20.8	4 21	11 48.30	+ 0 9.6	1.946	2.837	11.4	20.3
5 1	11 43.15	+10 15.6	1.922	2.691	16.5	21.1	5 1	11 44.87	+ 0 45.6	2.041	2.848	14.4	20.5
<b>331521</b>	2000 <i>QY</i> <sub>40</sub>		3 22.7 199°14	1°0/23.7	17		<b>427376</b>	2014 <i>XQ</i> <sub>12</sub>		3 22.7 78°46	0°2/22.5	18	
2 21	12 33.08	- 6 19.5	2.141	2.978	12.0	22.4	2 21	12 30.88	- 2 45.2	1.686	2.549	13.4	21.3
3 2	12 26.61	- 5 48.5	2.056	2.974	8.7	22.2	3 2	12 25.19	- 2 6.1	1.631	2.564	9.4	21.1
3 12	12 18.38	- 5 4.2	1.997	2.969	4.9	22.0	3 12	12 17.62	- 1 15.3	1.601	2.579	5.0	20.9
3 22	12 9.07	- 4 10.1	1.967	2.962	1.2	21.7	3 22	12 9.04	- 0 18.4	1.598	2.594	0.3	20.6
4 1	11 59.60	- 3 11.6	1.968	2.955	3.6	21.9	4 1	12 0.52	+ 0 37.4	1.623	2.610	4.4	20.9
4 11	11 50.89	- 2 15.0	1.997	2.947	7.5	22.1	4 11	11 53.08	+ 1 25.4	1.675	2.625	8.7	21.2
4 21	11 43.71	- 1 25.6	2.053	2.938	11.1	22.3	4 21	11 47.48	+ 2 0.8	1.751	2.640	12.5	21.5
5 1	11 38.60	- 0 47.7	2.132	2.928	14.2	22.5	5 1	11 44.19	+ 2 20.8	1.848	2.655	15.7	21.7
<b>96087</b>	1035 <i>T</i> -2		3 22.7 85°69	1°0/23.8	18		<b>57221</b>	2001 <i>QN</i> <sub>74</sub>		3 22.7 205°56	0°6/23.4	17	
2 21	12 30.16	-11 25.3	1.447	2.291	16.3	19.1	2 21	12 30.02	- 5 22.0	2.097	2.943	11.8	20.0
3 2	12 24.82	- 9 17.9	1.395	2.316	11.7	18.9	3 2	12 24.48	- 4 43.5	2.016	2.939	8.5	19.7
3 12	12 17.43	- 6 43.8	1.368	2.340	6.6	18.6	3 12	12 17.25	- 3 52.0	1.961	2.935	4.7	19.5
3 22	12 9.00	- 3 54.3	1.368	2.364	1.4	18.3	3 22	12 9.02	- 2 51.8	1.934	2.930	0.8	19.2
4 1	12 0.74	- 1 4.2	1.399	2.387	4.5	18.6	4 1	12 0.65	- 1 48.5	1.936	2.924	3.6	19.4
4 11	11 53.78	+ 1 31.6	1.457	2.410	9.5	19.0	4 11	11 53.03	- 0 48.6	1.967	2.918	7.6	19.6
4 21	11 48.91	+ 3 42.6	1.542	2.433	13.8	19.3	4 21	11 46.89	+ 0 2.5	2.024	2.911	11.2	19.8
5 1	11 46.53	+ 5 23.7	1.647	2.455	17.2	19.5	5 1	11 42.75	+ 0 40.9	2.104	2.904	14.2	20.0
<b>121340</b>	1999 <i>TO</i> <sub>17</sub>		3 22.7 113°55	11°1/17.7	17		<b>31678</b>	1999 <i>JX</i> <sub>18</sub>		3 22.7 314°24	4°8/26.5	18	
2 21	12 50.43	+23 10.1	1.187	2.051	17.7	18.7	2 21	12 30.49	-13 42.4	1.394	2.231	17.2	17.7
3 2	12 39.49	+23 46.5	1.148	2.063	14.2	18.5	3 2	12 25.58	-13 46.3	1.316	2.224	13.4	17.4
3 12	12 25.28	+24 1.0	1.131	2.075	11.6	18.4	3 12	12 18.15	-13 24.8	1.260	2.217	9.1	17.1
3 22	12 9.54	+23 42.9	1.138	2.087	11.4	18.4	3 22	12 9.10	-12 39.2	1.227	2.211	5.4	16.9
4 1	11 54.37	+22 47.6	1.171	2.098	13.7	18.5	4 1	11 59.72	-11 34.8	1.219	2.205	5.7	16.9
4 11	11 41.65	+21 18.6	1.227	2.109	17.0	18.8	4 11	11 51.44	-10 21.2	1.236	2.199	9.7	17.1
4 21	11 32.46	+19 24.2	1.303	2.119	20.3	19.0	4 21	11 45.36	- 9 8.5	1.277	2.194	14.1	17.3
5 1	11 27.16	+17 13.2	1.396	2.129	23.2	19.3	5 1	11 42.18	- 8 5.9	1.337	2.189	18.1	17.6
<b>138702</b>	2000 <i>SW</i> <sub>85</sub>		3 22.7 83°72	2°5/20.5	18		<b>57149</b>	2001 <i>PF</i> <sub>59</sub>		3 22.7 119°20	5°1/14.9	18	
2 21	12 31.07	+ 1 49.5	1.440	2.319	14.2	19.4	2 21	12 27.37	+14 55.7	2.607	3.481	8.8	18.9
3 2	12 25.57	+ 2 59.3	1.388	2.330	9.8	19.2	3 2	12 22.26	+16 36.8	2.568	3.497	6.6	18.8
3 12	12 17.90	+ 4 18.3	1.360	2.341	5.1	18.9	3 12	12 15.92	+18 13.7	2.557	3.512	5.2	18.7
3 22	12 9.04	+ 5 37.7	1.358	2.351	2.7	18.8	3 22	12 8.93	+19 39.7	2.576	3.527	5.6	18.7
4 1	12 0.23	+ 6 47.8	1.384	2.362	6.5	19.1	4 1	12 1.96	+20 49.3	2.624	3.542	7.4	18.9
4 11	11 52.65	+ 7 41.0	1.434	2.373	11.0	19.3	4 11	11 55.68	+21 39.2	2.698	3.556	9.6	19.0
4 21	11 47.18	+ 8 13.0	1.508	2.383	15.0	19.6	4 21	11 50.63	+22 8.6	2.796	3.570	11.6	19.2
5 1	11 44.30	+ 8 22.8	1.599	2.393	18.2	19.9	5 1	11 47.16	+22 18.3	2.913	3.584	13.4	19.4
<b>237487</b>	2000 <i>KU</i> <sub>12</sub>		3 22.7 232°34	4°0/19.4	17		<b>124663</b>	2001 <i>SP</i> <sub>85</sub>		3 22.7 80°60	2°4/24.5	18	
2 21	12 34.24	+ 7 0.8	1.650	2.526	12.9	20.9	2 21	12 33.80	- 8 6.2	1.350	2.204	16.6	20.1
3 2	12 27.83	+ 7 56.9	1.577	2.516	9.1	20.6	3 2	12 27.69	- 7 57.1	1.292	2.215	12.2	19.8
3 12	12 19.18	+ 8 56.8	1.529	2.506	5.4	20.4	3 12	12 19.12	- 7 28.1	1.256	2.226	7.3	19.6
3 22	12 9.14	+ 9 52.6	1.509	2.495	4.2	20.3	3 22	12 9.16	- 6 43.3	1.244	2.238	2.7	19.3
4 1	11 58.90	+10 36.2	1.516	2.484	7.4	20.4	4 1	11 59.17	- 5 50.0	1.260	2.249	4.8	19.5
4 11	11 49.67	+11 1.7	1.549	2.472	11.5	20.6	4 11	11 50.54	- 4 57.1	1.300	2.260	9.6	19.8
4 21	11 42.43	+11 6.4	1.605	2.459	15.3	20.8	4 21	11 44.26	- 4 12.2	1.364	2.271	14.1	20.1
5 1	11 37.79	+10 50.4	1.680	2.446	18.6	21.0	5 1	11 40.88	- 3 40.9	1.448	2.282	17.9	20.3
<b>52439</b>	1994 <i>QL</i>		3 22.7 200°94	16°8/10.7	18		<b>167661</b>	2004 <i>ED</i> <sub>21</sub>		3 22.7 110°96	0°4/23.1	18	
2 21	12 53.86	+38 32.7	1.385	2.198	18.5	18.2	2 21	12 31.43	- 2 49.0	2.310	3.158	10.8	20.2
3 2	12 42.19	+39 56.4	1.349	2.196	17.2	18.1	3 2	12 25.24	- 2 42.3	2.242	3.167	7.7	20.0
3 12	12 26.84	+40 44.2	1.333	2.192	16.8	18.0	3 12	12 17.55	- 2 27.5	2.201	3.176	4.2	19.8
3 22	12 9.66	+40 43.1	1.338	2.187	17.5	18.1	3 22	12 9.05	- 2 7.6	2.189	3.185	0.5	19.5
4 1	11 52.99	+39 47.8	1.364	2.182	19.1	18.1	4 1	12 0.52	- 1 46.4	2.207	3.194	3.3	19.8
4 11	11 38.95	+38 3.3	1.409	2.176	21.2	18.3	4 11	11 52.77	- 1 27.8	2.254	3.203	6.9	20.0
4 21	11 28.74	+35 40.7	1.471	2.169	23.4	18.4	4 21	11 46.44	- 1 15.1	2.327	3.211	10.0	20.2
5 1	11 22.75	+32 52.1	1.547	2.161	25.2	18.6	5 1	11 41.95	- 1 10.8	2.423	3.220	12.7	20.4
<b>55943</b>	1998 <i>HJ</i> <sub>15</sub>		3 22.7 48°14	9°2/12.7	18		<b>419099</b>	2009 <i>SW</i> <sub>158</sub>		3 22.7 62°94			

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3 22.8

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>3649</b>	Guillermina		3 22.7 330°60	3°1/19.2	18		<b>246841</b>	Williamirace		3 22.8 61°61	0°9/23.6	18	
2 21	12 26.99	+ 6 9.3	2.148	3.024	10.3	16.8	2 21	12 29.37	- 5 59.0	1.710	2.565	13.6	21.1
3 2	12 22.27	+ 7 9.6	2.081	3.021	7.2	16.6	3 2	12 24.12	- 5 21.8	1.655	2.582	9.8	20.9
3 12	12 16.05	+ 8 13.2	2.041	3.019	4.1	16.4	3 12	12 17.07	- 4 29.9	1.624	2.599	5.4	20.7
3 22	12 8.95	+ 9 14.1	2.030	3.016	3.3	16.4	3 22	12 9.05	- 3 28.5	1.620	2.616	1.1	20.4
4 1	12 1.78	+10 6.0	2.047	3.014	5.8	16.5	4 1	12 1.08	- 2 24.6	1.644	2.633	3.9	20.6
4 11	11 55.36	+10 44.2	2.091	3.012	9.0	16.7	4 11	11 54.15	- 1 25.5	1.695	2.650	8.2	20.9
4 21	11 50.32	+11 5.9	2.159	3.010	12.0	16.9	4 21	11 49.00	- 0 37.2	1.771	2.668	12.0	21.2
5 1	11 47.11	+11 10.2	2.247	3.008	14.6	17.1	5 1	11 46.08	- 0 3.2	1.868	2.685	15.1	21.4
<b>412528</b>	2014 MX <sub>37</sub>		3 22.7 315°57	5°1/18.3	18		<b>37477</b>	1110 T <sub>-1</sub>		3 22.8 81°94	1°8/24.4	18	
2 21	12 29.96	+ 7 0.6	1.338	2.229	14.3	20.1	2 21	12 31.57	- 7 30.0	1.817	2.661	13.5	19.0
3 2	12 25.09	+ 8 30.6	1.279	2.225	10.1	19.8	3 2	12 25.65	- 7 19.1	1.755	2.674	9.8	18.8
3 12	12 17.81	+10 6.2	1.243	2.220	6.1	19.6	3 12	12 17.89	- 6 53.5	1.718	2.687	5.8	18.6
3 22	12 9.08	+11 36.2	1.232	2.216	5.5	19.5	3 22	12 9.12	- 6 16.7	1.707	2.701	2.1	18.4
4 1	12 0.22	+12 49.1	1.247	2.212	9.0	19.7	4 1	12 0.34	- 5 33.8	1.725	2.714	3.8	18.5
4 11	11 52.57	+13 36.8	1.286	2.208	13.4	19.9	4 11	11 52.57	- 4 51.3	1.771	2.727	7.8	18.8
4 21	11 47.12	+13 56.2	1.345	2.204	17.4	20.2	4 21	11 46.56	- 4 14.5	1.841	2.740	11.5	19.0
5 1	11 44.48	+13 47.9	1.421	2.201	20.8	20.4	5 1	11 42.79	- 3 47.8	1.933	2.753	14.6	19.3
<b>69073</b>	2003 AB <sub>43</sub>		3 22.7 67°77	6°5/28.4	18		<b>430000</b>	2013 QT <sub>44</sub>		3 22.8 202°43	1°0/23.7	17	
2 21	12 34.24	-18 35.9	1.600	2.400	17.1	19.3	2 21	12 31.84	- 5 34.8	2.293	3.131	11.2	22.0
3 2	12 27.74	-19 3.3	1.546	2.424	13.7	19.2	3 2	12 25.67	- 5 17.6	2.209	3.127	8.1	21.8
3 12	12 19.05	-19 4.8	1.514	2.448	10.1	19.0	3 12	12 17.89	- 4 49.3	2.151	3.122	4.6	21.5
3 22	12 9.17	-18 40.8	1.506	2.472	7.2	18.9	3 22	12 9.13	- 4 12.8	2.122	3.117	1.2	21.3
4 1	11 59.34	-17 55.5	1.523	2.496	6.7	18.9	4 1	12 0.22	- 3 32.5	2.123	3.110	3.4	21.4
4 11	11 50.79	-16 56.8	1.568	2.520	9.0	19.1	4 11	11 52.01	- 2 53.4	2.153	3.104	7.0	21.6
4 21	11 44.39	-15 53.6	1.636	2.544	12.1	19.3	4 21	11 45.20	- 2 20.0	2.210	3.096	10.4	21.8
5 1	11 40.64	-14 54.1	1.726	2.568	15.1	19.6	5 1	11 40.30	- 1 55.7	2.290	3.088	13.3	22.0
<b>497834</b>	2006 UX <sub>36</sub>		3 22.7 110°53	3°6/27.8	17		<b>502936</b>	2015 EB <sub>40</sub>		3 22.8 8°44	2°6/24.7	17	
2 21	12 26.80	-17 0.3	2.636	3.426	11.4	22.5	2 21	12 34.16	- 7 16.4	1.808	2.648	13.7	20.7
3 2	12 21.91	-16 33.6	2.563	3.440	8.9	22.3	3 2	12 27.64	- 7 45.4	1.733	2.649	10.2	20.5
3 12	12 15.77	-15 49.6	2.514	3.453	6.3	22.2	3 12	12 19.05	- 8 1.8	1.683	2.649	6.2	20.2
3 22	12 8.94	-14 50.7	2.492	3.467	4.1	22.1	3 22	12 9.22	- 8 6.8	1.659	2.650	2.8	20.0
4 1	12 2.10	-13 40.9	2.500	3.480	3.8	22.1	4 1	11 59.21	- 8 3.2	1.665	2.652	4.2	20.1
4 11	11 55.93	-12 25.7	2.538	3.493	5.8	22.2	4 11	11 50.15	- 7 55.7	1.697	2.653	8.1	20.3
4 21	11 50.94	-11 10.7	2.603	3.505	8.4	22.4	4 21	11 42.92	- 7 48.8	1.755	2.655	11.9	20.6
5 1	11 47.54	-10 1.3	2.692	3.518	10.8	22.6	5 1	11 38.10	- 7 46.9	1.835	2.658	15.1	20.8
<b>332395</b>	2007 HR <sub>53</sub>		3 22.7 211°70	3°9/18.3	17		<b>384255</b>	2009 EL <sub>16</sub>		3 22.8 45°07	0°5/23.3	17	
2 21	12 30.34	+ 9 24.0	2.200	3.073	10.2	20.8	2 21	12 27.44	- 4 53.3	1.979	2.834	12.0	21.2
3 2	12 24.62	+10 23.3	2.132	3.068	7.3	20.6	3 2	12 22.65	- 4 17.7	1.915	2.843	8.6	21.0
3 12	12 17.30	+11 23.1	2.090	3.063	4.6	20.4	3 12	12 16.27	- 3 30.0	1.876	2.852	4.7	20.7
3 22	12 9.05	+12 17.3	2.078	3.057	4.2	20.4	3 22	12 9.01	- 2 34.5	1.865	2.861	0.7	20.5
4 1	12 0.72	+13 0.0	2.094	3.051	6.5	20.5	4 1	12 1.73	- 1 37.1	1.882	2.870	3.6	20.7
4 11	11 53.16	+13 26.8	2.138	3.044	9.6	20.7	4 11	11 55.28	- 0 44.2	1.927	2.880	7.5	21.0
4 21	11 47.05	+13 36.1	2.205	3.038	12.5	20.9	4 21	11 50.34	- 0 0.7	1.996	2.890	11.0	21.2
5 1	11 42.86	+13 27.6	2.293	3.030	15.0	21.0	5 1	11 47.34	+ 0 30.0	2.088	2.900	13.9	21.4
<b>134394</b>	1997 BW <sub>3</sub>		3 22.7 212°74	3°6/19.1	16		<b>32435</b>	2000 RZ <sub>96</sub>		3 22.8 301°14	5°3/2.6	18	
2 21	12 31.10	+ 5 57.1	1.827	2.703	11.9	20.6	2 21	12 23.55	-30 21.1	4.300	4.974	9.0	18.5
3 2	12 25.42	+ 7 11.5	1.758	2.698	8.3	20.4	3 2	12 19.45	-30 37.2	4.196	4.965	7.9	18.4
3 12	12 17.83	+ 8 31.0	1.715	2.692	4.8	20.1	3 12	12 14.45	-30 39.1	4.115	4.956	6.7	18.3
3 22	12 9.10	+ 9 47.6	1.700	2.686	3.9	20.1	3 22	12 8.90	-30 26.5	4.057	4.947	5.8	18.2
4 1	12 0.23	+10 53.2	1.713	2.679	6.8	20.2	4 1	12 3.23	-30 0.1	4.027	4.937	5.3	18.1
4 11	11 52.27	+11 41.5	1.753	2.672	10.6	20.4	4 11	11 57.91	-29 22.0	4.023	4.928	5.5	18.1
4 21	11 46.03	+12 9.2	1.816	2.664	14.1	20.6	4 21	11 53.32	-28 35.3	4.047	4.919	6.4	18.2
5 1	11 42.04	+12 15.6	1.899	2.656	17.0	20.8	5 1	11 49.80	-27 43.5	4.095	4.910	7.6	18.3
<b>87709</b>	2000 SH <sub>28</sub>		3 22.7 290°96	6°0/28.5	18		<b>172159</b>	2002 NJ <sub>30</sub>		3 22.8 321°99	5°6/18.2	17	
2 21	12 28.46	-19 21.4	1.796	2.592	15.6	19.1	2 21	12 28.76	+ 8 7.5	1.259	2.155	14.6	19.2
3 2	12 23.91	-19 18.9	1.693	2.569	12.7	18.8	3 2	12 24.50	+ 9 26.4	1.191	2.138	10.4	18.9
3 12	12 17.21	-18 50.0	1.611	2.545	9.5	18.6	3 12	12 17.65	+10 50.6	1.145	2.122	6.6	18.6
3 22	12 9.06	-17 54.4	1.553	2.522	6.8	18.4	3 22	12 9.14	+12 8.9	1.123	2.106	6.0	18.5
4 1	12 0.47	-16 35.3	1.522	2.498	6.3	18.3	4 1	12 0.32	+13 9.6	1.126	2.091	9.6	18.7
4 11	11 52.60	-15 0.5	1.517	2.474	8.8	18.4	4 11	11 52.65	+13 44.0	1.151	2.077	14.3	18.9
4 21	11 46.44	-13 19.6	1.537	2.451	12.4	18.5	4 21	11 47.26	+13 49.1	1.196	2.064	18.6	19.1
5 1	11 42.72	-11 42.9	1.580	2.427	16.0	18.7	5 1	11 44.86	+13 25.4	1.257	2.051	22.3	19.3
<b>97093</b>	1999 VQ <sub>59</sub>		3 22.7 28°45	4°6/18.8	18		<b>119461</b>	2001 TA <sub>202</sub>		3 22.8 178°39	3°9/18.9	18	
2 21	12 32.19	+10 18.6	1.717	2.597	12.3	18.9	2 21	12 33.39	+ 6 41.8	1.782	2.656	12.2	20.3
3 2	12 26.15	+10 58.2	1.662	2.601	8.7	18.7	3 2	12 27.02	+ 7 57.0	1.720	2.658	8.6	20.1
3 12	12 18.17	+11 36.2	1.632	2.605	5.6	18.5	3 12	12 18.68	+ 9 16.0	1.684	2.659	5.1	19.9
3 22	12 9.12	+12 5.7	1.628	2.610	4.8	18.5	3 22	12 9.21	+10 30.4	1.676	2.660	4.2	19.8
4 1	12 0.09	+12 21.0	1.652	2.615	7.5	18.6	4 1	11 59.67	+11 32.3	1.696	2.660	7.1	20.0
4 11	11 52.16	+12 18.5	1.702	2.620	11.0	18.8	4 11	11 51.15	+12 15.5	1.744	2.660	10.8	20.2
4 21	11 46.11	+11 57.4	1.775	2.625	14.3	19.0	4 21	11 44.47	+12 37.6	1.814	2.658	14.3	20.4
5 1	11 42.43	+11 18.9	1.866	2.631	17.0	19.3	5 1	11 40.16	+12 38.3	1.904	2.656	17.2	20.6
<b>410204</b>	2007 RK <sub>207</sub>		3 22.7 310°00	2°5/20.6	16		<b>346208</b>	2007 XL <sub>58</sub>		3 22.8 286°53	2°6/25.5	17	

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3 22.8

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>399351</b>	2000 <i>SK</i> <sub>297</sub>		3 22.8 134°66	2°1/24.8	18		<b>283013</b>	2007 <i>VA</i> <sub>50</sub>		3 22.8 159°18	3°3/26.6	17	
2 21	12 32.73	- 9 45.6	1.858	2.690	13.7	21.7	2 21	12 28.13	-13 44.0	2.292	3.104	12.2	21.1
3 2	12 26.45	- 9 12.5	1.793	2.705	10.1	21.5	3 2	12 23.09	-13 31.6	2.212	3.106	9.4	20.9
3 12	12 18.33	- 8 21.8	1.752	2.718	6.1	21.3	3 12	12 16.53	-13 2.3	2.155	3.107	6.3	20.7
3 22	12 9.19	- 7 17.6	1.739	2.731	2.5	21.1	3 22	12 9.09	-12 18.2	2.126	3.108	3.7	20.6
4 1	12 0.04	- 6 6.2	1.754	2.743	3.8	21.2	4 1	12 1.53	-11 23.2	2.125	3.109	3.9	20.6
4 11	11 51.90	- 4 55.5	1.799	2.754	7.8	21.4	4 11	11 54.68	-10 23.0	2.153	3.110	6.6	20.7
4 21	11 45.53	- 3 52.0	1.868	2.765	11.5	21.7	4 21	11 49.17	- 9 23.5	2.208	3.111	9.6	20.9
5 1	11 41.42	- 3 0.9	1.961	2.775	14.6	21.9	5 1	11 45.48	- 8 30.0	2.286	3.112	12.4	21.1
<b>203909</b>	2003 <i>HK</i> <sub>51</sub>		3 22.8 317°30	1°6/21.4	18		<b>17445</b>	<i>Avatcha</i>		3 22.8 196°59	4°2/28.8	18	
2 21	12 28.19	- 1 22.1	1.257	2.141	15.6	19.9	2 21	12 29.03	-19 38.9	3.227	3.986	10.1	18.8
3 2	12 24.06	- 0 12.8	1.187	2.130	11.0	19.6	3 2	12 23.44	-19 47.7	3.131	3.983	8.2	18.7
3 12	12 17.40	+ 1 14.1	1.138	2.120	5.7	19.3	3 12	12 16.63	-19 41.9	3.061	3.979	6.2	18.5
3 22	12 9.13	+ 2 49.7	1.114	2.109	1.7	19.0	3 22	12 9.10	-19 21.9	3.018	3.975	4.6	18.4
4 1	12 0.59	+ 4 22.2	1.115	2.100	6.5	19.2	4 1	12 1.43	-18 49.6	3.005	3.970	4.3	18.4
4 11	11 53.19	+ 5 39.9	1.141	2.091	11.9	19.5	4 11	11 54.24	-18 8.2	3.021	3.964	5.6	18.4
4 21	11 48.03	+ 6 34.9	1.188	2.082	16.8	19.8	4 21	11 48.05	-17 21.9	3.066	3.958	7.6	18.6
5 1	11 45.79	+ 7 3.6	1.252	2.074	20.8	20.0	5 1	11 43.28	-16 35.1	3.135	3.952	9.6	18.7
<b>285675</b>	2000 <i>SX</i> <sub>134</sub>		3 22.8 157°70	3°2/27.1	17		<b>207952</b>	1994 <i>GT</i> <sub>4</sub>		3 22.8 208°06	1°2/21.5	17	
2 21	12 27.15	-14 57.2	2.652	3.452	11.0	20.6	2 21	12 30.33	+ 1 51.3	2.431	3.291	9.9	20.8
3 2	12 22.22	-14 38.9	2.570	3.456	8.6	20.4	3 2	12 24.51	+ 2 14.9	2.355	3.287	6.9	20.6
3 12	12 15.99	-14 4.9	2.513	3.459	5.9	20.3	3 12	12 17.25	+ 2 43.5	2.306	3.284	3.6	20.3
3 22	12 9.02	-13 17.2	2.484	3.463	3.6	20.1	3 22	12 9.15	+ 3 13.3	2.286	3.280	1.2	20.1
4 1	12 1.98	-12 19.3	2.484	3.466	3.6	20.1	4 1	12 0.95	+ 3 40.1	2.296	3.276	4.0	20.3
4 11	11 55.55	-11 16.3	2.513	3.469	5.9	20.3	4 11	11 53.44	+ 4 0.1	2.334	3.272	7.3	20.5
4 21	11 50.28	-10 13.4	2.570	3.471	8.5	20.4	4 21	11 47.21	+ 4 10.5	2.399	3.268	10.4	20.7
5 1	11 46.59	- 9 15.6	2.651	3.474	11.0	20.6	5 1	11 42.74	+ 4 9.7	2.486	3.263	12.9	20.9
<b>433613</b>	2013 <i>YV</i> <sub>94</sub>		3 22.8 14°65	1°1/21.7	17		<b>151154</b>	2001 <i>XD</i> <sub>89</sub>		3 22.8 20°50	6°4/29.2	18	
2 21	12 28.01	+ 0 12.8	1.923	2.792	11.7	21.1	2 21	12 29.23	-20 22.7	1.748	2.540	16.2	19.7
3 2	12 23.13	+ 0 49.2	1.857	2.794	8.2	20.8	3 2	12 24.33	-20 26.9	1.669	2.541	13.2	19.5
3 12	12 16.57	+ 1 33.9	1.817	2.796	4.2	20.6	3 12	12 17.37	-20 4.3	1.612	2.541	10.0	19.3
3 22	12 9.07	+ 2 21.5	1.804	2.799	1.1	20.4	3 22	12 9.16	-19 15.4	1.578	2.542	7.2	19.1
4 1	12 1.50	+ 3 6.2	1.819	2.802	4.5	20.6	4 1	12 0.76	-18 4.2	1.571	2.543	6.6	19.1
4 11	11 54.78	+ 3 42.3	1.861	2.805	8.4	20.9	4 11	11 53.31	-16 38.5	1.589	2.545	8.6	19.2
4 21	11 49.61	+ 4 6.2	1.927	2.809	11.9	21.1	4 21	11 47.68	-15 8.1	1.633	2.546	11.8	19.4
5 1	11 46.46	+ 4 15.6	2.015	2.813	14.8	21.3	5 1	11 44.46	-13 42.0	1.699	2.547	15.0	19.6
<b>96847</b>	1999 <i>RS</i> <sub>211</sub>		3 22.8 148°99	2°8/26.1	18		<b>163415</b>	2002 <i>RW</i> <sub>34</sub>		3 22.8 161°19	1°0/21.5	18	
2 21	12 30.48	-12 31.8	2.501	3.310	11.3	20.2	2 21	12 28.91	+ 0 26.0	2.575	3.432	9.5	21.1
3 2	12 24.57	-12 20.5	2.425	3.320	8.6	20.0	3 2	12 23.42	+ 1 6.9	2.506	3.437	6.6	20.9
3 12	12 17.24	-11 54.6	2.375	3.329	5.7	19.8	3 12	12 16.62	+ 1 53.9	2.464	3.442	3.4	20.7
3 22	12 9.12	-11 16.1	2.353	3.337	3.2	19.7	3 22	12 9.11	+ 2 42.9	2.452	3.447	1.0	20.5
4 1	12 0.94	-10 28.6	2.361	3.345	3.5	19.7	4 1	12 1.56	+ 3 29.3	2.470	3.451	3.7	20.7
4 11	11 53.46	- 9 37.3	2.398	3.353	6.2	19.9	4 11	11 54.66	+ 4 8.8	2.517	3.455	6.9	20.9
4 21	11 47.28	- 8 47.1	2.463	3.360	9.1	20.1	4 21	11 48.97	+ 4 38.3	2.591	3.458	9.7	21.1
5 1	11 42.85	- 8 2.6	2.552	3.366	11.6	20.3	5 1	11 44.89	+ 4 55.9	2.687	3.461	12.2	21.3
<b>58248</b>	1993 <i>PO</i> <sub>5</sub>		3 22.8 247°83	2°3/25.6	18		<b>154014</b>	2002 <i>BC</i> <sub>28</sub>		3 22.8 2°67	0°8/23.6	18	
2 21	12 27.76	-10 49.4	2.670	3.489	10.4	20.2	2 21	12 26.68	- 6 55.5	1.609	2.468	14.1	19.4
3 2	12 22.71	-10 37.4	2.575	3.477	7.9	20.0	3 2	12 22.50	- 5 57.9	1.539	2.467	10.2	19.2
3 12	12 16.30	-10 12.6	2.506	3.465	5.1	19.8	3 12	12 16.37	- 4 41.3	1.492	2.467	5.7	18.9
3 22	12 9.06	- 9 36.7	2.465	3.452	2.6	19.6	3 22	12 9.09	- 3 12.1	1.472	2.468	1.1	18.6
4 1	12 1.64	- 8 53.0	2.453	3.440	3.2	19.6	4 1	12 1.70	- 1 38.8	1.479	2.468	4.2	18.8
4 11	11 54.76	- 8 6.1	2.471	3.427	6.0	19.8	4 11	11 55.26	- 0 11.3	1.513	2.469	8.9	19.1
4 21	11 49.00	- 7 20.4	2.516	3.413	8.9	20.0	4 21	11 50.60	+ 1 2.8	1.571	2.471	13.0	19.3
5 1	11 44.82	- 6 40.2	2.585	3.400	11.5	20.1	5 1	11 48.25	+ 1 58.1	1.649	2.472	16.5	19.5
<b>64235</b>	2001 <i>TW</i> <sub>127</sub>		3 22.8 96°02	4°0/19.5	18		<b>341260</b>	2007 <i>RA</i> <sub>234</sub>		3 22.8 73°70	2°2/24.8	17	
2 21	12 33.75	+ 5 56.7	1.402	2.285	14.3	19.3	2 21	12 33.76	- 8 1.0	2.115	2.945	12.3	20.3
3 2	12 27.51	+ 7 2.9	1.355	2.297	10.0	19.1	3 2	12 26.96	- 8 15.7	2.056	2.966	9.1	20.1
3 12	12 18.99	+ 8 12.9	1.331	2.310	5.7	18.9	3 12	12 18.54	- 8 18.1	2.023	2.987	5.6	20.0
3 22	12 9.25	+ 9 17.5	1.334	2.322	4.3	18.8	3 22	12 9.25	- 8 10.0	2.018	3.008	2.5	19.8
4 1	11 59.60	+10 7.9	1.363	2.334	7.6	19.1	4 1	12 0.00	- 7 54.9	2.042	3.029	3.6	19.9
4 11	11 51.32	+10 37.7	1.417	2.345	11.9	19.3	4 11	11 51.69	- 7 37.0	2.095	3.050	6.9	20.1
4 21	11 45.29	+10 45.1	1.493	2.357	15.7	19.6	4 21	11 44.99	- 7 20.7	2.175	3.070	10.1	20.4
5 1	11 42.00	+10 30.6	1.587	2.368	18.9	19.8	5 1	11 40.35	- 7 9.5	2.278	3.091	12.9	20.6
<b>245503</b>	2005 <i>QL</i> <sub>167</sub>		3 22.8 251°41	2°7/26.6	17		<b>119379</b>	2001 <i>SS</i> <sub>323</sub>		3 22.8 79°94	4°6/27.7	18	
2 21	12 26.37	-14 25.7	2.670	3.474	10.9	21.3	2 21	12 30.30	-17 11.2	1.767	2.573	15.4	19.9
3 2	12 21.76	-13 44.4	2.567	3.457	8.4	21.1	3 2	12 24.80	-16 43.1	1.709	2.596	12.0	19.8
3 12	12 15.81	-12 45.9	2.490	3.441	5.6	20.9	3 12	12 17.47	-15 50.3	1.674	2.619	8.4	19.6
3 22	12 9.03	-11 32.7	2.440	3.424	3.2	20.7	3 22	12 9.18	-14 36.3	1.664	2.642	5.2	19.4
4 1	12 2.09	-10 8.8	2.421	3.407	3.3	20.7	4 1	12 0.95	-13 7.5	1.682	2.664	5.0	19.5
4 11	11 55.66	- 8 40.4	2.432	3.389	6.0	20.8	4 11	11 53.82	-11 33.1	1.727	2.686	7.7	19.7
4 21	11 50.35	- 7 13.5	2.471	3.371	8.9	21.0	4 21	11 48.50	-10 2.1	1.799	2.708	11.1	19.9
5 1	11 46.60	- 5 53.8	2.535	3.353	11.6	21.2	5 1	11 45.44	- 8 41.6	1.893	2.730	14.2	20.2
<b>80015</b>	1999 <i>GT</i> <sub>21</sub>		3 22.8 326°18	6°1/16.4	18		<b>45900</b>	2000 <i>YG</i> <sub>10</sub>		3 22.8 120°71	16°9/ 4.8	18	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>436747</b>	2011 <i>WJ</i> <sub>45</sub>		3 22.8 149°90	22°0/	1.1 17		<b>330673</b>	2008 <i>GM</i> <sub>137</sub>		3 22.8 147°05	3°7/19.2	17	
2 21	12 50.27	+47 58.2	1.181	1.973	22.3	20.5	2 21	12 31.35	+ 6 58.9	1.816	2.692	11.9	21.2
3 2	12 40.33	+50 12.0	1.178	1.979	22.0	20.5	3 2	12 25.56	+ 7 58.5	1.756	2.696	8.3	21.0
3 12	12 26.06	+51 34.4	1.190	1.984	22.5	20.5	3 12	12 17.93	+ 9 0.7	1.723	2.699	4.9	20.8
3 22	12 9.78	+51 53.6	1.218	1.988	23.4	20.6	3 22	12 9.25	+ 9 58.3	1.717	2.702	3.9	20.7
4 1	11 54.38	+51 7.5	1.259	1.992	24.8	20.7	4 1	12 0.55	+10 44.3	1.739	2.705	6.7	20.9
4 11	11 42.28	+49 24.1	1.312	1.996	26.2	20.9	4 11	11 52.83	+11 13.5	1.787	2.708	10.3	21.1
4 21	11 34.61	+46 56.4	1.375	1.998	27.5	21.0	4 21	11 46.85	+11 23.8	1.859	2.710	13.7	21.3
5 1	11 31.50	+43 57.4	1.447	2.001	28.6	21.2	5 1	11 43.11	+11 15.1	1.950	2.713	16.5	21.5
<b>479524</b>	2014 <i>BQ</i> <sub>30</sub>		3 22.8 64°78	4°5/27.7	17		<b>4522</b>	Britastra		3 22.8 177°37	4°0/17.7	18	
2 21	12 29.08	-16 23.2	2.223	3.021	12.9	21.0	2 21	12 29.53	+ 9 25.6	2.342	3.215	9.7	17.2
3 2	12 23.81	-16 31.8	2.147	3.028	10.2	20.8	3 2	12 24.00	+10 45.6	2.281	3.217	6.9	17.0
3 12	12 16.95	-16 22.2	2.094	3.034	7.3	20.6	3 12	12 17.00	+12 6.4	2.248	3.219	4.5	16.9
3 22	12 9.16	-15 55.4	2.068	3.040	5.0	20.5	3 22	12 9.19	+13 21.2	2.244	3.220	4.3	16.9
4 1	12 1.27	-15 14.5	2.070	3.047	4.8	20.5	4 1	12 1.32	+14 23.9	2.269	3.220	6.5	17.0
4 11	11 54.12	-14 24.9	2.099	3.054	6.9	20.6	4 11	11 54.19	+15 9.9	2.322	3.220	9.3	17.2
4 21	11 48.41	-13 32.6	2.155	3.060	9.8	20.8	4 21	11 48.41	+15 37.3	2.399	3.219	12.0	17.4
5 1	11 44.62	-12 43.2	2.234	3.067	12.4	21.0	5 1	11 44.41	+15 45.9	2.497	3.218	14.3	17.5
<b>423513</b>	2005 <i>UZ</i> <sub>51</sub>		3 22.8 178°68	0°8/23.6	15		<b>375956</b>	2009 <i>WP</i> <sub>175</sub>		3 22.8 145°27	4°6/18.6	17	
2 21	12 31.48	- 5 28.7	2.366	3.204	10.9	22.6	2 21	12 33.80	+11 17.4	1.959	2.832	11.3	21.1
3 2	12 25.37	- 5 3.4	2.287	3.206	7.9	22.4	3 2	12 27.16	+11 57.5	1.901	2.836	8.1	20.9
3 12	12 17.73	- 4 27.2	2.236	3.207	4.4	22.2	3 12	12 18.73	+12 35.2	1.869	2.839	5.3	20.8
3 22	12 9.22	- 3 43.4	2.213	3.208	1.0	21.9	3 22	12 9.32	+13 4.4	1.865	2.842	4.8	20.7
4 1	12 0.61	- 2 56.5	2.220	3.208	3.2	22.1	4 1	11 59.92	+13 19.7	1.889	2.846	7.1	20.9
4 11	11 52.72	- 2 11.6	2.258	3.208	6.8	22.3	4 11	11 51.52	+13 18.1	1.940	2.849	10.3	21.1
4 21	11 46.19	- 1 33.1	2.322	3.206	10.0	22.5	4 21	11 44.84	+12 58.9	2.015	2.851	13.3	21.3
5 1	11 41.49	- 1 4.3	2.409	3.204	12.8	22.7	5 1	11 40.38	+12 23.3	2.109	2.854	15.9	21.5
<b>211989</b>	2005 <i>AO</i> <sub>58</sub>		3 22.8 38°06	1°8/21.5	18		<b>297860</b>	2002 <i>CY</i> <sub>55</sub>		3 22.8 64°73	2°7/24.7	18	
2 21	12 30.99	+ 0 14.5	1.109	1.998	16.8	20.4	2 21	12 36.02	- 8 16.3	1.297	2.149	17.3	19.6
3 2	12 25.89	+ 1 0.3	1.069	2.015	11.6	20.2	3 2	12 29.21	- 8 19.8	1.251	2.173	12.7	19.4
3 12	12 18.24	+ 1 57.9	1.051	2.033	6.0	19.9	3 12	12 19.95	- 8 3.5	1.228	2.197	7.6	19.2
3 22	12 9.25	+ 2 58.3	1.056	2.051	1.8	19.7	3 22	12 9.41	- 7 31.2	1.229	2.222	3.1	19.0
4 1	12 0.45	+ 3 51.3	1.086	2.071	6.4	20.0	4 1	11 59.05	- 6 49.8	1.257	2.246	4.9	19.2
4 11	11 53.24	+ 4 28.6	1.139	2.091	11.6	20.4	4 11	11 50.26	- 6 7.7	1.310	2.270	9.5	19.5
4 21	11 48.56	+ 4 45.9	1.213	2.112	16.1	20.7	4 21	11 43.96	- 5 32.1	1.386	2.294	13.9	19.8
5 1	11 46.84	+ 4 42.2	1.305	2.133	19.8	21.0	5 1	11 40.61	- 5 8.2	1.482	2.318	17.4	20.1
<b>336269</b>	2008 <i>SP</i> <sub>191</sub>		3 22.8 284°40	2°5/20.4	17		<b>214175</b>	2005 <i>CJ</i> <sub>63</sub>		3 22.8 60°64	1°7/24.3	18	
2 21	12 30.13	+ 4 15.3	1.922	2.795	11.5	21.0	2 21	12 30.67	- 7 59.0	1.402	2.259	15.9	20.5
3 2	12 24.67	+ 4 58.3	1.854	2.793	8.0	20.7	3 2	12 25.47	- 7 26.2	1.343	2.269	11.6	20.2
3 12	12 17.45	+ 5 46.1	1.812	2.791	4.3	20.5	3 12	12 18.01	- 6 33.1	1.307	2.280	6.8	20.0
3 22	12 9.21	+ 6 32.9	1.797	2.789	2.6	20.4	3 22	12 9.28	- 5 25.3	1.296	2.290	2.1	19.7
4 1	12 0.88	+ 7 12.5	1.811	2.787	5.5	20.6	4 1	12 0.52	- 4 11.2	1.311	2.301	4.5	19.9
4 11	11 53.42	+ 7 39.8	1.852	2.785	9.3	20.8	4 11	11 53.00	- 3 0.4	1.352	2.312	9.3	20.2
4 21	11 47.56	+ 7 51.9	1.917	2.783	12.7	21.0	4 21	11 47.61	- 2 1.0	1.417	2.323	13.7	20.5
5 1	11 43.82	+ 7 47.8	2.003	2.781	15.6	21.2	5 1	11 44.90	- 1 18.3	1.501	2.335	17.4	20.7
<b>147654</b>	2004 <i>JM</i> <sub>35</sub>		3 22.8 345°98	6°0/17.9	18		<b>269097</b>	2007 <i>HV</i> <sub>65</sub>		3 22.8 278°69	3°0/19.9	17	
2 21	12 27.65	+ 9 17.1	1.227	2.126	14.6	18.2	2 21	12 30.39	+ 5 20.6	1.848	2.723	11.8	20.2
3 2	12 23.68	+10 30.9	1.168	2.116	10.5	17.9	3 2	12 25.00	+ 6 9.7	1.773	2.712	8.2	20.0
3 12	12 17.20	+11 46.9	1.131	2.107	6.8	17.7	3 12	12 17.71	+ 7 3.6	1.723	2.701	4.6	19.7
3 22	12 9.20	+12 54.0	1.118	2.099	6.4	17.6	3 22	12 9.27	+ 7 55.7	1.701	2.690	3.2	19.6
4 1	12 1.02	+13 41.4	1.129	2.093	9.8	17.8	4 1	12 0.64	+ 8 39.2	1.706	2.679	6.2	19.8
4 11	11 54.08	+14 2.0	1.162	2.087	14.2	18.0	4 11	11 52.86	+ 9 8.6	1.739	2.668	10.0	20.0
4 21	11 49.43	+13 53.8	1.214	2.083	18.3	18.3	4 21	11 46.75	+ 9 20.7	1.795	2.656	13.6	20.2
5 1	11 47.67	+13 18.4	1.283	2.080	21.7	18.5	5 1	11 42.85	+ 9 14.6	1.870	2.645	16.6	20.4
<b>414795</b>	2010 <i>RU</i> <sub>151</sub>		3 22.8 237°96	0°3/22.5	16		<b>25416</b>	Chyanwen		3 22.8 0°12	1°9/24.4	18	
2 21	12 30.75	- 3 18.8	1.819	2.677	12.8	22.1	2 21	12 29.90	- 8 18.2	1.499	2.352	15.3	18.7
3 2	12 25.31	- 2 26.9	1.735	2.665	9.1	21.8	3 2	12 24.95	- 7 50.2	1.428	2.351	11.3	18.4
3 12	12 17.90	- 1 21.0	1.676	2.653	4.9	21.6	3 12	12 17.78	- 7 2.3	1.380	2.351	6.7	18.2
3 22	12 9.25	- 0 6.5	1.645	2.641	0.4	21.2	3 22	12 9.27	- 5 59.0	1.357	2.351	2.3	17.9
4 1	12 0.36	+ 1 9.1	1.642	2.628	4.5	21.5	4 1	12 0.61	- 4 47.7	1.361	2.351	4.4	18.0
4 11	11 52.28	+ 2 17.8	1.667	2.614	9.0	21.7	4 11	11 53.01	- 3 37.7	1.391	2.352	9.1	18.3
4 21	11 45.89	+ 3 13.4	1.717	2.600	13.0	21.9	4 21	11 47.41	- 2 37.0	1.445	2.352	13.5	18.5
5 1	11 41.78	+ 3 51.8	1.787	2.586	16.4	22.1	5 1	11 44.40	- 1 51.6	1.519	2.353	17.2	18.8
<b>72363</b>	2001 <i>BQ</i> <sub>79</sub>		3 22.8 150°03	0°8/22.0	18		<b>57665</b>	2001 <i>UL</i> <sub>24</sub>		3 22.8 181°18	3°1/26.5	18	
2 21	12 32.07	- 1 42.1	1.925	2.783	12.2	20.1	2 21	12 29.06	-13 21.3	2.560	3.367	11.2	19.7
3 2	12 25.97	- 0 50.2	1.861	2.792	8.5	19.9	3 2	12 23.65	-13 18.2	2.476	3.367	8.6	19.5
3 12	12 18.11	+ 0 12.1	1.823	2.801	4.4	19.6	3 12	12 16.84	-13 0.6	2.417	3.367	5.8	19.3
3 22	12 9.26	+ 1 19.1	1.813	2.809	0.8	19.4	3 22	12 9.21	-12 30.0	2.386	3.367	3.5	19.2
4 1	12 0.40	+ 2 23.8	1.832	2.816	4.4	19.7	4 1	12 1.45	-11 49.5	2.384	3.367	3.7	19.2
4 11	11 52.47	+ 3 19.8	1.880	2.823	8.4	19.9	4 11	11 54.31	-11 3.6	2.412	3.367	6.1	19.3
4 21	11 46.21	+ 4 2.5	1.952	2.829	12.0	20.1	4 21	11 48.41	-10 17.4	2.466	3.366	8.9	19.5
5 1	11 42.10	+ 4 29.2	2.047	2.834	15.0	20.4	5 1	11 44.18	- 9 35.2	2.545	3.365	11.5	19.7
<b>173693</b>	2001 <i>PY</i> <sub>37</sub>		3 22.8 146°61	4°3/16.9	18		<b>332360</b>	2007 <i>EA</i> <sub>45</sub>		3 22.8 241°16	6°8/24.9	18	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>174011</b>	2001 YT <sub>15</sub>		3 22.8 179°12	4.4/16.2	18		<b>272452</b>	2005 UO <sub>34</sub>		3 22.8 91°63	2.3/25.1	18	
2 21	12 28.63	+15 16.1	2.979	3.846	8.0	20.9	2 21	12 29.81	-10 13.5	1.832	2.668	13.7	20.9
3 2	12 23.13	+16 15.2	2.921	3.848	6.0	20.7	3 2	12 24.48	-9 41.8	1.768	2.681	10.2	20.7
3 12	12 16.48	+17 10.6	2.892	3.849	4.6	20.6	3 12	12 17.37	-8 52.1	1.728	2.693	6.2	20.5
3 22	12 9.19	+17 57.6	2.892	3.849	4.7	20.6	3 22	12 9.27	-7 48.4	1.715	2.706	2.7	20.3
4 1	12 1.87	+18 32.2	2.921	3.849	6.3	20.7	4 1	12 1.17	-6 37.1	1.730	2.719	3.8	20.4
4 11	11 55.15	+18 51.8	2.978	3.849	8.4	20.9	4 11	11 54.02	-5 25.9	1.773	2.731	7.6	20.7
4 21	11 49.52	+18 55.7	3.059	3.848	10.4	21.0	4 21	11 48.56	-4 21.7	1.841	2.743	11.3	20.9
5 1	11 45.35	+18 44.3	3.160	3.846	12.1	21.2	5 1	11 45.27	-3 29.6	1.931	2.755	14.4	21.1
<b>83610</b>	2001 SZ <sub>274</sub>		3 22.8 241°40	0.4/23.2	18		<b>196826</b>	2003 SJ <sub>236</sub>		3 22.8 201°59	0.5/23.3	17	
2 21	12 28.02	-4 16.9	2.268	3.118	10.9	20.7	2 21	12 28.22	-5 26.1	2.118	2.967	11.6	21.0
3 2	12 23.04	-3 45.6	2.189	3.114	7.8	20.5	3 2	12 23.26	-4 41.1	2.041	2.966	8.3	20.8
3 12	12 16.56	-3 3 5	2.136	3.111	4.3	20.3	3 12	12 16.71	-3 43.0	1.989	2.964	4.6	20.6
3 22	12 9.20	-2 14.5	2.111	3.107	0.6	20.0	3 22	12 9.23	-2 36.5	1.966	2.962	0.7	20.3
4 1	12 1.73	-1 23.5	2.115	3.103	3.4	20.2	4 1	12 1.64	-1 27.3	1.972	2.960	3.5	20.5
4 11	11 54.93	-0 35.9	2.148	3.099	7.0	20.4	4 11	11 54.79	-0 22.2	2.006	2.957	7.4	20.7
4 21	11 49.45	+0 3 8	2.207	3.095	10.3	20.6	4 21	11 49.35	+0 33.6	2.066	2.955	10.9	20.9
5 1	11 45.76	+0 32.3	2.288	3.090	13.2	20.8	5 1	11 45.82	+1 16.0	2.148	2.952	13.9	21.1
<b>408989</b>	2002 TW <sub>141</sub>		3 22.8 123°97	8.0/15.1	18		<b>38320</b>	1999 RT <sub>120</sub>		3 22.8 194°07	0.5/22.0	18	
2 21	12 38.05	+22 38.2	2.031	2.888	11.7	22.0	2 21	12 26.07	-1 52.3	2.966	3.817	8.6	20.1
3 2	12 29.99	+23 39.2	1.997	2.905	9.4	21.8	3 2	12 21.38	-0 58.5	2.887	3.815	6.0	19.9
3 12	12 20.14	+24 27.0	1.989	2.922	8.1	21.8	3 12	12 15.59	+0 2 7	2.835	3.812	3.1	19.7
3 22	12 9.46	+24 54.9	2.008	2.939	8.4	21.8	3 22	12 9.16	+1 7 7	2.813	3.809	0.5	19.5
4 1	11 59.01	+24 58.6	2.055	2.955	10.1	22.0	4 1	12 2.65	+2 11.8	2.823	3.806	3.1	19.7
4 11	11 49.80	+24 37.3	2.127	2.970	12.4	22.1	4 11	11 56.65	+3 10.7	2.862	3.802	6.0	19.9
4 21	11 42.54	+23 53.6	2.220	2.984	14.6	22.3	4 21	11 51.64	+4 0 7	2.928	3.798	8.7	20.0
5 1	11 37.62	+22 51.4	2.332	2.998	16.4	22.5	5 1	11 47.98	+4 39.4	3.018	3.793	10.9	20.2
<b>244013</b>	2001 SY <sub>114</sub>		3 22.8 181°43	1°6/20.9	18		<b>495420</b>	2014 SM <sub>154</sub>		3 22.8 292°48	1°6/24.1	17	
2 21	12 29.91	+3 20.6	2.610	3.470	9.3	20.7	2 21	12 30.81	-6 58.1	1.417	2.276	15.7	21.0
3 2	12 24.15	+3 50.4	2.538	3.471	6.4	20.5	3 2	12 25.91	-6 36.7	1.332	2.260	11.6	20.7
3 12	12 17.07	+4 23.9	2.493	3.471	3.4	20.3	3 12	12 18.49	-5 55.5	1.269	2.243	6.8	20.4
3 22	12 9.24	+4 57.3	2.478	3.471	1.6	20.2	3 22	12 9.39	-4 58.4	1.231	2.226	2.0	20.0
4 1	12 1.35	+5 26.5	2.493	3.471	4.1	20.4	4 1	11 59.86	-3 52.5	1.219	2.209	4.8	20.2
4 11	11 54.11	+5 47.9	2.538	3.470	7.1	20.5	4 11	11 51.29	-2 47.4	1.233	2.193	10.0	20.4
4 21	11 48.08	+5 59.2	2.608	3.469	9.9	20.7	4 21	11 44.83	-1 51.8	1.269	2.177	14.9	20.6
5 1	11 43.68	+5 59.1	2.702	3.467	12.3	20.9	5 1	11 41.23	-1 12.1	1.325	2.161	19.2	20.9
<b>372953</b>	2011 BJ <sub>86</sub>		3 22.8 357°09	2°8/20.2	16		<b>381591</b>	2008 UW <sub>343</sub>		3 22.8 157°10	3°4/26.8	17	
2 21	12 28.99	+3 20.6	1.605	2.485	12.9	21.2	2 21	12 29.40	-14 18.1	2.330	3.136	12.2	21.3
3 2	12 24.14	+4 22.9	1.542	2.484	9.0	20.9	3 2	12 23.99	-14 5 8	2.250	3.140	9.4	21.2
3 12	12 17.28	+5 32.7	1.504	2.484	4.9	20.7	3 12	12 17.08	-13 36.5	2.196	3.145	6.4	21.0
3 22	12 9.26	+6 42.2	1.492	2.483	3.0	20.5	3 22	12 9.28	-12 52.2	2.168	3.149	3.9	20.8
4 1	12 1.14	+7 43.0	1.507	2.483	6.3	20.8	4 1	12 1.38	-11 56.7	2.169	3.152	3.9	20.8
4 11	11 54.04	+8 28.2	1.548	2.483	10.5	21.0	4 11	11 54.19	-10 55.6	2.199	3.156	6.5	21.0
4 21	11 48.77	+8 53.8	1.611	2.483	14.4	21.2	4 21	11 48.37	-9 55.0	2.256	3.158	9.5	21.2
5 1	11 45.88	+8 58.6	1.694	2.484	17.5	21.4	5 1	11 44.38	-9 0 0	2.337	3.161	12.3	21.4
<b>186184</b>	2001 VT		3 22.8 115°49	6°3/16.3	18		<b>96151</b>	4239 T <sub>-3</sub>		3 22.8 175°07	1°2/21.4	17	
2 21	12 35.84	+17 57.5	2.151	3.015	10.8	20.8	2 21	12 28.74	-0 22.0	2.132	2.994	11.0	20.4
3 2	12 28.33	+18 57.3	2.116	3.038	8.3	20.7	3 2	12 23.58	+0 39.1	2.061	2.995	7.7	20.2
3 12	12 19.24	+19 48.6	2.109	3.059	6.5	20.6	3 12	12 16.87	+1 49.2	2.018	2.997	4.0	20.0
3 22	12 9.40	+20 24.9	2.129	3.080	6.7	20.7	3 22	12 9.26	+3 2 7	2.003	2.998	1.3	19.8
4 1	11 59.76	+20 41.8	2.178	3.100	8.5	20.8	4 1	12 1.58	+4 12.9	2.017	2.998	4.4	20.0
4 11	11 51.21	+20 37.7	2.253	3.120	10.9	21.0	4 11	11 54.65	+5 13.7	2.060	2.998	8.1	20.2
4 21	11 44.40	+20 13.6	2.352	3.139	13.2	21.2	4 21	11 49.15	+6 0 7	2.128	2.998	11.4	20.4
5 1	11 39.71	+19 32.2	2.469	3.157	15.2	21.4	5 1	11 45.53	+6 31.5	2.218	2.998	14.2	20.6
<b>219754</b>	2001 YD <sub>26</sub>		3 22.8 189°38	5°8/15.9	17		<b>285136</b>	1995 SR <sub>76</sub>		3 22.8 328°40	0°3/22.4	17	
2 21	12 32.85	+16 56.1	2.373	3.239	9.9	21.5	2 21	12 25.12	-4 49.5	2.094	2.950	11.4	20.5
3 2	12 26.34	+18 3 0	2.315	3.238	7.5	21.3	3 2	12 21.11	-3 28.2	2.016	2.946	8.1	20.2
3 12	12 18.27	+19 4 3	2.284	3.236	6.0	21.2	3 12	12 15.58	-1 52.5	1.965	2.943	4.3	20.0
3 22	12 9.34	+19 53.5	2.282	3.234	6.2	21.2	3 22	12 9.17	-0 8 4	1.943	2.939	0.3	19.7
4 1	12 0.37	+20 25.5	2.308	3.231	8.1	21.3	4 1	12 2.65	+1 36.1	1.950	2.936	3.9	20.0
4 11	11 52.20	+20 37.5	2.361	3.227	10.5	21.5	4 11	11 56.84	+3 12.9	1.986	2.933	7.8	20.2
4 21	11 45.51	+20 29.2	2.437	3.222	12.9	21.6	4 21	11 52.37	+4 35.8	2.048	2.930	11.3	20.4
5 1	11 40.72	+20 2 3	2.533	3.217	14.9	21.8	5 1	11 49.72	+5 40.7	2.132	2.927	14.2	20.6
<b>345543</b>	2006 QT <sub>112</sub>		3 22.8 148°83	4°0/28.5	17		<b>189826</b>	2002 RN <sub>177</sub>		3 22.8 274°96	2°0/24.2	17	
2 21	12 29.96	-18 44.5	3.118	3.884	10.3	21.9	2 21	12 32.44	-7 43.0	1.353	2.210	16.4	21.1
3 2	12 24.08	-18 51.5	3.037	3.894	8.3	21.7	3 2	12 27.21	-7 22.2	1.267	2.193	12.2	20.8
3 12	12 17.00	-18 43.8	2.981	3.904	6.2	21.6	3 12	12 19.27	-6 39.6	1.203	2.175	7.2	20.4
3 22	12 9.24	-18 22.2	2.953	3.914	4.5	21.5	3 22	12 9.47	-5 39.0	1.163	2.157	2.4	20.1
4 1	12 1.42	-17 48.8	2.955	3.923	4.2	21.5	4 1	11 59.15	-4 27.8	1.149	2.139	5.0	20.2
4 11	11 54.15	-17 7 2	2.986	3.932	5.6	21.6	4 11	11 49.84	-3 16.2	1.160	2.121	10.5	20.4
4 21	11 47.95	-16 21.6	3.046	3.939	7.6	21.7	4 21	11 42.77	-2 13.9	1.194	2.102	15.6	20.7
5 1	11 43.22	-15 36.4	3.131	3.947	9.6	21.9	5 1	11 38.78	-1 28.3	1.247	2.083	20.1	20.9
<b>145643</b>	4064 P-L		3 22.8 227°03	0°7/23.6	18		<b>368768</b>	2005 WA <sub>3</sub>		3 22.8 174°57	5°4/16.1	16	
2 21	12 28.76	-5 11 5	2.623	3.463	9.9	20.8	2 21	12 32.23	+15 55.5	2.471	3.337	9.	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>416007</b>	2002 <i>CJ</i> <sub>29</sub>		3 22.8 13°55'	5°0'/26.3	17		<b>330033</b>	2005 <i>UB</i> <sub>199</sub>		3 22.8 286°06'	3°9'/19.4	17	
2 21	12 33.75	-12 37.0	1.566	2.395	16.0	19.8	2 21	12 32.17	+ 7 32.1	1.701	2.579	12.4	20.5
3 2	12 27.71	-13 20.9	1.495	2.397	12.4	19.6	3 2	12 26.44	+ 8 18.2	1.626	2.566	8.8	20.2
3 12	12 19.31	-13 45.5	1.446	2.400	8.6	19.4	3 12	12 18.59	+ 9 6.9	1.576	2.553	5.2	20.0
3 22	12 9.46	-13 50.9	1.422	2.403	5.5	19.2	3 22	12 9.43	+ 9 51.2	1.553	2.539	4.1	19.9
4 1	11 59.38	-13 39.4	1.424	2.406	5.7	19.2	4 1	12 0.05	+10 23.9	1.557	2.526	7.1	20.0
4 11	11 50.38	-13 16.9	1.453	2.410	9.1	19.4	4 11	11 51.60	+10 39.6	1.587	2.512	11.1	20.2
4 21	11 43.46	-12 50.3	1.505	2.415	12.8	19.7	4 21	11 44.99	+10 36.0	1.640	2.499	14.8	20.4
5 1	11 39.26	-12 26.3	1.578	2.420	16.3	19.9	5 1	11 40.85	+10 12.8	1.712	2.486	18.0	20.6
<b>6528</b>	Boden		3 22.8 190°37'	0°4'/23.2	18		<b>25847</b>	2000 <i>EV</i> <sub>97</sub>		3 22.8 184°34'	3°4'/18.0	18	
2 21	12 34.28	- 4 13.0	1.796	2.646	13.3	18.3	2 21	12 27.45	+11 4.9	2.967	3.836	8.0	18.8
3 2	12 27.78	- 3 43.7	1.720	2.645	9.5	18.0	3 2	12 22.34	+11 49.5	2.903	3.836	5.7	18.7
3 12	12 19.24	- 3 1.3	1.669	2.644	5.2	17.8	3 12	12 16.10	+12 32.9	2.867	3.836	3.8	18.6
3 22	12 9.45	- 2 10.1	1.645	2.641	0.7	17.4	3 22	12 9.24	+13 10.8	2.860	3.835	3.6	18.5
4 1	11 59.51	- 1 16.5	1.651	2.638	4.2	17.7	4 1	12 2.34	+13 39.6	2.884	3.835	5.3	18.7
4 11	11 50.51	- 0 27.3	1.684	2.635	8.7	17.9	4 11	11 56.02	+13 56.4	2.935	3.834	7.6	18.8
4 21	11 43.34	+ 0 11.8	1.743	2.630	12.7	18.2	4 21	11 50.73	+14 0.1	3.011	3.833	9.8	18.9
5 1	11 38.58	+ 0 37.1	1.823	2.625	16.0	18.4	5 1	11 46.85	+13 50.5	3.109	3.832	11.7	19.1
<b>210557</b>	1999 <i>TO</i> <sub>65</sub>		3 22.8 305°27'	0°1'/22.8	17		<b>517677</b>	2015 <i>CT</i> <sub>64</sub>		3 22.8 86°46'	2°4'/20.5	15	
2 21	12 30.66	- 3 11.7	1.384	2.255	15.2	20.4	2 21	12 30.58	+ 3 40.1	1.858	2.731	11.9	21.5
3 2	12 25.82	- 2 45.1	1.302	2.238	11.0	20.1	3 2	12 24.99	+ 4 27.4	1.800	2.739	8.2	21.3
3 12	12 18.45	- 2 2.5	1.243	2.222	6.0	19.8	3 12	12 17.65	+ 5 19.8	1.768	2.747	4.4	21.1
3 22	12 9.41	- 1 9.3	1.209	2.205	0.5	19.3	3 22	12 9.35	+ 6 11.2	1.763	2.755	2.5	21.0
4 1	11 59.96	- 0 13.2	1.200	2.189	5.2	19.6	4 1	12 1.05	+ 6 55.2	1.787	2.764	5.5	21.2
4 11	11 51.52	+ 0 36.6	1.217	2.173	10.6	19.9	4 11	11 53.71	+ 7 26.5	1.838	2.772	9.2	21.5
4 21	11 45.21	+ 1 13.2	1.256	2.158	15.5	20.1	4 21	11 48.04	+ 7 42.2	1.913	2.780	12.7	21.7
5 1	11 41.78	+ 1 31.7	1.314	2.143	19.6	20.3	5 1	11 44.51	+ 7 41.4	2.008	2.788	15.5	21.9
<b>51301</b>	2000 <i>KX</i> <sub>54</sub>		3 22.8 277°14'	5°8'/16.2	18		<b>88887</b>	2001 <i>SD</i> <sub>288</sub>		3 22.8 61°44'	4°8'/16.8	18	
2 21	12 29.79	+15 20.6	2.115	2.991	10.4	18.7	2 21	12 27.02	+ 9 59.3	1.989	2.872	10.7	19.2
3 2	12 24.37	+16 26.1	2.055	2.986	7.9	18.5	3 2	12 22.35	+11 44.6	1.952	2.891	7.6	19.0
3 12	12 17.31	+17 27.1	2.021	2.980	6.0	18.4	3 12	12 16.18	+13 28.7	1.941	2.911	5.2	18.9
3 22	12 9.31	+18 16.7	2.014	2.975	6.2	18.4	3 22	12 9.24	+15 3.3	1.959	2.931	5.3	18.9
4 1	12 1.25	+18 49.0	2.035	2.969	8.3	18.5	4 1	12 2.37	+16 20.8	2.006	2.951	7.6	19.1
4 11	11 54.01	+19 0.7	2.082	2.963	11.0	18.6	4 11	11 56.39	+17 16.6	2.078	2.971	10.5	19.3
4 21	11 48.28	+18 51.3	2.151	2.958	13.6	18.8	4 21	11 51.91	+17 49.1	2.173	2.991	13.1	19.5
5 1	11 44.54	+18 22.0	2.238	2.952	15.9	19.0	5 1	11 49.32	+17 59.3	2.287	3.011	15.3	19.7
<b>173332</b>	1999 <i>VQ</i> <sub>209</sub>		3 22.8 93°70'	1°6'/24.2	18		<b>60025</b>	1999 <i>TY</i> <sub>52</sub>		3 22.8 210°22'	0°0'/22.8	18	
2 21	12 33.42	- 7 7.5	1.623	2.471	14.6	20.1	2 21	12 27.51	- 2 59.1	2.954	3.799	8.8	20.7
3 2	12 27.15	- 6 48.6	1.566	2.487	10.6	19.9	3 2	12 22.43	- 2 27.8	2.869	3.793	6.2	20.6
3 12	12 18.85	- 6 13.6	1.532	2.504	6.2	19.7	3 12	12 16.18	- 1 49.0	2.811	3.786	3.3	20.4
3 22	12 9.43	- 5 26.8	1.525	2.520	1.9	19.5	3 22	12 9.25	- 1 5.6	2.783	3.779	0.3	20.1
4 1	12 0.04	- 4 34.5	1.546	2.535	4.1	19.6	4 1	12 2.23	- 0 21.4	2.786	3.772	2.8	20.3
4 11	11 51.83	- 3 44.2	1.594	2.551	8.5	19.9	4 11	11 55.70	+ 0 19.7	2.818	3.764	5.8	20.5
4 21	11 45.60	- 3 2.1	1.667	2.566	12.5	20.2	4 21	11 50.18	+ 0 54.3	2.878	3.756	8.5	20.7
5 1	11 41.85	- 2 32.5	1.761	2.581	15.8	20.4	5 1	11 46.06	+ 1 19.9	2.962	3.747	10.9	20.8
<b>365544</b>	2010 <i>SY</i> <sub>33</sub>		3 22.8 187°25'	0°1'/22.7	16		<b>280182</b>	2002 <i>RP</i> <sub>182</sub>		3 22.8 221°29'	4°5'/28.3	17	
2 21	12 32.61	- 2 51.2	2.101	2.951	11.7	22.2	2 21	12 28.65	-18 12.4	2.412	3.197	12.4	21.1
3 2	12 26.36	- 2 17.1	2.024	2.950	8.3	22.0	3 2	12 23.54	-18 4.6	2.320	3.191	10.0	20.9
3 12	12 18.39	- 1 32.6	1.973	2.949	4.4	21.7	3 12	12 16.90	-17 37.6	2.251	3.184	7.3	20.7
3 22	12 9.40	- 0 41.9	1.951	2.948	0.3	21.4	3 22	12 9.31	-16 52.5	2.209	3.177	5.0	20.6
4 1	12 0.29	+ 0 9.2	1.959	2.945	3.9	21.7	4 1	12 1.55	-15 52.4	2.195	3.170	4.7	20.5
4 11	11 51.98	+ 0 55.2	1.996	2.942	7.8	21.9	4 11	11 54.42	-14 42.9	2.210	3.163	6.7	20.6
4 21	11 45.22	+ 1 31.4	2.059	2.939	11.3	22.1	4 21	11 48.59	-13 30.3	2.251	3.155	9.5	20.8
5 1	11 40.50	+ 1 54.9	2.144	2.934	14.3	22.3	5 1	11 44.57	-12 20.9	2.317	3.147	12.1	20.9
<b>56286</b>	1999 <i>LG</i> <sub>9</sub>		3 22.8 147°64'	5°8'/31.9	18		<b>376234</b>	2011 <i>EN</i> <sub>44</sub>		3 22.8 167°40'	1°7'/21.3	17	
2 21	12 27.37	-26 46.0	2.778	3.500	12.4	19.0	2 21	12 31.54	+ 2 15.6	1.880	2.748	12.0	20.1
3 2	12 22.44	-26 21.3	2.690	3.507	10.5	18.8	3 2	12 25.73	+ 2 46.5	1.812	2.748	8.3	19.9
3 12	12 16.20	-25 34.3	2.625	3.513	8.4	18.7	3 12	12 18.09	+ 3 23.6	1.769	2.749	4.4	19.6
3 22	12 9.23	-24 25.9	2.585	3.519	6.6	18.6	3 22	12 9.40	+ 4 1.7	1.755	2.749	1.7	19.4
4 1	12 2.22	-22 59.2	2.573	3.525	5.8	18.5	4 1	12 0.63	+ 4 35.1	1.768	2.749	5.0	19.7
4 11	11 55.86	-21 19.7	2.591	3.531	6.6	18.6	4 11	11 52.76	+ 4 58.6	1.809	2.749	8.9	19.9
4 21	11 50.71	-19 34.3	2.637	3.536	8.4	18.7	4 21	11 46.57	+ 5 9.1	1.874	2.749	12.5	20.1
5 1	11 47.19	-17 49.9	2.709	3.541	10.5	18.9	5 1	11 42.56	+ 5 5.1	1.961	2.749	15.5	20.3
<b>140340</b>	2001 <i>TO</i> <sub>7</sub>		3 22.8 98°13'	2°6'/19.8	18		<b>301068</b>	2008 <i>UH</i> <sub>151</sub>		3 22.8 141°70'	0°2'/23.0	18	
2 21	12 30.95	+ 6 56.0	2.454	3.321	9.6	20.2	2 21	12 33.58	- 4 22.9	1.643	2.498	14.1	21.9
3 2	12 24.83	+ 7 31.7	2.405	3.340	6.7	20.0	3 2	12 27.32	- 3 41.2	1.580	2.508	10.0	21.6
3 12	12 17.40	+ 8 8.2	2.384	3.359	3.8	19.9	3 12	12 18.99	- 2 45.1	1.541	2.517	5.4	21.4
3 22	12 9.32	+ 8 41.0	2.391	3.378	2.7	19.8	3 22	12 9.47	- 1 40.2	1.529	2.525	0.6	21.0
4 1	12 1.32	+ 9 6.0	2.429	3.397	4.9	20.0	4 1	11 59.93	- 0 34.2	1.545	2.533	4.4	21.4
4 11	11 54.12	+ 9 20.1	2.495	3.416	7.8	20.2	4 11	11 51.49	+ 0 25.2	1.589	2.540	9.0	21.6
4 21	11 48.27	+ 9 21.8	2.587	3.434	10.4	20.4	4 21	11 45.01	+ 1 11.9	1.657	2.547	13.1	21.9
5 1	11 44.13	+ 9 10.9	2.700	3.451	12.6	20.6	5 1	11 41.02	+ 1 42.4	1.746	2.553	16.4	22.1
<b>89949</b>	2002 <i>GS</i> <sub>118</sub>		3 22.8 145°40'	2°3'/20.2	17		<b>129169</b>	2005 <i>JU</i> <sub>77</sub>		3 22.8 213°00'	4°1'/17.8	17	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>174723</b>	2003 <i>UG</i> <sub>159</sub>		3 22.8 55°76'	0°4/23.1	18		<b>340817</b>	2006 <i>UE</i> <sub>80</sub>		3 22.8 56°02'	3°9/18.7	17	
2 21	12 30.68	- 4 54.4	1.362	2.230	15.7	20.1	2 21	12 30.18	+10 13.1	2.159	3.034	10.3	20.5
3 2	12 25.47	- 4 9.5	1.311	2.245	11.1	19.8	3 2	12 24.53	+10 54.8	2.105	3.041	7.3	20.4
3 12	12 18.04	- 3 7.6	1.283	2.261	6.0	19.6	3 12	12 17.36	+11 35.1	2.077	3.049	4.7	20.2
3 22	12 9.41	- 1 55.8	1.281	2.277	0.7	19.2	3 22	12 9.39	+12 8.7	2.077	3.057	4.1	20.2
4 1	12 0.83	- 0 43.3	1.304	2.293	4.8	19.6	4 1	12 1.43	+12 30.6	2.105	3.064	6.3	20.3
4 11	11 53.56	+ 0 20.6	1.354	2.310	9.7	19.9	4 11	11 54.33	+12 37.7	2.161	3.072	9.3	20.5
4 21	11 48.45	+ 1 9.5	1.426	2.327	14.0	20.2	4 21	11 48.71	+12 28.9	2.240	3.080	12.1	20.7
5 1	11 45.99	+ 1 39.5	1.517	2.343	17.6	20.5	5 1	11 44.98	+12 4.8	2.340	3.088	14.4	20.9
<b>358540</b>	2007 <i>TS</i> <sub>92</sub>		3 22.8 277°71'	0°2/23.0	14 C		<b>346231</b>	2008 <i>AX</i> <sub>36</sub>		3 22.8 86°37'	7°8/2.1	17	
2 21	12 32.03	- 4 17.6	1.552	2.412	14.5	21.7	2 21	12 30.08	-29 5.0	2.443	3.153	14.3	20.5
3 2	12 26.73	- 3 40.1	1.457	2.387	10.5	21.4	3 2	12 24.58	-29 32.7	2.368	3.166	12.3	20.4
3 12	12 18.96	- 2 45.2	1.385	2.361	5.8	21.0	3 12	12 17.46	-29 36.5	2.314	3.180	10.3	20.3
3 22	12 9.51	- 1 37.8	1.339	2.335	0.6	20.6	3 22	12 9.40	-29 15.6	2.284	3.194	8.6	20.2
4 1	11 59.51	- 0 25.6	1.321	2.309	4.9	20.8	4 1	12 1.24	-28 31.7	2.279	3.208	7.8	20.2
4 11	11 50.32	+ 0 42.1	1.329	2.282	10.2	21.1	4 11	11 53.85	-27 29.3	2.301	3.222	8.3	20.2
4 21	11 43.07	+ 1 37.2	1.360	2.254	15.0	21.3	4 21	11 47.92	-26 15.2	2.348	3.235	9.8	20.3
5 1	11 38.55	+ 2 14.3	1.411	2.227	19.2	21.5	5 1	11 43.95	-24 56.6	2.419	3.248	11.7	20.5
<b>216822</b>	2006 <i>VD</i> <sub>7</sub>		3 22.8 238°09'	0°1/22.9	17		<b>106088</b>	2000 <i>SB</i> <sub>359</sub>		3 22.8 257°95'	7°9/31.3	18	
2 21	12 27.71	- 3 15.2	2.474	3.324	10.1	21.3	2 21	12 32.56	-27 24.9	2.536	3.251	13.7	19.8
3 2	12 22.76	- 2 42.9	2.391	3.318	7.2	21.1	3 2	12 26.49	-28 17.1	2.437	3.240	11.9	19.6
3 12	12 16.44	- 2 1.4	2.336	3.311	3.9	20.9	3 12	12 18.60	-28 48.9	2.359	3.229	10.0	19.5
3 22	12 9.30	- 1 14.3	2.309	3.305	0.3	20.6	3 22	12 9.51	-28 57.9	2.306	3.218	8.5	19.3
4 1	12 2.04	- 0 26.1	2.311	3.298	3.3	20.8	4 1	12 0.03	-28 44.0	2.279	3.206	7.9	19.3
4 11	11 55.38	+ 0 18.3	2.343	3.292	6.7	21.0	4 11	11 51.12	-28 10.3	2.279	3.194	8.7	19.3
4 21	11 49.93	+ 0 55.0	2.401	3.285	9.8	21.2	4 21	11 43.59	-27 22.1	2.304	3.183	10.3	19.4
5 1	11 46.12	+ 1 21.1	2.482	3.278	12.5	21.4	5 1	11 38.06	-26 26.2	2.353	3.171	12.4	19.5
<b>262785</b>	2006 <i>YD</i> <sub>20</sub>		3 22.8 168°36'	2°6/20.0	16		<b>105758</b>	2000 <i>SP</i> <sub>100</sub>		3 22.8 86°77'	3°9/27.1	18	
2 21	12 31.46	+ 4 32.9	2.144	3.011	10.7	21.6	2 21	12 30.45	-14 43.3	2.409	3.210	12.0	19.0
3 2	12 25.48	+ 5 28.9	2.079	3.015	7.5	21.4	3 2	12 24.70	-14 56.7	2.337	3.221	9.4	18.8
3 12	12 17.89	+ 6 29.2	2.041	3.019	4.1	21.2	3 12	12 17.48	-14 54.6	2.289	3.233	6.6	18.6
3 22	12 9.41	+ 7 27.9	2.033	3.022	2.7	21.1	3 22	12 9.41	-14 37.9	2.269	3.244	4.3	18.5
4 1	12 0.88	+ 8 18.9	2.053	3.025	5.4	21.3	4 1	12 1.27	-14 9.4	2.277	3.256	4.2	18.5
4 11	11 53.18	+ 8 57.4	2.102	3.027	8.8	21.5	4 11	11 53.85	-13 33.6	2.314	3.267	6.4	18.7
4 21	11 46.96	+ 9 20.4	2.175	3.028	11.9	21.7	4 21	11 47.79	-12 55.6	2.378	3.278	9.1	18.9
5 1	11 42.71	+ 9 27.1	2.270	3.029	14.5	21.9	5 1	11 43.53	-12 20.0	2.465	3.290	11.7	19.1
<b>269036</b>	2007 <i>FN</i> <sub>30</sub>		3 22.8 226°97'	0°1/22.8	17		<b>187578</b>	2006 <i>WQ</i> <sub>26</sub>		3 22.8 67°48'	2°6/20.6	18	
2 21	12 29.58	- 3 40.3	2.051	2.904	11.7	21.6	2 21	12 31.77	+ 3 27.1	1.577	2.454	13.3	20.4
3 2	12 24.32	- 2 59.6	1.970	2.898	8.4	21.4	3 2	12 26.08	+ 4 15.4	1.521	2.462	9.3	20.2
3 12	12 17.36	- 2 6.9	1.915	2.891	4.5	21.1	3 12	12 18.35	+ 5 9.9	1.490	2.470	5.0	19.9
3 22	12 9.37	- 1 6.9	1.888	2.885	0.4	20.8	3 22	12 9.48	+ 6 3.4	1.485	2.478	2.7	19.8
4 1	12 1.23	- 0 5.5	1.890	2.877	3.8	21.0	4 1	12 0.61	+ 6 48.4	1.508	2.486	6.1	20.0
4 11	11 53.83	+ 0 50.9	1.921	2.870	7.9	21.3	4 11	11 52.87	+ 7 19.0	1.556	2.494	10.3	20.3
4 21	11 47.91	+ 1 37.1	1.977	2.862	11.5	21.5	4 21	11 47.09	+ 7 31.8	1.628	2.502	14.1	20.6
5 1	11 43.99	+ 2 9.6	2.054	2.854	14.5	21.7	5 1	11 43.77	+ 7 26.2	1.719	2.510	17.3	20.8
<b>425940</b>	2011 <i>GQ</i> <sub>70</sub>		3 22.8 263°04'	1°6/24.7	17		<b>373444</b>	1999 <i>UG</i> <sub>18</sub>		3 22.8 15°90'	2°1/20.9	18	
2 21	12 27.44	- 9 32.4	2.133	2.968	12.1	21.0	2 21	12 30.47	+ 2 53.7	1.798	2.671	12.2	20.6
3 2	12 22.84	- 8 43.8	2.040	2.954	9.0	20.8	3 2	12 25.05	+ 3 33.4	1.733	2.671	8.5	20.4
3 12	12 16.59	- 7 37.6	1.971	2.939	5.4	20.6	3 12	12 17.77	+ 4 19.4	1.693	2.672	4.5	20.2
3 22	12 9.32	- 6 17.7	1.931	2.924	2.0	20.3	3 22	12 9.44	+ 5 5.6	1.680	2.673	2.2	20.0
4 1	12 1.83	- 4 50.1	1.920	2.909	3.4	20.4	4 1	12 1.03	+ 5 45.8	1.695	2.674	5.4	20.2
4 11	11 54.99	- 3 22.4	1.937	2.893	7.3	20.6	4 11	11 53.55	+ 6 14.3	1.737	2.676	9.4	20.5
4 21	11 49.53	- 2 1.7	1.981	2.878	10.9	20.8	4 21	11 47.77	+ 6 27.9	1.803	2.677	13.0	20.7
5 1	11 45.98	- 0 53.5	2.048	2.862	14.1	20.9	5 1	11 44.22	+ 6 25.2	1.889	2.679	16.0	20.9
<b>23018</b>	Annmoriarty		3 22.8 253°66'	2°3/20.6	18		<b>257680</b>	1999 <i>VR</i> <sub>134</sub>		3 22.8 263°10'	0°6/22.3	17	
2 21	12 32.01	+ 2 45.2	1.814	2.683	12.2	19.0	2 21	12 32.21	- 1 45.1	1.713	2.575	13.2	21.5
3 2	12 26.30	+ 3 39.3	1.729	2.667	8.6	18.7	3 2	12 26.58	- 1 9.2	1.625	2.558	9.4	21.2
3 12	12 18.54	+ 4 41.7	1.671	2.650	4.6	18.4	3 12	12 18.76	- 0 21.0	1.562	2.540	5.0	20.9
3 22	12 9.48	+ 5 45.9	1.639	2.632	2.4	18.2	3 22	12 9.53	+ 0 34.5	1.526	2.522	0.6	20.5
4 1	12 0.12	+ 6 44.4	1.637	2.614	5.8	18.4	4 1	11 59.94	+ 1 30.4	1.518	2.504	4.8	20.8
4 11	11 51.57	+ 7 30.2	1.661	2.595	10.0	18.6	4 11	11 51.19	+ 2 19.0	1.537	2.485	9.5	21.0
4 21	11 44.73	+ 7 59.0	1.709	2.576	13.9	18.8	4 21	11 44.23	+ 2 54.9	1.580	2.466	13.8	21.2
5 1	11 40.23	+ 8 8.8	1.778	2.556	17.3	19.0	5 1	11 39.75	+ 3 14.2	1.644	2.447	17.5	21.4
<b>376413</b>	2012 <i>GK</i> <sub>10</sub>		3 22.8 271°77'	0°1/22.8	17		<b>289276</b>	2004 <i>XM</i> <sub>149</sub>		3 22.8 44°04'	1°5/21.7	18	
2 21	12 31.46	- 2 58.2	1.807	2.665	12.9	21.8	2 21	12 32.06	+ 0 7.3	1.258	2.139	15.7	20.9
3 2	12 25.96	- 2 31.2	1.718	2.647	9.2	21.5	3 2	12 26.62	+ 0 46.6	1.208	2.150	11.0	20.7
3 12	12 18.39	- 1 51.9	1.653	2.629	5.0	21.2	3 12	12 18.74	+ 1 37.4	1.180	2.161	5.7	20.4
3 22	12 9.48	- 1 4.4	1.615	2.611	0.4	20.8	3 22	12 9.51	+ 2 31.8	1.178	2.173	1.5	20.1
4 1	12 0.24	- 0 14.9	1.605	2.592	4.3	21.1	4 1	12 0.33	+ 3 20.8	1.201	2.186	5.9	20.5
4 11	11 51.77	+ 0 29.9	1.623	2.574	8.9	21.3	4 11	11 52.56	+ 3 56.8	1.248	2.198	11.0	20.8
4 21	11 44.99	+ 1 4.4	1.665	2.554	13.0	21.5	4 21	11 47.15	+ 4 15.0	1.317	2.212	15.4	21.1
5 1	11 40.55	+ 1 24.8	1.728	2.535	16.6	21.7	5 1	11 44.59	+ 4 13.9	1.405	2.225	19.0	21.3
<b>40384</b>	1999 <i>NC</i> <sub>49</sub>		3 22.8 223°47'	0°2/22									

EPHEMERIDES

3 22.8

3 22.8

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>99437</b>	2002 <i>BS</i> <sub>25</sub>		3 22.8	24° 90	4° 9/26.5	18	<b>468217</b>	2015 <i>BH</i> <sub>87</sub>		3 22.8	262° 99	3° 1/19.5	17
2 21	12 32.09	-13 12.9	1.329	2.168	17.7	19.2	2 21	12 28.73	+ 5 2.6	1.909	2.786	11.4	21.1
3 2	12 26.81	-13 28.2	1.263	2.171	13.7	19.0	3 2	12 23.78	+ 6 10.6	1.843	2.784	7.9	20.9
3 12	12 18.97	-13 18.7	1.217	2.175	9.3	18.7	3 12	12 17.10	+ 7 23.8	1.803	2.781	4.5	20.7
3 22	12 9.54	-12 45.7	1.195	2.179	5.5	18.5	3 22	12 9.42	+ 8 35.0	1.791	2.779	3.3	20.6
4 1	11 59.92	-11 54.5	1.197	2.183	5.8	18.5	4 1	12 1.64	+ 9 36.8	1.807	2.777	6.2	20.8
4 11	11 51.55	-10 54.3	1.225	2.188	9.7	18.8	4 11	11 54.71	+10 23.4	1.850	2.774	9.8	21.0
4 21	11 45.50	- 9 54.8	1.275	2.193	14.1	19.0	4 21	11 49.34	+10 51.5	1.916	2.772	13.1	21.2
5 1	11 42.43	- 9 4.3	1.345	2.198	17.9	19.3	5 1	11 46.04	+11 0.0	2.002	2.770	15.9	21.4
<b>203377</b>	2001 <i>XL</i> <sub>38</sub>		3 22.8	188° 17	1° 7/24.2	18	<b>163392</b>	2002 <i>QH</i> <sub>32</sub>		3 22.8	271° 32	1° 0/21.8	17
2 21	12 35.32	- 6 54.6	1.748	2.589	14.0	20.6	2 21	12 30.27	+ 0 27.0	2.072	2.935	11.2	20.6
3 2	12 28.63	- 6 46.5	1.671	2.589	10.3	20.3	3 2	12 24.85	+ 0 57.4	1.988	2.922	7.9	20.4
3 12	12 19.78	- 6 23.4	1.618	2.588	6.1	20.1	3 12	12 17.70	+ 1 35.5	1.930	2.908	4.2	20.1
3 22	12 9.61	- 5 48.4	1.593	2.587	2.0	19.8	3 22	12 9.47	+ 2 17.0	1.899	2.895	1.0	19.9
4 1	11 59.25	- 5 6.7	1.596	2.585	4.1	19.9	4 1	12 1.04	+ 2 56.4	1.898	2.881	4.4	20.1
4 11	11 49.87	- 4 24.8	1.627	2.582	8.5	20.2	4 11	11 53.32	+ 3 28.4	1.925	2.868	8.3	20.3
4 21	11 42.39	- 3 48.9	1.683	2.579	12.6	20.4	4 21	11 47.06	+ 3 49.3	1.976	2.854	11.8	20.5
5 1	11 37.42	- 3 23.6	1.761	2.575	16.0	20.7	5 1	11 42.82	+ 3 56.6	2.049	2.840	14.9	20.7
<b>257952</b>	2000 <i>YK</i> <sub>113</sub>		3 22.8	46° 14	5° 6/18.2	18	<b>497605</b>	2006 <i>MF</i>		3 22.8	209° 16	5° 6/15.6	17
2 21	12 31.34	+ 9 8.8	1.353	2.243	14.2	19.5	2 21	12 30.15	+16 32.4	2.462	3.332	9.4	21.8
3 2	12 26.02	+10 28.9	1.306	2.251	10.1	19.3	3 2	12 24.50	+17 41.9	2.402	3.327	7.2	21.6
3 12	12 18.39	+11 49.6	1.283	2.258	6.5	19.1	3 12	12 17.38	+18 46.6	2.368	3.322	5.7	21.5
3 22	12 9.49	+13 0.3	1.285	2.266	6.0	19.1	3 22	12 9.44	+19 40.3	2.363	3.316	6.0	21.5
4 1	12 0.63	+13 51.6	1.313	2.274	9.1	19.3	4 1	12 1.44	+20 17.8	2.387	3.309	7.8	21.6
4 11	11 53.10	+14 17.5	1.365	2.283	13.1	19.5	4 11	11 54.14	+20 36.2	2.436	3.303	10.2	21.8
4 21	11 47.79	+14 17.1	1.437	2.291	16.8	19.8	4 21	11 48.17	+20 34.7	2.509	3.296	12.5	21.9
5 1	11 45.20	+13 52.1	1.526	2.300	19.8	20.0	5 1	11 43.97	+20 14.6	2.600	3.288	14.5	22.1
<b>128637</b>	2004 <i>RK</i> <sub>22</sub>		3 22.8	212° 83	0° 1/22.7	18	<b>208173</b>	2000 <i>QM</i> <sub>24</sub>		3 22.8	202° 73	0° 5/22.1	18 R
2 21	12 30.76	- 2 38.3	2.350	3.199	10.6	21.0	2 21	12 26.34	- 2 26.8	2.898	3.747	8.8	20.7
3 2	12 25.00	- 2 4.4	2.266	3.192	7.5	20.7	3 2	12 21.65	- 1 23.5	2.815	3.743	6.2	20.5
3 12	12 17.69	- 1 21.0	2.208	3.184	4.0	20.5	3 12	12 15.82	- 0 11.6	2.761	3.738	3.2	20.3
3 22	12 9.45	- 0 32.0	2.179	3.175	0.3	20.2	3 22	12 9.32	+ 1 4.7	2.737	3.733	0.5	20.0
4 1	12 1.05	+ 0 17.6	2.180	3.166	3.6	20.4	4 1	12 2.74	+ 2 20.3	2.744	3.727	3.2	20.3
4 11	11 53.31	+ 1 2.6	2.211	3.156	7.2	20.6	4 11	11 56.66	+ 3 30.3	2.781	3.721	6.2	20.5
4 21	11 46.89	+ 1 39.0	2.268	3.146	10.5	20.8	4 21	11 51.59	+ 4 30.8	2.845	3.714	8.9	20.6
5 1	11 42.29	+ 2 3.7	2.347	3.135	13.3	21.0	5 1	11 47.90	+ 5 18.9	2.934	3.707	11.2	20.8
<b>173169</b>	1997 <i>ED</i> <sub>27</sub>		3 22.8	40° 86	5° 7/15.1	18	<b>184468</b>	2005 <i>NX</i> <sub>98</sub>		3 22.8	206° 70	2° 8/26.0	18
2 21	12 25.80	+12 50.1	2.090	2.974	10.2	19.2	2 21	12 29.11	-11 44.1	2.456	3.272	11.3	20.4
3 2	12 21.58	+14 47.0	2.043	2.980	7.5	19.1	3 2	12 23.81	-11 41.5	2.372	3.270	8.6	20.2
3 12	12 15.86	+16 41.7	2.024	2.986	5.8	19.0	3 12	12 17.05	-11 25.0	2.312	3.268	5.7	20.0
3 22	12 9.30	+18 25.4	2.032	2.992	6.2	19.0	3 22	12 9.42	-10 56.2	2.281	3.266	3.1	19.9
4 1	12 2.71	+19 50.5	2.069	2.998	8.5	19.3	4 1	12 1.66	-10 18.3	2.279	3.264	3.5	19.9
4 11	11 56.89	+20 52.1	2.132	3.005	11.1	19.3	4 11	11 54.53	- 9 36.1	2.306	3.262	6.3	20.1
4 21	11 52.49	+21 28.6	2.216	3.012	13.7	19.5	4 21	11 48.65	- 8 54.4	2.359	3.259	9.2	20.2
5 1	11 49.92	+21 41.1	2.319	3.019	15.7	19.7	5 1	11 44.51	- 8 17.6	2.436	3.257	11.9	20.4
<b>382380</b>	2013 <i>TE</i> <sub>120</sub>		3 22.8	163° 92	2° 5/20.2	17	<b>81322</b>	2000 <i>GC</i> <sub>20</sub>		3 22.8	95° 02	0° 1/22.9	18
2 21	12 33.38	+ 6 3.8	2.309	3.172	10.2	21.8	2 21	12 31.13	- 3 31.4	1.666	2.527	13.6	19.5
3 2	12 26.73	+ 6 36.5	2.244	3.178	7.1	21.6	3 2	12 25.65	- 2 57.1	1.600	2.531	9.7	19.3
3 12	12 18.55	+ 7 11.1	2.206	3.182	4.0	21.4	3 12	12 18.16	- 2 9.7	1.558	2.535	5.2	19.0
3 22	12 9.51	+ 7 43.0	2.197	3.187	2.6	21.3	3 22	12 9.51	- 1 14.4	1.543	2.540	0.4	18.7
4 1	12 0.45	+ 8 7.6	2.219	3.190	5.1	21.5	4 1	12 0.79	- 0 18.1	1.556	2.544	4.4	19.0
4 11	11 52.20	+ 8 21.2	2.269	3.193	8.3	21.7	4 11	11 53.07	+ 0 31.8	1.596	2.548	8.9	19.2
4 21	11 45.41	+ 8 22.1	2.345	3.196	11.2	21.9	4 21	11 47.20	+ 1 9.9	1.659	2.552	12.9	19.5
5 1	11 40.52	+ 8 9.8	2.443	3.198	13.7	22.1	5 1	11 43.71	+ 1 32.7	1.744	2.556	16.2	19.7
<b>222282</b>	2000 <i>SS</i> <sub>63</sub>		3 22.8	179° 12	0° 3/23.2	17	<b>467662</b>	2008 <i>TW</i> <sub>169</sub>		3 22.8	190° 25	1° 2/21.4	17
2 21	12 31.56	- 3 42.1	2.073	2.923	11.8	20.8	2 21	12 30.14	+ 1 9.1	2.463	3.321	9.9	22.7
3 2	12 25.67	- 3 18.8	1.998	2.924	8.4	20.6	3 2	12 24.46	+ 1 50.1	2.388	3.320	6.9	22.5
3 12	12 18.07	- 2 44.9	1.949	2.924	4.6	20.4	3 12	12 17.36	+ 2 37.3	2.340	3.318	3.6	22.3
3 22	12 9.49	- 2 4.2	1.929	2.925	0.6	20.1	3 22	12 9.45	+ 3 26.2	2.321	3.316	1.2	22.1
4 1	12 0.79	- 1 21.7	1.937	2.925	3.7	20.3	4 1	12 1.45	+ 4 12.1	2.333	3.313	4.0	22.3
4 11	11 52.90	- 0 42.9	1.974	2.924	7.6	20.6	4 11	11 54.12	+ 4 50.3	2.374	3.310	7.3	22.5
4 21	11 46.53	- 0 12.3	2.037	2.923	11.1	20.8	4 21	11 48.04	+ 5 17.8	2.441	3.306	10.3	22.7
5 1	11 42.20	+ 0 7.1	2.121	2.922	14.1	21.0	5 1	11 43.68	+ 5 32.5	2.530	3.302	12.9	22.9
<b>106918</b>	2000 <i>YZ</i> <sub>52</sub>		3 22.8	72° 56	1° 8/24.3	18	<b>519999</b>	2013 <i>TF</i> <sub>170</sub>		3 22.8	223° 84	3° 0/19.6	17
2 21	12 32.16	- 7 27.6	1.465	2.319	15.5	19.9	2 21	12 31.62	+ 6 45.6	2.190	3.059	10.5	21.8
3 2	12 26.54	- 7 6.7	1.405	2.329	11.4	19.7	3 2	12 25.68	+ 7 30.4	2.115	3.051	7.4	21.6
3 12	12 18.67	- 6 27.5	1.367	2.339	6.6	19.4	3 12	12 18.08	+ 8 17.8	2.067	3.043	4.3	21.4
3 22	12 9.53	- 5 34.5	1.354	2.349	2.1	19.2	3 22	12 9.51	+ 9 2.1	2.047	3.034	3.2	21.3
4 1	12 0.35	- 4 35.0	1.369	2.359	4.4	19.3	4 1	12 0.81	+ 9 37.8	2.057	3.025	5.7	21.4
4 11	11 52.37	- 3 37.6	1.409	2.369	9.1	19.6	4 11	11 52.86	+10 0.6	2.095	3.016	9.0	21.6
4 21	11 46.49	- 2 49.5	1.474	2.379	13.4	19.9	4 21	11 46.36	+10 8.2	2.158	3.006	12.1	21.8
5 1	11 43.27	- 2 15.6	1.558	2.389	17.0	20.2	5 1	11 41.82	+10 0.0	2.241	2.996	14.8	22.0
<b>500691</b>	2012 <i>VP</i> <sub>94</sub>												

EPHEMERIDES

3 22.8

3 22.9

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>422801</b>	2001 <i>XH</i> <sub>207</sub>		3 22.8 144°49	4.4/28.5	15		<b>110713</b>	2001 <i>TH</i> <sub>229</sub>		3 22.9 180°77	3.7/18.5	18	
2 21	12 30.88	-19 4.5	2.461	3.236	12.5	22.3	2 21	12 30.07	+10 11.8	2.487	3.357	9.3	20.0
3 2	12 25.00	-18 45.7	2.384	3.249	10.0	22.2	3 2	12 24.38	+10 58.8	2.423	3.357	6.6	19.9
3 12	12 17.65	-18 7.3	2.331	3.261	7.3	22.0	3 12	12 17.32	+11 45.1	2.387	3.358	4.3	19.7
3 22	12 9.48	-17 10.9	2.305	3.273	5.0	21.9	3 22	12 9.48	+12 25.5	2.379	3.358	3.8	19.7
4 1	12 1.27	-16 0.4	2.309	3.284	4.6	21.9	4 1	12 1.61	+12 55.5	2.402	3.357	5.9	19.8
4 11	11 53.81	-14 41.7	2.342	3.294	6.5	22.0	4 11	11 54.44	+13 11.8	2.451	3.357	8.6	20.0
4 21	11 47.72	-13 21.6	2.403	3.303	9.1	22.2	4 21	11 48.55	+13 13.1	2.526	3.356	11.2	20.1
5 1	11 43.44	-12 6.0	2.489	3.312	11.6	22.4	5 1	11 44.37	+12 59.3	2.621	3.355	13.4	20.3
<b>141648</b>	2002 <i>JJ</i> <sub>64</sub>		3 22.8 282°78	0.7/23.4	17		<b>357060</b>	2001 <i>OC</i> <sub>99</sub>		3 22.9 127°60	8.0/13.7	18	
2 21	12 30.91	- 5 18.1	1.565	2.425	14.4	20.6	2 21	12 34.13	+17 50.0	1.813	2.687	12.0	20.7
3 2	12 25.89	- 4 44.4	1.475	2.404	10.5	20.3	3 2	12 27.55	+20 6.2	1.783	2.707	9.4	20.5
3 12	12 18.52	- 3 53.1	1.407	2.382	5.9	20.0	3 12	12 19.07	+22 12.8	1.781	2.726	8.0	20.5
3 22	12 9.57	- 2 48.6	1.365	2.361	1.0	19.6	3 22	12 9.62	+23 59.0	1.807	2.744	8.7	20.6
4 1	12 0.18	- 1 38.5	1.350	2.339	4.6	19.8	4 1	12 0.28	+25 16.8	1.860	2.762	10.9	20.7
4 11	11 51.63	- 0 31.6	1.362	2.318	9.7	20.0	4 11	11 52.10	+26 2.9	1.937	2.778	13.5	20.9
4 21	11 44.98	+ 0 24.1	1.397	2.296	14.4	20.2	4 21	11 45.83	+26 18.6	2.034	2.793	15.9	21.1
5 1	11 40.97	+ 1 3.0	1.452	2.274	18.5	20.4	5 1	11 41.92	+26 7.5	2.148	2.808	17.8	21.3
<b>136578</b>	1981 <i>EL</i> <sub>45</sub>		3 22.8 17°66	4.1/26.2	18	19.4	<b>311304</b>	2005 <i>JU</i> <sub>50</sub>		3 22.9 21°17	1.7/21.5	18	
2 21	12 29.68	-12 30.7	1.395	2.238	16.8	19.4	2 21	12 29.93	+ 0 6.1	1.287	2.170	15.3	20.3
3 2	12 25.00	-12 25.5	1.328	2.240	12.9	19.1	3 2	12 25.18	+ 0 54.8	1.231	2.174	10.7	20.0
3 12	12 17.97	-11 55.8	1.282	2.243	8.5	18.9	3 12	12 18.06	+ 1 55.7	1.198	2.179	5.6	19.7
3 22	12 9.52	-11 4.6	1.260	2.247	4.6	18.7	3 22	12 9.55	+ 3 0.6	1.189	2.184	1.7	19.5
4 1	12 0.90	- 9 58.1	1.263	2.251	5.1	18.7	4 1	12 0.99	+ 4 0.0	1.206	2.190	6.0	19.8
4 11	11 53.44	- 8 46.1	1.292	2.256	9.2	18.9	4 11	11 53.71	+ 4 45.5	1.247	2.197	11.1	20.1
4 21	11 48.12	- 7 38.1	1.344	2.261	13.5	19.2	4 21	11 48.66	+ 5 11.8	1.310	2.204	15.5	20.4
5 1	11 45.53	- 6 41.9	1.416	2.267	17.3	19.4	5 1	11 46.38	+ 5 17.0	1.391	2.212	19.2	20.6
<b>341391</b>	2007 <i>TV</i> <sub>131</sub>		3 22.8 42°72	0.9/21.9	17		<b>135089</b>	2001 <i>QC</i> <sub>60</sub>		3 22.9 196°03	2.6/19.4	18	
2 21	12 29.02	- 0 26.8	1.882	2.748	12.0	20.9	2 21	12 28.42	+ 6 8.9	2.603	3.470	9.0	20.8
3 2	12 23.91	+ 0 7.4	1.823	2.758	8.4	20.7	3 2	12 23.21	+ 7 5.5	2.532	3.468	6.3	20.6
3 12	12 17.14	+ 0 50.1	1.790	2.769	4.4	20.5	3 12	12 16.70	+ 8 4.8	2.489	3.465	3.6	20.4
3 22	12 9.44	+ 1 36.1	1.784	2.780	0.9	20.2	3 22	12 9.45	+ 9 1.8	2.476	3.462	2.8	20.4
4 1	12 1.75	+ 2 19.6	1.807	2.792	4.3	20.5	4 1	12 2.12	+ 9 51.5	2.492	3.459	5.0	20.5
4 11	11 54.98	+ 2 54.9	1.857	2.803	8.3	20.8	4 11	11 55.40	+10 29.8	2.538	3.455	7.8	20.7
4 21	11 49.80	+ 3 18.4	1.931	2.815	11.7	21.0	4 21	11 49.85	+10 54.3	2.608	3.450	10.5	20.8
5 1	11 46.67	+ 3 27.8	2.026	2.828	14.7	21.2	5 1	11 45.89	+11 4.0	2.700	3.446	12.8	21.0
<b>33373</b>	1999 <i>BL</i> <sub>28</sub>		3 22.8 234°42	3.9/18.9	18		<b>379320</b>	2009 <i>WS</i> <sub>32</sub>		3 22.9 56°45	1.1/23.9	17	
2 21	12 32.68	+ 6 9.2	1.787	2.661	12.2	19.4	2 21	12 29.78	- 6 15.7	1.729	2.582	13.6	21.1
3 2	12 26.81	+ 7 30.5	1.709	2.647	8.6	19.2	3 2	12 24.62	- 5 47.0	1.667	2.592	9.8	20.9
3 12	12 18.86	+ 8 58.1	1.657	2.633	5.1	18.9	3 12	12 17.60	- 5 3.3	1.629	2.602	5.6	20.7
3 22	12 9.60	+10 23.5	1.632	2.617	4.2	18.8	3 22	12 9.54	- 4 9.3	1.617	2.613	1.4	20.4
4 1	12 0.07	+11 37.5	1.637	2.601	7.3	19.0	4 1	12 1.45	- 3 11.4	1.634	2.623	3.9	20.6
4 11	11 51.40	+12 33.1	1.668	2.584	11.2	19.2	4 11	11 54.35	- 2 16.9	1.677	2.634	8.1	20.9
4 21	11 44.48	+13 6.4	1.722	2.566	14.9	19.4	4 21	11 48.99	- 1 31.6	1.745	2.645	12.0	21.1
5 1	11 39.96	+13 16.5	1.795	2.548	18.0	19.5	5 1	11 45.88	- 0 59.6	1.834	2.656	15.2	21.4
<b>271895</b>	2004 <i>VA</i> <sub>43</sub>		3 22.8 185°19	0.2/22.9	17		<b>24961</b>	1997 <i>TO</i> <sub>24</sub>		3 22.9 226°48	1.5/20.9	18	
2 21	12 29.57	- 3 47.6	1.945	2.801	12.2	21.4	2 21	12 29.87	+ 2 58.5	2.908	3.764	8.6	20.2
3 2	12 24.37	- 3 11.8	1.872	2.801	8.7	21.2	3 2	12 24.18	+ 3 36.6	2.819	3.750	6.0	20.0
3 12	12 17.43	- 2 24.0	1.824	2.801	4.7	20.9	3 12	12 17.23	+ 4 19.0	2.758	3.736	3.2	19.8
3 22	12 9.48	- 1 28.9	1.804	2.801	0.5	20.6	3 22	12 9.52	+ 5 2.0	2.728	3.720	1.5	19.6
4 1	12 1.42	- 0 32.4	1.813	2.800	3.9	20.9	4 1	12 1.66	+ 5 41.5	2.728	3.704	3.8	19.8
4 11	11 54.19	+ 0 19.0	1.849	2.800	8.0	21.1	4 11	11 54.30	+ 6 13.9	2.758	3.688	6.7	19.9
4 21	11 48.51	+ 1 0.2	1.910	2.800	11.6	21.4	4 21	11 47.99	+ 6 36.3	2.816	3.671	9.4	20.1
5 1	11 44.90	+ 1 27.9	1.993	2.799	14.7	21.6	5 1	11 43.16	+ 6 47.3	2.896	3.653	11.7	20.2
<b>337721</b>	2001 <i>UB</i> <sub>44</sub>		3 22.8 80°83	5.8/16.8	18		<b>495093</b>	2011 <i>SH</i> <sub>80</sub>		3 22.9 155°81	0.5/23.3	18	
2 21	12 33.45	+17 24.9	2.253	3.120	10.3	20.5	2 21	12 32.19	- 5 48.8	1.648	2.501	14.2	22.1
3 2	12 26.69	+18 8.6	2.216	3.140	7.8	20.4	3 2	12 26.44	- 4 57.1	1.581	2.507	10.2	21.8
3 12	12 18.47	+18 44.5	2.206	3.160	6.0	20.3	3 12	12 18.63	- 3 48.6	1.537	2.512	5.6	21.6
3 22	12 9.55	+19 7.4	2.224	3.180	6.1	20.3	3 22	12 9.63	- 2 29.3	1.521	2.517	0.8	21.3
4 1	12 0.81	+19 13.4	2.270	3.199	7.8	20.5	4 1	12 0.54	- 1 7.4	1.533	2.521	4.3	21.5
4 11	11 53.05	+19 0.9	2.343	3.219	10.2	20.6	4 11	11 52.50	+ 0 8.2	1.572	2.525	8.9	21.8
4 21	11 46.87	+18 30.9	2.439	3.238	12.4	20.8	4 21	11 46.35	+ 1 10.6	1.636	2.528	13.1	22.0
5 1	11 42.65	+17 45.3	2.555	3.258	14.4	21.0	5 1	11 42.64	+ 1 55.5	1.720	2.530	16.5	22.3
<b>341657</b>	2007 <i>VT</i> <sub>60</sub>		3 22.8 220°81	2.4/19.9	18		<b>248449</b>	2005 <i>TJ</i> <sub>118</sub>		3 22.9 278°64	1.0/24.0	17	
2 21	12 29.97	+ 5 43.5	2.545	3.410	9.3	21.5	2 21	12 27.49	- 6 33.1	2.388	3.230	10.7	21.4
3 2	12 24.34	+ 6 23.9	2.468	3.402	6.5	21.3	3 2	12 22.79	- 6 2.9	2.292	3.211	7.8	21.2
3 12	12 17.32	+ 7 7.0	2.418	3.394	3.7	21.1	3 12	12 16.60	- 5 20.4	2.222	3.193	4.5	20.9
3 22	12 9.48	+ 7 48.4	2.397	3.386	2.5	21.0	3 22	12 9.47	- 4 28.6	2.180	3.175	1.2	20.7
4 1	12 1.52	+ 8 23.3	2.406	3.377	4.8	21.2	4 1	12 2.13	- 3 32.0	2.167	3.156	3.2	20.8
4 11	11 54.19	+ 8 48.0	2.444	3.367	7.8	21.3	4 11	11 55.35	- 2 36.3	2.183	3.137	6.7	21.0
4 21	11 48.08	+ 9 0.2	2.508	3.358	10.6	21.5	4 21	11 49.77	- 1 46.3	2.226	3.118	10.1	21.2
5 1	11 43.64	+ 8 58.8	2.594	3.348	13.0	21.7	5 1	11 45.91	- 1 6.3	2.291	3.099	13.0	21.3
<b>130765</b>	2000 <i>SX</i> <sub>299</sub>		3 22.8 309°01	3.9/25.4	17		<b>16539</b>	1991 <i>PY</i> <sub>12</sub>		3 22.9 94°18	4.2/26.7		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>206210</b>	2002 VX <sub>15</sub>		3 22.9 57°13	7.3/15.4	18		<b>456920</b>	2007 XG <sub>43</sub>		3 22.9 17°26	4.1/26.2	17	
2 21	12 31.56	+19 4.6	1.909	2.784	11.5	19.4	2 21	12 30.75	-12 34.1	1.422	2.262	16.8	21.0
3 2	12 25.61	+20 14.3	1.880	2.804	9.0	19.3	3 2	12 25.79	-12 32.4	1.353	2.263	12.9	20.8
3 12	12 18.00	+21 13.7	1.876	2.824	7.4	19.3	3 12	12 18.45	-12 6.8	1.305	2.265	8.5	20.5
3 22	12 9.58	+21 55.7	1.898	2.844	7.7	19.3	3 22	12 9.66	-11 19.8	1.281	2.267	4.7	20.3
4 1	12 1.35	+22 15.4	1.947	2.865	9.6	19.5	4 1	12 0.69	-10 17.2	1.283	2.270	5.2	20.3
4 11	11 54.23	+22 11.1	2.020	2.885	12.0	19.7	4 11	11 52.84	-9 8.4	1.310	2.273	9.2	20.6
4 21	11 48.85	+21 44.3	2.114	2.906	14.4	19.9	4 21	11 47.13	-8 2.8	1.360	2.276	13.5	20.8
5 1	11 45.60	+20 57.9	2.227	2.927	16.3	20.0	5 1	11 44.18	-7 8.1	1.431	2.280	17.3	21.1
<b>9531</b>	Jean-Luc		3 22.9 191°68	0°2/23.0	18		<b>381611</b>	2008 WM <sub>74</sub>		3 22.9 207°88	0°8/23.7	17	
2 21	12 35.57	-3 17.3	1.799	2.650	13.3	18.1	2 21	12 32.04	-5 1.0	2.337	3.176	11.0	21.4
3 2	12 28.78	-2 53.2	1.723	2.649	9.5	17.8	3 2	12 25.95	-4 47.3	2.252	3.171	8.0	21.2
3 12	12 19.90	-2 17.2	1.672	2.647	5.2	17.6	3 12	12 18.28	-4 23.2	2.193	3.165	4.5	21.0
3 22	12 9.76	-1 33.5	1.648	2.644	0.5	17.2	3 22	12 9.65	-3 51.8	2.164	3.159	1.1	20.7
4 1	11 59.43	-0 48.1	1.654	2.641	4.2	17.5	4 1	12 0.85	-3 16.9	2.164	3.152	3.3	20.9
4 11	11 50.07	-0 7.5	1.687	2.636	8.7	17.7	4 11	11 52.73	-2 43.4	2.194	3.145	6.9	21.1
4 21	11 42.55	+0 23.2	1.746	2.631	12.7	18.0	4 21	11 45.97	-2 15.2	2.250	3.137	10.2	21.3
5 1	11 37.47	+0 40.6	1.826	2.626	16.1	18.2	5 1	11 41.07	-1 55.9	2.330	3.129	13.0	21.5
<b>50052</b>	2000 AV <sub>63</sub>		3 22.9 210°66	3°0/19.5	18		<b>430907</b>	2005 SF <sub>161</sub>		3 22.9 313°94	0°5/22.5	16	
2 21	12 31.76	+5 28.8	2.173	3.040	10.6	18.8	2 21	12 34.07	+0 38.8	1.854	2.716	12.4	20.8
3 2	12 25.83	+6 33.7	2.097	3.033	7.4	18.6	3 2	12 27.97	+0 30.6	1.751	2.683	8.9	20.5
3 12	12 18.23	+7 43.2	2.048	3.025	4.2	18.3	3 12	12 19.64	+0 28.4	1.673	2.651	4.8	20.1
3 22	12 9.62	+8 50.9	2.028	3.016	3.1	18.2	3 22	12 9.78	+0 29.0	1.622	2.618	0.6	19.7
4 1	12 0.87	+9 50.2	2.039	3.006	5.8	18.4	4 1	11 59.38	+0 28.4	1.600	2.587	4.5	20.0
4 11	11 52.85	+10 35.8	2.077	2.996	9.2	18.6	4 11	11 49.63	+0 22.5	1.606	2.555	9.1	20.2
4 21	11 46.30	+11 4.5	2.140	2.985	12.4	18.8	4 21	11 41.53	+0 8.1	1.636	2.524	13.3	20.4
5 1	11 41.71	+11 15.2	2.224	2.973	15.1	18.9	5 1	11 35.84	-0 17.2	1.688	2.493	17.0	20.5
<b>271723</b>	2004 RP <sub>234</sub>		3 22.9 84°42	2°7/19.8	18		<b>168950</b>	2001 AA <sub>26</sub>		3 22.9 348°18	2°3/21.6	18	
2 21	12 28.10	+2 1.4	1.792	2.667	12.1	20.8	2 21	12 36.76	+4 20.1	1.291	2.171	15.5	18.8
3 2	12 23.36	+3 39.4	1.738	2.679	8.3	20.6	3 2	12 30.19	+4 16.9	1.226	2.167	11.0	18.5
3 12	12 16.90	+5 25.7	1.711	2.691	4.4	20.4	3 12	12 20.87	+4 17.5	1.183	2.163	5.9	18.2
3 22	12 9.51	+7 11.4	1.712	2.702	2.9	20.3	3 22	12 9.87	+4 16.4	1.165	2.160	2.3	18.0
4 1	12 2.13	+8 47.3	1.741	2.714	6.1	20.5	4 1	11 58.67	+4 8.2	1.173	2.157	6.4	18.2
4 11	11 55.68	+10 5.9	1.798	2.725	9.8	20.8	4 11	11 48.84	+3 48.3	1.207	2.155	11.5	18.5
4 21	11 50.87	+11 2.8	1.878	2.737	13.2	21.0	4 21	11 41.50	+3 14.8	1.262	2.154	16.2	18.7
5 1	11 48.15	+11 36.9	1.979	2.748	16.0	21.2	5 1	11 37.33	+2 27.4	1.336	2.153	20.0	19.0
<b>314820</b>	2006 UK <sub>47</sub>		3 22.9 354°01	1°0/23.6	18		<b>501487</b>	2014 CL <sub>6</sub>		3 22.9 330°41	5°5/16.1	17	
2 21	12 29.33	-4 51.9	1.255	2.128	16.3	20.0	2 21	12 27.72	+13 51.7	2.169	3.048	10.1	20.9
3 2	12 24.97	-4 35.1	1.188	2.124	11.8	19.7	3 2	12 22.96	+15 11.7	2.112	3.046	7.5	20.7
3 12	12 18.08	-4 0.6	1.143	2.120	6.6	19.4	3 12	12 16.67	+16 28.7	2.082	3.044	5.7	20.6
3 22	12 9.63	-3 13.3	1.122	2.117	1.3	19.1	3 22	12 9.52	+17 35.6	2.080	3.043	5.9	20.6
4 1	12 0.95	-2 21.2	1.125	2.116	4.9	19.3	4 1	12 2.31	+18 26.2	2.106	3.041	8.0	20.7
4 11	11 53.48	-1 33.5	1.153	2.115	10.3	19.6	4 11	11 55.86	+18 56.5	2.157	3.040	10.6	20.9
4 21	11 48.27	-0 57.7	1.203	2.115	15.2	19.9	4 21	11 50.82	+19 5.4	2.231	3.038	13.2	21.0
5 1	11 45.98	-0 38.7	1.271	2.116	19.2	20.1	5 1	11 47.63	+18 53.8	2.323	3.037	15.4	21.2
<b>167021</b>	2003 QL <sub>32</sub>		3 22.9 135°64	1°7/21.2	18		<b>78875</b>	2003 RH <sub>1</sub>		3 22.9 146°69	1°2/21.6	18	
2 21	12 31.47	-0 9.3	1.714	2.581	13.0	20.7	2 21	12 31.54	-1 3.3	1.758	2.622	12.9	19.9
3 2	12 25.82	+1 1.0	1.654	2.590	9.0	20.5	3 2	12 25.86	+0 0.2	1.695	2.629	9.0	19.6
3 12	12 18.26	+2 21.8	1.619	2.599	4.7	20.2	3 12	12 18.29	+1 15.0	1.657	2.636	4.7	19.4
3 22	12 9.63	+3 45.6	1.613	2.607	1.7	20.0	3 22	12 9.65	+2 34.0	1.647	2.642	1.3	19.2
4 1	12 0.98	+5 3.9	1.634	2.615	5.3	20.3	4 1	12 0.97	+3 49.1	1.665	2.648	5.0	19.4
4 11	11 53.36	+6 9.0	1.683	2.622	9.5	20.6	4 11	11 53.27	+4 53.0	1.711	2.653	9.2	19.7
4 21	11 47.54	+6 56.2	1.756	2.629	13.3	20.8	4 21	11 47.34	+5 40.6	1.782	2.658	13.0	19.9
5 1	11 44.03	+7 23.4	1.849	2.636	16.4	21.0	5 1	11 43.68	+6 9.5	1.873	2.663	16.1	20.2
<b>33454</b>	Neilclaffey		3 22.9 132°98	3°1/20.1	18		<b>65572</b>	3173 T <sub>-2</sub>		3 22.9 88°83	2°4/21.1	18	
2 21	12 34.50	+4 43.5	1.710	2.581	12.8	19.0	2 21	12 36.07	+3 3.3	1.401	2.277	14.8	19.5
3 2	12 27.91	+5 42.8	1.656	2.594	8.9	18.8	3 2	12 29.29	+3 38.9	1.352	2.291	10.3	19.3
3 12	12 19.35	+6 46.7	1.628	2.606	4.9	18.6	3 12	12 20.17	+4 21.1	1.326	2.305	5.5	19.1
3 22	12 9.72	+7 47.8	1.627	2.617	3.2	18.5	3 22	12 9.81	+5 2.5	1.326	2.319	2.5	18.9
4 1	12 0.14	+8 38.4	1.656	2.628	6.3	18.7	4 1	11 59.53	+5 35.6	1.353	2.333	6.2	19.2
4 11	11 51.69	+9 13.2	1.710	2.638	10.2	18.9	4 11	11 50.67	+5 54.6	1.406	2.347	10.8	19.5
4 21	11 45.17	+9 29.4	1.789	2.648	13.8	19.2	4 21	11 44.12	+5 56.7	1.481	2.361	14.9	19.7
5 1	11 41.05	+9 26.7	1.887	2.657	16.7	19.4	5 1	11 40.38	+5 41.4	1.576	2.374	18.3	20.0
<b>343132</b>	2009 FV		3 22.9 24°99	0°2/22.7	17		<b>281036</b>	2006 HB <sub>22</sub>		3 22.9 347°18	5°1/18.3	17	
2 21	12 29.52	-1 45.4	2.018	2.877	11.6	20.1	2 21	12 31.73	+11 25.8	1.744	2.624	12.1	20.7
3 2	12 24.27	-1 25.2	1.949	2.880	8.2	19.9	3 2	12 26.06	+12 13.2	1.683	2.621	8.7	20.5
3 12	12 17.39	-0 56.2	1.907	2.884	4.4	19.7	3 12	12 18.43	+12 58.5	1.648	2.619	5.8	20.3
3 22	12 9.57	-0 22.3	1.891	2.888	0.3	19.4	3 22	12 9.68	+13 34.5	1.639	2.616	5.4	20.3
4 1	12 1.67	+0 11.5	1.905	2.892	3.8	19.7	4 1	12 0.87	+13 54.9	1.657	2.614	7.9	20.4
4 11	11 54.60	+0 40.1	1.946	2.896	7.7	19.9	4 11	11 53.07	+13 55.8	1.701	2.613	11.3	20.6
4 21	11 49.03	+0 59.8	2.012	2.900	11.2	20.1	4 21	11 47.09	+13 36.6	1.767	2.612	14.6	20.8
5 1	11 45.44	+1 7.9	2.100	2.905	14.1	20.3	5 1	11 43.44	+12 58.3	1.852	2.611	17.3	21.0
<b>79970</b>	1999 CJ <sub>135</sub>		3 22.9 231°85	0°2/23.1	17		<b>163684</b>	2002 YX <sub>22</sub>		3 22.9 128°09	0°2/22.6	18	
2 21	12 28.41	-3 47.9	2.366	3.215	10.5	20.8	2 21	12 2					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>430814</b>	2005 <i>EN</i> <sub>188</sub>		3 22.9 39°53	1.9°/24.9	16		<b>234802</b>	2002 <i>QN</i> <sub>78</sub>		3 22.9 225°07	1.2°/24.2	17	
2 21	12 21.03	-20 48.2	0.725	1.589	25.8	20.7	2 21	12 30.24	-6 37.2	2.420	3.256	10.8	21.6
3 2	12 19.84	-16 55.8	0.676	1.603	19.4	20.4	3 2	12 24.69	-6 19.5	2.332	3.248	7.9	21.4
3 12	12 15.52	-11 47.6	0.647	1.619	11.5	20.0	3 12	12 17.63	-5 50.4	2.269	3.239	4.6	21.1
3 22	12 9.46	-5 50.1	0.641	1.635	3.2	19.6	3 22	12 9.66	-5 12.6	2.235	3.229	1.4	20.9
4 1	12 3.51	+0 11.2	0.661	1.653	6.5	19.9	4 1	12 1.50	-4 30.2	2.231	3.220	3.1	21.0
4 11	11 59.39	+5 29.5	0.706	1.672	14.2	20.4	4 11	11 53.96	-3 48.0	2.256	3.210	6.6	21.2
4 21	11 58.13	+9 37.6	0.773	1.691	20.6	20.8	4 21	11 47.69	-3 10.5	2.308	3.199	9.8	21.4
5 1	12 0.11	+12 30.1	0.856	1.711	25.5	21.2	5 1	11 43.18	-2 41.4	2.384	3.188	12.6	21.6
<b>417628</b>	2006 <i>WW</i> <sub>171</sub>		3 22.9 26°20	9°5/1.8	18		<b>241332</b>	2007 <i>VH</i> <sub>200</sub>		3 22.9 142°08	0°3/22.6	17	
2 21	12 28.19	-27 28.6	1.517	2.279	19.5	20.6	2 21	12 28.99	-2 10.3	2.248	3.103	10.8	21.4
3 2	12 24.04	-27 42.6	1.445	2.284	16.7	20.4	3 2	12 23.80	-1 36.6	2.177	3.106	7.6	21.2
3 12	12 17.55	-27 20.6	1.391	2.290	13.6	20.2	3 12	12 17.13	-0 53.8	2.131	3.108	4.0	21.0
3 22	12 9.63	-26 21.0	1.358	2.296	10.9	20.1	3 22	12 9.61	-0 6.3	2.115	3.111	0.4	20.7
4 1	12 1.55	-24 47.5	1.348	2.303	9.6	20.0	4 1	12 2.03	+0 40.9	2.127	3.114	3.6	20.9
4 11	11 54.60	-22 49.8	1.363	2.311	10.5	20.1	4 11	11 55.16	+1 22.7	2.169	3.116	7.2	21.2
4 21	11 49.77	-20 40.7	1.401	2.318	13.1	20.2	4 21	11 49.64	+1 55.2	2.236	3.118	10.4	21.4
5 1	11 47.67	-18 33.5	1.461	2.327	16.1	20.4	5 1	11 45.91	+2 15.8	2.325	3.120	13.2	21.6
<b>504126</b>	2006 <i>RY</i> <sub>75</sub>		3 22.9 139°39	0°0/22.9	17		<b>10262</b>	<i>Samoilov</i>		3 22.9 206°25	3°8/19.1	18	
2 21	12 26.97	-4 17.8	2.547	3.394	9.9	22.0	2 21	12 34.04	+9 36.7	2.213	3.080	10.5	17.1
3 2	12 22.23	-3 24.4	2.476	3.401	7.0	21.8	3 2	12 27.41	+10 18.1	2.142	3.075	7.5	16.9
3 12	12 16.23	-2 20.9	2.433	3.408	3.8	21.6	3 12	12 19.09	+10 59.2	2.097	3.069	4.7	16.7
3 22	12 9.52	-1 11.7	2.418	3.414	0.3	21.4	3 22	12 9.79	+11 34.4	2.082	3.063	4.0	16.7
4 1	12 2.78	-0 2.0	2.434	3.420	3.1	21.6	4 1	12 0.39	+11 58.6	2.096	3.057	6.3	16.8
4 11	11 56.66	+1 2.8	2.479	3.426	6.4	21.8	4 11	11 51.80	+12 8.1	2.139	3.050	9.4	17.0
4 21	11 51.71	+1 58.4	2.551	3.432	9.4	22.0	4 21	11 44.72	+12 1.7	2.205	3.042	12.3	17.2
5 1	11 48.31	+2 41.8	2.646	3.437	11.9	22.2	5 1	11 39.66	+11 39.4	2.293	3.034	14.9	17.3
<b>162761</b>	2000 <i>WG</i> <sub>110</sub>		3 22.9 116°75	2°4/25.1	18		<b>500576</b>	2012 <i>UP</i> <sub>81</sub>		3 22.9 195°66	4°7/16.1	18	
2 21	12 34.58	-9 51.3	1.818	2.648	14.1	20.6	2 21	12 30.43	+16 29.1	2.966	3.829	8.2	22.7
3 2	12 27.91	-9 30.8	1.758	2.667	10.4	20.4	3 2	12 24.55	+17 25.7	2.903	3.826	6.2	22.6
3 12	12 19.36	-8 53.1	1.722	2.687	6.4	20.2	3 12	12 17.45	+18 18.0	2.869	3.822	4.9	22.5
3 22	12 9.78	-8 1.7	1.714	2.705	2.7	20.0	3 22	12 9.66	+19 1.0	2.864	3.817	5.0	22.5
4 1	12 0.25	-7 2.6	1.735	2.723	3.9	20.1	4 1	12 1.83	+19 30.9	2.889	3.812	6.6	22.6
4 11	11 51.79	-6 3.0	1.783	2.740	7.8	20.4	4 11	11 54.59	+19 45.1	2.941	3.807	8.7	22.7
4 21	11 45.18	-5 9.3	1.858	2.756	11.4	20.7	4 21	11 48.47	+19 43.1	3.018	3.800	10.7	22.9
5 1	11 40.89	-4 26.5	1.955	2.772	14.6	20.9	5 1	11 43.86	+19 25.6	3.114	3.794	12.4	23.0
<b>147927</b>	2006 <i>VU</i> <sub>129</sub>		3 22.9 237°04	0°7/21.9	17		<b>31740</b>	1999 <i>JW</i> <sub>77</sub>		3 22.9 335°51	0°5/23.4	18	
2 21	12 28.30	-0 26.3	2.633	3.488	9.4	21.2	2 21	12 26.29	-5 56.6	2.067	2.918	11.8	18.6
3 2	12 23.21	+0 10.7	2.547	3.477	6.6	21.0	3 2	12 22.06	-5 2.1	1.990	2.915	8.4	18.4
3 12	12 16.79	+0 54.8	2.489	3.466	3.5	20.8	3 12	12 16.27	-3 53.3	1.938	2.912	4.7	18.2
3 22	12 9.58	+1 42.2	2.459	3.455	0.7	20.6	3 22	12 9.57	-2 35.2	1.913	2.909	0.8	17.9
4 1	12 2.23	+2 28.5	2.460	3.443	3.5	20.8	4 1	12 2.74	-1 14.4	1.918	2.907	3.5	18.1
4 11	11 55.42	+3 9.1	2.489	3.431	6.7	21.0	4 11	11 56.64	+0 1.9	1.951	2.905	7.5	18.3
4 21	11 49.74	+3 40.8	2.546	3.418	9.7	21.1	4 21	11 51.91	+1 7.9	2.010	2.902	11.0	18.5
5 1	11 45.63	+4 1.0	2.625	3.405	12.2	21.3	5 1	11 49.05	+1 59.2	2.091	2.900	14.0	18.7
<b>166275</b>	2002 <i>GS</i> <sub>94</sub>		3 22.9 187°81	0°6/23.4	18		<b>125826</b>	2001 <i>XU</i> <sub>173</sub>		3 22.9 190°18	0°4/23.4	17	
2 21	12 33.34	-4 42.9	1.872	2.720	12.9	20.3	2 21	12 30.92	-4 50.6	2.411	3.252	10.7	20.6
3 2	12 27.16	-4 13.7	1.796	2.720	9.3	20.1	3 2	12 25.13	-4 15.1	2.330	3.251	7.7	20.4
3 12	12 19.04	-3 31.3	1.745	2.719	5.2	19.8	3 12	12 17.85	-3 28.8	2.276	3.249	4.2	20.2
3 22	12 9.77	-2 40.2	1.722	2.718	0.8	19.5	3 22	12 9.71	-2 35.4	2.250	3.246	0.7	19.9
4 1	12 0.34	-1 46.1	1.728	2.716	3.9	19.7	4 1	12 1.44	-1 39.8	2.255	3.243	3.2	20.1
4 11	11 51.81	-0 55.9	1.762	2.713	8.2	20.0	4 11	11 53.84	-0 47.2	2.290	3.239	6.8	20.4
4 21	11 44.99	-0 15.0	1.821	2.710	12.1	20.2	4 21	11 47.54	-0 2.2	2.351	3.234	10.0	20.6
5 1	11 40.44	+0 12.9	1.902	2.706	15.4	20.4	5 1	11 43.01	+0 31.9	2.436	3.229	12.7	20.7
<b>243984</b>	2001 <i>RS</i> <sub>57</sub>		3 22.9 200°40	0°4/22.4	18		<b>88694</b>	2001 <i>RH</i> <sub>139</sub>		3 22.9 359°27	0°5/22.5	18	
2 21	12 31.68	-0 20.0	2.456	3.308	10.1	20.2	2 21	12 30.26	-2 11.5	1.516	2.386	14.2	19.5
3 2	12 25.61	-0 7.0	2.378	3.306	7.1	20.0	3 2	12 25.29	-1 35.6	1.449	2.385	10.1	19.2
3 12	12 18.08	+0 12.1	2.326	3.303	3.8	19.8	3 12	12 18.16	-0 46.6	1.406	2.385	5.3	19.0
3 22	12 9.69	+0 34.3	2.304	3.300	0.5	19.5	3 22	12 9.74	+0 9.6	1.388	2.384	0.5	18.6
4 1	12 1.19	+0 55.7	2.312	3.297	3.5	19.7	4 1	12 1.18	+1 5.2	1.397	2.384	4.9	18.9
4 11	11 53.36	+1 12.5	2.350	3.294	6.9	20.0	4 11	11 53.67	+1 52.5	1.432	2.385	9.7	19.2
4 21	11 46.82	+1 22.0	2.413	3.290	10.0	20.1	4 21	11 48.12	+2 26.0	1.490	2.386	13.9	19.4
5 1	11 42.04	+1 22.1	2.500	3.286	12.6	20.3	5 1	11 45.09	+2 42.2	1.568	2.387	17.5	19.7
<b>472482</b>	2015 <i>BC</i> <sub>502</sub>		3 22.9 240°17	2°9/19.4	17		<b>270594</b>	2002 <i>LQ</i> <sub>51</sub>		3 22.9 278°44	0°7/23.6	17	
2 21	12 28.44	+4 9.2	2.115	2.987	10.6	21.1	2 21	12 28.63	-6 11.3	2.070	2.917	11.9	20.9
3 2	12 23.57	+5 31.0	2.038	2.977	7.4	20.9	3 2	12 23.88	-5 24.4	1.970	2.892	8.7	20.7
3 12	12 17.08	+6 59.6	1.988	2.966	4.2	20.6	3 12	12 17.36	-4 21.9	1.894	2.868	4.9	20.4
3 22	12 9.61	+8 28.0	1.967	2.955	3.1	20.5	3 22	12 9.68	-3 7.9	1.847	2.842	0.9	20.0
4 1	12 1.97	+9 48.6	1.976	2.944	5.9	20.7	4 1	12 1.68	-1 48.7	1.828	2.817	3.7	20.2
4 11	11 55.03	+10 54.8	2.012	2.933	9.3	20.9	4 11	11 54.27	-0 31.6	1.838	2.791	7.9	20.4
4 21	11 49.48	+11 42.8	2.072	2.921	12.6	21.1	4 21	11 48.27	+0 36.8	1.874	2.765	11.7	20.6
5 1	11 45.84	+12 10.7	2.153	2.908	15.3	21.2	5 1	11 44.26	+1 31.2	1.932	2.739	15.1	20.8
<b>352552</b>	2008 <i>CQ</i> <sub>209</sub>		3 22.9 278°17	5°9/15.3	17		<b>409117</b>	2003 <i>TD</i> <sub>56</sub>		3 22.9 189°50	2°1/20.8	16	
2 21	12 28.50	+16 50.0	2.321	3.196	9.7	20.2</							

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>120585</b>	1995 SA <sub>24</sub>		3 22.9 36°46'	1°1/21.8	17		<b>305739</b>	2009 CH <sub>55</sub>		3 22.9 69°97'	1°9/21.4	18	
2 21	12 29.08	- 0 52.6	1.677	2.548	13.0	19.8	2 21	12 33.43	+ 0 23.2	1.334	2.211	15.3	20.9
3 2	12 24.24	- 0 0.9	1.615	2.552	9.1	19.6	3 2	12 27.46	+ 1 22.1	1.292	2.232	10.6	20.7
3 12	12 17.50	+ 1 1.8	1.578	2.557	4.7	19.3	3 12	12 19.23	+ 2 31.2	1.274	2.254	5.5	20.4
3 22	12 9.69	+ 2 8.9	1.567	2.562	1.1	19.1	3 22	12 9.85	+ 3 41.9	1.281	2.276	1.9	20.3
4 1	12 1.81	+ 3 12.7	1.583	2.568	4.9	19.4	4 1	12 0.64	+ 4 44.8	1.315	2.297	6.0	20.6
4 11	11 54.91	+ 4 6.0	1.627	2.573	9.2	19.6	4 11	11 52.86	+ 5 32.0	1.374	2.319	10.7	20.9
4 21	11 49.77	+ 4 44.0	1.694	2.579	13.1	19.9	4 21	11 47.35	+ 5 59.7	1.455	2.340	14.8	21.2
5 1	11 46.88	+ 5 4.0	1.781	2.585	16.3	20.1	5 1	11 44.56	+ 6 6.7	1.556	2.361	18.2	21.5
<b>487496</b>	2014 SE <sub>288</sub>		3 22.9 160°36'	0°6/21.2	17		<b>467649</b>	2008 SN <sub>211</sub>		3 22.9 172°45'	8°2/11.5	16	
2 21	12 20.18	+ 2 3.0	6.461	7.315	4.2	23.4	2 21	12 33.05	+ 27 37.0	2.538	3.384	10.0	21.3
3 2	12 16.95	+ 2 31.0	6.390	7.320	2.9	23.3	3 2	12 26.58	+ 28 55.7	2.500	3.387	8.7	21.2
3 12	12 13.26	+ 3 0.9	6.348	7.325	1.5	23.2	3 12	12 18.60	+ 30 1.1	2.487	3.390	8.2	21.2
3 22	12 9.34	+ 3 31.1	6.336	7.330	0.6	23.1	3 22	12 9.80	+ 30 47.0	2.502	3.392	8.8	21.2
4 1	12 5.40	+ 4 0.0	6.357	7.335	1.7	23.3	4 1	12 1.03	+ 31 9.3	2.542	3.394	10.2	21.3
4 11	12 1.66	+ 4 26.2	6.407	7.340	3.1	23.4	4 11	11 53.11	+ 31 6.8	2.606	3.395	11.9	21.5
4 21	11 58.34	+ 4 48.5	6.487	7.345	4.3	23.5	4 21	11 46.69	+ 30 41.1	2.690	3.396	13.6	21.6
5 1	11 55.59	+ 5 5.9	6.591	7.349	5.5	23.6	5 1	11 42.18	+ 29 55.3	2.792	3.396	15.0	21.7
<b>374097</b>	2004 RZ <sub>256</sub>		3 22.9 167°77'	1°0/21.8	17		<b>88690</b>	2001 RL <sub>127</sub>		3 22.9 96°64'	2°7/20.4	18	
2 21	12 30.12	- 0 42.7	2.123	2.982	11.2	21.8	2 21	12 31.57	+ 3 51.3	1.701	2.576	12.6	19.8
3 2	12 24.68	+ 0 6.3	2.053	2.985	7.8	21.6	3 2	12 25.97	+ 4 43.9	1.642	2.581	8.8	19.5
3 12	12 17.65	+ 1 4.2	2.009	2.988	4.1	21.4	3 12	12 18.43	+ 5 42.2	1.607	2.586	4.8	19.3
3 22	12 9.71	+ 2 5.7	1.994	2.990	1.0	21.1	3 22	12 9.79	+ 6 39.3	1.600	2.591	2.8	19.2
4 1	12 1.70	+ 3 4.8	2.009	2.992	4.2	21.4	4 1	12 1.12	+ 7 27.9	1.620	2.596	6.0	19.4
4 11	11 54.46	+ 3 55.7	2.051	2.993	7.9	21.6	4 11	11 53.46	+ 8 2.2	1.667	2.601	10.0	19.6
4 21	11 48.67	+ 4 34.3	2.119	2.994	11.3	21.8	4 21	11 47.62	+ 8 18.8	1.737	2.605	13.6	19.9
5 1	11 44.79	+ 4 58.2	2.209	2.995	14.1	22.0	5 1	11 44.11	+ 8 17.1	1.827	2.610	16.7	20.1
<b>110402</b>	2001 TL <sub>12</sub>		3 22.9 167°40'	1°8/20.9	18		<b>374928</b>	2006 YB <sub>25</sub>		3 22.9 351°24'	5°3/18.2	18	
2 21	12 31.66	+ 2 16.1	2.181	3.043	10.8	20.5	2 21	12 31.28	+ 10 0.8	1.543	2.429	13.1	20.0
3 2	12 25.71	+ 3 4.5	2.113	3.047	7.5	20.3	3 2	12 25.97	+ 11 6.8	1.485	2.427	9.4	19.8
3 12	12 18.18	+ 3 58.8	2.073	3.051	4.0	20.1	3 12	12 18.51	+ 12 12.8	1.452	2.425	6.1	19.6
3 22	12 9.76	+ 4 53.9	2.061	3.054	1.8	19.9	3 22	12 9.81	+ 13 10.0	1.445	2.424	5.6	19.6
4 1	12 1.27	+ 5 43.8	2.079	3.057	4.7	20.1	4 1	12 1.02	+ 13 50.2	1.464	2.423	8.5	19.7
4 11	11 53.58	+ 6 23.6	2.126	3.059	8.2	20.3	4 11	11 53.35	+ 14 8.1	1.507	2.422	12.2	19.9
4 21	11 47.36	+ 6 50.0	2.198	3.061	11.4	20.5	4 21	11 47.66	+ 14 2.4	1.572	2.422	15.8	20.2
5 1	11 43.05	+ 7 1.5	2.291	3.062	14.1	20.7	5 1	11 44.50	+ 13 34.3	1.655	2.422	18.8	20.4
<b>137054</b>	1998 VB <sub>34</sub>		3 22.9 29°55'	6°4/18.4	18		<b>327895</b>	2007 BO <sub>59</sub>		3 22.9 89°36'	0°7/23.6	18	
2 21	12 31.81	+ 11 2.5	1.166	2.063	15.4	18.7	2 21	12 31.21	- 6 0.6	1.758	2.608	13.5	21.1
3 2	12 26.55	+ 12 3.8	1.131	2.077	11.1	18.4	3 2	12 25.60	- 5 18.1	1.701	2.626	9.7	20.9
3 12	12 18.81	+ 13 1.5	1.119	2.093	7.4	18.3	3 12	12 18.17	- 4 20.8	1.670	2.643	5.4	20.7
3 22	12 9.80	+ 13 45.0	1.130	2.110	6.7	18.3	3 22	12 9.78	- 3 14.3	1.665	2.661	1.1	20.4
4 1	12 1.00	+ 14 6.3	1.165	2.127	9.8	18.5	4 1	12 1.42	- 2 5.6	1.689	2.678	3.9	20.6
4 11	11 53.79	+ 14 1.3	1.223	2.146	13.8	18.8	4 11	11 54.10	- 1 2.1	1.740	2.695	8.1	20.9
4 21	11 49.04	+ 13 31.1	1.300	2.166	17.5	19.1	4 21	11 48.54	- 0 9.8	1.817	2.711	11.9	21.2
5 1	11 47.18	+ 12 38.8	1.394	2.186	20.6	19.3	5 1	11 45.21	+ 0 27.7	1.915	2.727	15.0	21.4
<b>24115</b>	1999 VH <sub>24</sub>		3 22.9 218°22'	0°1/23.0	18		<b>375964</b>	2009 WW <sub>203</sub>		3 22.9 61°65'	5°9/17.2	18	
2 21	12 30.98	- 4 43.8	1.869	2.721	12.8	18.6	2 21	12 31.75	+ 13 33.7	1.797	2.677	11.8	20.5
3 2	12 25.56	- 3 50.9	1.788	2.714	9.1	18.3	3 2	12 26.02	+ 14 38.8	1.746	2.681	8.7	20.3
3 12	12 18.25	- 2 43.0	1.732	2.707	5.0	18.1	3 12	12 18.42	+ 15 39.8	1.720	2.685	6.3	20.2
3 22	12 9.77	- 1 25.5	1.703	2.699	0.5	17.7	3 22	12 9.81	+ 16 28.9	1.722	2.690	6.3	20.2
4 1	12 1.09	- 0 5.8	1.704	2.691	4.1	18.0	4 1	12 1.20	+ 16 59.5	1.750	2.694	8.6	20.4
4 11	11 53.22	+ 1 8.2	1.732	2.682	8.5	18.2	4 11	11 53.63	+ 17 8.2	1.803	2.699	11.7	20.5
4 21	11 46.99	+ 2 10.1	1.786	2.673	12.4	18.4	4 21	11 47.84	+ 16 54.6	1.878	2.704	14.6	20.7
5 1	11 42.97	+ 2 55.5	1.861	2.663	15.8	18.6	5 1	11 44.31	+ 16 20.6	1.972	2.708	17.1	20.9
<b>317811</b>	2003 SR <sub>231</sub>		3 22.9 157°84'	1°9/20.9	18		<b>517539</b>	2014 SV <sub>215</sub>		3 22.9 245°41'	2°8/20.1	17	
2 21	12 33.21	+ 1 55.3	1.949	2.812	11.8	21.9	2 21	12 31.96	+ 3 42.7	1.837	2.708	12.1	21.4
3 2	12 26.92	+ 2 49.6	1.886	2.820	8.2	21.7	3 2	12 26.35	+ 4 48.2	1.755	2.693	8.5	21.2
3 12	12 18.87	+ 3 51.0	1.848	2.827	4.3	21.5	3 12	12 18.73	+ 6 1.7	1.699	2.677	4.7	20.9
3 22	12 9.82	+ 4 53.2	1.840	2.833	2.0	21.3	3 22	12 9.85	+ 7 15.8	1.670	2.661	3.0	20.7
4 1	12 0.73	+ 5 49.5	1.861	2.839	5.1	21.5	4 1	12 0.69	+ 8 22.5	1.671	2.644	6.2	20.9
4 11	11 52.57	+ 6 34.1	1.909	2.844	8.9	21.8	4 11	11 52.33	+ 9 14.9	1.698	2.627	10.2	21.1
4 21	11 46.07	+ 7 3.6	1.983	2.848	12.4	22.0	4 21	11 45.65	+ 9 48.6	1.750	2.609	14.0	21.3
5 1	11 41.72	+ 7 16.3	2.078	2.851	15.2	22.2	5 1	11 41.27	+ 10 1.8	1.821	2.591	17.2	21.5
<b>459587</b>	2013 GW <sub>126</sub>		3 22.9 346°84'	3°7/19.8	18		<b>366399</b>	2001 RJ <sub>41</sub>		3 22.9 191°22'	1°3/24.3	16	
2 21	12 30.88	+ 4 39.1	1.382	2.268	14.3	21.0	2 21	12 32.16	- 7 11.2	2.311	3.143	11.4	22.4
3 2	12 25.88	+ 5 45.6	1.321	2.266	10.0	20.7	3 2	12 26.09	- 6 49.1	2.228	3.141	8.3	22.2
3 12	12 18.53	+ 6 59.4	1.284	2.264	5.6	20.5	3 12	12 18.43	- 6 14.6	2.171	3.139	4.9	22.0
3 22	12 9.80	+ 8 10.9	1.272	2.262	3.9	20.4	3 22	12 9.82	- 5 30.6	2.143	3.136	1.6	21.7
4 1	12 0.93	+ 9 10.6	1.286	2.261	7.5	20.6	4 1	12 1.06	- 4 41.6	2.144	3.133	3.2	21.9
4 11	11 53.24	+ 9 50.7	1.325	2.260	12.0	20.8	4 11	11 52.99	- 3 53.0	2.176	3.129	6.8	22.1
4 21	11 47.69	+ 10 7.6	1.385	2.259	16.1	21.0	4 21	11 46.32	- 3 9.6	2.234	3.124	10.1	22.3
5 1	11 44.86	+ 10 0.9	1.463	2.258	19.6	21.3	5 1	11 41.52	- 2 35.3	2.315	3.118	13.0	22.5
<b>290580</b>	2005 UY <sub>149</sub>		3 22.9 234°31'	0°7/22.2	17		<b>280165</b>	2002 QX <sub>90</sub>					

EPHEMERIDES

3 22.9

3 22.9

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>465899</b>	2010 U <sub>X</sub> <sub>89</sub>		3 22.9 55°69	6°2/18.7	18		<b>353685</b>	2011 U <sub>Y</sub> <sub>304</sub>		3 22.9 280°83	3°6/25.9	17	
2 21	12 37.82	+13 16.2	1.416	2.296	14.4	20.9	2 21	12 30.66	-12 16.8	1.440	2.280	16.6	20.7
3 2	12 30.35	+13 54.5	1.384	2.320	10.4	20.7	3 2	12 25.92	-11 56.9	1.356	2.268	12.7	20.4
3 12	12 20.68	+14 26.1	1.376	2.344	7.1	20.6	3 12	12 18.71	-11 11.6	1.293	2.256	8.3	20.1
3 22	12 9.99	+14 43.2	1.394	2.369	6.4	20.6	3 22	12 9.88	-10 3.3	1.255	2.244	4.2	19.8
4 1	11 59.66	+14 40.5	1.438	2.394	9.0	20.8	4 1	12 0.66	-8 39.0	1.243	2.232	4.9	19.8
4 11	11 50.93	+14 16.2	1.507	2.419	12.4	21.0	4 11	11 52.43	-7 8.9	1.256	2.220	9.5	20.1
4 21	11 44.58	+13 32.0	1.597	2.444	15.7	21.3	4 21	11 46.28	-5 44.0	1.293	2.208	14.2	20.3
5 1	11 41.01	+12 31.1	1.706	2.469	18.4	21.6	5 1	11 42.95	-4 32.9	1.350	2.196	18.3	20.5
<b>281413</b>	2008 R <sub>X</sub> <sub>108</sub>		3 22.9 113°95	0°1/22.9	17		<b>20159</b>	1996 T <sub>M</sub> <sub>28</sub>		3 22.9 282°11	4°6/19.2	18	
2 21	12 29.15	-3 59.8	2.000	2.854	12.0	21.3	2 21	12 33.41	+7 50.0	1.480	2.363	13.7	18.5
3 2	12 24.07	-3 14.3	1.932	2.860	8.5	21.1	3 2	12 27.72	+8 47.0	1.408	2.350	9.8	18.2
3 12	12 17.37	-2 16.9	1.890	2.866	4.6	20.9	3 12	12 19.61	+9 47.5	1.360	2.336	5.9	18.0
3 22	12 9.73	-1 12.4	1.875	2.872	0.4	20.5	3 22	12 9.95	+10 42.7	1.338	2.323	4.9	17.9
4 1	12 2.03	-0 7.3	1.890	2.877	3.8	20.8	4 1	12 0.02	+11 23.7	1.342	2.309	8.1	18.0
4 11	11 55.15	+0 52.0	1.932	2.882	7.7	21.1	4 11	11 51.15	+11 44.0	1.370	2.296	12.4	18.2
4 21	11 49.78	+1 40.3	2.000	2.888	11.2	21.3	4 21	11 44.40	+11 41.2	1.421	2.283	16.5	18.4
5 1	11 46.38	+2 14.4	2.090	2.893	14.2	21.5	5 1	11 40.42	+11 15.4	1.489	2.269	20.0	18.6
<b>100898</b>	1998 J <sub>G</sub> <sub>4</sub>		3 22.9 313°95	0°4/23.2	18		<b>465712</b>	2009 U <sub>U</sub> <sub>38</sub>		3 22.9 185°37	0°2/22.7	17	
2 21	12 29.21	-4 37.9	1.351	2.221	15.5	19.5	2 21	12 30.38	-3 10.2	2.156	3.008	11.3	22.4
3 2	12 24.95	-4 1.3	1.270	2.205	11.3	19.2	3 2	12 24.90	-2 27.5	2.081	3.008	8.0	22.1
3 12	12 18.21	-3 5.7	1.212	2.190	6.2	18.9	3 12	12 17.82	-1 33.9	2.031	3.007	4.3	21.9
3 22	12 9.82	-1 56.9	1.178	2.174	0.8	18.5	3 22	12 9.80	-0 34.3	2.010	3.007	0.3	21.6
4 1	12 1.04	-0 43.5	1.170	2.159	5.0	18.7	4 1	12 1.67	+0 25.8	2.019	3.005	3.7	21.9
4 11	11 53.26	+0 24.2	1.187	2.145	10.5	19.0	4 11	11 54.28	+1 20.4	2.056	3.004	7.5	22.1
4 21	11 47.60	+1 17.7	1.225	2.131	15.5	19.2	4 21	11 48.32	+2 4.7	2.120	3.002	11.0	22.3
5 1	11 44.79	+1 51.5	1.283	2.118	19.7	19.5	5 1	11 44.28	+2 35.7	2.205	2.999	13.9	22.5
<b>90017</b>	2002 T <sub>W</sub> <sub>266</sub>		3 22.9 155°10	2°0/21.2	18		<b>178439</b>	1998 W <sub>F</sub> <sub>41</sub>		3 22.9 74°95	1°9/21.3	18	
2 21	12 35.65	+1 34.7	1.702	2.566	13.2	20.4	2 21	12 34.69	+1 50.4	1.586	2.456	13.7	20.5
3 2	12 28.85	+2 26.4	1.640	2.575	9.2	20.1	3 2	12 28.05	+2 32.3	1.545	2.482	9.5	20.3
3 12	12 19.98	+3 26.2	1.604	2.583	4.8	19.9	3 12	12 19.47	+3 20.9	1.529	2.508	4.9	20.1
3 22	12 9.96	+4 27.4	1.596	2.590	2.0	19.7	3 22	12 9.93	+4 9.4	1.540	2.534	1.9	20.0
4 1	11 59.90	+5 22.3	1.617	2.596	5.5	20.0	4 1	12 0.59	+4 51.0	1.579	2.560	5.4	20.3
4 11	11 50.95	+6 4.6	1.665	2.602	9.8	20.2	4 11	11 52.54	+5 20.0	1.645	2.586	9.6	20.6
4 21	11 43.96	+6 30.3	1.737	2.607	13.6	20.5	4 21	11 46.53	+5 33.7	1.734	2.611	13.2	20.9
5 1	11 39.44	+6 38.1	1.830	2.611	16.7	20.7	5 1	11 42.97	+5 31.1	1.844	2.636	16.2	21.1
<b>368944</b>	2006 W <sub>V</sub> <sub>166</sub>		3 22.9 257°29	1°8/21.3	17		<b>258219</b>	2001 T <sub>W</sub> <sub>33</sub>		3 22.9 109°27	6°5/30.2	18	
2 21	12 31.93	+1 18.1	1.825	2.692	12.3	21.7	2 21	12 31.08	-22 43.4	1.968	2.735	15.5	20.3
3 2	12 26.36	+2 6.0	1.740	2.676	8.7	21.4	3 2	12 25.59	-22 43.8	1.895	2.747	12.7	20.1
3 12	12 18.76	+3 3.2	1.680	2.659	4.6	21.1	3 12	12 18.25	-22 18.3	1.844	2.760	9.8	20.0
3 22	12 9.87	+4 3.7	1.648	2.642	1.8	20.9	3 22	12 9.84	-21 27.4	1.818	2.772	7.4	19.8
4 1	12 0.69	+5 0.4	1.644	2.625	5.3	21.1	4 1	12 1.35	-20 15.0	1.818	2.783	6.6	19.8
4 11	11 52.31	+5 46.5	1.668	2.607	9.6	21.3	4 11	11 53.79	-18 48.5	1.845	2.794	8.1	19.9
4 21	11 45.59	+6 17.2	1.716	2.589	13.5	21.5	4 21	11 47.93	-17 16.5	1.898	2.806	10.7	20.1
5 1	11 41.18	+6 30.1	1.784	2.571	16.9	21.7	5 1	11 44.30	-15 47.7	1.975	2.816	13.5	20.3
<b>466169</b>	2012 J <sub>J</sub> <sub>24</sub>		3 22.9 328°94	3°7/18.9	17		<b>375786</b>	2009 S <sub>Z</sub> <sub>206</sub>		3 22.9 205°63	1°5/24.3	17	
2 21	12 26.45	+2 53.2	1.549	2.433	13.0	20.0	2 21	12 34.70	-6 23.1	2.201	3.034	11.8	21.3
3 2	12 22.61	+4 48.9	1.482	2.427	9.0	19.8	3 2	12 28.00	-6 24.7	2.115	3.029	8.7	21.1
3 12	12 16.76	+6 56.3	1.441	2.421	5.1	19.5	3 12	12 19.52	-6 15.0	2.056	3.024	5.1	20.9
3 22	12 9.70	+9 4.2	1.427	2.415	4.0	19.5	3 22	12 9.96	-5 56.3	2.025	3.018	1.8	20.7
4 1	12 2.46	+11 0.6	1.441	2.410	7.5	19.6	4 1	12 0.19	-5 32.1	2.024	3.012	3.5	20.8
4 11	11 56.17	+12 35.3	1.480	2.404	11.8	19.9	4 11	11 51.15	-5 7.0	2.052	3.005	7.2	21.0
4 21	11 51.66	+13 42.6	1.541	2.400	15.6	20.1	4 21	11 43.61	-4 45.2	2.107	2.998	10.6	21.2
5 1	11 49.51	+14 21.0	1.621	2.395	18.8	20.3	5 1	11 38.12	-4 30.6	2.185	2.990	13.6	21.4
<b>433094</b>	2012 T <sub>L</sub> <sub>90</sub>		3 22.9 23°42	3°2/19.9	17		<b>436719</b>	2011 U <sub>B</sub> <sub>105</sub>		3 22.9 266°45	1°4/21.4	17	
2 21	12 31.89	+7 16.2	1.961	2.834	11.3	20.7	2 21	12 29.90	+2 6.6	2.413	3.274	9.9	21.7
3 2	12 26.02	+7 46.8	1.898	2.836	7.9	20.5	3 2	12 24.51	+2 35.0	2.326	3.259	7.0	21.5
3 12	12 18.41	+8 18.7	1.862	2.838	4.6	20.3	3 12	12 17.61	+3 8.8	2.266	3.244	3.7	21.3
3 22	12 9.83	+8 46.3	1.853	2.840	3.3	20.2	3 22	12 9.80	+3 44.0	2.235	3.229	1.4	21.1
4 1	12 1.22	+9 4.6	1.872	2.843	5.9	20.4	4 1	12 1.81	+4 16.0	2.234	3.214	4.1	21.3
4 11	11 53.50	+9 9.7	1.918	2.845	9.4	20.6	4 11	11 54.41	+4 40.8	2.261	3.199	7.5	21.4
4 21	11 47.41	+9 0.1	1.989	2.848	12.6	20.8	4 21	11 48.27	+4 55.2	2.314	3.184	10.7	21.6
5 1	11 43.42	+8 35.5	2.080	2.851	15.3	21.0	5 1	11 43.86	+4 57.5	2.390	3.168	13.4	21.8
<b>267482</b>	2002 G <sub>T</sub> <sub>72</sub>		3 22.9 293°02	2°4/20.5	17		<b>273285</b>	2006 R <sub>D</sub> <sub>58</sub>		3 22.9 181°99	0°5/22.5	16	
2 21	12 29.63	+3 8.0	1.808	2.682	12.0	20.2	2 21	12 33.89	-1 22.9	1.874	2.731	12.5	21.7
3 2	12 24.71	+4 0.3	1.728	2.667	8.4	19.9	3 2	12 27.57	-0 57.6	1.802	2.731	8.9	21.5
3 12	12 17.86	+5 0.2	1.673	2.653	4.6	19.6	3 12	12 19.33	-0 22.6	1.755	2.732	4.7	21.2
3 22	12 9.80	+6 1.3	1.646	2.638	2.5	19.5	3 22	12 9.95	+0 17.4	1.735	2.732	0.5	20.9
4 1	12 1.50	+6 56.0	1.647	2.624	5.8	19.6	4 1	12 0.45	+0 56.7	1.745	2.731	4.3	21.2
4 11	11 54.01	+7 38.1	1.674	2.609	9.8	19.8	4 11	11 51.86	+1 29.7	1.783	2.730	8.5	21.4
4 21	11 48.15	+8 3.2	1.724	2.595	13.6	20.0	4 21	11 45.00	+1 52.1	1.846	2.729	12.3	21.6
5 1	11 44.52	+8 9.6	1.795	2.581	16.8	20.2	5 1	11 40.40	+2 1.2	1.930	2.727	15.4	21.9
<b>504188</b>	2006 T <sub>Q</sub> <sub>37</sub>		3 22.9 168°37	0°9/21.6	17		<b>224334</b>	2005 U <sub>X</sub> <sub>60</sub>		3 22.9 90°91	3°1/20.1	18	
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>102615</b>	1999 <i>VJ</i> <sub>21</sub>		3 22.9 107°01	0°4/23.3	18		<b>209136</b>	2003 <i>SD</i> <sub>250</sub>		3 22.9 233°78	0°1/22.9	17	
2 21	12 32.93	- 4 57.5	1.743	2.595	13.6	20.4	2 21	12 32.50	- 3 56.1	1.937	2.788	12.5	20.9
3 2	12 26.83	- 4 14.1	1.687	2.613	9.7	20.2	3 2	12 26.70	- 3 13.6	1.848	2.774	8.9	20.7
3 12	12 18.87	- 3 16.8	1.656	2.631	5.3	19.9	3 12	12 18.95	- 2 17.6	1.784	2.760	4.9	20.4
3 22	12 9.91	- 2 11.4	1.652	2.648	0.7	19.6	3 22	12 9.96	- 1 12.8	1.748	2.745	0.4	20.0
4 1	12 1.00	- 1 5.0	1.677	2.665	4.0	19.9	4 1	12 0.68	- 0 5.6	1.742	2.729	4.1	20.3
4 11	11 53.16	- 0 4.9	1.730	2.682	8.3	20.2	4 11	11 52.15	+ 0 56.7	1.764	2.712	8.5	20.5
4 21	11 47.16	+ 0 43.3	1.807	2.697	12.1	20.5	4 21	11 45.22	+ 1 48.2	1.811	2.695	12.4	20.7
5 1	11 43.44	+ 1 16.3	1.906	2.713	15.3	20.7	5 1	11 40.50	+ 2 24.7	1.880	2.677	15.8	20.9
<b>252919</b>	2002 <i>NY</i> <sub>21</sub>		3 22.9 217°80	3°4/26.1	16		<b>354852</b>	2005 <i>YA</i> <sub>172</sub>		3 22.9 102°95	14°8/ 7.7	18	
2 21	12 32.24	-12 36.7	1.907	2.727	13.9	20.8	2 21	12 41.24	+37 31.8	1.595	2.419	16.0	20.5
3 2	12 26.53	-12 25.5	1.820	2.721	10.7	20.5	3 2	12 32.96	+39 33.7	1.595	2.442	14.9	20.5
3 12	12 18.85	-11 55.0	1.757	2.714	7.1	20.3	3 12	12 22.15	+41 2.5	1.616	2.465	14.9	20.5
3 22	12 9.92	-11 7.1	1.721	2.707	3.9	20.1	3 22	12 10.21	+41 49.6	1.659	2.487	15.7	20.6
4 1	12 0.74	-10 6.5	1.713	2.699	4.3	20.1	4 1	11 58.75	+41 51.9	1.722	2.508	17.1	20.8
4 11	11 52.37	- 9 0.3	1.732	2.691	7.8	20.3	4 11	11 49.20	+41 12.8	1.802	2.529	18.6	20.9
4 21	11 45.66	- 7 55.8	1.778	2.682	11.5	20.5	4 21	11 42.39	+39 59.9	1.898	2.549	20.0	21.1
5 1	11 41.22	- 6 59.6	1.846	2.673	14.9	20.7	5 1	11 38.68	+38 21.2	2.005	2.568	21.2	21.3
<b>119359</b>	2001 <i>SN</i> <sub>242</sub>		3 22.9 258°03	0°6/22.3	17		<b>51948</b>	2001 <i>QJ</i> <sub>215</sub>		3 22.9 11°45	0°5/22.6	18	
2 21	12 30.36	- 2 1.3	1.774	2.637	12.8	20.5	2 21	12 31.31	- 1 25.1	1.382	2.256	15.0	17.9
3 2	12 25.22	- 1 16.0	1.697	2.630	9.1	20.3	3 2	12 26.21	- 1 4.4	1.320	2.258	10.6	17.6
3 12	12 18.14	- 0 18.4	1.644	2.623	4.8	20.0	3 12	12 18.77	- 0 31.6	1.281	2.260	5.7	17.4
3 22	12 9.87	+ 0 45.8	1.619	2.615	0.7	19.7	3 22	12 9.95	+ 0 7.6	1.267	2.263	0.6	17.0
4 1	12 1.40	+ 1 49.3	1.622	2.608	4.6	19.9	4 1	12 1.01	+ 0 46.0	1.279	2.267	5.1	17.3
4 11	11 53.79	+ 2 45.0	1.652	2.601	9.0	20.2	4 11	11 53.26	+ 1 16.3	1.316	2.271	10.1	17.6
4 21	11 47.87	+ 3 27.4	1.707	2.593	12.9	20.4	4 21	11 47.66	+ 1 33.4	1.375	2.276	14.5	17.9
5 1	11 44.21	+ 3 53.0	1.782	2.586	16.3	20.6	5 1	11 44.77	+ 1 34.5	1.454	2.281	18.2	18.1
<b>292018</b>	2006 <i>QG</i> <sub>149</sub>		3 22.9 90°19	1°5/21.1	17		<b>472130</b>	2014 <i>BK</i> <sub>37</sub>		3 22.9 142°33	4°4/15.9	18	
2 21	12 28.40	+ 1 37.3	2.248	3.113	10.4	20.7	2 21	12 27.31	+12 0.9	2.713	3.586	8.5	21.1
3 2	12 23.40	+ 2 25.1	2.186	3.121	7.2	20.5	3 2	12 22.48	+13 45.5	2.663	3.595	6.2	21.0
3 12	12 16.97	+ 3 19.0	2.150	3.129	3.8	20.3	3 12	12 16.45	+15 28.8	2.641	3.604	4.6	20.9
3 22	12 9.76	+ 4 13.9	2.143	3.137	1.6	20.1	3 22	12 9.74	+17 4.1	2.650	3.612	4.8	20.9
4 1	12 2.52	+ 5 4.3	2.166	3.145	4.3	20.4	4 1	12 3.00	+18 25.6	2.689	3.620	6.7	21.0
4 11	11 56.02	+ 5 45.5	2.216	3.153	7.7	20.6	4 11	11 56.86	+19 29.3	2.756	3.628	9.0	21.2
4 21	11 50.86	+ 6 14.0	2.292	3.161	10.8	20.8	4 21	11 51.85	+20 13.3	2.847	3.635	11.1	21.4
5 1	11 47.45	+ 6 28.4	2.389	3.169	13.3	21.0	5 1	11 48.34	+20 37.9	2.957	3.642	12.9	21.5
<b>310271</b>	2011 <i>UA</i> <sub>50</sub>		3 22.9 113°15	1°0/22.1	18		<b>222308</b>	2000 <i>SA</i> <sub>298</sub>		3 22.9 120°04	2°3/25.4	18	
2 21	12 34.66	- 0 55.5	1.668	2.530	13.6	21.4	2 21	12 31.16	-10 25.1	2.098	2.924	12.6	20.8
3 2	12 28.11	- 0 11.9	1.615	2.547	9.5	21.2	3 2	12 25.45	-10 1.9	2.031	2.938	9.4	20.6
3 12	12 19.57	+ 0 41.7	1.586	2.564	5.0	21.0	3 12	12 18.12	- 9 22.9	1.988	2.951	5.9	20.4
3 22	12 9.98	+ 1 39.2	1.584	2.580	1.0	20.7	3 22	12 9.89	- 8 31.3	1.973	2.963	2.7	20.2
4 1	12 0.45	+ 2 33.2	1.612	2.596	4.8	21.0	4 1	12 1.63	- 7 32.1	1.988	2.976	3.5	20.3
4 11	11 52.09	+ 3 17.3	1.666	2.611	9.2	21.3	4 11	11 54.21	- 6 31.7	2.031	2.988	6.9	20.5
4 21	11 45.67	+ 3 47.0	1.745	2.626	13.0	21.6	4 21	11 48.32	- 5 36.0	2.100	2.999	10.3	20.8
5 1	11 41.68	+ 4 0.5	1.844	2.640	16.1	21.8	5 1	11 44.40	- 4 49.6	2.192	3.010	13.1	21.0
<b>74745</b>	1999 <i>RZ</i> <sub>191</sub>		3 22.9 270°05	8°1/14.6	17		<b>64786</b>	2001 <i>XM</i> <sub>199</sub>		3 22.9 268°16	7°2/14.3	17	
2 21	12 34.15	+17 37.0	1.728	2.603	12.4	19.6	2 21	12 29.93	+16 38.2	1.898	2.778	11.3	19.4
3 2	12 28.18	+19 14.6	1.651	2.578	9.8	19.4	3 2	12 24.91	+18 23.9	1.833	2.763	8.8	19.2
3 12	12 19.88	+20 47.9	1.600	2.551	8.2	19.2	3 12	12 17.99	+20 5.6	1.795	2.748	7.3	19.1
3 22	12 10.03	+22 6.0	1.576	2.524	8.8	19.2	3 22	12 9.89	+21 33.6	1.783	2.732	7.9	19.1
4 1	11 59.80	+22 59.5	1.578	2.497	11.3	19.3	4 1	12 1.59	+22 39.5	1.799	2.716	10.3	19.2
4 11	11 50.44	+23 22.7	1.603	2.469	14.6	19.4	4 11	11 54.11	+23 18.3	1.838	2.701	13.1	19.3
4 21	11 43.00	+23 14.9	1.649	2.440	17.8	19.5	4 21	11 48.28	+23 29.0	1.898	2.685	15.9	19.5
5 1	11 38.19	+22 38.8	1.710	2.411	20.6	19.7	5 1	11 44.66	+23 13.3	1.975	2.669	18.3	19.7
<b>192527</b>	1998 <i>ST</i> <sub>17</sub>		3 22.9 185°85	1°1/21.9	18		<b>11485</b>	Zinzendorf		3 22.9 240°30	0°2/22.7	18	
2 21	12 33.47	- 1 28.7	1.724	2.585	13.2	21.1	2 21	12 28.41	- 2 7.5	2.653	3.503	9.5	19.5
3 2	12 27.41	- 0 30.8	1.653	2.585	9.3	20.9	3 2	12 23.36	- 1 36.6	2.565	3.492	6.7	19.3
3 12	12 19.30	+ 0 39.4	1.607	2.585	4.9	20.6	3 12	12 16.98	- 0 57.7	2.505	3.481	3.6	19.0
3 22	12 9.97	+ 1 55.3	1.588	2.584	1.1	20.3	3 22	12 9.80	- 0 14.2	2.473	3.470	0.3	18.7
4 1	12 0.49	+ 3 8.8	1.598	2.582	5.0	20.6	4 1	12 2.48	+ 0 29.6	2.472	3.458	3.2	19.0
4 11	11 51.99	+ 4 12.0	1.636	2.580	9.4	20.9	4 11	11 55.69	+ 1 9.4	2.500	3.446	6.5	19.2
4 21	11 45.33	+ 4 59.5	1.698	2.576	13.4	21.1	4 21	11 50.02	+ 1 41.6	2.555	3.434	9.4	19.3
5 1	11 41.08	+ 5 28.3	1.781	2.572	16.8	21.3	5 1	11 45.90	+ 2 3.5	2.633	3.422	12.0	19.5
<b>358039</b>	2006 <i>GA</i> <sub>21</sub>		3 22.9 235°38	3°6/19.9	16		<b>425088</b>	2009 <i>SP</i> <sub>25</sub>		3 22.9 128°57	0°5/23.5	18	
2 21	12 34.68	+ 6 13.7	1.675	2.549	12.9	21.1	2 21	12 32.46	- 4 47.6	2.367	3.206	10.9	22.6
3 2	12 28.39	+ 7 2.6	1.602	2.540	9.1	20.9	3 2	12 26.16	- 4 19.1	2.304	3.224	7.8	22.4
3 12	12 19.89	+ 7 55.7	1.554	2.531	5.2	20.6	3 12	12 18.43	- 3 40.6	2.268	3.241	4.3	22.2
3 22	12 10.03	+ 8 45.6	1.533	2.521	3.7	20.5	3 22	12 9.93	- 2 55.7	2.262	3.258	0.8	22.0
4 1	11 59.96	+ 9 24.8	1.540	2.511	6.9	20.6	4 1	12 1.46	- 2 9.2	2.286	3.273	3.2	22.2
4 11	11 50.87	+ 9 47.6	1.573	2.500	11.0	20.9	4 11	11 53.77	- 1 25.8	2.339	3.289	6.6	22.4
4 21	11 43.71	+ 9 51.2	1.629	2.489	14.8	21.1	4 21	11 47.47	- 0 49.7	2.419	3.303	9.7	22.6
5 1	11 39.09	+ 9 35.2	1.704	2.478	18.1	21.3	5 1	11 42.98	- 0 23.6	2.523	3.317	12.3	22.8
<b>389499</b>	2010 <i>FG</i> <sub>30</sub>		3 22.9 58°26	0°8/23.8	17		<b>366418</b>	2001 <i>TE</i> <sub>240</sub>		3 22.9 154°24	2°7/		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>427539</b>	2002 QN <sub>137</sub>		3 22.9 173°69	4°3/16.9	17		<b>38123</b>	1999 JD <sub>43</sub>		3 22.9 267°55	4°4/26.5	18	
2 21	12 28.24	+10 17.5	2.406	3.280	9.4	21.4	2 21	12 32.54	-13 17.7	1.551	2.380	16.1	19.1
3 2	12 23.29	+11 50.8	2.347	3.283	6.8	21.2	3 2	12 27.17	-13 21.5	1.467	2.371	12.5	18.9
3 12	12 16.94	+13 24.5	2.316	3.284	4.6	21.1	3 12	12 19.41	-13 2.5	1.405	2.362	8.5	18.6
3 22	12 9.81	+14 51.5	2.315	3.286	4.7	21.1	3 22	12 10.07	-12 21.8	1.368	2.352	5.0	18.4
4 1	12 2.61	+16 5.4	2.343	3.287	6.8	21.2	4 1	12 0.36	-11 24.1	1.357	2.343	5.3	18.3
4 11	11 56.09	+17 1.5	2.398	3.287	9.4	21.4	4 11	11 51.60	-10 17.7	1.372	2.333	9.1	18.5
4 21	11 50.83	+17 37.8	2.477	3.288	12.0	21.6	4 21	11 44.85	-9 11.5	1.411	2.324	13.4	18.8
5 1	11 47.26	+17 54.2	2.576	3.287	14.1	21.7	5 1	11 40.84	-8 14.0	1.471	2.314	17.2	19.0
<b>78889</b>	2003 SA <sub>36</sub>		3 22.9 165°62	2°1/20.9	18		<b>368683</b>	2005 RB <sub>5</sub>		3 22.9 101°61	6°7/29.3	18	
2 21	12 34.39	+3 10.2	2.109	2.969	11.2	20.5	2 21	12 34.21	-20 40.6	1.901	2.677	15.6	20.7
3 2	12 27.71	+3 56.7	2.043	2.975	7.8	20.3	3 2	12 27.92	-21 12.1	1.831	2.690	12.8	20.5
3 12	12 19.35	+4 48.4	2.004	2.981	4.2	20.1	3 12	12 19.60	-21 20.0	1.782	2.703	9.8	20.4
3 22	12 10.03	+5 39.8	1.994	2.986	2.1	19.9	3 22	12 10.08	-21 3.7	1.759	2.715	7.4	20.2
4 1	12 0.66	+6 25.0	2.014	2.990	5.0	20.1	4 1	12 0.42	-20 25.9	1.762	2.727	6.8	20.2
4 11	11 52.17	+6 59.2	2.063	2.994	8.6	20.3	4 11	11 51.73	-19 32.6	1.792	2.739	8.5	20.3
4 21	11 45.26	+7 19.4	2.137	2.996	11.8	20.6	4 21	11 44.88	-18 31.6	1.847	2.750	11.2	20.5
5 1	11 40.40	+7 24.4	2.233	2.998	14.6	20.7	5 1	11 40.41	-17 30.8	1.925	2.762	14.0	20.7
<b>30159</b>	Behari		3 22.9 240°87	1°4/21.6	18		<b>201612</b>	2003 SB <sub>205</sub>		3 22.9 255°28	2°9/20.2	18	
2 21	12 32.01	+0 46.2	1.940	2.803	11.9	19.9	2 21	12 33.81	+6 52.9	2.193	3.059	10.6	20.4
3 2	12 26.32	+1 27.6	1.858	2.792	8.4	19.7	3 2	12 27.43	+7 21.4	2.109	3.043	7.5	20.2
3 12	12 18.74	+2 17.6	1.802	2.781	4.4	19.4	3 12	12 19.29	+7 51.8	2.051	3.027	4.3	19.9
3 22	12 9.99	+3 10.9	1.774	2.769	1.4	19.1	3 22	12 10.05	+8 19.1	2.022	3.010	3.0	19.8
4 1	12 1.02	+4 1.1	1.774	2.756	4.8	19.4	4 1	12 0.60	+8 38.4	2.022	2.993	5.5	20.0
4 11	11 52.83	+4 42.2	1.803	2.744	8.9	19.6	4 11	11 51.87	+8 45.9	2.051	2.976	9.0	20.1
4 21	11 46.23	+5 9.9	1.856	2.731	12.6	19.8	4 21	11 44.60	+8 39.4	2.105	2.958	12.2	20.3
5 1	11 41.79	+5 21.8	1.930	2.717	15.8	20.0	5 1	11 39.35	+8 18.5	2.180	2.940	15.0	20.5
<b>39122</b>	2000 WL <sub>42</sub>		3 22.9 171°96	0°3/23.3	18		<b>7407</b>	1988 TL		3 22.9 84°90	1°0/23.8	18	
2 21	12 30.25	-4 38.7	2.154	3.001	11.5	20.0	2 21	12 33.77	-5 50.0	1.542	2.396	14.9	18.0
3 2	12 24.84	-3 59.2	2.080	3.004	8.2	19.8	3 2	12 27.63	-5 20.1	1.490	2.416	10.7	17.8
3 12	12 17.83	-3 8.0	2.031	3.005	4.5	19.5	3 12	12 19.40	-4 34.4	1.461	2.435	6.0	17.5
3 22	12 9.91	-2 9.4	2.011	3.007	0.6	19.2	3 22	12 10.05	-3 38.5	1.458	2.454	1.3	17.2
4 1	12 1.89	-1 8.9	2.020	3.008	3.5	19.5	4 1	12 0.78	-2 39.6	1.483	2.472	4.2	17.5
4 11	11 54.62	-0 12.6	2.058	3.009	7.3	19.7	4 11	11 52.73	-1 45.5	1.535	2.491	8.8	17.8
4 21	11 48.78	+0 34.6	2.123	3.009	10.7	19.9	4 21	11 46.73	-1 2.4	1.611	2.509	12.9	18.1
5 1	11 44.84	+1 9.2	2.209	3.010	13.6	20.1	5 1	11 43.26	-0 34.1	1.707	2.527	16.2	18.4
<b>286105</b>	2001 TL <sub>93</sub>		3 22.9 160°19	3°1/25.8	18		<b>35743</b>	1999 GP <sub>29</sub>		3 22.9 311°50	1°2/22.1	18	
2 21	12 33.74	-12 8.7	1.773	2.597	14.6	21.6	2 21	12 33.11	-0 6.7	1.346	2.222	15.3	19.2
3 2	12 27.61	-11 45.3	1.700	2.604	11.1	21.4	3 2	12 27.70	+0 19.9	1.274	2.213	10.8	18.9
3 12	12 19.43	-11 1.3	1.650	2.609	7.1	21.2	3 12	12 19.71	+0 58.2	1.226	2.205	5.8	18.6
3 22	12 10.05	-9 59.8	1.627	2.615	3.6	21.0	3 22	12 10.10	+1 42.0	1.202	2.198	1.2	18.3
4 1	12 0.55	-8 46.9	1.631	2.619	4.2	21.0	4 1	12 0.20	+2 23.4	1.204	2.190	5.7	18.6
4 11	11 52.04	-7 30.9	1.664	2.623	8.0	21.3	4 11	11 51.45	+2 54.6	1.231	2.183	11.0	18.8
4 21	11 45.36	-6 19.6	1.723	2.626	11.9	21.5	4 21	11 44.95	+3 10.1	1.280	2.176	15.7	19.1
5 1	11 41.09	-5 19.5	1.804	2.628	15.3	21.7	5 1	11 41.39	+3 7.4	1.348	2.170	19.6	19.3
<b>50745</b>	2000 ET <sub>165</sub>		3 22.9 250°56	0°3/22.7	18		<b>110500</b>	2001 TT <sub>65</sub>		3 22.9 184°70	0°5/23.4	18	
2 21	12 29.79	-2 8.9	2.111	2.967	11.3	18.8	2 21	12 31.82	-4 23.7	1.943	2.793	12.4	19.9
3 2	12 24.57	-1 39.1	2.034	2.964	8.0	18.6	3 2	12 26.10	-3 56.3	1.868	2.793	8.9	19.7
3 12	12 17.72	-0 59.8	1.983	2.960	4.3	18.3	3 12	12 18.58	-3 16.7	1.818	2.793	4.9	19.4
3 22	12 9.90	-0 15.1	1.960	2.957	0.4	18.0	3 22	12 9.99	-2 29.0	1.796	2.792	0.8	19.1
4 1	12 1.96	+0 29.7	1.967	2.953	3.8	18.3	4 1	12 1.26	-1 38.9	1.803	2.792	3.8	19.4
4 11	11 54.74	+1 9.3	2.001	2.950	7.6	18.5	4 11	11 53.38	-0 52.6	1.838	2.791	7.9	19.6
4 21	11 48.96	+1 39.3	2.060	2.946	11.1	18.7	4 21	11 47.09	-0 15.1	1.899	2.789	11.6	19.8
5 1	11 45.11	+1 57.0	2.142	2.942	14.0	18.9	5 1	11 42.94	+0 10.0	1.981	2.788	14.8	20.0
<b>375022</b>	2007 GJ <sub>56</sub>		3 22.9 6°00	4°0/19.2	17		<b>192372</b>	1996 AB <sub>14</sub>		3 22.9 162°39	0°8/22.2	17	
2 21	12 31.06	+7 38.5	1.729	2.609	12.2	21.0	2 21	12 31.60	-0 7.1	2.127	2.985	11.2	20.7
3 2	12 25.68	+8 35.4	1.669	2.609	8.6	20.8	3 2	12 25.78	+0 19.4	2.057	2.988	7.9	20.5
3 12	12 18.38	+9 34.5	1.633	2.609	5.2	20.6	3 12	12 18.35	+0 53.3	2.012	2.990	4.1	20.3
3 22	12 9.96	+10 28.3	1.625	2.609	4.2	20.5	3 22	12 9.97	+1 30.3	1.996	2.992	0.8	20.0
4 1	12 1.47	+11 9.7	1.643	2.610	7.0	20.7	4 1	12 1.51	+2 5.4	2.009	2.993	4.0	20.3
4 11	11 53.96	+11 33.4	1.688	2.610	10.7	20.9	4 11	11 53.84	+2 34.0	2.050	2.995	7.8	20.5
4 21	11 48.24	+11 37.5	1.755	2.611	14.1	21.1	4 21	11 47.65	+2 52.5	2.117	2.996	11.1	20.7
5 1	11 44.80	+11 21.9	1.842	2.612	17.0	21.3	5 1	11 43.41	+2 58.7	2.206	2.997	13.9	20.9
<b>135160</b>	2001 QL <sub>241</sub>		3 22.9 198°52	0°3/23.4	18		<b>135672</b>	2002 NZ <sub>25</sub>		3 22.9 231°64	0°5/22.4	17	
2 21	12 29.02	-4 14.2	2.673	3.515	9.7	20.9	2 21	12 32.07	-2 21.3	2.064	2.917	11.7	20.8
3 2	12 23.75	-3 45.0	2.591	3.512	6.9	20.7	3 2	12 26.31	-1 34.3	1.976	2.904	8.3	20.6
3 12	12 17.19	-3 6.6	2.535	3.509	3.8	20.5	3 12	12 18.73	-0 35.7	1.913	2.889	4.4	20.3
3 22	12 9.86	-2 22.5	2.509	3.505	0.6	20.2	3 22	12 10.01	+0 29.6	1.878	2.874	0.5	20.0
4 1	12 2.42	-1 36.5	2.513	3.501	2.9	20.4	4 1	12 1.04	+1 35.3	1.873	2.859	4.1	20.2
4 11	11 55.55	-0 53.1	2.547	3.496	6.2	20.6	4 11	11 52.76	+2 34.7	1.897	2.842	8.3	20.4
4 21	11 49.81	-0 16.2	2.608	3.491	9.1	20.8	4 21	11 45.98	+3 22.4	1.947	2.825	12.0	20.6
5 1	11 45.62	+0 11.4	2.692	3.486	11.6	21.0	5 1	11 41.27	+3 55.2	2.018	2.807	15.1	20.8
<b>423604</b>	2005 WE <sub>34</sub>		3 22.9 344°85	9°0/13.9	17		<b>217924</b>	2001 TK		3 22.9 142°30	0°1/23.0	18	
2 21	12 33.53	+22 12.7	1.742	2.614	12.6	20.0	2 21	12 31.52	-3 51.8	2.079	2.928	11.8	21.7
3 2	12 27												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>203255</b>	2001 <i>QD</i> <sub>136</sub>		3 22.9 212°45	2°4/25.2	17		<b>229769</b>	2008 <i>JX</i> <sub>19</sub>		3 22.9 252°92	6°1/29.5	18	
2 21	12 33.66	-10 13.1	1.843	2.673	13.9	21.2	2 21	12 31.10	-21 49.5	2.188	2.953	14.2	20.4
3 2	12 27.62	-9 47.0	1.757	2.666	10.5	20.9	3 2	12 25.75	-21 51.1	2.081	2.934	11.7	20.1
3 12	12 19.50	-9 2.0	1.694	2.658	6.5	20.7	3 12	12 18.52	-21 29.3	1.997	2.914	9.1	19.9
3 22	12 10.09	-8 1.1	1.658	2.649	2.8	20.4	3 22	12 10.02	-20 43.5	1.938	2.894	6.8	19.8
4 1	12 0.39	-6 50.2	1.651	2.639	4.0	20.5	4 1	12 1.16	-19 36.1	1.907	2.874	6.2	19.7
4 11	11 51.53	-5 37.1	1.672	2.629	8.1	20.7	4 11	11 52.92	-18 13.0	1.903	2.852	7.9	19.7
4 21	11 44.42	-4 29.5	1.719	2.618	12.2	20.9	4 21	11 46.15	-16 42.1	1.926	2.830	10.8	19.9
5 1	11 39.66	-3 33.5	1.788	2.606	15.7	21.1	5 1	11 41.49	-15 11.7	1.973	2.808	13.7	20.0
<b>500602</b>	2012 <i>UP</i> <sub>120</sub>		3 22.9 190°84	4°0/27.7	17		<b>397813</b>	2008 <i>RJ</i> <sub>95</sub>		3 22.9 188°36	0°6/23.5	18	
2 21	12 28.89	-16 12.2	2.411	3.206	12.1	21.7	2 21	12 32.72	-6 24.1	1.626	2.477	14.4	21.7
3 2	12 23.85	-16 6.1	2.325	3.205	9.6	21.5	3 2	12 27.04	-5 28.9	1.552	2.477	10.4	21.5
3 12	12 17.31	-15 42.6	2.264	3.205	6.8	21.3	3 12	12 19.22	-4 15.2	1.502	2.476	5.8	21.2
3 22	12 9.89	-15 2.8	2.229	3.204	4.5	21.2	3 22	12 10.08	-2 49.1	1.479	2.475	1.0	20.9
4 1	12 2.32	-14 10.3	2.223	3.203	4.3	21.1	4 1	12 0.77	-1 19.1	1.484	2.473	4.3	21.1
4 11	11 55.39	-13 10.2	2.246	3.201	6.4	21.3	4 11	11 52.46	+0 5.1	1.517	2.470	9.1	21.4
4 21	11 49.75	-12 8.4	2.295	3.200	9.3	21.4	4 21	11 46.07	+1 15.9	1.574	2.467	13.4	21.6
5 1	11 45.88	-11 10.4	2.369	3.198	11.9	21.6	5 1	11 42.18	+2 8.2	1.652	2.463	17.0	21.9
<b>285341</b>	1999 <i>LB</i> <sub>19</sub>		3 22.9 335°65	11°9/9.6	17		<b>66829</b>	1999 <i>UY</i> <sub>42</sub>		3 22.9 250°46	4°0/26.9	18	
2 21	12 29.19	+27 15.9	1.535	2.408	13.8	19.2	2 21	12 30.56	-14 25.9	2.031	2.842	13.5	19.3
3 2	12 24.86	+28 57.7	1.480	2.386	12.3	19.1	3 2	12 25.30	-14 26.2	1.944	2.836	10.6	19.1
3 12	12 18.14	+30 22.8	1.448	2.364	11.9	19.0	3 12	12 18.22	-14 7.6	1.881	2.830	7.3	18.9
3 22	12 9.96	+31 19.5	1.438	2.344	13.0	19.0	3 22	12 10.00	-13 31.4	1.844	2.824	4.5	18.7
4 1	12 1.58	+31 39.6	1.451	2.325	15.2	19.1	4 1	12 1.54	-12 41.2	1.835	2.817	4.5	18.7
4 11	11 54.33	+31 20.6	1.482	2.306	17.7	19.2	4 11	11 53.83	-11 43.2	1.853	2.811	7.4	18.8
4 21	11 49.19	+30 25.1	1.530	2.289	20.3	19.3	4 21	11 47.65	-10 44.1	1.898	2.805	10.8	19.0
5 1	11 46.79	+28 58.2	1.592	2.274	22.5	19.5	5 1	11 43.57	-9 50.3	1.965	2.798	13.9	19.2
<b>234657</b>	2002 <i>EJ</i> <sub>103</sub>		3 22.9 233°24	0°9/22.1	17		<b>338430</b>	2003 <i>CZ</i> <sub>13</sub>		3 22.9 37°56	0°1/22.9	17	
2 21	12 32.42	+0 20.3	2.035	2.894	11.6	20.4	2 21	12 28.90	-2 42.9	1.923	2.783	12.1	20.6
3 2	12 26.50	+0 44.1	1.956	2.888	8.2	20.1	3 2	12 23.98	-2 13.5	1.862	2.793	8.6	20.4
3 12	12 18.80	+1 15.5	1.904	2.881	4.3	19.9	3 12	12 17.41	-1 33.8	1.826	2.803	4.6	20.1
3 22	12 10.03	+1 49.9	1.879	2.875	0.9	19.6	3 22	12 9.92	-0 48.5	1.817	2.813	0.4	19.8
4 1	12 1.08	+2 22.4	1.884	2.868	4.3	19.8	4 1	12 2.40	-0 3.1	1.836	2.824	3.8	20.1
4 11	11 52.91	+2 47.9	1.916	2.861	8.2	20.1	4 11	11 55.75	+0 36.6	1.883	2.835	7.8	20.4
4 21	11 46.29	+3 2.9	1.974	2.853	11.8	20.3	4 21	11 50.65	+1 6.3	1.954	2.846	11.3	20.6
5 1	11 41.75	+3 5.1	2.054	2.846	14.8	20.5	5 1	11 47.55	+1 23.2	2.048	2.857	14.2	20.8
<b>14671</b>	1999 <i>RM</i> <sub>49</sub>		3 22.9 144°93	0°3/22.6	18 R		<b>170765</b>	2004 <i>CN</i> <sub>57</sub>		3 22.9 76°10	6°0/16.1	15	
2 21	12 31.62	-1 51.4	2.260	3.111	10.9	18.8	2 21	12 29.94	+15 16.0	2.058	2.935	10.7	20.0
3 2	12 25.69	-1 19.8	2.192	3.120	7.7	18.6	3 2	12 24.62	+16 30.6	2.012	2.943	8.0	19.8
3 12	12 18.25	-0 39.8	2.152	3.128	4.1	18.4	3 12	12 17.71	+17 39.9	1.993	2.951	6.2	19.7
3 22	12 9.97	+0 4.5	2.140	3.136	0.4	18.1	3 22	12 9.94	+18 36.9	2.000	2.959	6.4	19.8
4 1	12 1.66	+0 48.1	2.158	3.143	3.6	18.4	4 1	12 2.20	+19 15.5	2.035	2.967	8.4	19.9
4 11	11 54.11	+1 26.2	2.205	3.150	7.2	18.6	4 11	11 55.34	+19 32.7	2.095	2.975	11.0	20.1
4 21	11 47.97	+1 55.1	2.278	3.157	10.4	18.8	4 21	11 50.02	+19 28.2	2.178	2.983	13.5	20.2
5 1	11 43.69	+2 12.3	2.373	3.163	13.1	19.0	5 1	11 46.68	+19 3.7	2.279	2.991	15.7	20.4
<b>409776</b>	2006 <i>EX</i> <sub>26</sub>		3 22.9 284°69	1°0/23.6	16		<b>52640</b>	1997 <i>WJ</i> <sub>46</sub>		3 22.9 139°92	5°4/18.1	18 R	
2 21	12 34.15	-4 25.2	1.431	2.292	15.4	21.8	2 21	12 35.37	+11 9.5	1.694	2.570	12.6	18.9
3 2	12 28.45	-4 18.6	1.350	2.280	11.2	21.5	3 2	12 28.68	+12 20.2	1.645	2.580	9.1	18.7
3 12	12 20.16	-3 56.9	1.292	2.267	6.4	21.2	3 12	12 19.96	+13 29.0	1.620	2.590	6.1	18.6
3 22	12 10.16	-3 23.9	1.259	2.254	1.3	20.8	3 22	12 10.14	+14 27.3	1.623	2.598	5.7	18.6
4 1	11 59.76	-2 45.7	1.252	2.242	4.8	21.0	4 1	12 0.37	+15 7.8	1.654	2.607	8.3	18.8
4 11	11 50.37	-2 10.0	1.271	2.229	10.0	21.3	4 11	11 51.76	+15 26.1	1.710	2.614	11.7	19.0
4 21	11 43.15	-1 43.4	1.313	2.216	14.8	21.5	4 21	11 45.13	+15 21.8	1.789	2.622	14.9	19.2
5 1	11 38.84	-1 30.7	1.374	2.204	18.9	21.8	5 1	11 40.97	+14 56.4	1.886	2.628	17.6	19.4
<b>452669</b>	2005 <i>WH</i> <sub>100</sub>		3 22.9 158°21	2°2/24.9	18		<b>508625</b>	2017 <i>SA</i> <sub>41</sub>		3 22.9 235°13	1°6/21.3	17	
2 21	12 33.83	-9 44.7	1.668	2.505	14.8	22.4	2 21	12 29.89	+1 33.8	2.095	2.960	11.0	21.7
3 2	12 27.75	-9 12.0	1.598	2.511	11.0	22.2	3 2	12 24.65	+2 16.2	2.022	2.957	7.7	21.4
3 12	12 19.55	-8 19.6	1.551	2.517	6.7	22.0	3 12	12 17.78	+3 5.5	1.974	2.953	4.1	21.2
3 22	12 10.10	-7 11.6	1.530	2.522	2.6	21.7	3 22	12 9.96	+3 56.7	1.955	2.949	1.6	21.0
4 1	12 0.53	-5 55.0	1.538	2.527	4.1	21.8	4 1	12 2.01	+4 43.8	1.965	2.945	4.6	21.2
4 11	11 52.01	-4 38.7	1.573	2.531	8.5	22.1	4 11	11 54.81	+5 21.7	2.002	2.941	8.3	21.4
4 21	11 45.42	-3 30.5	1.633	2.534	12.6	22.3	4 21	11 49.06	+5 46.8	2.065	2.937	11.6	21.6
5 1	11 41.33	-2 36.4	1.715	2.537	16.1	22.6	5 1	11 45.24	+5 57.0	2.149	2.933	14.5	21.8
<b>140812</b>	2001 <i>UE</i> <sub>159</sub>		3 22.9 105°34	2°5/26.2	17		<b>158469</b>	2002 <i>CM</i> <sub>248</sub>		3 22.9 46°77	3°3/19.9	18	
2 21	12 27.51	-12 29.8	2.379	3.196	11.6	20.2	2 21	12 31.04	+5 38.4	1.721	2.599	12.4	19.6
3 2	12 22.81	-11 57.7	2.305	3.204	8.8	20.0	3 2	12 25.66	+6 31.8	1.662	2.603	8.6	19.4
3 12	12 16.72	-11 9.6	2.255	3.212	5.7	19.9	3 12	12 18.37	+7 29.1	1.629	2.607	4.9	19.2
3 22	12 9.85	-10 8.4	2.233	3.219	3.0	19.7	3 22	12 10.01	+8 23.2	1.622	2.611	3.4	19.1
4 1	12 2.91	-8 58.9	2.240	3.227	3.3	19.7	4 1	12 1.60	+9 7.0	1.643	2.615	6.4	19.3
4 11	11 56.66	-7 47.1	2.276	3.234	6.2	19.9	4 11	11 54.19	+9 35.1	1.690	2.619	10.2	19.5
4 21	11 51.68	-6 38.7	2.339	3.242	9.2	20.1	4 21	11 48.55	+9 44.9	1.760	2.624	13.7	19.7
5 1	11 48.38	-5 38.8	2.426	3.249	11.9	20.3	5 1	11 45.19	+9 36.1	1.849	2.628	16.7	19.9
<b>37922</b>	1998 <i>FQ</i> <sub>109</sub>		3 22.9 328°15	3°4/26.0	17		<b>202816</b>	2008 <i>SS</i> <sub></sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>175990</b>	2000 QQ <sub>119</sub>		3 22.9 156°78	3°6/27.5 18			<b>333434</b>	2003 SO <sub>61</sub>		3 22.9 191°61	0°7/22.2 17		
2 21	12 31.42	-15 46.5	3.006	3.788	10.3	20.6	2 21	12 32.16	-0 4.0	2.116	2.973	11.3	20.6
3 2	12 25.37	-15 59.3	2.923	3.795	8.1	20.5	3 2	12 26.24	+0 18.3	2.042	2.972	7.9	20.4
3 12	12 18.05	-15 58.8	2.866	3.801	5.8	20.3	3 12	12 18.64	+0 47.9	1.994	2.971	4.2	20.1
3 22	12 10.00	-15 45.8	2.837	3.807	3.9	20.2	3 22	12 10.07	+1 20.7	1.974	2.970	0.8	19.9
4 1	12 1.84	-15 22.1	2.838	3.813	3.8	20.2	4 1	12 1.38	+1 51.8	1.984	2.969	4.0	20.1
4 11	11 54.23	-14 51.4	2.869	3.818	5.6	20.3	4 11	11 53.47	+2 16.7	2.023	2.968	7.8	20.3
4 21	11 47.71	-14 17.5	2.928	3.822	7.8	20.5	4 21	11 47.05	+2 31.9	2.086	2.966	11.2	20.6
5 1	11 42.71	-13 44.4	3.012	3.827	10.0	20.7	5 1	11 42.63	+2 35.1	2.172	2.964	14.1	20.7
<b>406524</b>	2007 VK <sub>230</sub>		3 22.9 48°51	1°0/22.2 18			<b>80361</b>	1999 XZ <sub>130</sub>		3 22.9 119°11	0°6/22.5 18		
2 21	12 32.71	-0 53.1	1.316	2.192	15.5	20.9	2 21	12 37.11	-1 29.5	1.461	2.323	15.1	20.0
3 2	12 27.18	-0 18.3	1.265	2.204	10.9	20.6	3 2	12 30.16	-1 1.3	1.404	2.337	10.6	19.8
3 12	12 19.29	+0 28.5	1.237	2.217	5.7	20.3	3 12	12 20.86	-0 21.5	1.372	2.350	5.6	19.5
3 22	12 10.10	+1 20.3	1.234	2.230	1.0	20.1	3 22	12 10.26	+0 24.1	1.366	2.362	0.6	19.2
4 1	12 0.95	+2 8.7	1.258	2.244	5.4	20.4	4 1	11 59.68	+1 7.9	1.388	2.374	5.0	19.5
4 11	11 53.15	+2 45.9	1.306	2.258	10.4	20.7	4 11	11 50.43	+1 42.9	1.436	2.386	9.9	19.8
4 21	11 47.62	+3 7.3	1.376	2.273	14.8	21.0	4 21	11 43.43	+2 4.5	1.507	2.396	14.2	20.1
5 1	11 44.86	+3 10.5	1.466	2.287	18.3	21.3	5 1	11 39.23	+2 10.1	1.599	2.407	17.7	20.4
<b>322330</b>	2011 HV <sub>8</sub>		3 22.9 114°23	1°6/21.2 18			<b>472651</b>	2015 DB <sub>216</sub>		3 22.9 324°72	0°3/21.1 16		
2 21	12 29.08	+0 36.9	1.972	2.839	11.5	20.5	2 21	12 15.61	+3 43.1	14.272	15.129	1.9	20.3
3 2	12 24.10	+1 38.5	1.908	2.844	8.0	20.3	3 2	12 13.71	+3 49.5	14.184	15.116	1.3	20.2
3 12	12 17.49	+2 48.7	1.870	2.849	4.2	20.1	3 12	12 11.63	+3 56.5	14.126	15.104	0.7	20.2
3 22	12 9.95	+4 1.1	1.859	2.854	1.7	19.9	3 22	12 9.44	+4 3.5	14.098	15.091	0.3	20.1
4 1	12 2.34	+5 8.7	1.878	2.858	4.8	20.2	4 1	12 7.24	+4 9.8	14.101	15.079	0.8	20.2
4 11	11 55.57	+6 5.2	1.924	2.863	8.6	20.4	4 11	12 5.12	+4 15.0	14.134	15.067	1.4	20.2
4 21	11 50.30	+6 46.6	1.995	2.867	12.0	20.6	4 21	12 3.16	+4 18.7	14.196	15.055	2.0	20.3
5 1	11 47.02	+7 10.6	2.087	2.872	14.8	20.8	5 1	12 1.44	+4 20.4	14.283	15.042	2.6	20.3
<b>165922</b>	2001 TK <sub>144</sub>		3 22.9 308°42	5°3/17.8 18			<b>370203</b>	2002 EV <sub>36</sub>		3 22.9 103°00	1°7/21.2 17		
2 21	12 31.87	+13 3.3	1.933	2.810	11.3	19.3	2 21	12 30.37	+1 4.2	1.905	2.772	11.9	21.4
3 2	12 26.24	+13 49.1	1.860	2.794	8.3	19.1	3 2	12 25.02	+2 0.8	1.846	2.782	8.2	21.2
3 12	12 18.73	+14 31.9	1.812	2.779	5.9	18.9	3 12	12 17.99	+3 5.1	1.813	2.792	4.3	21.0
3 22	12 10.07	+15 5.1	1.791	2.763	5.6	18.8	3 22	12 10.02	+4 10.9	1.808	2.802	1.7	20.8
4 1	12 1.22	+15 22.6	1.798	2.748	7.9	18.9	4 1	12 2.03	+5 11.4	1.832	2.812	4.9	21.1
4 11	11 53.21	+15 20.7	1.830	2.734	11.1	19.1	4 11	11 54.95	+6 0.4	1.883	2.822	8.7	21.3
4 21	11 46.84	+14 58.6	1.885	2.719	14.2	19.3	4 21	11 49.48	+6 34.2	1.959	2.831	12.2	21.6
5 1	11 42.68	+14 17.5	1.959	2.705	16.9	19.4	5 1	11 46.06	+6 51.0	2.055	2.840	15.0	21.8
<b>456864</b>	2007 VE <sub>9</sub>		3 22.9 231°44	3°5/19.4 17			<b>332972</b>	2011 FY <sub>1</sub>		3 22.9 252°33	5°4/17.2 17		
2 21	12 33.34	+5 53.8	1.935	2.805	11.6	21.7	2 21	12 31.36	+12 45.7	1.969	2.846	11.1	20.2
3 2	12 27.32	+7 3.0	1.854	2.791	8.2	21.4	3 2	12 25.82	+13 53.9	1.904	2.838	8.2	20.0
3 12	12 19.34	+8 17.7	1.800	2.776	4.8	21.2	3 12	12 18.48	+15 0.1	1.864	2.830	5.8	19.9
3 22	12 10.13	+9 30.6	1.774	2.761	3.7	21.1	3 22	12 10.07	+15 56.8	1.852	2.822	5.8	19.9
4 1	12 0.66	+10 33.8	1.778	2.745	6.6	21.2	4 1	12 1.53	+16 37.2	1.868	2.813	8.1	20.0
4 11	11 51.99	+11 21.0	1.808	2.728	10.3	21.4	4 11	11 53.84	+16 57.0	1.909	2.804	11.2	20.1
4 21	11 44.94	+11 48.7	1.863	2.710	13.8	21.6	4 21	11 47.75	+16 55.2	1.973	2.796	14.1	20.3
5 1	11 40.13	+11 55.9	1.938	2.691	16.8	21.8	5 1	11 43.80	+16 32.5	2.056	2.787	16.7	20.5
<b>355759</b>	2008 RE		3 22.9 147°16	2°2/20.9 18			<b>428790</b>	2008 SN <sub>286</sub>		3 22.9 191°86	0°3/22.6 17		
2 21	12 35.32	+2 4.8	1.773	2.637	12.8	21.6	2 21	12 31.46	-1 38.0	2.300	3.151	10.7	21.7
3 2	12 28.59	+3 3.2	1.714	2.649	8.9	21.4	3 2	12 25.66	-1 12.6	2.223	3.150	7.6	21.5
3 12	12 19.92	+4 8.9	1.682	2.660	4.7	21.2	3 12	12 18.31	-0 39.0	2.172	3.148	4.0	21.2
3 22	12 10.17	+5 15.0	1.677	2.670	2.2	21.0	3 22	12 10.05	-0 1.0	2.150	3.147	0.4	20.9
4 1	12 0.42	+6 14.0	1.702	2.679	5.5	21.2	4 1	12 1.68	+0 36.8	2.158	3.144	3.6	21.2
4 11	11 51.74	+6 59.6	1.754	2.688	9.6	21.5	4 11	11 54.01	+1 9.7	2.195	3.141	7.2	21.4
4 21	11 44.93	+7 28.3	1.830	2.695	13.2	21.7	4 21	11 47.70	+1 34.1	2.258	3.138	10.5	21.6
5 1	11 40.49	+7 38.7	1.927	2.702	16.2	22.0	5 1	11 43.23	+1 47.5	2.344	3.135	13.2	21.8
<b>372902</b>	2011 AR <sub>46</sub>		3 22.9 56°20	2°3/25.1 18			<b>186178</b>	2001 UT <sub>184</sub>		3 22.9 165°58	1°3/21.5 16		
2 21	12 31.02	-9 7.5	1.663	2.507	14.5	21.2	2 21	12 30.47	-0 21.5	2.189	3.047	10.9	21.8
3 2	12 25.74	-8 52.7	1.598	2.515	10.8	21.0	3 2	12 24.97	+0 42.6	2.120	3.052	7.6	21.6
3 12	12 18.47	-8 20.0	1.557	2.524	6.6	20.8	3 12	12 17.93	+1 55.6	2.079	3.057	4.0	21.4
3 22	12 10.04	-7 33.1	1.541	2.532	2.8	20.5	3 22	12 10.02	+3 11.6	2.066	3.061	1.3	21.2
4 1	12 1.54	-6 37.8	1.552	2.541	4.0	20.6	4 1	12 2.04	+4 24.1	2.083	3.064	4.3	21.4
4 11	11 54.05	-5 41.9	1.590	2.551	8.2	20.9	4 11	11 54.81	+5 27.0	2.129	3.067	7.9	21.6
4 21	11 48.40	-4 52.0	1.653	2.560	12.1	21.2	4 21	11 49.00	+6 16.0	2.201	3.069	11.2	21.8
5 1	11 45.12	-4 13.4	1.737	2.569	15.5	21.4	5 1	11 45.06	+6 48.9	2.295	3.070	13.9	22.0
<b>230643</b>	2003 RQ <sub>10</sub>		3 22.9 211°10	2°6/26.1 18			<b>473192</b>	2015 KU <sub>73</sub>		3 22.9 355°13	6°0/16.3 17		
2 21	12 30.74	-11 55.2	2.590	3.400	11.0	20.9	2 21	12 29.05	+14 45.0	1.954	2.834	11.0	20.3
3 2	12 25.09	-11 43.8	2.497	3.393	8.4	20.7	3 2	12 24.15	+15 54.9	1.899	2.832	8.2	20.1
3 12	12 18.00	-11 18.3	2.430	3.385	5.5	20.5	3 12	12 17.54	+17 0.4	1.870	2.831	6.3	20.0
3 22	12 10.01	-10 40.6	2.391	3.377	3.0	20.3	3 22	12 9.98	+17 54.0	1.867	2.830	6.4	20.0
4 1	12 1.84	-9 54.0	2.382	3.368	3.3	20.3	4 1	12 2.37	+18 29.4	1.892	2.829	8.6	20.1
4 11	11 54.24	-9 3.2	2.403	3.359	6.1	20.5	4 11	11 55.63	+18 43.2	1.941	2.828	11.4	20.3
4 21	11 47.85	-8 13.3	2.451	3.349	9.1	20.7	4 21	11 50.47	+18 34.7	2.012	2.828	14.1	20.5
5 1	11 43.13	-7 28.7	2.524	3.338	11.7	20.8	5 1	11 47.35	+18 5.4	2.102	2.829	16.5	20.7
<b>123977</b>	2001 FO <sub>34</sub>		3 22.9 359°75	1°0/23.9 18			<b>437100</b>	2012 US <sub>101</sub>		3 22.9 114°69	4°2/18.5 17		
2 21	12 30.86	-5 25.1</											

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3 22.9

3 22.9

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>31330</b>	1998 <i>HB</i> <sub>84</sub>		3 22.9 61°59	0°3/23.3	18		<b>129158</b>	Michaelmellman		3 22.9 322°12	5°7/16.6	17	R
2 21	12 27.48	- 5 30.9	2.060	2.911	11.8	18.4	2 21	12 29.68	+13 44.5	2.008	2.887	10.8	19.5
3 2	12 22.86	- 4 32.0	2.004	2.929	8.4	18.2	3 2	12 24.58	+14 57.7	1.951	2.885	8.0	19.3
3 12	12 16.78	- 3 20.5	1.973	2.948	4.6	18.0	3 12	12 17.80	+16 7.8	1.919	2.882	6.0	19.2
3 22	12 9.91	- 2 1.8	1.971	2.967	0.6	17.7	3 22	12 10.06	+17 7.1	1.915	2.880	6.1	19.2
4 1	12 3.08	- 0 42.8	1.998	2.986	3.5	18.0	4 1	12 2.26	+17 49.4	1.939	2.878	8.3	19.3
4 11	11 57.07	+ 0 29.8	2.053	3.005	7.2	18.3	4 11	11 55.29	+18 10.7	1.987	2.876	11.1	19.5
4 21	11 52.49	+ 1 30.9	2.134	3.024	10.5	18.5	4 21	11 49.87	+18 10.0	2.058	2.874	13.8	19.7
5 1	11 49.72	+ 2 17.1	2.238	3.043	13.3	18.7	5 1	11 46.48	+17 48.6	2.148	2.873	16.2	19.8
<b>480534</b>	2015 <i>MQ</i> <sub>25</sub>		3 22.9 279°74	2°5/25.7	17		<b>239874</b>	2000 <i>JN</i> <sub>83</sub>		3 22.9 312°84	3°3/20.7	17	
2 21	12 28.43	-10 47.4	2.307	3.131	11.7	21.5	2 21	12 30.90	+ 2 51.7	1.151	2.042	16.1	20.0
3 2	12 23.63	-10 34.0	2.216	3.121	8.8	21.3	3 2	12 26.79	+ 3 41.9	1.064	2.011	11.5	19.7
3 12	12 17.28	-10 5.7	2.151	3.111	5.7	21.1	3 12	12 19.64	+ 4 45.5	0.998	1.980	6.3	19.3
3 22	12 9.97	- 9 24.8	2.112	3.101	2.8	20.9	3 22	12 10.27	+ 5 53.9	0.956	1.949	3.4	19.0
4 1	12 2.47	- 8 35.1	2.103	3.091	3.4	20.9	4 1	12 0.11	+ 6 55.4	0.937	1.919	8.0	19.1
4 11	11 55.57	- 7 42.0	2.122	3.080	6.6	21.1	4 11	11 50.90	+ 7 38.8	0.941	1.889	14.0	19.3
4 21	11 49.96	- 6 51.0	2.168	3.070	9.8	21.3	4 21	11 44.13	+ 7 57.0	0.964	1.861	19.5	19.6
5 1	11 46.15	- 6 6.9	2.236	3.060	12.7	21.4	5 1	11 40.80	+ 7 47.0	1.003	1.833	24.3	19.8
<b>511656</b>	2015 <i>BJ</i> <sub>291</sub>		3 22.9 175°18	1°8/24.7	17		<b>39951</b>	1998 <i>FN</i> <sub>116</sub>		3 22.9 189°80	2°1/25.1	18	
2 21	12 31.33	- 7 38.9	2.004	2.842	12.6	21.1	2 21	12 32.25	- 9 47.2	1.891	2.723	13.5	18.9
3 2	12 25.77	- 7 29.6	1.927	2.843	9.3	20.9	3 2	12 26.55	- 9 16.5	1.811	2.722	10.1	18.7
3 12	12 18.46	- 7 6.5	1.875	2.843	5.6	20.7	3 12	12 18.94	- 8 27.8	1.755	2.721	6.2	18.5
3 22	12 10.08	- 6 32.4	1.850	2.843	2.1	20.5	3 22	12 10.18	- 7 24.7	1.727	2.719	2.5	18.2
4 1	12 1.56	- 5 52.0	1.854	2.843	3.6	20.6	4 1	12 1.24	- 6 13.2	1.728	2.717	3.8	18.3
4 11	11 53.84	- 5 10.8	1.886	2.843	7.4	20.8	4 11	11 53.15	- 5 0.9	1.756	2.714	7.8	18.5
4 21	11 47.67	- 4 34.2	1.944	2.843	10.9	21.0	4 21	11 46.73	- 3 55.0	1.811	2.710	11.6	18.8
5 1	11 43.58	- 4 6.5	2.024	2.843	14.0	21.2	5 1	11 42.53	- 3 1.0	1.888	2.706	14.9	19.0
<b>230839</b>	2004 <i>PE</i> <sub>103</sub>		3 22.9 148°87	2°8/25.9	18		<b>126062</b>	2001 <i>YE</i> <sub>81</sub>		3 22.9 41°47	0°6/23.5	18	
2 21	12 34.42	-11 23.3	2.476	3.284	11.5	21.3	2 21	12 32.42	- 4 42.7	1.273	2.142	16.4	19.6
3 2	12 27.65	-11 31.5	2.400	3.294	8.7	21.1	3 2	12 27.17	- 4 16.4	1.216	2.149	11.8	19.3
3 12	12 19.35	-11 26.4	2.350	3.304	5.7	20.9	3 12	12 19.43	- 3 32.7	1.180	2.157	6.5	19.0
3 22	12 10.17	-11 9.4	2.329	3.313	3.2	20.8	3 22	12 10.22	- 2 37.5	1.168	2.164	1.1	18.7
4 1	12 0.90	-10 43.4	2.337	3.322	3.6	20.8	4 1	12 0.94	- 1 39.3	1.182	2.172	4.9	19.0
4 11	11 52.36	-10 12.8	2.376	3.329	6.3	21.0	4 11	11 52.98	- 0 47.5	1.221	2.181	10.2	19.3
4 21	11 45.19	- 9 41.8	2.442	3.337	9.2	21.2	4 21	11 47.34	- 0 8.9	1.283	2.189	14.9	19.6
5 1	11 39.87	- 9 14.8	2.533	3.343	11.8	21.4	5 1	11 44.60	+ 0 12.1	1.363	2.199	18.7	19.8
<b>116033</b>	2003 <i>WY</i> <sub>92</sub>		3 22.9 307°63	4°4/26.4	17		<b>139683</b>	2001 <i>QG</i> <sub>208</sub>		3 22.9 87°72	1°5/21.6	18	
2 21	12 31.45	-12 56.6	1.489	2.323	16.4	19.4	2 21	12 32.97	+ 0 39.3	1.726	2.593	12.9	19.9
3 2	12 26.48	-13 1.0	1.408	2.315	12.7	19.1	3 2	12 26.92	+ 1 25.4	1.676	2.612	9.0	19.7
3 12	12 19.11	-12 42.2	1.349	2.307	8.6	18.9	3 12	12 19.03	+ 2 19.6	1.652	2.630	4.7	19.5
3 22	12 10.17	-12 1.6	1.314	2.299	4.9	18.6	3 22	12 10.18	+ 3 15.4	1.654	2.649	1.5	19.3
4 1	12 0.88	-11 4.2	1.305	2.292	5.3	18.6	4 1	12 1.40	+ 4 6.0	1.685	2.668	5.0	19.6
4 11	11 52.58	- 9 58.5	1.322	2.284	9.2	18.8	4 11	11 53.72	+ 4 45.3	1.743	2.686	9.0	19.9
4 21	11 46.32	- 8 53.6	1.362	2.277	13.5	19.0	4 21	11 47.86	+ 5 10.0	1.826	2.703	12.6	20.1
5 1	11 42.82	- 7 57.9	1.422	2.271	17.4	19.3	5 1	11 44.28	+ 5 18.3	1.929	2.721	15.6	20.4
<b>451775</b>	2013 <i>GA</i> <sub>64</sub>		3 22.9 30°22	9°6/2.9	18		<b>50946</b>	2000 <i>GM</i> <sub>75</sub>		3 22.9 204°20	3°4/19.2	18	
2 21	12 24.73	-30 7.0	1.170	1.945	23.5	20.0	2 21	12 31.32	+ 8 47.5	2.311	3.180	10.0	19.3
3 2	12 22.04	-29 16.9	1.107	1.956	20.0	19.8	3 2	12 25.55	+ 9 29.3	2.243	3.178	7.1	19.1
3 12	12 16.73	-27 33.8	1.060	1.969	15.9	19.6	3 12	12 18.26	+10 11.4	2.203	3.176	4.3	18.9
3 22	12 9.94	-24 58.6	1.032	1.983	12.0	19.4	3 22	12 10.11	+10 48.7	2.191	3.173	3.6	18.9
4 1	12 3.13	-21 41.5	1.028	1.998	9.7	19.3	4 1	12 1.89	+11 16.2	2.208	3.171	5.8	19.0
4 11	11 57.77	-18 2.2	1.049	2.013	10.7	19.4	4 11	11 54.40	+11 30.3	2.253	3.168	8.8	19.2
4 21	11 54.83	-14 23.6	1.094	2.030	14.1	19.6	4 21	11 48.29	+11 29.5	2.322	3.165	11.6	19.3
5 1	11 54.80	-11 5.4	1.163	2.047	18.0	19.9	5 1	11 44.00	+11 13.6	2.413	3.161	14.0	19.5
<b>310497</b>	2000 <i>UJ</i> <sub>83</sub>		3 22.9 221°15	2°9/20.2	18		<b>192823</b>	1999 <i>VD</i> <sub>89</sub>		3 22.9 131°72	2°3/25.8	18	
2 21	12 33.42	+ 4 5.3	1.783	2.653	12.4	20.9	2 21	12 29.68	-11 35.7	2.290	3.109	11.9	20.7
3 2	12 27.46	+ 5 6.5	1.708	2.646	8.7	20.7	3 2	12 24.39	-11 2.2	2.218	3.120	9.0	20.5
3 12	12 19.46	+ 6 14.4	1.659	2.637	4.8	20.4	3 12	12 17.64	-10 12.7	2.171	3.131	5.7	20.3
3 22	12 10.20	+ 7 22.0	1.637	2.628	3.0	20.3	3 22	12 10.06	- 9 10.5	2.152	3.141	2.7	20.1
4 1	12 0.73	+ 8 21.3	1.645	2.618	6.2	20.5	4 1	12 2.43	- 8 0.6	2.163	3.151	3.3	20.2
4 11	11 52.15	+ 9 5.7	1.678	2.608	10.3	20.7	4 11	11 55.54	- 6 49.2	2.203	3.160	6.4	20.4
4 21	11 45.35	+ 9 31.5	1.736	2.597	14.0	20.9	4 21	11 50.02	- 5 42.4	2.270	3.169	9.6	20.6
5 1	11 40.90	+ 9 37.3	1.814	2.585	17.2	21.1	5 1	11 46.29	- 4 44.8	2.360	3.178	12.3	20.8
<b>49558</b>	1999 <i>CN</i> <sub>92</sub>		3 22.9 50°59	5°4/17.8	18		<b>82169</b>	2001 <i>HY</i> <sub>3</sub>		3 22.9 287°39	1°5/21.9	18	
2 21	12 31.68	+12 57.0	1.883	2.761	11.4	18.5	2 21	12 34.63	+ 0 21.5	1.305	2.181	15.6	19.4
3 2	12 25.95	+13 50.9	1.836	2.771	8.4	18.3	3 2	12 29.09	+ 0 49.8	1.222	2.161	11.2	19.1
3 12	12 18.49	+14 40.9	1.814	2.781	5.9	18.2	3 12	12 20.70	+ 1 30.4	1.162	2.142	6.0	18.8
3 22	12 10.12	+15 20.0	1.820	2.791	5.6	18.2	3 22	12 10.36	+ 2 17.1	1.126	2.122	1.5	18.4
4 1	12 1.80	+15 42.7	1.853	2.802	7.9	18.3	4 1	11 59.47	+ 3 1.3	1.117	2.102	6.2	18.6
4 11	11 54.48	+15 45.9	1.911	2.812	10.8	18.5	4 11	11 49.62	+ 3 34.4	1.131	2.082	11.8	18.9
4 21	11 48.87	+15 29.4	1.992	2.823	13.7	18.7	4 21	11 42.10	+ 3 50.3	1.168	2.063	16.9	19.1
5 1	11 45.39	+14 54.7	2.092	2.834	16.1	18.9	5 1	11 37.76	+ 3 46.0	1.222	2.043	21.3	19.3
<b>207362</b>	2005 <i>JE</i> <sub>147</sub>		3 22.9 182°62	4°8/16.1	18		<b>172472</b>	2003 <i>SM</i> <sub>52</sub>		3 22.9 200°63			

EPHEMERIDES

3 22.9

3 23.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>184992</b>	2006 <i>ML</i> <sub>6</sub>	3 22.9 216°28		3°7/18.9 17			<b>456770</b>	2007 <i>TC</i> <sub>125</sub>	3 22.9 152°41		1°3/21.8 17		
2 21	12 31.85	+ 6 25.8	1.936	2.809	11.4	20.3	2 21	12 33.91	- 0 2.0	1.911	2.770	12.2	22.5
3 2	12 26.23	+ 7 44.3	1.864	2.801	8.1	20.1	3 2	12 27.57	+ 0 46.4	1.847	2.779	8.6	22.2
3 12	12 18.76	+ 9 7.4	1.818	2.794	4.8	19.8	3 12	12 19.42	+ 1 43.6	1.809	2.787	4.5	22.0
3 22	12 10.17	+10 27.6	1.801	2.785	4.0	19.8	3 22	12 10.25	+ 2 43.7	1.800	2.795	1.3	21.8
4 1	12 1.41	+11 36.8	1.812	2.776	6.7	19.9	4 1	12 1.04	+ 3 40.2	1.819	2.802	4.6	22.0
4 11	11 53.47	+12 28.8	1.851	2.767	10.3	20.1	4 11	11 52.78	+ 4 26.8	1.867	2.808	8.7	22.3
4 21	11 47.13	+13 0.4	1.913	2.756	13.7	20.3	4 21	11 46.21	+ 4 59.7	1.940	2.814	12.2	22.5
5 1	11 42.95	+13 10.7	1.995	2.746	16.5	20.5	5 1	11 41.83	+ 5 16.6	2.035	2.818	15.2	22.7
<b>303432</b>	2005 <i>AW</i> <sub>33</sub>	3 22.9 117°14		3°4/19.8 18			<b>23365</b>	4217 <i>T</i> <sub>-1</sub>	3 22.9 19°75		2°8/20.9 18		
2 21	12 32.45	+ 4 14.7	1.586	2.463	13.3	20.6	2 21	12 30.47	+ 2 27.4	1.172	2.062	15.9	18.3
3 2	12 26.77	+ 5 32.4	1.533	2.473	9.2	20.4	3 2	12 25.90	+ 3 17.2	1.121	2.067	11.1	18.0
3 12	12 19.05	+ 6 56.3	1.505	2.483	5.1	20.2	3 12	12 18.78	+ 4 16.5	1.092	2.074	5.9	17.7
3 22	12 10.19	+ 8 17.6	1.503	2.492	3.6	20.1	3 22	12 10.20	+ 5 16.2	1.087	2.081	2.9	17.6
4 1	12 1.33	+ 9 27.1	1.530	2.502	6.8	20.3	4 1	12 1.59	+ 6 6.2	1.107	2.089	7.0	17.8
4 11	11 53.60	+10 18.0	1.582	2.511	10.9	20.6	4 11	11 54.38	+ 6 38.6	1.150	2.099	12.0	18.1
4 21	11 47.82	+10 47.1	1.658	2.519	14.5	20.8	4 21	11 49.56	+ 6 49.5	1.214	2.109	16.5	18.4
5 1	11 44.47	+10 53.8	1.752	2.527	17.6	21.1	5 1	11 47.65	+ 6 38.0	1.296	2.119	20.2	18.7
<b>162553</b>	2000 <i>RH</i> <sub>12</sub>	3 22.9 42°37		5°1/26.8 18			<b>378677</b>	2008 <i>HX</i> <sub>45</sub>	3 22.9 247°61		2°4/20.3 17		
2 21	12 32.73	-13 51.1	1.304	2.141	18.1	19.2	2 21	12 32.11	+ 4 8.1	2.248	3.111	10.5	22.3
3 2	12 27.47	-14 3.7	1.243	2.149	14.1	18.9	3 2	12 26.31	+ 5 1.2	2.157	3.091	7.4	22.1
3 12	12 19.63	-13 50.2	1.201	2.158	9.6	18.7	3 12	12 18.81	+ 6 0.1	2.093	3.070	4.1	21.8
3 22	12 10.25	-13 12.2	1.183	2.167	5.8	18.5	3 22	12 10.22	+ 6 59.2	2.059	3.049	2.5	21.7
4 1	12 0.74	-12 15.6	1.190	2.176	5.8	18.5	4 1	12 1.35	+ 7 52.6	2.054	3.027	5.2	21.8
4 11	11 52.52	-11 10.0	1.222	2.186	9.6	18.8	4 11	11 53.11	+ 8 34.7	2.077	3.004	8.8	22.0
4 21	11 46.66	-10 5.5	1.277	2.196	13.9	19.0	4 21	11 46.23	+ 9 2.2	2.126	2.980	12.1	22.1
5 1	11 43.77	- 9 10.8	1.351	2.206	17.7	19.3	5 1	11 41.27	+ 9 13.1	2.196	2.956	14.9	22.3
<b>317505</b>	2002 <i>TH</i> <sub>18</sub>	3 22.9 243°29		0°3/23.2 17			<b>190420</b>	1999 <i>VZ</i> <sub>70</sub>	3 22.9 137°79		1°2/21.5 18		
2 21	12 32.54	- 4 1.2	1.872	2.724	12.8	21.5	2 21	12 31.01	+ 0 57.4	2.460	3.316	9.9	21.2
3 2	12 26.85	- 3 29.5	1.785	2.711	9.2	21.2	3 2	12 25.20	+ 1 41.3	2.398	3.329	6.9	21.0
3 12	12 19.17	- 2 44.6	1.722	2.698	5.1	21.0	3 12	12 18.03	+ 2 31.1	2.363	3.341	3.6	20.8
3 22	12 10.22	- 1 50.9	1.688	2.684	0.6	20.6	3 22	12 10.14	+ 3 22.2	2.358	3.353	1.2	20.7
4 1	12 0.98	- 0 54.3	1.681	2.669	4.1	20.8	4 1	12 2.24	+ 4 9.8	2.384	3.364	3.9	20.9
4 11	11 52.51	- 0 1.9	1.703	2.655	8.5	21.1	4 11	11 55.06	+ 4 49.4	2.438	3.375	7.1	21.1
4 21	11 45.68	+ 0 40.7	1.750	2.639	12.5	21.3	4 21	11 49.17	+ 5 18.1	2.519	3.385	10.0	21.3
5 1	11 41.12	+ 1 9.3	1.818	2.624	15.9	21.5	5 1	11 44.97	+ 5 34.0	2.623	3.395	12.4	21.5
<b>500798</b>	2013 <i>GM</i> <sub>1</sub>	3 22.9 312°57		2°3/24.7 17			<b>70585</b>	1999 <i>TA</i> <sub>170</sub>	3 22.9 359°05		0°3/22.8 18		
2 21	12 29.16	- 8 31.4	1.268	2.131	16.9	21.0	2 21	12 31.00	- 1 58.0	1.218	2.098	16.2	18.3
3 2	12 25.25	- 8 9.6	1.182	2.109	12.7	20.6	3 2	12 26.35	- 1 38.3	1.155	2.095	11.6	18.0
3 12	12 18.65	- 7 23.6	1.116	2.089	7.7	20.3	3 12	12 19.10	- 1 4.2	1.114	2.093	6.2	17.7
3 22	12 10.19	- 6 16.9	1.074	2.068	2.8	19.9	3 22	12 10.25	- 0 21.8	1.096	2.093	0.6	17.3
4 1	12 1.17	- 4 57.3	1.057	2.048	5.0	20.0	4 1	12 1.20	+ 0 20.7	1.104	2.093	5.4	17.7
4 11	11 53.12	- 3 36.1	1.064	2.029	10.6	20.2	4 11	11 53.42	+ 0 54.9	1.135	2.094	10.9	18.0
4 21	11 47.29	- 2 24.3	1.093	2.010	15.9	20.5	4 21	11 47.98	+ 1 14.7	1.188	2.096	15.7	18.2
5 1	11 44.54	- 1 30.3	1.140	1.993	20.5	20.7	5 1	11 45.54	+ 1 16.6	1.258	2.098	19.7	18.5
<b>500581</b>	2012 <i>UW</i> <sub>87</sub>	3 22.9 134°83		1°0/24.3 17			<b>471146</b>	2010 <i>FY</i> <sub>2</sub>	3 22.9 272°12		2°9/19.5 17		
2 21	12 28.49	- 6 55.3	2.544	3.380	10.3	22.2	2 21	12 28.65	+ 4 59.4	2.172	3.044	10.4	21.3
3 2	12 23.45	- 5 23.9	2.472	3.388	7.5	22.1	3 2	12 23.89	+ 6 9.1	2.087	3.025	7.3	21.0
3 12	12 17.10	- 4 51.2	2.426	3.395	4.3	21.9	3 12	12 17.51	+ 7 24.7	2.029	3.007	4.2	20.8
3 22	12 10.03	- 4 50.7	2.408	3.403	1.3	21.6	3 22	12 10.10	+ 8 39.9	2.000	2.988	3.1	20.7
4 1	12 2.90	- 3 56.8	2.421	3.410	2.9	21.8	4 1	12 2.47	+ 9 47.7	2.000	2.969	5.8	20.8
4 11	11 56.41	- 3 4.3	2.463	3.417	6.1	22.0	4 11	11 55.47	+10 42.1	2.028	2.950	9.2	21.0
4 21	11 51.10	- 2 17.6	2.532	3.423	9.0	22.2	4 21	11 49.81	+11 19.4	2.079	2.930	12.4	21.2
5 1	11 47.39	- 1 40.2	2.624	3.430	11.6	22.4	5 1	11 46.02	+11 37.9	2.152	2.910	15.2	21.3
<b>52582</b>	1997 <i>NE</i> <sub>6</sub>	3 22.9 207°06		3°7/19.1 18			<b>415278</b>	2013 <i>EP</i> <sub>123</sub>	3 22.9 282°39		3°0/20.7 17		
2 21	12 30.30	+ 5 36.5	1.811	2.688	11.9	19.6	2 21	12 34.83	+ 4 3.3	1.551	2.425	13.7	21.5
3 2	12 25.18	+ 7 0.5	1.746	2.686	8.3	19.3	3 2	12 28.98	+ 4 45.9	1.459	2.398	9.8	21.2
3 12	12 18.21	+ 8 30.1	1.706	2.683	4.9	19.1	3 12	12 20.57	+ 5 36.4	1.392	2.370	5.4	20.8
3 22	12 10.14	+ 9 56.8	1.695	2.680	3.9	19.0	3 22	12 10.41	+ 6 27.9	1.351	2.343	3.0	20.6
4 1	12 1.94	+11 12.2	1.711	2.677	6.9	19.2	4 1	11 59.69	+ 7 12.0	1.337	2.315	6.8	20.8
4 11	11 54.63	+12 9.5	1.754	2.674	10.5	19.4	4 11	11 49.80	+ 7 41.3	1.349	2.286	11.6	21.0
4 21	11 48.98	+12 45.2	1.821	2.670	14.0	19.6	4 21	11 41.89	+ 7 51.3	1.384	2.257	16.2	21.1
5 1	11 45.53	+12 58.6	1.906	2.667	16.9	19.8	5 1	11 36.79	+ 7 40.1	1.437	2.228	20.1	21.3
<b>496441</b>	2014 <i>OM</i> <sub>112</sub>	3 22.9 331°61		4°1/19.7 17			<b>228156</b>	2009 <i>SG</i> <sub>69</sub>	3 22.9 132°89		1°1/21.7 16		
2 21	12 29.17	+ 3 34.3	1.132	2.028	15.9	21.1	2 21	12 31.15	- 0 7.5	2.253	3.109	10.7	21.6
3 2	12 25.24	+ 4 57.0	1.069	2.018	11.2	20.8	3 2	12 25.39	+ 0 45.9	2.192	3.123	7.5	21.4
3 12	12 18.58	+ 6 31.8	1.028	2.009	6.3	20.5	3 12	12 18.17	+ 1 46.7	2.159	3.137	3.9	21.2
3 22	12 10.18	+ 8 7.1	1.011	2.001	4.4	20.3	3 22	12 10.16	+ 2 49.8	2.155	3.150	1.1	21.0
4 1	12 1.51	+ 9 29.3	1.017	1.994	8.6	20.5	4 1	12 2.15	+ 3 49.4	2.181	3.162	4.1	21.3
4 11	11 54.11	+10 27.7	1.046	1.987	13.8	20.8	4 11	11 54.93	+ 4 40.2	2.235	3.174	7.5	21.5
4 21	11 49.13	+10 56.7	1.095	1.981	18.6	21.0	4 21	11 49.11	+ 5 18.6	2.316	3.185	10.7	21.7
5 1	11 47.27	+10 55.5	1.160	1.976	22.5	21.3	5 1	11 45.11	+ 5 42.6	2.419	3.196	13.2	21.9
<b>308069</b>	2004 <i>TH</i> <sub>199</sub>	3 22.9 352°18		0°1/23.0 18			<b>406186</b>	2006 <i>WQ</i>					